



Integrating Immigrants into the Nordic Labour Markets



Nordic Council
of Ministers

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Lars Calmfors and Nora Sánchez Gassen (eds.)

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Foreword

The Nordic countries face similar problems when it comes to the integration of immigrants into their labour markets. Employment rates are considerably lower for non-European immigrants than for natives in all the Nordic countries except Iceland. This raises serious problems for the Nordic countries as the generous welfare models rely on high employment. Large employment gaps between natives and foreign born also threaten the social cohesion in the Nordics.

These common problems as well as the conclusions from the Nordic Economic Policy Review (NEPR) 2017 on Labour Market Integration in the Nordic Countries were the main reasons for the decision of the Nordic Council of Finance Ministers in 2017 to initiate and finance the project *Integrating Immigrants into the Nordic Labour Markets*.

The objective for this project was to find inspiration in current research regarding how to handle these problems. Questions that the ministers hoped to find answers to through this project were:

- What can the Nordic countries learn from each other's integration models regarding "best practices"?
- Can the Nordic Region learn from other countries' models of integration in the labor market?
- What does research have to say about the efficacy of various policies?

This project has been successfully carried out by Nordregio with Professor Lars Calmfors as project leader and with assistance from Nora Sánchez Gassen. Lars Calmfors and Nora Sánchez Gassen have jointly edited the volume.

Paula Lehtomäki
Secretary General
Nordic Council of Ministers

Chapter 1

Integrating Immigrants into the Nordic Labour Markets: Background, Summary and Policy Conclusions

Lars Calmfors¹ and Nora Sánchez Gassen²

ABSTRACT

Denmark, Finland, Norway and Sweden face similar problems of integrating large groups of immigrants, especially low-educated ones from outside the EU, into their labour markets. This volume investigates how labour market integration of these groups can be promoted and seeks to identify appropriate policies. Our introduction presents the background to the volume, summarises the main findings and discusses policy recommendations. A key conclusion is that no single policy will suffice. Instead, a combination of education, active labour market, social benefit and wage policies should be used. The exact policy mix must depend on evaluations of the trade-offs with other policy objectives.

Keywords: Migration, labour market integration, refugees, employment gap.

JEL codes: J15, J21, J24, J61.

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1. Introduction

Immigration is currently a key issue in the political debate throughout Europe. It certainly is so in the Nordics. The discussion concerns both the magnitude of immigration and the integration of immigrants into society. This volume focuses on the labour market integration in the Nordic countries. The aim is to contribute to the knowledge on what best promotes such integration by drawing on existing research relevant for the Nordics. This essay contains three parts: a background, a summary of the chapters in the volume and our take on policy conclusions.

2. Migration trends and integration challenges in the Nordics

The population increase in the Nordic countries in recent decades has to a large extent been driven by migration (Sánchez Gassen 2018, Heleniak 2018a). According to Eurostat, 23 million people lived in Denmark, Finland, Iceland, Norway and Sweden in 1990. By 2018, the population had increased to 27 million. Almost two thirds of this growth was due to migration. Many of the immigrants have come from Europe, but there has also been large immigration from several Asian and African countries (Rispling 2018, Heleniak 2018b).

2.1 Migration flows and stocks of foreign born

Migration has been particularly large to Sweden. Net migration, that is the difference between immigration and emigration, has exceeded 20 000 persons during most years since 1990. The peak was in 2015 with almost 120 000 persons (Figure 1). Norway also experienced large net migration especially after 2005. In the three other Nordic countries, it has remained lower.

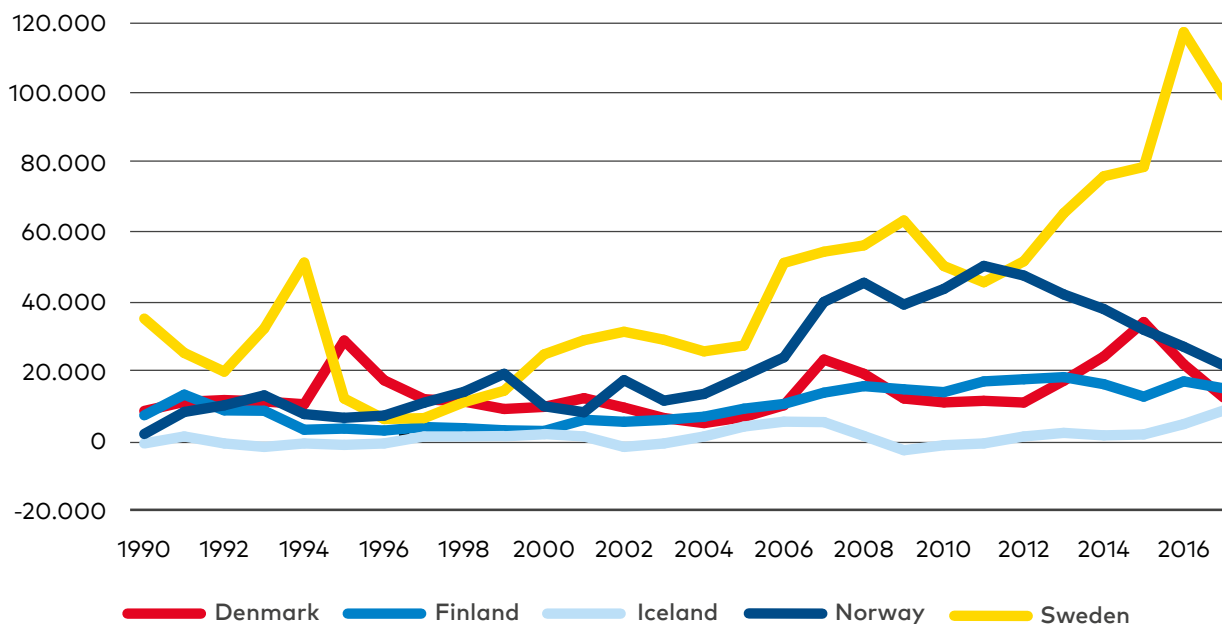
Many of the immigrants have come from Europe, but there has also been large immigration from several Asian and African countries.

On a per-capita basis, Sweden and Norway also received the largest numbers of immigrants during most of the time period considered here, but the differences to the other Nordic countries are less pronounced (Figure 2). Iceland shows notable fluctuations in per-capita net migration during the last 15 years. These were driven by large macroeconomic swings: a boom after the turn of the century, then the financial crisis 2008–11 and finally economic recovery during the most recent years. Fluctuations in Norway are also substantial and associated with macroeconomic developments - a boom in the mid-2000s and then a prolonged recession due first to the international financial crisis and later to the fall in the price of oil.

As a result of immigration, the populations in the Nordic countries have become more diverse.³ This is illustrated in Figure 3 which shows the shares of the population in each Nordic country born abroad (panel a) and born outside the EU (panel b). The shares of both groups have increased in all the Nordic countries during the last three decades. Sweden has the largest share of foreign-born residents. It increased from 9% in 1990 to 19% in 2018. In Iceland and Norway, the shares increased from 8% in 2006 to almost 16% in 2018. The share in Denmark was 12% in 2018. Finland has by far the lowest share of immigrants of the Nordic countries: only 7%. The

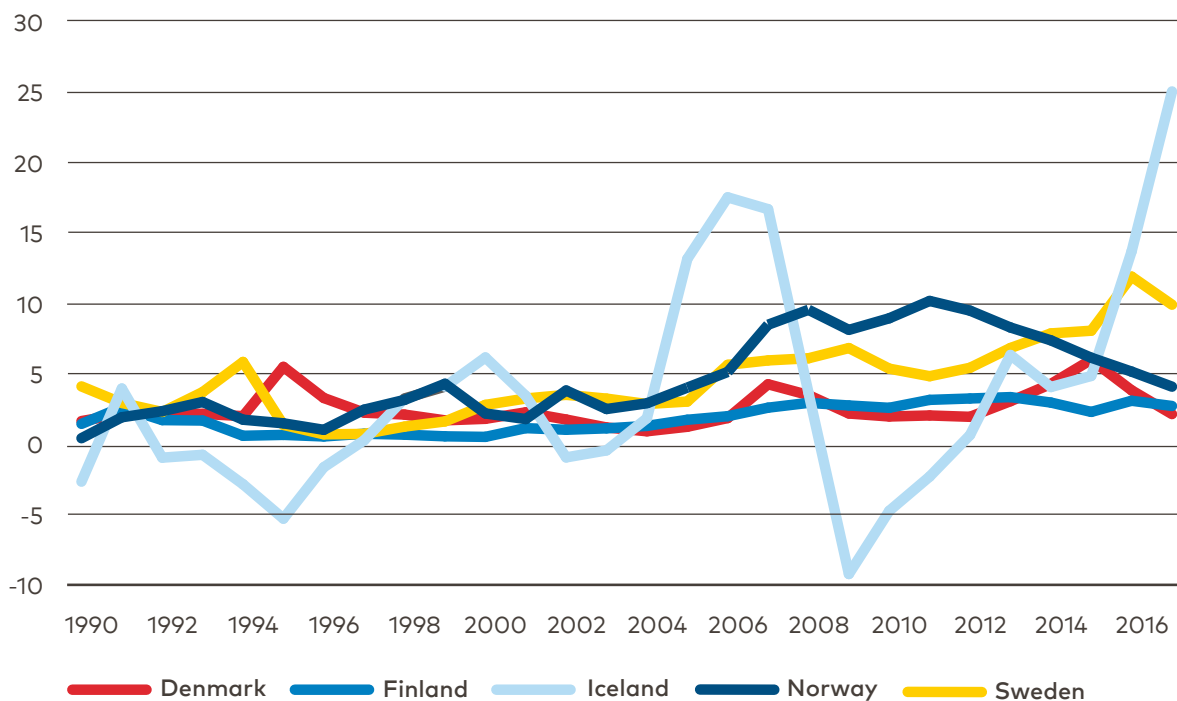
³ See also Heleniak (2018b).

Figure 1 Net migration in the Nordic countries, number of persons



Note: Net migration is defined as the difference between the number of immigrants and the number of emigrants during a calendar year. Immigrants are persons who establish their usual residence in the territory of one of the Nordic countries for a period that is, or is expected to be, at least twelve months, after having previously lived in another Nordic country or a third country. Emigrants are persons who cease to have their usual residence in one of the Nordic countries for a period that is, or is expected to be, at least twelve months.
Source: Eurostat.

Figure 2 Net migration, number of persons per thousand inhabitants



Note: See Figure 1.
Source: Own calculations based on data from Eurostat.

share of persons born outside the EU ranged from only 4.5% in Iceland and Finland to as much as 13% in Sweden in 2018. Denmark and Norway lie between these extremes with shares around 8%.

Migrants have traditionally come to the Nordic Region to work, to study or for family reasons. But, as is well-known, migration for humanitarian reasons has become very important in recent years. During the refugee crisis of 2014-15, the number of asylum seekers in the Nordic countries peaked. Sweden has a long history of accommodating refugees, and the number of asylum seekers during the crisis years was also substantially larger there than elsewhere in the Nordics (Figure 4). In 2015, more than 160 000 asylum seekers arrived, but the number dropped rapidly again after Sweden imposed border controls. In Norway and Finland, the number of asylum requests also peaked in 2015, even though it remained substantially lower than in Sweden. In Denmark, and especially Iceland, the numbers of asylum seekers have been much lower.

2.2 Mismatch between migrants' skills and job requirements

The question of how to integrate refugee and family immigrants into society is high on the political agenda in all the Nordic countries. Since many refugees are low-educated and come from countries with labour markets that are very different from the Nordic ones, their qualifications and experiences are often not a good match for the labour demand here.

Figure 5 shows that immigrants are a diverse group. In Denmark, Iceland, Norway and Sweden, more than 40% of foreign-born people are highly educated. But the foreign born are also more likely than natives to have attained only low educational achievements. This applies in particular to immigrants from outside the EU, where as many as around 30% belong to this group in all Nordic

countries. This is a considerably higher share than for natives. It is especially those low-educated migrants who often find it hard to obtain employment in the Nordic labour markets. One reason is the low frequency of elementary jobs that require only low skills in the Nordic economies. Norway, Sweden, Iceland and Finland belong to the five European countries with the lowest shares of such jobs: in the range of 3–6% (Figure 6). Hence, there is an obvious mismatch in these countries between the skills of many immigrants and the skill requirements on most jobs.

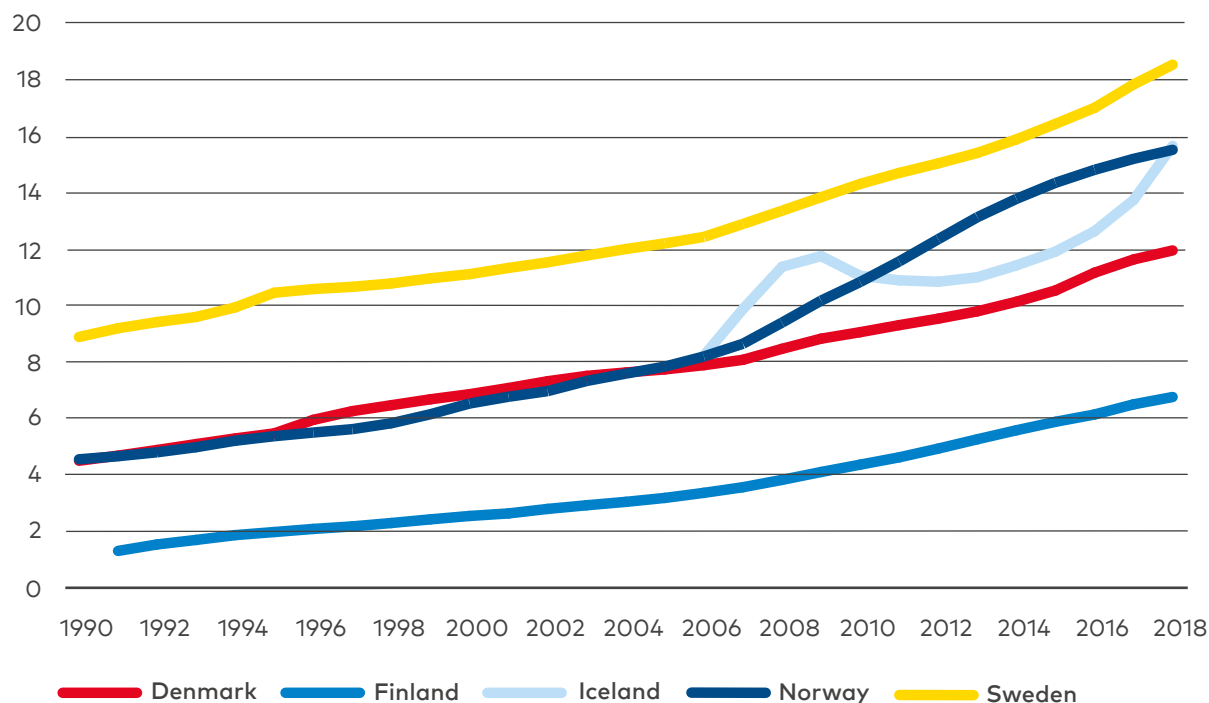
2.3 Labour market outcomes of immigrants

The successful labour market integration of refugees and other migrants is crucial for both the Nordic societies and the migrants themselves. The Nordic countries all have generous welfare systems that rely on high employment rates. The speedy and successful transition of immigrants into employment is necessary to reduce pressures on publicly funded programmes. For the refugees themselves, integration into the labour market fosters their societal integration, language acquisition, and ultimately increases their incomes and well-being. In addition, social cohesion probably depends to a large extent on an equitable distribution of employment. Large disparities in the access to work between groups are likely to foster mistrust between them. The consequence may be a polarised society very far from the traditional situation in the Nordic countries, which were in the past characterised by more or less full employment.

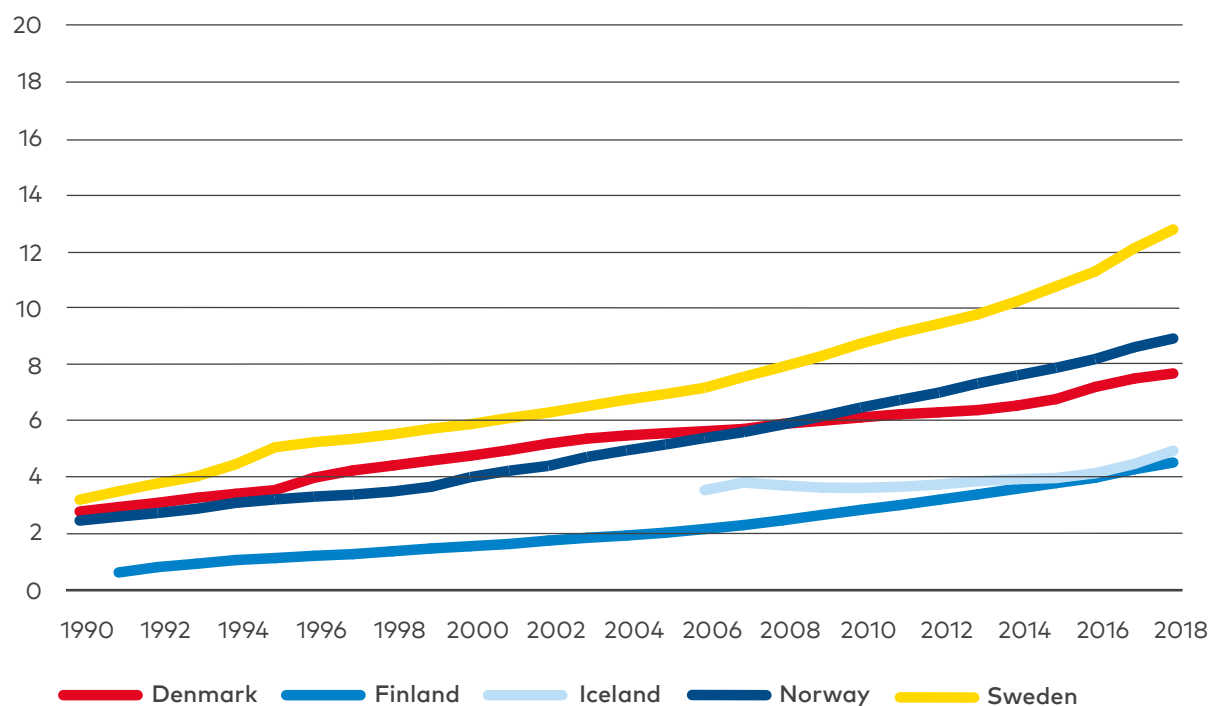
Employment rates of migrants remain substantially lower than those of natives in Denmark, Finland, Norway and Sweden (Figure 7, panel a). Those born outside the EU reach particularly low levels. In 2017, the employment rate of migrants from outside the EU was as low as 54% in Finland and around 60% in Denmark, Norway and Sweden. Iceland is the only Nordic country where foreign-born people have

Figure 3 Share of foreign-born people in the populations in the Nordic countries, percent

(a) Share of foreign-born persons in the population, percent



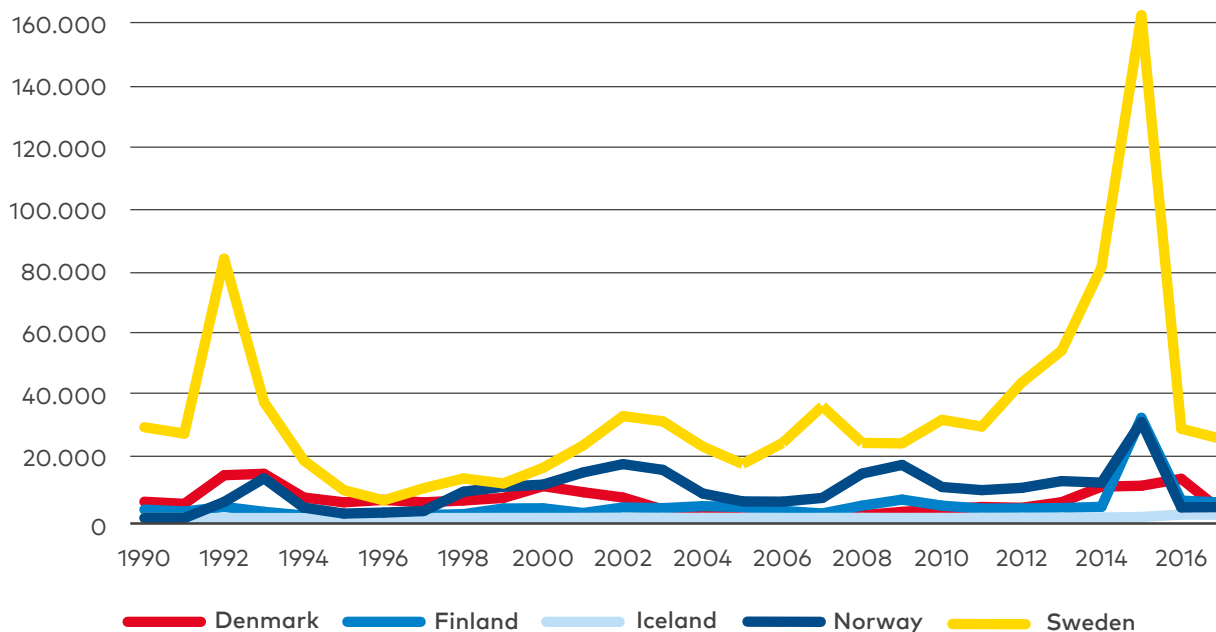
(b) Share of persons born outside the EU in the population, percent



Note: The EU includes all member states in April 2019 (including the UK) except Croatia (excluded here due to data limitations). Data for Iceland are not available before 2006.

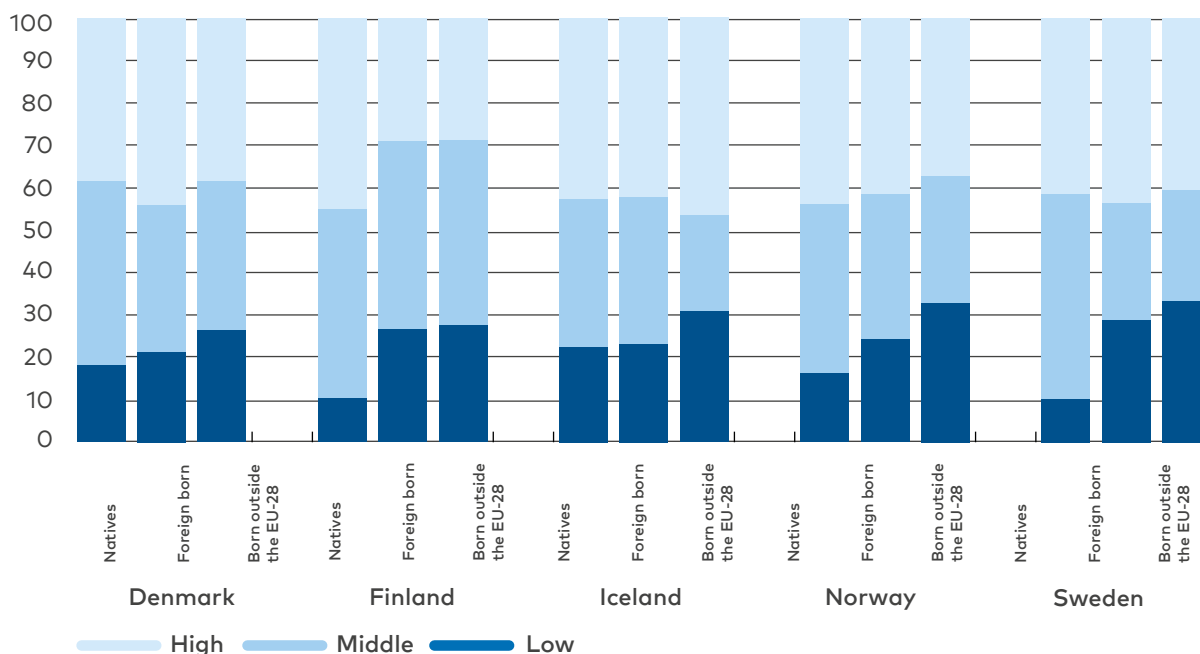
Source: Own calculations based on data from Nordic Statistics.

Figure 4 Number of requests for asylum in the Nordic countries



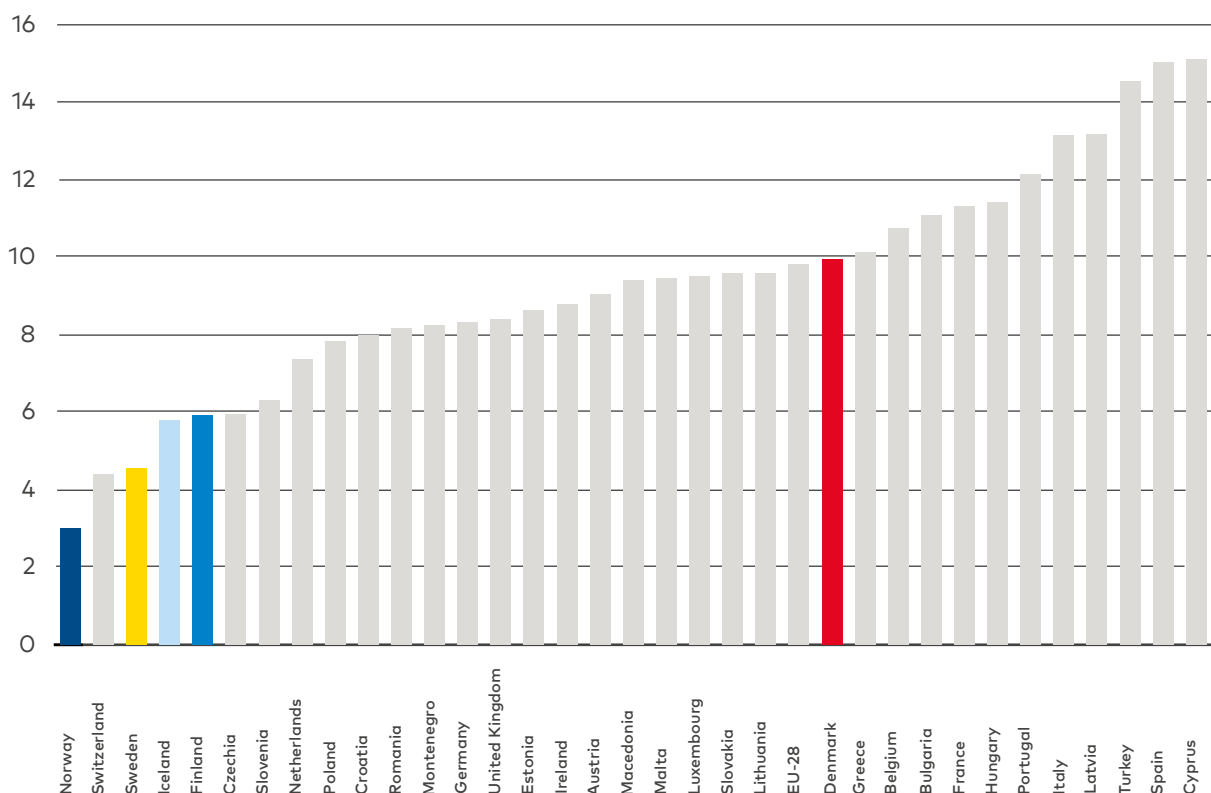
Note: Data refer to the number of applications. If one person submits several applications, she is counted more than once.
Source: Nordic Statistics.

Figure 5 Educational attainment of natives, foreign born and persons born outside the EU, 20-64 years, 2017, percent



Note: Low educational attainment means less than primary, primary or lower secondary education (International Standard Classification of Education, ISCED, levels 0-2); middle educational attainment means upper secondary or post-secondary non-tertiary education (ISCED levels 3 and 4); and high educational attainment means tertiary education (ISCED levels 5-8). EU-28 refers to the current (May 2019) member states of the EU, including the UK.
Source: Eurostat.

Figure 6 Share of employees working in elementary occupations in European countries, 20-64 years, 2017, percent



Note: Elementary occupations are defined in the ILO’s International Standard of Classification of Occupations (ISCO). The occupations consist of simple and routine tasks which mainly require the use of hand-held tools and often some physical effort. The skills required correspond to primary education (around five years). Source: Eurostat.

higher employment rates than natives. This reflects the fact that most of the migration there has been for labour market reasons.

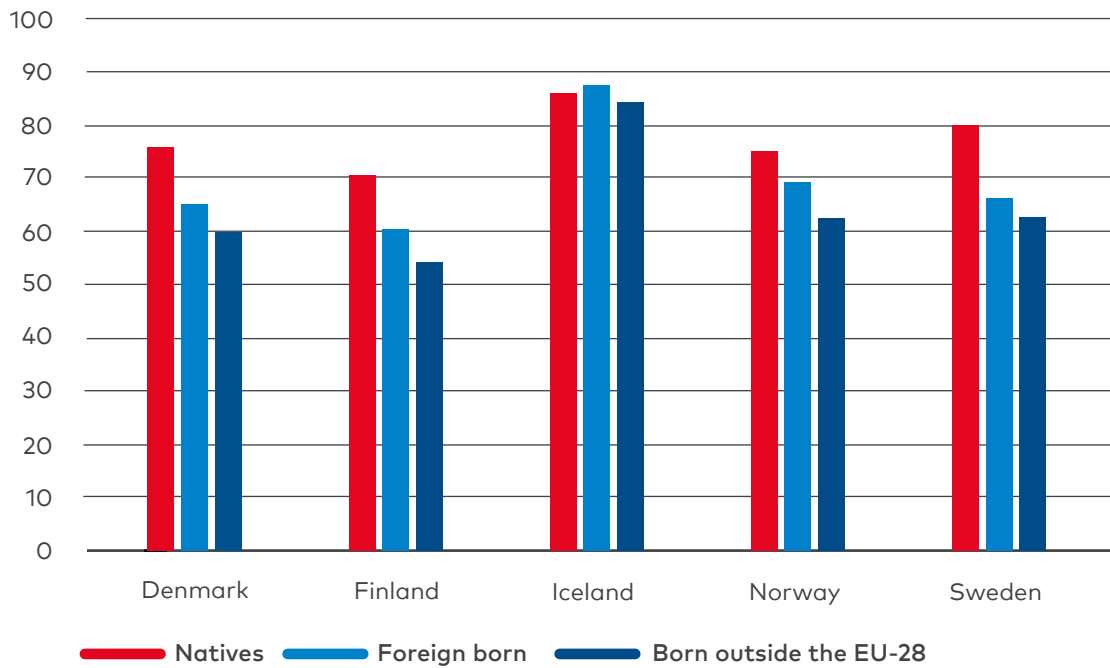
The differences in migrant employment rates among the Nordic countries are influenced by macroeconomic and institutional conditions that also affect the employment rates of natives (note, for example, that the native employment rate is also lowest in Finland and highest in Iceland). Panel b in Figure 7 therefore visualises the gap between the employment rates of natives and of the two migrant groups, respectively. In 2017, the employment gaps were largest in Sweden: 14 percentage points for foreign born in general and 17 percentage points for persons born outside the EU. This indicates that particular obstacles for labour market integration

of migrants exist there. Denmark and Finland had almost as large employment gaps, in particular between natives and those born outside the EU. In Norway, the gap was much smaller. In Iceland, foreign born had a higher employment rate than natives. For those born outside the EU there was only a small negative employment gap.

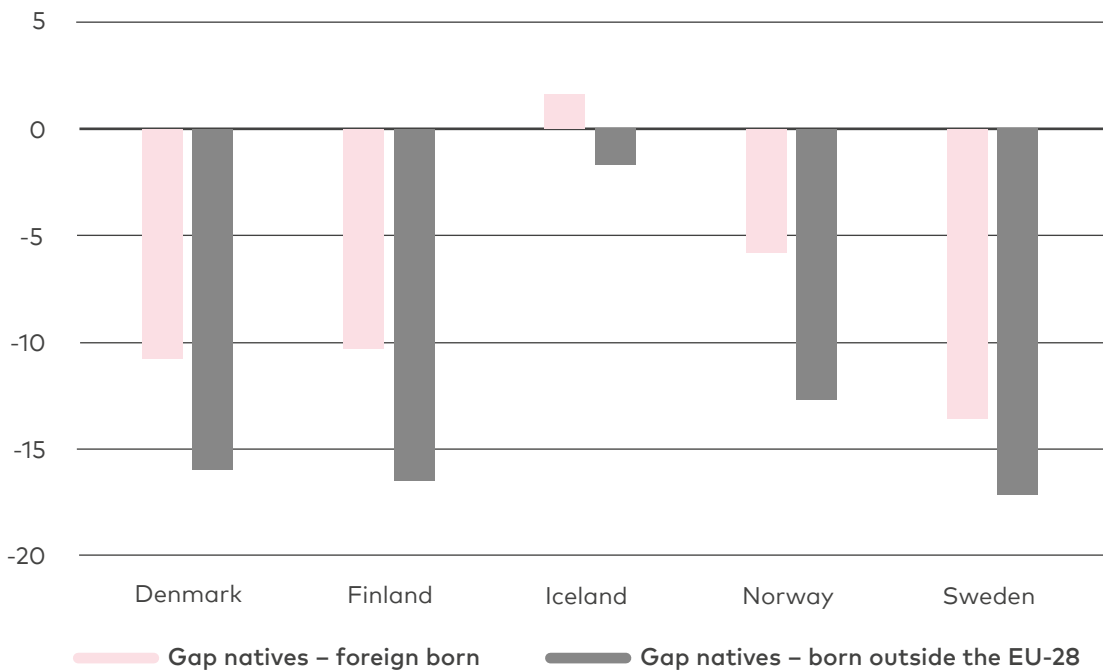
A comparison of unemployment rates shows similar patterns (Figure 8). With the exception of Iceland, foreign-born people have substantially higher unemployment rates than natives in the Nordic countries. Those born outside the EU are particularly likely to be out of work. In 2017, the unemployment rate of this group was 20% in Finland and 18% in Sweden. The unemployment gaps between natives and foreign-born people, and be-

Figure 7 Employment of natives, foreign born and persons born outside the EU, 15-64 years, 2017

(a) Employment rate, percent of population



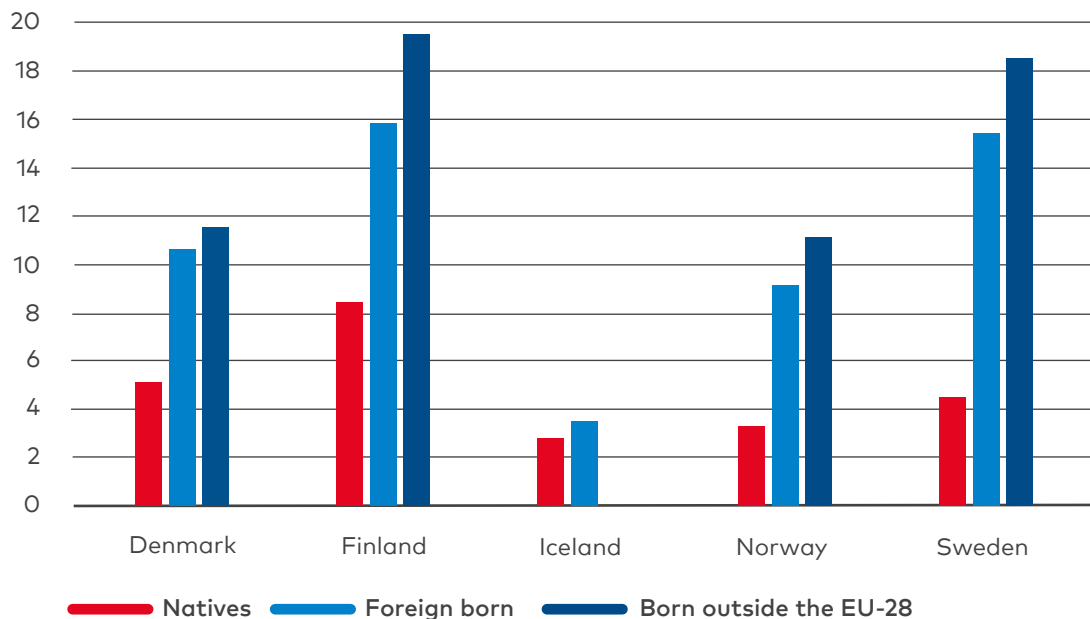
(b) Employment gap, percentage points



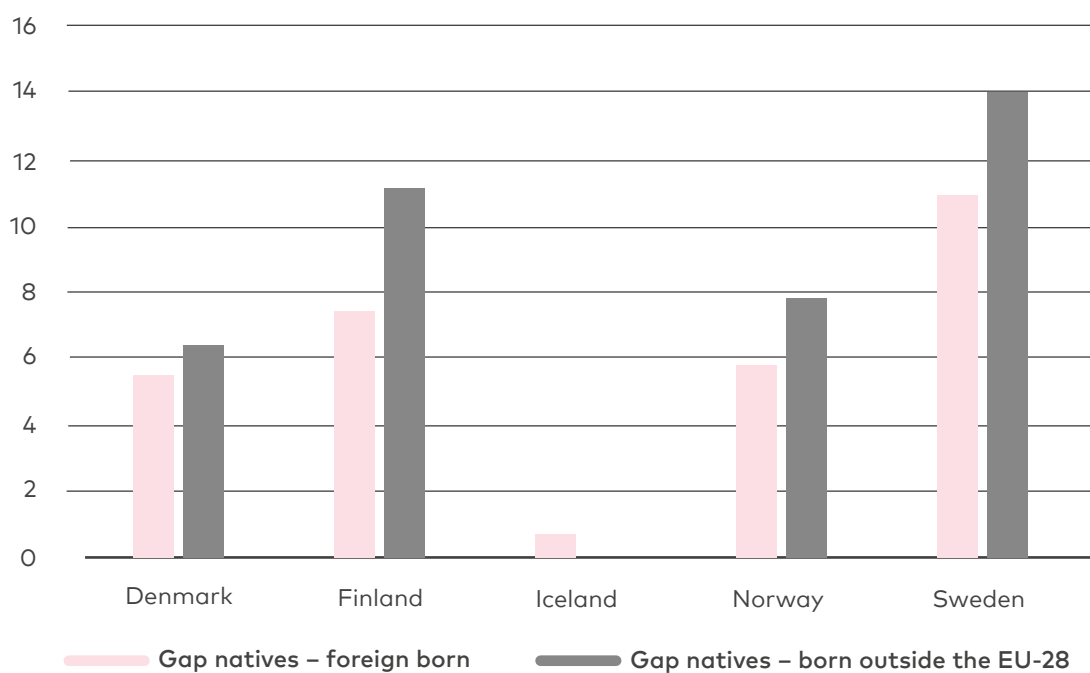
Note: Employment rates are calculated by dividing the number of persons aged 15- 64 years in employment by the total population in the same age group. Employment gaps are defined as the difference in percentage points between natives and the two groups of foreign born, respectively.
Source: Eurostat.

Figure 8 Unemployment of natives, foreign born and persons born outside the EU, 15-64 years, 2017

(a) Unemployment rate, percent of the labour force



(b) Unemployment gap, percentage points



Note: Unemployment rates are expressed as the number of unemployed persons as a percentage of the labour force based on the International Labour Office (ILO) definition. The labour force is the sum of employed and unemployed persons. Unemployment gaps are defined as the difference in percentage points between natives and the two groups of foreign born, respectively. Unemployment rates for persons born outside the current 28 member states of the EU (including the UK) are not available for Iceland. Source: Eurostat.

tween natives and people born outside the EU, were also largest in Sweden with 11 and 14 percentage points, respectively. In Denmark and Norway, the gaps only reached roughly half this size.

In recent years, an increasing number of studies has analysed existing measures to promote employment among non-European immigrants in particular.⁴ However, a systematic review of how various policies influence the employment of refugees and other migrants in the Nordic countries is currently not available. The goal of this volume is to deepen our understanding of how the labour market integration of immigrants in the Nordics can be improved. Researchers from across the Nordic Region evaluate the existing research literature and try to identify appropriate policies to raise employment among immigrants. Below, we provide a short summary of the main findings as well as our policy conclusions.

3. The chapters in the volume

The volume contains seven contributions.

Tuomas Pekkarinen and *Anders Böhlmark* both analyse education policy for immigrants in their chapters. Whereas Pekkarinen discusses education policies in general, Böhlmark focuses on appropriate policies for adolescent immigrants in particular.

Two chapters discuss active labour market programmes. The topic of *Pernilla Andersson Joona* is active labour market programmes for newly arrived refugees and family migrants. *Vibeke Jakobsen* and *Torben Tranæs* try to answer the more specific question of how programmes for immigrants should

best be organised: should provision of labour market services be public or private, and how should responsibility for policy be allocated between central and local government levels?

Bernt Bratsberg, Oddbjørn Raaum and Knut Røed address the issue of social insurance design, especially the generosity of benefits and the use of activation measures, for immigrants.

Jacob Nielsen Arendt and Marie Louise Schultz-Nielsen do not analyse just one type of policy, but attempt to sort out what policies work best for a specific group of immigrants with a particularly low employment rate: non-Western women.

Finally, *Simon Ek and Per Skedinger* discuss how wage policies of the parties in the labour market (employer organisations and trade unions) in their collective agreements, viz. the levels of minimum wages, affect the labour market integration of immigrants.

The various contributions are summarised below.

3.1 Education efforts

Tuomas Pekkarinen provides a survey of the education efforts for immigrants in the Nordic countries. He reviews education in the ordinary school system, pre-primary education and adult education.

The chapter starts out by noting that the native-immigrant gaps in literacy proficiency according to the OECD's achievement test PIAAC for adults are large in Sweden, Finland, Denmark and Norway (in that order) when compared to other OECD countries.⁵ This can to a large extent be explained by

⁴ See, for example, Andersson Joona et al. (2016), Arbetsmarknadsekonomska rådet (2016, 2017, 2018), Bratsberg et al. (2017), Greve Harbo et al. (2017), Karlsdóttir et al. (2017), SNS (2017) and Calmfors et al. (2018).

⁵ PIAAC stands for the Programme for the International Assessment of Adult Competencies. See, for example, Arbetsmarknadsekonomska rådet (2016), chapter 3, for a closer description of the test.

the differences in the composition of immigrants: the share of refugees in the immigrant population is larger in the Nordic countries than in most other OECD countries.

Pekkarinen also points out that the skill gradient of employment, that is how rapidly the employment rate increases with skills, is particularly steep in the Nordics, and especially so in Finland and Sweden. Figure 7 above documented the large employment gaps between natives and immigrants in the four large Nordic countries. But when comparing natives and immigrants with similar skill levels, the employment gaps decrease or are even reversed (for higher skill levels). The obvious conclusions are that the aggregate employment gaps between natives and immigrants depend to a large extent on skill differences and that policies which reduce these differences will also decrease those gaps.

Education in the ordinary school system

When controlling for the socioeconomic background of parents, early-arriving (before six years of age) immigrant children are doing much better in the OECD's PISA tests in literacy than their late-arriving (after six years of age) peers in Finland, Sweden and Iceland.⁶ This is an indication that the school systems in these countries are fairly successful in enhancing immigrant children's achievements. However, the achievement *levels* of early-arriving immigrant children in these countries are still low in comparison with several other European countries. As there remains an achievement gap between natives and early-arriving immigrant children, the school systems obviously still fail to sufficiently increase the skills of the latter.

Pekkarinen documents that the Nordic school systems do allocate extra time to language instruction

of immigrant children during formal school hours (as compared to native children), and also provide remedial language instruction outside these hours. But in both Finland and Sweden, the time devoted to language instruction for immigrant children during school hours is short in an international comparison; this, however, reflects mainly short school days in general in these two countries.

Pre-primary education

It is well-known from studies in Anglo-Saxon countries that pre-primary education can be a very effective tool in reducing the achievement gaps between students from different backgrounds. In line with this, Pekkarinen finds that longer participation in pre-primary education is associated with significantly higher PISA literacy test scores for immigrant children in all the five Nordic countries. Such an association also exists for native children, but it is much stronger for immigrant children. At the same time, differences in participation in pre-primary education between native and immigrant children are large in the Nordics relative to other countries. This suggests that larger participation of immigrant children in pre-primary education could represent a margin of improvement in Nordic integration policies.

Adult education

Participation in adult education is in general high in the Nordic countries. This holds true also for immigrants: in 2016, around 50% of them had taken part in some adult education during the past twelve months. Participation in *formal* adult education is much higher for immigrants than for natives. This strong overrepresentation appears to be a specific Nordic phenomenon. It reflects a general emphasis on secondary education and labour market training for adults with a need to compensate for gaps in ed-

⁶ The Programme for International Student Assessment (PISA) is an international achievement test for 15-year olds. This test is also more closely described in Arbetmarknadsekonomiska rådet (2016), chapter 3.

educational attainment as well as particular language training for immigrants.

The high immigrant participation in adult education in the Nordics implies that the courses are successful in targeting this group. Pekkarinen also finds that participation in adult education is positively correlated with literacy test scores in PIAAC data. The association is stronger for immigrants than for natives in Denmark, Finland and Sweden. In these countries, the association for immigrants is also stronger than in other countries.

It is not obvious how to interpret the described correlations. They could indicate that adult education raises skills. But they could also reflect that persons with better literacy skills are more likely to take part in adult education. Pekkarinen's conclusion is that the wide availability of adult education in the Nordics has at least not diluted the effectiveness of the programmes. He also concludes that, if "the selection based on unobservables does not differ between natives and immigrants", then the results suggest that immigrants may benefit more from adult education than natives. The particularly strong correlation between participation in *job-related* adult education and literacy test scores for immigrants could indicate that initiatives combining education and subsidised employment is a promising tool for promoting the integration of adult immigrants into the labour market.

3.2 Education policies for adolescent immigrants

Anders Böhlmark discusses both the specific problems of adolescent immigrants and policies that could address these problems.

The problems of adolescent immigrants

Adolescent immigrants who arrive at middle- or high-school age are particularly disadvantaged for several reasons. Like other immigrants they lack

pre-migration skills in the host country's language. But language learning tends to be more difficult for adolescents than for younger children.

In addition, many adolescent immigrants come from school systems that are far below the standards in the Nordic countries in universal subjects, such as mathematics. These immigrants are usually also disadvantaged at school because of their parents' low socioeconomic status (such as low education and low income), which is well known to affect children's educational outcomes negatively. The described factors are also likely to be compounded by other problems: many child refugees have previously been exposed to traumatic events, they have experienced stress during the waiting time in the asylum process, they go to socially segregated schools, and they have difficulties to study at home because of overcrowding.

Policy conclusions

It is a huge challenge for the school system to overcome the disadvantages of adolescent immigrants. Unfortunately, research on the best way to deal with these problems is limited both in the Nordic countries and elsewhere. Still, Böhlmark is able to draw a number of policy conclusions based on existing research regarding the effectiveness of different school interventions and practices for disadvantaged students in general. The following are some of his major recommendations:

- *Provide more study support in the immigrants' mother tongue in regular subjects* (other subjects than the language of the host country). Although bilingual teaching in regular subjects is unrealistic in most cases – there are simply not enough bilingual teachers around – help from teaching assistants may be a possibility.
- *Give students more time to study.* This can be done through summer schools and educational programmes during other breaks. One might also

cut down the number of subjects studied and devote extra time to the most important ones needed to qualify for high school.

- *Avoid discouraging immigrant students.* Written judgements, rather than just ordinary grading, may be useful for newly arrived students who do not get a pass in a subject. It could also be important not to keep students too long in preparatory programmes for high school that only focus on language learning but do not include other subjects, as this may have a discouraging effect on motivation.
- *Avoid too stringent admission criteria to vocational high-school programmes.* According to Böhlmark, these criteria have been raised too much in Sweden.
- *Take measures to raise the participation of immigrant youth in vocational high-school programmes.* The probability of finding a job shortly after completing a vocational programme has been shown to be high in general. At the same time, students born to parents from non-Western countries perform on average worse than native children in more theoretical subjects. Yet, the former group is underrepresented in vocational training (at least in Denmark, Norway and Sweden). A helpful intervention might be to offer more study guidance involving parents and helping families formulate educational objectives suited to the children's academic aptitudes.

Böhlmark's policy recommendations thus focus on both helping adolescent immigrants qualify for high-school studies and offering them education there with a more direct labour-market focus.

3.3 Labour market policy for newly arrived immigrants

An internationally unique feature of the integration policies in the four large Nordic countries is that

activities for newly arrived refugees and family migrants are organised within similar *introduction programmes*. These include language training, courses in civic orientation and labour market measures. In Denmark and Norway, the introduction programmes are the responsibility of municipalities, in Sweden of the Public Employment Service, and in Finland of both the Public Employment Service (for immigrants actively looking for a job) and the municipalities (for immigrants not actively looking for a job).

Pernilla Andersson Joona reviews the contents of the introduction programmes in Denmark, Norway and Sweden. Language training is the most common activity. Regular education is included to a rather small extent (especially in Denmark). Subsidised employment plays a significant role in Sweden but is used much less in Denmark and Norway.⁷ In all three countries, women participate in such employment programmes to a much smaller extent than men.

The author also surveys existing research that can highlight the likely effects of various activities within the introduction programmes. Her overall conclusion from evaluations of existing introduction programmes in Finland, Norway and Sweden is that they produce (slightly) better labour market outcomes for participants than earlier programmes. According to her, there are good reasons to believe that it is beneficial to organise measures for newly arrived immigrants and family migrants within coherent introduction programmes of the current type.

Evidence on various activities

Andersson Joona quotes a number of results from existing research which are relevant for the activities included in the Nordic introduction programmes:

⁷ In Norway, this appears to be the result of a low use of employment subsidies in general (see NOU 2019:7).

- The few studies of the labour market effects of *language training* have produced mixed results. A Swedish study finds that such training has positive long-run employment effects (but negative short-run ones, probably because of lock-in effects). In Norway, a study finds no effect on earnings. According to a Danish study, there is a moderately positive effect of enforced language training on employment in the long run, but no effect on labour market participation. A Swedish study does not find any effect of a monetary bonus for meeting certain proficiency requirements on immigrants' language skills (except in Stockholm).
- Mainly on the basis of research on the long-run effects of *labour market training* for broader groups of participants, Andersson Joona argues that an increase of such training from the currently low levels would likely be beneficial.
- Research from both the Nordic and other countries finds that *subsidised private-sector employment* is the most effective labour market programme for promoting regular employment of immigrants.⁸ This is in line with results from research on active labour market programmes for broader categories of job seekers.⁹ Andersson Joona therefore recommends more use of subsidised private-sector employment within the introduction programmes. This may necessitate measures to stimulate employers' take-up of the subsidies: better information (since many employers are unaware of the subsidies) and outsourcing of employer responsibility to the Public Employment Service or staffing agencies which would then rent out staff to client firms (thus reducing risks associated with the uncertainty regarding the employees' productivity).
- According to Swedish studies, *intensified job search assistance* (coaching and counselling) has had positive effects on the employment of immigrants. In contrast, studies of a Danish programme for long-term unemployed welfare recipients did not find any effect on economic self-sufficiency.

3.4 Provision of and responsibility for labour market integration measures

The main topic of *Vibeke Jakobsen's and Torben Tranæs'* chapter is how labour market integration measures are best provided. Is private or public provision of employment services more efficient? The authors also briefly discuss central versus local government responsibility for labour market policy.

Theoretical considerations regarding private versus public providers

Research on the relative efficiency of private versus public provision of labour market services for immigrants is almost non-existent. Therefore, Jakobsen and Tranæs draw on the theoretical research literature regarding private and public provision of services in general and on empirical studies of employment services for broader groups of hard-to-place unemployed.

Optimal contracts with for-profit private providers of labour market programmes should include both a fixed payment per participant and a variable payment that depends on results (employment outcomes). The role of the variable part is to incentivise providers to deliver results, whereas the aim of the fixed part is to guarantee that providers want to participate in the system by "insuring" them against failure due to factors outside their control. The variable part should be larger, the more accurate-

⁸ This is in contrast with work practice: Norwegian studies have found weak correlations between on-the-job work training and on-the-job language training on the one hand and transitions to employment on the other hand.

⁹ However, subsidised employment in the public sector does not appear to have positive effects on transitions to regular employment.

ly employment outcomes can be attributed to the activities undertaken by the provider and the less risk averse she is (compared to the principal, i.e. the government).

Too small payment by results may result in *parking*, i.e. providers may take on many participants without giving them much assistance in order to get revenues from the fixed payments. Too small a fixed part, together with difficulties of accurately measuring to what extent job placements depend on the efforts of the provider, can instead result in *cream-ing*. This means that providers take on primarily easy-to-place individuals in order to profit from the payments according to "results".

At first sight, the profit motive of private providers could be expected to make them more efficient than public ones given that there is sufficient competition. But the practical difficulties of verifying the quality of the services provided means that such a conclusion is not warranted. The problems of measuring results are obviously huge when it comes to the integration of immigrants in the labour market, since this can be a long process where there may be only gradual progression towards employment: from language learning over other education/training and precarious jobs to more permanent jobs. In addition, public providers might be led by intrinsic motives (such as contributing to the common good) to a larger extent than private ones. Hence, there is no theoretical presumption regarding whether private or public providers of employment services for immigrants are the more efficient.

Empirical research on private versus public providers

There exists only scarce empirical research on the relative efficacy of private and public providers of employment services. Jakobsen and Tranæs go through six high-quality studies (building on randomised

experiments in order to ensure that the results are not driven by differences in the composition of the groups that are compared) from both Nordic and other European countries. These studies do not suggest that private providers have been more efficient than public ones in improving participants' employment outcomes. On balance, the empirical studies indicate that the costs for the private providers' services were higher than those for the public ones.¹⁰

Central government versus local government responsibility

There is a short discussion of where the responsibility for employment services for immigrants should rest (independently of whether the services are provided by public actors or are contracted out to private ones). Again, the discussion is based on existing research on active labour market programmes for broader groups, but it is even more scarce than the research on private versus public providers.

Theoretically, there are opposing effects. On the one hand, local authorities have an information advantage over central authorities because of better knowledge about the local labour market. On the other hand, decisions at the local level may fail to take negative effects (externalities) on other areas into account. For instance, a municipality may favour job placement there even if it would be socially more effective to promote mobility to other municipalities. The scarce empirical research referred to in the paper gives some support for the view that decentralisation to the local level implies more of public job-creation programmes there, even when they are not very effective.

3.5 Social benefit policy

The role of social insurance systems is to protect individuals against income losses due to sickness, disability and involuntary unemployment, and thereby

¹⁰ The conclusions in the chapter are very similar to those of Crépon (2018), and Bergström and Calmfors (2018).

to reduce income inequality. The downside of such income protection is *moral hazard*, i.e. that individuals' incentives to self-sufficiency through employment are weakened. Hence, social protection systems must always trade off the insurance benefits against the incentive losses. *Bernt Bratsberg, Oddbjørn Raaum and Knut Røed* analyse this trade-off problem for immigrants. An extra dimension for immigrants is that incentives to immigrate to a country are also affected by the generosity of social insurance there.

Differentiation of social benefits

A key issue in the current context is whether or not social benefits should be differentiated between natives and immigrants. Denmark has introduced strong such differentiation. There, full entitlements to social assistance require residency in the country for seven of the last eight years. Differentiation is debated also in the other Nordic countries.

The case for differentiation of social benefit levels according to time of residency in the country is stronger if the employment of immigrants is more responsive to social benefit parameters than that of natives. Bratsberg et al. quote a study of their own which finds that the sensitivity of the exit rate from temporary disability insurance to employment is much larger for immigrants than for natives in Norway. Moreover, an increase in disability benefits has been found to have a permanent negative effect on labour earnings for immigrants, whereas there is no such effect for natives.¹¹ The authors also quote studies from Denmark according to which the benefit reductions undertaken there for immigrants have had substantial positive employment effects.

Bratsberg et al. also discuss the large labour market immigration (from other parts of the European Economic Area¹²) to Norway and the risk that the migrants accept jobs with low pay in order to achieve eligibility for social benefits (which are higher than in the country of origin). Evidence is quoted for "excessive churn" of migrant workers from the new EU states. This implies that workers from these countries become unemployed at the same time as the firms where they worked hire new similar workers.

Differentiation of benefits versus activation

Although the chapter points to likely employment gains from differentiating social benefits between natives and immigrants, it does not recommend that path. The motivation is that the employment gains would be "achieved at the cost of a considerable rise in poverty" as the majority of benefit receivers will remain out of employment also with such differentiation.

The policy recommended is instead to increase the use of *activation requirements* for receiving benefits. The authors back up this recommendation with own research results according to which tightened requirements for receipt of social assistance in Norwegian municipalities reduced social assistance claims and increased employment of male immigrants from low-income source countries. The effects were much weaker or non-existent for natives (and female immigrants).

3.6 Policies for non-Western immigrant women

The contributions discussed above each analyse a specific policy and its effect on immigrant employment. In contrast, *Jacob Nielsen Arendt and Marie Louise Schultz-Nielsen* focus on a particular group,

¹¹ The authors relate their finding to the research literature on how labour supply responsiveness to benefits depends on skills. This literature does not, however, come up with any clear-cut conclusions.

¹² The European Economic Area consists of the EU member states, Iceland, Liechtenstein and Norway.

non-Western immigrant women, and evaluate how different policies influence their labour market outcomes.

The reason for concentrating on this group is that its employment rate is low compared to other groups. There are several possible reasons: non-Western immigrant women often have less education, less knowledge of the host country language and worse health problems than immigrant men. In addition, many newly arrived female immigrants are in prime childbearing ages. Source-country cultural traditions are also likely to be important.

Different policies

Nielsen Arendt and Schultz-Nielsen distinguish between five different policies: (i) family policy; (ii) introduction programmes for newly arrived immigrants; (iii) active labour market programmes for participants with longer residency in the host country; (iv) social benefit policy; and (v) education policy. The chapter reviews 26 studies on the impact of such policies on the labour market outcomes of immigrant non-Western women in the Nordic countries and also discusses research from other countries (and to some extent for other groups). The main conclusions can be summarised as follows:

- There are only few studies of *family policy*. The provision of benefits for taking care of children at home raises the uptake of paid leave for non-Western immigrant women and hence reduces their labour force participation. The only study (from Sweden) that evaluated the effect of reduced costs of child care on female labour force participation did not find any (positive) effect for immigrant women (but for native ones).
- Several studies of introducing or upgrading *introduction programmes* have been undertaken. In most cases, results are disappointing. Employ-

ment effects, compared to less extensive earlier forms of support, are at best found to be moderate and sometimes even negative. One exception is the Swedish reform in 2010 which transferred the responsibility for introduction programmes from municipalities to the Public Employment Service and strengthened the employment focus. This reform seems to have increased transitions into employment. The only (Swedish) study of language training for immigrant women finds large long-run effects of *completing* the courses (larger than for men).

- *Active labour market programmes* for participants who have lived for some time in the host country appear to have positive employment effects. Subsidised employment is found to have the largest effect. This is in conformity with findings from the general research literature on active labour market programmes.¹³ On the whole, labour market effects of active labour market programmes have been found to be smaller for women than for men.
- *Social benefit policies* have been studied mainly in Denmark (and to some extent also in Norway). The studies concern benefit levels or sanctions when work requirements are not met. Overall, the studies support the view that lower benefit levels are associated with higher employment for non-Western immigrant women. Benefit sanctions appear to have positive effects on self-support rates. In general, effects of social benefit policies have been found to be smaller for immigrant women than immigrant men.
- Studies in Denmark, Norway and Sweden have found large long-term effects of post-secondary education in the host country on employment or wages for female refugees (usually larger than for men).

¹³ See Section 3.3 above.

3.7 Wage policy

The policies discussed so far – education policy, active labour market programmes and the design of social insurance – are all under the control of the government sector. But employment also depends on wage levels. For low-skilled immigrants with difficulties of establishing themselves in the labour market, wages at the lower end of the wage distribution are important for the employment prospects. These wages are heavily influenced by minimum wage stipulations. Unlike in most other countries, minimum wages in the Nordic countries are determined not by legislation but in collective agreements. This wage setting is the topic of *Simon Ek's and Per Skedinger's* chapter.

High minimum wages and low wage dispersion

The authors begin by noting that the Nordic labour markets are characterised by high minimum wages and low wage dispersion. The high wage floors increase the risks that the productivity of many low-skilled immigrants will not be high enough to make it profitable for firms to hire them. The consequence is, as was shown in Figure 6, that Norway, Sweden, Iceland and Finland (in that order) have few low-qualified jobs where immigrants with little education and poor language skills can be employed.¹⁴ In addition, Ek and Skedinger show that, when comparing European Economic Area countries, there is a strong relationship between wage compression in the lower half of the wage distribution and the employment gap between natives and immigrants.

The authors focus on minimum wages in the four large Nordic countries in hotels and restaurants, and retail. These industries are low-pay sectors where minimum wages often bind and where many immigrants work. The minimum wage bite (the ra-

tio between the minimum wage and the average wage in the economy) in these industries are largest in Sweden (61-62%) and lowest in Finland (47-50%).¹⁵ Denmark and Norway are in between with minimum bites in the range 50-56%. Whereas the minimum wage bite has fallen over the last decade in the three other large Nordic countries, it has risen in Sweden. In absolute terms, minimum wages are highest in Norway (which has the highest average wage level of the Nordic countries).

Minimum wages, employment and wage spillovers

Theoretically, the employment effects of minimum wage rises are ambiguous. Increases from a low level could raise employment because they increase labour supply (which in this situation is likely to be the main constraint on employment). But if minimum wages are high to begin with, employment is instead probably most constrained by firms' labour demand; a minimum wage hike then instead reduces employment. As minimum wages are high in the Nordics, one should expect empirical studies of these countries to find negative employment effects of minimum wage rises. A majority of studies also does this. In addition, research that examines composition effects finds that minimum wage rises cause substitution of more qualified workers for less qualified ones. It is unclear from the studies whether or not the employment effects are larger for immigrants than for native workers. Although the effects of rises and cuts in minimum wages need not be symmetric, the existing evidence (on rises) suggests that cuts would cause employment to increase.

Ek and Skedinger conclude that minimum wage cuts are likely to promote employment for low-skilled immigrants in the Nordic countries. However, an important issue is to what extent there would

¹⁴ Whereas the four Nordic countries mentioned above (together with Switzerland) have the lowest shares of low-qualified jobs among European OECD countries and are far below the EU average, Denmark is close to it.

¹⁵ The numbers refer to 2016.

be spillover effects on other wages. These would be negative for employees who are substitutes for the workers whose wages are cut and positive for employees who are complements. International research on wage spillovers has produced mixed results. Some studies have found that minimum wage hikes contribute to higher wages also somewhat up in the wage distribution, whereas others have found no effects. Results from research on how immigration affects the wage of natives are also contradictory: some studies find falls, others find rises.

Policy conclusions

To minimise the risk of negative spillover effects on other wages and achieve a proper balance between the conflicting objectives of high employment and income equality, Ek and Skedinger advocate *targeted* minimum wage cuts. These should be negotiated between the parties in the labour market and apply only to new types of auxiliary low-skilled jobs (involving assistance to more skilled workers). The authors acknowledge that the creation of such jobs may require substantial minimum wage reductions. Therefore, they may have to be combined with generous earned income tax credits to guarantee reasonable disposable incomes and stimulate labour supply to such jobs.¹⁶

Ek and Skedinger summarise earlier research, which they have been involved in, on labour outcomes for persons who have earlier entered already existing low-qualified jobs in Sweden. It has been found that a majority of those who were hired at wages in the lowest decile of the wage distribution transition to higher wages over time. Nearly half of those that entered a low-skilled job had a more skilled job eight years later. Comparing earlier unemployed low-ed-

ucated workers who took a low-skilled job in that year with as similar as possible a group of low-educated workers who remained unemployed, the former group had a better earnings development over time. The reported findings suggest that low-skilled jobs may act as a stepping stone to employment for persons, and in particular immigrants, with low education. But the results also indicate that the effects are modest. They might become larger if more generous financial support for combining such jobs with education are given, as suggested by Ek and Skedinger.

4. What have we learnt about appropriate policies?

The contributions discussed above highlight that several policies influence the labour market integration of immigrants. Education policy, active labour market policy, social benefit policy and wage policy all matter. Changes in all these policy areas could help raise employment of foreign-born persons and narrow the employment gap to natives

Below we summarise our take on the main policy conclusions from the contributions that we have described. We also discuss the trade-offs between different objectives that are involved as well as where the uncertainties regarding policy impacts are greatest and the need for more research most obvious. Finally, we offer some reflections on the policy differences between the Nordic countries.

4.1 Lessons regarding different policies

We draw the following main policy conclusions from the chapters in the volume:

¹⁶ The argumentation is similar to that in Arbetsmarknadsekonomska rådet (2016, 2017, 2018) and Calmfors et al. (2018) to which the authors contributed. The so-called establishment jobs (*etableringsanställningar*), which are to be introduced in Sweden in the autumn of 2019, will combine low wages paid by employers with a government grant to employees so that the disposable income on such jobs equals the disposable income from a normal minimum wage (see, for example, Calmfors et al. 2018, chapter 7).

Education policy

Stronger *education efforts* have a large potential to increase immigrants' human capital and thereby improve their employment opportunities, since the association between skill levels and employment is particularly strong in the Nordic countries. Policy measures here could encompass both more *pre-primary education* and more *adult education* (some evidence suggests that the latter may be especially effective in the long run for non-Western immigrant women).

It seems important to extend measures in the ordinary school system to target *adolescent youth* who have arrived at middle- or high-school age since this group is particularly disadvantaged as compared to early-arriving children. Appropriate policies could be:

- More study support in the mother tongue.
- More time to study through summer schools and education programmes during other breaks.
- A stronger focus on the most important subjects needed to qualify for high school.
- More encouraging grading systems for newly arrived students.
- Less stringent admission criteria to vocational high school as well as other measures (including more study guidance) to stimulate the participation of immigrant youth in such education.

Active labour market policy

There is strong evidence that *subsidised employment* in the private sector is the most effective labour market programme for increasing immigrants' transitions to work.¹⁷ At the same time, this programme is only used to a limited extent within the intro-

duction programmes for newly arrived immigrants and family migrants. This is especially the case in Denmark and Norway, but also in Finland. These countries could likely benefit from more use of subsidised employment.¹⁸ This could require better information to employers about these programmes and new arrangements to reduce the risks for employers of using these subsidies, as pointed out by Andersson Joona in her chapter. This could be done by letting the Public Employment Service take the formal employer responsibility or outsourcing it to a staffing company. Alternatively, a subsidised job could start with an initial probationary period.¹⁹

Use of *labour market training* is also rather limited within the introduction programmes in the Nordic countries. The evidence on the effects of labour market training in general is mixed, although some studies have found positive long-run effects (including for non-Nordic immigrants in particular). But the case for more labour market training of newly arrived immigrants and family migrants is weaker than for more use of subsidised employment. The case appears even weaker for more use of *work practice*, where some evidence (from Norway) rather suggests negative employment effects.

As regards *intensified job search assistance*, there are some studies from Sweden finding positive employment effects. This gives some weak support for an increased use of this measure.

Existing evidence does not suggest that private provision of employment services is more efficient than public provision, although it is possible that contract

¹⁷ Subsidised employment has also been found to have large displacement effects on regular unsubsidised employment. Crowding out of employment of more advantaged groups (insiders) is, however, usually seen as a reasonable price to pay for integrating more outsiders into the labour market, since this is likely to increase the effective labour supply and therefore also employment in the long run (see, for example, Forslund 2018, 2019 and von Simson 2019).

¹⁸ In Norway, such a policy change was recommended in NOU 2019:7.

¹⁹ See also Behrenz et al. (2015) and Calmfors et al. (2018) on this.

arrangements and systems (including rating of providers and forced exit of inefficient ones) can be devised that would give such a result.²⁰

Social benefit policy

Social benefit policy encompasses both benefit levels and benefit sanctions when recipients do not fulfil job-search requirements.

Studies from Denmark and Norway find that changes in *benefit levels* (reductions in the Danish case, increases in the Norwegian) have strong effects on immigrants' employment. But studies from these countries also find that *benefit sanctions* (conditioning benefits on some form of activation) have a large impact on employment and self-sufficiency of immigrants. Overall, the described results suggest that social benefit policy is important for the employment of immigrants. It also appears clear that the provision of benefits for taking care of children at home affects the employment of immigrant non-Western women negatively.

Denmark stands out among the Nordic countries because of its strong differentiation of social assistance levels depending on time of residency in the country. It is possible that similar measures could improve employment and self-sufficiency outcomes for immigrants in the other Nordic countries if they were to be adopted.

Wage policy

International empirical research on the employment effects of minimum wage changes has produced diverse results. On the whole, however, studies from the Nordic countries suggest that minimum wage increases there have affected employment negatively. There is also some evidence that the negative employ-

ment effects of minimum wage hikes have primarily concerned those with the weakest qualifications.

Although rises and cuts in minimum wages may not have symmetric effects, there is a strong presumption that *cuts* would raise the employment of low-skilled immigrants. This would likely happen through an increase in jobs which require only low qualifica-

tions. It is not clear though how minimum wage cuts would affect other wages higher up in the wage distribution. One way of trying to avoid negative wage spillovers is if the parties in the labour market can define, and confine, minimum wage cuts to new types of auxiliary jobs that are complements to already existing more qualified ones (and thus serve to increase the productivity there) as proposed by Ek and Skedinger in their chapter.²¹

Sweden is the Nordic country where minimum wages are the highest relative to the average wage in the economy. Norway has the highest minimum wages in absolute terms. It is not obvious from theory whether it is the relative or absolute levels that are most important for the employment levels of low-skilled workers in a country. But one should expect Sweden and Norway to be the two Nordic countries that stand the most to gain in terms of increased employment for immigrants from lower minimum wages.

4.2 Combination of policies and trade-offs

Our discussion suggests that many different policies could promote higher employment for immigrants. But it is also a striking conclusion that none of the policies appear to be very effective. Therefore, a one-sided focus on a single policy is likely misguided. The appropriate question is not what policy is the

²⁰ See, for example, Finn (2011) and Norberg (2018).

²¹ See Arbetsmarknadsekonomiska rådet (2017) and Calmfors et al. (2018) for a more thorough discussion of possible auxiliary jobs

most effective one but rather how various policies are best combined.

Trade-offs between policy objectives

All policies imply trade-offs against other objectives than labour market integration and employment. The trade-offs differ between policies:

- For education policy, the trade-off is between raising employment and increasing budgetary costs. More education efforts are likely to be costly.
- Employment subsidies entail a similar trade-off as education efforts.
- Lower benefit levels have a positive impact on public finances. Here, there is instead a trade-off between employment gains for a minority (who will receive higher incomes when they move from benefits to wage incomes) and income losses for a majority who will remain on benefits.²² Benefit reductions for newly arrived immigrants may also be in conflict with principles of universalism (equal treatment) for residents in a country.
- Benefit sanctions if job-search requirements are not met contribute to higher employment without any income reductions for those who remain on benefits, but instead imply more monitoring of individuals. This, too, might have negative welfare effects for those concerned.
- Lower minimum wages imply a trade-off between income gains from those who move from non-employment to employment and income losses for those who would hold a job anyway but now receive a lower (minimum) wage.

Research alone cannot answer the question of what exact combination of policies is the best when taking all these trade-offs into account, as this will depend both on the effectiveness of various policies and on pure value judgements. For example, is it desirable to reduce the employment gap between natives and

immigrants if the price is a larger income gap because of lower benefit levels or lower average wages for immigrants? The answer obviously depends on one's relative evaluation of employment inequality versus income inequality.

Incentives for immigration

Concerns about migration incentives could influence the choice of labour market integration policies. In addition to strengthening the incentives for work, benefit cuts that apply to immigrants reduce the economic gains from migrating to a country (as the expected income there depends inter alia on expected benefits when not being employed). Thus, to the extent that a country wants to use a restrictive benefit policy to restrain immigration, the arguments for benefit cuts are strengthened. Such considerations have clearly been a motive behind the cuts in social assistance for newly arrived immigrants in Denmark.

It is not obvious how minimum wage cuts would affect incentives for immigration. On the one hand, lower wages reduce income when a migrant finds work. This reduces the expected income gain from migrating. On the other hand, lower wages also increase the probability of finding work, which raises the expected income gain. The net expected income gain depends on which of these two effects is the stronger one.

Generous education opportunities as well as generous employment subsidies for migrants to facilitate their labour market integration instead raise the expected income gains from migrating. In these policy areas, there exists a potential conflict between possible objectives of restraining immigration and of promoting labour market integration for those who have already arrived.

²² This majority is obviously larger if the benefit cut is for everyone than if it is for those who have lived in the country only for a certain period of time.

Needless to say, considerations with respect to migration incentives need not influence the choice of measures to promote the labour market integration of foreign-born persons if immigration is mainly regulated through other means such as conditions for granting asylum and border controls.

4.3 Needs for more knowledge

Despite a large research literature on the employment effects of various integration policies, knowledge is very incomplete. In some areas, research results are uncertain, in others they are more or less missing. This must also be taken into account when deciding policies. In general, it is an argument for a diversified policy, i.e. for not “putting all eggs in one basket”.

Uncertainties regarding policy impact

The studies of the employment effects of some policies are fraught with great uncertainties. As discussed above, it is a common research finding that subsidised employment is a more effective labour market programme than others. But there is a risk that the positive effects are overstated because of *selection bias*. Studies routinely try to control for differences in the composition of participants in the examined labour market programmes and of non-participants. This can be done for observables. But differences with respect to non-observables probably remain. This may be a larger problem for subsidised employment than for other labour market programmes, as employers who hire workers with the help of subsidies probably often do this with an intention to keep the workers also after the subsidy period expires. Therefore, they are likely to

make a careful screening of the persons in question (also with respect to factors that are unobservable ex post to researchers evaluating the programme).²³ Similar considerations apply to education.²⁴ Those likely to benefit the most from more education are probably overrepresented among participants in such activities relative to non-participants. Research studies are unlikely to be able to control fully for this. Therefore, one should expect the correlation between education and subsequent employment to weaken if education programmes are expanded. However, as pointed out by Pekkarinen in his chapter, the association between participation of immigrants in adult education and literacy skills is stronger in the Nordics than in other Western European countries despite the larger volumes of such education in the former countries.²⁵

One must also distinguish between *completion* of education programmes and starting them. For instance, a Swedish study of the employment effects for immigrant women of participating in language training within the introduction programme found positive effects only if the courses were completed.²⁶ This points to the importance of trying to reduce drop-out rates, which tend to be high, especially for women.²⁷ Incentives for this could be provided through monetary bonuses for completing courses (as was tried in Sweden but with unclear results), by linking social assistance to participation (as in Denmark) or by making the possibility of obtaining a permanent residence permit conditional on passing a language test (as in Denmark and Norway). However, such incentives imply difficult trade-offs as the ability to reach a certain level of proficiency in

²³ See, for example, von Simson (2019).

²⁴ It is also likely that the better long-run earnings outcomes in Sweden for earlier unemployed low-skilled persons who took low-qualified jobs as compared to those low-skilled who remained unemployed found by Ek and Skedinger in their chapter reflects to some extent that it has not been possible to account fully for composition differences between the two groups.

²⁵ However, the stronger association holds only for job-related, but not for non-job-related, adult education. See Section 3.1 above.

²⁶ Kennerberg and Åslund (2010).

²⁷ See, for example, Calmfors (2016).

the host-country language depends also on factors which are unrelated to the efforts of the individual.²⁸

Missing knowledge

The most striking lack of knowledge concerns the effects of language training. This is noticed by both Andersson Joona, and Arendt and Schultz-Nielsen, in their chapters.²⁹ This is very unfortunate, as there is a strong association between literacy skills and employment in all the four large Nordic countries. A recent survey also found that Swedish employers regard insufficient language skills as the most important obstacle to hiring with an employment subsidy.³⁰ There is a great need for research on the effects of various types of language training on both language skills and labour market outcomes.

Another important knowledge deficiency concerns the question of job-related versus non-job-related adult education. Pekkarinen, in his chapter, sees the strong(er) correlation between job-related adult education and literacy skills for immigrants (than for natives) in the Nordics as an indication that such education is the most efficient one.³¹ A Swedish study also found that participants in work practice received on average higher earnings than participants in preparatory education. On the other hand, studies from Norway did not find any effect of on-the-job work training and on-the-job language training on the transition to employment after programme completion.³² In Sweden, the take-up of subsidies for programmes combining work and education (for

both low-skilled persons in general and low-skilled immigrants in particular), where employers have to take a large part of the responsibility for organising the training/education parts, has been disappointingly low. It seems that such administrative burdens work as a disincentive for employers to engage in such programmes.³³ A possible conclusion is that study support for employees should put as small an administrative burden on employers as possible.³⁴

We also know very little about which form of governance of introduction programmes produces the best labour market outcomes. A study in Sweden found an improvement after the main responsibility was transferred from the municipalities to the central government (the Public Employment Service) in 2010.³⁵ Nonetheless, the reform also introduced several other changes to the system, such as a stronger focus on labour-market-related activities. In Norway, municipalities are responsible for the introduction programme, and employment outcomes for the participants are better than in Sweden.³⁶

The knowledge on integration policies that exists concerns almost exclusively the labour market (or sometimes the skill) impact of various policies. But there appears to be an almost total lack of *cost-benefit analyses* of various education and labour market programmes.³⁷ This may partly depend on unavailability of good administrative data on programme costs.³⁸ This is a huge problem for policy making. It is impossible for policy makers to make an

²⁸ See, in particular, Andersson Joona's chapter for a more thorough discussion.

²⁹ See Sections 3.3 and 3.6 above.

³⁰ The survey is reported in Arbetsmarknadsekonomiska rådet (2017) and Calmfors et al. (2018).

³¹ See Section 3.1 above.

³² The studies are summarised in Andersson Joona's chapter (see Section 3.3).

³³ See Statskontoret (2016).

³⁴ See Arbetsmarknadsekonomiska rådet (2017) and Calmfors et al. (2018).

³⁵ See Andersson Joona's chapter.

³⁶ See Hernes et al. (2019). The Norwegian outcomes are better than the Swedish ones in both the short and the long run. The outcomes in Denmark, which also has local responsibility for the introduction programme, is worse than in both Norway and Sweden in the long run, but better in the short run.

³⁷ This was, for example, pointed out in NOU 2019:7.

³⁸ See Ackum (2018) for the case of Sweden.

informed choice of policies without proper cost-benefit analyses of existing programmes. This is an area that should be given high priority in future research on integration efforts for immigrants.

4.4 Some reflections on policy differences between the Nordic countries

Our discussion has highlighted many similarities in both problems and policies between the Nordic countries. Although the size of immigration differs, all the four large Nordic countries face similar qualitative problems of integration of non-Western immigrants. All four countries also have similar organised introduction programmes.

Differences in problems

Nonetheless, there are also important differences. Sweden has had the largest non-Western immigration. At the same time, minimum wages relative to the average wage in the economy are higher than in the other Nordic countries. This means that there are higher thresholds for low-skilled immigrants to become employed. As a consequence, Sweden has the largest gaps in both employment and unemployment between natives and immigrants of all the Nordic countries. This suggests that Sweden may need to do more in terms of policy reforms, and possibly in more areas, than the other Nordic countries.

Norway has had much more of labour immigration than has been the case elsewhere. As pointed out by Bratsberg et al. in their chapter, this has raised specific problems of whether such immigration is stimulated by the possibility to become eligible for generous social benefits in the country. This could make the labour immigrants more prone to accept low pay and thus contribute to more wage competition in Norway, affecting wages of natives negatively. Another difference between Norway and the other

countries is that the employment gap between native and immigrant men goes down only during the first years after arrival but then widens again after a few years (whereas the pattern elsewhere usually is a steady reduction over time).³⁹ It is not clear to what extent the Norwegian pattern reflects the design of the country's social insurance system.

Differences in policies

We have also noted several differences in the policy mixes between the Nordics. The reasons are not obvious. There may be differences in policy traditions, in perceptions of the efficacy of various policies, in the magnitudes of integration problems and in preferences regarding trade-offs between various objectives.

Denmark has a wide-ranging policy of differentiating social benefits depending on time of residency in the country. As benefit levels affect the expected gains from immigration, this could reflect a greater concern with large immigration than in the other Nordic countries. But lower benefits for newly arrived immigrants are likely to promote labour market integration. It would be possible for the other Nordic countries to adopt similar differentiation of benefits as in Denmark. It would, however, entail difficult trade-offs with respect to goals of low income inequality and universalistic welfare systems for residents in a country. Another option is to rely more on activation requirements for receiving benefits, but this might involve other trade-offs relating to both integrity and efficiency concerns with intensive monitoring of (formal) job-search activities.

A striking observation is the much higher reliance on subsidised employment in Sweden than in the other Nordic countries. The reasons for this are not clear. One possibility is that the high minimum wages rel-

³⁹ In Denmark, the employment gap between native men and men with a refugee status also goes down during the first seven to eight years after arrival but then increases again (Schultz-Nielsen 2017).

ative to average wages in Sweden necessitate more subsidies if low-skilled workers are to pass the implied high productivity thresholds. The extensive evidence regarding the efficacy of employment subsidies in promoting employment suggests (despite the question marks regarding overstated effects discussed in the previous section) that a more frequent use of this labour market programme is also motivated in the other Nordic countries.

Finally, the different organisation of the introduction programmes for newly arrived refugees and family migrants in the four large Nordic countries should be noted. In Denmark and Norway, these programmes are organised by the municipalities, while they are administered by the Public Employment Service in Sweden. In Finland, both the municipalities and the Public Employment Service are involved. Existing research does not, however, permit any conclusions on the best form of governance of the introduction programmes.

The value of policy diversity

This volume tries to collect evidence on which policies are most appropriate to promote labour market integration of immigrants in the Nordics. The great similarities between the countries in terms of integration problems and welfare state models makes such an effort worthwhile. Learning from research and experiences from all the Nordic countries gives a larger pool of knowledge. There are lessons to learn from "best practices". But at the same time, one should not strive for uniformity of policies across the Nordics. In view of the great uncertainties of what works best, policy diversity has a value in itself since it is a precondition for evaluating the efficacy of different policies. Differences in policy traditions and other conditions can sometimes also result in similar policies giving very different results in various countries.

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Chapter 2

Education Efforts for Immigrants

Tuomas Pekkarinen¹

ABSTRACT

This chapter examines the role of education in facilitating the integration of immigrants in the Nordic countries. I use PIAAC data to document that immigrant employment improves with skills as it does for natives. The roles of pre-primary education, the school system, and adult education in improving immigrant skills is studied. Pre-primary education is positively correlated with test scores, but immigrant attendance rates are relatively low. Schools allocate resources towards immigrants, but we lack evidence on the effectiveness of these efforts. Immigrants participate in adult education programmes more than in the rest of Europe and participation is positively correlated with skills.

Keywords: Education, immigrants, schools.

JEL codes: I24, J15, J24.

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1. Introduction

One of the characterising features of Nordic labour markets is the combination of low wage compression and high minimum wages. For many decades the so-called Nordic labour market model was admired for its success in combining these features with high employment and economic growth. Education policy played a key role in the functioning of this system. A high-quality school system was supposed to guarantee that young people who were entering the labour market met the high skill requirements created by high minimum wages. Similarly, workers who lost their jobs because of structural changes could easily update their skills in labour market training or in publicly provided adult education courses.

Yet for workers who, for one reason or another, are not successful in meeting the high skill requirements that these institutional features imply, Nordic labour markets are difficult to access. Even though average employment levels are high in the Nordic countries by international standards, employment levels of low-skilled individuals are typically lower than in Anglo-Saxon countries where wage dispersion is larger and minimum wages lower.

Given these institutional features, the recent influx of refugee immigrants imposes a challenge on the Nordic labour markets. Refugee migration is not typically motivated by labour market considerations and the skill levels of refugee migrants are often not a good match for the existing labour demand in the Nordic labour markets. From a labour market perspective, the increase in the number of refugee migrants can be seen as an increase in the supply of low-skilled labour. Standard textbook models of perfectly competitive labour markets would suggest that wages adjust to such a change in the skill structure of labour supply. One

It is well-known that employment gaps between immigrants and natives are large in the Nordic countries.

would expect the wages in low-skills occupations to decline in order to accommodate the increasing supply. However, rapid wage adjustment seems unrealistic in the Nordic context. Therefore, it is likely that many of the recently arrived refugee migrants will have difficulties in obtaining employment in the current institutional setting. In these circumstances, education policy should play a key role in improving the skills of the newly arrived immigrants so that they correspond better to the existing structure of labour demand.

This contribution analyses the extent to which educational policies can help solve the problem of low-skilled immigrant employment. I start by showing, with data from the OECD, that skills are key in successful integration into the Nordic labour markets. At high or medium skill levels, native-immigrant employment gaps are clearly lower than at low skill levels. Hence, improving the skill levels of immigrants could be a solution to the problem. I then discuss educational policies that have proved successful in improving immigrant skills and examine to what extent such policies have been adopted in the Nordic countries. I analyse the role of schools and of pre-primary and adult education. Particular focus is put on policies that target immigrants such as language instruction and remedial education. Finally, I discuss the relative efficiency of devoting resources to these policies in turn.

Table 1 Native-immigrant gaps in literacy test scores by formal qualification in Western Europe and the United States, 2012

	Lower than secondary	Secondary	Post-secondary non-tertiary	Tertiary	Total
Austria	35	18	25	17	25
Denmark	46	34	36	47	40
Finland	50	39	27	61	45
France	38	26	31	34	38
Germany	32	19	21	27	28
Ireland	4	17	18	12	6
Italy	28	31	24	17	30
Netherlands	47	36	38	39	44
Norway	54	32	37	42	40
Spain	20	25	31	23	25
Sweden	61	41	41	47	51
United States	33	26	16	19	28
United Kingdom	36	24	27	31	24

Note: The cells report the native-immigrant difference in average test scores within categories defined by formal educational qualifications.

Source: PIAAC (2012) and own calculations.

2. Immigrants and skills in the Nordic labour markets

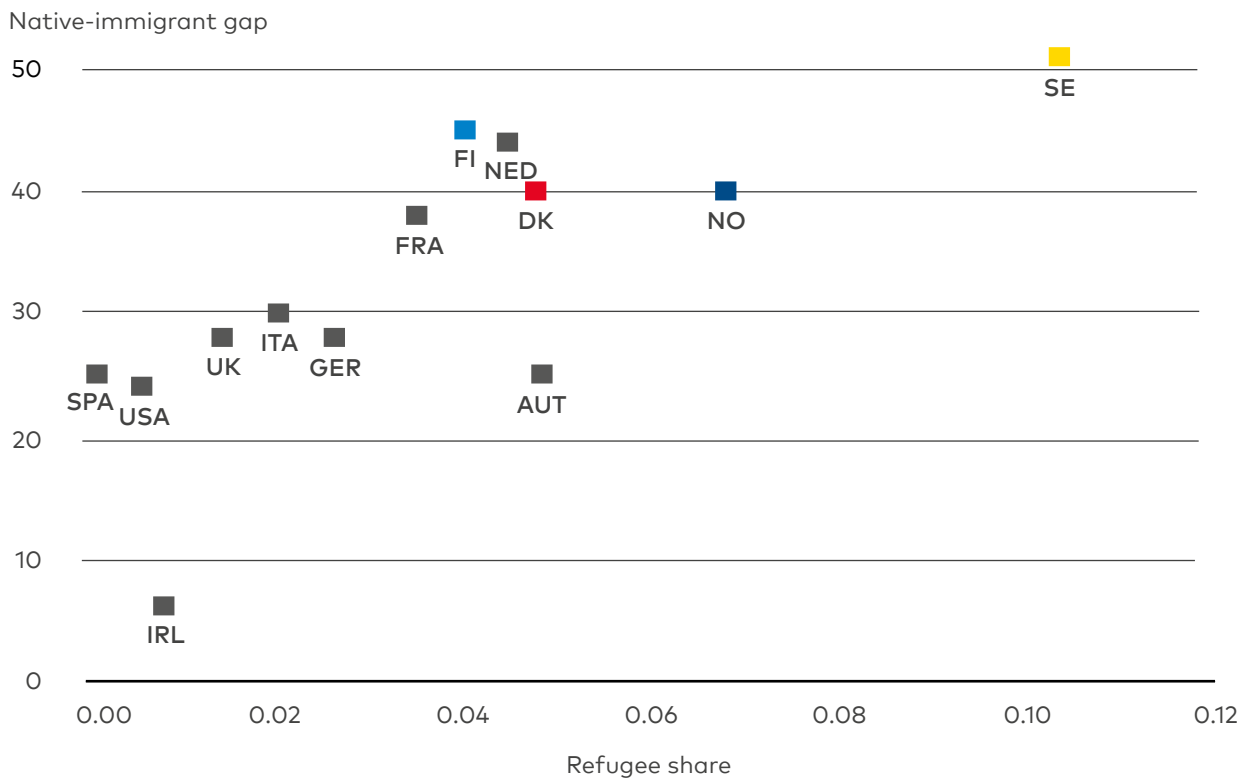
It is well-known that employment gaps between immigrants and natives are large in the Nordic countries. The failure of large numbers of immigrants to find work may be caused by both supply- and demand-side factors. Reluctance to employ immigrants or outright discrimination may make it harder for immigrants to find work than for native job seekers with similar characteristics. It is also possible that some institutional features in the Nordic labour markets disincentivise immigrants from searching for jobs. On the other hand, many immigrants may not possess the kind of skills for which there is demand. Indeed, the fact that a large fraction of the recent immigrants to the Nordic countries are refugees whose migration decisions are not mainly motivated by labour market reasons suggests that their skills may not be a good match for existing demand.

The comparison of skill levels and their role in explaining native-immigrant employment gaps across

different countries is hampered by the lack of comparable skill measures. This is a particularly difficult problem in the case of migrant skills, since the most often used measures, such as formal educational qualifications, may give a misleading picture. Foreign qualifications usually do not translate very well to domestic ones, and they may be a bad proxy for the labour market skills of the immigrants. Fortunately, the international achievement tests that organisations such as the OECD conduct provide comparable data on the skill levels of representative samples of native-born and foreign-born populations.

Table 1 reports differences in the average literacy test scores of native- and foreign-born adults by formal qualification categories in several countries in the OECD's PIAAC achievement test. PIAAC is the first full-scale assessment of adult skills in the OECD. PIAAC assesses the proficiency of adults from age 16 onwards in literacy, numeracy, and problem solving. The aim is to measure "key information-processing competencies" that should be relevant to adults in their usual social contexts and

Figure 1 The correlation between native-immigrant test score gaps and the share of refugees in the immigrant population



Source: Own calculations based on PIAAC (2012) data and the World Bank Database. The native-immigrant gap on the vertical axis is calculated as in Table 1 using PIAAC data. Refugee share refers to the share of refugees in the immigrant population in 2015 calculated using data from the World Bank.

work situations. The table reports the test score differences in points.²

Table 1 reveals that average native-immigrant gaps in skills, as measured by PIAAC literacy tests, are high in the Nordic countries by international standards. Sweden and Finland have the highest average gaps among these countries at 51 and 45 points, respectively. These gaps are both larger than the standard deviation of the literacy test scores among all the participating countries. The achievement gaps are somewhat lower in Denmark and Norway, but also there the gaps are clearly higher than, for example, in the Anglo-Saxon

countries. The same pattern is also reflected within educational categories. In fact, within each educational category, one of the Nordic countries has the highest native-immigrant gap among the countries shown. Finland has the largest gap among individuals with tertiary education, whereas Sweden has the largest gap in all the remaining categories. This pattern implies that the high average native-immigrant gaps in skills in the Nordic countries are not simply a result of differential migrant selection by formal qualifications.

The differences in the native-immigrant skills gaps across countries in Table 1 naturally reflect many

²The PIAAC tests scores range from 0 to 500 with the OECD mean set at 250 and the standard deviation at 50. Iceland is the only Nordic country that did not participate in PIAAC.

Table 2 Immigrant and native employment rates by literacy proficiency in Western Europe and the United States, 2012, percent of labour force

	Proficiency level 1		Proficiency level 2		Proficiency level 3		Proficiency level 4-5		Ratio between levels 4-5 and 1	
	Native	Immigrant	Native	Immigrant	Native	Immigrant	Native	Immigrant	Native	Immigrant
Austria	62	60	71	69	80	76	82	76	1.29	1.27
Denmark	57	55	72	64	80	71	85	74	1.40	1.29
Finland	47	47	63	73	75	77	79	76	1.60	1.64
France	56	53	65	59	68	69	72	69	1.21	1.30
Germany	62	63	75	69	81	75	83	73	1.31	1.19
Ireland	44	53	59	57	68	64	77	78	1.55	1.21
Italy	49	68	53	61	63	54	70	96	1.29	0.79
Netherlands	60	52	71	61	82	73	86	82	1.37	1.40
Norway	60	66	74	76	83	85	89	94	1.38	1.29
Spain	46	50	58	58	67	68	75	75	1.46	1.36
Sweden	56	48	69	71	78	83	86	90	1.39	1.73
USA	59	75	68	74	79	78	83	82	1.34	1.04
UK	54	57	68	68	76	77	84	78	1.41	1.35
OECD	57	69	66	67	77	73	82	79	1.35	1.06

Note: Cells report immigrant and native employment rates by proficiency levels based on the scores in PIAAC literacy tests.

Source: PIAAC (2012) and own calculations.

factors. One important factor that can potentially explain a large fraction of the cross-country differences in native-immigrant gaps is the structure of immigration. In particular, the share of refugees in the immigrant population is considerably lower in the Anglo-Saxon countries than in the rest of the countries listed in Table 1. Figure 1 plots the native-immigrant literacy gap in PIAAC against the share of refugees in the immigrant population in 2015 according to World Bank Data. There is a clear correlation between the test score gap and the refugee share: the higher the share of refugee migrants, the larger is the skills gap between natives and immigrants.³

Although the composition of immigration is important for explaining the skills gaps, policymakers who are trying to improve the labour market integration of immigrants have to take the structure

of the immigrant stock as given. It has important ramifications for the skills structure.

Immigrants with high skills fare well in the Nordic labour markets. This pattern can be seen in Table 2 which reports immigrant and native employment rates by literacy proficiency levels in PIAAC. Proficiency levels are a way of summarising the test score information in PIAAC⁴ data by categorising individuals according to their test results. In the table, proficiency levels vary from the lowest, 1, to the highest category that combines levels 4 and 5.

Table 2 reveals that employment rates increase very rapidly with skills in the Nordic countries for both immigrants and natives. This pattern is particularly striking in Sweden and Finland where the ratios of the immigrant employment rates between the proficiency levels 4-5 and 1 are the highest among

³ The refugee shares are from 2015, since the data on migrant stocks are only available every five years. Using 2010 refugee shares provides a similar pattern across countries although the refugee shares are smaller in all the countries.

⁴ Using test scores in numeracy and problem-solving yields virtually identical patterns. Test scores in different areas are strongly correlated for individuals.

the countries shown (1.7 and 1.6 respectively). In all the Nordic countries, this ratio is clearly higher than the OECD average or the one in the United States. At the same time, the table shows that immigrants with the lowest level of proficiency in literacy have large difficulties in finding employment. With the exception of Norway, the immigrants in the Nordic countries do relatively worse than similar immigrants in other high-income countries or in the OECD on average.

The comparison of skill levels of immigrant and native populations across countries reveals that the gaps are relatively high in the Nordic countries. Hence it is not surprising that immigrant employment levels are clearly lower than native ones. However, when comparing immigrants and natives with similar levels of skills, these gaps decrease considerably. Moreover, the skill gradient of employment, that is how rapidly employment rates increase with skills, seems to be particularly steep in the Nordic countries, and in Finland and Sweden in particular. Therefore, it seems that the Nordic labour markets do reward immigrant skills. Policies that succeed in reducing the skill gaps between immigrants and natives would likely also reduce employment gaps.

3. The education system and the native-immigrant achievement gap

The analysis above suggests that the native-immigrant gaps in the Nordic countries are primarily a skills question. Hence, an obvious way of improving the labour market outcomes of immigrants in the Nordic countries would be to enhance their skill levels. One obvious policy instrument that can be used to try to achieve this is education policy.

3.1 Economic theory and investment in education

The typical economic approach to the analysis of investment in education is based on the classical theory of human capital, developed by Becker (1993) and others. This theory builds on the assumption that individuals make their educational investment decisions with the goal of maximising lifetime utility. Individuals are assumed to have perfect information about the future demand for skills and to be unhampered by credit market frictions. The individual has to balance the benefits of education against its costs. The utility-enhancing benefits of education are thought to arise from two sources. First, education raises productivity in the labour market and enables workers to earn higher wages and achieve higher levels of consumption. Second, education itself may have some consumption value for individuals. The costs of education can be direct or indirect. Direct costs typically include monetary costs such as tuition, which in the Nordic countries are usually negligible. Effort costs, such as the psychological strain of undergoing demanding training, are usually also included in the direct costs of education. In the Nordic context, the indirect costs of education, in the form of by-gone earnings, are usually the most important component of the costs. The opportunity cost of education is the amount of earnings the individual could earn in the labour market during the time invested in education.

The key feature of the human-capital model is that the benefits of education are decreasing with the age of the individual, while the opportunity costs of education become higher with age. The finiteness of human lives means that older individuals have less time to reap the benefits of educational investments. But the productivity of individuals also increases through work experience. Together these features imply that the returns to invest-

ments in education are higher when individuals are young. The importance of early investments has been further emphasised in recent years when the human-capital model has been enriched by a more detailed modelling of the formation of skills building on insights from developmental psychology and cognitive sciences. Economists now acknowledge that the return to later investments in human capital increases with the amount of early investments.⁵

The basic human-capital model leaves little scope for welfare-improving public interventions in education. Even if individuals are somehow constrained in their investment decisions, models of skill formation suggest that effective public interventions should take place at early ages. However, immigrants, and refugees in particular, are a special case both from the perspective of the classical human-capital model and the theory of skill formation. Even if one was willing to assume that individuals make their educational investment decisions under perfect information about the structure of future skill demand in the labour market, immigrants usually have done this with a very different kind of labour market in mind. This applies to working-age, first-generation immigrants as well as to their children who have already started schooling in their countries of origin. Especially in the case of refugee immigrants, it is completely unrealistic to assume that these individuals would have been able to foresee that they will at some point move to a country where skill demand is completely different from the one in which they made their education decisions. Immigrants should therefore be a group where the case for public intervention in the form of targeted education policies is particularly

well-founded. Moreover, given that the quality of the education systems of the source countries may vary substantially, some of the arriving immigrants will have significant gaps in their earlier skill investments. Therefore, there is considerable scope for the education system of the receiving country to improve the skill levels of the arriving immigrants.

3.2 Previous literature on the effect of education policies on native-immigrant skill gaps

Although the immigrant-native gap in educational attainment is a very common problem especially in Europe, the literature on policies that are effective in reducing these skill gaps is scarce. The main reason for the lack of rigorous research is that it is very difficult to come up with research designs where one would be able to identify the effects of particular policies on the achievement gap under plausible assumptions. Because of this difficulty, the literature has mainly focused on documenting correlations of certain policies and immigrant achievement.

Effectiveness of various school policies have been studied by Schneeweiss (2009) and Cobb-Clark et al. (2012) who use international test score data, such as PISA or TIMSS, to examine the effects of policies on the skills of adolescent immigrants.⁶ These studies show that language spoken at home and the amount of years spent in the host country are the most important predictors of immigrant achievement. These factors are obviously outside the realm of education policy, but the correlations do suggest that policies such as facilitating access to pre-school education and targeted language training can reduce the native-immigrant gap in achievement.

⁵ See Heckman and Mosso (2014) for an overview of this literature.

⁶ Programme for International Student Assessment (PISA) is an international achievement test for 15-year-olds conducted by the OECD. The Third International Mathematics and Science Study (TIMSS) is a test for nine- and twelve-year-olds organised by the International Association for the Evaluation of Educational Achievement (IEA).

Whereas the literature on the economics of education has found that school resources, such as reduced class size, have an effect on average student achievement, the results on the correlation between resources and the immigrant-native gap in achievement are mixed. Schneeweiss (2009) fails to find any clear correlation, while the results in Cobb-Clark et al. (2012) actually suggest that native students benefit more from additional resources and, as a result, may end up increasing the native-immigrant gap in achievement. However, as these studies do not focus on resources targeted at immigrant pupils, one cannot draw conclusions on such targeting from them.

The research on the effects of adult education on immigrant-native gaps is, if possible, even more scarce than the studies on school policies. Most of the literature assesses the effectiveness of targeted introduction programmes where education and training only form a part of the measures that are used to enhance the employability of immigrants. The few available studies on the effects of adult education programmes on immigrants deal with the effects of language instruction. Hayfron (2001) as well as Kennerberg and Åslund (2010) examine the effects of immigrant language courses in Norway and Sweden, respectively. Hayfron finds that the language instruction is successful in enhancing the skills of immigrants in Norwegian but fails to find any earnings effects. Kennerberg and Åslund are not able to examine the effects of the Swedish language instruction programme (SFI) on language skills. However, they do find that this kind of training has positive employment effects for immigrants in Sweden although it takes up to five years for the effects to emerge.

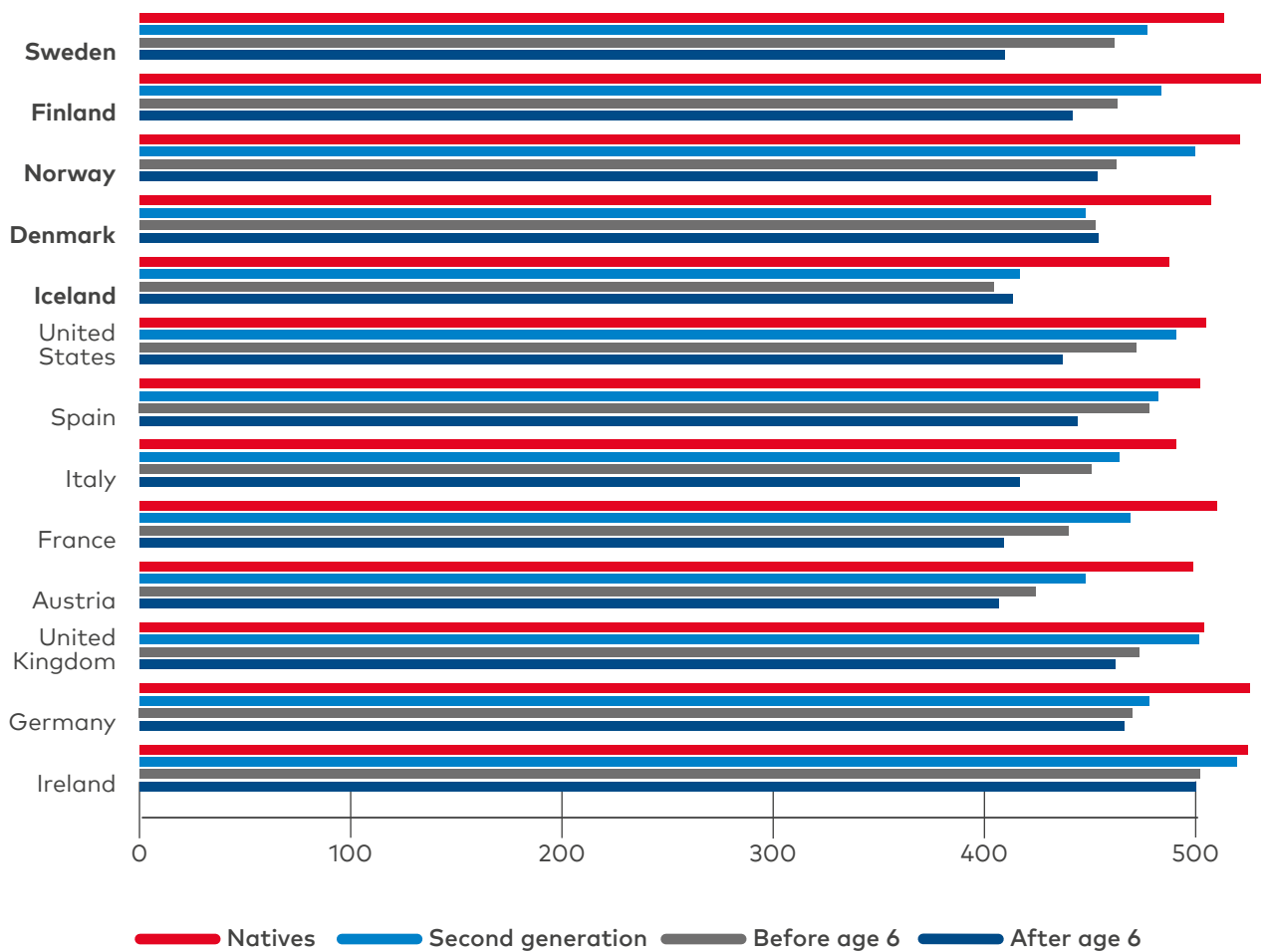
4. School policies and the integration of immigrants

International studies cited above point towards pre-primary education and remedial language training as promising tools that can be used in schools to reduce the native-immigrant gaps in achievement. This section discusses the available evidence on the effects of these policies in the Nordic context and presents some results on the correlation of these tools and the native-immigrant gap in the PISA data. We start the discussion by comparing the differences in immigrant achievement as a function of age at arrival in the Nordic countries and compare these patterns with other countries. Age at arrival is obviously negatively correlated with the time that immigrant children are exposed to the influences of the host country. Since one of these influences is the education system of the host country, the achievement differences between early- and late-arriving immigrant children are, among other things, indicative of the success of the schools in enhancing immigrant achievement.

4.1 Late-arrival penalty

Negative correlation of age at arrival of first-generation immigrants and their performance along various dimensions is a very common finding. In the case of test scores this pattern has been documented, for example, in OECD (2012). Several studies have also documented a pattern of late-arrival penalty in school performance. Many of these studies have focused on identifying the "critical age" of arrival after which achievement declines rapidly. Examples of this literature are Böhlmark (2008) and Bratsberg et al. (2012) who study the age-at-arrival penalty in Sweden and Norway, respectively, as well as Corak (2011) who conducts a similar analysis with Canadian data. Böhlmark and Bratsberg et al. use grade point average at the end of compulsory school as a measure of achievement.

Figure 2 Average reading test scores for various groups, 2015



Source: Own calculations based on PISA 2015.

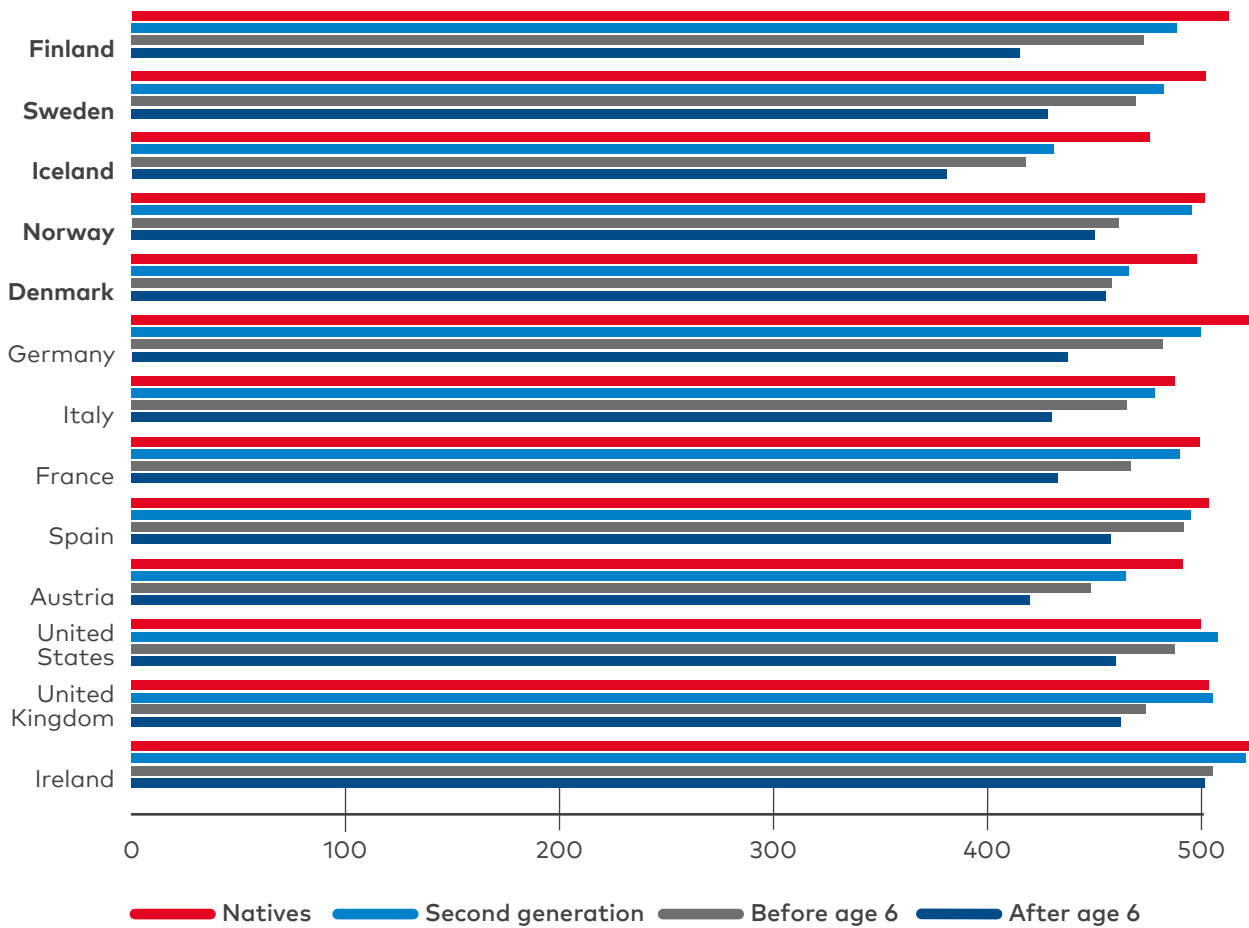
Both studies find “critical arrival ages” after which results decline rapidly. These ages vary between seven in Norway and nine in Sweden. Similarly, Corak (2011) finds that the probability of completing high school in Canada starts to decline after age nine years. The results in these studies therefore indicate that years preceding puberty are critical arrival ages. This is consistent with the results in van den Berg et al. (2014) who examine the critical-age hypothesis with a richer set of outcomes.

Figure 2 compares the late-arrival penalties across countries using PISA 2015 test scores in literacy. The diagram documents average literacy test scores for natives and second- as well as first-generation immigrants. The latter are grouped into two cate-

gories depending on how old they were when they arrived in the country. I use age six to divide the first-generation immigrants into groups, since this is an age after which most children are enrolled in school in the OECD countries. The Nordic countries are compared with the same countries as in the rest of this chapter. Both Nordic countries and the comparison countries are listed in descending order according to the gap in average reading score of immigrants who arrived in the country before and after age six.

The diagram shows that performance of late-arriving first-generation immigrants varies considerably across the Nordic countries. Whereas late-arriving immigrants in Iceland and Sweden are among

Figure 3 Average reading test scores for various groups, adjusted for parental background, 2015



Note: Test score means are adjusted for the highest education level of the parents and the socioeconomic status of the family using the OECD’s socioeconomic background index.
 Source: Own calculations based on PISA (2015).

the worst performers in the group of comparison countries and Finland is close to the average, this group performs considerably better in Denmark and Norway. However, among the early-arriving immigrants Sweden is a mid-ranking country and more or less at the same level as Denmark, Finland and Norway. Indeed, in Denmark and Norway the performance of early- and late-arriving immigrants hardly differs at all, and in Iceland the early-arriving immigrants actually perform slightly worse than the late-arriving immigrants. In Sweden, on the other hand, the gap between the early- and late-arriving immigrants, 52 points, is the highest among the countries shown.

Naturally, immigrants who arrive in the country at different ages may differ in various characteristics. For example, immigration has changed from mainly labour migration to refugee migration over the past 40 years in many European countries. More recently, the countries from which the immigrants arrive have changed. These compositional changes may explain a large part of the achievement differences between early- and late-arriving immigrants in Figure 2. To identify the effect of time spent in the host country on achievement, one would like to control for the composition of the immigrant cohorts.

Earlier research on this topic has used several strategies to deal with the issue. Often researchers have been able to compare the performance of early- and late-arriving immigrants from the same countries and regions and sometimes, as in the case of Böhlmark (2008), even from the same families. Unfortunately, PISA data give very limited possibilities to control for background characteristics of immigrants. In Figure 3, the literacy test scores of natives, second-generation immigrants and the two first-generation immigrant groups are adjusted for parental education and socioeconomic status so that the gap estimates are based on regressions that control for these variables. The diagram presents the average scores for individuals who have the mean index value of the OECD socioeconomic background index and whose parents have the median educational level.

Conditioning on parental background decreases the gap between early- and late-arriving immigrants somewhat in Sweden, to 44 points, and increases it to 54 points in Finland and to 26 points in Iceland. In Denmark and Norway, conditioning on background variables does not affect the gap between the achievements of early- and late-arriving immigrants in a significant way. While conditioning on such a limited number of background characteristics is obviously unsatisfactory, these figures suggest that the difference in test scores between early- and late arriving immigrants is not affected dramatically by adjusting for background characteristics of the immigrant cohorts.⁷

According to Figure 3, immigrant tests scores increase considerably with the time spent in Finland and Sweden and to a lesser extent in Iceland. Immigrants who arrive in these countries before the

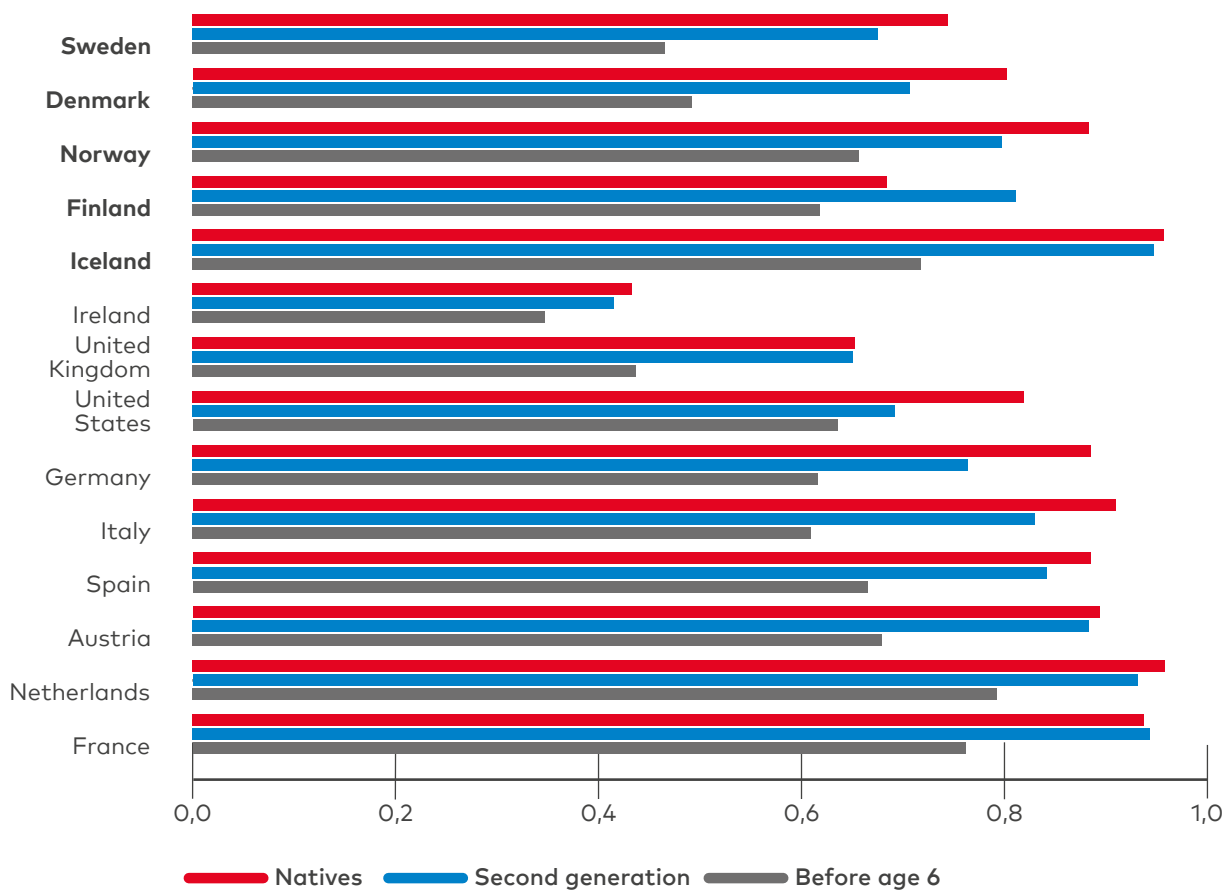
school-starting-age perform much better than immigrants who arrive at later ages. This improvement in achievement is also large by international standards. On the other hand, in Denmark and Norway the performance of immigrant children does not improve with the years spent in the country. Since the time spent in the host country is mechanically correlated with the number of years that the immigrants are able to benefit from the host country schools, the late-arrival penalty also reflects the influence of the school system. However, these calculations only control for the basic background characteristics that can be measured with PISA data. It is possible that some of the differences in the achievement of early- and late arriving immigrant children can be explained by compositional differences that we do not observe with the data at hand. Moreover, the achievement levels of the immigrants in Finland, Iceland, and Sweden are still low compared to other countries. Hence, even though the school systems seem to improve the scores, they fail to increase them enough to make up for the initial gap in achievement.

4.2 Importance of pre-primary education

The fact that the age at arrival correlates negatively with test scores suggests that the earlier the immigrant students can start their educational career in the arrival country the better. Therefore, pre-primary education should be a promising tool to facilitate the integration of immigrant children who arrived in the country early enough to attend it. Pre-primary education is closely linked to the primary school curriculum in many countries. Even when this link is weak, pre-primary education provides a setting where immigrant children are exposed to the language of the host country. Hence, it seems obvious that participation in pre-primary

⁷ PISA (2012) does include some information on the source country of immigrants. However, this information is missing for many of the countries in Figure 3 and the cell sizes of source country groups are too small for a meaningful analysis.

Figure 4 The share of children who attends more than one year of pre-primary education for various groups, 2012, percent



Source: Own calculations based on PISA (2012).

education should decrease the native-immigrant gap in achievement.

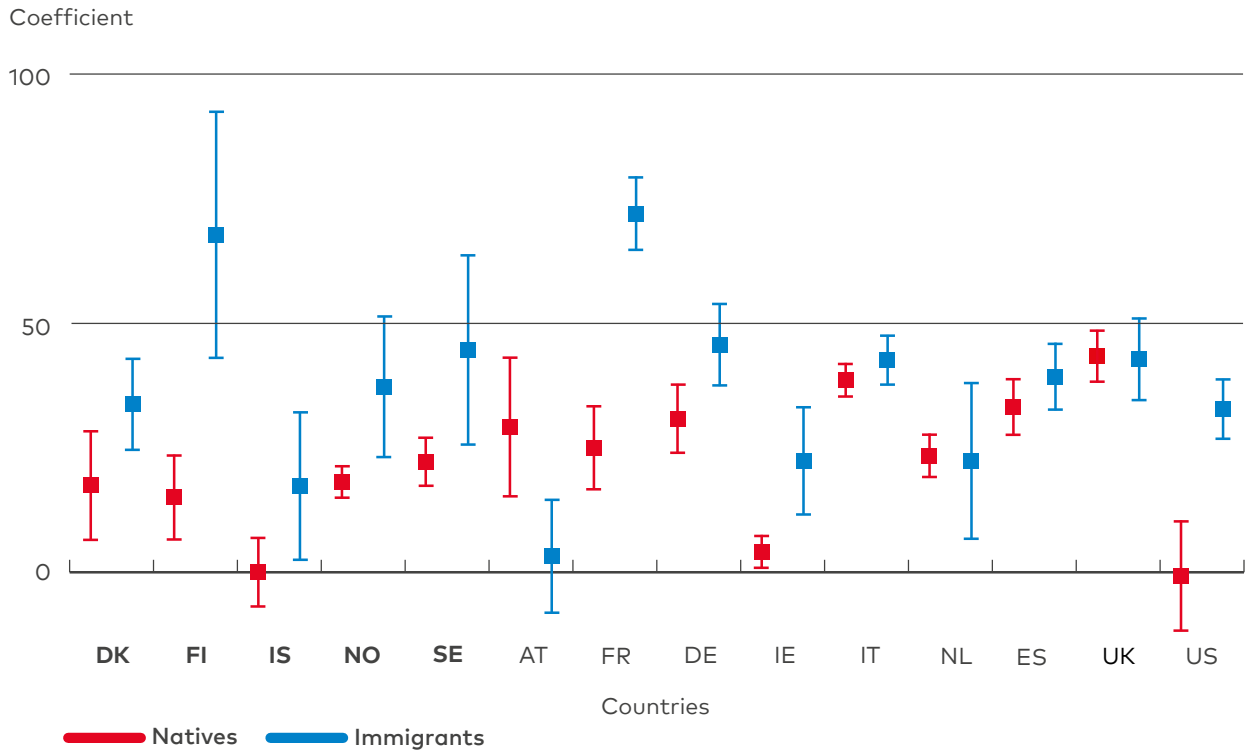
As was explained above, the role of pre-primary education has been emphasised in recent research that seeks to understand the formation of human capital during childhood and adolescence. Evaluations of pre-primary education initiatives targeted at disadvantaged children, for example the American Perry Pre-school Program (see Heckman et al. 2013), have also shown that it may be a very effective tool in reducing the achievement gaps between students from different backgrounds.

Nordic countries differ from other OECD countries in having heavily-subsidised, publicly-provided pre-primary education for large parts of the pop-

ulation. It is therefore not entirely clear how the results on the effects of pre-primary education from, for example, Anglo-Saxon countries can be generalised to the Nordic context. However, there are several Norwegian studies, such as Havnes and Mogstad (2012), which suggest that pre-primary education is likely to diminish the gaps between students from different socioeconomic backgrounds also in a Nordic context. Furthermore, Norwegian evidence in Drange and Telle (2017) suggests that participation in pre-primary education increases the educational achievement of female immigrant students.

Figure 4 plots the share of children who attends pre-primary education for more than one year according to the PISA 2012 data in the Nordic and the

Figure 5 The relationship between attending pre-primary education and literacy test scores conditional on socioeconomic background for natives and immigrants, 2012



Note: The figure depicts regression coefficients of dummy variables for having attended pre-primary education for natives and immigrants by country. In the regressions, literacy test scores are regressed on the pre-primary education dummy variable while controlling for parental background and gender. All regressions use PISA (2012) data. The dots and diamonds reflect the size of the regression coefficients and the lines correspond to 95% confidence intervals of these estimates. If the lines do not overlap zero, the regression coefficients are significant at the 95% confidence level. Source: Own calculations.

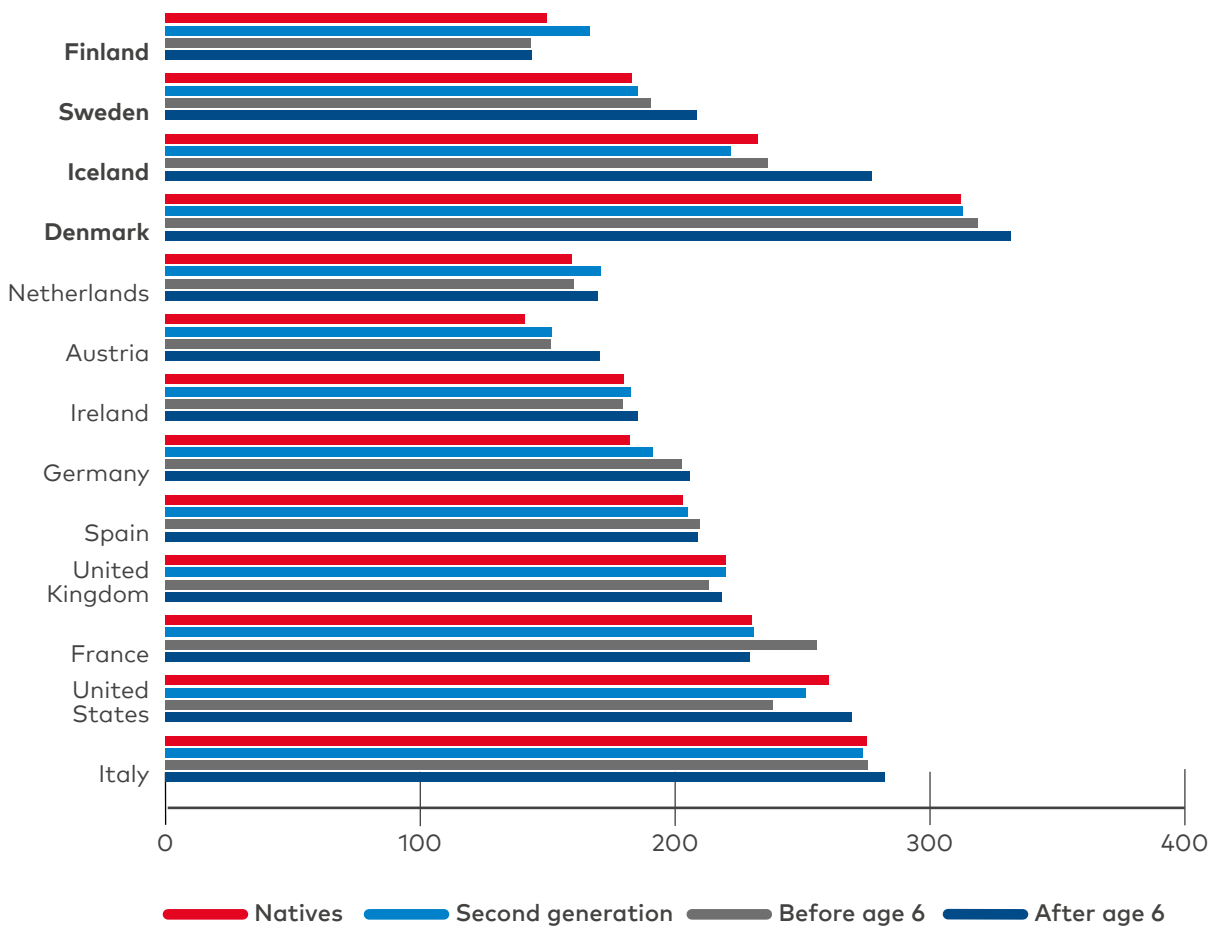
comparison countries.⁸ The countries in Figure 4 are ordered based on the attendance rate of the second-generation immigrants. Although the share of children who attends any pre-primary education is typically very high in the Nordic countries, the share of children who attends more than one year is, with the exception of Iceland, smaller than in countries such as France where pre-primary education has been incorporated into compulsory education. This is particularly the case for second-generation immigrants. The diagram reveals that second-generation immigrant children in Iceland are most likely to attend more than one year of pre-primary education among the countries shown. In the other Nordic countries, the percentage of second-gen-

eration immigrant children attending pre-primary education for more than one year is smaller than in countries such as Italy, Spain, Austria, and France. In all the Nordic countries, except Finland, the gap between the attendance of immigrant children who arrived in the host country before age six and natives is also relatively large.

Pre-primary education is clearly positively correlated with test scores in PISA data. Figure 5 reports the regression coefficients of dummy variables that take value 1 if the respondent has attended pre-primary education for one or more years and 0 otherwise. In these regressions, literacy test scores are regressed on the pre-primary education dummy variable and

⁸ The PISA questionnaire is addressed to 15-year-olds in 2012. Hence, the pre-primary attendance information refers approximately to the years 2000-03.

Figure 6 Minutes of language instruction per week in school for various groups by country, 2009



Source: Own calculations based on PISA (2009).

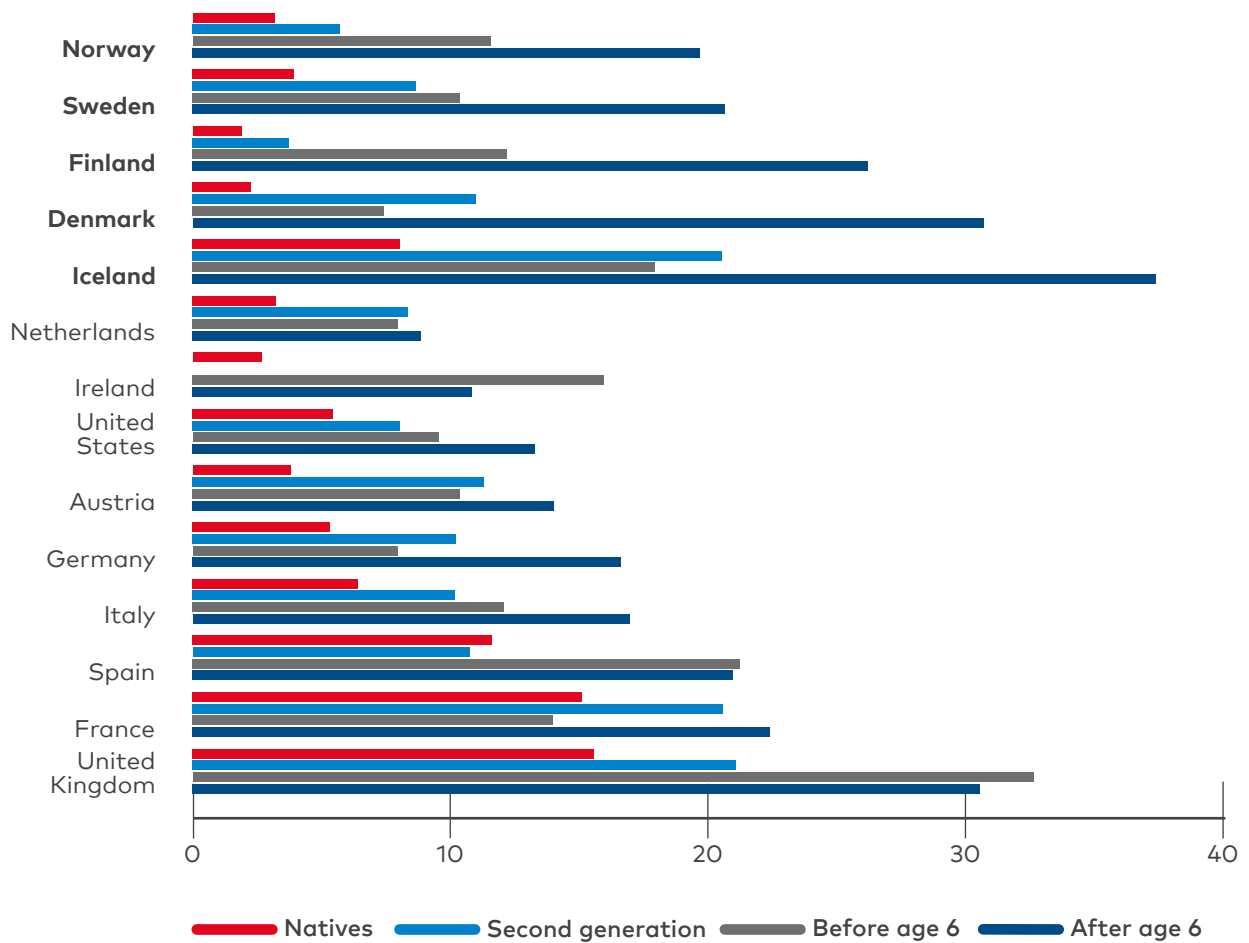
controls for parental background and gender, pooling both first- and second-generation immigrants, and natives using data from PISA 2012. The diagram also reports the 95% confidence intervals of the coefficient estimates.

The estimates reported in Figure 5 can be interpreted as test score gaps, adjusted for background variables, between the students who have attended pre-primary education and those who have not. These gaps are clearly positive and significant in the Nordic countries for both natives and immigrants, with the exception of native children in Iceland. In Finland, the gap between immigrant children who have attended pre-primary education and those who have not is the second largest after France. The differences between the immigrant and native coef-

ficients are also large. In Finland immigrant children seem to benefit the most, in relative terms, from pre-primary education compared to the native children.

The differences in Figure 5 can reflect many factors that are not observable in the PISA data. There are several reasons to believe that participation in pre-primary education is correlated with unobservable factors that are also correlated with literacy skills. Therefore, the correlations in Figure 5 do not necessarily reflect the effects of pre-primary education. However, if one is willing to assume that immigrants and natives are not differentially selected into pre-primary education, Figure 5 suggests that immigrant children do benefit more from pre-primary education than native children in the Nordic

Figure 7 Share of students who receive remedial language education outside normal school hours for various groups by country, 2009, percent



Source: Own calculations based on PISA (2009).

countries. Against this background, the fact that the Nordic countries, with the exception of Finland, are not entirely successful in targeting pre-primary education at immigrant children is a cause for concern. Especially the participation rates of second-generation immigrant children in Denmark and Sweden are low by international standards according to Figure 4.

4.3 Language instruction

The school curriculum often provides possibilities of enhancing the skills of immigrants. For example, schools can put extra resources into additional instruction hours or provide possibilities for immigrant students to get remedial education outside of normal school hours.

Previous research suggests that increasing instruction time can have a positive effect on student achievement and can be especially beneficial for students from disadvantaged backgrounds, such as immigrants. For example, charter schools that have longer instruction hours have been shown to improve the test scores of minority students in the United States (Dobbie and Fryer 2011). Furthermore, Lavy (2015) uses PISA data to show that instruction time has a positive effect on test scores and that this effect is stronger for immigrant students.

Language instruction plays a particularly important role in the integration of immigrants. Adequate language skills are a prerequisite for effective learning in all subjects. Hence, one would expect an

integrating school system to devote more hours of language instruction to immigrants. Figure 6 shows that the time spent on language instruction within schools is relatively low especially in Finland and Sweden compared to other countries and very high in Denmark. However, this mostly reflects variation in the length of schooldays in general. International comparisons of instruction time, such as OECD (2017), show that Finnish children have the shortest and the Swedish children the fourth shortest school days in the OECD. Immigrants do receive more language instruction than natives in Denmark, Iceland, and Sweden, but not in Finland.⁹ Especially first-generation immigrants who arrive in these countries after age six seem to receive special attention. The ratio of the minutes of language instruction received by late-arriving first-generation immigrants to the minutes of instruction received by natives is the highest in Iceland and third highest in Sweden.

Figure 6 only reports the language instruction given within the limits of the normal school day. However, in many countries immigrant children also receive language instruction outside formal school days. In PISA 2009, which focused on literacy, students were asked whether they received remedial language education outside normal school hours. Figure 7 shows the shares of natives and different groups of immigrant students who received such language education.

According to Figure 7, remedial language instruction is a relatively well-used tool in the Nordic education systems. Especially the shares of late-arriving first-generation immigrant students who receive remedial language instruction are high by international standards. Over 20% of the immi-

grant students who arrived in Sweden or Finland after age six received additional language instruction after normal school hours. In Denmark and Iceland this share exceeds 30%.

Survey evidence in PISA 2009 hence suggests that the Nordic school systems do allocate extra resources to the language instruction of immigrants during formal school hours and in addition provide remedial language instruction especially to first-generation immigrant students.¹⁰ In this sense, the Nordic education systems do allocate resources to facilitate the integration of immigrant students. Unfortunately, PISA data do not allow assessment of how effective additional hours of remedial language instruction are in enhancing skills. Even though it is possible to correlate the use of these tools with test scores at the individual level, the selection to additional instruction is inherently negative in the sense that only students with learning problems in these subjects receive it. Since the data do not make it possible to control for such problems, naïve regressions of test scores on additional instruction generate biased associations. However, evidence in Lavy (2015) does suggest that instruction time may have a positive effect on learning and that this is especially true for immigrant students.

5. Adult education and the integration of immigrants

Second-generation immigrant children and first-generation immigrants who arrive in the host countries before the age at which compulsory schooling ends can be targeted with school policies. However, immigrants who arrive after the age of compulsory schooling are beyond the reach

⁹ The Norwegian distribution of language instruction hours across student migrant status is degenerate in PISA 2012, suggesting that this information should not be used.

¹⁰ It should be noted that the information in PISA on language instruction is from 2009. Unfortunately, later PISA surveys do not contain questions on language instruction.

Table 3 Participation in adult education during the past twelve months for natives and immigrants, percent

	2011			2016		
	Natives	Immigrants	Gap	Natives	Immigrants	Gap
Denmark	59.0	53.3	5.7	50.5	48.4	2.1
Finland	55.8	53.4	2.4	54.4	49.5	4.9
France	52.5	38.0	14.5	53.6	37.8	15.8
Ireland	24.4	24.7	-0.3			
Italy	31.9	28.7	3.2	38.0	34.6	3.5
Netherlands	60.6	49.8	10.9	65.7	55.0	10.7
Norway	57.2	61.3	-4.1	61.6	51.5	10.1
Spain	38.3	33.8	4.4	44.9	34.8	10.1
Sweden	74.2	61.9	12.4	66.8	53.6	13.2
Germany	53.3	35.2	18.1	51.6	39.4	12.2
Austria	49.7	42.3	7.4	62.2	51.3	10.9

Source: Own calculations based on Eurostat's Adult Education Survey, waves of 2011 and 2016.

of these policies. Yet also these immigrants often have significant skill gaps and could benefit from further education. Adult education interventions are a tool than can be used to enhance the skills of this immigrant group. This section analyses the success of Nordic adult education systems in targeting these immigrants as well as in enhancing their skills.

5.1 Participation in adult education

Nordic countries have a long tradition in extensive public provision of adult education. The well-developed supply structure for such education in these countries is reflected in participation rates that are very high by international standards. This pattern is shown in Table 3 which gives the shares of native and of immigrant respondents, respectively, who report participating in adult education during the previous twelve months in Eurostat's Adult Education Survey (AES) questionnaire. AES is a survey organised by the EU. The survey has been conducted three times: in 2007, 2011 and 2016. Table 3 uses data from the two latest surveys. In each participating country, individuals between ages 25 and 64 were randomly drawn to participate in the survey.

The sample sizes for the Nordic countries vary between 3 018 in Norway and 4 144 in Finland.¹¹

Participation rates are high in the Nordic countries, for both natives and immigrants. Especially in 2011 well over 50% of the immigrants in the Nordic countries took part in some adult education programme. In 2016 however, the immigrant participation rates had declined, although they remained at relatively high levels. In Finland, the gaps between native and immigrant participation rates are also very small in both years. Although immigrants in Sweden are considerably less likely to take part in adult education than natives, their participation rates, 62% in 2011 and 54% in 2016, are still higher than in most comparison countries. Table 3 thus suggests that adult education programmes are widely accessible for immigrants in the Nordic countries.

The AES also categorises adult education programmes by their content. The programmes are divided into formal and informal adult education as well as on-the-job training programmes. Formal adult education is organised within the regular education system. It consists of courses that corre-

¹¹ Iceland did not participate in the AES.

Table 4 Participation in formal adult education during the past twelve months for natives and immigrants, percent

	2011			2016		
	Natives	Immigrants	Gap	Natives	Immigrants	Gap
Denmark	12.3	15.4	-3.1	12.4	19.3	-6.9
Finland	11.9	13.6	-1.7	13.9	18.6	-4.7
France	3.4	4.7	-1.3	3.3	3.9	-0.7
Ireland	6.4	8.8	-2.4			
Italy	2.5	2.3	0.2	2.7	0.8	1.8
Netherlands	11.9	15.4	-3.5	9.4	6.3	3.1
Norway	6.4	11.9	-5.5	11.5	15.6	-4.1
Spain	7.2	5.8	1.4	10.1	8.4	1.7
Sweden	11.2	22.6	-11.4	11.5	21.8	-10.3
Germany	3.8	3.7	0.2	3.5	2.8	0.6
Austria	5.6	7.0	-1.4	5.9	7.2	-1.3

Source: Own calculations based on Eurostat's Adult Education Surveys 2011 and 2016.

spond to compulsory education, post-compulsory education (including higher education) as well as courses designed specifically for adults. Formal adult education encompasses secondary education classes directed at adults, language training for immigrants and labour market training.

Since formal adult education mainly aims to compensate for gaps in educational attainment that remain after finishing regular education, it is not surprising that immigrants are more likely to participate in these programmes than natives in most countries. However, the immigrant overrepresentation is a particular Nordic phenomenon. This can be seen in Table 4 which reports the shares of participants in formal adult education programmes according to the AES surveys. At 22%, the participation rate of Swedish immigrants was the highest among the comparison countries, and the gap with respect to the participation rate of natives is the largest among the included countries in 2016. However, immigration participation rates in Denmark, Finland and Norway are also high by international standards and higher than native participation rates.

The high participation rates in formal adult education reflect the importance of attaining skill levels in the Nordic labour market model. The fact that

participation rates are particularly high for immigrants also suggests that the courses successfully target groups that have difficulties with labour market entry. In terms of attendance rates, the system seems to be working in the way it was intended.

Informal adult education, on the other hand, is organised outside the normal education system. Hence, the training provided in these courses does not directly qualify for degrees recognised by the education system. Informal adult education encompasses study circles, courses provided by open universities and on-the-job training. Since informal adult education often takes place at workplaces, employed individuals are more likely to take part in informal adult education.

Informal adult education is used more intensively by natives than immigrants in almost all countries that take part in the AES, as can be seen in Table 5 where the participation rates of the respondents in the AES are reported. Immigrant participation rates were high in the Nordic countries by international standards in 2011, but by 2016 they had declined to levels much closer to those in the comparison countries. When one contrasts these figures to those in Table 4, a clear pattern emerges. Whereas the formal adult education system is targeted

Table 5 Participation in informal adult education during the past twelve months for natives and immigrants, percent

	2011			2016		
	Natives	Immigrants	Gap	Natives	Immigrants	Gap
Denmark	53.6	44.2	9.4	44.2	39.9	4.2
Finland	51.7	42.2	9.5	48.3	39.3	9.0
France	51.2	35.9	15.4	52.3	36.2	16.0
Ireland	19.0	16.8	2.2			
Italy	30.8	28.0	2.8	37.2	34.5	2.7
Netherlands	56.6	42.1	14.6	63.2	51.5	11.7
Norway	54.8	54.9	- 0.1	56.9	44.5	12.4
Spain	34.7	30.6	4.1	40.5	30.5	10.0
Sweden	71.1	50.0	21.2	62.0	37.7	24.3
Germany	51.7	33.0	18.7	49.7	38.2	11.5
Austria	47.4	38.4	9.1	60.8	49.4	11.4

Source: Own calculations based on Eurostat's Adult Education Surveys 2011 and 2016.

Table 6 Participation in on-the-job training during the past twelve months for natives and immigrants, percent

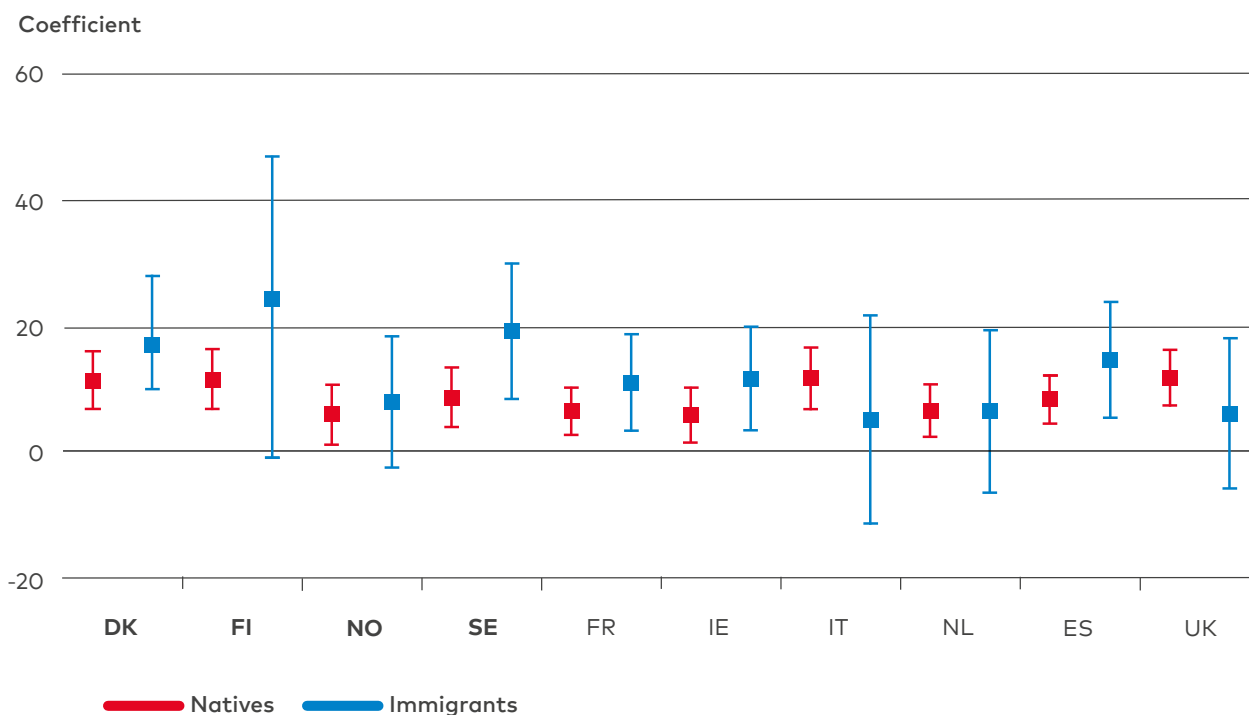
	2011			2016		
	Natives	Immigrants	Gap	Natives	Immigrants	Gap
Denmark	51.6	30.0	21.6	49.7	41.6	8.2
Finland	22.6	12.6	10.0	25.4	16.3	9.1
France	21.2	16.7	4.4	20.0	13.9	6.2
Ireland	7.9	4.7	3.2			
Italy	21.5	15.4	6.2	20.1	18.5	1.6
Netherlands	51.2	33.3	17.8	58.5	37.4	21.2
Norway	50.3	40.4	9.9	63.8	44.1	19.7
Spain	31.0	28.0	3.0	37.6	27.8	9.8
Sweden	64.5	34.8	29.7	56.0	32.5	23.5
Germany	42.8	21.5	21.3	35.4	19.7	15.6
Austria	42.1	34.1	8.0	58.9	37.0	21.9

Source: Own calculations based on Eurostat's Adult Education Surveys 2011 and 2016.

more towards immigrants, the informal adult education is focused more on natives. One potential explanation for the large native-immigrant gap in the latter case is that informal education tends to be provided by employers. Since immigrant employment rates are typically lower than native employment rates, it is not surprising that immigrants receive less informal adult education.

Table 6 includes only the training that is explicitly provided by the employer. As can be seen, the native-immigrant gaps in participation are larger in employer-provided training than in all informal training. Nevertheless, the immigrant participation rates are again high in the Nordic countries apart from Finland where only 13-16% of immigrants participate in on-the-job training.

Figure 8 The association of participation in adult education with literacy test scores for natives and immigrants in PIAAC 2012



Note: The figure shows the regression coefficients and their 95% confidence intervals of a dummy variable that takes value 1 if the individual participated in adult education during the twelve months preceding the interview and otherwise 0. The dependent variable in the regression is the literacy test score. Regressions use all ten plausible values of this test and control for gender, age, previous educational attainment, number of children, and the educational attainment of the parents. The calculation of the standard errors takes into account the sampling structure of the PIAAC data. Source: Own regressions with PIAAC (2012) data.

5.2 Adult education and skill gaps

The fact that immigrant participation rates in adult education are high in the Nordic countries suggests that these countries are successful in targeting these resources to groups whose skill profiles are less likely to match the structure of labour demand. However, high participation rates do not imply that these programmes are successful in enhancing immigrant skills.

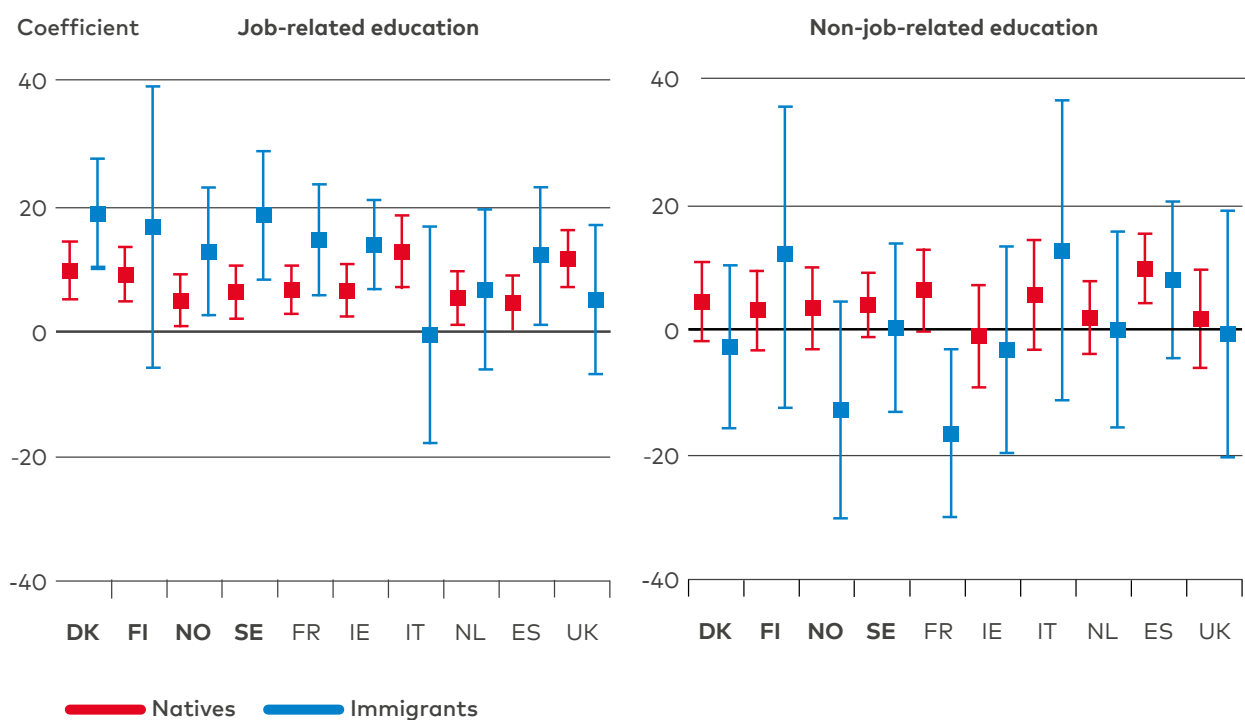
Unfortunately, as was explained above, the literature on the effects of adult education programmes on immigrant labour market integration is scarce. The few available results mainly deal with the employment and earnings effects of language edu-

cation that is targeted at immigrants.¹² However, there are no results on the effectiveness of adult education programmes in improving immigrant skills. This is unfortunate because, as was shown above, especially in the Nordic context skills seem to be key for the labour market integration of immigrants. Furthermore, enhancement of skills is the primary aim of adult education programmes and it is the main reason why these programmes are generously funded by governments in the Nordic countries.

One obvious difficulty in assessing the effect of adult education on skills is that it is not at all clear what the relevant productive skills are, and it

¹² See, for example, Swedish studies on the effects of language instruction for immigrants such as Kennerberg and Åslund (2010).

Figure 9 The association of participating in job-related and non-job-related adult education with literacy test scores for natives and immigrants in PIAAC, 2012



Note: The diagrams show regression coefficients and their 95% confidence intervals of a dummy variable that takes value 1 if the individual participated in job-related and non-job-related adult education during the twelve months preceding the interview and otherwise 0. The dependent variable in the regression is the literacy test score. Regressions use all ten plausible values of this test and control for gender, age, previous educational attainment, number of children, and the educational attainment of the parents. The calculation of the standard errors takes into account the sampling structure of the PIAAC data.

Source: Regressions with PIAAC (2012) data.

is even more difficult to come up with data that measure them. Furthermore, the individuals who decide to participate in adult education are likely to be a highly selective group. Some of this selection is based on the kind of individual and environmental factors that are typically not observable in the data available to the researcher. Hence, even if one would have measures of relevant skills, it is unlikely that one would be able to control for all the relevant background factors so that one would be able to estimate the actual effects of adult education programmes.

Still, one can study the correlation between adult education programmes and productive skills with the OECD's PIAAC data. In PIAAC, test subjects answer a questionnaire about their background

characteristics and current labour market status. Some of the questions deal with the participation in adult education and training programmes during the past twelve months. These questions have a very similar structure to the ones used in the AES that we discussed above.

Figure 8 reports the association of adult education and literacy skills in the PIAAC 2012 data. The figure plots the regression coefficients with 95% confidence intervals for each country from simple regressions where test scores, measured in points, are regressed on a dummy variable that takes value 1 if the individual has participated in adult education or training during the twelve months before the test and otherwise the value 0. Control variables that capture background characteristics such

as gender, age, number of children, previous educational attainment, and the educational attainment of parents have been included in the regressions as well.

As can be seen from the diagram, participation in adult education is clearly positively associated with literacy skills in PIAAC data. Interestingly, the highest point estimates are obtained for immigrants in Finland, Sweden and Denmark. Even though the confidence intervals of these estimates are quite wide, the results strongly suggest that in these countries participation in adult education is more strongly associated with literacy skills among immigrants than natives. Among the Nordic countries, only Norway shows a pattern of similar native and immigrant coefficients. Figure 8 also indicates that, despite the very high participation rates, the association of adult education and literacy skills is high in the Nordic countries for both natives and immigrants when compared with the comparison countries. One should not draw strong conclusions about the selection into adult education programmes based on the evidence here. Still, the diagram suggests that wide availability of adult education does not necessarily dilute the effectiveness of the programmes even though large participation rates likely imply that selection to adult education is more negative.

PIAAC data also allows one to disaggregate adult education into job- and non-job-related education. Figure 9 plots the association of literacy tests scores with participation in different types of adult education for natives and immigrants. The regressions behind Figure 9 are based on the same set of controls and the same methodology as the regression behind Figure 8. The association is clearly stronger with job-related than with non-job-related adult education.

In the case of job-related adult education programmes, the highest point estimates can again be found for immigrants in Denmark, Sweden and Finland. In all the Nordic countries the immigrant coefficients for job-related adult education are larger, although with wide confidence intervals, than the native coefficients. In the case of non-job-related adult education, on the other hand, there is no clear pattern in the relationship between immigrant and native coefficients. Indeed, the immigrant coefficients for non-job-related adult education are so imprecisely estimated that it is very hard to draw any conclusions about the association between these kinds of programmes and literacy skills at all.

Figures 8 and 9 suggest that participation in adult education is clearly positively associated with skills in the Nordic countries and that this association may be more positive for immigrants than for natives. Furthermore, when compared to other countries, the association of Nordic adult education programmes and skills is clearly stronger despite the fact that participation rates, for both natives and immigrants, are much higher. Figure 9 also shows that the association between adult education and test scores is particularly strong in the case of job-related adult education. This implies that policies that facilitate the contact of immigrants and employers who provide training may be a very effective way of integrating immigrants. It is important to remember, however, that these diagrams only present associations that control for observable background characteristics which are available in the PIAAC data. Individuals who take part in adult education probably differ from non-participants in productive characteristics not measured in the data. Such unobservable characteristics are likely to confound the associations between participation and skills such that it is impossible to interpret the average association between participation in adult education and test scores causally. But as discussed earlier in relation to pre-primary

education, if the selection based on unobservables does not differ between natives and immigrants, the stronger associations for immigrants in Figures 8 and 9 suggest that immigrants may benefit more from adult education than natives do.

6. Relative efficiency of different policies

The evidence in the preceding section suggests that Nordic countries try to target educational resources to immigrants to facilitate the enhancement of their skills. Especially the adult education programmes seem to be easily accessible for both natives and immigrants, and immigrants seem to exploit this opportunity more than in other European countries. On the other hand, pre-primary education is not used by immigrants to the same extent as by natives in the Nordic countries, with the exception of Finland. The share of immigrant children who attend pre-primary education for more than one year is clearly lower in the Nordic countries, apart from Iceland, than in countries such as France where pre-primary education is an integrated part of the education system. Within the formal school system, resources such as language instruction as well as remedial education are clearly targeted towards immigrants in the Nordic countries.

Given these patterns in the use of resources, it is natural to ask how efficiently the resources are allocated. Immigrants are a special group in the education system, since many arrive in the host country either after having finished formal education in the source country or after having started attending school there. When it comes to second-generation immigrants or immigrant children who arrive in the host country before the school starting age, the standard lessons of human-capital and skill-formation theories apply perhaps even more strongly than in the case of native children. Immigrant children usually come from families where the language of the host country is not spoken, and their parents

may often lack information about useful skills in the host country labour markets. Therefore, the dynamic and complementary nature of investments in skills has particularly important implications for these immigrant children. Hence the case for early intervention, such as pre-primary education, is particularly strong in the case of these children. Furthermore, if the education system fails to target resources towards these children early enough, the returns to later investments in their skills may clearly be lower. Early-arriving and second-generation immigrant children are thus a good example of a group where the lessons of skill formation literature should be taken particularly seriously. The fact that the association of PISA test scores and pre-primary education attendance is stronger for immigrants than for natives in all Nordic countries (Figure 5) suggests that more efficient targeting of pre-primary education at immigrant children may be an effective tool of enhancing their skills.

However, some of the immigrants are beyond the reach of pre-primary education when they arrive in the host country. In the case of immigrant children who arrive in the host country at school age, specific tools such as language instruction and remedial education are often used to facilitate their integration into the school system. However, we lack evidence on the effectiveness of these tools. While the literature can give some general guidance regarding the effect of instruction time, there are very few results on the effects of specific school policies on immigrant children. Hence, existing research does not really offer clear guidance as to how the resources should be allocated within schools.

Immigrants who arrive in the host country after compulsory schooling age are naturally beyond the reach of the school system. However, Nordic countries are known for the highly developed structure of adult education and this resource seems to be accessible for immigrants as well. Immigrants

in the Nordic countries are more likely to attend adult education programmes than immigrants in other European countries. Unfortunately, the research literature does not provide clear results on the effects of adult education on immigrants. The best available evidence, such as Stenberg (2012) or Calmfors et al. (2018), deals with the average effects of such programmes on the general population and finds positive effects on earnings that take a long time to materialise. The earnings of individuals who participate in adult education exceed the earnings of non-participants first seven years after the programme participation has taken place. Although this evidence is discouraging, it is possible that the returns to adult education are higher for immigrants. The correlations with PIAAC test scores presented above suggest that immigrants may benefit more from adult education than natives. Heterogeneous effects of adult education by immigrant status are a topic that future research should examine more closely.

7. Conclusions

The gap in labour market outcomes between natives and immigrants seems to be mostly a skill problem in the Nordic countries. Immigrants and natives of similar skills are more or less as likely to find employment. Inferior labour market outcomes of immigrants are driven by low levels of skills. Indeed, the Nordic native-immigrant gaps in skills, as measured in surveys such as PIAAC, are among the largest in the OECD countries. This is not surprising given that a relatively large share of immigrant inflows to these countries has consisted of refugees whose migration decisions are not motivated by labour market considerations. Since high minimum wages and strong wage compression make it hard for low-skilled individuals to find stable employment in the Nordic labour markets, the skill gap between natives and immigrants results in low employment rates for immigrants as compared to those of natives. Therefore, education policies can

play a key role in facilitating the integration of immigrants into the labour markets.

How successful are the Nordic education systems in meeting this challenge? My analysis gives a somewhat mixed answer. When it comes to institutional features, the education systems of the Nordic countries should have a good potential to improve immigrant skills. Access to pre-primary education is available for immigrant children who arrive before the school-starting age, and schools seem to allocate remedial language instruction resources to improving the skills of immigrant children who arrive at later ages. For immigrants who arrive after compulsory schooling age the access to various adult education programmes is easy. All these features should make the Nordic education systems comparatively successful in improving immigrants' skills.

The immigrants who have the potential to benefit most from the education system of the host country are those who arrive when they are very young. Yet, in some of the Nordic countries the gaps between the PISA test scores of the early- and late-arriving immigrants are very small even when controlling for family background. Although this pattern may partly reflect compositional differences between immigrant cohorts, it is also suggestive of the failure of the education system in boosting immigrant skills. Partly this may reflect the failure of the immigrant families of taking advantage of the services that are available but not compulsory. In particular, this seems to be case with pre-primary education where participation rates are lower for immigrants than for natives in many Nordic countries. Yet our analysis with PISA data as well as earlier research suggest that immigrant children would really benefit from participating in pre-primary education. Facilitating and incentivising the participation of immigrant children in pre-primary education should therefore be a priority.

Within compulsory schooling the resources seem to be targeted in the right way, but we lack evidence on the effectiveness of their use. This is a topic where the cooperation of researchers and school authorities could be fruitful in order to obtain causal evidence on the effects of tools such as remedial language instruction in enhancing immigrant skills.

Immigrants who arrive in their host countries after compulsory schooling age are naturally beyond the reach of traditional schooling policies. For this group of immigrants, the wide availability of adult education opportunities is vital. The Nordic countries appear to be successful in providing adult education for immigrants. Participation in adult education is also positively correlated with test scores in PIAAC data. Although this evidence is not causal, the correlation is stronger for immigrants than for natives. This is particularly the case with adult education that is more directly related to jobs. This evidence suggests that initiatives that combine education and subsidised employment may be a promising tool for integrating adult immigrants into the labour market.

Even though the education system could undoubtedly play an important role in facilitating the labour market integration of immigrants, it is unrealistic to expect education to erase the native-immigrant gaps in achievement completely. In all the Nordic countries, there is still a large gap between the achievement levels of native students and second-generation immigrants who have both received the same amount of schooling. The fact that this gap is considerably reduced when family background is controlled for suggests that the differences between native and first-generation immigrant students are partly socioeconomic. However, this does not change the fact the schools seem unable

to compensate for the effects of family background. Given that inflows of refugee immigrants have been so large in recent years, it is unlikely that these gaps can be eliminated in the future. For this reason, one should not rely on education policy alone to improve the labour market integration of immigrants. Other tools, such as subsidised employment and wage policy (discussed elsewhere in this volume)¹³, need to be used as well.

¹³ See the contributions by Andersson Joona, and Ek and Skedinger.

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Chapter 3

Education Policy for Adolescent Immigrants¹

Anders Böhlmark²

ABSTRACT

This chapter describes the challenge to prepare adolescent immigrants for the Nordic labour markets. A review of the literature identifies general education efforts and targeted interventions that may be useful. There is convincing evidence of the effectiveness of several school practices for the benefit of disadvantaged students, some of which are probably generalizable to immigrant students. The evidence of the effectiveness of interventions targeted to adolescent immigrants is scarce. However, study support and guidance are identified as important measures, as well as new roads to employment for individuals who have difficulties to qualify for and finish regular high school programs.

Keywords: Adolescent immigrants, education efforts, labour market integration.
JEL codes: I21, I24, J15.

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1. Introduction

Large numbers of non-Western immigrants are currently enrolled in education in the Nordic countries as a consequence of the historically high immigration that peaked in 2015. The Nordic countries received nearly 200 000 young asylum-seekers during the period 2011-16, of which 74% arrived in Sweden, 11% in Norway, 8.5% in Denmark, 6% in Finland and 0.2% in Iceland.³

Denmark, Finland and Norway are all above the EU average in terms of asylum seekers per capita during this time period, but Sweden stands out compared to both the neighbouring Nordic countries and other EU member states (Dustmann et al. 2017). In the peak year 2015, about 70 000 asylum seekers younger than 18 years arrived in Sweden, which corresponds to about 65% of a normal birth cohort. This had an immediate impact on the composition of the Swedish student population. For example, in the school year 2016/2017 about 80 000 pupils in Swedish primary schools (*grundskola*, grades 1-9) were either newly arrived (within the last four years) or had an unknown background. This corresponds to 8% of all pupils (Swedish National Agency for Education 2017a).⁴

Extensive and sustained educational efforts, and probably also new or improved interventions and policies are required to integrate these young people into the Nordic school systems. However, the Nordic countries have a long experience of integrating

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immigrant children at school, and many of the challenges involved are not new. The school achievement gap between natives and immigrants is well documented⁵, as is the gap in labour market outcomes.⁶ Previous research further shows how these gaps increase with age at immigration for childhood immigrants.⁷

Adolescent immigrants who arrive at middle- or high-school age are disadvantaged, compared to natives and younger immigrants, as they enter a new school system at more advanced levels of schooling.⁸ They lack many destination-country specific skills that were learned at lower grade levels. Adolescent immigrants need to catch up on these skills at the same time as they typically need to learn the language of the host country. Compared to younger immigrants, adolescents may also acquire new language skills at a slower pace

³ These numbers are based on data from the Eurostat database, retrieved from <http://appsso.eurostat.ec.europa.eu/nui/submitViewTableAction.do>. The numbers refer to asylum-seekers younger than 18.

⁴ 'Newly arrived' means that immigrants arrived during the past four years. Students with an unknown background lack a Swedish personal id number. These are mainly individuals who wait for a decision from the migration authorities. Thus, individuals with an unknown background have on average shorter times of residence in Sweden than newly arrived individuals.

⁵ See for instance Bratsberg et al. (2012), Grönqvist and Niknami (2017), Harju-Luukkainen and McElvany (2018), and Wind Fallesen (2015).

⁶ See for instance Bratsberg et al. (2017), Sarvimäki (2017), Schultz-Nielsen (2017), and Åslund et al. (2017).

⁷ See for instance Bratsberg et al. (2012), Böhlmark (2008), Hermansen (2017), and Åslund et al. (2015).

⁸ One important aspect to keep in mind when discussing immigrant disadvantage is that the educational opportunities of refugee students are in most cases probably better in schools in the Nordic countries than in their countries of origin.

(Newport 2002), and they are at an age where the transition from childhood to adulthood may be a time of turmoil even without the migration experience. Additionally, this is a period in life where a range of crucial educational decisions need to be made, such as choice of high-school education. Compared to older immigrants, adolescents may find it easier to acquire new language skills, but they are often too young to have any substantial work experience from their home country. A successful acquisition of skills at school should therefore be crucial for adolescent immigrants' future labour market integration.

The purpose of this chapter is to discuss how education efforts for adolescent immigrants (about 10-18 years) may be designed to facilitate labour market integration. The discussion will be based on a review of the existing literature with a particular focus on experiences from the Nordic countries. The Swedish case will be given most attention as it stands out from the other Nordic countries when it comes to the scale of immigration in recent years.

The paper is structured as follows. The next section discusses the particular school problems facing adolescent immigrants. Section 3 provides a review of the results from international knowledge assessments to put the Nordic immigrant-native achievement gaps into an international perspective. Section 4 describes the adolescent immigrants' educational outcomes and employment prospects, with a focus on the Swedish case. Section 5 discusses education efforts in the Nordic countries to facilitate the future employment among adolescent immigrants and provides some policy recommendations. Section 6 concludes.

2. School problems facing adolescent immigrants

A natural starting point for discussing education efforts is the potential causes of the immigrant disad-

vantage that is reflected in the school achievement gap compared to natives. Since the immigrant population is very heterogeneous, it is important to stress that these disadvantages do not concern all immigrants. The existing literature discusses the following main disadvantages that immigrant youth faces in schools.

Language learning. The most obvious disadvantage of immigrant children in the Nordic countries relative to natives is that they typically lack pre-migration skills in the language of instruction. The major immigrant groups speak languages that are linguistically very different from the Scandinavian ones and Finnish. Linguistic distance matters for language learning (see, e.g., Chiswick and Miller 2005).

Difficulties to adapt and catch up increase with age at immigration. The challenge for immigrants to catch up with their new peers tends to be greater the higher their age when they enter the new school system. Skills acquired at lower grade levels are often crucial for learning of new skills at higher grades, and skills acquired in different school systems may not always be substitutes. Language learning also tends to be more difficult for adolescents than for younger children. The ability to learn a new language appears to decline after age 12-13 (see Hyltenstam et al. (2012) for an overview).

Lower quality/quantity of education received in country of origin. Children from countries where the school systems are below the standards in the Nordic countries may suffer not only from a lack of skills that are specific to the Nordic context but also from a lower skill level in more universal subjects, such as mathematics. A new experience for the Nordic school systems in recent years has been to teach an increasing number of adolescents with very little or no previous schooling (see e.g., SOU 2017a).

Many parents of immigrant children have low education and income. The positive association between parents' socioeconomic status and children's outcomes is well documented (see, e.g., Eriksson and Jansson 1993).⁹ On average, immigrant parents have a lower income than natives. One reason for this gap is that labour market integration takes time. Immigrant parents also tend to have a lower level of education than natives (see Grönqvist and Niknami 2017 for an overview).

Many child refugees have experienced traumatic events. Children and/or their parents from countries plagued by war and oppression often suffer from mental illness due to their experiences. For example, 20-30% of asylum seekers in Sweden are estimated to suffer from mental illness (Swedish National Board of Health and Welfare 2015).

Many asylum-seeking children experience uncertainty and stress due to long waiting times for a residence permit. The asylum process often takes a long time and is linked to stress and anxiety. This impacts children's health and well-being negatively. The impact on school performance is, however, ambiguous. Some children may work harder at school as they may believe that a good performance will increase their or their family's chance to obtain a residence permit (Ottosson et al. 2017).

Segregation. Immigrants are not evenly distributed across municipalities and schools. For example, 43% of all newly arrived immigrant pupils in Sweden attended 10% of the country's schools in 2016

(SOU 2017a). School segregation by immigrant and socioeconomic status may affect pupils' outcomes through peer influence and/or potential differences in school quality. Fewer contacts with natives, for example, make language learning more difficult.

Difficulties to study at home due to overcrowding. Residential segregation and relative poverty among some immigrant groups have led to overcrowding. This may have negative consequences for children, including their possibilities to do their homework.

We will return to some of these disadvantages in the following sections as education efforts for adolescent immigrants are often about compensating for, or counteracting, particular disadvantages.¹⁰

3. The school performance of adolescent immigrants in the Nordic countries: evidence from international knowledge assessments

How do the disadvantages of immigrant students, briefly discussed in the previous section, affect their school performance and skills in adulthood? And how do immigrants in the Nordic countries perform compared to immigrants in other countries? The international knowledge assessments PISA, TIMSS, PIRLS and PIAAC provide a lot of evidence.¹¹

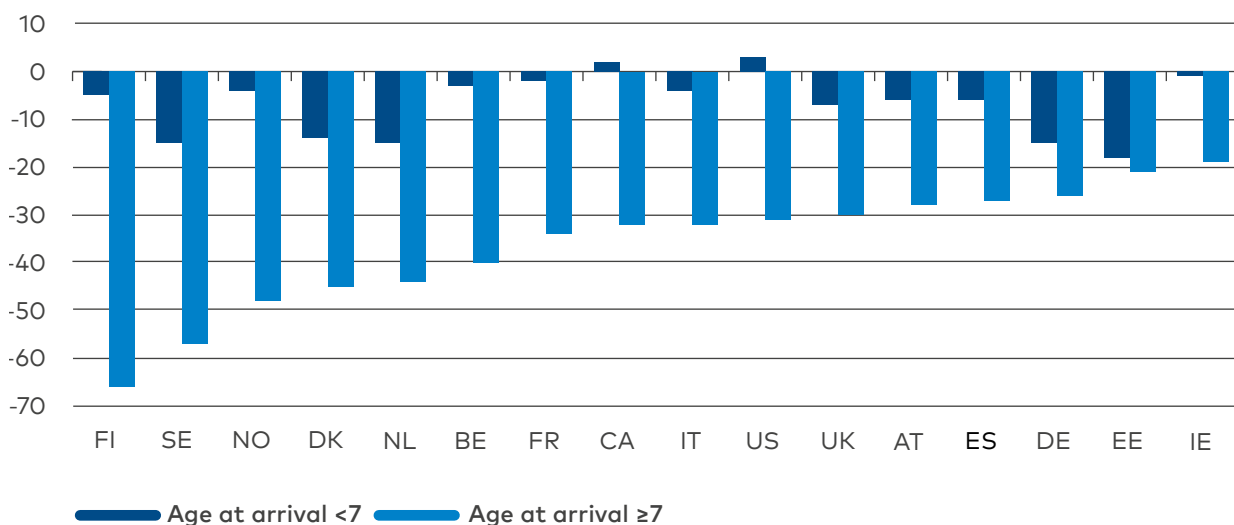
In a special report on immigrants at school, the OECD (2015) analyses the performance of 15-year-old students in the PISA survey of 2012. The report shows that the test scores of immigrant students in all five Nordic countries fall below the OECD av-

⁹ Bratsberg et al. (2012), however, show that parental resources do not predict educational outcomes (upper secondary completion at age 21) for immigrants to the same extent as for natives.

¹⁰ However, policies to combat, for example, segregation and overcrowding are outside the scope of this paper. The discussion in Section 5 is limited to pure school policies and practices.

¹¹ The OECD's Programme for International Student Assessment (PISA) is a triennial international survey which aims to evaluate education systems worldwide by testing the skills and knowledge of 15-year-old students. The IEA's TIMSS & PIRLS International Study Center conducts regular international comparative assessments of student achievement in mathematics and science (TIMSS) and in reading (PIRLS) in more than 60 countries. The OECD's Programme for the International Assessment of Adult Competencies (PIAAC) conducts the Survey of Adult Skills. The survey measures adults' proficiency in key information-processing skills - literacy, numeracy and problem solving in technology-rich environments - and gathers information and data on how adults use their skills at home, at work and in the wider community.

Figure 1 Differences in literacy proficiency between immigrants and natives



Note: The figure is based on PIAAC data for 2012 and includes individuals aged 16-65. The gaps in the figure are adjusted for individuals' age, gender, education and parental education.
Source: Bonfanti and Xenogiani (2014)

erage of immigrant students in both reading and mathematics.¹² The performance gaps between natives and immigrants are also consistently large in the Nordic countries, and especially pronounced for reading performance in Finland, Iceland and Sweden. The reading performance gaps in these three countries amount to about 100 score points, which are about twice the size of the OECD average.

The OECD report points at two main reasons for the large performance gaps in the Nordic countries: First, a large fraction of immigrants is accepted on the basis of humanitarian grounds. Second, almost all students in this group are unfamiliar with a Nordic language before arrival. Over 80% of immigrant students in Finland, Iceland and Sweden report that they speak another language at home than the language of instruction. Unsurprisingly, childhood immigrants in countries with more selective migration policies and/or more globally spoken languages, such as Australia and Canada, perform better in all subjects in the PISA survey. Gaps between natives and immigrants are also smaller or non-existent.

Schnepf (2007) finds a similar pattern when analysing earlier PISA surveys as well as TIMSS and PIRLS studies in ten "high-immigration Western countries" (including Sweden but no other Nordic country). Her finding is that immigrants clearly perform better in English-speaking countries, and that language skills, socioeconomic background and school segregation are important explanations for immigrants' lower performance in "Continental European countries" (including Sweden).

There is also evidence in the PISA surveys for a substantial "late-arrival penalty" for adolescent immigrants relative to immigrant children (arrival age 0-5 years) in the Nordic countries. Arrival at age twelve or above is associated with a performance penalty of about 35-50 score points in Denmark, Norway and Sweden. (The OECD average for late arrival is a penalty of about 20 score points). The penalty associated with arriving at age 6-11 is about 15-20 score points in Denmark, Finland and Norway, but notably lower in Sweden, about 5-10 points. (The OECD average is about zero).¹³

¹² See Figure 2.1 in OECD (2015) for a full set of results.

¹³ See Figure 4.8 in OECD (2015).

The OECD Survey of Adult Skills (PIAAC) measures skills among adults. Figure 1 shows evidence on the difference in literacy proficiency between immigrants and natives aged 16-65 years in different Western countries, by immigrants' age at arrival. The score point differences in the diagram are adjusted for self-reported age, gender, educational attainment and parental education. The Nordic countries have the largest differences in literacy proficiency when comparing immigrants and natives with similar reported characteristics. The gaps are particularly large for immigrants arriving at age seven or later. In Finland and Sweden, the performance deficit for this group relative to natives is about 60 score points. The gaps are much smaller for those who arrived at a young age, but also these gaps are mostly larger for the Nordic countries than for the other Western countries. These results show that age at immigration is clearly important for immigrants' literacy skills in adulthood, and that adulthood literacy skill gaps are larger in the Nordic countries than elsewhere. This confirms the findings from the PISA survey. The education challenges appear greater in the Nordic countries than in comparable countries.

4. Adolescent immigrants' educational outcomes and employment prospects:

The Swedish case

One finding in the previous section is that the Nordic countries share many similarities concerning the need to improve the skills of adolescent immigrants. However, the extent of the current challenge is largest in Sweden. This motivates a particular look at the Swedish case.

4.1 The current challenge

There are several reasons to believe that it will be difficult for the current childhood immigrants who have arrived in Sweden in recent years to reach

the same educational achievements as previous cohorts. One reason is the large number of newly arrived immigrant students that have to be integrated at the same time, and that they also tend to be geographically concentrated. Special preparatory classes for immigrants have become a common practice, whereas previously it was more common to integrate new students in regular classes at an earlier stage. Many immigrant students have also experienced unusually long waiting times for a decision on their asylum application, and some still wait in uncertainty. Multiple moves within Sweden during the first years after arrival have also been common, making it difficult to arrange structured schooling for students.

Another reason for concern is the age structure among the newly arrived young students. For example, 41% of the young immigrants (<18 years) that arrived between 2011 and 2016 were in the age range of 14-17 years. Even the most talented students at these ages will find it extremely demanding to catch up educationally in a new school system and to learn in a completely unfamiliar language. The skewed gender distribution might also be a reason for concern. For example, about 90% of the unaccompanied minors that arrived in 2015 were boys. This implies that over 11% of all pupils in grade levels 7-9 in the school year 2016/2017 were immigrant boys with an unknown background (5%) or newly arrived (6%) (Swedish National Agency for Education 2017a). We know from the experience of previous cohorts that immigrant boys who start school in grade 7-9 perform particularly poorly (Grönqvist and Niknami 2017). A final concern is that the average parental education among childhood immigrants who are accompanied by one or two parents has decreased since the mid-2000s (Swedish National Agency for Education 2016a). All these factors suggest that the recently arrived immigrant

children and youth face even larger challenges in the Swedish school system than their peers who arrived in earlier years and decades.

4.2 Recent evidence on adolescent immigrants' educational outcomes

The grade marks at the end of compulsory school (normally at age 16) are important for the admission to high school. Grönqvist and Niknami (2017) show that the gap in 9th-grade point averages between natives and immigrants at the national level in Sweden was relatively constant between 1988 and 2005, at about eleven percentile rank units (on a scale 1-100). The gap then started to increase and around 2008 it increased rapidly for a couple of years before it stabilised again between 2010 and 2015, albeit at a much higher level.¹⁴ The total increase in the performance gap between 2005 and 2010 is about seven percentile ranks, or about 60%. The authors identify two interrelated explanations for the declining performance of immigrant pupils: a change of the dominating countries of origin and a change in the average age at immigration. The most remarkable compositional changes since 2005 have been a distinct drop in the fraction of immigrant pupils from European countries outside of the EU and a large increase in the fraction of immigrant pupils from Asia and Africa. The average age at immigration increased from 7.5 years in 2005 to almost ten years in 2010. The authors show that the age at immigration increased over time when the fraction of refugees increased. This is expected since refugee families flee irrespective of the age of their children, whereas other immigrants tend to be families with younger children.¹⁵

Figure 2 below is from Grönqvist and Niknami (2017). It shows that the mean grade point average in the 9th grade was similar in 1988 among immigrants who arrived before and after seven years of age – the age starting compulsory school in Sweden. The average performance of those who arrived at a young age has in fact increased slightly over time, whereas it has dropped by about ten percentile units between 1988 and 2014 among those who arrived after school start. The overall drop in performance over time is thus concentrated among pupils who arrived after age seven and missed the first years of compulsory education in Sweden.

Overall, the existing research suggests that that the group of adolescent immigrants has demographically changed in a way that makes them more disadvantaged: they have become older at arrival and the majority has arrived from countries plagued by war, humanitarian crises, failing states and poor school systems. Many adolescent immigrants suffer from a lack of previous schooling and a majority speak languages that are linguistically very different from Swedish (Swedish National Agency for Education 2016a).

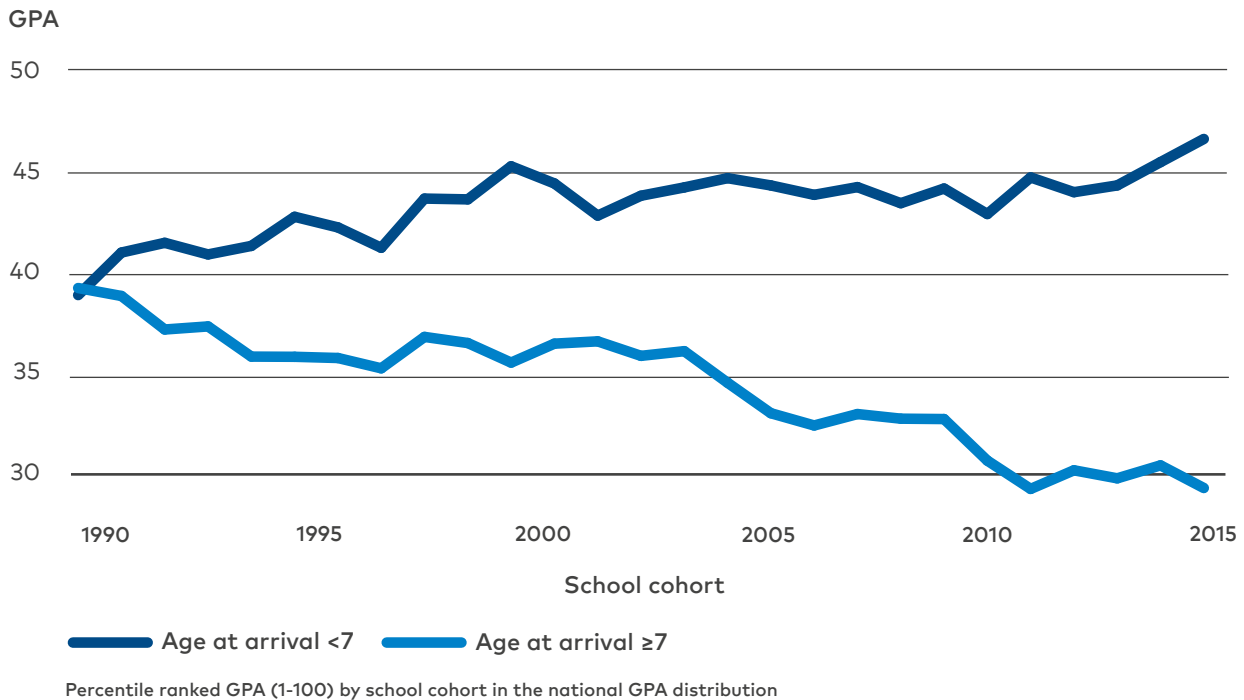
There is, however, a large variation in school performance within the group of adolescent immigrants, and also within the group of newly arrived. For example, 20% of the adolescent immigrants who started school in Sweden in grade levels 5-9 (at ages 12-16) managed to achieve the grade mark "pass" (E) or better in all subjects in grade 9 in the school year 2015/2016 (Swedish National Agency for Education 2016b).¹⁶

¹⁴ The authors also investigate whether there are gender differences in the gap between native and immigrant pupils. Figures 6.6 and 6.7 in their report reveal that the performance gap between immigrant girls and boys are about equally large in absolute numbers as the performance gap between native girls and boys.

¹⁵ It should be noted that the time of arrival in the register data from Statistics Sweden is based on time of the first registered residential address. Since the processing time for asylum cases can be long, the true time and age of arrival among child refugees tend to be overestimated. Most asylum-seeking children also attend school before they eventually get a residence permit.

¹⁶ There are no data by country of origin for this group of well/high performing newly arrived adolescents. It would, for example, be interesting to know the fraction of refugees in this group.

Figure 2 School performance at the end of ninth grade, by age at arrival and year



Note: GPA denotes the grade point average in all subjects at the end of the ninth grade.
Source: Grönqvist and Niknami (2017).

The performance differences in compulsory school seem to persist in high school. Statistics Sweden (2016) reports that 75% of non-European immigrant girls and 66% of non-European immigrant boys who arrived before age seven had finished high school at age 24, as compared to 82% of native girls and 77% of native boys. Non-European adolescent immigrants who arrived above the age of twelve did on average much worse. Only 32% of the girls and 28% of the boys managed to complete high school with grade marks at age 24.¹⁷ Improved education efforts as well as reforms to high-school education will probably be needed to improve these numbers.

4.3 Recent evidence on adolescent immigrants' labour market outcomes

What are the employment prospects for adolescent immigrants as predicted by previous cohorts? Ruist (2018) presents evidence on employment levels of young adults (aged 26-35 years) in 2015 who had arrived in Sweden at age 0-19 years, either as refugees or as relatives to refugees.¹⁸ One interesting finding is that the employment gap between natives and refugees who arrived at ages 0-15 years is relatively modest. The employment level in this group is about five percentage points below the level of natives at age 35, both for men and women. This must be seen as an indication of their successful labour market integration, especially as this group includes adolescent immigrants who arrived in Sweden at middle-

¹⁷ This comparison applies to the years 2011-15 and is based only on individuals who were registered as high-school students at some point in time between 1999 and 2015. Note also that these statistics are based on cohorts that normally finished compulsory school in 1999-2007. Figure 2 shows that the performance among immigrants who arrived in Sweden after age seven declined for school cohorts 2008-10, and then continued at a low level for later cohorts. From this perspective, a realistic expectation is that the majority of the recently arrived adolescent immigrants will have difficulties to complete a high-school education with final grades by age 24.

¹⁸ Employment is defined as having an annual income from employment, self-employment or capital that exceeds 40% of the median income among native men 20-50 years of age in the same year.

school age (at grade levels 7-9). The outcome is clearly worse for refugees who arrived at ages 16-19 years. The corresponding employment gap at age 35 is over ten percentage points for men and nearly 20 percentage points for women.¹⁹ Yet, in light of all the disadvantages associated with arriving at age 16-19 compared to arriving at a younger age, these employment gaps do not seem surprisingly high.

The size of these gaps also depends on how employment is defined. Ruist uses a measure that defines an individual as employed if he or she has a level of income from work or capital considered as a lower level for self-sufficiency. The employment gap between natives and immigrants would probably be larger if the cutoff between employed and unemployed was drawn at a higher level of income, as immigrants, for example, tend to be overrepresented in temporary jobs and in low-paid jobs (Eriksson 2011). This is supported by the results in Engdahl and Forslund (2016) who present similar statistics as Ruist for the outcomes of young adults, but focusing more on gaps in income. They look separately at natives and individuals born abroad who either arrived in Sweden at age 16 or younger or at ages 17-30 (thus including also individuals who arrived as young adults). The authors measure individuals' income as the fraction of the median income among 45-year-olds. Their finding is that the native-immigrant gap at age 30 (cohorts born between 1974 and 1980) is about 20 percentage points for young arrivals and above 40 percentage points for older arrivals (note again that the group of older arrivals also includes individuals who arrived as adults). Thus, the income gaps between young natives and immigrants are more pronounced than the employ-

ment gaps, especially when employment is defined on the basis of a relatively low level of income.

With the definition of employment in Ruist (2018), previous cohorts of young male refugees have reached employment levels of about 77% (age at arrival 16-19 years) and 85% (age at arrival 0-15 years) at age 35. The corresponding numbers for females are about 68% and 82%.²⁰ Education efforts should be important in order to achieve similar or better employment outcomes among the current cohorts of young immigrants.

5. Education efforts to facilitate future employment among adolescent immigrants

How to best design education efforts so as to promote the future employment among adolescent immigrants is an important current topic. The following discussion will focus on education as a means of preparing individuals for the labour market. It is clear that education may have many other beneficial effects for the individual and society. However, with the focus on labour market integration, jobs are the final target.

Research on the effects of educational policies on adolescent immigrants' later labour market performance in the Nordic countries is limited. Quantitative evaluations of the effectiveness of different education efforts for immigrants are, in fact, also rare outside of the Nordic countries.²¹ However, there exists more high-quality research on the effectiveness of different school interventions and practises for disadvantaged students in general. The results from such studies should be highly relevant also for policy makers who want to help immigrant students.

¹⁹ The difference between early and late arrivals in this comparison cannot be interpreted as purely an effect of age at migration. These two groups belong to different immigrant cohorts and differ in composition (the 0- to 15-year-olds arrived in 1980-1995 and the 16- to 19-year olds between 1996 and 1999).

²⁰ See Figure 2.20 (males) and Figure 2.21 (females) in Ruist (2018).

²¹ See Pekkarinen (2019) for a discussion about the likely reasons for this.

As with all education efforts, it should be important to spend the money on the most cost-effective interventions and practices. Nonetheless, information about the cost efficiency of different interventions to guide policy making is typically rare, even in well-designed effect studies. Therefore, I will only refer to the numerator of the effect-to-cost ratio when discussing the effects of various interventions below.

5.1 School practices that benefit disadvantaged students

There exists much high-quality research on the effectiveness of different school interventions and practises for disadvantaged students in general. This literature includes many studies based on randomised control trials and quasi-experimental designs, the majority conducted in the US. To the extent that the findings from this literature are generalisable to other countries and to immigrants, they may be highly relevant also for policy makers and school managers who want to design practices that can help immigrant students in the Nordic countries. Dietrichson et al. (2017) is one example of a recent meta study, which is based only on underlying studies with strong research designs, that focuses on the effects of interventions to the benefit of disadvantaged students (with a low socioeconomic status). For example, the authors find statistically and economically significant positive effects of tutoring, small-group learning, cooperative learning, feedback and progress monitoring, and coaching and mentoring of teachers on the outcomes of disadvantaged students. These kinds of practices seem relevant also when designing school practices to the benefit of adolescent immigrants in the Nordic countries.²²

5.2 Individualized study plans and support in mother tongue

Some basic interventions targeted at childhood immigrants are common to all five Nordic countries (Hadnagy 2017). First, they all offer some kind of individual knowledge assessment. This forms the basis for either placing immigrant children in special preparatory classes or directly placing them in an ordinary class. The assessment is also used for developing individual study plans or for determining the need for additional support (Bunar 2010, Swedish Schools Inspectorate 2014, SOU 2017a). Second, the Nordic countries offer tutorials in the students' mother tongue. Third, they provide native language classes and/or bilingual instruction of regular subjects.

Native language classes are sometimes criticised in the public debate as they are perceived to slow down students' progress in learning their new host-country language. This critique does, however, seldom originate from the teaching profession or from pedagogical researchers. On the contrary, experts stress that learning in all subjects benefits from a continued development of children's mother tongue (see, e.g., Swedish Schools Inspectorate 2010 and Hyltenstam et al. 2012). However, only limited quantitative evidence is available from studies with a strong research design to substantiate this. One exception is Calmar Andersen et al. (2017) who evaluate the effects of a randomized controlled trial in the first grade of Danish compulsory schools. The experiment implied that bilingual pupils in treated schools were given extra teaching in their mother tongue (three times a week for a duration of 32 weeks). It was found that the treatment increased some of the pupils' well-being and motivation as well as the parents' involvement in school. The effects on pupils' skills in their mother tongue differed

²² See Lindahl (2019) for an overview of this literature.

by country of origin: They were positive for Arabic pupils but not statistically significant for Turkish and Somali pupils. There were no measurable effects on pupils' linguistic abilities in Danish.

Whereas native language classes are often offered in schools, the bilingual teaching of regular subjects for immigrants is not equally common. Intuitively, if language is the main obstacle to learning, then bilingual teaching for adolescent immigrants who have limited time to catch up in school should be beneficial for their skill level in various subjects.²³ Nonetheless, it seems unrealistic to apply bilingual teaching as a general policy. It would clearly be very costly to hire the required number of bilingual teachers in different languages with the skills and formal qualifications needed.

A related, but more feasible, intervention could be to offer rigorous study support to immigrant students in their mother tongue. One recent and comprehensive government investigation about how to help newly arrived immigrant pupils obtain a qualification for high schools in Sweden points at this particular intervention as the most important one (SOU 2017a). Previous qualitative studies for Sweden also stress the importance of study support in the mother tongue (Bunar 2010, Swedish Schools Inspectorate 2014). The authors of these studies claim that this is appreciated by the students, that it speeds up their learning, strengthens their self-esteem and motivation, and is especially important for newly arrived adolescent immigrants. SOU (2017a) therefore suggests that newly arrived students in

grades 7-9 should be offered proper study support in their mother tongue.²⁴

The argument that immigrant pupils would gain from the help of bilingual study supporters seems to be well-founded. One natural extension would be to also offer study support to older adolescent immigrants who are attending preparatory high-school education. However, there is a lack of direct empirical evidence on the effectiveness of hiring bilingual study supporters, and one needs to look at the evidence from evaluations of related policies to find guidance. One closely related general education effort is to hire more teaching assistants at schools. Calmar Andersen et al. (2018) evaluate a randomised experiment in Denmark and show that teaching assistants improved student performance and in particular the performance among students with a weak school background. Silliman (2018) examines the effects of a Finnish policy that provided schools with many immigrant students with extra resources that were mostly spent on teaching assistants.²⁵ He finds modest effects of the policy on short-term school performance, but large positive effects on various medium-term and long-term outcomes such as on-time graduation and enrollment in higher education. These results from Denmark and Finland support the idea that study support, targeted to immigrant students, has beneficial effects.²⁶

5.3 Give students extra time

Extra time for studying is one crucial component to compensate for adolescent immigrants' shortage of host-country specific skills. Even if it takes them a

²³ The findings in the existing literature are, however, ambiguous (see Tvingstedt and Salameh 2011).

²⁴ SOU (2017a) points at a current shortage of study supporters at schools, but also states that the pool of potential candidates is large, given that study supporters do not need to hold formal qualifications as teachers. They are also cheaper to hire.

²⁵ The extra resources were not earmarked to hiring assistants. Principals had discretion over how to use the money, but they were encouraged by officials to use it for targeted interventions, such as hiring teaching assistants to target at-risk students. The paper also reports that conversations with several principals suggest that the extra funding was primarily used for additional classroom assistants.

²⁶ Relatedly, mentorship programs have in some cases also shown very positive effects (See Oreopoulos et al. 2017).

few more years to complete compulsory school and later successfully finish a high-school program, this extra time does not matter much in the longer perspective.

One way to offer extra time is to arrange teaching during the summer holidays and at other times of the year when students are normally free from school.²⁷ The "summer learning loss" is a well-documented phenomenon (see, e.g., Cooper et al. 1996). To avoid such loss of skills during breaks should be especially important for adolescent immigrants who need to catch up quickly. Intuitively, summer school could be an important measure to give adolescent immigrants, and other students who need it, extra time for learning. The literature on the effects of summer school is extensive, and it typically finds positive average effects (see, e.g., the two meta studies Cooper et al. 2000 and Kim and Quinn 2013).²⁸ Unsurprisingly, this literature underscores that the quality of teaching and the attendance and effort among students are crucial for the effectiveness of the intervention. It also stresses that school-based programs can be quite costly. Thus, summer schools and educational programmes during other short breaks might be a way to speed up the learning process among adolescent immigrants. The main challenge is probably to find enough teachers willing to work during breaks and the associated costs.

Another way to give extra study time to adolescent immigrants is to cut down the number of subjects and devote extra hours to the most important subjects that are needed to qualify for high school. This type of adjustment could be designed on the basis of an individual assessment.

Other strategies to give extra time to adolescent immigrants are to place them in classes with younger students and to offer grade repetition when needed. According to interviews with school managers in Sweden, these strategies are often not appreciated by the students and should only be used after a careful individual assessment (SOU 2017a). In Denmark and Finland, it is common to offer an additional tenth school year to students who are not yet qualified for high-school studies. Sweden's model of preparatory programs in high school has a similar purpose and is unique among the Nordic countries.

One delicate issue is how much extra time should be given to newly arrived students at high-school age and what the aim should be. It should be important to give generous time to motivated students who make reasonably quick progress and aim to eventually finish a regular high-school program. It should be equally important not to lock in less motivated or less able students for long periods of time in potentially unproductive preparatory classes. I will return to this issue below.

5.4 Minimise school failures

Previous studies have found that immigrant students tend to have a high level of motivation and aspirations, while having difficulties to catch up with school (see, e.g., Jonsson and Rudolphi 2011). From this perspective it seems particularly important to avoid elements in the school system that discourage students. One obstacle for progression that has been identified in Sweden is the grading system. The scale is F-A, where F indicates a performance below the proficiency that is required for pass (E), and

²⁷ Summer school has been offered for several years in many municipalities in Sweden to students who are in need of extra teaching in order to get qualified for high school. This has been financed by the central government. The Swedish government has proposed to make summer school programs obligatory for all students who need the extra teaching in grade levels eight and nine. Education experts have also proposed to extend this further, especially to adolescent immigrants in grades 7-9 (SOU 2017a).

²⁸ However, Dietrichson et al. (2017) find no statistically significant effects for students with a low socioeconomic background, which is the group of interest in their meta study.

A indicates excellent performance. A large fraction of the adolescent immigrants get F in many or all subjects. It has been pointed out that written judgments should be more useful for newly arrived immigrant students if their performance is below grade E (SOU 2017a) so that they get constructive feedback on their progression.²⁹

Several studies also point out that the transition between the initial preparatory class and the regular class is a critical event that discourages some students as they have difficulties to follow the teaching in the regular class. Newly arrived immigrant pupils, in all five Nordic countries, often attend preparatory classes in compulsory school which typically have a main focus on language learning. The time spent in preparatory class is meant to last for a maximum of two years (Hadnagy 2017). These classes are most common at schools that have received many immigrant students. It seems that study support, which was discussed above, could play an important role, particularly during and after the students' transition to a regular class.

Another critical transition is from compulsory school to high school. Many immigrant students in Sweden who are not qualified for a regular high school program end up in one of four preparatory programs. These programs aim to prepare students for a regular program or to help them find a job. The clearly most common program for immigrant students is *språkintrödn* which focuses on Swedish language learning. Due to the large number of adolescent immigrants, *språkintrödn* is the fourth

largest high-school program in Sweden. About 10% of all students attended this program in 2016 (Swedish National Agency for Education 2017b). On average, students stay in *språkintrödn* for three to four years. This program has been criticised for offering too little teaching in other subjects and for a common absence of individualised study plans. The frequency of transitions from this program to regular high-school programs is low.³⁰ The Swedish Schools Inspectorate (2017) reports that students tend to lose motivation within this program. Especially students who transit from compulsory school to *språkintrödn* tend to feel that their progress stops.³¹ Therefore, study plans, guidance and support should be important components in high school preparatory programs as well.³²

5.5 Increase high school admittance

Previous studies show that low-performing students with incomplete high-school education often face difficulties in the labour market (Engdahl and Forslund 2016). General reforms that make it easier for marginal groups of pupils to enter and complete high-school education may thus be important. Nordström Skans et al. (2017) show that students with low grade scores from compulsory school in Sweden increasingly attend preparatory programs in high school. And only about 40% of the beginners in a preparatory program in 2012 finished with an exam from a regular program in 2015. The report further shows that overall high-school completion dropped, and preparatory program enrollment increased, in association with a high-school reform in 2011. This reform reduced the theoretical content in

²⁹ This is similar to a general critique of the Swedish grading system which argues that many students get more discouraged from getting a grade that in essence indicates "fail" than from receiving a low grade, say "1" or "2" on a scale 1-5 (Björklund et al. 2010).

³⁰ For example, only 36% of the students enrolled in the program in 2011 attended a regular high-school program within five years, and only 15% had finished a regular program within the same time frame. A considerable fraction was not registered to either study or work in 2016 (Swedish National Agency for Education 2017c).

³¹ OECD (2016) is also critical of the placement of immigrants in the preparatory program *individuell alternativ* that the least motivated students tend to attend. The argument is that more motivated immigrant students are negatively influenced by the native-born students with low motivation.

³² The Swedish Schools Inspectorate has found that systematic individual knowledge assessment, the establishment of individual study plans and guidance and support work less satisfactorily at *språkintrödn* in high school compared to how it works in compulsory school.

vocational programs, but at the same time raised the criteria for admission.³³ The effect of this reform seems to have been a flight from vocational to theoretical programs among students with higher previous grade scores. Many students with lower performance lost access to the vocational programs. The raised admission criteria seem to be a mistake since they preclude many students from vocational high-school programs.

One policy change that could help many students would be to return to the pre-reform general admission criteria which demanded a grade score A-E in Swedish or Swedish as a second language, English and mathematics. Students who do not reach the required scores in these three subjects when they finish compulsory school can then enter the preparatory program "program-oriented individual choice" (*programinriktat individuellt val*) and focus only on these subjects that they need for getting qualified. SOU (2017a) suggests that students should be helped to find their way to this preparatory program instead of *språkintrödn*. This is motivated by the fact that *programinriktat individuellt val* is the program with clearly the best outcomes.³⁴ Well-functioning study and vocational guidance should furthermore be important in this context.

5.6 More vocational education

Nordström Skans et al. (2017) show that the probability of finding a job shortly after completing a vocational program is persistently high over time for

a range of study choices. Despite this, immigrants have been underrepresented in vocational high-school tracks for a long time in Denmark, Norway and Sweden (see, e.g., Olofsson and Wadensjö 2007 and SOU 2017a). Interestingly, vocational tracks are also clearly less popular than academic tracks among students born in Sweden to parents from non-Western countries, compared to natives with Swedish-born parents, holding constant the students' performance in compulsory school (Jonsson and Rudolphi 2011).

The relative lack of interest among immigrant students in the vocational programs is surprising given their lower average performance in compulsory school and the obvious benefits of vocational education. Reasons for this lack of interest may include a higher degree of parental involvement in immigrant students' educational choices, a lack of experience with high-quality vocational education in many countries of origin (SOU 2016), and unrealistic expectations (Jonsson and Rudolphi 2011).³⁵

Goux et al. (2015) performed a randomised control trial in France where parents of randomly selected low-achieving pupils were invited to group meetings with principals. The aim of these meetings was to help families formulate educational objectives suited to their children's academic aptitudes. The authors find that by changing the high-school plans of the students with less realistic plans, the intervention substantially reduced grade repetition and

³³ The new general admission criteria to vocational programs are at least a grade E ("pass") in Swedish or Swedish as a second language, English, mathematics and in at least five other subjects in compulsory school. Newly arrived adolescent immigrants have particular difficulties to obtain a grade A-E in Swedish as a second language and in English (see SOU 2017a, Table 3.6), but the requirement to obtain a grade score A-E in relatively many subjects is probably also a severe obstacle for this group.

³⁴ About 58% of the students in *programinriktat individuellt val* attend a regular program within two years. This preparatory program enrolls students who are motivated to get into a particular regular study program.

³⁵ Jonsson and Rudolphi (2011) discuss the reasons behind the high educational aspirations of many second-generation immigrants: "[Immigrants] expect higher benefits from academic education than from vocational schooling. This, in turn, could be due to anticipated discrimination in the (manual) labour market. In addition, ethnic minority students – and perhaps especially their parents – may also expect higher benefits from academic studies because their usefulness can be extended to the parents' country of origin (or a third country). Benefits from academic studies may also extend beyond the pecuniary in immigrant families – a speculation in that direction is that in many non-European countries, lower vocational qualifications may not have the same positive status as in Northern Europe."

dropout. Thus, study guidance that involves parents seems to have a clear potential to make a difference. Informing parents and children about the benefits of vocational education might thus have positive long-term consequences for many adolescent immigrants who perform at a low or medium level in theoretical subjects.

As discussed above, a large proportion of adolescent immigrants in Sweden participate in the preparatory programs.³⁶ It should be very important to offer roads to employment for all students (immigrants and natives) within these programs for whom the barriers to the regular programs are too high. One suggestion is to strengthen the existing preparatory program *yrkesintroduktion* and offer these students a chance to train for various jobs and occupations. This program aims to lead either to a job or to further studies at a regular vocational program. However, the current frequency of transitions from *yrkesintroduktion* to regular vocational programs is low. One suggestion is to strengthen the job-training content of the program to make students employable and able to move directly into employment. This suggestion is in line with the government investigation SOU (2016), which argues for an individually designed vocational training for students. In terms of program content, a large proportion of work practice would likely be desirable.

It might also be useful to look at the Danish model for vocational education. A central component of this model is a well-developed apprenticeship system, similar to the German one. However, even if a more practically oriented vocational education with

apprenticeships seems like an attractive option for many immigrant students, the Danish vocational education also has its problems. Olofsson and Wadensjö (2007) report that immigrant students have difficulties to establish contacts with employers for apprenticeships and that the dropout rate is particularly high among immigrant students.

The Norwegian model is more similar to the Danish model for vocational education than to the Swedish one.³⁷ However, only a small fraction of high-school students with immigrant background in Norway are trainees and they are overrepresented among dropouts (Olofsson and Wadensjö 2007). Hence, despite quite different models for the organisation of vocational education in Denmark, Norway and Sweden, students with immigrant background are underrepresented in vocational programs, and they are less likely to finish them. Given the concern for the future employment among large groups of adolescent immigrants in the Nordic countries, it seems important to investigate why immigrants tend not to enter and finish vocational programs to the same extent as natives.

6. Concluding discussion

A natural policy response to the current education challenge is to devote extra resources to schools with many immigrant students. Such resource injections are clearly well motivated from the perspective that failing to integrate immigrant students at school could be very costly in the long term. However, it is important to use these additional resources on interventions and practices that work the best

³⁶ About 64% of the students in these programs in 2015/16 were immigrants, and 23% of all high-school students were in these introduction programs.

³⁷ Olofsson and Wadensjö (2007) report that the basic vocational education is organised very differently in the Nordic countries. The biggest differences exist between Denmark and Sweden. The systems in Finland, Iceland and Norway are in between, with Finland's system closest to the one in Sweden. In Finland and Sweden, vocational education provides general qualifications for higher education (although the high-school reform GY2011 in Sweden changed this and reduced the theoretical subject content). This is not the case in Denmark, Iceland and Norway. Students are, however, able to take complementary courses to achieve the requirements for higher education in all countries. Denmark is the only Nordic country that does not have integrated upper secondary schools. Vocational training takes place in special schools. In Norway, where apprenticeship education also has a strong position, the school-based part of education takes place in integrated upper secondary schools. Iceland represents an intermediate case with significant elements of apprenticeship education as well as school-based vocational education.

at the lowest cost. Unfortunately, the existing literature gives little guidance about the relative cost efficiency of different education efforts. An even more serious limitation is that the literature gives little guidance on what works best for immigrants, even when neglecting the cost side. However, evidence from studies with a strong research design reveal, for example, that tutoring, small-group learning, cooperative learning, feedback and progress monitoring, and coaching and mentoring of teachers are practices that benefit students with low parental education and income. This kind of evidence should be relevant for policy makers and school managers who want to help immigrant students.

Some targeted interventions seem well-established in all Nordic countries, such as native language classes. Recent policy reports point at a need for more rigorous study support for newly arrived immigrant students, preferably in their mother tongue by bilingual speakers. Recent evidence from Denmark and Finland lends support to this idea, since teacher assistants (not necessarily bilingual) have been found to have positive effects for disadvantaged and immigrant students. Other important components for targeted interventions are individual knowledge assessments at an early stage after immigration and individual study plans. Giving immigrants who arrive at ages 10-18 years extra time to catch up in school is obviously important. Summer and holiday school is one intervention that has shown mostly positive effects according to existing research, but it may not be the most cost-efficient intervention.

The challenge to educate the large number of adolescent immigrants that have arrived in the Nordic Region in recent years can roughly be divided into two parts. First, there is a need to help younger pupils catch up in compulsory school with the aim of qualifying for high school. Second, it is important to

help adolescent immigrants arriving at high-school age to either qualify for high-school studies, or to offer alternative education or training with a more direct focus on the labour market. When it comes to more general reforms that may benefit adolescent immigrants in this regard, one example from Sweden is the need to reconsider the stricter acceptance to and exam requirements from vocational high-school programs.

Several vocational programs are associated with very good employment opportunities. There are indications that marginal groups of students, who may benefit the most from vocational education, have difficulties to access these programs. In Sweden, an urgent issue is to support the many adolescents and young adults in high-school preparatory/introduction programs, typically focusing on learning Swedish in classes with only immigrant peers. There is a clear risk that young people get stuck for several years in these programs that do not improve their productivity and may have adverse effects on their self-esteem.

Young individuals who have difficulties to qualify for and finish a regular high-school program would probably benefit from having access to a broad array of vocational education programs at different levels, as in Denmark and Norway. In Sweden, it seems most reasonable to build on existing structures to offer similar programs. One suggestion is to strengthen the current program *yrkesintroduktion* to offer individualized training for jobs with a focus on practical skills. Contacts with and the involvement of employers should be one crucial component in such an education effort. A related issue for targeted interventions is how to make vocational education more popular among immigrant students. Immigrants have been underrepresented in these tracks for a long time in Denmark, Norway and Sweden.

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Chapter 4

Labour Market Policies: What Works for Newly Arrived Immigrants?¹

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ABSTRACT

In the Nordic countries, activities for newly arrived refugees and family migrants are organized within introduction programmes and the question of which type of activities works for this group has recently gained increased attention. The programmes typically include language training, courses in civic orientation and labour-market-related activities. This contribution first describes how the introduction programmes are organized and which activities are included. It then summarizes research findings concerning the effectiveness of these activities. A recurring conclusion is that subsidized employment in the private sector is effective but that there is scope for increasing its use among immigrants.

Keywords: Labour market policies, Nordic countries, refugees and family migrants.

JEL codes: J68, J61, J15.

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1. Introduction

All of the Nordic countries experienced a large inflow of asylum seekers during the autumn of 2015 although there was a difference between the countries in both total numbers and numbers per capita of the population. To a large extent, asylum seekers came from the same countries in the Middle East and Africa, e.g. Iraq, Afghanistan, Syria and Somalia. The OECD classifies Denmark, Finland, Norway and Sweden together in a group of "destination countries with significant recent and humanitarian migration" (OECD/EU 2018, p.29) and states that these countries "often face similar integration challenges related to the characteristics of the immigrant population" (ibid, p.25). It is also well known that the labour market performance of refugees and family migrants has been rather poor in all the Nordic countries when compared with the native populations. There is a worry that also more recently arrived cohorts will have large difficulties in the labour market.

Although being similar in many ways, the Nordic countries differ with respect to migration policies. Sweden has traditionally been the most generous and Denmark the strictest.³ However, as a response to the large inflows in 2015, Denmark, Norway and Sweden all decided to tighten migration policies by introducing temporary border controls and implementing stricter rules for receiving a permanent residence permit and for family reunification. In Finland, the government also responded to the rapid increase in the number of asylum seekers by restricting the possibility for family reunification and reducing social benefits (Sarvimäki 2017). These changes were intended to lower the number of asylum seekers. At the same time, there has been an increased focus on making integration efforts more

A common feature of the Nordic countries is that measures targeted at newly arrived refugees and family migrants are organized within introduction programmes.

effective in order to improve labour market integration for those who receive a residence permit.

A common feature of the Nordic countries is that measures targeted at newly arrived refugees and family migrants are organized within *introduction programmes*. This distinguishes the Nordics from, for example, Germany and the Netherlands where measures targeting these groups are not organized in the same structured way.⁴ The introduction programmes in the Nordic countries are similar in many ways: they are restricted in time (although the length varies slightly between countries), participation rates are high, and the programmes include language training, courses in civic orientation and labour market activities.

The aim of this contribution is to discuss the effectiveness of different types of active labour market programmes (ALMPs) for newly arrived refugees and family migrants. ALMPs here include labour market training, subsidized employment, and matching and job search activities. The roles of language training and regular education are also analyzed since they are of particular importance for (low-skilled) immigrants. Research on the effectiveness of ALMPs for participants in the introduction

³ See Jakobsen et al. (2018) for an analysis of the consequences of this Scandinavian policy divergence for immigrant integration

⁴ See Joyce (2017) for a detailed comparison between the Nordic countries, Germany and the Netherlands, and Tronstad and Hernes (2014) for a comparison of the introduction programmes in Denmark, Norway and Sweden.

programmes is still scarce, and most of the research discussed below reviews the effects for a larger group of immigrants or for unemployed people in general. The focus is primarily on evidence from the Nordic countries, although when relevant I include studies also from other (European) countries. Particular attention is paid to the situation in Denmark, Norway and Sweden, since these are the Nordic countries that have received the largest numbers of refugees and family migrants. Finland is also discussed, but not as thoroughly as the other Nordic countries because of its rather short history of being a refugee-receiving country. Iceland has been excluded altogether from the overview because of the low number of refugees.

In Norway, it has been an outspoken political goal since 2010 that 70% of the participants in the introduction programme should be employed or enrolled in regular education one year after leaving the programme (Lunde and Lysen 2018). In Denmark, the objective is that 50% of the participants should be employed within three years (Regeringen 2016). In Sweden, there is no explicit goal that defines the share of participants who should be in employment or education after completing the programme. A more general statement has been that "newly arrived refugees and family migrants should normally be employed or in education after two years" (Persdotter Wallström 2017). Since, this is a rather vague statement in terms of what is meant by "normally", critics have suggested that the government should define a more specific objective concerning employment levels among individual groups, such as refugees.⁵

A cross-country comparison of actual results reveals that transitions into employment or regular education are highest in Norway and lowest in Denmark, with Sweden in between. Among the cohorts who immigrated to Norway between 2008 and 2013 and participated in the introduction programme, 70% of the men and 49% of the women were either employed or in regular education five years after settlement. The corresponding figures for Denmark were 55% among men and 29% among women, and for Sweden 58% among men and 41% among women (Hernes et al. 2019).⁶ The situation in Finland is somewhat different than in the other Nordic countries, since refugee immigration has been comparatively low. Employment rates among refugees seem, if anything, to be lower in Finland than in the other three countries. Among refugees from Iraq and Somalia who came between 2005 and 2009, employment rates barely reached 20% in 2013, and among those born in Afghanistan they were around 30% (Sarvimäki 2017).

Earlier studies analysing the integration process over a longer time period have found similar country differences, i.e. that employment and participation in regular education is higher in Norway than in Denmark and Sweden in the short run. Nonetheless, country differences appear to fade out over time (Åslund et al. 2017, Bratsberg et al. 2017, Schultz-Nielsen 2017).

The exposition is structured as follows: In Section 2 institutional facts about how active labour market policies are organized in the different Nordic countries are presented. Statistics on participation in different types of measures within the introduction programme are also presented. In Section 3, previ-

⁵ See, for example, Finanspolitiska rådet (2017) and SNS (2017).

⁶ These numbers are averages for all cohorts between 2008 and 2013. In Sweden, there has been an increase in employment over time. For example, male employment five years after settlement was approximately 41% for the 2008 cohort and 50% for the 2012 cohort. This increase is probably related to a general increase in labour demand. In Denmark, there also seems to be an improvement in employment rates over time, particularly for men since the second quarter of 2017. See for example Integrationsbarometer.dk.

ous research on the effectiveness of different types of active labour market measures is described. Section 4 summarizes the discussion and draws some conclusions.

2. The introduction programmes in the Nordic countries

The aim in Denmark, Norway and Sweden is that immigrants who are eligible to participate in an introduction programme should start participation shortly after having received their residence permit. In 2016, around 33 000 newly arrived immigrants participated in the Danish introduction programme, almost 24 000 participated in the Norwegian programme and slightly over 70 000 participated in the Swedish programme. In all three countries, this was a large increase in relation to the previous year (Joyce 2017). Below, the organization of the introduction programmes is described in more detail. Table 1 provides an overview of differences and similarities between the countries.

2.1 The organization of the programmes

Denmark

Until 1999, the central government was responsible for the integration programme, which at the time lasted for one and a half years.⁷ In 1999, the responsibility was transferred to local authorities, the programme duration was extended to three years, and participation became mandatory. Programme participants now sign an 'introduction contract' with the municipality. The contract defines the content and objectives of the introduction programme and includes a description of the activities that the participant should take part in to reach the objectives.⁸ Since 1999, the programme has included language training, civic orientation and labour market activities. It can now last between one and five years,

depending on the needs of the participant. Participants can in principle stay in the programme until they become employed or enrol in regular education, but no longer than five years. In 2004, a reform enhanced the programme's labour market focus.

In the beginning of 2016, after negotiations between the government, trade unions and employers' associations, additional changes to the introduction programme were made in order to improve labour market integration outcomes (Kvist 2016). The labour market focus was further enhanced, and the municipalities became obliged to arrange work practice or subsidized employment from the start of the programme. Those eligible to participate should start the programme no later than two months after settlement in a municipality. The primary activities within the programme are work practice and subsidized employment, but these can be complemented with counselling and shorter education (Joyce 2017). Earlier, participants had first taken part in language courses and courses in civic education before starting labour market activities. Since the reform, the intention has been that newly arrived immigrants should learn these things while being on the job.

Immigrants who have left the introduction programme without obtaining employment or being enrolled in regular education can participate in the same type of municipally-organized measures as all other unemployed people (Joyce 2017). To a large extent, these measures resemble activities in the introduction programme, but the intensity of participation is lower.

Finland

On May 1, 1999, the government introduced a programme for immigrants in Finland that aimed at

⁷ See Schultz-Nielsen (2017) for an overview.

⁸ For more information see Udlændinge- og Integrationsministeriet (2019).

improving their labour market performance.⁹ Within the programme, the Public Employment Service (PES) is responsible for preparing individualized integration plans for nonworking immigrants who have lived in Finland for less than three years. Caseworkers meet with the immigrant and together they decide upon a suitable sequence of measures. The plan typically includes a combination of language courses, courses in civic orientation, vocational training, work practice and subsidized employment.

As a response to the large inflow in 2015, the Finnish government decided on an action plan which includes measures to improve the recognition of foreign education and to integrate language studies into other types of education. In addition, a new public-private initiative now combines short language training with a fast pathway to employment (Sarvimäki 2017).

Currently, only immigrants who are actively searching for employment are registered at the PES and can take advantage of the measures offered there. Immigrants not actively looking for a job at the time of arrival are directed to the municipalities for their integration support. In practice this means that they will participate in fewer labour-market-related activities. This can possibly delay, or even prevent, labour market entry. There is also a risk of large regional variations, since municipalities are free to decide themselves how to organize their activities (OECD 2018). The recommendation from the OECD is to address the differential treatment of newly arrived refugees and to direct all of them to the PES (OECD 2018).

Norway

In 2004, the Establishment Act was adopted. It stipulates that municipalities should offer all refugees and family migrants the possibility to participate in an introduction programme.¹⁰ The programme starts with caseworkers mapping out the participants' education, labour market experience and other competencies. An individualized plan is then established. The programme includes language training, courses in civic orientation and labour market activities. It can also include regular education at a lower level than the tertiary one. Validation of previous education can also be included in the programme. Labour market activities include different types of work practice and subsidized employment but also labour market training (Joyce 2017). Participation is both a right and a responsibility. To receive a permanent residence permit, participation in the programme is a prerequisite. Reception of benefits is also conditional upon participation in the programme.

The responsibility for interventions during the introduction period is divided between the central government and local governments. The central government is responsible for arranging housing and for paying out benefits during the asylum process, but local governments take over responsibility once a newly arrived refugee or family migrant settles in a municipality. Since the organization of the introduction programmes is a municipal responsibility, there is some scope for regional variation. If a newly arrived refugee or family migrant has not found work during the introduction programme, she can continue to participate in labour market activities organized by the Norwegian Labour and Welfare Administration (*Ny arbeids- og velferdsforvaltning*,

⁹ See Sarvimäki and Hämäläinen (2016), Sarvimäki (2017) and OECD (2018) for descriptions and analyses.

¹⁰ See, for example, Enes and Wiggen (2016) for a description of the programme and its participants.

Table 1 Overview of the introduction programmes

	Denmark	Finland	Norway	Sweden
Duration	1-5 years	2-3 years	2-3 years	2-3 years
Participants	Refugees and all family migrants from outside the EU/EES	Immigrants who are not working and who have lived in Finland for less than three years	Refugees and family migrants of refugees	Refugees and family migrants of refugees
Content/activities	Language training, civic orientation, labour market activities			
Main responsibility	Municipalities	PES (for those who are actively searching for employment) and municipalities (for those who are not registered at the PES)	Municipalities	Central government (PES)
Outcome	Employed or in regular education five years after settlement: Men: 55% Women 29%	Employed four to eight years after settlement: Iraq: 18%, Afghanistan: 27%, Somalia: 15%	Employed or in regular education five years after settlement: Men: 70% Women: 49%	Employed or in regular education five years after settlement: Men: 58% Women: 41%

Sources: For Finland: OECD (2018) and for the other countries: Joyce (2017). For outcomes: Hernes et al. (2019) for Denmark, Norway and Sweden, and Sarvimäki (2017) for Finland.

NAV).¹¹ All unemployed are entitled to participate in these activities.

Sweden

Prior to the establishment reform that took effect on December 1, 2010, the main responsibility for newly arrived refugees and family migrants in terms of introduction efforts, settlement and financial support lay with the municipalities. The PES had no actual role in the introduction programmes and their first contact with newly arrived refugees and family migrants was when they registered as job-seekers at the local employment office. In some municipalities, this occurred shortly after settlement, but the migrants rarely started a programme until they were judged to have sufficient knowledge in Swedish. In other municipalities, it could take a long time before migrants were registered at the PES.

One of the objectives of the establishment reform was that newly arrived refugees and family mi-

grants should register at the PES and start the introduction programme as soon as they obtain a residence permit. Hence, through the establishment reform the PES was given a central role for the labour market establishment of newly arrived refugees and family migrants. The programme now lasts for two years but can be extended up to three years. As in Denmark and Norway, participants get an individualized integration plan that stipulates which activities they should participate in during the introduction period. Activities included are language training, courses in civic orientation and labour-market-related activities such as labour market training and subsidized employment. During the first four years after the reform, it was possible for participants to choose a private coach (*etableringslots*) who was meant to assist the immigrant to achieve the goals of the plan. The system was abolished in February 2015 after having been heavily criticized.¹²

¹¹ NAV is an authority which has existed since 2006 when the PES, the Social Insurance Agency and the municipal social services were merged into one authority.

¹² It was, for example, argued that coaches often had a weak labour market focus, that the system where participants could freely choose a coach was difficult to use for the target group, and that the follow-up and control of the coaches did not work satisfactorily (Riksrevisionen 2014). See also Sibbmark et al. (2016) for an analysis of the system.

In Sweden, nearly half of all programme participants are not enrolled in regular education or in employment one year after leaving the introduction programme. A majority of them receive welfare payments from the municipalities. It is possible for municipalities to make payment conditional on participation in certain activities. In this sense, former participants in the introduction programme become the responsibility of the municipalities, although they can still be registered at the PES and participate in their activities. Research on the effectiveness of municipally-organized labour market activities for immigrants is even scarcer than research on ALMPs that are organized by the PES for this group.¹³

2.2 Participation in ALMPs within the introduction programmes

As mentioned above, newly arrived refugees and family migrants within the introduction programme can participate in different types of activities. The type, combination and order of activities as well as the number of weekly hours of participation in each activity is stipulated in the individualized integration plan and varies between individuals. A description of participation in activities in Denmark, Norway and Sweden is presented in Table 2. Since individuals often participate in several types of activities the groups are not mutually exclusive. The three countries do not offer exactly the same types of activities, but there are some similarities. In all countries, introduction programmes contain elements of language training, civic orientation, labour market training, subsidized employment and regular education.

There are some common patterns for the three countries in the table. Almost all participants in the introduction programmes take part in language training.¹⁴ In Denmark, it is quite common to participate in some form of job training or work practice (labelled "internship"). In Norway, 23% among men and 20% among women participate in work practice. In Sweden, work practice is included in the broader category "labour market programmes". 87% of men and 83% of women participate in these programmes, and around 20% participate in work practice.¹⁵ Subsidized employment, on the other hand, appears to be most extensively used in Sweden, while participation in regular education is less common in Denmark than in Norway and Sweden. It should, however, be noted that regular education is not a part of the introduction programme in Denmark. In Sweden, the single most common activity, besides language training, is the so-called preparatory education (*förberedande och orienterande utbildning, FUB*).¹⁶ This is, like work practice, part of the broader category "labour market programmes". Only a minority participate in labour market training (Arbetsförmedlingen 2018a).

Among the labour-market-related activities within the introduction programmes, subsidized employment is perhaps the type of activity that has received most attention in the public debate. One reason may be that earlier research has shown that ALMPs resembling regular jobs are the most effective ones (see Section 3.5 below). The willingness among politicians to use employment subsidies for newly arrived immigrants has increased in all Nordic countries. For example, in Norway, the Minister of Labour has encouraged NAV to use employment

¹³ See, for example, Lundin (2018) for a discussion of the effectiveness of municipal labour market programmes.

¹⁴ In Finland, which is not included in the table, there is also a heavy emphasis on language training (OECD 2018).

¹⁵ See Arbetsförmedlingen (2018a) for description of activities within the introduction programme.

¹⁶ The purpose of preparatory education is to strengthen the individual's chances to get or to keep a job by preparing and guiding the individual and providing basic knowledge and skills. Examples of activities are general basic education (*allmän teori*), language training for a specific occupation (*yrkessvenska*) and recognition of foreign credentials (*kunskapsvalidering*). For a more detailed description see Riksrevisionen (2018).

Table 2 Participation in different activities within the introduction programme in Denmark, Norway and Sweden, 2008-16 (Denmark and Norway) and 2011-16 (Sweden), percent

Denmark	Men	Women
Language training	94	92
Internship	73	46
Labour market programmes ^a	41	39
Subsidized employment	20	5
Regular education ^b	2	1
Norway	Men	Women
Language training with civic orientation	96	97
On-the-job language training	45	47
Labour market programmes (work practice)	23	20
Validation	4	3
Course provided by municipality	57	64
Subsidized employment	13	8
Regular education	20	19
Other	37	43
Sweden	Men	Women
Swedish for immigrants	92	92
Civic orientation	43	43
Labour market programmes ^c	87	83
Labour market preparatory courses ^d	75	75
Subsidized employment	38	16
Regular education	20	20
Hindrance ^e	10	43

Note: ^a Labour market programmes include labor market counseling and validation, ^b Not part of the introduction programme, ^c Labour market programmes include, for example, preparatory education (*FUB*), work practice and labour market training, ^d Labour market preparatory courses include for example social activities, validation and job search activities, ^e Hindrance means that the individual is temporarily prevented to participate in activities due to, for example, parental leave.

Source: Hernes et al. (2019).

subsidies to a larger extent (Lilleås 2017). The Norwegian Trade Union Confederation (*Landsorganisasjonen i Norge, LO*) is also in favour of increasing the use of employment subsidies to improve labour market integration among immigrants (Landsorganisasjonen i Norge 2016). Such subsidies have also been used in Finland to facilitate labour market entry among immigrants, although not to a very large extent.¹⁷

In Sweden, the two most commonly used forms of subsidized employment among newly arrived refugees and family migrants have been start-up jobs (*nystartsjobb*), which target both long-term unemployed persons and those within the introduction programme, and stepping-in jobs (*instegsjobb*)¹⁸, which only target newly arrived immigrants in the introduction programme. Employers' willingness to hire people using these subsidies has been

¹⁷ One explanation for the less frequent use in Finland is that the size of the subsidy increases with time in unemployment, and the time spent in integration measures is not included in the duration of unemployment (OECD 2018). Hence, for employers it becomes more attractive, due to a larger subsidy, to employ long-term unemployed natives.

¹⁸ From May 1, 2018, the stepping-in jobs began to be phased out. Both they and some other employment subsidies (although not the start-up jobs) are being replaced by so-called introduction jobs (*introduktionsjobb*).

relatively low which is slightly surprising considering that the subsidies are quite generous. A few studies have analyzed the effectiveness of these specific employment subsidies and found that a stepping-in job tends to lead to a start-up job, which, in turn, tends to lead to regular work (Riksrevisionen 2013). Start-up jobs increase the likelihood of regular employment but also have a crowding-out effect on such jobs (Liljeberg et al. 2012a).

The Swedish PES concludes in a follow-up study of unemployed persons who have had some form of subsidized employment during 2017 that 37% of native-born participants and 23% of non-Western immigrants were in regular employment 90 days after exiting these jobs (Arbetsförmedlingen 2018b). It is also found that transition rates vary across types of subsidy, with start-up jobs showing a substantially higher transition rate compared to other forms of employment subsidies: 37% compared to 7%. This difference could partly be explained by the fact that start-up jobs often follow other forms of subsidized employment in a chain of different interventions to facilitate labour market entry. Another explanation is that start-up jobs are initiated by the unemployed and the potential employers themselves, and that caseworkers at the PES do not assign unemployed to these jobs. This could possibly lead to a selection of those with a stronger position on the labour market into this particular form of subsidized employment (Arbetsförmedlingen 2018b).

Arendt et al. (2016) compare differences in labour market outcomes for newly arrived refugees and other immigrants across Danish municipalities. The authors find that labour market outcomes are better in municipalities which use subsidized employment and private-sector work practice to a larger extent than in municipalities where these measures are less often used.

Work practice seems to be more extensively used in Denmark and Norway than in Sweden. In Norway, two of the most commonly used measures are on-the-job work training (*arbeidspraksis*) and on-the-job language training (*språkpraksis*). Djuve et al. (2017) and Djuve and Kavli (2018) find weak correlations between these two types of measures and labour market transitions, as do Hardoy and Zhang (2010).

In summary, the organization of measures for newly-arrived refugees and family migrants within introduction programmes is a key element of integration policies in the Nordic countries. The programmes have many similarities: they mainly target refugees and their families, they are limited in time and they include similar activities. Descriptive statistics on participation rates in different types of activities indicate that participation is highest in language training (all three countries), internship (Denmark), on-the-job training and on-the-job language training (Norway) and labour market programmes that include preparatory education (Sweden). Studies analysing the correlation between activity and labour market outcomes find that those having participated in activities closely linked to the labour market have the best outcomes in terms of transitions to employment and education. It should, however, be noted that the results from follow-up studies can be caused by a positive selection of participants. Kvinge and Djuve (2006), for example, conclude that the effect of subsidized employment on employment opportunities for non-Western immigrants in Norway is overestimated if selection is not taken into account.¹⁹ Nonetheless, the researchers find a positive effect even after controlling for selection. The next section provides a more detailed overview of earlier research on the effectiveness of different types of labour market programmes.

¹⁹ Kvinge and Djuve (2006) use a so-called propensity-score matching approach to control for selection into subsidized employment.

3. Labour market programmes – earlier research

There is a lack of research on the effect of ALMPs for newly arrived immigrants, but lessons can be learnt from research on how different types of programmes work in general. After a discussion of what we know about the overall effect of participation in introduction programmes, the following programmes are discussed: language training, labour-market training (including preparatory education), regular education, subsidized employment, intensified coaching and counselling, and other measures specifically targeting immigrants.

Before we turn to studies of the effects of specific programmes or activities, a few words are in order on what we know about the effects of ALMPs in general. Card et al. (2018) summarize the results of over 200 recent studies in a meta analysis.²⁰ Their main conclusions are: (1) the impact of programme participation is on average close to zero in the short run but becomes more positive two to three years after completion of the programme; (2) the time profile of average impacts in the post-programme period varies with type of ALMP (job search assistance has similar impacts in the short and long run whereas programmes that emphasize human capital accumulation have small - or in some cases even negative - short-term impacts but larger positive impacts later); (3) women and participants who enter from long-term unemployment seem to gain more from programme participation than other groups; and (4) the impact from participation in ALMPs seems to be greater during recessions. The conclusion that long-term unemployed people gain more from programme participation is consistent with findings for Norway where Røed and Raum (2006) conclude that programmes should be "tar-

geted at persons with poor individual employment prospects" (p. 566). This could, for example, include newly arrived immigrants.

3.1 The overall effect of participation in introduction programmes²¹

As discussed in the introduction, measures for newly arrived refugees and family migrants are organized within introduction programmes in the Nordic countries. A number of studies evaluate the overall effect of participation in these programmes. The setup and results of these studies are summarized below. It should be noted that the counterfactual outcomes in the studies differ slightly. While the studies for Sweden and Finland evaluate the effect of a reform of the integration programmes, which means that there were changes to an already existing programme, the Norwegian studies compare participation in the introduction programme to non-participation. None of these evaluations are based on a randomized control trial (RCT) approach but compare outcomes between those who immigrated before and after some policy change.

Denmark

For Denmark, no studies investigate the overall effect of participation in the introduction programme. There are, however, some studies that look at the effect of specific changes within the programme. Rotger (2011), for example, estimates the effect of forced language training on labour market participation. He finds that it does not increase labour force participation in the long run but has a moderately positive effect on the earnings of family migrants after eight to nine years. Rosholm and Vejlin (2010) estimate the effect of replacing ordinary social assistance to refugee immigrants with a lower transfer level labelled "start help" on the job-finding rate. They find that lowering transfers has a positive

²⁰ In a meta analysis, estimates from a large number of individual studies are analysed and overall conclusions are drawn on the basis of these estimates.

²¹ See Rinne (2013) for an overview of the results from studies evaluating immigration policies.

effect on the job-finding rate after two years. They also find that the exit rate into "non-participation", that is, out of the labour force, is positively affected by receiving lower transfers during the early phase of the integration process.

Norway

Kavli et al. (2007) provide a detailed analysis of the implementation and effects of the mandatory introduction programme for newly arrived immigrants in Norway. The programme was implemented in September 2004. To identify its effect, the authors compare outcomes for refugees who arrived within the first two years after the implementation with the outcomes of earlier cohorts that were not affected by the reform. The authors discuss a number of methodological challenges, e.g. a difference in selection into the programme between the groups and differences in general labour market conditions when outcomes are measured and call for a careful interpretation of the results. Nevertheless, the results indicate that outcomes are better for those who participated in the introduction programme.

Finland

Changes in the Finnish introduction programme were briefly described above. Sarvimäki and Hämäläinen (2016) evaluate the reform. The "treatment" should be seen as an increased focus on individual circumstances, with PES caseworkers trying to find a sequence of integration measures most suitable for each participant. The primary focus of the new integration plans seems to have been to improve the communication between the caseworker and the immigrant. This happened in conjunction with an increased supply of training specifically designed for immigrants. For example, more of language training was arranged by the PES, adult education centres and universities.

The authors evaluate the reform by exploiting a discontinuity in the phase-in rules of the reform. The reform was launched on May 1, 1999, but it only affected immigrants who had arrived in Finland after May 1, 1997. Hence, the outcomes of immigrants arriving just before and after this cut-off date are compared. The main finding is that the restructuring of the programme strongly increased participants' earnings and reduced their reliance on social benefits over a ten-year period following the introduction of the reform. One possible explanation for the improvement in outcomes is that the reform seems to have increased the time spent in language training and other types of training specifically designed for immigrants.

Sweden

In December 2010, the so-called establishment reform (*etableringsreformen*) was implemented in Sweden. It meant that the PES took over the coordinating responsibility for the introduction programme from the municipalities. Responsibility for organizing language training and courses in civic orientation remained with the municipalities. The effect of the reform has been analyzed by comparing employment outcomes among newly arrived immigrants who took part in the municipal introductory programme with newly arrived immigrants who participated in the new introduction programme organized by the PES (Andersson Joonna et al. 2016). A regression analysis shows that there was no difference in employment after one year, but after two and three years there was a small statistically significant difference in employment between the groups: the probability of being employed was 1.8 percentage points higher in the group who participated in the new introduction programme after two years and 2.7 percentage points higher after three years. One possible explanation for the result is an earlier contact with the PES and an enhanced focus on labour-market-related ac-

tivities. Another possible explanation is the change in the benefit system, from a household-based system to an individualized income system. This new system was thought to provide stronger incentives in particular for women to take on a job.

In sum, existing evaluations from Finland, Norway and Sweden indicate that labour market outcomes of participants in the now existing introduction programmes are slightly better than the outcomes of participants in earlier existing programmes. Although we cannot say exactly what is causing these positive results, there are good reasons to believe that it is beneficial to organize measures for newly-arrived immigrants within coherent introduction programmes of the current type. Below, results from previous studies that analyze the effect of different measures within the programmes are summarized.

3.2 Language training

Language training is included in the introduction programmes in all Nordic countries. Proficiency in the host country language is considered an important factor behind successful labour market integration. A Swedish study investigates differences in employment and income between those who took part in language training (*Swedish for Immigrants – SFI*) and non-participants. According to the study, participants initially have lower employment. This is probably due to a lock-in effect.²² But after ten years in Sweden, those who received language training have approximately the same income and, moreover, higher employment rates than those who did not participate in the language training (Kennerberg and Åslund 2010). For Norway, Hayfron (2001) finds that language training improves language skills for immigrants, but contrary to the expectations no effect on earnings is found. A possible explanation is that language skills matter for

employment opportunities but not for wages once employed (Hayfron 2001).

In general, there have been few studies that look at the effect of participating in language training, the two studies mentioned above being exceptions. As could be seen from Table 2, currently almost all newly arrived refugees and family migrants participate in language training, which makes it difficult to find a comparison group consisting of non-participants. A related question is whether the acquisition of a minimum level of language skills should be a precondition for receiving a more stable resident status. In Denmark and Norway refugees and family migrants need to pass a language test in order to receive a permanent residence permit. This has also been discussed in Sweden. However, it may be quite problematic to link the possibility of a residence permit to language requirements. The ability to reach a certain level of host-country language proficiency can be influenced by other factors than incentives or motivation to learn the language. For example, migrant's anxiety about their own status and the well-being of family members who are still living in the home country might make it difficult to focus on language training and perform well on a test. Another factor which may be of importance is age. Younger people often learn a new language faster than older migrants.

In Denmark, a reform of the introduction programme in 1999 made language training compulsory for family migrants. To enforce participation, the possibility to receive a permanent residence permit was made conditional upon participation, and there could also be a withdrawal of social assistance in case of non-participation. Rotger (2011) uses a regression discontinuity approach and compares outcomes between those who arrived in Denmark

²² The lock-in effect refers to the observation that programme participants have difficulties in searching for a job during the programme period. As a result, there could be a negative effect of programme participation on employment in the very short run.

shortly before the introduction of the new law and those who arrived shortly thereafter. The results indicate that enforced language training does not increase labour force participation in the long run but has a moderately positive effect on the earnings of family migrants after eight to nine years.

There could, however, also be other ways to incentivize newly arrived immigrants to learn the host country language. During 2009-10 Sweden tested the so-called SFI bonus. Participants in SFI courses could receive a monetary bonus if they met certain language skill requirements. The possibility of a bonus was introduced in a number of randomly selected municipalities that were paired with comparable municipalities. The trial was evaluated by studying the effects of the bonus on participation and performance (Engdahl and Åslund 2018). On average, no effect of the bonus could be identified. A deeper analysis revealed a positive effect for Stockholm, but differences between geographical regions led the authors to interpret the results with some caution. The bonus was introduced at a national level in July 2010 but was abolished four years later. There was criticism of the bonus, among other things, because the design disadvantaged participants who were less familiar with studying.

3.3 Labour market training

Labour market training has traditionally consisted of relatively short courses targeted at specific occupations with a labour shortage. As was discussed in Section 2.2, relatively few newly arrived immigrants in the Nordic countries participate in labour market training during the introduction programme. One possible explanation, at least in the Swedish case, is that many participate in so called preparatory education (see below for a description) which is often a prerequisite for later participation in labour market training. Most educational programmes are also held in the host country language and hence require relatively good language skills.

The results in previous studies on the effects of labour market training for unemployed people have varied depending on the time studied and the length of the follow-up period. In general, it appears that the effect of training programmes on employment outcomes is larger in the medium and long run than in the short run (Card et al. 2018). In the early 1980s, the employment effects in Sweden seem to have been positive, but they appear to have decreased and become negative during the 1990s. For participants in the beginning of the 21st century, a positive effect on employment has been found, but for participants since 2007 and onwards the results have been negative (Liljeberg 2016). This applies to all groups – both those far from and those relatively close to the labour market. Another recent study, which focuses on the long-term effects on labour income, however, finds positive effects of participating in labour market training (Vikström and van den Berg 2017).

Since earlier research provides mixed results and few studies specifically study the effect of labour market training for foreign born or newly arrived refugees and family migrants, it is difficult to draw conclusions about the effect for these groups. One exception is a Swedish study which analyzes the effects of vocational labour market training in the beginning of the 2000s (de Luna et al. 2008). The study finds a positive effect of labour market training for most groups, but the effect seems to be stronger for lower-educated participants and persons born in non-Nordic countries than for those with a stronger position in the labour market. There are therefore reasons to believe that labour market training can have a positive effect on the transition to work for newly arrived refugees and family migrants in the long term. This is consistent with findings in Clausen et al. (2009). They find no effect of ALMPs consisting of education and training in the short run, possibly due to lock-in effects, but acknowledge that there might be positive effects in the longer run.

In Sweden, a special type of labour market training is the so-called preparatory education (*förberedande och orienterande utbildning – FUB*). This is one of the activities that newly arrived immigrants participate in to the largest extent. This type of educational programme contains a large number of courses that should prepare participants for other labour market programmes, education or work.²³ A review by the Swedish National Audit Office (*Riksrevisionen*), which uses a so-called matching approach, shows that unemployed people who participated in this type of education have on average lower earnings than those who were openly unemployed or who participated in work practice. In this study, participants in the introduction programme were, however, excluded (Riksrevisionen 2017).

3.4 Regular education

A majority of participants in the introduction programmes in the Nordics have fairly low education. At the same time, it is difficult to find jobs without at least upper secondary education in the Nordic labour markets. Traditionally, regular education has not been a part of the introduction programmes in Denmark and Sweden. In Norway, participants have since the start of the introduction programme had formal access to both primary and secondary education, but participation rates have been low (Djuve and Kavli 2018).

In the Swedish case, one issue has been that the system for organizing the introduction programmes has been separated from the educational system, and it has not been possible to assign unemployed people to any form of regular education. Adult education

(*Komvux*), which is the type of education that many newly arrived refugees and family migrants need to participate in, is a municipal responsibility. The curriculum at *Komvux* was previously not designed to fit the needs of newly arrived who now constitute a majority of participants. Changing and adapting the curriculum is outside the area of responsibility of the PES and instead lies within the competence area of the Swedish National Agency for Education (*Skolverket*). The introduction of a so-called educational obligation (*utbildningsplikt*) on January 1, 2018 now allows case workers at the PES to assign newly arrived in the introduction programme to education at *Komvux* or a Folk High School (*folkhögskola*).²⁴

The situation appears to be similar in Denmark where regular education is not a part of the introduction programme, while in Norway, as mentioned above, regular education has been a part of the programme, but participation has been low. In Norway, there also seems to have been an issue with adopting the curriculum of the adult education programmes so that it fits the needs and qualifications of the refugees (Djuve and Kavli 2018). An additional problem in the Norwegian case is the division of responsibility between the central government and the local governments. This seems to have been an obstacle to local initiatives in the area of adult education at the secondary level (Djuve and Kavli 2018).

Validation and recognition of foreign credentials are often mentioned as important parts of the integration process and can apply to both formal and informal skills.²⁵ Still, the statistics suggest that few migrants are offered validation of their certificates

²³ See Riksrevisionen (2016, 2017) for a detailed description of preparatory education. Examples of courses are career orientation, professional Swedish, level test (*nivåtest*) or motivational measures.

²⁴ The educational obligation targets individuals who participate in the introduction programme and who are judged to need additional education in order to find a job. This means that the participants should apply for education, accept education that is offered and participate in the educational programme(s) that they are assigned to. If the individual does not participate or drop out, there could be sanctions in the form of reduced benefits.

²⁵ See, for example, OECD (2014) and SNS (2017) for a discussion on the importance of validation.

and degrees within the introduction programme in Norway and Sweden.²⁶ For newly arrived immigrants without formal qualifications, it is even more difficult to get their (informal) qualifications recognized. In Sweden, there is an opportunity for newly arrived immigrants to participate in a vocational qualifications assessment within the framework of the introduction programme. The initiative targets jobseekers with no or limited experience from the Swedish labour market. According to certain so-called industry models, applicants can have their skills assessed during a short period of time (at most 15 days) in a workplace within their industry.

3.5 Subsidized employment

Earlier research has found that measures which resemble regular employment, such as subsidized employment, are the most effective in terms of facilitating transitions to employment.²⁷ This is also found when studying the effect of various interventions for newly arrived refugees and family migrants as well as foreign-born persons in general (Kvinge and Djuve 2006, Svantesson and Aranki 2006, Clausen et al. 2009, Hardoy and Zhang 2010, Heinesen et al. 2013, Butschek and Walter 2014). A disadvantage of subsidized employment is that it can have significant displacement effects, that is, employers can choose to hire someone with a subsidy instead of hiring someone without one. It has, however, been argued that this is not a substantial problem if the subsidy is targeted at those far from the labour market, such as newly arrived immigrants or long-term unemployed persons.²⁸

One of the few studies looking specifically at the effect of ALMPs for immigrants is Clausen et al. (2009). They analyze the effect of ALMPs on the hazard rate into employment for newly arrived im-

migrants coming to Denmark. The authors look both at the lock-in effect of different types of activities, the programme effects, and the total effect. The programme effects on the transition into employment are significant and positive for subsidized employment in the private sector but not for other programmes. For immigrants participating in language courses, an improvement in language proficiency is also found to have a positive effect. Heinesen et al. (2013) use administrative data for Denmark and estimate programme effects for immigrants who receive social assistance. The authors find positive employment effects of most programmes, but the largest ones for subsidized employment programmes.

Butschek and Walter (2014) perform a meta analysis condensing 93 estimates from 33 empirical studies on the effectiveness of different types of ALMPs which are targeted at immigrants. The researchers find positive effects only for employment subsidies and conclude: "At this point, only wage (employment, author's remark) subsidies are indeed a promising measure to increase employment rates among immigrants" (p.14). It is further concluded that employment subsidies are not frequently used for immigrants and that there is scope for improving their labour market integration by increasing the use of this type of subsidy. The studies by Clausen et al. (2009) and Heinsen et al. (2013) also note that, although subsidized private-sector employment is by far the most effective ALMP, only a small proportion of immigrants participate in such programmes. The authors suggest that one way to improve the labour market integration of immigrants would be to increase the number of subsidized jobs.

²⁶ See, for example, Enes and Wiggen (2016) for Denmark and Arbetsförmedlingen (2018a) for Sweden.

²⁷ See, for example, Calmfors et al. (2002), Forslund and Vikström (2011) and Calmfors et al. (2018) for reviews of the research.

²⁸ For a discussion of unintended effects of employment subsidies, see Forslund (2018).

To learn more about why employers' take-up rates of employment subsidies have been relatively low and what can be done to increase it, the employers' perspective has been studied in Sweden using surveys (Behrenz et al. 2015, Arbetsmarknadsekonomiska rådet 2017, Calmfors et al. 2018). A result from the surveys is that around one fifth of the employers who have not used wage subsidies have been unaware of the possibility. This suggests that a simple measure such as better information on subsidies could improve take-up. The surveys also indicate that an increase in the subsidy would not necessarily increase employers' take-up. It seems more important to reduce the uncertainty associated with hiring someone who has been out of work for a long time. The possibility of a trial period before making a decision on whether to hire a long-term unemployed person with a subsidy appears to be an important factor. Based on this, it has been suggested that employers should be allowed to test people in the firm before entering into a contract (Behrenz et al. 2015, Arbetsmarknadsekonomiska rådet 2017, Calmfors et al. 2018). Another way of reducing employers' uncertainty would be to relieve them of the employer responsibility. Such a proposal was formulated in a report to the Swedish government on "matching jobs" (*matchningsanställningar*).²⁹ According to the proposal, jobseekers would be employed by a "matching actor" (*matchningsaktör*) with employer responsibility and then work at a client firm which pays the "matching actor" for the services. Although the proposal received many positive reactions (Lago and Gartell 2018), the PES argued that such an arrangement would be in conflict with EU state aid rules (Arbetsförmedlingen 2015).³⁰ The proposal has so far not been implemented.

The results discussed concern subsidized employment in the private sector. Other ways to gain experience

in the host country's labour market have not been very effective in terms of subsequent transitions into regular employment. For example, Card et al. (2018) conclude that public-sector employment programmes have negligible or even negative effects at all time horizons. This is also found in Clausen et al. (2009) for Denmark.

3.6 Intensified counselling and coaching

Almost all unemployed persons take part in counselling and coaching, e.g. job search assistance, at some point during their unemployment spell. Therefore, this type of activity can be difficult to evaluate. Nonetheless, a few studies look at variations in the intensity of the use of this measure. They analyze the effect of what can be called intensified coaching and counselling or job search assistance.

In Denmark, the programme "All on board" (*Alle i Gang*) was started in 2008 and meant that welfare recipients who had been unemployed for more than 26 weeks could receive intensified job search assistance. Those eligible to participate were randomly assigned into two groups, one of which received intensified assistance and a control group whose participants were offered the normal number of meetings with a caseworker. The programme has been evaluated by Rosholm and Svarer (2009) as well as by Brodersen (2014). Neither of the studies found any effect of intensified counselling on economic self-sufficiency, which was the stated goal of the programme.

In Sweden, there have been two attempts to intensify coaching and counselling that have also been evaluated, the so-called SIN trial project – a workplace introduction programme targeting immigrants – and a trial introduction programme for some groups of newly arrived immigrants. The evaluation of the

²⁹ See A2014:D 2015.

³⁰ State aid is when the public supports an economic activity with public funds, which results in the recipient gaining an advantage over other market players.

SIN trial programme shows an increased transition from unemployment to work practice and improved employment opportunities for those who had previous work experience (Åslund and Johansson 2011). The trial introduction programme, which was in place from October 2006 to June 2008, meant that some newly arrived refugees and family migrants were randomly assigned to PES caseworkers with a considerably reduced caseload. The comparison group was assigned to caseworkers with the normal workload. In practice this meant that participants got intensified coaching and counselling. An evaluation of the programme indicates that there are significant treatment effects on employment probabilities as well as on participation in intermediate PES training programmes. Effects are, however, only found for men and not for women (Andersson Joona and Nekby 2012).

Some studies investigate the effect of intensified coaching and counselling on a larger sample of unemployed, which not only consists of immigrants or newly arrived refugees and family migrants. For example, in an experimental study by Hägglund (2009), the selection of participants and non-participants was random. The main finding from this research is a positive effect of the intensified job search assistance, primarily by shortening the unemployment spell.

In summary, existing research provides some evidence of a positive effect of intensified coaching and counselling. It can, however, be noted that the studies by Clausen et al. (2009), Heinesen et al. (2013) and the meta analysis performed by Butschek and Walter (2014) find no effect of counselling or job search assistance in general.

A related question is whether intensified support is best provided by public or private actors.³¹ Previous studies show that clients of private actors participate in more activities and are more satisfied than participants for whom the PES is responsible (Liljeberg et al. 2012b, Bennmarker et al. 2013). Even though no overall difference in the chances of finding employment is found, private providers seem to be better at providing employment services to immigrants than the PES (Bennmarker et al. 2013). It is possible that immigrants benefit more from intensified job search assistance than natives due to a lack of network in the host country's labour market.

3.7 Other specific measures

One feature of the introduction programmes in the Nordic countries is that the main measures are also used for unemployed people in general, that is, the core parts of the programmes are not specifically designed for newly arrived immigrants. In all Nordic countries there are, however, some measures specifically designed for this group. Most of these specific measures are small in scale and directed at specific groups. They can be regionally or locally administrated and have in most cases not been evaluated. Hence it is difficult to draw conclusions about their effectiveness.

It is beyond the scope of this contribution to provide a comprehensive overview of all specific measures targeted at immigrants and newly arrived refugees and family migrants, but a short description of some of the more common measures is provided below.³²

Projects financed by the Swedish Social Fund

Szulkin et al. (2013) compare the outcomes of individuals who participated in projects financed by the Swedish Social Fund (ESF) with the outcomes of participants in regular programmes at the PES

³¹ See Jakobsen and Tranæs (2019) in this volume for a more general discussion of public versus private providers.

³² See Joyce (2017) for a more detailed description of these specific measures.

namely, preparatory education (*FUB*) and the so-called 'job- and development guarantee' (*jobb- och utvecklingsgarantin*).³³ A problem with the evaluation is that participation in ESF projects and regular programmes at the PES is non-random, and hence it cannot be excluded that results are partly explained by differences in selection. When outcomes are measured in terms of transitions into regular employment, participation in an ESF-financed project seems to be more effective than preparatory education at the PES. The authors stress, however, that the main purpose of this type of education is not that it should lead to employment, but rather that it should prepare for labour market training or work practice. When comparing ESF-project participation to other regular measures, programmes at the PES seem to be more effective.

Fast tracks

In Sweden, the fast-tracks programme (*snabbspåren*) was introduced in September 2015. It is a collaboration between the PES, trade unions and employer organizations. The aim was that newly arrived immigrants who participate in the introduction programme and have specific vocational skills within an occupation with a shortage of labour should quickly come into contact with employers in their field of expertise. The fast-tracks programme includes early validation and assessment of previous education and vocational skills, and early participation in language courses. The number of participants has not been as high as was initially expected.³⁴ Among those who participated in a fast track for an occupation which does not require a certificate, 49% were employed 19-21 months after starting the programme. Among participants in occupations which require a certificate, transition rates were 35% in the same time period (Arbetsförmedlingen 2018c).

A similar type of fast track – *Hurtigsporet* – has been implemented in Norway (Arbeidsgruppe for arbeidslivs- og pensjonspolitisk råd 2016). The set-up is very similar to the Swedish version of the fast tracks, and there are also some indications that it has not been used very extensively (Karlsen 2018). *Hurtigsporet* was implemented in 2016, but a study by Pettersen and Aure (2019) indicates that it is not a very well-known measure, neither at the NAV nor in the municipalities which participated in the study. The authors also conclude that cooperation between the municipalities and NAV needs to be improved for the fast-track to be organized more efficiently.

Branchpakker is a Danish measure that has some similarities with the Swedish fast tracks although it mainly targets low-skilled immigrants. The general idea, however, is the same: the programme combines language education with shorter labour market courses and work practice in a specific industry with a shortage of labour. The measure is organized in cooperation with trade unions and employers' organizations. Firms that hire employees within this programme do not receive any compensation but neither do they pay any wage.

Integration education (IGU) – Denmark

The integration education programme (*IGU*) is, despite its name, not an education programme but a type of subsidized employment which can be combined with different types of shorter education. The programme was introduced in June 2016 in an agreement between the Danish central government, trade unions and employers' organizations. *IGU* is a temporary measure and has similarities with the Swedish YA-jobs (*yrkesintroduktionsanställningar*). YA-jobs were initially targeted at young people between 15 and 24 years of age with no la-

³³ The 'job- and development guarantee' is a programme targeting long-term unemployed that need assistance from the PES to re-enter the labour market. Participants in the introduction programme who are still unemployed after the completion of the programme are eligible to participate in this programme as well. It includes activities like job search assistance, counselling, work practice and labour market training.

³⁴ Between January 2016 and April 2018, 6 721 people have started a fast track (Arbetsförmedlingen 2018c).

bour market experience, but the subsidy was later extended to newly arrived immigrants within the introduction programme. At least 15% of the programme time should be dedicated to education or tutoring by a mentor at the workplace. In both the Danish and the Swedish programme, wages are set below minimum wages to compensate for time devoted to training. In both countries, the number of participants has been lower than expected.

Extra jobs (extratjänster) – Sweden

In all the Nordic countries, women are underrepresented among those who have subsidized employment as part of their introduction plan. One explanation might be that women are generally underrepresented in the sectors which make use of the subsidy to the largest extent. In Sweden, a new form of subsidized employment was introduced in November 2015 – extra jobs (*extratjänster*) – and it has mainly been women who receive this subsidy. It is now possible for employers in the public sector, non-profit organizations and organizations engaged in cultural activities to receive a subsidy to hire a newly arrived immigrant or a person that has been unemployed for a long time. The employer receives a subsidy corresponding to the whole wage cost. The job can last for up to twelve months with the possibility of an extension for an additional twelve months. In the budget for 2019, it was decided to cut back on funding of the PES. As a result, the PES stopped assigning unemployed to extra jobs as from January 1, 2019. Jobs already agreed upon will not be affected (Arbetsförmedlingen 2018d).

Jobbsjansen – Norway

This qualification programme targets immigrant women who have been outside the labour force for a long time (Karlsdóttir et al. 2017). The programme can last for up to two years, with a possible exten-

sion of one additional year, and includes mainly language education and courses in civic orientation (Joyce 2017). The outflow from this programme to regular education and employment has been relatively high: 68% in 2016. The number of participants in that year was around 1 800 out of which 84% were women (Høgestøl and Synnøve Skutlaberg 2017).

Establishment positions (etableringsanställningar) – Sweden

In March 2018, the government, the Swedish Trade Union Confederation (*Landsorganisationen i Sverige, LO*), *Unionen*³⁵ and the Confederation of Swedish Enterprise (*Svenskt Näringsliv*) agreed that so-called establishment positions (*etableringsanställningar*) would be introduced. The positions can last for up to two years and the total monthly wage cost for the employer should be around 8 000 SEK. The government should then pay a tax-free individual compensation directly to persons with this form of employment so that the disposable income corresponds to what would be obtained from a minimum wage according to collective agreements. A difference to other forms of subsidized employment is that the employer does not have to first pay the entire wage and is then compensated by the government ex post. This may be of importance to smaller companies that may find it difficult to pay full wages and then get a subsidy retrospectively. As the proposal is currently designed, firms without a collective agreement and temporary employment agencies are excluded.³⁶ There are also unions within construction (*Byggnads*) and transportation (*Transport*) that have not signed the agreement. This will probably reduce the importance of this type of employment. The establishment positions programme has not yet been implemented in practice, and it is unclear when it will start.

³⁵ Unionen is Sweden's largest trade union in the private sector.

³⁶ See Calmfors et al. (2018) for a more detailed discussion.

4. Summary and conclusions

Which type of ALMPs works best for newly arrived immigrants? The purpose of this chapter has been to provide some answers to this question by summarizing what we know from previous research. Denmark, Finland, Norway and Sweden have all experienced large inflows of refugees and family migrants during recent years and a particularly large inflow during the autumn of 2015. In terms of both total immigration and immigration per capita of the population, Sweden experienced the largest inflow while Finland experienced the largest increase. All countries reacted to the increased inflows by tightening migration policies, introducing temporary border controls and implementing stricter rules for receiving a permanent residence permit and for family reunification.

The Nordic countries are similar in many ways. For instance, activities for newly arrived immigrants are organized within so called introduction programmes. This is unique to the Nordic countries. Even though migration policies have been tightened, there has also been an increasing focus on how policies and specific measures should best be organized and which activities should be offered to facilitate labour market entry among recent cohorts in the most efficient way. Labour market performance for earlier cohorts of refugees and family migrants has been rather poor in all the Nordic countries. The gap in employment between these groups of immigrants and natives has not closed even after 10-15 years. If the more recently arrived large cohorts of immigrants will have similar difficulties in establishing themselves on the labour market, there will be a large group of residents in the future that cannot economically provide for themselves and hence will depend on welfare. This is undesirable both from an individual perspective and from society's point of view. Therefore, the question of what can be done

to facilitate and speed up labour market integration of newly arrived immigrants is crucial.

There has not been much earlier research on the effects of ALMPs on the particular group of refugees and family migrants. Most studies have looked at the effects on unemployed persons in general. One conclusion is therefore that more research is needed on what works for newly arrived refugees and family migrants in particular.

Measures aimed at improving labour market integration of immigrants can broadly be divided into measures focusing on the supply side, measures focusing on the demand side and measures focusing on matching between the supply and demand sides.

Measures focusing on the supply side include those designed to increase human capital, e.g. different types of education but also work experience. Education can in turn be divided into language training, labour market training and regular education. Work experience can both be gained through work practice and subsidized employment. Many individuals in more recent immigrant cohorts have very low education. It will probably be difficult for them to find employment in the relatively advanced Nordic labour markets.

There is an ongoing discussion about whether the focus should be on improving migrants' skills through education or if both language and other skills are best learnt on the job. Concerning language training, there is no compelling evidence that carrots or sticks are effective in incentivizing or pushing participants to learn the host country language faster and better. Previous research has found that the effect of labour market training varies over the business cycle and depends on the time horizon with small, or even negative, effects in the short run but substantial positive effects in the longer run. In ad-

dition, there are studies which indicate that participation can be particularly beneficial for immigrants. In practice, however, few newly arrived immigrants participate in labour market training within the introduction programme.

Traditionally, rather few participants have been enrolled in regular education during the time they participate in the introduction programme. One reason, at least in the Swedish case, has been that adult education is a municipal responsibility and that the PES has not had the authority to assign participants to education in this system. This was, however, changed in 2018 through the so-called educational obligation (*utbildningsplikt*). It remains to be seen which impact this will have. Participation in regular education is seen as a desired outcome after completing the introduction programmes in Denmark, Norway and Sweden, and national governments have defined targets concerning the share of participants who should be employed or enrolled in regular education after programme completion.

Other supply-side factors that are important are work experience and access to a network on the labour market. Both can be improved through work practice, a measure that is also included in the introduction programmes. Nonetheless, several studies from Norway indicate that on-the-job work training for newly arrived refugees and family migrants has not been very effective.

Demand-side factors are those that affect firms' willingness to employ workers. Different types of subsidies are one way of decreasing employers' costs for hiring persons with a weak position on the labour market and hence increasing the demand for employing this group. A recurring result in previous studies is that subsidized private-sector employment is the most efficient measure in terms of transition to employment. One risk with offering subsidies to employers is that there will be displacement

effects if employers hire someone with a subsidy instead of someone without. It has, however, been argued that this is not a great problem if the subsidy is targeted towards groups with a weak position on the labour market.

Even though previous research indicates that subsidized employment seems to improve immigrants' employment opportunities, it has not been used to a very large extent within the introduction programmes in any of the Nordic countries. Nonetheless, there seems to be a political willingness to increase its use. One way of doing this could be to provide better information on subsidies. The use of subsidies could also be increased if the PES or a staffing company could assume the formal employer responsibility and then send employees to client companies.

A third group of measures that has been used to improve the integration of immigrants into the labour market concerns matching. Here, the goal is to improve the tools of unemployed persons and employers to find each other. Some studies from Sweden report a positive effect of intensified coaching and counselling on employment probabilities for immigrants. Evaluations of a Danish programme did not, however, find any positive effect of intensified job-search assistance.

Taken together, this overview has shown that some ALMPs in the Nordic countries work quite well, e.g. subsidized employment, labour market training (in the longer run) and intensified coaching and counselling (at least in Sweden). A central question is whether these measures can be used more extensively among participants in the introduction programme and whether this would have positive effects. There are reasons to expect that there is a positive selection into the measures that are positively correlated with employment probabilities. In other words, those who are likely to benefit most

are the ones who already participate. If, for example, subsidized employment would be used more extensively and directed to groups that are less "job ready", it is not certain that this would give the same positive results. Also, since previous research is mostly based on unemployed people in general, there is some uncertainty as to which conclusions carry over to refugee and family immigrants. Several studies do, however, indicate that the effects of many measures are stronger for those with a weak position on the labour market, such as immigrants, than for other groups.

Previous studies have also shown that some measures do not seem to be very effective. In Sweden, for example, participation in preparatory education (*FUB*) is less effective than work practice. In Norway, several studies have not found any effect of on-the-job work training (*arbeidspraksis*) and on-the-job language training (*språkpraksis*) on the transition into employment after programme completion. In spite of these results, these measures are among the most commonly used for newly arrived immigrants.

Regarding measures specifically directed towards immigrants, different versions of fast tracks programmes have been introduced in Denmark, Norway and Sweden. Although they target different groups (e.g. high-skilled persons in Sweden and low-skilled persons in Denmark) the idea is the same – to recruit newly arrived immigrants with specific competencies in occupations with labour shortages and provide participants with a package of language training and work practice designed for their specific occupation. Even though intentions are good, the number of participants has been lower than expected.

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Chapter 5

How Should the Integration Efforts for Immigrants Be Organised?¹

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ABSTRACT

How should the labour market integration for immigrants be organised in order to be successful? We compare what contract theory suggests with the empirical research on the topic. We compensate for the scarce empirical literature by looking at the larger group of hard-to-place unemployed persons as well as at employment services more generally. We find that for-profit private service providers are not more effective than public providers in this area, and are often more costly to use, even when the private provider is the incumbent. There is no clear picture regarding the relative efficiency of local versus central responsibility for integration policy.

Keywords: Integration policy, contracting out employment services, local versus central responsibility.

JEL codes: H44, H75, J15, L33.

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1. Introduction

The Nordic countries all struggle with the task of integrating non-Western immigrants from less developed countries into their societies in general and into their labour markets in particular. Employment is low, and dependency on public support high, for immigrants originating from these countries, with immigrants from the Middle East and Northern Africa representing the biggest challenge. Over the past two decades, all Nordic countries have placed increased emphasis on policies that can improve the labour market performance of this vulnerable group in society.

Here we discuss how the labour market integration effort should be organised in order to achieve success. Should central or local authorities be responsible? Moreover, who is more efficient in providing the service and interacting with the newcomers: public agencies or private for-profit firms? What type of contract should the government enter into with the organisations that provide the services?

Our focus is on the organisation of efforts to integrate immigrants into the labour market, and we will not discuss how this is related to the organisation of integration policies more generally. This is not because housing, education, and access to health services are not important for immigrants' lives, or irrelevant for their success in the labour market; it is simply because there is little research on these issues.

The Nordic countries all share a tradition of implementing active employment policies with a particular focus on individuals who have the greatest problems to get a foothold in the labour market. These are workers with low productivity for one reason or another: low education, little experience, social vulnerability, etc. The focus on 'hard-to-place' individu-

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als is greater in the Nordic countries than elsewhere because the strong social safety nets and high levels of benefits push up wages for the low-skilled and tend to price them out of the market. The focus on the hard-to-place unemployed has meant that refugees, together with low-skilled immigrants in general, have been made a priority in the implementation of active labour market policy in all the Nordic countries. The immigrant population is extremely heterogeneous, with some individuals faring very well in the labour market while others have a hard time entering it. This paper focuses on the latter group.

Active labour market programmes (ALMPs) were generally given high priority in the Nordic countries from the 1990s onward, following the long tradition of Sweden which began to implement active programmes as early as in the 1950s. Until the turn of the century, there were generally high hopes for these ALMPs, based on the Swedish experiences. But as research evaluations of the programmes began to come in, interest shifted. In Denmark, few programmes seemed to have any effect that was related to their actual content. Sweden also encountered problems with the effectiveness of the ALMPs when they were expanded in the 1990s. Attention has hence turned to the question of how employment services can be operated more efficiently.

Over the past decade or two, most developed countries, including the Nordic countries, have reformed the management of public institutions, for instance by outsourcing various elements to private organisations. In ALMPs in particular, private providers have come to play an increasing role. This trend has also influenced the organisation of the integration programmes for immigrants. What have been the results of this? What can research tell us about the relative efficiency of private and public providers? What do we know about the effects of local government versus central government responsibility for the organisation of employment services for immigrants? These topics are discussed below.

The structure of the paper is as follows. Section 2 reviews the organisation of integration policy in the Nordic countries. Section 3 contains a theoretical discussion of what types of contracts and what organisational structures are expected to work most effectively. Section 4 discusses the empirical literature, with the focus on studies using experimental or quasi-experimental data. Section 5 concludes.

2. The organisation of integration policy in the Nordic countries⁴

The Nordic countries have followed different routes but arrived at similar managerial structures of their integration policies: a centrally controlled integration programme that is compulsory for recently arrived refugees and their families in Denmark, Finland, Norway and Sweden. Other foreigners can participate in parts of the programmes on a voluntary basis. The integration activities are carried out locally by the municipality of residence in Denmark and Norway, and by both the municipality and the government-funded public employment service in Sweden and Finland.

The Danish programme was centrally managed from early on by the Ministry of the Interior. The service operator was a major NGO, the Danish Refugee Council, which arranged social work, language training and introductory courses, and allocated newly arrived refugees across municipalities. Immigrants were covered by the ordinary welfare schemes provided by the municipality of residence. The Danish Refugee Council operated the integration activities with considerable autonomy. This situation changed with the first Integration Act, passed in 1998 and implemented in 1999, when the central authorities took control over both the content of the integration activities and the geographical dispersion of the refugees. All newly arrived immigrants – not just refugees – were allowed to participate in the three-year integration program. Programme participation was made a precondition for claiming social assistance benefits for both refugees and non-refugee immigrants. Labour market integration is now the main focus of the programme and all integration activities – like language training – have to be organised around it. The programme is now two years in duration and includes fewer non-refugee immigrants than before.

In Norway, integration efforts were originally coordinated by a central agency, but the municipalities could themselves decide if and how many refugees they wanted to receive. The government used subsidies to incentivise municipalities to accommodate refugees. Until 2003, there was no central regulation of integration activities. In that year, an Integration Act was passed that was fairly similar to the Danish Act of 1998. According to the Act, settlement of refugees in Norway remains at the discretion of the municipalities, influenced by economic incentives, but the content and the implementation of integration programmes are henceforth decided centrally.

⁴ This section is based on the Danish Ministry of Immigration and Integration (2018), Andersson Joona et al. (2016), Borevi (2010), Brochmann and Hagelund (2010), Djuve and Kavli (2007) and Hagelund (2008).

Programmes are now focused on labour market integration and have a strong compulsory element.

Sweden kept municipality discretion over integration policy until 2010. The Integration Act of 1997 laid down national guidelines for integration practices, but it was up to municipalities to decide which programmes, if any, they wanted to offer. Unlike in Denmark and Norway, immigrants could decide to participate only in those activities they found useful. In 2010, Sweden centralised the control of integration policy and incentivised participation in programmes by differentiating benefit payments according to participation. The integration activities have since then been managed locally by both the municipalities and the government-funded Public Employment Service (PES), with the latter carrying the main responsibility for newly arrived refugees after 2010 (see Andersson Joona et al. 2016). As in Denmark and Norway, the integration policy has a strong focus on labour market integration.

The first Integration Act in Finland came into force in 1999, around the same time as in the other Nordic countries. The Act only applied to immigrants who received social assistance or were registered as unemployed. When the Act was revised in 2011 and enacted under a new name, the Act on Promoting Integration, it came to cover all immigrants with legal residence in the country (Seppelin 2010). The primary responsibility for the integration of newcomers was, and is still, placed centrally with the Ministry of Economic Affairs and Employment (MEE). The integration effort itself is organised around an individual integration plan covering typically the first three years of residence. The activities of the plan are managed locally either by the local Public Employment Service (which is a body under the MEE)⁵ if the immigrant is a registered job seeker,

or by the municipality for those who are not seeking work. The central authorities specify minimum requirements for the integration programme. It is mandatory for the registered unemployed and for immigrants receiving social assistance. Within these restrictions the individual integration plan is supposed to be negotiated between the immigrant, the municipality and the PES, where the municipality or the PES has the final say, depending on whether the immigrant is a job seeker or not (see Seppelin 2010 and OECD 2017).

3. Employment services for low-skilled immigrants and other hard-to-place unemployed individuals: theory

The body that implements active labour market policies is typically the PES. It is managed by the state in some Nordic countries and by municipalities in others. Sometimes there are separate units specialising on immigrant workers, sometimes this is not the case. Here we discuss what constitutes an efficient employment service for immigrants. We start by reviewing economic arguments for having a publicly subsidised employment service to begin with. Second, we discuss the conditions that need to be fulfilled for the government's support to be efficient. The government always needs an agent to provide the employment service in practice. Thus, we will consider (i) what characterises an effective contract between the government and the operating unit that provides the service to private individuals and to firms; (ii) what characterises an efficient environment for the government to contract in with providers, and whether public or private providers are more effective; and (iii) whether central or local authorities should be responsible.

⁵ In Finland, PES offices are called TE offices.

3.1 Why should the government subsidise employment services?

What is the argument for having a publicly financed, or subsidised, employment service? In a market economy with perfect markets, unemployed workers (firms) announce their interests in the market place and search for vacancies (workers). If there is a need for an agent to act as a broker between workers and firms, such a service will be offered on the market as well and priced just like any other commodity. In practice, this matching process is seldom left entirely to the market, at least not for all types of labour. The most common form of intervention is for the government to offer a service to job seekers.

The arguments for intervention are standard market failure arguments regarding both the job matching process and imperfect competition, together with an argument related to the functioning of an unemployment insurance system. First, external effects may lead to an inefficiently high or low level of job search (Hosios 2004). When a worker engages in job search, he or she is making it more profitable for firms to open vacancies and more costly for other workers to search for jobs. A job seeker bears the cost of his or her own job search but neither the additional cost inflicted on other job searchers nor the benefits obtained by firms. The net externality can in principle be either positive or negative, but making hard-to-place individuals more employable and more visible to the market is likely to represent an overall positive externality.

Second, imperfect capital markets imply that some qualified workers are liquidity constrained: they cannot borrow against a future stream of earnings (see Chetty 2008). Therefore, experienced workers might accept a bad job match, because they cannot afford to wait for a better match, and unskilled workers will not invest in increasing their employability. The imperfect-capital-market argument for subsidising

an employment service coincides with a distributional argument, in that it is disproportionately the low-skilled unemployed workers who cannot borrow against future earnings, even in situations where there would be an expected gain from doing so.

Third, asymmetric information can also hinder the market from supplying an efficient amount of job search assistance. Private employment services might possess better information on job opportunities, the return to job search, and the value of search assistance than unemployed workers would. The better-informed party, in this instance the service provider, does not necessarily have the right incentive to pursue the best interests of the job seeker. Such markets are known to provide too little or too much service. This is likely to be even more the case for low-skilled immigrants.

Finally, a government-controlled employment service also plays a role in relation to the moral-hazard problem generated by generous unemployment insurance systems (see Chetty 2008). Public employment services are given the right to check job seekers' availability for work and can therefore condition unemployment benefits on actual job search.

3.2 Organising the public integration effort

Having established the grounds for at least some government involvement in the provision of employment services for hard-to-place individuals like low-skilled immigrants, the next question is how this service should be organised. The government needs to contract with a service provider who carries out the employment integration activities. The way an effective contract should be written depends on the task in question, the information structure, and the preferences of the parties involved. It also depends on whether the service provider is publicly or privately owned and whether there is free access to compete to be the provider. Below, we first discuss the most important elements of contracts and the

characteristics of an optimal contract, assuming that the quality of the service is verifiable. Then we discuss the case where contracts have to be incomplete in the sense that the contract cannot be conditioned on all the elements relevant for the provision of an efficient service.

Task, preferences, and information

Immigrants do not just constitute a group of hard-to-place unemployed individuals. They are also a group for whom it is particularly difficult to assess how difficult the placement task is, since information regarding the job seekers' qualifications, preferences, and job market opportunities is imperfect. Lacking precise information, a service provider will have to use indirect ways of assessing both motivation and the relevant set of qualifications. Qualifications can be tested, the job chances of a worker with a given set of qualifications can be studied by looking at job-finding rates of similar workers, motivation can be inferred by monitoring job search, etc. Nevertheless, any contract between a government and a service provider will have to assume imperfect assessment and monitoring of some relevant information. This influences the definition of contract objectives, means and payments.

Assessing actual labour market opportunities for unemployed workers is difficult in general. It is particularly difficult for the least-skilled individuals, including immigrants who are not employable upon arrival, because their productivity does not match the wages they must be paid. For many immigrants, weak employability is not just a matter of lack of basic qualifications; it may also be due to health issues such as Post Traumatic Stress Disorder, family issues (concerns about whether the person's family is safe, whether the children are attending school, etc.), social issues, the housing situation, and other

factors that might influence how easy it is to concentrate on the job in an unfamiliar labour market. Increasing the job chances of these immigrants involves improving their qualifications and their life circumstances in general. This might require the joint efforts of a whole team of caseworkers with different qualifications across the fields of labour market, education, social services and health.

Due to these difficulties, the effort of a service provider and the results are hard to measure. How hard this is will influence the optimal provider and contract environment. In principle there are ways to measure the results achieved by a service provider even in the case of hard-to-place unemployed. This could involve quantitative assessments of as much of the relevant information discussed above as is available and then using statistical methods to predict the counterfactual employment situation which would have arisen without the intervention of the employment service. This is then compared to the observed employment situation, and the difference is the result of the service provider's effort. This estimation is very difficult to do with any meaningful precision for a single individual, but it might be possible for groups of individuals. Experiments are currently being made with such methods, but they have not yet been used to measure the results obtained by the type of employment service that we consider here.⁶

The optimal contract

An optimal contract is incentive compatible: it rewards efforts by the service provider that actually increase the likelihood of job placements for the target group, and it does not reward placements that would have happened independently of the efforts of the service provider. Thus, when the average employment rate changes for a particular group of immigrants, it is important to know whether this is due

⁶ See Hartman (2018).

to the efforts of the service provider, business cycle movements, other initiatives, or simple chance.

The theory of optimal contracts studies situations in which it is not possible to distinguish perfectly between chance and effort.⁷ One basic element of most contracts is a payment that depends on some observable results such as the number of job placements, i.e. a *variable* element to enhance effectiveness. Another element acts as an insurance for the provider against uncertain circumstances and depends on what types of activity the provider carries out and for how many individuals they are supplied. In practise, this element is typically a *fixed* payment that can be adjusted to ensure that the provider wants to participate. Dixit (2002) and Sørensen (2014) discuss the optimal contracts for different situations. Some factors pull in the direction of placing more weight on payment for results and less on the fixed element, while others pull in the opposite direction. A number of factors would imply that there should be heavy weighting on payment per new job placement:

- *Government dislike of risk.* If the government dislikes uncertainty enough relative to what the provider does, the government will only want to pay for observed job placements, in which case the provider will carry all the risk. When hit by a bad (good) shock the service provider receives a small (high) payment independent of the effort put in.
- *Low uncertainty.* Little uncertainty about whether new job placements are caused by the effort of the provider rather than by chance.
- *A risk-neutral provider.* The less the uncertainty with respect to earnings is a concern for the provider, the more the government can reduce the fixed payment.

- *Unaffected marginal costs.* The less costly it is for the service provider to raise effort, the stronger is the case for enhancing effort by linking payments to the observed outcome.

An extra complication arises if several providers work together (say in areas of language, job skills and health) on improving immigrants' chances of becoming employed. The more providers are involved, the greater is the weight that the government will want to place on observed results if payment is made to the group of providers collectively. If the government has to sign a contract with each provider in isolation, then the more providers are involved, the less weight should be put on results. This is because when a given provider increases its effort, that provider has to share the benefit of its effort with all the other providers – but carries the full cost alone. Thus, the more providers are involved, the more expensive it becomes for the government to incentivise effort (Sørensen 2014).

With suboptimal contracts, the service provider does not have the right incentives to deliver the desired service. If the contract puts too much weight on payment by results, then the service provider is encouraged to serve the best individuals first (*creaming*). If the contract puts too little emphasis on results, the provider will put down too little effort and clients will not make progress (*parking*). If the contract is based on an imprecise measure of the results, the provider has an incentive to perform according to an incorrect standard. An example of such *gaming* is when providers sign up unemployed workers for training, not because it has any relevance for the individuals concerned, but only because payment is related to the number of individuals placed in the "activity".⁸ In summary, we have arrived at the following char-

⁷ Pioneering contributions are Holmström (1979, 1982) and Holmström and Milgrom (1991).

⁸ The literature on various types of gaming originates from initial work on "pay for performance" by Heckman et al. (2002). See, for instance, the discussion in Koning and Heinrich (2013).

acteristics of an optimal contract. The more strongly results depend on the effort of the provider, and the less they depend on factors outside her control, the greater the extent to which payment should be according to observed results, such as the number of job placements. The contract should place more weight on payment by results the less complex the task is, the easier it is to measure results, and the more risk adverse the government is relative to the provider. Furthermore, the contract should place more weight on payment by results the fewer independent providers are involved in generating the results, unless a collective contract can be made between the government and the whole group of providers.

Incomplete contracts

So far, we have assumed that the quality of the service is verifiable at a cost which is not too high. Considering the task in question, increasing the employability of low-skilled immigrants, this is probably a questionable assumption. Information might well be so imperfect that complete contracts are too costly or simply not feasible.

Hart et al. (1997) suggest a simple framework for analysing situations where the provider of the service can invest both in cost reduction and in quality improvement, and it is socially optimal that the provider invests in both. What complicates matters is the realistic assumption that quality is adversely affected if the provider invests in reducing cost and similarly that quality-improving investments result in a costlier service. The government and the service provider observe all the relevant parameters, but the effort - the investment - and the results of the effort in terms of cost reductions and quality improvements are not verifiable by a third party and thus cannot be contracted upon. A contract written under these circumstances is called *incomplete*. Once partnered, the government and a provider enter into a contractual relationship which

implies that there is a surplus to share between them if they stay together and provide the service rather than separating and contracting with others.

The government can either contract with a for-profit private provider or have the service produced in-house. In the former case, the private provider owns the service capital. In the latter case the government does. The main consequence is that the private provider can benefit financially either from providing the service at a lower cost or by negotiating a higher price for providing a better-quality service, whereas an in-house provider has to get approval for any investment and share the surplus with the government. In fact, the in-house provider gets to share only a fraction of the surplus from the investments, which is why an in-house provider has weaker incentives to invest than a private provider. This is an important feature and is based on the assumption that the government owns the service capital and can, at some cost, replace the in-house provider and still produce the service.

The Hart et al. model predicts that contracting with an in-house provider, as compared to outsourcing to a for-profit firm, will result in higher costs and that the effect on quality will be ambiguous. The private provider will invest too much in cost reduction, and the public provider too little. Both invest too little in activities that improve quality, compared to what is socially optimal.

In other words, there is no general prediction that either the private or the public provider is always the more efficient. It depends on the specific task in question. The private provider is preferable when it is hard to reduce costs or when cost-reduction investments have little effect on quality. In-house provision is preferable the more cost reduction activities reduce quality, and the higher the priority is that the government places on quality innovations.

Finally, the case for in-house provision depends crucially on the possibilities that the government has to incentivise the in-house provider.

3.3 Contract environment, competition, and private versus public provision

Having described the principles of an optimal contract between the government and a service provider, we turn to the question of what characterises an efficient environment in which the government can contract with providers.

A quasi-market is a publicly governed institutional structure that is designed to reap the efficiency gains of competition without losing political control over issues such as equity and fairness. Under certain conditions a quasi-market is expected to do a better job than a publicly operated monopoly service (see Bartlett and Le Grand 1993). First, entry barriers should be low. It should be relatively easy for an innovative outsider to compete with an incumbent for government contracts. Second, conditions for writing a sufficiently complete contract as discussed above should be in place. Third, transaction costs such as the administrative costs of preparing tenders, evaluating bids and monitoring the service outcome should be low.

The argument that private providers are most efficient is usually based on the importance of competition and private ownership. Competition creates a pressure to continuously optimise one's business, and private ownership gives the service provider a profit motive for doing so. This situation is then compared to one where a public provider is in a monopoly situation without the pressure of competition, with vague public-service objectives rather than a motive for maximising revenue, and without any bankruptcy risk. Together, these elements create weak economic incentives for pursuing efficiency in public provision. However, the picture is not as asymmetric as this.

First, public providers can be asked to compete in the market as well. Second, the contract can use payment by results to provide incentives for pursuing efficiency for public providers as well.

The more competition there is between potential providers, the more cheaply the government can obtain the services it wants. However, the surplus to be shared between the government and the service provider is highly uncertain in a market for employment services for individuals with weak labour market prospects. Therefore, formulating optimal contracts implies considerable transaction costs. Competition could in principle be useful here, because the government does not know the minimum cost incurred by providers in producing the service (which is private information). The government could therefore use the logic of a private-value auction to increase efficiency and minimise costs.

Thus, basic institutional features such as ownership and competition might suggest that relying on private rather than public providers is in general more efficient, at least in the medium to long run, when learning and adjustments have time to play out. Nonetheless, the difference might not be as big for services such as the labour market integration of immigrants or other hard-to-place unemployed individuals. Furthermore, there might be other important differences between public and private provision based on norms and traditions in the two sectors. For example, weaker economic incentives in the public sector might have formed another motivation structure over the years. The question is, of course, whether it can be substantiated that the public sector is different from the private in this respect. Here we examine what is special about public-sector organisations compared to private organisations in terms of organisational goals, preferences of managers and workers, economic incentives, bureaucracy, and regulation con-

straints relating to labour and operations in general. The basic reason why economic incentives are weaker in the public sector is that in practice, the difference in terms of ownership is impossible to fully overcome by means of cleverly drafted contracts, for a number of both technical and political reasons.⁹ Other important factors could be that public providers have more ambiguous goals, that they face more bureaucracy, that public managers are less motivated by pecuniary rewards, and that public employees are to a greater extent motivated by the cause for which they are working (the public-service motivation) than private providers. If a public employee feels that she is fulfilling a mission by helping low-skilled immigrants, the service activities might carry some rewards in themselves (Besley and Ghatk 2005). In a multi-country study, Jakobsen and Sørensen (2012) indeed find that public-sector employees consistently have a stronger public-service motivation than private-sector employees. This difference seems to be due to the selection of employees with different preferences rather than the influence of the sector that they work in (Gregg et al. 2011). The difference also seems to evaporate with tenure or promotion; it does not exist among employees at more senior levels.

There is also some support for the claim that public agencies (outside the US) have more ambiguous goals than private agencies, as Boyne (2002) concludes from his meta studies. The evidence as to whether the amount of bureaucracy differs is mixed (Boyne 2002 and Rainey and Bozeman 2000). Boyne (2002) furthermore finds clear support for the claim that public managers are less materialistically motivated.

The task of increasing the employment chances of immigrants from poor countries who live in rich

countries with high social assistance benefit levels is very hard to assess. It is therefore difficult to write complete contracts. As discussed above, this weakens our initial expectation that competition and profit motives will make private providers of integration services more efficient than public providers. Moreover, research seems to suggest that there is a stronger public-service motivation in the public than in the private sector. This implies that it is less important for performance to write a complete contract when the government contracts with a public rather than a private provider. This leaves us with ambiguous expectations as to whether private or public organisations are more efficient providers of a complex service such as integrating immigrants into the labour market.

3.4 Vertical and horizontal externalities

An incentive-compatible organisation of the integration service also involves the right allocation of responsibility between the central government and local governments (the relevant ministry and municipal authorities). The right allocation would take into account both the importance of having the best-informed authority in charge and possible externalities with regard to the level of centralisation. These two forces point in different directions and theory is ambiguous as to what the optimal degree of centralisation is.

The information aspect points towards decentralisation (Faguet 2004). The local government is likely to be best informed about both the local labour market and the strengths and weaknesses of the local labour force. With decentralised authority over the policy, the local government can tailor activities to match local needs that are likely to vary between municipalities.

⁹ See, for instance, the discussion in Blank (2000) and Petersen et al. (2018).

The existence of externalities, however, points towards centralisation. Central and local governments will typically not have the same incentives when it comes to spending money on integration activities. First, in the interests of the local taxpayer, the local government could have an incentive to use an inefficient tool to achieve a given employment goal if the state subsidy for that activity is sufficiently high (Besley and Coate 2003). Second, the municipality might try to focus job placement within the municipality. Thus, investments in job placement that crowd out employment in neighbouring municipalities could be inefficiently high (Lundin and Skedinger 2006). Central responsibility would internalise these externalities.

The incentives at the local level depend crucially on the relevant legislation and the decentralisation models in place. Researchers have also argued that local policy makers might want to ease the obligations of unemployed workers prior to local elections to secure their votes (e.g. Brollo et al. 2015). Similar considerations, however, could probably also be relevant at the central level.

The next section discusses the evidence about which organisational elements seem to work most efficiently in practice.

4. Employment services for low-skilled immigrants and other hard-to-place unemployed individuals: empirical evidence

4.1 Contracting out employment services to private providers

Studies focusing on which actors should be responsible for employment services are scarce, and studies that further focus on refugees and other immigrants are (to the best of our knowledge) almost non-existent. This section therefore presents the

main results from studies that examine the effects of contracting out employment services to private providers in general.

We have identified six randomised evaluations and a smaller number of observational studies. The main emphasis is given to the first set of studies because the risk of unobserved confounders (variables affecting both assignment and response) which may result in spurious effects and lead to wrong conclusions is higher in the observational studies (Rehwald et al. 2017, Crépon 2018). Only one of the randomised evaluations includes specific analyses of employment effects for immigrants: a trial scheme in Sweden, where private contractors were commissioned to match hard-to-place unemployed individuals to jobs in the regular labour market (Bennmarker et al. 2013).

It is important to analyse the costs of the services as well as the effects on the employment probability of the target groups. In the following, we first describe the employment effects found in the evaluations and then the results from cost analyses.

Employment effects: randomised evaluations

Two of the randomised trials described here are from Sweden, one from Germany, one from France, one from Switzerland and one from Denmark. The two Swedish studies (Bennmarker et al. 2013, Laun and Thoursie 2014) and the German study (Krug and Stephan 2016) focus on hard-to-place groups. The target groups in these three studies were:

- Disabled individuals with impaired ability to work, immigrants of at least 25 years of age who had been unemployed for at least six months, and adolescents under 25 years who had been unemployed for at least three months (Bennmarker et al. 2013).

- Individuals who had been receiving sickness benefit for more than two years or were receiving temporary disability benefits (Laun and Thoursie 2014).
- Hard-to-place unemployed individuals, where the categorisation as hard-to-place was based on profiles compiled by caseworkers (Krug and Stephan 2016).

In the French studies (Behaghel et al. 2012, 2014) the target group was job seekers entering unemployment and entitled to at least one year of benefits, in the Swiss study (Cottier et al. 2015) it was long term-unemployed. In the Danish study, the target group consisted of unemployed individuals with higher education, thus a relatively well-qualified group (Rehwald et al. 2017).

Overall, the results do not indicate that private providers improve exit rates from unemployment to employment or increase the duration of employment for those who obtain it. However, one study (Cottier et al. 2015) finds that private providers are more successful in the short run than public providers with respect to increasing the rate of transition into employment and reducing the amount of unemployment benefits paid. But in the medium term, these positive impacts vanish, and after two years the pattern is reversed as the privately-placed job seekers lose their jobs again, earn less when they are employed and claim more unemployment benefits than their publicly-placed counterparts. Thus, the results in Cottier et al. seem to indicate that private providers focus on placing the job seekers as quickly as possible, at the cost of ignoring their suitability for the jobs found. The authors also find indications of heterogeneous effects: the performance of private and public providers differs especially with respect to median job seekers, whereas the results are

similar for both easy-to-place and hard-to-place individuals.

Two studies find that public employment services perform better than private providers. According to Krug and Stephan (2016), public providers were more effective in reducing unemployment in the short run, while there were no differences in the medium term. The finding of Behaghel et al. (2014) is that an intensive public programme increases the exit rate to employment after six months by 10.2 percentage points compared to the standard public program, while the corresponding private programme increases it by 4.5 percentage points. Furthermore, the public programme works very rapidly – there is an impact after three months, while this is not the case for private programmes.

The remaining three studies find no overall differences in the performance of public and private providers (Laun and Thoursie 2014, Rehwald et al. 2017, Bennmarker et al. 2013). However, Bennmarker et al. show heterogeneous effects across target groups. The authors find a significant positive effect of private programmes on employment and earnings for immigrants, and some support for a negative effect from the use of private providers on earnings and hours worked for adolescents. Furthermore, within-target-group estimations show that the employment effect is positive for immigrants with pre-trial higher-than-average earnings, but close to zero for those with pre-trial lower-than-average earnings.

Employment effects: observational evaluations

The results from the observational studies are mixed.¹⁰ For example, Skipper and Sørensen (2013) find that the use of private providers in Denmark has a negative effect on the unemployment rate of unemployed individuals for the first six months

¹⁰ See also Finn (2011) and Crépon (2018) for more results from observational studies.

after the assignment (Skipper and Sørensen 2013). Cockx and Baert (2015) analyse the effectiveness of contracting out mandatory training and counselling for long-term unemployed in Belgium. The finding is that for-profit organisations perform better than non-profit and public organisations. Finally, for Germany, Bernhard and Wolff (2008) conclude that assignment of the unemployed to private providers is generally ineffective. However, for some subgroups, for example male immigrants, it has a positive effect on employment.¹¹

Analysis of costs

Five of the six randomised evaluations at least roughly estimate the cost of the private and public programmes. Four of the studies find that the cost of the private providers is higher than or equal to the cost of the public providers. Thus, the worse performance of private providers is not offset by cost savings. The fifth study (Cottier et al. 2015) finds a higher programme cost of the private providers over the first six months, but the amount saved on unemployment benefits in the short run is large enough to compensate for this. According to this study, the private programme is cheaper than the public programme over all lengths of time.

One can compare these results with a systematic review of studies on the effects of contracting out public services in general to private providers (Petersen et al. 2018). The review covers studies for the period 2000-14. The finding is that contracting out public services to private providers reduces overall average cost by 4.2%. However, there are differences in the cost reductions for technical services (e.g. waste collection and transport) and for social services (e.g. health and employment services). While the average cost reduction in technical services is

5.7%, the average cost reduction in social services is only 0.2%, and not significantly different from zero. A theoretical explanation of this difference is that the unambiguous description and measurement of the quantity and quality of the services are a condition for high cost reductions, and technical services are typically characterised by higher measurability than social services (Petersen et al. 2018).

All in all, existing studies show little support for the hypothesis that private actors are more efficient than public ones in providing employment services. However, it should be noted that the outsourcing of employment services is a relatively new procedure in the countries examined here. Finn (2011) argues that there is a steep "learning curve" for policy makers with respect to developing and managing subcontracting systems. Efficiency gains and cost reductions from subcontracting may take time to emerge. Rehwald et al. (2017), however, argue that their findings can be interpreted as experimental evidence against the learning curve argument. In their experiment, the private providers are the experienced players in the field and the job centres are the newcomers, but they find no difference in their performance and that the costs are higher for private than for public providers.

Payment structure and employment effects of private providers

Behaghel et al. (2012, 2014) argue that the poor performance of the private providers in their study may be explained by the inability of the Public Employment Service to provide them with the right financial incentives. 30% of the maximum total payment was paid as a fixed payment upfront, 35% was paid if a job was found within six months, and the remaining 35% was paid if the worker was still in em-

¹¹ The most radical reforms of the employment services have taken place in Australia, Netherlands and the UK, where all job seekers are serviced by private providers in the reformed systems (Crépon 2018). However, according to Crépon (2018), it is impossible to evaluate the impact of these reforms because there are no control groups (all job seekers are assigned to private providers).

ployment after six months. This payment structure corresponds to a high degree to the compensation schemes in other randomised evaluations described above (except the payment structure in the experiment studied in Cottier et al. 2015).

Behaghel et al. show that the payment structure is suboptimal. The incentives for creaming increase with the weight put on conditional payment, and the incentives for parking increase with the upfront fixed payments. Private providers in their experiment had incentives to maximise enrolment into the programme and provide a bare minimum of services (parking) rather than cream-skimming. Empirical evidence from qualitative interviews confirms that the behaviour of the private providers was in accordance with a parking strategy. On the other hand, the public providers had no incentives to increase enrolment: first, because the main criterion for assessing success was the placement rate, and second, because the human resources available for the programme were limited. In contrast, for the private providers, each additional job seeker involved the use of additional resources.

Cottier et al. (2015) discuss more briefly the implications of the financial incentives for the performance of private providers. They discuss a very different payment scheme whereby a private provider does not receive payment upon placement but instead is given a decreasing monthly flat rate per job seeker enrolled.¹² The argument for such a payment structure is to encourage private providers to quickly place job seekers in work. Furthermore, there is a constraint on the number of enrolled job seekers: a given private provider's capacity must not exceed 100 job seekers at a time. This constraint, together with the payment structure, means that the provider is forced to allocate resources across all types of

job seekers in order to have a desirable composition of job seekers in the long run.

4.2 Decentralisation of employment services

Another relevant question is where the responsibility for public employment services should best be placed. At the local or the central governmental level? There are even fewer studies focusing on decentralisation/centralisation issues than on contracting out employment services. The lack of empirical evidence is probably related to empirical constraints: the level of decentralisation typically does not vary within a country, and therefore it is difficult to construct a treatment and a control group (Mergele and Weber 2017). Nonetheless, we have identified three studies on decentralisation of employment services which exploit policy experiments that brought about variation within a country. However, none of the studies addresses the integration of refugees or other immigrants.

One of the studies focuses on decentralisation in Sweden (Lundin and Skedinger 2006), and two focus on decentralisation in Germany (Boockmann et al. 2013, Mergele and Weber 2017). The Swedish study examines the effects of a Swedish pilot programme in 1996 that strengthened the role of local authorities in labour market policy in certain regions. From July 1996 the role of the local authorities was strengthened in 25 municipalities, and from October in the same year the role of the local authorities was strengthened in the remaining municipalities in the country. Thus, the pilot programme offered an opportunity to compare outcomes in the decentralised-programme municipalities with those in less decentralised, non-programme municipalities for the period July to September. The two German studies exploit large-scale German policy experiments. The experiment described in Mergele and

¹² 1-6 months: 1000 SFr, 7-18 months: 500 SFr and 19+ months: 350 SFr.

Weber (2017) exploits the devolution of responsibility for public employment offices (job centres) to the district level within 41 of the 402 districts.

The studies find no evidence of geographical lock-in effects¹³ of decentralisation in Sweden and Germany, but the two German studies show negative effects of decentralisation on job-finding rates. Mergele and Weber (2017) find that decentralisation reduced the number of new job matches by approximately 10% during the first four post-reform years. This is equivalent to an increase in the average unemployment duration by three months.

Both Lundin and Skedinger (2006) and Mergele and Weber (2017) find that decentralisation increases local ALMP initiatives. For instance, Mergele and Weber find an immediate and permanent shift after decentralisation towards public job creation programmes despite the fact that these programmes are less effective than other measures in increasing reemployment rates. The reason why decentralised job centres favour these schemes may be that they generate local public goods, while the federal government covers most of the associated costs. Lundin and Skedinger emphasise that job creation programmes organised by municipalities may crowd out regular jobs (e.g. jobs in infrastructure, health, children's day-care and old age care). Overall, these studies show that decentralisation reforms necessitate a careful assessment of potential incentive problems and fiscal externalities to avoid unintended consequences.

5. Conclusions

We have discussed what constitutes an efficient organisation of a labour market integration policy for refugees and immigrants. Who should provide

the integration service? Are private or public service organisations more efficient? And what constitutes an optimal contract between the government and a service provider? We have also touched upon the pros and cons related to the decentralisation of responsibility for the policy.

The task of increasing the employability of immigrants with weak initial labour market prospects is a difficult one. It involves genuine uncertainty, and the conditions for writing contracts are far from perfect. We concluded that an optimal contract with a private provider for an employment service for immigrants should include a relatively high fixed payment to provide insurance to cover this uncertainty. Nevertheless, some element of payment by results should also be part of an optimal contract: for example, a payment proportional to the number of job placements that a service provider can document. How much weight should be placed on the payment-by-results element depends on how precisely the results – the net increase in employment that can be causally attributed to the activities of the provider – can be measured. Furthermore, we should expect to see an environment where several small providers compete with each other for tender because the potential minimum costs of placing immigrants in jobs is uncertain. Therefore, the government will want to test frequently that the incumbent service provider is also the most effective one.

Theory is ambiguous on whether public or private service providers are more efficient. The profit motive could at first sight be taken to imply that private provision is the most efficient form of organisation given that there is sufficient competition. However, the difficulties of writing a complete contract for the service task in question implies that the expected advantage of private providers is not obvious.

¹³ Geographical lock-in may occur if local policymakers aim to maximise their constituency's tax base by strictly focusing on job placements within their own region. This would come at the cost of lower labour market mobility across regions.

This is even more so because public providers might not be equally affected by the fact that complete contracts cannot be written. Research suggests that there are motivational differences between employees in the public and private sectors, with the former having a stronger public-service motivation than the latter. Taken together, these factors result in an ambiguous theoretical hypothesis regarding the relative efficiency of private and public providers of employment services. Theory also suggests an ambiguous expectation of the outcome with respect to placement of responsibility for the service, locally with the municipalities or with a central authority.

Few empirical studies have examined which actors should be responsible for employment services, and typically the existing studies do not include specific analyses for immigrants and refugees. Nonetheless, studies focusing on employment services in general, and especially those focusing on hard-to-place groups, may be relevant for the organisation of integration policy.

Overall, the scarce empirical evidence shows no support for using private providers of employment services. Among six existing randomised evaluations, two find that public providers perform better than private providers. One study finds that private providers are more successful in the short run than public ones, but in the medium term these positive impacts vanish, and after two years the pattern reverses. The remaining three studies do not find any differences between private and public providers. However, one of these evaluations finds that the effects on employment are heterogeneous across subgroups; for immigrants in Sweden with higher-

than-average pre-trial earnings, the employment effect is larger for private providers than for public providers. Cost analyses indicate that the poorer performance of private providers is not compensated for by lower costs.

The studies offer no clear explanation of the private providers' relatively poor performance. One study argues that the inability of the public employment services to give private providers the right financial incentives might be part of the explanation. Others suggest that the market for contracting out employment services in general and for hard-to-place groups in particular has not yet matured and that with more learning both on behalf of private providers and the government, the picture could change.

Overall, the studies of decentralisation reforms show a negative effect of decentralisation on the job-finding rate and argue that such reforms require a careful assessment of potential incentives and fiscal externalities.

To sum up, research focusing directly on how to best organise employment services for immigrants is almost non-existent. Provisional conclusions therefore have to be drawn on the basis of research on the provision of employment services for hard-to-place groups in general. The empirical research on this broader group is still scarce, but some high-quality studies exist. This research does not support the view that private providers are more efficient than public ones: rather the opposite is suggested. There is some (weak) support that central administration of employment services is superior to local administration.

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Chapter 6

Social Insurance Design and the Economic Integration of Immigrants

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ABSTRACT⁴

Social insurance design balances equality and social security against moral hazard. We discuss whether the optimal balance is influenced by immigration and point to two potential reasons. First, immigrant labour supply might be particularly sensitive to social insurance parameters. Second, social insurance generosity may directly impact migrant inflows. We provide evidence for both mechanisms. Still, we do not find that such evidence defends reduced social insurance generosity or tighter regulations on migration. Instead, we call for a more activity-oriented social insurance policy. Activation requirements in the Norwegian social assistance programme seem to reduce immigrant welfare dependency and raise immigrant employment.

Keywords: Immigration, social insurance, moral hazard, social dumping.

JEL codes: F22, H53, J15, J22.

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1. Introduction

Social insurance programmes typically entail trade-offs. Their primary role is to insure citizens against income shocks caused by involuntary unemployment or disability and to prevent excessive inequality and poverty. For certain immigrant groups, such as refugees, social insurance transfers often support initial human capital investments that promote economic integration. A possible downside of social insurance programmes, however, is that they involve moral hazard and reduce individual efforts to avoid unemployment and disability problems.

To balance the aim of income insurance against moral hazard concerns, programmes typically rely on two system features. The first is that replacement ratios (the benefit level relative to forgone earnings) are well below 100%, giving (potential) claimants a clear economic incentive to avoid unnecessary claims. The second is that eligibility is based on a set of conditions related to past contributions or to contemporaneous behaviour. The latter typically take the form of activation requirements, e.g., such that benefit payments are conditional on active job search, participation in training programmes, or willingness to accept any job offer with a decent pay.

The behavioural responses to social insurance generosity obviously vary across individuals. Hence, given that an optimal social insurance system must represent a balance between insurance and moral hazard, it can be argued that the design should also vary across individuals. We examine the case for discriminating between natives and immigrants. Such discrimination is now being debated in many countries, and, as we return to below, has since 2002 played an important role in the Danish social assistance programme, where full entitlements require residency in Denmark for at least seven of the last eight years.

For certain immigrant groups, such as refugees, social insurance transfers often support initial human capital investments that promote economic integration.

There are several reasons to suspect that discrimination may be part of a socially efficient insurance system. The first is that while the size and composition of the insured native population can be taken as given, it is probable that both the size and the composition of the immigrant population respond to social insurance generosity: The more generous is a country's social insurance system, the higher will be its exposure to immigrants in need of insurance, *ceteris paribus*. A second motivation for a differentiated system is that the behavioural responsiveness with respect to social insurance generosity may differ between natives and immigrants. Such disparities can arise either because there are systematic differences between immigrants and natives in job opportunities and economic gains associated with employment, or because there are cultural discrepancies, for instance, related to work morale or gender roles. Finally, a defining characteristic of some immigrant groups – particularly refugees and their family members – is that, upon arrival, they start out from a very difficult position, with no country-specific experience, little knowledge of the native language, often low or downgraded educational attainment, and sometimes also poor health. The need for introductory guidance, skill upgrading, and activation may be acute.

Our starting point is the observation that certain immigrant groups are heavily overrepresented in social insurance programmes and underrepresented in self-sufficient employment. Based on Norwegian administrative data, in Section 2 we describe this phenomenon in some detail and discuss its possible causes.

In Section 3, we move on to an assessment of the empirical evidence regarding the existence of native-immigrant differentials in the way social insurance design affects economic behaviour. A chief insight is that immigrants from low-income source countries are indeed on average more responsive than natives with respect to social insurance parameters, but that this discrepancy largely reflects differences in employment and non-employment opportunity sets. In Section 4, we turn to labour migration and discuss how social insurance institutions may distort labour migrant flows. The question is whether social insurance generosity can generate incentives for domestic employers and foreign workers to collude in the creation of low-paying jobs. Our main conclusion is that within open labour markets characterized by large differences in wages and social insurance generosity, social insurance may effectively subsidize migration from low-income to high-income countries. The latter two sections draw on the empirical evidence presented in two recent research papers based on Norwegian register data (Bratsberg et al. 2018b, 2018c), although we also comment on the relevant existing literature more generally. Norway is a country of particular interest in this context, as it has experienced large inflows of both refugees and labour migrants that can be followed more or less continuously through employment and social insurance spells based on administrative data sources.

In recent years, many countries have introduced or strengthened the activation requirements in their social insurance programmes, making benefits con-

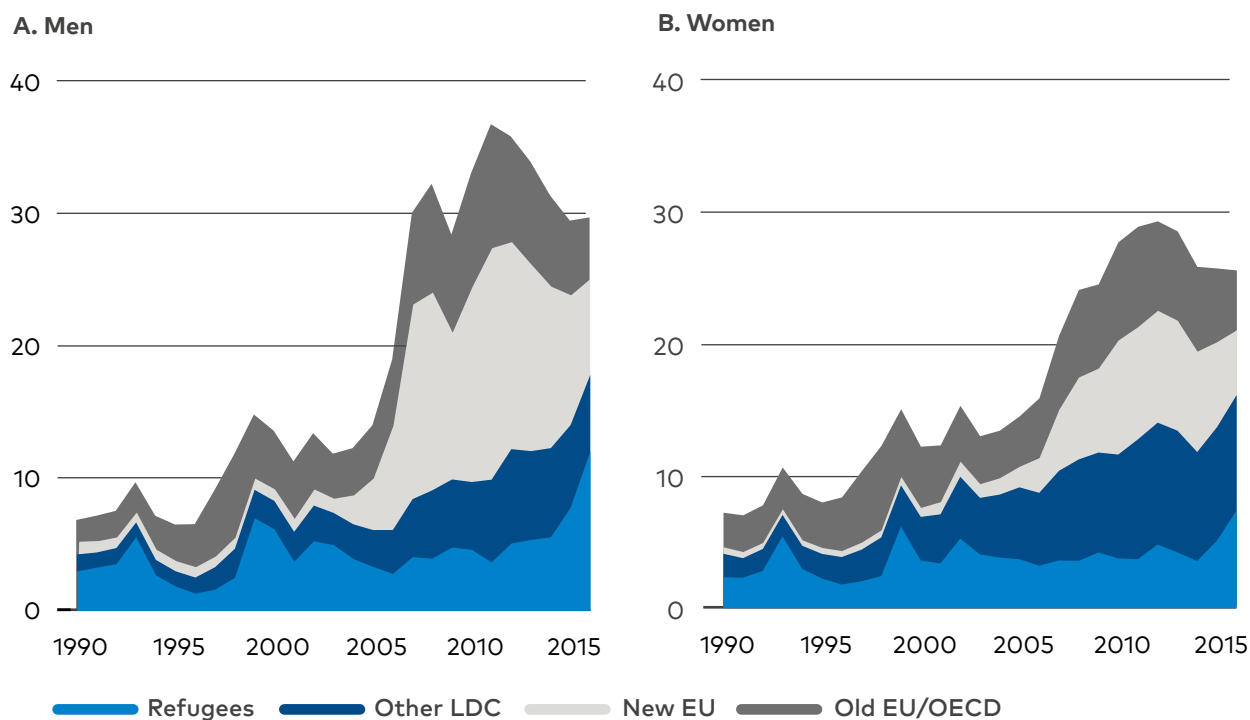
ditional on participation in activities such as community work or training programmes (Røed 2012, OECD 2013). In Section 5, we build on two studies of a reform of the Norwegian social assistance programme (Hernæs et al. 2017, Bratsberg et al. 2018a) and discuss the role of activation policies and present new empirical evidence on the impacts of activation requirements on employment and social insurance reliance among immigrants. The analysis is based on a staggered local implementation of stricter activation requirements, such that we can use a difference-in-differences strategy to identify causal effects. Our findings show that activation requirements do significantly reduce the reliance on transfers among immigrants from low-income source countries.

Finally, Section 6 discusses available policy alternatives and draws some conclusions. We argue that the way forward is neither to restrain immigration by more restrictive policies nor to cut down on benefit entitlements. Instead, we recommend a policy based on effectively enforced minimum standards in the labour market and a more activity-oriented social insurance system.

2. Social insurance claims among natives and immigrants

Until the early 1990s, Scandinavian social insurance institutions could largely be viewed as closed systems, in the sense that their members normally spent their lifetime within them. A typical user profile then entailed being a net receiver during childhood and old age, and a net contributor during working ages. In expected terms, there existed a sort of implicit contract that claims and contributions balanced over the lifecycle. This pattern has changed during the last decades. Large migration flows have broken the linkage between expected contributions and expected claims over the lifecycle within each country's social insurance accounting

Figure 1 Total immigration to Norway by region of origin and refugee status, 1990-2016, thousands



Note: "Refugees" are resettlement refugees and those admitted following asylum application as well as family reunifications when the reference person is a refugee, "Other LDC" other immigrants from less developed countries outside the EEA/OECD area, "New EU" immigrants from the new member states of the European Union following the 2004 and 2007 expansions, and "Old EU/OECD" immigrants from other EEA and OECD countries.
Source: Own calculations.

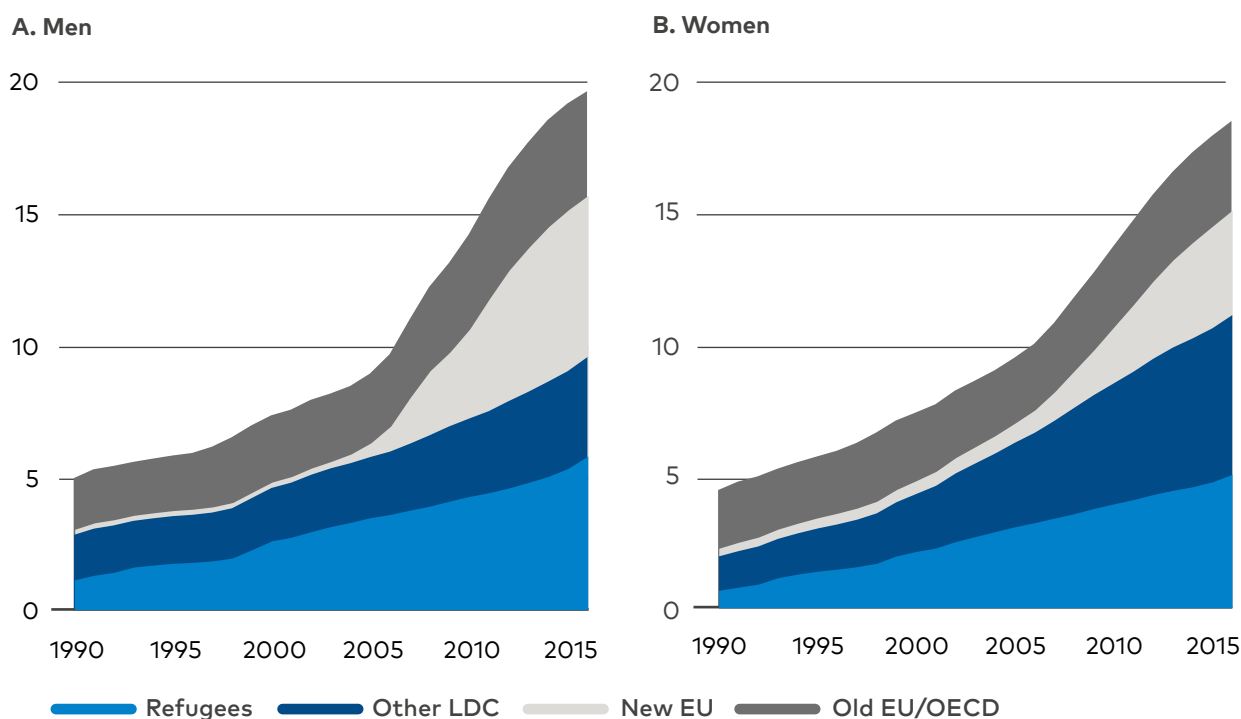
system. This development may in turn have altered the way these systems work, including the nature of the trade-off between equity and efficiency.

Figure 1 shows immigrant inflows to Norway between 1990 and 2016, separately by gender and disaggregated across four major immigrant groups. The groups are refugees (covering resettlement refugees and those admitted following asylum application, as well as family reunifications when the reference person is a refugee), other immigrants from less developed countries outside the European Economic Area (EEA)/OECD area, immigrants from the new member states of the European Union following the 2004 and 2007 enlargements, and immigrants from other EEA and OECD countries. The figure illustrates how immigration took off after the eastward expansion of the European labour market in 2004. As a result, the composition

of the population has changed considerably. Figure 2 shows that the overall shares of immigrants in the working age population (ages 20-62) over the 26-year period depicted increased from below 5% to almost 20%. Most of this increase came from immigrants originating in countries with much lower living standards and less generous social insurance systems than Norway.

To see how the changes in the composition of the working-age population have influenced the balance between contributions and claims in the social insurance system, we have divided the population into two major groups, depending on the source of their largest income component. For each individual and for each year, we collect from administrative registers all sources of income. We categorize income from employment and self-employment as work-related income and income from transfer

Figure 2 Immigrants as a share of the working-age population (20-62 years), 1990-2016, percent



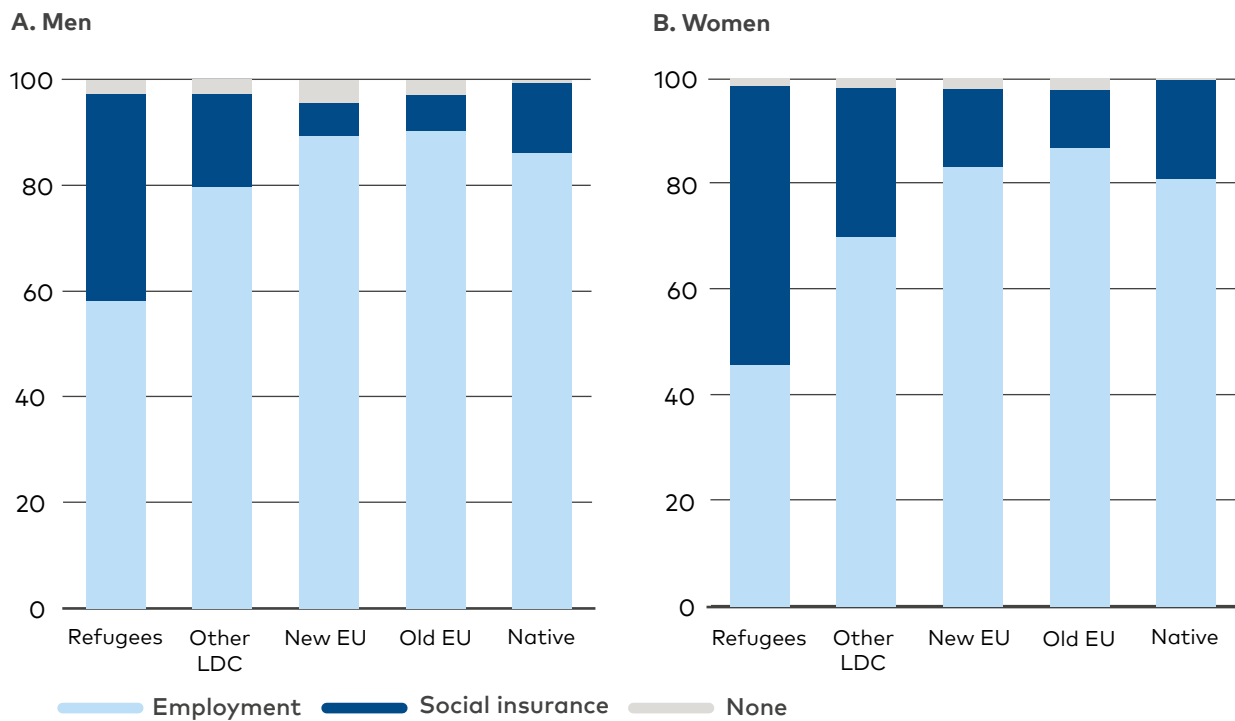
Note: The immigrant population includes all persons who were living in Norway at the end of the calendar year, See also Figure 1.
Source: Own calculations.

programmes as social insurance-related income. We then define a person's main state in a given year as being *employment* if the work-related income exceeds the social-insurance part and *social insurance* if the opposite is the case. Persons with zero income are assigned the status of their spouse if married,⁵ and as neither in employment nor in social insurance if not (or when the spouse also has zero income). Our definitions of the employment and social insurance states imply that the distinction is not completely independent of individual wage levels: An employment spell of a given length is more likely to generate earnings that exceed a given amount of social insurance income the higher is the wage.

For the observation period 2011-15, Figure 3 illustrates how adult residents in Norway fall into these categories, separately by gender and for natives and immigrant groups by country of origin or reason for admission. Refugees are quite dispersed in terms of origin, with Iraq and Somalia the two major source countries. Among non-refugee immigrants from less developed countries outside the EEA/OECD area, family immigrants from Pakistan and Turkey form the two largest groups among men, while immigrants from Thailand and the Philippines (often married to Norwegian-born men) constitute about one third of the female group. Poland is the dominant source country among the new EU countries, while Sweden and Germany dominate among the old EEA countries (see Appendix Table A1). Com-

⁵ To avoid a selected sample as classification is undetermined with zero income, the rule assigns individuals the status of their spouse. A limited number of individuals are affected, however: 0.3% of natives, 0.9% of immigrant men, and 3.5% of immigrant women.

Figure 3 Main source of income: employment versus social insurance, percent



Note: The population consists of individuals aged 20-62 years, who are not enrolled in education, and are living in Norway at the end of the calendar year. The observation period is 2011-15. The immigrant population is restricted to those aged 18-47 years at arrival.
Source: Own calculations.

pared to the other Nordic countries, labour migration from the new EU countries has been larger in Norway and this motivates the perspective in Section 4 where we study the implications of social insurance generosity on the creation of jobs for new migrants.

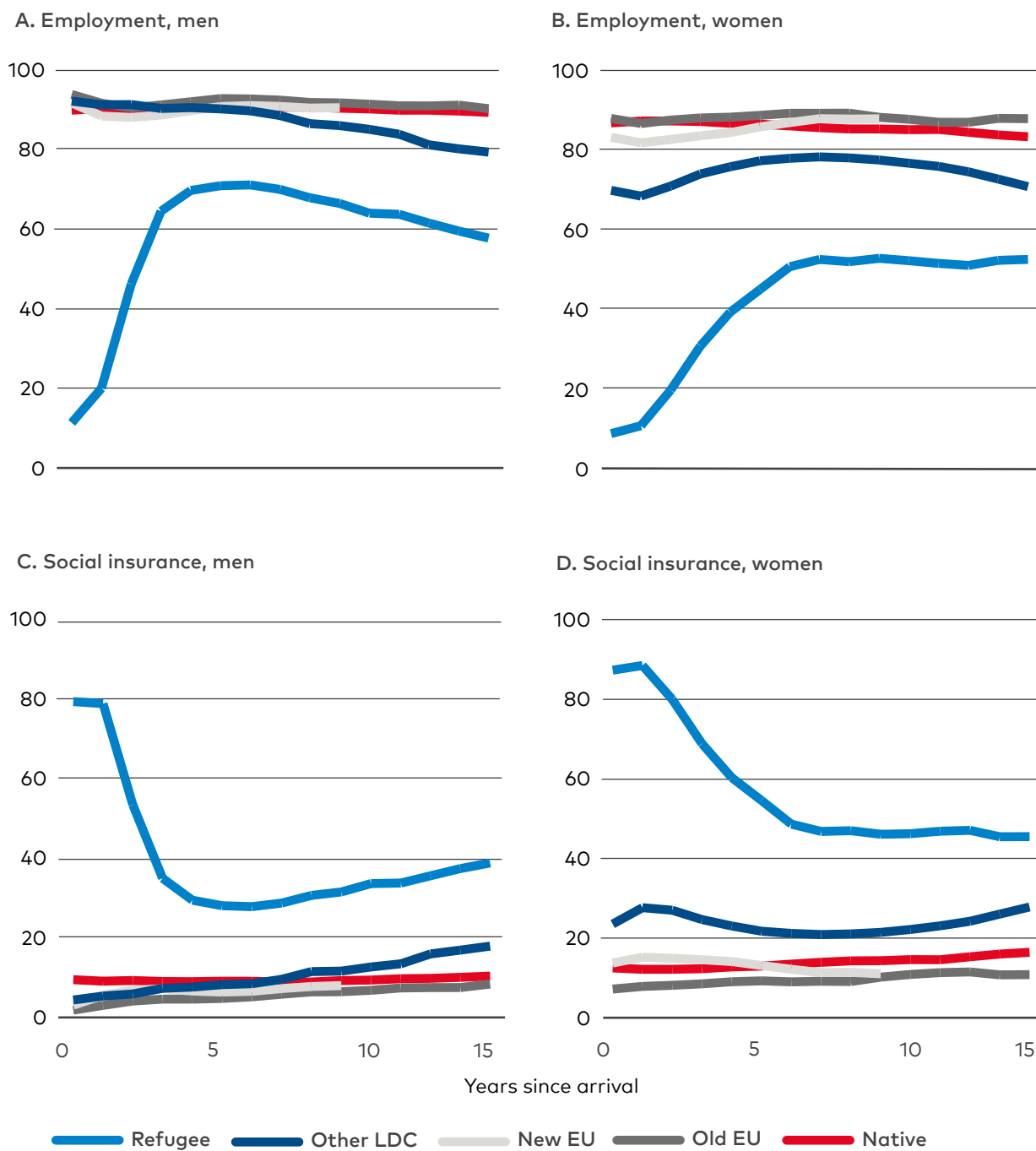
Starting at the right in the two panels in Figure 3, we note that approximately 85% of native men and 80% of native women have work as their main source of income. At the other end, this is the case for less than 60% of male refugees and less than 50% of female refugees. Non-refugee immigrants from less developed countries also appear to have lower employment rates, and correspondingly higher social insurance rates, than natives. On the other hand, immigrants from both new and old EU coun-

tries have higher employment rates and lower social insurance rates than natives.

These patterns are of course strongly influenced by the composition of the different groups in terms of characteristics such as age and years since migration. Figure 4 illustrates the importance of the latter by showing employment and social insurance rates by years since arrival. For natives, we have constructed an artificial comparison group in the graph by using years since turning 29 instead of years since arrival, as 29 is the median age at arrival for the immigrant groups depicted.

While most immigrant groups have relatively high employment rates during the first few years after arrival, refugees start out with very low employ-

Figure 4 Employment and social insurance dependency by years since migration , percent



Note: See Figures 1 and 3. 'New EU' profiles end at ten years because of the more recent arrivals of this group. For natives, values on the horizontal axis correspond to age minus 29 (the median immigrant age at arrival in the immigrant samples).
 Source: Own calculations.

ment rates in Norway. This is not surprising as refugees have come for protection and not primarily for employment. Many have little knowledge of the majority language and are poorly prepared for the requirements of the Norwegian labour market. However, during the initial five- to seven-year period, they catch up rather quickly, with employment rates reaching 70% for men and 50% for women. Thereafter, the employment gap between natives and immigrants starts to widen for both refugees and other immigrants from low-income countries. As a result, social insurance dependency starts to climb. At least for men, the growth rates in social insurance dependency of refugees and other immigrants from low-income source countries exceed those of other groups (who also exhibit rising social insurance use primarily reflecting lifecycle patterns in disability insurance); see Panel C. The patterns of declining employment and rising social insurance dependency deviate from those observed elsewhere in Europe (Dustmann et al. 2017, Fasani et al. 2018),⁶ raising questions of whether social insurance generosity may impede the labour market integration process for immigrants from low-income source countries.

To provide a better understanding of the transition into the social insurance system, Figure 5 shows, for those categorized as social insurance claimants, the share of the transfer stemming from specific programmes. Here, we have divided the social insurance programmes into five main groups:

- *Introduction benefit*: The introduction programme is specifically targeted at refugees and their dependents. It offers a stable annual income equal to two basic amounts (193 766 NOK from May 1, 2018). The duration is two years, with discretionary extensions up to three years.
- *Social assistance*: This a means-tested income

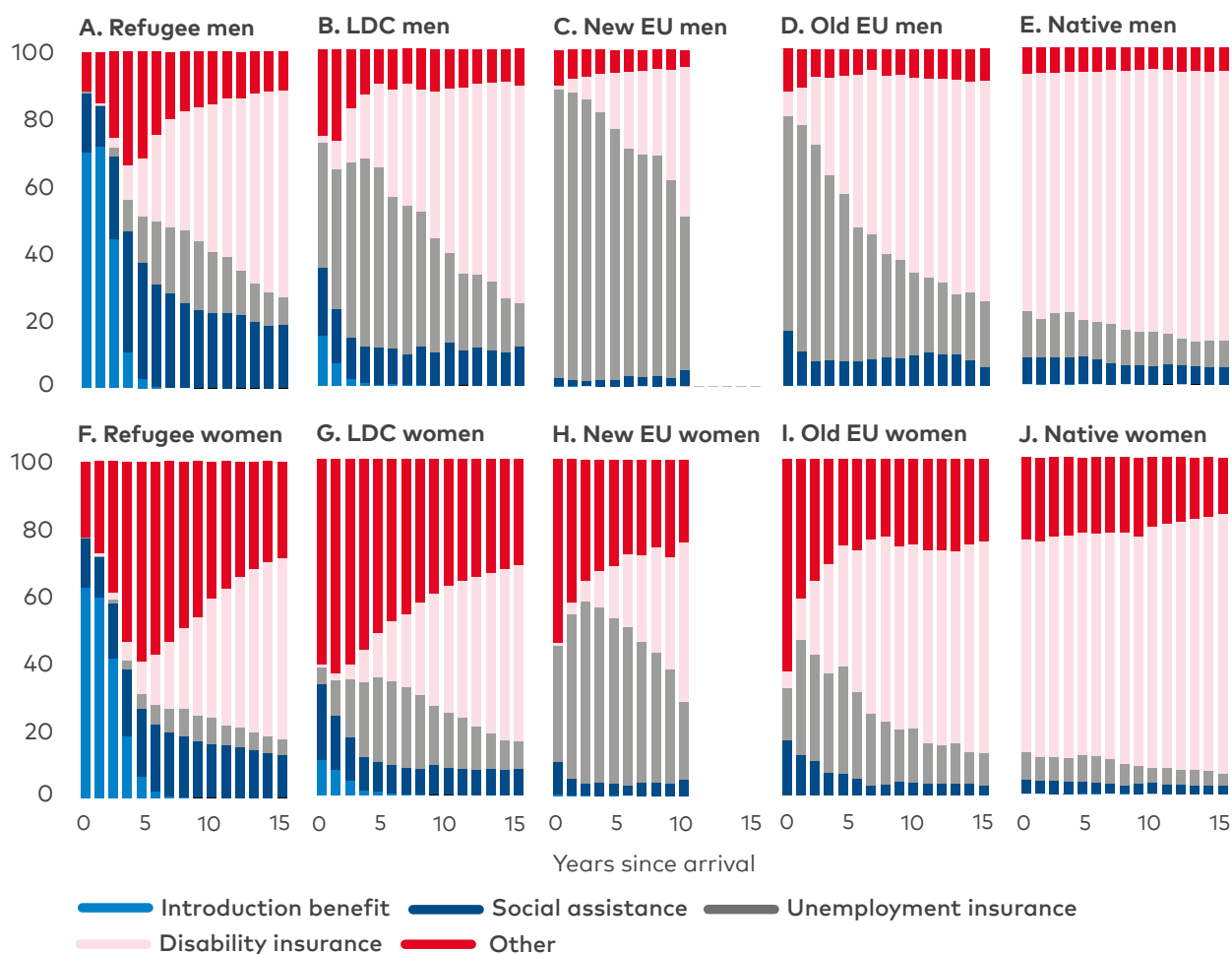
support programme administered by the municipalities, primarily targeted at adults with no other means of economic support and with benefits typically lower than the introduction programme benefit.

- *Unemployment insurance*: This is a support programme for active job seekers, with eligibility conditional on past contributions (typically, earnings exceeding 1.5 basic amounts during the prior calendar year). It offers a replacement rate equal to 62.4% of employment income recorded during the last calendar year (or the average of the last three calendar years).
- *Disability insurance*: There are two disability insurance programmes, a temporary and a permanent. They offer replacement rates around 66% of forgone earnings. Eligibility for disability insurance requires that the work capacity is reduced by at least 50% due to a health problem. Eligibility also requires three years of residency in Norway prior to the onset of the sickness/disability spell.
- *Other programmes*: This category comprises family-related support programmes, such as general child allowances and transitional lone parent support.

As expected, the introduction programme is the dominant source of social insurance income for newly arrived refugees, while unemployment insurance is the most important income support programme during the first years after arrival for the other immigrant categories. However, for all immigrant groups, disability insurance quickly gains importance, and after 10-15 years of residence, it is the major source of income support for non-employed immigrants, just as it is for natives.

⁶ Similar patterns are observed among refugees in Denmark (Husted et al. 2001, Schultz-Nielsen 2017), but not among refugees in Finland (e.g., Sarvimäki 2017) and Sweden (e.g., Bevelander 2016).

Figure 5 Main sources of social insurance transfers by years since arrival, gender, and immigrant group, percent



Note: See Figure 4.
Source: Own calculations.

Considering the trends displayed in Figures 4 and 5 together, it appears that the process of labour market integration works relatively well over the first few years after arrival in Norway. For immigrants from other European countries, this is the case almost by definition, as a job is the typical reason for arriving in the first place. Even for refugees and other immigrants from low-income countries (LDCs), we see indications of rapid labour market inclusion (Figure 4). But after five to seven years in the country, the integration process apparently goes into reverse. Instead of closing, the immigrant-native employment differential widens again. For refugees, it appears that the transition into the social insurance system primarily takes

place through social assistance and disability insurance programmes, whereas other LDC immigrants go through an interim period with unemployment insurance (Figure 5).

Why do we see this reversal of the integration process after just a few years of residence in Norway? The existing literature points to several possible explanations. First, and most obviously, many immigrants with a refugee background have experienced traumatic events prior to arrival in Norway and have serious health problems that do not provide the best foundation for a long and successful labour market career. Blom (2008) reports that while 86% of the overall population consider their

own health as good or very good, this is the case for only 67% of non-western immigrants. Second, there is empirical evidence indicating that employed immigrants from low-income countries are heavily overrepresented in poor and precarious jobs that come with a high probability of being eliminated in the near future, and that they also experience more severe adverse consequences of individual job loss (Bratsberg et al. 2018d). Third, immigrants are sometimes subjected to both statistical (rational) and prejudice-based discrimination in the labour market. And fourth, it is probable that the social insurance system works differently for some immigrant groups, both because their labour market opportunities are poorer and because their payoff in the social insurance system sometimes is better (due to their family composition). In the next section, we discuss the evidence for such mechanisms.

3. Different responsiveness to social insurance generosity?

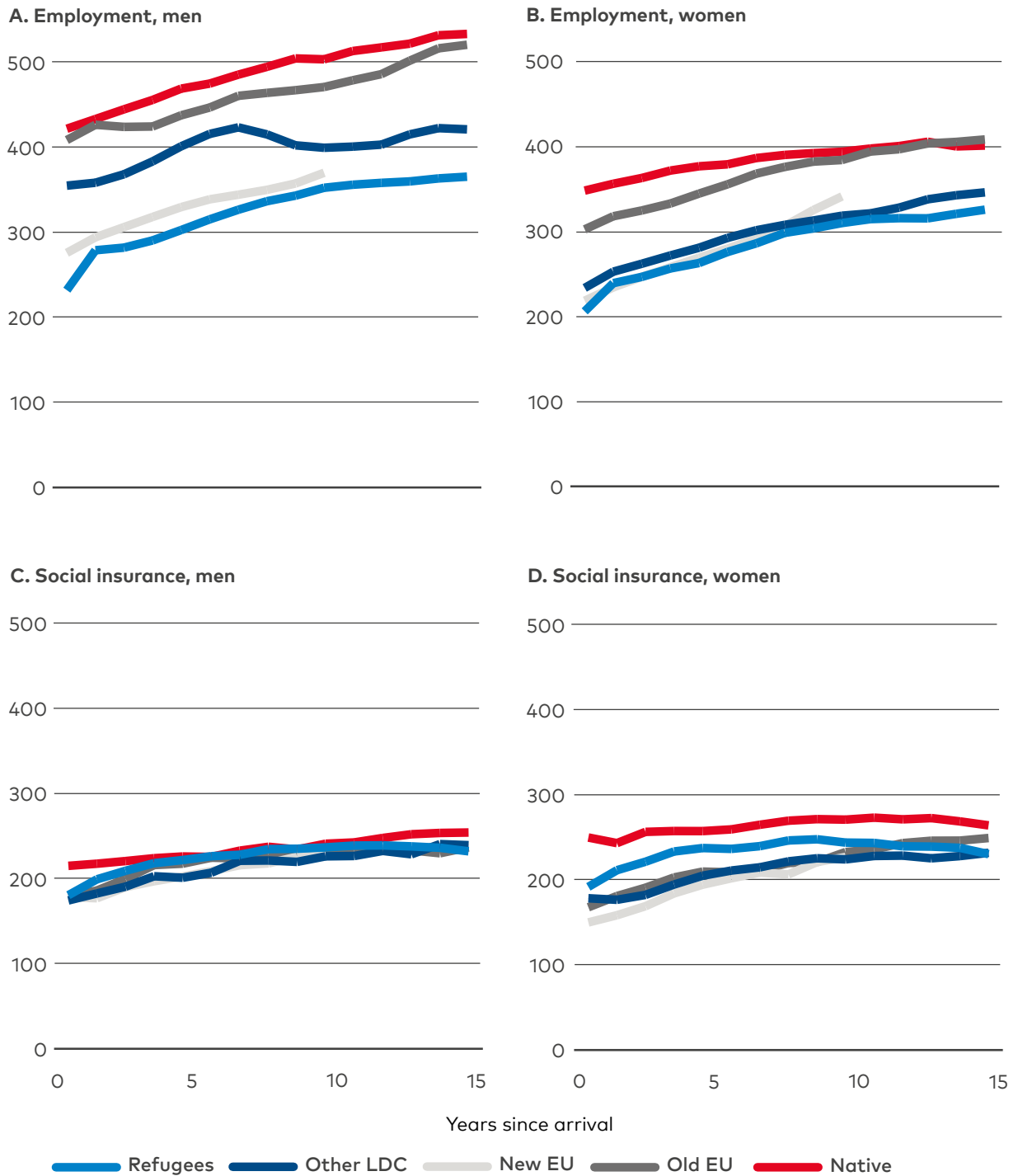
In the design of social insurance programmes, policy makers need to consider the probable responses to alternative values of key system parameters, such as the replacement ratio, minimum and maximum payments, eligibility rules, etc. If, say, a higher replacement ratio implies a considerable increase in the caseload (and a corresponding reduction in self-supporting employment), this may be an argument for a low replacement ratio and/or strict eligibility conditions, as it may indicate that moral hazard problems are important. Considering the presumably rather limited set of policy-relevant alternatives for social insurance design in this context, it may be helpful to think of the insured population as consisting of three groups.

Never-takers are persons who under the current circumstances will always prefer employment over social insurance dependency, regardless of realistic

variations in social insurance parameters; hence the behaviour in this group is completely inelastic with respect to these parameters. This may be because expected earnings by far exceed social insurance payment levels and/or because persons in this group get direct utility from working. In contrast, the group of *always-takers* consists of persons who will claim social insurance regardless of realistic variations in the parameters of the system; hence the behaviour in this group is also completely inelastic with respect to these parameters. This may be because persons in this group have poor health and/or lack basic skills, such that they are non-employable, or because expected earnings in the labour market are so low that they fall below all realistic benefit levels. Finally, *compliers* are employable and, in utility terms, on the fence between employment and programme participation; hence, *ceteris paribus*, their preferred state depends directly on the parameters of the social insurance system. Indifference between employment and benefit dependency may arise because feasible jobs are unpleasant and/or poorly paid or because opportunity costs (the value of leisure) are high.

In this setting, the appropriate balancing of effective insurance against moral-hazard concerns depends, *inter alia*, on the relative size of the three groups. In a population where everyone is either a never-taker or an always-taker, social insurance dependency is, at least in the short run, largely unaffected by benefit generosity; hence moral hazard problems are negligible, and the system can safely be designed such that it offers the desired level of insurance. In a population dominated by compliers, moral hazard problems may be considerable. In practice, there are of course large grey areas between the three groups, and persons may switch between them depending on circumstances. For example, while refugees are likely to start out as always-takers, many will become compliers or

Figure 6 After-tax income by main source of income and years since arrival, thousand NOK



Note: See Figure 4.
Source: Own calculations.

never-takers after some time in the host country. Our point is that sensitivity with respect to plausible variations in social insurance parameters is typically limited to a relatively small fraction of the insured population, the complier group.

To illustrate the differences in potential gains from entering employment across groups, Figure 6 compares, separately for natives and four immigrant groups, the observed net-of-tax incomes for those with employment and social insurance as their main source of income, respectively, by years since arrival (years since age 29 for natives). The purpose is to compare immigrants and natives at a similar stage of the lifecycle to see how their employment and non-employment options differ. Starting with the lower left-hand panel (C), we note that men who derive their main income from social insurance have approximately the same after-tax income level regardless of immigrant background. For all groups, net income varies from around 200 000 to 250 000 NOK, depending on years since migration/age.

However, looking at the after-tax incomes for those in employment (panel A), we note huge differences across the various groups. While refugees and immigrants from the new EU member states typically have incomes in the range of 300 000-350 000 NOK, native men have after-tax incomes in the range of 400 000-550 000 NOK. Hence, the difference in net income between employees and programme participants is much larger for natives than for immigrants. While employed native men on average have a net income almost twice as high as those on social insurance, the corresponding differential for male refugees is only 50%.

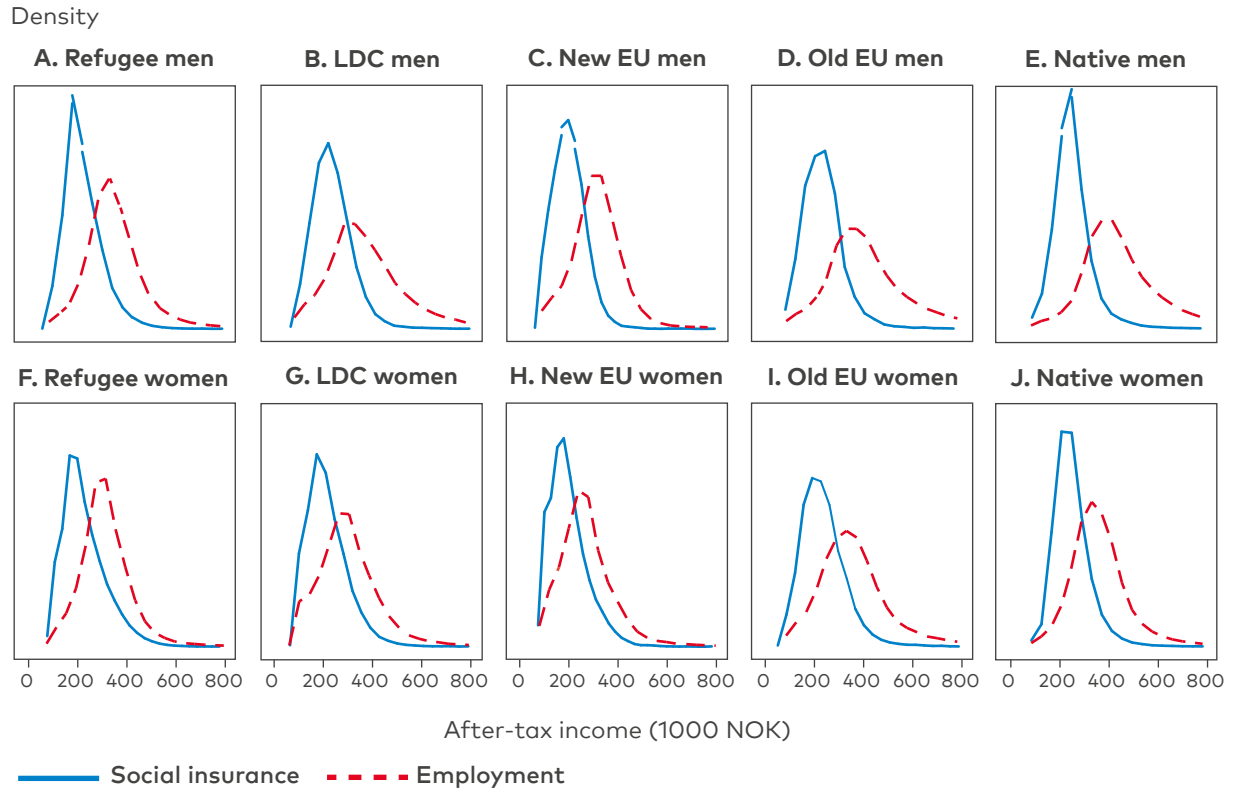
Although income differences between employees and those on social insurance are smaller for wom-

en than for men, the patterns of relative differences by group are similar. For example, net incomes of employed female refugees are on average 22% higher than incomes of those on social insurance, compared to a 46% difference among native women. As there are different individuals behind the income levels observed for the employment and social insurance states, the patterns in Figure 6 cannot be directly interpreted as replacement ratios. They nevertheless indicate that natives, on average, have more to gain from employment than immigrants.

The much smaller difference in average incomes between employees and benefit takers among immigrants than natives also suggests that the overlap of the two income distributions is greater for immigrants than natives. This is illustrated in Figure 7. For all groups, the income distribution for the employed lies to the right of the income distribution for those on social insurance. However, the overlap is indeed larger for refugees and other LDC immigrants as well as for immigrants from new EU countries, indicating that a substantial number of immigrants with social insurance as their main source of income receive transfers on par and even above the earnings of those in employment. For example, the share of employed immigrants with annual after-tax income *below* the 75th percentile of the social insurance group is 19% for male refugees and as much as 28% for other male immigrants from low-income countries. In comparison, this is the case for just 11% of the native men. For women, the differences between immigrants and natives are smaller, and the corresponding frequencies are 28% for refugees, 29% for other LDC immigrants, and 23% for native women.

These numbers may suggest that the fraction that belongs to the never-taker group is significantly

Figure 7 After-tax income distribution by immigrant group, gender, and main source of income



Note: See Figure 3.

Source: Own calculations.

smaller among immigrants than among natives. However, some immigrant groups are also likely to be heavily overrepresented in the always-taker group. In particular, immigrants with a refugee background may lack basic labour market skills or have health problems that make them temporarily or permanently non-employable. Hence, whether or not the behavioural responses to social insurance generosity are larger or smaller among immigrants than natives is essentially an empirical question.

In Bratsberg et al. (2018b), we examine this topic, exploiting changes in the benefit level in the Norwegian temporary disability insurance (TDI) generated by a reform in 2002.⁷ A main finding is that immigrants from low-income countries are on average much more responsive than natives to variation in TDI benefits. For example, while the estimated

elasticity of the exit rate from the TDI programme to employment with respect to benefits is -0.647 for immigrant men, it is -0.311 for native men. The implication is that if the benefit level increases by 10%, the average exit rate for immigrants declines by 6.47%. For women, the corresponding elasticities are -0.424 for immigrants and -0.084 for natives. More importantly, it appears that while the adverse effect on labour earnings for natives tends to be washed out after a few years, they are highly persistent for immigrants. For both immigrant men and women, the study estimates a permanent negative earnings effect amounting to around 20 cents per euro increase in TDI benefits.

If the higher responsiveness among immigrants primarily reflects that a larger share of the immigrant population belongs to the complier group –

⁷ In 2002, TDI consisted of *rehabiliteringspenger* and *attføringspenger*. In 2010, these programmes, together with *tidsbegrenset uførestønad*, were replaced by *arbeidsavklaringspenger*.

the group of people who with some effort are able to find employment but have little to gain from it in utility terms – we would expect to see similar responsiveness among natives with skills and family characteristics similar to the immigrant group. We find some support for this explanation, with the estimated immigrant-native responsiveness differential dropping considerably when immigrants are compared to natives with similar characteristics.

A main conclusion from this exercise is thus that variation in social insurance parameters primarily affects persons who for some reasons have little to gain from employment over social insurance programme participation; i.e., they are on the fence between employment and non-employment. This finding accords well with a related strand of the literature showing that labour supply in general tends to be particularly elastic at the bottom of the wage distribution (e.g., Aaberge et al. 2000, Bargain et al. 2014).⁸ The high sensitivity of labour supply in this group has been shown to stem from responses at the extensive margin, that is, in labour force participation (and not in hours worked per person).

The findings reported above suggest that the labour supply responsiveness declines with the level of labour market skills, since higher skills will raise the probability of belonging to the never-taker group rather than the complier group. However, higher skills may also imply a lower probability of belonging to the inelastic always-taker group. Hence, it is likely that empirical investigations of the relationship between labour supply responsiveness and skills can come to different conclusions depending on the composition of the group under study and on the source of variation in economic incentives.

A study of particular relevance in this context is Mullen and Staubli (2016), who, based on Austrian disability insurance benefit reforms, find that the responsiveness with respect to the benefit level tends to be greater for persons generally considered to be more resourceful: white-collar workers are more responsive than blue-collar workers, and individuals with high lifetime earnings are more responsive than poorer individuals. The authors interpret these findings as reflecting the better labour market opportunities of the former groups, which in our terminology translates into a lower fraction of always-takers. In line with this, Kostøl and Mogstad (2014) report larger effects of improved work incentives among disability insurance claimants for those with more years of schooling, more labour market experience, and higher pre-programme earnings. In a study of a reform of the income support system for newly arrived refugees in Denmark, Rosholm and Vejlin (2010) present evidence of considerable labour supply responses with respect to economic incentives, with the largest responses coming from the immigrants considered to have the best employment prospects.

Other studies uncover no evidence of greater responses among the highly skilled. French and Song (2014) find that receiving disability insurance reduces labour force participation less among college graduates than non-graduates. Maestas et al. (2013) report employment effects of disability insurance programme admission that are stable across the earnings history distribution but find heterogeneous effects according to the health condition of the applicant – from zero effect among those with severe impairments to a 50-percentage points reduction in employment for entrants with the least severe health problems. Our reading of the research literature is that differ-

⁸ In line with this, Bhuller et al. (2016) show that immigrants in Norway tend to have a considerably more elastic labour supply behaviour than natives.

ences in the average responsiveness with respect to economic incentives across groups, such as immigrants and natives, do not necessarily mirror any fundamental or intrinsic differences between similarly positioned individuals, but rather that the groups may be differently composed in terms of labour market and non-labour market options.

4. Social insurance design, migration, and labour churning

Social insurance design is also likely to affect the level and composition of migrant flows. A country with generous and costly welfare support programmes is, *ceteris paribus*, relatively more attractive for persons who consider themselves likely to become dependent on such programmes than for persons who consider themselves likely to end up on the paying side. There is some empirical evidence suggesting that welfare benefit generosity affects the location choices of immigrants across states in the US (Borjas 1999, McKinnish 2005). More recently, it has also been shown that the size and skill composition of migrant flows to and within Europe respond to differences in the host countries' welfare state generosity, although effects appear to be small when compared to the effects of labour demand conditions (De Giorgi and Pellizzari 2009, Razin and Wahba 2014).

Given the almost universal shift in Europe toward a stricter and more strongly regulated immigration policy for refugees and their family members, it is probable that social insurance design has become less important for the direction of these migrant flows. However, internal migration within integrated labour markets is likely to be affected by the social insurance design of each country as well as the transferability of entitlements. This is probably of particular importance in the European labour market, as it binds together countries with large differ-

ences in both social insurance generosity and wage levels, where social insurance eligibility depends on the country of current (or most recent) employment only. Factor mobility is typically seen as an important feature of an optimal currency area (Mundell 1961, McKinnon 1963), and worker mobility is favourable when productivity differentials and business cycles are not completely in line (Lundborg 2006, Basso et al. 2018). On the other hand, when employment in a richer country is also a ticket to welfare transfers and social insurance entitlements in that same country, migrants may be willing to accept a low wage – potentially well below the opportunity cost of their labour in the home country – for a short period in order to qualify for entitlements in the richer welfare state. Once eligibility is obtained, the reservation wage (the minimum acceptable wage offer) is expected to rise. This gives incentives for migrants as well as firms in rich and generous markets to partake in (implicit) contracts where workers are laid off when they achieve full social security entitlements. At the same time, the firm recruits new and similar immigrant workers without welfare entitlements.

For workers from, say, Poland or Lithuania, unemployment benefits in a Nordic host country will typically exceed potential labour earnings in the home country by an order of magnitude. Table 1 reports average monthly unemployment benefits and wages in selected countries, collected from the OECD Social and Welfare Statistics database (see columns 1 and 2). These data show that typical unemployment benefits in the Nordic countries are many times higher than average fulltime earnings in Eastern Europe. Even if we take into account that unemployment benefits tend to be lower for immigrants than for natives because of their lower earnings base for computing benefits, they remain much higher than benefits and wages at home (see columns 3 and 4 for an illustration based on Nor-

Table 1 Unemployment insurance (UI) benefits and average earnings in country of origin and in Norway, immigrants from the Baltic states, Poland, and the Nordic countries, 2010

	(1)	(2)	(3)	(4)
	In country of origin		In Norway	
	Monthly UI benefits	Monthly wage income if employed	Monthly UI benefits among claimants	Monthly pay, wage earners
Estonia	405	809	1 891	3 344
Latvia	411	684	1 686	3 282
Lithuania	188	561	1 579	3 224
Poland	223	754	1 689	3 353
Denmark	2 188	4 208	2 095	5 188
Finland	1 584	3 283	2 186	4 141
Iceland	1 547	2 793	1 900	4 599
Norway	2 948	4 916	1 929	4 491
Sweden	1 545	3 217	2 067	4 432

Note: Benefits and wages are converted to euros using average exchange rate for 2010.

Source: Entries in columns (1) and (2) are taken from OECD iLibrary, OECD Social and Welfare Statistics; entries in columns (3) and (4) are from Bratsberg and Røed (2016).

wegian data). Hence, there are strong incentives for accepting a job with low pay in order to achieve eligibility to unemployment insurance in a Nordic country.

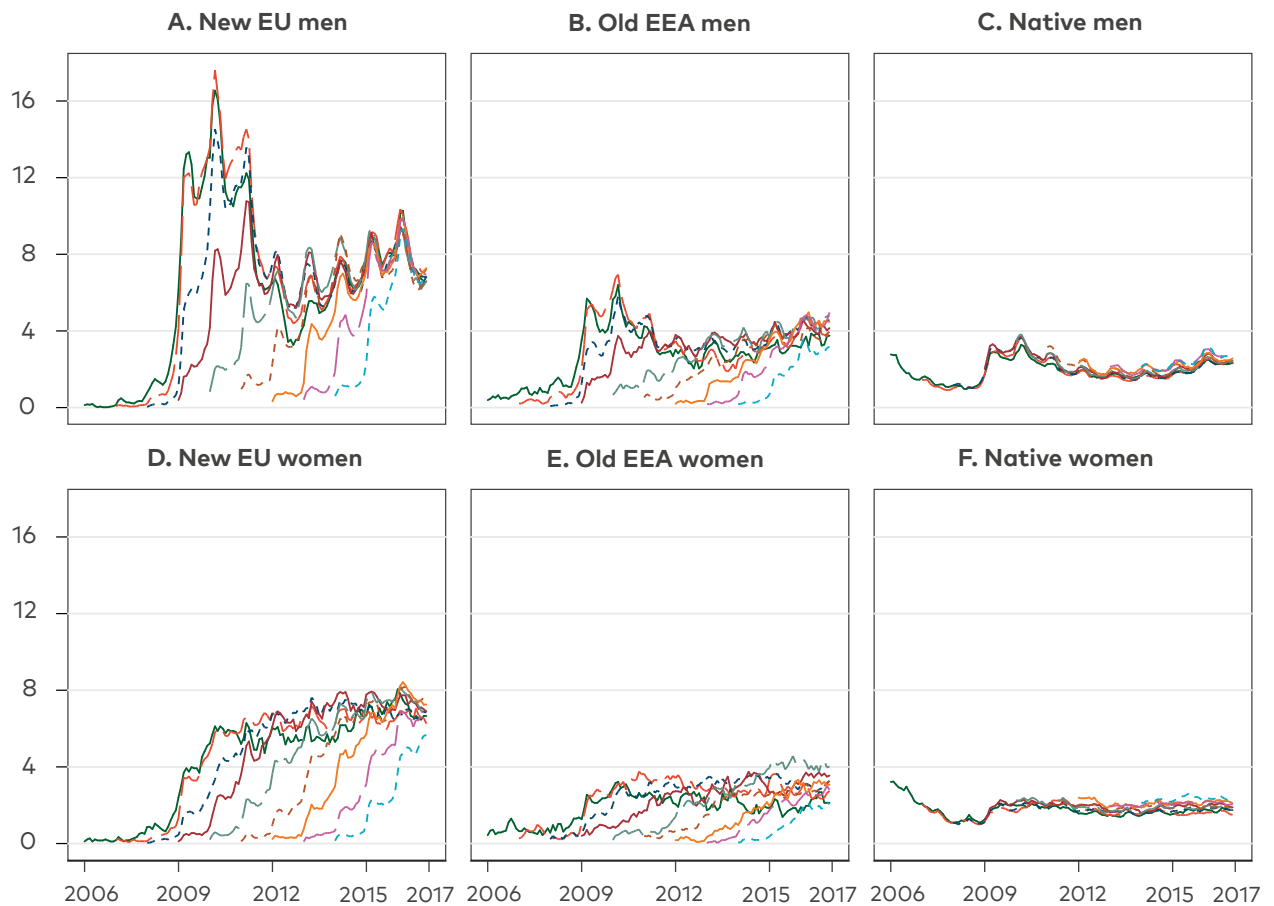
Such a “throwaway labour market” represents an externality in the matching of employers and migrant workers. Employers have incentives to offer the lowest acceptable wage, and thus also to offer a lower wage the higher is the migrant’s expected payoff from the welfare state. Once welfare state entitlements are secured in the host country, the firm has an incentive to lay off workers entitled to unemployment benefits and replace them with new immigrants willing to accept a lower wage. Based on Norwegian administrative registers, in Bratsberg et al. (2018c) we examine the empirical evidence for the existence of such practices. We define “excess churn” as a situation where some workers in a firm become unemployed and claim unemployment benefits while the firm at the same time hires new similar workers. We find that excess churn has increased considerably in Norway after

the expansion of the European labour market in 2004, and also that its prevalence is significantly higher in firms with a larger share of migrant workers from the new EU member states.

Descriptive evidence also indicates that labour immigrants to Norway from the new EU countries quickly become heavily overrepresented in the unemployment insurance program, despite being characterized by full employment to start with. This is illustrated in Figure 8, where we follow each annual immigrant cohort that arrived between 2006 and 2014 month-by-month and examine their unemployment insurance claims. There is a remarkable regularity in the dynamic patterns across entry cohorts. For immigrants from the new EU countries, the benefit propensity rises sharply during the first couple of years, with particularly large increases just after the turn of the calendar year (when unemployment insurance entitlements are updated).⁹ Although the unemployment claim propensity varies somewhat over the business cycle and the calendar year, all cohorts appear to con-

⁹ Some immigrants are eligible for disability insurance in the year of immigration, based on contributions made in prior years from temporary migrant employment.

Figure 8 Fraction of population receiving unemployment insurance (UI) benefits by gender, source, region, and year of immigration, percent



Note: The immigrant samples are restricted to those aged 18-47 years at arrival and who are living in Norway on December 31st each calendar year. The curves for natives are drawn for successive cohorts aged 30 in the first year depicted. The fraction of the population with UI benefits includes all individuals who were recipients on the 28th of each month between January 2006 and December 2016.
Source: Own calculations.

verge toward an average claim rate around 7-8%, for both men and women. This is well above the corresponding rates around 3-4% for immigrants from the old EEA countries, and much higher than the corresponding rates for the native comparison groups.

When laid-off workers are eligible for unemployment benefits, the host country's taxpayers suffer losses from excess churn of migrant labour. Migration levels may become too high, in the sense that labour migration takes place even when labour pro-

ductivity in the host country falls below its opportunity cost.

The described mechanism may be strengthened by the fact that many unemployment insurance systems typically offer particularly high replacement ratios for low-wage workers. An immigrant's reservation wage is likely to be lower, the higher the expected future payoff from the welfare state is. *Ceteris paribus*, firms therefore also have a perverse incentive to recruit foreign workers with a high expected future income flow from social insurance.

Referring back to the evidence presented in Section 2, it is notable that, despite their high usage of unemployment insurance, relatively few of the post-EU enlargement immigrants from Eastern Europe have so far become dependent on social insurance as the main source of income (see, e.g., Figure 4). The explanations for this are, first, that their employment rate starts from an extremely high level (almost 100%); second, that many of the unemployment spells are relatively short; and, third, that relatively few of the immigrants have yet become eligible for the health-related social insurance programmes that dominate among natives and immigrants from low-income source countries outside Europe.

5. Does activation work?

Since the mid-1990s, the Norwegian social assistance programme has undergone reforms toward more intensive use of conditionality and activation, such that means-tested social assistance is paid out conditional on participation in some form of activation like community work or participation in job-training programmes (see Gubrium et al. 2014 and Hernæs et al. 2017). This reform process has primarily been targeted at young welfare clients, but it has also singled out immigrants as a prioritized group.

To examine the potential of activation as a strategy for offsetting moral hazard problems and/or helping immigrants get a foothold in the labour market, this section presents results from a novel empirical analysis where we exploit geographical differences in the local timing of these reforms. We build on a survey conducted by Telemark Research Institute, in which all local social insurance offices in the country were asked about changes in the conditions for social assistance receipt during the period 1994-2004 (Brandtzæg et al. 2006). The survey resulted in a sample of municipalities with data on

local practices that can be directly linked to (potential) claimants in 201 of the 428 municipalities in the country. While 43 municipalities strengthened their activation requirements at some point during the period, 158 maintained a status quo throughout the data window. These data have previously been used to examine the influence of activation requirements on the behaviour of disadvantaged native youths (see Hernæs et al. 2017 and Bratsberg et al. 2018a). These studies show that activation reduced the level of social assistance claims and increased the degree of high-school completion (Hernæs et al. 2017). It also significantly reduced youth crime (Bratsberg et al. 2018a).

In our empirical analyses, we relate the observed annual outcome of an individual – for example, whether or not the individual received social assistance – to explanatory variables such as calendar year, municipality of residence, contemporaneous local unemployment rate, as well as individual characteristics like age, educational attainment, and, for immigrants, years since migration and age at arrival. Because the data window contains observations before and after the reform, we identify the effect of the reform with a difference-in-differences approach, allowing for a shift in the outcome in years after the reform for individuals living in municipalities that actually tightened their activation requirements. The estimated reform effect is then simply the *change* in the difference in outcomes between reform and non-reform municipalities from before to after the reform. The effects of the activation requirement are estimated separately for natives and each of three immigrant groups (note that the studied reforms took place before the rise in immigration from the new EU countries).

We study three outcome variables. The first is the incidence of receiving social assistance; i.e., it is a dummy variable equal to one if a person received social assistance during the year in question, and

Table 2 Descriptive statistics, regression samples, age group 20-44 years

	(1)	(2)	(3)	(4)
	Men		Women	
	Treatment municipalities	Control municipalities	Treatment municipalities	Control municipalities
Refugees				
Social assistance receipt	0.503	0.503	0.244	0.252
Employment	0.525	0.542	0.368	0.408
Social insurance	0.466	0.456	0.624	0.578
Mean age	33.2	32.6	32.9	32.6
Observations	17 837	37 407	17 672	31 435
Other LDC immigrants				
Social assistance receipt	0.124	0.070	0.048	0.042
Employment	0.810	0.788	0.584	0.638
Social insurance	0.153	0.149	0.397	0.336
Age	32.3	31.7	32.3	32.1
Observations	3 617	10 196	10 785	27 458
EEA immigrants				
Social assistance receipt	0.044	0.032	0.045	0.033
Employment	0.895	0.894	0.724	0.775
Social insurance	0.065	0.057	0.245	0.187
Age	34.0	33.9	32.7	32.4
Observations	10 371	29 271	11 325	32 948
Natives				
Social assistance receipt	0.055	0.051	0.053	0.049
Employment	0.885	0.890	0.776	0.793
Social insurance	0.110	0.104	0.221	0.204
Age	32.2	32.9	32.3	32.3
Observations	106 320	268 297	98 632	253 780

Note: Samples consist of individuals aged 20-44 years who resided in one of 201 municipalities with data on the social assistance activation reform during the observation period 1993-2006. Immigrant samples are further restricted to those aged 18 years or older at arrival. The native sample is a 10% random extract.

Source: Own calculations.

otherwise zero. The second is employment, in the sense of having earnings from work as the most important income source. And the third is being on social insurance, in the sense of having transfers from the welfare state as the largest income source. The latter two states will almost be mirror images of each other. However, there is also a third group of individuals with no registered income,

such that they are counted neither as employed nor as social insurance claimants. Because the activation requirements were primarily directed toward younger claimants, we restrict the analysis population to persons 20-44 years of age.

Table 2 gives descriptive details. The patterns of social assistance, employment and social insurance

Table 3 Activation reform effects, age group 20-44 years

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Men				Women			
	Refugees	Other LDC immigrants	EEA immigrants	Natives	Refugees	Other LDC immigrants	EEA immigrants	Natives
Social assistance receipt								
Reform	-0.053** (0.022)	-0.042*** (0.012)	0.003 (0.006)	-0.006** (0.003)	-0.018 (0.022)	-0.007 (0.006)	-0.010* (0.006)	-0.002 (0.002)
Employment as main source of income								
Reform	0.031** (0.015)	0.026* (0.015)	-0.001 (0.009)	0.002 (0.004)	0.019 (0.015)	0.005 (0.014)	0.002 (0.009)	-0.001 (0.005)
Social insurance as main source of income								
Reform	-0.038** (0.016)	0.001 (0.016)	0.003 (0.007)	-0.002 (0.004)	-0.019 (0.015)	-0.001 (0.014)	-0.011 (0.009)	0.001 (0.004)
Number of observations								
	55 244	13 813	39 642	374 617	49 107	38 243	44 273	352 412

Note: Standard errors are clustered within 201 municipalities. Models control for educational attainment, local unemployment, age, year and municipality fixed effects. In addition, immigrant regressions control for age at arrival and years since arrival fixed effects. See also Table 2. */**/** Statistically significant at the 10/5/1 percent level. Source: Own calculations.

are similar to those presented in Section 2, with refugees having the lowest employment rate and the highest incidence of social insurance. Comparing individuals in treatment and control municipalities, both outcome and age distributions are similar within seven of the eight groups. For male immigrants from other LDC countries, social assistance take-up is higher in treatment regions. This group is the smallest, and when we look more carefully into pre-treatment trends (Appendix Figure A1), we find no significant differentials in the years preceding the reform.

Estimated reform effects are presented in Table 3. They show that the activation requirements implemented in Norwegian municipalities significantly reduced the number of social assistance claims made by male immigrants from less developed countries. The point estimates indicate a reduction of as much as 5.3 percentage points for refugees and 4.2 percentage points for other LDC immigrants. Our results also confirm the previously reported findings of a negative effect for natives, although this is of a much smaller magnitude than for immigrants from low-income source countries. For immigrant women, the point estimates also in-

dicade small negative effects, but they are not statistically significant at conventional levels.

Moving on to the impacts on main economic activity, we find that tighter activation requirements also led to a significant rise in male refugees' probability of having employment as the main source of income (3.1 percentage points), and a significant decline in the probability of having transfers from the welfare state as the main source (of 3.8 percentage points). The reform effect on employment is also positive for immigrants from other LDC countries, but we find no impact on their social insurance probability. Again, the results are small and insignificant for women.

Overall, the evidence for immigrants in Table 3, in combination with published studies on the reform effects for youth more generally, strongly suggest that the provision of income support *through activation* – rather than simply providing cash – has a considerable potential for reducing moral hazard problems and improving labour market outcomes among immigrants as well as natives.

6. Discussion and conclusion

For the Nordic countries, existing evidence suggests that the moral-hazard dimensions of social insurance programmes have been accentuated in the open European labour market, and, although the evidence remains a bit mixed, that immigrants from low-income countries respond more strongly than natives to social insurance generosity. These findings may be taken as arguments in favour of either reducing social insurance generosity more generally or designing a dual system whereby natives and immigrants are treated differently. However, both of these alternatives inevitably imply greater economic inequality and presumably also more poverty and may thus run against egalitarian values that traditionally have had wide support in the Nordic countries. Less generous programmes would make the insurance less effective as a means to share risk.

A country that has moved quite far toward a dual system is Denmark, where entitlement to regular social assistance has been constrained since 2002 (except between 2012 and 2015) to persons who have lived in Denmark (or within EU) at least seven of the last eight years. If this requirement is not met, the alternative form of income support is the so-called "start help," which is approximately 35% lower than regular social assistance. The empirical evidence from studies of the start-help programme (Rosholm and Vejlin 2010, Andersen et al. 2012) indicates considerable positive employment effects associated with the reduced benefit level. For example, based on a comparison of refugees arriving just before and just after the benefit reduction in 2002, Andersen et al. estimate that the employment rate among refugees in Denmark four to five years after arrival increased from 30% to 42% as a direct result of the lower support level. However, the majority of refugees are still not employed. Andersen et al. also show that the flip side of the dual

system is that refugees depending on start help live in deep poverty, with no chance of being able to pay for a standard Danish family budget. Hence, the twelve-percentage point gain in employment propensity has apparently been achieved at the cost of a considerable rise in poverty.

Another policy option is to regulate migration more strongly in the first place. With respect to refugees and their family members, policies have been tightened in recent years in the Nordic countries. The limitations of this policy instrument are primarily set by humanitarian, and not economic, considerations as well as by international agreements. However, free movement of labour within Europe is a policy choice that has been motivated at least partly by economic considerations, driven by the idea that it is mutually beneficial for all the countries involved. If evidence points to unintended costs in terms of excess churn of labour and implicit subsidies of inefficient jobs, there should be room for adjustments. Furthermore, allowing social insurance entitlements to be completely (and immediately) transferable across countries does not obviously follow from a free movement policy. However, regulations regarding free movement of labour and exportability of entitlements are decided at a European level; hence there is little room for isolated Nordic reforms.

Given that free movement of labour in Europe also entails large economic benefits, an alternative to limitations is to look for means to offset the externalities generated by cross-country differences in welfare state institutions. We have argued that these differences may in effect subsidize inefficient migration to low-pay, low-productivity jobs. Therefore, one policy option could be to implement and enforce (higher) minimum wages and other standards in the labour market. Another could be to strengthen employment protection legislation to avoid excess churning of labour. However, while

these measures may prevent inefficient migration, they may also generate new inefficiencies and raise the risk that some low-skilled workers (including immigrants) become non-employable.

As an alternative to cutting benefits across the board, or for immigrants in particular, the evidence suggests that a more activation-oriented social insurance policy may work. Offering income through activation, rather than just providing money, may give a double advantage. First, it will reduce moral hazard problems in the social insurance system (as it removes the leisure component of income support). Second, it facilitates the use of vacant labour resources for productive purposes. This requires, of course, that the activation strategy is designed such that it contains meaningful and productive activities, either in the form of skills upgrading or in the form of relief work that is of value to society.

This is admittedly a challenge. A recent meta analysis of active labour market programmes for immigrants in Europe (Butschek and Walter 2014) indicates that many labour market programmes targeted at immigrants are ineffective, and the authors conclude that *wage subsidies* is the only labour market programme that, based on the existing research literature, can confidently be recommended to European policy makers. Even if wage subsidies are offered to private employers who hire unemployed workers, the take-up that involves immigrants can be limited and selective, favouring candidates with otherwise good job opportunities. Programmes must be designed carefully and implemented in ways that facilitate credible effect identification in the future.

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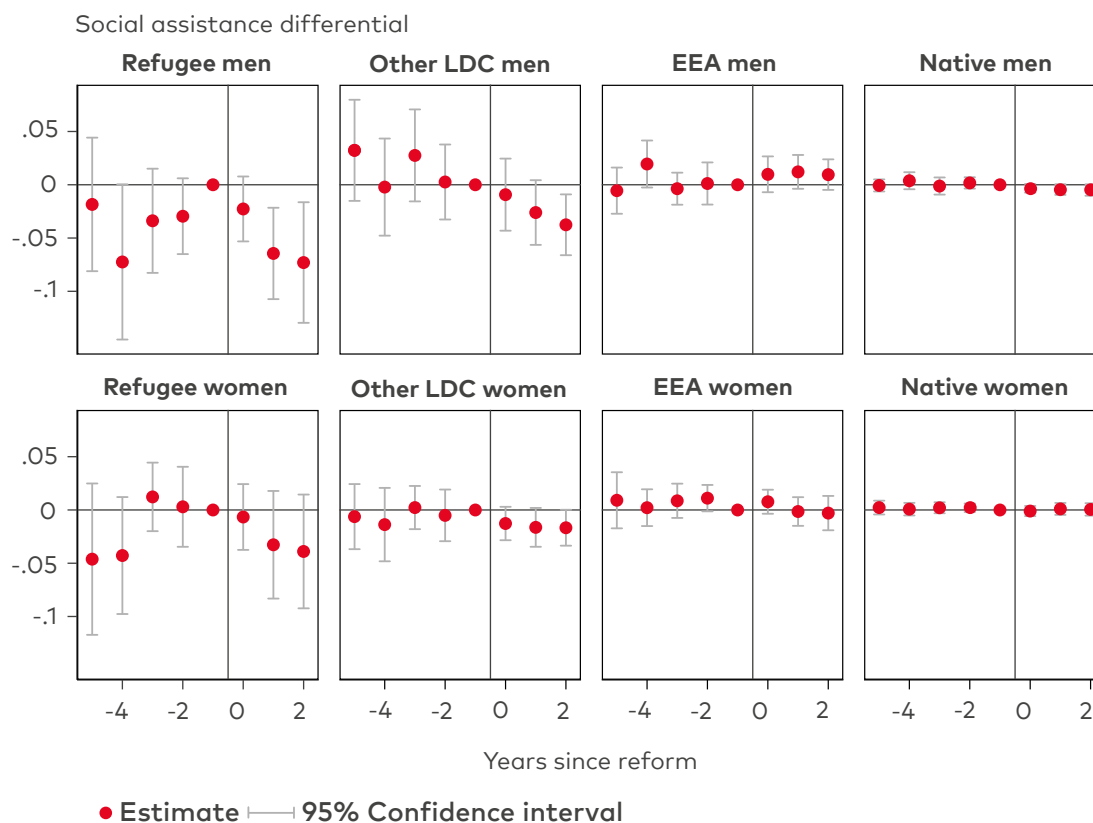
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Appendix

Figure A1 Pre- and post-reform trends in social assistance differentials



Note: See Tables 2 and 3 for description of samples. The regression model is the same as in Table 3, with the exception that the treatment indicator is replaced by a set of indicators for years preceding and years following the reform. Source: Own calculations.

Table A1 Main countries of adult immigrant population 2011-15, by immigrant group and gender

(1) Refugees	(2) Other LDC immigrants	(3) New EU	(4) Old EEA/OECD
Men			
Iraq (14)	Pakistan (17)	Poland (59)	Sweden (26)
Somalia (13)	Turkey (10)	Lithuania (20)	Germany (16)
Iran (9)	India (9)	Romania (6)	Denmark (11)
Women			
Somalia (13)	Thailand (17)	Poland (51)	Sweden (31)
Iraq (11)	Philippines (17)	Lithuania (22)	Germany (17)
Vietnam (8)	Pakistan (8)	Romania (8)	Denmark (10)

Note: Numbers in parentheses are percentages within each group. Source: Own calculations.

Chapter 7

Employment Effects of Welfare Policies for Non-Western Immigrant Women

Jacob Nielsen Arendt¹ and Marie Louise Schultz-Nielsen²

ABSTRACT³

We summarise the employment effects from impact studies of five types of welfare policies for non-Western adult immigrant women in the Nordics. Active labour market and social benefit policies have mostly had positive effects on women's employment rates in the short run. Extensions of the introduction programmes for newly arrived immigrants have in most cases had no or even negative short-term effects. An exception is the Swedish establishment programme, which raised employment after two-three years. The family policies that we analyse have not raised employment. Most studies only consider short-term effects, but two exceptions are found for language courses within the introduction programme and post-secondary education. Both types of policies have been successful in facilitating immigrant women's entry into the labour market in the long run.

Keywords: Welfare policy, non-Western immigrants, women, employment, impact study.

JEL codes: J15, J16, J22 and J24.

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1. Introduction

This study summarises existing research from the Nordics on policies that could improve labour market outcomes for non-Western immigrant women.⁴ We analyse the impact of family policies, introduction programmes, active labour market programmes, social benefit policies and education policies for adults on women's labour force participation, employment rates and income.

The labour market behaviour of immigrant women is often more complex than that of their male counterparts. The reason is that, in addition to determinants such as skills and economic incentives, immigrant women's behaviour is expected to be affected to a larger extent by family composition, childbearing and country-specific norms. Hence, it is well documented that the overall employment rate for non-Western immigrant women is lower than for men, that it is even lower for refugee women, and that it increases more slowly over time than for men in the new host country (NEPR 2017, Liebig and Tronstad 2018). Potential explanations for these differences have been discussed in other studies (e.g. Rendall et al. 2008, Liebig and Tronstad 2018, Oxford Research 2018). They form the basis for an a priori expectation that non-Western immigrant women react differently to a given intervention than men or native-born women.

To explain the low employment levels of non-Western immigrant women, it has been emphasised that they are often even less educated, have more limited host-country language skills and report worse health problems than immigrant men (Liebig and Tronstad 2018). Moreover, many immigrant women arrive in their host country in the prime childbearing

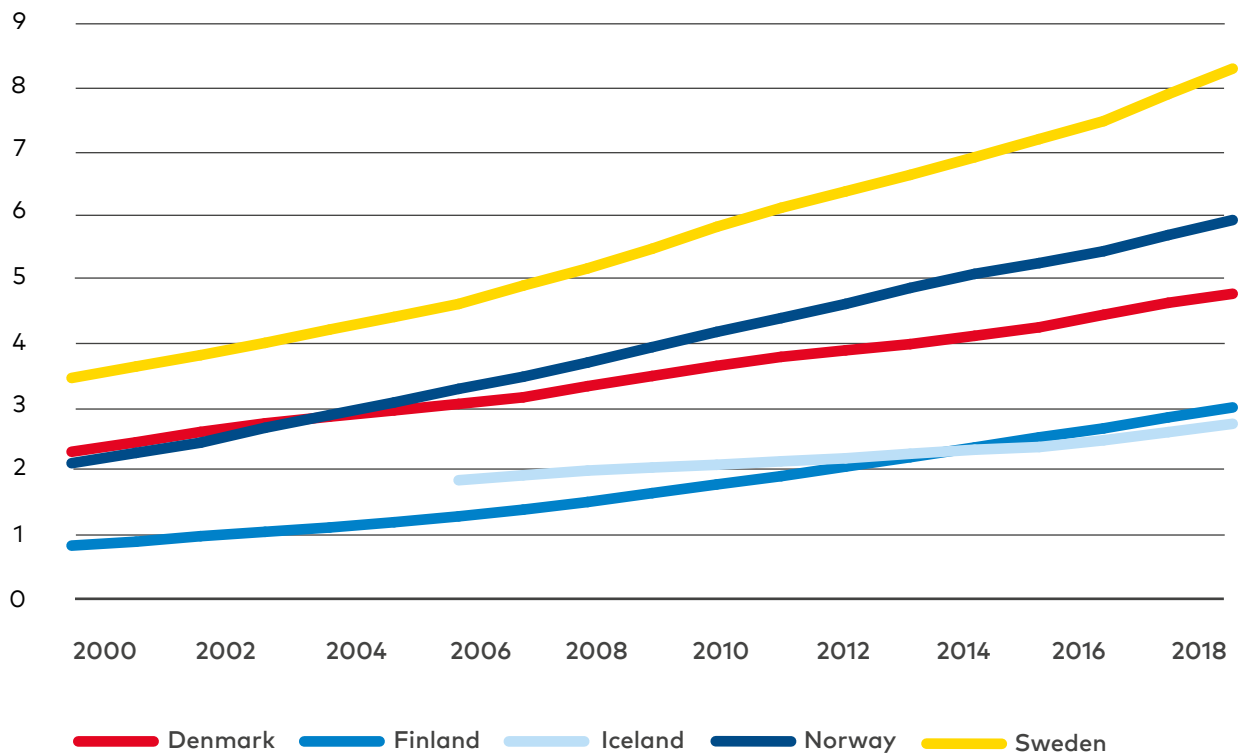
Moreover, many immigrant women arrive in their host country in the prime child-bearing ages.

ages. They may bear children shortly after arrival, which may slow down labour market integration. This has been documented to be the case in, for example, Norway and Sweden (Liebig and Tronstad 2018, Vikman 2013). Differences between the culture and values of the host and home country also play a role. Indirect evidence of this has been found in studies that document large differences in female employment by country of origin that correlate with employment levels from their home country (Antecol 2000, Kok et al. 2011, Bredtmann and Otten 2014).

According to the UN, the Nordic countries are all among the world's top ten countries with respect to gender equality on several dimensions, including labour market participation (UNDP 2018). Therefore, immigrating as an adult woman from a non-Western country – with lower gender equality – to a Nordic country can be a significant change. Many of the tasks traditionally carried out by these women, such as taking care of children and the elderly, are 'outsourced' to the welfare state in the Nordics. In return, Nordic welfare states depend upon tax payments from a population with a high employment rate. Immigrant women's situation in the labour market can therefore potentially be affected by a range of different factors. A broad policy perspective is therefore probably called for to boost immigrant women's employment levels.

⁴Western countries comprise EU/EEA countries, Australia, Canada, New Zealand and the USA. Non-Western countries comprise all other countries.

Figure 1 Immigrants from non-Western countries as a share of the population, age 20-64 years, percent



Note: Data not available for Iceland before 2006.

Source: Nordic Statistics database (www.nordicstatistics.org), Tables CITI01 and CITI02.

Numerous studies summarise the effectiveness of active labour market programmes and other policies for immigrants on employment (for example Nekby 2008, Rinne 2013, Arendt and Pozzoli 2014, Butschek and Walter 2014, Strøm et al. 2015, Åslund and Forslund 2016, NOU 2017).⁵ However, to the best of our knowledge, none of the reviews focus specifically on immigrant women. The present study is organised as follows: Section 2 summarizes descriptive statistics on the number of immigrants from non-Western countries in the Nordic countries and their employment rates. Section 3 describes the methods and focus of the survey. Evidence on the effects of family policies, introduction programmes, active labour market programmes, social benefit policies and education policies for adults is presented in Section 4. Section 5 contains a summary and conclusions.

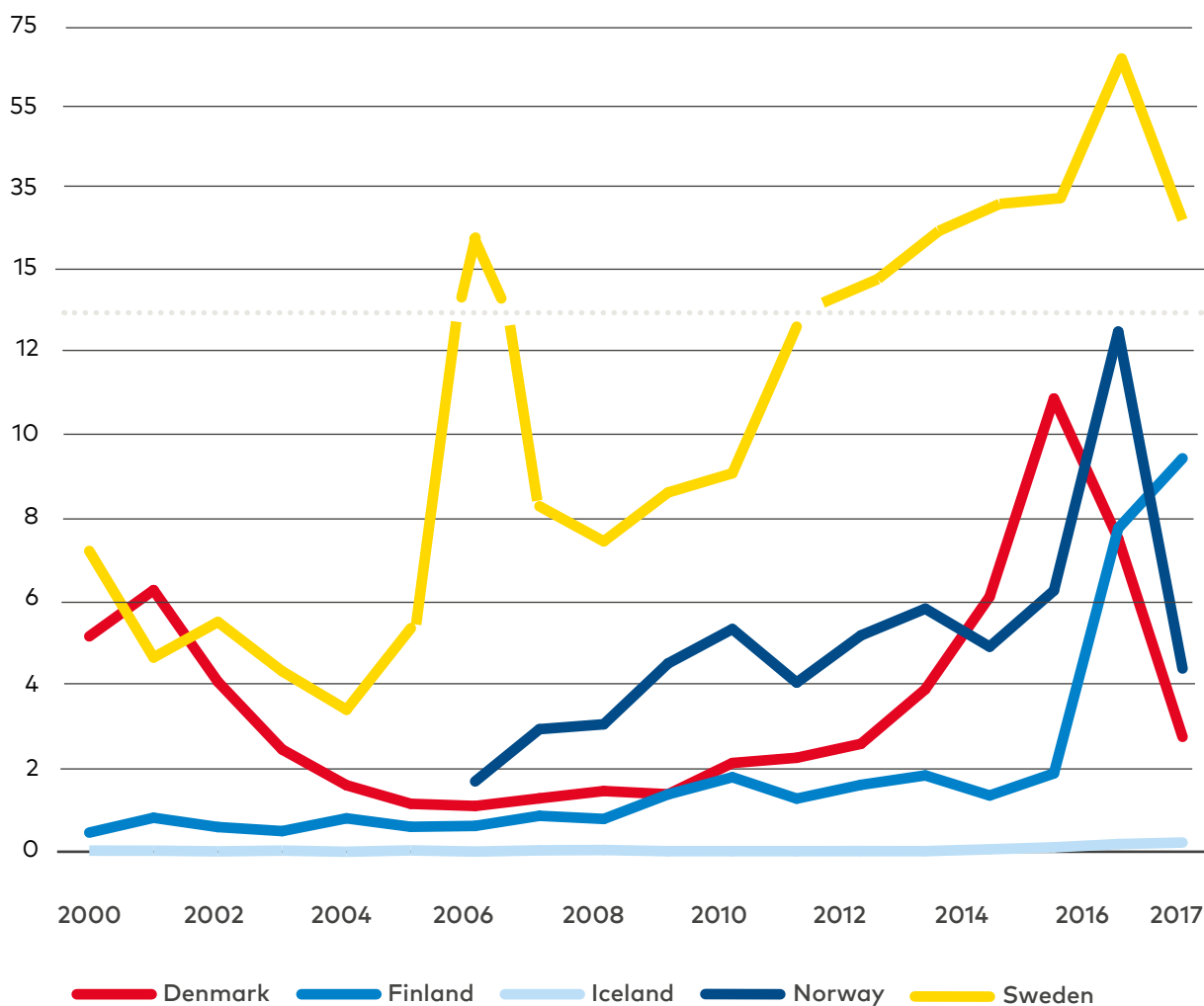
2. Non-Western immigrant women and their employment in the Nordics

This section presents statistics on the number of immigrants from non-Western countries and the employment rates of immigrant women in the Nordic countries.

Figure 1 shows the share of immigrants aged 20-64 years from non-Western countries as a ratio of the population in the same age group in the five Nordic countries. The share has increased slowly but steadily over the past two decades in all the countries. In 2017, immigrants from non-Western countries constituted just below 3% of the working-age population in Finland and Iceland, just below 5% in Denmark, 6% in Norway and more than 8% in Sweden.

⁵ The number of reviews on the effectiveness of labour market policies for immigrants seems to converge to the number of actual studies on the matter. The current study contributes to this trend.

Figure 2 Number of immigrants granted asylum, 2000-2017, thousands



Note: The figures include immigrants of all ages. The vertical axis is cut into two parts to accommodate the large numbers in Sweden. Data is not available for Norway before 2006.
 Source: Nordic Statistics database (www.nordicstatistics.org), Table MIGR04.

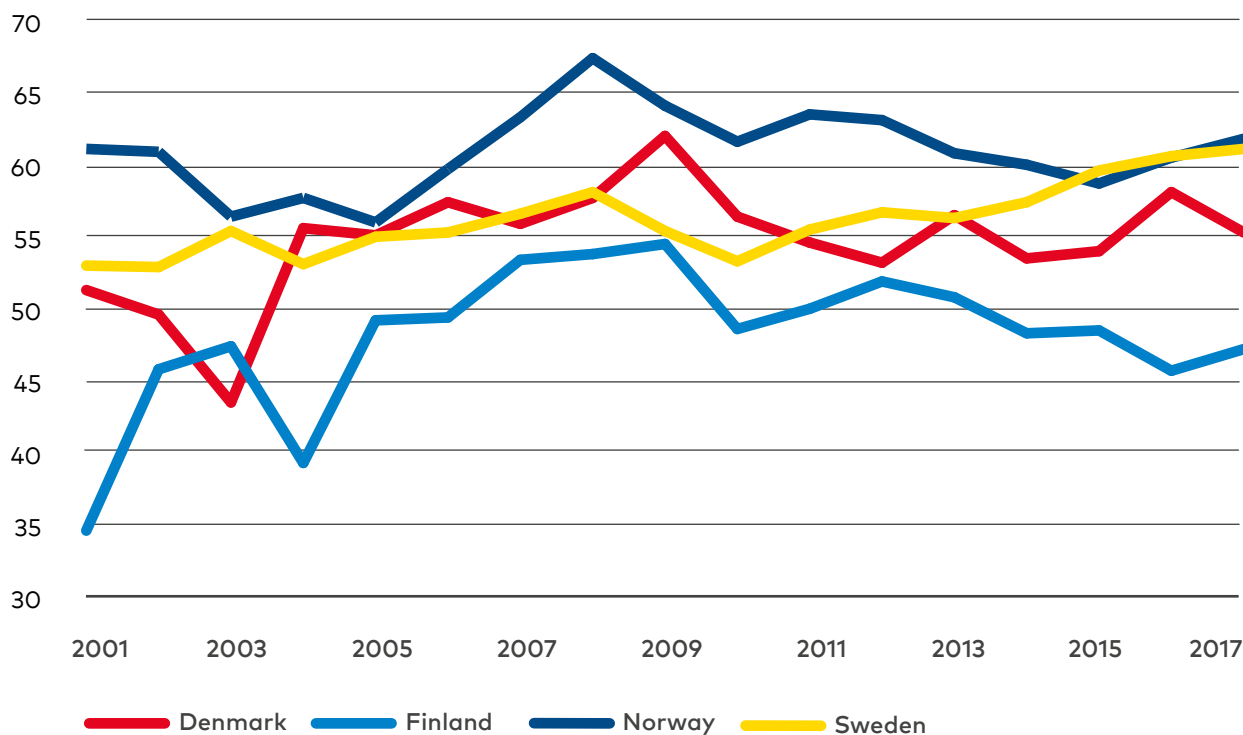
Figure 2 shows the inflow of immigrants who were granted asylum in the period 2000 to 2017. The number of immigrants who were granted asylum was at the same level in Denmark and Sweden before 2002, but the numbers began to diverge after that and have since remained apart. Refugee immigration has risen since the mid-2000s, but the increases occurred at different points in time in the different countries, reaching a maximum of ap-

proximately 11 000 in Denmark in 2015, 12 500 in Norway in 2016 and more than 67 000 in Sweden in 2016. They have continued to rise to 9 500 in Finland and to 220 in Iceland in 2017.

We have not found any comparable statistics on the employment rates of immigrant women from non-Western countries across time.⁶ Instead, Figure 3 documents the employment rates of non-EU im-

⁶ www.nordicstatistics.org only contains statistics on employment rates for immigrants from 2016, at the time of writing (February 2019).

Figure 3 Employment rates of non-EU immigrant women aged 20-64, in four Nordic countries, percent



Source: Eurostat (<https://ec.europa.eu/eurostat/data/database>), Table LFST_R_LFE2EMPRC.

migrant women in the four largest Nordic countries from 2001 to 2017.⁷ The diagram shows that the employment rate of immigrant women from non-EU countries lies in the range 45-65% in Denmark, Norway and Sweden in most years, and is generally lower in Finland. The employment rate dropped by 8-10 percentage points (i.e. by nearly 20%) after the crisis in 2009 and it has only reached pre-crisis levels again in Sweden.

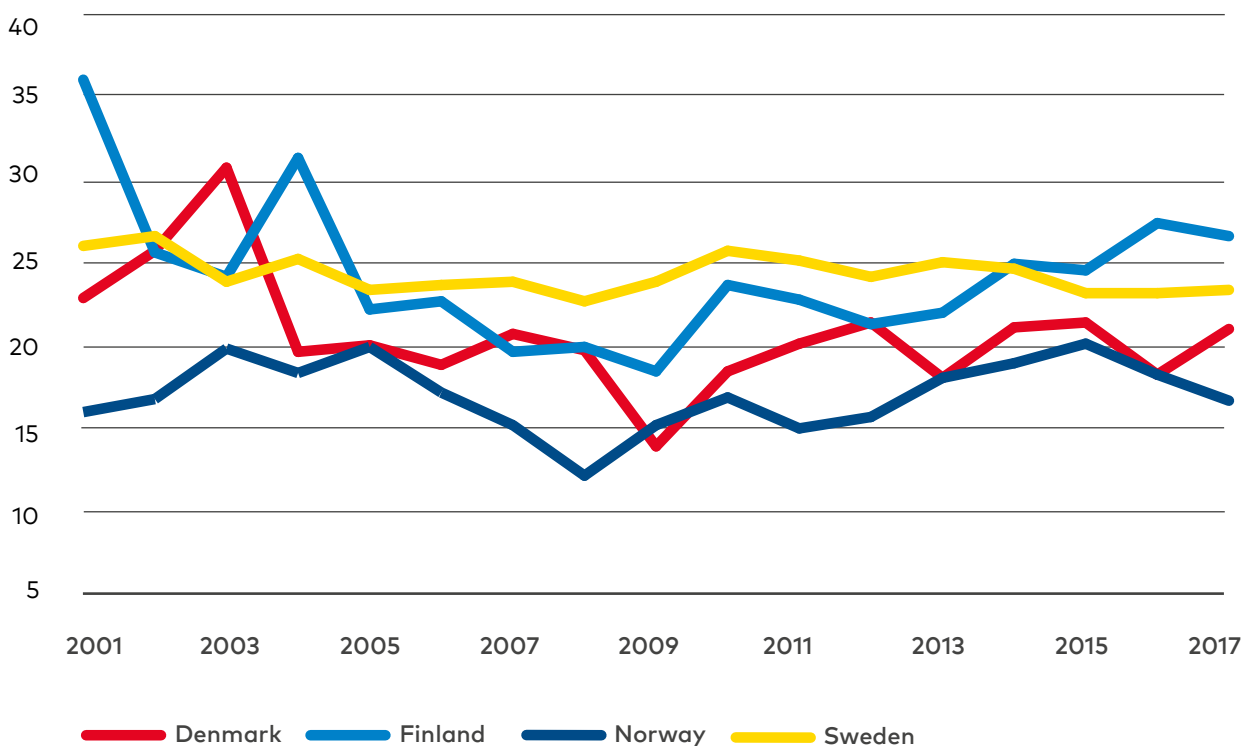
Liebig and Tronstad (2018) show that the employment rate of women from non-EU countries is somewhat higher than the OECD average in all the Nordic countries except Finland. The employment gap between immigrant and native-born women is nevertheless relatively large due to the high female employment rates in the Nordic countries (Figure 4). The gap is smallest in Norway at 12-20 percentage

points, and largest in Denmark and Finland just after the millennium, when it reached more than 30 percentage points. The gap decreased prior to or during the global financial crisis in all the Nordic countries but increased again thereafter. It has been lower in Denmark and Norway than in Sweden and Finland during most of the period after 2008.

The country-specific differences are hard to interpret because they may reflect compositional effects. Previous research shows that employment rates vary substantially by country of origin, type of residence permit and length of time since immigration. Bevelander et al. (2013) report employment rates by gender in 2008 among 25-54-year-old immigrants from Iran, Iraq, Pakistan, Somalia, Turkey and Vietnam who live in Denmark, Norway and Sweden. This study shows a remarkable similarity in the av-

⁷EU is the 28 countries that were members in 2017.

Figure 4 Employment gap between non-EU immigrant women and native-born women in four Nordic countries, percentage points



Note: Own calculation based on Eurostat statistics.

Source: Eurostat (<https://ec.europa.eu/eurostat/data/database>), Table LFST_R_LFE2EMPRC.

average employment rates of women from the same country of origin across the three host countries, but substantial variability across country of origin. The highest employment rates (around 60%) are found among Vietnamese and Iranians, followed by Turks (40-50%). The lowest employment rates (less than 40%) are found for Pakistanis, Iraqis and Somalis.

Evidence on the employment rate of immigrants by type of residence and time since immigration can be found in the different chapters in the 2017 volume of the *Nordic Economic Policy Review* (NEPR 2017). Although it was not produced for cross-country comparison, the issue contains detailed country-specific analyses for the four largest Nordic countries. All studies find that the employment rates of immigrant women increase within the first seven to ten years after immigration and stabilise thereafter. The Danish and the Norwegian studies show that employment rates are substantially lower for refu-

gees than for immigrants who are granted family reunification.

3. Methods

Our focus is on studies of the impact of welfare policies on labour market outcomes of non-Western adult immigrant women in the Nordic countries. To interpret estimates from impact studies causally, i.e. whether changes in, for example, employment rates can be attributed to the policy being evaluated, we need to rule out other reasons for the observed change. Studies that achieve this are rare because the individuals who are subject to a given policy are usually not selected randomly. When participants in labour market programmes are selected by caseworkers, or when parents choose to make use of childcare based on their needs, the participants and users of childcare will usually differ from non-participants and non-users with regard to char-

acteristics that can be related to their employment prospects. When such reasons for differences in outcomes for participants and non-participants are present, there is *selection bias*. When such bias cannot be ruled out, the impact estimate may reflect a difference in the composition of participants and non-participants and not a potential causal effect.

If we had chosen to limit this review to causal studies that rule out selection bias, the list of included studies would have been very short. As a second-best solution, we have chosen to include studies that have made some adjustment to observed correlations between labour market outcomes and policy participation with the intention to limit the selection bias. As a prerequisite for being included, the studies should therefore, as a minimum, have identified two groups of non-Western immigrant women that closely resemble one another, one as a treatment group and the other as a comparison group, where the treatment group is subject to the policy that is being evaluated, while the comparison group is not. The comparison group may be (and usually is) subject to other policies. In such a case, the impact study measures the relative effect of the two policies, and therefore does not answer whether the policy under evaluation is effective, but whether it is more effective than the alternative policy.

To encompass some of the most important policy areas believed to have an impact on the labour market attachment of immigrant women, studies of the following policies are included:

- Family policies: childcare and parental leave policies
- Introduction programmes for newly arrived immigrants
- Active labour market policies: training and subsidised employment

- Social benefit policies regarding benefit levels and benefit sanctions
- Educational policies: upper- and post-secondary education for adults.

We collected published reviews, if possible, within each of the policy areas (Nekby 2008, Butschek and Walter 2014, Strøm et al. 2015, Arendt and Andersen 2015, Arendt et al. 2016, Åslund et al. 2017, Oxford Research 2018). The reviews were examined to identify studies that focus on immigrant women. The results of this search were combined with google-scholar citation searches and more general google searches. Finally, we corresponded with national experts in Finland, Norway and Sweden to increase the likelihood that relevant studies were not overlooked.

We synthesise the evidence from the Nordic studies in tables. The studies are classified according to whether the policy under evaluation has a positive, negative or no impact. Policies are considered to have a positive impact if study results are statistically significant at the 5% level and imply an improvement e.g. in the form of an increase in employment levels or a reduction in unemployment duration.

4. Effectiveness of different policies and interventions

Below we discuss research within each of the policy areas with an emphasis on impact studies from the Nordic countries. We start each section by presenting a short overview of relevant international studies, followed by an overview of relevant Nordic studies that do not present evidence by gender, and, finally, we will take an in-depth look at the Nordic studies that present impact estimates for women.

A total of 26 Nordic studies with impact estimates for women were identified. We stress that the potential for causal interpretation of the impact estimates varies across the studies.⁸

4.1 Family policies

This section focuses on different family policies and their impact on women's labour force participation and employment rates. We begin by reviewing studies on the underlying relationship between family structure and employment, before moving on to consider the employment effects of the family policies.

It is well established that the gender gap in labour-force participation of immigrants in the host country is correlated with the gender gap in the home country. This suggests that country-specific norms with regard to family and housework are important for women's employment or skill acquisition (Antecol 2000, Kok et al. 2011, Bredtmann and Otten 2014). Several Nordic studies also show that, while having children has no or a positive correlation with employment rates of immigrant men, the correlation is negative for immigrant women (Constant and Schultz-Nielsen 2004, Svantesson 2006). This is also the case for native-born women and is sometimes referred to as the "motherhood penalty". It has also been shown that the correlation is larger for non-Western immigrant women than for native-born women (Bonke and Schultz-Nielsen 2013).

Studies have also documented a strong correlation between choice of partner and employment. For example, two Swedish studies and one Danish study

have found that immigrants married to natives are more likely to be employed than immigrants married to another immigrant (Dribe and Lundh 2008, Bonke and Schultz-Nielsen 2013, Irastorza and Bevelander 2014). To the best of our knowledge, no studies estimate the causal relationship between immigrants' employment and family composition (choice of partner, number of children). The high correlations in the three Nordic studies nevertheless indicate that policies that influence family composition and support of families with children could potentially affect female labour force participation.

One such policy is parental leave schemes. All Nordic countries have comprehensive parental leave schemes. The length of parental leave varies from nine months in Iceland to up to 14 months in Norway (Oxford Research 2018). While fathers are eligible for two weeks of paid paternity leave in Sweden, Norway and Denmark, and three weeks in Finland in the first weeks after birth, the additional number of weeks earmarked for the father differs from none in Denmark to ten in Sweden (Eydal et al. 2015). International studies have shown that shorter non-earmarked parental leave periods increase the return to work for women, and that longer parental leave periods may increase the risk of negative effects on employment and earnings (Kalb 2018). These effects have been found to be stronger among mothers with little or no education (Broadway et al. 2016). A few studies have used Nordic paternity leave reforms as quasi-experiments. The results of these studies were mixed: a positive impact of the number of earmarked weeks for fathers on female employment was found in Denmark and in Sweden

⁸ The only randomised experimental study included in this review is Andersson Joonas and Nekby (2012). All the other studies are observational. Ten studies use different policy reforms or regulations to form quasi-experimental designs (Hardoy and Schøne 2008, Kavli et al. 2007, Huynh et al. 2010, Rosholm and Vejliin 2010, Andersen et al. 2012, Vikman 2013, Wikström et al. 2015, Andersson Joonas et al. 2016, Lanninger 2016, Bratsberg et al. 2018). The use of quasi-experimental designs does not necessarily allow for a causal interpretation of the impact estimates but is generally considered to be better than other observational designs. Heinesen et al. (2013) use the timing-of-event method, which controls for a selection of factors not observed by the researcher. These do not include external events such as policy reforms. The remaining 14 studies only control for observed differences between the treated and control groups, some with a much wider set of controls than others.

Table 1 Estimates of the effect of family policies on labour market outcomes for immigrant women in the Nordics

Study / country	Population	Intervention	Outcome	Time horizon	Result	Comment
Hardoy and Schøne (2008) Norway	30 952 non-Western mothers aged 20-45 years with children born in 1992, 1995 and 1998	Introduction of cash-for-care subsidy	Labour force participation	0-2 years	Negative	Descriptive evidence suggests larger effects for immigrant than for native-born women
Vikman (2013) Sweden	56 495 non-Western women immigrating 2000-2005 (as mothers) or 1985-1995 (as future mothers)	Access to paid parental leave	Labour force participation Employment	0-9 years after arrival	Negative Negative ¹	Difficult to ensure that control and treatment group only differ by paid parental leave
Wikström et al. (2015) Sweden	8 070 immigrant women	Reduced cost for childcare	Labour force Employment	7 years	Zero Zero	Positive effects for native-born women

Note: Results which imply improvements in outcomes and which are significant at a 5% level are summarised as positive. Non-significant results are summarised as a zero impact. ¹ The overall result is negative, mainly driven by women from Asia and South America, while a positive result is found for women from the Middle East and from Africa.

(Johansson 2010, Duvander and Johansson 2015, Andersen 2016) but not in Norway (Cools et al. 2015, Hart et al. 2016).

The motherhood penalty may also be affected by different forms of childcare subsidies. In all the Nordic countries, daycare is generally subsidised and is free for low-income families in order to secure child care for all children independent of family background. Attendance rates are generally high, ranging from 51% in Finland to 75% in Sweden and 83% in Denmark for children below six years of age (Ankestyrelsen 2015). There is some evidence that suggests daycare is beneficial for immigrant children (Cornelissen et al. 2018), which stresses the general point that the effect of family policies on adult labour market outcomes should be weighed against potential effects for the child.

We are only aware of a few studies that consider the impact of family policies on immigrant women. Two studies analyse the effect of delaying marriage

for young non-Western immigrants based on a reform in Denmark in 2002 which restricted younger people's right to family reunification with a partner (Nielsen et al. 2009, Schultz-Nielsen and Tranæs 2010). In the first study, Nielsen et al. analyse the short-term effects of delaying marriage on educational enrolment and find a positive effect for immigrant men, but no effect for women. In the second study, Schultz-Nielsen and Tranæs find positive medium-term effects of delaying marriage on educational enrolment for both immigrant men and women. Neither of the two studies consider employment effects, and they are therefore not included in the table below.

We identified three studies that consider the impact of family policies on labour market outcomes for immigrant women in the Nordic countries. They are summarized in Table 1.

The results in Vikman (2013) suggest that immigrant women with access to paid parental leave have an

eight percentage points lower probability of being in the labour force 2-3 years after their arrival in Sweden than native-born Swedish women. The author suggests that this could either be an effect of the economic incentive or an interruption in the introduction or language program, which is mandatory for recipients of parental leave benefits. The overall employment effects are also negative but differ according to country of origin: They are negative for women from Asia and South America, but positive for women from the Middle East and Africa. Whether these results can be subject to a causal interpretation is, however, less certain.

Wikström et al. (2015) examine a reform that reduced the cost of attending preschool childcare in Sweden in 2001 and 2002. On average, the cost was reduced by 50% in comparison to the pre-reform levels. The reform also allocated specific childcare slots to children of unemployed parents. While the reform substantially increased employment of native-born Swedish mothers, it had no effects on employment or labour force participation of immigrant mothers.

Hardoy and Schøne (2008) investigate whether the introduction of a cash-for-care subsidy in Norway in 1999 had an impact on the labour force participation of non-Nordic immigrant women. Each family was given 2 250 NOK per month if they did not use public daycare, but instead took care of their child themselves or hired private daycare. Similar subsidies have existed in Denmark, Finland and Sweden (Sipila et al. 2010). The Norwegian study found that the cash-for-care subsidy reduced the labour force participation of immigrant mothers by 5-10%.

As the number of studies evaluating the impact of family policy on women's labour force participation and employment is limited, policy conclusions should be drawn with caution. But the few available studies suggest that family policies that benefit women economically for taking care of their small children at home have a negative impact on immigrant women's labour force participation, while reducing the cost of pre-school daycare does not seem to have the opposite effect. Hence, if the political goal is to increase immigrant women's labour supply, it seems advisable to refrain from policies (such as cash for care) that increase their incentives to remain at home with the children.

4.2 Introduction programmes

All Nordic countries have extensive introduction programmes that last between one and five years and that aim at helping newly arrived refugees and (to a varying degree) also family members reunified with refugees be introduced to the host country.⁹ The programmes typically include civic orientation, language training, and job-related training and counselling.¹⁰ Language courses typically constitute a large part of the introduction programme. In Iceland, only quota refugees are offered an introduction programme (Karlsdóttir et al. 2018), whereas the courses are mandatory for all refugees or persons with subsidiary protection in Denmark, Finland and Norway and (from 2010) Sweden, in the sense that participation is necessary for receiving social benefits.

The labour market effect of language courses is measured in a couple of international studies, but without specific results for women. Orlov (2017) finds positive effects of participating in language

⁹ The introduction programmes are named differently across countries and time. For instance, it was named "integration programme" in Denmark between 2010-2019, and most recently, it has changed name to "self-support, home journey or introduction programme". In Sweden, the programme has been called "establishment programme" since 2010.

¹⁰ See the contribution by Andersson Joona in this volume.

courses on both language proficiency and wages for immigrants in Canada within four years after arrival.¹¹ In contrast, according to Gerfin and Lechner (2002) there are negative employment effects of language courses for unemployed immigrants in Switzerland. A possible reason for this could be that participants have worse employment prospects than non-participants, even after correcting for observed characteristics of the groups. A study by Lochmann et al. (2018) of France is particularly interesting because it is likely better able to control for selection into language-training programmes. Immigrants in this country are assigned to reduced hours of language training if their results in a language test pass a threshold.¹² Lochmann et al. find that men who are assigned to more hours of training have higher labour force participation. This is not the case for women. No effects on employment or language skills are found three years after the assignment.

A number of Nordic studies have examined the labour market effects of changing different elements in the introduction programmes, but without specific estimates for women. A study from Norway focusing on immigrant men suggests that language training improves their language proficiency but has no impact on their wages once they find a job (Hayfron 2001). Delander et al. (2005) find that immigrants who participate in work-oriented language training and practical on-the-job training in Sweden leave unemployment or (to a minor extent) employment for regular education more frequently than non-participants with similar observed characteristics.

Two studies consider the impact of introduction programmes on employment and earnings on a

longer time horizon than most other studies. The first study by Rotger (2011) investigates the effect of mandatory language training for family-reunified immigrants of non-Western origin that was introduced after a reform of the Danish introduction programme in 1999. He finds no significant employment effect of the reform in the following eight years but a small positive earnings effect. Sarvimäki and Hämäläinen (2016) examine the effect of integration plans in Finland. Integration plans are prepared during early meetings between immigrants and their caseworkers with the purpose of coordinating participation in language classes and individually tailored employment interventions. Since 1999, these plans are offered to all newly arrived immigrants. Prior to 1999, similar interventions were offered, but without the integration plan. According to the study, the reform had a large positive impact on immigrants' earnings over a ten-year period. Two other Nordic studies have found that establishing labour market contacts during the introduction programme, for example in the form of organised visits to companies (Svantesson and Aranki 2006) or in the form of wage subsidies (Clausen et al. 2009), is positively correlated with subsequent employment.

We have identified nine studies that examine the labour market effects of changes to introduction programmes for newly arrived immigrant women: one from Denmark, three from Norway and five from Sweden. A short summary of these studies is included in Table 2.

These studies estimate the effects of different changes to the introduction programmes in the three countries, i.e. they do not estimate the effect of the entire introduction programme. Although they are hard to compare directly, the results are

¹¹ Only 5% of the immigrants were refugees, 17% were reunified family members, and the rest were labor migrants.

¹² The number of hours of language training, however, varies only between 50 and 200 hours, which is a relatively low number compared to the Nordic integration programmes.

Table 2 Estimates of the effect of introduction programmes on labour market outcomes for immigrant women in the Nordics

Study / country	Population	Intervention	Outcome	Time horizon	Result	Comment
Andersson Joona and Nekby (2012) Sweden	375 newly arrived refugee women 2006-08 in three counties selected for participation	Trial Introduction Program (TIP): case manager with lower caseload and flexible language and employment interventions	Employment	22-30 months after programme enrolment	Zero	
Andersson Joona et al. (2016) Sweden	6 410 refugees and their reunified family members (3 179 women)	The introduction programme from 2010: PES responsible, earlier labour market contact, intensive coaching	Employment and Earnings	2-3 years	Positive	The effects are similar for men and women
Blom and Enes (2015) Norway	13 715 refugees ending the introduction programme 2007-2011	Validation of education	Employment and/or education	1-2 years	Positive	Larger effect for women than for men
		Basic schooling			Positive	
		Internship			Positive	
		Other (language course, further schooling, skills test)			Zero	
Clausen et al. (2006) Denmark	36 699 refugees and reunified family members immigrated 1995-2002	The introduction programme from 1999: municipalities responsible, longer programme with employment support and more language classes	Employment or education	0-3 years	Zero ¹	
Djuve et al. (2017) Norway	8 145 participants in the introduction programme, arrived 2007, 2009, 2011.	Municipal share in	Employment	4 years	Positive	
		a) Internship			Zero	
		b) Language course			Positive	
		c) Ordinary employment:			Zero	
	Less intensive: Less than 75% participate fulltime					
Kavli et al. (2007) Norway	4 050 newly arrived refugees and family members ending the introduction programme 2004-06	The introduction programme from 2004 is an individually tailored qualification programme that varies in length by municipality.	Employment	0-2 years	Zero	The effect is smaller for women than for men

Continues next page

Study / country	Population	Intervention	Outcome	Time horizon	Result	Comment
Kennerberg and Åslund (2010) Sweden	95 000 immigrant women arrived 1994-2003	Language course	Employment	10 years	Positive	The effect is larger for women than for men
Lanninger (2016) Sweden	6 410 refugees and family reunified to refugees (3179 women)	The introduction programme from 2010: PES responsible, earlier labour market contact, intensive coaching	Employment	2-3 years	Positive ²	
Svantesson (2006) Sweden	4 561 newly arrived refugees and reunified family members	Eligible for (pre-2010) introduction programme	Employment	2 years	Negative	The effect is smaller for women than for men

Notes: Results which imply improvements in outcomes and which are significant at a 5% level are summarised as positive. Non-significant results are summarised as a zero impact. ¹The overall result is zero, but negative effects are found for refugees and women from Somalia and Afghanistan, while positive effects are found for immigrants from Turkey. ²Result for childless women. No effects are found for women with children and for women with only primary education.

discouraging: Two studies find that changes to the introduction programmes in Denmark and Norway in 1999 and 2004 had no short-term effects on employment for immigrant women compared to the type of support that prevailed prior to implementation of these programmes (Clausen et al. 2006, Kavli et al. 2007). The support consisted mainly of shorter but voluntary language courses. Nor did studies find employment effects of the Swedish (pre-2010) introduction programme: Svantesson (2006) compared refugees, who were eligible for the introduction programme, with their reunified family members, who were not eligible. Andersson Joona and Nekby (2012) considered a trial programme that reduced the caseload for caseworkers in charge of the (pre-2010) Swedish introduction programme.¹³ The most promising results for women are found for the introduction programme in Sweden existing from 2010.¹⁴ The programme transferred the responsibility for the employment support from the municipalities to the Public Employment Service (PES) and, compared to the pre-2010 programme, offered earlier meetings with a caseworker where qualifications and needs were clarified and more intensive

counselling and coaching was provided. The changes produced positive but small employment and larger earning effects two to three years after arrival compared to the earlier programme (Andersson Joona et al. 2016, Lanninger 2016). Lanninger (2016) analyses how the effect varies across different sub-populations and finds a positive effect for childless women and women with a secondary or post-secondary education, but not for mothers and women who have only completed primary education.

Two Norwegian studies suggest that the use of internships, which imply temporary job-training, as part of the introduction programme increases subsequent employment rates for immigrant women (Blom and Enes 2015, Djuve et al. 2017), but whether or not this is due to sample selection is less certain. Early and extensive use of internships has been emphasised, but not yet evaluated, in the Danish introduction programme from 2016. A single study has considered the long-term effects of participating in Swedish language training for immigrants (Kennerberg and Åslund 2010). The study finds large negative effects during the first five years after enrol-

¹³ The study by Andersson Joona and Nekby (2012) is based on a randomised controlled trial and a causal interpretation is therefore particularly convincing.

¹⁴ The Swedish introduction programme from 2010 is called the Establishment Programme.

ment, but the effects become positive thereafter and increase women's employment levels by ten percentage points after ten years. The effect is only found for individuals who complete the course.

With the exception of the latter Swedish study, all the studies mentioned in Table 2 estimate effects within a rather short time horizon – either during or shortly after the programme period ends. As the introduction programmes are extensive, there could potentially be large lock-in effects, reducing employment effects in the short term. The generally low effects for women may also be related to different participation patterns for men and women: It has been documented in Norway that more men than women participate in employment-related activities (Blom and Enes 2015), and more men than women complete language courses (Drøpping and Kavli 2002). Interviews reveal that when women drop out of language training, this is related to their large responsibility for care activities, especially childcare.

The overall impression from the existing studies is that the adjustments made over the years in most Nordic introduction programmes have had little short-run effect on immigrant women's labour market outcomes, with the notable exception of the 2010 programme from Sweden which resulted in moderate employment effects, but large earnings effects. This programme transferred the responsibilities from the municipalities to the PES and offered earlier meetings with a caseworker as well as more intensive counselling and coaching. However, from a policy perspective the long-term consequences are most important. The only study that considers a long period evaluates language training

in Sweden and finds positive employment effects for immigrant women.

4.3 Active labour market programmes

Active labour market programmes (ALMPs) are an important part of the interventions targeting newly arrived immigrants, as we have seen in the previous section, as well as unemployed immigrants who no longer participate in the introduction programmes. The Nordic countries have a strong tradition of using ALMPs. These policies emphasise both the individual's right to receive support and the individual's duty to participate in activities. The purpose of this duality is to counter any disincentive effects of the relatively high benefit levels. ALMPs consist of several measures, ranging from counselling and job-search courses to subsidised employment and training programmes, either as part of an educational programme or at a workplace.

The effectiveness of ALMPs has been evaluated in numerous studies. A recent review pays specific attention to the effectiveness of ALMPs for immigrants in Europe (Butschek and Walter 2014). The authors condense the results of 93 estimates from 33 studies (where 34 of the estimates from 14 studies are from the Nordic countries).¹⁵ The authors conclude that subsidised employment in private companies has a significantly better impact on immigrants' labour market outcomes than other programmes for immigrants. The review finds that the impact estimates for women are generally lower across all types of ALMPs, but they are not significantly different from the estimates for men. Another and more comprehensive review of studies for the general population of unemployed finds that training programmes perform better in the long than in

¹⁵ Seven of the 14 studies of the Nordics in Butschek and Walter (2014) did not contain specific results for immigrant women. Four of the remaining seven are included in other sections of this review: two studies deal with benefit sanctions and two studies deal with introduction programmes. Two studies are not considered relevant for our review, as they consider the impact of temporary jobs. Only one study from Butschek and Walter (2014) is therefore included in this section (Heinesen et al. 2013). We discuss three other studies that are not included in Butschek and Walter (2014); see Table 3 below.

Table 3 Estimates of the effect of ALMPs on labour market outcomes for immigrant women in the Nordics

Study / Country	Population	Intervention	Outcome	Time horizon	Result	Comment
Hardoy and Zhang (2013) Norway	51 307 non-Western immigrant women, unemployed between 1993-2007	1.Vocational Training	Duration of unemployment	Unemployment duration up to 14 years	Negative	The effect is more negative for women than for men
		2.Subsidised employment			Negative	
		3.Internship			Negative	
		Sequence: 1+2 or 1+3			Positive	
Heinesen et al. (2013) Denmark	31 215 non-Western immigrant women with social benefits in 1997-98	Subsidised employment	Duration of unemployment	Unemployment duration up to 7 years	Positive	The effect is smaller for women than for men
		Public job training			Positive	
		Other			Positive	
Kvinge and Djuve (2006) Norway	6 795 non-Western immigrant women from Asia, Africa and Eastern Europe, unemployed in 2003	Subsidised employment	Employment	2-3 years	Positive ¹	Subsidised employment has the largest effect. No clear gender pattern
		Vocational training			Positive ¹	
		Internship			Positive ¹	
Røed and Raaum (2006) Norway	7 528 non-Western immigrant women, unemployed between 1989-2002	Any ALMP (training, job-training in public company, subsidised employment in private company, internship)	Duration of unemployment	Unemployment duration up to 14 years	Positive	The effect is smaller for women than for men

Note: Results which imply improvements in outcomes and which are significant at a 5% level are summarised as positive. Non-significant results are summarised as a zero impact. ¹ Positive results are found for women from Asia and Eastern Europe but not for immigrants from African countries.

the short run, particularly for women and the long-term unemployed (Card et al. 2018). The poor results for programmes other than subsidised employment reported in Butschek and Walter (2014) may therefore be a result of lack of studies which consider the long-term impact of ALMPs for immigrants.

We have identified four studies that measure the effects of ALMPs for immigrant women in a Nordic country. They are summarised in Table 3. There is one study from Denmark and three from Norway. The rate of participation in ALMPs is between 10% and 35% among the unemployed in all four studies, without large systematic gender differences. All studies

are conducted on samples of immigrants who immigrated to the Nordic countries 10-30 years ago. It is therefore uncertain whether the results can be extrapolated to the present. While most of the studies were thoroughly conducted using sophisticated methods, the evaluation designs rely on relatively strong assumptions to identify causal effects.

The first study reported in Table 3 is a Norwegian one (Hardoy and Zhang 2013). The authors consider the impact of participating in ALMPs (vocational training, subsidised employment and internship) versus no participation as well as relative comparisons of pairwise combinations of programmes for

unemployed women who participate in at least two types of ALMPs.¹⁶ For the latter comparisons, they find that vocational training followed by either internship or subsidised employment reduces the unemployment duration relative to other pairwise ALMP combinations. The isolated effect of the three ALMPs compared to no participation is to prolong the duration of unemployment for the participants, although only marginally so for subsidised employment. The negative result is the opposite of what is found in the three other studies. One Norwegian study finds that participating in ALMPs reduces unemployment duration relative to non-participation (Røed and Raaum 2006). The authors do not consider the impact of specific types of ALMPs, and they also conclude that in spite of positive effects, the benefits do not seem to cover the costs of the programmes. A positive effect is also found in Norway for internships, subsidised employment and vocational training for immigrants from Asia and Eastern Europe (Kvinge and Djuve 2006). Positive effects of participating in internships, subsidised employment and other ALMPs are found for immigrant women from non-Western countries in Denmark (Heinesen et al. 2013).¹⁷ While two of the studies find small effects, the other two find relatively large effects, particularly for subsidised employment.¹⁸ Three of the four studies find that the effects are smaller for women than for men (Røed and Raaum 2006, Hardoy and Zhang 2013 and Heinesen et al. 2013).

Although the number of studies is limited, the overall impression is that all types of active labour mar-

ket programmes have positive employment effects for immigrant women, but that the effect is smaller than for men. The impact of subsidised employment is larger than that of other programmes in the short run. One should expect from other research that programmes which contain human capital investments have a larger impact in the long than in the short run also for women, although this has not been examined yet.

4.4 Social benefit policies

This section considers the importance of social benefit policies for improving labour market outcomes of immigrant women. In particular, we focus on the effect of changing social benefit levels and using economic sanctions in the event of non-compliance with respect to requirements of job search or participation in ALMPs. It is a common hypothesis that the relatively generous, but means-tested, social benefits and high taxation in the Nordic countries generate welfare traps that may explain the low employment rates of non-Western immigrants. This is generally supported by a large empirical literature on labour-supply responses to changes in taxes and social benefits, which however also emphasises that the size of the effects differs across incentive mechanisms, target groups and contexts.¹⁹

We have identified six single impact studies that estimate the effect of social benefit levels and benefit sanctions on immigrant women's labour market outcomes: five Danish studies and one Norwegian study. The studies are summarised in Table 4.

¹⁶ Vocational training (*opplæring* and *arbeidsmarkedsoplæring*, AMO) lasts up to ten months. Internships (*arbeidspraksis* or *praksisplass*) imply job training where the unemployed individual is not paid, in contrast to subsidised employment, where the unemployed individual is hired on ordinary terms, and the employer receives a wage subsidy.

¹⁷ Other ALMPs stand here for the programme *individuel job-træning*, which may include internships (*virksomhedspraktik*).

¹⁸ Heinesen et al. (2013) find that the effect of subsidised employment, other job-training and other ALMPs is a reduction of unemployment duration by ten, four and two months, and Kvinge and Djuve (2006) find that internships and training raise employment rates by seven to 13 percentage points, while subsidised employment raises employment by 18-30 percentage points. In contrast, Røed and Raaum (2006) find that ALMPs reduce unemployment duration by half a month. Hardoy and Zhang (2013) find that ALMPs increase unemployment duration by half a month.

¹⁹ See, for example, Tatsiramos and van Ours (2012) and Nichols and Rothstein (2016) for recent surveys.

Table 4 Estimates of the effect of social benefit policies on labour market outcomes for immigrant women in the Nordics

Study / Country	Population	Intervention	Outcome	Time horizon	Result	Comment
Andersen et al. (2012) Denmark	5 370 refugees, aged 18-59, arrived 2001-2003	Reduced social assistance (start aid)	Employment	4 years	Positive	The effect is smaller four years after arrival than after two. The effect is smaller for women than for men
Bratsberg et al. (2018) Norway	12 395 immigrants aged 27-59 years, disability pension recipients between 1999-2004	Increased temporary disability benefits	Employment Earnings Spouse Employment Family income	Up to 10 years	Negative Negative Negative Negative	The effect is smaller for women than for men
Diop-Christensen (2015) Denmark	5 564 non-Western married immigrants, aged 18-64, social assistance benefit recipients for more than 18 months in 2006	Sanction if not fulfilling work requirement	Short-term self-support (< 3 months) Longer term self-support (≥ 3 months) Other benefits	Up to 9 month	Zero ¹ Positive ² Positive ¹ Positive ² Positive ¹ Zero ²	
Huynh et al. (2010) Denmark	5 892 female refugees and female family members reunified with a refugee, arrived 2001-03, aged 18-59 years	Reduced social assistance (start aid)	Employment	1-2 years	Positive	The effect is smaller for women than for men one year after the benefit reduction, but vice versa two years after the reform
Rosholm and Vejlin (2010) Denmark	1 637 refugees and their reunified family members, arrived 2002, aged 18-65 years	Reduced social assistance (start aid)	Employment Not in the labour force	0-2 years	Zero Zero	The effect is smaller for women than for men
Svarer (2010) Denmark	9 420 insured immigrant women (54% from less-developed countries)	Sanction if job search requirements are not complied with	Duration of unemployment	Up to 6 years	Positive ³	

Notes: Results which imply improvements in outcomes and which are significant at a 5% level are summarised as positive. Non-significant results are summarised as a zero impact. ¹The effect of the threat of a sanction. ²The effect of the sanction. ³The study estimates the effect of small and large sanctions (benefit removed for a few days or for up to three months). Only large sanctions have an effect.

Four of the studies consider changes in benefit levels and two consider benefit sanctions. Three of the four studies on benefit levels are evaluations of the same regulation; the so-called start aid: social benefits for newly arrived immigrants were reduced by nearly 50% in Denmark in 2002 (Huynh et al. 2010, Rosholm and Vejlin 2010, Andersen et al. 2012). The studies provide diverging evidence for women. Two studies find a positive employment effect (Huynh et al. 2010, Andersen et al. 2012), while the third study finds no significant effect for women (Rosholm and Vejlin 2010). The latter result could potentially be explained by the use of a smaller population. The study finds significant effects for groups with generally better labour market attachment (being a man, younger, married or beyond primary education in the home country). The three studies find a larger effect for married women and women with dependent children, but this effect is only significant in the two first studies. These studies also find that the effects increase from the first to the second year after arrival but decrease again thereafter.

The fourth study estimates the effect of an increase in temporary disability benefits on immigrant women in Norway (Bratsberg et al. 2018). The study sample includes both non-Western and Western immigrants. The study finds a large negative impact of the increase in benefit levels on the employment and earnings of immigrant women, as well as on the employment level of their spouses.

Two Danish studies estimate the impact of sanctions that temporarily remove benefits either if a work requirement has not been fulfilled or if other requirements for accepting offered jobs, active job search and ALMP participation have not been

fulfilled (Svarer 2010, Diop-Christensen 2015). Diop-Christensen (2015) considers social assistance recipients from non-Western countries, whereas Svarer (2010) includes all immigrants receiving unemployment insurance. Both studies find that a benefit sanction reduces unemployment durations and increases the transition to self-support, but the effect is temporary for the social assistance recipients. The threat of a sanction based on work requirements, but not the sanction itself, increases transitions to other benefits that are exempted from the sanction requirements (Diop-Christensen 2015).

Three of the studies find that the effects of benefit changes or sanctions are smaller for women than for men (Rosholm and Vejlin 2010, Andersen et al. 2012, Bratsberg et al. 2018), whereas a fourth study finds that gender differences vary over time (Huynh et al. 2010).

Overall, the studies support the expectation that benefit reductions and sanctions have positive employment effects for immigrant women. There are several indications that the effect is larger for groups with a stronger attachment to the labour market, and that the effects can be temporary. These positive employment effects should be weighed against the potential negative consequences on the welfare of the women and their families, particularly when it comes to the use of larger and longer lasting benefit reductions.²⁰

4.5 Education policy

Education is traditionally the main investment made in human capital and is possibly the intervention that has been most studied in social science in

²⁰ An analysis of some of the unintended effects of the reduced social benefits in Denmark has been published after the collection of studies for this review was completed. Andersen et al. (2019) find that the reduction in social benefits caused an increase in property crime for the adults who were affected. Moreover, children's likelihood of being enrolled in childcare or preschool, their performance in language tests, and their years of education all decreased, while teenagers' crime rates increased.

Table 5 Estimates of the effect of education on labour market outcomes for immigrant women in the Nordics

Study / country	Population	Intervention	Outcome	Time horizon	Result	Comment
Arendt (2018) Denmark	24 160 female refugees and reunified family members, aged 18-55 years	Enrolment in secondary or tertiary education in Denmark	Employment	Up to 16 years after enrolment	Positive	The effect is largest for women and for refugees
Bratsberg et al. (2017) Norway	10 500 female refugees, reunified family members and labour migrants, aged 18-47 years	Completed secondary or tertiary education in Sweden	Employment	Up to 24 years after arrival	Positive	The effect is largest for women, refugees and reunified family members
Nordin (2007) Sweden	141 330 immigrant women, aged 26-64 years in 2001	Completed years of schooling in Sweden	Annual income from work	Unknown	Positive	The effect is largest for men and for immigrants arriving as adults
Skaksen and Schultz-Nielsen (2017) Denmark	45 809 employed adult non-Western immigrant women, aged 25-64 years in 2015	Completed primary, secondary and tertiary education in Denmark	Hourly wage	Unknown	Positive	The effects are largest for women and for refugees

general. Nonetheless, causal studies which analyse the impact of participation in host-country education as an adult immigrant on their labour market participation are rare. As a policy tool for fostering labour market integration, education programmes for immigrants are costly and positive outcomes are likely more uncertain than for native-born groups because they take place later in life.

Many immigrants who migrated as adults have participated in educational programmes in their home country. An alternative to costly education programmes in the host country is to officially recognise foreign degrees and qualifications through certification procedures. All the Nordic countries have formal systems for recognising foreign qualifications, but according to Karlsdóttir et al. (2018) there are no studies of their influence on immigrants' employment rates or earnings. Studies from Germany and Australia suggest a substantial positive impact of official recognition of foreign qualifications on immigrant employment levels (Brücker et al. 2015, Tani 2015).

Yet another alternative is to offer specific education programmes that complement or upgrade education from abroad. Such an approach has been taken in Sweden and has been found to be effective for teachers and lawyers, but less so for immigrants with a degree in political science (Nikmani and Schröder 2012). The effects were not identified separately for men and women and are less relevant for most groups of non-Western immigrants who rarely possess the mentioned qualifications.

Several studies have examined the relationship between educational achievements and labour market outcomes for immigrants, but most do not distinguish between education obtained in the home country and education from the host country, and even fewer provide specific estimates for immigrant women. We have identified four Nordic studies that examine the effect of education in the host country for adult non-Western immigrant women: two studies from Denmark, one study from Norway and one from Sweden (Nordin 2007, Bratsberg et al. 2017, Skaksen and Schultz-Nielsen 2017, Arendt

2018). They are summarised in Table 5. The results from these studies should not be interpreted causally because individuals who are able and willing to undertake education in their new country may have other skills that are valued on the labour market, which those who do not undertake education do not possess.

Two of the studies provide estimates for refugees and their reunified family members. Both find large and significant effects of education in the host country on women's employment (Bratsberg et al. 2017, Arendt 2018). It is noteworthy that the effects of education completed in the host country are of the same magnitude in Denmark and Norway, and that they are much larger than the effects of education from the country of origin. Both studies also show that the premium to completed education is particularly large for refugee women. Arendt (2018) shows that these results also hold when looking at the effect of being enrolled in an education programme (i.e. irrespective of whether completing or not).

A single study looks at hourly wages once immigrants are employed (Skaksen and Schultz-Nielsen 2017). The study documents that, for non-Western immigrant women, hourly wages rise steeply with the length of the education from Denmark relative to Danes with primary education as the highest attained education. The Swedish study also finds that immigrants who arrived and completed an education in Sweden as adults earn more than immigrants without education from Sweden (Nordin 2007). This study includes Western immigrants, but supplementary results suggest that the effect of education is of the same size for immigrants from Western Europe as for immigrants from countries outside of Europe.

The studies show that there is a potentially very large employment gain from education for some

adult non-Western immigrant women. Recognition of foreign qualifications have also provided positive employment effects for immigrants in general. As education is a costly intervention and it is not clear to what extent the results in the studies can be given a causal interpretation, an increased focus on education for adult non-Western immigrants is associated with substantial risk. Whether to pursue the potential gain from an increased focus on education should therefore be weighed against this risk. The risk could likely be mitigated e.g. through careful consideration of groups to be targeted and matching between type and length of education and the needs of the labour market.

5. Summary

This contribution has summarised research on the labour market effects of welfare policies in the Nordic countries for non-Western immigrant women. We concentrate on quantitative studies that compare groups who are subject to a policy with a control group that is subject to other policies, to allow for tentative causal interpretations. Unfortunately, the number of high-quality causal studies is small, so the findings must be interpreted with caution.

The employment rate of non-EU immigrant women is often 50-60% in the Nordic countries, and it is usually lower for refugee women. It has been documented that immigrant women from non-EU countries are on average low-skilled and that their employment level correlates highly with their labour force participation in their country of origin. Immigrant women also face large "motherhood penalties" in terms of reduced employment after becoming a parent. Such empirical patterns suggest that the reasons for their low employment rates are manifold and that it is a difficult challenge to increase the employment level of first-generation immigrant women. A quick fix to this complex problem does not seem likely, nor does it seem likely that any

single intervention can do the trick. Instead a combination of different policies may be required.

We have focused on the effects of family policies, introduction programmes for newly arrived immigrants, active labour market policies, social benefit policies and education policies related to adult immigrants. We identified 26 impact studies from the Nordic countries within these policy areas and supplemented the findings in these studies with results from studies in other countries.

Three studies evaluating the employment effects of family policies for immigrant women in the Nordic countries were identified. Two studies suggest that the provision of economic benefits for taking care of children at home may raise the uptake of paid leave for immigrant women and hence reduce labour force participation. The third study finds no employment effects from the reverse mechanism: provision of subsidised childcare. Moreover, while it has been found that earmarked paternity leave may increase the uptake of paid leave by immigrant fathers, no studies have documented the impact of paternity leave for immigrant mothers, and there is mixed evidence in the general literature (for natives) whether paternity leave affects the employment of mothers. The Danish experience of postponing marriage for young people by restricting access to family reunification with an immigrant spouse also provided mixed results with respect to educational enrolment. Therefore, the evidence suggests that family policies can reduce labour force participation of immigrant women, but there are no studies which suggest that family policies by themselves can raise their employment levels.

The effect of introducing or upgrading introduction programmes is evaluated in nine studies. With one exception, the reported employment effects are at best moderate and, in some cases, even negative in the short run, relative to the less extensive types of

support that were in place prior to the changes. This is somewhat disappointing, given that the introduction programmes are relatively extensive and costly in the Nordic countries compared to other European countries. But it is partly expected, as the effects were only measured soon after the programmes ended. The requirement of full-time participation is also likely to have lock-in effects, i.e. participants are kept in the programme and hence out of employment during their first years in the Nordic countries. An exception is positive findings from the reform of the Swedish system in 2010 when the Public Employment Service took over responsibility for the introduction programme from municipalities and the employment focus was strengthened. There is also suggestive evidence that the promotion of labour market contacts, e.g. in the form of internships as part of the programme, may provide better labour market outcomes, at least in the short run. The only study that documents effects of components of the introduction programme in the long run finds large positive effects of participating in language training for immigrant women. This study emphasises that the positive results are only obtained if the courses are completed. From other studies we know that drop-out rates from language courses are higher for women than for men, and that women's drop-out is most likely due to childcare responsibilities. These findings suggest the need for a coherent approach that takes a broad view on the family situation.

Four studies have been identified that estimate the effect of participating in active labour market programmes for non-Western immigrant women. As opposed to the studies of introduction programmes, the participants in these studies include unemployed immigrants who have lived for a longer time in the Nordic countries. Three of the four studies find positive effects in the short term for any type of ALMP, although the size of the effects varies and is smaller than for men. In agreement with the general literature, all the studies find that sub-

sidised employment has larger effects than other programmes, but the general literature (that does not focus on immigrants) suggests that the effect of training may be larger in the long than in the short run. The evidence therefore supports a conclusion that labour market programmes raise employment for non-Western immigrant women and suggests that several types of programmes may be beneficial, particularly in the longer run.

We identified six studies on the effect of social benefit policies for non-Western immigrant women: five from Denmark and one from Norway. The policies either change the social benefit levels or temporarily remove benefits through sanctioning. Three of the studies consider the effect of the same policy: the reduction of the social benefit level for immigrants in Denmark by nearly 50% in 2002. Two of them find a positive effect of the reduced social benefit level on employment levels of newly arrived refugee women, while the third only finds positive results for refugee men. Two studies find that a sanction of removing social benefits has positive effects on self-support rates, while one of the studies finds that the effects may be temporary and that the sanctions also increase transitions to other types of benefits. Finally, the Norwegian study finds that an increase in disability benefits lowers employment, earnings and family income for immigrant women. Overall, these studies suggest that economic incentives in social benefit systems matter for immigrant women, but that the effects are smaller than for immigrant men. Nonetheless, the use of particularly high or long-lasting reductions in benefits may be a risky strategy, since only a share of women responds, and as a result, the reduced economic living standards may have potential unintended effects for these women and their children.²¹ Whether or not the benefit of increased employment for some immigrant women is outweighed by reduced living standards for others is ultimately a political question.

We identified four studies that estimate the effect of post-secondary education for adults in the host country: two Danish studies, one Norwegian and one Swedish study. All four studies find large positive employment or wage effects of education over a long period. The effects seem particularly large for refugee women. These results should, however, be interpreted with caution, as refugees who are able to obtain an education in the host country could have other favourable skills related to employment (such as better language skills or better health) than refugees who do not obtain an education in the host country. In this case the value of host country education could be overstated. The results therefore suggest that an increased focus on education could be beneficial, although such a strategy should be weighed against the costs and risks of failure. A couple of international studies suggest that official recognition of foreign education can facilitate labour market integration, but there is no evidence as to whether this pertains to non-Western immigrant women in the Nordic countries.

To summarise the main findings, there is evidence of employment effects of interventions within all the different policy areas, except family policies. But the effects are often more moderate for women than for men. Increasing incentives or opportunities to acquire education seems to be a potential route for further exploration for some women, although careful considerations of costs and risks are necessary. Likewise, the long-term results of language training are promising, even though they rest on a single study.

²¹An analysis of some of the unintended effects of the reduced social benefits in Denmark has been published after the collection of studies for this review was completed, see footnote 20.

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Chapter 8

Wage Policies and the Integration of Immigrants¹

Simon Ek² and Per Skedinger³

ABSTRACT

Most Nordic countries struggle with the integration of low-skilled immigrants. Relying on research from primarily the Nordics, we discuss to what extent minimum wage reductions can improve labour market prospects for immigrants, whether unskilled and low-pay jobs serve as stepping stones to more qualified and higher-paid jobs and how wages of incumbent workers would be affected by lower minimum wages. We argue that targeted minimum wage reductions aimed at new, previously non-existing jobs and increased differentiation of minimum wages according to experience provide an appropriate balance between the conflicting goals of high employment and low wage inequality.

Keywords: Integration of immigrants, minimum wages, wage policies.

JEL codes: J08, J31, J38, J50.

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1. Introduction

The immigrant population has increased substantially in all the Nordic countries during the last two decades. A large fraction of immigrants originates from outside the EU. According to Eurostat, the share of foreign born among the working-age population (20-64 years) ranged from 9% in Finland to 23% in Sweden in 2016. The corresponding figures were around 16% for Denmark, 21% for Norway and 18% for Iceland. Approximately three quarters of the foreign born in Sweden were born outside the European Union (EU28), while the shares in Denmark, Finland and Norway ranged between 55% and 66%. In Iceland, less than a third of all immigrants came from outside the EU28 (Eurostat 2018).

The Nordic labour markets are characterised by low wage dispersion and high collectively agreed minimum wages. High wage floors increase the risk of disemployment because there will be less demand for labour. In line with this reasoning, there are relatively few low-skilled jobs available for the substantial share of immigrants who have little education and poor language skills. Employment rates are also markedly lower for immigrants than for natives. According to studies of the Nordic and other European countries, many immigrants need a long time after arrival to establish themselves in the labour market.⁴

The Nordic welfare models are largely premised on high employment rates. Arguably, this means that successful labour market integration of immigrants is especially important in the Nordics. Improving

The Nordic welfare models are largely premised on high employment rates.

the labour market integration of immigrants is key to achieving better economic outcomes, both for individuals and in the aggregate.

In connection with the large influx of low-skilled refugee immigrants in recent years, various proposals for reductions of minimum wages have been discussed in the Nordic countries.⁵ What role could minimum wage cuts play for creating more low-skilled jobs and improving the labour market prospects of immigrants? This is the primary question in this contribution. We also discuss to what extent such jobs could serve as stepping stones to more qualified and higher-paid jobs and how wages of natives and already employed immigrants would be affected by lower minimum wages.

At present, employment subsidies are being used extensively as a means of cutting wage costs for persons with marginal attachment to the labour market in the Nordic countries. While these subsidies are not the focus of our essay, we provide a brief discussion of them in the concluding section where we appraise different policies to facilitate the labour market integration of immigrants.⁶

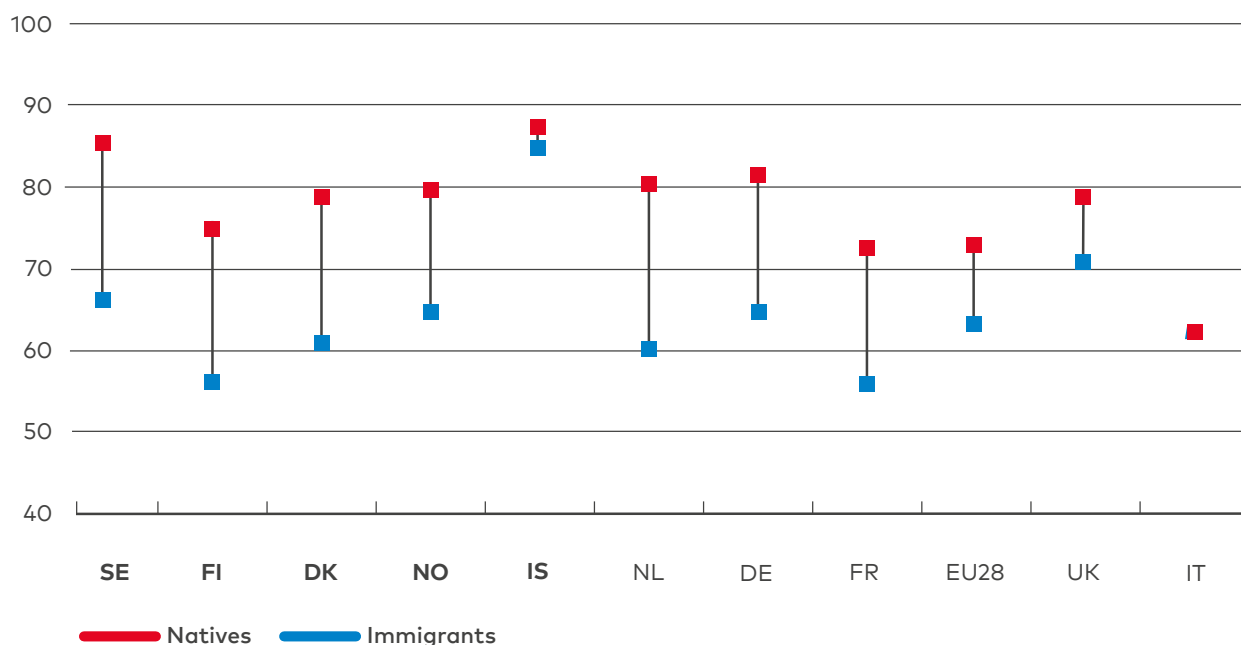
Section 2 describes the labour market situation of foreign-born people in the Nordic countries, while Section 3 is concerned with an aspect of wage formation in these countries that is of particular rel-

⁴ See, e.g., Åslund et al. (2017) for Sweden, Bratsberg et. al (2017) for Norway, Sarvimäki (2017) for Finland, Schultz-Nielsen (2017) for Denmark and Fasani et al. (2018) for several European countries.

⁵ See Winther (2015), Schauman (2016), Dagbladet (2016), and Schüch (2016), for examples from Denmark, Finland, Norway and Sweden, respectively.

⁶ See Andersson Joona (2019) in this volume for a more extensive discussion of subsidised employment in the Nordic countries

Figure 1 Employment rates for natives and immigrants born outside the EU28, 20-64 years, percent of population group



Note: The data refer to 2017 and are ordered by the difference in employment rates between natives and immigrants born outside the EU28.
Source: Eurostat.

advance for the low-skilled: the minimum wage arrangements. Focusing on Nordic studies, Section 4 reviews previous research on the employment effects of minimum wages and wage mobility among low-paid and low-skilled workers. Section 5 discusses the policy implications of our analysis.

2. Immigrants in the Nordic labour markets

We focus primarily on immigrants born outside the EU28 in this section. Migration from outside the EU, as opposed to migration within the EU, is mostly refugee immigration and less often work-related.

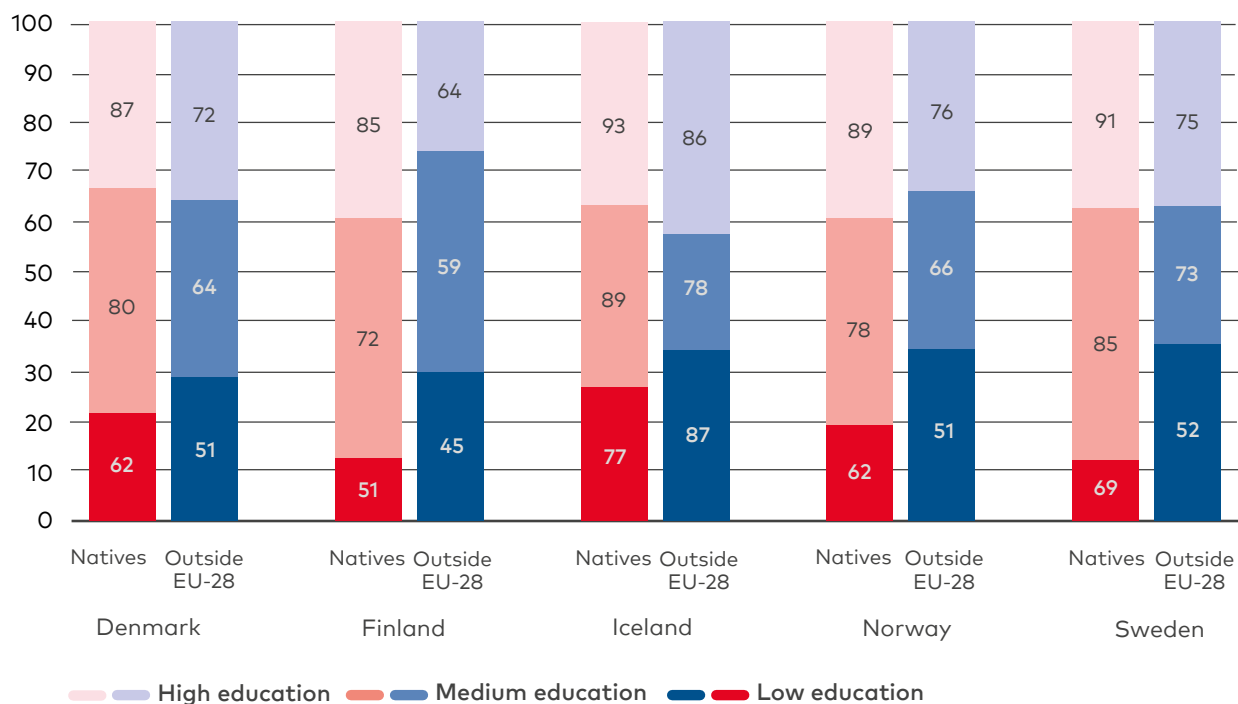
Figure 1 reports employment rates for immigrants and natives in the Nordic as well as other European countries.⁷ While employment rates for natives

are high in an international comparison in Sweden, Denmark and Norway, employment rates for immigrants are around the same as in most other comparison countries. This is reflected in the large employment rate gaps between natives and foreign born, ranging from 15 percentage points in Norway to 19 in Sweden. The generally high employment rates in the Nordics are mainly due to higher female employment than in most other EU countries. Differences in employment rates for men are smaller. Employed immigrants also tend to have lower wages than employed natives and more insecure jobs. Those born outside the EU28 are overrepresented in fixed-term employment in Denmark, Finland, Norway and Sweden, and (except in Denmark) more so than in the EU28 on average.⁸

⁷ Norway and Iceland are not included in the EU28. Immigrants from these countries in the other Nordic countries are thus included in the group of non-EU immigrants.

⁸ See Nielsen et al. (2004), Elonen and Woolley (2014), Barth et al. (2012) and National Institute for Economic Research (2014) for more details on wages in Denmark, Finland, Norway and Sweden, respectively, and Calmfors et al. (2018a) for more details on fixed-term employment.

Figure 2 Employment rates by educational attainment in the Nordic countries for natives and immigrants born outside the EU28, percent



Note: The data are for 2017 and the population refers to those aged 18-64 years. Low, medium and high education refers to lower secondary education or lower, upper secondary and post-secondary non-tertiary education and tertiary education, respectively. The employment rate is reported inside the bars and refers to the age group 20-64 years. Source: Eurostat.

An important determinant of labour market prospects is educational attainment. High entry wages may act as a barrier to entering the labour market primarily for low-skilled immigrants. As shown in the next section, minimum wages cut far into the wage distribution in sectors offering jobs with low qualification requirements.

Figure 2 shows the educational composition among natives and immigrants born outside the EU28 in the Nordic countries as well as the employment rate for each group (reported inside the bars of the diagram). Immigrants in all Nordic countries are more likely to have lower education (lower secondary or less) than natives. This is particularly true for Finland and Sweden, mainly due to the very small share of low-educated natives. The share of immi-

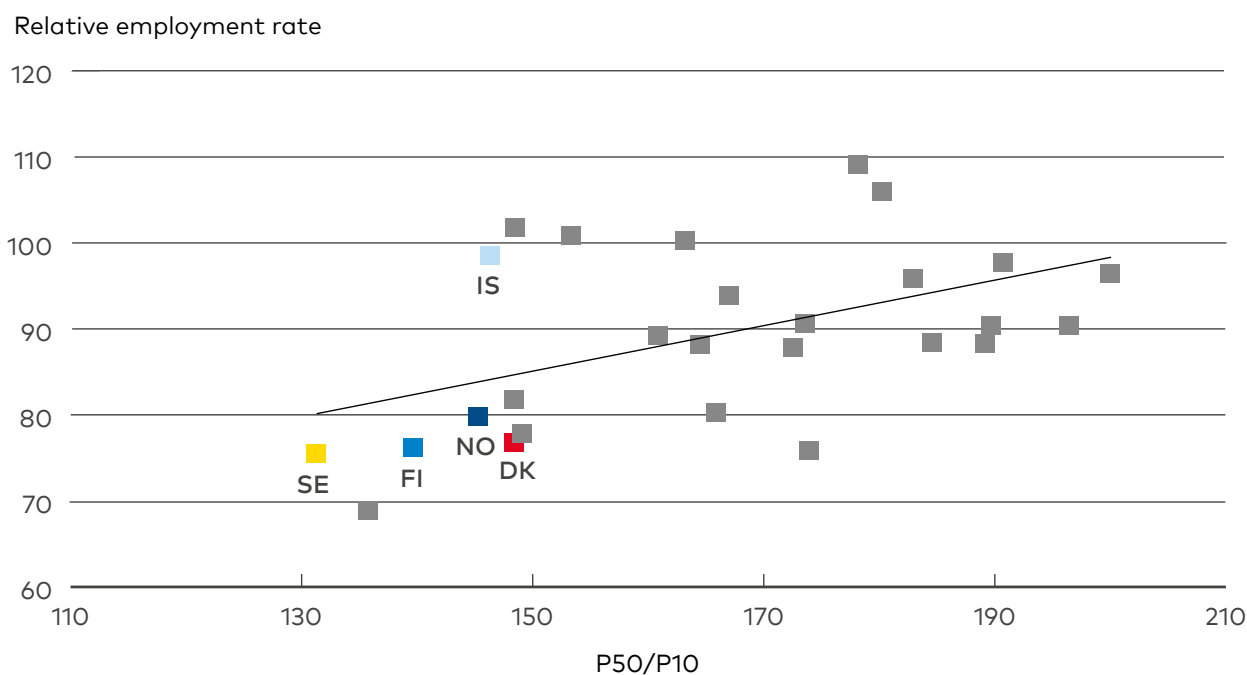
grants with a low-education background varies only moderately across the countries, ranging from 29% in Denmark to 36% in Sweden. However, it should also be noted that a large share of immigrants are highly educated (with tertiary education) in some of the Nordic countries.

Employment rates are positively related to the level of education for both natives and immigrants in all countries.⁹ However, even after accounting for educational attainment, employment rates are in almost all cases lower for immigrants.

Besides high employment rates, the Nordic countries are also characterised by low wage inequality, as evident in Figure 3. The figure relates the dispersion in the lower part of the wage distribution

⁹ The exception is immigrants in Iceland with low education, who have a higher employment rate than immigrants with medium-level education.

Figure 3 Relationship between wage dispersion and relative employment rate of foreign born from outside the EU-28, percent



Note: The relative employment rate of immigrants is measured as the ratio between the employment rates for immigrants and natives in the age group 20-64 years. Dispersion in hourly wages is measured as P50/P10 (see footnote 10). Data refer to 2014.
Source: Eurostat.

(P50/P10)¹⁰ to the relative employment rate of immigrants from outside the EU28 (the ratio between the employment rates for these immigrants and natives) for 27 European countries. There is a positive relationship between wage inequality and immigrants' relative employment. This is no proof of causality, but the duality in the Nordic labour markets seems to manifest itself in employment rate differentials rather than wage differentials.

The Nordic countries have some of the largest differences in literacy proficiency between natives and foreign born. Calmfors et al. (2018a) find that differences in literacy proficiency explain a much larger share of the employment gap between natives and immigrants than differences in formal education. This is also suggested by Figure 4, which

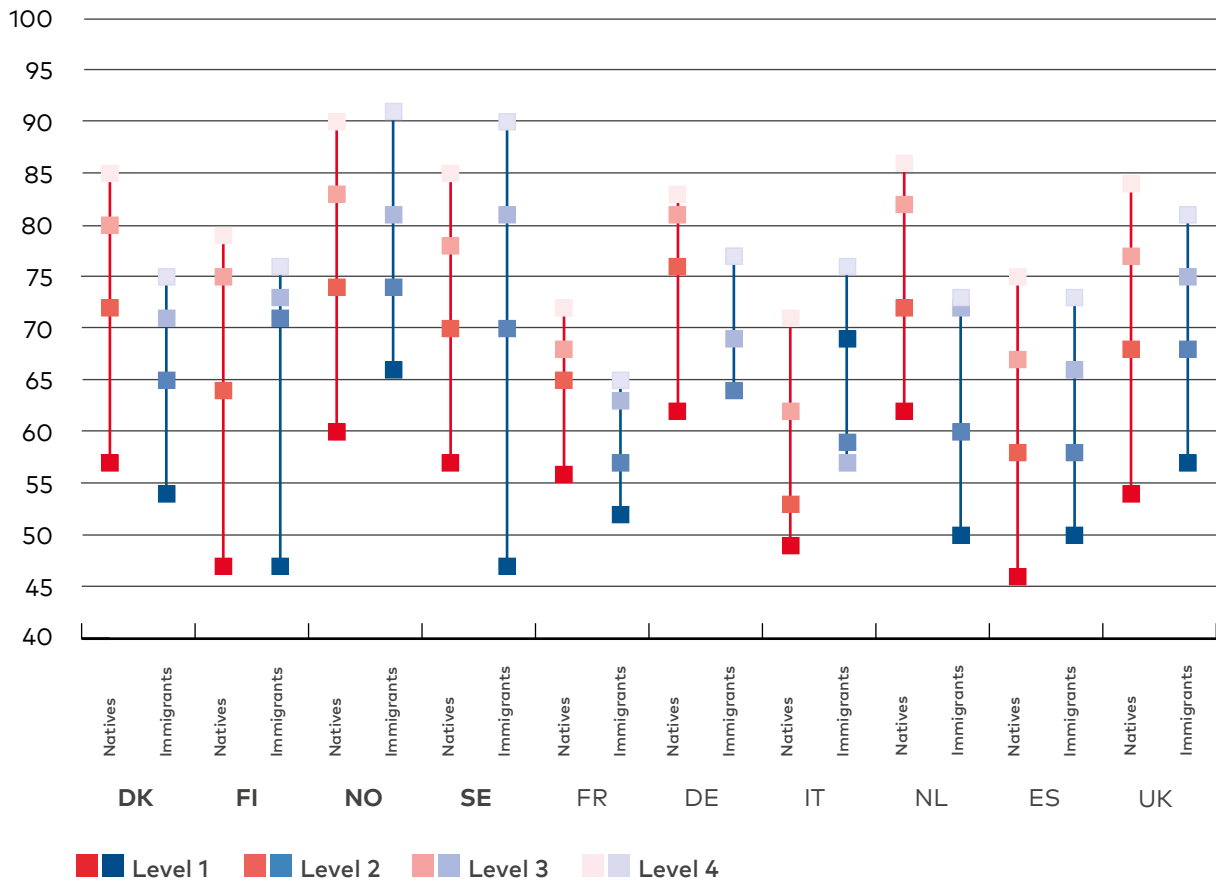
shows employment rates for natives and persons with an immigrant background by the level of literacy proficiency in the Nordics and a few comparison countries.¹¹ Those with an immigrant background and with low levels of literacy proficiency seem to have lower absolute employment rates in Sweden and Finland than in most other comparison countries, suggesting that sufficient language skills may be more important for employability in these two Nordic countries than elsewhere.

To summarise, this section has shown that most Nordic countries struggle with the labour market integration of non-labour immigrants, but to varying extents. The exception is Iceland, where the share of immigrants born outside the EU28 is small and their employment rate is very high. We conclude

¹⁰ P50/P10 refers to the median wage divided by the wage in the tenth percentile, i.e., the wage of the worker with a higher wage than 10% of all employees and a lower wage than 90% of the employees.

¹¹ "Immigrant background" is defined as having spoken a foreign language as a child.

Figure 4 Employment rate by literacy proficiency for natives and persons with an immigrant background, percent



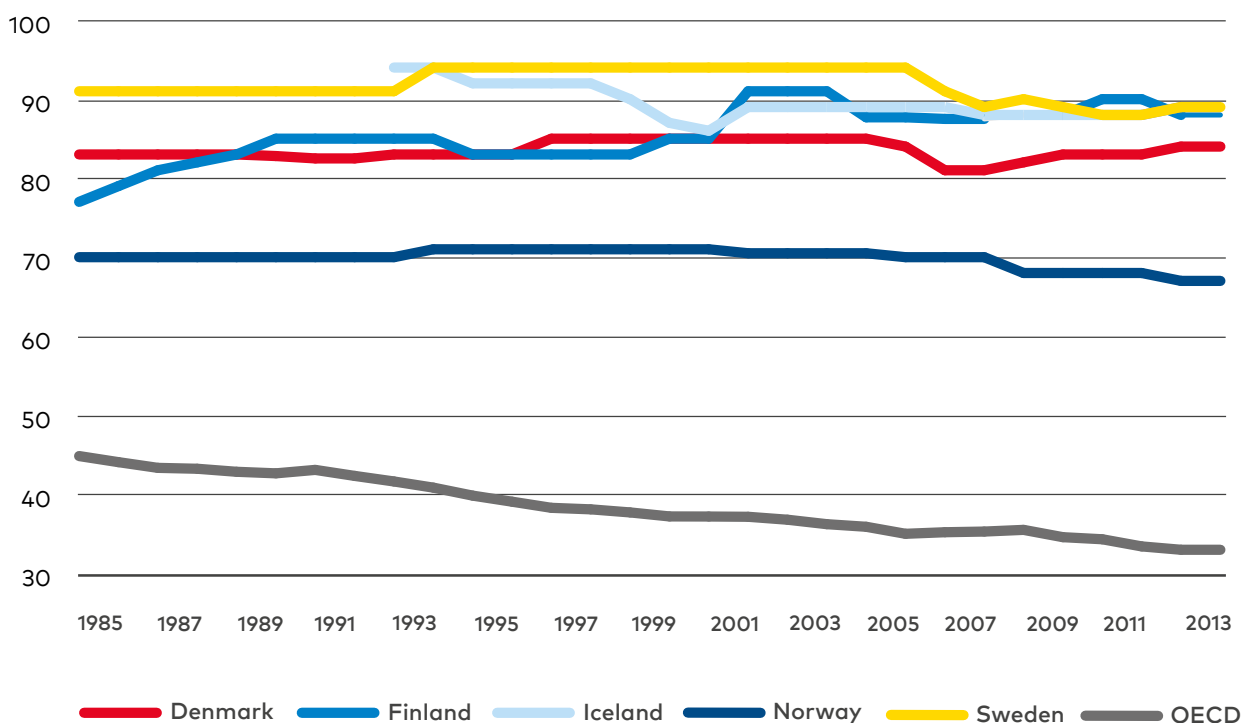
Note: Immigrant background is defined as having spoken a foreign language as a child. The data are from the Programme for the International Assessment of Adult Competencies (PIAAC), conducted by the OECD in 2012. There are six levels of literacy proficiency: the two lowest and two highest have been merged here. Source: Calmfors et al. (2018a).

that the integration challenge is much smaller in Iceland than in the other Nordic countries. Thus, we will focus our analysis on Denmark, Finland, Norway and Sweden. The large differences in the share of immigrants in the population across these countries, however, imply that the magnitude of their challenges differs. Sweden has by far the largest share of foreign born as well as of immigrants born outside the EU28. This makes Sweden's economic prospects even more dependent on successful labour market integration of immigrants than is the case in Denmark, Finland and Norway.

3. Minimum wage systems in the Nordic countries

An aspect of wage formation of particular relevance for the low-skilled in the Nordic countries is the design of the minimum wage systems. Minimum wages are agreed in negotiations at the industry level between employers and unions and not set by legislation as in most other countries. This is a consequence of the Nordic labour market models, which rely heavily on the self-governing of the social partners. The rules to be followed by employers and employees are to a large extent stipulated in collective agreements at the central, industry or

Figure 5 Coverage of collective bargaining, percent of employees



Note: The series for the OECD is a weighted average of the 35 member countries.

Source: OECD (2017).

local level. Figure 5 shows that the coverage of collective agreements is high in the Nordics relative to the OECD average.

Almost all OECD countries including the Nordics (with the exception of Iceland) have experienced decreases in union membership rates in the last thirty years (Calmfors et al. 2018b). But contrary to most other OECD countries, none of the Nordics have seen a significant downward trend in collective agreement coverage. This means that, by and large, collective agreements still set the terms for the labour market.

In Denmark and Sweden, collective agreements (and thus minimum wage stipulations) only apply to firms who have signed such an agreement. Firms

with collective agreements must apply the agreement to all workers, regardless of union membership due to *erga omnes*-clauses, which are used in all Nordic countries. Finland and Norway have different types of extension rules. Such extensions imply that firms not covered by collective agreements must still comply with certain elements of the agreement in their industry or worker profession, e.g., with minimum wage rates.¹²

Table 1 shows minimum wage rates in the Nordic countries (except Iceland) for three industries: hotels and restaurants, retail, and construction.¹³ The first two industries are among the largest of the low-pay sectors, in which minimum wages are typically binding.¹⁴ Also, many immigrants work in these industries. The third industry is not characterised

¹² Norway implements extensions only in some industries, providing additional agreement coverage for around 4% of all employees in 2013, while extensions are more widespread in Finland, covering 16% of employees in 2014 (OECD 2017).

¹³ In Finland and Norway, the collectively agreed rates in these industries are extended by law to firms without collective agreements (with the exception of retail in Norway; see Arbeidstilsynet 2018).

¹⁴ See, e.g. Skedinger (2006, 2015).

Table 1 Minimum wages in the Nordic countries

Collective agreement	Denmark		Finland		Norway		Sweden	
	2006	2016	2006	2016	2006	2016	2006	2016
Hotels and restaurants								
Monthly, national currencies	16 072	19 038	1 300	1 599	18 141	24 816	15 006	20 610
Monthly, euros	2 155	2 557	1 330	1 599	2 254	2 671	1 621	2 177
Hourly, national currencies	100.24	118.74	8.36	10.06	111.98	153.17	86.75	119.13
Hourly, euros	13.44	15.95	8.36	10.06	13.92	16.49	9.37	12.58
Percent of average wage (monthly)	58.1	52.8	49.7	46.6	59.4	56.2	60.1	61.8
Retail								
Monthly, national currencies	15 060	18 024	1 331	1 707	16 521	22 803	14 515	20 239
Monthly, euros	2 019	2 421	1 331	1 707	2 053	2 454	1 568	2 137
Hourly, national currencies	93.93	112.42	8.32	10.67	101.67	140.33	87.44	121.92
Hourly, euros	12.59	15.10	8.32	10.67	12.63	15.10	9.45	12.88
Percent of average wage (monthly)	54.5	50.0	49.8	49.7	54.1	51.6	58.2	60.7
Construction								
Monthly, national currencies	15 416	18 382	1 317	1 721	19 175	27 667	13 642	18 575
Monthly, euros	2 067	2 469	1 317	1 721	2 383	2 979	1 474	1 962
Hourly, national currencies	96.15	114.65	7.60	9.93	118.00	170.32	78.40	106.75
Hourly, euros	12.89	15.40	7.60	9.93	14.66	18.33	8.47	11.27
Percent of average wage (monthly)	55.8	51.0	49.2	50.1	62.8	62.7	54.7	55.7

Note: The rates apply to unskilled non-trainee manual workers (except cleaners, if covered by the collective agreement) without experience and at least 20 years of age. If the hourly (monthly) minimum rate is not stated in the collective agreement, we have converted it from the monthly (hourly) rate using the explicit formulas in the agreements. The stipulated working week is 37 hours in the Danish collective agreements, 37.5 in the Norwegian agreements and 40 in the Finnish and Swedish agreements. For retail in Finland, the rates apply to the region with lowest adjustment for cost of living.

Source: Own compilation of minimum wages from various collective agreements, using average gross monthly wages in full-time equivalents for the whole economy from UNECE and exchange rates from Eurostat. For details on the collective agreements included, see Ek and Skedinger (2019).

by low pay, nor is it a major employer of immigrants from outside the EU28, but it has attracted a substantial inflow of foreign workers from other EU countries. These individuals include posted workers, i.e., those employed by a foreign firm temporarily operating in the country, as well as workers employed by a domestic firm.

The rates in Table 1 pertain to a worker who is unskilled, without work experience and at least 20 years of age. These are the minimum rates at which a low-educated adult would normally be employed

in his or her first job in the selected industries (apart from apprentices and trainees, for whom special subminimum rates usually apply).

Minimum wage levels, expressed in euros, are highest in Norway, followed by Denmark and Sweden, and lowest in Finland. A more informative measure of the extent to which minimum wages cut into the wage distribution is the relative minimum wage, i.e., the minimum as a percentage of the average wage in the whole economy. These "bites" are consistently smaller in Finland (47-50% in 2016) than in

Table 2 Criteria for differentiation of minimum wages in the Nordic countries

Collective agreement	Age	Experience	Occupation	Region
Hotels and restaurants				
Denmark		X	X	
Norway		X	X	
Finland		X	X	
Sweden	X	X	X	
Retail				
Denmark		X	X	
Norway		X	X	
Finland		X	X	X
Sweden	X	X	X	
Construction				
Denmark		X	X	
Norway		X	X	
Finland		X	X	
Sweden	X	X	X	

Note: The criteria refer to 2016 and apply to non-trainee manual workers who are at least 18 years of age.
Source: See Table 1.

the other countries, and largest in Sweden (55-62% in 2016), except for construction.

Relative minimum wages in hotels and restaurants and retail have evolved differently over time in the Nordics. Compared to 2006, the minimum wage bite in hotels and restaurants in 2016 decreased in all countries except Sweden, where it increased from 60% to 62%. Similarly, relative minimum wages in retail have decreased in Denmark and Norway and increased in Sweden (from 58% to 61%). In construction, though, relative minimum wages have remained rather stable in all countries except for the decline in Denmark.

Displaying the minimum wages only for a standardised worker, Table 1 conceals the fact that minimum wages are differentiated along several dimensions in the collective agreements. Table 2 shows the criteria used for differentiating minimum rates in the selected agreements in the Nordic countries. All of the collective agreements in the four countries differentiate minimum wages by work experience and occupation. Differentiation by occupation always distinguishes between

unskilled and skilled jobs, but differentiation within the two categories also exists in some agreements. For adult workers, age is used as a criterion for differentiation only in the Swedish agreements, and it applies up to the age of 19 or 20. The collective agreement for retail in Finland is the only agreement that differentiates minimum wages by region, with slightly higher rates in areas with higher costs of living.

Differentiation of minimum wages by experience can be justified by economic theory, as more experience is assumed to increase the productivity of the worker. However, a closer look at the differentiation by experience in the collective agreements reveals that it is rather modest. Two years' experience, for example, yielded no higher minimum at all in two countries (Denmark and Sweden) and at most 2.8% (Finland) in hotels and restaurants for an unskilled worker in 2016. The corresponding range in retail is from 3.1% (Norway) to 4.5% (Sweden). Additional experience (above two years and up to at most ten years) is associated with higher minimum wages in almost all of these agreements.

Minimum wages in the Nordics are high by international standards.¹⁵ To the extent that high relative minimum wages act as hurdles for immigrants in the hotels and restaurants industry and in retail, data indicate that this is likely a more severe problem in Sweden than in the other Nordic countries. In line with this argument, our discussion in Section 2 pointed to relatively less successful labour market integration of the large population of immigrants in Sweden. Conversely, relative minimum wages are lowest in Finland. Data also suggest that the hurdles associated with minimum wages have become higher in Sweden during the last decade, while the other three Nordics have moved in the opposite direction and lowered them.

4. Research on minimum wages, spillovers and wage mobility

An assessment of the effects of minimum wages on the functioning of the labour market must address a number of questions concerning efficiency and distributional concerns. How large is the effect on employment in general, and for the low-skilled in particular? Are wages of incumbent and higher-paid employees affected by spillover from minimum wages? Do workers at minimum wages and other low-paid employees get stuck in these jobs or do they proceed to better-paid positions? This section reviews research on these questions, focusing on studies dealing with Nordic labour markets.

4.1 Minimum wages and employment

There is a voluminous international literature on the employment effects of minimum wages, but there is hardly any consensus on the issue.¹⁶ A survey by

Neumark and Wascher (2007) argues that most studies indicate negative effects, albeit in many cases small ones. Several findings also suggest that the negative effects are concentrated among the low-skilled. These views have been challenged in meta studies by Doucouliagos and Stanley (2009) and Belman and Wolfson (2014), who claim that publication bias favouring negative results has exaggerated adverse employment effects. However, these meta analyses do not take into account the methodological quality of the studies.

To what extent are the findings in the international literature relevant in the Nordic context? According to theoretical research, higher minimum wages may have both positive and negative effects on employment. Raising an initially low minimum wage may increase employment because labour supply will be larger. But if the minimum wage is high to begin with, employment will instead decrease because there will be less demand for labour. The competitive model, the monopsony model as well as search and matching models all predict that minimum wages decrease employment if the minimum exceeds the competitive wage, that is the wage at which the labour market clears under perfect competition (see e.g. Cahuc et al. 2014). On theoretical grounds disemployment effects are therefore more likely in the Nordic countries where minimum wages are much higher than in most other countries. Nonetheless, few minimum wage studies are concerned with the Nordic countries. This is somewhat surprising, since these countries are characterised by high minimum wages in low-pay industries that "bite" far into the wage distributions (as noted in Section 3).¹⁷

¹⁵ In OECD countries with statutory minimum wages, these ranged between 25% (US) and 51% (New Zealand) of average wages for full-time workers in 2016, according to the OECD.

¹⁶ See, e.g., Sabia et al. (2012), Giuliano (2013) and Dube et al. (2016) for some of the more recent studies on US data.

¹⁷ The dearth of studies is probably at least partly explained by the fact that the minimum wages are negotiated at the industry level, implying difficulties in matching bargaining areas with industries (as classified in databases available from national statistics offices) as well as uncertainty regarding whether a given worker or firm is actually covered by a collective agreement.

Table 3 Minimum wage studies in the Nordic countries

Study	Country	Target group/ sector and sample period	Analytic approach	Effect on employment
Albæk and Madsen (1987)	Denmark	Unskilled workers, 1976-78	Comparison of wage distributions	Negative Decrease in level of employment
Askildsen et al. (2000)	Norway	Manufacturing, 1991-95	Quasi-experiments	Mixed Increase in job separations to unemployment with increasing minimum wages, no effect on hirings from unemployment with decreasing minimum wages
Böckerman and Uusitalo (2009)	Finland	Youth, retail, 1991-96	Quasi-experiments	Mixed Share of employment and hours decreased after introduction of youth subminimum as well as after its removal
Edin and Holmlund (1994)	Sweden	Youth, engineering industry, 1972-91	Regression	Negative Decrease in level of employment
Eliasson and Nordström Skans (2014)	Sweden	Public sector, 2003-11	Quasi-experiments	Mixed Decrease in hirings. No effect on job separations in general or for immigrants, but increase for individuals with lower school grades
Forslund et al. (2014)	Sweden	Five case studies, 2001-10	Quasi-experiments	None No effect on job separations in general or for immigrants, but increase for individuals with lower school grades
Kreiner, Reck and Skov (2019)	Denmark	Youth, private sector, 2012-15	Quasi-experiments	Negative Increase in job separations
Lundborg and Skedinger (2014)	Sweden	Refugees, young natives, 1998-2007	Regression	Negative Increase in probability of and number of days in unemployment, larger for refugees than for young natives
Skedinger (2006)	Sweden	Hotels and restaurants, 1979-99	Quasi-experiments	Negative Increase in job separations with increasing minimum wages, increase in hirings with decreasing minimum wages
Skedinger (2015)	Sweden	Retail, 2001-05	Quasi-experiments	Negative Increase in job separations. Substitution of workers with higher wages for workers with lower wages

Note: Eliasson and Nordström Skans (2014) are not studying minimum wages in a strict sense but examine the employment effects of a one-shot increase in collectively agreed wages for a selected group of low-wage workers. Quasi-experiments rely on comparisons between individuals affected by a change in the minimum wage and individuals assumed to be unaffected by the change.

Source: Own compilation.

Table 3 summarises the Nordic studies on the employment effects of minimum wages.¹⁸ A majority of the studies – six out of ten – deal with Sweden, two with Denmark and one study each with Finland and Norway. Six studies report consistently negative employment effects, one study is unable to document any statistically significant effect and the remaining three yield mixed results. Various analytical approaches are used. Seven of the studies rely on quasi-experiments where individuals “affected” by minimum wage changes are compared to a control group of “unaffected” individuals.

Four of the Swedish studies examine how hirings and separations from jobs are affected by changes in minimum wages in a quasi-experimental setting. Skedinger (2006, 2015) finds that increased minimum wages cause more workers to lose their jobs or be separated for other reasons in the hotels and restaurants industry and in retail, respectively. Forslund et al. (2014) deal with minimum wage increases in five collective agreements in the private and public sector. Overall, the results indicate small or negligible effects on job separations. Eliasson and Nordström Skans (2014) study minimum wage increases for municipal workers and find that separations from jobs were little affected but hirings declined.

The most recent study, Kreiner et al. (2019), is also quasi-experimental and documents large job losses when Danish teenagers turn 18 – an age after which substantially higher minimum wages apply according to collective agreements. The oldest study in Table 3, by Albæk and Madsen (1987), also finds a negative employment effect but its analytical approach, originally developed by Meyer and Wise (1983), is

rarely used today. It has been criticised for not being robust to different assumptions about the functional form of the wage distribution and how far spillovers reach into the wage distribution (Dickens et al. 1998). Results in Askildsen et al. (2000) for Norway are mixed, but the choice of manufacturing as the target sector is problematic as minimum wages tend to be more binding in other sectors, primarily personal services. This is also manifested by the fact that there are few observations of individuals “affected” by changes in minimum wages in the data set, resulting in little statistical power.

Böckerman and Uusitalo (2009) examine a natural policy experiment in Finland, in which subminimum wages for youth in the retail sector were introduced on a temporary basis.¹⁹ The finding is that both the decrease in minimum wages and the subsequent increase were associated with a decline in employment for youth. The authors argue that the contradictory findings may be attributed to differential labour force or employment trends that they are unable to adequately control for in the short panel at hand.

Three studies (Forslund et al. 2014, Eliasson and Nordström Skans 2014, Skedinger 2015) examine composition effects in the workforce as minimum wages increase and find that more qualified workers are substituted for less qualified ones (which is consistent with many studies for other countries; see Neumark and Wascher 2007). Notably, this includes the one study that does not suggest any negative effect on overall employment (Forslund et al. 2014).

¹⁸ One Nordic study on the employment effects of minimum wages, Sauramo and Solttilla (1985), is not included in Table 3, since it is written in Finnish (in which we lack proficiency). According to the working paper version of Böckerman and Uusitalo (2009), the study finds no negative effects on youth employment.

¹⁹ The subminimum applied to workers below 25 years of age and amounted to 80% of the lowest minimum wage, depending on occupation and region.

Separate results for immigrants are reported in three studies. Eliasson and Nordström Skans (2014) and Forslund et al. (2014) do not find any difference in the probability of separation from a job between natives and foreign born. In contrast, Lundborg and Skedinger (2014) find that refugee immigrants are considerably more likely than young natives to become unemployed as minimum wages increase. Unlike the other more recent studies, the authors rely on a regression framework to identify the effects.²⁰

Several of the features that characterise international research on minimum wages also apply to the Nordic studies. Long-term effects of minimum wages have been examined much less than short-term effects, even though theory suggests that disemployment effects may grow over time as firms adjust their capital-labour ratio (Sorkin 2015).²¹

Another characteristic in common with the international literature is that few studies investigate cuts in the minimum wage (see Hammarstedt and Skedinger 2017). This is not surprising, given that (nominal) decreases of minimum wages are rare. From a policy perspective, this gap in research is serious since the employment effects of wage increases and decreases are not necessarily symmetric. The effects of a decrease may be small because it can take time for new low-wage jobs that can absorb the supply of low-skilled workers to emerge. Employers may also be concerned that a decreased minimum wage would be associated with adverse effects on worker morale and effort. Accordingly, Böckerman and Uusitalo (2009) report low take-up rates of the Finnish temporary subminimum wage for youth. A survey of Swedish employers by Lund-

borg and Skedinger (2016) as well as experimental evidence in Eriksson et al. (2017) also suggest that quite large minimum wage reductions are required before employers are prepared to hire more immigrants.

The Greek experience in the aftermath of the financial crisis may provide the best evidence available on the effects of large reductions of the minimum wage. A reform in 2012 cut minimum wages substantially for workers as part of the country's structural adjustment programme, which was a condition for the rescue loans obtained. The reductions were differentiated by age: 32% for workers below the age of 25 and 22% for older workers. Yannelis (2014) finds a strong positive effect of the minimum wage cuts on employment of young workers relative to that of older workers, most of which was due to a substitution away from the latter to the former group. Karakitsios (2016) finds similar effects of the same reform.

To sum up, the evidence on the effects of minimum wage increases is more suggestive of negative employment effects for the Nordic countries than for other countries. This is consistent with the theoretical prediction that negative employment effects of minimum wages are more likely if these are high as is the case in the Nordics. There is not, however, any empirical research for the Nordic countries on minimum wage cuts.

4.2 Spillover effects

There is overwhelming evidence that minimum wage hikes are associated with wage increases for the lowest paid workers.²² Although rarely studied, minimum wage reductions can be expected to

²⁰ The wage data are too crude to allow a quasi-experimental approach, comparing "treated" individuals to those in a control group "unaffected" by minimum wages.

²¹ Meer and West (2016) find no immediate effects of minimum wage hikes on employment but adverse effects after one and two years.

²² See, e.g., Forslund et al. (2014) and Skedinger (2014) for results concerning Sweden.

have analogous direct effects, at least in the longer run.²³ However, effects of increases and decreases are not necessarily symmetric in the short term, as discussed previously. An often-expressed concern regarding such reductions of minimum wages is the possibly adverse *indirect* effects on the wages of incumbent workers higher up in the wage distribution. Such wage spillover can occur because of production technology. If minimum wage workers (A) and a group of more skilled and highly paid workers (B) are substitutes, employers may seek to hire more of A workers and less of B workers, when the wage of the former group falls. This may force also B workers to accept lower wages. However, if the groups are complements in production, so that B workers become more productive as more A workers are hired, B workers may see an increase in their wage.

The international literature on spillover effects of minimum wages is much smaller than that on employment effects, and the studies invariably consider only minimum wage increases. The findings are mixed: While some studies indicate that minimum wage hikes contribute to higher wages further up in the wage distribution, albeit not reaching very far, others suggest no spillover at all.²⁴ The National Institute of Economic Research (2007) shows that minimum wage increases in 2003–05 compressed the wage distribution in the hotel and restaurant industry and for employees in municipalities in Sweden. The increases also seem to have affected workers above the minima – but still far down in the distribution – through spillover. We are aware of no other Nordic studies on the subject.

As with employment outcomes, it is not clear whether spillover effects of minimum wage increases and decreases are symmetric. It also appears uncertain to what extent the findings in the international literature on wage spillover are applicable to the Nordic labour markets with their collectively bargained minimum wages.

A different, but related, strand of research deals with wage spillover for native workers due to immigration. The extent to which immigration causes wages of native workers to decrease, if at all, is a highly controversial issue.²⁵ Bratsberg and Raam (2012) study the impact of immigrants entering the Norwegian construction industry and exploit the fact that different occupations have different requirements on certification and licensing, giving rise to exogenous differences in immigrant inflows. The finding is that an increase in the number of immigrants entering a particular occupation has a negative effect on the wages of especially low- and medium-skilled natives. In contrast, recent work by Giovanni Peri and co-authors, including Foged and Peri (2016) for Denmark, finds that native workers are pushed into other, better-paying occupations, even though immigration may cause wages to decrease in a specific occupation.²⁶ According to the Danish study, larger refugee immigration increased the propensity of low-skilled natives to move to occupations with more complex tasks, resulting in higher wages for low-skilled natives. The findings indicate that immigrants and natives act as complements in production to each other.

Despite the lack of consensus in the literature, recent research thus indicates that immigration does not necessarily have detrimental effects on native

²³ The study by Yannelis (2014), discussed in Section 4.1, finds that young workers, who were subject to a larger drop in the minimum wage than older workers, also experienced a larger decrease in the average wage.

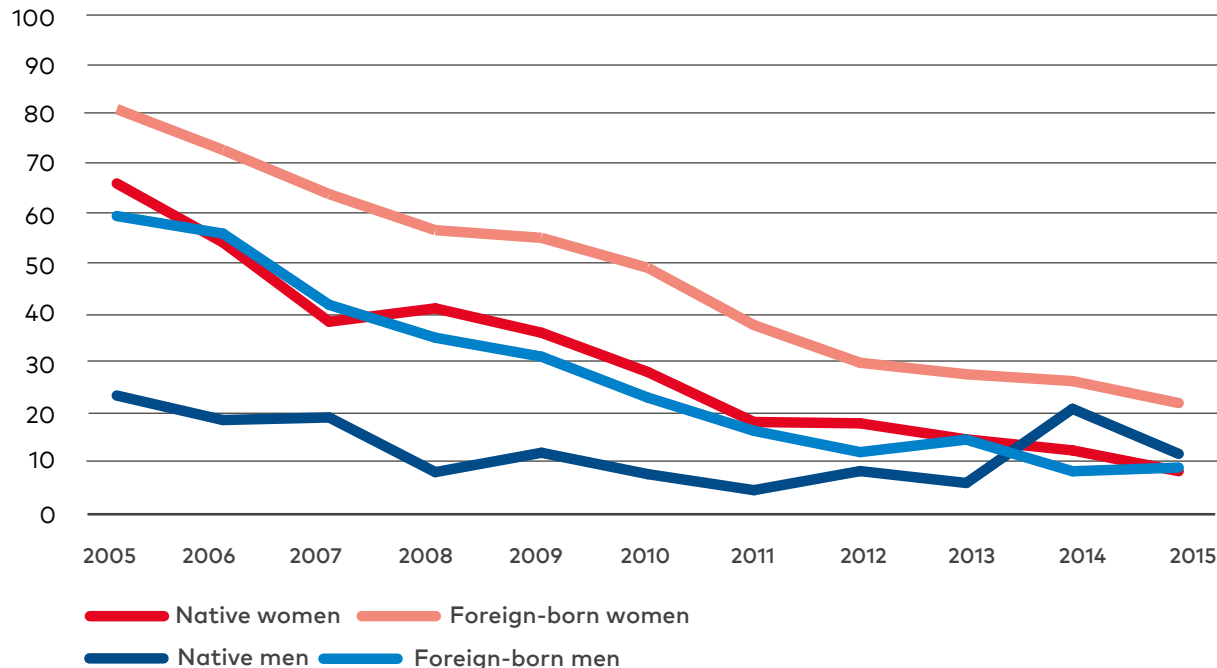
²⁴ See, e.g., Autor et al. (2016) for evidence indicating wage spillovers in the US and Stewart (2012) for evidence to the contrary for the UK.

²⁵ See, e.g., Card and Peri (2016) for a survey of the literature.

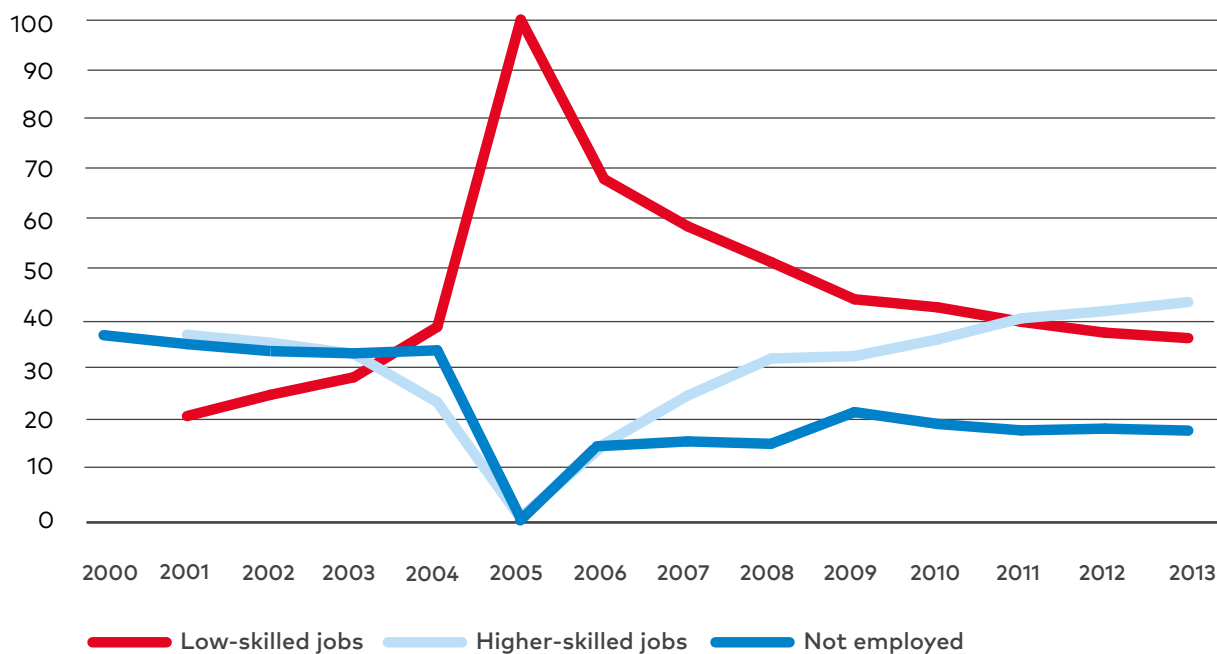
²⁶ See also, e.g., Peri and Sparber (2009), Ottaviano and Peri (2012) and D'Amuri and Peri (2014).

Figure 6 Trajectories of unemployed individuals who were hired on low-skilled jobs in 2005 in Sweden

(a) Persons with a wage in the lowest decile of the wage distribution, percent



(b) Persons in low-skilled jobs, higher-skilled jobs and non-employment, percent



Note: The diagrams apply to individuals aged 25-54 years who had at least 60 days of registered unemployment at the Public Employment Service in 2005 and who were employed in low-skilled jobs according to the International Standard Classification of Occupations in November the same year. These individuals are then tracked five years back (in panel b) and up to ten years forward in time. Panel (a) shows the share of all workers from this group (employed at a particular point in time) who are in the lowest decile of the Swedish wage distribution of workers aged 18-64 years. Panel (b) shows the share of all workers from this group who are either employed in low-skilled (elementary) occupations, higher-skilled (not elementary) occupations or not employed in November in different years. Source: Calmfors et al. (2018a).

workers' wages. This is relevant to our discussion, since it suggests that incumbent workers may be able to transition to other jobs should wages in their current occupation fall, at least if the reduction is caused by large immigration inflows and possibly also if it is due to lower minimum wages.

4.3 Wage mobility

A potential downside of minimum wage cuts to facilitate the creation of low-skilled jobs is the risk that more workers may be stuck with very low wages. Therefore, the extent to which low-wage workers are able to proceed to jobs with higher skill requirements and higher wages is important for the long-run effects of minimum wage policy.

There is a large international literature on wage and earnings mobility.²⁷ It explores the characteristics of low-wage workers and whether low-wage jobs act as stepping stones to better-paid jobs or lead to lower future wages through, e.g., stigmatisation or deterioration of human capital.

Forslund et al. (2012) and the National Institute of Economic Research (2014) study workers in the lowest decile of the Swedish wage distribution in 2000 and 2008, respectively. Only few of these workers experienced low-wage persistence in the long term, but it was more common for women, older workers, lower educated and foreign born. Nonetheless, most workers leaving jobs with low wages did not move very far upwards in the wage distribution according to the second study. Similar results are presented by Skedinger (2014), who analyses low-wage persistence in the short term in the Swedish hotel and restaurant industry and retail. Few workers in the lowest decile of the intra-industry wage distribution

remained there in the following year, but most workers moved only to the second-lowest decile.

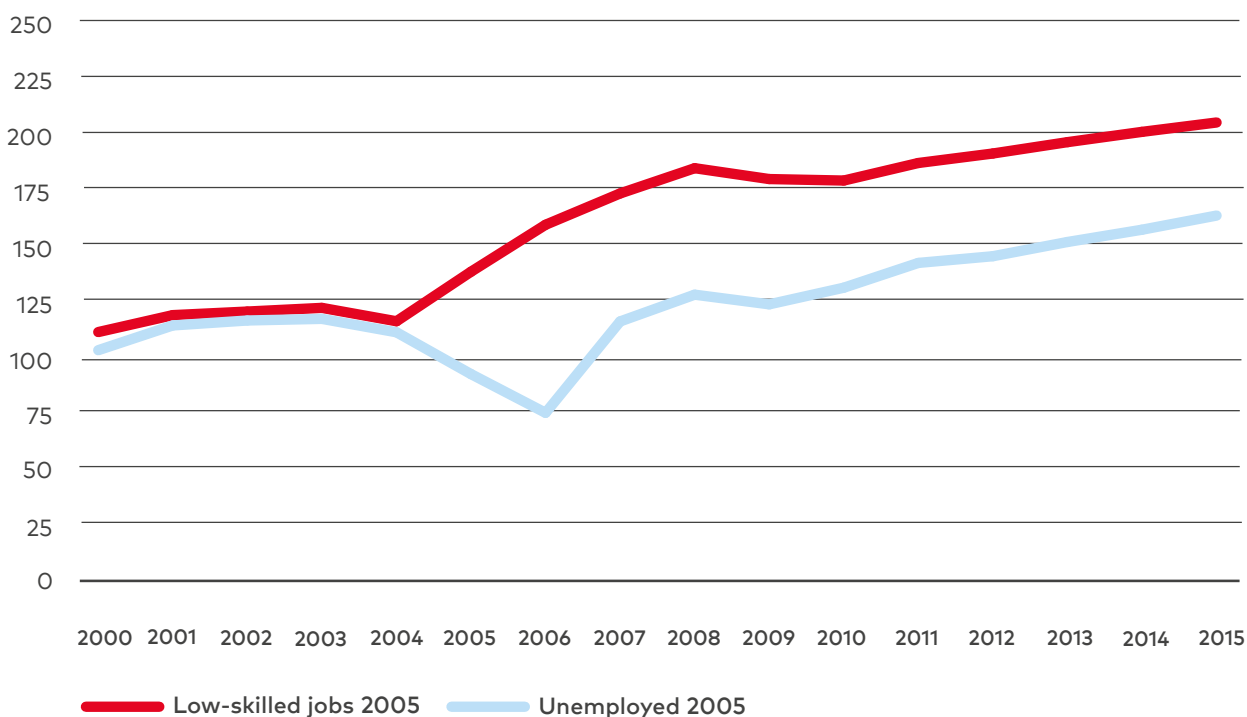
For Denmark, Deding (2002) finds that men and workers with less work experience had a higher probability of leaving low-wage employment between 1992 and 1995 than women and more experienced workers. Swedish low-wage workers who switch sector, occupation, workplace or participate in education have an increased probability of leaving low-wage employment, according to the National Institute of Economic Research (2014).²⁸

In previous work (Calmfors et al. 2018a), we study the stepping-stone effect of low-skilled jobs in, e.g., cleaning, hotels and restaurants in Sweden – elementary occupations in the terminology of the International Standard Classification of Occupations. We examine the long-term labour market outcomes for unemployed persons who took such jobs in 2005, as shown in Figure 6. Panel (a) reports the share of all employees from this group who had a wage in the lowest tenth of the wage distribution between 2005 and 2015. Although many workers, especially foreign born and women, are hired at wages in the lowest decile of the wage distribution, the majority transition to higher wages over time. Quite a few of them also eventually move to more skilled occupations. This is evident from panel (b), which shows the share of all individuals in the studied group who were employed in low-skilled jobs, in higher-skilled jobs and not employed in November 2000-13. For instance, eight years after entry into a low-skilled job, 43% were employed in occupations with higher skill requirements.

²⁷ See McKnight et al. (2016) and Schnabel (2016) for reviews of the international literature. Asplund and Eriksson (2000) provide a review of earlier research from the Nordics.

²⁸ In general, foreign studies show that education and (on-the-job) training increase the probability of – but far from guarantee – upward wage mobility and future employment. The effect likely depends on the scope and quality of the training (see McKnight et al. 2016 for a discussion).

Figure 7 Annual earnings of unskilled unemployed individuals who were hired in low-skilled jobs or who remained unemployed in November 2005 in Sweden, in thousand SEK



Note: The figure compares the annual earnings (in thousand SEK, 2015 prices) of low-skilled individuals (less than upper secondary school education), aged 25-54 years, who had at least 60 days of registered unemployment at the Public Employment Service (PES) in 2005 and who were employed in low-skilled jobs in November the same year, with earnings of low-skilled individuals, also with at least 60 days of unemployment, who remained registered at the PES in November. We utilise nearest neighbour matching to make individuals within the two groups more comparable. Matching is performed on gender, birth region and educational attainment (exact matching) as well as age, years since immigration (for foreign born), earnings in 2004 and registered unemployment days in 2004 and 2005 (as close matching as possible). Matching is performed with replacement. All workers in low-skilled jobs in 2005 are matched to persons who were unemployed in 2005 but not vice versa.
Source: Calmfors et al. (2018a).

Further analysis in Calmfors et al. (2018a), however, shows that this process does not lead very far – neither in terms of the wage level nor occupational skill requirements. Around 15% of workers also quickly leave employment after entering low-skilled occupations. Foreign-born and low-skilled workers have less favourable long-term labour market outcomes than natives and high-skilled workers, but low-skilled jobs act as a path to employment to a larger extent for foreign born than for natives. Another observation is that among the unemployed with tertiary education who take up low-skilled jobs, many are foreign-born. Finally, we find a positive, but small, relationship between the share of high-skilled jobs at the firm of the low-skilled job entrants and their probability of transitioning to occupations

with higher skill requirements in the future. Hence, the characteristics of the workplace also seem to affect future wage and job mobility.

Figure 7 estimates the effect on annual earnings of entering a low-skilled job. We compare the annual earnings of low-skilled, unemployed individuals taking such jobs with those of unemployed who remained registered at the Public Employment Service in November 2005. The latter group thus acts as a control group. To improve comparability of the two groups, we match each individual from the first group to an individual in the second group with as similar observable characteristics as possible. Then we only compare the outcomes of the matched individuals. According to the results, average earnings

were markedly higher among the unemployed who took low-skilled jobs than in the control group – both in the short and long term.²⁹ Taking low-skilled jobs may thus be a favourable strategy for the unemployed with little education.³⁰ Even so, low-skilled jobs do not generally work as shortcuts to more qualified jobs: the share of workers in jobs with higher skill requirements in 2013 was markedly lower among workers who took low-skilled jobs than for those who remained unemployed in November 2005 (Calmfors et al. 2018a). This means that one should not expect low-skilled, low-paying jobs to quickly lead to better-paid jobs, even though a sizeable share of the low-skilled entrants eventually transitioned to more skilled occupations.

There is some related Nordic research on the wage assimilation of immigrants. Husted et al. (2001) and Nielsen et al. (2004) find that the wage catch-up for non-labour immigrants in relation to natives in Denmark is strongly related to work experience, especially for males. This suggests that finding a job soon after arrival is important for future wage levels. Ansala et al. (2018) report that entry-job characteristics, like co-worker earnings, strongly predict both initial and future annual earnings for immigrants in Sweden and Finland. Apparently, the nature of the entry job – not just having found one – also plays an important role.³¹

5. Policy conclusions

Our analysis has shown that there are large groups of low-skilled immigrants in the Nordic countries and that labour market integration is problematic

mainly for these immigrants (and much less so for those with higher skills). We have also documented relatively high wage floors in industries that employ low-skilled workers. Our conclusion is that the productivity of many low-skilled immigrants does not match the wage levels associated with the Nordic labour market models.

Could minimum wage reductions improve labour market prospects for low-skilled immigrants? We think so, but such cuts would probably need to be fairly large, implying a trade-off between increased employment and increased wage inequality that should be taken seriously.³² In our opinion, the case for minimum wage reductions to improve labour market integration for immigrants is strongest in Sweden, almost as strong in Denmark, Finland and Norway, but weak in Iceland. Sweden stands out with the largest number of immigrants born outside the EU28 relative to the working-age population, the largest employment gap between natives and those born outside the EU28, and the highest minimum wages in the low-wage sectors that we have examined.

It is sometimes argued that low take-up of generous employment subsidies is evidence against large employment effects of minimum wage cuts.³³ But employer surveys show that this is not necessarily the case, since employers report a multitude of reasons for not using employment subsidies despite lower wage costs: a belief that those eligible for support do not have the appropriate skills, a lack of knowledge about the availability of subsidies, demanding contacts with the authorities, the need

²⁹ Even though we use matching to control for observable worker characteristics in our analyses, there may still be unobserved heterogeneity between the groups that we have not accounted for. Consequently, the results should be interpreted with some caution.

³⁰ This is also suggested by the international literature on low-wage persistence (see Schnabel 2016).

³¹ See also Barth et al. (2012) and Eliasson (2013) for studies on the wage catch-up of immigrants relative to natives in Norway and Sweden.

³² The trade-off between increased employment and increased income inequality is less certain, as there are large differences in income between those with and those without jobs.

³³ See, e.g., Swedin (2017).

for mentoring and so forth (Calmfors et al. 2018a). One could add that the temporary nature of the employment subsidies and their being subject to political discretion also make it quite unlikely that firms would endeavour to set up large-scale operations relying on such subsidies. It has proven especially difficult to achieve large volumes for programmes that combine subsidised employment with education and training. The Swedish vocational introduction jobs, YA jobs (*yrkesintroduktionsanställningar*), for youths, the long-term unemployed and newly arrived immigrants, is a case in point. YA jobs require the employer to have a collective agreement, are complex to administrate and engaged only 600 participants in January 2019, which is far below expectations when the programme was launched in 2014.

In 2016, Denmark introduced a special programme with subminimum wages for refugees, the Basic Integration Training Programme, IGU (*integrationsgrunduddannelse*).³⁴ Refugees and their reunited family members, aged 18-40, who have resided in Denmark less than five years are eligible for the two-year programme, which combines work with 20 weeks of schooling. Unlike the Swedish YA jobs, employers are not required to have a collective agreement. Employers should apply the minimum wage for trainees in the corresponding agreement. These wages are in most cases lower than the regular ones for non-trainees but differ substantially across agreements. In hotels and restaurants, for example, IGU workers are at present (December 2018) entitled to 62% of the regular industry minimum during the first year and 68% during the second, while the corresponding figures for 18-25-year-olds in construction are 79% and 93%, respectively. Those aged 26 and older in construction receive no less than 100% of the minimum. As in the YA programme, take-up rates have been low, with only about 1 800

workers having registered from July 2016 to November 2018 (Ministry of Immigration and Integration 2018b). Critics of the programme have zeroed in on its bureaucratic procedures, including the stipulation that workers receive a wage that differs by industry rather than a flat, low rate (Centre for Political Studies 2017).

As argued in Calmfors et al. (2018a), *global* minimum wage reductions, pertaining to the whole labour market, are likely to result in higher employment but also wider wage disparities, since many incumbent workers – both those on minimum wages and some of those indirectly affected through spillovers – would probably see their wages decline. Some form of *targeted* minimum wage reductions could achieve a better balance between the two conflicting goals of high employment and wage equality. The proposal outlined in Calmfors et al. (2018a) builds upon the idea that minimum wage reductions should apply only to permanent, new types of jobs for the low skilled. Tasks in these jobs, which could include janitors, receptionists, handymen, caretakers, manual help/assistants (in construction), “pick and pack” (in warehouses) and the like, should involve various types of assistance to more skilled workers. Due to high wage floors, these tasks are not carried out at all today or performed by the skilled workers themselves according to employer surveys. If the new workers are complementary to the existing work force, so that their productivity increases, wage spillovers could be positive rather than negative. We also noted above that the labour market mobility of low-wage and low-skilled workers tends to be higher in firms with more skilled workers. This suggests that low-skilled jobs that complement more qualified ones could be associated with higher wage mobility than other low-skilled jobs.

³⁴ See Ministry of Immigration and Integration (2018a) for more details.

The poor take-up rates in the Swedish YA and Danish IGU programmes, in particular, point to the importance of minimal bureaucracy and a flat, low wage rate. About a third of Swedish employers report that they would hire workers in new types of low-skilled jobs for monthly wages of SEK 14 000-15 000 (about € 1 470-1 580, and roughly 70% of the minimum wage in hotels and restaurants and retail at the time of the survey). This could be an appropriate wage level in the new types of jobs. It is preferable that the subminimum is negotiated between employers and unions and not introduced through legislation. Political involvement in wage setting is not only alien to the traditional Nordic labour market models, but also increases the risk of opportunistic election promises from politicians in the longer term.

To reduce the risk that workers in the new jobs get stuck in low-wage jobs, it is important that training and education opportunities are provided. However, forcing employers to provide them may not be a viable policy option since this can affect their willingness to hire workers. An alternative strategy is to give workers generous possibilities to combine low-wage jobs with education, with financial study support given directly to individual employees. This could increase possibilities of advancing to higher-paying jobs. Even so, workers without the necessary skills required by current minimum wage levels can be expected to receive lower future wages than those of incumbent low-wage workers. It is not realistic to assume that very low-paid jobs would enable the foreign born with a weak connection to the labour market to quickly proceed to more qualified and higher-paying jobs. This speaks to the usefulness of targeting earned income tax credits to low-wage workers to reduce net-of-tax wage inequality and stimulate labour supply to such jobs.

A targeted minimum wage reduction could be combined with other changes in the minimum wage systems in the Nordic countries. As we have seen, differentiation of minimum wages is quite modest and could be expanded, both according to experience and region.³⁵ If, say, lower minimum wages for inexperienced workers were combined with a contemporaneous hike of those for more experienced workers, this would not necessarily increase wage inequality in a life-cycle perspective.

As discussed previously, the employment impact of minimum wage reductions seems to be more uncertain than that of increases, simply due to the fact that the former are more unusual and thus have not been studied to the same extent. This makes careful evaluation of any future minimum wage reductions all the more important. It would be helpful if some minimum wage changes could be carried out in an experimental setting, as proposed by Hammarstedt and Skedinger (2017), in order to improve our knowledge of the employment effects of minimum wages.³⁶

Discussions on labour market integration have suffered from a tendency to regard minimum wage reductions as a *substitute* to other policies, such as adult education and employment subsidies. A more constructive approach is to see the different policies as *complements*. Taken in isolation, minimum wage reductions, adult education and employment subsidies cannot be expected to strongly enhance employment, according to the empirical evidence reviewed in Calmfors et al. (2018a). If minimum wage reductions are part of a wider policy package, however, the combined effects on labour market integration of immigrants could be substantial.

³⁵ Greater differentiation of minimum wages to improve labour market integration has also been advocated in the Swedish context by Nordström Skans et al. (2017)

³⁶ See Horton (2017) for a randomised field experiment on the employment effects of minimum wages in the US.

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Denmark, Finland, Norway and Sweden face similar problems of integrating large groups of immigrants, especially low-educated ones from outside the EU, into their labour markets. In this volume, researchers from across the Nordic Region analyse how labour market integration of immigrants can be promoted. Education policy, active labour market policy, social benefit policy and wage policy are analysed. A key conclusion is that no single policy is likely to suffice. Instead, various policies have to be combined. The exact policy mix must depend on evaluations of the trade-offs with other policy objectives.