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Accumulation of welfare problems among immigrants in Norway

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Accumulation of welfare problems among immigrants in Norway

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Preface

This report analyses a large-scale survey of living conditions among immigrants in Norway. Data were collected by Statistics Norway in 2016 and covered 12 of the largest immigrant groups in Norway. The aim of the present report is to analyse the kinds of welfare problems experienced by immigrants. Which immigrants accumulate most welfare problems? What are the main predictors of welfare problems among immigrants in Norway? How does the accumulation of welfare problems relate to general life satisfaction among immigrants? In addition, we compare the accumulation of welfare problems among immigrants with the total population.

An early draft of this report was presented at the *International Forum on Migration Statistics 2018*, in Paris in January. A more recent draft was presented internally at a seminar for migration researchers at Oslo Metropolitan University. We would like to thank participants at both events for constructive and valuable feedback. This project was commissioned and financed by the Directorate of Integration and Diversity (IMDi). We would like to thank IMDi for making possible this interesting and challenging project, and especially Anja Wedde Sveen and Eivind Hageberg, both at IMDi, for cooperation underway. Project leader has been Kristian Rose Tronstad of the Norwegian Institute for Urban and Regional Research, NIBR. Tronstad has conducted the statistical analyses and written most of the report. Marit Nygaard at NIBR has contributed on analysis and discussion of the results. Miia Bask at Norwegian Social Research, NOVA, has written about the theory of accumulation of welfare problems in Chapter 3.

Oslo, April 2018

Geir Heierstad,
Head of research, NIBR

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Sammendrag

Kristian Rose Tronstad, Marit Nygaard og Miia Bask

Accumulation of welfare problems among immigrants in Norway

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Denne analysen utnytter SSBs levekårsundersøkelse blant innvandrere 2016 og bidrar med ny kunnskap om innvandreres integrering ved at den ser på opphopning av levekårsproblemer på flere ulike områder. Analysen omfatter innvandrere over 16 år som selv har innvandret til Norge med bakgrunn fra Afghanistan, Bosnia-Herzegovina, Eritrea, Iran, Irak, Kosovo, Pakistan, Polen, Somalia, Sri Lanka, Tyrkia og Vietnam. De tolv landgruppene utgjør noen av de største innvandregruppene i Norge, de er bosatt i hele landet, med ulik botid og innvandringsgrunn. Dataene er representative for de tolv landgruppene, men er ikke representativ for alle innvandrere i Norge, som har bakgrunn fra mer enn 200 ulike land og selvstyrte regioner.

Rapporten identifiserer velferdsproblemer knyttet til arbeid, bolig, inntekt, nabolag, sosialt marginaliserte, dårlig helse og psykiske problemer, og analyserer hvilke levekårsproblemer som er hyppigst blant innvandrere, og i hvilken grad velferdsproblemer hopper seg opp i enkelte grupper av innvandrere. Analysen inneholder også analyser av hvilke kombinasjoner av levekårsproblemer som er mest vanlig blant innvandrere fra de 12 landgruppene. I tillegg til å fokusere på levekårsproblemer inneholder rapporten en analyse av hvordan dårlige levekår påvirker innvandreres livskvalitet. Utover å analysere livskvalitet og opphopning av levekårsproblemer for innvandrere i Norge, inneholder rapporten enkle sammenligninger av levekår og livskvalitet mellom innvandrere og befolkningen som helhet basert på Barstad (2016).

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Analysen viser at

- **Innvandrere opplever mer opphopning av levekårsproblemer.** Det er nesten dobbelt så stor sjanse for at en med innvandrerbakgrunn opplever stor opphopning (>3 levekårsproblemer) sammenlignet med hele befolkningen. Blant innvandrerkvinner har en av fire (27%) mer enn tre levekårsproblemer, mens en av fem (20%) innvandrer menn har levekårsproblemer på tre eller flere områder.
- **Innvandrere opplever mer levekårsproblemer og på andre områder enn befolkningen ellers.** Innvandrere opplever i mye større grad problemer knyttet til boligsituasjon og lav tilknytning til arbeidsmarkedet sammenlignet med befolkningen ellers. I hele befolkningen er det problemer med helse og med nabolaget som er de hyppigste.
- **Uførhet, arbeidsledighet, lav utdanning og kort botid** er faktorer som i sterk grad henger sammen med opphopning av levekårsproblemer. Innvandrerkvinner opplever mer levekårsproblemer enn menn, og i motsetning til i majoritetsbefolkningen er det ikke slik at levekårsproblemene avtar med økende alder. Innvandrere som er bosatt i byer har mer opphopning av levekårsproblemer sammenlignet med innvandrere bosatt på mindre tettsteder og i distriktene.
- **Stor variasjon mellom ulike landgrupper.** Innvandrere fra Polen, Bosnia, Kosovo, men også Vietnam og Eritrea har mindre levekårsproblemer sammenlignet med innvandrere fra Somalia, Irak og Afghanistan, også når vi kontrollerer for kjønn, alder, utdanning, botid, bosted og familiesituasjon.
- **Enslige med barn.** I hele befolkningen er enslige med barn en gruppe av som opplever mest opphopning av levekårsproblemer (15 prosent har mer enn fire levekårsproblemer). Blant innvandrere finner vi en tilsvarende er tilsvarende andel (13 prosent), men det er ikke signifikante forskjeller i opphopning av

levetårproblemer, sammenlignet med enslige uten barn eller par med eller uten barn blant innvandrere.

- **Arbeid, bolig og inntekt.** Blant innvandrere problemer knyttet til arbeid og bolig, samt arbeid og inntekt de to hyppigste kombinasjonene av levetårproblemer (16 prosent opplever disse to kombinasjonene). For majoritetsbefolkningen er nedsatt helse og liten tilknytning til arbeidslivet, og nærmiljø- og boligproblemer de to hyppigste (ca. 5 prosent opplever disse levetårproblemerne).
- **Hvordan du har det og hvordan du tar det.** Innvandrere og befolkningen ellers oppgir i gjennomsnitt høy grad av tilfredshet med livssituasjonen (gjennomsnittskår 8, på en skala fra 0-10.) Ikke uventet er innvandrere med mange levetårproblemer langt mindre fornøyd med livssituasjonen sammenlignet med innvandrere og andre som ikke har noen opphopning av levetårproblemer. Somaliere er en av innvandrergruppene som har mest opphopning av levetårproblemer, men er samtidig den gruppa som rapporterer om høyest tilfredshet med livet.
- **Mental uhelse og økonomiske problemer påvirker livskvaliteten negativt.** Alle typer levetårproblemer reduserer livskvaliteten, men vi finner at de som har symptomer på angst og depresjon og eller har økonomiske problemer rapporterer om dårligst livskvalitet.
- **Analysen gir et øyeblikksbilde.** Denne analysen er basert på tverrsnittsdata. Vi ha analysert statistiske sammenhenger mellom ulike levetårproblemer og livskvalitet på et tidspunkt (2016), men dataene gir i liten grad mulighet til å avdekke dynamikken og kausale sammenhenger i hvordan disse tingene hoper seg opp over tid. En slik analyse vil kreve forløpsdata.
- **Matteus-effekt?** Den som har mye skal få mer, og den som har lite skal også miste dette. Slik kan den såkalte Matteus-effekten sammenfattes. Tidligere forskning har vist at noen individer og grupper av mennesker opplever ekskludering på flere områder. Denne analysen viser at

innvandrere i større grad enn majoritetsbefolkningen erfarer at problemene hoper seg opp. Den lave tilknytningen til arbeidsmarkedet for mange innvandrere, og spesielt blant mange innvandrerkvinner ser ut til å være en viktig faktor for å forklare utenforskapet.

Summary

Kristian Rose Tronstad, Marit Nygaard og Miia Bask

Accumulation of welfare problems among immigrants in Norway

NIBR Report 2018:8

Drawing on the 2016 Statistics Norway survey of living conditions among immigrants, this report contributes new insights about the integration of immigrants by examining the accumulation of problems related to living conditions in several different domains. The analysis concerns adult immigrants to Norway, with backgrounds from Afghanistan, Bosnia and Herzegovina, Eritrea, Iran, Iraq, Kosovo, Pakistan, Poland, Somalia, Sri Lanka, Turkey and Vietnam. These 12 country groups constitute some of the largest immigrant groups in Norway: They reside throughout the country, have been in Norway for varying lengths of time, and have migrated for a range of reasons. The data are representative of these 12 country groups – but not of all immigrants in Norway, who have backgrounds from more than 200 different countries and autonomous regions.

The report identifies welfare problems related to work, housing, income, neighbourhood, social isolation, poor health and mental health problems. We analyse which problems related to living conditions are the most common among immigrants, and the extent to which welfare problems accumulate in certain groups. Further, we examine which combinations of living-condition problems are most common among immigrants from these 12 country groups, and how poor living conditions affect immigrants' perceived quality of life. In addition, the report presents comparisons of living conditions and quality of life between immigrants and the population as a whole, based on Barstad (2016).

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Our findings in brief:

- **Immigrants experience more problems related to living conditions.** Immigrants are almost twice as likely to experience major accumulation of welfare problems (> 3) compared to the entire population: 27% among immigrant women, 20% among immigrant men.
- **Immigrants experience more welfare problems and problems in other areas compared with the total population.** Immigrants experience more problems related to housing and low participation in the labour market, compared to the general population. In the entire population, health and neighbourhood problems are the most frequent welfare problems reported.
- **Disability, unemployment, low formal education and short duration of residence** are factors strongly associated with accumulation of problems related to living conditions. Immigrant women experience more such problems than do men and, unlike the case in the majority population, these problems do not lessen with increasing age. Immigrants living in cities accumulate more problems related to living conditions than do immigrants living in smaller towns and rural areas.
- **Large variation among country groups.** Immigrants from Poland, Bosnia, Kosovo, but also Vietnam and Eritrea, report fewer problems related to living conditions than do immigrants from Somalia, Iraq and Afghanistan, even when we adjust for gender, age, level of formal education, duration of residence, housing and family situation.
- **Single parents with children.** In the entire Norwegian population, single parents with children experience the greatest accumulation of welfare problems (15% have more than four welfare problems). The proportion is similar among immigrants (13%). However, among immigrants, we do not find significant differences in accumulation of welfare problems regarding single persons without children or couples with or without children.

- **Work, housing and income.** Among immigrants, problems related to the combination of work and housing, as well as work and income, are the two most frequent combinations of welfare problems (16% experience these two combinations). For the majority population, health problems and low labour-market attachment, and housing and problems in residential areas are the two most frequent combinations of welfare problems (about 5% experience these problems).
- **Welfare problems mean less satisfaction with life.** Immigrants generally report high levels of life satisfaction (on average, scoring 8, on a scale from 0-10) Not unexpectedly, immigrants with many welfare problems are far less satisfied with their life situation than are immigrants and others without welfare problems. However, Somalis tend to accumulate the most welfare problems, but are also the immigrant group who report highest life satisfaction.
- **Mental health and financial problems** affect the quality of life significantly. Experiencing any kind of welfare problem reduces the quality of life, but persons who suffers from symptoms of anxiety and depression and who have financial problems report the lowest quality of life.
- **The analysis gives a snapshot.** Our analysis is based on cross-sectional data. We have analysed the statistical relationships between combinations and accumulation of welfare problems, and the relationship on quality of life at one point in time (2016). These ‘snapshot’ data provide little opportunity to uncover the dynamics and causality of how welfare problems accumulate over time. Such analysis requires longitudinal data.
- **Matthew effect?** The rich get richer and the poor get poorer – that sums up the ‘Matthew effect’. Our analysis shows that immigrants experience accumulating welfare problems, to greater extent than the majority population. For many immigrants, and especially among immigrant women, low labour market attachment appears to emerge

as an important factor behind the accumulation of other welfare problems.

1 Introduction

1.1 Aim of this study

The aim of this report is to analyse living conditions among immigrants in Norway. More specifically: do welfare problems accumulate among immigrants, compared to the Norwegian population in general – and if so, how? Earlier research has indicated that if a person experiences one welfare-problem, that increases the probability of experiencing other problems as well (Barstad 2016).

The research questions analysed here are the following: What kinds of welfare problems do immigrants have? Among immigrants, who experience and accumulate most welfare problems? What are the major predictors for welfare problems among immigrants in Norway? What are the most common combinations of welfare problems? How does accumulation of welfare problems relate to general life satisfaction among immigrants? While focusing on immigrants, we also compare the situation for immigrants with that of the total population in Norway, where possible.

Most studies on the accumulation of welfare problems use large-scale surveys, such as the European Income and Living Condition Survey (EU-SILC) that target the total population. Immigrants in Norway constitute a relatively small group in the total population; however, the immigrant population is a very diverse one as regards to country of origin, duration of residence, educational background and skills, and family situation. Hence, datasets like the EU-SILC are less suited for analysing the accumulation of welfare problems and variation in living conditions between different groups of immigrants in the case of Norway.

In this study, we draw on a large-scale survey of living conditions among immigrants in Norway, conducted by Statistics Norway in 2016. Participants were immigrants from 12 countries that are among the largest immigrant-sending nations to Norway. Statistics Norway has interviewed a representative sample of immigrants from Afghanistan, Bosnia and Herzegovina, Eritrea, Iran, Iraq, Kosovo, Pakistan, Poland, Somalia, Sri Lanka, Turkey and Vietnam.

2 Background

The Norwegian welfare state is characterized by high labour market participation, considerable public spending on welfare, and the promotion of equal opportunities. A central task of the welfare state is to hinder the accumulation of welfare problems among individuals or groups. In line with this, the national integration policy could be regarded as a set of measures intended to facilitate the aims of the welfare state, and to provide immigrants with equal rights, duties and opportunities in Norway.

2.1 A more diverse society

Migration to Norway has increased significantly over the past 50 years. In 1970, only 1.5% of the population were of immigrant background, and were mainly from other Nordic and European countries. By the beginning of 2017, almost 900 000 or 16.7% of the population were immigrants or children born in Norway to two foreign-born parents. More than half a million of the immigrant population in Norway came from Asia, Africa, Latin America, or non-EU European countries (Statistics Norway 2017).

Over the past ten years, two developments have lifted immigration and integration to the top of the political agenda in Norway. First, in 2004 and 2007, enlargements of the common European labour market triggered a huge influx of labour migrants, especially from Poland and the Baltic states. Second, Norway received 31 500 asylum-seekers in the wake of the refugee crisis in late 2015.

More than a million asylum-seekers were registered in the EU/EEA in 2015. Norway ranked fourth behind Germany, Sweden and Austria as the country with the highest number of asylum applications, adjusted for population size (Eurostat 2017). In

addition to the recent inflow of labour migrants and humanitarian migrants, family migration to Norway has risen steadily, now comprising around one third of the total inflow over the past 25 years (Statistics Norway 2017).

2.2 Successful integration, but there are challenges

Previous studies indicate that integration outcomes for immigrants in Norway, as compared to other countries, are reasonably good (OECD 2015, Tronstad 2016). The level of education is relatively high among immigrants in Norway, and it has increased over time. The employment rate among immigrants is higher in Norway than in the other Scandinavian countries or in most other EU countries. The same applies to income level, adjusted for purchasing power parity. Also among immigrants with low levels of formal education, employment rates of immigrants are relatively high in Norway. In addition, immigrant women have higher employment rates in Norway than in most other European countries (OECD 2015, Tronstad 2016).

However, behind these indicators of integration outcomes, there are persistent gaps between the majority and the minority populations in important areas of society. Many immigrants, also those with high levels of formal education, have poor Norwegian reading skills. Immigrant households are far more likely to be at risk of poverty than are native-born Norwegian households. Children raised in immigrant households are four times more likely to live in 'poor households' compared to children whose parents are not immigrants (OECD 2015, Tronstad 2016).

The persisting gaps between native Norwegians and foreign-born have spurred massive public debate about migration and the sustainability of the Norwegian welfare state. On the one hand, migration of relatively young people of core working age is considered a key component to counteract the demographic development of an aging population and population decline in rural areas. On the other hand, immigration, particularly immigration of refugees, is costly. The long-term perspective is for immigrants and their children to be net contributors and not net receivers of public transfers over their life-span (NOU 2017:2).

In a short-term perspective, the Norwegian government invests in the newcomers by providing language training and a compulsory and paid introduction programme for refugees. The latter programme is full-time and lasts for two to three years. It includes comprehensive language training, social studies and labour-market measures (Hernes & Tronstad 2014). A recent evaluation of the introduction programme found that there were huge differences in short-term and long-term integration outcomes between various groups of refugees, related to, *inter alia*, gender, level of formal education and country of origin. The evaluation confirmed findings from previous studies and also found considerable variation in integration outcomes for refugees depending on which municipalities they were settled in (Djuve et al. 2017)

Another recent study, drawing on Norwegian longitudinal administrative data covering labour earnings and social insurance claims over a 25-year period, found encouraging signs of labour market integration for refugees and family migrants during an initial period (Bratsberg, Raaum & Røed 2017). However, this study also found that the initial period of convergence between immigrant/native employment differentials reversed after approximately 10 years of residence. After that, employment and social insurance differentials increased between native Norwegians and the various entry classes of immigrants.

2.3 Concern over the costs of immigration

Considering the high level of immigration to Norway and the relatively low level of economic integration among many groups of immigrants, the positive fiscal effect of immigration on the public purse is highly questionable (OECD 2013).¹ A report from Statistics Norway analyses the contribution to the long-term growth in national income per capita and fiscal sustainability from migration to Norway thus far in the 21st century (Holmøy & Strøm 2017). According to this report, Norway is facing a fiscal sustainability problem, independent of migration, caused mainly by the ageing of the population. However, a realistic migration scenario is assumed to enlarge (not reduce) the fiscal gap each year

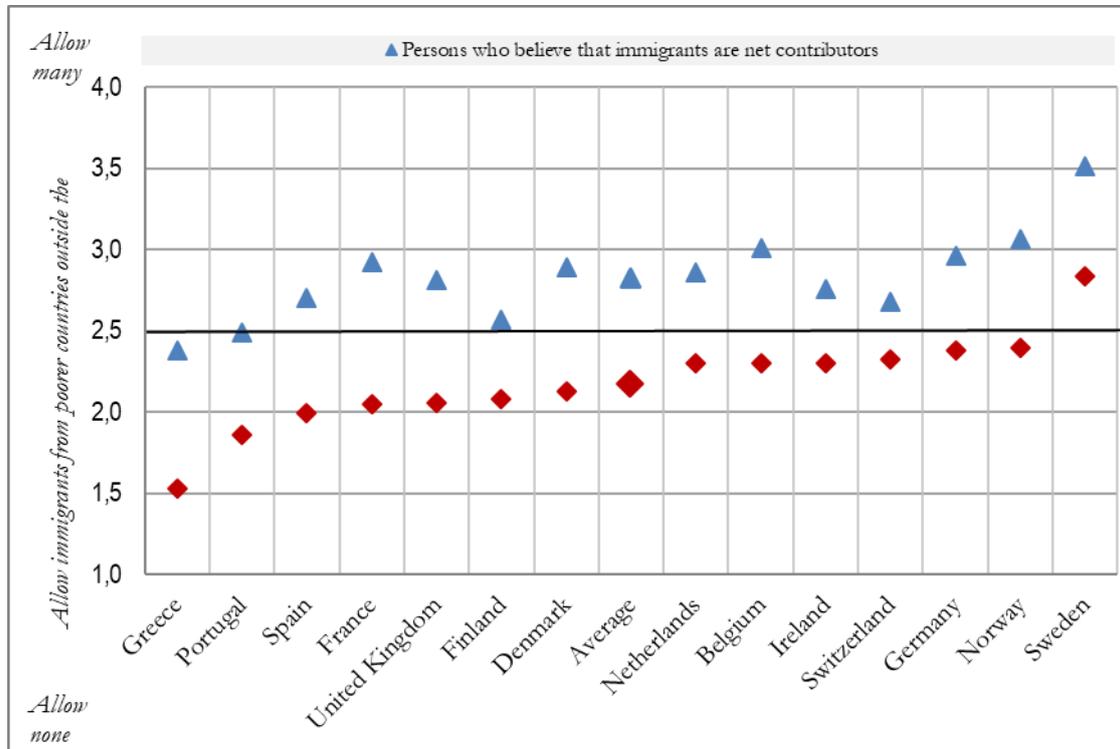
¹ 'Fiscal impact of immigration on OECD countries'. Chapter 3, International Migration Outlook 2013. OECD.

after 2025 by approximately 2.5% of mainland GDP (Holmøy & Strøm 2017).

In many European countries, there is public concern over immigrants' use of the welfare system. Analyses from the European Social Survey, OECD (2013), found a strong association between the desirability of further migration and perceptions of immigrants' fiscal contribution. Further, people who believe that the fiscal impact of immigration is positive are also more inclined to welcome additional migration.

Figure 1 shows the average score on a scale from 1 to 4, where 1 indicates unwillingness to allow more immigrants from poor countries, and 4 indicates willingness to receive many immigrants from poorer countries outside the EU/EFTA. Respondents who see migrants as net contributors are significantly more willing to receiving more migrants from poor countries. Sweden emerges as the only country where people who believe that immigrants are net recipients on average also welcome additional immigration from poor countries.

Figure 2.1: *Attitudes towards immigration from poor countries and perception of immigrants as net recipients or net contributors*



Source: *European Social Survey, OECD 2013*

This association does not necessarily mean that the fiscal impact is the main determinant of views on migration. However, there is clearly a link between the perceptions of the fiscal impact and public acceptance of additional migration (OECD 2013).

2.4 Immigration and ‘the social contract’ of the welfare state

The implication of excluding immigrants from the labour market and other sectors of society is not just a concern for public finances, it may also negatively affect the high level of interpersonal and institutional trust that is found in Norway,

thereby also jeopardizing the legitimacy of the social contract behind the 'Norwegian model' (NOU 2017:2).

If the high ambitions of the Norwegian welfare state, 'employment for all', are not fulfilled and large groups of immigrants of working age are outside the labour force, it signals that the system is functioning poorly in a situation of considerable immigration. Secondly, the commitment of the majority to accept generous welfare schemes, small wage gaps and high taxation may be undermined when faced with an increasingly cultural and economically diverse population (Djuve & Grødem 2013). In order to maintain the legitimacy of the welfare state and the high level of trust, it is essential for newly arrived immigrants to become integrated into various domains of Norwegian society.

2.5 Integration of immigrants in different domains

'Integration' is a word used by many but understood in many different ways, according to Robinson (1998). This is in line with Castle et al. (2001) who point out that there is no single, generally accepted definition or theory of immigrant integration. However, the concept remains significant both as a stated policy goal and for describing the process of economic mobility and social inclusion of newcomers.

For the purpose of this report, the term 'immigrant integration' relates to the process of including immigrants in several important domains of society. Studies have tended to analyse this in one domain at a time (Sandnes 2017). In this report, we highlight seven welfare problems, and analyse how various types of immigrants experience and accumulate these welfare problems.

This approach is inspired by the classic work of Ager and Strang (2008) who prescribed a framework for successful integration that relates to separated but interconnected domains. From a review of several definitions of the term, fieldwork and analysis of survey data, they identified four key domains of integration: employment, housing, health and education, also highlighting the process of social connection within and between groups, and the barriers to

successful integration related to language, culture and the local environment.

In this report, we focus on the inclusion/ exclusion of immigrants in relation to seven welfare problems: problems concerning work, housing, income, neighbourhood, social isolation, poor health and mental health issues.

3 Measuring welfare problems and how they accumulate

There are many ways of analysing welfare problems, poverty and social exclusion. One is to study households at *risk of poverty*, following households over time to calculate a rate of *persistent risk of poverty*, based on their disposable income being below 60% of national median disposable income after social transfers.

An alternative is *material deprivation*: estimating the proportion of people whose living conditions are severely affected by lack of resources. The material deprivation rate represents the proportion of those who cannot afford basic things such as a meal, heating their house, or a washing machine, and those who are unable to pay unexpected expenses.

Another alternative, the *counting approach*, monitors the individual's situation on various welfare dimensions, counting the number of 'deprivation' issues that the individual is exposed to. This approach takes into account both objective indicators such as low labour market attachment, overcrowding and material deprivation, as well as more subjective indicators, such as self-reported health condition, symptoms of anxiety and depression, social marginalization and trust, and neighbourhood environment. It is this third alternative we will focus on in this report. Our approach is inspired by Barstad (2016), for several reasons. His study is recent; it employs Norwegian data and operationalizes welfare problems applicable in the Norwegian context. By applying the same methods as Barstad, we can compare findings from the immigrant population with findings from the general population.

3.1 Theories on accumulation of welfare problems

The tendency for individuals to accumulate problems is well established in the social sciences (Inghe 1960). Accumulation of welfare problems and the related phenomenon of increasing intra-cohort inequality are described as cumulative disadvantages and the 'Matthew effect'.

‘[F]or unto every one that hath shall be given, and he shall have abundance: but from him that hath not shall be taken away even that which he hath’
(Matthew 25:29)

The concept of the Matthew effect became common in the sociology of science due to Merton’s observation that well-known scientists tend to receive more academic recognition than lesser-known scientists for similar achievements (Merton 1968, 1988). One reasoning behind the mechanism of accumulation of welfare problems can be found in Amartya Sen’s (1983) concept of resources, capabilities and functionings. According to Sen, individuals have resources, including human and monetary capital, to differing degrees. The capability to meet one’s wants and needs depends on how well an individual can transform these resources into functionings.

A relevant example here would be that an individual with low educational attainment is more likely to have difficulties in the labour market compared with individuals with higher education. Low earnings are a consequence of little or no attachment to the labour market, which in turn could result in crowded housing in unsecure neighbourhoods. Thus, it is reasonable to expect lack of resources in one area to affect performance in other areas as well.

The processes leading to accumulation of welfare problems are complex, and are probably the result of institutional factors, combined with the stress an individual suffers when experiencing hardship and living conditions inferior to those of others. Greater inequality may also be a consequence of a societal process where some individuals are not involved in a general positive trend in society: such inequality may increase even if the disadvantages are not accumulating (O’Rand 1996, 2003).

It is difficult to determine causality when examining the accumulation of welfare problems, but it appears reasonable to see causality as functioning in both directions. Health problems may cause economic hardship, but also the converse: stress associated with economic hardship may cause health problems.

3.2 Life-satisfaction and welfare problems

For decades, national income, measured by gross domestic income (GDP) per capita, has been used as an indicator of social progress. Some economists have even used GDP to measure human well-being over time. According to Joseph Stiglitz, who headed the Commission on the Measurement of Economic Performance and Social Progress, there are several pitfalls involved in using GDP as an indicator of social progress. In many cases, GDP statistics seem to indicate that the economy is doing far better than perceived by most people. Moreover, the focus on GDP can create conflicts: political leaders are told to maximize GDP, but the people also demand that attention be paid to enhancing security, to reducing air, water and noise pollution, and so forth – all of which might lower GDP growth. The Commission concluded that in analysing welfare, it is time to shift attention from measuring GDP alone. They recommended measuring various dimensions of well-being simultaneously – such as material standard of living, health, education, personal activities, civil and political involvement, social relations and networks, and the environment. This way of measuring social well-being is in line with our approach of counting specific welfare problems and simultaneously analysing how satisfied immigrants are with their life. How does accumulation of welfare problems relate to life-satisfaction?

3.3 What do we know about the accumulation of welfare problems and life satisfaction among immigrants?

There is a vast literature demonstrating that welfare problems do cluster (Bask 2005, 2010, 2016; Berthoud et al. 2004; Bradshaw & Finch 2003; Fløtten 2005; Halleröd & Heikkilä 1999; Kangas & Ritakallio 1998). However, few studies have focused specifically on

immigrants. Barstad (2016) found in his study based on EU-SILC 2013 that immigrants in Norway originating from Africa, Asia and Latin America and Eastern Europe accumulated more welfare problems than native-born Norwegians or migrants with Nordic or West European backgrounds.

In a study of cross-sectional data from Sweden, Bask (2005) investigated the accumulation of welfare problems, such as long-term unemployment, economic problems, health issues, experiences of violence or threats, crowded housing and lack of interpersonal relationships. Groups under comparison were native Swedes, first-generation immigrants in Sweden, immigrants to Sweden who had obtained Swedish citizenship, Nordic citizens and non-Nordic citizens. Bask found that welfare problems accumulated more among immigrants than among Swedes. This study also revealed that personal economic problems have the strongest association with other welfare problems in every nationality group. Unexpectedly, the associations between welfare problems were weaker among immigrants than among Swedes.

Bask (2005) found that non-Nordic citizens were especially vulnerable, but even first-generation Swedes, naturalized Swedes and other Nordic citizens were more likely to experience social exclusion than native-born Swedes. Several possible explanatory factors were controlled for, but even so, there remained a sizeable difference in welfare problems between immigrants and native-born Swedes. Duration of residence and socioeconomic class could account for this difference only partly.

4 What have we done?

In this chapter, we present the data that are used in this study, the target population, the sample frame, non-response and weights. We explain how the dependent and independent variables are constructed, and describe briefly the methods employed. At the end of the chapter, we present our assumptions and hypotheses.

4.1 Data

We utilize data from a survey of living conditions among immigrants in Norway, conducted by Statistics Norway in 2016, based on data collected between November 2015 and July 2016. In all, 4,435 immigrants were interviewed about housing and neighbourhood, main activity, employment and working environment, unpaid work and volunteering, education, Norwegian-language skills, religion, family and social contacts beyond the family, background in the country of origin, transnational ties, economy, health, victimization and insecurity, discrimination, attitudes and values, trust, belonging and citizenship. The data were collected in face-to-face interviews or by telephone. (Holmøy & Wiggen 2017).

Since all legal residents in Norway have a personal identification number, which can be keyed to population and administrative registers, some data were added to the survey after the collection of data. Survey respondents were informed about which administrative data were to be keyed and used, and gave their consent prior to answering the questionnaire. The data from this

survey are available through NSD - Norwegian Centre for Research Data.²

4.2 Target population – immigrants from 12 countries

The survey covers some of the largest immigrant groups in Norway: from Afghanistan, Bosnia and Herzegovina, Eritrea, Iran, Iraq, Kosovo, Pakistan, Poland, Somalia, Sri Lanka, Turkey and Vietnam. For a short presentation of the immigrant groups included in the sample, see text box page 29 – 30.

The target population for the survey was immigrant persons aged 16–74, residing in Norway as of 1 October 2013, and whose country of origin was one of the twelve countries listed above. The variable ‘country of origin’ was constructed from the population register with information about the person’s own (or mother’s and father’s) country of birth. In total, the population of immigrants with background from these 12 countries totalled 214,193 persons as of 1 October 2015 (Holmøy & Wiggen 2017). Consequently, this survey is not representative of *all* immigrants in Norway, some 725 000 altogether as of 1.1. 2017. However, the sample consists of immigrant groups who are among the largest in Norway, with variation in duration of residence, settlement patterns and reasons for migration.

The sample includes a combination of labour migrants, refugees and family class immigrants with minimum two years of residence. Immigrants from Sweden or other Nordic countries are not included in the survey even though they are among the largest immigrant groups in Norway. The reason for not including them is that living conditions for Swedes, measured by labour market participation and income, in general do not differ much from those of the native Norwegian population.

If the respondents had been randomly selected, without any stratification, we would expect many recently arrived immigrants

² NSD - Norwegian Centre for Research Data
<http://www.nsd.uib.no/nsd/english/index.html>

to be highly underrepresented, and immigrants from e.g. the Nordic countries to be overrepresented. This is because in most surveys there is a selection bias: immigrants without foreign language skills and those who have arrived very recently are harder to find and contact, and the non-response-rate is higher. This survey circumvents some of these challenges.

Because the sample is stratified by country of origin, a weight has been calculated to correct for non-response within groups, and simultaneously to adjust for the true size of the groups in Norway at the time of sampling in 2015 (Holmøy and Wiggen 2017). This means that some of the country groups in this survey in reality are much smaller than others. When calculating averages for the total sample, we want the larger groups in the sample frame to account for their relative size, compared with the smaller groups.

Afghanistan - Three out of four immigrants from Afghanistan have come to Norway as refugees; the other 25% arrived through family reunification. Afghans are overrepresented in single households, and are younger than most immigrant groups in this survey. The employment rate is 62%, not the lowest and not the highest among the Asian countries.

Bosnia-Herzegovina - Most immigrants from Bosnia-Herzegovina were refugees who arrived in the mid-1990s. Median years of residence is 20 years. Labour market participation is relatively high, among both men and women. Many own their own home, and they tend to live spread all over the country. They have lower median income than the total population, but the highest among the immigrant groups in this survey (Dzarmarjia 2016).

Eritrea - The majority (83%) of immigrants with background from Eritrea have arrived as refugees. They have a short median stay of in Norway, 4 years. Only 49% are employed – the second lowest employment rate among the 12 countries surveyed. They live both in densely and less densely populated areas in Norway.

Iran – Two-thirds have arrived as refugees. Median years of residence is 16 years, but there is great variation here. Despite high educational levels, employment is relatively low, similar to that for Afghans, 62%, but it is relatively high (71%) among the core working-age group, 25–44 years.

Iraq – 55% of Iraqi immigrants have arrived as refugees, and 44% through family reunification. Median duration of stay is 13 years. In contrast to Bosnians, who came mainly between 1993 and 1995, Iraqis have arrived over a longer time span; also today there are Iraqis arriving in Norway as refugees or through family reunification. A relatively low share (53%) are employed.

Kosovo - The majority (71%) have arrived as refugees. Median length of stay is 15 years. Their employment rate is similar to that for Afghans and Iranians, 63%, but is higher among the age group 25–44 years. As is the case with Sri Lanka, Pakistan and Turkey, most households are couples with children under 19 years of age.

Pakistan - Three out of four with a background from Pakistan have arrived through family reunification. Many have stayed in Norway for more than 20 years. In all age groups, the employment rate is lower than among the total population, and there is a significant gender gap in employment between men and women.

Poland - Immigrants from Poland constitute the largest immigrant group in Norway. Three out of four are labour migrants. Median years of residence for Polish immigrants is 5 years. Poles are the immigrant group with the highest share of people living in sparsely populated areas. Their employment level is high, even higher than among native-born Norwegians.

Somalia - Somalia is the largest African immigrant group in Norway. 68% have arrived as refugees, and 30% through family reunification. Median length of residence is 9 years. Somalis have the lowest employment rate among the immigrant groups in this survey, and median income of Somalis is half that of the total population.

Sri Lanka – 14% have arrived on student permits, 38% as refugees and 45% are family class migrants. More than 70% live in densely populated (urban) areas. More than three out of four own their own flat – this share is higher than the average in the total population. Some 74% are employed; this is higher than the average among immigrants, but lower than in the total population.

Turkey - 82% of migrants from Turkey have arrived through family migration. Median length of residence in Norway is 19 years. Employment level is relatively low (56%), in particular among those over 45 years of age (41%). On many variables, Turkey ranks in the middle among the 12 countries in this survey.

Vietnam - Approximately half of the immigrants from Vietnam arrived as refugees in the early 1980s. After the initial humanitarian migration from Vietnam, recent migration to Norway has been family reunification. Many Vietnamese immigrants have lived in Norway for more than 20 years, and more than 70% speak Norwegian at home.

(Source: Vrålstad & Wiggen 2017)

4.3 Dependent variables

We have identified seven welfare problems to be examined as dependent variables:

1. Low labour market attachment
2. Health problems
3. Economic difficulties
4. Mental health problems
5. Social isolation
6. Problematic neighbourhood
7. Housing problems.

Each of these seven welfare problems is coded with a binary outcome. In addition, a variable counting the outcome on each welfare problem is calculated as an additive index, ranging from 0–7.

4.4 Operationalizing the seven welfare problems

Welfare problem 1: Low attachment to the labour market

A commonly used indicator for this welfare problem is long-term unemployment. However, in Norway the number of long-term unemployed persons is very low. Recent Norwegian research (Bratsberg et al. 2010) argues that economies with low unemployment rates tend to have high disability rates. The pattern is particularly striking in Nordic welfare states like Norway, and it could be argued that disability insurance is sometimes unemployment in disguise. As there are not many long-term unemployed in Norway, we do not consider this a good measure of labour market attachment. Instead, we followed Epland et al. (2013) on labour market marginalization, defining people who

have a very low level of income from work,³ and who were not students or on early retirement schemes, as having low labour market participation. Respondents with the characteristics of low labour market attachment are coded =1, all others are coded =0.

Welfare problem 2: Health problems

Individuals who report having a long-term illness, health problems or disabilities and who experience that these problems restrict them in performing everyday activities, are defined as having a health problem.

Respondents who answered yes to either question 1 or 2 and yes to question 3 were considered to have health problems:

1. Do you have any long-term illnesses or health problems?
2. Do you have any disabilities or pain as the result of an injury?
3. Do these long-term illnesses or health problems/ disabilities or pains/any of these restrict your ability to carry out ordinary everyday activities?

Person with health problems are coded =1, others are coded =0.

Welfare problem 3: Economic difficulties

Economic difficulties can be operationalized in many ways. As with health problems, we have chosen to emphasize self-reported activity and constraints on action, in this case in relation to the household's financial situation. We have defined having an economic difficulty as belonging to a household that cannot afford one week's vacation outside the home once a year, or keep the home warm during the cold season. In addition, we included persons who reported that it was very difficult for them to make ends meet on their income. Persons with difficult economy are coded =1, all others are coded = 0.

³ Income from work below 1,5 G. G- refers to National Insurance scheme basic amount. In 2015, 1,5 G equaled 132 000 NOK.

Welfare problem 4: Social isolation

Social isolation and loneliness are considered ‘the last taboo’ – not something that people would like to admit.⁴ Some people may find it easier to declare that they have disabilities or that their financial situation is not good; they could find it harder to tell outsiders that they do not have other persons to talk to about private matters. However, we have chosen to define socially marginalized persons as those who reported that they did not have any other people around who were close to them and in whom they could confide. In addition, we included respondents who expressed very low trust in other people (scores 0–4 on a scale from 0 to 10, where 0 is, ‘cannot be too careful’ and 10 are ‘most people can be trusted’). People who report not having anyone to confide in, or with low level of interpersonal trust, are coded 1, all others = 0.

Welfare problem 5: Mental health problems

The questionnaire included seven questions regarding respondents’ feelings of hopelessness, loneliness, blues, anxiety, and to what degree they have sleeping problems. The seven items are part of the Hopkins Symptom Checklist (HSCL), a symptom inventory that measures symptoms of anxiety and depression. The seven symptoms of mental disorders are recognized from previous Norwegian versions of the Hopkins Symptoms Checklist (Strand et al. 2003). The scale is available in several versions according to how many symptoms it monitors. Originally, the checklist included 25 items. The version used here addresses questions from the five and ten symptoms edition (HSCL-5 and HSCL-10). It is claimed to be of secondary importance which version is used, as the scales correlate strongly with each other (Strand et al. 2003). The scale for each question includes four responses (‘not at all,’ ‘a little,’ ‘quite a bit,’ ‘extremely’, rated 1 to 4, respectively). Respondents who had an average score > 2 on the 7 items were coded as having symptoms of depression and anxiety =1, all others= 0.

⁴ Loneliness: The cost of the ‘last taboo’ <http://www.bbc.com/news/education-41349219>

Welfare problem 6: Problematic neighbourhood

Respondents who reported having problems with criminality, violence or vandalism in the area they live, or who live in a neighbourhood with considerable external noise, e.g. from heavy traffic or factories, were coded= 1, all others= 0.

The questions were as follows:

1. When you are inside your home, do you experience problems with noise from neighbours or other external sources, like traffic, factories or construction work?
2. Are there problems with crime, violence or vandalism in the area where you live?

Welfare problem 7: Housing problems

The operationalization of this variable is a combination of variables concerning household size (number of persons) and available rooms in the house or flat. A household is defined as being overcrowded if the flat has one room for one person or less than one room per person. Couples without children who share one room are not defined as having poor housing conditions. In addition to overcrowding, respondents who reported that they were extremely unsatisfied with their housing conditions were coded =1, others =0.

4.5 Independent variables

In the analysis, we include sociodemographic characteristics such as *gender, age, education, country of origin, duration of residence highest completed level of education, household composition and domicile*. All variables are based on administrative register data linked to each respondent.

Gender is coded: 0 = male, 1= female

Age is a continuous variable ranging from 16 until 74. In the multivariate analysis age, is centred to mean age 39.

Level of education refers to highest completed formal education based on administrative register data, and is coded as follows: 0=

no formal education, 1 = primary/secondary school, 2 = upper secondary school, 3 = university/college, 4 = No information.

Country of origin is based on own and parents' country of birth

Duration of residence is coded into short (<6 years), medium (7 - 15 years) and long duration (more than 16 years) in Norway.

Household composition or type of family is coded into single without children, single with children, couples without children, and couples with children and other.

Domicile is based on population density in the area where the respondent is residing, and coded into densely populated area, less densely populated area, and sparsely populated.

We have included the variables above in the analysis for two reasons. Since we are looking for major predictors that can explain variation in the accumulation of welfare problems, we include variables such as gender and age as controls to ensure that differences we find are not due solely to the gender composition and age structure in different groups of immigrants. Previous research regarding gender and age differences has not shown consistent results. While some analyses do not find gender differences (Ferrarini et al. 2010), others report that men are most vulnerable (Bask 2016) or that women accumulate more welfare problems (Halleröd & Selden 2013). Further, we assume that level of education, duration of residence, country of origin, household composition and domicile could be important in explaining differences in welfare problems among immigrants in Norway.

Hypothesis 1: Welfare problems decrease with age

The relationship between age and accumulation of welfare problems is not obvious. Barstad (2016) concludes that, among the total population, the accumulation of welfare problems decreases with age. By contrast, evidence from Southern and Eastern European countries indicates that welfare problems increase with age (Whelan et al. 2014) Our first hypothesis is:

H1: Older immigrants in Norway experience less accumulation of welfare problems than do younger immigrants.

Hypothesis 2: Woman experience more welfare problems

Previous research is not consistent regarding gender differences, but Barstad (2016) finds that women on average have more welfare problems than men. Our assumption is therefore:

H2: Women with immigrant background have more welfare problems than do immigrant men.

Hypothesis 3: Education matters

Following Sen (1983) individual resources differ, including human and monetary capital. It is reasonable to assume that people with less human capital, measured by educational level, will have less capability to meet their wants and needs.

H3: Immigrants with little or no formal education accumulate more welfare problems than do immigrants with higher education.

Hypothesis 4: The accumulation of welfare problems decreases with duration of residence

As we consider integration a process that entails convergence between majority and minority population over time, we expect:

H4: Immigrants with longer duration of residence have fewer welfare problems than immigrants with shorter duration of residence.

Hypothesis 5: Less accumulation of welfare problems in urban areas

Many immigrants settle in cities, or move to cities after an initial phase of settlement in less densely populated areas. In line with official policy, most refugees are initially settled all over the country. After 5 years of residence, approximately 20% of them move, usually to larger cities – perhaps to find a job or to live closer to family or immigrants from the same country. It is reasonable to assume that cities offer more opportunities for economic and social integration for immigrants compared to less densely populated areas. We hence expect that:

H5: Immigrants settled in densely populated areas accumulate fewer welfare problems than do immigrants living in rural areas.

Hypothesis 6: Single parents accumulate more welfare problems than other types of households

Previous research indicates that single persons, especially single parents with children, are more likely to experience multiple welfare deprivations. Our assumption is that:

H6: Single parents with immigrant background accumulate more welfare problems than do other types of households.

Hypothesis 7. Where you come from matters

It might be assumed that differences in integration outcome for immigrants of differing backgrounds related to differences in initial human and financial capital at the time of immigration. However, there are persistent gaps in, e.g., labour market integration between different groups of immigrants based on country of origin, even when adjusting for background characteristics. Refugees have more trouble and take more time to adapt than do family- and labour migrants. In our study, it is somewhat difficult to disentangle reasons for migration from country of origin, since they are highly correlated. We focus on country of origin, and assume, in line with Sandnes (2017) that:

H7. Immigrants from European countries accumulate fewer welfare problems than do immigrants from Africa and Asia.

5 What did we find?

In this chapter, we first present the results from the descriptive analysis of the most common welfare problems. Then we examine predictors for accumulation of welfare problems. Finally, we present the results from a multivariate analysis, to see which variables can explain variation in the accumulation of welfare problems.

5.1 The most common welfare problems

Comparing the seven dimensions of welfare problems in this study (see Table 5.1); we find that overcrowding and trouble with the housing situation are the areas in which most immigrants experience difficulties. Four out of ten report that their housing conditions are very unsatisfactory, or that the dwelling is overcrowded.

Table 5.1: *Welfare problems among immigrants, by gender, %*

	Men	Women	Total	Gender gap ⁵	N=
<i>Housing</i>	39	44	41	5	4 435
<i>Work</i>	27	41	33	14	4 435
<i>Economy</i>	25	31	28	6	4 435
<i>Health</i>	17	21	19	4	4 435
<i>Social isolation</i>	19	14	17	-5	4 435
<i>Neighbourhood</i>	17	17	17	0	4 435
<i>Mental health problems</i>	14	19	16	5	4 435

Source: Living condition among immigrants 2016

⁵ Gender gap is measured in percentage points.

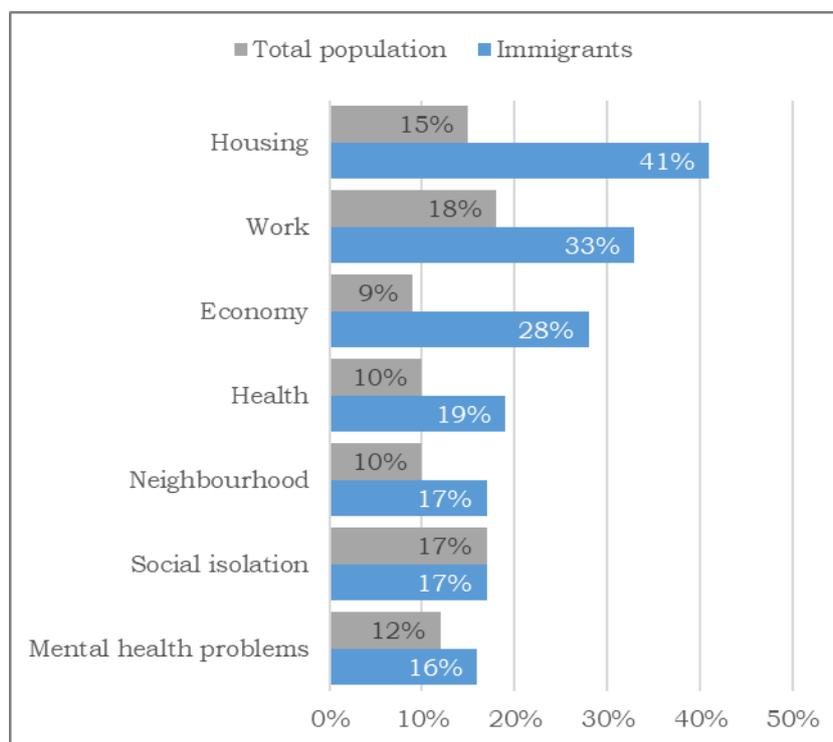
Low labour market attachment is the second most common welfare problem experienced by immigrants in Norway. This is also the dimension where we find the largest gender gap. Among immigrant women, 41% have no income or very low income from work. For immigrant men the proportion with low labour market attachment is 27% – a 14-percentage-point difference. The share is high for both immigrant men and immigrant women, and much higher than among the general Norwegian population.

In total 28% of the immigrants reported experiencing economic problems. One out of six immigrants experiences health and disability problems, problems with the neighbourhood, or mental health issues such as anxiety, and social isolation.

5.2 Immigrants have more welfare problems than the general population

Comparison of the level of welfare problems experienced by immigrants with that of the total population in Norway, based on calculation of EU-SILC (Barstad 2016) shows that immigrants experience more welfare problems than do native-born Norwegians on all dimensions except for social isolation (see Figure 5.1). This is in line with empirical findings from Sweden, which showed that immigrants faced more welfare problems than native Swedes in several domains (Bask 2016).

Figure 5.1: *Welfare problems by immigration category. Per cent. 2013 for total population*, 2016 for immigrants*



Source: *Living Condition Survey for Immigrants 2016*, and **Barstad, based on EU-SILC 2013*.

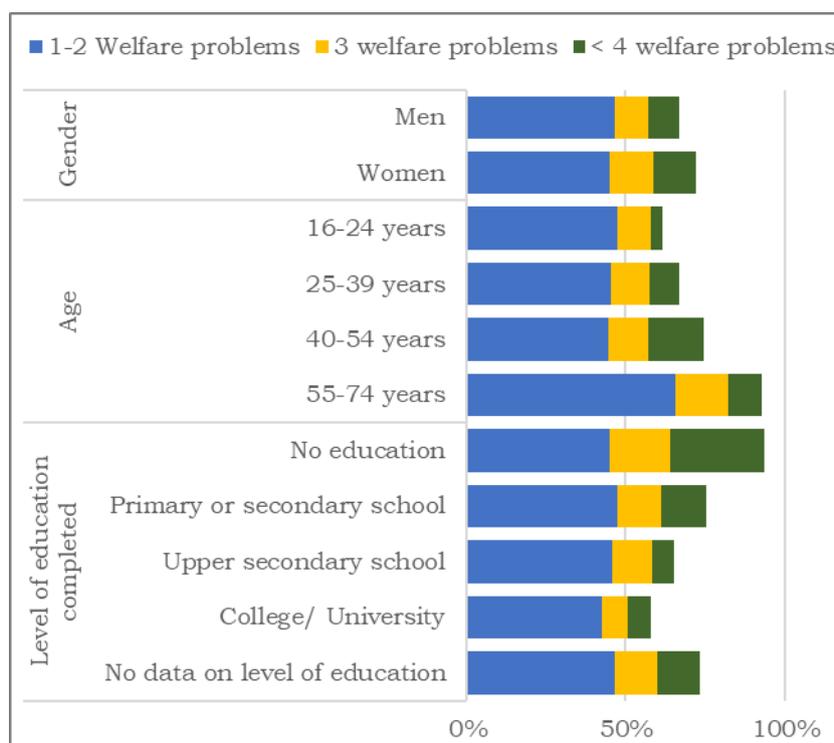
Persons with immigrant background are three times more likely to have economic problems or poor housing conditions than are people of non-immigrant background. Concerning attachment to the labour market, Figure 2 shows that immigrants are twice as likely to have no or very low income from work than are persons of non-immigrant background.

5.3 Welfare problems among various groups

Figure 5.2 shows the results of the additive index of welfare problems. Having counted the number of welfare problems that immigrants face, we compare the number of welfare problems among various categories (such as gender and age) of immigrants.

It emerges that immigrant women accumulate more welfare problems than men do: 27% of immigrant women and 21% of immigrant men experience three or more welfare problems simultaneously. Also in the general population, women experience more welfare problems compared to men: overall, 13% in the total population experience more than three welfare problems. As the corresponding figure for immigrants is 24%, immigrants are almost twice as likely to experience accumulation of welfare problems compared with the population general.

Figure 5.2: *Accumulation of welfare problems among immigrants, by gender, age, level of education*



Source: *Living condition among immigrants, Statistics Norway 2016*

Barstad (2016) concluded that the accumulation of welfare problems drops with age. For immigrants, however, the opposite seems to be the case. It is the oldest age group (< 55 years) in this survey who have accumulated most welfare problems. Only 7% of respondents in this age group report having no welfare problems. There are not many observations (n=85) for this age cohort, but a

statistical test⁶ comparing the proportions shows significant differences, with greater accumulation of welfare problems for the oldest cohorts. However, also for the core working-age population, 25–54 years, we find many immigrants who have accumulated more than three welfare problems.

Immigrants who have completed upper secondary school or tertiary education report fewer welfare problems than those with no formal education or only primary school. Among immigrants with no formal education, we find the highest proportion (29%) of those reporting four or more welfare problems.

5.4 Immigrants in rural areas accumulate fewer welfare problems

Further, we find that immigrants living in rural areas accumulate fewer welfare problems than do immigrants in urban areas (see Figure 5.3). This finding is particularly interesting in view of the dispersal policy for settlement of refugees in Norway. Smaller municipalities in rural areas settle disproportionately many refugees from Africa, Middle East and Asia.

Barstad (2016) found that single persons with children had a particularly high accumulation of welfare problems: 42% (27+15)% in this group experienced three or more welfare problems. Also in our data, single persons with children have a higher accumulation of welfare problems than do other family compositions, but we found a lower proportion than Barstad – 28% (15+13)% with three or more welfare problems compared to single parents in the general population.

5.5 Improvement with duration of stay

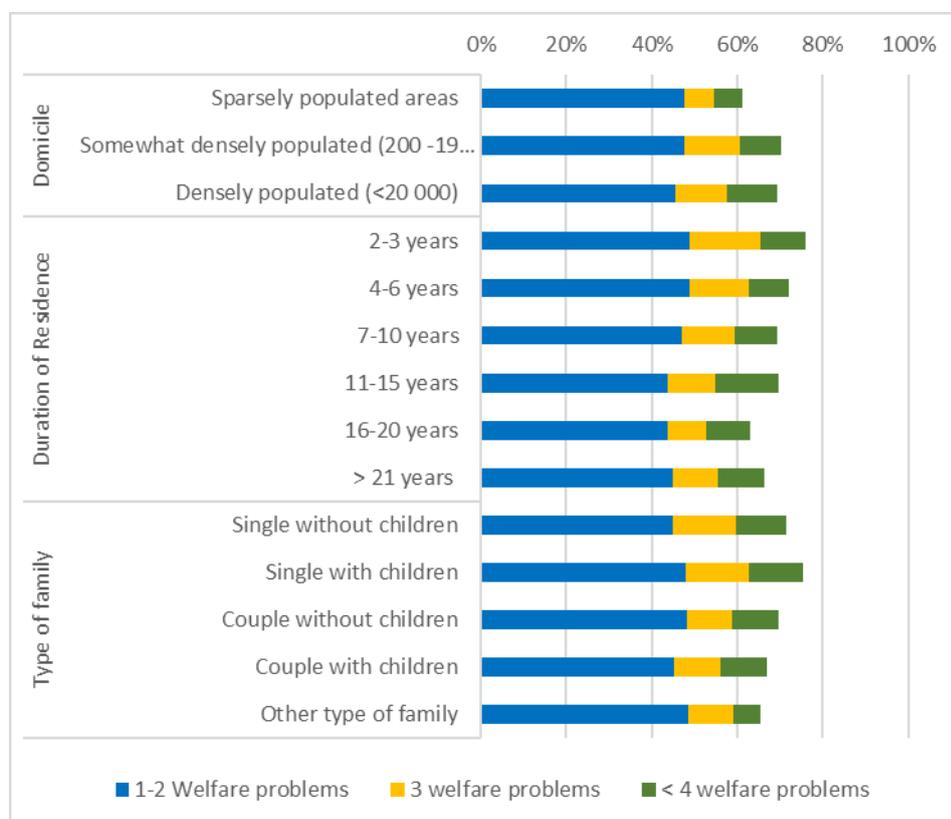
Especially in studies that utilize cross-sectional data, duration of residence is an important variable for understanding the process of integration over time. However, this must be interpreted with

⁶ Tests are adjusted for all pairwise comparisons within a row of each innermost subtable using the Bonferroni correction.

caution, as there may be considerable differences in the composition of cohorts of immigrants to Norway.

We find that immigrants who have been in Norway only a short time experience more welfare deprivations than do immigrants with longer duration of residence. However, among the immigrants with more than 21 years of residence, two out of three still reported some kind of welfare problem. As noted, this might be explained by the composition of the different cohorts of immigrants. Immigrants from Poland and Eritrea have the shortest median duration of residence (5 and 4 years) in this survey (Vrålstad & Wiggen 2016).

Figure 5.3: *Accumulation of welfare problems by domicile, duration of residence and family situation*

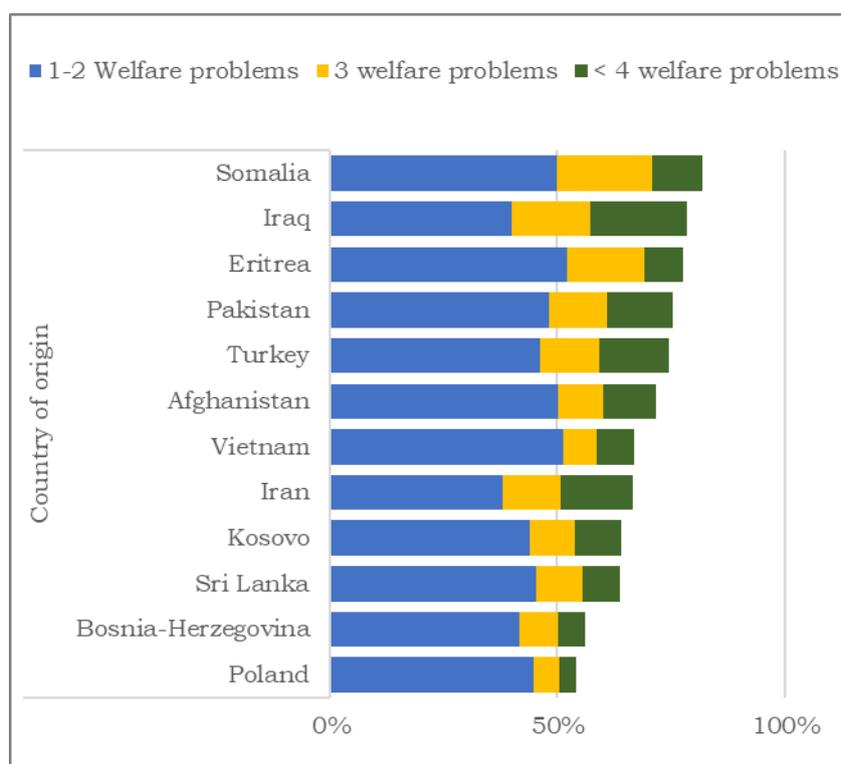


Source: Living condition among immigrants, Statistics Norway 2016

5.5.1 Welfare problems by country of origin

Immigrants from Poland rank at the bottom of Figure 5.4: they experience the fewest welfare problems compared to the other groups of immigrants. Immigrants from Somalia, Iraq and Eritrea have the highest proportion of welfare problems.

Figure 5.4: *Accumulation of welfare problems by country of origin*



Source: Living condition among immigrants, Statistics Norway 2016

Although immigrants from Somalia in total have the greatest accumulation of welfare problems, Figure 4 shows that the proportion of immigrants from Iran, Turkey, Pakistan and Iraq who report more than four welfare problems is even larger than for immigrants from Somalia and Eritrea.

5.6 Multivariate analysis

The descriptive statistics presented so far offer useful insights into the accumulation of welfare problems among immigrants with different background characteristics. However, as the composition of the immigrant groups differ when it comes to median length of stay, settlement patterns, educational level and age, it is important to analyse the variables simultaneously. A multivariate analysis can reveal the net-effect of each variable when we control for all the others. For instance, might the lower accumulation of welfare problems in rural areas be explained by the fact that immigrants from Poland are often overrepresented in rural areas? If so, then it is not really settlement in urban areas as such that explains this, but the country of origin.

Table 5.2 presents the results from a linear regression analysis with the additive index with six welfare problems included as the dependent variable. Low labour market attachment has been omitted in the dependent variable, as we are using main activity as a covariate, with being employed as the reference category. Barstad (2016) found that a person's main activity, such as being employed, unemployed or inactive, explains much of the accumulation of welfare problems.

Table 5.2: *Results from OLS regression. Dependent variable: Additive index of welfare problems (0-6). N = 4 434, adjusted R² = 0.174. *** p<0.01, ** p<0.05, *p<0.1.*

	Unstandardized Coefficients			t
		B	Std. Error	
	(Constant)	1.87 ***	0.15	12.5
Gender (ref. male)		0.13 ***	0.04	3.4
Age (centred at 36)	(centred)	0.02 ***	0.00	8.1
Level of education (ref. no formal schooling)	Primary education (ISCED 1-2)	-0.33 ***	0.12	-2.9
	Medium (ISCED 3-4)	-0.41 ***	0.12	-3.4
	Long (ISCED 5-8)	-0.61 ***	0.12	-5.0
	Not available	-0.33 ***	0.12	-2.6
Domicile (ref. urban)	Rural	-0.27 ***	0.10	-2.7
	Densely populated	-0.08 *	0.04	-1.9
Duration of residence (ref short duration)	Medium	-0.17 ***	0.05	-3.3
	Long	-0.48 ***	0.06	-8.0
Family situation (single with children)	Single without children	-0.09	0.06	-1.4
	Couples (without children)	-0.10	0.08	-1.3
	Couples with children	0.00	0.06	0.0
	Other	-0.33 ***	0.10	-3.3
Main activity (ref. employed)	Unemployed	0.76 ***	0.07	10.8
	Student	0.25 ***	0.06	4.1
	Pensioner	0.30 ***	0.10	2.9
	Disability	1.09 ***	0.06	16.8
	Homemaker	0.34 ***	0.12	2.8
Country of origin (ref. Somalia)	Afghanistan	-0.03	0.09	-0.4
	Bosnia-Herzegovina	-0.37 ***	0.09	-3.9
	Eritrea	-0.22 **	0.09	-2.5
	Iraq	0.16 *	0.09	1.8
	Iran	-0.01	0.09	-0.1
	Kosovo	-0.31 ***	0.09	-3.4
	Pakistan	-0.07	0.09	-0.7
	Poland	-0.60 ***	0.09	-6.6
	Sri Lanka	-0.06	0.09	-0.7
	Turkey	-0.13	0.09	-1.5
Vietnam	-0.37 ***	0.09	-4.0	

5.7 Older immigrants and immigrant women

The multivariate analysis confirms what we found in the descriptive statistics concerning age and gender. The coefficient for age is small 0.02 but highly significant. Age is a continuous variable, so with each passing year, an immigrant has an estimated 0.02 increase in the accumulation of welfare problems. On average, a 70-year-old immigrant can be expected to have one additional welfare problem compared to a 20-year-old immigrant ($70-20*0.02$).

Table 2 shows that immigrant women experience more welfare problems than immigrant men, even when we adjust for all the other background characteristics. The analysis confirms our hypothesis concerning immigrant women and accumulation of welfare problems, as well as supporting Barstad (2016), who found a similar gender gap in the entire population. However, the analysis does not support our assumption of decreasing accumulation of welfare problems with increasing age, although the increase is a moderate one.

5.8 Education does matter

Further, the multivariate analysis shows that higher education among immigrants is associated with lower probability of accumulating welfare problems compared to immigrants with no formal education. The probability of accumulating welfare problems is also lower among immigrants who have a low level of education than among those who have no formal schooling at all. In line with Sen (1983), education can be viewed as a resource that can be transformed into getting a well-paid job, which again can prevent welfare problems from accumulating. Also in the general population, education is a strong predictor for not accumulating welfare problems (Barstad 2016).

5.9 Fewer welfare problems in the countryside

The result of the multivariate analysis further confirmed the findings of the descriptive statistics, but the opposite of what we

expected in our hypothesis. Table 2 shows that, *ceteris paribus*, immigrants living in rural areas have fewer welfare problems than those living in urban areas. Living costs are lower in the countryside, and there is a considerable demand for labour in many rural areas. Previous studies of migration and integration of immigrants have shown promising results on the economic and social integration of refugees in rural areas in Norway (Søholt, Tronstad & Vestby 2015). Rural areas in Norway experience outmigration of young people, but international migration to rural areas in Norway can maintain or even increase the population in such areas. This may explain why immigrants accumulate fewer problems in rural areas than in urban areas. The analysis also shows that immigrants living in less densely populated areas seem to accumulate fewer welfare problems compared with immigrants living in densely populated/urban areas.

5.10 Duration of residence

The analysis confirms the results from the descriptive statistics concerning duration of residence, and our hypothesis: the accumulation of welfare problems falls with duration of residence. As we have cross-sectional data, not longitudinal data, it is difficult to disentangle the dynamics of accumulation of welfare problems of both age and duration of residence, as they go in different directions. Clearly, the result shows that the oldest immigrants have more welfare problems than younger. All survey respondents were adults at the time of the interview, but many had migrated to Norway at an early age. This means that even young adult immigrants could have relatively long duration of stay and have significantly fewer welfare problems than recent newcomers.

5.11 Single persons with children

Contrary to the findings in Barstad (2016), we do not find (Table 2) that single parents with children accumulate significantly more welfare problems than singles/couples without children or couples with children, or other household compositions. The descriptive statistics (Figure 4) indicate that single parents with children accumulate more welfare problems, but when we control for other

characteristics the differences between types of household is no longer significant. This finding may seem surprising. If we compare single parents in the total population with severe accumulation (>4) of welfare problems, the proportion is 15%. In our sample, the corresponding figure for immigrants is very similar, 13%. In other words, welfare problems among single parents are not negligible, but neither are they very different from the situation among the total population.

5.11.1 Fewer welfare problems among immigrants from Europe

Immigrants with backgrounds from other European countries, such as Poland, Bosnia-Herzegovina and Kosovo, report significantly lower levels of welfare problems than immigrants from Africa and Asia. Immigrants from Vietnam and Eritrea stand out as having fewer welfare problems compared with immigrants from other non-European countries. Our results are not directly comparable to results from Sweden. However, it appears that coming from a country that is relatively close reduces the probability of accumulating welfare problems. Bask (2005) found that non-Nordic citizens accumulated far more problems than Nordic citizens did, who again accumulated more welfare problems than native Swedes. Our analysis confirms Barstad's (2016) findings on the cumulative disadvantages of immigrants from Asia, Africa and Latin America, but our analysis also shows there are considerable variations among groups of immigrants.

5.12 The importance of good health and having a job

Unemployed, students, pensioners, disabled and homemaker immigrants accumulate more welfare problems than those with paid jobs. Being disabled (*yfor* in Norwegian) is the strongest predictor for accumulating welfare problems: it is associated with on average accumulating one more welfare problem than those who are employed. Being unemployed is the second strongest predictor for accumulating welfare problems. As noted, there are relatively few unemployed in Norway, but the situation for those

who are is, on average, significantly worse than those who are employed.

These findings are in line with Barstad (2016:24), who finds that among the general population, the disabled and the unemployed are overrepresented among those who have accumulated many welfare problems.

In Norway, where the employment rate is high, the workplace is not merely a place to earn money, but also an arena for social interaction and self-development. In such a setting, being outside the labour market not only increases the probability of having economic problems, it is also likely to be associated with other forms of deprivation such as loneliness and exclusion.

6 Combinations of welfare problems

Having analysed the accumulation of welfare problems, we now turn to the most common *combinations* of welfare problems, and run multivariate analyses to find what predicts these combinations. Lastly, we examine the correlations between the seven welfare problems dealt with in this study.

6.1 Work problems often go in hand with other problems

Examining the most common pairs of welfare problems, we find that the most frequent combinations are work/housing, economy/housing (both 16%), work/personal economy and work/ health (15% and 12% respectively).

Immigrant women have a significantly higher risk of experiencing all these combinations of welfare problems compared with immigrant men (see Table 6.1)

Table 6.1: *Share of immigrants with various combinations of welfare problems*

	Men	Women	Total	N =
Work / housing	12 %	21 %	16 %	4 435
Economy / housing	13 %	18 %	16 %	4 435
Work / economy	11 %	19 %	15 %	4 435
Work / health	11 %	14 %	12 %	4 435

Comparison of the most common combinations of welfare problems in the total population reveals huge differences as to the nature and extent of such combinations. Among the entire adult population, 5% had the combination of poor health and low labour market attachment, and 4.5% reported problems with overcrowding (housing) and trouble in the neighbourhood.

Clearly, immigrants accumulate far more welfare problems; the cumulative effect is highly related to exclusion from the labour market.

6.2 Four multivariate analyses on combinations of welfare problems

What predicts these four combinations of welfare problems? We have run four multivariate regression analyses, with the combination of two welfare problems as the dependent variable (Table 6.2). Since the dependent variable is binary, we have used binary, logistic regression. For example: The first analysis uses the combination of work and housing problem as the dependent variable. Those who both have both work and housing problems are coded 1, others 0. In model two, where we analyse housing and economic problems we have included main activity as independent variable. In the three remaining models where work is one of the welfare problems in the combination, main activity is omitted, as this variable is highly correlated with low labour market attachment.

Table 6.2: *Logistic regression, combinations of welfare problems and background characteristics. 2016. Exp (B)/Odds ratio.*
 *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Variables in the equation		Work/ housing	Economy/ housing	Work/ Economy	Work/ health
		Exp(B)	Exp(B)	Exp(B)	Exp(B)
Gender (reference: male)		1.9 ***	1.2 **	2.2 ***	1.7 ***
Age (centred at 36 years)		1.0 ***	1.0 ***	1.1 ***	1.1 ***
Country of origin (reference: Vietnam)	Afghanistan	1.0	2.0 **	1.4	1.6
	Bosnia-Herzegovina	0.9	0.5 *	0.7	1.4
	Eritrea	1.2	3.5 ***	2.0 ***	0.5 **
	Iran	1.5	1.9 **	1.6 *	1.7 **
	Iraq	3.1 ***	2.8 ***	4.7 ***	3.2 ***
	Kosovo	2.1 ***	1.4	1.8 **	2.1 ***
	Pakistan	1.9 ***	1.6 *	1.8 **	1.7 **
	Poland	0.6 *	0.3 ***	0.2 ***	0.7
	Somalia	2.5 ***	5.7 ***	4.5 ***	0.8
	Sri Lanka	1.3	2.1 ***	1.5 *	0.8
Turkey	1.9 ***	1.6 *	2.0 ***	2.0 ***	
Duration of residence (reference: long)	Short	3.3 ***	3.1 ***	3.0 ***	1.0
	Medium	1.8 ***	2.2 ***	1.9 ***	1.2
Domicile (reference: urban)	Rural	0.8	0.9	1.1	0.5 *
	More densely populated	0.8 **	0.9	1.0	0.8
Education (reference: tertiary)	No formal education	2.8 ***	1.8 **	2.8 ***	4.1 ***
	Primary	1.5 ***	1.3 **	1.7 ***	1.9 ***
	Upper secondary	1.2	1.1	0.9	1.2
Family situation (reference: singles with children)	Singles without children	0.5 ***	0.6 ***	1.2	1.1
	Couples without children	1.0	0.8	0.6 **	1.0
	Couples with children	1.3 *	1.5 ***	0.8	1.0
Main activity (reference: employed)	Unemployed		3.1 ***		
	Student / introductory course		2.4 ***		
	Pensioner		1.3		
	Disabled		2.7 ***		
	Homemaker		1.9 **		
Constant		0.041 ***	0.023 ***	0.026 ***	0.042 ***
Cox & Snell R Square		0.084	0.126	0.131	0.106

6.3 What factors predict combinations of welfare problems?

In all models in Table 4, age is a strong predictor for the four most frequent combinations of welfare problems. Women are more prone to experience the four pairs of welfare problems than are men, holding other explanatory factors fixed. This gender effect is evident in all our analyses so far.

We also find consistent results concerning duration of residence. The less time a person has resided in Norway, the higher is the probability of experiencing a combination of work/housing, economy/housing and work/economy problems. This is as expected, as it often takes time to acquire the skills needed to become financially self-sufficient and accumulate enough capital to own a flat or other accommodation of good quality.

Bearing in mind that single parents do not accumulate more welfare problems than other migrants, the results in Table 4 clearly show that single parents do experience more problems related to work/ housing and work/personal economy than single persons without children. More surprisingly, single parents with children do not significantly differ from couples without children.

Immigrants with higher educational attainment have fewer problems related to all four combination of welfare problems. Having completed upper secondary school seem to be the tipping point. Persons who have no formal education or only primary schooling experience the four combinations more often than those who have completed upper secondary or tertiary education. Previous studies have found that the impact of having completed at least upper secondary also significantly increases the employment probability for (Søholt, Tronstad & Vestby 2015)

Not being employed increases the probability of accumulating welfare problems. This finding also receives support in the analysis of what explains the *combination* of economic and housing problems: Being unemployed or disabled strongly increases the probability of experiencing these two problems combined.

Having controlled for all the variables mentioned above, we still find that immigrants from Iraq experience all four combinations of

welfare problems more often than immigrants from with background from Vietnam (the reference category). Immigrants from Somalia experience problems with housing in combination with either work or economic problems more often compared with most other immigrant groups. A large share of Somalis, but also other migrant groups, do not own their own accommodation. Some are reluctant to take up bank loans. Analysis from Statistics Norway also show that they more often have relatively large households , with few employed persons per household., making it even more difficult for many immigrants to achieve good housing conditions.

6.4 Correlation between welfare problems

Which of the welfare seven problems are correlated most strongly? Table 5 contains a correlation matrix with each of the welfare problems. The correlation is measured with Pearson's r , which varies between -1 and 1, and where 0 indicates no relation, -1 indicates a perfect negative relationship and 1 indicates a perfect positive relationship. More generally, Pearson r is positive if X and Y are on the same side of their respective means. Thus, the correlation coefficient is positive if X and Y tend to be simultaneously greater than, or simultaneously less than, their respective means. The correlation coefficient is negative (anti-correlation) if X and Y tend to lie on opposite sides of their respective means. Moreover, the stronger is either tendency, the larger is the absolute value of the correlation coefficient. A common rule of thumb is that when the absolute value of $r \Rightarrow 0.10$, there is a weak relationship. When the absolute value of r has a value between 0.3 and 0.5, the relationship is characterized as moderate. When the absolute value of r has a value of 0.5 or higher, the relationship between the two variables is considered strong. (Field & Miles 2010).

Table 6.3: *Correlation matrix for 7 welfare problems. Pearson's r*

	Work	Health	Economy	Social isolation	Mental health problems	Neighbourhood	Housing
Work	1.0						
Health	0.318**	1.0					
Economy	0.262**	0.138**	1.0				
Social isolation	0.147**	0.073**	0.185**	1.0			
Mental health problems	0.218**	0.343**	0.213**	0.118**	1.0		
Neighbourhood	0.010	0.073**	0.054**	0.033*	0.122**	1.0	
Housing	0.110**	0.062**	0.196**	0.061**	0.085**	0.089**	1.0
N=	4435	4435	4435	4435	4435	4435	4435

Source: Living condition among immigrants, Statistics Norway 2016

* 95 CI

** 99 CI

Table 6.3. shows that all the correlations in the matrix are positive, indicating that having a problem on one dimension is associated with having a problem on the other. All correlations but one are significant (neighbourhood/work). However, the correlations between the different problems are not very strong.

We find the strongest correlation between having a health problem and having mental health problems (0.34) and between health and work problems (0.32). The third-strongest correlation is found between problems related to work and personal economy. In a study from Sweden, Bask (2005) found that personal economic problems had the strongest association with other welfare problems in every nationality group. It is logical that economic problems correlate strongly with work and housing problems, as is the case with immigrants in our study and also among the general Norwegian population (see Barstad 2016).

The matrix also shows that the correlation between economy and housing is not negligible (0 /0.196). However, the correlations between housing and neighbourhood problems are in general weakly correlated with other welfare problems.

Low labour market attachment and mental health problems have the highest r , indicating the strongest correlation with other welfare problems. Being both unemployed and disabled has proven to be a strong predictor of accumulation of welfare problems (table 4) and the probability of experiencing the most common combinations of welfare problems. Hence, we are not surprised to find that low labour market attachment correlates strongly with other welfare problems. Not having a job may exclude a person from many arenas, such as getting bank approval for a housing loan, which in turn increases the probability of experiencing housing problems. We examine the effect of having a mental health problem in further detail in the next chapter.

7 Welfare problems and life satisfaction

Having a welfare problem does not necessarily decrease personal satisfaction with life. For instance, having a housing problem may not affect life satisfaction for a person who is otherwise in good health or who spends much time outside the home. Having an economic problem may be of less importance if spending time with friends and family does not involve economic costs. Moreover, some people may have opted for a life-style that may imply poor economic or housing conditions. All the same, there appears to be a link between the accumulation of welfare problems and self-reported life satisfaction. Barstad (2016) found a strong link between the accumulation of welfare problems and self-reported life satisfaction among the general population.

Previous chapters in this report have shown that immigrants accumulate more welfare problems than the general population. This probability is higher among certain categories, like women, older age groups, urban dwellers and unemployed and disabled.

7.1 Life satisfaction plunges with increasing welfare problems

Immigrants without any welfare problems generally report being very satisfied with their life (mean score 8 on a scale from 0 to 10: similar to the mean score in the general population, which is 7.9 (Brastad 2016). Figure 7.1 shows the level of life-satisfaction in relation to number of welfare problems. The illustration reveals that having one or more welfare problem(s) reduces life satisfaction significantly.

Figure 7.1: *Average level of life satisfaction (vertical axis, scale 0–10) over the number of accumulated welfare problems. N = 4 434*

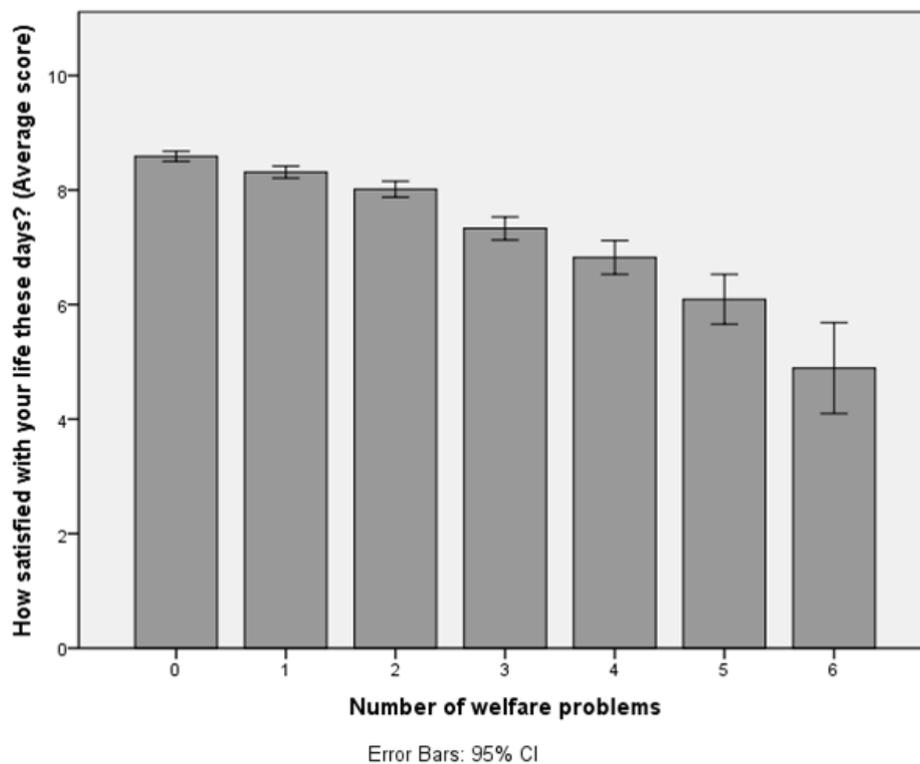


Table 7.1 shows how many immigrants report low or high life satisfaction within each group of the number of accumulated welfare problems. High life satisfaction is here defined as having scored 9 or 10, and low life satisfaction as having scored below 5 on a scale from 0 to 10.

Clearly, the share of those who experience low life satisfaction increases with the number of welfare problems. Similarly, the share who experience high life satisfaction decreases with the number of welfare problems.

Table 7.1: *Share of immigrants reporting low and high life satisfaction within each group of accumulated welfare problems. N = 4 434*

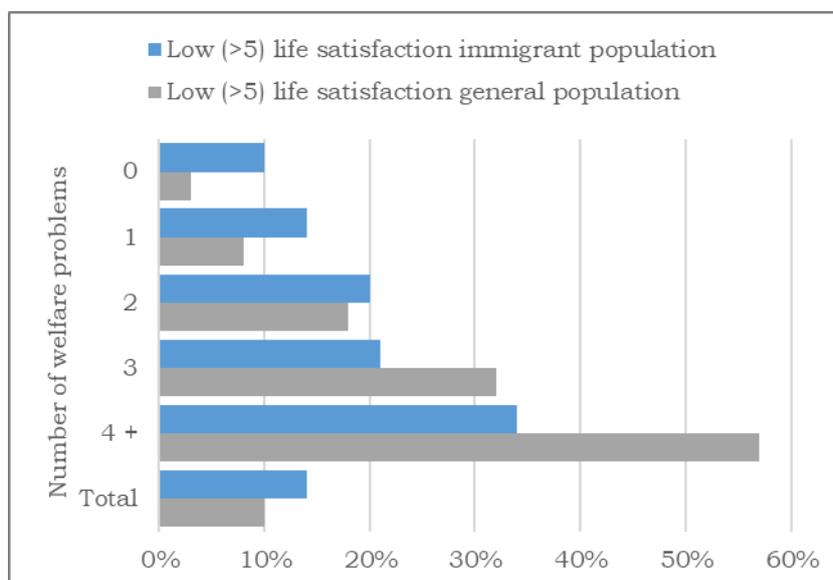
Number of welfare problems	Life satisfaction		
	Low (>5)	High (9-10)	Mean score
0	10%	38%	8.6
1	14%	28%	8.3
2	20%	20%	8.0
3	21%	9%	7.3
4 +	34%	6%	6.4
Total	14%	46%	8.0

There appears to be greater dispersion in life satisfaction among the immigrant population than among the general population. Among the immigrant population (See figure 7.2), a higher share are dissatisfied *and* a higher share are very satisfied with their lives compared to the general population: 14% of the immigrants are dissatisfied, compared to 10% among the general population. However, 46%, that is, almost half, are very satisfied, compared to 36% in the general population (Barstad 2016).

7.1.1 Do immigrants have better coping mechanisms?

Among persons reporting four or more welfare problems, the differences between the general and the immigrant population are striking. In the general population, more than half report low life satisfaction, whereas the share is one in three among the immigrant population. (See Figure 7.2)

Figure 7.2: *Share of general population and immigrant population who report low life satisfaction, by number of welfare problems*



Source: Data on the general population are from Barstad (2016:27).

7.2 Predictors of life satisfaction

There is clearly an association between welfare problems and life satisfaction. However, which welfare problem predicts reduction in life satisfaction the most? Table 7.2 shows the results of our multivariate analysis, where life satisfaction was the dependent variable, with welfare problem, country of origin, gender, age, duration of residence, domicile and education as covariates.

Table 7.2: *Association between life satisfaction (0–10) and gender, age, duration of residence, domicile, education, family situation, welfare problem and national background. N = 4 434*

		Non-standardized Coefficients		Standardized Coefficients		Sig.
		B	Std. Error	Beta	t	
Constant		9.4	0.15		63.2	0.00
Gender (Reference: Men)		0.2	0.06	0.05	3.8	0.00
Age (centred at 36 years)		0.0	0.00	0.01	0.3	0.77
Duration of residence (Reference: Long)	Short	-0.2	0.10	-0.05	-2.5	0.01
	Medium	-0.2	0.08	-0.04	-2.3	0.02
Domicile (Reference: Urban)	Rural	-0.2	0.16	-0.02	-1.1	0.27
	More densely populated	0.2	0.07	0.04	2.5	0.01
Education (Reference: Higher)	No formal education	0.8	0.19	0.06	3.9	0.00
	Primary	0.0	0.07	0.01	0.6	0.57
	Upper secondary	0.0	0.08	0.01	0.4	0.73
Family situation (Reference: Single parents with children)	Singles without children	-0.1	0.10	-0.02	-1.1	0.25
	Couples without children	0.2	0.12	0.03	1.9	0.06
	Couples with children	0.5	0.09	0.11	5.4	0.00
Welfare problem	Work	-0.2	0.07	-0.05	-3.0	0.00
	Health	-0.5	0.08	-0.09	-5.8	0.00
	Economy	-0.5	0.07	-0.11	-7.1	0.00
	Social marginalisation	-0.3	0.08	-0.05	-3.8	0.00
	Mental health	-1.5	0.09	-0.27	-18.0	0.00
	Neighbourhood	-0.2	0.08	-0.04	-2.7	0.01
	Housing	-0.3	0.06	-0.06	-4.4	0.00
Country of origin (Reference: Somalia)	Afghanistan	-0.7	0.14	-0.09	-4.6	0.00
	Bosnia-Herzegovina	-1.0	0.16	-0.13	-6.2	0.00
	Eritrea	-0.7	0.14	-0.09	-4.9	0.00
	Iran	-1.3	0.14	-0.17	-8.7	0.00
	Iraq	-1.0	0.15	-0.12	-6.5	0.00
	Kosovo	-0.9	0.15	-0.13	-6.4	0.00
	Pakistan	-0.7	0.15	-0.09	-4.5	0.00
	Poland	-1.5	0.15	-0.19	-9.6	0.00
	Sri Lanka	-0.8	0.15	-0.10	-5.2	0.00
	Turkey	-1.0	0.15	-0.13	-6.9	0.00
Vietnam	-2.3	0.15	-0.29	-14.8	0.00	

Having a mental health problem is the strongest predictor of experiencing low life satisfaction ($t = 18.9$). Persons who experience mental health problems have on average more than one point lower self-reported life satisfaction on a scale from 0 to 10 than those with no mental health problems. This is consistent with

Barstad (2016), who also finds that having a mental health problem is the strongest predictor of reduced life satisfaction.

Experiencing all the type of welfare problems significantly reduces life satisfaction. Experiencing economic and health problems reduces the level of life satisfaction by around half a point. It is reasonable to believe that having economic or health problems prevents the individual from participating in many arenas of society, and may lead to social exclusion. Atkinson (1998) recognized *relativity* as a central aspect of social exclusion. As mentioned in Chapter 3, *relativity* indicates that social exclusion takes place in a specific society and in a setting and context relevant in that specific society. If an individual experiences, for instance, an economic problem while others are well off, that person is prevented from taking part in arenas that cost money. However, if everyone were poor, that would not apply. If certain groups consistently have more economic problems than others do, that can lead to social exclusion and lower life satisfaction, even if their situation is not in itself bad, because it is bad relative to that of the others.

7.2.1 Despite more welfare problems, immigrant women are more satisfied with their lives

We have seen that women accumulate more welfare problems than men do. However, for any given level of accumulated welfare problems (and national background), women are on average more satisfied with their lives than are men.

The previous chapter showed that Somalis have accumulated more welfare problems than the other immigrant groups in this survey. However, the analysis of life satisfaction (Table 7.2) shows that Somalis are *more* satisfied with their life compared with other immigrant groups. Among the immigrant groups in this survey, Poles and Vietnamese are most dissatisfied – but are also the immigrant groups with the fewest welfare problems.

8 Conclusions

This report has analysed living conditions among immigrants in Norway – specifically, whether and how welfare problems accumulate among immigrants, compared to the Norwegian population in general. A central task of the Norwegian welfare state is to hinder the accumulation of welfare problems for individuals and groups. National integration policy, provide a set of measures for facilitating the aims of the welfare state to support immigrants with equal rights, duties and opportunities in Norway.

The report has identified welfare problems related to work, housing, income, neighbourhood, social isolation, poor health and mental health problems. It has analysed the most common problems regarding living conditions among immigrants, and the extent to which welfare problems accumulate in certain groups of immigrants.

Immigrants are almost twice as likely to experience major accumulation of welfare problems (> 3 living conditions) compared to the entire population. Among immigrant women, one in four (27%) has more than three living-condition problems, as against one in five (20%) immigrant men.

Immigrants experience more welfare problems, and in other domains, than the total population. Immigrants experience far more problems related to housing and low labour market attachment compared to the population in general. Among the entire population, health and neighbourhood problems are the most frequent welfare problems reported.

Disability, unemployment, low education and short duration of stay in Norway emerge as factors strongly associated with problems concerning living conditions. Moreover, unlike in the majority population, these problems do not lessen with increasing

age. Immigrants living in cities accumulate more living-condition problems than do immigrants living in small towns and rural areas.

We found huge variations among different groups of immigrants. Immigrants from Poland, Bosnia, Kosovo, but also Vietnam and Eritrea, have fewer living-condition problems compared to immigrants from Somalia, Iraq and Afghanistan, even when we adjust for gender, age, education, duration of residence, housing and family situation.

In the entire population, single parents with children experience the greatest accumulation of welfare problems (15% have more than four welfare problems). Among immigrants, we find a corresponding proportion (13%). However, we did not find significant differences in accumulation of welfare problems, compared to singles without children or couples with or without children among immigrants.

Among immigrants, problems related to the combination of work and housing, as well as work and income, are the two most frequent combinations of welfare problems: 16% report these two combinations. For the majority population, health problems and low labour market attachment, and housing and problems in residential area the two most frequent combinations of welfare problems, with about 5% reporting these problems.

Compared with the total population, immigrants report generally high levels of life satisfaction (on average both score 8, on a scale from 0 to 10) Not unexpectedly, immigrants with many welfare problems report being far less satisfied with the life situation than do immigrants and others with no welfare problems. Somalis are one of the immigrant groups that accumulate most welfare problems – but they are also the immigrant group that reports highest life satisfaction.

Mental health and financial problems affect the quality of life significantly. Experiencing any type of welfare problem reduces the quality of life, but those who have symptoms of anxiety and depression and have who have financial problems report the lowest quality of life.

This report gives only a snapshot. Our analysis is based on cross-sectional data. We have analysed the statistical relationships

between combinations and accumulation of welfare problems, and the relationship with quality of life at one point in time: the year 2016. These data are not sufficient for uncovering the dynamics and causality of how welfare problems pile up over time. Such an analysis will require longitudinal data.

The rich get richer and the poor get poorer. That sums up the ‘Matthew effect’. Our analysis has shown that immigrants, to a greater extent than the majority population, experience the accumulation of that welfare problems accumulate. The low labour market attachment found among many immigrants, and especially the women, appears to be an important factor in explaining the accumulation of other welfare problems.

Many immigrants experience unsatisfactory housing conditions. Housing prices in Norway are high, and have been rising for many years. Persons who had the opportunity and means to become home-owners in previous years have seen the value of their house properties multiplying. Conversely, entering the housing market has become more difficult for low-income households and households with no or little equity. Thus, it is not surprising that the housing situation is among the most frequent problems facing immigrants. Among our 12-nation sample, it was the most common welfare problem, affecting more than 40%.

8.1 What can we learn from this?

Labour market attachment is an important aspect of integration. It facilitates contacts with the native population and increases opportunities to learn the language. Further, it is an important aspect for the sustainability of the welfare state, as exclusion from the labour market implies lower income and higher costs for the welfare state.

Our multivariate analyses have shown that being without paid work is associated with accumulating welfare problems for immigrants. Continuous efforts aimed at achieving full employment seem to be a good strategy for the individual as well as for the public purse.

Attention should also be directed towards what makes immigrants stay employed. For instance, Bratsberg, Raaum and Røed (2016)

found that employment rates among refugees *decreased* after 7 to 10 years of residence in Norway. This indicates that overcoming the first hurdles of integration – basic learning language, getting one’s skills assessed, landing a job – may not be sufficient measures for long-term integration.

Closely linked to employment is the positive effect of education, in particular having completed upper secondary or tertiary education. For immigrants, access to education and to obtaining recognized credentials is likely to improve employment and prevent the accumulation of welfare problems.

Our analysis has shown that immigrants who settle in more rural areas of Norway accumulate fewer problems. In the development of settlement and integration policies, more attention should be given to the significance of differences in regional labour markets. This is also indicated by recent studies showing that matching refugee placements with labour market conditions considerably boosts the labour market integration of immigrants (e.g. Banyak et al. 2017).

Even if problems tend to accumulate, the correlations between problems are not especially strong. Our study shows that low labour market attachment and mental health problems are the problems most strongly correlated with the other welfare problems among our sample.

As in the general population, having a mental health problem is a strong predictor of reduced life satisfaction among immigrants. Although having a mental health problem is the least frequent welfare problem, 14% of the immigrant men in our sample report having a mental health problem, twice as much as among men in the general population. Among the immigrant women, 19% report having a mental health problem, as against 11% in the general population.

An ongoing study (Ruud et al. 2018 forthcoming) of living conditions in less wealthy areas in Oslo shows two prototypes of patients with mental health problems. The first is a male in his 20s or 30s who has dropped out of school and has no or weak attachment to the labour market. He is in conflict at home and struggles with being in two different cultures (immigrant at home, Norwegian outside the home). Drugs are easily available, and he

has no daily routines. The other prototype is female. She is around 35–40 years of age, little knowledge of the Norwegian language, is isolated and lacks a firm understanding of Norwegian society

As is evident from these descriptions, mental health problems are complex and often correlate with other welfare problems, as shown in our study. Untangling mental health problems calls for complex interventions, as the problems tend to be interdependent on work and economic problems. However, untangling them is likely to improve life satisfaction – which in turn is an important element in the successful integration of immigrants in Norway.

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Appendix

Table Appendix: Regression output with corresponding Wald values from four logistic regression analyses. Dependent variable: Combination of two welfare problems. . *** p<0.01, ** p<0.05, *p<0.1.

		Work / housing		Economy / housing		Work / economy		Work / health	
		Exp(B)	Wald	Exp(B)	Wald	Exp(B)	Wald	Exp(B)	Wald
Gender (reference: men)		1.90 ***	49.458	1.25 **	5.363	2.20 ***	62.887	1.70 ***	26.498
Age (centred at mean = 36 years)		1.04 ***	74.776	1.03 ***	48.079	1.07 ***	241.506	1.07 ***	216.361
Country of origin (reference: Vietnam)	Afghanistan	1.03	0.014	1.99 **	6.328	1.42	1.525	1.57	2.513
	Bosnia-Herzegovina	0.85	0.355	0.51	3.186	0.66	1.697	1.38	1.69
	Eritrea	1.22	0.704	3.46 ***	22.396	1.99 ***	7.31	0.48 **	4.787
	Iran	1.46	2.616	1.88 **	5.642	1.58	3.259	1.70 **	5.14
	Iraq	3.06 ***	25.424	2.77 ***	15.645	4.71 ***	41.369	3.16 ***	24.1
	Kosovo	2.12 ***	10.949	1.45	1.818	1.77 **	4.76	2.05 ***	9.093
	Pakistan	1.86 ***	7.797	1.63	3.481	1.82 **	5.89	1.68 **	5.32
	Poland	0.57	3.73	0.34 ***	7.682	0.23 ***	13.198	0.70	1.164
	Somalia	2.46 ***	15.208	5.75 ***	47.259	4.53 ***	38.472	0.80	0.536
	Sri Lanka	1.34	1.531	2.08 ***	7.649	1.52	2.716	0.81	0.746
	Turkey	1.90 ***	8.092	1.63	3.371	2.05 ***	8.119	2.05 ***	9.748
Duration of residence (reference: long)	Short	3.32 ***	72.837	3.06 ***	53.262	3.03 ***	50.537	0.95	0.084
	Medium	1.79 ***	22.757	2.23 ***	35.952	1.86 ***	21.551	1.19	1.667
Domicile (reference: urban)	Rural	0.76	0.926	0.92	0.082	1.09	0.083	0.47	3.362
	More densely populated	0.80 **	3.927	0.92	0.513	1.04	0.107	0.84	1.835
Education (reference: tertiary)	No formal education	2.80 ***	19.567	1.79 **	5.861	2.75 ***	18.092	4.14 ***	29.08
	Primary	1.51 ***	15.781	1.31 **	6.323	1.72 ***	23.994	1.92 ***	28.607
	Upper secondary	1.21	2.256	1.06	0.178	0.89	0.633	1.17	1.167
Family situation (reference: single parent with children)	Singles without children	0.48 ***	20.133	0.64 ***	7.959	1.23	1.804	1.06	0.121
	Couples without children	0.97	0.02	0.81	1.003	0.59 **	6.352	0.99	0.005
	Couples with children	1.27	3.786	1.52 ***	10.17	0.84	1.559	0.97	0.026
Main activity (reference: employed)	Unemployed			3.13 ***	58.027				
	Student / introductory course			2.36 ***	37.863				
	Pensioner			1.27	0.8				
	Disabled			2.72 ***	46.196				
	Homestayer			1.86 **	5.764				
Cox & Snell R Square		0.08		0.13		0.13		0.11	