NAV's Horizon Scan 2021

Developments, trends, and consequences towards 2035

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1. EXECUTIVE SUMMARY

NAV's Horizon Scan 2021 discusses the most important societal trends that will affect the area of labour and welfare towards 2035 and the potential consequences these may have for NAV. The trends portray possible developments, but abrupt unforeseen events and crises may occur. The last few years have shown that NAV must be able to deal with such unexpected events and crises quickly.

1.1 Faster restructuring

A faster pace of restructuring is expected in the future due to technological developments, globalisation, and the green transition. The coronavirus pandemic will accelerate the restructuring in several areas. This means that workers must expect to change jobs and update their qualifications more frequently than before.

There will probably be no shortage of jobs in the longer term. Although an ageing population will lead to a shortage of labour, the major restructuring will create new jobs. Nevertheless, we must expect periods of higher unemployment in certain industries and occupations affected by the restructuring. At the same time, employers must expect to experience periods where it will be difficult to recruit relevant and up-to-date expertise. We expect low unemployment among those who have higher education and skilled workers. The greatest labour shortage is expected to be among skilled workers in the health sector and traditional trades. A shortage of nurses is also expected.

Unemployment today is by far the highest among unskilled workers and the trend is expected to intensify further. Depending on how well society succeeds with the restructuring, there is a risk that more people will remain permanently outside the labour market, and that there is rising income inequality and a growing number of people on health-related benefits. The risk is particularly high among unskilled workers in low-skilled professions.

An important task for NAV will be to facilitate the restructuring. NAV must be well prepared for the restructuring and be able to develop its resources and services to meet the changing needs. This will result in a greater demand for up-to-date knowledge and understanding of the labour market and social inclusion, as well as better cooperation with industry and commerce and across sectors. Abrupt unforeseen changes mean that NAV must be ready to reprioritise quickly.

1.2 Changing demographics – the challenges facing the welfare state

The population is growing at a slower pace than before, while ageing is stronger due to lower birth rates and immigration. Moderate population growth of 3 per cent towards 2035 is expected for people of working age. Around 3 out of 4 employees in NAV work on services and benefits for people of working age, and the changing demographics are assumed to have little effect on NAV's workload. The number of people over the age of 67 years is expected to increase by more than 40 per cent towards 2035, while the total population is expected to grow by 7 per cent. This means that the largest growing user groups for NAV towards 2035 will be assistive technology recipients and pensioners. An ageing population will be accompanied by a wider gap between expenditure and revenues in the state budget and will challenge our labour and welfare policy going forward. We expect increased demands to rationalise the public sector and that NAV may be required to follow-up more user groups towards employment than today.

Immigration is expected to be lower than before, yet substantial net immigration is still expected, and the immigrant population will increase by 23 per cent towards 2035. Lower immigration may provide easier access to the labour market for those who do arrive. However, the changing composition of immigration, lower labour migration and a higher proportion who arrive through family reunification or as refugees,

could pull in the opposite direction, if more people fail to match the requirements of the labour market. Immigration forecasts are uncertain though and may change quickly.

Population growth is expected to be strongest in the most central municipalities, while in 4 out of 10 municipalities the population is expected to decrease towards 2035. This will result in a shortage of skilled labour in many parts of the country, which will also apply to NAV in the less central areas. Fewer people of working age in many areas will affect how NAV organises its resources in the future to ensure adequate knowledge environments and effective use of resources.

1.3 New expectations and opportunities

We believe that people's expectations for NAV will change in the future as services improve elsewhere in society. This is especially true of expectations for coordinated services in the public sector. We also believe that people will to an increasing extent expect services adapted to their situation and needs. In 2035, a substantial amount of user dialogue will be digitalised and automated. This will presumably contribute to greater expectations for the service NAV provides and increase the importance of good counselling and relationship-building skills. If we are to succeed in providing good services, we must have an excellent understanding and the right expertise to meet the users' needs.

The pervasive digitisation of our society will provide NAV with new opportunities within data-driven services. Many benefits and services are suitable for full or partial automation and self-service, and NAV can meet its users in new ways through innovative use of information the public sector already has available. Services can be tailored to individual needs to a greater extent and coordinated across NAV and other sectors. Available data can be used in solutions that provide advice and decision-making support to users and employees. NAV can also create digital platforms where external providers offer new types of services. To maintain trust and security, NAV must have a transparent, ethical, and responsible approach to the use of data-driven services and thus ensure a broad acceptance in the population.

1.4 Changes since the last Horizon Scan

The following are the biggest changes since NAV's last Horizon Scan (NAV 2019):

- **The period** of the scan has been shifted from 2030 to 2035. This has the greatest impact on areas where we can quantify the forecasts going forward, as in the chapters on the labour market and demographics.
- The possible long-term consequences of the **coronavirus pandemic** have been assessed in all areas and are particularly discussed in the chapters on the labour market, demographics, user expectations and health.
- **Population growth** is expected to be lower than expected two years ago, while the ageing of the population is expected to be stronger. Population growth of 7 per cent is expected from 2020 to 2035, compared with 8 per cent growth from 2019 to 2030. Another difference is that the population of some age groups (0–18 years and 19–34 years) is expected to decline. The immigrant population is expected to increase by 23 per cent from 2020 to 2035, compared with the previous forecast of 25 per cent from 2019 to 2030.
- This time we have estimated the proportion of NAV employees working with benefits and services aimed at people of working age (around 3 of 4), and it is now clearer that **in isolation, the demographics will have little impact** on the number of users in the areas where most NAV employees work.
- **The area of assistive technology,** where one in ten NAV employees work, has been more thoroughly evaluated. Assistive technology and retirement pensions are the areas where the growth in the number of users is expected to be the greatest. In Chapter 4, a fact box on demographics considers how demographics, user expectations, technology, health, and developments in assistive technology policy will affect the area going forward.

- A new feature of this scan is that we also point out that increased automation may lead to greater demands for **improved service from NAV** and professional advice and relationship-building skills.

- We have made a thorough review of the **innovation opportunities** NAV will have through data-driven services. NAV must have an ethical and responsible approach to the use of data-driven services, with a broad acceptance in the population. Although most people want innovative, coordinated, and adapted digital services, a new risk factor is a lack of acceptance and trust.

- We still expect a fast pace of restructuring in working life, but a new factor is that the corona-virus pandemic may lead to an acceleration of the restructuring, which increases the risk of vulnerable groups remaining permanently outside the labour market.

- A thorough analysis has been made of the **political trends** that will be important to NAV, based on a research project Fafo (the Institute of Applied Science) has carried out for NAV (Ødegaard et al. 2020). See Chapter 10.

- In a separate chapter of the extended summary (see Chapter 3.8), we have assessed more thoroughly how societal trends will affect **the competence needs in NAV**.

2. INTRODUCTION

Society is restructuring and the pace is accelerating, and NAV's services must reflect this development. The Horizon Scan discusses the most important societal trends in labour and welfare towards 2035 and the potential consequences these may have for NAV. In some areas, the forecasts have a reasonable degree of certainty, while there is great uncertainty in other areas. The scan shows what we believe to be the most probable developments, but it has been supplemented with discussions on which risk factors are pulling in different directions.

The purpose of the scan is twofold:
- To help NAV formulate more accurate strategies and plans for the years ahead. The findings of the Horizon Scan will be an important source when updating NAV's corporate strategy in 2021.
- To contribute to reflection and discussion about the opportunities and challenges NAV faces in the future and considering how these will affect NAV in general and the individual employee.

An additional objective is to also disseminate knowledge outside NAV. Many of the trends are also important for our partners. The scan can provide a picture of common challenges making it easier to cooperate across sectors and contributing to a more knowledge-based labour and welfare policy.

NAV's Horizon Scan was first published in July 2014 (NAV 2014) and this is the fourth edition. The Horizon Scan is based on external research and NAV's publications, supplemented with assessments of the opportunities, and challenges the societal trends may present to NAV. It has been necessary to involve all of NAV to ensure support and obtain relevant input. Two questionnaire surveys have been conducted, one among NAV employees and one among user representatives. The employees' unions and the Norwegian Association of Local and Regional Authorities (KS) have also been involved. There have been a few dozen workshops and meetings with presentations of the preliminary results and collection of input.

The scan is general in nature. NAV covers large and complex areas where societal trends do not all pull in the same direction or proceed at the same pace. Developments can vary from place to place and from area to area, they can be unpredictable, and it can be difficult to interpret what a change means. We encourage units in the organisation to prepare more local and detailed horizon scans, where expedient.

The scan has been divided into seven areas of society (Chapters 4–10): Demography, user expectations, technology, the labour market, health, living conditions and policy. Chapter 11 contains the results of the two questionnaire surveys.

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3. EXTENDED SUMMARY

NAV's Horizon Scan 2021 discusses the most important societal trends that will affect the area of labour and welfare towards 2035, and the potential consequences these may have for NAV. The scan is based on external research and NAV's publications, as well as internal questionnaire surveys. The trends portray a potential development, but abrupt unforeseen events and crises may occur. The last few years have shown that NAV must be able to deal with such unexpected events and crises quickly.

3.1 Weaker population growth in the future – great variation between user groups

The three most important demographic trends will be the ageing of the population, the growing immigrant population and centralisation. Population growth is expected to be weaker in the future than in the last 10–20 years, and weaker than previous projections indicated. From 2020 to 2035, the population of Norway is expected to increase by 7 per cent.

For most services and benefits, the direct effect of demographics will have modest consequences for NAV's workload. This is because around 3 out of 4 NAV employees work directly or indirectly with user groups of working age. The population aged 19–66 years is expected to increase by only 3 per cent towards 2035.

However, some user groups will grow much more due to the ageing of the population. The 67 years and older age group is expected to increase by more than 40 per cent towards 2035. The number of recipients of retirement pension and assistive technology is expected to increase correspondingly, both by just over 40 per cent. Those already receiving retirement pension often need little assistance from NAV and retirement pensions is an area where NAV has had success with automated services in a period with a substantial increase in the number of old-age pensioners. We expect further growth to have manageable consequences, even if a higher proportion of old-age pen-

sioners who have lived/live abroad often requires most of the processing to be done manually. The growth in the use of assistive technology will pose greater challenges, as this is an area that requires more personal assistance and almost 10 per cent of NAV employees work in this area. For assistive technology, there is also considerable uncertainty as to how higher expectations, new technology and better health will affect future developments.

The immigrant population is expected to rise by 23 per cent towards 2035. Expected net immigration is lower than in the previous decade due to lower immigration and higher emigration. Rapid changes and uncertain forecasts will require NAV to be prepared to reprioritise quickly.

Three-quarters of the growth in the immigrant population is expected to be among people from Eastern Europe outside the EU, Africa, Asia, and Latin America. Most immigrants are expected to be from Africa and Asia. This is because refugees, and people who arrive in Norway through family reunification, are expected to account for a much higher proportion of the immigrants who arrive in the future. Lower growth in the immigrant population may make it easier for immigrants to find employment in Norway. A higher proportion of immigrants who lack the relevant skills and work experience may pull in the opposite direction. Labour migration has decreased and is expected to be lower than in the past. This is due to the stronger ageing of the population in Eastern European EU countries compared with Norway, resulting in a greater demand for labour in these countries. The wage gap between Norway and the Eastern European EU countries is also smaller than before. This may result in a shortage of labour in certain industries, especially in less central areas.

Population growth is expected to be strongest in the most central municipalities. A decline in population towards 2035 is expected in 40 per cent of the municipalities. However, population growth is expected in all the counties except Nordland. Continued centrali-

sation will lead to significant differences in how the ageing of the population will affect the local labour markets. In less central areas, it may become difficult to recruit skilled labour, which can also be a challenge for NAV. The major local differences in population development will have a bearing on how NAV should organise itself in the future to ensure adequate knowledge environments and efficient use of resources.

An ageing population is expected to have greater indirect consequences for NAV than the direct consequences of the rise in the number of users. A greater health care burden leads to a larger gap between expenditure and revenue in the state budget. This is expected to place increasing demands on efficiency in the public sector and may also lead to greater political expectations for NAV to follow up more user groups towards employment than today. This may apply to the young and elderly, such as people on disability benefits and recipients of social assistance who currently do not have an activity obligation, as well as working seniors, to help raise the retirement age.

3.2 Changed user expectations.

The expectations for digital services, customer service and availability are largely shaped by what we experience in our daily lives. In recent years, digitalisation has provided people and businesses with smart and efficient services at a rapid pace. User expectations will change and increase towards 2035 and NAV must keep up with developments to make its services available and relevant.

In 15 years, we believe digitalisation will provide users with other and better services. Many of the pain points users face when in contact with NAV today will be solved using so-called proactive and automatic services. In many areas, the users will barely notice that NAV is the provider of the benefit or service. OECD refers to this trend as «invisible services».

While up to now NAV has mostly been concerned about ensuring that users with limited digital skills also have access to our services, other skills will be equally or even more important in order to make the most of digital, public services in the future. For example, we see that knowledge of the public sector (often called administrative competence) is important. It is difficult to envisage what skills people will need when using public services 15 years from now. The automation of services can make digital and administrative competence less important. At the same time, automation will create new problems. For example, users may have less knowledge of public services and regulations if they do not need to use them. This in turn can affect our ability to verify whether the users are receiving what they are entitled to. OECD also points out that one challenge «invisible services» presents may be that the users no longer understand the important role public services play or how they contribute to their lives. This can affect the understanding of and willingness to fund public services through taxation.

Putting the needs of the users at the heart of the development of our services has been our mission for some time now and we believe it will become even more apparent over the next 15 years. The trend is largely about people expecting analogue and digital services tailored to their specific situation and needs, regardless of how the public sector is organised. In 2035, we believe that users and businesses will want to choose for themselves how they contact NAV and what kind of help they should receive. We believe that most people will prefer digital and automated services, though some people will still prefer one-on-one assistance from a NAV counsellor.

Today, people and businesses must largely understand how the public sector is organised and who is responsible for what services. In 2035, we assume that people will expect more coordinated services both from NAV and across public sectors. Coordinated services are particularly important within labour and welfare policy, where close cooperation between NAV and other actors is needed both in the private and public sectors.

In 2035, we believe that users will to an even greater extent gain knowledge and expertise on how they can obtain help through online information and tools. This can change the expectations people have when they are in contact with NAV, regardless of whether the

contact is with a person or a machine. Firstly, this development may lead to higher expectations for NAV's services helping people to move on in life or away from the situation that made them seek help. We assume that these expectations will be more about building relationships, as well as motivating and supporting the user. Secondly, we believe the expectations will include disseminating good knowledge and advice about the labour market. This is not only about knowledge being an important factor in helping people and businesses but the fact that we believe expectations towards specialised and tailored knowledge will be heightened when people can source information themselves.

3.3 Digitalisation provides NAV with great opportunities.

A digital revolution is underway, which many people refer to as the fourth industrial revolution. Digitalisation will provide cheaper and more flexible data performance, greater and easier access to data and rapid development of data-driven services that rely on algorithms. The development provides great opportunities to improve, rationalise and create new business models for NAV. To take advantage of these opportunities, NAV must develop the full breadth of its organisation: Service offerings, user meetings, regulations, resources, coordination with others, work processes, culture, and competence.

Important opportunities are linked to:
- Automation: Many of the benefits and services in NAV are suitable for automation and self-service. NAV could consider granting benefits or providing services automatically to a greater extent. Moreover, NAV could, on its own initiative, prepare a proposal for the individual to consider – in the same way as the Norwegian Tax Administration offers a completed tax return.
- Adaptation: Services will be tailored to individual needs to a greater extent, by joining together combinations of services both across areas in NAV and together with other enterprises in the public and private sector. Personalised digital services will help meet the users' expectations.

- Recommendation: Data acquisition and analyses provide recommendations to the users of the services, whether these are personal users, employers, or NAV's employees. Examples of opportunities are that NAV's counsellors can receive recommendations about which users should be prioritised for follow-up, or that unemployed people can receive recommendations on training measures to increase their opportunities to find employment.
- Nudging: Use of information experiments to test different ways of presenting information and options to find the most effective strategies for influencing the individual's behaviour, for example, to help more people find employment.
- Platform operator: The public sector will be able to offer platforms that allow other actors to develop and offer services to various user groups. The more people who participate, the greater the network effects of such platforms could be.

The opportunities NAV can and should use must comply with the legislation, including data protection rules, ethics, and social acceptance. Some people predict that there may be a delay in the use of algorithms and data-driven services due to greater attention to issues such as discriminatory outcomes of algorithms or that the outcomes cannot be explained. As the most important actor in the field of welfare, it will be particularly important for NAV to have an ethical and responsible approach to the use of data-driven services with a broad acceptance in the population.

3.4 A faster pace of restructuring

A faster pace of restructuring is expected in the future due to technological developments, globalisation, and the green transition. The coronavirus pandemic is likely to accelerate the restructuring due to a faster pace of digitalisation and restructuring in other areas as well. We also expect habits and preferences in some areas to be permanently changed.

The global economy is expected to be affected for several years to come by the impact of the coronavirus pandemic as well as major public investments to help rebuild the economy. Many countries are already

struggling under a heavy burden of debt. The after-effects of the pandemic elsewhere in the world, especially among our most important trading partners, will also impact Norway. Unemployment internationally is expected to fall gradually towards 2025. In the Euro area, the unemployment rate in 2025 is expected to fall to the same level as in 2019. Although the digitalisation of an increasing number of sectors contributes to increased globalisation, rising protectionism has helped slow down globalisation. Significant growth is expected in international trade in the future, following the sharp decline resulting from the pandemic in 2020, but rising protectionism may curb the growth. This may harm a small, open economy such as the Norwegian economy. The ageing of the population will result in a decreasing proportion of the population of working age both in Norway and internationally, which will slow down the growth of the world economy in the long term.

Norway has committed to reducing greenhouse gas emissions from 1990 levels by 50–55 per cent by 2030, and the decrease has so far been modest. New estimates show that global oil production may have peaked in 2019. Both factors mean that the green transition will result in a major restructuring of the Norwegian economy in the next decade.

New technology provides many new opportunities and will also lead to major changes in the type of expertise and manpower in demand. Rapid technological development and abrupt changes are likely to require employees to change jobs and update their qualifications more frequently. In this regard, the Expert Committee for Tertiary and Higher Education has proposed establishing small tertiary education modules tailored to the needs of the labour market. Six per cent of the jobs in Norway are thought to be at high risk of disappearing completely as a result of automation, while around 25 per cent are expected to experience significant changes, according to OECD. There is great uncertainty in such analyses. Low-skilled jobs are most at risk, but tasks performed by highly trained workers will also be affected.

Technological developments and other trends leading to restructuring will also create many jobs and surplus labour will be in demand in other industries and professions. We do not expect the high level of unemployment to be permanent, as the ageing of the population will lead to a shortage of labour. Nevertheless, we expect to see periods of higher unemployment in industries and professions particularly affected by the restructuring.

Estimates from Statistics Norway show that in the future, there will be more jobs in private and public service production, with an almost 10 per cent increase by 2040. These are already the largest industries and will become even more dominant going forward. In 2040, they will account for 60 per cent of the workforce. Employment within oil and gas production is expected to fall the most in the same period, by around 20 per cent. A significant decline is also expected within the retail trade and manufacturing, by around 10 per cent. In the case of the retail trade, this is due to automation and new trading patterns in e-commerce, while the decline in manufacturing is mainly due to the knock-on effects of the decline in the petroleum industry. In total, the decrease in the number of people employed in these industries will be much greater than within oil and gas production.

An increasing shortage of labour with vocational training is expected in the future, especially within the health sector and traditional trades. A shortage of nurses is also expected. At the same time, the highest drop-out rate from upper secondary education is among students in vocational programmes, as around 1 in 3 students do not complete their programme of study. Overall, around 1 in 5 do not complete their upper secondary school education within five years. This proportion has fallen in recent years but is still high. Unemployment today is highest for people who only have a primary and secondary school education or an upper secondary school education specialising in general studies. This trend is expected to intensify in the years ahead and the restructuring resulting from technology and globalisation will affect vulnerable groups in the labour market more than others.

It will be an important task for NAV to facilitate restructuring and contribute to greater mobility. If possible, NAV must be at the forefront of this restruc-

turing and be able to deal with abrupt and unexpected events and crises. This will lead to a greater demand for up-to-date knowledge and understanding of the labour market and social inclusion. At the same time, this is a cross-sectoral challenge that will require better cooperation with employers and across sectors, including the municipal, health and education sector. An important question will be related to NAV's role in meeting the needs of the labour market in the future – and how to cooperate on this with other sectors.

3.5 Young adults and immigrants most at risk of having low incomes.

Up to 2013, Norway experienced a long period where most households experienced a significant increase in purchasing power, including the one-fifth of wage earners with the lowest income. Since 2013, purchasing power has remained stable. In the period from 2005 to 2019, there has been an overall decrease in the proportion of recipients of social assistance. However, from 2013 to 2018, the proportion increased slightly and can be explained by increased immigration and an increase in the number of new refugees. Although purchasing power has increased and the proportion of social assistance recipients has decreased, the risk of material and social deprivation has been stable and low, according to SSB's survey on living conditions.

Purchasing power has increased less for those at the bottom of the income distribution and thus income inequality has increased slightly. The proportion of children and young adults on relatively low incomes according to the EU-60 target[1] has increased. Fifteen per cent of young adults (18–34 years) had a persistently low income in 2018, around 5 percentage points more than in 2006. In the same period, the proportion of people over the age of 67 with low incomes fell from 17 to 9 per cent. The increase in young people with low incomes can be partly explained by a reduction in the proportion of employed people in this age group. However, there has recently been a positive

trend and the proportion of young people who are not in education, employment, or training (NEETs) has decreased somewhat while the proportion who complete upper secondary education has increased.

Immigrants are strongly overrepresented in the low-income group and immigrant children account for more than half of the children in low-income households. This has led to concern that low income is inherited. However, recent research on the descendants of immigrants who came to Norway in the 1970s and 1980s shows that the group has largely succeeded both in the education system and working life. This is despite many of these families having a weaker labour market attachment and tougher financial circumstances than most of the population. Good welfare schemes, free higher education and access to favourable student loans are some of the factors used to explain the high level of social mobility among the descendants of immigrants.

Weak labour market attachment is among the main reasons for low incomes among households with young adults and immigrants. Among immigrants, recently arrived refugees present a challenge when it comes to finding employment. The challenge will be to ensure that the individual matches the demands of the labour market. NAV must cooperate with the education sector, employers, and other sectors here.

The expected low net immigration towards 2035 may help reduce the proportion of social assistance recipients in the years ahead. A high level of employment is the most important factor for ensuring good living conditions in the population. A faster pace of restructuring in the labour market and periods of increased unemployment are expected in the future, as well as lower demand for a labour force with only lower secondary education or upper secondary education specialising in general studies. For the groups affected, the risk of dropping out from the labour market permanently and receiving benefits increases, which will weaken the living conditions for the people in these groups, as the benefits provide a lower income than wage earnings. This may lead to greater differences in living conditions in the population towards 2035.

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[1] Persistent low income according to the EU definition (EU-60) means that the household as an income below 60 per cent of the median income for three successive years.

The coronavirus pandemic has resulted in a strong increase in the proportion of people who are long-term unemployed. The crisis has had a broad impact and has led to an increase in the number of job seekers among those with low income and immigrants. There is a risk that this will soon create greater financial problems and an increased proportion of people seeking financial social assistance or health benefits.

We do not expect an increase in the proportion of people suffering from material and social deprivation, as we assume that there will still be a strong social security network to help secure the livelihoods of households with a weak labour market attachment.

3.6 Reduced use of health-related national insurance benefits

According to the World Health Organisation (WHO), Norway is among the countries that score the best in the world in terms of public health. Life expectancy is assumed to increase rapidly and steadily. In the last 20 years it has increased more in Norway than elsewhere in the Nordic region and there are several indications that healthy life years are increasing at the same rate. Several factors point to a further improvement in public health, including developments in health technology and medical research, as well as an expected decline in the number of smokers and lower alcohol consumption among young people. An increasing proportion of overweight and obese people is pulling in the opposite direction. Socioeconomic conditions also affect health, and another risk factor is if the restructuring in the future leads to more people remaining out of work.

It is uncertain how the coronavirus pandemic will affect public health, both in the short and the long term. Little is known about the after-effects for those who have been infected and have received treatment. In 2020, a lower-than-normal mortality rate was observed in the population, mainly due to the reduced incidence of other infectious diseases. There is no reason to believe that the coronavirus will continue to have a significant impact on public health in the years to come. However, infection control measures can have an impact on mental health for a period after the acute coronavirus crisis is over.

The incidence of mental health disorders in the population has been stable over time. However, an increasing proportion of young women are suffering from mental health issues. It is unclear to what extent the development is due to objective changes in health and to what extent it is due to greater transparency about mental disorders or an increased tendency to diagnose complex problems.

The proportion of the population receiving health-related benefits has fallen every year since 2009. At the end of 2019, barely 17 per cent of the population aged between 18 and 66 years were receiving such benefits. Important explanations for the decrease include improved public health, a higher education level, more immigrants with a short period of residence and tighter regulations on work assessment allowances introduced in 2018. More stringent activity requirements and more contact with the workplace during the period of sickness absence may also be contributing factors. The decrease applies to all groups over the age of 30 and is particularly strong among the 60 to 66 age group, where it may also be explained by the pension reform, which allowed people to take out their retirement pension from the age of 62. The development has been stable for young people under the age of 30, but there has been strong growth in the proportion of people on disability benefit. This is mainly due to an increase in the number of young people under the age of 24 on disability benefits, and one hypothesis is that more children with serious disorders survive and that when they reach adulthood, they have an increased prevalence of neurological and mental health problems.

Up until 2035, we expect the proportion of the population receiving health-related benefits to remain stable. Improved public health pulls downwards, while an increased average age among those of working age pulls in the opposite direction. The fact that the restructuring in the labour market affects vulnerable groups to a greater extent, as well as a continued high drop-out rate from upper secondary school, may help turn the trend. The latter will depend on how well

Norway succeeds in tackling the pace of restructuring. Similarly, the coronavirus pandemic may accelerate the pace of restructuring and mean that more people are permanently excluded from the labour market.

Despite a positive trend, Norway still has a high proportion of recipients of health-related benefits compared with other countries. Heavy use of these schemes may be due to social problems and unemployment being medicalised, which in turn can weaken the individual's labour market attachment.

To counteract the increased use of benefits due to a rapid pace of restructuring in the labour market, NAV must, in cooperation with employees and employers, place greater emphasis on the need for adaptation, resources and work capacity. This will require more targeted follow-up independent of the diagnosis and benefit, and that regulatory amendments underpin this. These are cross-sectoral challenges.

3.7 Restructuring, inclusion and the sustainability of the welfare state are important political challenges.

The main goals of Norway's labour and welfare policy are to have a well-functioning labour market with a high level of employment, financial and social security, and a safe and professional workplace. This has facilitated a high level of labour force participation and education, as well as significant social mobility. However, societal changes such as climate change, globalisation, demographic changes, and technological developments are of great importance for political lines of conflict, choice of path and priorities in the years ahead. There is reason to believe that the restructuring and new expertise, the inclusion of vulnerable groups and ensuring the sustainability of the welfare state will be the most important political challenges.

The skills policy has been high on the agenda in recent years and will probably be even more important in the future, especially due to technological developments and the green transition. It will be particularly important to ensure the inclusion of vulnerable groups in the workplace, such as certain groups of immigrants and young people who lack formal qualifications. Immi-gration requires integration and training, where improved and earlier access to upper secondary school education and trade certificates can be relevant measures. To prevent young people at risk from being permanently excluded from the labour market, relevant measures will include easier access to apprenticeships and closer follow-up.

Another key political challenge will be balancing the desire for secure welfare schemes with economic sustainability. Politicians face tough priorities here. One option is to cut expenditure through fewer or lower welfare benefits and/or a reduction in services. Another possibility is through increased tax revenues and tax basis. A third option is to increase labour market participation and thereby the tax revenues. A fourth option is to cut expenditure through a rationalisation of the public sector. Political parties have different views on which instruments are best suited, but a combination of several instruments will probably have to be used. Any economic shock scenario, for example, triggered by a sharp and permanent fall in oil prices will make these measures even more pressing.

Nevertheless, the Norwegian labour and welfare policy will most likely be characterised by stability. The Norwegian economy is sound and there is cross-party consensus on many of the fundamental features of this policy area. Some persistent lines of conflict in politics are likely to prevail in the years ahead. A greater need for health and care services and tighter economic frameworks are likely to strengthen the debate on public or private solutions. There is growing scepticism among the population about the privatisation of public services, while many people are positive towards private welfare services as a supplement to public services.

Dilemmas about universal services versus means-testing, adaptation and political micro-management will be relevant. The relationship between a «whip» and a «carrot» to boost employment will also be a key political issue. Much of this is about the balance between incentives and distribution. There will probably be political disagreement about how high the level of benefits should be without leading to too many nega-

tive work incentives. The same applies to the scope of the activity requirements and measures for those excluded from the labour market.

The labour and welfare policy will be influenced to a great extent by other important policy areas. This applies not least to climate and the environment. A green transition will require major restructuring. However, politicians can adopt measures that facilitate the restructuring, and industry and commerce can seize opportunities in a world of a green transition.

In the field of immigration and integration, the debate is often about the extent of immigration, integration measures and what requirements to set in different areas. There are several political paths here, both in connection with labour migration, reception of refugees and integration in education and employment. This may require an additional effort by NAV in the years ahead and will place greater demands on coordination between NAV and other affected parties.

With increased centralisation and an elder boom hitting the rural areas hardest, there are several indications that the centre/periphery will be a key line of conflict in the years to come. The discussion here revolves around basic welfare services linked to regional policy, where municipal mergers and centralisation of NAV offices may become key areas of contention. At the same time, digital services have made geographical distances less important.

A final policy area that will become important in the future is international cooperation. As a small and transparent economy, Norway has benefited from the internationalisation that has taken place over the last few decades. Relations with Europe are likely to become more important in the years to come, with misinterpretation of the EEA rules still fresh in the memory.

The Norwegian labour and welfare model assumes that citizens trust politicians and institutions. Internationally, declining political trust and increasing polarisation and populism have been much-debated phenomena in recent years. These are currently limiting

factors in a Norwegian context, partly due to comprehensive welfare schemes and institutionalised cooperation in the labour market. The coronavirus crisis has so far shown that trust in the authorities and politicians is strong in Norway and that political compromise and cooperation are the rule. However, a high level of unemployment, greater economic inequality and a sharper tone in the public debate could contribute to increased polarisation and less trust.

NAV and other public authorities will be expected to take targeted measures to ensure the necessary restructuring and boost in competence, increase coordination within and between government departments and adopt new technologies through digitalisation, automation, and data sharing. Digitalisation often requires simplification of the regulations, which cannot always be combined with the desire for greater flexibility, more targeted benefits, and means-testing.

3.8 The societal changes will change NAV's competence needs.

The societal changes discussed above will change the competence needs in NAV.

A faster pace of restructuring in the labour market will require:
- That NAV is **up to date on developments** and knows what the changes mean to NAV and its services.
- **Expertise in innovative and flexible development of services**, where skills training is an integral part of the service development. Innovative and flexible development of services requires insight and analytical skills.
- **Continuous and practice-oriented skills development** and change management to capture, reflect on and apply the employees' knowledge and experiences.

Greater user expectations will require:
- More **knowledge about the user groups in NAV** to gain a better understanding of their life situation and assistance needs.
- That employees who work with NAV users should have and further develop **guidance skills**.

Knowledge of communication and relations through research and further education are key prerequisites, as are adapted arenas for reflection on their practice and skills training.

- **Knowledge sharing and learning across** NAV, and with our partners. To meet future user needs, those working with user follow-up towards employment should have expertise in several disciplines, such as market, social studies, inclusion, administration, and guidance.

A greater need for cooperation across sectors will require:

- **Increased knowledge of partners** in other sectors, about the services that can be offered to users and the effects of these.
- **Competence in interdisciplinary/inter-sectoral cooperation** that involves a structured way of working between personnel from different professional groups, users, and any relatives. Competence in interdisciplinary cooperation may also be relevant internally in NAV, where the different professional environments join forces to assist the user.

Pervasive digitalisation will require:

- An increased need for **technology and analytical skills** and the use of digital tools.
- Knowledge of **how digitalisation affects the labour market** for different occupational groups.
- Expertise in the **use of digital technology at user meetings** to promote attachment to the labour market and improve the individual's living conditions.

4. DEMOGRAPHICS

By: Magne Sortland

This chapter is based on Statistics Norway's (SSB) latest population statistics as of 1 January 2020, as well as the population projections from 3 June 2020 (Gleditsch et al. 2020 and Leknes et al. 2020).

4.1 Continued weak population growth, but a strong increase in the number of older people

At the beginning of 2020, the population of Norway was just under 5.4 million. In the population projections from 2020, population growth from 2020 to 2035 was adjusted downwards by 2.6 percentage points compared with the projection from 2018. In the three alternatives outlined in Figure 4.1, we can expect the population to be between 5.5 million (low alternative) and 6 million (high alternative) in 2035.

In the main alternative, SSB expects the population to increase by around 380,000 inhabitants compared with the current population and this corresponds to an increase of 7.1 per cent from 2020. If this is correct, Norway will have a population of around 5.8 million in 2035. The population increase will result in more personal users for NAV. The consequences of this will depend on the age composition of the population, immigration to Norway and the population development in the various parts of the country. The rest of the chapter is based on Statistics Norway's main alternative.

The greatest increase among older age groups

The population of Norway is ageing (Figure 4.2 and 4.3), and the new projections show an expected decline in the population aged 0–18 years and 19–34 years. At the same time, the population aged 75 and older is expected to increase by almost 70 per cent. In

Figure 4.1. The population development in Norway with a projection towards 2035 with three alternatives. Figures in millions as of 1 January each year.
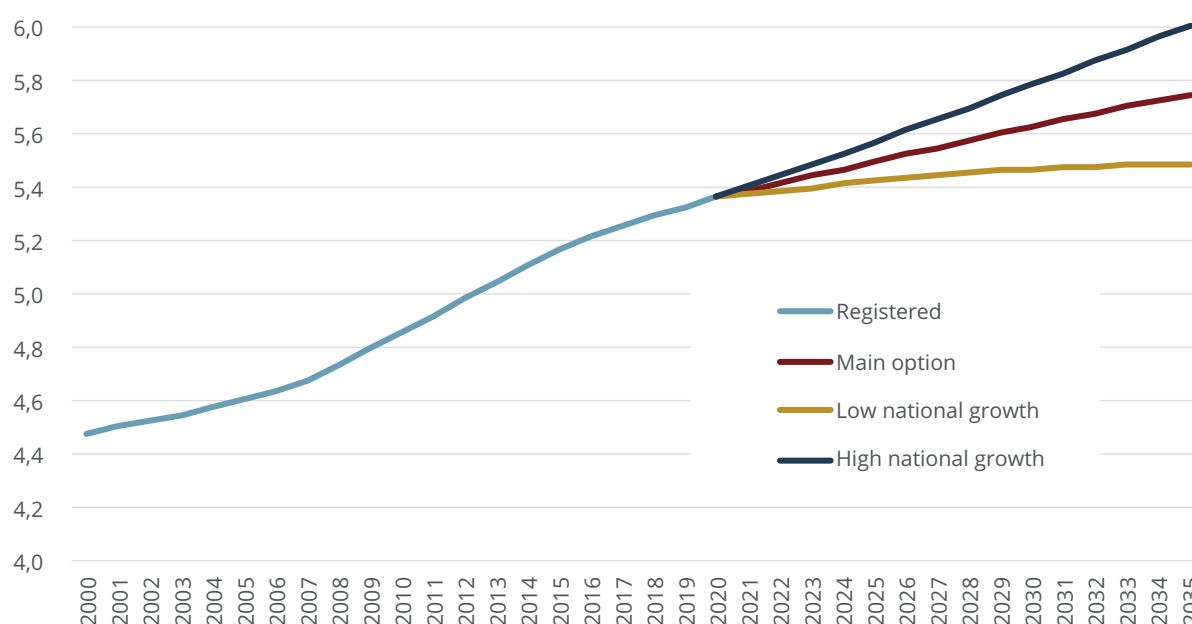
Source: SSB

Figure 4.2. Population growth 2020–2035, by age group.
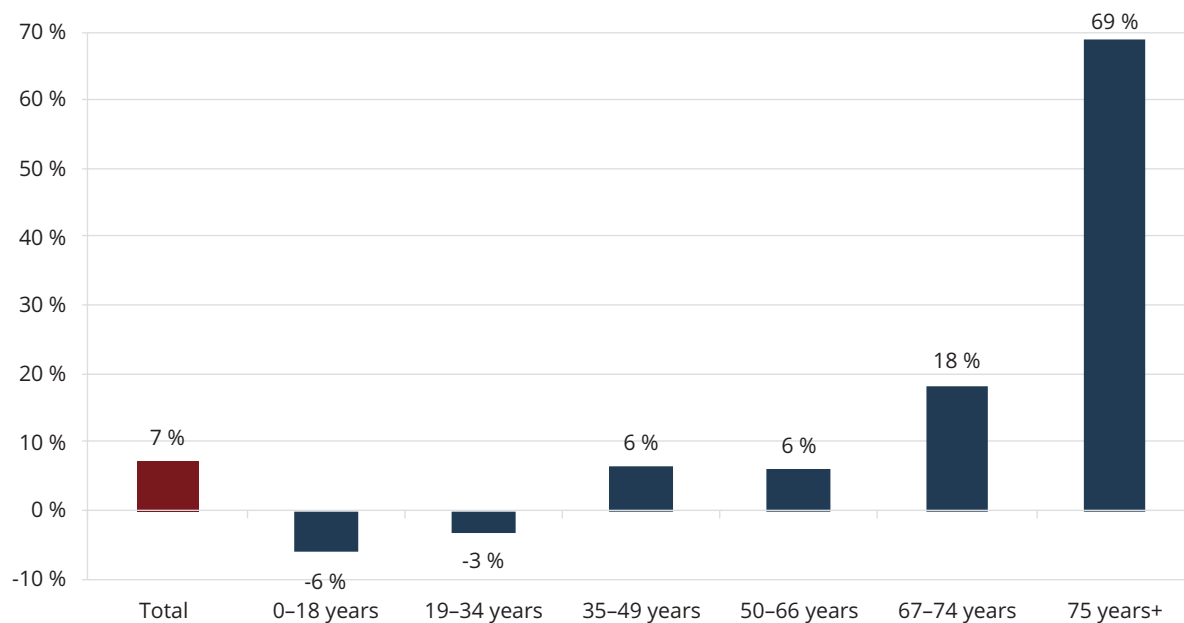
Source: SSB

Figure 4.3. Population statistics as of 1 January 2020 and 2035, by age group.
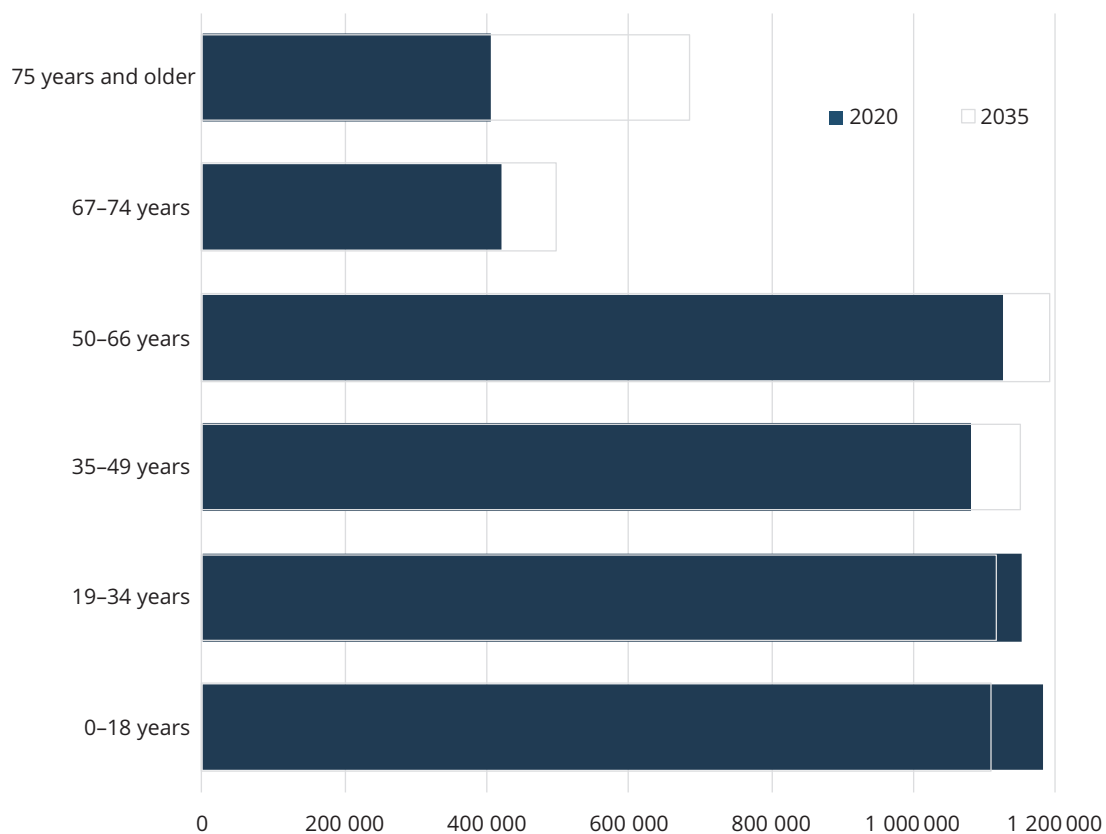
Source: SSB

Figure 4.4. The population aged 0–19 years and 67 years and older relative to the population aged 20–66 years. Figures for 1 January. Percentage.
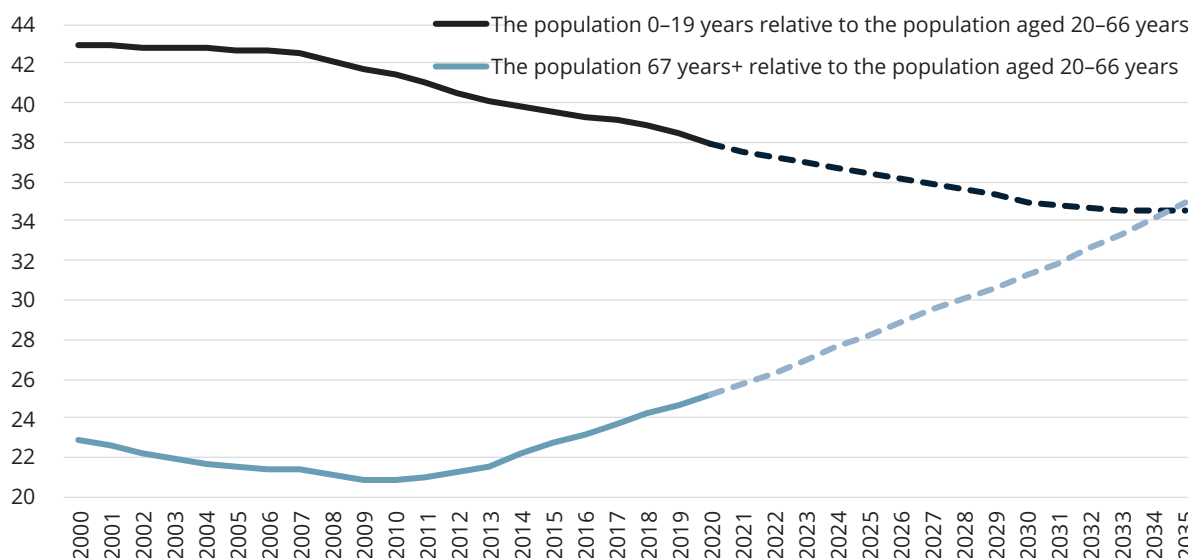
Source: SSB

total, the 67 and older age group is expected to grow by 43 per cent and thus there will be 360,000 more people in this group in 2035 than in 2020. The fact that ageing is greatest among the oldest group means that the number of new retirement pensioners will increase far less than the total number of old-age pensioners. Much of NAV's case processing work takes place when the individual draws his or her retirement pension for the first time.

From the introduction of the National Insurance Scheme in 1967 and up to 2019, life expectancy in Norway has increased from 74 years to just under 85 years. Up to 2035, life expectancy in Norway is expected to increase further to 86.1 years. From 1967 to 2019, the life expectancy of 67-year-olds has increased from 14 to around 19 years. Figure 4.4 shows the development in the population aged 0–19 years, as well as 67 years and older, relative to the population aged 20 to 66 years. There are fewer children and young people compared to the number of people of working age, while there is an increasing number of elderly. The number of older people over the age of 67 is expected to exceed the number of children and young people for the first time in 2035.

An ageing population, but to a lesser extent than in other European countries

An ageing population is not a distinctively Norwegian phenomenon. Like Norway, the rest of Europe is experiencing an increase in the older age groups. However, compared with other European countries, Norway has a more favourable demographic development (Eurostat 2020).

On average, 23 per cent of the population of the EU[2] will be 67 years or older in 2035, compared with around 20 per cent in Norway. In addition to more favourable population development, the return on the Government Pension Fund Global (the Oil Fund) helps mitigate the challenges Norway faces compared with those faced by many other European countries. Nevertheless, fiscal freedom will be more restricted in the future. The ageing of the population will lead to a smaller proportion of people working and paying taxes, and the cost of pensions and health and care services will increase (The Perspective Report 2017). The large increase in the number of older people will have a significant effect on the financial burden of the working population, which is the number of people in

[2]   Demographic development in 27 EU member states from 2020.

Figure 4.5. The percentage of the population in Norway, the EU and selected European countries aged 67 years and older (left) and 0–18 years (right). 2019–2035.
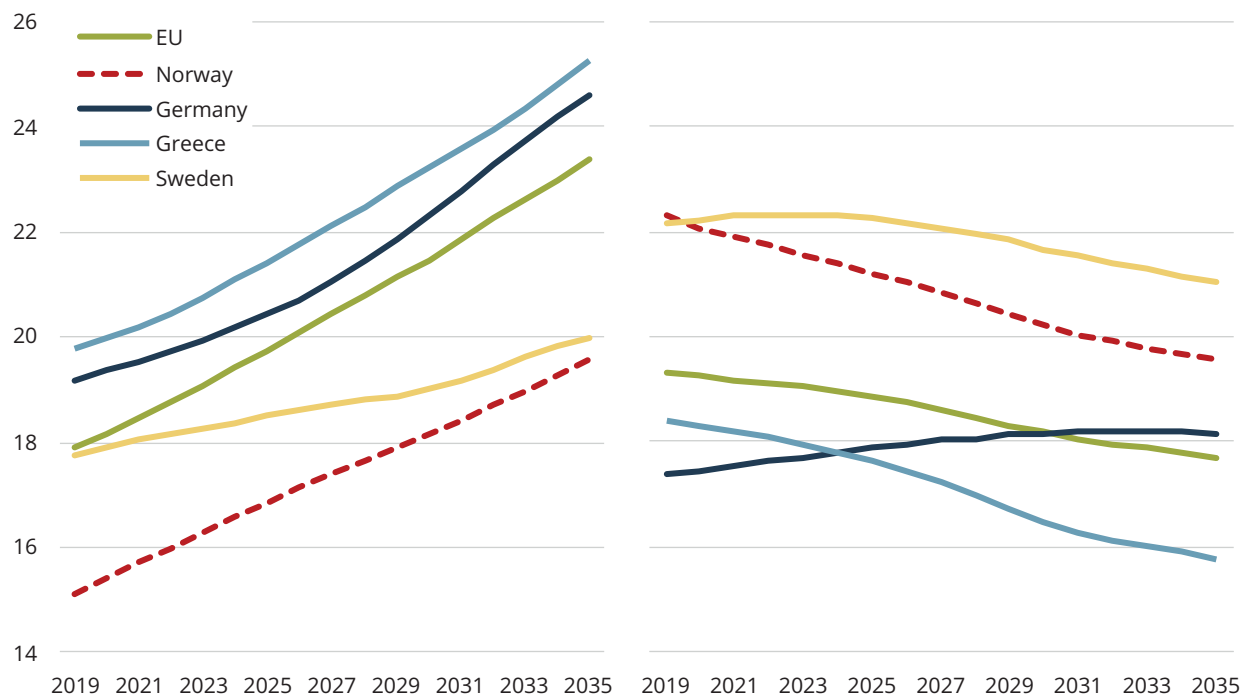
Source: Eurostat

employment in relation to the number of non-working people. The consequences of the financial burden on the working population will be mitigated somewhat by the increasing number of senior citizens in employment. The average retirement age was 66 years in 2019 and has increased by just over 2 years since the new millennium according to NAV's statistics.

The increased financial burden on the working population is likely to require improved public sector efficiency and may also lead to greater expectations for NAV to follow up more user groups (see also chapter 10). For example, this may apply to seniors and the efforts to raise the retirement age, expectations that NAV is more active towards people on disability benefits and that the activity obligation to receive social assistance can be extended to more groups than today.

The largest increase in retirement pensioners and recipients of assistive technology

Increased life expectancy and lower birth rates will lead to differences in the need for various benefits. Low birth rates will mean fewer recipients of benefits

for families with children, among other things. In the opposite direction, increased life expectancy will result in more old-age pensioners. If the main alternative of Statistics Norway transpires, a fifth of the population in Norway will be 67 years or older in 2035. In the period 2013 to 2019, the number of old-age pensioners has increased by 21.5 per cent. In the same period, there has been a reduction in NAV's use of resources in the pension area. This is mainly because old-age pensioners are a user group that requires little personal assistance from NAV and there is a high level of automation in the case processing. Therefore, growth in the pension area is expected to be manageable, also because the number of new retirement pensioners is relatively stable. However, an increased proportion of pensioners who have lived or live abroad, and who require manual processing, will pose a challenge. From 2021 to 2035, a growth of 39 per cent is expected in the number of recipients of retirement pension.

Three out of four NAV employees work with services or benefits for people of working age. User growth is

Figure 4.6. The growth in the number of recipients of assistive technology and selected NAV benefits from 2010 to 2035.
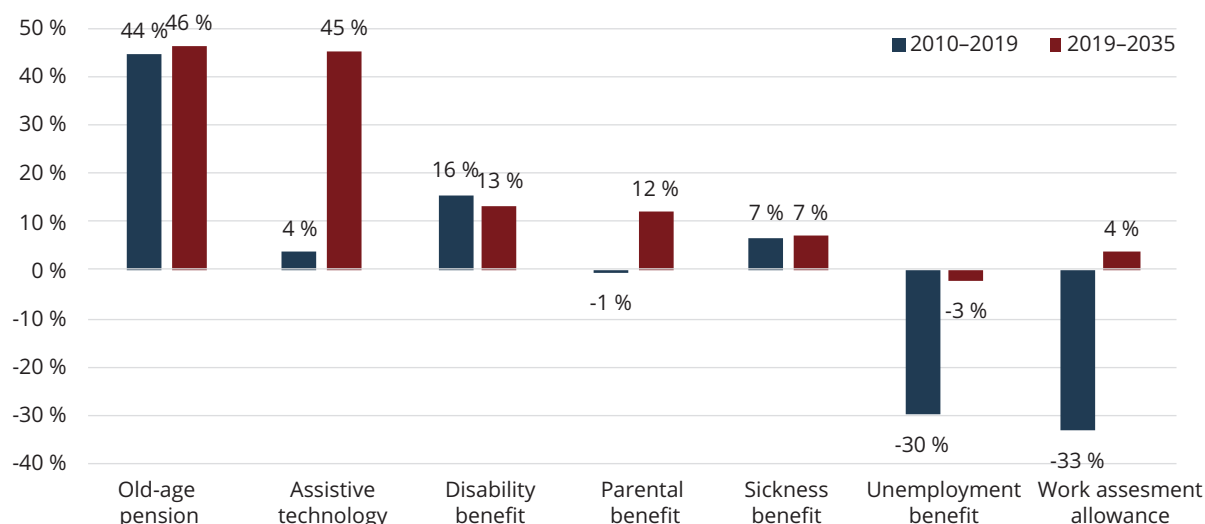
Source: **NAV**

expected to be close to the general population growth for several of these areas. The disability benefits group is likely to increase the most, but this is a group where NAV currently provides limited follow-up. Much of the resources[3] dealing with people on disability benefits are in NAV Work and Benefits and NAV Appeals. In 2019, just under 20 per cent of the resources in NAV Work and Benefits worked on the processing of disability cases. All other things being equal, the expected growth in the number of people receiving disability benefits could increase the need for caseworkers in NAV Work and Benefits by around 35 people in 2035.

When it comes to work assessment allowance, we expect a decrease in the number of recipients up to and including 2026, followed by a moderate growth towards 2035. However, in the short term, an increase is expected in 2021 due to a weak labour market and temporary measures introduced during the coronavirus pandemic, as recipients of work assessment allowance have had their eligibility period extended by 6 months. The expected decrease in the coming years is due to the regulatory amendments in 2018, which

mean that the maximum eligibility period was reduced from four to three years from 1 January 2018. At the same time, a two-year limit was introduced for how long it is possible to receive work assessment allowance beyond the ordinary maximum eligibility period. Under the new provisions, the recipients of work assessment allowance are expected to be transferred more quickly to disability benefit or employment than before and the changes will have a gradual effect over several years. The discontinuation of special entry conditions for refugees and increased residence requirements from 2021 will also result in lower growth in the number of recipients going forward. From and including 2027, a slight increase in the number of recipients is expected due to demographic developments.

68,000 more users of assistive technology in 2035

Since the population growth is primarily strong in the oldest group, we also expect a strong increase in the number of users of assistive technology through NAV, as 7 out of 10 users of assistive technology were over 60 years of age in 2019, while 4 out of 10 were over 80. The growth will be curbed somewhat by people staying healthy longer. In a situation where there are fewer people of working age, it will be even more important to provide assistive technology, adaptations

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[3]   Figures from the 2019 Resource Management Survey. The survey is conducted annually in the NAV offices and monthly in the Benefits Administration.

Trends in assistive technology

The life situation of the users requires better coordination in the public sector.

NAV's assistive technology services are largely provided in cooperation with other actors, especially the local authorities and the health service. Various facilitation measures, such as assistive technology and interpretation, help people with functional challenges to be able to live a good life where they can master, participate and be active. This is essential for the individual's health, the possibility of labour force participation and for public health.

Assistive technology and facilitation are important prerequisites for being able to master and participate in education and work. NAV's services in this area have an impact together with all the other support functions in the schools and in connection with working life. Cooperation at the system level and dissemination of knowledge and sharing expertise between sectors with overlapping responsibilities will be key success factors. Digital collaboration platforms, communication channels and learning arenas will also be of great benefit. At the same time, different regulations among the various actors will present a challenge, as the rules do not always support each other and pull in the same direction. Therefore, coordination of the regulations will be important for developing assistive technology systems of the future.

Development of assistive technology

Technologies such as Digital Collaboration Platforms, Data Sharing, the Internet of Things (IoT), Artificial Intelligence (AI), Mechanical Robotics and Automation (see also Chapter 6.1) will influence the development of assistive and welfare technologies in the years ahead. Progress has already been made in several areas, including smart homes, intelligent cars, and small vehicles. The assistive technology of the future will be able to predict events and recommend measures before the event takes place by using sensors and artificial intelligence. This will be especially useful for service and repair assignments, periodic inspections, and remote support, among other things, to prevent outages.

An increasing number of digital job meetings and digital teaching will affect NAV's service deliveries. An example of this is the area of interpretation, where the interpreter can then participate digitally rather than through physical attendance. Other user consultations, such as professional advice and service and repair assignments, will also be affected. Speech recognition technology and auto-text, translation and text-to-speech technologies are in rapid development and are technologies that can provide greater opportunities to more of NAV's user groups, including people with hearing disabilities, the visually impaired and the disabled. Focus on universal design will also ease everyday life for many. The development of digital technology for the consumer market that can meet the needs where special assistive technology is needed today can give increased availability and reduced costs.

The importance of improved public health

When it comes to the increase in the number of recipients of assistive technology, the increase in healthy life years can moderate the number of older people. However, the demand is also driven by other factors, such as greater user expectations and increased access to good assistive technology. Calculations show that around 90 per cent of the people who die of old age have one or more assistive technology aids from NAV. From a public health perspective, it is desirable that everyone, regardless of age and functional level, lives active lives. People want to maintain activity levels and living standards, even when they have age-related ailments. We justify this by the fact that there has been a growing demand for activity aids, especially special electric bikes, among other things, from people who have no other ailments than natural old age. An increasing number of healthy life years seem to generate a need for assistive technology and adaptation for those who have mild age-related ailments, such as impaired balance, vision, and hearing. Therefore, strong growth in the number of users of assistive technology is expected.

In the future, older people will place greater and different demands on NAV as a supplier of assistive technology. Digital coordination with users and our partners will continuously evolve the services.

The ageing of the population is likely to lead to a higher percentage of people with deafness and hearing loss. Technological developments may compensate somewhat for this, but people who have not used NAV's interpreting services in the past may benefit from subtitling. The benefits of subtitling have become better known and are marketed to a greater extent by user organisations and others, and therefore, the demand could increase.

A weak decline is expected in the number of people who use sign language. One of the reasons for this is that more children are receiving Cochlear Implants (CI). The need for all methods of interpretation is greatest when a person is of working age, where a moderate population development is expected.

Assistive technology policy

The funding responsibility between NAV, the municipalities, other government departments (including the health sector) and the individual, will be challenged regularly. This is due to the boundary between what is considered assistive technology funded by the National Insurance Scheme and what is considered standard equipment. This may mean that some assistive technology NAV currently provides in areas such as body care, household care, vision, and hearing, will no longer be covered, since objects which are normal to own will not be funded by the National Insurance Scheme.

Increased requirements and expectations for universal design will reduce the need for individual adaptation. For example, when it comes to interpreters for people with hearing impairment, other public bodies will be able to provide

subtitles for their events. In the area of housing, we see that universal design will reduce the need for technical aids such as stairlifts and lift ramps. The transition will take time, as most of the existing housing stock in Norway is far from having a life cycle standard.

Changing competence needs in NAV
Digitalisation and changes in assistive technology policy will affect the organisation and working methods in the field of assistive technology and change the competence

needs of assistive technology management in NAV. Digitalisation and development of competence at all levels will be particularly important, but there will also be a need for increased inter-disciplinary work and expertise in personal data protection and knowledge-based practice. We expect assistive technology management to become to a greater extent a centre of competence for professional advice and guidance, also for facilitation opportunities that are not covered by the National Insurance Scheme.

and measures for as many young people with disabilities as possible, so that they can participate in the labour market or complete their education (The Assistive Technology Committee 2017). If the use of assistive technology increases correspondingly to the demographic development of the population, the number of users will increase by 45 per cent towards 2035. Therefore, more people in need of assistive technology will occupy more of NAV's resources in the future. In 2019, 1,274 FTE in NAV were working with assistive technology and many of the people working with assistive technology are also employed in the municipalities and health sector. 20 per cent of NAV's tasks are performed regardless of the service volume. The expected increase could thus mean that the need for resources in NAV will increase by around 460 FTE in 2035. In comparison, the number of users

of assistive technology is expected to increase by around 40 per cent from 2021 to 2035.

However, the developments in assistive technology are uncertain. In the Government's 2015–2020 care plan (The Ministry of Health and Care Services 2015), one of the goals is to ensure that *«more elderly people live at home longer and live active and independent lives – with individually adapted services, security and dignity»*. The goal of more elderly people living at home can increase the need for assistive technology. At the same time, improved health among the older population is expected to pull in the opposite direction to some extent. Over the past decade, there has also been a focus on robotics and smart technology. These are solutions that can help increase labour force participation, quality of life and security for NAV users who rely on assistance daily. It is unclear

Figure 4.7. Immigration by reason for immigration. Except for Nordic citizens. No. of people.
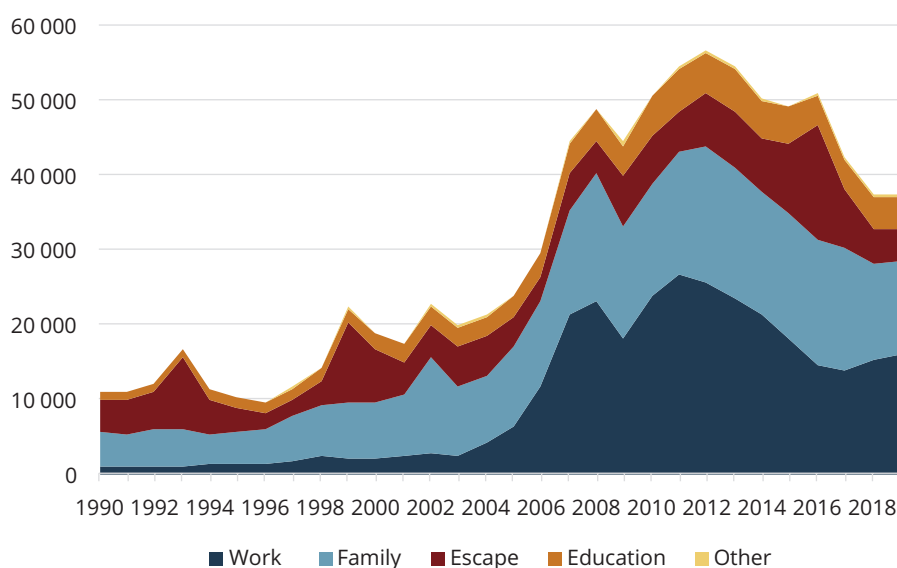
Source: SSB

Figure 4.8. The age distribution among immigrants in 2020 and the expected age distribution in 2035.
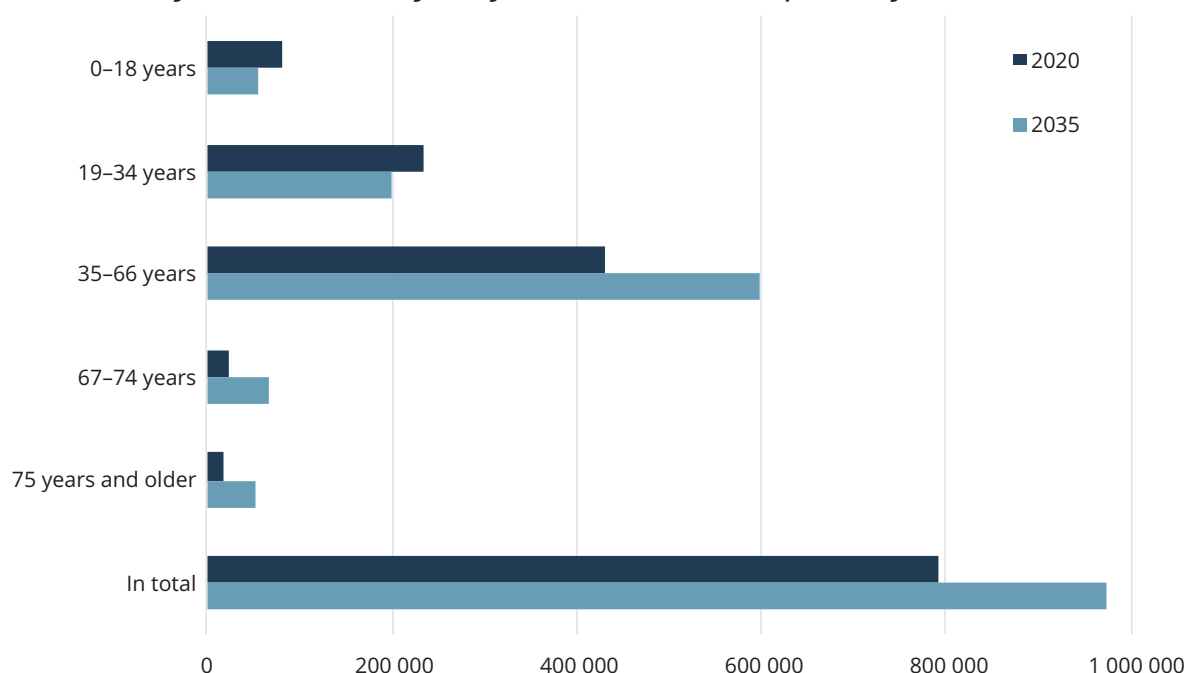
Source: **SSB**

Figure 4.9. The development in immigration, emigration, and net immigration to Norway.
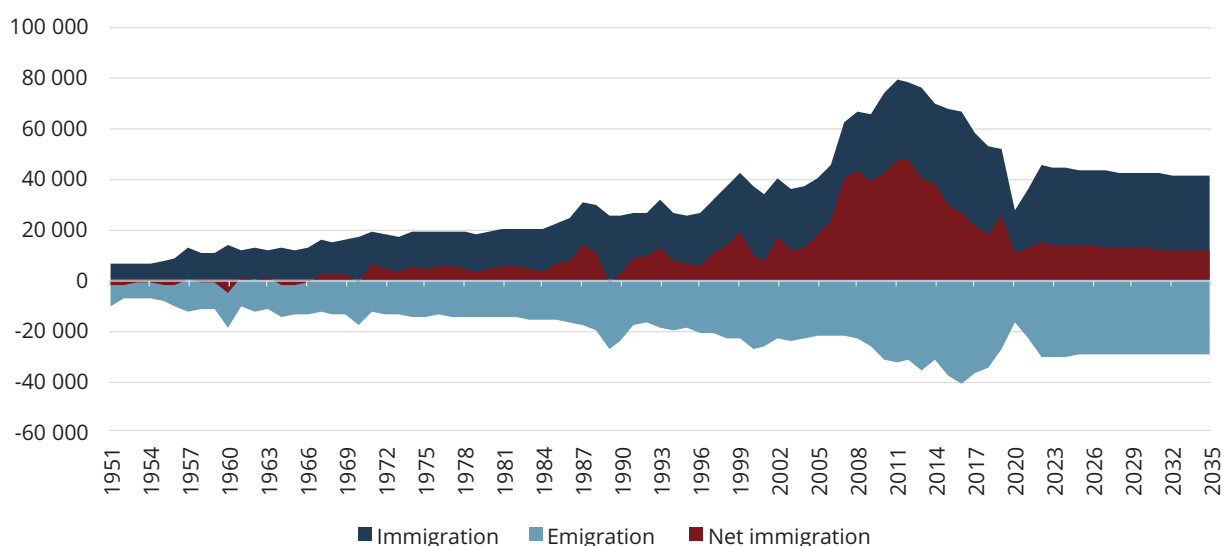
Source: **SSB**

what the technology developments will mean for the need for assistive technology. See the fact box for a closer discussion of the developments in assistive technology.

4.2 Lower immigration and changing composition

Immigration to Norway has been one of the main reasons for population growth in recent decades. In 2010, the immigration surplus in Norway was 42,000 peo-

ple, an increase of 337 per cent from the new millennium. This was mainly due to increased immigration from the EU and EEA. In 2009, the rules on residence permits were amended, making it easier for non-Nordic EU citizens to stay in Norway. The rules mean that most EU citizens can travel to Norway to work, live with their families or study (The Norwegian Directorate of Immigration 2009). Immigration from the EU and EEA member states has since fallen sharply in the wake of the oil crisis between 2014–2016. This trend is expected to continue and will present challenges in meeting the need for labour in occupations where there is a particular shortage and in regions with weak population development.

This assumption is strengthened when we look at labour migration as the reason for immigration. Figure 4.7 shows that labour migration from non-Nordic countries rose from 12 per cent of all immigration in 2003 to 49 per cent in 2011. After the peak year in

2011, labour migration from countries outside the Nordic region has declined, both in the number of people and as a proportion of the total immigration. In 2016–2017, family reunification was the most common reason for immigration to Norway, but in the last two years, labour migration to Norway has risen somewhat once more. In 2019, 16,000 non-Nordic citizens reported that they had immigrated to Norway due to work. This is 10,000 fewer than in 2011 and corresponds to 43 per cent of all immigration in 2019.

Immigrants live in central areas

Many immigrants choose to live in central areas (NOU 2020:15) and thus help to strengthen the centralisation trend in Norway. The trend is particularly evident among family immigrants and refugees, while labour immigrants have settled to a greater extent where there is a demand for labour in the rural areas. As of 1 January 2020, the population of Oslo consists of about 26 per cent immigrants and Norwegian-born

Figure 4.10. The development in the immigrant population with projection to 2035.

- Eastern European EU member states
- The EU without Eastern Europe, as well as EFTA, North America, Australia and New Zealand
- Eastern European outside the EU, Africa, Asia and Latin America
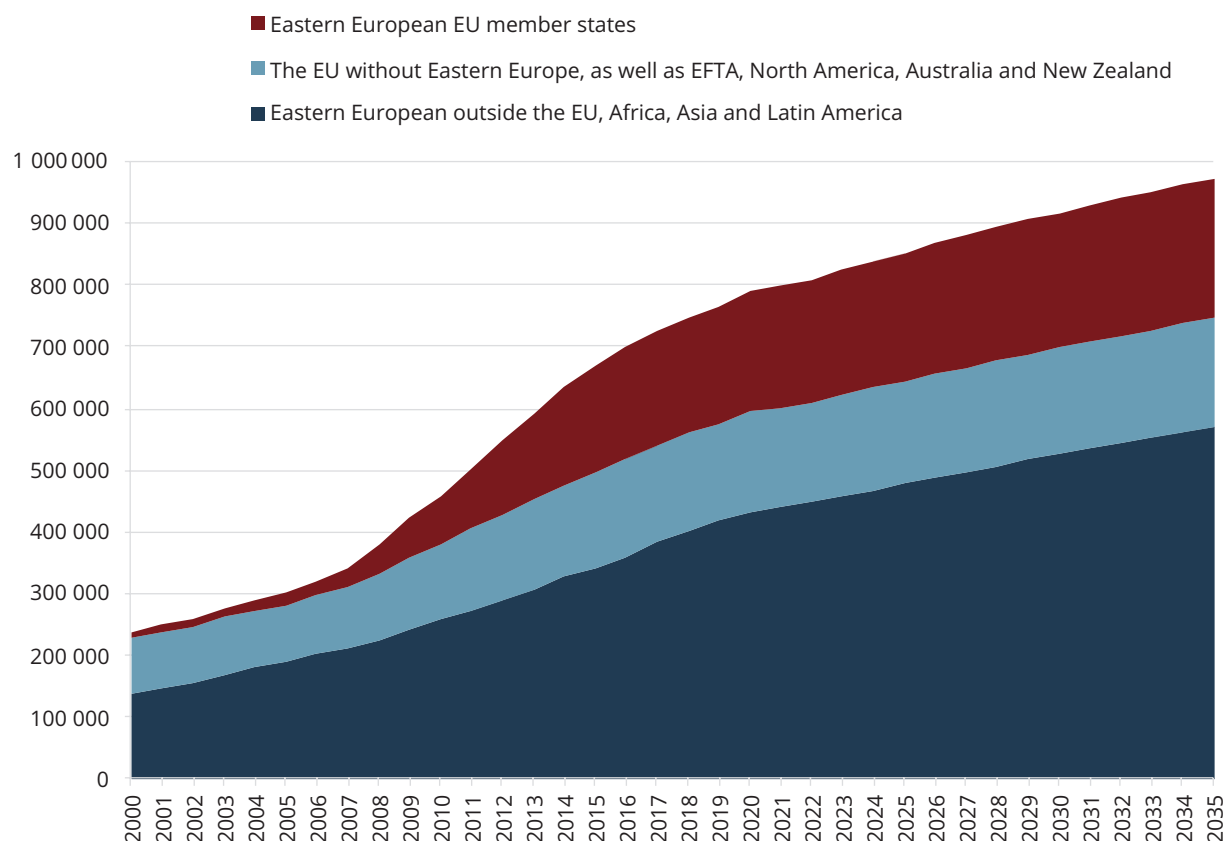
Source: SSB

citizens with an immigrant background. In Viken, the corresponding proportion is about 16 per cent, while Nordland has the fewest immigrants compared to the population, with about 9 per cent. For a long period, a high level of immigration has helped compensate for net emigration in many outlying municipalities. Lower immigration to Norway may have greater consequences in the long term for small municipalities that rely on immigration to maintain the population size.

NAV must offer efficient and good services

An increasing proportion of the immigrants arrive in Norway to reunite with their family. At the same time, labour migration is declining (SSB 2020b). Labour migration has been essential to meet the demand for health care personnel, cleaners and building and construction workers. The fact that the immigrant population is increasing at a slower pace than before will make it easier for immigrants to be integrated into the labour market. At the same time, in recent years, there has been a large increase in the number of immigrants from Eastern Europe outside the EU, Africa and Latin

America (the increase is highest among immigrants from Africa and Asia), where a large proportion lack basic skills[4], have weak qualifications, language difficulties and health challenges. This development places great demands on how NAV deals with immigrants that have complex challenges and a need for complex follow-up services. This is strengthened by the fact that there are fewer low-skilled jobs (see Chapters 7.4 and 7.6).

At the end of 2020, there were 790,000 immigrants and 189,000 Norwegian-born citizens with immigrant parents in Norway. Poland remains the largest immigrant group in Norway. As of 1 January 2020, about 115,000 people were immigrants or Norwegian-born citizens with parents from Poland. Among the Norwegian-born citizens with immigrant parents, those of Pakistani origin remain the largest group, with 17,600 people. In the years leading up to 2035, the immigrant

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4   Reading, writing, arithmetic, oral and digital skills (The Norwegian Directorate of Education 2020).

Figure 4.11. The population growth from 2020 to 2035 by municipal groups based on centrality. The population in each group in millions in brackets.
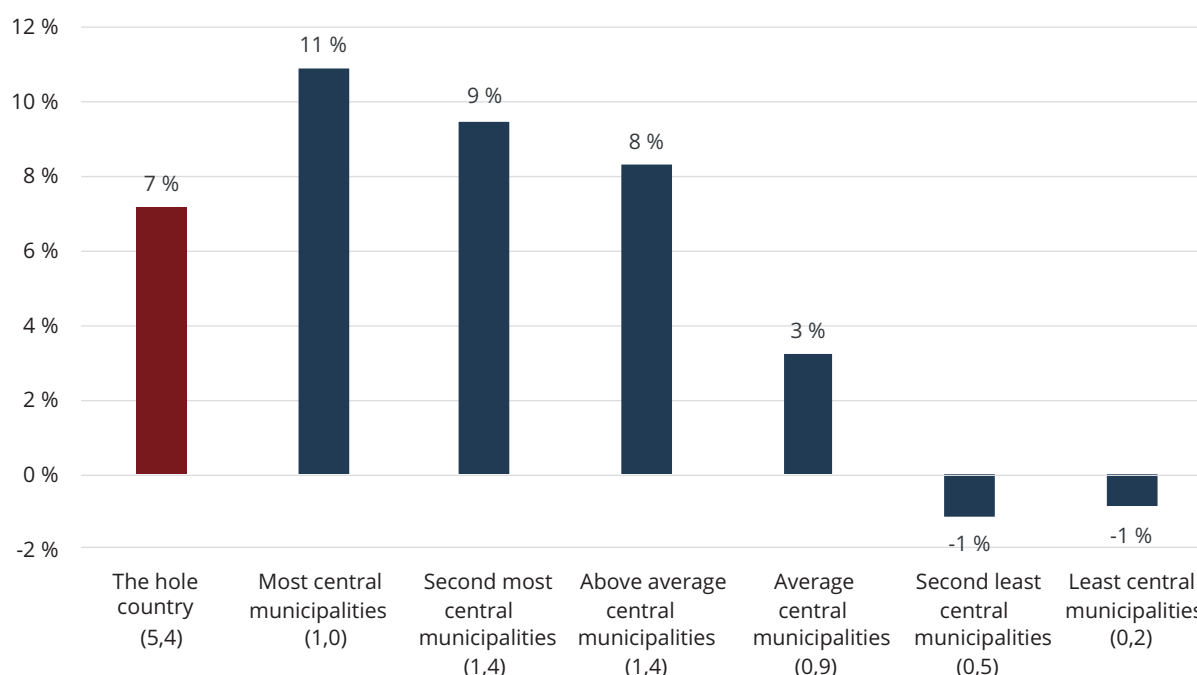
Source: SSB

population is expected to increase from 790,000 in 2020 to 972,000 in 2035.

The growth has been adjusted downwards compared with the previous population projections, but the trend can change abruptly, and NAV must be prepared for unforeseen events. Due to the coronavirus pandemic, population growth is expected to decline in the coming years due to closed borders and lower mobility. An abrupt increase in the flow of refugees to Norway, on the other hand, will present challenges to Norwegian municipalities. We experienced this during the refugee crisis in Syria, where the number of asylum seekers in Norway almost tripled due to the crisis (The Norwegian Directorate of Immigration 2020). For NAV, this meant a greater and unforeseen strain on services aimed at immigrants. NAV plays an important role in the work of integrating immigrants more quickly, among other things, through work experience, language tests, work assessment measures and cooperation with external actors. The work is largely based on individual measures that require close follow-up by the individual counsellor. The war in Syria has displaced large parts of the population. In

the future, climate changes could also lead to millions of people having their livelihoods destroyed. This can have dramatic consequences for the migration situation in Europe and the rest of the world. Nevertheless, we do not know how great the climate changes will be or the consequences these will have on immigration and when this may occur.

4.3 Differences in the municipalities' population development

The population of Norway is steadily ageing but the development varies in different parts of the country. In the years ahead, a decline in the number of young people and increased life expectancy will contribute to an increase in the number of older people in rural areas. In less central areas, it may also become difficult to recruit skilled labour, which can also be a challenge for NAV (KS 2020). On the other hand, it is difficult to determine whether it is the jobs that attract people or whether it is the people that create the jobs, according to the Demographics Committee (NOU 2020:15). The Demographics Committee points out that education is a centralising factor and that the

Figure 4.12. The population in 2020 and 2035 in the country's most and least populated municipalities, by age groups.
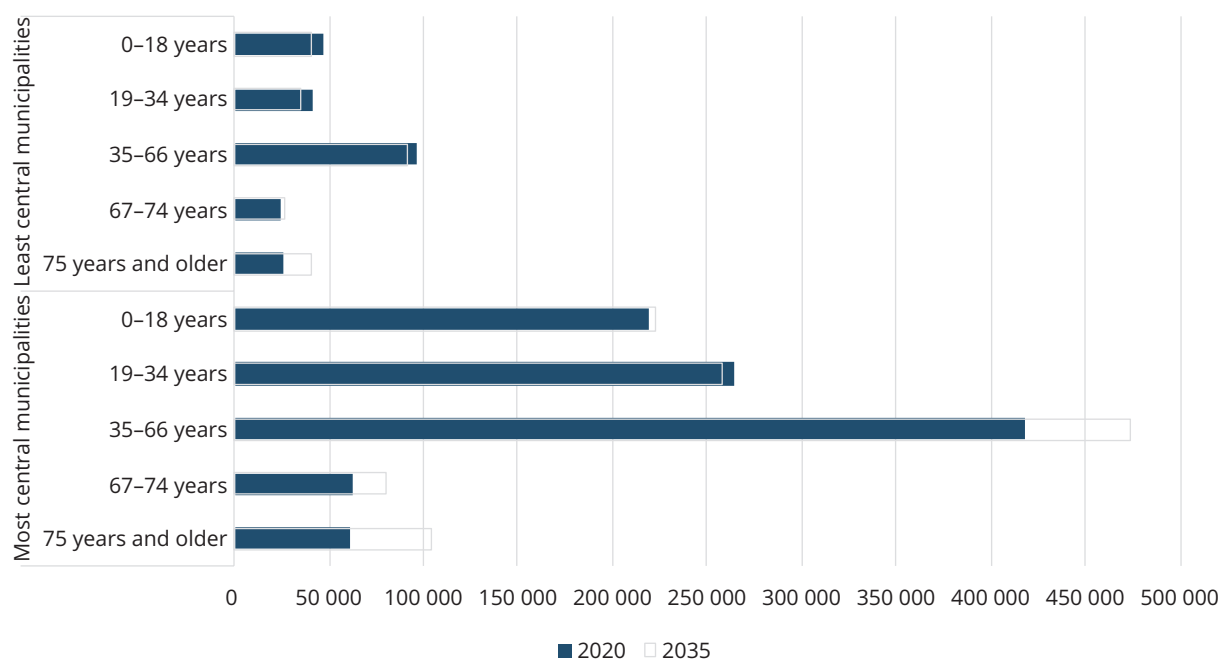
Source: SSB

growth in the number of skilled jobs is greatest in central areas. At the same time, they point out that differences in job growth can to a certain extent explain population development.

Continued strong growth in the rural areas

Statistics Norway has divided Norwegian municipalities into six centrality classes (SSB 2020a). These have been based on proximity to workplaces and service functions.[5] 70 per cent of the population already lives in municipalities with above-average centrality and the population growth is expected to increase in the future the more central the municipalities are (Figure 4.11). A decrease is only expected in the second least and least central municipalities in Norway. At the same time, there is great variation within each group. Statistics Norway expects a decrease in population in almost 40 per cent of the municipalities towards 2035 but only 13 per cent of the population live in these municipalities today.

There is an increasing number of elderly people in the least central municipalities. This is because more young people are moving from the rural areas to more central areas to take higher education and do not return at the end of their educational pathway, which in turn affects the birth rate. At the beginning of 2020, around one-fifth of the population in the country's least central municipalities was older than 67 and the proportion of elderly people is already higher than the proportion of young people. In 2035, the proportion is expected to increase further to just under one third. If the demographic trend continues, in 2035 there will be 1.5 persons aged 67 and older for each person aged 0–19 years in the country's lead central municipalities.

The population development may have consequences for the organisation of NAV. NAV's highest priority is to help more people find employment and most benefits are aimed at people of working age[6]. An increasing number of elderly in the rural areas indicates that

there will be more people who do not have any special need for follow-up from NAV. Follow-up of pensions mainly takes place through automated payments. One consequence of this may be that there will be a need for larger and fewer NAV offices to ensure adequate knowledge environments. Digitalisation can pull in the same direction (see Chapter 6). This development is already in progress. On 1 January 2020, the number of counties in Norway was reduced to 11, but already in 2019, NAV was restructured to meet the new county boundaries, except for Viken, which NAV has divided in two. The restructuring was aimed at strengthening the services to the user groups with the greatest need for close follow-up, contribute to larger and more robust NAV offices and not least becoming a more cost-effective organisation.

The Debureaucratisation and Efficiency Reform (the ABE reform) means that government departments will have their operating budget reduced by 0.5 per cent annually (Prop. 1 S Yellow Book (2020–2021)). If we assume that NAV has its operating budget reduced by the same amount in the years ahead, it means that the annual operating budget will be reduced by about 7 per cent in 2035. The demographic development indicates that NAV will have just over 7 per cent more users in the same period, with the highest growth in densely populated areas. The largest increase will be in the form of more old-age pensioners and users of assistive technology. Nevertheless, this will an important incentive to rationalise the Norwegian Labour Welfare Administration, which must prioritise good, physical services in the parts of the country where users with the greatest follow-up needs live. For other users, the services can be provided to a greater extent through self-service solutions (e.g., parental benefit applications) and automation (e.g., pension payments).

4.4 The coronavirus pandemic increases the dependency burden

As we write this, Norway is in the middle of a global pandemic. The population development indicates that the dependency burden will increase in the years ahead and the coronavirus pandemic has helped to reinforce this trend. In the new population projections,

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[5]   More precisely, the division is based on how many jobs and service functions you can reach by car within 90 minutes from each constituency in the municipality.

[6]   Sickness benefit, work assessment allowance, disability benefit and unemployment benefit

closed borders, lower mobility, and reduced fertility are expected to lead to a slight decline in population growth in the next few years.

Like the refugee crisis in Syria, the coronavirus pandemic has challenged NAV's ability to provide good services to its citizens, but it has also made it harder to envisage the future picture. More users of assistive technology are expected in 2035. However, it is far harder to predict what the migration picture in Europe will look like at the same time. We may experience new outbreaks of infection that require strict measures or conflicts that displace large groups of people. We do not know the consequences this will have for Norway. Nevertheless, this shows the importance of NAV considering how to deal with unforeseen events. The future is uncertain, and the coronavirus pandemic has shown that abrupt unforeseen events pose far greater challenges to NAV than the restructuring we can plan to a greater extent.

4.5 Reflection questions

- What are the consequences of the population changes for your unit?
- How will the population changes affect the labour market where you work?
- Where and how will increased migration in and out of the country affect NAV?
- What can an increased dependency burden and a wider gap between expenditure and revenues on the National budget mean to NAV?

5. USER EXPECTATIONS

By: Ragnhild Kongsvoll and Tor Erik Nyberg

Thousands of people are in contact with NAV every day, and have different life situations, needs and roles. The two major user groups to which NAV provides services are personal users and employers. NAV also cooperates with others such as doctors, the education sector, municipal employees, banks, and many other public and private undertakings. To provide good and relevant services, we must develop in step with the changes in the expectations of citizens and businesses. Expectations are shaped by other undertakings, trends and the picture people have of NAV. In this chapter, we will highlight the trends we believe will shape user expectations in the next few years. We have used input from user representatives, employees from various professional environments in NAV and other external sources as a basis.

NAV users reflect the diversity of the population and society

NAV has approximately 2.8 million personal users, who largely reflect the diversity of the Norwegian population. All residents of Norway will be in contact with NAV at some point during their lifetime and will require our services to a greater or lesser extent. Our users include the unemployed, parents, people on sick leave, pensioners, and those in need of assistive technology (Figure 5.1).

Around 200,000 registered businesses cooperate with us or may require our services. Employers play an important role as partners to include people who are unemployed and ensure that employees update their skills in step with expectations of the workplace and technological development. Employers are also users of our services, for example, in connection with recruiting and retaining employees and restructuring (Figure 5.2). NAV will continue its efforts to strengthen cooperation with employers in the years ahead.

Figure 5.1. Examples of situations and needs where personal users contact NAV.

On sick leave

Jobseeker

Approaching retirement age

Laid off

Need assistive technology

New in Norway

Young and little job experience

Illness in the family

Expecting a child

Source: **NAV**

User satisfaction with NAV varies

User surveys show a complex picture of how users experience their contact with NAV. While most personal users and employers are satisfied, some areas require improvement. If we look at the areas that personal users consider important, they are relatively satisfied with the guidance and information they receive from NAV. At the same time, they say that NAV is poorly coordinated, difficult to contact and that it is difficult to submit a complaint. A large proportion of the employers are satisfied with how NAV understands their needs. Nevertheless, many employers experience that NAV is poorly coordinated, that it is difficult to contact the right person and that our routines and rules are difficult to understand.

Figure 5.2. Examples of situations and needs where employers are in contact with NAV.
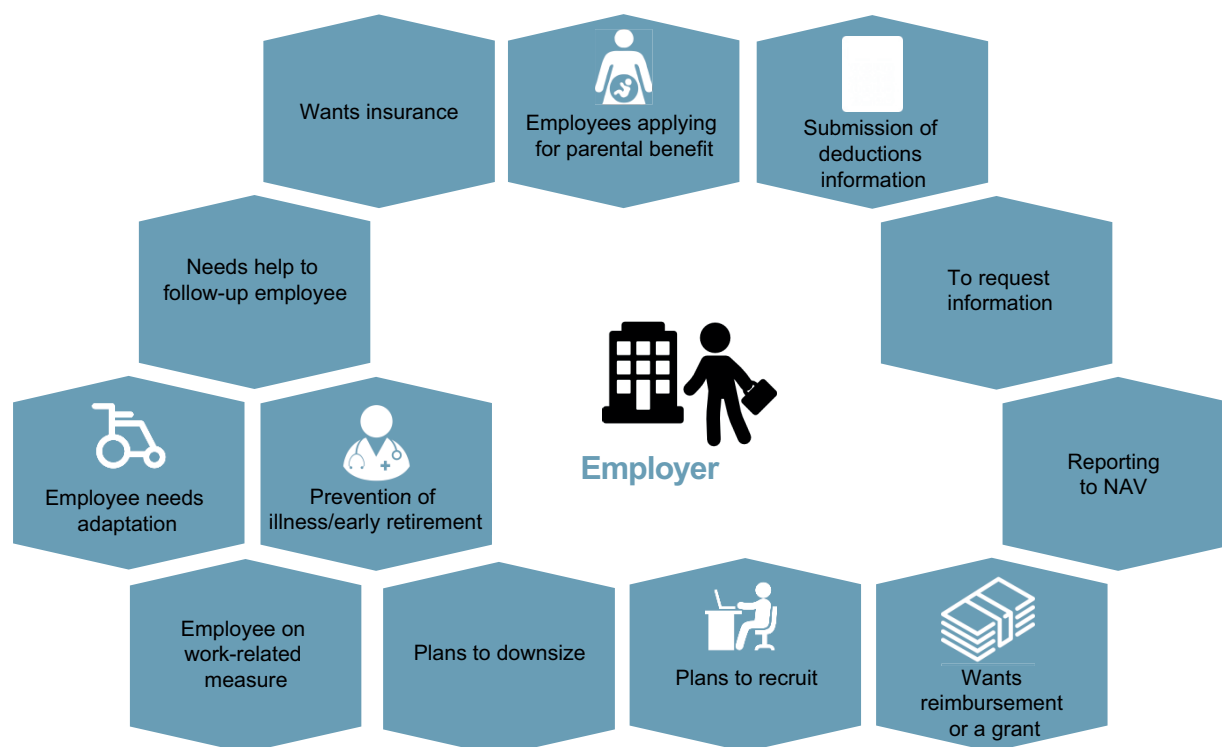
Source: **NAV**

In 2020, about 65 per cent of the personal users and 80 per cent of the employers say that they are satisfied with and have trust in NAV. As regards personal users, this is a decrease compared with 2019, which is largely due to jobseekers experiencing long processing times for unemployment benefits during the coronavirus pandemic. Furloughed employees say that they experienced their contact with NAV as complicated and cumbersome. Among the employers, satisfaction and trust are generally unchanged from 2019. However, in 2020 satisfaction fell, especially among businesses, which have probably noticed the impact of the coronavirus situation to a greater extent (Nyberg et al. 2020).

The fact that the satisfaction among some user groups has declined in 2020 may indicate that expectations are high even in an incredibly challenging period where there has been an enormous demand for NAV's services. New user groups have been in contact with NAV and expectations have probably been shaped by the situation they are in. Many users face major financial and personal challenges due to the coronavirus situation.

As we see it now, user expectations for NAV have not necessarily changed from what they were before the coronavirus situation. However, we see that some factors have become clearer, for example, that people expect a quick response. In the period when new schemes were launched frequently and quickly, people and businesses expected a ready-made service and guidance soon after the Government presented proposals at their press conferences. There was little understanding among the users that in NAV, there is a decision-making and development process from proposal to finished service.

5.1 Expectations are shaped by other trends

In this report, we consider the users' expectations as trends NAV must face in 2035. At the same time, these expectations will largely depend on and be influ-

enced by other trends in society that have been described in other chapters of the report. We think some societal trends will be more important for user expectations than others, and we will describe these connections briefly in the following.

Digitalisation leads to increased expectations

The expectations we have for digital services, customer service and availability are largely shaped by experiences in our daily lives. In recent years, we have seen how digitalisation has provided the population and businesses with smart and efficient services at a rapid pace. These experiences shape the expectations of citizens and businesses for public services. At the same time, many will have different expectations for private and public actors, and surveys show that many have lower expectations for public digital services than for private ones. One reason for this may be that it is often not possible to choose between different providers of public services and thus, the service is accepted as it is to a greater extent (Kantar 2019). However, in some areas, NAV competes with private actors, which may mean that citizens and businesses have the same requirements for digital solutions, regardless of whether providers are private or public. For example, this applies to recruitment and job search websites (such as finn.no and arbeidsplassen.no).

Surveys show that young people under the age of 30 are increasingly shaping their expectations for public digital services based on private actors such as Snapchat and Vipps (The Ministry of Local Government and Modernisation 2018). We believe that private digital services will shape the users' expectations to a greater extent in the next 15 years and that NAV must follow this trend to create good quality and relevant services.

Many citizens and businesses experience that the public sector provides good quality services. At the same time, there is a widespread perception that contact with public services is time-consuming and bureaucratic. Many people have less contact with the public sector than with the private sector and therefore, are not familiar with the processes they must go through. For example, we can use certain private digital services several hours a day, while most of us visit gov-

ernment websites a few times a week or month. The Population Survey (The Agency for Public Management and eGovernment 2019) shows that 60 per cent of those surveyed believe that contact with public services involves a lot of «hassle and inconvenience», and in the latest surveys, this proportion has increased. The fact that more people than before find public services to be cumbersome, is not necessarily because the services have deteriorated but rather because expectations have increased. We think that digitalisation is an important reason for this, as in many areas it has radically changed services for large parts of the population. As better services are offered elsewhere in society, citizens will expect the same service from NAV and other public actors.

The labour market and the demographics change the composition and needs of the users

The expectations of personal users and employers will evolve in step with other major trends in our society. The demographic trend leads to a different composition of users. The population will be older, a larger proportion will be immigrants, and more people will live in central areas. People will have better health and live longer, but there may be greater differences in living conditions.

Much of industry and commerce is restructuring and we believe this trend will intensify in the years ahead. The trends described in Chapter 7 show that the labour market will probably be affected by a faster pace of restructuring due to technological developments, globalisation, and the green transition.

The restructuring of the labour market can also lead to changes in the needs and expectations of users, and this may challenge NAV and the policy instruments available to us. There will be an increasing need for continuous skills development throughout people's working lives. It may also be difficult for businesses to recruit qualified employees. NAV must keep up with and be at the forefront of the restructuring in the labour market in our collaboration with the users. This will apply to the policy instruments available to NAV and its role related to qualifications and education.

Knowledge-based practice

Users and citizens expect the administration to be knowledge-based. Knowledge-based practice is a well-known concept within professional research and in short, means that to achieve the best solutions, for example, counsellors must see the users' problems, circumstances and wishes in contact with their experience and research-based evidence (Krogstrup 2011, pages 21–38). Thus, in situations where employees have room to exercise discretion, a knowledge-based practice means that the employee shall not choose randomly between various alternatives, but exercise the «best» discretion in the situation (Molander et al. 2012, page 2019).

Thus, a knowledge-based method of working means that NAV takes into consideration and enables its employees to familiarise themselves with up-to-date and relevant research so that training, digital systems, dissemination of knowledge are considered and used in the work with the individual user. Since it is unreasonable to require that every employee has an overview of all relevant research, this is often provided in the form of counsellors and guidelines (Bergmark et al. 2011, page 16). Training and further education are also important tools to help the individual become familiar with the research in his or her field, to keep in step with developments and be able to develop the ability to translate research findings into practice.

Naturally, research-based work requires research. While professions based on science, such as doctors, have long had a large supply of research-based evidence, it is only in the last two or three decades that attention has been paid to this in relation to social work (Satterfield et al. 2009). Compared with science, the supply of research in this field is limited and the findings more ambiguous, which makes it difficult to translate findings from social science studies into practice (Slagstad 2008).

Research in NAV's scope often requires specific studies that can be translated into practice. Being a major actor in the field such as NAV, means that NAV must actively encourage research and analyses in relevant areas. In the further development of NAV, expectations toward research-based evidence in the restruc-turing process will probably be higher, as well as a demand for documented effects. This will often be associated with increased demands for efficiency and goal achievement.

At the same time, NAV must reflect on what is required to translate social science findings into practice. In the early phase of the research on social work, many people had hopes for the «experimental society», where randomised experiments would produce the final solutions (Krogstrup 2011, pages 21–38). Since then, the methodical approaches have become more numerous, while the findings are just as ambiguous. Often, they must be interpreted and translated into practice by a counsellor who considers the user's circumstances, opportunities and wishes – in other words, the whole picture. In many cases, the research will only gain value when it is part of a knowledge-based *practice*. Therefore, the employees' competence and capabilities play a decisive role in strengthening the knowledge-based administration of NAV.

The expectation of a knowledge-based administration also applies to digital services. At the same time, it is important to note that the research is slow, while technological developments happen quickly and continuously. There is no one-to-one relationship between research and good digital services. The research must be translated and interpreted through law, design and technical choices before the finished solution is available. Specialists with user insight and a deeper understanding are required so that NAV can provide good digital services to the users in 2035. Therefore, NAV aims to involve these in product development. Given that NAV's services will be more digital in 2035, we must have this expertise when making choices and priorities as in the ongoing digital product development. NAV should also find ways to connect researchers and the results of their research close to what is happening within product development.

5.2 Invisible, automatic, and proactive services

The reuse of information and simpler processes for users

Digitalising services is about considering how the services can be improved and not just «electrifying» existing forms and processes. Digitalisation can provide a greater opportunity space for how to achieve the goal of the service. The Digital Agenda for Norway (Meld. St. 27 2015–2016) (white paper) emphasises the need to reuse information we already have about users, which will prevent users from having to submit the same documentation multiple times. Another example of how services can be simplified for the users is to reverse the process so that the users do not have to apply for benefits and services to which they are entitled (see also Chapter 6.3). What we achieve will depend on how we use the opportunities given and factors such as regulations, ethics, competence, and culture. The ability to understand and meet the users' needs will be decisive, together with regulatory development, technological competence, and innovation culture.

In 15 years, we believe digitalisation will provide users with other and better services. Many of the pain points users face when in contact with us today will be solved with so-called proactive and automatic services. In many areas, we assume that users will neither be in contact with us nor know that NAV is the one providing the benefit or services they are receiving. OECD refers to this trend as «invisible services» OECD (2020a), and in 2035, we believe this will apply to many of NAV's services.

> **In 15 years, I hope the system is so good that I, as an ordinary user, do not notice it.**
>
> *User representative*

Data protection and security

The welfare services of the future will be better and more adapted to the individual's needs due to access to data and how they can be used in service development. The development trend is also about the users' attitudes and expectations for data security and protection. In recent years, we have experienced several instances where actors with malicious intent have misused data. An example of this is when foreign states try to extract information about popularly elected representatives.[7] A survey conducted by Ipsos (2018) also shows that people are more concerned about data security and protection than before. Despite several such cases, it seems that most people still think it is worth taking the risk to access popular services.

A possible development is that people will become more sceptical about sharing and using data. One reason why this might become a trend is the growing number of services and businesses that use data. This in turn can lead to more cases of misuse, which we think will increase people's scepticism. This may have consequences for the regulations on data security and the protection of personal data and how we use data in the development of services. Another possible consequence of this is that the users will probably have to make several choices when it comes to the protection of personal data, which may be perceived to be complicated and create uncertainty. The fact that users can make different choices may also affect NAV in that the solutions can be more complex to manage.

Young people are more concerned than older people about data security and protection of personal data, which may be linked to higher digital expertise. How this trend will develop in the next 15 years could affect which opportunities NAV will have in using data for service development purposes.

What competence is needed when dealing with public services?

According to Kompetanse Norge (2020), in 2020, 14 per cent of the population (about 600,000 people) over the age of 16 were non-digital. Of these, three per cent did not use a computer, tablet, smartphone or the internet. Eleven per cent had poor digital skills. Of the non-digital, 80 per cent are aged 60 or older and 75 per cent have an upper secondary school or lower education as the highest completed level of education.

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7 The Norwegian government pointed out Russia as being responsible for the cyber-attack on the Storting in October 2020 (Aftenposten 2020).

In 2035, we believe there will be significantly fewer people in the non-digital group. On the way there, it is important to ensure that the services are also available to these users. NAV administers welfare schemes that should be accessible to everyone and therefore, it must create digital services that are so simple and good that even people with inadequate digital skills can use them. NAV must also ensure that those who are unable to use nav.no also receive the full range of services.

While we must facilitate for those who have no or poor digital skills, we believe that digital services will steadily improve, and that people will be better at using them. We also believe that in the years to come there may be other skills that affect the extent to which people benefit from digital, public services, such as knowledge of the public sector (often called administrative competence). For many, the jungle of regulations and the way we structure the services according to legal areas form a barrier against using public services (Kantar 2019). In a user survey, 35 per cent of the personal users responded that information about rules and obligations is difficult to understand. Around 40 per cent responded that it is difficult to understand which regulations have been used in each decision and furthermore, it is difficult to understand how NAV calculates the allowances. Among employers, the smaller private businesses are least satisfied with NAV's efforts during the coronavirus pandemic. One possible reason may be that smaller businesses have fewer resources and little expertise with which to manage their collaboration with NAV (Nyberg et al. 2020).

Young people, who generally have a high level of digital competence, often struggle more than older people with the public services (NAV's user surveys; Digitaliseringsstyrelsen 2018; Verne 2015). Our surveys also show that even though those with higher education often have better digital skills, they also contact us more often to look for answers. Firstly, this may mean that digital skills are not the reason why they are struggling and that even those with higher education find our services difficult to understand.

Administrative competence affects the ability to understand the language used in the public sector. Although a lot has improved in this area, NAV has a long way to go before 'the language meets the users' needs'. This affects the users' ability to understand rights and obligations and may even affect their legal protection. Also, people with little or no Norwegian skills should be able to claim whatever they are entitled to when in contact with NAV and the public sector. An understandable language would be effective because it will make it easier for people to use NAV's self-service solutions.

Digital technology can help users to gain more authority, control, and information. A common way of doing this today is through self-service solutions. At the same time, this assumes that the regulations, processes, and choices the users make are manageable. For many, it will require support and guidance to make choices based on information that is difficult to understand and that creates uncertainty. This becomes apparent when people and businesses must make choices that may affect their financial predictability. Making mistakes can have major consequences and many people contact NAV because they are uncertain. It shows that digital technology also depends on the development of regulations and internal processes in NAV.

Digital technology can help improve services and make them more available to people for whom today's paper-based services work poorly. An example of this is how we can facilitate being represented by transferring authority to lawyers, relatives, guardians, legal representatives, or others. Another example is better language services, or «text-to-speech» and «speech-to-text» solutions. To achieve good language services, one possibility may be that NAV shares language data with shared solutions in the public or private sector. NAV should facilitate and be a driving force for digital services to increase availability in the public sector.

> **In 2035, I envisage that we will not have to strive to receive the various services. That these will be available to us where we live, when we need them.**
>
> *User representative*

It is difficult to envisage what skills people will need in 15 years when contacting public services. The automation of the services can make digital and administrative competence less important. At the same time, automation will create new problems. For example, the user may acquire less knowledge of public services and regulations when they do not have to contact them or apply. This in turn can affect the ability to verify whether the users are receiving what they are entitled to. Verne (2015) shows how young people who have never filled out a tax return understand less than older people about what happens when they fall outside the current automatic tax return process. OECD also points out that one challenge of «invisible services» may be that the users will no longer understand the important role public services play and what these contribute to their lives (OECD 2020a). This can affect the understanding of and willingness to fund public services through taxation.

> **How can we expect people to use self-service solutions when you really need a lawyer to understand NAV? We need de-bu-reaucratisation.**
>
> *Counsellor at NAV Call and Service Centre*

5.3 Customised service and coordinated services

The user at the heart of developments

Putting the needs of the users at the heart of the development of the services has been a trend within private and public services and we believe it will become even clearer in the next 15 years. The trend is largely about people expecting analogue and digital services tailored to their specific situation and needs. In its experience report from 2020, The Digitalisation Council (2020) points out that it is not enough to put the users at the heart of the development, we must also think like the users themselves. By that, we mean that we must put ourselves in their situation when they need a service. The NAV user representatives describe the same thing when they point out that we must create «packages» for the users based on their needs. The Government's digitalisation strategy (The Ministry of Local Government and Modernisation 2019a) is based

on the principle «the user at the heart of development» when pointing out that digital services should be based on life events to better coordinate services. We see examples of how this takes shape in the development of analogue services. Asker welfare lab is one model where all actors join forces and cooperate so that the person or family does not have to deal with separate entities.

In 2035, we believe that users and businesses will want to choose how they will contact NAV and what kind of help they will receive. Among personal users and employers, there is a diversity of needs and expectations that must be met with a tailored service. For example, today we see that smaller businesses, to a greater extent than the large ones, need guidance to deal with NAV's schemes and services, while larger businesses have their own resources to deal with NAV. We believe that most people want service through digital and automated services. Using data and more user-oriented services, we believe that most people will experience digital services as being tailored to their needs. However, other people will want a tailored and individual service through assistance from a NAV counsellor and at the same time expect this to be readily available.

Will I receive the help I need?

One consequence of the users being accustomed to services that use personal data may be the expectation that services and benefits will be provided automatically when needed. This can lead to less understanding and patience because the users must provide information that NAV already has available and that they do not receive the right help when they need it. This is a trend that to some extent already exists and that became more apparent during the coronavirus pandemic. The understanding among the users that our services and benefits did not meet their immediate needs varied, and many users probably felt that NAV and other government departments delivered too little too late. This is despite the broad acceptance and understanding that public authorities were in an extreme situation for which they were not adequately prepared.

One problem that may arise when the expectations for an adapted and individual service increase, is that the users' expectations will differ from those of society. For example, from a taxpayer's perspective, it may be that public funds should be managed more effectively. This may conflict with user expectations for an adapted and individual service. Cyclical downturns will affect this gap, when public goods are in shorter supply than today, but also in the future when the 'new normal' will probably be that fiscal freedom is more restricted than today. And it will require tougher financial priorities. On the other hand, the technological developments may support the possibilities for customised and individual service in other and much more efficient ways than through the NAV Offices, which you can only visit within given office hours.

Is geography becoming less important?

Technological developments have long made it possible to communicate and work without being physically present. During the coronavirus pandemic, this trend has accelerated, and video conferencing has become more commonplace both privately and in a work context. We believe that this may also affect the expectations for communication with NAV and that users will to a greater extent expect their contact with NAV to take place without meeting physically. This can affect NAV's organisation in several ways. Firstly, it can affect the number of NAV offices and physical presence around the country. Secondly, it can affect who you are in contact with in NAV, as digital solutions make «everyone» available. At the same time, we see that the desire for only digital contact varies and many people prefer personal contact (Nyberg et al. 2020).

How we perceive geographical limitations can also affect the regulations NAV administer. When geography becomes less important in many other contexts, these expectations will also apply to contact with NAV. For example, we can assume that people will have little understanding of the rules about having to stay in a particular geographic area to receive benefits if activities they have planned can be carried out anywhere in the world.

Coordinated services

Today, to gain access to public services, people and businesses must largely understand how the public sector is organised and who is responsible for what services. The expectations for coordinated services are about the services for which NAV is responsible and across public entities. We believe that technological developments can help users receive better and more coordinated services.

> **Employers want us to be available and coordinate better. That we act as one NAV.**
>
> *Counsellor at a NAV office*

We see that personal users and employers want more coordinated services from NAV (Nyberg et al. 2020). The expectations for coordinated services also include being able to contact NAV without knowing our internal organisation. When the users contact NAV today, they are not free to choose the channel they want. For example, people must contact different channels for questions about benefits and follow-up, respectively. The reason for this is that we have specialised units to provide the correct answers, good quality and efficient operations. In other words, we try to direct inquiries to the units that have the right expertise to meet the needs of the people. Going forward, users will expect equal service and expertise in all channels.

In recent years, there has been increasing expectations that various public entities coordinate their services to a greater extent. Coordinated services are at the heart of the Government's digitalisation strategy (The Ministry of Local Government and Modernisation 2019a). The emphasis here is on better coordination and more data sharing across government departments.

Coordinated services are particularly important in the labour and welfare policy, where close cooperation is needed between NAV, education authorities, the health service, child welfare, correctional services, immigration authorities and other municipal services that are not located within the NAV Offices. In future, it will be important to develop good models for this

type of cooperation in areas such as common management goals, funding, work processes, information sharing and measurement of results. Experience from Individual Placement and Support (IPS), which is a collaboration between NAV, the specialist health service, and the municipal health service to help people with moderate or severe mental health problems, shows that good and coordinated services significantly increase the chances of the individual finding employment. We already see that NAV is more likely to be placed where users are when they need assistance, e.g., in upper secondary schools. We believe that there may be more such schemes in the future and that a counsellor is physically attached to a NAV office to a lesser extent.

Will NAV become a data provider to an increasing extent?

The expectation of not having to deal with NAV and the bureaucracy of the public sector can also be a motivation to providers of services where the users already are. Examples of this today can be found in public transport companies that allow Google to use data to suggest itineraries and Yr that allows others to use weather data in their services. Public transport companies and Yr allow other parties to use their data to provide services to the users. NAV, on the other hand, uses data from private solutions, such as Finn, to provide the service at arbeidsplassen.no, which shows job vacancies from multiple sources. NAV also collects data from partners such as organisers of labour market measures or the health service. It is difficult today to predict how much this trend will grow over the next 15 years, but there are several instances where this form of data sharing has contributed to better services for the users. Therefore, we assume that we will see more examples in the years to come. The consequences for NAV may be that we take on the role of a data provider, not a service provider, in several areas. In other words, we envisage a development where other parties, both private and public, can offer the services NAV which currently provides. See also Chapter 6.3 for more about this, where NAV's role as a platform operator is discussed, which deals with a similar topic.

5.4 Meetings that help people to move on

Automation will change the expectations for the contact with NAV

In 2035, we assume that more of NAV's services will be automated and, in many ways, invisible. At the same time, we believe that users will gain even greater knowledge and expertise on how they can help themselves through available online information and tools. This can change the expectations people have for contact with NAV.

Firstly, this development may lead to higher expectations that contact with NAV will help people to move on in life or from the situation that made them, or their business, seek help. We assume that these expectations will be more about building relations, motivating, and supporting the user. This is important expertise among NAV counsellors today and may become even more important in the years to come. The need for expertise can also develop more towards coaching, psychology and other expertise required to help people to move on in life and at work. In many ways, this development is like the one we expect within care professions. One of the reasons for the focus on welfare technology is that the personnel who are in contact with the users and patients should be able to spend more time on providing care and support where this is needed the most (NOU 2011:11).

The change is also about NAV's future role. In the welfare professions, there has been less state control through orders and prohibitions for some time now (Øverbye 2013). This means that employees in welfare professions no longer determine whether people meet a set of criteria, and instead help to activate the users through incentives and communication. According to Øverbye, a consequence of this development is that the welfare professions are drawn closer together, since activation is not a core competence in some of the professions, but requires cooperation between NAV, the health sector, and the education sector, among others.

Secondly, we believe that the expectations will be about disseminating good knowledge about the labour market. Knowledge will be essential to help people

and businesses, but we also believe that the expectations for knowledge will be heightened. The internet already gives people access to information and knowledge that enables them to ask more difficult questions when in contact with professional expertise in many sectors. An example of this is how today you can read up on symptoms and medicine before visiting your GP. We believe this trend will be reinforced by more information being available in better ways on the internet.

Security and predictability are important when contacting NAV

Although expectations will change, the users have some basic and stable needs. When people and businesses contact NAV, they are often in a difficult situation. For example, they are concerned about their finances and may be afraid of doing something wrong. For personal users, it is often the case that their financial situation is uncertain or has deteriorated. Stress and illness can reduce the ability to understand a lot of complicated information. Research (see Pieterson and Ebbers 2020) and user surveys in NAV show that many personal users only contact us to make sure that they have understood the information they have acquired. They want to be sure and need extra confirmation and insurance. This can lead to people contacting us for personal assistance, but we also believe that in the future, these needs can be addressed by digital services.

Employers who contact NAV can also find themselves in difficult situations, where benefits or services from NAV are decisive for their finances and future. Employers also often provide important information in a case involving one of their employees.

Although we assume that NAV's services will change significantly in the next 15 years, we believe that our ability to provide security and predictability will be vital, regardless of whether the user is in contact with a counsellor or a digital service.

> In 2035, we will be working more with people to help them out of the situation they are in. We will arrange financial assistance. There is no need to worry about that. You will receive what your situation dictates you should have. Today, many people miss out on financial assistance because the system is too complicated. We need to focus on getting people healthy again. Today, NAV focuses too much on regulations and systems and not on people.

5.5 Reflection questions

- What needs do users who contact NAV have?
- What expectations will NAV users have in 2035?
- What characterises a good user meeting in 2035?
- What skills do NAV employees need in 2035 to meet the users' expectations?
- What user needs can NAV solve better through increased cooperation with others?
- How can we ensure that we are working with a good, research-based knowledge base?

6. DIGITAL TECHNOLOGY

By: Robindra Prabhu

Technological developments continue to influence our everyday lives and constantly change how we live and work. Technology and society mutually influence each other and form strategies and business models in the private and public sector. Although the development is gradual, it still takes place at a fast pace and affects many different areas.

Innovative solutions come in the wake of new challenges and technological maturity. In 2019, it was almost inconceivable that so many people could work from home. Over the next decade, we will probably see that the climate crisis paves the way for a new wave of green and more sustainable technology, while other industries must restructure or adapt. New production tools and materials (DNV GL 2020a) will open business opportunities and even facilitate a more sustainable and circular economy. Agricultural robots that sow, harvest and gather will probably be a more frequent sight in the countryside (Tekna 2020), while driverless buses and ferries may transport people to work in the morning (The Technology Council 2020). Genetic mapping and personalised medicines will allow for more detailed diagnoses and courses of treatment tailored to our individual needs. Sensors and digital twins (see the fact box) not only make it possible to rationalise production processes but will perhaps change both where and how the design and development of new products take place. In many areas of society, technology will affect lives, health, and work in Norway, and this will also become important for NAV.

Information and communication technology currently have a pervasive and transformative effect on society. Digitalisation brings with it many new opportunities but also several changes that can put society and the «Norwegian model» to the test.

This chapter provides an overview of key technological developments that we believe will affect the labour and welfare area in the coming decade.

6.1 Digitalisation towards 2035

A pervasive trend across sectors, industries and areas of activity is that the world is becoming more influenced by how data is produced, collected, analysed, and converted into services and products. Several coinciding factors that reinforce each other are expected to give the development increasing weight and force in the years to come:
- cheaper and more flexible computing power
- greater and easier access to data
- development and use of algorithmic systems that translate data in various ways.

Increasing digitalisation is referred to by many as the fourth industrial revolution (Schwab 2016) and several far-reaching consequences for business models, employment and societal structures are predicted.

In the next decade, we will probably see how this development affects the social mission and helps shape the labour and welfare area. NAV manages a large volume of data on behalf of the population and when other businesses use such data to develop new knowledge and better services, the expectations for efficiency and innovation in the public sector will increase.

This expectation is not least expressed in the Government's public sector digitalisation strategy 2019–2025 (The Ministry of Local Government and Modernisation 2019a). To be able to offer citizens, businesses, and the voluntary sector an easier everyday life, the strategy aims to solve more tasks digitally, that the user is offered coordinated public services based on life events across agencies, among other things, and that the public sector uses, reuses, and shares more data to create user-friendly services. In 2020, a national data-sharing resource centre was established to support the latter (The Norwegian Digitalisation Agency 2020). At the same time, the Government artificial intelligence strategy states that the public sector should actively explore the potential of artifi-

Technology trends with indirect importance for NAV

- **Green technology** refers to technologies that directly or indirectly contribute to changes in a more environmentally friendly direction and include everything from renewable energy, production with reduced emissions and more efficient utilisation of resources and raw materials. The rapid development in battery technology in recent years (DNV GL 2020a) has helped make electric transport available to more people and will be able to make solar and wind energy available even in the dark and when there is no wind. Solar energy is now the fastest-growing energy technology in the world and the price of solar energy has fallen every year (BBC 2020).

- **New materials and production techniques**: Nanotechnology[1], advanced hybrid materials and additive manufacturing technology (such as 3D printers) provide new opportunities in product development, design, orthopaedics, spare parts, assistive technology, etc. Together with sensors, simulations through so-called "digital twins" and robotisation of processes, opportunities are provided to produce objects in new ways. At the same time, in many cases, the tasks in the workplace can have a different content that requires new expertise.

- **Digital twin** refers to a digital representation of a physical object. This could, for example, be a visual representation of a building or an engine created using design drawings, maintenance history and sensors. A digital representation of an organisation can be used to predict the effects of organisational changes and identify process changes.

- **Robotisation and autonomous objects**: Self-operating machines, cars, robots and drones that, by using sensors and artificial intelligence, manage to relate to their surroundings without human intervention. Autonomous objects can operate on land, in the air and at sea, and they can make completely new services possible. Self-driving cars will affect everyone who works as a driver and will thereby affect NAV. At the same time, however, they provide new opportunities for mobility for elderly people and others who currently receive help in the form of specially adapted vehicles.

- **Personalised medicine** refers to the prevention, diagnosis, treatment and follow-up adapted to the biological makeup of the individual patient. Progress in molecular biology and genetics provides new opportunities for personalised diagnostics and treatment, supported by advances in nanotechnology and artificial intelligence. At the same time, data from sensors in, for example, smartwatches, opens new ways to alert you to your health. Major tech giants such as Apple, Google and Microsoft are positioning themselves to take advantage of a more-data-driven health sector (DNV GL 2020a).

- **Quantum computers** differ from traditional computers in that logical operations rely on quantum mechanical processes. Quantum computers take advantage of the physical laws of quantum mechanics, which allow particles to be in many states at the same time instead of either 0 or 1. This enables operations that are significantly faster than in traditional computers, and which in some cases are impossible to carry out with traditional technology. Quantum computers are predicted to be able to crack much of the encryption used in modern computing and communication, among other things. Although significant challenges remain in the development of robust and stable quantum computers, and the technology is still some distance away from commercial maturation, several companies have thrown themselves over the possibilities. As technology matures, it will quickly find its way to other parts of society.

[1] Utilisation of materials, structures, components and systems based on phenomena and processes that take place on a nanometer scale. A nanometer is a billionth of a meter and nanostructures are referred to as structures in the range of 0.1–100 nanometers.

cial intelligence «to provide more accurate and user-adapted services, increase the societal benefits of own business, streamline operations and work processes and reduce risk» (The Ministry of Local Government and Modernisation 2020a).

Norway has a good starting point with a forward-thinking public sector that adopts new digital services and a population that is a European leader in the use of online public services (SSB 2019). At the same time, tighter financial conditions, expectations from a new «all-digital» generation, changes in the labour market and structural changes in society, such as the ageing of the population, will make it necessary not only to streamline existing processes and solutions but also to facilitate innovation within the social mission. NAV will continue to move services «to the cloud», share data through, for example, the Data catalogue, and

Technology trends with particular importance for NAV

- **Cloud services** provide access to shared computing power from large online data centres. This enables efficient operation and distribution of software and cost-efficient services. Many people use cloud services, such as map services, Gmail, OneDrive and Office 365, and increasingly other software, such as financial systems, are being delivered as cloud services. It is not only information that is delivered over the internet, but also computational power, data storage, systems, and software. The coronavirus pandemic has provided several examples of how cloud services provide public enterprises with opportunities for rapid restructuring and adaptation when user inquiries multiply overnight (World Economic Forum 2020a). While the use of cloud services in the public sector has so far been modest, it is expected to increase in the years to come (the Ministry of Local Government and Modernisation 2016).

- **Artificial intelligence (AI):** Artificial intelligence systems perform actions, physically or digitally, based on interpretation and processing of structured or unstructured data to achieve a specified purpose (the Ministry of Local Government and Modernisation 2020a). Some AI systems can also adapt by analysing and considering the influence of past actions on the environment. Such technology allows us to talk with a mobile, translate between languages, recognise faces, or let the car drive itself.

- **Machine learning** is a category of artificial intelligence that allows computers to learn without being programmed. The computer can make its own rules based on data and results, because it learns from examples it has seen. Machine learning makes it possible to make assessments and decisions based on large amounts of data. Among other things, this technology is used to recognise patterns and group similar cases, detect deviations, predict outcomes, create synthetic data, translate between languages and it can be used for speech and image recognition. The technology can also give us recommendations or be rigged to make independent decisions. The emergence of digital toolboxes that facilitate the development of machine learning models is expected to make the technology available to more people and lower the threshold for putting it to use.

- **Digital platforms** make it possible to create new business models by offering infrastructure that connects customers and suppliers. Examples of platforms are Amazon, Apple, Alipay, Airbnb, Facebook, Uber, Spotify, and Finn. Digital platforms create a network effect by increasing participation and value creation for their users. Such platforms are increasingly data-driven through algorithms that provide advice and recommendations to the users of the platforms. As the platforms offer cross-border services and challenge the forms of connectivity in the traditional workplace, digital platforms will provide the need for regulatory development related to tax, working conditions, competition, security, and privacy.

- **Hybrid reality** is a mixture of real and virtual worlds where physical and digital objects appear to interact and integrate naturally. Hybrid reality can be divided into «virtual reality» and «mixed reality». Virtual reality (VR) is a computer technology that allows the user to influence and be influenced by a computer-generated environment that imitates reality. NAV has already experimented with giving youths insight into work tasks and jobs they had never thought of before (MEMU 2018). In «mixed reality» it is possible to mix digital information with what one hears and sees, as in the game Pokémon Go.

- **High-speed mobile network (5G):** The opportunities mobile phones have provided have gone hand in hand with the capacity of the mobile network. With 5G, the next-generation mobile network, the distinction between the mobile network and fibre network is expected to be erased (The Technology Council 2019). The number of connected devices is expected to increase drastically, which in turn provide more data to AI and new services. The introduction of the 5G network will enable **the Internet of Things** and open opportunities such as «smart cities»[1], that you can track goods from raw material to production, predict maintenance needs and «climate track» a product. Sensors on store shelves will automatically notify when the shelf needs to be refilled. In this way, 5 G will probably also reinforce the automation trend in several professions. The digitalisation of office buildings with sensors will provide better insight into how the workplace is used and help to improve resource allocation and reduced the spread of infection (Gartner 2020), but will also lead to more monitoring of the workplace.

  For NAV, 5G lowers the technical barriers for remote consultation and hybrid reality. It can provide new opportunities to give job seekers preparatory work training and adapted vocational rehabilitation measures, such as helping the job seeker using virtual reality (VR). For example, the job seeker can put on a VR headset and receive guidance and virtual practical

[1] Smart cities have been defined as cities that connect their infrastructure electronically with the aim of improving the quality of life by using technology to improve the efficiency of services and meet the needs of the citizens (Musa 2016).

experience of repairing a machine part or dealing with situations that may arise in the store (Deloitte 2018).

- **The Internet of Things (IoT):** Consumables, clothing, household products and machinery have built-in

sensors that allow data to be collected by being connected to an online service. For example, the area of assistive technology can use this to plan maintenance and understand utility models.

explore the opportunity space for artificial intelligence (Tekna 2020).

The pace of development in the environment makes it necessary for NAV to organise with a view to rapid change and restructuring. Difi's «Digitalisation Strategy in the Public Sector» (Difi 2019) emphasises that the public sector should adopt an «innovative and flexible» approach to developing public services. For NAV, a «flexible approach» will mean that we work across entities to allow the diversity of expertise to shape the products and continuously make small changes, improvements, and deployment, reducing the risk of making the wrong choices, as well as the costs and the risk associated with large projects. It will be important for the public sector to create an innovative culture where employees and enterprises dare to try something new and are not afraid to make mistakes. There will be an increasing need for technology and analysis and there will be competition for those with talent.

Technology will continue to provide new opportunities but will also challenge the structure of the services provided and change the relationship between NAV and the users and in some cases, may pose a greater ethical risk (more about this in Chapter 6.4). How NAV seizes opportunities, applies the technology, and deals with the challenges will help shape the welfare state in 2035.

6.2 User contact is digitalised: From online self-service to «the digital NAV office»

In 2035, few graduates will have visited a bank, a travel agent or dealt with a TV guide. Companies with new digital business models are already expanding into everything from dating sites to shopping carts at the grocery store. For NAV too, digitalisation will continue to move user dialogue and service produc-

tion onto digital platforms. This will not only take place when processing applications but also when providing occupational rehabilitation services. While online solutions are expanding and allow for «24/7 self-service», the 5G network lowers technical barriers for remote consultation and hybrid reality (see the fact box). The technology for virtual, augmented, and mixed reality is developing at a fast pace. Together with digital simulation, this opens for designing work-related training schemes, so that users are provided with opportunities to practise specific tasks and deal with typical situations they will encounter in a job.

Almost overnight, the coronavirus pandemic transferred public services, such as doctor consultations, school lessons and parent meetings onto digital platforms. In the future, job seekers can probably receive guidance and adapted services without ever visiting a NAV office, for example, through consulting a counsellor from home and attending digital courses. It would be conceivable that practical experience in interviews or work training by repairing a machine part using a VR headset (Kroc 2017) could take place. See Chapter 7.2 for more on how technological developments will affect the labour market in the future.

6.3 Digitalisation of the administration

Today's processes and regulations are a result of yesterday's opportunity space. If we were to redraw everything today, organisation charts and work processes would look different. While mail, paper and personal attendance at a NAV office are being replaced by digital self-service solutions, digitalisation provides the opportunity to think anew about what a good process is and how we solve our tasks.

NAV as a platform operator

Digitalisation provides new opportunities for cooperation between different agencies. Digital platforms

such as Finn, AirBnB and LinkedIn do not provide services directly, but primarily facilitate cooperation between various parties. Similarly, both Apple and Google have quickly benefited from allowing others to develop and innovate on basic platforms via AppStore and PlayStore. Such platforms also provide network effects: The more people who participate, the more valuable the platform becomes.

In many areas, NAV is also a collaboration coordinator between the various actors, such as employers and job seekers, initiative providers and users or an employee, doctor, and employer. When this collaboration is moved onto digital platforms, it allows for digital meeting places where NAV's role changes from being a service provider to a platform operator offering information, managing collaboration rules and operating the platform, but at the same time allowing other actors to innovate by developing and providing services to our users. Arbeidsplassen.no is already such a platform that connects employers and employees with future collaboration opportunities with other social networking services such as Finn and LinkedIn, and even payroll and human resource systems. Assistive technology suppliers can be connected to municipal occupational therapists and the municipalities can build services aimed at NAV's interface. This enables closer integration with other municipal services, perhaps based on IoT sensor data from the assistive technology provided by NAV. There are also opportunities for collaboration across public bodies, e.g., labour market data from NAV and data from the education sector can form a part of a platform where various actors can develop new solutions in lifelong learning.

Life is a stream of events (and choices)

Today, services and benefits are usually initiated through an application or on the initiative of a caseworker or counsellor. Digitalisation enables systems to detect life events, such as a birth or medical certificate. This means that the public authorities can take the initiative in the form of a recommendation or (partly) automated approval of benefits, because the public authorities know that the service or benefit may apply to the person concerned.

Algorithmic personalised content, recommendations and offers are already a widespread part of everyday life online. Users of Spotify, Finn and Netflix are used to being greeted by content tailored to their preferences and needs. This trend influences user expectations and therefore it is also possible that public web services take inspiration from this trend, perhaps based on the user's life events and associated needs. For example, job seekers who need to change jobs after a long sick leave can be matched with available jobs based on how their experience profile coincides with other profiles that have made similar «leaps». At the same time, a job seeker may be recommended a preparatory, virtual course at «Ditt NAV» and automatically assigned to a job specialist with experience from similar cases.

Nudging

Just as the position of a product on a candy shelf in a supermarket will influence what you put in your shopping cart, the architecture of choices on digital platforms and processes is designed to change people's behaviour in the desired way, e.g. in the digital activity plan to help users find employment. This is often referred to as nudging. NAV has already experimented with nudging, including experiments such as providing people on sick leave with targeted the information that 'no change required in the sick note if they feel healthy and see the opportunity to return to full-time work earlier', which has led to more people doing just that.

Using information experiments, where various information strategies are tested against each other, produces better answers about how information should be provided to achieve the greatest effect in the desired direction.

Decision-making support

The use of data in combination with artificial intelligence is spreading and makes it possible to create more personalised services or to offer different forms of decision-making support to counsellors and users. Processes related to case processing, applications, and follow-up of users in NAV can be digitalised and, in some cases, even partially or fully automated. The French public employment service Pôle Emploi has

tested a machine learning model which predicts the likelihood of a job seeker finding employment after 6 months (European Network of Public Employment Services 2020). This is based on the job seeker's previous job history, qualifications, the local labour market and job preferences, among other things. The mechanical assessment determines the follow-up needs of the user. For NAV, such an assessment will require regulatory amendments, as the current rules grant job seekers who want assistance from NAV to find employment the right to an individual assessment of their need for assistance. According to the Swedish Public Employment Services Horizon Scan 2019 (The Swedish Public Employment Services 2019) researchers at Lund University have similarly developed an algorithm that will match newly arrived foreign job seekers with geographical areas where they are most likely to find employment. Artificial intelligence can also be used to detect errors and fraud as the State Educational Loan Fund does when it checks to see whether applicants are actually living away from home (Aftenposten 2019) or to simultaneously translate between different languages so that citizens can write (and in the future perhaps speak) to NAV or a chatbot in their preferred language.

For NAV, it is also possible that counsellors can receive advice about which people should be given priority for follow-up and an unemployed person can receive more personalised advice about which jobs he or she should apply for or which educational measures will improve their job prospects.

The user may experience less resistance in the face of such a proactive administration but at the same time, event-orientation raises important issues related to self-determination, (dis)empowerment and the user's duty of contribution, as well as several challenges under administrative law (Jusstudentene 2019). The boundary between the acceptable influence of behaviour and manipulation is not always as clear and in the long run, may weaken trust in NAV, if the arrangement is not ethically balanced. The technological opportunity space and user expectations will continue to challenge the legislation NAV administers.

Cyberattacks and cybercrime

As the digitalisation of NAV increases, we expose ourselves to new vulnerabilities. Open information can stimulate innovation and new developments, but can also give potential threat actors insight into data that can be misused to plan unwanted or criminal activity against individuals and businesses (The Norwegian National Security Authority 2020). As the «Internet of Things» evolves, IoT units with inadequate security will open new fronts for threat actors to attack and with which we have little experience. According to the World Economic Forum (2020a), cyberattacks on critical infrastructure and data breaches are considered key and persistent threats over the coming decade. Attacks such as the data breach at the Parliament in the autumn of 2020 (The Ministry of Foreign Affairs 2020) are expected to occur more frequently. Cloud services can contribute to improved security because operations take place in large, professional environments. At the same time, the Norwegian National Security Authority (NSM) warns that remote installations outside Norwegian territory pose a significant risk (The Norwegian National Security Authority 2020). The use of cloud services also raises key issues related to the protection of privacy, such as where and how long data is stored, security, digital autonomy and the balance of power between the public authorities and internet giants such as Amazon, Google and Microsoft (FriFagbevegelse 2020). Germany has chosen to develop a cloud service for the German public sector, among other things (Informations Technik Zentrum Bund 2020). As NAV and the public authorities in Norway adopt cloud services to an increasing extent, we can expect the debate on digital autonomy in the public sector to intensify.

6.4 The future is hungry for data – is the protection of privacy and legal protection on the agenda?

While digitalisation presents new security challenges, the use of data and algorithmic systems raises many major and ethical issues that can undermine trust in NAV. In 2019, the UN's poverty envoy warned against a «digital welfare dystopia» (FN 2019) driven by artificial intelligence in the public sector. In 2020,

a court (de Rechtspraak 2020) found that an AI-based system for detecting welfare fraud in the Netherlands resulted in a breach of human rights (Privacy International 2020), and was therefore unlawful. At the time of writing, it is being considered whether an algorithm used to set grades for upper secondary school pupils is legal, following accusations of unfair treatment and lack of transparency (The Norwegian Data Protection Authority 2020).

In recent times, we have also seen several examples of various actors using technology and digital platforms to control or corrupt public debate or to achieve strategic goals in other ways. Digital substitutes, false profiles, so-called brigading, which means that groups work together to manipulate another, receive support from the emergency of algorithmically adapted or manipulated information, such as «deep fakes» (NRK 2019). The technology makes it harder to distinguish fake news from real news and has a reinforcing effect in digital echo chambers, which can be used to manipulate opinion and contribute to increased polarisation. It can also be used purposefully to smear the image of government officials or otherwise weaken trust in NAV and the public sector (Misinformation Review 2020).

Gartner (2020) expects a growing digital trust and ethics crisis in the years to come, as more examples of misuse emerge and the debate over ethical application intensifies. Accenture (2020) talks about a «tech-clash». Despite using technology more than ever, the business models of the past decade are increasingly at odds with user expectations for ethics and the protection of privacy. Also from a political point of view, we can expect more attention in the coming years related to technology and regulation (Politico 2020).

Digitalisation can contribute to value creation and rationalisation in the public sector, but it can also challenge values and shift power and decisions in new and unintended ways that marginalise vulnerable groups. Issues such as bias, discriminatory algorithms and «black boxes» that make it difficult to explain outcomes have received increasing attention in recent year. At the same time, existing weaknesses and biases in manual processes are highlighted and this can force important discussions about who NAV should prioritise, how this should be done and how processes must be arranged to ensure the legal protection of the users. This will also be of importance for the work on the new Public Administration Act.

The EU has emphasised the use of a responsible and reliable artificial intelligence (The European Commission 2019), and the National Strategy for Artificial Intelligence (The Ministry of Local Government and Modernisation 2020a) states that «Norway shall lead the way in the development and use of artificial intelligence concerning the rights and freedoms of the individual». As the most important actor in welfare, it will be particularly important for NAV to have an ethical and responsible approach to the use of data-driven services with broad anchoring and acceptance in the population.

6.5 Reflection questions

- How can data-driven services be useful in your field of work?
- How can NAV contribute so that data-driven services gain broad acceptance in the population?
- How can we prevent algorithms from helping to discriminate against individuals or groups?
- How can we use technology to find employment for more people?
- How will technology change the user meetings in 2035?
- How do you want digitalisation to change NAV?

7. THE LABOUR MARKET

By: Audun Gjerde and Eugenia Vidal-Gil

The coronavirus pandemic has had major consequences for the Norwegian economy and the labour market. The lockdown in the spring of 2020, both in Norway and abroad, led to the steepest fall in Gross Domestic Product (GDP) for mainland Norway[8] ever measured and the highest recorded unemployment in peacetime. As the strictest infection control restrictions were lifted or eased, activity in the Norwegian economy began to pick up already before the summer and the registered unemployment rate began to fall. NAV expects the recovery in the Norwegian economy to continue in 2021 and 2022 (Vidal-Gil and Gjerde 2020). This will help registered unemployment to continue to decrease towards 2022 but at a slower pace than in 2020. According to NAV's forecast, registered unemployment will still be higher at the end of 2022 than before the outbreak of the coronavirus pandemic.

How our trading partners fare is important for Norway's economic development because exports of traditional goods and services account for around 25 per cent of mainland Norway's gross domestic product (GDP). In 2019, 65 per cent of mainland exports went to the EU and about 7 per cent went to the US. Like Norway, most of our trading partners experienced an unprecedented economic downturn in the second quarter of 2020. Although economic activity picked up significantly in the third quarter of 2020, a weaker development is expected at the end of 2020 and into 2021 because of the reintroduction of stricter infection control measures. However, approval of the first vaccines against Covid-19 at the end of 2020 has raised hopes of a stronger recovery internationally through 2021. In section 7.1, we describe the outlook for the Norwegian and international economy towards 2025.

The coronavirus crisis has also forced changes in how we travel, work, communicate and consume. Many of these changes will probably affect us for a long time to come. Investments to speed up the economy after the acute crisis is over both in Norway and the rest of the world will probably be made to an increasing extent within sustainable industries. In section 7.2, we discuss the possible effects of increased digitalisation, as well as the restructuring from oil and gas to other industries partly because of the climate agreement, less oil and gas resources, rapid development in renewable energy and a fossil-free motor vehicle population.

There is considerable uncertainty about how the economy and the labour market will develop in the long term. If we look as far as 10 and 20 years ahead, it is impossible to say when cyclical upturns and downturns will occur. Therefore, we must disregard short-term economic fluctuations and try to project the underlying trend going forward. In sections 7.3–7.7, we have used as our main scenario Statistics Norway's projection of supply and demand for labour distributed according to the level of education towards 2040 (Cappelen et al. 2020).

7.1 The Norwegian and international economy will be characterised by recovery

The International Monetary Fund (IMF 2020) expects a sharp recession in the global economy in 2020 as a result of the coronavirus pandemic. The IMF estimates that the global gross domestic product (GDP) will fall by 4.4 per cent in 2020. By comparison, the global GDP fell by 0.1 per cent during the financial crisis in 2009. The IMF expects a significant recovery in 2021, with a growth in GDP of 5.2 per cent. After 2021, the IMF expects the global GDP to continue to increase but the growth rate will gradually slow down to 3.5 per cent in 2025 (Figure 7.1).

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[8] The GDP for mainland Norway is equal to the GDP excluding oil and natural gas production, pipeline transport and international marine transport.

In December 2020, vaccination in the EU member states, the UK, Norway and the US got underway following the approval of the first vaccines against Covid-19. This raises hopes for a stronger economic recovery through 2021. However, there is still great uncertainty about the forecasts in the short term. The third wave of coronavirus infection may be underway in several countries and the infection control measures introduced in the second wage in the autumn of 2020 were extended to the beginning of 2021 in several European countries. Measures to ensure social distancing and limit the spread of the coronavirus will be necessary until a large enough proportion of the population have been vaccinated. It is thought that around two-thirds of the population should be vaccinated to achieve herd immunity. The European Union is aiming to have this implemented in the first half of 2021 but if there are delays in the production and distribution of the vaccines, this may take longer.

The coronavirus pandemic and international trade

The IMF expects international trade, i.e., the total of all import of goods and services in the world (or the total global exports) to fall by just over 10 per cent in 2020 (Figure 7.1). This is mainly due to a sharp fall in international tourism and transport due to the coronavirus pandemic. The decline in international trade is about the same as during the financial crisis, although

the fall in GDP is much greater than in 2009. This can be seen in context with the fact that exports and imports of goods, which account for a larger proportion of global exports and imports than services, have been less affected by the pandemic. Consequently, countries, where tourism accounts for a large proportion of the GDP, will experience a sharper decline in foreign demand than countries where exports of goods have greater weight. The recovery in the global economy will contribute to international trade growing by 8 per cent in 2021 and then by 4 per cent on average in the years 2022–2025, according to the IMF.

The growth in international trade slowed down already in 2019 due to increased protectionism and trade disputes, especially between China and the US. Several international trade agreements were renegotiated in 2020, which helped reduce uncertainty about what rules and rates should apply. Agreement in 2020 between China and the US on the first phase of a new, bilateral trade agreement dampened the level of conflict between the two countries somewhat. A new trade agreement between the US, Canada and Mexico also came into effect in the summer of 2020. However, many of the import rates and higher tariffs on several products introduced over the last two years are still in force, which has curbed growth in international trade. At the end of December 2020, the UK and the European Union (EU) also agreed on a trade deal that

Figure 7.1. The annual growth in international trade and global GDP. Estimates from 2020. Percentage.

Source: IMF

came into effect on 1 January 2021. This has avoided a so-called «hard Brexit», which would have resulted in import barriers between the UK and the EU with a significant negative economic impact for both parties. Several details have not been decided yet, including an agreement on the trading of financial services which still must be negotiated, but it has been clarified that no tariffs will be introduced on imports of goods between the UK and the EU. Norway has also signed an interim trade agreement with the UK, which came into effect on 1 January 2021, and ensures that Norwegian goods will not face new tariffs while a final trade agreement is being negotiated.

Upturn among Norway's trade partners after the downturn in 2020

The IMF expects a sharp downturn in the Euro area[9] in 2020, with a fall in GDP of 8.3 per cent. The second wave of the coronavirus in the autumn of 2020 resulted in local lockdowns and further restrictions, and in several European countries, the infection control measures have been extended to the beginning of 2021. This curbs the economic growth in the fourth quarter of 2020 and into 2021. However, access to the vaccine against Covid-19 offers hope of a faster recovery throughout the year. GDP growth in the Euro area is expected to be 5.2 per cent in 2021 and gradually

9   The Euro area includes Belgium, Germany, Estonia, Ireland, Greece, Spain, France, Italy, Cyprus, Latvia, Lithuania, Luxemburg, Malta, the Netherland, Austria, Portugal, Slovenia, Slovakia and Finland.

Figure 7.2. Annual growth in GDP. Estimates from 2020. Percentage.

Source: **IMF, NAV and SSB for Norway**
1 NAV's forecast for the years 2020–2022, Statistics Norway's projection (Cappelen et al, 2020) for the years 2023–2025

decrease towards 2025 (Figure 7.2). In the US, the decline in GDP in 2020 is expected to be slightly less than in the Euro area, at 4.3 per cent, while GDP growth in 2021 is estimated to be 3.1 per cent. Despite high growth rates in 2021, it will take time for the economic activity among trade partners to return to the pre-pandemic levels. According to the IMF, the total GDP in the industrial countries will be around 2 per cent lower at the end of 2021than it was at the end of 2019.

The coronavirus pandemic has not hit the Chinese economy as hard as in most industrialised countries. The IMF expects GDP growth in China to be 1.9 per cent in 2020 and 8.2 per cent in 2021, which will be an important contribution to the growth of the world economy. In 2022–2025, the IMF expects the growth rate to slow down and the GDP to increase on average by 5.5 per cent annually.

The recovery in Norway continues

Activity in the Norwegian economy has picked up since May, following a sharp fall in March and April due to the lockdown. NAV (Vidal-Gil and Gjerde 2020) expects the recovery to continue towards 2022. Due to the forced savings through 2020, we expect strong growth in private consumption in 2021 and 2022 and that this will be the most important contribution to the growth in the Norwegian economy, despite a somewhat weaker real wage growth this year. On the other hand, a decline in oil investments, especially in 2021, will harm growth. A slightly stronger rise in house prices is forecasted for the years ahead due to low borrowing costs and fewer houses on the market. In isolation, higher house prices will lead to more housing construction and housing investments will gradually recover after several years of weak development. In the long term, this will have a positive impact on the Norwegian economy. Public demand will continue to help boost the growth in the Norwegian economy in 2021 and 2022, but to a lesser extent than in

Figure 7.3. Unemployment as a percentage of the workforce[1]. Estimates from 2020.
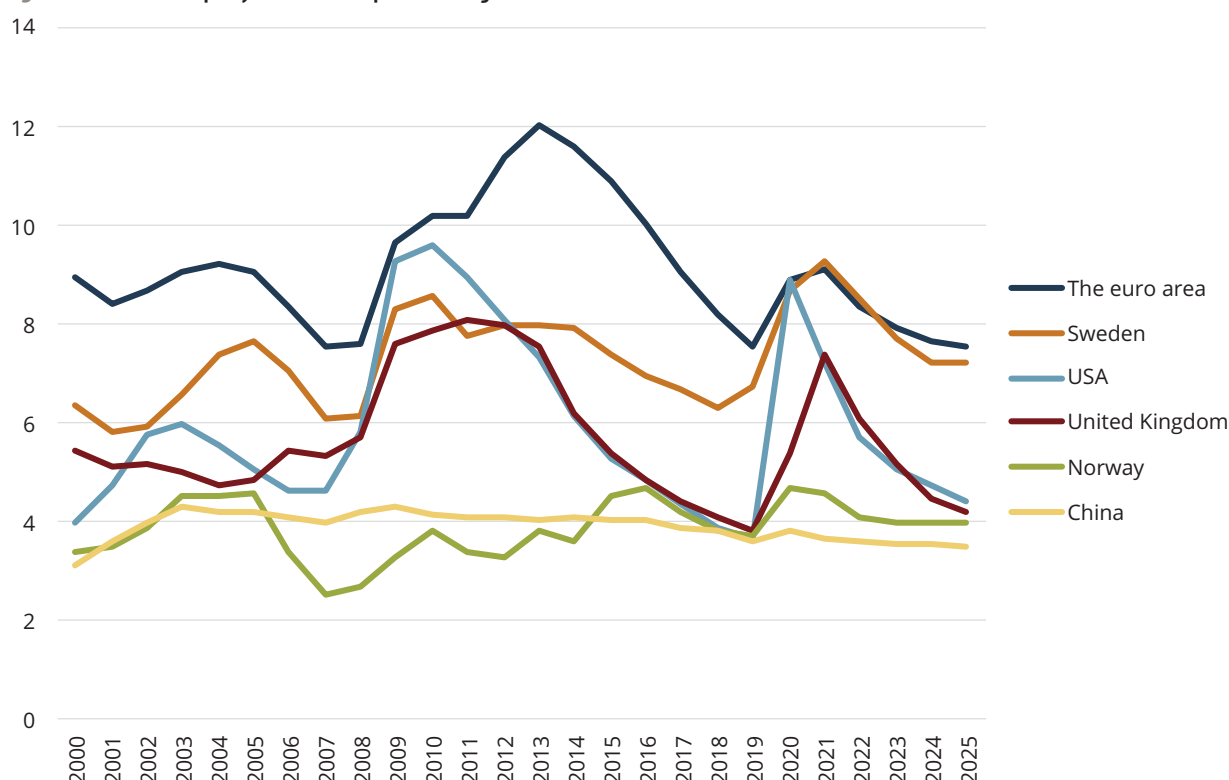
Source: **IMF, NAV and SSB for Norway**
[1] Unemployment is measured in the labour force survey for all the countries shown in Figure 7.3
[2] NAV's forecast for 2020–2022, Statistics Norway's projections (Cappelen et al., 2020) for 2023–2025

2020. Increased foreign demand in the years to come will lead to an increase in exports of traditional goods and services, but it will take time for exports to return to the same level as before the coronavirus crisis.

Higher unemployment

The lockdown in the spring of 2020 resulted in a sharp rise in unemployment in Norway and among trading partners. Figure 7.3 shows unemployment measured in the labour force survey, which is the harmonised measure for comparison between countries. The disadvantage of the labour force survey is that in the first three months of being temporarily laid off, laid-off employees are defined as employees temporarily absent from work and are only considered unemployed after three months if they have not yet returned to work. During the coronavirus crisis, temporary layoffs have increased sharply in Norway and among trade partners, which is not fully shown in the labour force survey. However, the trend in the number of working hours shows the extent of layoffs. According to the International Labour Organisation (ILO), the global decline in the number of hours worked in the first and second quarter of 2020 is equivalent to 550 million fewer full-time positions than in the fourth quarter 2019, before the pandemic.

According to the IMF, unemployment among Norway's most important trade partners will gradually decline towards 2025. In several countries, such as the Euro area, the UK and Sweden, unemployment will continue to increase in 2021, while in the US it is already beginning to fall slightly. However, it will take a long time before unemployment returns to pre-pandemic levels. In the Euro area in 2025, unemployment will be almost at the same level as in 2019, while in the UK, Sweden, and the US it will continue to be higher in 2025 than before the coronavirus crisis.

The challenges ahead

The coronavirus pandemic has led to greater inequality. Service industries that involve contact between people, such as tourism and transport, culture and entertainment or retail, have been the hardest hit. Small businesses, young people and workers with few formal qualifications have been particularly affected.

According to the IMF, the coronavirus pandemic could lead to an increase in extreme poverty for the first time in more than 20 years, where 90 million people can fall below the income threshold of USD 1.90 per day in 2020. An expansive fiscal and monetary policy has helped mitigate the downturn and compensate workers and businesses for loss of income due to the pandemic. Both the IMF and OECD are urging governments to continue with government support schemes to prevent the negative consequences of the coronavirus crisis from persisting. Among other things, targeted measures for training and retraining the unemployed are recommended to be able to switch from industries where the activity will probably remain lower than before the pandemic, such as tourism and transport, to industries that have grown, such as e-commerce. Furthermore, increased investments in health, education and infrastructure are recommended, which will contribute to the transition to a greener and more digitised economy. The coronavirus crisis is a global crisis, which is why the IMF and OECD are also calling for increased international cooperation to ensure broad access to vaccines and medicines against Covid-19, as well as financial support to poorer countries for a solid recovery in the global economy.

7.2 Faster restructuring

The coronavirus crisis has also forced changes in how we travel, work, communicate and consume. Some of these changes will probably be temporary, while others will probably affect us for a long time to come.

As the acute crisis subsides, attention will shift from reducing the short-term negative consequences for Norwegian businesses and households to rebuilding value creation and creating new jobs. Investments made to speed up the economy both in Norway and the rest of the world will probably be made within sustainable industries in line with the climate obligations in the Paris Agreement. This will present major challenges in the next ten years but will also provide great opportunities in new and emerging industries.

NHO (2020), which uses analyses from SINTEF (2019), among others, points to four industry-wide

areas of opportunity that present challenges, but that can also help to ensure growth and new jobs in the future:

- **A greener economy:** More renewable energy, growth in the circular economy and adaptation to a warmer and wilder climate.
- **A more digital economy:** The increased value of data, increased automation and autonomous solutions and new business models.
- **A more service-based economy:** Growth in labour-intensive services, the digital transformation of services, home delivery of services and increased demand for experience-based services.
- **A more international economy:** A slowdown in globalisation, withdrawal of global value chains, increased Nordic and European cooperation and major export opportunities in emerging industries.

These are all areas that even before the coronavirus crisis helped drive restructuring processes in Norwegian business and industry, but these restructuring processes are expected to accelerate further when the acute crisis is over.

Increased digitalisation

In many areas, digitalisation has accelerated during the coronavirus crisis through the increasing use of digital tools. According to a survey conducted by Computas (2020), 8 out of 10 businesses have become more digitalised due to the coronavirus pandemic. Just over 1/3 of the businesses in the survey have given their employees training in new technology and digital tools. Meetings and conferences have largely been conducted digitally and being able to provide good digital services has become increasingly important.

Many businesses will also offer their employees a flexible workplace in the future, and in many professions, there may be changed work patterns and more innovations in digital collaboration solutions and meeting places (Economist 2020). The emergence of the 5G network and the «Internet of Things» (IoT) (see the fact box in Chapter 6.1) will make it easier for even more occupational groups to work both where and when they want: Technical installations can be monitored from the cabin and patients can be followed up and even operated on by specialists located elsewhere (E24 2017).

Digital collaboration also allows employees to be in different geographical locations. In some professions, the competitive dynamics of the labour market will evolve as employees no longer need to move to take up employment. In turn, this will affect NAV¨s communication work and challenge the requirement we currently set for job seekers that they must be willing to move, especially if this requirement affects job seekers in some sectors more than in others.

Almost overnight, the education sector was forced to switch to digital distance education. Although it has not been as successful in all cases, this digital boost could provide benefits in the long run. For example, distance education may make it easier to engage in skills development to be able to quickly adjust to a constantly changing labour market. For some professions, there is an ever-growing range of courses from services such as Coursera, EdC and Udacity. These offer not only individual courses but also, to an increasing extent, course packages to people who want to formalise their knowledge or reorientate themselves towards new professions. Some employees will have the opportunity for such skills development at work, while others may have to consider lost earnings here and now towards future career prospects (NOU 2019:12). This could lead to new social divisions. When most people also continuously learn and adapt through work, it becomes even harder for those who are outside an employment market with a high pace of change.

Increased digitalisation will also result in more tasks being automated. This increases efficiency and can free up resources to perform other tasks but will also mean that some jobs disappear or are solved in other ways. A recession tends to lead to increased automation. The loss of routine jobs in the US over the past three decades is almost entirely linked to jobs that disappear permanently during economic recessions (Jaimovich and Siu, 2020). A global pandemic, where

human contact should be avoided, will probably not reduce the incentives for automation and the development of autonomous solutions (such as self-driving cars, transport systems, etc.)

There is a great deal of uncertainty about how many jobs in Norway risk being affected by automation. OECD (2019) estimates that it is highly probable that about 6 per cent of all jobs in Norway are at high risk of disappearing due to automation, but automation will lead to significant changes for a far greater proportion of jobs. Ekeland et al. (2015) estimate that it is highly probable that around one in three jobs in Norway will disappear because of automation in the next 20 years. However, this analysis has been criticised for not taking into account that a given occupation will often change when new technology is introduced instead of disappearing (Bye and Næsheim 2016). Demographic changes, policies and income growth are other factors that can affect which occupations are needed in the future, and therefore, the estimates are very uncertain. Although many jobs will disappear, digitalisation and automation will also create many jobs. Historically, the net effect of major technological changes in the number of jobs has been positive (OECD 2019). The World Economic Forum (WEF) has estimated that while automation will lead to the disappearance of large numbers of jobs, the new interaction between people, machines and algorithms worldwide will create about 12 million more jobs by 2025 than the number of jobs expected to disappear (World Economic Forum 2020b).

Jobs that are less likely to be automated will probably face increased employment in the years to come. Occupations with low-qualified employees will probably disappear to a greater extent, while more people will be employed in occupations requiring higher education (Øye 2019). The restructuring is expected to be particularly difficult in industries where workers have a generally low level of education and specific expertise (Ødegaard et al. 2020). Although the number of jobs will probably increase in the long term, some of those who lose their jobs due to automation will probably have skills that are no longer in demand.

The Norwegian Committee on Skill Needs (Norwegian Official Report: NOU 2020: 2) points out that digital skills will be increasingly more important in the workplace and that a lack of digital skills could lead to fewer employment opportunities. More than 70 per cent of employees believe they will have to improve their digital skills to some extent as a result of increased digitalisation (Ingelsrud and Steen 2019). At the same time, a steadily increasing number of employees state that they are interested in training or further education if their employer facilitates this. This proportion is also clearly lower among people with only an upper secondary education than among those with higher education, despite the risk of automation and thus the need for retraining being highest in this group.

The steadily increasing importance of data can also provide new opportunities. NHO (2020) points out that data accounts for a larger proportion of value creation in most industries. The emerging trend with artificial intelligence and big data analysis will make it even easier to realise the value of existing data. This applies to data as a pure resource in value creation, but also increased productivity both in the public and private sector, and increased welfare through improved public services. An analysis carried out on behalf of The Ministry of Local Government and Modernisation (2020b) estimates that the data centre industry[10] employs around 2,000 people, but that the industry will experience strong growth in the coming decade, given that it has good and predictable framework conditions. By 2030, it is estimated that the industry can employ up to 25,000 people.

NAV plays a key role in facilitating the transition from unemployment and return to work. When jobs become less secure, more people may also need support from NAV. To provide good guidance, we need to know how digitalisation affects the various occupational groups and we will probably have to support an increasing need for life-long learning through both changes in regulations, practice and a new portfolio of

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[10] A data centre is a facility consisting of servers and other components used to organise, process, store and disseminate large amounts of data (The Ministry of Industry and Fisheries 2018).

work training and skills-enhancing courses. Here, the emergence of Massive Open Online Courses (MOOC) and adapted teaching aid provides new opportunities (The Technology Council 2018), while digitalisation removes the «waiting list» and makes the training available to more people. Perhaps this opportunity should not be limited to job seekers but also be offered to employees in occupational groups particularly a risk of losing their jobs?

The platform economy – opportunities and challenges

The platform economy, often also referred to as the sharing economy, is presently modest in size in Norway. In the platform economy, financial activity and work are organised through digital platforms, where the digital platform facilitates interaction between groups (Oppegaard 2020). The platform economy includes platforms such as Finn.no, Airbnb, Foodora, Nabobil etc. A survey from 2017 shows that around 1 per cent of the population aged between 18 and 65 years performed work via work platforms in the last 12 months, but only 30 per cent of these stated that they have worked weekly or more often (Alsos et al. 2017).

There is great uncertainty as to what the extent will be in the future. Pedersen et al. (2016) estimate that the platform economy will reach a turnover of around NOK 42 billion in 2025, but research from the US, among others, indicates that the growth there is levelling off and thus should not be taken for granted (Alsos et al. 2017). NHO (2020) point out that digitalisation helps remove geographical market boundaries and thus also provides good growth opportunities for businesses within the platform economy in Norway. A survey conducted by FAFO on behalf of the Norwegian Union of Municipal and General Employees among young people aged 16–25 years shows that 95 per cent of those asked believe that the opportunities for a permanent job are important for the choice of profession (Andresen et al. 2017). This may indicate that the flexibility the platform economy offers to a greater extent than ordinary working life is not necessarily desired, at least not among young people.

The Platform Economy Committee (NOU 2017:4) points to several challenges, but also opportunities related to the growth of the sharing or platform economy. It can offer more efficient use of existing resources and lead to more competition and thus lower prices, better products, and more innovation. It also provides greater employment opportunities for people who, for various reasons, have ended up outside the traditional labour market. At the same time, it presents challenges related to tax rules, consumer rights and the Norwegian working life model. Some participants in the platform economy will be paid below the minimum contractual wage rates, while those who are in demand will achieve good earnings. Since the income from such work largely serves as a supplement to ordinary working income, it is somewhat unclear how the sharing economy affects the income inequality in society.

In many businesses within the platform economy, the service providers are defined as independent and not as permanent employees. Among other things, self-employed persons do not have the same rights when it comes to social security and pension rights and job protection that ordinary employees have. The lack of income security for self-employed persons and freelancers has become a relevant issue during the coronavirus crisis and a temporary compensation scheme was established for this group to compensate for the loss of income due to the coronavirus crisis. Persons who are not permanent employees also participate to a lesser extent in training activities in the enterprises, which in the long term may have negative consequences for the overall competence in this part of the workforce. Therefore, contractors in the platform economy must take more initiative to improve their qualifications.

The green transition

2019 was the second warmest year ever recorded on a global basis, with a temperature of 1.1 degrees higher than pre-industrial levels (WMO 2020). Only 2016 has been warmer, but all the warmest years have been registered in the last five years. Climate change also leads to more frequent extreme weather such as droughts, wildfires, floods, and tropical cyclones. The consequences of climate change are becoming

increasingly more visible, and time is of the essence if the climate targets set out in the Paris Agreement are to be met.

The Paris Agreement, which was signed in 2015, obliges Norway and the rest of the world to cut their greenhouse gas emissions sharply in the coming years. The international climate agreement aims to limit the increase in the global average temperature to below 2 degrees and preferably as close to 1.5 degrees as possible. 2020 was an important year for the Paris Agreement, as it is the first time the nations of the world will update their climate targets with the agreement. As one of the first countries in the world, Norway reinforced its climate targets at the beginning of February. Through the updated targets, Norway is committed to reducing its greenhouse gas emissions by 50 per cent compared with the 1990 levels, and to strive for a reduction of up to 55 per cent (The Ministry of Climate and the Environment 2020a). Achieving the ambitious targets requires comprehensive restructuring within all areas of society. According to the model calculations made by DNV GL (2020b), Norway is currently on track to meet the climate targets. Instead of a 50 per cent reduction, we are currently on the way to managing to cut greenhouse gas emissions by 23 per cent before 2030.

Energy-related greenhouse gas emissions account for around ¾ of the total global greenhouse gas emissions (OurWorldInData 2020), where the largest sources are energy consumption in industry, buildings, and the transport sector. As a result of the coronavirus crisis, the world's energy demand is estimated to fall by around 8 per cent this year (DNV GL 2020c). This is expected to have a strong impact on the demand for oil and coal and that the demand for renewable energy sources will be least affected (Statkraft 2020). This means that energy-related greenhouse gas emissions probably reached a peak in 2019 (DNV-GL 2020c). The International Energy Agency (IEA 2020) estimates that the demand for oil will continue to increase slightly in the coming years, but that it will level off towards 2030. The increased demand comes mainly from emerging economies.

Lower demand for oil will, in isolation, have a negative impact on the price of oil, which in turn affects the level of oil investments. Investments in production and pipeline transport peaked in 2014, but then fell sharply in the following years due to the sharp fall in the price of oil in the period 2014–2016 (SSB 2020). Oil investments have gradually picked up since then, but investments are expected to fall again after 2020. At the same time, major investments in renewable energy have meant that installed wind power capacity has quadrupled, and solar energy capacity has doubled a total of 27 times in the last ten years (Statkraft 2020). The substantial increase in capacity is largely due to a sharp cost reduction and improvement in technology.

The combination of lower demand for oil, climate change and major investments in renewable energy on a global basis will probably accelerate the need for restructuring from an oil-driven economy. At the same time, the Norwegian economy is less dependent on the oil industry today than back in 2014. The number of direct employees in the oil industry and oil and gas exports as a share of Norwegian exports and value creation as a share of GDP in the oil industry has declined noticeably. While the revenues from the petroleum activities continue to be important for the Norwegian economy for a long time to come, the development of new projects on the Norwegian continental shelf will in all probability slow down towards 2035, which will affect the parts of the industry that depend on supplies to the oil industry, among other things. The Norwegian authorities have also launched several different priority areas to speed up the green transition in the Norwegian economy and to create new green jobs. In the autumn, the Government launched its plans to support the implementation of capture, transport and storage of CO_2 in Norway (The Ministry of Climate and Environment 2020b). The «Longship» project provides extensive state subsidies to lay the foundation for new technology and further development of the industry. It has previously been estimated that a commitment to CO_2 management could help create between 30,000 and 40,000 new jobs in Norway towards 2050, as well as strengthening competitiveness with up to 90,000 jobs (SINTEF 2018).

The Government has provided extensive support to Equinor's offshore wind project at the Snorre and Gullfaks fields through Enova, mainly to further develop the technology. Floating offshore wind is a relatively immature market and the estimates for the future size are therefore very uncertain. It is expected to account for a modest share of Norwegian energy production towards 2035 (DNV GL 2020b).

Compared with other countries, there is a high proportion of people receiving health-related benefits such as sickness benefit, work assessment allowance and disability benefit in Norway (NOU 2019:7). This can be explained by financial incentives through relatively generous welfare schemes, but also increased competence needs and attention to efficiency (Fevang 2020). It has previously been shown that periods of high unemployment led to a greater transition to health-related benefits. Lima (2016) found an increase in the proportion of people who had exhausted their right to sickness benefit and who were now receiving work assessment allowance during the oil-driven downturn in the counties of Rogaland and Aust-Agder in 2016. The probability of becoming a disability pensioner also increases noticeably when a person becomes unemployed (Bratsberg et al., 2013). During the coronavirus crisis, there has been concern that an increased proportion of unemployed people, especially young people with weak attachment to the labour market, will fall permanently outside the labour market (The Ministry of Finance 2020).

Due to a high rate of restructuring in the future, we may experience several periods of increased unemployment in some industries or geographical areas. Although some jobs and occupations will disappear, many new jobs will also be created in the coming years. Fölster (2018) estimates that the strongest growth will be in education, health care and social services, as well as software and application developers/analysts. Particularly within health and social services, NAV's enterprise survey reported a significant shortage of labour in recent years. We know from the past that geographical mobility resulting in relocation to find employment is relatively low (Andreev and Schou 2017). However, geographical mobility measured by commuting is considerably higher as is occu-

pational mobility (Kann et al. 2018). Mobility is also higher among people with higher education and incomes. Given that digitalisation and automation are expected to affect low-income groups to a greater extent, measures aimed at increasing geographical and occupational mobility should be considered. Among other things, the Employment Committee (NOU 2019:7) has proposed stricter enforcement of the current regulations related to mobility and better digital tools to help job-seekers identify their opportunities based on job vacancies. A high pace of restructuring in the labour market will also require that NAV counsellors keep in step with local conditions in the labour market to be able to efficiently procure labour.

A key tool for increasing occupational mobility among job seekers is to facilitate skills development. In April 2020, the Government presented a white paper on the Competence Reform «Life-long Learning». The white paper presented several measures to prevent employees from «being outdated» as a result of lack of qualifications (The Ministry of Education 2020). This includes measures to stimulate more demand for skills development, open the education system for life-long learning and a better link between supply and demand after skills development. As a temporary arrangement, up until the summer of 2021, it will be possible to combine unemployment benefits with education to provide incentives for skills development while a person is unemployed or laid off during the coronavirus crisis. A permanent arrangement with a combination of unemployment benefit and education has been proposed in various forms in several Official Norwegian Reports, see NOU 2019:7, NOU 2018:13 and NOU 2019:12. One concern related to the implementation of educational measures for the unemployed is that the return to work is delayed, but in a demanding labour market in the coming years, there is less reason to fear such effects as it will be more important to prioritise the prospects in the labour market.

It has also been proposed to create a new programme for building skills to match the labour market (NOU 2019:12). This will be a cooperation between industry and commerce and the public sector, both in terms of implementation and funding. New education and

training programmes will be developed based on specific identified competence needs in the workplace. This includes a formal education in upper secondary schools, vocational schools, and higher education but also informal training. To be able to implement digital education in the best way during the coronavirus crisis, the education sector has had a digital boost. This will probably make it easier to complete competence-enhancing measures without physical attendance thereby lowering the threshold.

7.3 More employees in the service industries towards 2040

To forecast employment according to the industry in the long term, it is necessary to project the industrial structure of the economy. The size and composition of the population, the extent of the petroleum activities, the development in the international economy and fiscal policy are of great importance for the developments in the Norwegian economy. Cappelen et al. (2020) present a reference path showing how the Norwegian economy may develop towards 2040, based on several assumptions. Projections so far have been very uncertain, and the aim is to detect possible imbalances that may arise. This means that measures can be taken to counter unwanted trends.

It is assumed that the population will develop as estimated in the main alternative in Statistics Norway's latest population projection (see Chapter 4.1). With fewer births and lower net immigration than estimated two years ago, the growth in the population between the ages of 15 and 74 years will be 0.2 per cent on average each year in the period 2022–2040. This means that the population of working age will grow at a slower pace than in previous years and that in the future, the oldest of the elderly will account for an increasingly large proportion of the population. Thus, pension payments and the need for care services will increase. Lower population growth in the future leads to lower growth in the Norwegian economy seen in isolation.

Oil prices are expected to be at USD 50 at the end of 2021, as indicated by the price of future oil contracts. Up to 2040, the oil prices will then rise the same as the

rate of inflation. Oil production is estimated to peak in 2024/2025 and fall sharply up to 2030, in line with estimates from the Norwegian Petroleum Directorate (2021), and then level off slightly towards 2040. Oil investments are expected to follow the same pattern and remain at a high level until 2024 and then fall sharply towards 2040. Oil investments will go from accounting for 6 per cent of GDP for mainland Norway on average in the last two years, to 2 per cent in 2040. The decline in oil production and investments will dampen growth in the mainland economy in the long term and affect the composition of industries and the demand for labour in the future.

The growth internationally had picked up in recent years before the coronavirus pandemic and with it the demand for Norwegian goods and services. A weaker krone also contributed to this. The coronavirus pandemic resulted in a sharp economic downturn among Norway's trading partners in the first half of 2020. Cappelen et al. (2020) assume a recovery in the international economy in the next few years and that in the medium term,[11] the GDP growth among trading partners will be around 2 per cent annually. This corresponds to the average growth in the 20 years before the coronavirus crisis. As in Norway, economic growth is expected to be somewhat lower than this in the long term due to lower population growth and increased ageing of the population. Furthermore, a stable exchange rate is assumed and that the relationship between import and export prices changes little in the future. Exports of traditional goods will thus grow faster in the period 2022–2040 than has been the case in the last decade, which will contribute positively to the growth in the Norwegian economy.

The projection assumes that public expenditure, i.e., the sum of public consumption and investments, as well as benefits to households, follows the fiscal rule for the fiscal policy. This means that the oil-adjusted budget deficit is assumed to be almost 3 per cent of the Government Pensions Fund Global (the Oil Fund) in the period 2022–2040. Measured as a percentage of GDP for mainland Norway, the total benefits to house-

11   The period is not further specified in the report, but this probably applies towards around 2030.

holds will be stable in the period 2022–2040. An increase in the number of old-age pensioners contributes to higher transfers to households going forward, while fewer children will pull slightly in the opposite direction. Public investments are expected to grow at a slower pace than mainland GDP. At the same time, a slight increase in employment in public administration is expected mainly due to a higher level of activity in the health sector so that public consumption grows at about the same rate as mainland GDP. On the other hand, private consumption is expected to grow faster than mainland GDP, partly because of increased pension payments. Given these assumptions, the growth in the mainland economy will be between 1.4 and 1.6 per cent annually towards 2040. This is below the trend growth before the coronavirus pandemic and the service industries will grow at a faster pace than the rest of the economy.

Employment development by industry follows the predicted development in the Norwegian economy and as Figure 7.4 shows, employment in private service industries and public administration will increase towards 2040, which increases the total employment in mainland Norway. Only weak growth is expected within building and construction, while employment within retail and wholesale, manufacturing and oil and gas production will be lower in 2040 than in 2019.

Employment in the private service industries accounted for more than one-quarter of employment in mainland Norway in 2019. According to Statistics Norway's projections, employment in this industry will increase by 13 per cent towards 2040, which is equivalent to 93,000 more employees than in 2019. In public service, employment has grown steadily in recent decades, which is mainly due to growth in health and care services. This trend is expected to continue, so that employment in public services, except the armed forces, will be 11 per cent higher in 2040 than it was in 2019, i.e., around 90,000 more employees (Figure 7.5). Thus, employment in private and public services will account for just under 60 per cent of the employment in mainland Norway in 2040.

Figure 7.4. Projected employment according to industry. Estimates from 2020. Indexed, 2019=100.
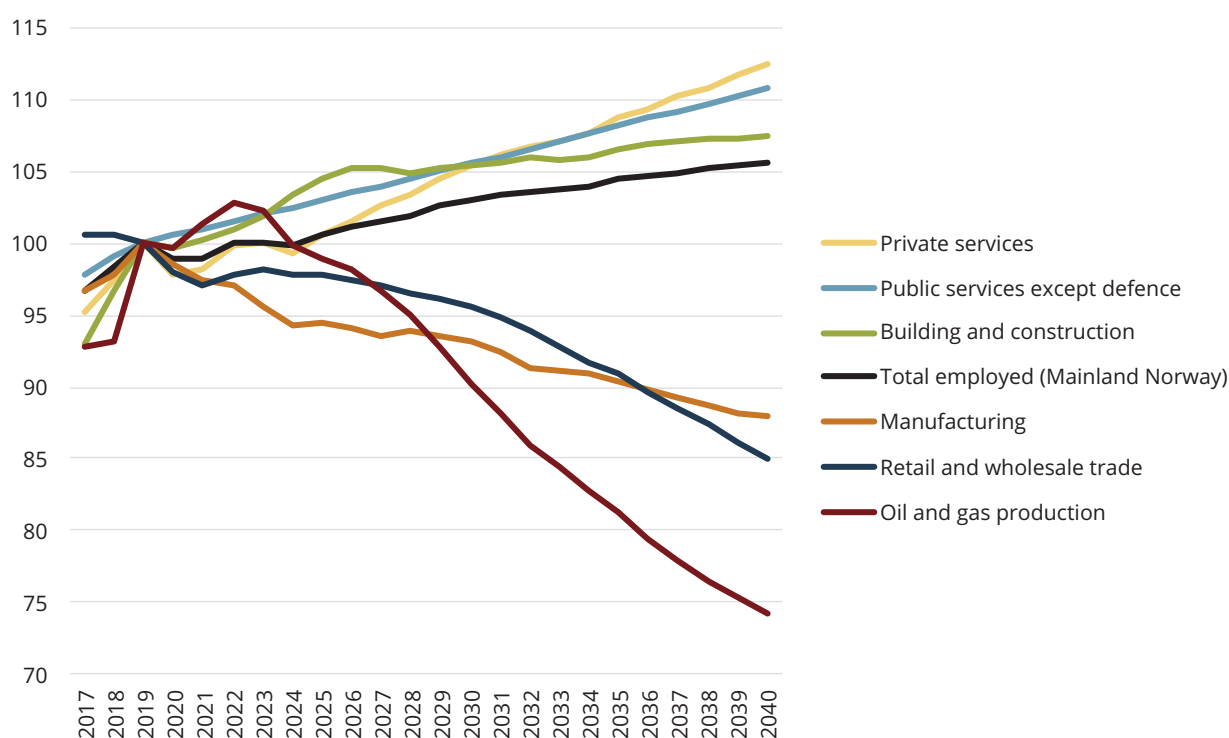
Source: SSB (Cappelen et al. 2020)

Figure 7.5. The number of employed persons according to industry. Actual figures in 2019, estimated in 2040. Thousand people.
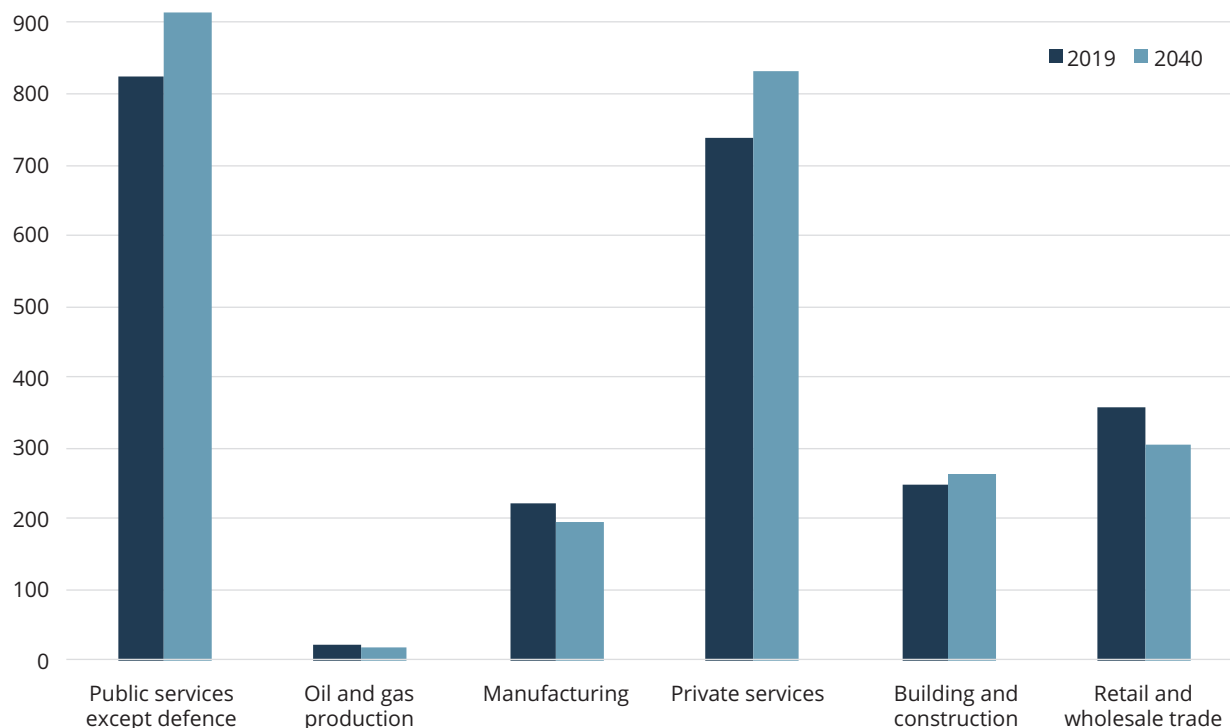
Source: SSB (Cappelen et al. 2020)

Within building and construction, employment is estimated to increase at a slow pace towards 2040. Employment in this industry increased significantly in recent years due to strong growth in housing investments, especially in 2015 and 2016. Although housing investments fell in 2018 and 2019, employment in building and construction continued to increase, but at a slower pace. The decline in housing investments has continued through the first three quarters of 2020 and employment has decreased slightly. In the projections, this trend will turn next year and the number of employees in building and construction is expected to increase by 18,000 by 2040.

The retail and wholesale industry is one of the largest industries in terms of the number of employees. In 2019, this industry employed 359,000 people. However, employment in the retail and wholesale industry decreased through 2018 and 2019 and the decline was even greater in the first and second quarters of 2020 because of the lockdown to limit the spread of the coronavirus. Statistics Norway projects a weak decline

in employment in retail and wholesale towards 2040, which can be seen in context with changing trading patterns and increasing e-commerce, although private consumption is expected to grow in future. According to the projection, there will be 54,000 fewer employees in the industry in 2040 than in 2019.

Employment in the production of oil and natural gas has fallen sharply since 2014 but is expected to recover slightly towards 2023 in step with a new rise in oil investments. In Figure 7.4, we see that after 2023, the projections indicate a decline of 28 per cent in employment in the petroleum sector towards 2040, which means around 6,000 fewer people employed than in 2019. The decline in the oil industry also affects those parts of the manufacturing industry that provide services to the oil industry, such as the engineering and shipbuilding industry. Even though other parts of the manufacturing industry will experience greater demand from abroad going forward, Statistics Norway's projections show a fall in employment

towards 2040. There will then be around 26,000 fewer people employed in the industry than in 2019.

Geographical and occupational mobility will become more important

A new decrease in employment in the petroleum and oil-related industry after 2024 could lead to relatively large geographical differences in the labour market. In counties with many oil-related enterprises, a focus on restructuring the labour force will be important. Other regions will have increased employment and lower unemployment. This means that geographical and occupational mobility among job seekers will continue to be an important part of NAV's follow-up.

7.4 Highest unemployment among those with little education

In its projections, Statistics Norway estimates that unemployment measured by the labour force survey (LFS) will be 4.3 per cent of the labour force on average in the period 2022–2040, which is assumed to be

an average level for the LFS unemployment rate. However, unemployment varies with economic cycles. As Figure 7.6 shows, unemployment has fluctuated strongly in the period 2006 to 2020, with strong increases for example after the financial crisis in 2008 and during the economic downturn between 2014–2016. In 2020, the coronavirus pandemic and extensive infection control measures to limit the spread of infection have led to an unparalleled increase in unemployment in Norway in peacetime. This applies regardless of the level of education, but those with little education have experienced greater fluctuations and higher unemployment levels than those with upper secondary or higher education.

NAV must deal with sudden changes in the labour market

As mentioned, stable unemployment towards 2040 described in the projection must be regarded as the average level of unemployment, and fluctuations in unemployment must be expected in the future. This means that NAV must be able to deal with sudden

Figure 7.6. Unemployment according to education level. Percentage of the workforce.
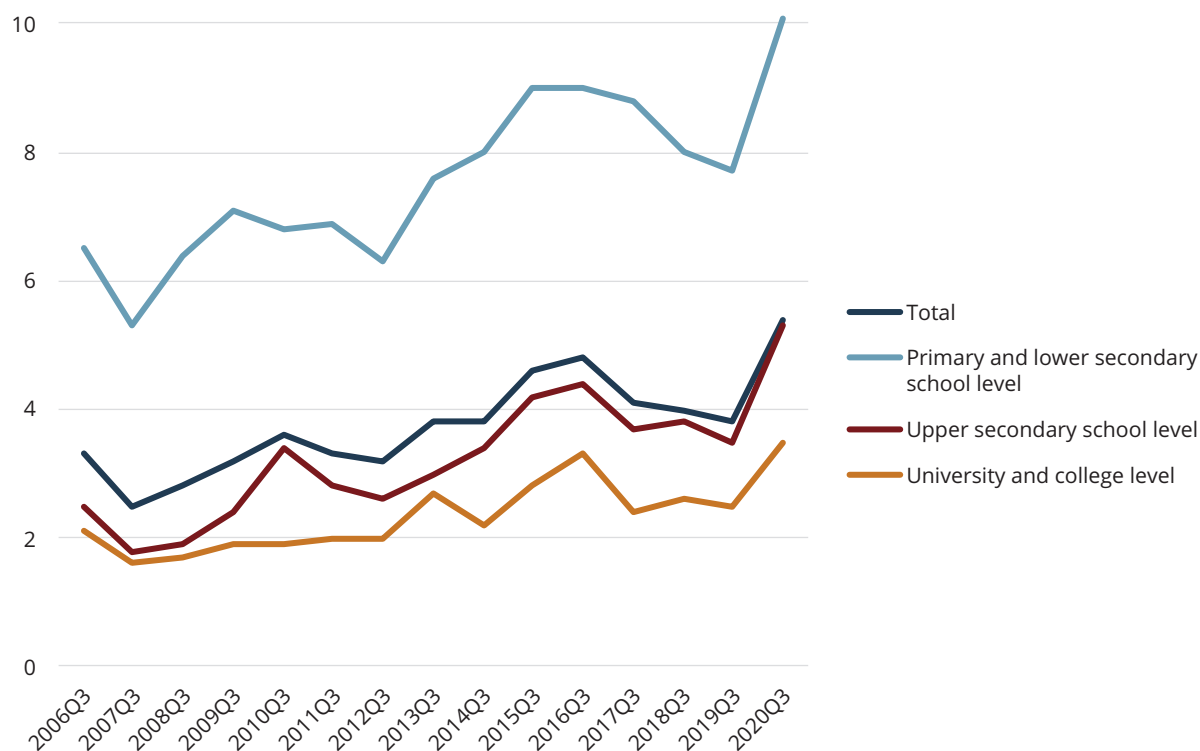
Source: SSB

changes in the labour market, which means that NAV's workload may increase considerably in a short space of time. We have seen this during the coronavirus pandemic, and we have experienced it in the past during the financial crisis and the oil crisis, which hit Rogaland in 2014–2015. This concerns both the processing of applications for unemployment benefits and the follow-up of unemployed people. In addition, we know that during periods of higher unemployment, more people receive health-related benefits such as sickness benefits and work assessment allowance (See Chapter 9.2). We expect unemployment to continue to be higher for people with limited education than among people with a trade certificate or

higher education. Those who have not completed an education generally require more follow-up from NAV and different types of work-related measures to a greater extent.

7.5 Increasing number of people with higher education

In recent years, the demand for labour with higher education has increased. From the third quarter of 2006 to the third quarter of 2020, total employment measured in the labour force survey (LFS) increased by 330,000 persons or an increase of 14 per cent. The increase among those with higher education was even

Figure 7.7. The number of people in the workforce and employed persons according to the level of education. 3Q 2006–3Q 2020. 1,000 people.
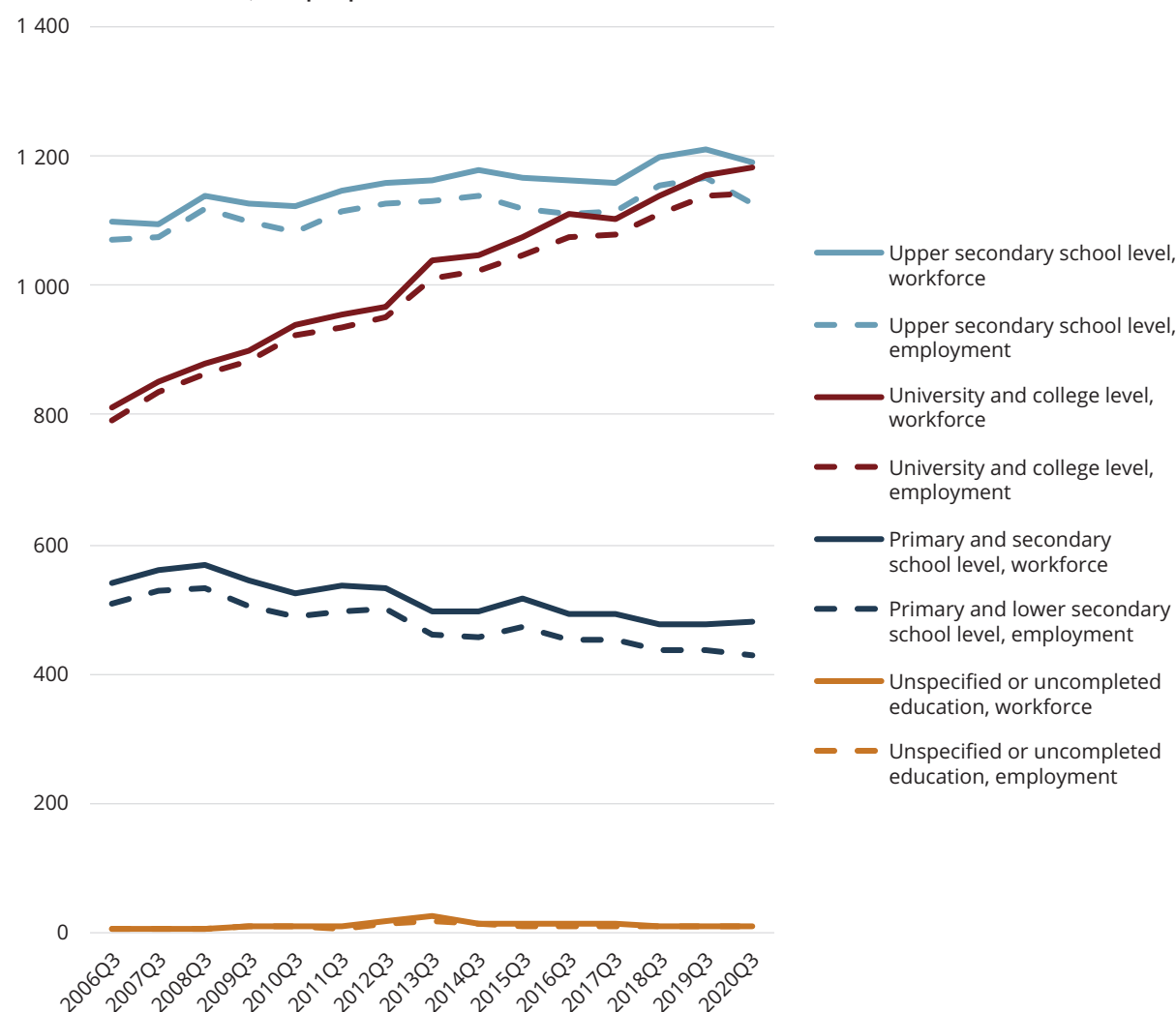
Source: SSB

greater and accounted for 42 per cent of the total employment in the third quarter of 2020, up from 33 per cent in the third quarter of 2006. On the other hand, the number of people employed with lower secondary as their highest education fell by 77,000 or 15 per cent in the same period. The number of employed people with an upper secondary education as their highest education increased by 56,000 (5 per cent) from the third quarter of 2006 to the third quarter of 2020. In 2020, this accounted for 42 per cent of all employed people, down from 45 per cent in 2006.

Due to the coronavirus pandemic and the infection control measures to limit the spread of the virus, the total number of people employed in the third quarter of 2020 was lower than in the third quarter of 2019. Employment fell among all education groups, except for those with higher education.

The education level of the population has also increased strongly since 2006. Figure 7.7 shows that the number with higher education has increased and this group also makes up an increasing share of the labour force. At the same time, there are now fewer people without an education higher than lower secondary school.

More people complete upper secondary school
Since 2006. there has been a positive trend of more people completing upper secondary school and this proportion that complete their education was 6 percentage points higher in 2019. A total of 78.1 per cent of students who started upper secondary education in the autumn of 2013 had completed within five-six years. This is 0.5 percentage points higher than the previous cohort. However, there are differences between study programmes and gender. The proportion of students who do not complete an upper secondary education within five to six years is highest among boys in vocational programmes. Here, 65.6 per cent of those who began in 2013 completed the course in 2019. Although this completion rate is lower than average, it is 0.2 percentage points higher than the previous cohort. Girls following the general studies programme had the highest completion rate in 2019 at 90.4 per cent. On average, the proportion of boys who completed an upper secondary education in 2019 was

somewhat lower than the proportion of girls. It was also among the boys that the proportion had increased the least, compared with the previous cohort.

An increasing number of people are completing higher education. In 2011, 67.5 per cent of those who started higher education had completed in 2019, i.e., within eight years. This proportion is 13 percentage points higher than ten years ago. In 2019, the proportion of students that had completed higher education within eight years was higher among girls than among boys, with 71.7 and 61.8 per cent, respectively, although the proportion had not increased the most among men in the last decade. However, the proportion of students who completed higher education of more than four years was higher among boys than among girls, and this was also the case ten years ago. In 2011, students under the age of 20 when they started higher education, completed more often than the other age groups (80 per cent). Six out of ten students who completed a higher education programme were women, and this proportion has changed little since 2009.

7.6 Strong demand for skilled health and care workers
Figure 7.8 shows the projected supply of and demand for labour by educational level up until 2040 (Cappelen et al. 2020). Supply and demand are projected in two separate models that are both based on the current population and Statistics Norway's recent population projection. Demand for labour is modelled on assumptions about the economic development in Norway. This means that demand for certain types of labour depends on the industry composition going forward and what the employment composition in each industry has been like in recent years. The projection of the labour force has been done independent of assumptions about the future economic development and has been based on the population's educational choices made in the period 2012–2016, as well as the observed labour force participation rate in different age and educational groups. Thus, the project does not consider mechanisms that contribute to adaptation to the labour market, such as changes in relative wages and unemployment levels for various educational groups. Therefore, the discrepancies that emerge in the project

between supply and demand for some education groups cannot be interpreted as project unemployment among these groups but point to possible imbalances in the labour market in the longer term.

Fewer people with only lower secondary school education

The projections show that the trend towards an increased education in the population will continue to go forward. People with a short higher education (Bachelor) and long higher education (Master's degree or Doctorate) will account for an increasingly large share of the labour force, but the growth in demand for people with higher education appears to be lower than the growth in the labour force.

The demand for skilled workers is expected to increase more than the supply, especially for health professionals and other occupations aimed at manufacturing, building and construction and craft industries. A shortage has already been revealed in several of these educational groups, including in NAV's enterprise survey 2019. According to Cappelen et al. (2020), this shortage is likely to intensify unless measures are taken.

People with only a compulsory or unspecified education will account for an increasingly smaller proportion of the labour force. It must be seen in context with the fact that the population projections show lower net immigration in the future and that many immigrants are registered with a primary and lower secondary education or unknown educational background. This group will account for an increasingly smaller proportion of the labour force, but the projections show that the demand for people with lower secondary school education is expected to be higher than the supply. This could indicate somewhat lower unemployment among this group going forward, but it is also possible that some of the work tasks can be taken over by employed people with higher education, and that the projections do not sufficiently capture that these tasks have a higher risk of becoming automated. The level of unemployment is highest among people with lower secondary or unknown education (as shown in Figure 7.6), and they will probably continue to be a disadvantaged group in the labour mar-

ket. This can also be justified by the fact that most of the conditions that make us expect a higher pace of restructuring in the labour market going forward – both technological development, globalisation, and the after-effects of the coronavirus pandemic – affect low-competence occupations to a greater extent than other groups (see Chapter 7.2).

Lower immigration in the future than was assumed in Statistics Norway's population projection from 2018 is also the main reason why the level of the labour force and employment in this year's project is significantly lower than in the projection from 2018. Statistics Norway estimates that there may be around 70,000 fewer people in the labour force and 90,000 fewer people employed in 2035 than estimated two years ago.

Uncertain projections

It is important to interpret Figure 7.8 because the projection of the labour force assumes that those who choose an education in the time ahead will make the same educational choices as corresponding persons have done in 2012–2016. Young people who make their educational choices will consider the demand for different types of education as well as the expected wage and unemployment level in different occupations. When recruiting, employers will also consider what types of education the available labour force holds. For example, with an imbalance between supply and demand, employers may increase ages for the labour in short supply, which will provide an incentive to take up education in the field in question. Education policy can also help to correct any imbalances.

One important reason for the discrepancies between supply and demand for some educational groups is that more people with a low education level will retire in the years ahead, while relatively few with a higher level of education will retire towards 2040. It is assumed in the projections that people who retire will be replaced by people with the same level of education as themselves. However, employers can also change the composition of the labour force by recruiting employees with a higher (or lower) level of education than they did in the past. As Cappelen et al. (2020) point out, some educational groups are similar to each

Figure 7.8. The projection of supply and demand for labour with different levels of education, 2019–2040. The proportion of the total workforce.
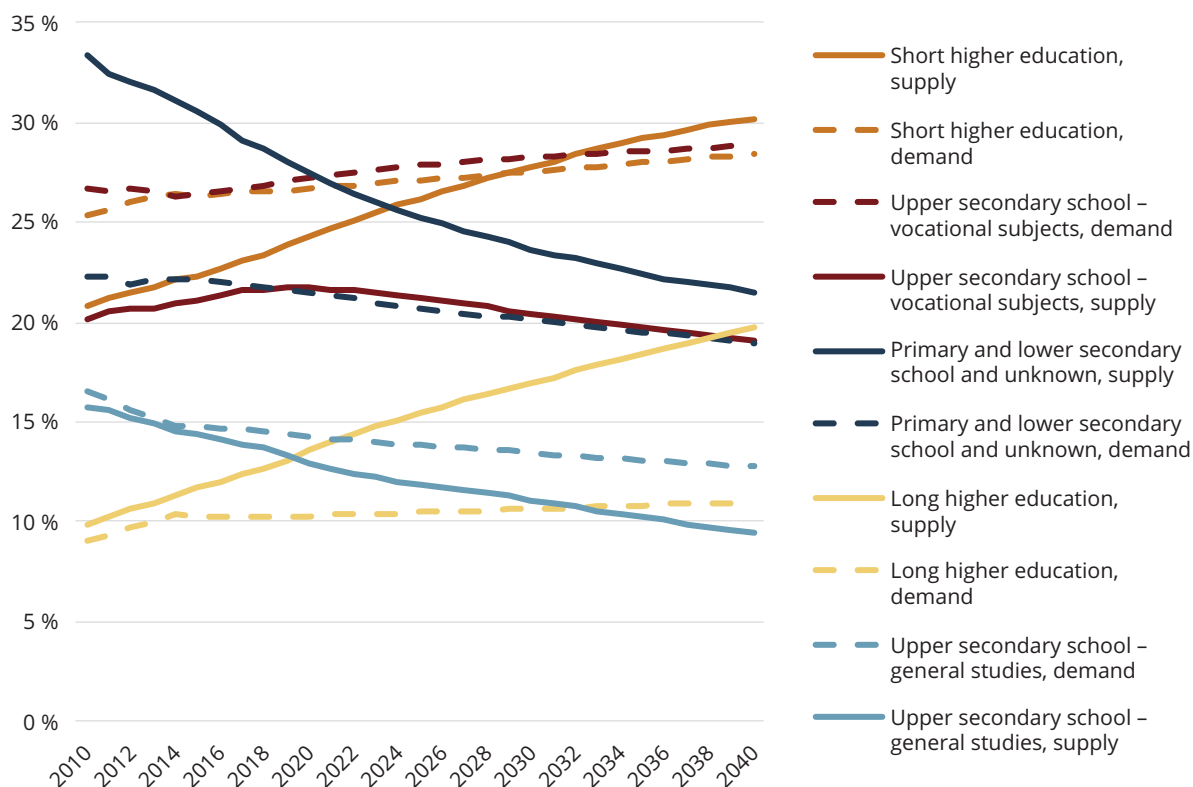
Source: SSB (Cappelen et al. 2020)

other and can perform each other's tasks and people with higher education should be well equipped to learn new skills. The introduction of new technology can also change how different types of labour are used going forward, though this is not explicitly considered in the projection, beyond it shown in historical trends.

Increased demand for people with an upper secondary vocational education

As Figure 7.8 shows, much higher growth is expected in the demand for people with an upper secondary vocational education than in the supply of qualified people to fill the jobs. Cappelen et al. (2020) also make more detailed projections for this group by discipline. Overall, there will a higher increase in the demand for labour with an upper secondary vocational education relevant to manufacturing, building and construction and the traditional trades than the corresponding increase in supply. A continued shift from employed people with lower secondary educa-

tion to employed people with vocational training in these industries will contribute to increased demand for this labour group. Furthermore, it is estimated that the number of people in the working population with this competence will start to decrease in 2025 since fewer people will be educated than those who retire. Based on these assumptions, the shortage of labour with upper secondary vocational training relevant to manufacturing, building and construction and traditional trades is estimated to be around 50,000 people in 2035. It may be difficult to replace this type of labour with people who have higher education. Ensuring a higher completion rate in such programmes at the upper secondary level could help to reduce the potential shortage in the future.

The projection also reveals an uncovered demand for people with upper secondary education in general studies and economic and administrative subjects. However, it is probable that those retiring who have

an upper secondary education in economics and administration, instead will be replaced by people with an education in the same field of study at bachelor or master's degree level.

As mentioned, the labour force projections have been based on educational preferences from the years 2012 to 2016, so that any changes in educational choices after that time have not been considered. Based on this, there are fewer people with upper secondary vocational training to replace those who are retiring, and therefore the number of people in the labour force in this education group is declining. Cappelen et al. (2020) estimate that the total shortage of labour with an upper secondary vocational education may be up to 88,000 people in 2035, based on the assumptions used and with no measures in place to counter this.

Growing demand for health and care personnel

As a result of the ageing of the population, there will be a growing demand for health personnel in the period up to 2040. According to the projections, there may be a significant shortage of people with an upper secondary education in health and care subjects. The demand for people with this competence has been adjusted upwards while the supply of labour has been adjusted downwards due to lower immigration and observed educational choices. Based on the assumptions, Cappelen et al. (2020) estimate an uncovered demand for persons with upper secondary education in health and care subjects of around 36,000 in 2035. In addition, there will not be enough people taking a bachelor's degree in nursing and healthcare studies to meet the growth in demand. This mainly concerns nurses and social educators, and the estimated shortage in 2035 is expected to be around 20,000 people. All in all, a growing shortage of people with this type of education is expected towards 2040. Some of this shortage can be met by people who have a bachelor's degree in other health subjects that are not specifically aimed at the elderly population and which the projections predict that more people will be taking than there is a demand for. At the same time, there is uncertainty as to what extent the standard of health services will be improved and what technological developments may change the need for healthcare professionals.

How the population develops will also determine the demand for teachers. For this educational group, the employment projection has been adjusted downwards due to lower growth in the number of children resulting from lower immigration and a lower fertility rate, and it is expected to decrease towards 2040. The labour force shows a stable development, since almost equally as many are being educated as are retiring. The projections thus indicate that the supply of people with this education will exceed the demand in the future.

More people with higher education

In the time ahead, we will see strong growth in the proportion of the labour force with higher education. This is because the proportion of people with higher education is higher among those starting their careers than among those who retire. Although the demand for employees with higher education will increase, the supply of labour with higher education will increase even more. It is particularly in economic and administrative subjects, social science and the arts and humanities that the projection shows a higher supply than demand. This could mean that those with higher education will perform tasks that were previously carried out by people with a lower educational level, but the tasks could also change in a way that makes higher education necessary.

People with higher education in technical and natural sciences will make up a stable proportion of employment in the projections. The reason why this proportion will not increase going forward is that many people with such competence have been working in the petroleum sector and manufacturing, and that lower activity in oil-related industries is expected from 2024. The growth in the private service industries, and to a lesser extent in building and construction, helps to slow the decline in demand for this expertise. Therefore, the demand for people with higher education in technical and natural science subjects is expected to remain constant, while the labour force is expected to grow going forward, as more people are being educated than those who retire. However, technological developments could lead to an increased demand for people with higher education in technical and natural sciences than the projection indicates.

7.7 Reflection questions

- How will the changes in the labour market affect NAV?
- What does it mean for NAV that the need for competence changes rapidly?
- How will the platform economy and other changes in types of employment affect NAV?
- How should we deal with rapid change for specific occupation groups or regions?

8. LIVING CONDITIONS

By: Ivar Lima

The term living conditions is used both in the National Insurance Act and the Social Services Act. The benefits and schemes NAV administer are important for ensuring the living conditions of groups that for various reasons are excluded from the labour market. Through the management of the National Insurance Scheme, NAV will ensure financial security and «contribute to the equalisation of income and living conditions throughout the individual's life and between groups of people.» (Section 1 of the National Insurance Act). NAV administers the Social Welfare Act, which constitutes society's final safety net. According to section 1 of the Social Welfare Act, NAV is responsible for «improving the living conditions for disadvantaged people, contributing to social and financial security, including allowing the individual to live independently and promoting the transition to work, social inclusion and active participation in society.» The circular to the Social Welfare Act describes a minimum standard of living. The Act states that subsistence includes coverage of basic needs. In addition, «cost coverage […] shall make it possible to maintain a standard of living at a reasonable and modest level, adapted to the general welfare development and the local community of which the service recipient is a part. The term subsistence is, therefore, a dynamic term.»

Living conditions shall be understood here as a material standard of living and limited to material resources that the individual household has at its disposal. Material resources range from access to food and drink, housing, clothing, transport and other essentials and access to different types of services. Access to good health services and education is also a key aspect of the living standard in modern society. In Norway, everyone has access to educational and health services, regardless of household income. The number of resources and the quality of these defines the standard of living. The type of standard of living a household can achieve has a strong correlation with the household's overall income, but will also be influenced by other factors, such as personal resources.

A household income will be the factor that has the most to say for a household's standard of living and in this chapter, we will report on the development in real wages, among other things.

Norway is one of the richest countries in the world, and for many years economic growth has resulted in higher real wages for most people. Compared with other countries, we have largely succeeded in maintaining an even income distribution with relatively small differences in living conditions. This is due to a prolonged high level of employment and a low unemployment rate, and the fact that the tax system, welfare schemes and income policy continue to contribute to an income distribution that results in smaller differences than in other countries.

8.1 Fewer employed persons

The most important source of income for persons of working age is income from paid work. Income from paid work also constitutes the main income basis for calculating the income-securing arrangements of the National Insurance Scheme, such as unemployment benefit, sickness benefit, work assessment allowance, disability benefit, parental benefit, and retirement pension. A high level of employment is the most important factor for ensuring good living conditions in the population.

Using the figures from the Labour Force Survey (LFS), we can follow the employment of people aged between 25–54 years over a long period (Figure 8.1). Ever since the mid-1980s, there has been a slight downward trend in the number of employed men. The number of employed women was significantly lower for a long time; however, the trend has grown sharply since the 1970s. The growth in employed women gradually slowed but continued until 2008, peaking at

Figure 8.1. Employment rate by gender. Percentage of the population aged 25–54 years.
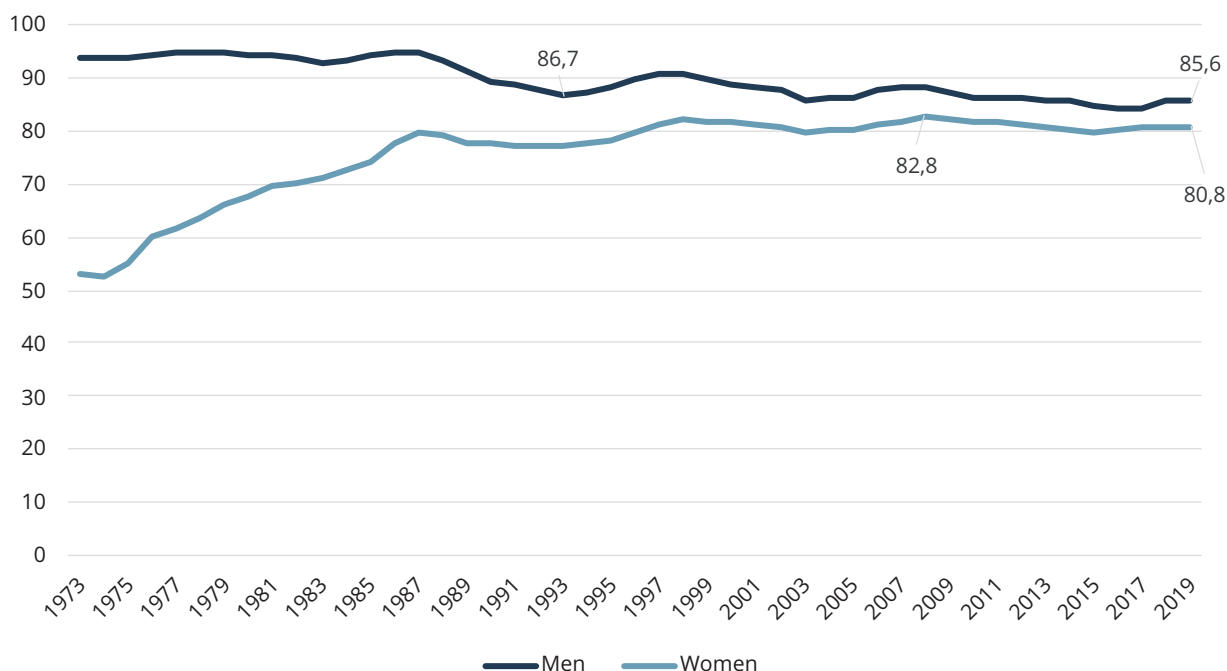
Source: SSB

82.8 per cent. Since 2008, the number of employed women has fallen slightly, and in 2019, it was at 80.8 per cent. In recent years, the development in the proportion of employed men and women has been similar.

Statistics Norway (SSB 2020d) points out that the decline in employment has taken place without a corresponding increase in the unemployment rate. SSB observes this by describing the development in the labour force, which has been defined as the total number of employed and unemployed people, i.e., people who offer their services in the labour market. The labour force percentage (the total of employed and unemployed people as a proportion of the population) has been reduced in the same period as employment has fallen. The report points out the following: «Furthermore, more short-term fluctuations in the development of employment due to economic cycles also affect the labour force percentages. This means that the growth in unemployment does not correspond to the decline in employment during adverse times in the labour markets.» This is an indication that some people stop looking for work in times of recession, and that long-term unemployment causes an increased

proportion of people to be permanently excluded from the labour market. Several impact studies that have examined the consequences of people losing their jobs support this. A study of Norwegian workers shows that losing their jobs increases the likelihood of these people becoming disability pension recipients by 121 per cent for men and 48 per cent for women, six years later (Bratsberg et al. 2013). The study also deals with the more short-term effect of the transition to temporary health benefits and shows that the probability increased by 9 percentage points for men and 12 percentage points for women. Men are more strongly affected by cyclical downturns than women, both because men often work in more cyclically exposed industries, and that the negative effect of unemployment on health and the transition to receiving disability benefit is stronger among men than among women. It is among groups with a weak labour market attachment that we find most of the low-income households.

8.2 New technology and globalisation can result in poorer living conditions for some groups

Despite the decline in employment among men, Norway has a high level of employment and relatively small differences compared with other countries. These two characteristics help significantly to counteract low income and poor living conditions. The government-appointed Commission on Income Distribution pointed out that Norway and the other Nordic countries have contributed to this through universal and generous income security arrangements, coordinated wage formation through tripartite cooperation, which has led to small income differences before tax, relatively high and progressive income tax, comprehensive provision of publicly funded health services and education, and an active labour market as well as a macroeconomic policy that ensures high and stable economic activity and employment (NOU 2009:10).

However, even income distribution is being challenged by the effects on the labour market of long-term restructuring due to globalisation, demographic trends, migration, and technological developments. This is discussed further in Chapters 4 and 7.

Labour migration has led to increased competition for jobs that require lower qualifications (Fedoryshyn 2018). Several studies indicate that this can make it more difficult for vulnerable groups to enter the labour market. According to Hoen, Markussen and Røed (2018), increased immigration from low-income countries has led to a weaker labour market attachment among young Norwegian-born people who have grown up in low-income families. However, lower net immigration is expected in the future, compared with the record high level of immigration in the period 2005–2015 (See Chapter 4.2). This may help curb increased competition for low-skilled jobs.

8.3 Increased real income for low-income households

Households' real disposable income is an indication of the number of goods and services a household can buy for its income and is the measure of income that best describes the development in households' material living conditions. However, there is no unambiguous link between such income and living conditions, as different households will have different composition needs and the prices of various goods and services will vary between households. In particular, the variation in living expenses has an impact on how income can be translated into a standard of living.

Figure 8.2. Developments in income after tax per consumption unit (EU scale). Average. Index in fixed 2018 NOK. 1986=100. Quintiles.

Source: SSB

Definitions

Income after tax
This income term is defined as the aggregate of a household's registered income after tax. This includes all income from employment, capital income and transfers, such as pensions, various social security benefits and housing benefit. Taxes and negative transfers, such as child maintenance payments and pension premiums are deducted. Several factors affect a household's financial resources but are not included in the concept of income. These are the value of public services, home production, the value of housing services and durable consumer goods, and any income not liable to tax, such as income from undeclared work (Omholt 2019).

EU-scale and the consumption unit
Income is measured at the household level. This means that a person who has 0 in personal income, still does not have a low income if his or her spouse or cohabitant has a high income. On the EU scale, the first adult is weighted 1, the next adult as 0.5 and the children as 0.3. A household consisting of two adults and two children is thus calculated to constitute 2.4 consumption units. This means that, according to the EU scale, the household needs an income 2.4 times higher than that of a single person to enjoy the same standard of living. Thus, the measure takes into account economies of scale in large households. In 2018, the low-income thresholds were NOK 190,000 and NOK 228,000 after tax per consumption unit for EU-50 and EU-60, respectively. This means that the low-income threshold for a house consisting of two adults and three children according to the EU-50 target was NOK 457,000 while according to the EU-60 target, it was NOK 548,000 after tax.

Figure 8.2 shows the development in household income according to tax per consumption unit in 2018 NOK for the average of all people and the average among the 20 per cent (one fifth) belonging to the households with the highest and lowest incomes. In the period 1986–2018, the real income (income after tax) of a typical household[12] increased by 86 per cent. Real income has largely increased from 1997 to 2014, which was a period of high growth in prosperity. The growth for the fifth of the population with the highest income was 106 per cent in the period, while for the fifth of the population with the lowest income, the average income increased by 66 per cent. Although

the differences in income have widened in the period, those with the 20 per cent lowest incomes have also experienced increased purchasing power. At the same time, the purchasing power of the households with the lowest income quintile began to level off as early as 2012, while the purchasing power of households with a high income increased significantly for three more years. In the lowest fifth of the population, real income is now the same as in 2012, and there was no increase in the real income of this income group over the same six years. Also when looking at a smaller group, such as the 9.6 per cent of the population that had an income before tax of 60 per cent of the median in 2005, there is a significant improvement in purchasing power from 1997 to 2013 (Lima et al. 2020).

In 2016, there was a significant decline in real income for those with higher incomes, and only a slight decline for those on low incomes. Median income after tax for all households fell by 2.2 per cent, measured in fixed prices. The decrease in real income in 2016 was due to strong price rises, a slight nominal increase in wages and unchanged child benefit rates (SSB 2017). In 2017 and 2018, real household incomes increased slightly, and the development is similar for the highest and the lowest quintile.

In the last 20 years, there has been a growth in prosperity among all income groups, and there have been no periods with a significant decline in real income. The question is whether this trend will continue in the future, or whether we will see periods of decline in real income for the median households or the low-income groups. A decline in the real income of the median household may occur if there is a prolonged cyclical downturn in the Norwegian economy and must be seen in context with the conclusions in Chapter 7 on the labour market, where no prolonged cyclical downturn and periods of extensive restructuring in the labour market are expected.

8.4 More people with a three-year low income

A measure of relatively low income widely used in Norway is EU-60 (Omholt 2019). Here, low income in a household is defined as an income below 60 per

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[12] Income after tax per consumption unit in fixed 2018-NOK.

Figure 8.3. The proportion of people with three-year low income (EU-60) by age. Three-year periods from 2004–2018. Percentage.
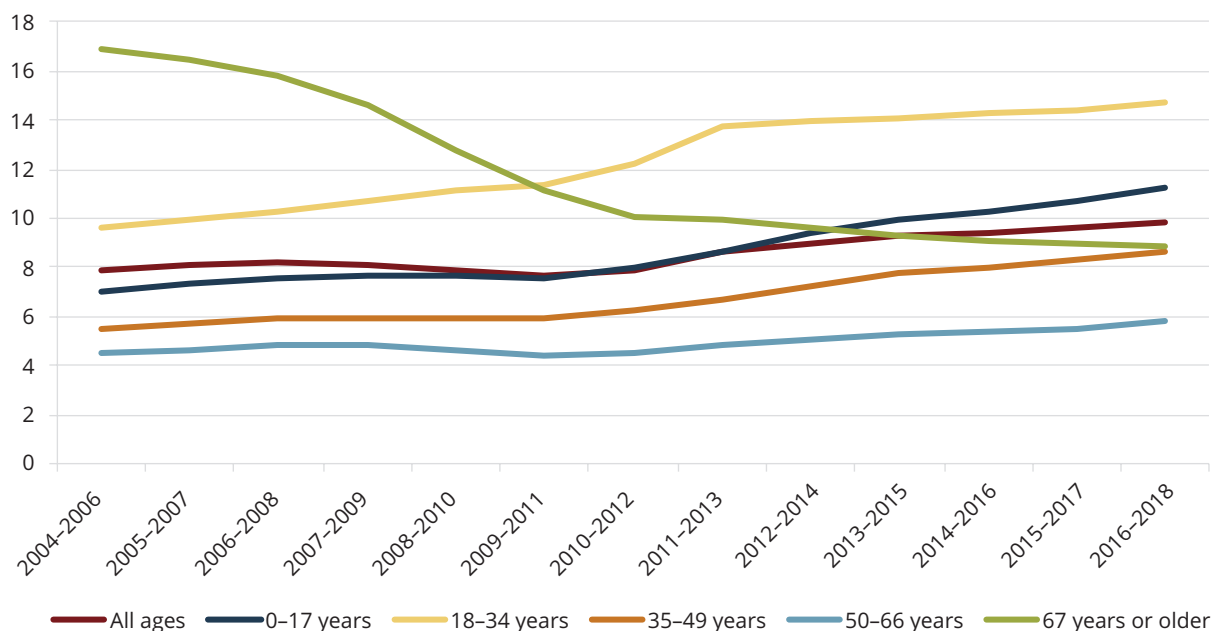
¹ Students living alone are not included.

Source: **SSB.** *Available from: http://www.ssb.no/tabell/10 498*

cent of the median income, adjusted for the number of members of the household (see the fact box). A household's wealth or debt is not considered in this measure. Here we will describe the development in three-year low income (called «persistent low income» by Statistics Norway) – i.e., the proportion of people living in households that have less than 60 per cent of the median income over three years.

The proportion of young people and young adults with low incomes is increasing, while the proportion among the elderly is decreasing

Figure 8.3 shows the development of persistent low-income for different age groups. In the period from 2006 to 2018, the proportion of the population with a persistent low income has increased from 8 per cent to 10 per cent. The reason for this is not that the income of those with low incomes has decreased in this period, on the contrary, the real incomes of this group have increased. The reason is that *the income differences* between the households have increased somewhat because the median income has risen more than the incomes of those at the bottom of the income

distribution. EU-60 measures low income relative to the median income and not low income.

In the past, it was elderly people in particular who had less to spend than the typical household, but the demographic composition of the low-income group has now changed. The proportion of low-income people aged 67 years and older has fallen significantly in recent years and is now lower than the average in the population. If we consider wealth, the proportion of older people with relatively low income decreases further.

That the proportion of elderly with a relatively low income is decreasing must be seen in context with the fact that new pensioners have worked more and thus have a higher pensionable basis than the oldest pensioners. There has also been an increase in the minimum pension level beyond the general wage development. We must expect that the proportion of elderly with a low income will continue to fall for a few years due to further employment growth among people over the age of 60. New contribution rules for old-age pensions have also resulted in a gradual reduction of the

minimum pension in relation to the income-dependent pension, which will result in fewer pensioners on a basic pension going forward.

The proportion of people with a low income is highest among young people between the ages of 18 and 34 (not including students) and the gap with the other age groups under retirement age has also increased in the period. To a significant extent, the high proportion of young people on low incomes is probably because several of them have had a period of unstable employment or part-time work before managing to establish themselves in the labour market. Another explanation for the increase in the proportion of young people on low incomes is a reduction in the proportion of young people employed. In the period from 2008 to 2016, the proportion of young people in employment or education decreased from 86 to 83 per cent for the 18–29 years age group (Fedoryshyn 2018). The tendency was even stronger among young people who have not completed an upper secondary education, where the proportion of people in employment or education was reduced by 10 percentage points in the period. One explanation for this development is the increased competition for unskilled jobs, partly due to increased immigration. However, in the period from 2005 to 2018, there was a decrease in the proportion of lost man-years among people aged 18–34 years, and the decrease was greater among men than among women (Furuberg and Thune 2019). The decrease is due to fewer young people being registered as unemployed or job seekers in employment schemes because in the same period there was a slight increase in lost man-years due to people with a reduced ability to work. A reduced ability to work is defined as people who receive disability benefits and are registered with reduced ability to work (which includes recipients of work assessment allowance) or have doctor-certified sickness absence. Thus, there has been a clear shift towards more young people receiving long-term health-related benefits than other and more short-term NAV benefits, which may help explain the increased proportion of young people with persistent low incomes (see also Figure 9.9 in Chapter 9.2).

There has been a significant increase in the proportion of young recipients of disability benefit in this period

and some increase in the proportion of young people receiving work assessment allowance (AAP) and its predecessors (Kalstø and Kann 2018). At the same time, though there is some decrease in the proportion of young people in employment or education, it could indicate an increase in the proportion of young people out of work for a long time due to illness or injury. This does not necessarily mean that young people have poorer health but can also be explained by labour market mechanisms since there is a significant grey area between unemployment and health benefits. For example, we know that during periods of high unemployment, there has also been an increase in the transition to work assessment allowance among unemployed young people (Lima 2016). When it comes to the shift from unemployment to impaired work capability among young people in general, one explanation for this is the medicalisation of young people with problems. Medicalisation means that some of those who would have previously been registered as job seekers for a shorter time are now more likely to start receiving long-term health-related benefits that delay or prevent their return to work. This can also be seen in context with the fact that over time, there has been a lower demand for labour among young people with low formal skills. See Chapter 9.2 for more about this.

There is an increase in the proportion of *new* recipients of disability benefits, especially among young people aged 18–19 years. This development can largely be explained by medical reasons. The most important medical reasons for people receiving disability benefits between the ages of 18–19 years is mental retardation, congenital malformations and chromosomal abnormalities (Brage and Thune 2015). The increase in young people on disability benefits is probably due to «lower infant mortality among babies with serious congenital diseases, lower mortality among premature births and probably also better welfare schemes» (Brage and Thune 2015:37). This is also discussed in Chapter 9.2.

Immigrants are overrepresented in the low-income group

In 2018, 32 per cent of all people in all households where the main providers were immigrants from Eastern Europe, Asia, Africa, and Latin America had

incomes below the low-income threshold. There are significant differences between immigrants, depending on which country they come from. The differences between immigrant groups and persons born in Norway can largely be explained by differences in labour market attachment. The proportion of households with no labour market attachment is higher among immigrants. There are also significantly more households with only one income among many of the immigrant groups. The probability of having a low income decreases with the length of residence, although many remain at a low-income level, even after a long period of residence. This applies especially to immigrants with backgrounds from Somalia, Iraq, and Afghanistan. The proportion of immigrants with a low income has remained almost stable in the period from 2006–2018, but the number of immigrants with a low income has increased due to a high level of immigration.

In the period 2005–2018, the number of people with a refugee background increased from 110,000 people to 230,000 people, an increase of 210 per cent. The increased number of refugees explains a good deal of the growing income inequality among households (Lima et al. 2020) and is due to a higher proportion of refugees who have a weak occupational attachment, especially in the first few years after arriving in Norway. For example, these people receive social assistance or introductory benefit and the payments from the said benefits are too low for them to exceed the income threshold defined by EU-60. Although refugees are greatly overrepresented in low-income statistics, the *proportion* of employed persons with a refugee background has increased somewhat from 2006 to 2018.

The proportion of children in households with persistent low incomes increased in the period 2011–2018. The most important reason for the increase is that more immigrant families have arrived in Norway in the period and that far more of these people often have a lower income than Norwegian-born people and not that there has been a particular increase in the proportion of immigrant families with low incomes (Lima et al. 2020). A contributory factor is that financial support in the form of child benefit has been reduced, both in absolute and relative terms, from the late

1990s to the present day (Epland and Kirkeberg 2016). There are households with relatively low incomes, especially among families with young children. In 2019, child benefit was increased for the first time since 1998 – by NOK 84 a month (an increase of 8.5 per cent), and child benefit for families with children under the age of 6 has subsequently been increased twice by NOK 300 a month, from September 2020 and September 2021. There have also been increases in lump-sum grants and cash-for-care benefits in recent years.

8.5 Fewer Norwegian-born and more foreign-born people receiving social assistance

The development in the number of recipients of financial social assistance is an indicator of how many people who are not able to secure their livelihoods through work, savings, or social security entitlements in the National Insurance Scheme. In connection with the cyclical downturn in the early 90s, there was a period where more than 6 per cent of the population received financial social assistance. After this, the proportion has fallen significantly, and the proportion of recipients annually has remained fairly stable at 3.8 per cent.

Among Norwegian-borns, we see that the number of recipients has decreased by around 20,000 people from 2005 to 2019 (Figure 8.4). Among foreign-born people, however, the number has increased by around 20,000 people. In 2019, immigrants accounted for 52 per cent of all recipients of social assistance of working age in an average month (the social assistance percentage). As previously mentioned, the main reason why more foreign-born people are receiving social assistance over time is that an increasing number of refugees have arrived in Norway. It is particularly among refugees with a short period of residence we see a high proportion of social assistance recipients, and in periods when more refugees arrive in Norway, there is reason to expect an increase in the number of foreign-born people receiving social assistance. There is reason to believe that the future development in the number of recipients of social assistance will be affected by the number of refugees that arrive in Nor-

Figure 8.4. The number of social assistance recipients distributed according to Norwegian-born and foreign-born and the number of people in the population with a refugee background with a period of residence of 0–9 years.[1]

Norwegian-born citizens receiving social assistance
Foreign-born citizens receiving social assistance
Refugees with a period of residence of 0–9 years
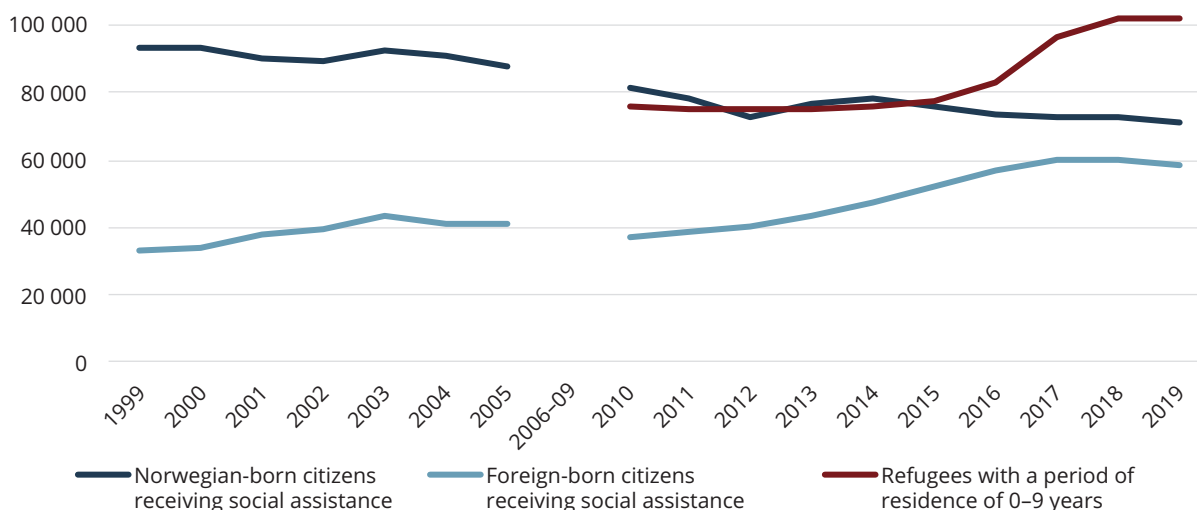
[1] Figures for social assistance recipients for the period 2006–2009 are missing and the figures for refugees in the population according to period of residence are only available from 2010.
Source: SSB

way, as well as how quickly and to what extent the newly arrived refugees are integrated into the labour market.

8.6 Descendants of immigrants have high social mobility

Immigrant families are greatly overrepresented among the groups with persistent low incomes. Will this hamper the integration of their Norwegian-born children, so that in the future we will see an increase in the proportion of people on low incomes when these descendants become adults and enter working life? New studies of adult descendants of immigrants who arrived in Norway in the 1970s and 1980s show that they achieve a high degree of social mobility (Kirkeberg and Epland 2018, Hermansen 2017). According to Hermansen, the descendants are «much more similar to the majority population than their immigrant parents in terms of income, employment and receipt of social benefits». The income gap between immigrant children and the majority population has been reduced by almost 80 per cent, compared with the gap within the immigrant generation. At the same time, a higher proportion of descendants are unemployed and

there is also a large variation in income as well as level of education among descendants related to their parents' country of origin. Descendants are overrepresented in well-paid professions, such as doctors, while a larger proportion of them are completely outside the labour market (The Norwegian Institute of Social Research 2019).

Possible explanations for the descendants' high social mobility are good welfare schemes which ensure acceptable living standards and free higher education (Hermansen 2017). Figures from Statistics Norway show that in 2019, descendants completed upper secondary education almost to the same extent as the majority population (76 per cent compared with 80 per cent) and that the proportion who progresses to higher education is higher. This gives some grounds for optimism for the social mobility of new generations of descendants of immigrants, even though the parents often have low incomes and a weak attachment to the labour market.

8.7 Reflection questions

- How can NAV prevent cyclical downturns and periods of restructuring in the labour market from leading to an increased transition to health-related benefits and increased permanent dropping out from the labour market?
- How can NAV change the trend of lower employment among young people who have not completed an upper secondary education?
- How can NAV provide good social services to Norwegian-born and refugees that ensure an acceptable living standard and contribute to increasing the transition from unemployment?
- How can NAV contribute to high social mobility among children and young people who grow up in low-income families?

9. HEALTH

By: Espen Steinung Dahl

According to WHO, good health is characterised by physical, mental, and social well-being and not just the absence of illness.[13] This broad definition is found in the Norwegian Public Health Act, which will «contribute to societal development that promotes public health and reduces social inequalities in health. Public health work shall promote the public's health, well-being and good social and environmental conditions and contribute to the prevention of mental and somatic illness, disorders or injuries».

«Public health» means the state and distribution of health in the population, while «public health work» means the society's efforts to promote health and well-being. Such a broad perspective carries with it two implications that are important in this context. Firstly, the influencing factors of health become not only important but an almost integral part of the concept of public health, be it a good childhood, environmental factors, working environment and financial and material resources. Secondly, it means that far more actors than the typical health institutions are responsible for public health work.

Although NAV is not a health institution, we have a role in promoting public health. This role is particularly prominent in NAV's work of finding more people employment and providing income security to those who are unemployed. An important topic within the public health work is the fact that health is unevenly distributed in the population and co-varies with socio-economic conditions (The Norwegian Institute of Public Health 2020). A large proportion of NAV's users are thus at risk of facing a deteriorating health situation if they do not find work and many are recipients of NAV's services because they are struggling with health problems in a more traditional sense, i.e. illness.

Naturally, we cannot discuss everything NAV does related to a broad health concept. However, we will look at future life expectancy as an indication of public health and risk factors such as smoking and inactivity. We will then look at the expected development of health benefits. We have also chosen to briefly discuss new methodologies for inclusion in the labour market that are specifically aimed at those at risk of long-term exclusion and who traditionally have been taken care of by the health service.

9.1 Life expectancy and the number of healthy living years are expected to increase in the future

In general, we can say that the health of the population in Norway is generally good (WHO 2018). One of the most used measures of the state of public health is life expectancy, i.e., how long we are expected to live at different ages. Figure 9.1 indicates the development in recent years for life expectancy at birth in Norway and a forecast for life expectancy up to 2035. Life expectancy has increased by 4.3 years since 2000. The number of healthy living years has also increased steadily over the past 20 years.

The development in life expectancy in Norway has been positive compared with the other Nordic countries in the same period. In 2000, Norway was in the middle, while in 2018, we were on a par with Iceland and Sweden (figure 9.2).

The impact of the pandemic on public health
It is very uncertain how the coronavirus pandemic will affect public health, both in the short and the long term. There are relatively large differences in how various countries have tackled the pandemic. Nossen and Sundell (2020) show how sickness absence rose sharply at the start of the pandemic. The total sickness absence increased by 10 per cent in the first quarter of 2020 compared with the same quarter the previous year. From February to April there were four times as

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[13]   https://www.who.int/about/who-we-are/constitution

Figure 9.1. The development in life expectancy and healthy life years in Norway in the period 2000–2019, projection towards 2035.
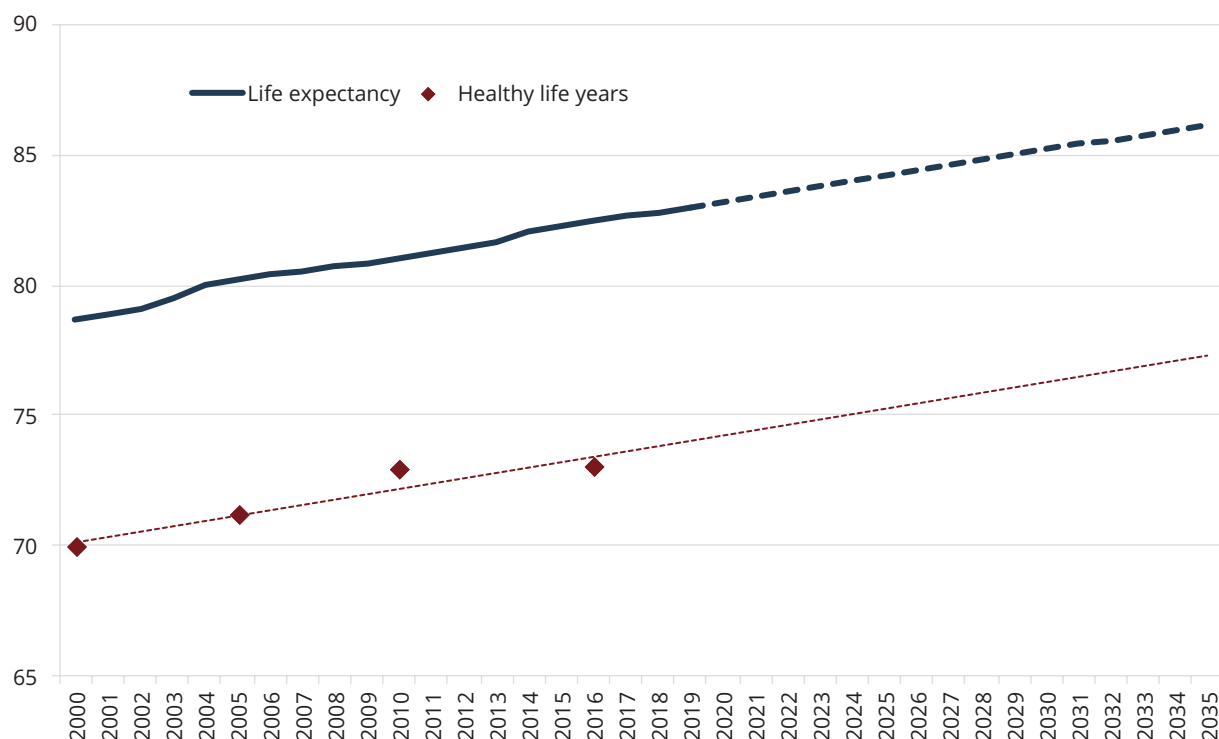
Source: SSB, NAV and the World Health Organisation

Figure 9.2. The development in life expectancy in the Nordic countries 2000–2018.
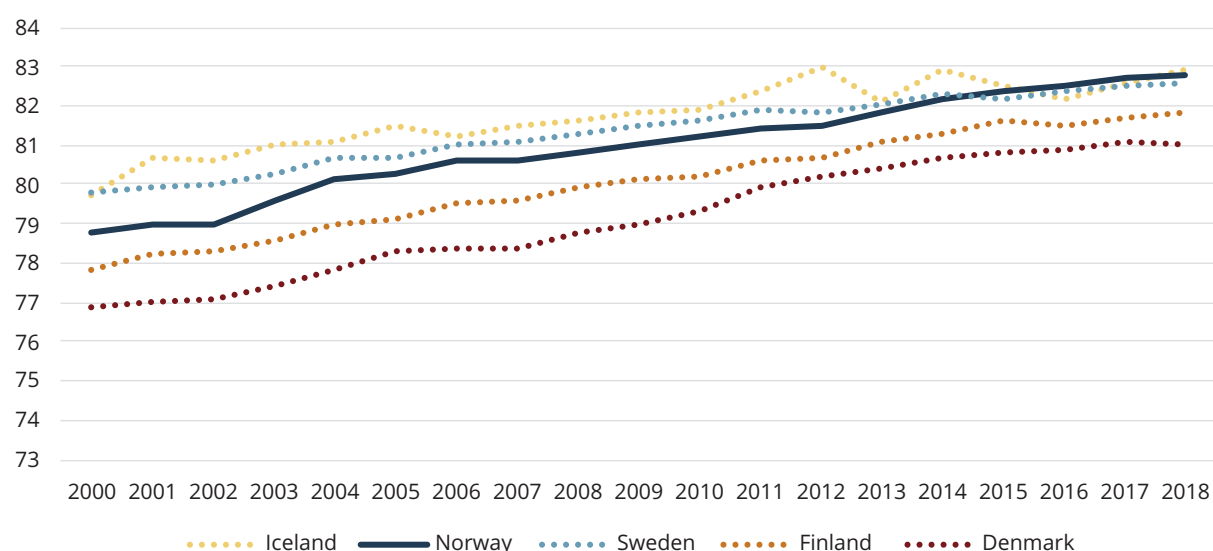
Source: The World Health Organisation

many cases of sick leave diagnosed with the coronavirus as the number of coronary cases detected.

With such a deadly virus as Covid-19 spreading in the population, in the short term, we could have expected excess mortality in the population. However, the

Figure 9.3. The weekly number of deaths per 100,000 inhabitants in Norway and Sweden. 2015–2020.
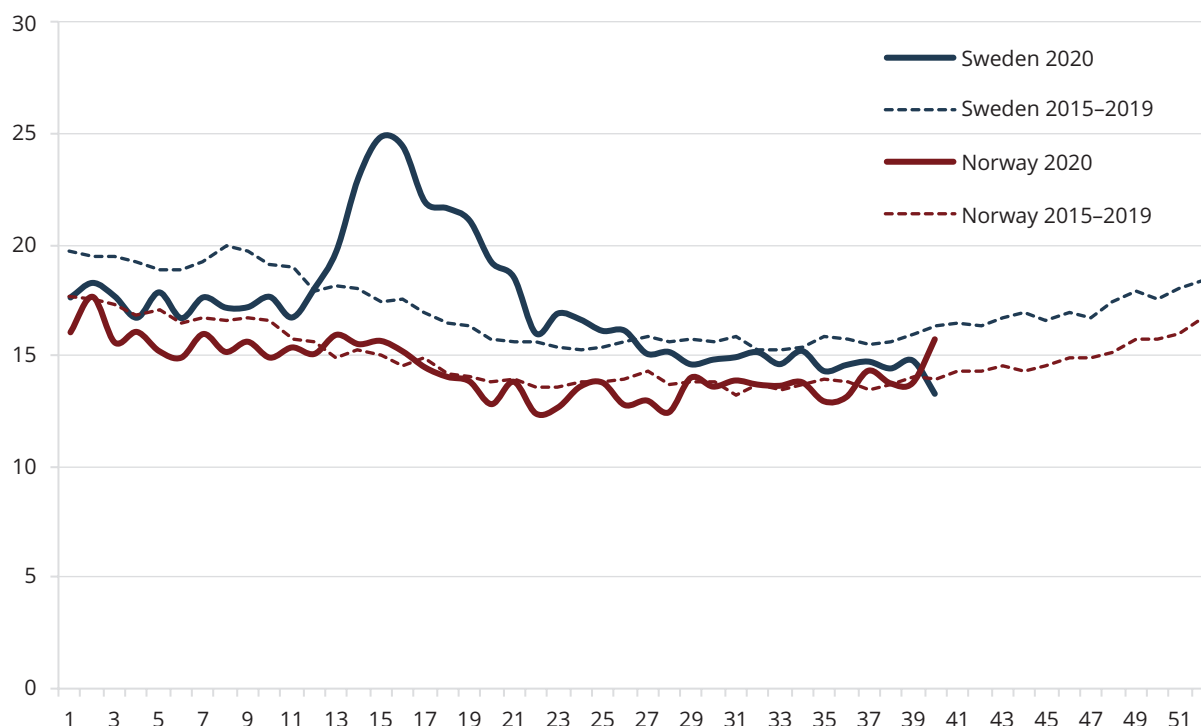
Source: SSB, Socialstyrelsen and Jon H. Fiva (http://www.jon.fiva.no/data/weeklydeathsper100k.png)

spread of infection in Norway has been relatively modest and so far, we can observe a low mortality rate (Figure 9.3). This is not the case in countries with a greater spread of infection (see, for example, the comparison with Sweden in the figure). The development in mortality in the long term remains uncertain and depends on how quickly the population is vaccinated, among other things. At the time of writing, it is expected that everyone who so wishes will be offered vaccination in the first half of 2021.

The direct consequences of the pandemic for public health are still uncertain. Several elements may well be affected. Firstly, the direct long-term effects of having been sick with Covid-19 are not known. Although preliminary findings suggest that most people recover completely, some appear to have suffered from the after-effects of having had the illness and being treated for it.

The indirect effects of the pandemic on public health are also uncertain, but potentially significant. It is a challenging period for the population with unemploy-

ment, financial and general uncertainty. Furthermore, in the spring of 2020, there was a period when the health service only prioritised essential treatments. Overall, this may have negative consequences for public health. Tani et al. (2020) have examined how the pandemic has affected mental health in the UK. They found that mental health, in general, has been impaired, especially among working parents. Possible explanations for this may be increased loneliness, isolation, and stress. This can pose a challenge to those who are already vulnerable when it comes to mental health. We will take a closer look at the incidence of mental disorders in general in the population.

Risk factors: smoking, obesity, and inactivity

The first main goal of the World Health Organisation is to reduce premature mortality (WHO 2018). In connection to this goal, countries are aiming to reduce the risks associated with mortality, cardiovascular disease, cancer, diabetes, and chronic respiratory disorders. Countries are measured on their success in reducing conditions with negative impacts on these diseases. These conditions include smoking, alcohol

consumption, obesity, vaccination coverage and death rates dues to external conditions such as traffic death, accidental poisoning, alcohol poisoning, suicide, accidents, and murder.

Norway fares well when we compare life expectancy with other European countries. We also have a low percentage of people who smoke. The proportion of daily smokers has fallen steadily since 2000. At that time, almost one in three people between the ages of 16 and 74 considered themselves daily smokers. In 2019, the proportion was reduced to one in ten. The decline in the number of smokers is particularly significant among young people. Norway also has a low proportion of smokers compared with other countries and small differences between genders (WHO 2018).

Average alcohol consumption has remained at a stable level in recent years (The Norwegian Institute of Public Health 2020). However, the consumption of alcohol among young people has decreased. Norway has a low level of alcohol consumption compared with other countries in Europe and also the lowest between the Nordic countries.

The proportion of people who are overweight and obese in Norway measured by body mass index has increased steadily since the turn of the millennium (The Norwegian Institute of Public Health 2020 and SSB 2020e). Over time, overweight and obesity are associated with an increased risk of a variety of diseases and ailments, such as type 2 diabetes, cardiovascular disease, certain types of cancer and osteoarthritis of the hips and knees. FHI explains that the increased incidence of overweight and obesity is due to changes in the environment and living habits, less physical activity and a high energy intake.

Mental health
The proportion of people with mental illnesses in the adult population has generally remained stable since the turn of the millennium (FHI 2018). Nevertheless, there is an increasing proportion of young women who report mental health problems and seek help from the health service for these ailments. Data for very young people show similar findings, where there is a particular increase among young girls reporting

mental health problems (Bakken 2020). Although the proportion of the population with mental disorders and substance abuse disorders is stable, it is a concern and a significant cause of impaired health in the population. According to the Norwegian Institute of Public Health (2020), around 10 per cent of all men and 15 per cent of all women were in contact with primary healthcare services due to mental health problems. Similarly, around 4 per cent of men and 6 per cent of women were in contact with the specialist health service for such ailments. Despite suffering from mental illnesses, many people are not in contact with the health service, so that the proportion of the population who suffer from mental disorders is actually higher than what is stated above.

The clinical picture can change abruptly
Illness caused by infections accounts for a small part of the total burden of disease in Norway today, but the situation can change rapidly partly due to increased antibiotic resistance (The Norwegian Institute of Public Health (2020)). Infectious diseases can increase the burden of disease since it can take a long time to recover from serious infections caused by antibiotic-resistant bacteria. There is uncertainty about the consequences of antibiotic resistance towards 2035.

Future health care
What the health of the population in the future will be like will depend on how the health services of the future develop, among other things. Economist (2020) has asked several health experts in which areas they expect developments in the short term (5 years) and in the long term (30 years). In the short term, the experts expect developments in technology for portable medical devices with sensors based on «the Internet of Things» within health care (which will also apply to smartwatches, smart glasses, and the like, which can monitor health), 3D printing, genomic analyses (analyses of DNA sequences, etc.), robotics, VR (virtual reality) and AR (Augmented Reality), as well as the use of artificial intelligence to provide medical decision support. Thus, this will largely be technological developments which will provide better and more precise medical treatments of diseases and prevention through prediction of the course of illness and risks.

These changes can lead to major changes in the health services and therefore, will in turn affect public health.

9.2 The expected development of health-related benefits depends on more than health

The health-related benefits that NAV administers mainly include sickness benefit, work assessment allowance (AAP) and disability benefit. When looking at health-related benefits towards 2035, we will need to review the developments back in time.

A continued decline in health-related benefits for the elderly

Since 2010, we have observed a steady reduction in the proportion of the population receiving health-related benefits (Figure 9.4). The proportion has decreased from around 18.5 per cent of the population between the ages of 18 and 66 years who received

such benefits in 2010, to less than 17 per cent who received such benefits at the end of 2019. The reduction has been particularly evident among the population aged 50 years and older (Kann and Sutterud 2017).

Although there has been a reduction in the proportion of health-related benefits, overall, we see an increase in the proportion of people receiving disability benefits, a reduction in the proportion receiving AAP and a stable proportion of recipients of sickness benefits. What has caused this shift?

Since 2006, there has been a sharp reduction in the proportion of elderly people receiving health-related benefits. It is mainly the reduction in this group that is driving the decrease in the total proportion of recipients of such benefits. As described in Chapter 4 on demographics, the largest population growth is expected in this age group in the period towards 2035.

Figure 9.4. The proportion of the population aged 18–66 years on health-related benefits in total (right axis), and the proportion on disability benefit, work assessment allowance and sickness benefit (left axis) at year-end 1998–2019. Percentage.
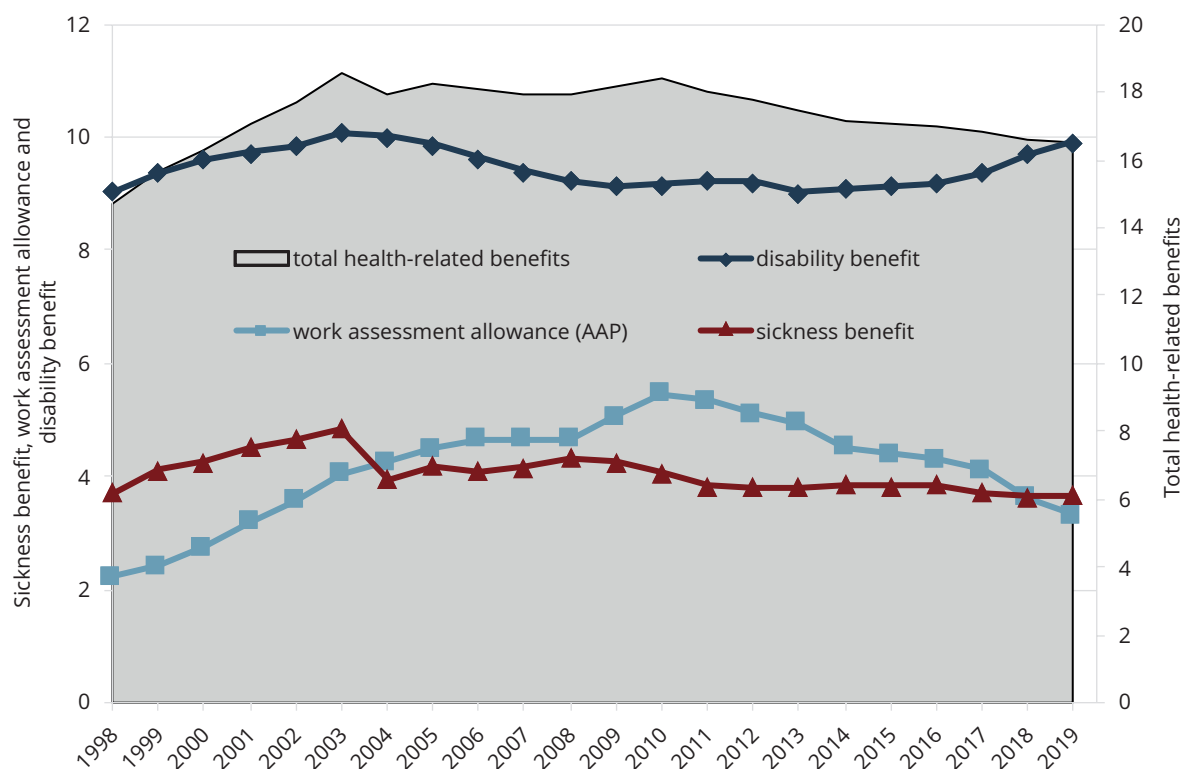
Source: **NAV**

Figure 9.5. The change in the proportion receiving health-related benefits 2006–2019 and expected change in the population from 2020 to 2035, by age.

■ Change in the proportion with health-related benefits 2006–2019   ■ Expected growth in the populatin 2020–2035
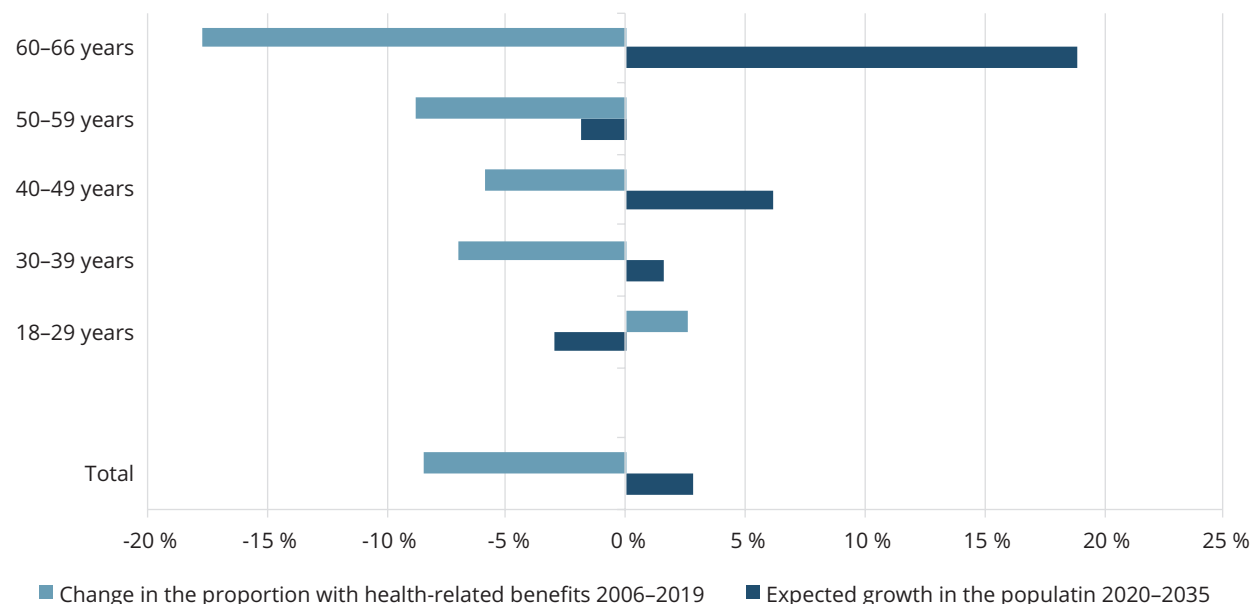
Source: NAV and SSB

If the trend with a reduced proportion of recipients of health-related benefits among elderly people continues, the total proportion of health-related benefits in the population between the ages of 18 and 66 will also be reduced.

What has led to a reduction in the proportion of elderly recipients of health-related benefits? In part, this can be explained by the improvement in public health, and the pension reform, where a flexible retirement age has meant that many people have drawn an old-age pension earlier than before (Jacobsen 2014). Thus, disability benefit has become less relevant for this age group, even though the financial incentives for disability benefit still exist.

In other age groups older than 30 years of age, there has been a steady decrease in the proportion of recipients of health-related benefits. Here, the improvement in public health has probably contributed to this.

For those under the age of 30, there are a few worrying signs. In this age group, we have long observed a steady increase in the proportion of people receiving health-related benefits.

More people on health-related benefits when unemployment is high

Cyclical fluctuations in the labour market will influence on how many people become recipients of health-related benefits and how many who will stop receiving health-related benefits (see for example Nossen 2014, Kann and Kristoffersen 2014, Kann and Kristoffersen 2015 and Kann et al. 2016). For example, a strong labour market until 2009 reduced the number of new recipients of sickness benefit and work assessment allowance (AAP) (and the predecessors of AAP) and the number who no longer received such benefits increased. We saw the same trend when unemployment increased in 2014/2015 and decreased in 2017.

Schreiner (2019) has studied the effect of receiving AAP, instead of unemployment benefit or financial social assistance, on young people in the grey area between unemployment and health problems. She saw that for this group, receiving AAP led to reduced occupational income, increased social security payments and a greater risk of transitioning to permanent disability benefits. Therefore, this can have adverse long-term effects. The risk of such medicalisation is

Figure 9.6. The proportion of Norwegian-born and immigrants aged 18–66 years receiving health-related benefits. Percentage.
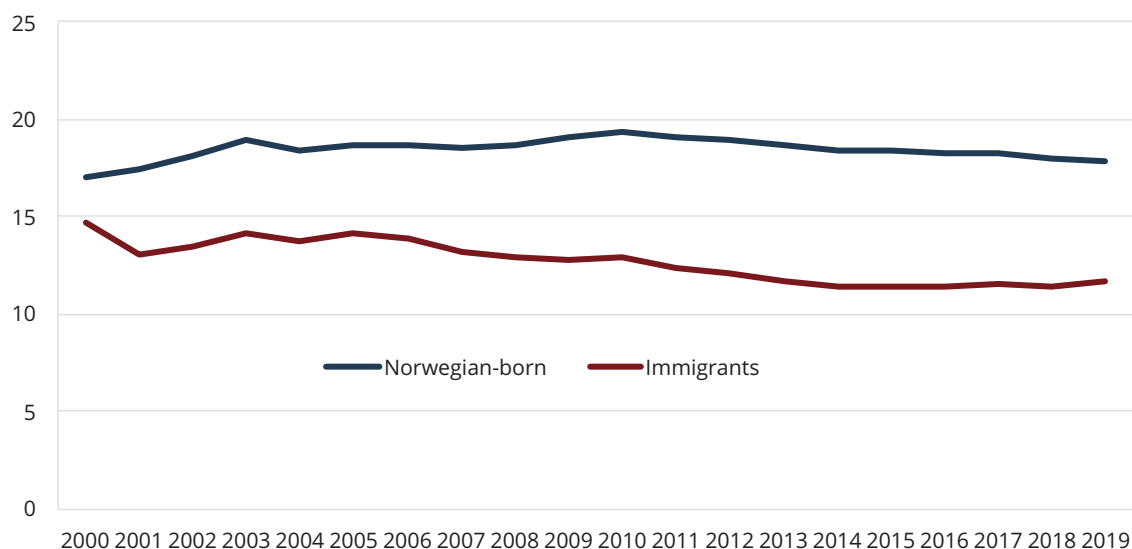
Source: **NAV**

Figure 9.7. The proportion of Norwegian-born citizens and immigrants aged 18–66 years receiving health-related benefits, by gender and one-year age. 2019. Percentage.
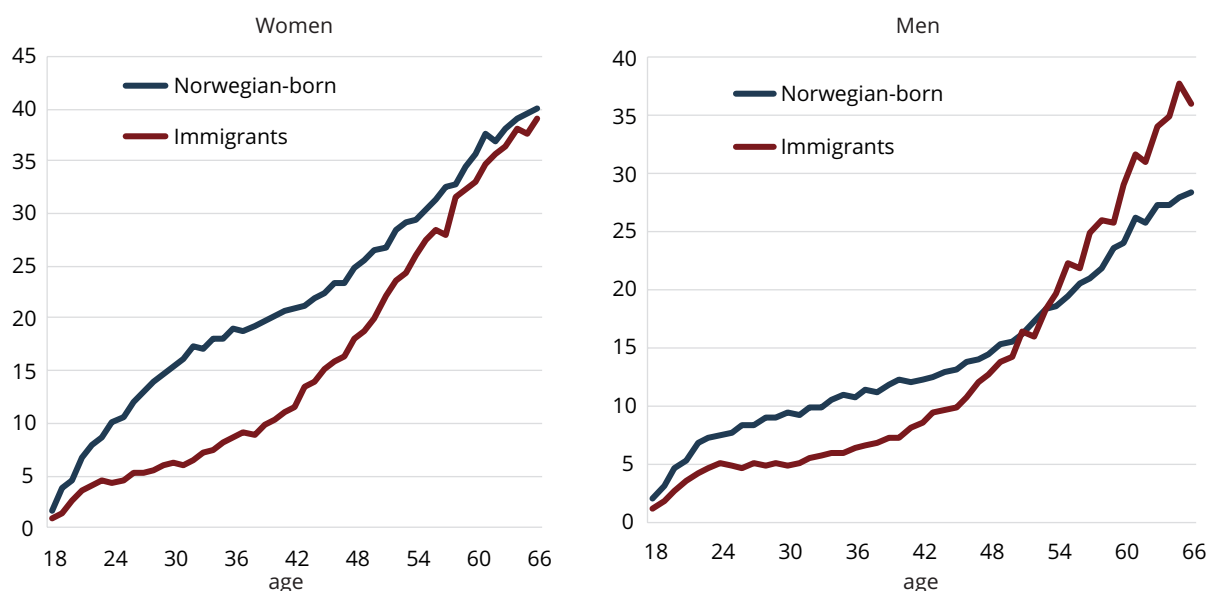
Source: **NAV**

particularly high in periods of economic downturn. Therefore, how unemployment will develop towards 2035 will probably also strongly influence the number of people on health-related benefits.

Continued significant differences between men and women

There are significant gender differences in the number of recipients of health-related benefits and these remain steadily high (Figure 9.6). While the average

proportion of the female population receiving health-related benefits has varied from 17 to 22 per cent, the corresponding proportion among men has varied from 13 to 16 per cent. When it comes to health-related benefits, the differences are the greatest – and increasing – concerning sickness benefit. Although some of the difference between the genders can be explained, there is still a lot we do not know (see for example Nilsen et al. 2017 and Mastekaasa 2016).

Ulvestad (2018) studies the variation in sickness absence between workplaces. The analysis shows that around 40 per cent of the differences in sickness absence between the workplaces is due to factors in the workplace, while the remainder is due to differences in the composition of the labour force. Moreover, the results indicate that a high level of sickness absence in the municipal sector is not because municipal workplaces «create more absence» but rather that they have employees who are more inclined to be absent from work. In sectors and occupations where sickness absence is high, most of the employees are often women. In such occupations and sectors, workplace adaptations or people with poor health can become a substantial challenge for employers and NAV in the years ahead.

Immigrants receive health-related benefits less often

People born in another country receive health-related benefits much less often than people born in Norway. Recipients of such benefits accounted for almost 12 per cent of the immigrant population aged 18–66 at the end of 2019, compared with almost 18 per cent among Norwegian-born people in the same age group. The difference has remained stable over the last decade. The main reason for this difference is regulations connected receiving health-related benefits. The person in question must have been in employment, and employment is low in some immigrant groups, especially for women. In addition, labour migrants are often a resourceful group since they have been willing to migrate and have succeeded in finding a job in Norway. They are thereby probably a group with relatively good health.

Increased immigration may lead to a decrease in the proportion of the population receiving benefits (Figure 9.6). However, immigrants also receive other benefits such as social assistance and unemployment benefit to a greater extent, and examined together, the proportion receiving income-securing assistance from NAV is roughly the same for immigrants as for those born in Norway.

In Figure 9.7, we see the status in 2019, by age. We see that immigrants receive health-related benefits to a lesser extent than Norwegian-born people. For women, this applies to all ages, while for men, it applies up to around the age of 50. Among those over the age of 50, immigrants receive health-related benefits to a greater extent than Norwegian-born people.

Bratsberg et al. (2010) found that the length of residence in Norway affects the extent to which immigrants receive health-related benefits. As expected, immigrants who arrive in Norway to seek asylum have a high assistance rate during the initial period after arrival in Norway, mostly through social assistance, and some health-related benefits. For these people, the degree of self-sufficiency will increase during their first decade of living in Norway. Labour migrants tend to claim a few benefits initially, but after 10–15 years in the country, the proportion increases. Since this pattern is seen regardless of the time of arrival in Norway, it is difficult to use cyclical fluctuations to explain the phenomenon. Therefore, there seems to be exclusion mechanisms in the labour market and/or aspects of the national insurance system which result in immigrants becoming more prone to receiving benefits the longer they have lived in Norway.

A strong increase in disability benefits among young people

The proportion of young people on health-related benefits has been stable for the last 20 years, at between 6 and 7 per cent in the 18–29 age group (Figure 9.8) (Kann and Sutterud 2017a).

From 2001–2019, sickness absence in this group fell by as much as 44 per cent. However, the disability rate for young people has increased significantly, especially in the years after 2010. The proportion of

Figure 9.8. Recipients of health-related benefits as a proportion of the population aged 18–29 years. At year-end 2001–2019. Percentage.
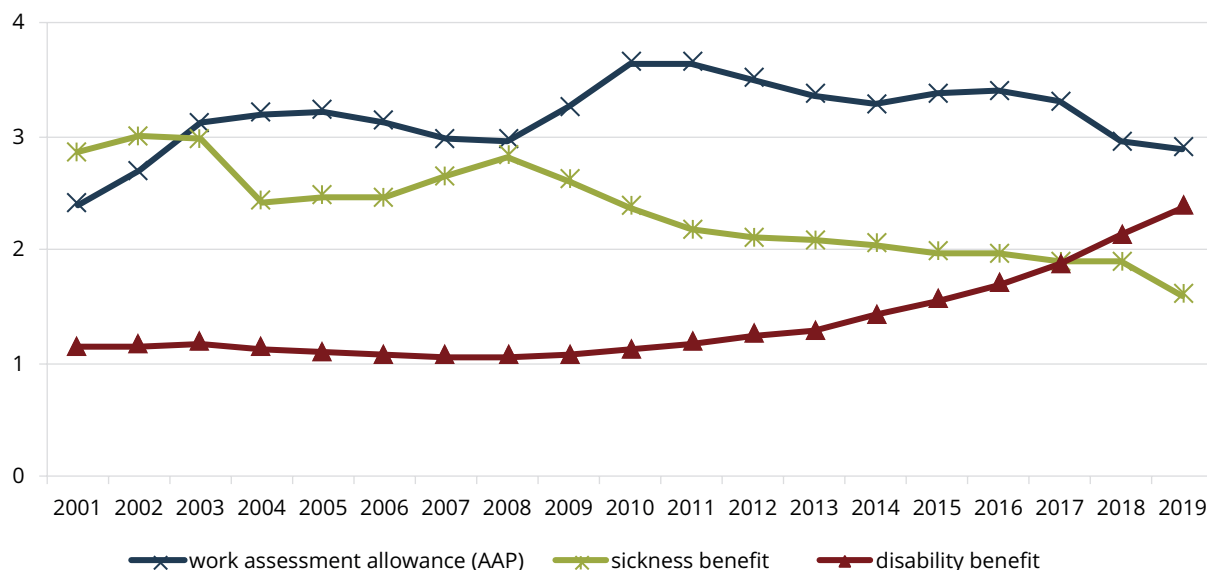
Source: **NAV**

Figure 9.9. Recipients of income security benefits as a proportion of the population aged 18–29 years. At year-end 2001–2019. Percentage.
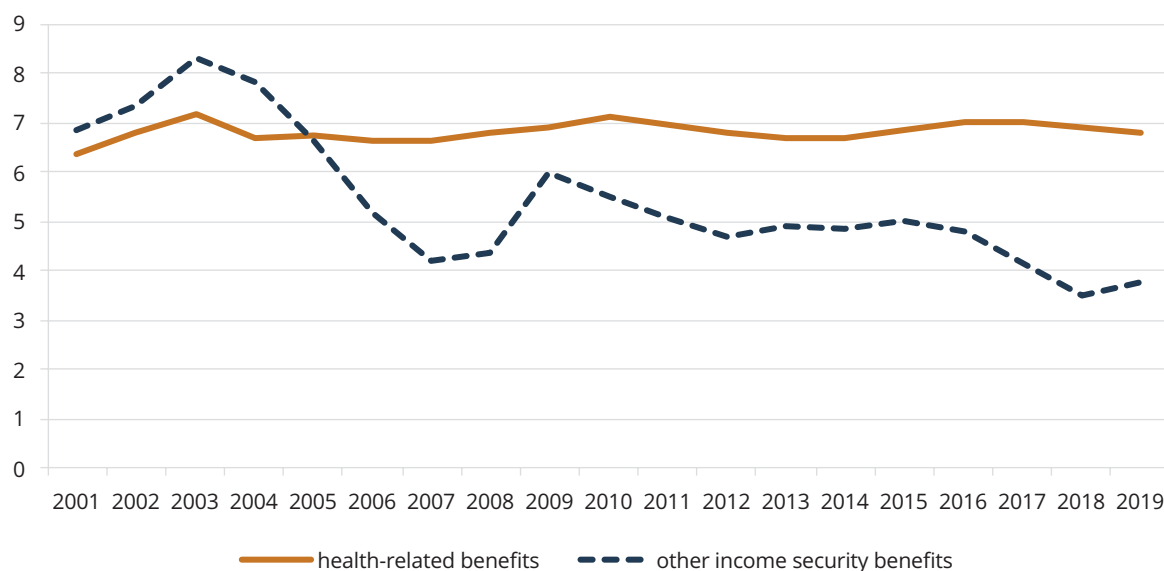
Source: **NAV**

young people on work assessment allowance and the earlier benefits that were replaced by work assessment allowance increased up to 2010 (when AAP was introduced) but has since decreased. The most important factor contributing to the increase in young peo-

ple on disability benefit is that a growing number of eighteen-year-olds are receiving disability benefits. The most common diagnosis is mental retardation. This could be explained by the fact that more children are born with disabilities, either because more women

Figure 9.10. Young people between 15 and 29 years, by activity in 2018. Percentage.
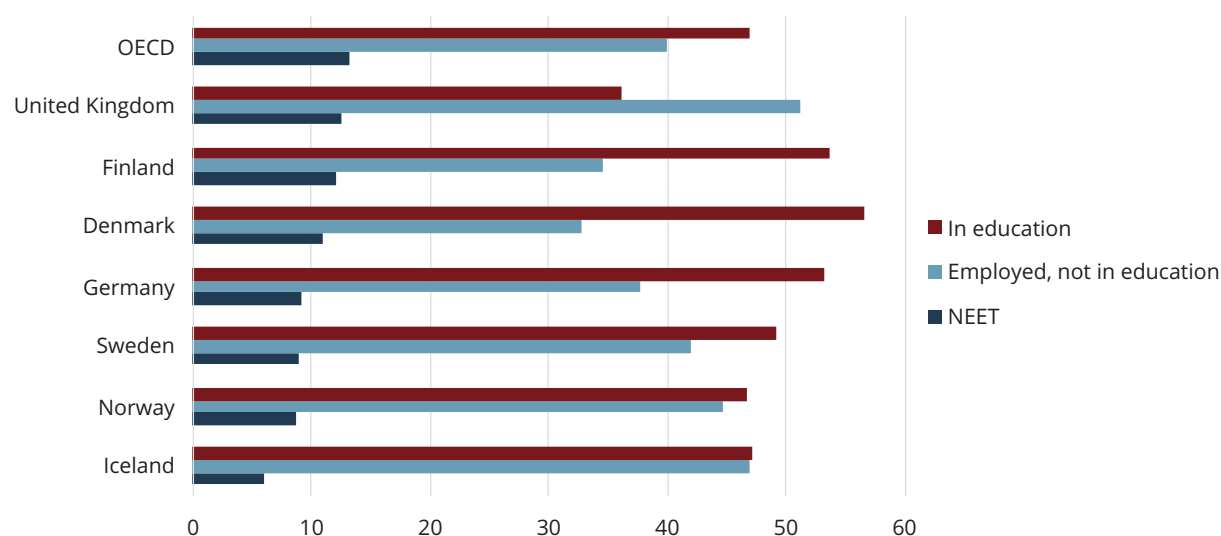
Source: **OECD**

are having children later in life or because prematurely born children survive with persistent neurological and mental health problems. Ever-improving medical care has resulted in an increased survival rate among children and young people with disabilities so that the proportion who grow to adulthood and are awarded disability benefit has increased (Brage and

Thune 2015). Asperger's syndrome and autism[14] is another diagnosis group that has increased among those who receive disability benefit as eighteen-year-olds. We do not know the reasons behind this increase, but it could be that more people than before are given

[14] Among these, like those with deformities, there is great variation in functional level. Only the worst-functioning people are granted disability benefit.

Figure 9.11. Young people between 15 and 29 years, by activity. Change from 2008 to 2018. Percentage points.
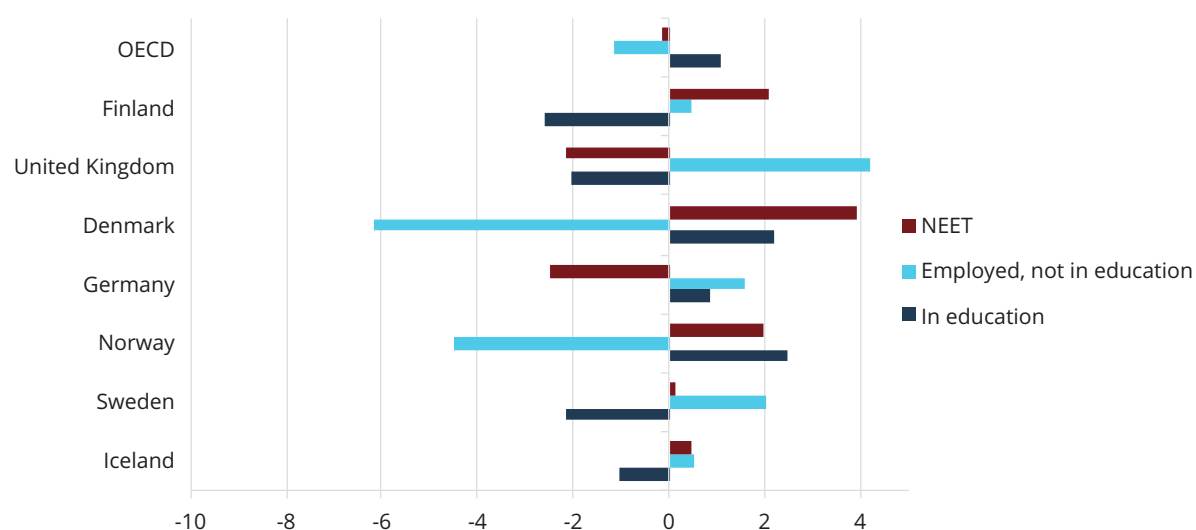
Source: **OECD**

this diagnosis, and that the condition is becoming more prevalent. Some researchers also believe that environmental toxins could play a part in triggering autism.

There has been a noticeable shift from non-health-related income benefits (unemployment benefit, social assistance, transitional benefit, and benefits received while participating in employment schemes) to health-related benefits (sickness benefit, work assessment allowance and disability benefit) in the period 2002–2004 (Figure 9.9). Before 2005, non-health-related benefits were more common than health-related benefits, but decreased significantly in the period 2004–2007, and have been significantly lower ever since. This is because the maximum period for unemployment benefit was reduced from three to two years and that the rules governing benefits to single parents were tightened (Kann and Sutterud 2017a). There has been an increase in the number of young people receiving disability benefit before the age of 24 since the 1970s (Brage and Thune 2008 and 2015).

The counterpart to the number of people on benefits is the number of people employed. Employment among young people is also high in Norway, 6 percentage points above the OECD average[15]. However, the level is somewhat lower than it was 10 years ago. Much of the fall in employment among young people in Norway can be explained by the fact that the proportion in education is increasing (Kann and Sutterud 2017b). However, since 2008[16] there has been an increase of 2 percentage points in the proportion of young people who are not in education, employment, or training (often referred to as the NEETS group, an abbreviation for the English phrase «not in education, employment, or training»). Even though Norway is still lowest in the OECD together with Iceland and Sweden in terms of the proportion of young people in the NEETS group, this is a development that should be closely monitored (Figures 9.10 and 9.11) (OECD 2020b).

Disabled people want to participate in the labour market

Employment among disabled people has remained at a stable and low level for many years. The labour force survey from June 2020 shows that 41 per cent of the disabled group are in employment[17]. This is a decrease from previous years but is probably related to the generally demanding conditions in the labour market during the coronavirus pandemic. Of the disabled people not in income-earning employment in the second quarter of 2019, just over 100,000 had expressed a wish to be in employment (Bø 2019). This corresponds to 17 per cent of the total number of disabled people and it will be a major task to increase employment in this group going forward.

Norway from an international perspective

There are relatively few people in Norway who are outside the labour force or who are unemployed without receiving unemployment benefit or other benefits. However, of those who are outside the labour force, the proportion receiving benefits is high, and an extremely high proportion receive health-related benefits. Sickness absence is high in Norway compared with other countries. International comparisons of sickness absence are often based on various national labour force surveys (LFS). Based on LFS figures, Norway has the highest sickness absence among countries with which it is natural to compare ourselves. A report by Statistics Norway (Berge et al. 2012) concludes that the labour force surveys are relatively similar and therefore, cannot explain the differences in sickness absence. The composition of the labour force can explain some of the difference in sickness absence. Moreover, differences in the sickness benefit systems and other institutional factors can influence the registered sickness absence. Another survey (Gleinsvik et al. 2014) concludes that in an international comparison, Norway's high rate of sickness absence can neither be explained by differences in how sickness absence is measured, differences in the maximum period of absence nor by other rules concerning sick leave.

[15]   The categories are mutually exclusive. In these statistics, the OECD has defined those combining employment with education as "not employed".
[16]   2007 was the year with the highest employment among young people in Norway in the period 1997–2018.

[17]   https://www.ssb.no/akutu

In Norway, the proportion of people receiving disability benefits (disability benefit and work assessment allowance) in the 18–64 age group is significantly higher than in other European countries, including the Nordic countries (Barth et al. 2015). OECD figures show the same pattern. Barth et al. have studied how many people live on benefits alone in various countries and how many combine benefits with work. They found that the proportion of people living on benefits in Norway was at the lower end of the scale. They then included unemployment benefit, old-age pension, and all other cash transfers (national insurance benefits). They also noted that in Norway, it is more common to combine benefits with work. For example, 22 per cent of the population between the ages of 25 and 64 receive more than half of their income from benefits. The proportion in Denmark is 23 per cent, Finland 25 per cent, the UK 25 per cent and Ireland 30 per cent.

People with health problems may be easier to identify in Norway because they are entitled to benefits. When medical diagnoses are the criterion for benefits, this can lead to social problems and unemployment becoming medicalised. This means that the individual and the individual's surroundings explain the individual's situation and problems, within several areas of life, based on (individual) medical causes that are expected to be treated by the health service. A diagnosis and long-term health benefits may affect the user's self-understanding and how he/she is perceived by those around him or her; problems in the labour market can then easily be interpreted as health problems for the individual (Grødem et al. 2014).

Schreiner (2019) has conducted an effect survey which indicates that local variations in the practice of awarding work assessment allowance may contribute to the medicalisation of social problems and unemployment, and that this, in turn, weakens the individual's labour market attachment. The findings indicate that awarding work assessment allowance to young people instead of unemployment benefits and social assistance generally increases the probability of a weaker labour market attachment after five years. This is manifested in the form of a substantial reduction in employment and income from employment and a corresponding increase in benefits received.

These findings apply to young people in the grey area between health problems and unemployment, i.e., young people who are not awarded a health-related benefit if the criteria are applied more strictly.

High employment rates among weak groups
In a country with a small wage gap and a generous national insurance system, it is easy to imagine that people with poor qualifications and health will have lower employment rates. Using data from extensive international surveys of people's skills (so-called PIAAC data), Barth et al. (2015) have calculated employment rates for different age groups among persons with poor health and those who have weak numerical skills. They found that Norway fares very well compared with other European countries as regards employment in both these groups, but better for those with weak numerical skills than for those with poor health.

The activity obligation as an alternative to restricting benefits
An activity obligation as a condition for receiving welfare benefits is a common European trend. The activity obligation means that the right to welfare benefits is contingent upon the recipient participating in some form of activity, for example, work for benefit, active job seeking or qualifying activities in the form of courses and training. The legislator's dilemma is that the benefits are intended to function as insurance for those who, through no fault of their own, lose their ability to work. At the same time, it should pay off to work so that possible misuse of the welfare schemes is minimised. Therefore, economists often refer to the activity obligation as an alternative to low benefits which are subject to strict criteria.

How the activity obligation is implemented in NAV will be important in relation to which effects it will have. It may have adverse effects on the individual and how NAV is perceived if the criteria are unreasonable, inappropriate or difficult or impossible to meet (Hagelund et al. 2016, Kann et al. 2012, Lima et al. 2017).

Several surveys indicate that the activity obligation which comes into effect after 8 weeks of sick leave has contributed to a strong reduction in sickness

absence since its introduction in 2004, see Markussen (2010), Kann and Brage (2007) and Kann et al. (2012). Hedmark county introduced stricter activity requirements for sickness benefit in 2013, and in 2014, they did the same for work assessment allowance. This led to a significant reduction in sickness absence and new applications for work assessment allowance. The same requirements were later introduced in the rest of the country (Lima et al. 2017, Kann and Lima 2015, Hernæs et al. 2017). The reduction in sickness absence has also led to lower recruitment to long-term health-related benefits such as work assessment allowance and disability benefits (Kann et al. 2013).

The activity requirement does not just entail an obligation for the sick person, it also gives him or her a right to an adjusted workplace. It will be important to focus more on the employers' duty to facilitate so that as many people as possible can return to work. The use of adaptation grants or subsidising wages for stand-ins who replace an employee on sick leave could be one way of making adaptations, as is the use of assistive technology (See Chapter 4.1).

Health-related benefits in the future

As discussed in the above chapter, in recent years, there has been a clear trend towards the introduction of activity requirements for the receipt of various benefits. Disability pension was replaced by disability benefit in 2015 and one of the aims of this reform was to make it easier to combine disability benefit with work. Alne (2018) found that those who already combine disability benefit with work are working more following the reform. However, it does not appear to be the case that more people are working following the introduction of the reform.

From 1 January 2018, extensive changes were made to the AAP regulations. The changes resulted in «a narrower entry to the scheme» and «a tighter benefit process» with faster clarification of the benefit recipient's ability to work and an increased transition to work. Among other things, as a rule, the benefit period was reduced from 4 to 3 years. In a provisional assessment of the effects of the tightening of regulations, Grønlien and Lima (2020), found, as expected, a sharp reduction in the number of people receiving AAP

beyond 4 years. Together with this reduction, there was not only an increase in the proportion of people in employment, but also an increase in the proportion of recipients of disability benefit and social assistance. The impact these legislative amendments will have in the longer term is uncertain. It will be interesting to see whether the tightening of regulations will help to achieve the goal that more people with impaired health are included in the labour market going forward.

There will probably be more amendments to the regulations for health-related benefits in the future (see Chapter 10). At the same time, there will be several external influencing factors that will affect the use of these schemes. For example, we can expect developments in health technology to continue to contribute to the improvement in public health. This may result in lower demand for health benefits, though we have seen that a global pandemic has the potential to reduce health which leads to an increased demand for health services. The developments in the labour market, both locally and globally, could affect the demand for health services.

9.3 Closer cooperation with health institutions: new methods and challenges

NAV has already established and regulated cooperation with the health service in the form of follow-up of absence due to sickness. This is often about increasing the probability that a person will return fully or partly to work following an illness. In addition, NAV often has contact with health institutions in connection with reviewing a person's ability to work.

In addition to this established cooperation, new methods for cooperation between the health institutions and NAV have been adopted in recent years. The new methods have two common features. Firstly, they target users who were previously taken care of by the health service, for example, people with mental health disorders. Secondly, work is a part of the treatment. The methods form a kind of paradigm shift, where work is considered a health-promoting activity and is

part of the treatment. It is thus a move away from the traditional way of thinking that a person needs to be prepared to return to work (train then place) to where preparation for the return to work takes place in the workplace itself (place then train). Broadly speaking, methods that follow «place then train» logic are referred to as Supported Employment (SE) (Frøyland and Spjelkavik 2014).

One of the research-based methods (See Chapter 5 on user expectations) is Individual Placement and Support (IPS) (Velden Hegelstad et al. 2014). IPS is an integral part of the treatment of people with mental health and substance abuse disorders. The method involves a binding cooperation between NAV's IPS job specialists, the specialist health service, and the municipal health service. The aim is to help the target group back to ordinary working life and therefore, it also involves close cooperation with employers.

This method has a documented positive effect according to international studies and was first tested in Norway through a successful piloting period between 2012–2016 (Endresen Reme et al. 2016). Subsequent long-term studies also indicate that the method has had a positive effect in Norway (Holmås et al. 2019).

Although it is well documented that work is health-promoting, it takes time to adapt to work as a therapeutic tool in treatment. However, it seems that the perspective is gradually strengthening. IPS is highlighted as a good example of systematic cooperation with NAV and the health service in the National Health and Hospital Plan 2020–2023 (The Ministry of Health and Care Services 2019) and there is an increase in the use of IPS and SE in municipal health services (Osborg Ose and Kaspersen 2020). The Government recommends that the specialist health service and the municipalities cooperate with NAV and continue to disseminate effective, employment schemes within health and work/education.

The experience so far indicates that the introduction of IPS and other methods presents challenges in the cooperation between the agencies. Different capacity and organisation of the cooperation can mean that users do not receive well-coordinated assistance. For example, lack of treatment or waiting periods may result in some people not benefitting from follow-up and schemes from NAV. There are also barriers related to the lack of common IT systems, unresolved issues regarding privacy, different approaches to how the cooperation should take place, the differing capacity to prioritise IPS, as well as a different understanding of what to achieve (Strand et al. 2020). Some of these issues are exactly the kind of issues we assume users expect to be resolved (See Chapter 5 on user expectations). If the methods are in an introductory phase, there will also be major geographical and capacity-related variations.

In October 2020, there were around 400 IPS job specialists and method counsellors in NAV and around 3,000 people receiving this service. In 2021, there will be an extra MNOK 50 million in funding, much of which is allocated to IPS Young and is aimed at young people on work assessment allowance.

It is difficult to speculate on how the scope of IPS and similar methods will develop towards 2035. Given the continuing positive results and that these are considered both socially beneficial and socio-economically profitable, a further escalation is most likely. This will challenge the distribution of work internally in NAV and between agencies but will be in line with users and the populations' expectation of research-based services and more coordination between the departments.

9.4 Reflection questions
- How will improved public health and an ageing population affect NAV?
- How can NAV help prevent rapid restructuring from leading to more people receiving health-related benefits?
- How should NAV cooperate with the health service?
- How can NAV help prevent people with mental health disorders from being excluded from the labour market?
- What new methods will be important in 2035, and what new expertise will they require? (such as SE (Supported Employment) and IPS (Individual Placement and Support))

10. POLITICAL TRENDS

By: Jørgen Daroische Holbæk-Hanssen

In this chapter, we will discuss some important political trends, challenges and opportunities that may have an impact towards 2035. This chapter is based largely on the report «*Trender i arbeidslivs- og velferdspolitikken fram mot 2035*» (Trends in Labour and Welfare Policy towards 2035), which FAFO prepared in the autumn of 2020 on behalf of the Directorate of Labour and Welfare (Ødegaard et al. 2020).

The main goals of the labour and welfare policy as set out in Prop.1S (2019–2020) (Bill) from the Ministry of Labour and Social Affairs is «a well-functioning labour market with a high level of employment, financial and social security and a safe and professional workplace». The Bill further states that financial and social security through good welfare and income securing arrangements are important both for the individual and the restructuring of the labour market. The Norwegian labour market is characterised by a high level of employment, a relatively low wage gap and strong adaptability (Ødegaard et al. 2020). The so-called «arbeidslinjen» («work as main goal») is the basis for the main features of the labour and welfare policy over many years. This is defined as the individual being able to support himself or herself as much as possible and contributing to value creation in society (St.meld. 35 (1994–95)) (White paper).

Norway has long shown a willingness and ability to pursue an economic policy aimed at full employment and social cohesion. This has led to the development of universal welfare schemes in key areas: education, health and income securing for those who, for various reasons, cannot support themselves through work. The policy has facilitated a population with a high level of education and labour force participation for both genders and a high level of social mobility (Ødegaard et al. 2020). In addition, the Norwegian working life model is characterised by cooperation between the parties in the labour market (Barth et al. 2015).

Political trends are shaped by societal changes that affect people's attitudes, values, voting and political activity. Traditional lines of conflict in the population that have emerged from sociocultural and economic interests are increasingly relevant and have been supplemented by new lines of conflict involving climate, immigration, and globalisation, among other things. This has helped create a growing unpredictability in the behaviour of the voters (Bergh and Aardal 2019 (ed.)). Populism, increased polarisation, and diminished trust have grown in several countries, partly in connection with such new lines of conflict. This currently applies to a lesser extent in Norway, which is still characterised by stability (Haugsgjerd and Segaard 2020).

The main features of the Norwegian welfare state are expected to remain, but the dispute will revolve around which *instruments* will be the most appropriate to use to achieve the goals, about *priorities* between different groups and purposes, and *adapting expenditure and income* to ensure the long-term sustainability of the welfare state (Ødegaard et al. 2020).

Developments will be affected by changes in society, such as climate changes and the green transition, globalisation, demographic changes (including ageing and migration), technological changes, centralisation, and urbanisation. These trends have implications for Norway's ability to achieve the main goals of the labour and welfare policy. They are also examples of common challenges facing countries in Europe that will also require political answers in Norway (Ødegaard et al. 2020). Another example of global challenges affecting Norwegian politics is the UN Sustainability Goals (UN 2021), where the Government has decided that all government strategies, action plans, white papers and bills shall address the effects of the sustainability goals (The Ministry of Local Government and Modernisation 2020c).

10.1 Restructuring and sustainability will be important challenges

Restructuring and new expertise

In recent years, a skills policy has been high on the political agenda. A National Skills Policy Strategy (The Ministry of Education and Research 2017) has been adopted, the aim of which is to help individuals and businesses have the expertise to ensure that Norway has a competitive national industry, an efficient and strong public sector, and that as few people as possible are outside the labour market. The latest perspective report (Meld St. 29 (2016–2017)) states that the restructuring to increase value creation cannot wait. Restructuring and skills development must be adapted to the tasks at hand in line with the changing environments and requirements, where the need for occupational and geographical mobility must also increase.

People with low foundation skills are overrepresented among the unemployed and recipients of health-related benefits. Unemployed people also do not have access to the skills training provided in the workplace. If the skills training in the population does not match the new labour demands, it may lead to lower economic growth and more people outside the labour market. Exclusion and poor foundation skills can therefore become mutually reinforcing (NOU 2020:2) and political steps to break this link will be necessary.

In the spring of 2020, the Government presented a white paper on «Life-long Learning» as part of its Competence Reform. The aim of the reform is that no one should be excluded from the labour market due to low education and poor foundation skills, and that the labour market should have access to the competence it requires (The Ministry of Education and Research 2020). The Competence Reform is based on the National Skills Policy Strategy mentioned above, among other things. One of the measures of the reform is to provide a skills training programme, where the government provides funding to skills training for employees in selected industries. The measures are particularly aimed at industries with a large proportion of skilled and unskilled workers, such as the manufacturing and construction industries and the municipal health and care sector.

Digitalisation and the green transition reinforce the requirement for new and updated skills among the employees. Many people will experience that their work tasks and job content change and possibly become automated. In industries where the expertise is specific and the general level of education is low, restructuring can be particularly challenging. Examples of such industries are the wholesale and retail trade, warehousing, and logistics, as well as some occupations within manufacturing and construction. Here, political initiatives that can support skills training and further education will be all the more important (Olberg et al. 2017). Since low income and low-skilled occupations will be the most at risk following the automation of «mechanical» tasks, the restructuring pressure will also be greatest on these groups (Ødegaard et al. 2020).

Preventing social exclusion

Restructuring and skills development help to prevent exclusion from the labour market. Growing economic disparities, poverty, integration issues and social exclusion are key topics of discussion about the ability of the welfare state to take care of its citizens. Measures for the inclusion and integration of vulnerable groups are likely to be important in the years ahead.

Integration and inclusion of immigrants

This applies not least to different groups of immigrants. Overall, immigrants have 11 percentage points lower labour force participation than the national population (Olsen 2020). In particular, former refugees are overrepresented in the group that lacks a stable attachment to the Norwegian labour market (See for example Olsen and Bye 2020). It is also in this group that we find the highest proportion of children living in families with persistently low incomes (See Epland and Normann 2020 and Chapter 8.4, among others).

It is nevertheless the case that the participation in working and social life among refugees increases over time and that the children of immigrants succeed to a greater extent than their parents in education and working life (Ødegaard et al. 2020, see also Chapter 8.6). At the same time, there are signs of polarisation among these descendants: This generation is overrep-

resented among those who do well in the education system, but also among those who drop out of school (The Norwegian Institute for Social Research 2019).

Immigration requires integration measures, where skills development is also a key element. The Committee on Future Competence Needs points out that a lack of formal competence is one of the main reasons for low employment, especially among refugees. At the same time, we know that an education taken abroad often pays off less in the Norwegian labour market than an education from Norway (NOU 2017:2). In Meld. St. 13 (2018–2019) (white paper), the Government reports that it wants to enable more people to take trade certificates and other formal qualifications as part of the introduction programme and that more people will be encouraged to take an upper secondary education, vocational training and trade certificate. This is also highlighted in the recently adopted Integration Act, which allows for the introduction programme to be extended so that more people can participate in, for example, an upper secondary education (Prop 89 L (2019–2020)) (Bill).

Vulnerable young people
The Productivity Commission (NOU 2016:3) points to the importance of more young people completing upper secondary school. A persistent challenge is that many young people drop out along the way or complete their education without having achieved vocational qualifications or university and college admission certification (Barth 2019). The labour market will have lower demand for this group in the years ahead.

The main concern is that young people with little education and foundation skills will remain permanently outside the labour market. It is of socioeconomic benefit to ensure that young people find employment (Ødegaard et al. 2020). The challenges associated with failure to complete an education are particularly significant among young people who have chosen to take vocational subjects at upper secondary school, partly due to the lack of apprenticeships. One proposal that has been put forward repeatedly is establishing apprenticeships by statutory enactment. The main argument is that this will strengthen the rights of the individual and ensure an opportunity to complete an education programme or training once it has been started. However, this type of apprenticeship costs money and private businesses may find it intrusive. One of the reasons for the lack of apprenticeships is that the framework conditions and cooperation in connection with the job placement process are not considered to be good enough and that the companies report that the applicants are not adequately qualified (The Directorate of Education 2019). Other measures include many public undertakings requiring that companies have apprentices to be able to participate in competitive tendering. At the same time, it is not just a case of being offered an apprenticeship, the apprentice also needs to complete this apprenticeship. Pilot projects have shown that more people have the opportunity to complete their apprenticeship if they can spend more time and receive closer follow-up during the training (Ødegaard et al. 2020).

Ensuring the sustainability of the welfare state
One of the major political challenges in the next 15 years may be to balance the population's expectations of what the welfare state should provide against economically sustainable welfare policies. This depends on funding, but also on the trust the population has in the welfare schemes. As recipients of public benefits, many people will have expectations that the level of benefits will make it possible to maintain a high standard of living (Haugsgjerd and Segaard 2020).

As we have discussed in Chapter 7, several trends indicate that it will be more challenging to fund the welfare state in the future. There is reason to believe that tighter public budgets will make Norway more similar to other countries in the sense that we cannot «buy» ourselves out of social problems and settle political differences with the help of oil revenues. This will require stricter priorities as regards welfare state expenditure and/or increased taxes or duties and deductibles on the income side (Ødegaard et al. 2020).

The development of services and benefits has implications for the funding of the welfare state. Over the past few decades, costly expansions (e.g. in the family policy), reforms and restrictive measures (e.g., the pension reform, shortening of benefit periods for various benefits and activity requirements) have been intro-

duced (Ødegaard et al. 2020). In general, it seems that the reciprocity requirements for the recipients of benefits have gradually come to the fore (Kildal 2006). Important political issues are what requirements is it reasonable to set, what is practically feasible and how such requirements can be arranged so that the motivation for work is maintained, without the living conditions for those remaining outside the labour market deteriorating (Ødegaard et al. 2020).

These trends mean that politicians face the following choice of instruments in the future:

1. **Reduce welfare state expenditure** through fewer or lower benefits and/or through changes in the services provided. National Insurance benefits will be balanced against the funding of welfare services, such as education, health, old age welfare services and so on. Different emphasis may be considered here depending on the political majority, both in terms of which areas to prioritise and the extent to which the recipients of a service should contribute with more self-fund-

ing. Reducing the cost of old-age pensions through raising the retirement age may become a reality. Several countries have adopted a significant increase in the retirement age in the coming years (Pedersen 2019). In general, drastic cuts in benefits will only become likely if the Norwegian economy comes under such strong pressure that stricter priorities and clearer policy choices are necessary (more about this below). Another possibility is that the benefits are part-funded by other parties than the public sector. This may be done in the form of self-funding, the growth of insurance schemes or by requiring employers to be more responsible for the funding. We also envisage that some benefits disappear completely (Ødegaard et al. 2020).

2. **Increase welfare state revenues** through increased tax revenues and tax basis. Fiscal policy is an area where the political dividing lines are pronounced. An increased tax burden does not automatically mean more money for welfare benefits, as there will be many competing items of expend-

Figure 10.1. To what extent do you agree or disagree with each of the following claims? *A high tax level is necessary to maintain important public services.* The percentage that has responded strongly or partly agree. Representative population sample.
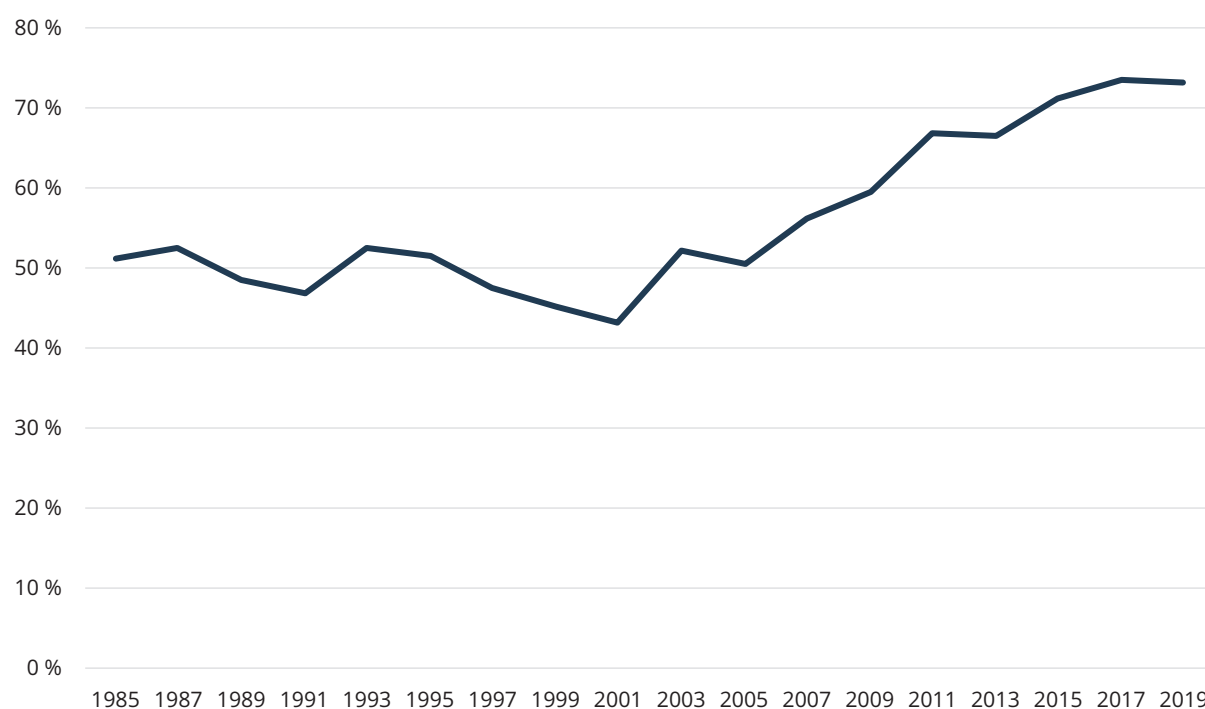
Source: Norsk Monitor (Ipsos).

iture (Ødegaard et al. 2020). At the same time, there are limits to how much the tax burden can be increased before it weakens the incentives to work and thereby reduces the tax bases (Meld St. 29 (2016–2017)) (white paper). The voters' willingness to accept a higher tax burden will depend on various factors. The population's willingness to pay tax has grown since the turn of the millennium, as shown in Figure 10.1. However, if the quality of the public services is perceived to be poor, or the welfare schemes are misused or go to people other than those in need, it will weaken trust in the welfare state (Kumlin and Rothstein 2005; Nannestad 2008) and thus also the desire to fund.

3. **Increase labour market participation** and thereby tax revenues. This means that the trend towards lower employment rates must be turned, especially in some parts of the workforce. There is a cross-party consensus to increase labour market participation. In general, there is also broad agreement that reducing wages in the lower part of the wage distribution is not an effective tool for increasing the employment of low-skilled groups. The goal is for the elderly to stay longer in employment, that fewer young people become part of the disability statistics, that sick people return to work faster, that fewer women work part-time and that more immigrants enter the labour market and remain there (Ødegaard et al. 2020). There may also be potential to increase labour market participation by getting young people into the labour market faster through shorter and more efficient study programmes and by increasing the requirements for a normal working week. All of this can create political strife concerning the policy instruments and political lines of conflict.

4. Reduce the welfare state's expenditure through the **rationalisation of the public sector.** The welfare state shall address distribution and efficiency considerations and for years, a growing state bureaucracy has been the subject of political debate. In recent times, this applies to the debureaucratisation and efficiency reform, the «ABE reform», with annual budget cuts for all government agencies and undertakings. Rationalisation due to technological developments will be an

increasingly important topic and is assumed to have significant potential, provided that the benefits are realised. There is a cross-party consensus that the technology will be used in case processing and the administration's communication with the users (Ødegaard et al. 2020).

Any financial shock will force tough priorities. These measures to ensure the sustainability of the welfare state will be even more intrusive in any economic shock scenario, for example, triggered by a sharp fall in oil prices in a situation where the public sector cannot expect the oil revenues to return to previous levels. This may impact the agendas and lines of conflict in Norwegian politics. With an oil price shock, the pressure to take larger structural measures will increase (Ødegaard et al. 2020).

In such a context, where prioritisation and distribution conflicts become tougher, discussions about the boundaries of universalism, who is the «worthy needy», deductibles, distribution of wage growth or wage reduction, as well the scope and distribution of the tax burdens, will quickly take new forms. A high level of unemployment, possibly combined with tax increases and cuts in benefits could trigger strikes, social unrest, and a greater degree of polarisation. In combination with increasing inequality, a growing perception that the distribution of burden is skewed, and that politicians are unable to come up with unifying solutions, such a development could weaken trust in the authorities and the politicians. If the oil price shock lasts for a long time, with persistent weak development in the economy and unresolved structural problems, it is not difficult to envisage outbreaks of more profound political crises. The politicians will then be confronted with conflicting considerations and difficult strategic choices (Ødegaard et al. 2020).

10.2 Political lines of conflict and dilemmas: universal or means-tested schemes and the impact of private solutions

Despite the various political challenges and changes, the Norwegian labour and welfare policy is likely to be characterised by stability. The Norwegian econ-

omy is sound and there is cross-party consensus on many of the fundamental features of this policy area. The party-political landscape has become somewhat more fragmented, with traditionally large parties becoming smaller, while smaller and newer parties have gained a foothold in politics. Nevertheless, various government alternatives will probably be based on blocks (government constellations), which are likely to neutralise the extremes. There is reason to expect continued broad support for knowledge-based policies, for example when it comes to questions about major reforms (Ødegaard et al. 2020).

Some persistent lines of conflict in politics are likely to prevail in the years ahead. Five dimensions of attitude among Norwegian voters seem to prevail: (1) Immigration, (2) growth/protection, (3) public/private (4) religious/secular and (5) centre/periphery. In addition to these, there are attitudes to globalisation and internationalisation. Which topics or issues become dominant in each election and which parties appear to have the strongest ownership of these, has proved to be important for the election result (Bergh and Aardal 2019 (ed.)).

Important issues in the last decade have been school and education policy, taxes, care of the elderly and health. Immigration has also become a contentious political issue. In the next 15 years, topics such as climate and inequality will probably form a larger part of the political agenda. Funding and organisation of the labour and welfare policy will continue to influence the debate. Political parties have different views on which instruments are best suited to increase the tax revenues and reduce spending, but politicians will probably have to combine the various instruments described in section 10.1. The Perspective Report from 2013, (Meld. St.12 (2012–2013)) (white paper) presented by the Stoltenberg Government and the Perspective Report from 2017 (Meld St. 29 (2016–2017)) (white paper) presented by the Solberg Government point to the same possible main steps: increased labour market participation, rationalisation of the public sector, increased co-funding and increased taxes (Ødegaard et al. 2020).

Within welfare policy, a distinction can be made between schemes designed to protect against the risk associated with certain life phases, such as illness and old age (life cycle risks), and schemes to protect against so-called labour market risks, such as job losses during economic downturns. These two types of schemes have different political conflict potential and divide the voters and the parties along a classic economic left/right axis (Haugsgjerd and Kumlin 2019). The election survey from 2013 showed that there is slightly less support for schemes to reduce labour market risks (such as unemployment benefits) than there is for schemes to reduce life cycle risks, such as old-age pension and sickness benefit (Bergh and Aardal 2019 (ed.)).

More discussions about the social security schemes are expected in the years to come. The Employment Committee (NOU 2019:7) was concerned about what can be done with the social security system, among other things, and proposed several changes to disability benefit and sickness benefit schemes, such as combining social security and work. The right-wing side of politics is often in favour of tightening sickness benefits, which the left-wing side will often oppose. The same dividing line applies to cuts in disability benefits, while greater agreement can be envisaged across the traditional blocks when it comes to the possibility to combine social security and work (Ødegaard et al. 2020).

Universalism vs. selectivity

The Nordic welfare model is often characterised as universal in the sense that the rights include the whole population, not just those who are particularly vulnerable or who have earned rights through labour market participation (Esping-Andersen and Korpi 1986). The term universalism is primarily used about welfare benefits, but, in reality, several services are universal, such as health and education (Ødegaard et al. 2020).

The Norwegian welfare state is not universal in the strictest sense, for example, many benefits are means-tested and based on financial criteria (NOU 2017:6). The reciprocity requirements for recipients of benefits have also gradually become more prominent (Leseth et al. 2020). This creates political strife, not least

because it is often associated with a debate about who are more or less «worthy» recipients of public benefits.

The benefits have consequences for the individual recipient. The criticism against an overly comprehensive welfare state with too generous benefits is often linked to a concern for so-called *clientification*. The argument is that if the schemes are too generous, it reduces both the will and ability for self-sufficiency and it can destroy the recipients' self-esteem (Kildal 2006).

The political strife in the future is likely to mainly be about the levels and limits of benefits. Various forms of means-testing and self-funding, more legislation of individual rights and earmarking, reciprocity requirements and part-time work in combination with benefits and cuts to the sickness benefit scheme are political issues that are likely to be important going forward. Increased means-testing and possibly local adaptations may be a possible direction. Political micro-management, with a greater degree of securing rights in selected areas or for individual groups, may be pushed to the fore in that politicians feel the need to «sort out» individual cases (Ødegaard et al. 2020). However, universal schemes are less resource-intensive in terms of administration. In addition, a key finding in the
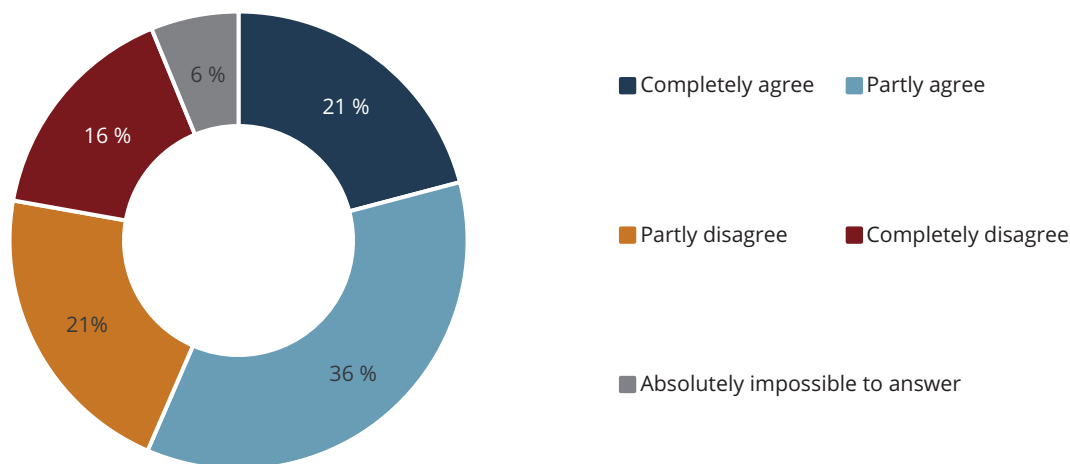
research literature is that experiences with universalist welfare institutions are based more on political trust than experiences with means-tested welfare institutions (see for example Rothstein and Uslaner 2005).

Public vs. private
A key line of conflict in the right/left-wing side of politics in the organisation of the labour and welfare policy is the relationship between the public and private solutions. According to the Government's Perspective Report from 2017 (Meld St. 29 (2016–2017)) (white paper), the division of responsibilities between the public and private sector must be continuously assessed.

There is a significant element of commercial and non-profit undertakings on the service side within health, childcare centres, care of the elderly and in the child welfare service. Competitive tendering of public services is a recurring theme in the political debate. There is often considerable disagreement about what is the most effective, least costly, provides the best quality and at the same time ensures decent wages and working conditions for the employees – and what should be given the strongest emphasis. The differences in this area are likely to intensify in the years to come, given the greater need for health and care services and potentially tighter economic frameworks

Figure 10.2. To what extent do you agree or disagree with each of the following claims? *If the future needs for welfare services, such as kindergartens and nursing homes are to be met, it will be necessary to purchase services from private companies in addition to public services.* Representative population sample, 2019.

Legend:
- Completely agree
- Partly agree
- Partly disagree
- Completely disagree
- Absolutely impossible to answer

Values shown: 21 %, 36 %, 21%, 16 %, 6 %

Source: Norsk Monitor (Ipsos).

(Ødegaard et al. 2020). This is also a relevant issue in NAV, where we have focused on providing more user follow-up in recent years. The same applies to IT development.

There is a trend in the population towards increasing scepticism to the privatisation of public services (VG 2020). At the same time, many people are positive about private welfare services as a supplement to public services, as shown in Figure 10.2.

Probable political issues in the years to come are the degree of competitive tendering of public services, the use of commercial or non-profit actors, what requirements will be set for private actors offering the services and who will have financial and organisational responsibility for increased restructuring and skills development needs in the workplace.

Whip vs. carrot
One of the most important challenges in the labour and welfare policy is to balance the desire for a high level of employment with the generosity of the social security system. Overall, this means a balance between a reasonable income distribution in the population and

stimulating labour force participation (Dølvik et al. 2014).

A key goal of most welfare reforms has been to increase labour force participation. The structure of the reforms has differed; some have focused on facilitation, some on being tougher on the people outside the labour market, while others have focused on financial incentives to stimulate increased labour force participation. A growing number of groups have been included in the activation policy (Dølvik et al. 2014).

The relationship between a «whip» and a «carrot» to boost employment will also be a key political issue in the years to come. Much of this concerns the balance between incentives and distribution. There will probably be political disagreement about how high benefits can be without them leading to too many negative work incentives. The same applies to the scope of the activity requirements and measures for those excluded from the labour market (Ødegaard et al. 2020).

Most of the population wants neither a restriction nor further developments of social security schemes, as

Figure 10.3. *Many people believe that there are more than enough social security benefits and that we should seek to limit these in the future, while others argue that we should maintain our social security benefits and, if necessary, expand them further. What is your opinion?* Representative population sample.
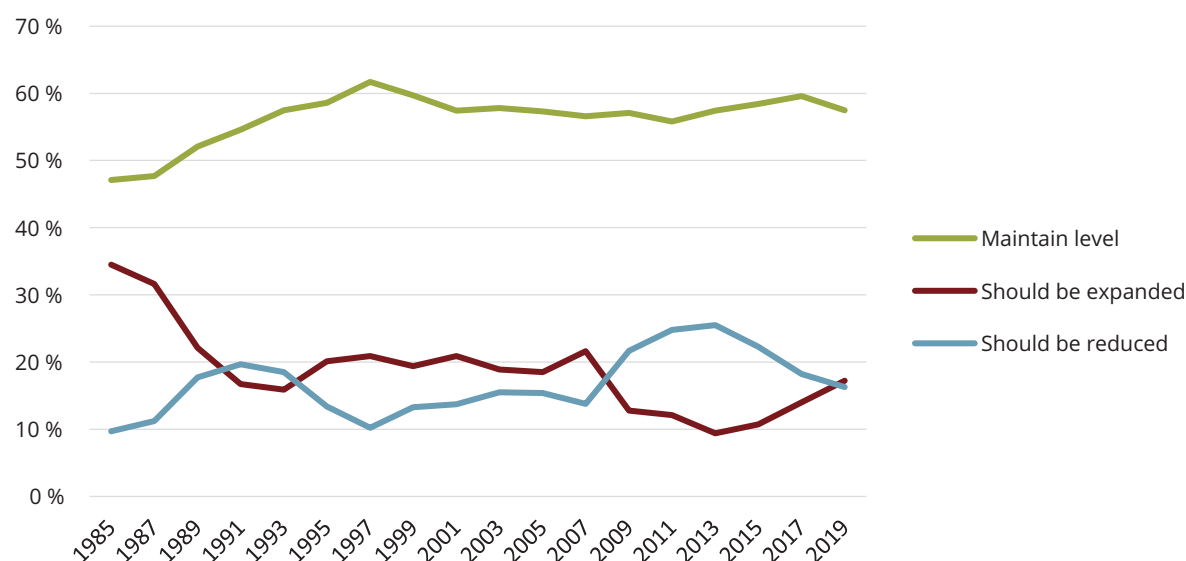
Source: Norsk Monitor (Ipsos).

shown in Figure 10.3.[18] If this attitude persists over the next 15 years, it speaks in favour of a relatively stable policy with cautious reforms, rather than major intervention.

There is also a discussion about how to «influence» the labour market and whether inclusion measures can weaken existing wage and working conditions. If wages and employment security are weakened to include more people in the labour market, it could lead to many people combining low-paid work in the service sectors and various targeted public benefits (so-called *working poor*). One alternative is more support and assistance to the companies from the public sector, such as NAV, so that it is easier to employ people from vulnerable groups. Another alternative is to give up the ambition to have «everyone» in the mainstream labour market and establish a larger sheltered sector. In any case, this discussion will probably become more relevant as the elder boom leads to increased costs and fewer job opportunities (Ødegaard et al. 2020).

Other lines of conflict: climate, immigration, centralisation, and globalisation

There are several important policy areas and lines of conflict that will affect the labour and welfare policy in the years ahead and will be central to societal development.

Growth vs. protection

First, growth vs. protection, i.e., the conflict between environmental protection and the development of industry and jobs, will be a central line of conflict going forward. In recent times, this line of conflict has largely been related to climate changes, but it is not new. Establishing new jobs and phasing out old ones is also not a new phenomenon.

A green transition will require major restructuring. The pace of the restructuring, the instruments used and the division of responsibility between the business sector and the authorities will be important. If the

employees find that the restructuring is progressing too quickly, this will increase the level of conflict in society and unrest in the workplace. It will be decisive for the politicians to adopt measures that can facilitate the restructuring (Ødegaard et al. 2020).

At the same time, opportunities for Norwegian industry and commerce in a world of green restructuring, especially in fish farming and aquaculture, the maritime industry, renewable energy production and technological development are pointed out (Vennemo et al. 2016; Norwegian Industry 2016; SINTEF 2019). Here, Norway can play on its natural resources and knowledge transfer from petroleum to green products and services, among other things. It is too early to say whether the net effects of the green transition will be positive or negative for the Norwegian economy and employment. However, there is no doubt that this will be a key area in the years ahead.

Immigration and integration

Immigration and integration have become one of the most important political issues over the last decades. Immigration policy has defined a new line of conflict in Norwegian politics, has contributed to significant voter migration and has lifted the Progress Party to become a medium-sized party. While in recent decades, Norwegians have moved gradually in a more immigration-positive direction (Jenssen and Ivarsflaten 2019).

The debate is often about the extent of immigration, integration measures and the requirements to be set in different areas. It is important to distinguish between different types of immigration. Debates about labour migration tend to have a different form than the debates about refugees and asylum seekers, and different types of immigration also have different consequences for the workplace. Given the inequality that exists in employment between different categories of immigrants, a significant influx of refugees and family immigrants will represent different challenges to what challenges migrant workers will represent (Ødegaard et al. 2020). See also Chapter 4.2.

It is highly uncertain how immigration and emigration will develop in the future. Abrupt changes can create

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[18] The question does not specify whether there are more schemes and/or more favourable schemes, so this must be interpreted more generally.

a situation where the authorities and NAV must again be prepared to take care of more new arrivals[19].

There are several political paths both in connection with labour migration, reception of refugees and integration in education and employment. There is reason to believe that the immigration practice will be relatively restrictive. At the crossroad between the immigration and integration policy and the labour and welfare policy, an increasing number of requirements have been introduced for immigrants in recent years before they are eligible for receiving benefits (Djuve and Kavli 2019), and the reciprocity requirements for the recipients of benefits have gradually become more prominent (Kildal 2006). This may require an additional effort from NAV in the years ahead and place greater demands on good coordination between NAV, the immigration authorities, employers, educational institutions, and other parties concerned.

Centre vs. periphery

As stated above, the centre vs. the periphery, i.e., the contrasts of interest and sociocultural differences between city and country, forms an important line of conflict in Norwegian politics (Bergh and Aardal 2019 (ed.)). With demographic trends such as centralisation and an old age boom that affects the rural areas the hardest, in addition to constant political debate about municipal mergers, there are strong indications that this will be a key line of conflict in the years to come. Labour shortages, and thus potentially poorer services may be the consequence in many outlying municipalities (See Chapter 4.3). This is an important part of the debate about basic welfare services connected to regional policy. In short, the debate is about how far the citizens must travel to access good services. The development of fewer and larger NAV offices limits physical availability. An ageing population could lead to a high demand for health services and require difficult priorities (Ødegaard et al. 2020).

On the other hand, technological developments mean that geographical distances become less important. Digital services are available to people regardless of

their geographical location. For example, this applies to educational services, as well as services provided by NAV.

Global vs. national

A final line of conflict is the attitude to international cooperation and the tension between national and international orientation. As a small and transparent economy, Norway has benefited from the internationalisation that has taken place in the last few decades. The global economy has been characterised by uncertainty and trade tensions for several years before the coronavirus pandemic, and if the tendencies towards rising protectionism continue, this will continue to have a dampening effect on incentives in small, transparent economies such as the Norwegian economy. For example, this can lead to the loss of export jobs and a shortage of labour in other industries. The Norwegian labour market depends on developments in the world at large, and a further polarisation among the major players in the global market (e.g. the US and China) could have unfortunate consequences for Norway's economy (Ødegaard et al. 2020).

Relations with Europe will probably be more important in the years to come with misinterpretation of the EEA rules still fresh in the memory. Supranational regulations that accompany the EEA Agreement mean in some cases that Norway must comply with legislation that Norwegian politicians do not support. Such cases are suitable for increasing the political unrest concerning the agreement and in the long term it may contribute to greater uncertainty about Norway's connection with the EU. The EU is our most important trading partner and accounts for the majority of foreign investments in Norway (Ødegaard et al. 2020).

10.3 A high level of trust, but some warning signs

The Norwegian labour and welfare model assumes that Norwegian citizens trust the politicians, institutions and the parties in the labour market (Ødegaard et al. 2020), while institutions and schemes are organised so that they promote and maintain trust. Norwegians have a persistently high level of trust in the elec-

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19 See for example Cicero (2017).

toral system[20], national democracy, institutions, political parties and local democracy (Haugsgjerd and Segaard 2020). However, trust in the local democracy is declining in certain groups, such as those with little education and people living on social security benefits (Segaard 2020 (ed.)).

Internationally, decreasing political trust, increasing polarisation and the resurgence of populism have been much-discussed phenomena in recent years. This has not least attracted attention in connection with «Brexit» and Donald Trump's presidency (Ødegaard et al. 2020). Populism often plays on an alleged contrast between «the pure people» and the «corrupt elite» (Mudde 2004).

Populist views are currently a limiting factor in a Norwegian context, but Norway is still a part of the international trend. It has become more common in the political debate to play on the opposite poles of people and the elite, and a stronger definition of in- and out-groups is becoming clearer. This applies not least in the area of immigration. The differences between the centre and the periphery have occasionally also been communicated in a more populist form (Ødegaard et al. 2020). The conflict between the centre and the periphery can be intensified because there is a coincidence between this conflict and attitudes towards globalisation and immigration (Bergh and Aardal 2019 (ed.)). Such tendencies can reinforce lines of conflict and create increased polarisation, not least as a result of greater inequality, urbanisation and immigration (Zynk 2018). A growing perception that politicians and the welfare state do not take enough care of vulnerable groups, or that they do not «care» will reinforce the differences (Ødegaard et al. 2020).

The media can contribute to such reinforcement. Individual cases and personal focus have played a greater role (See for example Waldahl 1999; Aardal and Van Wijnen 2005). This can lead to politicians becoming even more preoccupied with current issues and more cautious about arguing for comprehensive solutions. The important characteristics of a polarised society are a reduced ability to find constructive solutions and an increased tendency to pit groups and cases against each other, which contributes to less willingness to cooperate. Combined with diatribes and comments on social media, it can lead to the dissenters experiencing that they are living in separate realities (Ødegaard et al. 2020). We see this to some extent in social media, where so-called «echo chambers» can easily emerge, each with its own understanding of reality. The spread of fake news and disinformation contributes to this.

Norway is equipped to prevent polarisation and diminished trust

However, such «echo chambers» are not particularly prevalent in a Norwegian context (Aalberg et al. 2019). In general, several things make Norway well equipped to avoid strong elements of populism and polarisation. The most important reasons for polarisation trends are found in the labour market, when people become unemployed, for example, as a result of jobs disappearing due to globalisation or the introduction of new technology (Barth 2019). To weigh up for this, we have strong trade unions and employer organisations that help to narrow the wage gap, as well as welfare schemes that reduce inequality. This helps to reduce polarisation and uncertainty more than in countries that have poorer welfare schemes.[21] In addition, the multi-party system helps action groups and special interest groups to use established political channels more often in their quest for influence (a recent example is the People's Movement No to more tolls (FNB)) (Ødegaard et al. 2020).

The coronavirus crisis has so far shown that trust in the authorities and politicians is strong and that political compromise and cooperation are the rule. However, it is not a matter of course that this will continue. A high level of unemployment, greater economic inequality and a sharper tone in the public debate could contribute to increased polarisation and diminished trust (Ødegaard et al. 2020). According to *«Scenarios for the public sector 2040»* (The Ministry of Local Government and Modernisation 2019b), prepared in connection with a white paper on innovation in the

[20] https://www.samfunnsforskning.no/aktuelt/nyheter/2020/tre-ting-forskerne-vare-fortalte-kronprinsen.html

[21] https://forskning.no/samfunnsvitenskap/er-norge-i-ferd-med-a-bli-et-polarisert-land/1635506

public sector, a diminished trust may be linked to a trend towards increased protectionism, greater economic differences, increased political polarisation, greater distance between politicians and «most people», a greater fear of conspiracy and «echo chambers» and poor conditions for privacy and responsible data use. However, a continued high level of trust is likely if the trend goes towards an emphasis on global agreements, continued small economic differences, a high level of trust in the media, little distance to politicians and safeguarding the citizens' digital rights and privacy. The development is likely to pull in both directions, but there is reason to believe that a high level of trust will still be the main rule.

10.4 Political opportunities: rule changes that support skills development, coordination and digitisation

NAV and other public authorities will be expected to take the necessary steps to meet the challenges and changes of the future. A knowledgeable population will have increased expectations for the quality of NAV's services. Experiencing inefficiency and the perception of misuse of welfare schemes have been described as the weakest elements in the population's support for the welfare state (Haugsgjerd and Kumlin 2019).

This requires taking targeted measures to ensure the necessary restructuring and rise in competence, increased cooperation, and coordination within and between government departments and that new technology is adopted and developed through digitisation, automation, and data sharing. Digitisation often requires simplification and adaptation of the regulations, which cannot always be combined with the desire for greater flexibility, more targeted benefits and means-testing.

Measures for restructuring and skills development in the workplace

NAV is expected to be a provider of services that facilitate restructuring and skills development to promote occupational and geographical mobility. Employers are responsible for ensuring competence

that matches the needs of the company, while employees have a responsibility to build on their skills. At the same time, it is in the interest of the community to ensure opportunities for continuing and further education. Young people who have not completed an upper secondary education are another example of a group which needs adapted and more comprehensive labour market schemes than those targeting other groups that, for example, have been affected by a specific cyclical downturn (Ødegaard et al. 2020).

Considering the faster pace of restructuring, increased government contributions may be more relevant. As a rule, it is currently not possible to combine unemployment benefit with education or training.[22] The reason for this is that people who are pursuing an education cannot be considered genuine job seekers and as a rule, that education should be financed with student loans. However, in recent years, several public committees have pointed out that pursuing education may be a suitable labour market policy instrument. If education meets a need in the labour market and thus contributes to finding employment, the combination of unemployment benefit and education may be an appropriate measure (NOU 2019:12).

This has become relevant in connection with the coronavirus situation, as a temporary amendment was made to the regulations, which makes it possible to take credits while receiving unemployment benefit. The challenge is to find solutions which do not «lock the employee in a long study programme that he or she must either interrupt or that prevents the laid-off person from returning to work».[23] Despite such challenges, combinations of social security schemes and skills development are likely policies in the years to come.

Increased interaction and coordination

There are several political initiatives related to cooperation with public undertakings. The aim is to create improved and coherent services for users while allow-

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[22] Changed regulations in connection with the coronavirus pandemic. https://www.nav.no/arbeid/no/student/
[23] https://www.aftenposten.no/norge/politikk/i/Jo56y6/krever-adgang-til-kompetanseheving-ogsaa-for-arbeidsledige-akademikere

ing the public sector to operate as cost-effectively as possible (Ødegaard et al. 2020).

Many barriers must be overcome to facilitate seamless interaction. More cooperation and coordination also affect the debate on the boundary between public services and private or non-profit actors (Ødegaard et al. 2020). Regulatory amendments and the dismantling of organisational barriers are necessary to meet the expectations of increased cooperation. This is reflected in the proposed new Public Administration Act, where cooperation between the various administrative bodies is one of several purposes of the Act (NOU 2019:5).

There are several examples of such cooperation where NAV is involved, such as pilot schemes with NAV counsellors in upper secondary schools, cooperation with the health sector (IPS), the labour market crime centres and the Norwegian Inter-Agency Intelligence Centre. There is currently little to suggest that the new Public Administration Act itself will lead to more interaction. This will depend on the political will and the supply of resources, as well as employees seeing the benefit of cooperation. However, the proposal for easing the duty of confidentiality between the various administrative bodies, which is also a part of the Bill, will make interaction easier (Ødegaard et al. 2020). According to the Committee, this could allow for a rationalisation that can provide significant savings (NOU 2019:5).

In addition, there is interaction with actors outside the public sector, such as NGOs and the private sector. These actors have their own routines and regulations to follow. Stronger local cooperation between upper secondary schools, apprenticeship companies and NAV can probably contribute to more young people gaining access to apprenticeships and the possibility to complete their upper secondary education with a trade certificate. In other industries, there is great demand for apprentices and far better opportunities for students who have a weak starting point from school. NAV can play a more important role as an adviser and counsellor based on its knowledge of local labour markets (Ødegaard et al. 2020).

Digitalisation and simplification of the regulations

Increased interaction goes hand in hand with digitalisation and adaptation of the regulations. The overall objective of the Government's digitalisation strategy is one public digital sector. This means preventing people from being shuttled between different public actors and that the services appear cohesive to the users (The Ministry of Local Government and Modernisation 2019a).

An important objective of the digitalisation policy is to get the systems to communicate so that people do not need to submit information to the public authorities more than once. More digital services can allow resources to be directed to services that cannot be automated, such as, increased individual follow-up of users who need this (NOU 2016:3). The Government develops strategies and policies that provide ambitions for change that it will take time to realise. Towards 2035, we will see effects of policies expressed in, for example, The Digitalisation Strategy for the Public Sector, National Strategy for Artificial Intelligence, Norway's Action Plan 4 – Open Government Partnership, National Strategy for the Use of Cloud Services, National Strategy for Information Security, the White Paper on Innovation in the Public Sector (St. meld. 29 2019–2020), forthcoming white papers such as the White Paper on Data-Driven Economy and Innovation, and also participation in EU programmes such as the Digital Europe Program.

Simplifications and adaptations to the regulations are often required to facilitate digitalisation (Ødegaard et al. 2020). For example, many benefits have complicated the regulations that are both demanding for NAV to administer and for the users to understand, and which are not suitable for digitalisation and automation. Increased cooperation and exchange of information between public actors requires political clarification about the scope available to our digital services, seen against privacy concerns.

On the other hand, there are often political desires for greater flexibility, more targeted benefits («tailoring») and greater elements of means-testing. This often requires more detailed regulations, which in turn com-

plicates digitalisation and rationalisation. This is to a certain extent in contrast to simplification and universal changes, which was discussed in Chapter 10.2. Increased digitalisation is likely to require that the regulations and communication with the users must be simplified. Simpler regulations can provide better public services and will be easier for the users of the services to understand. At the same time, regulatory simplifications will sometimes have negative consequences for some, and therefore, in some cases, will face resistance. A move towards more means-testing and exercise of discretion can create a greater debate about the justification and quality of the schemes, as well as how NAV carries out its mandate (Ødegaard et al. 2020).

The focus on clear language, the establishment of the Rule Council in 2016 and the Government's strategy for small and medium-sized companies (The Ministries 2019), are among recent simplification measures and strategies. Common to these measures is that it is the needs of small, private actors that are in focus. Furthermore, there is much to suggest that it is easier to remove laws and regulations that are not used, than to simplify the language of legal texts (Ødegaard et al. 2020).

The National Insurance Act has so far not been subject to simplification, but the new Public Administration Act is expected to lead to somewhat simpler regulations that both benefit the citizens and the administrative bodies. The Public Administration Act Committee emphasised that the Bill should be tech-

nology-neutral and facilitate further digitalisation in the administration (NOU 2019: 5). The need to make amendments to the regulations is also highlighted in the Government's digitalisation strategy (Meld St. 27 (2015–2016))(white paper). The white paper also emphasises the need for rule changes to the regulations because of automation, something which assumes that rules can be expressed through program codes. This trend is primarily driven by digital development and the opportunities it provides and is likely to continue regardless of the political majority (Ødegaard et al. 2020).

10.5 Reflection questions

- How can we ensure sustainable welfare schemes?
- How does NAV ensure restructuring and a competence boost to meet the technological developments and the green transition?
- What measures are appropriate to prevent immigrants and young people from dropping out of working life?
- Should tougher requirements be made for recipients of benefits, such as an activity obligation?
- Should more benefits be means-tested rather than being universal?
- How do we ensure the necessary regulatory development and simplification?
- Which political lines of conflict will become dominant in the years ahead?
- Is «the Norwegian model» immune to less trust and polarisation?

11. WHAT DO THE EMPLOYEES AND USERS THINK?

By: Tor Erik Nyberg and Sverre Friis-Petersen

11.1 About the survey

In connection with the update of the Horizon Scan, a questionnaire survey was sent to all NAV employees in September 2020. The survey deals with how NAV employees envisage future challenges for NAV in general and the consequences these will have for their work tasks. To be able to identify changes in the potential challenges, the survey contained the same questions as in 2018. An almost identical survey was also sent to user representatives in NAV's central and local user committees.

The answers to the survey are descriptive of what employees in different parts of NAV envisage about the challenges of the future, but the survey says little about why the employees have responded the way they have done. Nevertheless, this is an important source of information both in terms of the weighting of topics in the Horizon Scan and the assessment of future strategies and measures.

The survey was sent by email to 20,906 employees in NAV, including municipal employees and employees who are on leave, vacation, and the like. We received

4,487 full responses, which gives a response rate of 21. The corresponding response rate in 2018 was 25. The difference is probably because the 2020 survey was collected in fewer days. The highest response rate was among employees in NAV County, while the lower percentage response rate was among employees in NAV offices (Figure 11.1). We have corrected for biases in the material. Employees at NAV offices will nevertheless be dominant in the analysis, as they account for almost half of those who responded.

Of the background variables, the unit to which the employee belonged affected the responses the most. Whether the respondent was a manager, or an employee also influenced the knowledge about and view of the usefulness of the Horizon Scan.

The survey of user representatives was sent to around 700 people, and we received 222 replies to the questions about the Horizon Scan, which is a response rate of 32 per cent. The survey also included other topics. Several reminders were sent.

Figure 11.1. Response percentage, by result range.
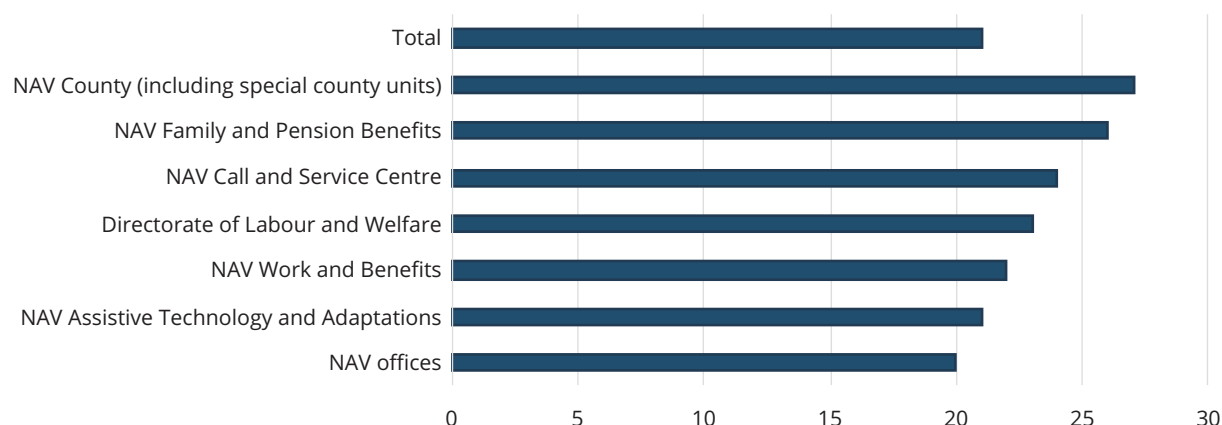
Source: **NAV**

Figure 11.2. How familiar are you with NAV's Horizon Scan, sorted by branches within NAV? Average of a scale of 1–6.
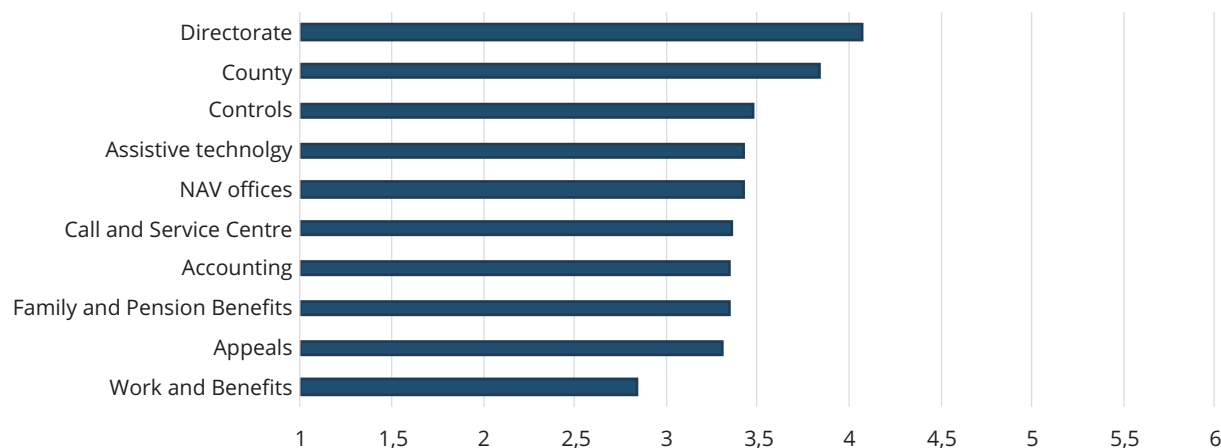
Source: **NAV**

11.2 The Horizon Scan contributes to the direction and prioritisation in NAV

One of the purposes of the Horizon Scan is to be a part of NAV's internal labour and planning processes. Therefore, we asked employees to what extent they are familiar with the Horizon Scan, what they think of it and whether it affects NAV's priorities. The respondents responded using a six-point scale, from very little or not at all (1) to very well (6).

Overall, 53 per cent of the employees responded positively (4–6 on the scale) in terms of their knowledge of the Horizon Scan. 7 per cent said that they know the Horizon Scan well. The proportion that responded positively is slightly higher than in 2018 (44 per cent), which indicates that more people in the organisation are familiar with the Horizon Scan. Most people in the Directorate and the counties are familiar with the Scan, while employees in NAV Work and Benefits are least familiar with the Scan (Figure 12.2). Knowledge of the Horizon Scan has increased significantly in most parts of the organisation, compared with 2018. This applies to the Directorate, NAV Office, NAV Assistive Technology and Adaptations and NAV Call and Service Centre.

Managers are most familiar with the Scan (87 per cent), followed by employee representatives (67 per cent) and employees (47 per cent). We interpret this

as meaning that the Scan is used mostly for planning and strategy purposes, rather than in the day-to-day work of the organisation. The relatively low proportion of the employees who are familiar with the Scan may indicate the need for better dissemination of the Scan and that the Scan must be made more relevant to a larger proportion of the employees. At the same time, the Horizon Scan can be said to be more or almost as well-known as other publications. About the same proportion, 51 per cent, responded positively to knowing about the NAV magazine Labour and Welfare, while 62 per cent responded that they know the NAV magazine MEMU well.

To compare these three publications with each other, we looked at how they contributed to the extent employees stated that they were up to date on research and analyses concerning their work tasks (in a multiple regression model, not presented here).[24] Among the publications, knowledge of the Horizon Scan has the strongest connection with how up to date the employees think they are. Labour and welfare also has a positive connection. However, knowledge of MEMU seems to have little connection. We must be

[24] The explained variance in the model (R^2) is 26 per cent, which indicates that these publications, not entirely surprisingly, do not cover the wealth of knowledge of those who believe they are up to date on research and analyses.

careful not to draw too strong conclusions from such a model. However, it seems that the Horizon Scan contributes significantly to the employees considering themselves to be up to date in their field.

When asked about how useful the Horizon Scan is for the employees' workplace, a relatively high proportion at 22 per cent responded, «Don't know». Apart from these, the proportion that indicated 4–6 on the scale is 58 per cent, which is slightly higher than in 2018 when the proportion was 43 per cent. Thus, the Horizon Scan is perceived as being more useful to NAV in 2020 than in 2018. In general, it is perceived to be the most useful to managers, with 81 per cent, which is slightly higher than in 2018.

We asked the respondents who replied positively to the question about whether the Horizon Scan is useful about how it is useful in their work. It turns out that it is part of many different contexts. Many people responded that it generally provides direction for planning and prioritisation and can point to developments in future case volumes and internal competence needs. Many people also responded that it is a useful document to be able to think on a level above everyday details when trying to look ahead. Although the NAV offices are less familiar with the Horizon Scan than elsewhere, it also seems that many counsellors use the Scan in their follow-up of users, including advice on employment schemes, education, and career choices.

When asked about whether the Horizon Scan affects NAV's priorities, the «don't know» group was even larger, at 32 per cent. The proportion that responded 4–6 on the scale is 49 per cent, around the same as in 2018. Among managers, the proportion is 73 per cent.

The proportion of people who find the Horizon Scan useful is thus significantly higher than the proportion that is familiar with the Scan and the proportion who thinks it affects NAV's priorities. The Horizon Scan is more useful despite not everyone being familiar with it. One explanation may be that the internal division of labour means that not everyone is familiar with the same sources of knowledge, but that several

people know that the Horizon Scan is used in their colleagues' work.

Despite these nuances, there is a strong correlation between knowledge of the Scan, perceived usefulness, and its importance for NAV's prioritisation. Therefore, it will probably be of significance for the usefulness of the Scan and priorities that many employees are familiar with its contents so that it can be used in the relevant planning and strategy work as needed, rather than everyone having a detailed knowledge of its contents.
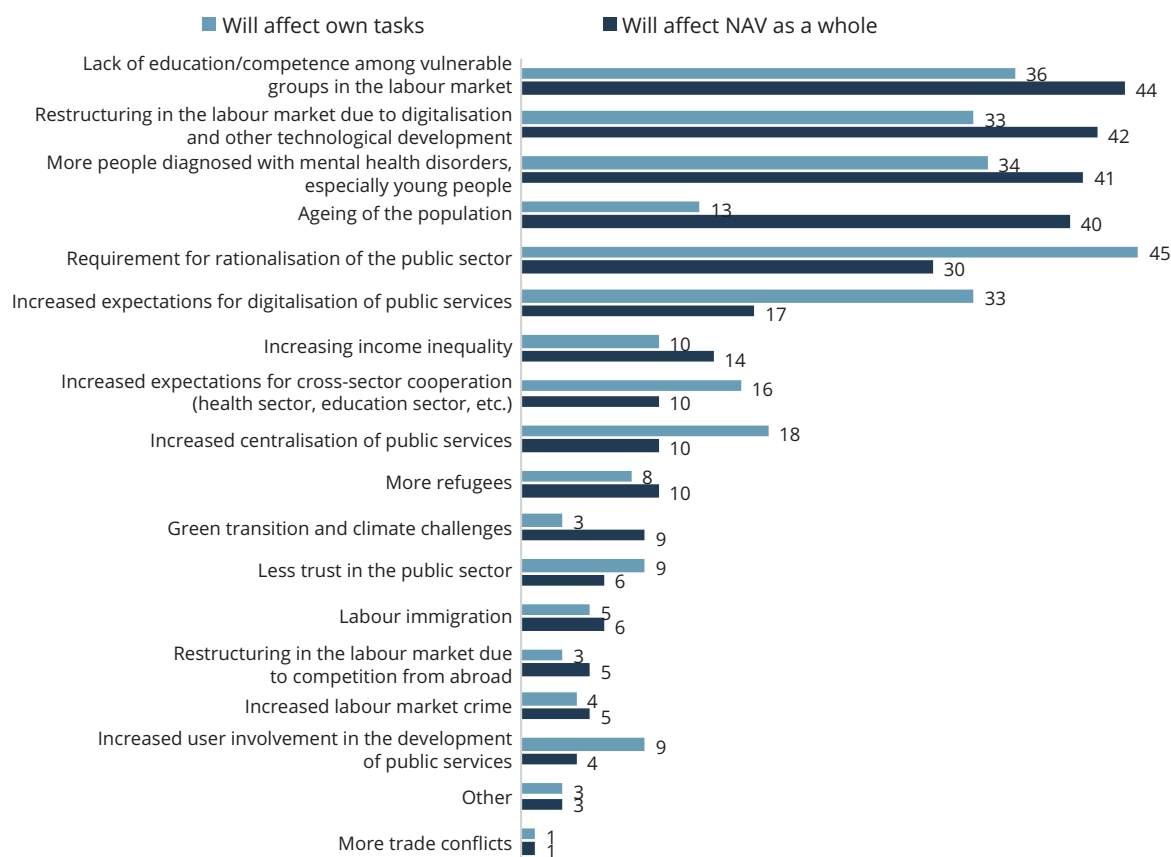
It seems that employees became familiar with the Horizon Scan in different ways. Twenty-six per cent found out about the Scan by reading a news story on NAV's intranet site or at nav.no, while 22 per cent found out about the Scan when it was presented at a meeting. Sixteen per cent say they have read all or parts of the Scan. Nine per cent say that they have read a Powerpoint presentation and that it has been a topic of conversation among colleagues. On average, employees have become familiar with the Scan from four different sources. The sources that have the greatest influence on whether an employee thinks that he or she is familiar with the Scan is whether he or she has read all or parts of the Scan or have had it presented in a lecture or a meeting[25].

11.3 Restructuring and lack of education among vulnerable groups will affect NAV the most

In the survey, the employees and user representatives were asked to choose up to three societal trends that they believe are important for NAV as a whole, as well as for the individual tasks of the employees. To point out whether these trends have become stronger or weaker in recent years, we chose to ask the same questions as in 2018. Alternatively, we could have added health and pandemics as a separate societal trend considering the current situation. Instead, we choose to ask an explicit question about how long the respondents thought the coronavirus situation would

[25] According to a multiple regression with knowledge as a dependent variable and the sources as independent variables.

Figure 11.3. Which of the following possible societal trends do you think will affect NAV as a whole and your work tasks the most over the next decade? Choose up to 3 alternatives. Response distribution as a percentage.

■ Will affect own tasks　　　■ Will affect NAV as a whole

|	Will affect own tasks	Will affect NAV as a whole
Lack of education/competence among vulnerable groups in the labour market	36	44
Restructuring in the labour market due to digitalisation and other technological development	33	42
More people diagnosed with mental health disorders, especially young people	34	41
Ageing of the population	13	40
Requirement for rationalisation of the public sector	45	30
Increased expectations for digitalisation of public services	33	17
Increasing income inequality	10	14
Increased expectations for cross-sector cooperation (health sector, education sector, etc.)	16	10
Increased centralisation of public services	18	10
More refugees	8	10
Green transition and climate challenges	3	9
Less trust in the public sector	9	6
Labour immigration	5	6
Restructuring in the labour market due to competition from abroad	3	5
Increased labour market crime	4	5
Increased user involvement in the development of public services	9	4
Other	3	3
More trade conflicts	1	1

Source: **NAV**

affect NAV. Around 79 per cent of the employees and user representatives responded that it would affect NAV significantly until 2021–2023 – i.e. a shorter period than for the Horizon Scan. When we asked for examples of how the coronavirus situation affects NAV, many people responded that it would affect unemployment, with implications for work-oriented follow-up and case processing for NAV. Many people state that this will affect vulnerable users the most. Many people also said that the situation escalates the digitalisation of the public sector and that NAV will meet its users in a new way as well as working differently internally.

Four trends, in particular, stand out in that a large proportion of the employees and user representatives point to them as future challenges for NAV as a whole:

(1) lack of education/competence among vulnerable groups, (2) restructuring in the labour market due to digitalisation and technological development, (3) more people diagnosed with mental health disorders (especially young people) and (4) an ageing population (Figure 11.3, see also Figure 11.6 for user representatives specifically). Except for an ageing population, we find these trends again among the trends the employees believe will have the greatest impact on their work tasks. In addition, employees envisage that rationalisation and digitalisation of the public sector will greatly affect their work tasks.

The four above-mentioned trends will have a different impact depending on where in NAV the respondents work. «Lack of education/skills among vulnerable groups» is by far the most important among NAV

Figure 11.4. The change in some societal trends affecting NAV since 2018. Percentage points, with 95 per cent confidence interval.
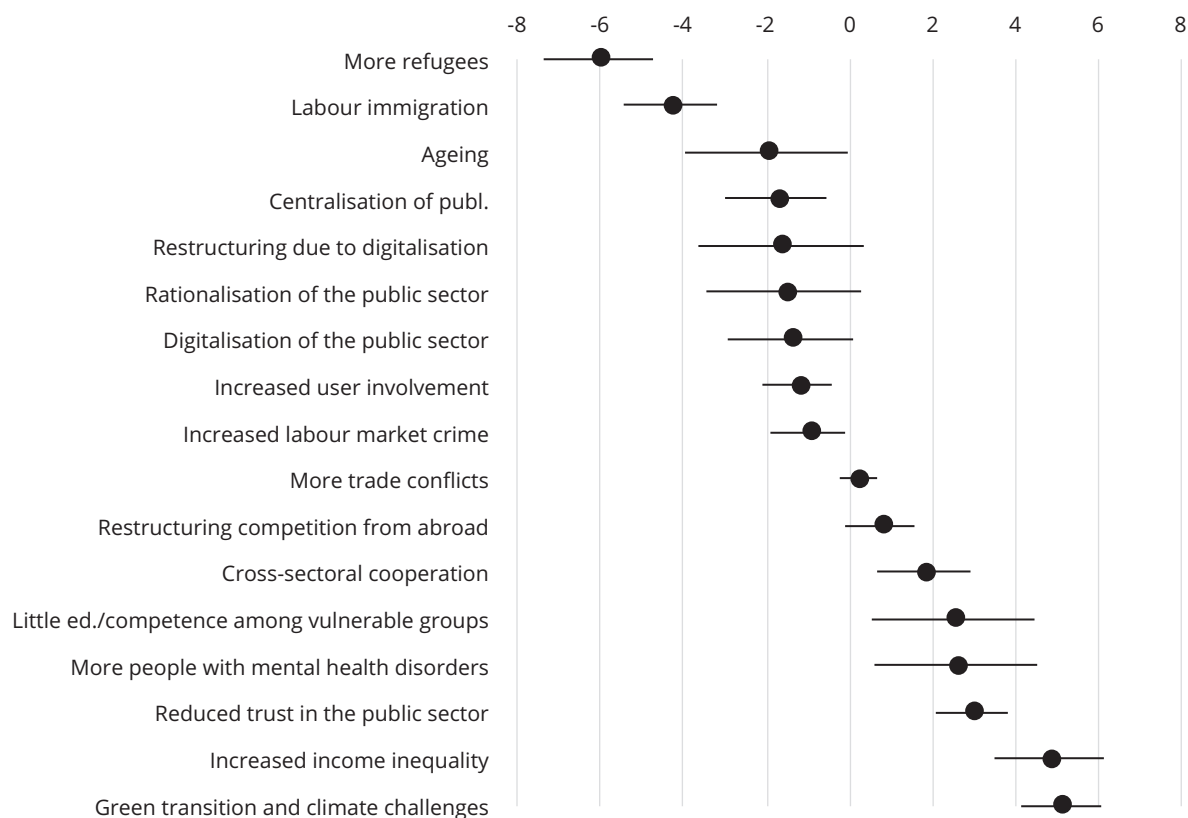
Source: **NAV**

County and NAV offices, i.e., among employees who work directly with counselling users toward employment. The same applies in part to «more people diagnosed with mental health disorders», but also NAV Appeals has emphasised this. When it comes to «Ageing», employees at the Assistive Technology Centres indicate that this is an important trend – not surprisingly considering that this will have a direct impact on their field.

Some of the societal trends affecting NAV have changed significantly compared with 2018 (Figure 11.4).[26] The most amplified trends are the «Green Transition», «Higher income inequality» and «More people diagnosed with mental health disorders». The trends that have been weakened are «More refugees»

and «Labour migration». There is no reason to assert that the trends which overlap with the zero point in the figure have changed since the last time.

Some of the trends that affect own work tasks have also changed since 2018 (Figure 11.5). Some of these changes are almost the same as we saw for NAV as a whole. However, we see that employees are more likely than before to highlight «Reduced trust in the public sector», while the emphasis placed on «Rationalisation of the public sector», «Centralisation of the public sector» and «Restructuring due to digitalisation» has been reduced. The reduction in the latter may be because, in recent years, many NAV employees have been involved in a major restructuring that made this particularly relevant in 2018. At the same time, it must be mentioned that these are still considered important trends, even if they are somewhat reduced.

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26 Here, we are only looking at the change among the employees.

Figure 11.5. Change in societal trends affecting own work tasks since 2018. Percentage points, with 95 per cent confidence interval.
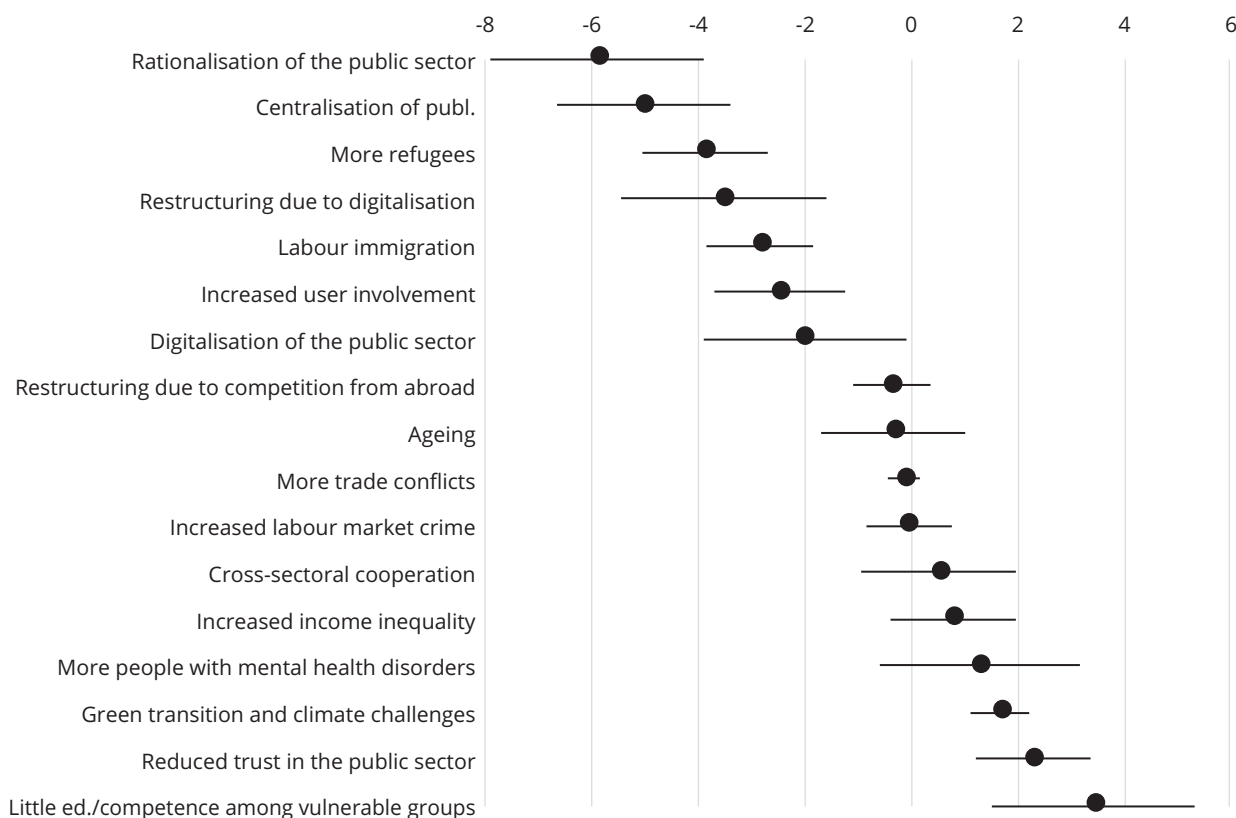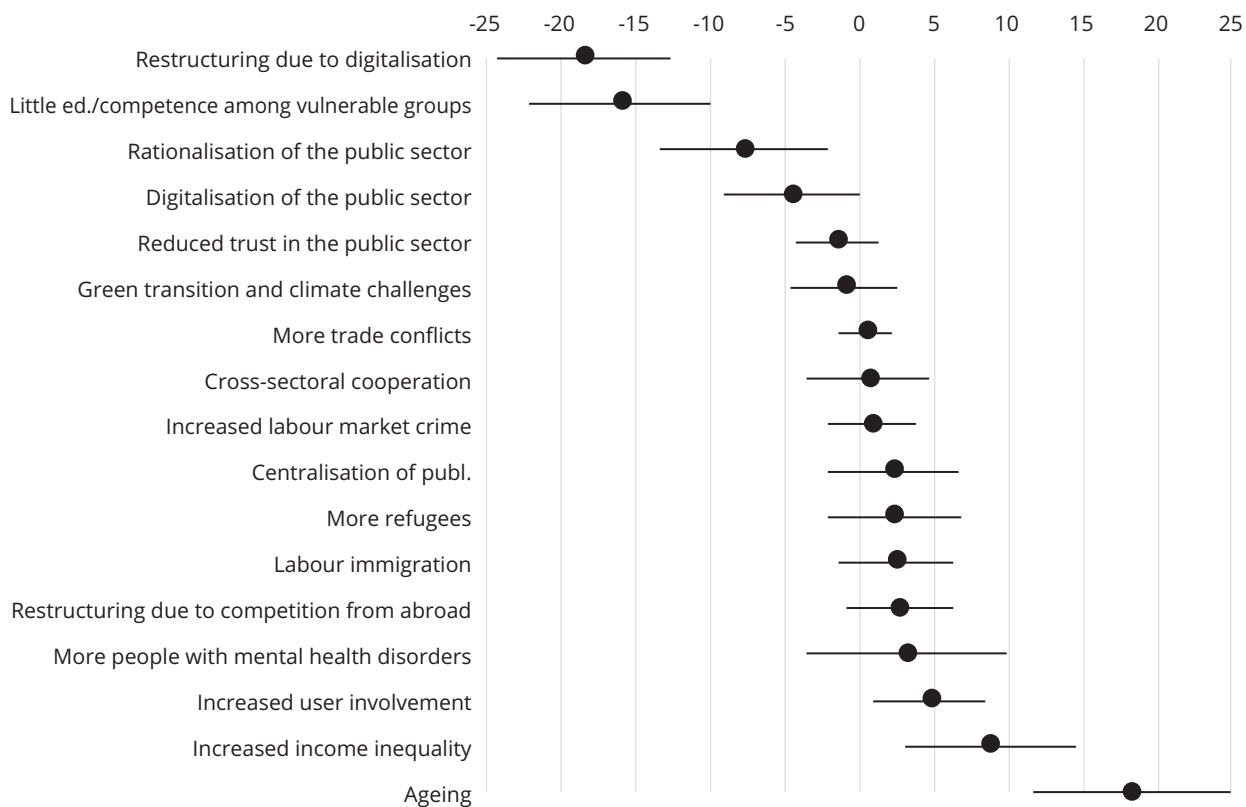

Source: **NAV**

Finally, we will look at the difference between what the employees and the user representatives see as the most important societal trends for NAV (Figure 11.6). As mentioned, employees and users are largely concerned with the same main trends: lack of education/skills among vulnerable groups, restructuring in the labour market due to digitalisation, more people diagnosed with mental health disorders and an ageing population. At the same time, we find that the user representatives are somewhat less concerned than the employees when it comes to low education/skills among vulnerable groups. On the other hand, they are even more concerned about ageing and increased income inequality. The other differences can probably be attributed to the employees and the user representatives' point of view: the employees are more concerned about restructuring in general and in the public sector, while the user representatives are somewhat more concerned about increased user involvement.

11.4 Advice to those updating the Horizon Scan

In the survey, we asked employees and user representatives for comments on the work on the Horizon Scan. Several suggestions concern making more employees in NAV aware of the Horizon Scan and some people pointed out that it should be published in a more accessible format than a report, to make it easier and faster to familiarise oneself with the material findings. Some employees would also like to be more involved in the work: Some of the comments were that the distance from those who produce the Horizon Scan to the «front line» is too far.

Much of the advice is that the Horizon Scan must be taken into consideration to a greater extent in the employees' work. Some people write that they have not seen that the findings from the Horizon Scan are translated into practical work, for example, in the business plans.

Figure 11.6. The difference between the user representatives and the employees' assessment of which societal trends will affect NAV as a whole[1]. Percentage points, with 95 per cent confidence interval.

[1] Positive values mean that user representatives have pointed out more frequently to the current societal trend, and vice versa for negative values.

Source: **NAV**

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