

Chapter 1

Perspectives and summary

1.1 The Commission's perspectives on infection control, economic policy and crisis management

A global crisis

The word crisis has no precise economic meaning, but is derived from the Greek *krisis*, which may be translated as a sudden change, decisive turn or fateful disruption. A special feature of the current crisis is that the virus has struck worldwide within a short period of time. This means that effects in Norway are exacerbated by international developments and that national measures need to be adapted in response to developments and measures in other countries. A shared predicament has provided an impetus for rapid and forceful mobilisation to develop and produce vaccines against the virus. Nonetheless, a whole world suddenly had to refocus its energies on tackling challenges not experienced for more than a century.

The crisis and the measures taken have been specific to our time. Infection spread more rapidly than in previous epidemics because we have more interaction than before. Countries that were better placed to isolate themselves physically from the outside world were able to combine effective infection control with strict border control. Moreover, we were able to address the crisis with better medical expertise and more health service resources than before. We were able to partly compensate for lockdown by flexibility and restructuring. Work has to a large extent been done from home, and visits to physical shops have to some extent been replaced by online shopping – these and other responses were facilitated by technological solutions that did not become widespread until after the turn of the millennium.

A medical, economic and social crisis

The response to the crisis, with infection control measures that entailed, inter alia, extensive travel restrictions and shutdown of entire industries, has no clear historical parallel. The authorities therefore had no experience with predicting what consequences the measures would have. In 2006, the European Commission prepared a report to

shed light on potential macroeconomic consequences of a pandemic (European Commission, 2006). The report infers the macroeconomic loss directly from sickness absence and death in the working population. The report is in a basic trajectory assuming a mortality of 7.5 deaths per thousand. This is significantly more than Covid-19, which has thus far caused about one death per thousand (ECDC, 2021). The report concludes that a potential pandemic is unlikely to pose a serious macroeconomic threat. The report contrasts sharply with the impact of the coronavirus crisis, which is estimated to have reduced EU GDP by about 6.3 percent in 2020 (European Commission, 2021).

The report from 2006 on the potential economic effects of a pandemic is just one example that projections of the consequences of a pandemic have been off the mark. In October 2019, an internationally recognised research team published the 2019 Global Health Security Index report, which assessed how well placed the countries of the world were for dealing with a pandemic. The two countries with the best score were the US and the UK. This assessment highlights the difficulties of predicting the future. In addition to emergency preparedness, there is a need for fast learning, as well as a willingness and ability to turn such learning into practice.

An unusual economic policy dilemma

It has for infection control reasons been necessary to curtail or close down activities during periods of high and increasing infection pressure. Measures to limit the spread of infection are also known from previous epidemics, but the scale and scope of government intervention have exceeded anything observed in the past. The crux of the matter has been which principles to apply in deciding priorities between activities.

Assessments of both the crisis and the measures launched by the authorities were initiated already at an early stage of the pandemic. A group led by Professor Steinar Holden at the University of Oslo provided useful early guidance on the trade-off between the economy and infection

control (Holden et al., 2020). There has throughout the crisis been an active public debate on both the structuring of measures and the challenges posed by the trade-off between various consequences. The whole range of social sciences and medical expertise will continue to do research on the crisis, and hopefully provide us with useful lessons for dealing with future crises.

Infection risk influences behaviour

A study (Caselli, Grigoli, & Sandri, 2021) finds that the economic slump in the first few months of the pandemic was only partly caused by lockdowns ordered by the authorities, although such lockdowns served to significantly reduce the number of people infected, especially if introduced early. It finds support for the argument that although there are economic costs to brief lockdowns, such lockdowns may pave the way for a quicker rebound by limiting the spread of infection and reducing social distancing. The study also indicates that brief lockdowns are preferable to more lengthy intervention. This is also in conformity with the recommendations of the third report from the Holden Group (Holden et al., 2021). The study of Caselli et al. nonetheless argues that infection control by way of infection tracking, face masks and working from home may be preferable to lockdowns.

Behavioural changes during the pandemic have served to reduce the demand for products and services that entail infection risk (Golec, Kapetanios, Neuterboom, Risema, & Ventori, 2020). Some types of demand reduction in, inter alia, personal service provision, public transport and travel have had favourable public health implications and reduced the need for government-initiated infection control measures. Early government-initiated measures may be beneficial. Golec et al. argue that government-initiated measures to keep infection at bay reduce the risk that society will enter a situation of increasing voluntary social distancing as the result of mounting infection pressure, which would have a considerable negative impact on the economy over time.

Behaviour influences trust, and trust influences behaviour

Trust between people, businesses and authorities is highly valuable. It has been demonstrated that a high level of trust promotes economic growth (Knack & Keefer, 1997). A high level of trust may make it easier to address medical, economic and social challenges and to implement targeted and effective measures in response to such challenges and make the most of available opportunities. There has during the pandemic been a strong correlation between trust

and citizens' compliance with measures initiated to limit the spread of infection (Bargain & Aminjonov, 2020). It is more demanding and time-consuming to build trust than to erode it. According to the most recent Ipsos confidence survey (January 2021), confidence in the Norwegian authorities was significantly boosted in 2020. However, the Norwegian Institute of Public Health's own user survey shows waning support for the measures adopted by the authorities. In the last week of 2020, 70 percent of respondents expressed support for the measures. The level of support declined to 60 percent in the first four weeks of 2021.

The relationship between the government and businesses

Lockdown measures and other infection control measures imposed on businesses have primarily been implemented by means of prohibitions, orders, checks and the sanctioning of violations. This reflects a standard public policy approach to commercial interests, but the measures have been highly unusual in scale and scope, in Norway as well as in other countries. In Norway, the government has to a greater extent than ever before compensated businesses for loss of income during the crisis. This new development calls for special caution.

Loss of income during the pandemic may result in businesses folding. We do not yet know whether the willingness to start new business ventures will be as strong as before – especially when considering that pandemic risk will continue to be more significant than previously assumed by the vast majority of decision makers.

A key justification for the compensation scheme has been to avert unnecessary bankruptcies and redundancies. The compensation scheme may serve to also keep non-viable businesses afloat. It must be expected that this disadvantage will become more prominent over time.

Business interests should be consulted, but not be given prominence as advisors on schemes from which they will also be receiving support. Little is known about the distributional effects of the many compensation schemes for businesses, and such effects may be at odds with established distributional considerations. Compensation schemes may give rise to expectations that government will continue to look after businesses that are disadvantaged by unforeseen events. This may reduce risk prevention incentives on the part of businesses.

The relationship between the government and individuals

Although people may be highly focused on avoiding infection, private incentives to prevent own infection are likely to be significantly lower than the economic cost of infection. An analysis (Bethune & Korinek, 2020) estimates that the

economic costs of one instance of Covid-19 infection are about three times the financial cost to the infected individual. Risk behaviour externalities mean that voluntary behavioural changes during a pandemic may be less than would be desirable.

Externalities may provide an economic rationale for government intervention to limit infection, but offer little guidance on how the measures should be structured. The problem of non-compliance with advice and orders intended to limit the spread of infection may pose a challenge during a lengthy pandemic. Compliance fatigue may result in dilution of good social habits and erosion of trust. The idea of social institutions exercising control over the social contacts and travels of individuals does, however, sit uncomfortably with basic principles regarding the relationship between the government and individuals in Western liberal democracies. The pandemic does, at the same time, highlight some of society's internal social control mechanisms – for better or for worse.

The relationship between employees and employers

There is an expectation that the amount of work carried out from home will remain at a permanently higher level than was usual before the coronavirus crisis. Research suggests that some element of working from home may be of benefit to both employees and employers and may serve to increase productivity (Barrero, Bloom & Davis, 2020), although extensive working from home may impair productivity (OECD, 2020a). New practices, customs, agreements and legal rules should be developed for the relationship between employees and employers, in order to reap the benefits in a sustainable manner. OECD notes, inter alia, that it is incumbent on the two sides of industry to ensure that working from home remains an option for employees after the pandemic, but not a requirement, and to prevent working from home from becoming a mechanism for hiding overtime work. New working methods and frameworks may also have implications for what constitute good management and recruitment practices. More knowledge will be needed on this as well.

The relationship between high-income groups and low-income groups

Recessions hit different population groups differently. Vulnerable groups with weak labour market affiliation and low wages will often suffer the most. The coronavirus crisis is conforming to this pattern. The longer the crisis lasts, the more severe may be the distributional effects. A particular challenge in this regard is that people who are out of work may over time lose out in terms of skills and attractiveness. Measures that

may serve to build skills in the unemployed may counteract this.

The ability of businesses to restructure, add value and compete for labour is important to prevent negative shocks from resulting in lower employment and more inequality. It is therefore important to pave the way for businesses that add value and create jobs, a well-functioning labour market, as well as employees whose skills make them attractive in the labour market. Labour market measures have delivered uneven and partly disappointing results in this regard, but the most prominent conclusion is that we have limited knowledge of how various measures work. Instead of just expanding the general use of such measures, a renewed focus on said measures should be combined with more intensive knowledge development through, inter alia, evaluation of measures by way of registered data and field experiments. Knowledge on social and emotional skills is also of key importance. The Norwegian Labour and Welfare Administration should be given responsibility for designing measures that lend themselves to scientific evaluation, e.g. by way of measures being implemented in different areas at different times to increase the scope for research-based evaluation.

The relationship between cities and adjoining areas

Areas with high population density may be especially vulnerable to outbreaks of severe infectious diseases. A large portion of the population in cities is for example dependent on public transport, and homes may be small because of high land costs. The social contact arena is larger and more fragmented. In addition, there may be a relatively large element of business activities that suffer financially, such as personal service provision and international activities. Cities and adjoining areas will, on the other hand, often have a relatively large portion of employees who can work from their own home, many of whom commute on a daily basis from residential areas adjoining the cities.

Increased flexibility with regard to workplace attendance will save travel time and facilitate travelling outside rush hours. The considerable uncertainty regarding the consequences of more working from home suggests that restraint should be exercised when it comes to new office building and infrastructure investment until more experience has been gained.

The pandemic has highlighted changes in the population's use of holiday homes and secondary homes.¹ The discussion regarding the ban on using holiday homes during the pandemic has brought to light a potential imbalance between local

¹ Norway has an especially high proportion of such homes. There are about 471,000 holiday homes and secondary homes in Norway, and owners used their holiday homes for an average of 48 days a year in 2015 (Prognosesenteret).

authorities' responsibility for the health and welfare of holiday home users, and the apportionment of tax revenues from the population. This imbalance may increase if it becomes more common to work from holiday homes.

The relationship between institutions

The Government makes the key economic policy decisions, within the limits defined by the Storting. The Storting has decided that Norges Bank shall be the monetary policy execution and advisory body. The central bank is also responsible for managing liquidity in society. The Government and the Storting have through extensive government loan guarantees assumed responsibility for providing businesses with liquidity during this crisis.

Monetary policy is often referred to as the first line of stabilisation policy defence. Low interest rates reduce the ability of monetary policy to respond to negative shocks. Active fiscal policy increases the need for coordination between the macroeconomic policy institutions. Major upheavals such as have been observed during the coronavirus crisis put pressure on established cooperation patterns.

Fiscal policy trade-offs become more complex when short-term stability considerations are to be balanced against long-term considerations. The flexibility embedded in the fiscal policy rule offers scope for providing expansionary measures for a while, but it is important to swiftly revert to more normal budget processes.

Most of the bill for the increased spending will probably be charged to future generations, but will soon have an impact on budgets. This may be made clearer when new expensive measures are adopted to shelter households and businesses from loss of income. Other countries are facing an additional macroeconomic policy challenge as a result of their central bank having in recent years also become a major government creditor through, inter alia, secondary market government bond purchases. If monetary policy is given an inflationary tilt, the debt burden of highly indebted states will be reduced, and high government debt may thus spark increased political interest in monetary policy. Persistently low interest rates may affect returns on the Government Pension Fund Global.

The relationship between states

A global effort is needed to prevent the passing of virus infections from animals to humans, and to prevent local outbreaks from becoming pandemics. Prevention and control can deliver gains in economic terms, as well as in terms of public health, livestock health and

the ecosystem as a whole. Intergovernmental and global collaboration in this regard is fragile. The US decision to leave the World Health Organisation in 2020 and China's lack of transparency in relation to the same organisation are current examples.

In the absence of robust intergovernmental solutions for preventing pandemics, enhanced national border control may be considered an alternative, although at a high cost. There is a considerable need for coordination across countries. There may also within the EEA, which embodies a major effort to develop a common single market without internal border controls, be a need for reviewing and considering advantages and disadvantages of border control. This also applies to enhanced border control preparedness, for example during periods when a vaccine passport is required.

More robust value chains, also through digitalisation

Businesses with a relatively large element of digitalisation and automation have been among the winners of the pandemic. A reason for this is that increased digitalisation and automation have served to boost robustness during the pandemic. The crisis has also added to, and at times accelerated, behavioural patterns and production patterns based on digital platforms, and several digital platforms and business models that previously had a limited uptake have attained critical mass.

Developments in the years prior to, as well as adaptations during, the pandemic have served to make the economy less vulnerable to infection outbreaks and better prepared for reaping productivity gains through increased exploitation of new technology. In particular, developed countries and businesses with readily accessible digital infrastructure and comprehensive digital expertise have been adaptable and have seized the opportunity to make the transition to digital platforms (OECD, 2020b). This effect may also give rise to some environmental benefits.

Green transition

The pandemic resulted in lower global greenhouse gas emissions in 2020. The emission reduction is primarily caused by less mobility and lower production. Permanent greenhouse gas emission reductions will be the consequence of targeted policy tools. The most effective policy tool for reducing emissions and increasing profitability in the development of green technology will be to increase emission pricing. Particularly high emission prices in Norway may reduce the competitiveness of established industry. Shared ambitions and coordinated price setting between industrialised countries will contribute significantly

to averting a reduction in competitiveness.

The coronavirus pandemic may have affected the uncertainty about how committed some parts of the world are to the transition to a low-emission society, although support appears to be strong in, inter alia, Norway and the EU/EEA. Developments also appear to be positive in the US, and there are also positive long-term signals from China in this regard. Uncertainty may delay and increase the cost of the transition, by inhibiting restructuring. Clear and more binding signals that greenhouse gas emissions will carry a high price tag in the years to come, along with a policy strategy for promoting sustainable solutions, will contribute to the green transition of Norwegian businesses.

The need for infection control measures may persist

If the vaccine uptake is low, the need for infection tracking and other infection control measures may persist. Organisational and technical solutions should be primed in anticipation of potential future pandemics.

Such need will vary between countries and over time, depending on regional mutations and outbreaks. Measures to accelerate vaccination should be considered in such a situation. Norway has in recent years taken on a special responsibility for contributing to international vaccine collaboration, and it would be appropriate to continue this.

Joint solutions to joint challenges

The pandemic has affected all countries and all people of the world. It has highlighted joint challenges, but also the power of joint solutions. The pandemic has brought to light the mutual interdependence between the public sector, the voluntary sector and the private sector. Certain properties of Norwegian society mean that it was better placed to handle the pandemic than some other countries. A pandemic poses rather unique challenges, which require a balance to be struck between trust and the need for control, control to be combined with creativity, intervention with flexibility, regulation with compassion, and the rational with the emotional. Norway having thus far coped quite well compared to many other countries may possibly be attributed to a good balance having been struck between such considerations in Norwegian society. This balance is neither accidental, nor fixed. It is continuously evolving,

and challenged by both domestic and international developments. It changes as the result of technological and economic innovation, and cannot by its very nature remain static. It also raises issues that we need to confront as members of the international community.

In the same way that some groups in Norway have carried heavier burdens than others in the pandemic, some countries will be harder hit than others through no fault of their own. The international communications, mobility and travel that contributed to the rapid spread of the pandemic have also contributed to the vaccines having been developed in record time, and to providing Norway with quantities of medicines and infection control equipment that could hardly have been produced domestically. The pandemic has highlighted how problems may be addressed both domestically and internationally, as well as the importance of jointly seeking, finding and implementing the right solutions.

1.2 Does the coronavirus pandemic mark the dawn of a new era?

Globalisation and the pace of change – change is the norm

For thousands of years, humans could move no faster than the speed of a mounted horse. In 1825, a steam locomotive opened the first railway, between Stockton and Darlington. In 1903, the first powered flight took place, near Kitty Hawk in North Carolina. Sixty-six years later, humans first landed on the Moon. This was almost fifty-two years ago.

We have become accustomed to rapid change, and to information, ideas and products being disseminated immediately, and all over the world. The pandemic provided a reminder that this may also apply to negative threats, and that their effects may be felt simultaneously in many aspects of life.

International mobility and travel spread the coronavirus more rapidly than any past pandemic virus. The epidemiological and economic effects were immediate. However, mobilisation against the virus was also characterised by unprecedented scope, scale and speed. It appears to have taken Chinese scientists about ten days to sequence the virus' genome. Two days later, the pharmaceutical company Moderna in the US had developed a potential vaccine that was entered into use in Norway 364 days later. The pandemic may *change* us. But it is just as much *highlighting* the ongoing changes on a global scale. Changes in the global footprint are in many ways the norm.

The pandemic is highlighting strengths and weaknesses, as well as the need for responding constructively to change

The rapid spread of the virus is anthropogenically driven, and did trigger a need for swift adaptation to respond constructively to the changes. Other aspects of the pandemic, such as for example the development of certain mutations, may also have been accelerated by experimental medical treatments. Such mutations are themselves spreading rapidly, also outside the countries in which these occur.

Some of the changes observed represent a classic crisis response. We have over the course of the pandemic accumulated a large emergency stockpile of infection control equipment, but without significantly boosting intensive care capacity. Our future medical preparedness, infection control preparedness, as well as preparedness for dealing with the economic fallout, may be better – next time. We may even in normal times get a higher level of infection control awareness than has traditionally been the case in Norway. However, we need broader emergency preparedness than that, because the details of the next crisis are unknown to us.

The pandemic highlighted some strengths, but also various challenges. There was no supply crisis, despite long international value chains and increased global interdependence. As a digitalised country, Norway was able to meet many challenges by working from home. New digital solutions were entered into use in the education system, health service and judicial system, and the scope of digital work was vastly expanded. The pandemic also provided a reminder that not all work can be done from home, and that we are dependent on the international movement of labour. Neither the challenges, nor the solutions, have been specific to Norway.

The crisis has brought about international collaboration that has at its best been extraordinarily powerful and capable of mobilising resources on a large scale, but we have also observed insularity, scepticism and an understandable impulse to prioritise one's own population. At a national level, Norway witnessed a capacity for solidarity, founded on a basis of trust, flexibility and willingness to cooperate, facilitated by financial resources and strong institutions not matched by all other countries. Internationally, efforts to eradicate extreme poverty are likely to have been set back by many years. It nonetheless remains feasible to eradicate extreme poverty globally in our own lifetime. Lessons from the pandemic, for example on vaccine development and collaboration, may be of considerable value in this regard.

Long-term changes

This green paper is seeking to identify some principles to further normalisation and short-term measures that

will also serve us well in confronting long-term needs for change.

In some respects, the pandemic has accelerated existing developments. These include, inter alia, changes in how we work and make a living, how we communicate and meet, as well as the need for coordinating major restructuring initiatives. The climate crisis is unfolding more slowly than the pandemic, but requires intervention on a much larger scale, and can like the pandemic only be solved through international collaboration. Some of the changes to society necessitated by the climate crisis may also be of relevance to the prevention of future pandemics.

Most articles on the effects of the Covid-19 outbreak consider the pandemic as an isolated event. There is a risk that the virus will become endemic, i.e. a virus that has humans as its host. For comprehensively studied existing endemic viruses, we are quite well placed to estimate the negative impact on health and the economy, as well as how often a pandemic may potentially occur. One analysis (Fan, Jamison, & Summers, 2018) does for example estimate that the annual probability of a new influenza pandemic with a severity in line with, or more severe than, the Spanish flu is about 1 percent. Thus far, we do not have sufficient knowledge to place Covid-19 in such a well-defined risk framework.

More than half of the infectious diseases affecting humans have been transmitted from animals; so-called zoonotic diseases. Influenza, AIDS, Ebola and Covid-19 are examples of such diseases. In the past, it is likely that natural selection and strengthening of the immune system served to gradually make population groups more resistant to new zoonotic diseases. However, the impact could be severe. It is likely that the introduction of new zoonotic diseases in the Americas and in Australia by small European populations contributed significantly to the decimation of indigenous populations. In modern times, medical and epidemiological progress, such as the development of antibiotics and vaccines, have made us more resistant.

Only a small number of new zoonotic diseases evolve into pandemics. The local ability to swiftly close down potential infection routes may be of decisive importance. The factors serving to prevent outbreaks from turning into pandemics are not obviously stronger than those having the opposite effect. Local travel means that viruses or bacteria may quickly reach major cities. Global travel means that viruses may be transmitted between major cities in different continents within hours. The self-interest

of individuals who want to flee areas of outbreak to find sanctuary in areas without infection, may in itself be accelerating the spread. Knowledge of outbreaks may therefore paradoxically also serve to exacerbate the infection control problem. Local efforts have nonetheless prevented new zoonotic disease outbreaks from spreading in recent years.

IPBES is a sister organisation of the UN, with special responsibility for the scientific basis for biodiversity. Last summer, IPBES gathered 22 of the world's leading experts in various disciplines to assess the risk of, and the risk posed by, pandemics. It is noted in the executive summary of the workshop report (IPBES, 2020) that the scientists warned that the world may be about to enter a period characterised by pandemics. The warnings reflect an increase in the frequency of new zoonotic disease outbreaks (Barbara, Kramer & Drake, 2016). The increased frequency is primarily driven by population growth, ecosystem destruction, wildlife trade, climate change and more intensive agricultural production. This may presage a new global era. In order to revert the frequency of new pandemics to earlier levels, fundamental changes have to be made to society, according to the scientists.

Preventing pandemics may be preferable to managing pandemics. A zoonotic disease needs to pass through a number of steps in order to make the transition from being an animal disease to becoming a human-borne global disease. Measures could and should be taken to counter risk in relation to all steps. Expanded knowledge may make it easier to design targeted measures against new zoonotic diseases. Precautionarily motivated action may be preferable where the consequences of missteps may be both large and irreversible – here as in relation to other major restructuring challenges.

1.3 The Commission's assessments and proposals

It is in a crisis easy to become absorbed in current challenges, but the terms of reference of the Commission call for it to look to the future. By 2025, the crisis will be felt in its lasting impact. On households, on the labour market, on businesses and on government finances.

Some developments in the Norwegian economy are well-known and have been observed for some time. A pandemic outbreak is an example that history is not only shaped by well-known, long-term developments. Sudden shocks will from time to time dislodge the economy from an apparently stable long-term trajectory.

The coronavirus crisis is an especially profound economic shock. Because this shock is not caused by imbalances in the economy, there may be a hope that the negative economic effects will be short-lived. The Commission is nonetheless of the view that the crisis has the power to change the nature of some permanent developments. The crisis has increased public sector and private sector indebtedness, and we are probably faced with a new permanent global health challenge. The long-term implications of these effects are difficult to envisage. The uncertainty suggests that government should hold on to general priorities.

Norway is well placed for continued economic success. Productivity levels are high compared to other countries, while the economy is well poised for restructuring, with comprehensive digitalisation and a well-educated population. Public services are extensive, while income safety nets will catch those who drop out. Norway's financial wealth in the Government Pension Fund Global does, in combination with the fiscal policy rule, provide Norway with more fiscal policy flexibility than most other countries.

The international economy

The pandemic has triggered a slump in the world economy that will influence developments for a long time to come. There has been an economic policy shift without historical precedent. Although the downturn appears to have already been reversed to an upturn, the world economy remains in recession. Several international organisations are advocating a continuation of expansionary fiscal policy. Warnings are, at the same time, sounded that economic growth driven by expansionary policy is vulnerable, and may result in private sector misallocation and the accumulation of financial imbalances in both the private sector and the public sector. The public sector debt burden has reached its highest level since World War II.

The international community's ability to bring vaccines to the world's population is a major test for international collaboration. Inadequate purchasing power and logistical challenges mean that parts of the world will be lagging behind in the vaccination rollout. Such a development does, inter alia, increase the risk of new mutations. This may result in reduced trade and persistently higher health risk.

The Norwegian economy

Forecasts prior to the outbreak predicted relatively stable developments for the Norwegian economy, but the pandemic has caused the steepest setback in the Norwegian economy since World War II. The slowdown in the Norwegian economy has nonetheless been less than in many other Western countries. Measured in mainland Norway economic activity,

the setback from 2019 to 2020 amounted to about NOK 5,000 per capita.

The outlook for comprehensive vaccination of the population of Norway and its key trading partners gives cause for optimism with regard to developments in the Norwegian economy in the time to come. There may nonetheless be lasting economic damage from the pandemic. Experience from previous crises and recessions, in both Norway and other countries, suggests that higher unemployment at one point in time may result in lower employment in the longer run. Getting the unemployed and those outside the labour force into work as we move towards 2025 will require a multipronged approach: Stabilisation policy needs to facilitate high labour demand and structural policy needs to result in more people being able to work, wanting to work and being given the opportunity to work.

The emergency measures

The negative economic impact of the coronavirus pandemic has triggered an expansionary fiscal policy and monetary policy response. The Government and the Storting have adopted a number of measures, including furloughing provision expansions, fixed expense compensation schemes, tax payment deadline extensions and other business support arrangements, aimed at reducing the costs associated with bankruptcies and loss of jobs. These measures are on top of the so-called automatic stabilisers, which are the effects of income safety nets and tax provisions that are automatically adapted to the level of activity in the economy.

The emergency measures have succeeded in keeping businesses afloat and have served to limit the number of redundancies. However, such schemes inhibit the functioning of the economy by locking resources into existing structures.

The compensation schemes may conceivably lower activity in the economy by reducing businesses' incentives, both to replace lost revenues and to keep employees working. Business compensation schemes should be discontinued no later than upon the discontinuation of the most invasive infection control measures.

Furloughing schemes reduce the incentives of furloughed employees for looking for a new job or for getting more education or otherwise improving their skills. The duration of furloughing schemes must be limited, with the limits reflecting the economic situation of the country and the state of the labour market.

The labour market

Employment in Norway is relatively high compared to many other countries. However, Norway's relative position has been significantly weakened in the last 20 years. The distinction between those inside and those outside the labour market has become sharper over this period. Youth employment developments have been especially weak since the turn of the millennium. The coronavirus crisis has excluded many people from job opportunities, and may have served to exacerbate many of the structural challenges. Labour demand will pick up once the infection control measures are rolled back. However, many of the jobs now lost will not come back. Major restructuring will be taking place in the years to come.

Restructuring requires additional skills, on the part of both employees and jobseekers. The Norwegian model does, in the assessment of the Commission, provide a sound basis for tackling the challenges facing the labour market. The tripartite model has proven to be robust to various shocks and crises, and is a framework well suited for restructuring.

The key short-term objective for labour market policy must be to prevent labour supply from being permanently reduced as the result of the crisis. Many of those who have lost their jobs or been furloughed during the coronavirus crisis have little education. The Commission sees a need for a renewed focus on further education and training, and recommends increased collaboration between the education sector and industry – for example industry programs, regional fora and measures to stimulate skill enhancement in cluster programs. In a world undergoing very rapid restructuring, it is important for education systems to be tailored to existing realities. Education systems should be flexible and tailored to local circumstances, in close cooperation with industry and based on the needs of industry.

Youth who are unable to gain a foothold in the labour market may enter a negative spiral, because they are also excluded from the important training arena accessed via the labour market. The Commission is proposing the trialling and evaluation of a wage subsidy scheme combined with workplace mentors who can provide help, support and guidance, as well as assist with workplace inclusion.

The Commission is also of the view that the unemployed should have more scope for acquiring basic skills during their period of unemployment. The main rule should nonetheless be that unemployment benefits are reserved for jobseekers.

Businesses

Norwegian businesses were generally well placed for withstanding a negative shock. Businesses had a high restructuring capacity and ready access to capital, qualified manpower and high-quality infrastructure. The pandemic has hit businesses asymmetrically, with some sectors suffering an especially steep reduction in activity and profitability. Many businesses in those industries have increased their debts and depleted their equity. Businesses with low equity and an uncertain outlook will often have limited investment capacity, and are vulnerable to new negative economic shocks.

In order to facilitate an anticipated profitable reorganisation and restructuring of businesses, the capacity of the public administration to process new enterprises and dissolutions should be expanded. A new permanent regulatory framework on restructuring and bankruptcy should be put into place to facilitate the preservation of valuable resources by means of divestment or restructuring.

Responsibility for various business policy measures is assigned to about 20 different institutions. Schemes and institutions under the auspices of regional and local government are additional thereto. The range of policy measures is complex and inadequately coordinated. Existing schemes may face challenges when it comes to being efficient, effective, well-targeted, simple and unbureaucratic. More and better empirical research on business policy measures will improve the quality of the basis for deciding the orientation of business policy measures. The Commission endorses the ongoing process for coordinating, simplifying and enhancing the effectiveness of available business policy measures. Key priorities for the near future should be a special focus on the need for capital accumulation in profitable businesses whose equity has been severely depleted by the pandemic, as well as the strengthening of arenas for competent investors with capital. Future government investment support may be structured to include a profit-sharing element.

The costs have been deferred

The pandemic has entailed major economic costs. In order to reallocate, and to some extent limit, these costs, monetary policy and fiscal policy were shifted to a highly expansionary stance. Norges Bank has put the key policy rate at nil, and market interest rates globally are also being kept very low by extensive securities purchases on the part of central banks. As far as fiscal policy

is concerned, existing income safety nets for sickness, furloughing and unemployment have been expanded. Temporary subsidy schemes have been introduced for businesses, self-employed, culture and sports, etc., along with lending and guarantee schemes for businesses. In addition to certain temporary tax reductions, tax revenues are significantly reduced by the low level of economic activity. In practice, these extensive measures mean that the loss of revenues caused by the pandemic is deferred, and will be manifested in less wealth in the Government Pension Fund Global than would otherwise have been the case. The Ministry of Finance has estimated that the excess transfers from the Fund for 2020 and 2021 will come to about NOK 370 billion.

These excess transfers come on top of other long-term public finance challenges. The aging of the population means that the number of economically active persons per retired person is in gradual decline. With declining growth in the Government Pension Fund Global, this translates into a long-term shortfall in government budgets. This funding need implies that expenditure growth must be curtailed or that revenue growth must be boosted in order for the public sector to keep long-term expenditure within the limits defined for revenues. An obvious response is to increase labour force participation. However, any increase in employment must take place in profitable businesses in order to make a contribution to solving the budgetary challenges. Profitability is also necessary in order to restructure the economy in a climate-friendly direction in parallel with the gradual decline in the importance of petroleum activities. The budgetary challenges highlight the need for effective and efficient spending of public funds. This becomes even more important if the low current international interest rate level is also indicative of lower returns on the government's international wealth.

Green transition

The reduction in economic activity during the coronavirus crisis caused an immediate reduction in global greenhouse gas emissions. It is uncertain to what extent emissions in the years to come will be affected by the pandemic. The challenge of generating economic growth in combination with reduced emissions has not been significantly changed as a result of the pandemic. The crisis has made us poorer and reduced our economic scope for manoeuvre. This suggests that cost effectiveness may be accorded more weight in climate policy. Effective climate policy principles suggest that all emissions should be priced and that taxes should be equal across all sectors to ensure that cuts are made where their cost to society is the lowest. Such is not the case in Norway. The oil and gas sector is subject to both an emission allowance price and

a CO₂ tax. Parts of the non-EU ETS sector are faced with a price that is lower than the general tax, and some parts are exempted from tax.

Net anthropogenic greenhouse gas emissions need to be reduced towards zero in order for the world to limit global warming in accordance with the Paris Agreement goals. Net zero emissions will require the use of other technologies than those that the world's population have increasingly relied on over the last 200 years. The transition to a low-emission society provides major business opportunities in climate technology development. Low-emission technology development should therefore be facilitated through emissions pricing, research support and a predictable regulatory framework. The public sector may also play a role in creating and upscaling demand through its procurement policy.

Green transition also involves other environmental challenges than the climate challenge. Use of natural resources and ecosystem services with negative externalities will not normally carry a price tag. A nature tax on all uses of nature that reflects the economic costs of such uses will limit the cost to society of any damage. A road pricing system which takes into account that negative externalities of road use vary by car type, time and location will be a more effective means of reducing the economic costs of road use than the current road usage tax.

The tax system

Norway needs to get through the crisis with government schemes and systems that remain efficient, effective and sustainable, and with a regulatory framework that continues to encourage private sector initiative and restructuring. This also applies to the tax system. One needs to prevent emergency measures from permanently weakening tax bases, the tax system's ability to raise revenues for society, as well as the tax system's contribution to reduction of income differences. When a large share of GDP is collected as tax revenues, the tax system needs to facilitate the best possible resource utilisation and the highest possible employment and economic growth.

The tax system influences how quickly the economy will revert to a state of high employment and resource utilisation. The tax system can facilitate the rechanneling of unused resources to those parts of the economy where these will generate the highest return and value added. This suggests that the tax system should be based on broad bases, low rates and equal treatment of different industries, funding models and legal entities.

The Commission proposes the appointment of a separate commission to conduct a comprehensive review of the tax system and assess aspects of the tax system that may be modified to strengthen productivity growth and competitiveness, while at the same time having regard for distributional considerations and the sustainability of nature. Such a tax commission should, inter alia, address the following issues:

- *The existing tax base should be utilised more broadly.* Tax bases are eroded by a number of tax exemptions and allowances, thus implying that tax rates have to be higher than would otherwise have been the case.
- *New and well-suited tax bases should be entered into use.* The Norwegian economy has a number of tax bases that may be expanded. These include, inter alia, taxation of homes, other real estate and economic rent.
- *Economically profitable tax exchanges should be implemented.* A number of tax exchanges, for example green tax exchange, should be implemented in accordance with basic principles for an efficient tax system. This may serve to reduce the economic costs of taxation.

The Commission is also proposing the abolition of the duty-free scheme. The duty-free scheme undermines the Norwegian tax system, as well as Norwegian alcohol and tobacco policy, while increasing alcohol and tobacco availability and consumption, and challenging the position of Vinmonopolet. The scheme has negative climate and environmental effects, inasmuch as it serves to reduce airline ticket prices, which means more air traffic and higher emissions than would otherwise have been the case.

Digitalisation

The pandemic has accelerated the digitalisation of society. Digital services have been developed and entered into use on a larger scale than before, thereby reducing the negative impact of the pandemic on much of the public sector, private businesses and the population in general. Work has been done from home, and shopping for goods and services has been done online. There is no reason to believe that the higher pace of digitalisation will slow down after the pandemic. In the new hybrid work-life balance, the working day will increasingly be tailored to individual needs, and the geographical link between the home and the workplace will become less significant. Extensive broadband development will lay the foundations for the development of rural jobs. The Commission is therefore recommending a digital infrastructure initiative with an ambitious broadband access target. Both general and specialised

ICT skills are needed to maintain the pace of digitalisation. The Commission is therefore proposing a digital skills initiative towards 2030. Such an initiative should include a mapping of skills needed in the public sector and the private sector, as well as measures to make it attractive for foreign employees with first-rate ICT expertise to start working in Norway.

Digitalisation, the Internet of Things and artificial intelligence represent the forefront of accelerating technological advancement. These technologies are dependent on access to sufficient quantities of high-quality data. The Commission is therefore recommending

examination of the scope for establishing national platforms for accessing, sharing, using and analysing data in various sectors, with appropriate data protection safeguards. This is important to promote data-driven innovation in Norway, and to respond to the ever-increasing competition from the large international platform companies. The Commission proposes that key supervisory bodies conduct a joint review of platform company activities, with an emphasis on issues relating to profit shifting, freedom of speech, data protection, competition law, emergency preparedness, etc.