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 Work has to a large extent been done from home, and visits to physical shops have to some extent been replaced by online shopping – these and other responses were facilitated by technological solutions that did not become widespread until after the turn of the millennium.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. the last week of In 2020, 70 percent of respondents expressed support for the measures. The level of support declined to 60 percent in the first four weeks of

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. The discussion regarding the ban on using holiday homes during the pandemic has brought to light a potential imbalance between local

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 is 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.