

COVID-19 EXIT STRATEGIES

Learnings from three Scandinavian
countries

April 2020

The immediate shock is over: European governments are looking towards an exit strategy

The Coronavirus has caused both a global health crisis as well as an economic crisis. Governments across the world have taken strict measures to curtail infection rates, thereby protecting the functioning of healthcare systems and their ability to care for the sick. However, approximately 25% of economic activity is currently shut down in most countries, [as described in this report by CE](#).

A number of countries have now successfully managed to flatten the curve of new infections, hospitalisations, and ultimately, the number of people dying each day. This applies to, among others, the three Scandinavian countries, Germany, and Italy – one of the most heavily affected countries as shown in the figure to the right.

The latest developments have triggered a debate in all countries on how to exit from these lockdowns, which have especially affected the service industries (having borne the brunt of the restrictions).

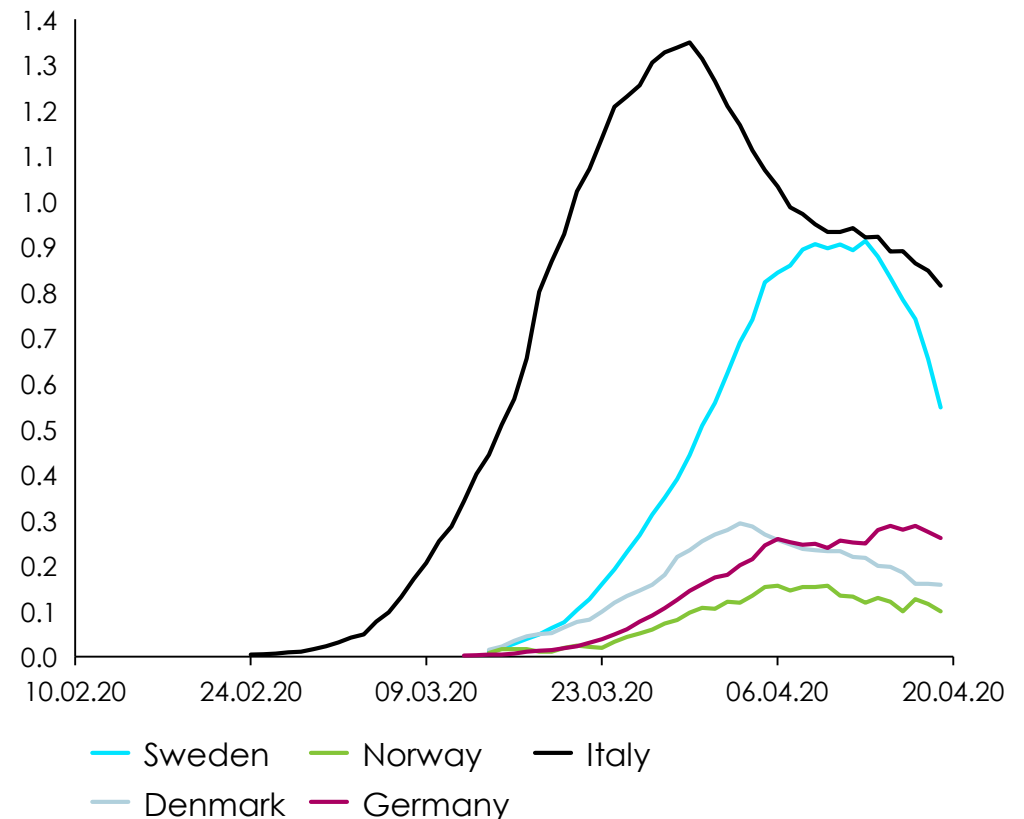
We believe we can learn some lessons by looking at the approaches adopted in the three Scandinavian countries: Denmark, Norway, and Sweden. The countries are economically, politically, culturally, and demographically similar. As such, one would expect similar impacts of the virus in each country, all else equal. However, each country has adopted different containment measures, making Scandinavia a well-suited starting point for reviewing the impact of different strategies.

From this perspective, we will analyse the following in this paper:

- 1 Which measures have the three countries taken?
- 2 What has been the impact on health and economic outcomes?
- 3 Which questions and considerations do the learnings entail?

The number of new fatalities are stabilising or falling in Europe, five examples

Daily death count per 100,000 inhabitants, one-week moving average



Source: Sundhedsdatastyrelsen, Folkhälsomyndigheten, Worldometers

Denmark, Norway and Sweden have implemented different responses to the mitigation of COVID-19

In Denmark and Norway, the prompt containment measures introduced in response to COVID-19 have been similar. They are more extensive in Norway however, e.g. restrictions on travel within national borders, mandatory quarantines after travel abroad, and prohibiting gatherings as few as 5 people.

In contrast, the measures put in place in Sweden are different to its Scandinavian neighbours, with fewer and later restrictions overall.

Denmark



Restrictions so far:

- Closure of schools, non-essential physical shops and businesses, cultural and sports facilities, and borders to all foreign citizens.
- Prohibition of public gatherings above 10 people.
- Public employees working from home.

Re-opening measures:

- Young children (up to 12 years of age) allowed to return to preschools and schools.
- Small businesses such as hairdressers and health services allowed to reopen for customers.

Norway



Restrictions so far:

- Closure of schools, non-essential physical shops and businesses, cultural and sports facilities, and borders to all foreign citizens.
- Prohibition of public gatherings above 5 people.
- Public employees working from home.
- Mandatory 2-week quarantine after arriving from abroad.
- Staying in cabins and other leisure properties outside one's municipality of residence prohibited.

Re-opening measures so far:

- Young children allowed to return back to school.
- Ban on staying in cabins and other leisure properties lifted.

Sweden



Restrictions so far:

- Closure of universities and high schools
- Ban on retirement home visitations.
- Prohibition of public gatherings above 50 persons.
- Entry ban for foreign citizens travelling from outside the EU, UK, Norway, Iceland, Liechtenstein, and Switzerland.

In addition, the Government has advised the Swedish population to limit unnecessary travel and to practise social distancing.



Differences in strategies: how are they reflected in key health outcomes?

There is great uncertainty around the number of people actually infected with Covid-19, but indicators point towards a much higher rate in Sweden.

In all three countries, the estimated number of people infected are manyfold higher than the number of confirmed cases.

Sweden has seen the highest number of persons in intensive care.

The majority of those infected in intensive care have predisposed illnesses. This applies to all age groups and all three countries.

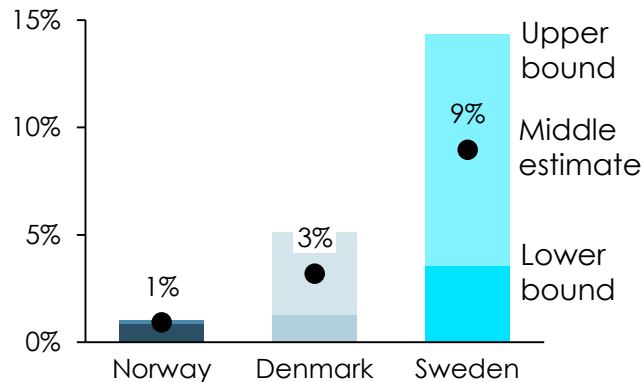
The working age population in all three countries is in less need of intensive care treatment when tested positive and hospitalised.

Sweden has a markedly higher fatality count for people 70+ years of age.

For the working age population (below 60 years of age), there is no real difference across the three countries.

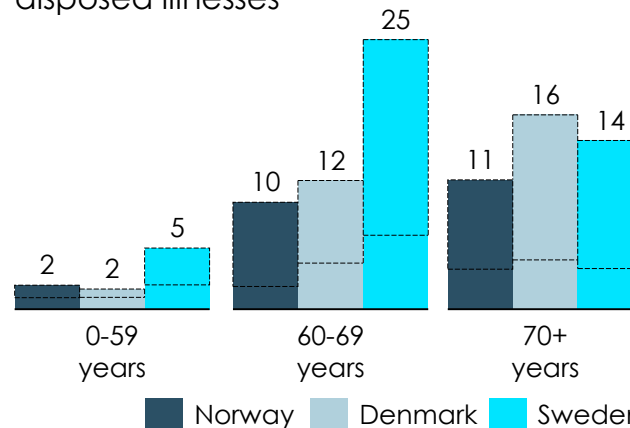
This reflects that fatality rates, i.e. the number of deaths divided by the number of confirmed infected, have been quite low for this age group in the three countries (and similar)

Estimated share of population infected (very high uncertainty)

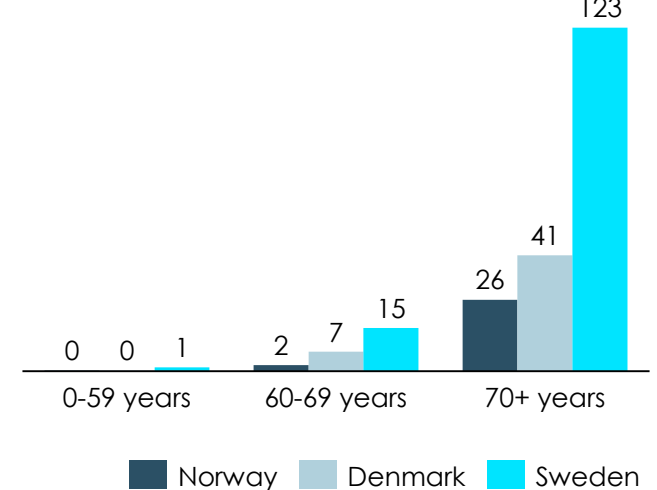


Patients in intensive care per 100,000 citizens

Dotted areas depict patients with pre-disposed illnesses



Number of deaths due to Covid-19 per 100,000 citizens



Note: Estimated infected for Norway is based on Norwegian Institute of Public Health estimates, where 15% of actual infected are reported. In Denmark and Sweden the upper bound estimate is the share of non-hospitalised infected per tested, in line with the Danish "Statens Serum Institut" statement that the estimated infected is between 30-80 times higher than confirmed cases. For figure 2 ICU data for the three Nordic countries are from different dates: data for Sweden is from 17th April, data for Norway is from 21st of April, data for Denmark is published 24th April.

Source: Sundhedsstyrelsen (Denmark), Folkhalsomyndigheten (Sweden), Folkehelseinstituttet (Norway)

Differences in strategies: how are they reflected in economic indicators?

The different strategies for the three countries are reflected in the development in unemployment rates. Norway, with the most severe restrictions, has seen the highest jump in unemployment, compared with only a slight increase in Sweden.

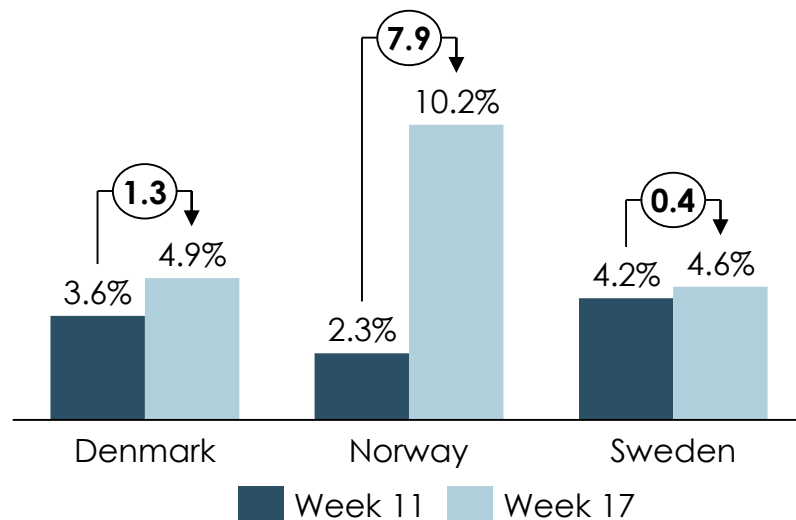
The hikes in unemployment rates in all three countries are heavily subdued due to extensive government rescue packages to companies.

The impact is also felt on the order books for Scandinavian manufacturing companies as measured with the so-called Purchasing Manager's Index (PMI), which has declined for all countries.

Again, Norway has seen the biggest decline of the three countries. Decline in the Danish PMI is mitigated by a large share of manufacturing within life sciences, which has been less affected by the crisis.

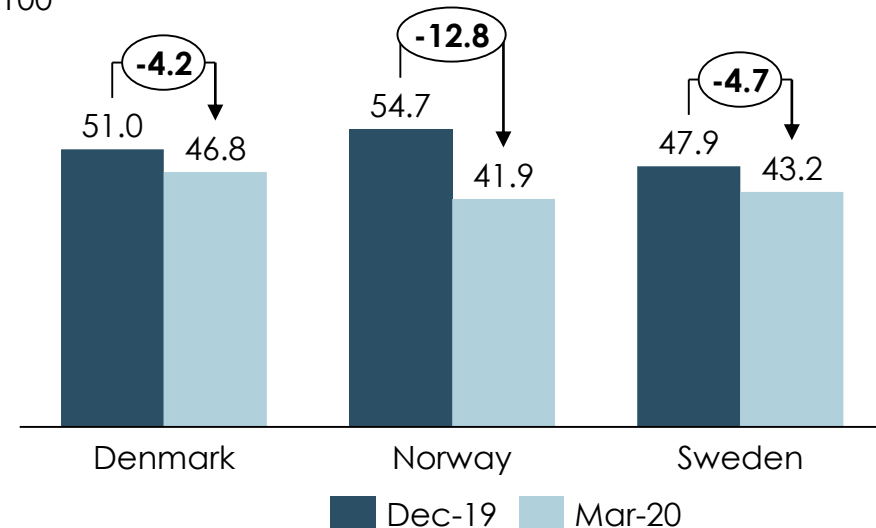
Unemployment rate before and after lockdown measures

Full-time unemployed as a share of labour force



Decrease in Purchasing Manager's Index (PMI) for manufacturing since new year

Point decrease in seasonally adjusted PMI. Measured from 0-100



Note: unemployment rate includes only those persons that are registered as full time unemployed, and does not include those that are part-time unemployed or on other unemployment measures. Source: Unemployment data from the Danish Agency for Labour Market and Recruiting, Statistics Sweden, and the Norwegian Labour and Welfare Administration. PMI data from Danish Purchasing and Logistics Forum, NIMA/DNB Markets, and Swedbank

Choice of exit strategy will have major impact on speed of recovery: Norwegian study as an illustration

The Norwegian Health Authority asked an expert group to estimate the GDP impact of three different exit strategies:

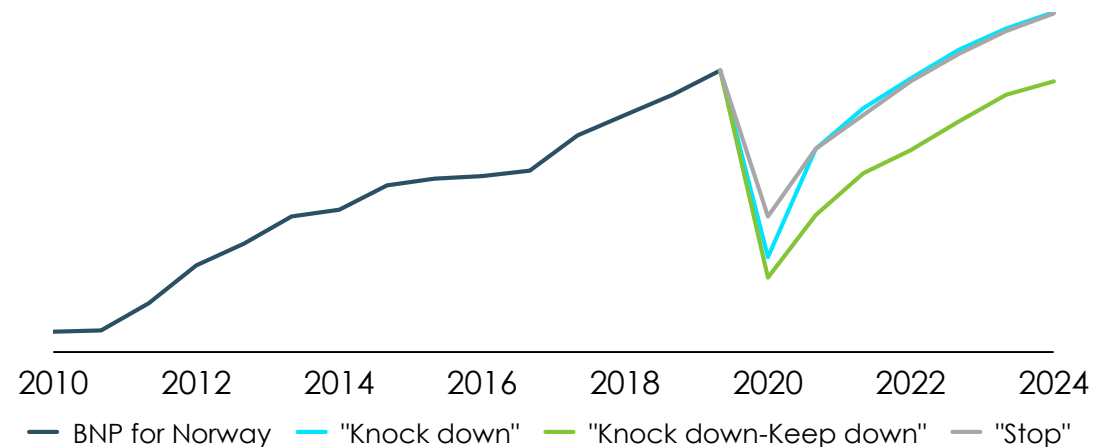
- In the **"Stop"** scenario, the strictest restrictions (such as closure of schools, non-essential physical shops and businesses, cultural and sports facilities) are lifted after Easter, whereas some of the lesser restrictions (e.g. ban on large events) are kept. Here the economic impact is from an increased infection rate when abandoning the restrictions, not from the restrictions themselves.
- In the **"Knock down"** scenario, the current measures continue for another three months. After which, the society will move to less strict measures (opening of kindergartens and schools as well as most services).
- In the **"Knock down-Keep down"** scenario, the current measures are kept for six months, followed by less strict measures kept in place for another twelve months.

Not surprisingly, the three different exit strategies have different effects on the economy

- The **"Stop"** scenario leads to the smallest impact in 2020 but is otherwise similar to the **"knock-down"** scenario.
 - The **"Knock-down-Keep-down"** leads to the largest cumulative loss of GDP, arising from real difference from 2021 and following years.
 - The **"Knock-down-Keep-Down"** is also by far the costliest from a GDP perspective.
- All scenarios are very assumption-dependent, including feedback effects from the number of infections to burden on health system, work force participation, etc.

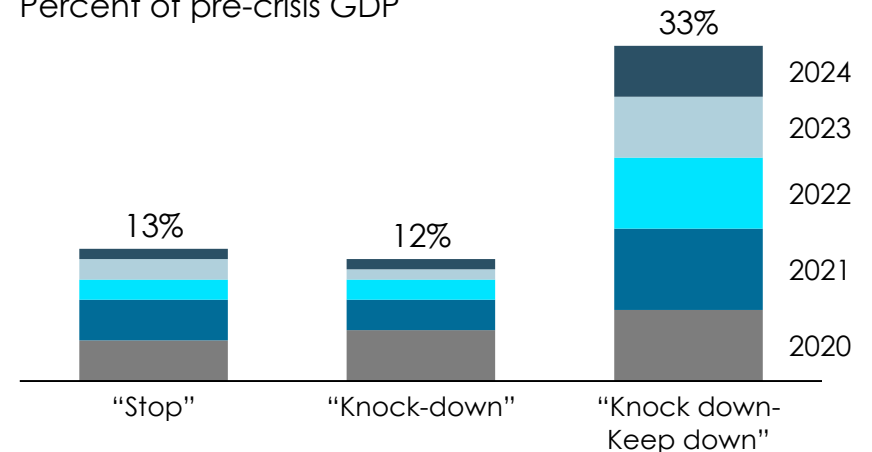
Scenarios for GDP development in Norway

Illustrative



Cumulative GDP loss until end of 2024

Percent of pre-crisis GDP



Source: Helsedirektoratet (2020) "Samfunnsøkonomisk vurdering av smitteverntiltak – Covid-19"

Exit strategies: Learnings from the three Scandinavian countries

The current debate in countries around the world emanates from the desire to minimise the economic loss from the COVID-19 containment measures, while protecting the functioning of health care systems and the most vulnerable members of society.

It is acknowledged that a prolonged economic downturn will eventually weaken governments' ability to support vulnerable groups and the health care systems, in view of the budgetary costs associated with large cumulated losses of production.



For countries now considering their exit strategies, we think that the Scandinavian example offers some potential learning points:

- It is becoming increasingly evident that fatality rates for infected people within the working age population are very low, particularly for people that have no pre-disposed illnesses prior to infection.
- This is likely the reason that Sweden, despite less pervasive lock-down measures, does not have a higher number of fatalities within the working age population than the two other countries.
- When the working age population is infected, they pose less of a burden for the health care sector than people with pre-disposed illnesses and the elderly, as most cases do not require care.
- The concentration of fatalities and intensive care cases among the elderly and people with predisposed illnesses in all three countries exhibits a need to improve infection prevention mechanisms among these groups. At least until improved treatments and ultimately a vaccine are available.
- Experience in all three countries has also shown the need to have appropriate means to protect frontline health staff from infection – they are unsurprisingly over-represented in the group that test positive among the working age population.
- Finally, different containment and exit strategies can have disparate impacts on the cumulated loss of economic activity. This is arguably already documented by the Swedish experience and supported by the Norwegian Health Authority study.

Implications for an exit strategy

The COVID-19 pandemic has already led to enormous economic costs as well as continuing loss of welfare, especially notable for the elderly and for people with predisposed illnesses not able to meet their families. As a consequence, the returns from actions that will allow a quicker resumption of economic activities and higher levels of social contact are enormous.

Decisive questions for designing exit strategies in the near future

- How can we move away from a general lockdown of the economy towards more **targeted restrictions**? For example, isolating and protecting people above 70 and with predisposed illnesses, while allowing healthy employees to gradually return to work.
- Is the strategy to wait until a vaccine is developed to fully open up? Or purposefully build herd immunity by gradually exposing healthy individuals to the virus (within the capacity of the health care system)?

Focus points in combatting the disease and opening up societies

- Low-cost and easy-to-deploy **testing** (active and past infections) to identify the level of immunisation within the population and ensure early identification of infected.
- **Prompt and effective treatment of seriously ill**, to reduce costs to the health care system and reduce fatalities.
- It is not just a question of the level of public funding, but also about speeding up processes, "smarter" public purchase procedures, facilitating cooperation between public and private operators, setting specific quality targets, etc.

Exit strategy game-changers

- **The development of a vaccine** will be a game-changer. However, keeping strict lockdowns until a vaccine has been confirmed medically effective and safe is an uncertain strategy, as there is no clear timeline estimate for it.
- If effective, **the development of a treatment** could be crucial, as it would allow for a reopening of societies while avoiding increasing fatality rates, eventually leading to herd immunity. Numerous different treatments are currently being tested with results being published in the coming weeks.

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