The COVID-19 pandemic has spread all over the globe. As of mid-May, there were more than 4.7 million confirmed cases and over 315,000 deaths. Roughly half of the global population has been under curfew or subject to other restrictions on their activities for some time. The economic impact of the pandemic has been virtually unprecedented, shattering the global economic outlook in near-record time. The same is true for Iceland. This Box discusses the impact of the pandemic on the global economy and the way its macroeconomic effects are estimated in the Bank's baseline forecast. It should be noted, however, that the economic outlook is highly uncertain as a result of the pandemic. In order to illustrate this uncertainty, two alternative scenarios are presented at the end of this Box.

## How has COVID-19 affected the global economy?

To date, the economic impact of the pandemic stems primarily from actions taken by government authorities in an attempt to slow the spread of the disease. In early February, the Chinese authorities decided to lock down provinces in the country that generate a large part of China's output. The Italian authorities adopted comparable measures in early March, followed shortly after by other governments the world over. Large gatherings have been banned, domestic travel restricted, and many schools closed. In many instances, borders have been closed as well, and air transport has virtually halted.

These measures have been considered necessary to contain the virus but have unavoidably affected consumption decisions and overall demand, value chains, travel, and the cost of doing business. Overall activity has therefore been severely affected in individual countries, with cross-border spillovers further magnifying the contraction.

The impact of the pandemic response measures falls into three main categories. First is the supply-side impact, with firms having increasing difficulty maintaining normal production levels in the face of a shortage of inputs. The difficulty could stem, for instance, from personnel shortages due to worker illnesses or quarantine, or from a lack of inputs from other suppliers struggling with the same situation. Furthermore, moving supplies from one location to another can prove complex because of regional closures, as was the case in China during the first stages of the pandemic. The disease could also cut into productivity, as it complicates the conduct of business between companies and between countries and companies must split activities up between business locations or arrange for employees to work from home.

Second is the contraction in demand resulting from the pandemic. The disease causes increased fears among the general public and exacerbates uncertainty, which leads to more cautious spending decisions. Fear of infection also causes people to avoid crowded places and put off travel plans. In many areas, curfews and bans on gatherings have been imposed, causing demand to contract even more, and the bleaker economic outlook has discouraged households and businesses from spending.

Added to this is the impact on financial markets. The uncertainty resulting from the pandemic has shaken markets all over the globe, causing large-scale capital flight from emerging market economies and making credit to households and businesses less accessible and more expensive than before.

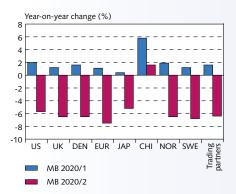
# Estimated impact of the pandemic on the domestic economic outlook

Because of the high level of uncertainty and the virtually unprecedented nature of the current situation, forecasting likely economic

Box 1

The economic impact of the COVID-19 pandemic

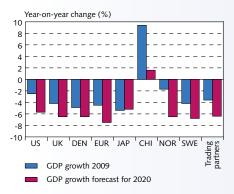
Chart 1 Change in international GDP growth outlook for 2020<sup>1</sup>



 Comparison of international GDP growth assumptions presented in MB 2020/1 and MB 2020/2. The data refer to the United States (US), the United Kingdom (UK), Denmark (DEN), euro area (EUR), Japan (JAP), China (CHI), Norway (NOR), Sweden (SWE), and the trading partner average.

Sources: Refinitiv Datastream, Central Bank of Iceland.

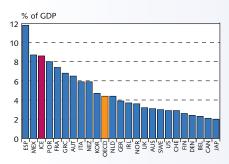
Chart 2
Comparison of GDP growth in 2009 and 2020<sup>1</sup>



 Comparison of GDP growth in 2009 and the GDP growth forecast presented in MB 2020/2. The data refer to the United States (US), the United Kingdom (UK), Denmark (DEN), euro area (EUR), Japan (JAP), China (CHI), Norway (NOR), Sweden (SWE), and the trading partner average.

Sources: Refinitiv Datastream, Central Bank of Iceland

Chart 3
Weight of tourism in GDP growth, selected
OECD countries<sup>1</sup>



1. Weight of tourism in GDP in 2018 or latest year avaliable. The countries are Spain (ESP), Mexico (MEX), Iceland (ICE), Portugal (POR), France (FAR), Greece (GRC), Austria (AUT), Italy (ITA), New Zealand (NEZ), South Korea (KOR), the Netherlands (NLD), Germany (GER), Ireland (IRL), Norway (NOR), the United Kingdom (UK), Australia (AUS), Sweden (SWE), the United States (US), Switzerland (CHE), Finland (FIN), Denmark (DEN), Belgium (BEL), Canada (CAN), and Japan (JAP). Sources: OECD, Statistics Iceland.

developments is unusually difficult at present. Under conditions like these, economic forecasts change rapidly as new information emerges – not least information on the progress of the disease itself. In order to assess the impact of the pandemic on the domestic economy and the economic outlook, the Bank uses its macroeconomic model to estimate the impact of economic shocks that are directly or indirectly attributable to the pandemic, in addition to relying on the most recent data and leading indicators.

## Abrupt reversal in the global economy

The assessment of economic developments among Iceland's main trading partners is based on the most recent forecasts and analyses of the global economic outlook. It is assumed that all advanced economies will suffer a significant economic contraction and that GDP growth will slow markedly in the largest emerging market economies. The outlook globally is for an economic contraction much larger than the contraction after the financial crisis in 2009. For example, a new forecast from the International Monetary Fund (IMF) expects global output to contract by 3% this year compared to 0.1% in 2009.

As Chart 1 indicates, the GDP growth outlook for Iceland's main trading partners has changed dramatically from the February forecast. Instead of growing by 1.6%, trading partners' GDP is now forecast to contract by 6.4%, a change of 8 percentage points from the previous forecast. This is nearly twice the size of the contraction Iceland's trading partners suffered in 2009, when GDP growth contracted by an average of 3.6% year-on-year (Chart 2).

# Steep decline in tourism and marine product exports

In a departure from a typical economic contraction, this time the services sector has borne the brunt of the shock, reflecting the severe impact that the lockdown measures have had on the sector. Travel restrictions have also had a profound impact on air transport and tourism worldwide. Domestic travel has declined significantly, and international air travel has been virtually at a standstill since mid-March. The economic repercussions of such a stoppage are severe, particularly for a country like Iceland, whose economy is heavily reliant on its tourism sector (Chart 3). The Bank's current baseline forecast assumes almost no tourists entering the country in Q2, followed by a minor rebound in H2/2020 (Chart 4). This situation is expected to last into next year, with fewer than 400,000 tourists projected to visit Iceland in 2020 as a whole - a decline of more than 80% relative to both the year 2019 and the Bank's February forecast. If the forecast materialises, this amounts to an 84% decline from 2018, when tourist arrivals peaked at 2.3 million. Because of this abrupt decline in tourist arrivals, services exports are set to decline by more than 50% between years; however, this is offset to a degree by a sharp contraction in imports, which is due partly to the steep drop in both Icelanders' overseas travel and domestic tourism operators' demand for imported inputs.

Furthermore, there are signs that the pandemic has significantly affected other export sectors, not least marine product exports, owing to disruptions in distribution and sales abroad, which have compounded the changes in consumption patterns that have come in the wake of widespread restaurant closures in trading partner countries. The baseline forecast assumes that marine product exports will contract by more than 12% year-on-year in 2020, as compared with the 2.6% contraction projected in February. If this forecast materialises, it will be the largest marine sector contraction since the early 1980s.

#### Increased uncertainty and tightening of financial conditions

Uncertainty in domestic and international financial markets has increased substantially in the wake of the pandemic. This heightened uncertainty can be seen, for instance, in financial institutions' reduced appetite for lending and a rise in risk premia and credit spreads. The Bank's baseline forecast therefore assumes that corporate credit spreads will rise by 1 percentage point, in addition to a similar increase late in 2019 (see Monetary Bulletin 2020/1).

# Public health measures lead to a sharp contraction in private consumption

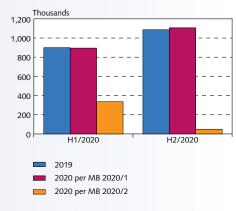
Tighter financial conditions cut into private sector demand, exacerbating the impact of the poorer outlook for employment and income. This is compounded by the sharp contraction in private consumption due to temporary self-quarantine, the ban on gatherings, and absences due to illness. In order to estimate these effects, it is important to look first at the composition of households' consumption spending. An estimated one-fourth of private consumption is strongly and directly affected by these factors (Chart 5).1 Chief among the categories affected are households' spending abroad and their spending on domestic travel, restaurants, and various types of recreation and personal service. Added to these is consumption spending on consumer durables and semi-durables, which households are likely to postpone or shelve indefinitely because of public health measures taken by the authorities. These expenses account for nearly 17% of total household spending; therefore, about 40% of households' consumption spending is likely to be significantly and directly affected by the public health measures. The impact on spending on alcoholic beverages, tobacco, and motor vehicle operation is less obvious, and the impact on purchases of food, beverages, and fixed household expenses such as housing, healthcare, and education is probably limited.

The baseline forecast assumes that the authorities' public health measures will continue to be eased in coming weeks, after having been in place since mid-March. Over this period, there has presumably been very limited spending on the private consumption components most strongly affected by the pandemic and related public health measures. Some portion of this spending will probably be shifted to the latter half of the year, however. It can also be expected that a share of the contraction in some of the most strongly affected expenditure items - restaurants, for example will shift to other forms of consumption, such as conventional food and beverage purchases. It is clear, however, that the public health measures will have a profound impact on private consumption in 2020, with direct effects of the measures causing a sizable share of the year's contraction, particularly in Q2. These effects come on top of, and amplify, the typical contractionary impact of increased pessimism, reduced labour demand, and falling income.

## The pandemic has a large impact on the labour market

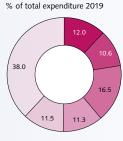
The pandemic and the temporary business closures caused by it have a profound impact on the labour market. A large number of companies are faced with a steep drop in revenues and a virtual halt to their business activities. As a result, unemployment has surged,

Chart 4 Assumptions on tourist visits to Iceland in 20201



1. MB 2020/2 forecast of tourists travelling through Keflavík Airport and comparison with MB 2020/1 forecast and year-2019 figures. Sources: Isavia, Central Bank of Iceland.

Chart 5 Classification of private consumption by probable scope of direct impact of COVID-19 on household spending<sup>1</sup>





Restaurants, accommodation, transport, package tours, cosmetics, misc. personal services

Recreation and culture, motor vehicles, household appliances, housewares, clothing

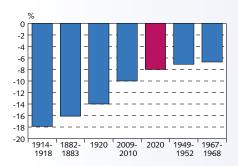
Alcoholic beverages, tobacco, motor vehicle operations Food, beverages

Housing component, telecom, healthcare, financial services, education, NGOs

1. Adjusted for the contribution of foreign tourists to each private Adjusted for the continuition of inergin course to each primary consumption subcomponent, which is based on Statistics Iceland's preliminary estimate of the distribution of foreign nationals' spending in Iceland in 2019. The darker colours reflect a stronger direct impact. Sources: Statistics Iceland, Central Bank of Iceland.

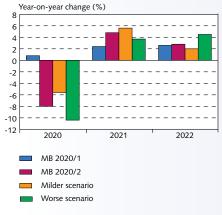
<sup>1.</sup> In official Statistics Iceland data on the classification of private consumption, individual components are not adjusted for spending by foreign tourists in Iceland. Foreign tourists' spending as a whole is deducted when the components are summed up, however. Here the individual components have been adjusted for foreign tourists' spending, based on Statistics Iceland's categorisation of tourists' spending by private consumption component.

Chart 6 Iceland's seven deepest recessions in the last 140 years<sup>1</sup>



Recessions since 1882 in which GDP contracted by more than 5%, based on annual data. Pre-1945 data are from the National Economic Institute, and post-1945 data are from Statistics Iceland.
 Sources: National Economic Institute, Statistics Iceland, Central Bank of Iceland.

Chart 7
Alternative forecasts of GDP growth in 2020-2022<sup>1</sup>



Comparison of baseline forecasts for 2020-2022 in MB 2020/1 and MB 2020/2, plus two alternative scenarios providing for recessions of differing depth and recoveries of differing speed.

 Source: Central Bank of Iceland.

although Government measures to protect jobs and keep companies running have compensated somewhat (see Box 2). The baseline forecast also assumes that inward migration of foreign labour will be significantly reduced as long as border closures remain in effect and air travel is limited and that a fraction will leave the country once travel restrictions are eased. Furthermore, the pandemic causes a substantial loss of work hours for employed people, owing to sick leave and quarantine. This includes the direct impact on workers who are ill or in quarantine and the indirect impact on those who miss work because of cutbacks in pre-school and primary school activities or because of illness among family members.

## Largest single-year contraction in a century

As is discussed in the main text of this *Monetary Bulletin*, it is assumed that GDP will contract by 8% this year, which corresponds to a close to 9 percentage point downward revision relative to the Central Bank's February forecast. The change in the 2020 output growth outlook for Iceland is therefore larger than in trading partners on average and would constitute the largest single-year contraction in Iceland since 1920 (Chart 6). According to the baseline forecast, it will therefore be larger than the one in 2009, although the overall contraction following the financial crisis a decade ago is larger when the additional contraction in 2010 is also taken into account.

# Alternative GDP growth outlook scenarios

As has been emphasised previously, it is highly uncertain how deep the current crisis will be and how quickly economic activity will normalise afterwards. The main uncertainty centres on how long the pandemic will last and whether it will resurface again after public health measures are relaxed. Furthermore, it is uncertain how extensive and persistent the impact on global value chains and food manufacturing will be, and when borders will re-open for international travel. By the same token, it is highly uncertain how much, and for how long, the self-quarantine and the ban on gatherings will affect private consumption, and to what extent households will postpone consumption decisions or abandon them altogether.

The baseline forecast assumes that economic activity will gradually start to return to normal in Q3/2020. This forecast could prove overly optimistic, however, if the pandemic turns out more persistent than is currently assumed. Chart 7 shows an alternative scenario wherein public health measures persist longer into H2 and uncertainty increases further, leading to higher risk premia and greater caution in spending decisions. In this example, the economic contraction will exceed 10% this year, and the recovery in 2021 will be weaker. The possibility cannot be excluded that the rebound will prove stronger, however. This could for example occur if the pandemic subsides more quickly, thus leading to a stronger rebound in tourism. Less uncertainty and more optimism concerning the economic outlook could also support increased consumption and investment spending. In this example, the contraction in 2020 could turn out less than 6%, with a stronger rebound in 2021.