



MONETARY BULLETIN

2020•2

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The objective of the Central Bank of Iceland's monetary policy is to contribute to general economic well-being in Iceland. The Central Bank does so by promoting price stability, which is its main objective. In the joint declaration made by the Government of Iceland and Central Bank of Iceland on 27 March 2001, this is defined as aiming at an average rate of inflation, measured as the 12-month increase in the CPI, of as close to 2½% as possible. Professional analysis and transparency are prerequisites for credible monetary policy. In publishing *Monetary Bulletin* four times a year, the Central Bank aims to fulfil these principles.

Monetary Bulletin includes a detailed analysis of economic developments and prospects, on which the Monetary Policy Committee's interest rate decisions are based. It also represents a vehicle for the Bank's accountability towards Government authorities and the public.

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Icelandic letters:

ð/Ð (pronounced like th in English this)

þ/Þ (pronounced like th in English think)

In *Monetary Bulletin*, ð is transliterated as d and þ as th in personal names, for consistency with international references, but otherwise the Icelandic letters are retained.

Statement of the Monetary Policy Committee 20 May 2020

The Monetary Policy Committee (MPC) of the Central Bank of Iceland has decided to lower the Bank's interest rates by 0.75 percentage points. The Bank's key interest rate – the rate on seven-day term deposits – will therefore be 1%.

The Committee has also decided to stop offering one-month term deposits. This entails that the Bank's key rate will be more effective and the Bank's policy rate signal clearer. Other things being equal, this measure should increase liquidity in circulation and further strengthen monetary policy transmission.

According to the Bank's new macroeconomic forecast, published in the May issue of *Monetary Bulletin*, the outlook is for an 8% contraction in GDP in 2020. The predominant factor underlying this forecast is a more than 80% decline in tourist visits to Iceland. The outlook is for a steep rise in unemployment, which appears set to reach 12% in Q3 and measure just under 9% for the year as a whole. According to the Bank's forecast, economic activity will gradually normalise starting in H2/2020. GDP growth is forecast at nearly 5% in 2021. Uncertainty is unusually pronounced, however, and economic developments will depend on the path the pandemic takes and the progress made in unwinding the associated public health measures.

Inflation measured 2.2% in April and has been below the Bank's inflation target since December 2019. The króna has depreciated since the pandemic reached Iceland, but this is offset by a steep decline in oil prices, as well as a decline in food and commodity prices. Furthermore, inflation expectations are broadly unchanged, and they appear to be firmly anchored to the target. According to the Bank's forecast, inflation will rise marginally in coming months due to exchange rate pass-through from the depreciation of the króna. The increased slack in the economy will weigh heavier as 2020 progresses, however, and the outlook is for inflation to measure below 2% in the latter half of the forecast horizon.

More firmly anchored inflation expectations provide monetary policy the scope to respond decisively to the deteriorating economic outlook. Lower interest rates, together with other actions taken by the Bank, will support the economic recovery and contribute to a more rapid recovery than would otherwise occur. Fiscal policy measures have pulled in the same direction.

The MPC will continue to monitor economic developments and will use the tools at its disposal to support the domestic economy and ensure that the more accommodative monetary stance is transmitted normally to households and businesses.

Monetary Bulletin 2020/2¹

The global economic outlook seemed to be improving at the beginning of the year but darkened suddenly when the COVID-19 pandemic began to spread within and between countries. Governmental authorities the world over have taken aggressive action in a bid to curb the spread of the disease. Entire regions have been locked down, public gatherings banned, domestic and international travel restricted, and borders closed. These pandemic response measures have caused enormous disruption to the world economy, giving rise to the deepest global peacetime contraction since the Great Depression in the 1930s.

The current crisis is also unique in that it has brought some economic activities to a virtual standstill and profoundly affected the lifestyles of much of the world's population, owing to the curfews and other similar restrictions that have been in place for several weeks. Uncertainty about when economic activity will start to normalise is therefore unusually pronounced, and the future will depend not least on how the pandemic is finally quelled.

In Iceland, as in other countries, the economic outlook has changed radically. Instead of the nearly 1% GDP growth forecast in the February *Monetary Bulletin*, the Bank now expects a contraction of 8% this year, Iceland's steepest single-year contraction in a century. A major factor in this is the prospect of a more than 80% year-on-year decline in tourist visits in 2020. Exports as a whole will therefore contract by nearly one-third, the largest single-year contraction in the history of Iceland's national accounts. Unemployment is set to peak at about 12% in Q3/2020. It is forecast to average almost 9% in 2020 as a whole, which would be the highest unemployment rate ever measured and markedly above its level after the financial crisis a decade ago.

According to the baseline forecast, economic activity will gradually normalise in H2/2020, but tourist visits are not expected to resume to any significant degree until 2021. Because of this year's contraction and the resulting output slack, the outlook is for robust GDP growth in 2021, provided that efforts to subdue the pandemic are successful and the lockdown can be lifted.

Even though the outlook is for robust output growth in 2021 and 2022, the pandemic is set to cause long-lasting damage to the domestic economy. If the forecast materialises, output in 2022 will be about 6% below what was forecast in February, which corresponds to roughly 180 b.kr. The final outcome is highly uncertain, however.

With the recent depreciation of the króna, inflation is expected to be higher in coming months than was forecast in February, although it is still expected to be at or below the Bank's inflation target. Offsetting the lower exchange rate are the plunge in global oil prices and an overall decline in global food and commodity prices, although shortages and various types of production problems have pushed some goods prices upwards. As 2020 progresses, however, the impact of the sizeable slack that has opened up in the economy will carry the day, and inflation is therefore expected to be below 2% in the latter half of the forecast horizon.

1. The analysis presented in this *Monetary Bulletin* is based on data available in mid-May. The COVID-19 pandemic has affected the activities of the Central Bank of Iceland, just as it has affected other firms and institutions. As a consequence, the May 2020 issue of *Monetary Bulletin* is being published in a different and more condensed format than usual. Owing to the high level of uncertainty about the effects of the pandemic on the economic outlook, the forecast appendix also shows fewer economic variables than usual.

I The global economy

The COVID-19 pandemic has caused severe disturbances in the global economy ...

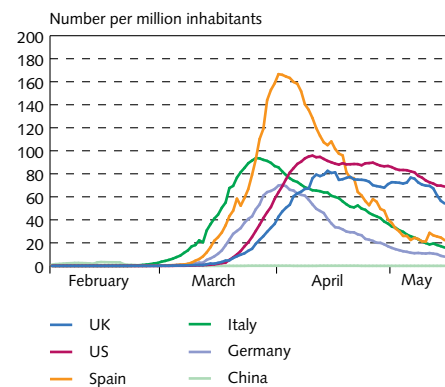
The global economic outlook has deteriorated markedly as a result of the COVID-19 pandemic. The disease has spread all over the world, infecting over 4.7 million and causing more than 315,000 deaths as of this writing. Governments the world over have put broad public health measures in place in order to curb the spread of the disease, reduce strain on healthcare systems, and mitigate the health repercussions of the illness. A large proportion of the global population has been placed under curfew, quarantine, or other comparable restrictions. Workplaces and schools have been closed in many areas, and large gatherings have been prohibited. Borders have been closed virtually worldwide, with only essential travel permitted.

Although these measures are deemed necessary to slow the spread of the disease, the economic impact is colossal. Global value chains are in disarray, and companies in services sectors such as transportation, tourism, and recreation are deeply affected. The public health measures have had a profound impact on households' spending decisions and have greatly reduced overall demand. World trade has declined and is now more costly and complicated than before. Increased uncertainty due to the pandemic, large-scale layoffs, and income losses for households and businesses have caused a chain reaction in domestic economies and spilled across borders, causing even further economic distress. Governmental authorities the world over have taken aggressive policy action to mitigate the impact of the economic shock on households and businesses (for further information on the economic impact of the pandemic, see Box 1).

... but infection rates appear to be declining in many areas

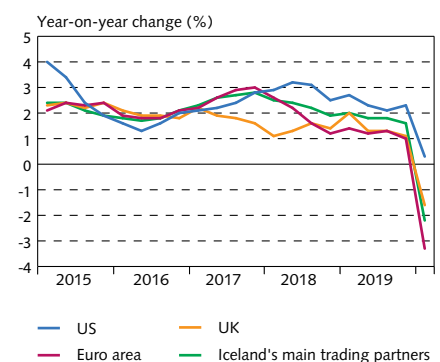
Even though the global number of infections is still rising, it appears that the pandemic is on the decline in many countries. The number of new infections has fallen, particularly in places that adopted the most rigorous public health measures early on (Chart I-1). Many countries have therefore relaxed containment measures and announced timetables for further easing. Companies have begun to re-open for business, schools are starting to return to normal, and increasing numbers of people are going back to work. Economic activity has therefore picked up again in many areas, although the recovery is likely to be slow and gradual. It can be expected to take some time before public health measures are fully lifted and economic activity returns to normal. Just how strong and lasting the impact on overall demand will be is highly uncertain, as is the degree to which households will postpone planned consumption spending or abandon it altogether. Businesses' investment plans are also up in the air, particularly in the tourism industry and other services sectors, a situation compounded by the uncertainty about when borders will completely re-open. Countries around the world are in different positions in their fight to contain the pandemic, and this divergence will probably slow down the global

Chart I-1
Daily new cases of COVID-19¹
1 February - 15 May 2020



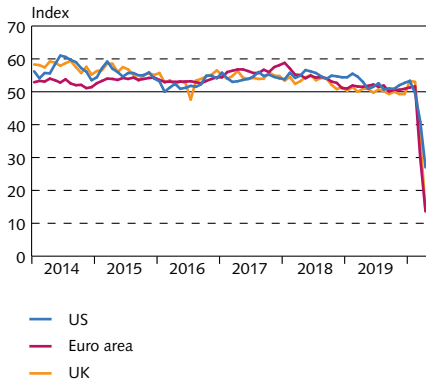
1. Seven-day moving average.
Sources: Johns Hopkins University Center for Systems Science and Engineering, World Health Organization.

Chart I-2
Global GDP growth¹
Q1/2015 - Q1/2020



1. Central Bank baseline forecast Q1/2020 for main trading partners.
Sources: Refinitiv Datastream, Central Bank of Iceland.

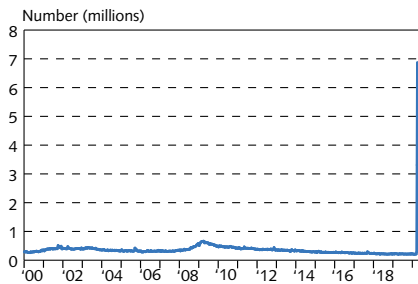
Chart I-3
Composite PMI¹
January 2014 - April 2020



1. Markit composite output purchasing managers' index. The index is published monthly and is seasonally adjusted. An index value above 50 indicates month-on-month growth, and a value below 50 indicates a contraction.

Source: Refinitiv Datastream.

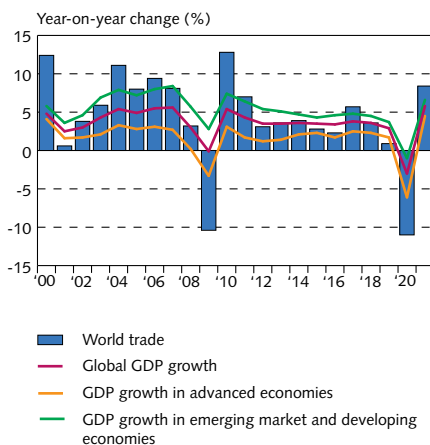
Chart I-4
US jobless claims¹
1 January 2000 - 9 May 2020



1. Number of US unemployment insurance initial claims. Seasonally adjusted weekly data.

Source: Federal Reserve Bank of St. Louis FRED-database.

Chart I-5
Global GDP and trade 2000-2021¹



1. World trade in goods and services. IMF forecast 2020-2021.

Source: International Monetary Fund.

economic recovery. The main uncertainty centres on developments in the pandemic itself, however: how quickly it can be controlled, whether relaxation of restrictions results in a resurgence, and whether and when a vaccine can be developed.

The global economy seemed to be picking up at the beginning of the year ...

Although 2019 saw the weakest global output growth in a decade, there were signs of a gradual recovery at the beginning of this year. Manufacturing appeared to be picking up, and pessimism among corporate executives in major advanced economies was on the wane. Key factors in the brighter outlook were the interim agreement signed in mid-January by the US and China, in partial resolution of their trade dispute, and the agreement reached between the UK and the European Union (EU) regarding the UK's exit from the EU. The labour market situation in advanced economies was favourable as well, supported by robust growth in services sectors.

... but everything changed when the pandemic struck

All of this changed when COVID-19 began to spread around the world. The severe economic repercussions quickly became clear in China, where the illness was first detected. Indicators of economic activity that suggested a sharp contraction in Q1 were confirmed when figures for the period showed a 6.8% year-on-year contraction in GDP.

Advanced economies also recorded a strong contraction in Q1, albeit a small one in comparison with the expected outcome for Q2. Preliminary figures suggest that GDP in the US contracted by 1.2% between quarters in Q1 and grew by only 0.3% year-on-year. The year-on-year contraction was much stronger in the UK (1.6%) and the eurozone (3.3%), owing mainly to a nearly 5% contraction in the southern part of the area. The contraction among Iceland's main trading partners is expected to average 2.2% in Q1, about the same as that measured in Q4/2008, at the beginning of the post-crisis recession (Chart I-2).

Unprecedented contraction expected in Q2/2020 ...

For advanced economies, the outlook for Q2 is for the deepest contraction in the history of quarterly national accounts data. Purchasing managers' indices (PMI) have fallen precipitously, particularly in services sectors, and are at the lowest ever measured (Chart I-3). New applications for unemployment benefits have exploded in the US, with over 36 million jobless added to the unemployment rolls from the time lockdown measures were imposed through early-May (Chart I-4). The US unemployment rate had risen to 14.7% by April, its highest in more than eight decades. Other advanced economies have also seen a surge in unemployment. Households and businesses are increasingly pessimistic, and uncertainty about the global economic outlook is on the rise. Trading partner GDP is projected to shrink by over 11% year-on-year in Q2, more than double the largest single-quarter contraction during the Great Recession in 2009, which measured nearly 5%.

... and the largest peacetime contraction in global GDP since the Great Depression

Although it is expected that the global economic contraction will begin to recede in Q3, a steep downturn in 2020 as a whole is clearly in the offing. According to the most recent forecast from the International Monetary Fund (IMF), the global economy is expected to shrink by 3% in 2020, whereas in January the Fund projected more than 3% growth for the year. If this forecast materialises, it will be the deepest peacetime contraction since the Great Depression in the 1930s, and much larger than the 0.1% downturn during the Great Recession a decade ago (Chart I-5). Advanced economies are forecast to shrink by 6.1% and emerging market and developing economies by 1% (2.2% if China is excluded). It will also be the first time since the Great Depression that a contraction has been measured in both of these groups at the same time. The IMF also projects that world trade will contract by about 11% this year, broadly the same as in 2009.

Similarly, the contraction among Iceland's main trading partners is forecast at 6.4%, whereas the Central Bank's February forecast assumed a trading partner growth rate of 1.6%. The economic outlook has deteriorated markedly in all countries, but most in the eurozone, where a contraction of 7.5% is forecast. If the forecast materialises, the contraction in 2020 will be nearly twice that in 2009, on average (see Box 1).

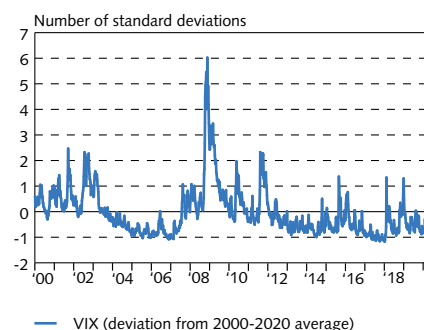
Strong GDP growth forecast for 2021, but the outlook is highly uncertain

Just how deep and protracted the 2020 crisis will be is highly uncertain, particularly because it is unknown how the pandemic will play out and how successfully healthcare systems will be able to combat it. The IMF forecast assumes that the pandemic will peak in Q2 and then begin to subside. As it tapers off, public health measures adopted to curb the spread of the disease will be phased out gradually. According to this, the Fund assumes that global GDP growth will rebound to 5.8% in 2021; however, this depends on how persistent the pandemic proves to be. Many economies are dealing with various other shocks as well, such as large-scale capital outflows and a steep drop in commodity prices. The Fund considers the risk to its forecast to be concentrated on the downside. The global contraction could turn out twice as large as the IMF has forecast if the pandemic recedes more slowly, and the 2021 recovery could evaporate altogether if another wave of COVID-19 infections occurs. On the other hand, if a vaccine is developed, the global economy could recover earlier and more strongly.

Global financial markets upended by the pandemic ...

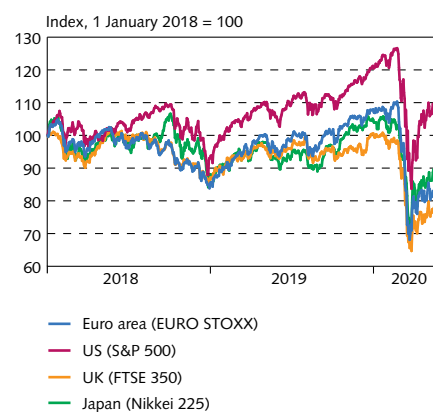
The changed economic outlook and the surge in uncertainty caused by the pandemic have put global financial markets into a tailspin. Uncertainty about global economic developments can be seen in wide swings in international asset prices, with share price volatility, for instance, roughly at the peak seen in the Great Recession a decade ago (Chart I-6). Investors have fled to safe assets such as gold and US

Chart I-6
Global share price volatility¹
7 January 2000 - 15 May 2020



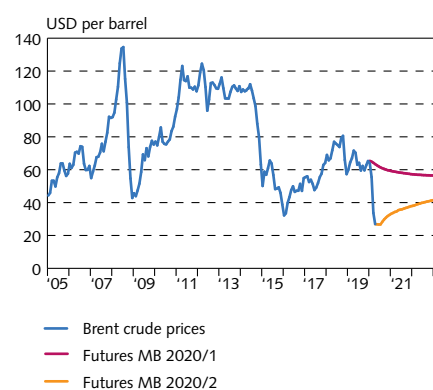
1. VIX (CBOE Volatility Index) indicates the implied volatility of the S&P 500. Weekly data through 15 May 2020.
Source: Federal Reserve Bank of St. Louis FRED-database.

Chart I-7
Global share prices
1 January 2018 - 15 May 2020



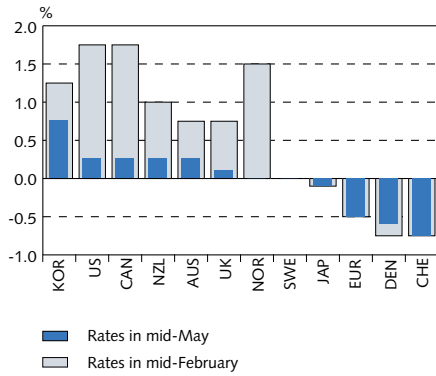
Source: Refinitiv Datastream.

Chart I-8
Global oil prices
January 2005 - June 2023



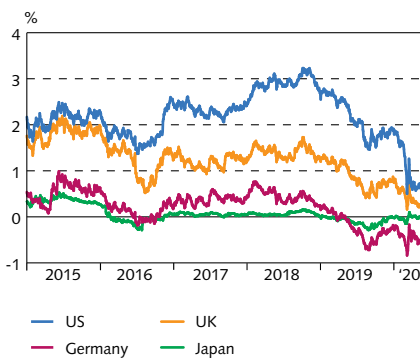
Sources: Refinitiv, Central Bank of Iceland.

Chart I-9
Central bank interest rates in selected advanced economies¹



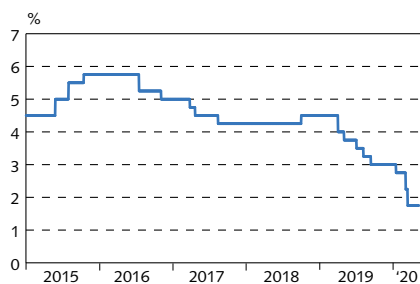
1. The economies are South Korea (KOR), the United States (US), Canada (CAN), New Zealand (NZL), Australia (AUS), the United Kingdom (UK), Norway (NOR), Sweden (SWE), Japan (JAP), euro area (EUR), Denmark (DEN) and Switzerland (CHE).
Sources: Central Bank websites.

Chart I-10
10-year government bond yields
1 January 2015 - 15 May 2020



Source: Refinitiv Datastream.

Chart II-1
Central Bank of Iceland key interest rate¹
1 January 2015 - 15 May 2020



1. The Central Bank's key interest rate is the rate on seven-day term deposits.
Source: Central Bank of Iceland.

Treasury bonds, and global share prices toppled when the pandemic struck, although they have partially recovered since then (Chart I-7). Furthermore, risk premia and interest rate spreads on riskier assets have risen steeply. In addition, capital outflows from emerging market economies have increased sharply to nearly four times the post-crisis level a decade ago.

... with the plunge in oil prices adding fuel to the fire

Global oil prices have collapsed since January. The price of Brent crude has fallen to a two-decade low, and other benchmark products are at or near historical lows. Oil prices in the US fell the most and, in mid-April, turned negative for the first time in history, with sellers willing to pay buyers to take supplies off their hands because of a lack of storage space.

The fall in global oil prices mainly reflects declining worldwide demand for oil, which in turn reflects measures taken by governments around the world to slow the spread of COVID-19. Motor vehicle traffic has declined substantially, and passenger transport by air has virtually halted. In addition to this, oil supplies are very uncertain since the collapse of negotiations between OPEC and non-OPEC oil-producing countries concerning a further reduction in supply. Even though an agreement providing for dramatically reduced production was reached in early April, prices have remained low, owing to the glut of supply and the accumulation of inventories. Brent crude has fallen in price by just over 50% year-to-date and is now selling at 32.5 US dollars per barrel. Futures prices suggest that the price of oil will gradually inch upwards over the course of the year, to an average roughly 46% below the 2019 average (Chart I-8).

Central banks worldwide have adopted unprecedented measures

Global inflation has subsided again since the onset of the pandemic, and inflation expectations have fallen once more, after years of attempts by central banks to bring them up to target finally appeared to be bearing fruit. Central banks all over the world have therefore cut interest rates again and taken a range of other measures to ease the monetary stance and boost financial system liquidity, with the aim of supporting demand, keeping inflation at target over the medium term, and ensuring that the financial system functions as normally as possible.

Central bank measures are broad in scope and have been implemented quickly. Interest rates have been slashed, particularly in economies where there was scope to lower them (Chart I-9). In many economies, financial institutions' access to liquidity facilities has been expanded, and other measures have been taken to boost households' and businesses' access to liquidity. Many central banks have also started large-scale government bond purchases in order to ensure that the crisis-driven increase in governments' borrowing needs does not push bond rates upwards. Some central banks have even begun buying corporate bonds or lending directly to companies. They have also both tapped and expanded US dollar credit lines among themselves in response to surging worldwide demand for dollar liquidity. In addition,

the US Federal Reserve began offering other central banks access to US dollar liquidity through a temporary repurchase agreement facility.

These measures by leading central banks, the decline in inflation expectations, and market agents' concerns about the worsening economic outlook have shown recently in a steep decline in long-term interest rates in advanced economies, particularly in the US, where long-term rates are at an all-time low (Chart I-10).

II Monetary policy and domestic financial markets

The Central Bank has lowered interest rates and adopted a number of other measures

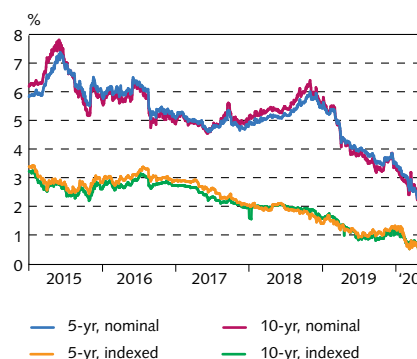
Since the effects of the COVID-19 pandemic began to show in Iceland, the Central Bank Monetary Policy Committee (MPC) has lowered the Bank's key interest rate by 1 percentage point. The key rate has therefore been lowered by 2.75 percentage points since May 2019 (Chart II-1). Prior to the publication of this *Monetary Bulletin*, the Bank's key interest rate – the rate on seven-day term deposits – was 1.75%, its lowest ever. The Bank has also taken a number of other actions to ease the monetary stance and boost financial system liquidity, in order to shore up demand, support increased access to credit, and preserve financial system stability (see Box 2). The Bank's real rate has fallen in line with the decline in nominal interest rates, and the interest rate differential with abroad has narrowed.

The yield on ten-year nominal Treasury bonds has also fallen, measuring 2.5% just before this *Monetary Bulletin* went to press – 1.7 percentage points lower than it was a year ago (Chart II). It actually rose temporarily in mid-March, in the wake of news about the Treasury's increased borrowing need, which investors were concerned would reduce market liquidity and push bond rates upwards. The rise in yields reversed several days later, however, after the MPC announced the Bank's intention to begin buying Treasury bonds in the secondary market so as to ensure even further that the more accommodative monetary stance would be passed on to households and businesses (see Box 2).

The króna has depreciated during the pandemic, as have many other currencies

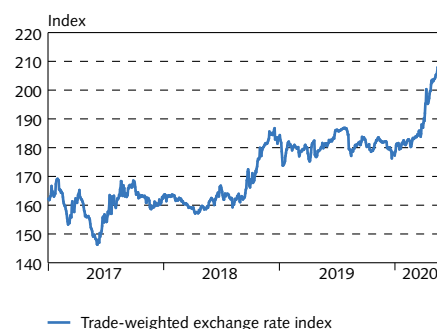
The króna began to depreciate in late February, after the pandemic spread to Iceland, and by mid-March it had fallen a full 8% (Chart II-3). Just before this *Monetary Bulletin* went to press, the króna had fallen by 12% in trade-weighted terms since end-February and by 14% year-to-date. The currencies of other advanced economies, commodity-exporting countries in particular, have weakened as well, as the pandemic has prompted investors to flee in greater numbers to

Chart II-2
Government-guaranteed bond yields¹
2 January 2015 - 15 May 2020



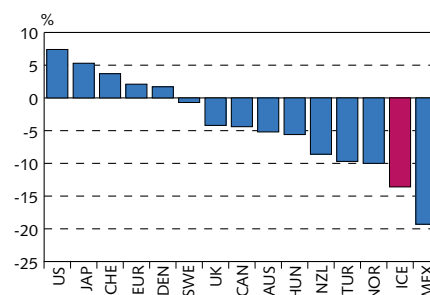
1. Based on the zero-coupon yield curve, estimated with the Nelson-Siegel method, using money market interest rates and government-guaranteed bonds.
Source: Central Bank of Iceland.

Chart II-3
Exchange rate of the króna¹
2 January 2017 - 15 May 2020



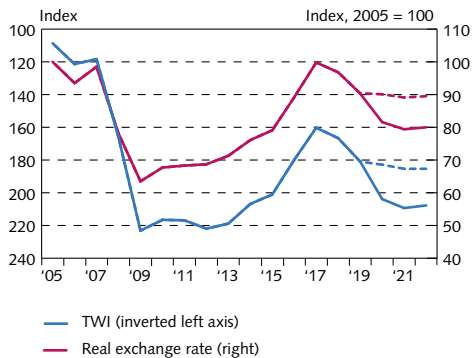
1. Price of foreign currency in krónur (narrow trade index).
Source: Central Bank of Iceland.

Chart II-4
Change in trade-weighted exchange rate of various OECD currencies¹



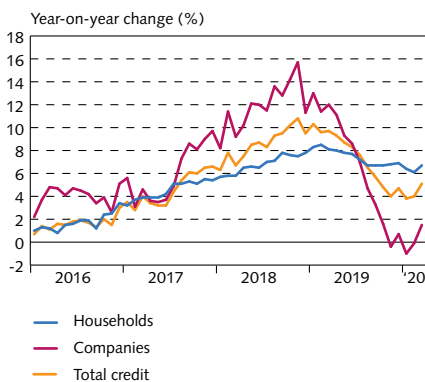
Change in trade-weighted exchange rate in 2020 through 15 May. Currencies are those of the United States (US), Japan (JAP), Switzerland (CHE), euro area (EUR), Denmark (DEN), Sweden (SWE), the United Kingdom (UK), Canada (CAN), Australia (AUS), Hungary (HUN), New Zealand (NZL), Turkey (TUR), Norway (NOR), Iceland (ICE), and Mexico (MEX).
Sources: Refinitiv Datastream, Central Bank of Iceland.

Chart II-5
Exchange rate of the króna 2005-2022¹



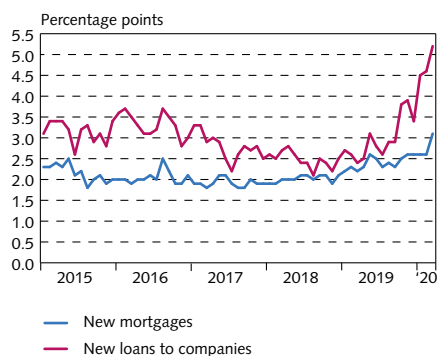
1. The trade-weighted exchange rate index (TWI) is based on a narrow trade basket. Real exchange rate in terms of relative consumer prices. Central Bank baseline forecast 2020-2022. Broken lines show forecast from MB 2020/1. Source: Central Bank of Iceland.

Chart II-6
Credit system lending¹
January 2016 - March 2020



1. Credit stock adjusted for reclassification and effects of Government debt relief measures. Excluding loans to deposit institutions, failed financial institutions, and the government. Businesses include non-financial companies and non-profit institutions serving households. Source: Central Bank of Iceland.

Chart II-7
Credit spreads¹
January 2015 - March 2020



1. The difference between a weighted average of the large commercial banks' non-indexed lending rates and the Central Bank's key rate. The most recent figures are preliminary. Source: Central Bank of Iceland.

safe assets and currencies, which are popular options during times of global uncertainty (Chart II-4).

Shocks to the tourism industry and other export sectors probably weigh heaviest in the recent depreciation of the króna, however. The interest rate differential with abroad has narrowed and net capital outflows due to new investment have increased, particularly outflows relating to sales of listed equities, although foreign investors have also sold domestic Treasury bonds in greater measure than before. There have been offsetting capital inflows, though, including inflows linked to a non-resident investor's acquisition of a stake in a domestic real estate company. Furthermore, Icelandic pension funds' currency purchases have declined in the wake of their decision to temporarily refrain from buying foreign currency. The Central Bank has also intervened in the foreign exchange market, selling foreign currency for just over 17 b.kr.

The average exchange rate of the króna is now some 15% lower than was assumed in the Bank's February forecast. The baseline forecast is based on the assumption that the trade-weighted exchange rate index will hold relatively steady at its current level over the forecast horizon (Chart II-5). If this assumption is borne out, the real exchange rate in 2020 will be relatively close to the level seen in H2/2015, when the tourism boom had just begun.

Corporate lending growth has lost pace, and credit spreads have risen even further

Growth in corporate lending slowed markedly as 2019 progressed, in line with the overall slowdown in economic activity, and annual growth has averaged less than 1% since late last year (Chart II-6). Growth in lending to all sectors has eased, and credit to retail, wholesale, and services companies has contracted. On the other hand, growth in lending to households has not yet slowed down but instead has held broadly unchanged at 6-7% since mid-2019. There are no signs that households have reduced access to credit since the onset of the pandemic, either, and residential mortgage rates have continued to fall in tandem with Central Bank rate cuts. Credit spreads on corporate loans have risen still further, however, and rates on new corporate loans are now about 5 percentage points above the Central Bank's key rate (Chart II-7).

Share prices have fallen, and house price inflation continues to ease

Share prices have tumbled in 2020 and most companies on the Nasdaq Iceland exchange have seen their share prices fall. Icelandair shares have fallen the most, or by almost 74% year-to-date. House price inflation has lost pace as well, single-family home prices in particular. House price increases are expected to continue easing as the economic slowdown and increased uncertainty make their mark on the real estate market. In addition, the supply of newly built properties has risen recently, as has the number of older homes available for sale.

III Demand and GDP growth

Abrupt reversal in private consumption as Q1 advanced ...

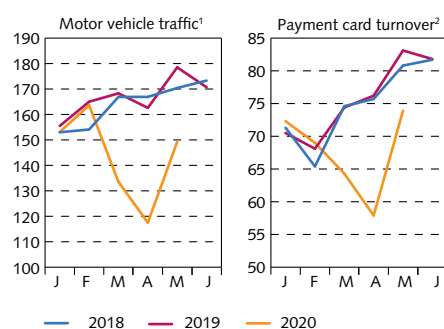
Following years of rapid growth, private consumption slowed down last year as it increased by 1.6%. Early in Q1/2020, consumption spending appeared to be growing at about the same pace as in 2019, but the situation changed abruptly in March, when the pandemic took hold in Iceland and the authorities adopted various public health measures in a bid to contain the spread of the disease. Road traffic data for the greater Reykjavík area indicate that the impact in March and April was substantial, reflecting changed consumption patterns, large numbers of people in quarantine or isolation, and a surge in telecommuting (Chart III-1). The same can be seen in payment card turnover, which contracted strongly after the public health measures were imposed. Households have also grown significantly more pessimistic. The Gallup Consumer Confidence Index fell steeply in April, measuring at its lowest since October 2010 (Chart III-2). Households were especially pessimistic about the current situation, and for the first time in four years they were more pessimistic about the present than about the situation six months ahead. In May, however, the index rose from the previous month, reflecting greater optimism concerning the economic outlook in the next six months.

... with a steep contraction expected in Q2

Private consumption is estimated to have contracted year-on-year in Q1, for the first time since Q3/2010, but an even sharper contraction is expected in Q2. This is particularly the case for the spending categories affected most strongly by restrictions on gatherings and travel. As is discussed in Box 1, the authorities' public health measures can be expected to have a strong direct impact on roughly 40% of household spending. To some extent, this will be offset by increased spending on groceries, however, and firms have tried to adapt to the situation with expanded e-commerce and home delivery services. Added to the direct impact of the public health measures are the indirect effects of higher unemployment, reduced real disposable income, and increased uncertainty, all of which discourage households from spending, particularly on consumer durables and other big-ticket items that can be postponed. Moreover, households' spending abroad has virtually halted as the restrictions on travel have taken effect. This can be seen clearly in itemised payment card turnover figures, which show, for instance, that spending on services that were greatly affected by the public health measures, such as restaurants and recreation, contracted by more than 60% year-on-year in April, and spending on miscellaneous specialty goods declined by nearly 10% (Chart III-3). However, high-frequency data suggest that activity bottomed out in April, and data on road traffic and payment card turnover suggest an uptick in household demand in early May, when the number of infections started to fall and lockdown measures were eased (Chart III-1). Nevertheless, these indicators imply that consumption will contract by nearly one-fifth year-on-year in Q2, broadly the same as in Q4/2008 and Q1/2009.

Chart III-1

Indicators of economic activity in H1/2020

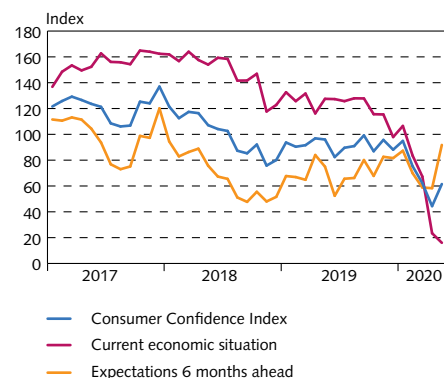


1. Daily traffic along three main routes in the capital area (thousands of vehicles). The figure for May shows traffic in the first half of the month.
2. Debit and credit cards issued in Iceland. Domestic turnover is deflated with the CPI excluding housing. Foreign turnover is deflated with the import-weighted exchange rate index (b.kr.). Turnover in May is estimated from daily card turnover in Iceland for the first ten days of the month and foreign turnover for the previous month.
Sources: Statistics Iceland, The Icelandic Road and Coastal Administration, Central Bank of Iceland.

Chart III-2

Consumer sentiment about the economic outlook¹

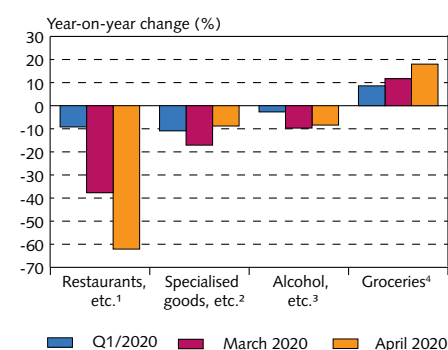
January 2017 - May 2020



1. The Gallup Consumer Confidence Index is a measure of consumers' sentiment about the economy and the labour market.
Source: Gallup.

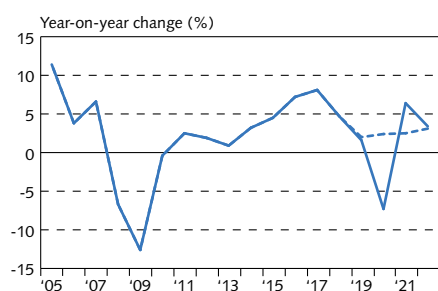
Chart III-3

Payment card turnover by main categories



1. Restaurants, accommodation, transport, package tours, duty-free shopping, culture and recreation, personal care, and other personal services. 2. Electronics, household appliances, furniture, clothing, and other specialised retail goods and services. 3. Alcohol, and motor vehicle operating expense. 4. Grocery stores and supermarkets.
Source: Centre for Retail Studies.

Chart III-4
Private consumption 2005-2022¹



1. Central Bank baseline forecast 2020-2022. Broken line shows forecast from MB 2020/1.

Sources: Statistics Iceland, Central Bank of Iceland.

Largest contraction in private consumption in a decade

Developments in private consumption for the rest of 2020 will be determined largely by how successful the easing of public health measures turns out to be. Demand for various services that were unavailable during the partial lockdown can be expected to increase strongly once those services become available. Nevertheless, broad restrictions are still in place, and the economic shock will have a long-lasting impact on incomes and jobs. For 2020 as a whole, private consumption is forecast to contract by more than 7%, with the decline in overseas spending weighing heaviest. If this forecast materialises, this year's contraction in private consumption will be the largest since 2009, when it measured 12.6% (Chart III-4). The steep decline in households' real disposable income weighs heavily in this, albeit offset by reduced tax burdens, increased transfer income, and payment deferrals. Private consumption is expected to rebound strongly in 2021, however, as households' disposable income will rise and they are expected to tap into savings accumulated in recent years.

The economic crisis will affect many companies' investment plans ...

Business investment contracted in 2019, as it did in 2018. Last year's contraction, which measured 17.5%, stemmed mostly from general business investment (i.e., excluding energy-intensive industry, ships, and aircraft), although the sale of WOW Air's aircraft out of the country contributed significantly as well.

The ongoing economic shock has a major impact on many firms' investment plans. Firms in sectors directly affected by forced business closures are likely to postpone or abandon investment plans, and most companies are changing their plans in response to declining domestic and foreign demand. Rising credit spreads on new loans and generally tighter access to credit are also likely to affect companies' investment plans, not least in the case of smaller firms that rely heavily on external funding and have limited liquid assets to use for investment. This can be seen in the Central Bank's March 2020 survey of firms' investment plans. According to the survey, executives expect to invest slightly less this year than in 2019. If 4 b.kr. in additional investment by Keflavík Airport operator Isavia is excluded, the survey indicates a year-on-year contraction of 6%. It should be noted that the Bank's survey was conducted before the full impact of the pandemic came to the fore. In addition, only large companies are included in the survey, whereas smaller firms are likely to have revised their investment plans even more than their larger counterparts. After taking this into account, as well as the fact that the survey does not include planned investment in ships, aircraft, energy-intensive industry, and hotel construction, it is possible that the Bank's survey underestimated the contraction in business investment in 2020. On the other hand, there are signs of robust year-on-year growth in business investment in Q1, although this is mainly due to negative base effects from the steep contraction in Q1/2019, when WOW Air's aircraft were sold out of the country. Based on all of this, the Bank's baseline forecast assumes that aggregate business investment will contract by more than 6% this year (Chart III-

5). The contraction is set to be even larger if investments in ships and aircraft are excluded.

... and total investment is set to contract markedly in 2020

In addition to the aforementioned contraction in business investment, the outlook is for a contraction of nearly one-fourth in residential investment this year, in line with key high-frequency indicators and a steep decline in housing starts, according to the count carried out by the Federation of Icelandic Industries this spring. On the other hand, the count shows an increase in the number of homes that are weather-proof or further along in the construction process. As a result, many contractors have capital tied up in unsold assets, making financing of new projects more difficult. Added to this is the uncertainty caused by the pandemic, although this is offset to a degree by the authorities' decisions to accelerate and expand previous public investment plans and to increase value-added tax reimbursements for new real estate construction (see Box 2).

The Bank's baseline forecast assumes a large contraction in total investment in Q2, after relatively robust growth in Q1. As the year progresses, however, investment is expected to pick up gradually, supported by Government measures and pent-up investment needs, including investment needs relating to projects that had been postponed. Investment in tourism will probably take longer to recover, however. Total investment is projected to contract by more than 6% in 2020 as a whole and then start to rise again in 2021 (Chart III-5). Developments in the pandemic itself, the public health response measures, and restrictions on international travel could change the outlook considerably, however.

Large fiscal deficit expected in 2020

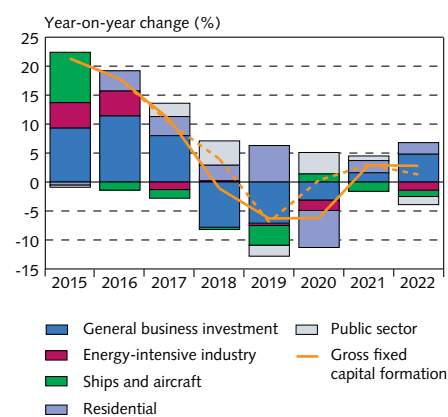
The sudden economic downturn will have a profound impact on the Treasury outcome this year, in addition to the effects of Government measures designed to soften the economic blow caused by the pandemic. As is discussed in Box 2, the Government measures are large in scale and scope; therefore, a sizeable fiscal deficit is all but assured this year. This is the second year in a row that the Government has put broad-based economic response measures in place. In 2019, the Treasury outcome was negative by 0.7% of GDP, most of it due to Government measures to mitigate the impact of WOW Air's insolvency. The deficit in 2020 is expected to total about 12% of GDP, similar to the deficit on the overall balance in 2008 (Chart III-6). The final Treasury outcome for the year is highly uncertain, as it will depend not only on economic developments but also on whether additional measures must be adopted to support the economy during the pandemic. In this regard, the authorities benefit from the considerable fiscal space available to the Treasury, given its low debt level.

Goods and services exports contracted in 2019, for the first time since 2006

Exports of goods and services contracted by 5% year-on-year in 2019, closing out a decade of growth averaging over 5% per year. Services

Chart III-5

Gross fixed capital formation and contribution of main components 2015-2022¹

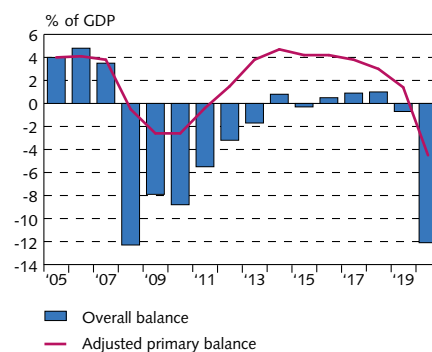


1. General business investment excludes ships, aircraft, and energy-intensive industry. Central Bank baseline forecast 2020-2022. Broken line shows forecast from MB 2020/1.

Sources: Statistics Iceland, Central Bank of Iceland.

Chart III-6

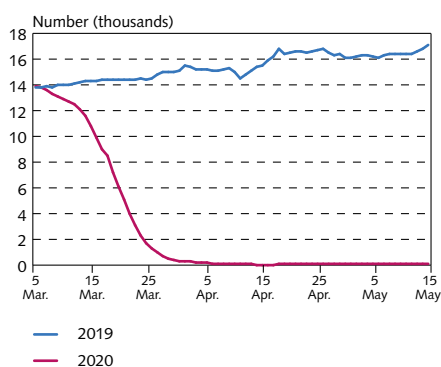
Treasury balance outcome 2005-2020¹



1. The primary balance is adjusted for one-off items. For 2016 through 2020, both the overall balance and the primary balance are adjusted for stability contributions, accelerated write-downs of indexed mortgage loans, a special payment to LSR A-division, dividends in excess of the National Budget, and other discretionary measures. Central Bank baseline forecast 2020.

Sources: Ministry of Finance and Economic Affairs, Statistics Iceland, Central Bank of Iceland.

Chart III-7
Daily passenger traffic through Keflavík Airport¹



1. Seven-day moving average. Passenger numbers for 2019 excluding WOW Air. The dates of the data for 2019 have been shifted so that the same days of the week are compared (Thursday 5 March 2020 is therefore compared with Thursday 7 March 2019).
Source: Isavia.

exports declined steeply as a result of WOW Air's collapse and the grounding of Icelandair's new Boeing 737 Max jets. The failure of the capelin catch and production difficulties in one of the large aluminium smelters caused exports of marine products and aluminium products to contract as well.

Tourism industry battered by the pandemic ...

The COVID-19 pandemic has upended the global economy and world trade, dealing an especially heavy blow to international air transport and tourism. Tourist arrivals declined steeply in March, and in early April, travel to and from Iceland virtually halted (Chart III-7). Travel exports are estimated to have fallen precipitously in Q1, owing mainly to a nearly 30% decline in tourist numbers. The contraction will be even sharper in Q2, with international passenger flights all but non-existent. The forecast assumes a minor rebound in H2/2020 and a contraction of more than 80% year-on-year for 2020 as a whole. Tourism is expected to recover further in 2021 (see also Box 1).

... and the outlook for marine product exports has deteriorated as well

In spite of a downturn in demand and a 10% contraction in marine product exports, fishing industry export revenues increased slightly year-on-year in Q1. Product prices have remained favourable, and the depreciation of the króna has supported revenues in the sector. It is obvious, though, that the pandemic will cause serious difficulties in the fishing industry in the near future, and there are already signs of a significant contraction in export volumes in Q2. According to the survey taken by the Central Bank among fishing companies after the pandemic struck, demand for marine products has changed significantly and distribution of products to merchants has been disrupted. The impact on processing volumes, exports, and inventories varies from one company to another, however. Sales of frozen-at-sea products to European markets have declined, and hotels' and restaurants' demand for fresh and frozen-at-sea products dried up almost entirely when tourism in trading partner countries came to a virtual halt and restaurants were subjected to widespread closures. There are also signs that the largest fisheries have cut back on their fishing. The baseline forecast therefore assumes that marine product exports will be down by roughly 12% year-on-year in 2020, the largest contraction in volume terms since the early 1980s.

The outlook for other goods exports has deteriorated as well. Exports of high-tech food manufacturing equipment and medical products are expected to fall markedly, and aquaculture exports are projected to increase less than previously forecast. In addition, aluminium product exports are projected to contract by 1½% this year, somewhat more than was forecast in February.

Exports forecast to show the largest contraction in the history of Iceland's national accounts

On the whole, exports of goods and services are expected to contract by nearly one-third in 2020 (Chart III-8). This would be the largest

single-year export contraction in the history of Iceland's national accounts, bringing total exports back to their 2010 level. The main driver of the decline is a nearly 53% contraction in services exports, although goods exports are set to contract by more than 9%. This is a much larger contraction than was forecast in February, reflecting the severe repercussions of the pandemic and the response measures for Iceland's export sector. The outlook is for a relatively robust recovery in 2021, however, once the impact of the pandemic has begun to recede. Year-on-year growth is projected at almost one-fourth, owing mainly to a surge in services exports and a turnaround in marine product export growth.

Current account surplus set to shrink significantly despite a strong contraction in imports

The steep decline in goods and services exports is also reflected in a reduced need to import inputs for the export sector, such as jet fuel, transport equipment (including rental cars), and alumina. Furthermore, Icelanders' overseas spending has fallen markedly, and aircraft leasing has declined significantly as well. Added to this is a reduction in imports because of the domestic economic contraction. The outlook is for goods and service imports to contract by one-fourth this year, following a nearly 10% contraction in 2019.

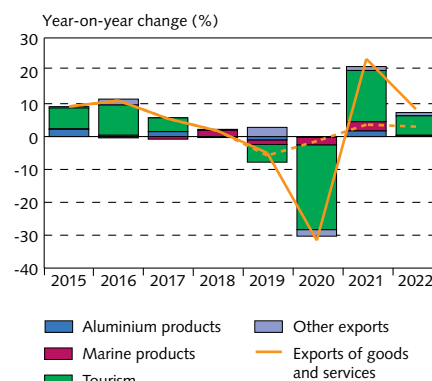
Although reduced imports and improved terms of trade pull in the opposite direction, the headwinds facing Icelandic exporters are expected to result in a trade deficit in H1/2020. A rebound is forecast for H2, however, and a trade surplus of 1½% of GDP is forecast for the year as a whole, as compared with last year's surplus of 4.7%. The current account surplus is set to shrink even further as the primary income flips from a surplus to a deficit, owing to a weaker operating performance from Icelandic-owned foreign companies (Chart III-9). According to the baseline forecast, the current account surplus will grow again in 2021, although it will remain below the February forecast for the entire forecast horizon.

Outlook for the largest single-year output contraction in a century ...

GDP growth gained pace in Q4/2019, measuring 4.7% for the quarter and 1.9% for the year as a whole, 1.3 percentage points more than was assumed in the Bank's February forecast. In part, this reflects Statistics Iceland's downward revision of year-2018 GDP growth by 1 percentage point, although the contribution from net trade turned out more favourable than was projected in February.

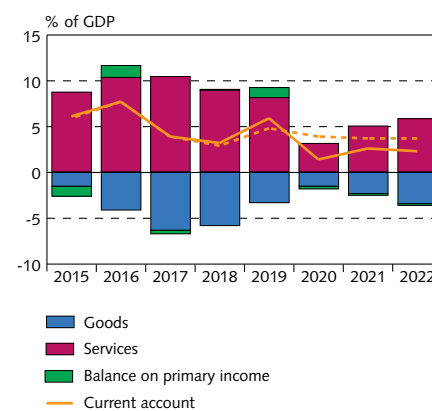
High-frequency indicators suggest that economic activity grew in January and February 2020 at a rate similar to that in 2019. In March, however, the pandemic began to take hold and economic activity slowed abruptly. The full effects of the pandemic will show in Q2, however, particularly in tourism, recreation, and restaurant services, as well as wholesale and retail trade. GDP is estimated to have contracted by almost 2% year-on-year in Q1, whereas the contraction in Q2 is expected to reach almost 15%. If this forecast materialises, it would be the largest single-quarter contraction in the history

Chart III-8
Exports and contributions from underlying components 2015-2022¹



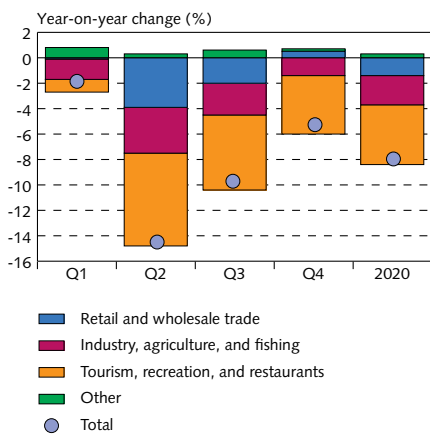
1. Because of chain-volume linking, the sum of components may not equal total exports. Aluminium exports according to national accounts definition. Tourism is the sum of "travel" and "passenger transport by air". Central Bank baseline forecast 2020-2022. The broken line shows the forecast from MB 2020/1.
Sources: Statistics Iceland, Central Bank of Iceland.

Chart III-9
Current account balance 2015-2022¹



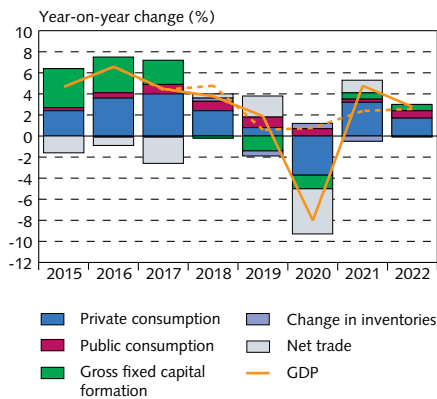
1. Balance on secondary income included in the balance on primary income. Central Bank baseline forecast 2020-2022. Broken line shows forecast from MB 2020/1.
Sources: Statistics Iceland, Central Bank of Iceland.

Chart III-10
GDP growth 2020 and sectoral contributions¹



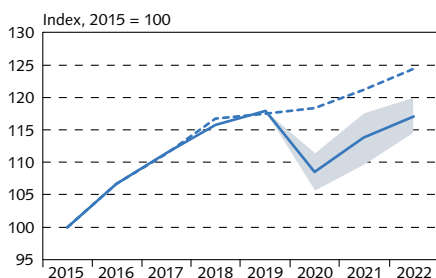
1. Contribution of sectors derived from their share in gross domestic factor income in 2019. Source: Central Bank of Iceland.

Chart III-11
GDP growth and contribution of underlying components 2015-2022¹



1. Central Bank baseline forecast 2020-2022. Broken line shows forecast from MB 2020/1. Sources: Statistics Iceland, Central Bank of Iceland.

Chart III-12
GDP 2015-2022¹



1. Central Bank baseline forecast 2020-2022. Shaded area shows the range of possible outcomes based on the alternative scenarios discussed in Box 1. Broken line shows forecast from MB 2020/1. Sources: Statistics Iceland, Central Bank of Iceland.

of quarterly national accounts data in Iceland, and far larger than the previous record of 8.7% in Q4/2009. As Chart III-10 indicates, the steep decline in tourism and other services sectors weighs heaviest, with activity in those segments of the economy down by about half between years.

The baseline forecast assumes that the authorities' public health measures will continue to be eased gradually in coming weeks. Accordingly, economic activity will slowly and steadily return to normal, although the effects of the pandemic will still be felt in the tourism industry and in households' and businesses' appetite for major expenditures. The year-on-year contraction in GDP is expected to ease as H2 progresses, although it will remain sizeable. If this forecast materialises, the contraction for 2020 as a whole will measure 8%, the largest in a single year since 1920 (see Box 1) and considerably larger than the post-crisis contraction of 6.8% in 2009. However, the baseline forecast indicates that the contraction will be slightly smaller in 2020 than in the post-crisis period when the 3.4% contraction in 2010 is also included.

... and despite a strong GDP growth forecast for 2021, the impact of the pandemic will be long-lasting

The GDP growth outlook for 2021 is also significantly changed relative to the February forecast. Growth is now forecast to be well above its long-term trend rate, reflecting a recovery from a very low level of activity and the sizable spare capacity in the economy after the 2020 contraction. GDP growth for 2021 as a whole is forecast at just under 5%. Growth is expected to ease as 2021 advances, and even more over the course of 2022, when it is projected at just under 3%, broadly in line with the February forecast (Chart III-11). As is discussed in the alternative scenarios in Box 1, the economic outlook is highly uncertain, and the effects of the pandemic could persist longer than is assumed in the baseline forecast. This year's contraction could easily exceed 10%, and the recovery in 2021 could turn out weaker, if the public health measures remain in place longer or another wave of the pandemic strikes and the contraction in tourism proves deeper and more protracted. On the other hand, the economy could rebound more strongly if tourism returns more quickly to normal. In that case, the contraction in 2020 could be reduced to just under 6% and the rebound in 2021 turn out stronger.

If the baseline forecast is borne out, year-2020 GDP will be more than 8% below the February forecast, and in spite of strong growth next year, output will not return to the 2019 level until 2022. The level of output that year will nevertheless be about 6% below the level forecast in February, which corresponds to a loss in output of roughly 180 b.kr. at 2019 prices (Chart III-12). The outlook is very uncertain, however, and according to the alternative scenarios in Box 1, the loss in output could range from 4-8%, or 120-240 b.kr.

IV Labour market and factor utilisation

Significant job losses and reduction in working hours expected in Q2

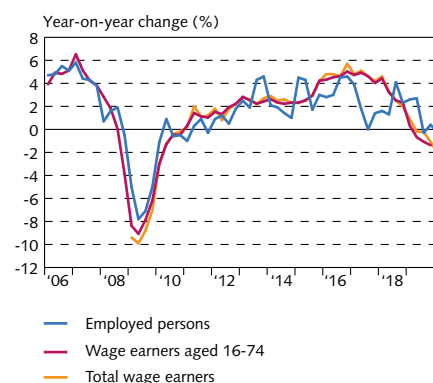
According to the Statistics Iceland labour force survey (LFS), total hours worked declined by 1.4% year-on-year in Q1/2020. Of that total, the number of employed persons fell by 0.3%, whereas the most recent pay-as-you-earn (PAYE) register indicates a 2.1% year-on-year reduction in job numbers (Chart IV-1). The impact of the COVID-19 pandemic on Q1 figures was limited but will emerge in full in Q2. By mid-May, the Directorate of Labour (DoL) had received over 38,000 applications for partial unemployment benefits to offset reduced employment percentages under the Government's part-time option (see Box 2). In comparison, the number of people receiving those benefits during the post-crisis period a decade ago peaked at just over 2,000.² Roughly 18% of employed people have applied for these partial benefits after their working hours were cut by an average of 60 percentage points. According to this, the average work week could be shortened by more than 4 hours, or 11% (Chart IV-2). This estimate is most likely too high, however, as some of the applications may have been rejected and a few large firms recently decided to withdraw from the partial unemployment programme. Furthermore, this does not include the impact on other groups' working hours, the impact of applicants losing their jobs, and the possibility that some employees will be able to return to work before the end of the quarter.

Unemployment has increased sharply, even though a portion of the adjustment will show in reduced labour participation and increased part-time work

In spite of a lower labour participation rate and a surge in the number of part-time unemployment benefit recipients, the jobless rate has risen steeply. The number of persons on the unemployment register surged to over 17.8% of the labour force as of April, although the DoL estimates that the rate could subside in May (Chart IV-3). In this context, however, it should be noted that the DoL classifies recipients of part-time benefits as unemployed even though they still have jobs.³ Excluding this group gives a rise in the unemployment rate from 5% at the beginning of the year to 7.5% in April. Even though the outlook is for a small decrease in May, unemployment will likely rise again after the end of the termination notice period following a number of mass lay-offs at the end of April. Seasonally adjusted unemployment according to the LFS has also risen, measuring 3.9% in Q1, almost 1 percentage point above the Q1/2019 level. It is set to rise in Q2 and

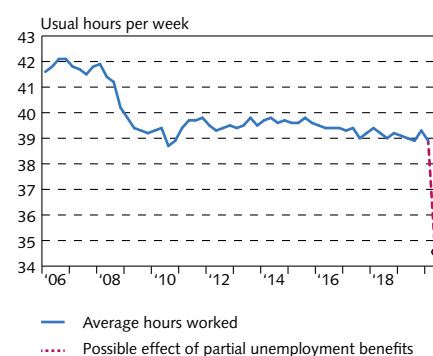
2. During the post-crisis period, it was permissible to reduce working hours to as low as 50% and still be eligible for part-time benefits. Under the current arrangement, however, working hours can be cut to 25%.
3. The DoL calculates the sum of partial benefit ratios to obtain the total number of unemployment days per month and then uses that to calculate the average number of unemployed individuals in order to obtain the unemployment rate. For example, if four individuals each receive benefits to compensate for a 25% decline in their employment percentage, they will be classified collectively as a single unemployed person. According to the LFS, however, these individuals would all be classified as employed.

Chart IV-1
Number of employed persons¹
Q1/2006 - Q1/2020



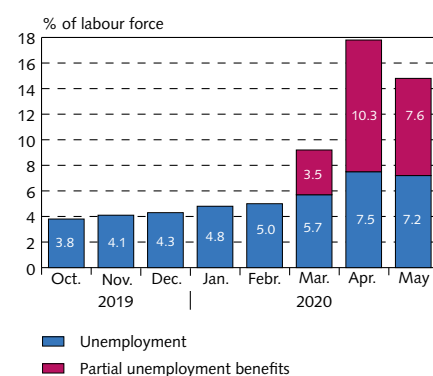
1. Employed persons according to Statistics Iceland's labour force survey and wage-earners according to the Directorate of Internal Revenue's PAYE register. Wage-earners aged 16-74 includes individuals on childbirth leave and self-employed persons; figures from Q2/2019 onwards are Central Bank estimates. The category "all wage-earners" excludes these groups but covers all age groups; the Q1/2020 figure is based on January values.
Sources: Statistics Iceland, Central Bank of Iceland.

Chart IV-2
Average hours worked and partial unemployment benefits¹
Q1/2006 - Q2/2020



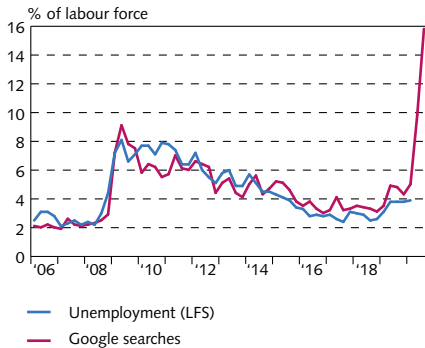
1. The possible effect of partial unemployment benefits shows only the effect of 18% of employed persons working 40% of their previous hours in Q2/2020. Seasonally adjusted figures.
Sources: Statistics Iceland, Central Bank of Iceland.

Chart IV-3
Registered unemployment¹
October 2019 - May 2020



1. Directorate of Labour forecast for May.
Source: Directorate of Labour.

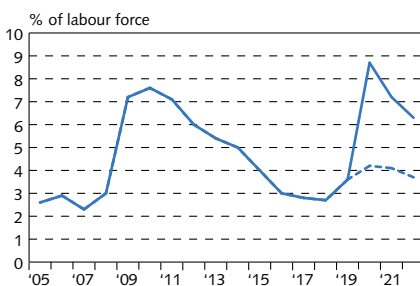
Chart IV-4
Unemployment and Google searches¹
Q1/2006 - Q3/2020



1. Google searches are based on the relative popularity of the words "unemployment benefits" or "Directorate of Labour" in Google's search engine. The Q2/2020 figure is the average for the quarter to date. The time series is lagged by one quarter and is given the same mean and standard deviation as unemployment. Unemployment is seasonally adjusted.

Sources: Google Trends, Statistics Iceland, Central Bank of Iceland.

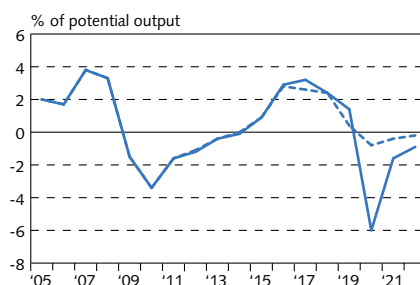
Chart IV-5
Unemployment rate 2005-2022¹



1. Central Bank baseline forecast 2020-2022. Broken line shows forecast from MB 2020/1.

Sources: Statistics Iceland, Central Bank of Iceland.

Chart IV-6
Output gap 2005-2022¹



1. Central Bank baseline forecast 2020-2022. Broken line shows forecast from MB 2020/1.

Source: Central Bank of Iceland.

even further in Q3, with data from Google's search engine indicating that it could reach 16% during the quarter (Chart IV-4). This is probably an overestimate, however, as some of those searching for information on unemployment benefits could end up on partial unemployment benefits rather than becoming unemployed. Long-term unemployment has also begun to rise and was up by 0.7 percentage points in Q1 relative to Q1/2019.

Foreign labour force still growing, but a reversal could lie ahead

Iceland's foreign labour force continued to grow in Q1/2020. Year-on-year population growth measured 2% during the quarter, including 1.4 percentage points due to immigration of foreign nationals. The outlook is for very little travel to and from Iceland while the pandemic is ongoing. Some of the foreign workers who have moved here in recent years could therefore leave again once transportation is more readily available, particularly those without either a job or any entitlement to benefits.

Outlook for a marked decline in total hours worked and a rise in unemployment ...

The post-pandemic outlook for the Icelandic labour market is quite uncertain, but it is clear that jobs will be lost and unemployment will rise. Total hours worked are projected to decline in 2020 by more than 11% year-on-year, which would be the largest single-year drop in the history of the data. Uncertainty about developments in unemployment is unusually pronounced, as some of the adjustment in the labour market will take place through workers exiting the job market or being measured as outside the market, given that many will consider it rather pointless to look for work in the current environment. In addition, some will shift to part-time employment, which will probably increase, particularly as a result of the Government's provision of part-time unemployment benefits. According to the baseline forecast, unemployment will measure about 12% in Q3 and average just under 9% in 2020 as a whole, the highest unemployment rate ever measured and more than 1 percentage point above the average in 2010, the post-crisis peak (Chart IV-5). A relatively robust turnaround is expected in 2021, when unemployment will begin to fall once again. It will remain high, however, and long-term unemployment is likely to continue to rise.

... and a large output slack has opened up

It is unusually difficult to estimate resource utilisation under conditions like those currently prevailing, not least because surveys on major firms' capacity utilisation reflect the situation as it was just before the pandemic hit. In addition, developments in potential output will depend on whether foreign labour importation resumes and whether some of the foreign workers in Iceland leave the country. There is also considerable uncertainty about how much and how lasting an impact the pandemic will have on value chains and international business relationships, how long it will take companies to bring their production lines back to normal, and how strong and persistent the impact of the pandemic on labour participation and skills proves to be.

It is likely, though, that departures of foreign workers and increased long-term unemployment due to the pandemic will cause growth in potential output to slow markedly this year. Nevertheless, a large output slack will open up this year because of the deep economic contraction that is forecast (Chart IV-6). This year's slack in output is estimated at 6% of potential output, much more than in 2010, although at that time the contraction in potential output also offset a contraction in GDP. The slack is assumed to narrow somewhat in 2021 but remain open throughout the forecast horizon.

V Inflation

Inflation below target in 2020 to date

Inflation measured 2.1% in Q1, slightly above the February forecast of 1.9%. It rose to 2.2% in April and has therefore been below the Bank's 2.5% inflation target since December 2019 (Chart V-1).⁴ Underlying inflation is above target, however, and had risen to 3.1% by April, according to the average of various measures of underlying inflation.

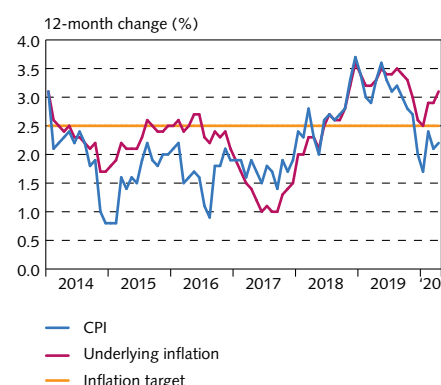
The króna has depreciated, but falling global prices partly offset the impact ...

Imported twelve-month inflation has fallen in the past year, measuring only 1.5% in March 2020. Since the end of February, however, the króna has depreciated by about 12%, although it is uncertain how much this will affect imported goods prices. To some extent, firms could pass the increased cost of imported inputs and goods through to prices, particularly if the currency depreciation persists, although the drop in demand and the larger slack in the economy are likely to discourage such efforts. Furthermore, global food and beverage prices have fallen recently, after an uptick in late 2019, although this is offset by consumers' hoarding of necessities and by temporary disruptions of both goods transport and global value chains as a result of the pandemic (Chart V-2). Commodity prices have also fallen steeply since the pandemic struck, to their lowest in four years.

Global oil prices have also all but collapsed, as previously discussed, and futures prices suggest that they will be down by an average of 46% year-on-year in 2020 (Chart V-3). International forecasts also assume that global food and beverage prices will fall by over 1% this year, and commodities by over 5%. The outlook is for trading partners' export prices to fall marginally between years and for inflation to measure below 1% in those countries. The Bank's baseline forecast therefore assumes that relative import prices will rise this year by 3%, slightly above the inflation target.

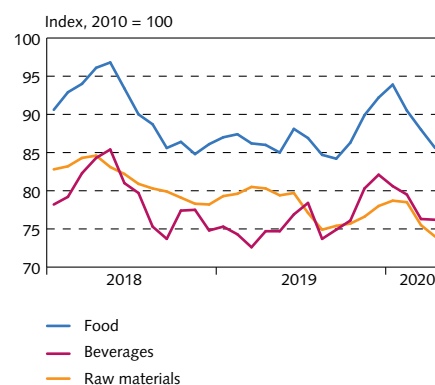
4. The interest component of imputed rent has lowered inflation in the past year, as real mortgage interest expense has fallen in response to Central Bank rate cuts. Annual inflation is estimated to have been approximately 0.5 percentage points lower as a result.

Chart V-1
Headline and underlying inflation¹
January 2014 - April 2020



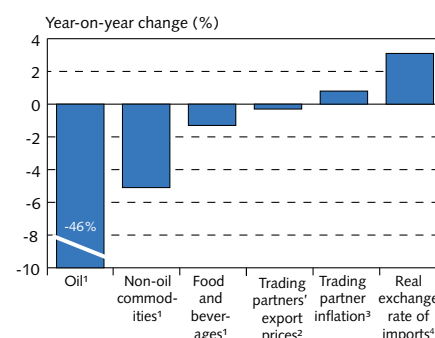
1. Underlying inflation is the average of inflation according to a core index (which excludes the effects of indirect taxes, volatile food items, petrol, public services, and real mortgage interest expense) and statistical measures (weighted median, trimmed mean, a dynamic factor model, and a common component of the CPI).
Sources: Statistics Iceland, Central Bank of Iceland.

Chart V-2
Global commodity prices¹
January 2018 - April 2020



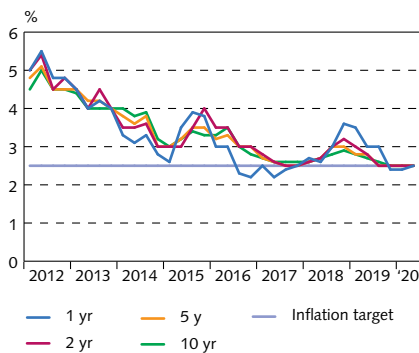
1. Food includes various comestible oils, various meal and grains, meat, and fruit. Beverages include cocoa, coffee, and tea. Raw materials include timber, cotton, rubber, and tobacco.
Source: World Bank.

Chart V-3
Indicators of developments in international prices in 2020



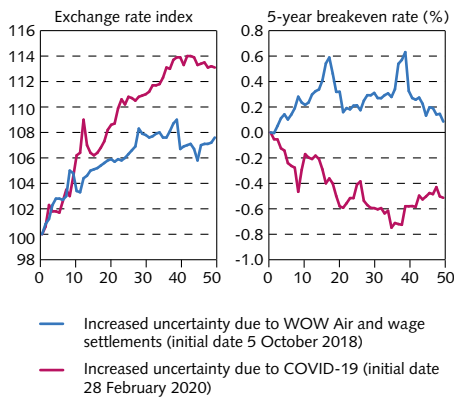
1. Forecasted annual price change of oil, commodities, food, and beverages, in USD. 2. Forecasted annual change in export prices, based on a trade-weighted average. 3. Forecasted inflation in trading partner economies, based on a trade-weighted average. 4. Forecasted annual change in real exchange rate of imports (price of imports relative to price of domestic production).
Sources: World Bank, Central Bank of Iceland.

Chart V-4
Inflation expectations¹
Q1/2012 - Q2/2020



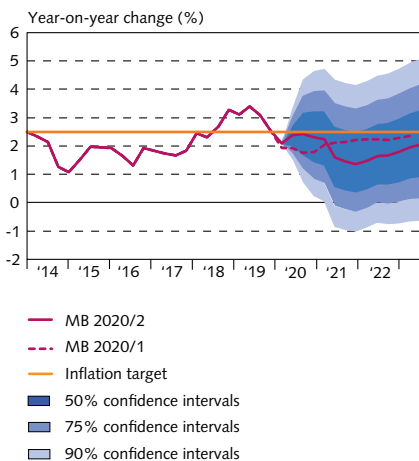
1. Market agents' inflation expectations based on Central Bank survey taken 4-6 May 2020.
Source: Central Bank of Iceland.

Chart V-5
Exchange rate of the króna and inflation expectations in autumn 2018 and spring 2020¹



1. Comparison of developments in the exchange rate of the króna and the breakeven rate in the bond market over 50 days following two periods of elevated uncertainty. Initial date = 100 for the exchange rate and = 0 for the breakeven rate.
Source: Central Bank of Iceland.

Chart V-6
Inflation forecast and confidence intervals
Q1/2014 - Q2/2023



Sources: Statistics Iceland, Central Bank of Iceland.

... and inflation expectations have not risen

Market agents expect inflation to be at the target in coming years, according to the Bank's recent survey (Chart V-4). Market expectations are therefore broadly unchanged despite the recent depreciation of the króna. Surveys of corporate and household expectations sketch out a similar picture. As Chart V-5 shows, the breakeven inflation rate in the bond market has fallen since the króna began to slide in late February. This is unlike the pattern seen following the autumn 2018 depreciation, when uncertainty about the outcome of ongoing wage settlements and WOW Air's financial position was escalating, although this year's depreciation is somewhat larger. It is likely that, to some extent, the two situations differ because the cyclical position was very different in autumn 2018, when there was still a positive output gap and unemployment was low.

Outlook for below-target inflation throughout the forecast horizon

The baseline forecast assumes that because inflation expectations are firmly anchored, the effects of the recent depreciation of the króna will taper off relatively quickly. Wages are expected to rise in the near future, in line with private sector wage settlements, although there has been some pressure from employers to review contractual pay rises or find other ways to lower firms' wage costs temporarily. Given the slack in the economy and the rise in unemployment, it is considered likely that firms will be able to reduce their wage costs somewhat.

Even though the outlook is for a considerably larger slack in the economy than was forecast in February, inflation is expected to be higher for much of this year than was forecast at that time. This is due to a less favourable initial position and the effects of the recent depreciation of the króna. Inflation is projected to measure 2.4% in Q2 and Q3/2020 and then ease to 1½% by mid-2021 before inching up to 2% later in the forecast horizon. All of this is highly uncertain, however, particularly the short-term outlook, as the effects of the depreciation of the króna, temporary disruptions in manufacturing, and shortages of goods could be underestimated. There is a roughly 50% probability that inflation will be in the ½-2¾% range in one year and in the 1-3¼% range by the end of the forecast horizon.

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.

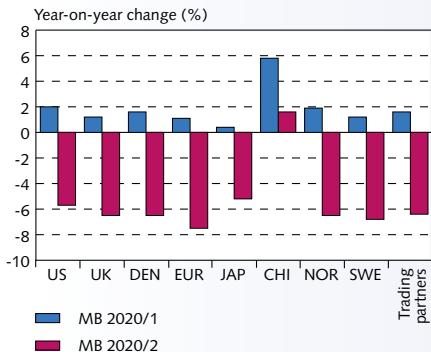
Estimated impact of the pandemic on the domestic economic outlook

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

Box 1

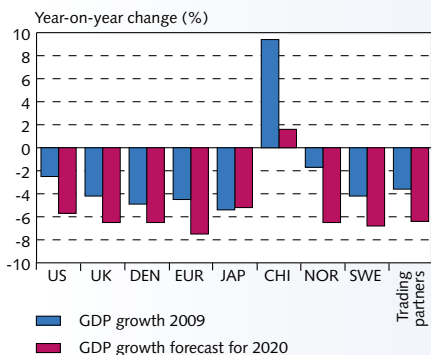
The economic impact of the COVID-19 pandemic

Chart 1
Change in international GDP growth outlook for 2020¹



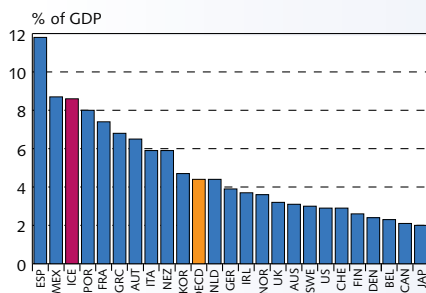
1. Comparison of international GDP growth assumptions presented in MB 2020/1 and MB 2020/2. The data refer to the United States (US), the United Kingdom (UK), Denmark (DEN), euro area (EUR), Japan (JAP), China (CHI), Norway (NOR), Sweden (SWE), and the trading partner average.
Sources: Refinitiv Datastream,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

Chart 2
Comparison of GDP growth in 2009 and 2020¹



1. 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 countries¹



1. Weight of tourism in GDP in 2018 or latest year available. The countries are Spain (ESP), Mexico (MEX), Iceland (ICE), Portugal (POR), France (FRA), 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.

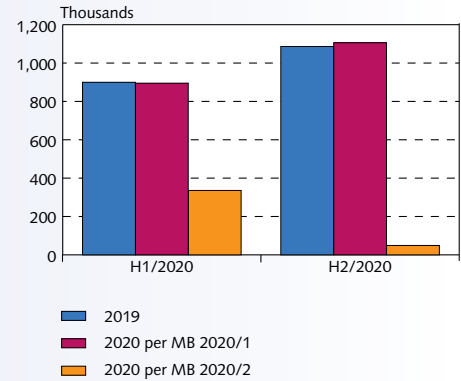
The baseline forecast assumes that the authorities' public health measures will continue to be eased in coming weeks, after having been in place since mid-March. Over this period, there has presumably been very limited spending on the private consumption components most strongly affected by the pandemic 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,

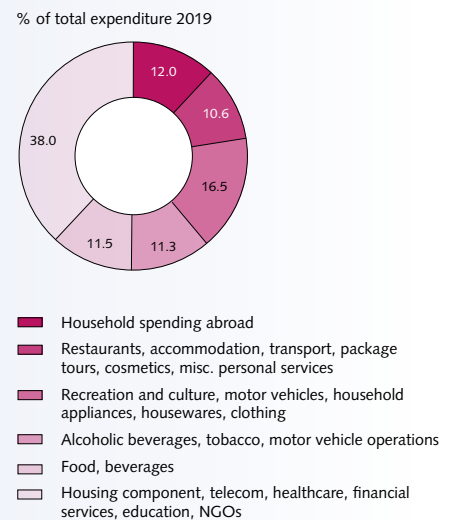
1. In official Statistics Iceland data on the classification of private consumption, individual components are not adjusted for spending by foreign tourists in Iceland. Foreign tourists' spending as a whole is deducted when the components are summed up, however. Here the individual components have been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

Chart 4
Assumptions on tourist visits to Iceland in 2020¹



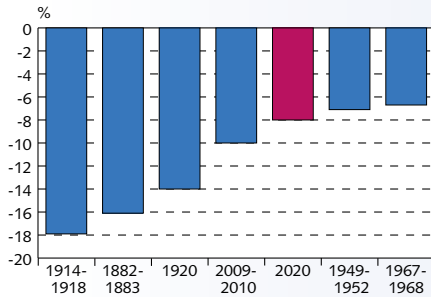
1. MB 2020/2 forecast of tourists travelling through Keflavik Airport and comparison with MB 2020/1 forecast and year-2019 figures.
Sources: Isavia, Central Bank of Iceland.

Chart 5
Classification of private consumption by probable scope of direct impact of COVID-19 on household spending¹



1. Adjusted for the contribution of foreign tourists to each private 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.

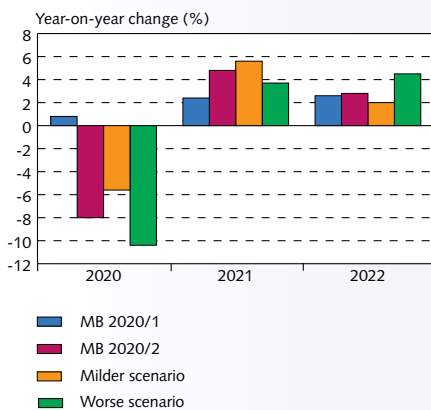
Chart 6
Iceland's seven deepest recessions
in the last 140 years¹



1. 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
2020-2022¹



1. 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.

The COVID-19 pandemic and government measures to curb the spread of the disease have caused the global economic outlook to change radically in a short period of time (see Box 1). Many companies have scaled down operations significantly, and both domestic and foreign demand have all but collapsed. In addition, domestic and international financial markets have been highly volatile. The economic contraction has been unusually sharp and sudden, but a rebound is expected to begin in H2. The chief task of macroeconomic policy is to mitigate the economic impact of the pandemic to the extent possible and support households and businesses through the most difficult period. The aim of such mitigation is to minimise the probability of permanent damage to households and businesses, thereby maximising the strength of the economic recovery once the pandemic recedes.

Monetary policy measures

Since the pandemic struck, the Central Bank of Iceland has taken a wide range of actions to ease the monetary stance and boost financial system liquidity, in order to shore up demand, support increased access to credit, and preserve financial system stability. In this way, the Bank attempts to achieve its set objectives; i.e., to ease the economic contraction so that inflation can be held at target and financial stability can be ensured.

Central Bank cuts interest rates by 1 percentage point

The Central Bank Monetary Policy Committee (MPC) lowered the Bank's key interest rate by 0.5 percentage points at two consecutive meetings, on 11 March and again on 18 March, bringing the key rate to 1.75% (Chart 1). Even before these reductions, the key rate was at its lowest ever. The objective of the rate cuts was to ease the monetary stance in response to the worsening economic outlook, which stemmed from the spread of the virus and the negative economic impact of public health measures taken in Iceland and abroad to curb the spread of the disease.

Liquidity boost

In order to stimulate demand even further, the Bank adopted wide-ranging measures aimed at easing financial institutions' access to liquidity, thereby facilitating lending to households and businesses.

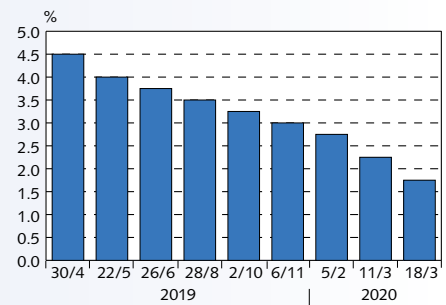
On 11 March, the MPC announced changes to minimum reserve requirements; i.e., the amount deposit institutions must hold with the Central Bank as liquid assets. Minimum reserve requirements fall into two categories: average reserve maintenance and a fixed reserve requirement. The average reserve maintenance requirement – the requirement that deposit institutions hold in reserve a specified percentage of their liquid assets, on average, over any given reserve maintenance period – was lowered from 1% of short-term funding to 0% (Chart 2). Although the fixed reserve requirement – the portion of liquid assets that deposit institutions must hold in reserve at all times – remained unchanged, its treatment under the Rules on Liquidity Coverage Ratio (LCR) was changed. With this, credit institutions' LCR increased, even though the fixed reserve requirement was unchanged. As a result of these changes in reserve requirements, deposit institutions' liquidity position was strengthened by approximately 40 b.kr.

On 18 March, the Bank's Financial Stability Committee (FSC) announced that financial institutions' capital requirements would be eased so as to bolster their lending capacity and their ability to restructure distressed households' and businesses' debt. The counter-

Box 2

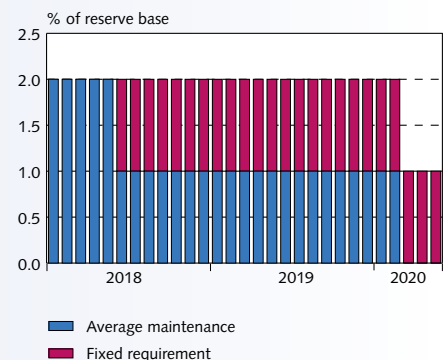
Macroeconomic policy measures in response to the COVID-19 pandemic

Chart 1
Central Bank of Iceland key interest rate¹
April 2019 - May 2020



1. The Central Bank's key interest rate is the rate on seven-day term deposits.
Source: Central Bank of Iceland.

Chart 2
Minimum reserve requirements¹
1 January 2018 - 15 May 2020



1. A financial institution's minimum reserve requirement is a percentage of its reserve base, which includes deposits and its own bond issues with a maturity of up to two years.
Source: Central Bank of Iceland.

Chart 3
10-year Government-guaranteed bond yields¹
1 January 2018 - 15 May 2020



1. Based on the zero-coupon yield curve, estimated with the Nelson-Siegel method, using money market interest rates and Government-guaranteed bonds.
Source: Central Bank of Iceland.

cyclical capital buffer – the special capital buffer that had been built up in recent years so as to bolster financial institutions' resilience – was lowered from 2% to 0% and will remain there for at least two years. All else being equal, this measure should give credit institutions additional scope to expand their loan portfolios by 12.5%, or 350 b.kr.

On 27 March, the Central Bank announced that it would tighten financial institutions' access to one-month term deposits with the Bank. These deposits have been one of financial institutions' main avenues for investing króna-denominated liquid assets and complying with liquidity requirements, as Treasury bonds have been in short supply. The commercial banks have held a large share of their liquid assets in these accounts, and interest rates on them have been somewhat above the Central Bank's key rate. Reducing the supply of term deposits in this manner forces the banks to find other uses for this excess liquidity; i.e., hold it in current accounts or seven-day term deposits or, alternatively, to use it to buy Treasury bonds or increase other assets, such as loans.

On 8 April, in order to ensure that deposit institutions have access to adequate liquidity, the FSC and the MPC introduced a special temporary collateralised lending facility and an expanded list of eligible collateral. This measure was designed primarily to guarantee smaller deposit institutions sufficient access to liquidity while the pandemic is ongoing.

Secondary market purchases of Treasury bonds

On 23 March, the MPC announced that the Bank would begin buying Treasury bonds in the secondary market. The purpose was to ensure even further that the more accommodative monetary stance would be transmitted normally to households and businesses. It was announced that the Bank will purchase bonds for up to 150 b.kr., or about 5% of GDP. Further details on the purchases were announced on 22 April, and in early May the Bank began buying Treasury bonds. The Bank announced that it will purchase bonds for up to 20 b.kr. in Q2.

This measure is particularly important under the current circumstances, where it is foreseen that the Treasury will need to borrow significant amounts via Treasury bond issuance in order to finance pandemic response measures. Because of this, there was a risk that the increased Treasury bond supply would push market rates upwards, thereby disrupting the transmission of the more accommodative monetary stance to the long end of the yield curve. The impact of these Central Bank measures could be seen immediately after the MPC's 23 March announcement, with long-term interest rates falling by 0.37 percentage points (Chart 3).

Other Central Bank measures

The Central Bank had announced previously that, effective 1 April 2020, deposit institutions would be the only institutions authorised to hold deposits with the Central Bank. This forced the deposits of other financial institutions and Government institutions into the financial system, thereby strengthening deposit institutions' liquidity and supporting monetary policy transmission.

The Bank has also intervened in the foreign exchange market in recent months in order to mitigate excess exchange rate volatility. Furthermore, the Bank has urged the pension funds to reduce the amount of foreign currency they purchase to finance foreign investments until the economic situation normalises. Moreover, the Central Bank has obtained access to the US Federal Reserve's temporary repurchase agreement facility, which grants the Bank access

to US dollar liquidity against collateral in US Treasury securities from the Bank's international reserves. Finally, the Bank has instructed the boards of financial institutions to refrain from using their improved liquidity position and reduced capital requirements to pay dividends.

Fiscal policy measures

The main objectives of the Government's fiscal policy measures have been, on the one hand, to mitigate the shock suffered by those households and businesses that are most vulnerable to the impact of the pandemic and, on the other hand, to protect jobs and companies during the pandemic and support a strong economic recovery when it recedes.

Policy measures and their scope

In March and April, the Government introduced over twenty measures aimed at softening the economic blow from the pandemic. The scope of these measures is estimated at nearly 352 b.kr., or around 11.9% of year-2019 GDP. The measures that directly affect the fiscal budget amount to 4.2% of GDP, which is similar to the measures announced in Norway and Denmark (Chart 4).

From an economic perspective, the measures centre mainly on two areas: reducing distressed households' and businesses' income losses and supporting economic activity during a steep contraction in private sector demand. Also introduced were special measures aimed at improving the position of students and protecting individuals with delicate health or difficult social circumstances (Table 1).

Table 1 Fiscal policy measures in response to COVID-19

Measure	Scope (b.kr.)
Government-guaranteed bridge loans to businesses ¹	70.0
Support loans ¹	40.0
Deferral of tax payments ¹	75.0
Corporate income tax netting ¹	13.0
Closure subsidies ³	2.5
Expedited reduction of bank tax ²	11.0
Deferral of payments of import levies and cancellation of customs processing fees ^{1, 2}	13.6
Part-time employment option ³	38.0
Wage payments during termination notice period ³	25.0
Wage payments in quarantine ³	1.0
Supplemental child benefit ³	3.0
Additional authorisation for third-pillar pension withdrawal ⁴	10.0
Special tourism-centred measures ^{2, 3}	4.6
Special support for media, local governments, and front-line workers ³	4.7
Innovation and R&D ^{2, 3}	5.2
Student jobs initiative and artists' stipends ³	2.5
Measures for students and vulnerable groups ³	4.7
Increased VAT reimbursement for property construction and maintenance ²	8.0
Special investment initiative ³	20.0

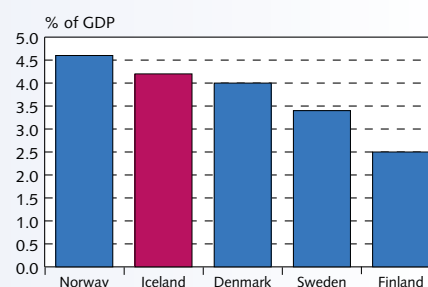
1. Affects firms' balance sheets and cash flow statements. 2. Entails reduced Treasury revenues 3. Entails increased Treasury expenditures 4. Increases households' cash balances for consumption spending.

Sources: Government of Iceland, Central Bank of Iceland.

Firms helped to withstand temporary revenue losses

One of the broadest aspects of the Government assistance lies in measures to support companies through a period of substantially reduced revenues stemming from the pandemic and the actions taken

Chart 4
Pandemic response – international comparison of fiscal measures¹



1. Only those measures that directly affect the national treasury's profit and loss account are included.

Sources: Government of Iceland, International Monetary Fund, Central Bank of Iceland.

in an attempt to hinder the spread of the disease. The Treasury will guarantee up to 70% of bridge loans to companies deemed viable. The amount of the Treasury guarantee is up to 50 b.kr., and the impact of the measures on firms' balance sheets and cash flow is estimated at 70 b.kr.

As a further measure to counteract smaller companies' liquidity problems, the State will also grant support loans of up to 40 m.kr. per company, for a minimum term of thirty months. The first 10 m.kr. will be guaranteed in full by the State, as will 85% of the loan amount over and above that. Loans of up to 10 m.kr. will bear interest equivalent to the Central Bank key rate, but for loans beyond that, the lender is allowed to charge a moderate credit risk premium. An estimated 40 b.kr. will be loaned in this manner, and both support loans and bridge loans will be processed through the commercial banks.

Firms experiencing operational difficulties will also be authorised to defer up to three payments of pay-as-you-earn tax (PAYE) and payroll tax until 2021. This measure will improve companies' liquidity by an estimated 75 b.kr. Another measure designed to improve companies' liquidity by a further 13 b.kr. is a new authorisation to carry year-2020 operating losses back to offset 2019 profits, thereby lowering their income tax payments.

Businesses that were forced to close for public health reasons will be eligible for closure subsidies of up to 2.4 m.kr. per company, to compensate for a portion of lost revenue and help them to cover fixed costs during the closure period. The scope of these closure subsidies is estimated at 2.5 b.kr.

In addition, a reduction of 11 b.kr. in the tax on financial institutions has been expedited, customs processing fees are cancelled through year-end 2020, and payment due dates for import levies have been deferred by four months. The Treasury will relinquish a total of 13.6 b.kr. in revenues because of these changes in fees and levies.

Mitigating households' income losses

The Government will also guarantee that workers receive income in spite of a temporary reduction in working hours. First, the Treasury will pay income-linked unemployment benefits proportional to the reduction in employment percentage if the employer must scale down operations because of pandemic response measures. Through 30 June 2020, workers must be employed at least 25% to qualify for the measure, and from 1 July through 31 August they must be employed at least 50%. The measure is set to expire on 1 September. For those covered by this measure, the sum of labour income and unemployment benefits may not exceed 90% of the worker's average total monthly wages, and may never exceed 700,000 kr. per month. For jobs that pay 400,000 kr. per month or less for a 100% position, full monthly wages are guaranteed. Although an assessment has yet to be finalised, the cost of this measure is expected to total about 38 b.kr.

Second, firms will be given the opportunity to apply for Government support to cover a portion of wage costs during employees' termination notice period. This support will take the form of a payment not to exceed 633,000 kr. per month for up to three months. It is limited to those companies that have suffered at least a 75% loss in revenue and envision continued revenue losses at least through end-2020. It is estimated that up to one-fourth of companies have suffered such losses. The Government support will be capped at 85%, and the measure is available from 1 May through 30 September 2020. The estimated cost to the Treasury for this measure is 25

b.kr. Third, the Treasury will reimburse employers for wages paid to workers in quarantine and will pay self-employed individuals 80% of their 2019 income, up to 633,000 kr. per month. The estimated cost to the Treasury for this measure is 1 b.kr.

Incentives for increased economic activity

The Government measures also include other incentives to support economic activities and mitigate the adverse impact of the pandemic on the domestic economy. Families with children will be paid a special supplemental child benefit, at an estimated total cost of 3 b.kr. Furthermore, the authorisation for early withdrawal of third-pillar pension savings has been expanded, and the Government's estimates assume that the scope of this measure will be 10 b.kr., some 4 b.kr. of which will revert to the Government in the form of income tax. These measures increase households' cash balances for consumption spending.

Special support for tourism

In order to provide special support to domestic tourism operators, the bed-night tax has been cancelled through end-2021, and payment due dates for the first three months of the year have been deferred until February 2022. The Treasury also plans to allocate 1.5 b.kr. to the issuance of special gift certificates to all adults in Iceland, which can be used to pay for domestic tourism, and another 1.5 b.kr. will be allocated to a dedicated marketing campaign advertising Iceland as a tourist destination. The total scope of these special tourism support measures is estimated at 4.6 b.kr.

Other support measures

It has been decided to provide special support to privately operated news media companies totalling up to 350 m.kr., in partial compensation for revenue losses. There are also plans to support the municipalities that have suffered most from the pandemic response measures, the Suðurnes peninsula in particular. In addition, investment by local governments will be supported with an expansion of the "Back to Work" initiative, and the Real Estate Fund of the Local Authorities' Equalisation Fund will be authorised to grant subsidies to municipalities. Healthcare employees and others fighting COVID-19 on the front lines will receive special wage bonuses totalling 1 b.kr. These measures together total 4.7 b.kr. Incentives for research and development (R&D) will also be strengthened and financing for innovation expanded. The estimated cost to the Treasury for this measure is 5.2 b.kr.

Other measures will be taken to address various groups' special needs due to the pandemic and its repercussions. The Government will offer up to 3,000 new summer jobs for students. It has also been decided to increase the number of artists receiving Government stipends by up to 40%. The estimated cost to the Treasury for this measure is 2.5 b.kr. Funding is also being allocated to new measures intended to strengthen job-seekers' skills. Moreover, funding will be dedicated to new social and mental health measures to protect vulnerable groups. The estimated cost to the Treasury for these measures is 4.7 b.kr.

Increase in investment funding and incentives

The "Back to Work" initiative will be expanded so that value-added tax (VAT) on labour for property construction, maintenance, and renovation will be reimbursed at a rate of 100%, up from the previous 60%. VAT on labour for car repairs will be reimbursed as well. With this programme, which will remain in effect through the year-end, the Treasury will relinquish about 8 b.kr. in revenues.

Finally, the Government has decided to expedite large-scale investment projects and increase total planned public investment by 20 b.kr. relative to the previous plan. Chief among these projects are investments in construction of traffic structures and other infrastructure. In addition, Government-owned companies will expedite investments totalling roughly 10 b.kr.

Appendix 1

Forecast tables

Table 1 Main economic indicators¹

	2018	2019	2020	2021	2022
Private consumption	4.7 (4.7)	1.6 (2.0)	-7.3 (2.4)	6.4 (2.5)	3.4 (3.1)
Public consumption	3.9 (3.5)	4.1 (2.9)	3.1 (2.5)	1.2 (2.4)	2.6 (2.5)
Gross capital formation	-1.1 (4.0)	-6.3 (-6.9)	-6.2 (0.3)	2.9 (3.0)	2.8 (1.3)
Business investment	-11.5 (-4.1)	-17.5 (-17.4)	-6.3 (1.2)	-0.1 (-0.3)	4.2 (1.7)
Residential investment	15.5 (16.2)	31.2 (30.1)	-23.0 (-4.6)	9.5 (5.3)	8.2 (4.5)
Public investment	30.6 (28.3)	-10.4 (-9.7)	21.5 (4.7)	3.8 (10.7)	-6.4 (-4.6)
Domestic demand	3.5 (4.6)	-0.1 (-0.4)	-3.9 (2.1)	3.7 (2.6)	3.0 (2.5)
Exports of goods and services	1.7 (1.7)	-5.0 (-5.8)	-31.6 (-1.4)	23.6 (3.6)	8.3 (3.0)
Imports of goods and services	0.8 (0.8)	-9.9 (-8.5)	-24.6 (1.5)	21.2 (4.0)	9.2 (2.8)
Gross domestic product (GDP)	3.8 (4.8)	1.9 (0.6)	-8.0 (0.8)	4.8 (2.4)	2.8 (2.6)
Contribution of net trade to GDP growth (percentage points)	0.4 (0.4)	2.0 (1.0)	-4.3 (-1.2)	1.2 (-0.1)	-0.1 (0.2)
Unemployment (% of labour force)	2.7 (2.7)	3.6 (3.6)	8.7 (4.2)	7.2 (4.1)	6.3 (3.7)
Output gap (% of potential output)	2.4 (2.4)	1.4 (0.4)	-6.0 (-0.8)	-1.6 (-0.4)	-0.9 (-0.2)
Current account balance (% of GDP)	3.1 (2.8)	5.8 (4.7)	1.3 (3.8)	2.5 (3.6)	2.2 (3.6)
Trade-weighted exchange rate index ²	166.7 (166.7)	181.0 (181.0)	203.9 (182.9)	209.4 (185.4)	207.8 (185.4)
Inflation (consumer price index, CPI)	2.7 (2.7)	3.0 (3.0)	2.3 (1.9)	1.7 (2.1)	1.6 (2.2)
Inflation in main trading partners ³	2.0 (2.0)	1.5 (1.5)	0.7 (1.6)	1.4 (1.7)	1.7 (1.8)
GDP growth in main trading partners ³	2.3 (2.3)	1.8 (1.7)	-6.4 (1.6)	5.0 (1.6)	2.4 (1.6)

1. Year-on-year change (%) unless otherwise specified (figures in parentheses are from the forecast in MB 2020/1). 2. Narrow trade-weighted basket. The index has been recalculated so that on 2 January 2009 it was assigned a value equivalent to that of the now-discontinued Exchange Rate Index. 3. Forecast based on Consensus Forecast, Global Insight, IMF, and OECD.

Sources: Consensus Forecasts, Global Insight, IMF, OECD, Refinitiv Datastream, Statistics Iceland, Central Bank of Iceland.

Table 2 Quarterly inflation forecast (%)¹

Quarter	Inflation (year-on-year change)	Inflation (annualised quarter-on-quarter change)
	Measured value	
2019:2	3.4 (3.4)	4.3 (4.3)
2019:3	3.1 (3.1)	1.3 (1.3)
2019:4	2.5 (2.5)	2.5 (2.5)
2020:1	2.1 (1.9)	0.2 (-0.4)
	Forecasted value	
2020:2	2.4 (1.9)	5.4 (4.3)
2020:3	2.4 (1.8)	1.5 (0.6)
2020:4	2.3 (1.8)	2.1 (2.6)
2021:1	2.2 (2.1)	0.0 (0.7)
2021:2	1.6 (2.1)	2.8 (4.5)
2021:3	1.5 (2.1)	1.0 (0.7)
2021:4	1.4 (2.2)	1.7 (2.9)
2022:1	1.5 (2.2)	0.5 (0.9)
2022:2	1.6 (2.2)	3.4 (4.5)
2022:3	1.7 (2.2)	1.1 (0.6)
2022:4	1.8 (2.3)	2.2 (3.1)
2023:1	1.9 (2.4)	1.1 (1.2)
2023:2	2.0	3.8

1. Figures in parentheses are from the forecast in MB 2020/1.

Sources: Statistics Iceland, Central Bank of Iceland.