Box 1

Alternative scenarios and uncertainties

The economic outlook is highly uncertain at present, perhaps more than usual. A major contributor to the uncertainty is the fact that domestic and international economic developments will depend in large part on how successful efforts to control the COVID-19 pandemic prove to be, yet it is difficult to foresee how broad public health measures will have to be and how long they must remain in place. But there are other uncertainties at play as well. This Box discusses several of them and presents alternative scenarios based on differing assumptions about the progress made in the battle against the pandemic and the extent to which households tap the savings they accumulated after the pandemic struck.

Alternative scenarios: Different assumptions about the path of the pandemic

Alternative scenario assuming that the pandemic proves more intractable

The Bank's baseline forecast assumes that a COVID-19 vaccine will be developed early in 2021 and that widespread inoculation will have taken place by mid-year, after which daily life will gradually normalise. But the battle with the pandemic could prove more difficult. If so, governments' public health measures – closures and bans on public gatherings – will need to be stricter and remain in place longer than in the baseline forecast. This alternative scenario also assumes that the public will be more pessimistic about the economic outlook and more concerned their own health, which will prompt them to stay at home and spend less. As a result, domestic demand will weaken more and will take longer to recover. Increased overall uncertainty will also make firms less likely to hire workers and spend on investment. This scenario assumes as well that credit spreads on firms' domestic financing will rise even further and taper off later than in the baseline forecast.

Reduced global demand and more stringent public health restrictions at national borders will erode the outlook for Iceland's goods and services exports relative to the baseline forecast. According to this alternative scenario, there will be virtually no year-on-year increase in tourist arrivals in 2021, and tourist numbers will be lower than in the baseline throughout the forecast horizon. Services exports will therefore grow by only 9% in 2021, some 17 percentage points less than in the baseline scenario. The outlook for goods exports is poorer as well, owing in particular to a bleaker outlook for marine product exports, which in turn stems from reduced global demand and increased difficulties with product distribution in international markets. Goods and services exports will therefore rise by 5% in 2021 instead of the nearly 12% provided for in the baseline forecast.

The poorer outlook for exports amplifies still further the adverse effects of the pandemic on domestic incomes and demand. This is compounded by the pandemic's adverse impact on potential output: corporate insolvencies will rise, more people will exit the job market, and increased unemployment will cause the equilibrium unemployment rate to rise higher and taper off more slowly. Furthermore, the pandemic and the associated disruptions to domestic production will temporarily lower productivity growth.

Although domestic macroeconomic policy actions pull in the opposite direction, the alternative scenario assumes that the eco-

The alternative scenarios use the International Monetary Fund's recent assessment of the impact of various levels of success against the pandemic on the global economy. See World Economic Outlook, Chapter 1, October 2020.

Chart 1 Alternative scenarios Chart 1a The pandemic recedes more slowly Chart 1b The pandemic recedes more quickly Deviation from baseline forecast (percentage points) Deviation from baseline forecast (percentage points) 2020 2021 2022 2023 2020 2021 2022 2023 Chart 1c Households tap their savings more Chart 1d Households tap their savings more Deviation from baseline forecast (percentage points) Deviation from baseline forecast (percentage points) 2020 2021 2022 2023 2020 2021 2022 2023 Private consumption growth GDP growth

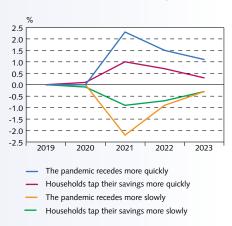
nomic outlook will deteriorate relative to the baseline.² The outlook for the remainder of 2020 is broadly unchanged, as the year-end is approaching. The outlook for 2021 changes significantly, however: consumption growth slows by 2.6 percentage points and output growth by 2.3 percentage points (Chart 1a). Instead of 2.3% GDP growth next year, output remains broadly flat in this alternative scenario. However, output growth is higher in the alternative scenario starting in 2022, when the pandemic is finally brought under control. In spite of this, GDP will be slightly below the level assumed in the baseline by the end of the forecast horizon, in 2023 (Chart 2). According to the alternative scenario, inflation will fall more in 2021, owing to a larger slack in the economy, although this will be offset by a lower exchange rate and weaker growth in potential output.

Source: Central Bank of Iceland

Alternative scenario assuming greater success in controlling the pandemic

This alternative scenario assumes that efforts to control the pandemic will bear fruit sooner and that domestic and international transportation and trade will re-open earlier. It is assumed that widespread inoculation will be achieved early in 2021 and that public health measures can be eased relatively quickly. Reduced fear of the disease increases the public's desire to avail themselves of services that have suffered during the peak of the pandemic. Demand for services will therefore recover more rapidly than in the baseline forecast. Greater optimism among households and businesses fuels their willingness to spend, thereby supporting overall demand in the economy. A more rapid turnaround also means that supply-side disruptions and long-term damage to the domestic economy will

Chart 2 Alternative scenarios of developments in GDP1



GDP according to different alternative scenarios (deviation from the Bank's baseline forecast). Source: Central Bank of Iceland.

^{2.} It is assumed that monetary policy will respond with lower interest rates than in the baseline, in line with the monetary policy rule in the Bank's macroeconomic model, and that automatic fiscal stabilisers will be allowed to work unimpeded. The macroeconomic policy stance is correspondingly tighter in the more optimistic alternative scenario.

quickly, and just over 1 million tourists are assumed to visit Iceland in 2021, a full 40% more than in the baseline forecast. Iceland's services exports will therefore rise by 45% in 2021 instead of the 27% provided for in the baseline. The outlook for goods exports improves as well, and combined goods and services exports increase by an additional 7 percentage points in 2021.

As a result, the economic outlook according to this alternative

be less pronounced. Global economic activity also recovers more

As a result, the economic outlook according to this alternative scenario improves markedly in comparison with the baseline forecast. Private consumption grows by 5.3% in 2021, or 2.6 percentage points more than in the baseline, and year-2021 GDP growth is 2.3 percentage points stronger (Chart 1b). GDP growth for 2022-2023 is somewhat weaker than in the baseline, however, but year-2023 GDP will be 1% higher (Chart 2). A stronger turnaround in exports and a tighter monetary stance support the exchange rate of the króna, which is somewhat higher in the alternative scenario than in the baseline. Inflation falls more slowly in 2021, however, as the slack in the economy closes more quickly.

Alternative scenarios: Different assumptions about households' saving patterns

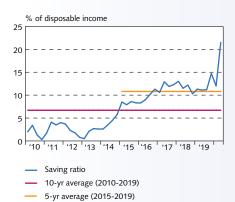
The pandemic and the Government's response measures have made a strong impact on households' spending patterns, as is discussed in Box 2. Households have been cautious about spending because of the economic contraction and increased uncertainty about the economy and the employment situation. Furthermore, because of public health measures imposed by the Government, households have had reduced access to various services that they would have purchased otherwise, and many people have significantly scaled down both travel and goods and services purchases in an attempt to reduce the risk of contagion. Households' consumption spending has therefore contracted markedly. In fact, despite the worsening employment situation, consumption has declined much more than household income has, owing in part to various Government measures to protect jobs and personal income.

This implies that households have stepped up their saving markedly in the recent past, after having already increased it as a result of lessons learned from the financial crisis. In Q2/2020, the saving ratio rose still further, to twice its five-year average (Chart 3). Although the Bank's baseline forecast assumes that the ratio declined again in Q3, the forecast assumes that households will be relatively cautious and that the saving ratio will not fall to its historical average until mid-2021. Changes in households' saving patterns could have a significant impact on the economic outlook, even if the assumptions about developments in the pandemic are borne out.

Households could choose to tap their savings more rapidly ...

Households could choose to tap more quickly into these "forced" savings that they have amassed since the pandemic struck. It is also possible that pent-up demand for various consumer durables and semi-durables has accumulated, particularly among higher-income households, which could cause consumption spending to increase faster through 2021 than is assumed in the baseline forecast. This is supported by the fact that many households' financial and asset position was strong before the pandemic struck: household debt has fallen markedly and is low in a historical context, and net household wealth is at an all-time high.

Chart 3 Household savings¹ Q1/2010 - Q2/2020



1. There is some uncertainty about Statistics Iceland's figures on house-holds' actual income levels, as disposable income accounts are not based on consolidated income accounts and balance sheets. The saving ratio is calculated based on the Central Bank's disposable income estimates, as Statistics Iceland figures are increased to reflect households' estimated expenses over a long period. Seasonally adjusted figures.
Sources: Statistics Iceland, Central Bank of Iceland.

... but they could also opt for greater caution in their spending decisions

Households could also choose to spend more cautiously than is assumed in the baseline forecast. People may opt to continue social distancing for a longer period even if developments in the pandemic are in line with the baseline forecast; furthermore, uncertainty about the economic and employment situation could prompt households to build up even more precautionary savings. Moreover, households' strong aggregate income and asset position could be misleading, as the pandemic has had a lesser impact on higher-income households, which generally have a lower marginal propensity to consume than lower-income households.

Alternative scenarios assuming differing household saving patterns

The first alternative scenario assumes that the saving ratio will be about 2 percentage points below the level in the baseline forecast over the forecast horizon, and that the two will gradually converge thereafter. Private consumption will then increase considerably more quickly, job growth will be more rapid, and unemployment will not rise as high (Chart 1c). As a result, inflation will rise faster, albeit offset by a higher exchange rate and higher Central Bank interest rates. Year-2021 GDP growth will measure over 3%, or about 1 percentage point more than in the baseline forecast, and while it will be somewhat weaker in the latter half of the forecast horizon, GDP will be higher by the end of the period (Chart 2).

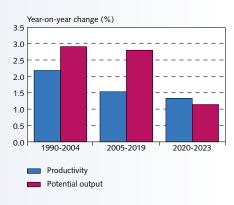
The second alternative scenario is similar, except that it assumes that the saving ratio remains, on average, 2 percentage points higher than in the baseline over the forecast horizon, and that the two will converge over time. This has a significant impact on household demand, particularly in 2021, when private consumption increases 2½ percentage points less than in the baseline (Chart 1d). The greater caution exhibited by households in their spending decisions will therefore delay the economic recovery, and year-2021 GDP growth will measure only 1.5%, or nearly 1 percentage point less than in the baseline forecast. The slack in the economy will therefore be larger, job numbers will decline further, and unemployment will be higher. On the other hand, Central Bank interest rates will remain low for a longer period, and although the króna will be weaker, inflation will be lower. Even though GDP growth in 2022-2023 will be slightly stronger, year-2023 GDP will still be 0.3% below the level assumed in the baseline forecast (Chart 2).

Other uncertainties

The impact of the pandemic on potential output could be underestimated

The medium-term economic outlook is subject to a number of other risks. For instance, uncertainty lies not only in how long the pandemic persists and how it affects demand and GDP growth in 2020 and 2021, but also on its potential impact on the long-term GDP growth outlook. The outlook is for many companies to become insolvent and for surviving ones to scale down investments in fixed assets and knowledge, not least because they must increasingly invest in production processes that enhance employee safety and facilitate remote working. The economic crisis will also cause a costly resource reallocation across sectors, and there is the risk that the openness and flexibility of the economy will be reduced, at least temporarily. Furthermore, there is the risk that workers will exit the job market and that human capital will be lost as a result.

Chart 4
Productivity and potential output¹



 Labour productivity measured as GDP per hour worked. Central Bank baseline forecast 2020-2023.
 Sources: Statistics Iceland, Central Bank of Iceland. All of these factors could have a dampening effect on productivity growth and on growth in potential output. As Chart 4 shows, the baseline forecast assumes that labour productivity and potential output will grow markedly slower over the forecast horizon than on average over the past thirty years. This assumption could easily prove overly optimistic if the pandemic drags on even longer or if the changes described above turn out more extensive than is assumed in the baseline forecast. The impact of the pandemic on output and employment could therefore easily be stronger and more lasting.

The baseline forecast is based on the current fiscal policy measures

The chief task of macroeconomic policy has been to mitigate the economic impact of the pandemic to the extent possible and support households and businesses through the most difficult period. Fiscal policy has played a key role in the battle with the pandemic. As the pandemic drags on, the challenge facing fiscal policy will be increasingly to mitigate the long-term damage to the extent possible, but without hindering the normal adjustment of the economy to a new reality once the pandemic is over. It is also important to ensure that the unavoidable increase in public debt does not give rise to unsustainable debt accumulation in the long run. At the same time, the support measures must not be unwound too quickly; otherwise, there is the risk that the economic recovery will stall. As a result of all this, the authorities are faced with an exceedingly complex and difficult set of challenges. The baseline forecast assumes significant fiscal stimulus in line with the Government's plans (for further discussion, see Chapter III and Box 3). But it is uncertain how successful those plans will be, and further changes in the scope of policy measures would inevitably change the medium-term economic outlook.

The impact of increased uncertainty could be underestimated, and credit spreads could remain wider

The pandemic has exacerbated overall uncertainty about both economic developments and many people's income and employment prospects. This increased uncertainty has also affected the financial markets and led to wider credit spreads on many financial instruments, thereby deepening the economic contraction even further. The baseline forecast assumes that credit spreads will gradually narrow as the pandemic tapers off. This may not materialise if it takes longer to control the pandemic (see the above discussion of alternative scenarios based on various pandemic-related assumptions), as the baseline forecast may also overestimate the pace at which uncertainty subsides and credit spreads narrow. If so, there is the risk that the economic outlook as portrayed in the baseline will prove overly optimistic.

The baseline forecast assumes that international trade disputes will not resume

In recent years, trade disputes have undermined world trade and damaged the global economy. The interim agreement reached in January in the dispute between the US and China is still in place, but friction between the two countries has escalated further, and it is not impossible that a full-scale trade dispute will break out once again, with severe global economic repercussions (for a discussion of the impact on the domestic economy, see Chapter I of *Monetary Bulletin* 2019/4). Furthermore, it is still uncertain whether the UK and the European Union (EU) will reach an agreement on the future relations between the two by the end of this year (for a discussion of the potential impact on the domestic economy, see Chapter I of *Monetary Bulletin* 2019/2).

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Uncertainty about the extent to which the adjustment of domestic spending will be directed at imports

The baseline forecast assumes that the contraction in private sector demand will be concentrated to some extent on imported goods and services. Import penetration will therefore fall markedly this year, approaching the post-financial crisis low from just over a decade ago. From 2021 onwards, however, it will rise again as the economy turns around. These assumptions are subject to considerable uncertainty, however, and the experience of airline WOW Air's collapse in spring 2019 shows clearly that the composition of private sector spending responses strongly affects the ultimate impact of macroeconomic shocks on GDP growth (see Box 4).

The inflation outlook is highly uncertain

The baseline forecast assumes that inflation will remain above the inflation target well into 2021 and then begin to ease, owing to the sizeable slack that has developed in the economy. There is considerable uncertainty about this, however – not only about the outlook for the short term, but also later in the forecast horizon. The impact of the pandemic on the production and distribution of goods and services, and on consumers' ability to access them, creates an unusually high level of uncertainty about price developments over the next few months (see Box 2). Furthermore, near-term developments in the exchange rate of the króna are highly uncertain. Other things being equal, further depreciation would slow down the easing of inflation relative to the baseline forecast. Moreover, the inflationary impact of the depreciation that has already occurred could be underestimated in the baseline scenario, particularly if inflation expectations become deanchored.

On the other hand, if the pandemic persists longer than is assumed in the baseline forecast and the economic contraction proves to have been underestimated, inflation could fall faster and to a lower level than in the forecast. That said, the slack in the economy could be overestimated if the negative impact of the pandemic on potential output is underestimated. If that proves to be the case, underlying inflationary pressures could be greater than is assumed in the baseline. The inflation outlook is therefore unusually uncertain at present, and the near-term risk profile is adjudged to be tilted slightly to the upside.