

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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Statement of the Monetary Policy Committee 4 May 2022

The Monetary Policy Committee (MPC) of the Central Bank of Iceland has decided to raise the Bank's interest rates by 1 percentage point. The Bank's key interest rate – the rate on seven-day term deposits – will therefore be 3.75%.

The economic outlook has deteriorated relative to the Bank's February forecast, owing to the adverse impact of Russia's invasion of Ukraine. On the other hand, there are signs of strong domestic economic activity. The slack in the economy appears to have disappeared, and the labour market is tightening. GDP growth is forecast at 4.6% this year, followed by a growth rate of just under 3% in 2023 and 2024.

Inflation measured 7.2% in April, and the outlook has deteriorated markedly. As before, house prices and other domestic cost items are strong drivers of inflation, and global oil and commodity prices have risen sharply as well. Price increases are therefore broad-based, as can be seen in the rapid rise in underlying inflation, which currently measures just over 5%. Furthermore, inflation expectations have risen by all measures. According to the Bank's forecast, the outlook is for inflation to rise above 8% in Q3/2022, some 2.8 percentage points above the February forecast. It is assumed that the combination of interest rate hikes and tighter borrower-based measures will slow down house price inflation and domestic demand.

The MPC considers it likely that the monetary stance will have to be tightened even further in coming months so as to ensure that inflation eases back to target within an acceptable time frame. Decisions taken at the corporate level, the labour market, and in public sector finances will be a major determinant of how high interest rates must rise.

Symbols:

- * Preliminary or estimated data.
- 0 Less than half of the unit used.
- Nil.
- ... Not available.
- . Not applicable.

Icelandic letters:

ð/Ð (pronounced like th in English this)

þ/Þ (pronounced like th in English think)

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

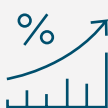
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Monetary Bulletin in a nutshell



Russia's invasion of Ukraine has pushed prices of energy, commodity, and food products higher. The risk is that, with the war and tightened public health measures in China, it will take longer to unwind the supply-chain disruptions that have plagued the global economy for the past two years. The economic outlook among trading partners, particularly in Europe, has therefore deteriorated relative to the Bank's February forecast. Inflation has risen sharply the world over, reaching highs not seen in decades. The war also erodes the global inflation outlook significantly.



Although steep rises in the price of marine and aluminium products offset the negative terms of trade effects of higher oil and commodity prices, the economic outlook for Iceland has worsened since February. Because the growth outlook for key trading partners has deteriorated, slower export growth is forecast, and greater uncertainty and higher input prices and living costs look set to impede growth in private consumption and investment. Offsetting this are, among other things, signs of robust activity in 2022 to date. GDP growth for this year is projected at 4.6% instead of the 4.8% in the February forecast. As in February, the domestic economy is estimated to be running at full capacity, and capacity constraints are likely to slow down GDP growth as the forecast horizon advances.



Job numbers continue to grow rapidly and are now above the pre-pandemic level. Job vacancies have also increased markedly. A steadily growing number of firms report being understaffed, and the foreign labour force is growing swiftly. Unemployment has fallen faster than was projected in February and is now estimated to be below its equilibrium level.



In April, inflation measured 7.2%, its highest since 2010. As before, it is driven mainly by surging house prices, plus sharply increasing global oil and commodity prices. The effects of strong domestic inflationary pressures are discernible as well, as can be seen, for instance, in steep wage rises. Underlying inflation has therefore risen rapidly, to 5.3% in April. Inflation expectations have also continued to rise. Inflation is projected to keep increasing, averaging 8.1% in Q3/2022, some 2.8 percentage points above the February forecast. It is not expected to fall below 3% until late-2024. The bleaker inflation outlook is attributable largely to the effects of the war in Ukraine; furthermore, the recent rise in long-term inflation expectations slows down the disinflation further ahead.



Economic uncertainty has escalated sharply following the invasion of Ukraine. The war has upended global commodity markets and thrown trade relationships and supply chains into disarray. It is difficult to predict how deep and lasting these effects will be. The same is true of the effects of the war on global financial markets and on households' and businesses' spending and investment decisions. Added to this is uncertainty about the impact tightened public health measures in China will have on important supply chains. Given the recent rise in long-term inflation expectations, there is greater risk that the inflation outlook as depicted in the Bank's forecast is overly optimistic. Furthermore, the risk of a wage-price spiral would grow if next winter's wage settlements provide for large pay hikes, which could cause high inflation to become more firmly entrenched.

The analysis presented in this *Monetary Bulletin* is based on data available at the end of April.

The global economy and terms of trade



The global economy

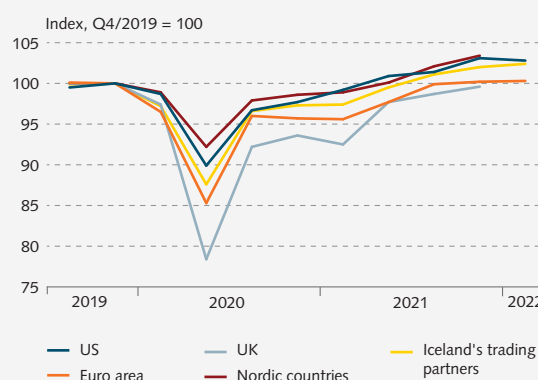
Strong economic recovery in 2021, although GDP growth slowed as the year drew to a close

The global economic recovery picked up strongly in 2021, as COVID-19 vaccination programmes moved forwards and public health measures were eased (Chart I-1). GDP growth started to lose pace in major advanced economies as the year progressed, however, owing in part to the mounting problems related to pandemic-generated supply-chain disruptions coupled with strong demand for goods. Persistent shortages of important inputs developed, shipping was delayed, and hiring workers became ever more difficult. A setback in the fight against the pandemic and the re-tightening of public health measures also impeded growth in economic activity towards the end of the year. Added to this were the adverse effects of the steep rise in energy prices from autumn onwards. Among Iceland's key trading partners, GDP growth measured 5.6% in 2021, after a 5% contraction in 2020. In nearly all of Iceland's trading partner countries, output had overtaken the pre-pandemic level by the end of 2021.

Last year's recovery was driven by a rebound in domestic demand

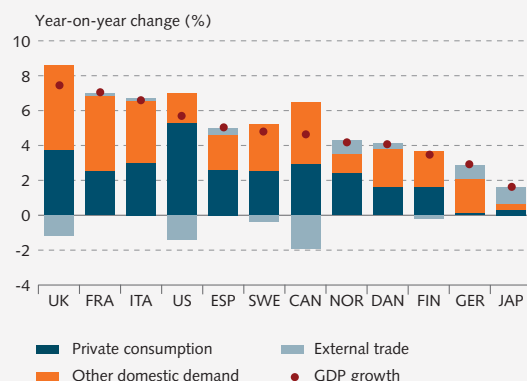
A large share of the 2021 recovery is due to a turnaround in private consumption, which had contracted sharply in 2020 because of the pandemic (Chart I-2). Other domestic spending also grew strongly in major advanced economies. Exports grew as well, albeit offset by a surge in imports concurrent with the recovery of domestic demand. The contribution of net trade to output growth was therefore small or negative.

Chart I-1
GDP in the wake of the pandemic¹
Q3/2019 - Q1/2022



1. Seasonally adjusted data. "Nordic countries" is the average for Denmark, Norway, and Sweden. Central Bank baseline forecast Q1/2022 for main trading partners.
Sources: Refinitiv Datastream, Central Bank of Iceland.

Chart I-2
Size and composition of 2021 economic recovery¹



1. The contribution from other domestic demand is the sum of the contributions from public consumption, gross capital formation, and inventory changes, plus possible errors and omissions, as the sum of components may not equal GDP growth because of chain-volume linking in the national accounts. Figures for Norway exclude the production and shipping of oil and gas.
Sources: Norges Bank, OECD, Statistics Iceland.

Public health measures have widely been eased, and the economic impact of the pandemic has receded

The spike in infection rates and the associated tightening of public health measures following the spread of the Omicron variant of COVID-19 slowed global GDP growth even further in early 2022. Economic activity started to pick up quickly, however, once it was clear that Omicron caused less severe illness than previous variants. The authorities in trading partner countries therefore began to ease their public health restrictions once again despite high infection rates, and by now many countries have relaxed them substantially or lifted them in full. PMI indices in major advanced economies rose thereafter, particularly in the services sector, and retail sales increased once again (Charts I-3 and I-4). Unemployment continued to fall as well, in line with brisker economic activity, and there are signs of increased tension in the labour market. Although strain on global supply chains remains significant, there were also signs that bottlenecks were easing after having peaked in late 2021 (see also Box 1). This is reflected in surveys among corporate executives to the effect that commodity shortages had subsided somewhat and delivery times had grown shorter, and industrial manufacturing had also increased (Chart I-4). The past two months' surge in infection rates in China and the aggressive response from the Chinese authorities may well have caused a setback in the resolution of supply-chain problems, however.

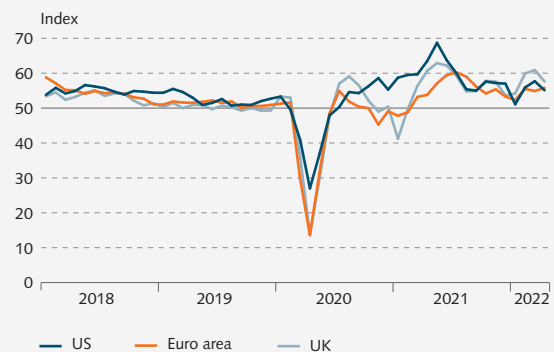
Uncertainty about the global economic outlook has escalated in the wake of the war in Ukraine ...

The global economic outlook has deteriorated sharply and uncertainty has increased with Russia's invasion of Ukraine in late February and the economic sanctions imposed on Russia by Western countries. Even though Ukraine and Russia are not dominant players in the global economy, world trade, or the global financial system, they are important producers of a wide range of commodities (see below and Box 2). The war and the sanctions have created uncertainty about commodity supplies and caused commodity prices to soar. The war has also put additional pressure on supply chains and disrupted transport by sea and air, in part because of the closure of Russian airspace. Sea-based transport via the Black Sea has already been disrupted, and the cost of shipping commodities has risen. The war will therefore have broad-based impact on the global economy.

... and the global GDP growth outlook has deteriorated

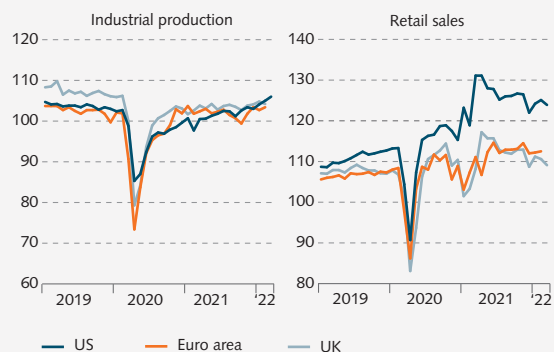
As is discussed in Box 2, the adverse impact of the invasion on the global economy will probably surface primarily in

Chart I-3
Composite PMI¹
January 2018 - April 2022



1. IHS 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 in output, and a value below 50 indicates a contraction.
Source: Refinitiv Datastream.

Chart I-4
Industrial production and retail sales¹
January 2019 - March 2022



1. Seasonally adjusted volume indices (2016 = 100).
Source: Refinitiv Datastream.

the form of surging commodity prices. Higher commodity prices will lead to higher import prices and will exacerbate inflationary pressures, which were already considerable. Households and businesses will therefore be faced with higher costs, which will dampen domestic demand. The impact will be greatest in the European countries that rely most heavily on energy imports from Russia, natural gas in particular. Higher prices and reduced supplies of energy could also force companies – especially those in energy-intensive industry – to scale back production. In addition, households' expectations about the economic outlook have been eroded, and financial conditions have worsened. Pulling in the opposite direction are the substantial savings that households have accumulated in the past two years. The authorities in many economies have stepped up public investment, including defence spending, and have taken mitigating measures to cushion against the impact of rising energy prices on households' disposable income. For commodity-exporting countries, higher prices for their own exports will also counteract the negative effects of higher import prices on domestic demand.

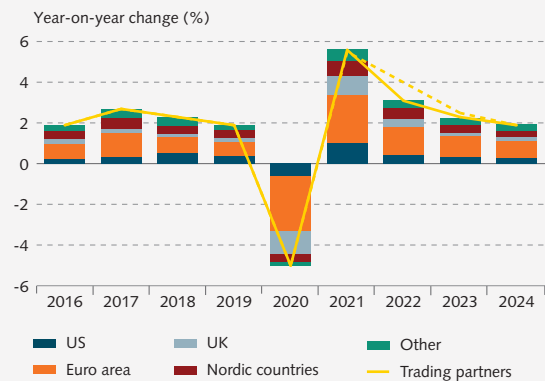
Global GDP growth set to be weaker in 2022 and 2023 ...

According to the International Monetary Fund's (IMF) mid-April forecast, global GDP growth is projected to measure 3.6% in 2022, or 0.8 percentage points less than in the Fund's January forecast. The downward revision is due largely to the impact of the war in Ukraine and the sanctions against Russia on the global economy. The IMF has lowered its year-2022 GDP growth forecast by 0.6 percentage points for advanced economies and by 1 percentage point for emerging and developing countries. It also projects global GDP growth for 2023 at 3.6%, or 0.2 percentage points below the January forecast. The outlook for world trade has also deteriorated, according to the IMF.

... and slower growth is forecast for Iceland's main trading partners

According to the Bank's baseline forecast, GDP growth among Iceland's main trading partners will measure 3.1% this year (Chart I-5). This is 0.9 percentage points below the Bank's February forecast, mainly reflecting the adverse impact of the war. The output growth outlook has worsened in all main trading partner countries, but particularly in the eurozone. The outlook for 2023 has deteriorated as well, and GDP growth is now projected at 2.3%, down from 2.5% in the February forecast. The outlook for trading partner imports has also worsened, in line with the bleaker GDP growth outlook.

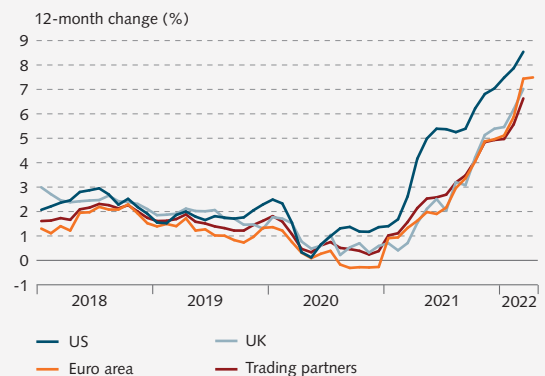
Chart I-5
GDP growth in Iceland's trading partners and contribution from selected countries 2016-2024¹



1. Trade-weighted contribution from selected countries. Central Bank baseline forecast 2022-2024. Broken line shows forecast from MB 2022/1. "Nordic countries" is the average for Denmark, Norway, and Sweden. Sources: Refinitiv Datastream, Central Bank of Iceland.

Chart I-6
Global inflation

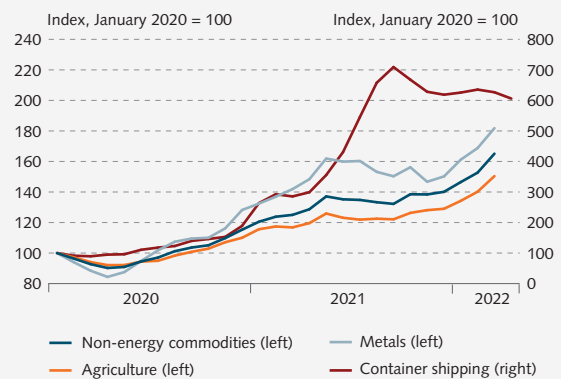
January 2018 - April 2022



Sources: Refinitiv Datastream, Central Bank of Iceland.

Chart I-7
Global shipping and commodity prices¹

January 2020 - April 2022



1. Agricultural products are divided into food (62%), beverages (13%), and raw materials (25%). Container shipping based on the Freightos Global Container Index. Based on data through 29 April 2022. Sources: Refinitiv Datastream, World Bank.

The economic outlook is still highly uncertain, however. Economic developments will depend in large part on how long the war lasts and whether further sanctions are imposed on Russia. The outlook could grow even bleaker if the war drags on or if energy imports to Europe are severely curtailed. Developments will also be determined to a large extent by the path the pandemic takes and how quickly the persistent supply-chain bottlenecks can be unwound.

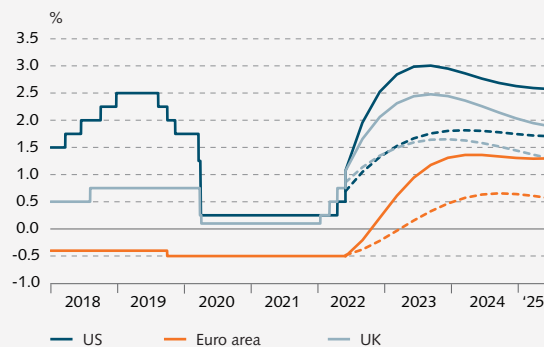
Inflation among Iceland's trading partners hits a thirty-year high ...

Inflation has soared worldwide and is much higher than was generally forecast. In Q1/2021, it averaged 1.2% among Iceland's main trading partners, but by the same quarter of 2022 it had risen to 5.8% (Chart I-6), or 1.4 percentage points above the Bank's February forecast. It is the highest inflation rate seen in trading partner countries in over three decades. The recent surge in energy prices is a major contributor to the current inflation episode. For instance, higher energy prices account for over one-fourth of headline inflation in the US and about half of inflation in the eurozone. A strong economic recovery and booming demand for goods concurrent with persistent pandemic-related supply-chain disruptions have also pushed consumer prices higher. This can be seen in steeply rising shipping costs and a broad-based increase in commodity prices (Chart I-7). As a result, underlying inflation has risen markedly, especially in the US and the UK. In Q1/2022, for instance, inflation excluding volatile items such as energy and food averaged 3.3% in trading partner countries, up from just over 1% a year earlier.

... and the global inflation outlook has deteriorated still further

The global inflation outlook has grown even bleaker since Russia invaded Ukraine, particularly because of additional rises in energy and commodity prices (see Box 2). Furthermore, because of the war and the tightening of public health measures in China, it will probably take longer to resolve the stubborn supply-chain problems that have impeded economic activity and pushed prices upwards in the recent term. Trading partner inflation is projected to average 5.8% in 2022, some 2.3 percentage points above the February forecast. The inflation outlook has deteriorated in particular for eurozone countries that rely heavily on energy imports from Russia. Inflation in trading partner countries is also forecast to be higher in 2023.

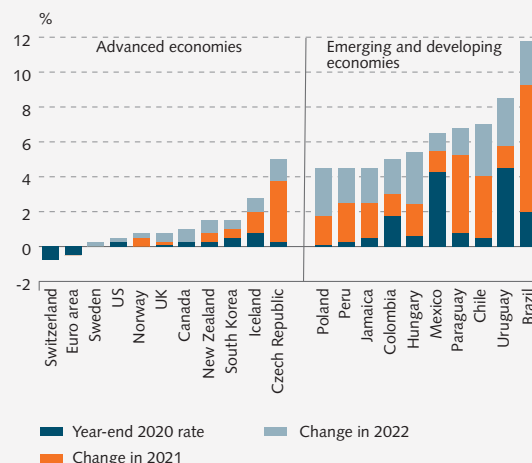
Chart I-8
Central bank policy rates¹
January 2018 - June 2025



1. Daily data 1 January 2018 through 29 April 2022, and quarterly data Q2/2022 through Q2/2025. US interest rates are the upper bound of the US Federal Reserve Bank's interest rate corridor, and rates for the euro area are the European Central Bank's deposit facility rate. Forward rates are based on overnight index swaps (OIS). Solid lines are based on forward rates as of end-April 2022, and broken lines as of beginning of February 2022.

Sources: Bloomberg, Refinitiv Datastream.

Chart I-9
Central bank policy rates in selected economies¹



1. Based on data through 29 April 2022.

Sources: IMF, Refinitiv Datastream.

Central banks in advanced economies have continued to withdraw support measures ...

Even though the GDP growth outlook has deteriorated and uncertainty has mounted, central banks in major advanced economies have continued to tighten monetary policy. Now they are expected to raise policy rates even more than previously anticipated, owing to a poorer inflation outlook and signs of increased tightening of the labour market (Chart I-8). In early March, the European Central Bank (ECB) announced plans to withdraw its quantitative easing, perhaps discontinuing its bond purchases altogether in Q3/2022. The US Federal Reserve went a step further in mid-March, raising interest rates for the first time since 2018 and signalling plans to raise rates more than it had previously stated. Furthermore, the Fed has halted its bond purchases and is planning to downsize its bond portfolio in coming months. The Bank of England (BoE) also raised interest rates in March, its third rate hike since December. Central banks in several other advanced economies have also continued raising rates, as have those in a number of emerging market economies (Chart I-9).

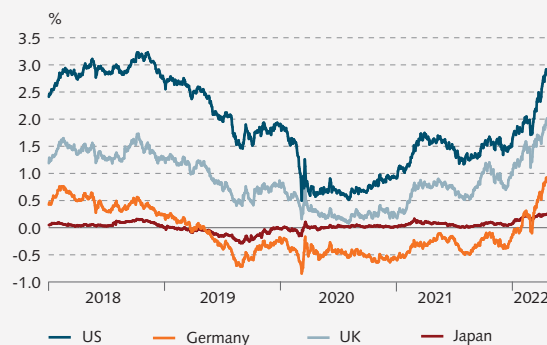
... and long-term interest rates have risen worldwide

Long-term bond yields in advanced economies started rising rapidly in late 2021 and kept climbing in early 2022 (Chart I-10). After a temporary dip following Russia's invasion of Ukraine, yields have risen even further and are now well above the pre-pandemic level. The rise in bond yields reflects expectations that central banks in major advanced economies will tighten policy more quickly in response to the worsening inflation outlook, even though the GDP growth outlook has deteriorated as well. The increase in the breakeven inflation rate in the market also indicates that inflation expectations have risen, mostly over short horizons, although the long-term breakeven rate has risen as well (Chart I-11). The rise in the breakeven rate may also reflect an increase in the term premium on Treasury bonds because of uncertainty about inflation and interest rates, particularly in the next few years. The term premium on ten-year US Treasury bonds is now positive for the first time since late 2018. Term premia on shorter bonds have risen more steeply; for instance, the premium on two-year Treasury bonds is at its highest in nearly twenty years. This is reflected in larger rises in short-term rates than in long-term rates, and the spread between yields on ten-year and two-year Treasury bonds is now close to zero in the US.

Financial conditions have deteriorated

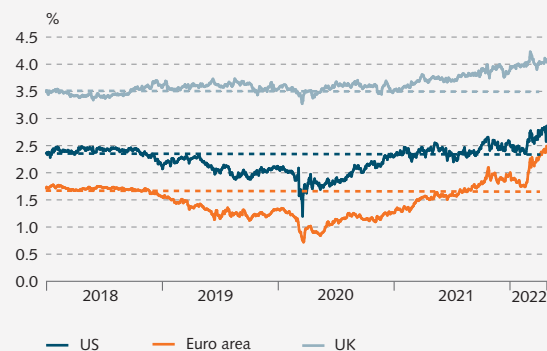
Asset prices in global financial markets have deteriorated in 2022 to date, and uncertainty has escalated. The

Chart I-10
10-year government bond yields
1 January 2018 - 29 April 2022



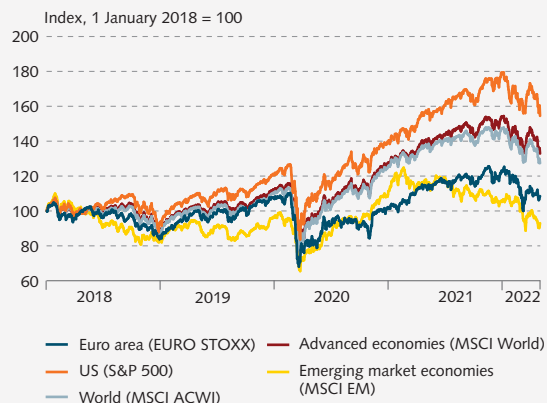
Source: Refinitiv Datastream.

Chart I-11
Breakeven inflation rates¹
1 January 2018 - 29 April 2022



1. Five-year breakeven rate five years ahead. Broken lines show the average since 2012. The breakeven inflation rate for the UK is based on the Retail Price Index (RPI).
Source: Refinitiv Datastream.

Chart I-12
Global share prices
1 January 2018 - 29 April 2022



Source: Refinitiv Datastream.

decline early in the year was due mainly to concerns that major advanced economies' central banks would raise interest rates more rapidly than previously assumed. Share prices fell even further in the wake of the Russian invasion of Ukraine (Chart I-12). Flight to safe assets such as gold and US Treasury bonds increased, and volatility in the financial markets grew more pronounced. Risk premia and interest rate spreads rose as well, particularly on higher-risk assets from emerging market economies. Stock markets in China have also declined sharply in recent months, partly in response to tighter public health measures. Global financial conditions have therefore worsened.

Export prices and terms of trade

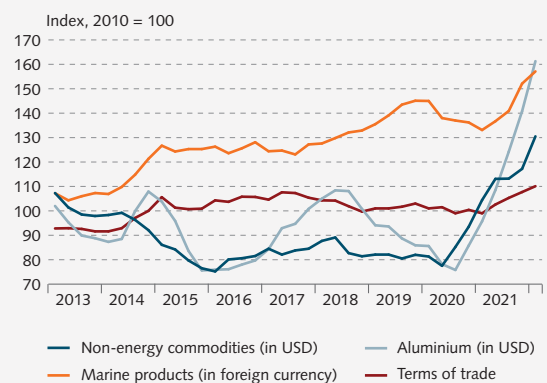
Outlook for a larger rise in marine product prices ...

Icelandic marine product prices rose swiftly in H2/2021, in line with improvements in market conditions following a steep pandemic-induced drop in 2020 (Chart I-13). Foreign-currency prices were roughly 5% above the pre-pandemic level by the end of the year, in line with the Bank's February forecast. Unexpectedly, though, prices continued to increase in early 2022, and they look set to rise much more this year than was previously forecast. This is due primarily to an improved outlook for demersal product prices, owing both to larger price hikes at the beginning of the year and, no less, to the effects of the sanctions on Russia. Russia is an important exporter of demersal fish, and its restricted market access has boosted demand for Icelandic marine products. Other things being equal, this will push demersal prices even higher during the year. Furthermore, the outlook is for capelin product prices to fall slightly less than previously assumed, as it was not possible to catch the entire quota issued for this season. The baseline forecast assumes that foreign-currency prices of marine product exports will rise by 9% in 2022 instead of 4%, as was projected in February. On the other hand, prices are expected to fall further next year, although they will be somewhat above the February forecast towards the end of the forecast horizon.

... and an even greater increase in aluminium prices

US dollar prices of aluminium exports have soared in the recent term, rising by 44% year-on-year in 2021 (Chart I-13). This is due in part to reduced production in China because of the Chinese authorities' environmental policy. Furthermore, energy shortages and rising input prices have led to production cutbacks all over the world. At the same time, demand has been growing as the global economy has recovered. Global aluminium prices rose even more in the wake of the invasion of Ukraine,

Chart I-13
Commodity prices and terms of trade¹
Q1/2013 - Q1/2022



1. Central Bank baseline forecast Q1/2022 for marine product prices and terms of trade.
Sources: Statistics Iceland, World Bank, Central Bank of Iceland.

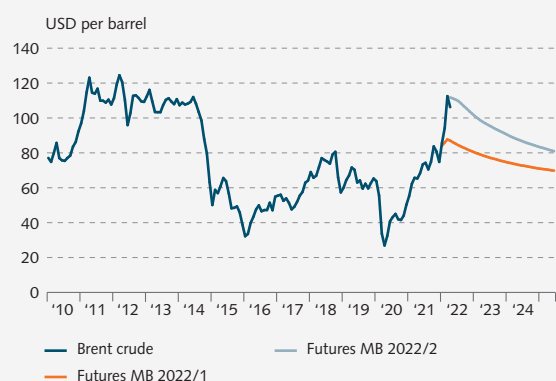
peaking at an all-time high of nearly 3,900 US dollars per tonne in early March. This is due mainly to elevated uncertainty about the impact the war and associated sanctions will have on supply, as Russia accounts for 6% of global aluminium production. Furthermore, there are signs that the surge in energy prices in the wake of the invasion has prompted even more cutbacks in aluminium production, particularly in Europe. Another contributor to high aluminium prices is the steep rise in the price of alumina, which is used in the production process. Aluminium export prices in US dollars are expected to increase by around 37% year-on-year in 2022 instead of the 16% forecast in February. On the other hand, the outlook is for prices to fall more in the coming two years.

Oil prices have continued to climb ...

Global crude oil prices have risen virtually without interruption in the past two years, after plunging at the onset of the pandemic (Chart I-14). They dipped temporarily in December, owing to concerns about the pandemic and tighter public health measures, but they picked up again in January, rising to an eight-year high. The main drivers of the increase are the improved outlook for demand, declining inventories, and concerns about production by OPEC countries and related oil producers. Prices continued to rise in mid-February, fuelled by growing indications that Russia planned to invade Ukraine, and rose even more once the invasion materialised. Because of the invasion and the sanctions imposed by Western countries, the supply of oil is highly uncertain, as Russia is the world's second-largest oil exporter. This uncertainty is reflected in unusually wide swings in market prices, with Brent crude closing at 130 US dollars per barrel in early March, its highest since 2008. The price of other energy sources surged as well, not least natural gas in Europe, which relies heavily on natural gas imports from Russia.

Oil prices have settled down a bit since March, although they remain far higher than before the war broke out. Increased production in the US and the decision by the US and all of its partner members of the International Energy Agency (IEA) to release an unprecedented supply of strategic oil reserves into the market have mitigated this uncertainty and contributed to lower prices. There is also increased optimism that the US government will ease its sanctions on Iran, which have impeded oil exports from the country in recent years. Growing concerns about the impact of tighter public health measures in China on oil demand have eased prices as well. The price of Brent crude averaged 106 US dollars per barrel in April, some 24% higher

Chart I-14
Global oil prices
January 2010 - June 2025



Sources: Refinitiv, Central Bank of Iceland.

than in January 2022 and 63% higher than in April 2021. Although futures prices suggest that oil prices will decline during the forecast horizon, the outlook is for prices to be well above the February forecast over the horizon as a whole.

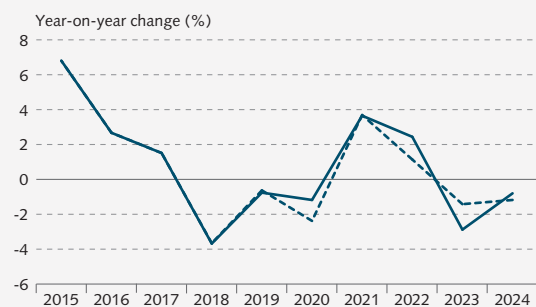
... and other commodity prices have surged as well

Non-energy commodity prices also rose steeply year-on-year in 2021, many of them reaching or closing in on historical highs (Charts I-7 and I-13). Demand has soared with increased economic activity, and supply-chain bottlenecks have hampered the production of many commodities. The rise in prices had halted in H2/2021, and prices were expected to decline marginally this year. But they started to climb again early in 2022, alongside the increase in energy prices, and rose still further because of the war. In March, commodity prices were at their highest ever, and about 18% above their end-2021 level. This trend reflects deep concerns about the impact the war and associated sanctions will have on commodity supplies, as both Russia and Ukraine are important producers of many commodities, including metals, agricultural products, and fertiliser (see Box 2). The outlook is for non-energy commodity prices to rise by an average of 15.4% in 2022, whereas the February forecast assumed a decrease of just over 1%. On the other hand, prices are expected to drop further in the next two years, although they will be well above the February forecast for the entire forecast horizon.

Terms of trade set to improve more strongly

Terms of trade for goods and services improved by 3.7% in 2021, as was forecast in February (Charts I-13 and I-15). The improvement was due primarily to the steep increase in aluminium prices, although the price of marine products and other goods exports, particularly silicon, rose as well. It appears that terms of trade improved even more in Q1/2022, and they are expected to improve by 2.3% over the year as a whole, or 1.2 percentage points more than was forecast in February. The outlook for terms of trade has therefore improved despite the surge in oil and commodity prices following the invasion of Ukraine. Key trading partners' export prices are expected to increase by just under 10% this year, or twice as much as was forecast in February. Iceland's export prices are set to rise more, however, owing to much larger increases in the price of aluminium and marine products. Although terms of trade are expected to deteriorate more in 2023, they will still be more favourable throughout the forecast horizon than was assumed in February.

Chart I-15
Terms of trade for goods and services 2015-2024¹



1. Central Bank baseline forecast 2022-2024. Broken line shows forecast from MB 2022/1.
Sources: Statistics Iceland, Central Bank of Iceland.

Monetary policy and domestic financial markets



Monetary policy and market interest rates

Key rate raised still further

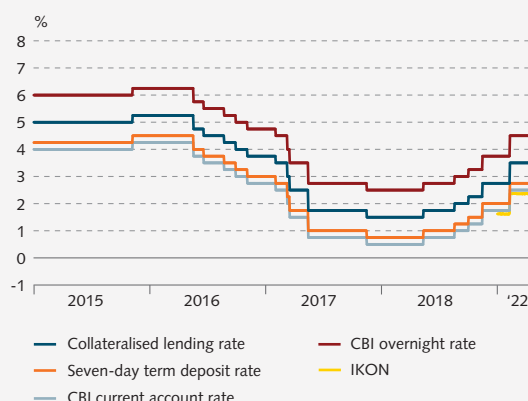
Prior to the publication of this *Monetary Bulletin*, the Bank's key interest rate – the rate on seven-day term deposits – was 2.75% (Chart II-1). It was raised by 1.25 percentage points in 2021 and another 0.75 percentage points in February 2022. Short-term market rates have risen accordingly.¹

The Bank's key rate is now at the same level as it was before the COVID-19 pandemic reached Iceland in February 2020. The Bank's real rate is lower, however, as inflation is considerably higher and short-term inflation expectations are above the level prevailing during the lead-up to the pandemic. The Bank's real rate, based on the average real rate as calculated from various measures of inflation and one-year inflation expectations, is currently -3.3%, whereas it was 0.4% in February 2020. It is also 0.7 percentage points lower than it was before interest rates were raised in February 2022. The interest rate differential with abroad has widened, however, and short-term real rates in Iceland are now 1.9 percentage points above the trading partner average.

The baseline forecast assumes that the key rate will develop in line with the monetary policy rule in the Bank's quarterly macroeconomic model, which ensures that forecasted inflation is in line with the Bank's inflation target over the medium term.

¹ The Central Bank started publishing data on the IKON rate (Icelandic króna overnight rate) at the beginning of April 2022. This new reference rate, derived from market rates on unsecured overnight deposits with the commercial banks, is considered a more accurate benchmark for short-term rates in Icelandic krónur than conventional interbank rates are, as it is based on far more trading activity than interbank rates.

Chart II-1
Central Bank of Iceland interest rates and short-term market rates
2 January 2018 - 29 April 2022



Source: Central Bank of Iceland.

According to the survey taken by the Bank in April, market agents expect the key rate to be raised even further, to 4.5% by the year-end and 4.75% by mid-2023 before starting to ease back again (Chart II-2). This is a larger rate hike than they expected in the last survey. Forward interest rates also suggest larger rate hikes than expected in February. Furthermore, the dispersion of market agents' responses on interest rates, inflation, and the exchange rate has increased since the last survey, indicating greater uncertainty.

Long-term nominal rates are at their highest in three years ...

The yield on ten-year nominal Treasury bonds has risen by 1.1 percentage point year-to-date. It was 5.3% just before this *Monetary Bulletin* was published (Chart II-3). Long-term nominal rates are at their highest since March 2019. The yield on five-year nominal bonds has risen somewhat more, or 1.4 percentage points, and the slope of the yield curve has flattened slightly. The yield on ten-year inflation-indexed Treasury bonds has risen by 0.1 percentage point year-to-date, to 0.8% just before this *Monetary Bulletin* went to press.

... owing mainly to a rise in the breakeven inflation rate

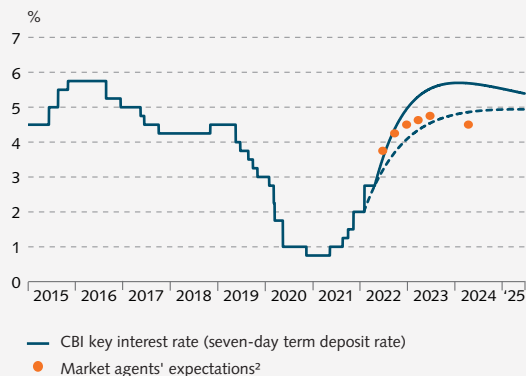
The rise in nominal bond yields since last autumn can be attributed for the most part to rising inflation expectations and increased uncertainty about the inflation outlook. This is reflected in the breakeven inflation rate, which rose sharply until the Bank's February interest rate decision, particularly after the publication of the January CPI measurement, which rose more than investors had expected (Chart II-4). The breakeven rate rose still further after Russia invaded Ukraine on 24 February, an event that has exacerbated inflationary pressures worldwide (see Box 2).

Demand for inflation-indexed bonds has been strong recently, but supply is limited, and most of the bonds are owned by pension funds. In addition, uncertainty about inflation has grown during the year, as can be seen, for instance, in greater dispersion of responses on inflation and interest rates in the Bank's most recent market expectations survey. Therefore, part of the rise in the breakeven rate probably stems from a higher inflation uncertainty premium, in addition to the effects of the limited supply of indexed bonds. Even so, the higher breakeven rate also reflects a rise in inflation expectations (see Chapter V).

Chart II-2

Central Bank of Iceland key interest rate¹

1 January 2015 - 30 June 2025



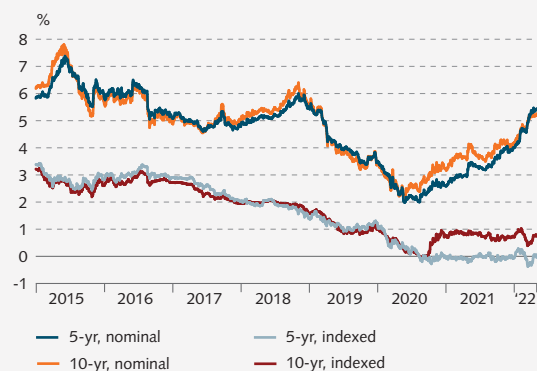
1. The Central Bank's key interest rate and Treasury bond yields are used to estimate the yield curve. The broken line shows forward market interest rates prior to MB 2022/1. 2. Estimated from the median response in the Central Bank's survey of market agents' expectations concerning the collateralised lending rate. The survey was carried out during the period 19-22 April 2022.

Source: Central Bank of Iceland.

Chart II-3

Government-guaranteed bond yields¹

2 January 2015 - 29 April 2022

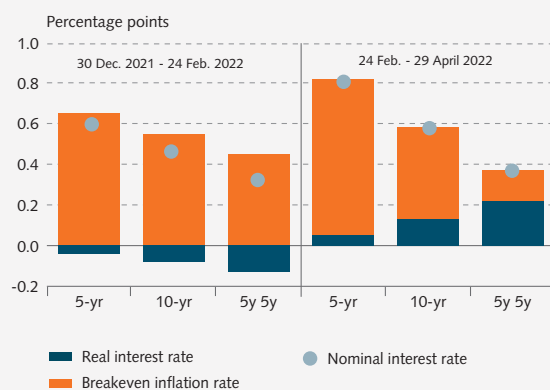


1. Based on the zero-coupon yield curve, estimated with the Nelson-Siegel method, using money market interest rates and Government-guaranteed bonds.

Source: Central Bank of Iceland.

Chart II-4

Breakdown of change in nominal bond interest rates¹



1. Change in nominal Treasury bond yields (estimated using the Nelson-Siegel method) and the contribution of corresponding changes in indexed bond yields and the breakeven inflation rate.

Source: Central Bank of Iceland.

Exchange rate of the króna

The króna has appreciated year-to-date ...

After sliding through much of 2021, the króna began to appreciate vis-à-vis the trading partner average towards the end of the year. It kept strengthening in early 2022, until Russia's invasion of Ukraine, when it fell sharply (Chart II-5). The appreciation during the period before the invasion partly reflected increased optimism about the relaxation of public health measures and a brighter overall economic outlook. The exchange rate was supported still further by increased forward currency sales, after authorisations for derivatives trading involving the króna were expanded significantly in mid-2021. Exporters have used this increased flexibility to sell their future foreign exchange revenues forward, and speculative trading has probably increased as well. However, the invasion of Ukraine caused severe turmoil in financial markets, and for a while investors sought out the secure assets and currencies that are considered a safe haven in times of heightened uncertainty. Strong downward pressure on the króna ensued, and the Central Bank sold large amounts of foreign currency in late February and early March, in line with its intervention policy. The sudden depreciation in the wake of the invasion may also have taken place because some of the investors that had sold currency via forward contracts closed their positions when uncertainty spiked. The króna began to appreciate again in early March, however, but by then it had weakened by 3.3% since the war began. It is now 1% higher than before the invasion and 3.9% stronger compared to a year ago. The trade weighted index is currently close to the level just before the pandemic hit Iceland in late February 2020.

Capital flows due to new investment were relatively limited from mid-2021 until March 2022, whereupon they increased marginally, owing in part to the Treasury's sale of shares in Íslandsbanki but also to increased inflow into Government bonds. The possibility of a further increase in inflows later this year cannot be ruled out, as the domestic stock market will be moved to the secondary emerging market category by FTSE Russell this coming September. The pension funds' net foreign currency purchases totalled 14.6 b.kr. in the first three months of 2022. Their purchases have declined since before the pandemic, as their foreign assets have grown markedly and some of the pension funds are approaching the foreign asset threshold provided for in their investment strategies.

... and is projected to remain broadly unchanged over the forecast horizon

The trade-weighted exchange rate index (TWI) stood at 191 points in Q1/2022, and the króna was therefore

Chart II-5

Exchange rate of the króna¹

2 January 2015 - 29 April 2022



1. Price of foreign currency in krónur. Narrow trade index.

Source: Central Bank of Iceland.

about 1% stronger, on average, than was forecast in the February *Monetary Bulletin*. According to the baseline forecast, it will remain broadly at that level throughout the forecast horizon (Chart II-6). The real exchange rate will therefore be nearly 6% higher by 2024 than it was, on average, in 2021, and a full 8% below its 2017 peak.

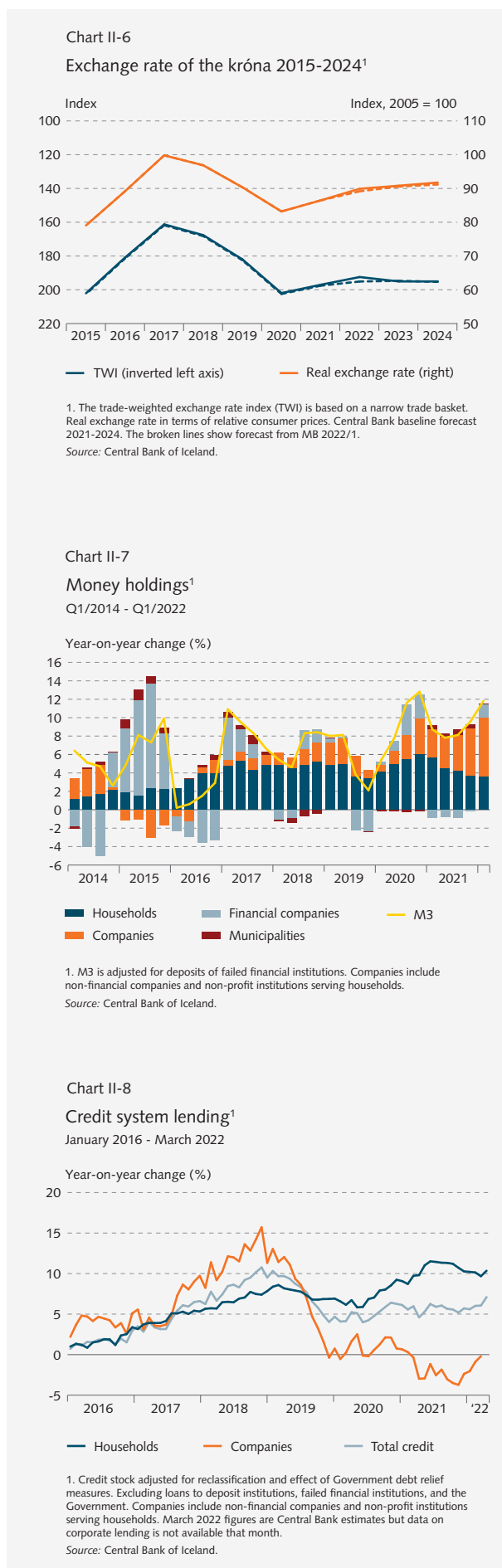
Money holdings and lending

Growth in money holdings driven by an increase in corporate deposits

Year-on-year growth in M3 measured 11.8% in Q1/2022, somewhat more than in 2021 (Chart II-7). Growth picked up over the course of last year, in line with an increase in corporate deposits. Corporate deposits have grown in nearly all sectors in tandem with rising turnover, although the lion's share of the increase stems from services companies. Increased activity in tourism may explain this trend in part, although companies in the services sector are a diverse group. Furthermore, deposits owned by non-bank financial institutions have picked up again, after contracting for virtually all of 2021. Growth in household deposits remains strong, at 6.9% year-on-year in Q1/2022, although the pace has eased relative to Q1/2021, when it measured nearly 11%. This coincides with the slowdown in mortgage lending towards the end of last year, the waning impact of the pandemic on individuals' consumption capacity, and a decline in household saving (see Chapter III).

Mortgage lending growth has eased ...

Year-on-year growth in credit system lending has been relatively stable at around 6% over the past year (Chart II-8). As before, lending to households accounts for most of the increase, although the pace of growth has started to ease. Year-on-year growth in credit system lending to households is estimated to have grown just over 10% in Q1/2022 but has subsided since mid-2021, when it peaked at nearly 11½%. It is likely that policy rate hikes are starting to affect mortgage lending growth; furthermore, it appears that refinancing is on the decline and that households are less inclined to use increased collateral capacity to finance other consumption spending. The results of the Central Bank's new lending survey, carried out in April, suggest that demand for mortgages will stand still or ease further during the year (see Box 3 in *Financial Stability 2022/1*). Concurrent with the slowdown in mortgage lending by the commercial banks, prepayment of pension fund loans has declined, as some of the pension funds are now offering better terms than the banks do.



... but corporate lending has stopped contracting

Credit system lending to companies remained broadly flat between years in Q1/2022 but increased slightly when adjusted for the effects of exchange rate changes on foreign-denominated corporate loans. Net new lending to businesses has increased in the recent term, and corporate credit growth may therefore be picking up again after contracting continuously since the beginning of 2021. This probably reflects increased need for investment in tandem with greater economic activity, and the first signs of an upturn in lending to the construction sector can now be seen (see Chapter III). Furthermore, corporate executives are more optimistic than before, though there is increased uncertainty due to the war in Europe and the growing impact of supply-chain problems. Despite this, the commercial banks do not expect large changes in the demand for corporate loans during the year. In addition to this, some firms have sought funding directly from the market or through alternative investment funds.

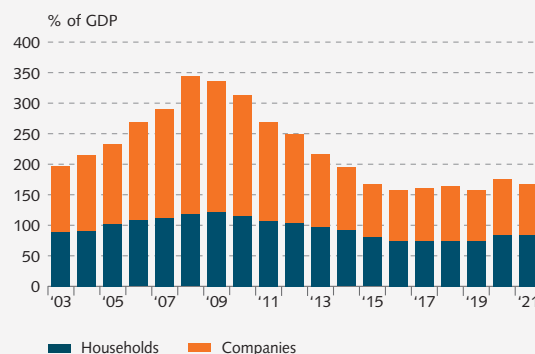
Households and businesses well positioned

Household debt has increased somewhat since before the pandemic but remains moderate (Chart II-9). Household arrears have also declined and are low in historical context. Furthermore, households' net worth improved throughout the pandemic, and the household saving ratio is still above its historical average (see Chapter III). It is therefore safe to assume that households are quite resilient on the whole, and reasonably well equipped to face the effects of higher interest rates and inflation.

Expectations about further interest rate hikes have apparently prompted more households to take non-indexed fixed-rate loans, even though they bear higher interest than variable-rate loans do. Credit spreads on non-indexed mortgages have also narrowed slightly, as interest rates on new mortgages have risen less than deposit rates and the Central Bank's key rate have (Chart II-10).

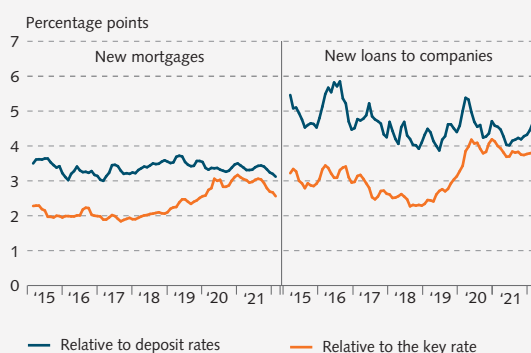
In spite of the economic contraction, corporate debt has declined slightly since before the pandemic, and firms appear better positioned than was anticipated at the onset of the pandemic. Although the firms hit hardest by the pandemic are still vulnerable, many companies less affected by it have been doing well. Some of Iceland's larger firms took advantage of easier access to credit and lower interest rates and refinanced their debt on better terms, although credit spreads on new loans have generally widened in comparison with the deposit rates offered to companies (Chart II-10). In addition, the banks' corporate loan losses have been less than was projected early in the pandemic, and corporate arrears declined in 2021.

Chart II-9
Household and non-financial corporate debt¹
2003-2021



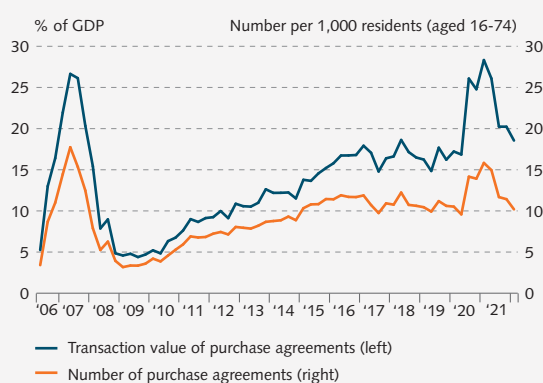
1. Debt owed to financial undertakings and market bonds issued. Excluding financial institutions (which includes holding companies).
Sources: Statistics Iceland, Central Bank of Iceland.

Chart II-10
Credit spreads¹
March 2015 - March 2022



1. The difference between a weighted average of the large commercial banks' non-indexed lending rates and, on the one hand, the Central Bank's key rate, and on the other, a weighted average of their deposit rates. Three-month moving average.
Source: Central Bank of Iceland.

Chart II-11
Number and transaction value of house purchase agreements nationwide¹
Q2/2006 - Q1/2022



1. Number and transaction value of purchase agreements on date of purchase. Number and transaction value of purchase agreements, seasonally adjusted by the Central Bank, but GDP data by Statistics Iceland. Central Bank baseline forecast for GDP in Q1/2022.
Sources: Registers Iceland, Statistics Iceland, Central Bank of Iceland.

Asset prices

Residential property in short supply, and prices have kept rising ...

House prices have surged in the recent past, with real estate market activity starting to pick up in late 2020 and peaking in H1/2021. Lower interest rates, significant accumulated savings, and higher disposable income made it easier for households to buy larger homes and enabled a larger share of first-time buyers to invest in their first home. Since interest rates began rising in mid-2021, market activity has subsided somewhat, and the number of purchase agreements per 1,000 inhabitants is now back to the pre-pandemic level (Chart II-11). In spite of this, house prices have kept rising, with the year-on-year increase in greater Reykjavík measuring 22.2% in March 2022, the second biggest surge since the May 2017 peak (Chart II-12). Presumably, limited supply is a major contributing factor: in April, an all-time record low of roughly 1,000 properties were advertised for sale nationwide, down from nearly 2,200 a year earlier. This severe mismatch between supply and demand can also be seen in an unusually large share of homes that sell above the asking price. The proportion of homes selling at a premium has more than quadrupled since mid-2020 and is at its highest since measurements were introduced (Chart II-13). In addition, the average time-to-sale has been very short, at about 1.2 months in March.

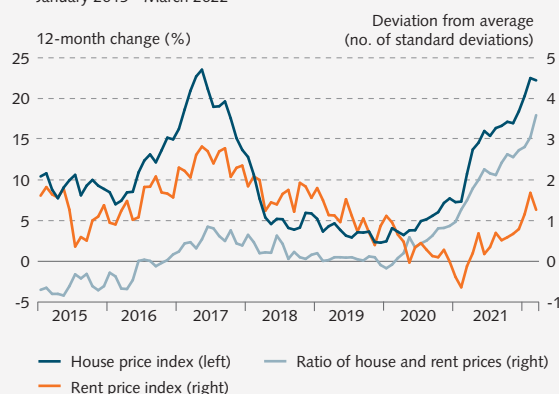
... well in excess of fundamentals ever since mid-2021

Rent prices have jumped this year and were up 6.3% year-on-year by March (Chart II-12). To a degree, the increase is due to a resurgence in immigration and the number of young people who seek out rental property, as the share of first-time homebuyers has begun to fall again after rising steeply in recent years. Even so, house prices have increased far in excess of rent, with the result that the ratio of house prices to rent has kept rising and is now well above its historical average. A similar trend has been seen in many other advanced economies, where substantial capital has been invested in the housing market because of low interest rates and generous government support measures during the pandemic (Chart II-14). As in many of these countries, there are signs that the rise in house prices since mid-2021 has been larger than can be explained by macroeconomic fundamentals (Chart II-15).²

Chart II-12

House prices and rent¹

January 2015 - March 2022



1. House prices and rent in the greater Reykjavík area. Deviation of the house price-to-rent ratio from the 2011-2022 average, measured in number of standard deviations.

Sources: Registers Iceland, Central Bank of Iceland.

Chart II-13

Residential properties sold at a premium on the asking price and average time-to-sale nationwide¹

January 2017 - March 2022

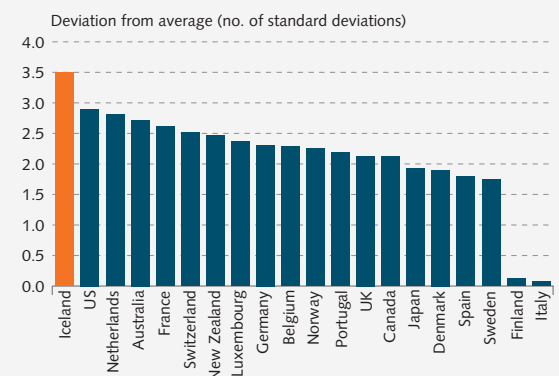


1. Properties sold at a premium on the asking price as a percentage of properties for sale. Three-month moving average. The number of purchase agreements is seasonally adjusted by the Central Bank.

Sources: Housing and Construction Authority, Morgunbladið Real Estate Website (mbl.is), Registers Iceland, Central Bank of Iceland.

Chart II-14

House prices-to-rent ratios in selected OECD-countries¹



1. Data for Iceland in Q1/2022 and for Q4/2021 in other countries, except Netherlands and New-Zealand in Q3/2021 and Japan in Q2/2021.

Sources: OECD, Registers Iceland, Statistics Iceland, Central Bank of Iceland.

2 Based on a dynamic forecast prepared using the house price equation from the Bank's macroeconomic model. For further discussion, see Chapter II of *Monetary Bulletin* 2021/4.

Tighter financial conditions and increased supply should ease price pressures in the housing market

It seems clear that the number of homes built during the pre-pandemic years did not satisfy the increased demand for housing in the wake of the pandemic. As is discussed in Chapter III, construction activity has been picking up in the recent past, which should ease supply constraints and price pressures in the housing market in the coming term. In addition, the reduction in the maximum LTV ratio on new mortgages, the new rules capping debt service-to-income ratios, and Central Bank interest rate hikes should slow down house price inflation.

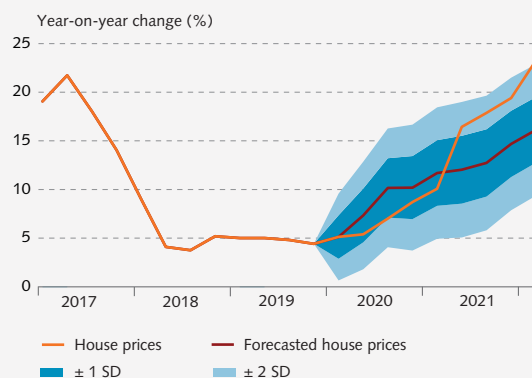
According to the baseline forecast, house price inflation is expected to slow down in H2/2022, although the situation is uncertain. For instance, the war in Europe has pushed many commodity prices sharply upwards, and shortages of inputs could result. This could complicate matters for construction companies, cause a setback in plans to boost housing supply, and contribute to further rises in housing costs. There is also some uncertainty about the impact of the upcoming wage negotiations and the economic outlook more generally. A sudden increase in immigration and a surge in demand for short-term rental housing for foreign workers could put more pressure on house prices than is currently envisioned.

Share price volatility in the wake of the Ukraine invasion

The Nasdaq Iceland OMXI10 index has fallen by nearly 11% year-to-date (Chart II-16). As has been the case in many markets abroad, the equity market was highly volatile in the wake of the invasion, causing the price of shares listed on the Nasdaq exchange to fall when investors shifted to safer assets. The post-invasion decline in share prices reached 12% in early March, and apparently there were widespread demands for additional collateral and forward contracts were closed out, either entirely or in part. Prices have recovered to a large extent, but they are still almost 7% lower than before the invasion. Stock market turnover totalled 357 b.kr. in Q1/2022, which is 35% higher than in Q1/2021.

Chart II-15

Actual and forecasted house prices¹
Q1/2017 - Q1/2022

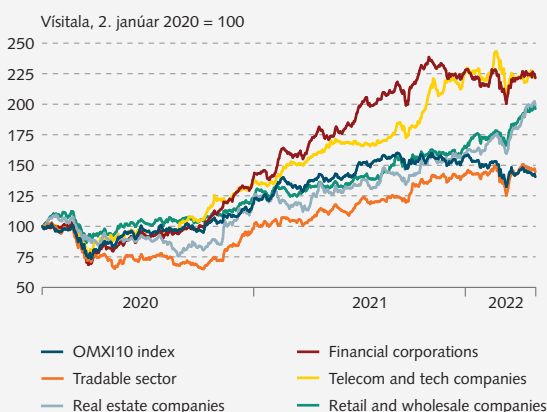


1. Forecasted year-on-year change in house prices from Q1/2020 through Q1/2022, obtained with a dynamic forecast using a house price equation similar to the one from the Bank's macroeconomic model, estimated for the period from Q3/2001 through Q4/2017.

Sources: Registers Iceland, Central Bank of Iceland.

Chart II-16

Share prices by sector¹
2 January 2020 - 29 April 2022



1. Average change in share price of listed companies in selected sectors, adjusted for dividend payments and share capital reductions.

Sources: Kodiak Pro, Nasdaq Iceland.

Demand and GDP growth



Domestic private sector demand

Private consumption grew strongly in Q4/2021 ...

Households' consumption spending grew throughout 2021, picking up the pace in H2 (Chart III-1). Households continued to tap into the savings they had accumulated after the pandemic struck, and the saving ratio has edged closer to its pre-pandemic level. The composition of consumption spending has also begun to return to the pre-pandemic pattern, as spending in 2020 was strongly affected by the impact of public health measures on households' consumption options (Chart III-2).

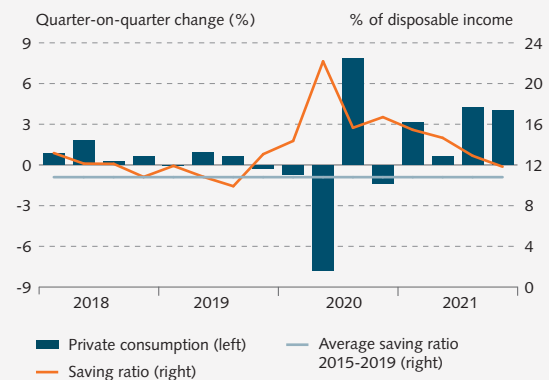
Private consumption grew by 12.9% year-on-year in Q4/2021, the fastest rate since Q2/2005 and well in excess of the 11% provided for in the Bank's February forecast. For the year as a whole, it grew by 7.6%, as compared with the February forecast of 6.8%. In part, this sharp rebound in private consumption reflects strong base effects following the 2.9% contraction in the prior year, but it also reflects the impact of interest rate cuts, job creation, rising real wages, and greater optimism among households.

... but there are signs that growth eased in Q1/2022 ...

COVID case numbers began to surge over the course of the autumn, and in mid-November public health measures were tightened again. In late February, though, all public health measures were lifted, both within Iceland and at the border, even though case numbers had continued to rise rapidly, as the harmful effects of the pandemic were diminishing. Even so, people appeared to have been cautious about resuming activities, owing both to widespread illness and to inclement weather. This can be seen in traffic data, which show reduced mobility in Q1/2022 relative to the same quarter in

Chart III-1

Private consumption and household saving¹
Q1/2018 - Q4/2021

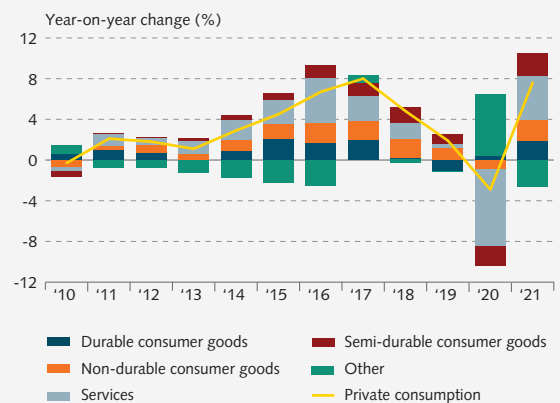


1. The saving ratio is calculated based on the Central Bank's disposable income estimates. Seasonally adjusted figures.

Sources: Statistics Iceland, Central Bank of Iceland.

Chart III-2

Private consumption and contribution of components
2010-2021¹



1. "Other" refers to activities of NGOs and Icelanders' spending abroad net of foreign tourists' spending in Iceland.

Sources: Statistics Iceland, Central Bank of Iceland.

2021. Payment card turnover within Iceland grew slowly as well, and total card turnover was driven by a surge in card use abroad (Chart III-3). This trend accords both with data from the Icelandic Centre for Retail Studies, which show a marked increase in card use at travel agencies, and with the Gallup index of planned overseas travel. New motor vehicle registrations (excluding car rental agencies) also suggest increased consumption spending, with new registrations rising by just under 16% year-on-year in the first two months of 2022. However, households appear less optimistic than they were last autumn, although they are still considerably more upbeat than they were in late 2020. The Bank's baseline forecast therefore assumes that private consumption grew by 3.8% year-on-year in Q1, or 0.4 percentage points more than in the February forecast, as public health measures were eased more rapidly than was projected at the time the forecast was prepared.

... and the outlook for 2022 as a whole has deteriorated since February

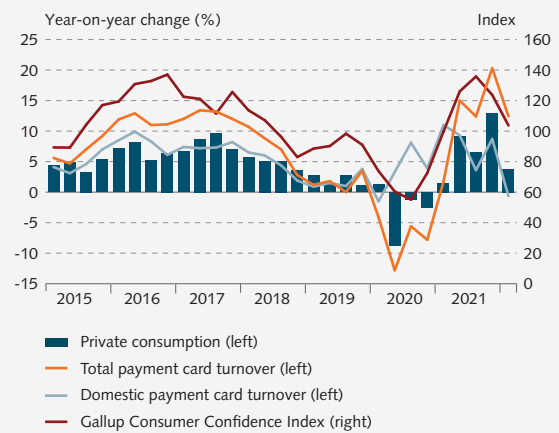
The outlook for private consumption growth in 2022 has deteriorated slightly relative to the February forecast. The war in Europe may prompt households to be more cautious about spending as the steep rise in inflation erodes their purchasing power. This is offset, however, by the high saving rate and the strong financial position of most households. Furthermore, the effects of higher energy costs on households' cost of living will be less pronounced here than in mainland Europe, as hydro-electric and geothermal power are used far more widely for home heating in Iceland than oil and natural gas are (see Box 2).

According to the baseline forecast, private consumption will grow by 3.1% in 2022, some 0.4 percentage points less than was projected in February (Chart III-4). This reflects the offsetting impact of stronger growth in Q1 versus the weaker outlook for the remainder of the year. Also at play are base effects from stronger private consumption growth in 2021. The outlook for the next two years is also bleaker than was assumed in February, with growth forecast at 3% in 2023 and 2.7% in 2024.

Business investment grew strongly in 2021 ...

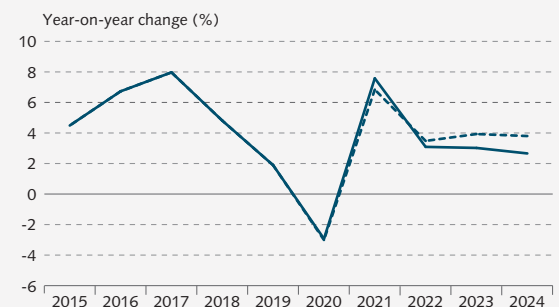
Business investment grew by 23.1% in 2021, after contracting in each of the three years beforehand. General business investment (excluding ships, aircraft, and energy-intensive industry) grew by 19.7% but the contribution from investment in ships and aircraft was sizeable as well (Chart III-5). Year-on-year growth

Chart III-3
Private consumption and its indicators¹
Q1/2015 - Q1/2022



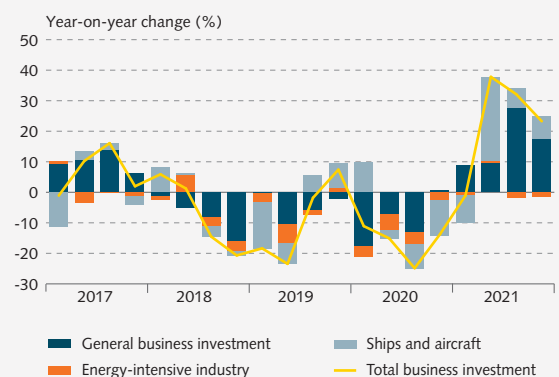
1. The Gallup Consumer Confidence Index is seasonally adjusted. Central Bank baseline forecast Q1/2022 for private consumption.
Sources: Gallup, Statistics Iceland, Central Bank of Iceland.

Chart III-4
Private consumption 2015-2024¹



1. Central Bank baseline forecast 2021-2024. The broken line shows the forecast from MB 2022/1.
Sources: Statistics Iceland, Central Bank of Iceland.

Chart III-5
Business investment and contribution of components
Q1/2017 - Q4/2021



Sources: Statistics Iceland, Central Bank of Iceland.

peaked in Q2, with the importation of a significant amount of aircraft to Iceland, while in H2 the contribution from general business investment increased. Growth in business investment was somewhat stronger in 2021 than had been assumed in the Bank's February forecast.

... and looks set to keep growing in 2022

It appears that investment was strong in Q1/2022 as well, even though indicators imply that the year-on-year pace eased relative to Q4/2021. Imports of generic investment goods increased less year-on-year in Q1/2022 than they did in Q1/2021 for example (Chart III-6). Furthermore, activity in the construction sector may well have been weaker than anticipated, owing to inclement weather.

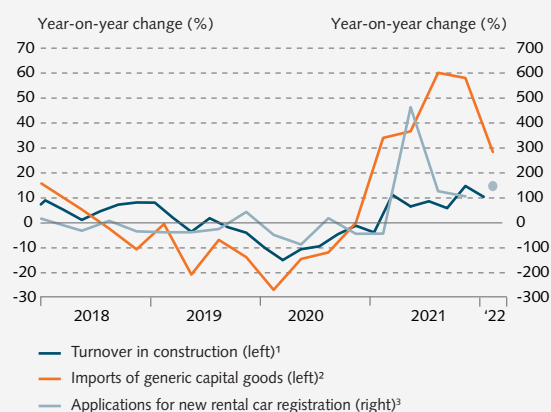
According to the Bank's survey of firms' investment plans, taken in February and March, business investment will increase in nominal terms by approximately 30% year-on-year in 2022 (Chart III-7). This is a far larger increase in investment spending than was indicated by a comparable survey taken in September. The survey results suggest that growth will extend to most sectors, although the contribution from tourism and transport will be strongest. The results of Gallup's February/March survey of Iceland's 400 largest firms imply as well that executives are optimistic about year-2022 investment. According to that survey, about a third of executives expect to invest more this year than in 2021, while only half as many expect to invest less this year.

These surveys were conducted either before Russia invaded Ukraine or shortly after the invasion began, and it is uncertain what impact the invasion will have on businesses' investment plans (see Box 2). Some companies may postpone their investment plans due to increased uncertainty about domestic and foreign demand, rising input prices, or a shortage of inputs.

Nevertheless, indicators give cause to assume that business investment will be stronger in 2022 than was forecast in February. It is now expected to grow by 9.5% year-on-year, over 6 percentage points above the February forecast. General business investment is estimated to have increased by 12.7% in Q1, which is below the February forecast, but growth for the year as a whole is projected to be slightly stronger than was forecast in February, or 10.8%. Added to this is robust investment growth in the energy-intensive sector, which is estimated by companies in the industry at 43% year-on-year. Business investment is expected to contract less in 2023 than was assumed in the last forecast, but strong investment in ships and aircraft in 2022 will cause the investment-to-GDP ratio to decline between years.

Chart III-6

Indicators of general business investment
Q1/2018 - Q1/2022

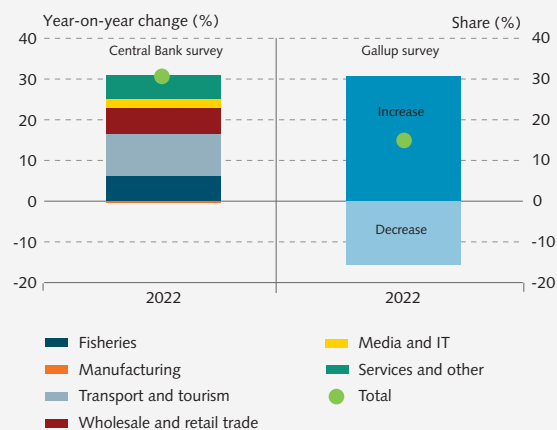


1. Total turnover in the construction sector. The data are according to two-month VAT periods and deflated with the building cost index. 2. Total value of imported capital goods and imported transport equipment excluding ships and aircraft, deflated with the exchange rate index. 3. The dot indicates an estimate for Q1.

Sources: Statistics Iceland, Central Bank of Iceland.

Chart III-7

Indicators of investment plans in 2022¹



1. Central Bank survey of firms' investment plans (excluding investments in ships and aircraft). Gallup survey of Iceland's 400 largest firms' investment plans. The chart shows the share of firms intending to increase investment and the share intending to decrease it.

Sources: Gallup, Central Bank of Iceland.

Residential investment to grow less in 2022 than was forecast in February

Residential investment contracted by 4.4% year-on-year in 2021, broadly as was forecast in February. Indicators imply that the pace of new construction has picked up in recent months, and a new tally taken by the Federation of Icelandic Industries and the Housing and Construction Authority shows that the number of properties in early stages of construction has risen since last autumn (Chart III-8). The outlook is uncertain because of the war in Ukraine, however, which has already caused steep rises in the price of inputs from Eastern Europe that are needed for the construction industry. In addition, shortages of important inputs could cause delays in construction activity. Added to this are executives' concerns about rising wages in the construction sector, according to Gallup's spring survey. The outlook for residential investment in 2022 is poorer than in the February forecast, with growth projected at 5.5% instead of the nearly 10% assumed in February. The outlook for the remainder of the forecast horizon is more favourable than in February, however. If the forecast materialises, the ratio of residential investment to GDP will have risen to 6½%, just over 2 percentage points above its twenty-five-year average, by the end of the forecast horizon.

Outlook for stronger investment growth over the forecast horizon than was projected in February

According to the baseline forecast, investment will be 6.9% higher this year than in 2021 (Chart III-9). For this year, it is driven mainly by an increase in general business investment and investment in the energy-intensive sector. This is offset by a contraction in investment in ships and aircraft, owing to base effects from strong imports in 2021. The outlook is for investment to grow more rapidly throughout the forecast horizon and for the investment-to-GDP ratio to rise to nearly 23% by the end of the period, or 1 percentage point above the February forecast.

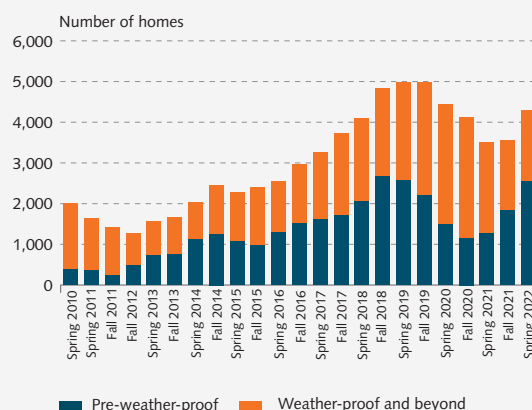
Public sector

Modest growth in public sector demand over the forecast horizon

Public sector demand grew by just over 3% in 2021, owing to public consumption and investment in roughly equal measure. For 2022, demand growth is projected to ease to 1.6%, reflecting the expectation that investment will remain virtually flat year-on-year.

The share of public consumption and investment in GDP grew markedly in the wake of the pandemic. In

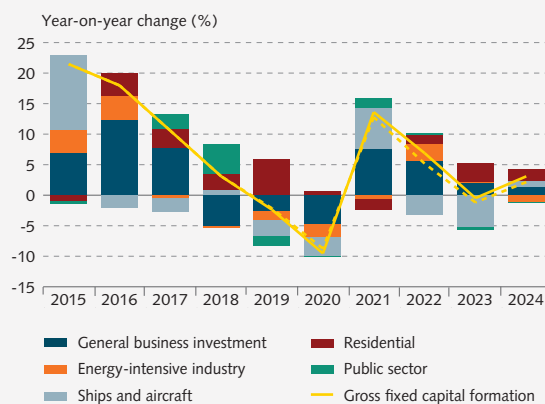
Chart III-8
Residential housing under construction in the capital area¹



1. According to residential construction tallies conducted by the Federation of Icelandic Industries and the Housing and Construction Authority.

Sources: Federation of Icelandic Industries, Housing and Construction Authority.

Chart III-9
Gross fixed capital formation and contribution of main components 2015-2024¹



1. General business investment excludes ships, aircraft, and energy-intensive industry. Central Bank baseline forecast 2022-2024. The broken line shows the forecast from MB 2022/1.

Sources: Statistics Iceland, Central Bank of Iceland.

2022, this increase will reverse to a degree, and over the next few years public sector demand is set to grow more modestly than in recent years. According to the forecast, public consumption growth will measure 1½-2% per year, and public investment will contract marginally. If this forecast materialises, the share of public consumption and investment in GDP will be close to 30% at the end of the forecast horizon, far above the twenty-five-year average.

Treasury deficit spending will slow markedly when discretionary measures expire this year

The fiscal deficit totalled 8.2% of GDP in 2021, about the same as in 2020 (Chart III-10). In addition to the effects of the pandemic-related economic contraction, the Government's discretionary countermeasures were a major driver of the deficit.

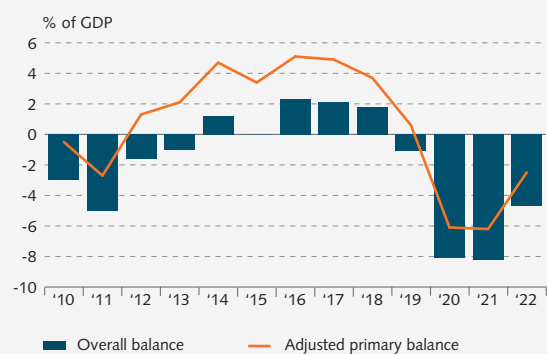
The Bank's baseline forecast assumes that the deficit will measure 4.7% of GDP in 2021, with the year-on-year improvement stemming from both reduced pandemic-related countermeasures and the continued strengthening of the Treasury's revenue base as economic activity rebounds. In addition, dividends to be paid by Government-owned companies are expected to increase considerably. This is offset by budgetary spending increases, value-added tax reimbursements in connection with the "Back to Work" initiative, and other smaller revenue changes provided for in the National Budget, all of which are estimated to increase the deficit by just over ½% of GDP.

Fiscal stance set to tighten markedly

Discretionary fiscal policy was actively used to support households and businesses while the impact of the pandemic and related public health measures was at the forefront. Over the past two years, fiscal support as measured in the change in the cyclically adjusted Treasury performance is estimated at nearly 6% of GDP, owing mostly to the temporary discretionary measures introduced in connection with the pandemic (see *Monetary Bulletin* 2021/2 and 2021/4). But as is mentioned above, a large share of these measures will expire this year, and the fiscal stance will tighten as a result, by just over 3% of GDP (Chart III-11).

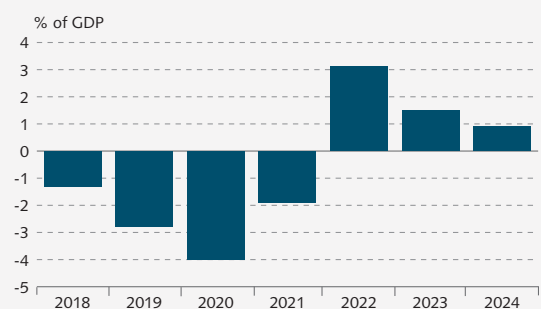
Treasury revenues are projected to increase in line with GDP and developments in underlying revenue bases in 2023 and 2024. As the economy works through the circumstances created by the pandemic, pressure on public spending will ease. The baseline forecast therefore assumes that the ratio of Treasury expenditures to GDP will fall slightly in the next few years. Fiscal consolida-

Chart III-10
Treasury outcome 2010-2022¹



1. Adjusted for irregular and one-off items. Central Bank baseline forecast 2022.
Sources: Ministry of Finance and Economic Affairs, Statistics Iceland, Central Bank of Iceland.

Chart III-11
Change in central government cyclically adjusted primary balance 2018-2024¹



1. Adjusted for irregular and one-off items. Central Bank baseline forecast 2022-2024.
Sources: Ministry of Finance and Economic Affairs, Statistics Iceland, Central Bank of Iceland.

tion will therefore keep increasing in the next two years, albeit less than in 2022.

Accumulated deficit in the new fiscal plan narrows significantly from the previous plan

The fiscal plan recently published by the Government contains an updated assessment of Treasury performance for this year. It assumes that the fiscal deficit will be smaller by ½% of GDP than was provided for in the National Budget for 2022, or 4.6% (Part A total). The Treasury performance improves year by year according to the fiscal plan, and the rise in the Treasury debt-to-GDP ratio is estimated to halt in 2025. The outlook has changed significantly from the previous fiscal plan, mainly reflecting changes in the economic outlook. As a result, the accumulated Treasury deficit for 2021-2026 is now estimated to be smaller by more than 6% of GDP than in the plan presented a year ago (Chart III-12).

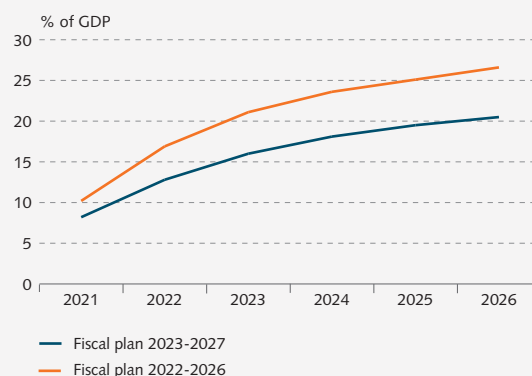
External trade and the current account balance

Tourism continued to recover in Q4, albeit offset by a contraction in other services

Goods and services exports grew by 8.6% quarter-on-quarter in Q4/2021 (Chart III-13). The year-on-year growth rate for 2021 as a whole measured 12.3%, nearly 2 percentage points below the February forecast. Services exports grew by 36% year-on-year during the quarter, somewhat less than in the quarters beforehand, and by 20.3% over the year as a whole. Even so, it remains about one-fourth less than at the end of 2019, before the onset of the COVID-19 pandemic. Growth in services exports during the quarter is attributable mainly to the recovery of tourism, which was in line with expectations. The recovery lost a little momentum, however, in the wake of rising case numbers and the spread of the Omicron variant of the virus, and total tourism-generated revenues came to 62% of revenues for the same period in 2019, at constant exchange rates. Average spending per tourist rose significantly in the wake of the pandemic, but the effects of this have diminished with rising tourist numbers, and in Q4/2021 the average was about one-fifth higher than before the pandemic.

Other services exports continued to contract during the quarter, however, and measured 9.2% lower in 2021 as a whole than in 2020, owing mainly to a contraction of one-fourth in exports relating to intellectual property leasing revenues in the pharmaceuticals industry, as well as a contraction of nearly one-third in research and development services. The deviation from

Chart III-12
Cumulative Treasury deficit 2021-2026 according to Fiscal Plan



Sources: Fiscal Plan 2022-2026, Fiscal Plan 2023-2027.

Chart III-13
Exports of goods and services¹
Q1/2010 - Q4/2021



1. Seasonally adjusted volume indices.

Source: Statistics Iceland.

the Bank's February forecast of export growth is due primarily to the fact that these items were expected to contract less markedly.

Omicron slowed the recovery of tourism in early 2022 ...

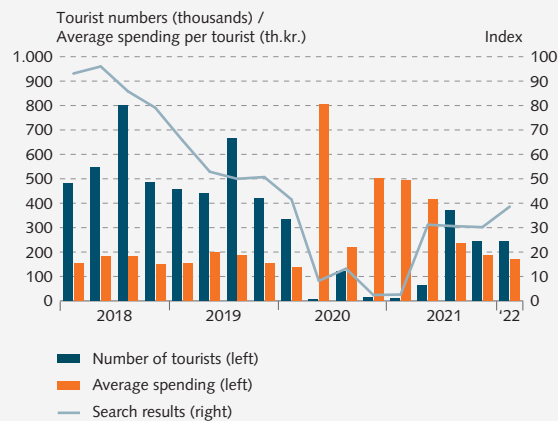
As expected, the rise in tourist numbers slowed somewhat in Q1/2022 amid the rise in COVID case numbers. They totalled roughly 245,000 for the quarter, just over half of that in Q1/2019. Foreign card turnover data suggest that average spending per tourist was slightly lower than in the previous quarter. On the other hand, indicators imply that domestic airlines' revenues contracted more than expected between quarters, and the number of transit passengers fell considerably more than other passenger numbers, which can also be attributed to disruptions in air traffic over Iceland due to the inclement weather in February. On the other hand, restrictions on cross-border travel were eased substantially in the first few months of the year, and vaccinated passengers are permitted to travel to the largest market areas in Europe without undergoing quarantine or having to show COVID test results.

... and the war affects the outlook, even though a robust recovery of tourism is still expected

In spite of reduced restrictions on travel and a brighter outlook regarding the pandemic, the outlook for 2022 has deteriorated since February, owing to Russia's invasion of Ukraine and its impact on prospects for global inflation and GDP growth (see also Chapter I and Box 2). The war has not yet made a discernible impact on the Icelandic tourism industry, and domestic airlines' flight schedules are broadly unchanged since February. Flight offerings are still expected to increase considerably over the course of Q2, and the outlook is for the spring and summer seasons to resemble the same period in 2019. The number of Google searches for flights to Iceland and accommodation in the country has increased since H2/2021 and is now comparable to that during the pre-pandemic period (Chart III-14).

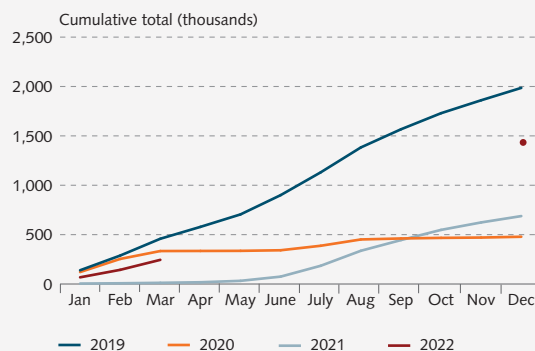
It is therefore still assumed that the tourism sector will recover strongly this year, although the effects of increased uncertainty and declining real incomes among Iceland's main trading partners, as well as the oil-price-induced rise in airfares, are expected to come to the fore later in the year. Because of this, the recovery will be slightly weaker than previously forecast. It is assumed that 1.4 million foreign tourists will visit Iceland in 2022 and that average spending per tourist will be slightly below the previous forecast (Chart III-15). The effects

Chart III-14
Indicators of tourism sector activity¹
Q1/2018 - Q1/2022



1. Average spending based on travel exports at constant exchange rates, Q1/2022 estimated from foreign payment card turnover. Tourist numbers are derived from foreign nationals' departures via Keflavik Airport. Search results are based on a factor model combining the frequency of five different Google search strings relating to travel to Iceland (seasonally adjusted).
Sources: Google Trends, Icelandic Tourist Board, Isavia, Statistics Iceland, Central Bank of Iceland.

Chart III-15
Foreign nationals' departures via Keflavik Airport
2019-2022¹



1. Cumulative total for each year. The dot indicates the 2022 total according to the Central Bank's baseline forecast.
Sources: Icelandic Tourist Board, Isavia, Central Bank of Iceland.

are expected to show until H1/2023, but their strength and duration will depend on how quickly the global economic outlook improves. As before, the recovery of tourism is projected to continue next year, with tourist numbers rising year-on-year, albeit at a slightly slower pace than previously envisaged. According to the forecast, a total of nearly 1.7 million tourists will visit Iceland in 2023.

Because of a somewhat weaker outlook for tourism and a poorer outlook for other services in the wake of the 2021 contraction, growth in services exports is assumed to lose pace this year, measuring just under 35% instead of just over 39% projected in February. Because of base effects, the growth rate will be stronger in 2023, or 15% instead of the 11% provided for in the February forecast.

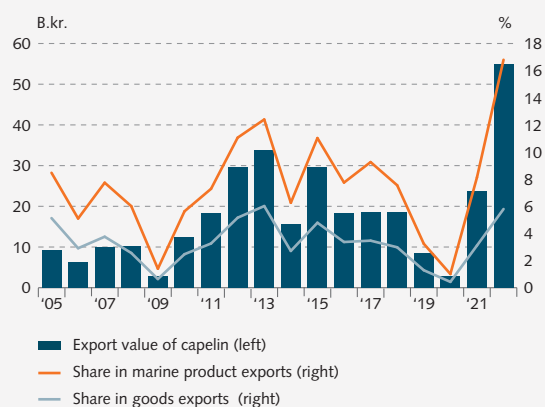
Marginal growth in goods exports in Q4, as expected ...

Goods exports increased by 2.8% year-on-year in Q4/2021, and by 7.6% in 2021 as a whole, as was forecast in February. Marine product exports were up 9.7% during the year, owing largely to an increase in capelin exports, although it was offset somewhat by a contraction in exports of cod, primarily in Q4, owing to a reduced quota in the current fishing year. Exports of silicon products also continued to increase in Q4, whereas aluminium exports were all but flat year-on-year, both in Q4 and in 2021 as a whole.

... but the outlook for 2022 as a whole has improved because of robust growth in other goods exports in Q1

The outlook is still for stronger marine product exports in 2022, owing to a historically large capelin quota, but the growth rate now looks set to be marginally lower than was forecast in February, as inclement weather and a difficult season prevented the capture of the entire quota. Even so, the capelin catch was the largest since the 2011-2012 season (Chart III-16). As is discussed in Chapter I, the reduction in product prices has been slightly smaller than previously anticipated, and the total value of the fishing season is therefore broadly in line with the last forecast. The invasion of Ukraine is expected to have limited direct impact on goods exports, and if trade with Russia, Belarus and Ukraine is halted, it is assumed that most of the marine products intended for these markets will be sold elsewhere (see Box 2). The outlook is also for aluminium production to be slightly below the February forecast, and it appears that cutbacks in energy sales has reduced the production of silicon products in the first few months of the year.

Chart III-16
Export value of capelin 2005-2022¹



1. Central Bank baseline forecast 2022.

Sources: Statistics Iceland, Central Bank of Iceland.

However, unusually strong exports of other industrial goods in Q1 somewhat offset the poorer outlook in other sectors; therefore, goods exports as a whole are projected to increase by 4.4% in 2022 and not 3.7%, as was forecast in February. Because of base effects, the contraction in 2023 is expected to be larger, but exports in the pharmaceuticals sector are still forecast to rise from 2023 onwards.

Total export growth set to be weaker in 2022 but in line with the February forecast in 2023

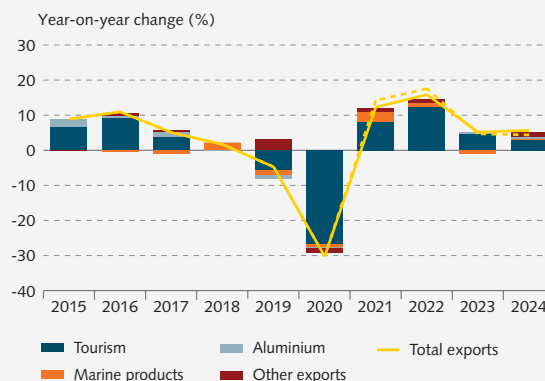
Total exports are projected to increase this year by just under 16%, which is below the February forecast. The deviation is due mainly to weaker services exports, although the outlook is for slightly weaker growth in marine and aluminium product exports as well (Chart III-17). The outlook for 2023 is for just over 5% growth, which is broadly in line with the February forecast. As in the February forecast, total export volume is projected to be similar to that in 2019 by the end of the forecast horizon.

Import growth loses pace

Goods and services imports grew by 8.9% quarter-on-quarter in Q4/2021, and by 20.3% year-on-year in 2021 as a whole (Chart III-18). By H2, total imports had risen above the pre-pandemic level. This was due largely to stronger goods imports, which increased by 21% year-on-year, as was forecast in February. Increased imports of ships and aircraft were a major factor, but other imports were also unusually strong. Indicators imply that strong growth in goods imports has continued in Q1/2022, while it is assumed that it will lose pace faster in H2 than was forecast in February. The change is due in part to the slightly more sluggish recovery of tourism in addition to likely delays in imports of certain goods due to the war in Ukraine. Goods imports are therefore expected to increase by 6.4% for the year as a whole instead of the 8.2% forecast in February.

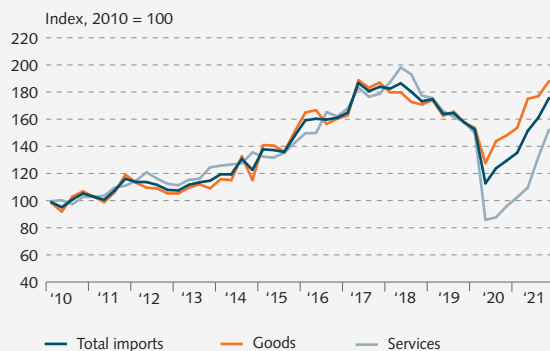
Services imports grew by 55% year-on-year in Q4/2021, far more than in the quarters beforehand, and by 18.6% in 2021 as a whole, over 3 percentage points more than was forecast in February. The difference is due largely to one-off effects of increased imports of telecom and IT services in Q4. Growth in the quarter stemmed mainly from increased spending by Icelanders during their travels abroad, which grew rapidly in Q3 and Q4. Other components of services imports also grew markedly, however. Indicators suggest that services imports also grew more strongly in Q1/2022 than was forecast in February, as Icelanders began travelling

Chart III-17
Exports and contribution of subcomponents 2015-2024¹



1. Because of chain-volume linking, the sum of components may not equal total exports. Tourism is the sum of "travel" and "passenger transport by air". Aluminium exports as defined in the national accounts. Central Bank baseline forecast 2022-2024. Broken line shows forecast from MB 2022/1.
Sources: Statistics Iceland, Central Bank of Iceland.

Chart III-18
Imports of goods and services¹
Q1/2010 - Q4/2021



1. Seasonally adjusted volume indices.
Source: Statistics Iceland.

abroad in greater numbers than previously anticipated and the effects of the Omicron variant of the coronavirus on people's appetite for travel appeared to be less than expected. The outlook is therefore for Icelanders' overseas travel to increase even more in 2022 than was previously expected, and for services imports to grow accordingly. Imports as a whole are projected to grow somewhat more slowly than was forecast in February, or by 12.4% in 2022 and 3.5% in 2023.

Current account deficit expected for the entire forecast horizon

The current account deficit measured 5.1% of GDP in Q4/2021 and 2.8% for the year as a whole. It was Iceland's first full-year current account deficit since 2008. The composition of the current account balance changed markedly between years, owing to a larger goods account deficit and a reversal in the primary income balance, although the surplus on services trade was slightly larger than in 2020 (Chart III-19). The smaller primary income surplus is due mainly to increased profits among foreign-owned domestic companies, and the outlook is for this trend to continue in the coming term, given the steep rise in aluminium product prices.

Last year's current account deficit was considerably larger than was assumed in February, owing both to a smaller services account surplus because of the aforementioned items falling under other services trade, and a larger-than-expected primary income deficit in Q4.

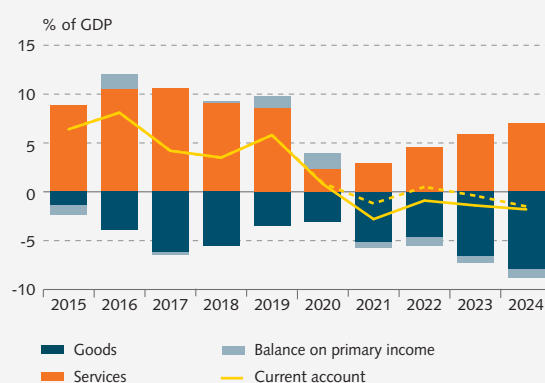
The outlook for 2022 has also deteriorated, driven by a smaller services account surplus coupled with a larger deficit of the primary and secondary income balance, which is offset by a smaller goods account deficit. The current account is projected to show a deficit measuring 0.9% of GDP in 2022, whereas the February forecast provided for a surplus of 0.5%. The outlook has worsened for 2023 and 2024 as well, and the current account is now expected to be in deficit for the entire forecast horizon.

GDP growth

Year-2021 GDP growth weaker than forecast in February

Even though domestic demand grew more strongly in Q4/2021 than was assumed in the February forecast, GDP growth was weaker, according to preliminary figures from Statistics Iceland (Chart III-20). This is because the contribution from net trade was considerably more negative than previously assumed. Less favourable external trade can be attributed in part to a stronger-

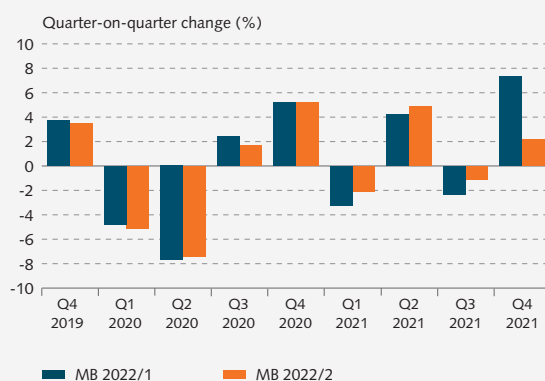
Chart III-19
Current account balance 2015-2024¹



1. Current account excluding the effect of failed financial institutions in 2015. Balance on secondary income included in the balance on primary income. Central Bank baseline forecast 2022-2024. Broken line shows forecast from MB 2022/1.

Sources: Statistics Iceland, Central Bank of Iceland.

Chart III-20
Quarterly changes in GDP growth¹
Q4/2019 - Q4/2021



1. Seasonally adjusted figures. Data for the series MB 2022/2 show Statistics Iceland's measurement from February 2022, but data for the series MB 2022/1 show Statistics Iceland's measurement from November 2021, with the exception of Q4/2021 data, which are taken from the baseline forecast in MB 2022/1.

Sources: Statistics Iceland, Central Bank of Iceland.

than-expected contraction in other services exports, compounded by the aforementioned one-off effects of increased imports of telecom and IT services. GDP was up 4.4% year-on-year in Q4/2021, the third quarter in a row to see an increase between years (Chart III-21).

For 2021 as a whole, GDP growth measured 4.3%, with domestic demand growing by 7.2%, albeit offset by a 2.9 percentage point negative contribution from net trade. All subcomponents of domestic demand increased markedly, except for a marginally negative contribution from inventory changes. GDP growth for the year turned out 0.6 percentage points less than was assumed in the February forecast, with the difference attributable mainly to a more negative contribution from net trade. GDP in 2021 was still 3% below its 2019 average and 1 percentage point below the February forecast. In addition to weaker output growth in 2021, Statistics Iceland revised year-2020 figures, and the contraction in GDP turned out to be 7.1% instead of the previous figure of 6.5%.

Increased output in most sectors after a sharp contraction in the wake of the pandemic

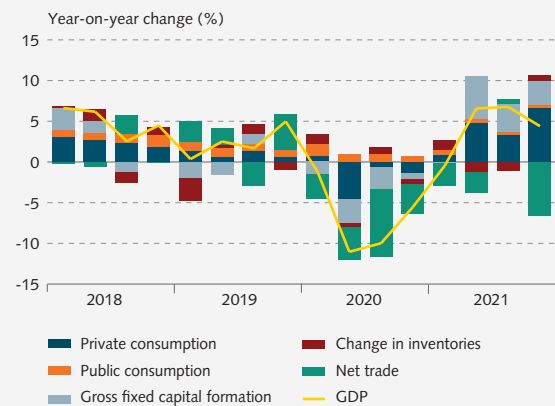
According to the production accounts, output grew in the majority of sectors in 2021, following a substantial contraction in 2020 (Chart III-22). Although GDP growth was relatively robust last year, output in about a third of sectors was still lower than before the pandemic. The sectors hit hardest by the Government's public health measures, most of them tourism-related, are the ones that still have some ground to cover before returning to the year-2019 level. In culture and recreation and related sectors, however, output grew by nearly 10%. These developments are reflected to a large degree in the expenditure accounts, which show stronger growth in private consumption and weaker growth in services exports.

Output growth in 2022 set to fall short of the February forecast

GDP is estimated to have grown by 5.5% year-on-year in Q1/2022, a full 1 percentage point below the February forecast. Public health measures were eased more rapidly than anticipated during the quarter, and private consumption therefore grew more strongly than in the last forecast; however, this was offset by a considerably more negative contribution from net trade. GDP growth is expected to pick up further in Q2 but then ease again in H2/2022.

As is discussed in Box 2, the war in Ukraine is likely to have an adverse impact on economic activity worldwide. With more sluggish growth in global demand and

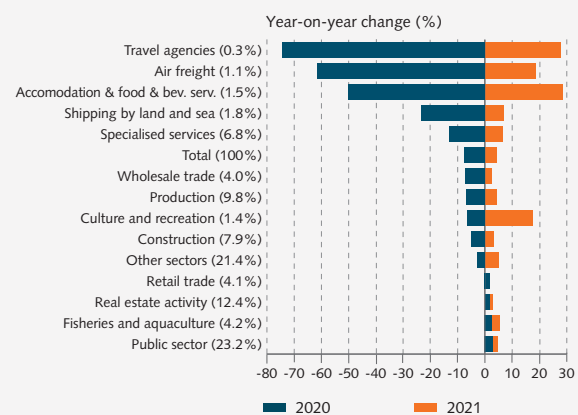
Chart III-21
GDP growth and contribution of components¹
Q1/2018 - Q4/2021



1. Because of chain-volume linking, the sum of expenditure components may not equal GDP growth.

Sources: Statistics Iceland, Central Bank of Iceland.

Chart III-22
Change in GNI in selected sectors¹



1. The change in gross national income (GNI) in 2020 and 2021, by economic sector. GNI measures the income of all parties involved in output. It is equal to GDP adjusted for indirect taxes and production subsidies. Figures in parentheses show the share of individual sectors in nominal GNI in 2020.

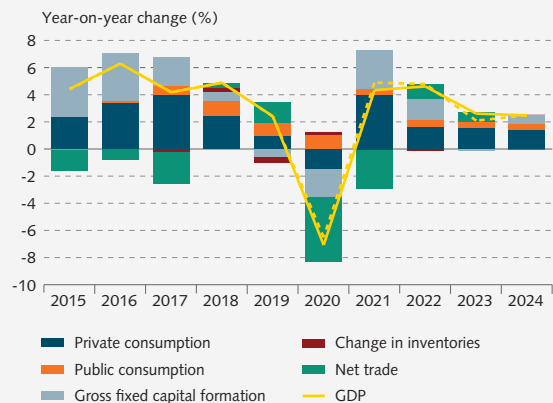
Sources: Statistics Iceland, Central Bank of Iceland.

elevated economic uncertainty, the GDP growth outlook for Iceland deteriorates as well. Added to this are the negative effects of increased supply-chain disruptions, potential shortages of manufacturing inputs, and rising commodity prices. Offsetting this, the war will lead to an improvement in terms of trade, and higher energy prices will affect Iceland less than they will most of mainland Europe (see Chapter I). This is compounded by indications of brisk economic activity so far this year, and by positive base effects since GDP growth was somewhat weaker in 2021 than had been assumed in the Bank's February forecast. According to the baseline forecast, domestic demand will grow by 3.5% in 2022, and the contribution from net trade will be positive for the first time since 2019. GDP growth for 2022 as a whole is therefore estimated at 4.6%, or 0.2 percentage points less than was forecast in February (Chart III-23). The outlook for 2023 and 2024 has improved slightly, however, and GDP growth is forecast at roughly 2½% for both years.

If the forecast materialises, year-2022 GDP will be 1½% above the 2019 average, although it will be below the February forecast for the entire forecast horizon. As before, the GDP growth outlook is subject to considerable uncertainty, as is discussed further in Box 1.

Chart III-23

GDP growth and contribution of underlying components 2015-2024¹



1. Central Bank baseline forecast 2022-2024. Broken line shows forecast from MB 2022/1.

Sources: Statistics Iceland, Central Bank of Iceland.

Labour market and factor utilisation



Labour market

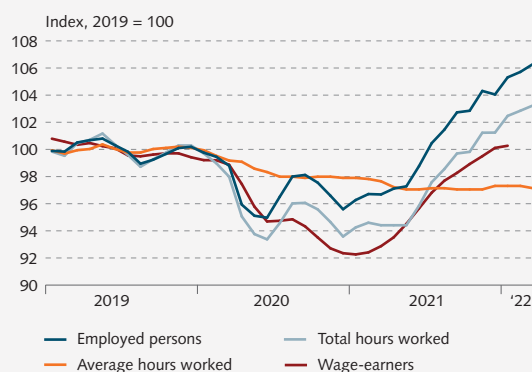
Job numbers are up, but average hours have fallen ...

According to the Statistics Iceland labour force survey (LFS), total hours worked rose by 9% year-on-year in Q1/2022, combining a 10% increase in job numbers and a 1% decline in average hours worked. Job numbers were about 6% higher in Q1/2022 than they were on average in 2019, but average hours worked were still 3% fewer (Chart IV-1). Total hours worked were therefore about 3% above the 2019 average. The number of employed persons according to the pay-as-you-earn (PAYE) register has also risen, but to a lesser extent: seasonally adjusted data for January suggest that the number of employed persons is now about ½% above the 2019 average. Job numbers are therefore higher than in 2019, although the composition of the jobs has changed. For example, the average number of people working in tourism-related sectors was still around one-fifth below the 2019 average.

... and unemployment is now broadly at the pre-pandemic level

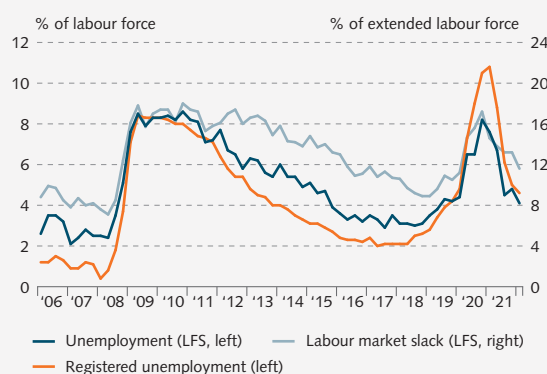
According to the seasonally adjusted results of the LFS, the labour participation rate increased by about 1 percentage point quarter-on-quarter in Q1/2022, and the employment rate rose by around 1½ percentage points. As a result, unemployment fell by nearly 1 percentage point between quarters, to 4.1%, slightly below its Q4/2019 level (Chart IV-2). The Bank's February forecast assumed that seasonally adjusted unemployment would measure 5% in Q1; therefore, the unemployment rate is falling faster than projected. The same could be said of the LFS measure of the slack in the labour market, which includes the underemployed and those

Chart IV-1
Employment and hours worked¹
January 2019 - March 2022



1. Wage-earners according to the Iceland Revenue and Customs' pay-as-you-earn (PAYE) register. Other figures are from the Statistics Iceland labour force survey (LFS). Persons aged 16-74 years old. Three-month moving average of seasonally adjusted figures.
Sources: Statistics Iceland, Central Bank of Iceland.

Chart IV-2
Unemployment and labour market slack¹
Q1/2006 - Q1/2022



1. The labour market slack is the sum of unemployed persons, underemployed part-time workers, and the potential addition to the labour market (persons seeking work but not ready to work within two weeks and persons available but not seeking work), expressed as a percentage of the extended labour force (labour force plus the potential addition to the labour market). Registered unemployment excludes persons receiving part-time unemployment benefits from Q1/2020 onwards. Seasonally adjusted figures.
Sources: Directorate of Labour, Statistics Iceland, Central Bank of Iceland.

outside the labour market who could join the labour force at short notice. It is now broadly at the Q1/2020 level. Registered unemployment was 4.6% in Q1 when adjusted for seasonality. It has fallen by more than 6 percentage points year-on-year, and is now about the same as at the beginning of 2020.

Long-term unemployment began to decline when the authorities introduced targeted hiring subsidies in April 2021. Although a large share of those subsidies expired late in 2021, the decline in unemployment has not slowed to any discernible degree. Long-term unemployment peaked at 3.4% of the labour force in April 2021 but had fallen to 1.7% by March 2022. It averaged 0.7% in 2013-2019, however, so it is still relatively high in historical terms. In comparison, it peaked at 2.8% in the wake of the financial crisis just over a decade ago but was much more persistent than it is now, as it remained above 2% until mid-2012.

Labour demand still strong ...

According to the seasonally adjusted results of Gallup's spring survey among executives from Iceland's 400 largest companies, 39% of firms were planning to recruit staff in the next six months, and only 9% were planning to downsize. The balance of opinion is therefore positive by 30 percentage points and has been broadly at that level in the last four surveys. Furthermore, there were 5,400 job vacancies in Q4/2021, according to Statistics Iceland's corporate survey (Chart IV-3). Job vacancy numbers declined between quarters but remain higher than in Q4/2020. They have also increased markedly relative to the pre-pandemic period.

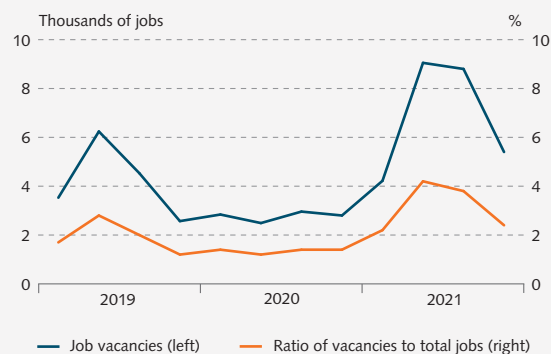
... and labour importation is still increasing

Iceland's population grew by about 2% year-on-year in Q1/2022, and population growth has been gaining pace since mid-2021 (Chart IV-4). Just over half of the increase is due to immigration, whereas foreign nationals accounted for a low of only 0.1 percentage point of population growth during the pandemic. The outlook is for immigration to continue in tandem with the recovery of the economy and the growing shortage of labour.

Unemployment set to continue falling

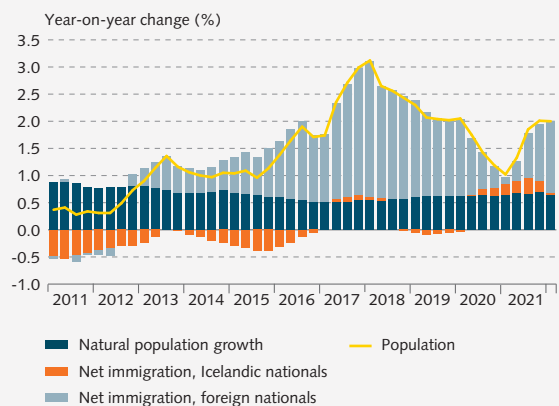
Labour demand has been strong in the recent term. Unemployment has continued to fall and is now below its estimated equilibrium level. Total hours worked are projected to increase this year by 5½%, somewhat above the February forecast. Job numbers are also increasing at a faster rate than was forecast in February, and as a result, unemployment will fall faster, although

Chart IV-3
Job vacancies
Q1/2019 - Q4/2021



Source: Statistics Iceland.

Chart IV-4
Population
Q1/2011 - Q1/2022



Source: Statistics Iceland.

the long-term outlook is broadly unchanged. According to the LFS, it is estimated to average 4.3% this year and continue to ease slightly in the next two years. Registered unemployment falls more rapidly, however, and is projected to measure 3.6% by the end of the forecast horizon.

Indicators of factor utilisation

Productivity grew in 2021, after contracting in 2020

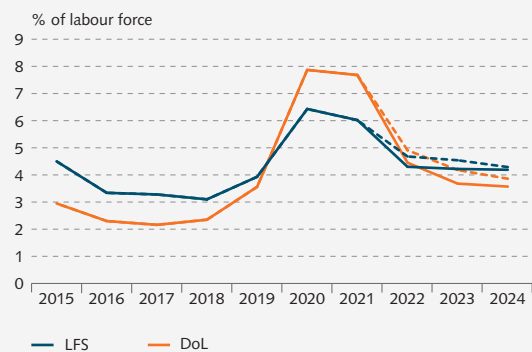
In terms of GDP per hour worked, labour productivity grew by 1.6% year-on-year in 2021, after contracting by 2.3% in 2020. Last year's productivity gain is even larger if measured in terms of gross national income per hour worked according to the national accounts. By this measure, productivity growth measured 3.4% in 2021, after contracting by 0.2% in 2020. The year-on-year turnaround therefore amounts to nearly 4 percentage points by both measures.

Increasing strain on factor utilisation

According to the seasonally adjusted results of Gallup's spring survey, just under half of executives considered themselves short-staffed, and just over half said they would have difficulty meeting an unexpected increase in demand (Chart IV-6). Both ratios increased marginally relative to the winter survey. They have risen steeply in the past year, however, and are now higher than during the strong upswing in 2016-2017. The resource utilisation (RU) indicator, which combines various indicators of factor utilisation, has risen as well, indicating that utilisation of resources is above normal.

The most recent national accounts figures from Statistics Iceland suggest, however, that the slack in the economy in 2020 and 2021 was wider than previously estimated. As a consequence, it will close, and an output gap will open up, slightly later in 2022 than was previously estimated (Chart IV-7). This assessment is unusually uncertain, however, owing to the effects of the pandemic and global supply-chain bottlenecks on potential output. The situation is compounded by wide fluctuations in relative prices, which further complicate the assessment of potential output (see also Box 1).

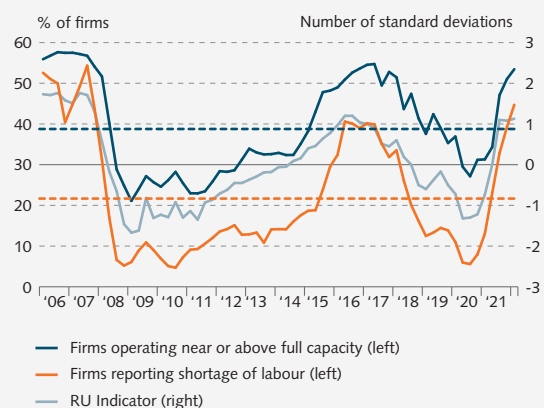
Chart IV-5
Unemployment 2015-2024¹



1. Unemployment according to Statistics Iceland labour force survey (LFS) and registered unemployment, excluding part-time benefits, according to the Directorate of Labour (DoL). Central Bank baseline forecast 2022-2024. Broken lines show forecast from MB 2022/1.

Sources: Directorate of Labour, Statistics Iceland, Central Bank of Iceland.

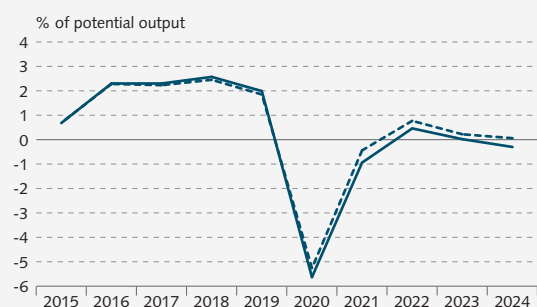
Chart IV-6
Capacity utilisation¹
Q1/2006 - Q1/2022



1. Indicators of capacity utilisation are based on the Gallup Sentiment Survey conducted among Iceland's 400 largest companies. The resource utilisation indicator (RU indicator) is the first principal component of selected indicators of capacity utilisation; it is scaled so that its mean value is 0 and the standard deviation is 1. A more detailed description can be found in Box 3 in MB 2018/2. Seasonally adjusted figures. Broken lines show period averages.

Sources: Gallup, Central Bank of Iceland.

Chart IV-7
Output gap 2015-2024¹



1. Central Bank baseline forecast 2022-2024. Broken line shows forecast from MB 2022/1.

Sources: Statistics Iceland, Central Bank of Iceland.

Inflation



Recent developments in inflation

Inflation is at its highest since 2010 ...

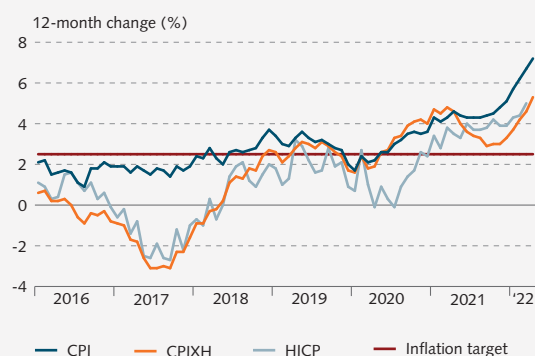
Inflation has risen steeply in the recent past, measuring 6.2% in Q1/2022, as compared with the February forecast of 5.8%. House prices have continued to surge, and the rise in the housing component of the CPI was the main driver of inflation during the quarter, as it was in 2021. Higher imported goods prices contributed nearly as much to inflation, however, owing in particular to increased petrol, furniture, and housewares prices. In March, domestic petrol prices had risen by nearly a fourth year-on-year, driven by the steep increase in the global market following Russia's invasion of Ukraine (see Chapter I and Box 2).

Headline inflation measured 7.2% in April, up from 5.7% in January (Chart V-1). Just over a third of the month's increase in the CPI was due to the rising cost of owner-occupied housing. Inflation excluding housing has also risen rapidly, measuring 5.3% in April. Inflation according to the HICP, which also excludes owner-occupied housing costs, has developed similarly, measuring 5% in March.

... and underlying inflation has risen as well in the recent term

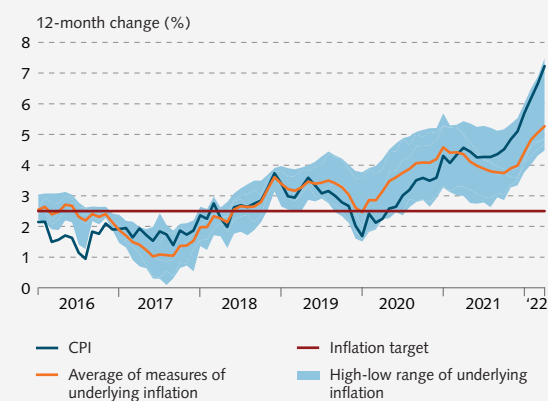
Underlying inflation in terms of the average of various measures was 5.3% in April, as compared with 4.4% in January (Chart V-2). There are signs that inflationary pressures are more widespread than they were in 2021. All measures of underlying inflation have risen in the recent term, but the dispersion among them has also increased, suggesting greater uncertainty. At the same time, the share of subcomponents that rise in price on a monthly basis is well above its historical average (Chart V-3).

Chart V-1
Various measures of inflation
January 2016 - April 2022



Sources: Statistics Iceland, Central Bank of Iceland.

Chart V-2
Headline and underlying inflation¹
January 2016 - April 2022



1. Underlying inflation measured using 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.

Furthermore, the composition of inflation has changed in 2022 to date. Although a large share of headline inflation was still attributable to the housing component in April, the contribution from imported goods – petrol and other imports – increased as well. Moreover, the contribution of price increases in domestic goods and private services had grown since the beginning of the year (Chart V-4).

Indicators of inflationary pressures

Rising house prices still the main driver of inflation ...

As is discussed in Chapter II, house prices have increased rapidly since the beginning of 2021 and have been the main driver of higher inflation. Developments in the housing market are therefore one manifestation of stronger domestic inflationary pressures. Owner-occupied housing costs were up 17.2% year-on-year in April.

... but global inflation has taken off ...

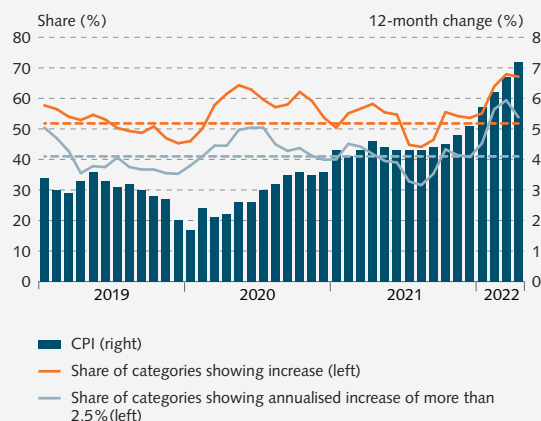
Imported inflation eased in 2021, but the outlook has deteriorated once again in view of global developments. The impact of global supply-chain disruptions caused by the pandemic can still be felt, and shipping costs are high, although they have fallen since the autumn. The rapid spread of the Omicron variant of the virus has set matters back in many markets, although the disruptions have apparently been less severe compared to previous waves of the pandemic, as governments and businesses have to some extent tried to adapt to circumstances. The supply-chain problem has been amplified by the invasion of Ukraine, however, and oil and commodity prices have risen even further (see Box 2). Furthermore, the recent surge in COVID case numbers in China and the subsequent tightening of public health measures there, have contributed to a further setback in attempts to resolve the bottlenecks.

As a result, trading partner inflation has soared as well in the recent term. In many eurozone countries, it is now roughly on a par with inflation in Iceland, whereas in the US it is noticeably higher (Chart V-5). If the effects of the large rise in food and energy costs are excluded, however, US inflation is similar to that in Iceland, whereas in the euro area it is considerably lower (see also Chapter I).

... and imported inflation is therefore on the rise

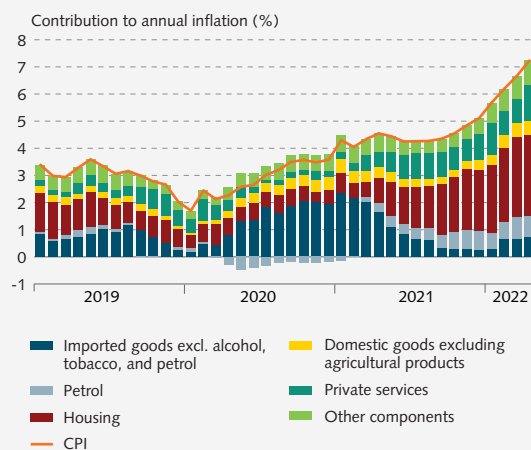
These factors have pushed imported inflation upwards in recent months, with the price of imported goods rising from 2.9% year-on-year at the end of 2021 to 4.8% by April. Higher commodity prices and higher global infla-

Chart V-3
Distribution of price increases in the CPI¹
January 2019 - April 2022



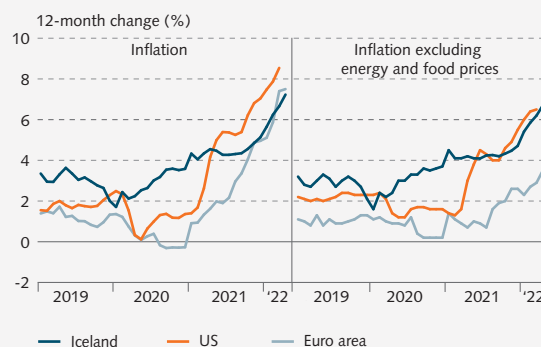
1. The share of goods categories that rise in price is a 3-month moving average. Broken lines show averages for the period January 2008 - April 2022.
Sources: Statistics Iceland, Central Bank of Iceland.

Chart V-4
Components of CPI inflation
January 2019 - April 2022



Sources: Statistics Iceland, Central Bank of Iceland.

Chart V-5
Inflation in Iceland and in international comparison
January 2019 - April 2022



Sources: Refinitiv Datastream, Statistics Iceland.

tion also affect domestic goods prices, owing to rising input prices. Domestic goods have risen in price by 6.4% between years. Offsetting these developments is a slightly more than 5% appreciation of the króna in 2022 to date.

Although imported inflation has gained pace, the effects of supply-chain disruptions and higher global inflation have passed through to domestic prices more slowly than previously expected. In this respect, the effects appear to differ from those seen in early 2020, when the króna depreciated after the pandemic spread to Iceland and imported inflation spiked abruptly (Charts V-6 and V-7). To an extent, this may reflect differences in the impact higher import prices have on firms' pricing decisions, which could vary depending on whether they attribute the price hikes to the depreciation of the króna or to higher foreign goods prices. The depreciation of the króna affects the full range of imported goods, whereas supply-chain bottlenecks and global price hikes tend to affect only selected goods. Furthermore, it can take time for higher shipping costs to pass through to prices, and if firms believe the global price increases are temporary, they may well be more reluctant to pass them on to their own prices.¹

Services prices continue to rise

Private services prices rose over the course of 2021, but the pace of the increase eased in Q1. Airfares rose sharply in April, however, as oil prices had risen and willingness to travel increased substantially in the recent term. The price of private services rose by 5.7% year-on-year in April, a larger annual increase than at the end of 2021.

Corporate executives expect further price hikes

The results of Gallup's spring survey of corporate expectations indicate significant risk that stronger cost pressures will continue to pass through to prices. About 70% of executives expect to raise the price of their own goods and services in the next six months, and about 90% expect the price of intermediate inputs to rise. This is a substantial increase since the autumn survey. Because part of the survey was carried out after the invasion of Ukraine began, the results are not entirely unexpected. Firms' expectations probably also reflect the recent surge in wage costs, however.

Wages have risen considerably

The general wage index and the total wage index have more or less kept pace with one another recently, both

Chart V-6
Domestic and imported goods prices
January 2019 - April 2022

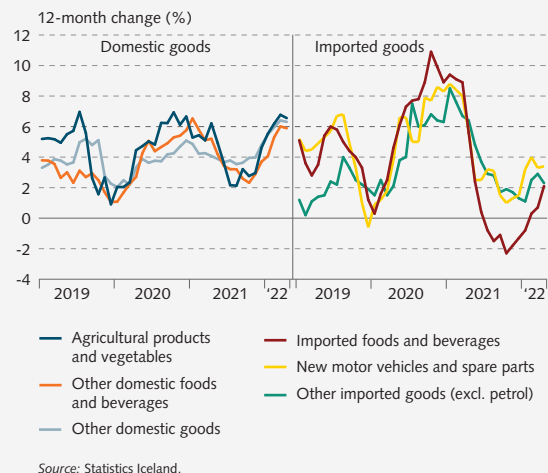
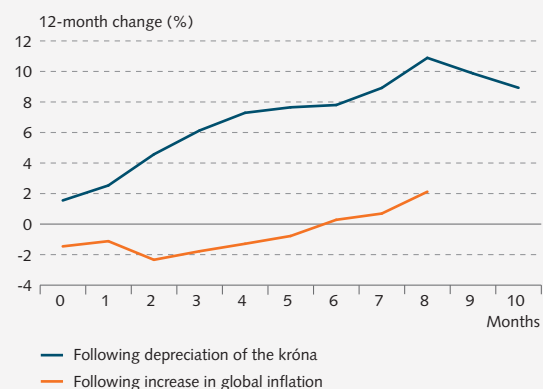


Chart V-7
Increase in imported food and beverage prices during selected periods¹



1. Annual increase in price of imported food and beverages in the CPI following the depreciation of the króna after the onset of COVID-19 (initial measurement February 2020) and following the rapid increase in global inflation (initial measurement August 2021).
Source: Statistics Iceland.

1 See, for example, Carrière-Swallow *et al.* (2022), "Shipping costs and inflation", International Monetary Fund, *IMF Working Paper* no. 2022/061.

indices rising by an average of 8.3% in 2021 (Chart V-8). The general wage index rose by 7.2% year-on-year in Q1, and since March 2019, before the current private sector wage agreements took effect, it has increased by 24.3%. Because GDP per capita grew by just over 2.5% year-on-year in 2021, according to Statistics Iceland's estimate, the provision in the wage agreements known as the GDP growth supplement will be activated, and wages will rise even further this year. The outlook is for the GDP growth supplement to be triggered again in 2023 (for further discussion, see Box 1). According to the baseline forecast, unit labour costs will increase this year by 7½%, the biggest single-year jump since 2011. They are projected to rise by about 5% per year, on average, in 2023 and 2024. Wage developments are highly uncertain, however, as private sector contracts are set to expire towards the end of the year.

Inflation expectations

Short-term inflation expectations have risen ...

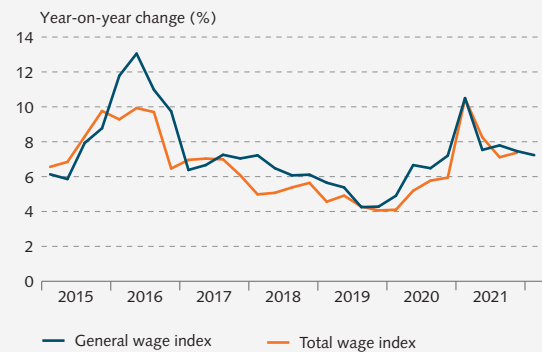
Short-term inflation expectations have soared recently, as they generally reflect developments in measured inflation. Market agents expect inflation to measure 5% a year from now and 3.5% after two years. This is roughly 0.5 percentage points above their response in the January survey (Chart V-9). The results of Gallup's spring surveys suggest that corporate executives expect inflation to measure just under 4% in two years' time, nearly 1 percentage point higher than in the winter survey. Households generally expect higher inflation than businesses do, and their two-year expectations also rose by around 1 percentage point, to 5%. By most of these measures, short-term inflation expectations are at their highest in a decade or more.

... and there is greater risk that expectations have become de-anchored from the target

Long-term inflation expectations have also risen in recent months. Market agents expect inflation to average 3.5% in the next five years and 3% in the next ten, the highest survey responses since 2016. As Chart V-10 shows, both short- and long-term expectations among market agents have inched upwards, although far more in the short term than further ahead.² The dispersion of their responses has also increased since the last survey, indicating greater uncertainty about the long-term outlook. Corporate executives' and households'

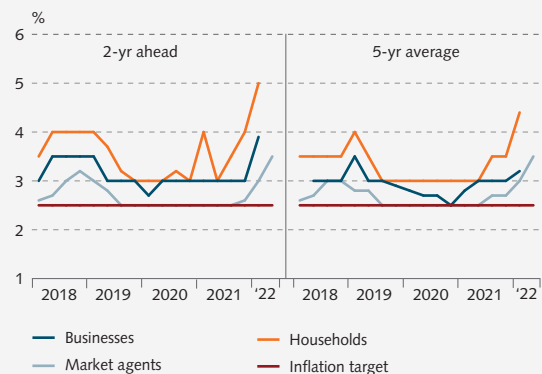
2 It should be borne in mind that the January survey of market expectations was conducted before Statistics Iceland published the CPI for that month.

Chart V-8
Wages
Q1/2015 - Q1/2022



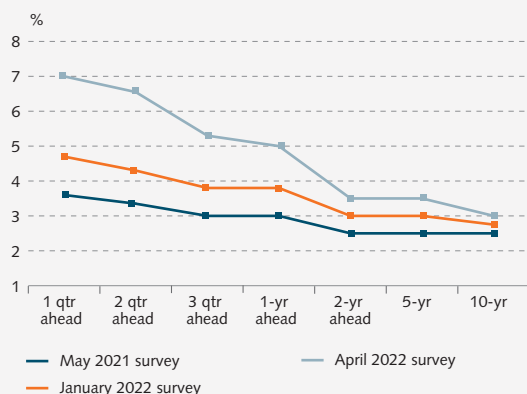
Source: Statistics Iceland.

Chart V-9
Two- and five-year inflation expectations¹
Q1/2018 - Q2/2022



1. Gallup surveys of households' and businesses' inflation expectations and Central Bank survey of market agents' inflation expectations. Median responses.
Sources: Gallup, Central Bank of Iceland.

Chart V-10
Market agents' inflation expectations
during selected periods



Source: Central Bank of Iceland.

expectations concerning inflation five years ahead have risen as well, to 3.2% and 4.4%, respectively.

In addition, the breakeven inflation rate in the bond market has risen since February (Chart V-11). The ten-year breakeven rate was 4.4% at the end of April, after rising by approximately 0.7 percentage points since the beginning of February. The five-year breakeven rate five years ahead, which generally gives a more reliable indication of long-term inflation expectations and how firmly anchored they are, rose less, to 3.4%. It should be borne in mind, however, that to a degree, the rise in the breakeven rate probably reflects a rise in the inflation risk premium due to growing uncertainty about inflation. Furthermore, some of the rise in the breakeven rate is likely due to technical issues in the bond market, such as a shortage of indexed bonds (see Chapter II). Even so, there is a risk that inflation expectations have become less firmly anchored to the target, given that all measures of inflation expectations have risen in the recent past.

The inflation outlook

The inflation outlook has deteriorated still further ...

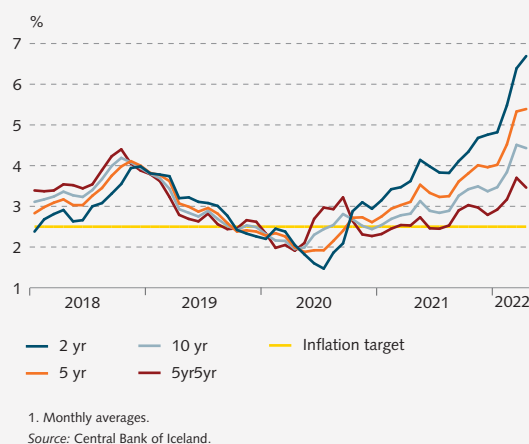
In Q1, inflation was above the February forecast, particularly because of larger-than-projected rises in the price of housing and fuel. The near-term outlook has deteriorated markedly because of elevated global inflation and higher commodity prices following the invasion of Ukraine. There are also continuing global supply-chain problems, which have grown worse with the onset of the war. Moreover, house prices are expected to rise more in the coming term than was previously anticipated. Inflation is forecast at 7.5% in Q2 and 8.1% in Q3, some 2.8 percentage points above the February forecast. It is then expected to begin easing again once house price inflation loses momentum and the effects of higher imported inflation taper off.

Further ahead, the inflation outlook is also bleaker, owing to higher imported inflation and higher long-term inflation expectations, which cause it to take longer than it would otherwise to bring inflation under control. Inflation is not expected to fall below 4% until late 2023. It is projected to average 2.9% in 2024 and be close to the target in mid-2025.

... and uncertainty has grown

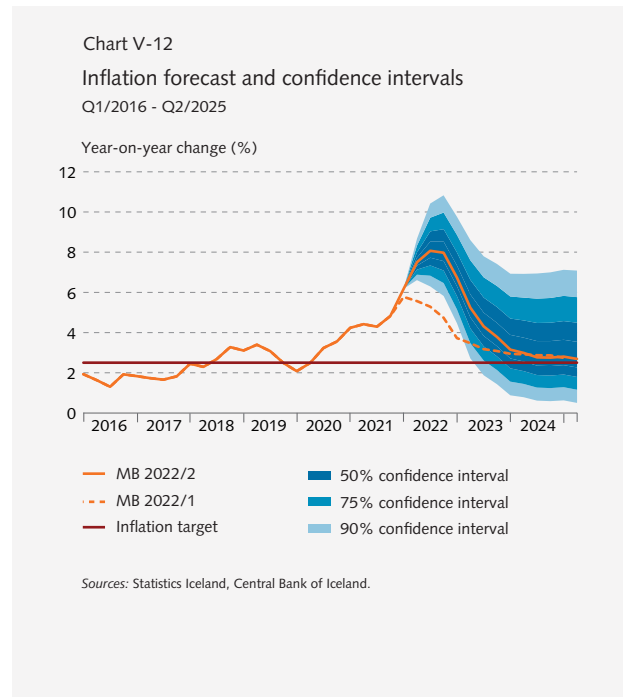
As is discussed in Box 1, uncertainty about the inflation outlook has grown substantially. It is particularly uncertain how global inflation and commodity prices will develop in the near term and how long the impact lasts, in light of the war in Eastern Europe, as well as how

Chart V-11
Breakeven inflation rate¹
January 2018 - April 2022



long it takes to unwind the global supply-chain gridlock. Given how long inflation has been above target, and because inflation expectations have begun rising, there is also a growing risk that inflation expectations have become unmoored from the target. Added to this are the forthcoming wage settlements, which will strongly affect inflation over the forecast horizon. Steep pay rises in the recent term and further tightening of the labour market during the run-up to the negotiations will exacerbate the risk of a wage-price spiral, which could cause inflation to become entrenched and make it more costly to bring it back to target.

The risk profile is still considered tilted to the upside; i.e., near-term inflation is likelier to be underestimated in the baseline forecast than it is to be overestimated, and uncertainty has increased. There is a 50% probability that inflation will be in the 4¼–6½% range in one year and in the 1¾–4½% range by the end of the forecast horizon (Chart V-12).



Alternative scenarios and uncertainties

The Central Bank's baseline forecast reflects what is viewed as the most likely outcome during the forecast horizon. The economic outlook is uncertain, however, and could change in response to changes in key assumptions underlying the forecast. Chief among them is the assessment of contractual wage increases over the forecast horizon. It has now been established that the provisions of the spring 2019 wage settlements concerning supplemental pay rises linked to GDP per capita growth will be activated. This will affect domestic economic activity, as is discussed in this Box.

There is considerable uncertainty about how much wages will rise during the forecast horizon, however, as most private sector wage agreements are set to expire this coming November. Added to this are a number of other uncertainties that could impact the economic outlook, that include the war in Eastern Europe, lingering issues relating to the COVID-19 pandemic, and the pace at which the production bottlenecks that have shaken the global economy are unwound.

Alternative scenario: The economic impact of the GDP growth wage supplement

Icelandic wages have risen steeply in international comparison ...

The general wage index compiled by Statistics Iceland rose by nearly 20% between early April 2019, the effective date of the most recent private sector wage agreements, and year-end 2021. This corresponds to an average annual increase of 6.7% over this scant three-year period. The wage index for the private sector has risen similarly, as have wages in the manufacturing sector, which are commonly used in international comparisons. As Chart 1 indicates, this is a much larger increase than in other advanced economies over the same period: it was three times larger than in the UK and the other Nordic countries, and nearly six times more than in Germany. Examining a longer period gives similar results: over the past twenty years, wages in the manufacturing sector have also risen by an average of nearly 7% per year in Iceland, almost three times the average in other advanced economies.¹

1. Wage statistics for the manufacturing sector in Iceland extend only back to 2005, but other wage statistics covering the entire twenty-year period give the same result. The general wage index has risen by an average of 6.8% per year over the past two decades, and the private sector wage index has risen by 6.9%.

Chart 1
Wage increases in the manufacturing sector¹



1. Increases in wages per hour in manufacturing. Quarterly data are seasonally adjusted. Data for Iceland extend back to 2005.
Source: OECD.

... and well in excess of productivity growth ...

Icelandic wages have also risen well in excess of realistic expectations of average productivity growth. As Chart 2 shows, labour productivity has increased by an average of 1½-1½% per year in the past decade, depending on whether the measurement is based on GDP per hour worked according to the Statistics Iceland labour force survey (LFS) or gross factor income per hour worked according to the labour volume measurement in the national accounts.² Over this same period, nominal wages have risen by an average of 6½-7% per year, depending on whether they are measured in terms of the general wage index or the total wage index, which measures all taxable wages per hour and not merely regular wages, as the wage index does (see Box 4 in *Monetary Bulletin* 2018/4).

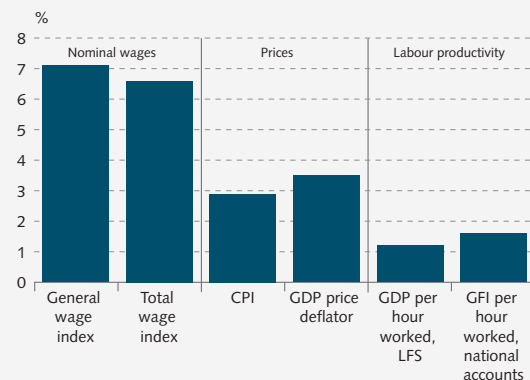
... putting pressure on demand and inflation

In the long run, nominal wages rise in line with inflation plus productivity growth. Nominal pay rises over and above productivity growth in recent decades have therefore put pressure on demand and inflation, as wages have risen by an average of 2½-3½ percentage points more per year than is consistent with the Central Bank's 2½% inflation target plus the 1½-1½% productivity growth measured over the period.³

As Chart 2 illustrates, inflation in terms of the consumer price index has averaged 2.9% per year in the past decade. In terms of the GDP price deflator, it has been somewhat higher, or 3.5%. Inflation has therefore been relatively moderate over this ten-year period, even though wages have risen well in excess of productivity growth. A major factor in this is the 14% improvement in terms of trade in between 2014 and 2017. It has also been necessary to tighten monetary policy somewhat in order to offset these underlying inflationary pressures. This is reflected in the fact that the Bank's key rate was above the neutral rate for the majority of the period. The decline in long-term inflation expectations and a firmer anchor to the inflation target have also helped.⁴

Chart 2

Developments in wages, prices, and productivity in the past decade¹



1. The chart shows the average annual increases in the past ten years (2012-2021) for wages (general and total wage indices), prices (CPI and GDP price deflator), and labour productivity (GDP per hour worked based on Statistics Iceland labour force survey (LFS) and gross factor income (GFI) per hour worked based on labour volume in the national accounts).

Sources: Statistics Iceland, Central Bank of Iceland.

2. The latter measure of productivity extends only back to 2008. The present discussion is therefore based on the past decade – i.e., 2012-2021 – which corresponds to approximately one business cycle that includes the post-crisis recovery and the pandemic-driven contraction. For the period from 2008 onwards, annual productivity growth averages 1.7% instead of the 1.6% depicted in Chart 2.

3. Furthermore, there are signs that long-term productivity growth has slowed to around 1% in Iceland in recent years as it has in other advanced economies (see Box 3 in *Monetary Bulletin* 2021/2).

4. See, for example, Þórarinn G. Pétursson (2022), "Long-term inflation expectations and inflation dynamics", *International Journal of Finance and Economics*, 27, 158-174.

The GDP growth supplement

The wage agreements of April 2019 entailed sizeable pay rises over the term of the contracts. In addition, they provided for additional pay hikes if GDP per capita in the preceding year exceeded a specified threshold, as can be seen in Table 1 (for further information, see Box 4 in *Monetary Bulletin* 2019/2).

Table 1 GDP growth supplement provision in wage agreements

Annual change in GDP per capita	Supplement added to pay scale (kr.)	Supplement added to monthly wages (kr.)
1.00-1.50%	3,000	2,250
1.51-2.00%	5,500	4,125
2.01-2.50%	8,000	6,000
2.51-3.00%	10,500	7,875
More than 3%	13,000	9,750

Sources: Private sector wage agreements.

According to Statistics Iceland estimates from February 2022, GDP per capita growth contracted by 8.6% in 2020. In 2021, however, it grew by just over 2.5%, and according to the Bank's baseline forecast, it looks set to grow by 2.6% this year (Chart 3). This would activate the GDP growth supplement both this year and next, even though GDP per capita in 2021 was a full 6% below the average in 2019, the year the contracts were finalised, and will still be nearly 4% below the 2019 level this year.

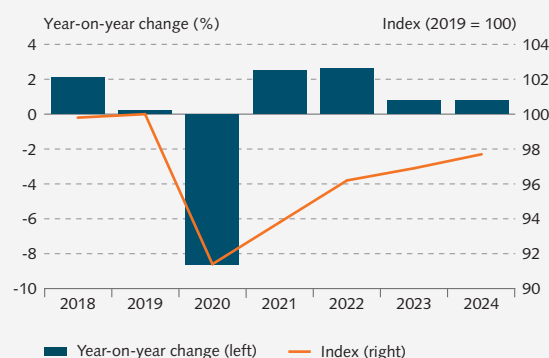
The economic impact of the GDP growth supplement

In order to estimate the impact these GDP growth supplement-generated pay rises have on the domestic economy, the Bank's dynamic stochastic general equilibrium (DSGE) model, DYNIMO, is used.⁵ This allows the examination of the general equilibrium effects the wage rises will have on inflation and aggregate demand, including labour demand.

Based on Statistics Iceland's estimates of GDP growth per capita in 2021 and the GDP growth supplement provision in the wage agreements as depicted in Table 1, it can be seen that the second-highest GDP growth supplement rate will be triggered this year. If the Bank's forecast of 2022 GDP growth per capita is borne out, the same will happen again in 2023. According to the provisions of the wage agreements, the supplement is to be paid in May 2022 and May 2023 and is also assumed to apply to public sector employees. This corresponds to an additional increase in annual average wages

5. See Stefán Thórarinnsson (2020), "DYNIMO – Version III. A DSGE model of the Icelandic economy", Central Bank of Iceland, *Working Paper*, no. 84. A brief discussion of the main characteristics of the model and a comparison with the Bank's other macroeconomic model, QMM, can be found in Box 2 in *Monetary Bulletin* 2021/4.

Chart 3
GDP per capita 2018-2024¹



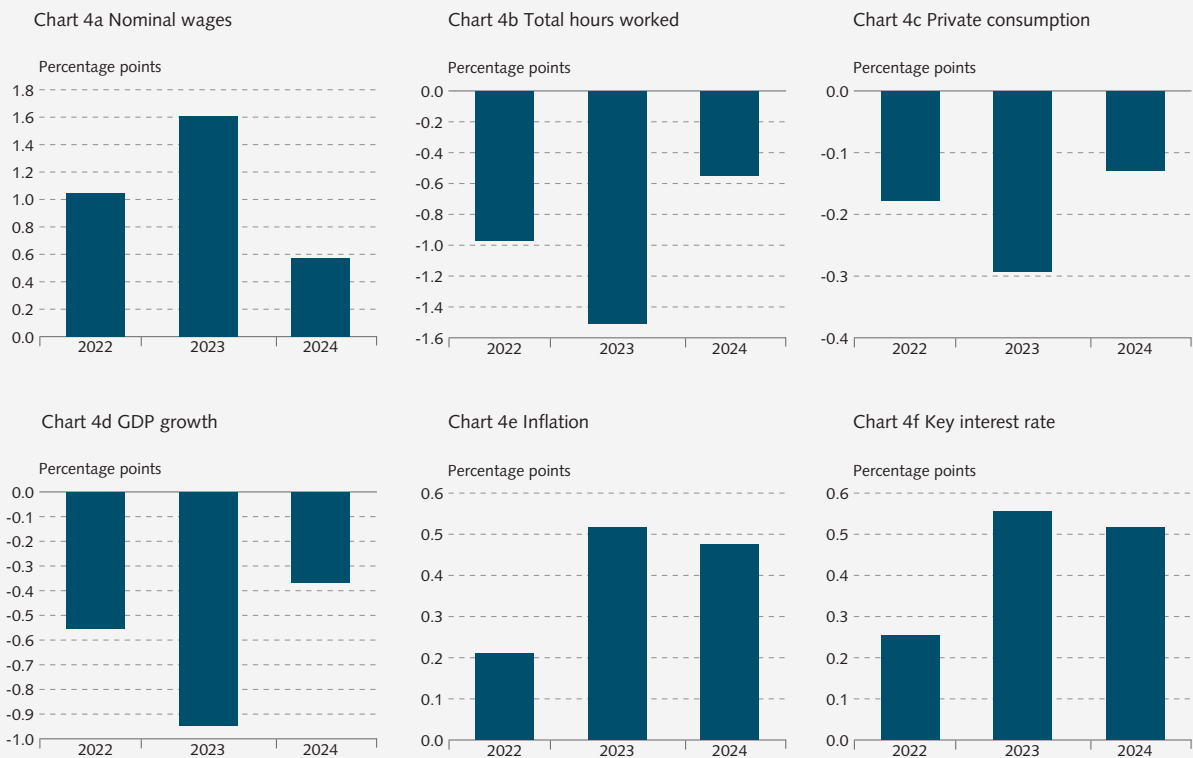
1. Chain-linked value of GDP relative to average population for the year. Average population for the year is estimated as the average at the beginning of the year and the beginning of the following year. Central Bank baseline forecast 2022-2024. Sources: Statistics Iceland, Central Bank of Iceland.

of 1 percentage point in 2022 and 1½ percentage points in 2023 (Chart 4a). Over the forecast horizon, the total pay increase due to the GDP growth supplement will come to nearly 3 percentage points.

More rapid pay hikes will increase firms' marginal costs, leading to higher product prices unless firms either absorb the extra costs through lower profit margins or streamline to compensate, such as by reducing labour demand through shorter working hours or downsizing. As Chart 4b indicates, the jump in wage costs due to the GDP growth supplement will cause total hours worked to increase more slowly than they would otherwise: 1 percentage point more slowly in 2022, and 1½ percentage points more slowly in 2023. By the end of the forecast horizon, total hours worked will therefore be 2½% fewer than they would have been without the GDP growth supplement. Higher nominal wages will therefore be offset by a poorer employment outlook, compounded by the negative impact of higher interest rates and inflation (see below), which will reduce real disposable income by 1% by the end of the forecast horizon. Households' consumption spending will therefore increase more slowly over the entire period, and by the end of the forecast horizon, private

Chart 4

Alternative scenario: Effects of wage rises due to GDP growth supplement¹



1. The charts show the deviation between the baseline forecast and a forecast that excludes the GDP growth supplement.
Source: Central Bank of Iceland.

consumption will be ½% lower than in a scenario where the GDP growth supplement is not activated (Chart 4c).

Weaker growth in private consumption and investment (due to higher domestic interest rates) will cause domestic demand to grow more slowly than it would otherwise. A higher real exchange rate will also cause external trade to be less favourable, as exports will grow more slowly and a larger share of demand shifts to imports. The GDP growth outlook is therefore less favourable than if the supplement had not been triggered: GDP growth will be weaker by ½ a percentage point this year and nearly 1 percentage point next year (Chart 4d). As a result, the level of GDP will be 1½% lower at the end of the forecast horizon.

Although economic activity will grow more slowly over the forecast horizon than it would otherwise, the GDP growth supplement will exacerbate underlying inflationary pressures causing inflation to subside more slowly to target than otherwise. Inflation will be ¼ of a percentage point higher this year and an average of ½ a percentage point higher in 2023 and 2024 (Chart 4e). The Central Bank will have to respond to these increased inflationary pressures by tightening the monetary stance so as to ensure that inflation is in line with the target over the medium term. According to the monetary policy rule in the model, the Bank's key rate will be an average of ¼ of a percentage point higher this year and ½ a percentage point higher in 2023 and 2024 (Chart 4f).

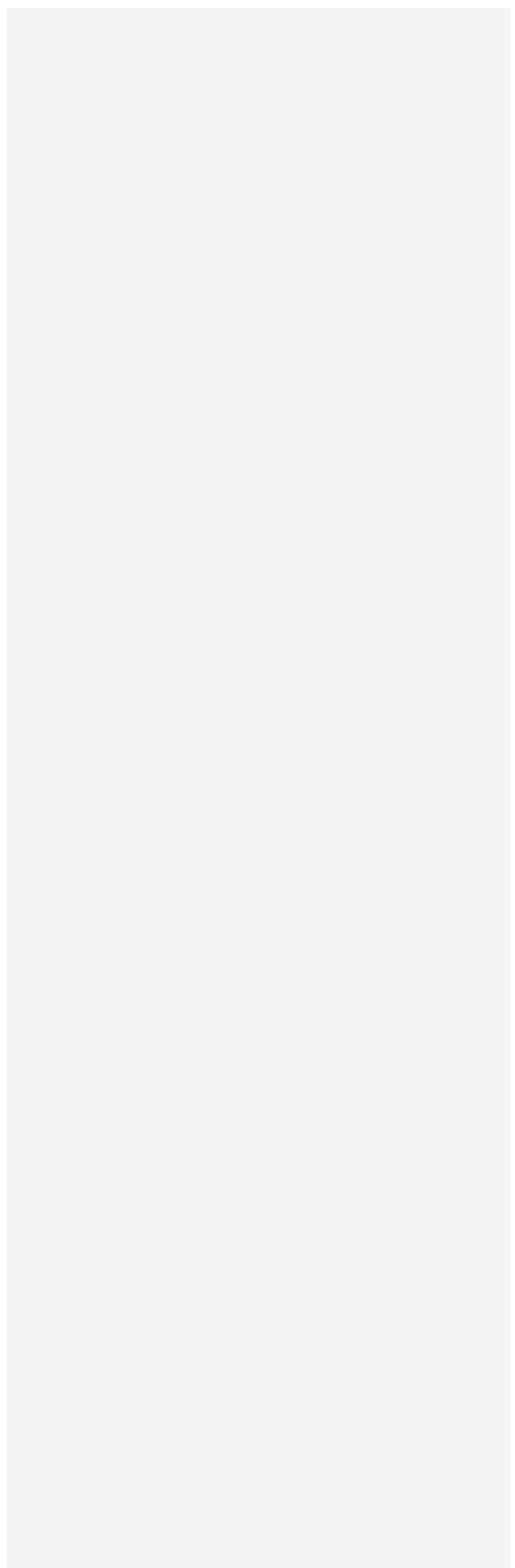
Other uncertainties

Global economic uncertainty has escalated sharply in the wake of Russia's invasion of Ukraine

As is discussed in Box 2 of this report, the war in Ukraine has strongly affected the global economy, not least because of the surge in various commodity prices. The baseline forecast attempts to account for the potential impact of the war on the outlook for commodity markets and on global and domestic economic developments. Significant uncertainty remains, however. It is difficult to estimate how long the war will last and how persistent an impact it will have on international relations and world trade, including how long the sanctions against Russia will remain in effect and what the implications will be for commodity markets, in which Russia plays an important role.

Widespread easing of public health measures, yet a setback in the fight against the pandemic cannot be ruled out

The war broke out in late February, when the end of the aggressive public health measures in response to the COVID-19 pandemic, which had held the global economy hostage



for two years, appeared to be in sight. Although case numbers have continued to rise in many areas – and even more rapidly than in earlier waves of the pandemic – the harmful effects of the disease had clearly diminished. As a result, the authorities in many countries took decisive steps towards lifting restrictions. It is probably still too soon to declare the pandemic at an end, however, as large numbers of people are still unvaccinated in poorer countries and new case numbers remain high. Therefore, there is still the risk that new variants of the virus will emerge and a setback will occur, potentially slowing down global GDP growth once again.

Supply bottlenecks started easing in early in 2022, but risk of setback

The relaxation of public health measures in much of the world boosted hopes of an easing of the severe supply-chain disruptions that have caused supply to lag far behind demand in the markets for commodities and consumer goods over the past year. The strain on supply chains appears to have peaked in mid-2021, but the surge in COVID case numbers in China and the stringent public health measures imposed there may well have caused a setback in the resolution of the bottlenecks (Chart 5). In addition, the war in Ukraine and the economic sanctions on Russia have upended commodity markets, potentially causing renewed supply-chain gridlock.

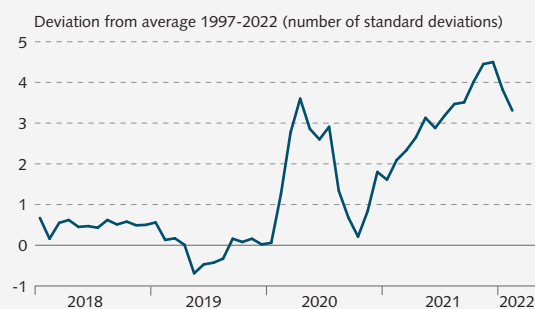
Inflation outlook highly uncertain; elevated risk of underforecasting

The evolution of the aforementioned factors affects developments in economic activity and inflation in the Bank's forecast. Commodity prices could rise even further, for example, and global inflation could turn out higher and more persistent than currently assumed. Domestic inflationary pressures would therefore be stronger, as is described in the alternative scenario in Box 1 of *Monetary Bulletin* 2021/4.

Added to this is the uncertainty surrounding the wage negotiations slated for this winter. If new settlements provide for even larger pay rises than the baseline forecast assumes, domestic inflationary pressures will unavoidably be stronger than is provided for in the baseline. Furthermore, developments in the exchange rate over the forecast horizon are always uncertain. If terms of trade turn out poorer and the current account deficit widens, the exchange rate assumptions in the baseline forecast could prove overly optimistic. On the other hand, a more rapid recovery of exports and a wider interest rate differential with abroad could lead to a higher exchange rate than is provided for in the baseline.

As has previously been discussed in *Monetary Bulletin*, it has been unusually difficult to estimate Iceland's potential

Chart 5
Strain on global supply chains¹
January 2018 - February 2022

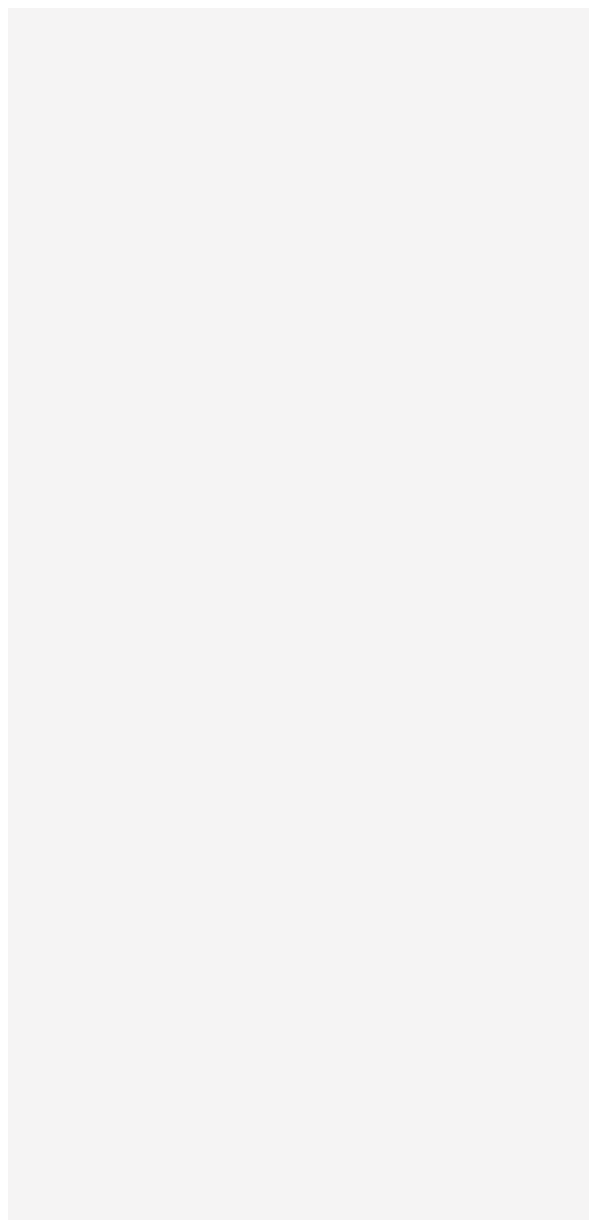


1. Estimated effects of various measures of shipping costs and delivery times on supply chains.
Sources: G. Benigno, et al. (2022), "Global supply chain pressure index: March 2022 update", Federal Reserve Bank of New York *Liberty Street Economics*.

output in the wake of the pandemic and the associated production disruptions and changes in relative prices. This is compounded by even further supply shocks following Russia's invasion of Ukraine. Because of this, the possibility cannot be excluded that potential output has been impaired even more than is assumed in the baseline forecast, and that the output gap that has started to open up – and therefore, the underlying inflationary pressure – is underestimated. Moreover, the output gap could widen more rapidly than is currently projected if households are quicker to tap the significant savings they accumulated in the wake of the pandemic (see the alternative scenario in Box 1 of *Monetary Bulletin* 2021/4). The same applies if the fiscal stance is eased more rapidly than is assumed in the baseline.

Inflation has been above the Central Bank's inflation target for about two years and above 4% since the beginning of 2021. According to the baseline forecast, it will be above target for the entire forecast horizon and above 4% until H2/2023. Such a large deviation from target puts a strain on inflation expectations and increases the risk that they could become unmoored from the target, which in turn could cause higher inflation due to temporary supply shocks to become entrenched. If this happens, inflation could prove more persistent than is currently assumed. This uncertainty is exacerbated by the fact that inflation is higher throughout the industrialised world than it has been in decades.

Although some of these factors could develop more favourably than is provided for in the baseline forecast, the risks to the inflation outlook are tilted more strongly to the upside. Uncertainty is also considered to have increased relative to the Bank's previous forecasts, and the probability distribution is skewed even further to the upside.



The economic impact of the invasion of Ukraine

The Russian army invaded Ukraine on 24 February. The ensuing war has brought devastation to the Ukrainian people, and the economic sanctions imposed on Russia by Western countries will cause significant hardship to the Russians. Uncertainty about the global economic outlook has mounted, and the war could spread to other countries. Asset prices have slid in many markets, and a number of commodities have soared in price. It is therefore clear that the global economic outlook has deteriorated and that inflation will be both higher and more persistent than previously assumed.

This Box discusses the main channels through which the war will affect the global economy and the war's potential impact on economic activity and inflation.

The economic impact of the war will be greatest in Ukraine and Russia

After the Russian army's ceaseless attacks on Ukrainian cities and infrastructure, it is clear that the Ukrainian nation will be faced with a monumental task in rebuilding their country once the war is over. Large numbers of people have been killed, and millions have fled their homes or left the country entirely. Cities, manufacturing equipment, and infrastructure have been destroyed. Reconstruction will therefore take time and cannot be accomplished without the involvement of the international community, including direct financial contributions and debt restructuring.

The economic impact on Russia will also be substantial, albeit of a different type. In the wake of widespread sanctions and ostracism from the global community, Russia is now isolated. Asset prices in Russia plummeted, and financial conditions deteriorated severely as a result of pressure on the domestic banking system and closure of access to foreign financing. The Russian central bank imposed capital controls and raised interest rates significantly to protect the rouble, although the freeze imposed on a large share of its foreign exchange reserves has greatly limited its room for manoeuvre. Furthermore, a number of Russian banks have been refused access to the SWIFT payment messaging system, which makes it far more difficult for Russian companies and the banks themselves to carry out and settle cross-border transactions. A host of international firms have discontinued business activities in Russia, and companies the world over have stopped doing business with Russians and have severed their ties with companies in the country. The US has prohib-

ited the importation of fossil fuels from Russia, and the UK is planning to cease all imports of Russian oil by the end of 2022. The EU has also announced a ban on coal imports from Russia and is planning to reduce its imports of Russian natural gas by two-thirds within a year.

It is difficult to estimate the impact this will have on economic activity in Ukraine and Russia, but it will clearly be substantial. According to the International Monetary Fund's (IMF) (2022), GDP in Russia could contract by some 8.5% this year, and inflation could rise above 20%. In Ukraine, the contraction in output will be even more severe, or around 35%.

The impact of the conflict through the trade channel

One channel for the impact of the war on the global economy lies through trade relationships with Russia and Ukraine. Important export markets could be lost because of the war and the associated sanctions. By the same token, the war could cause world trade to snarl up, owing to shortages of important inputs from Russia and Ukraine that companies in other countries need for their own production.

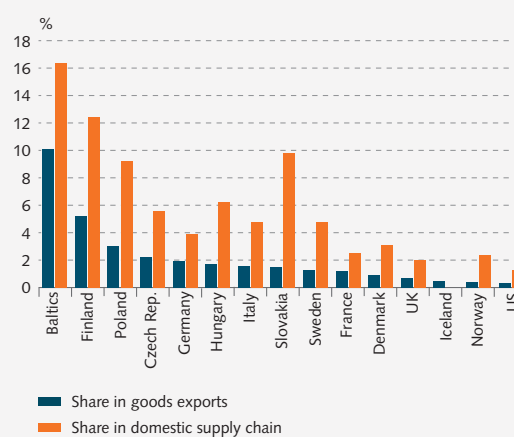
Although the effects on individual firms and sectors could be measurable, the direct damage due to lost trade with Russia will probably be relatively limited. The Russian economy accounts for less than 2% of the global economy, about the same as Australia and only 7% of the US economy. The weight of advanced economies' exports to Russia is similarly low. Russia accounts for only 0.3% of US goods exports, for instance, and 0.7% of UK goods exports (Chart 1). Among advanced economies, EU countries are probably the most exposed, Germany in particular, yet only 1.9% of German goods exports are sold to Russia. The economic impact on countries in Eastern Europe will probably be greater, as they conduct more business with Russia. This is particularly true of the three Baltic countries, which sell an average of 10% of their goods exports to Russia.

The weight of exports to Russia does not tell the whole tale about the potential economic repercussions of the war, however. Inputs from Russia can be important in individual countries' supply chains, even though they may be routed through third countries and therefore not be included in measurements of direct trade with Russia. As Chart 1 indicates, Russia's weight in other countries' domestic supply chains generally exceeds its direct weight in international trade, particularly in Finland and various Eastern European countries.¹ On the whole, though, the economic impact

1. Corresponding data on the weight of individual countries in domestic value added are not available for Iceland, but it can be assumed that Iceland is similar to, for example, Norway in this regard.

Chart 1

Weight of exports to Russia and importance in supply chains in selected OECD countries¹



1. Goods exports to Russia as a share of total exports in 2020 and imports from Russia as a share of total imported inputs in 2018 (data for Iceland not available). *Baltics* is the average for Estonia, Latvia, and Lithuania.
Sources: OECD TIVA database, UN UNCTAD database.

through cross-border trade is probably not very strong, particularly because firms can often find inputs in other countries, although doing so can take time and effort.

The impact of the conflict through the financial channel

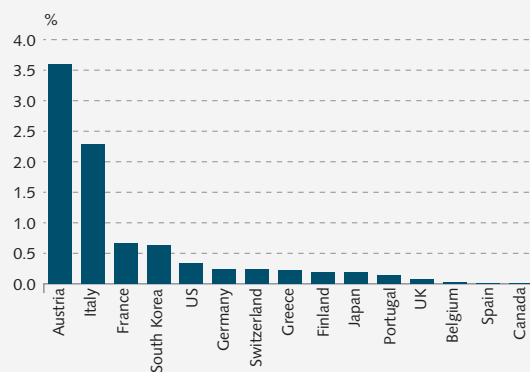
Despite the severe strain on the Russian financial system, the impact on other countries via the global financial system will probably be limited. Financial linkages with Russian banks and companies are relatively modest, and international banks' claims against Russian counterparties are generally small in scale (Chart 2) and have diminished in recent years, particularly following Russia's invasion of Crimea in 2014. Financial conditions in advanced economies have deteriorated in the wake of this year's invasion of Ukraine, however, and some countries' risk premia and interest rate spreads have inched upwards. In addition, financial institutions' risk premia have risen, and the hardships faced by Russian banks with cross-border operations could have a negative impact on the markets in which those financial institutions operate. The overall risk vis-à-vis Russian financial institutions appears to be limited, however. Even so, increased uncertainty as a result of the war, coupled with capital flight to safe assets, could amplify instability in some countries' financial systems.

The impact of the conflict through the commodity channel

Russia's relative lack of importance in world trade and the global financial system only sheds light on part of the impact of the war and the sanctions on the global economy. Russia is one of the world's most important producers of a number of commodities, and Ukraine is also an important producer of food products. It is therefore clear that the war and the sanctions will have a colossal impact on the global commodity market and, by extension, the global economy.

As Chart 3 indicates, Russia produces about 12% of the global supply of oil, and it is the world's second-largest oil-exporting country, after Saudi Arabia. Its importance in the production of natural gas is even greater: Russia produces some 17% of the world's natural gas and is the largest single exporter of it. Russia is also very important in other commodities and metals. The country supplies the world with nearly half of its supply of palladium, an important input in the production of catalytic converters for automobiles, among other things. Russia and Ukraine are also important in the production of gases such as neon. Neon is used together with palladium to produce semiconductors, which are indispensable for the manufacture of all types of electrical equipment and computerised goods. Moreover, Russia is an important producer of nickel, which is used for the manufacture of steel and batteries. Russia and Ukraine are both leading food

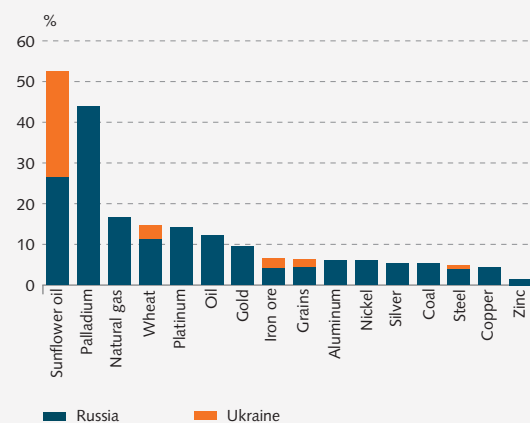
Chart 2
Financial institutions' claims on Russia in selected OECD countries¹



1. Outstanding bank claims against Russian entities in Q3/2021 as a share of their total claims against foreign entities.

Sources: Bank for International Settlements (consolidated banking statistics), OECD.

Chart 3
Russia and Ukraine's share in global commodity production 2020



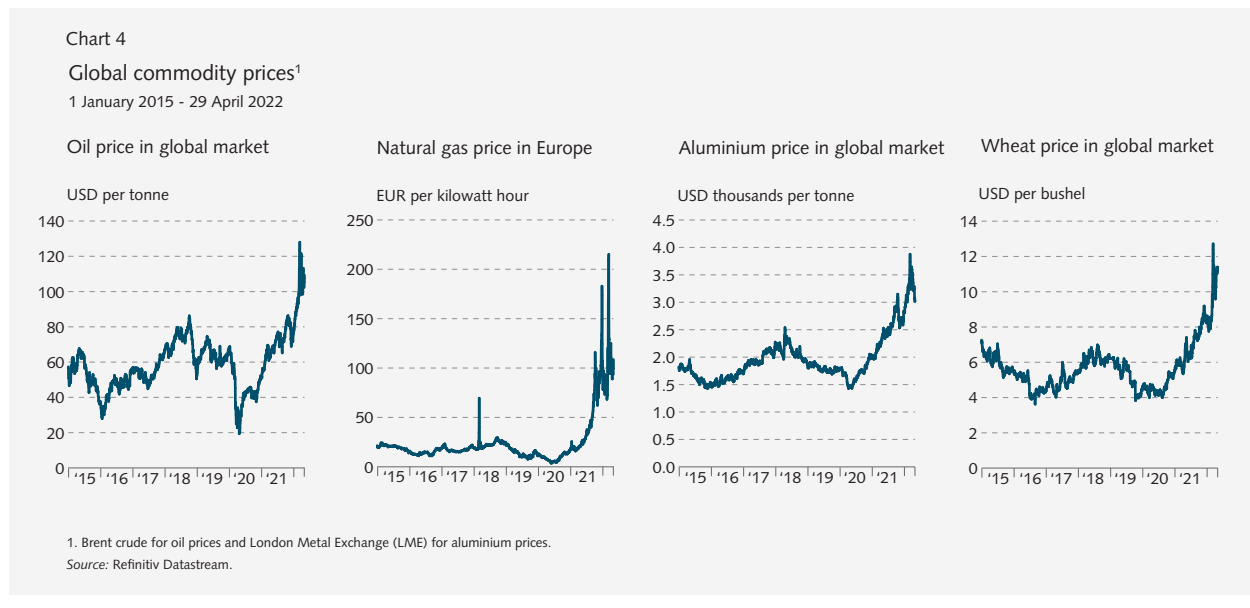
Sources: J. P. Morgan Commodity Research, UN Food and Agriculture Organization (FAO), US Geological Survey.

producers, ranking in the world's top five exporters of a number of foodstuffs. Almost 15% of global wheat production comes from Russia and Ukraine, and about one-fourth of global wheat exports. The two countries are also important manufacturers of fertilisers used for the production of a large number of food products, as well as producing over half of the world's sunflower oil.

Because of all this, the main channel through which the war will affect the global economy will be the commodity market, where steep price hikes will push imported inflation higher and increase households' and businesses' expenses. This deterioration in terms of trade has a negative impact on economic activity, although commodity exporters will benefit from higher prices on their own exported commodities. Some countries may therefore see their terms of trade improve, although it will be offset by the negative impact of weaker global demand and elevated global economic uncertainty.

As Chart 4 indicates, commodity prices surged in the wake of the invasion, although some of the increase has reversed since then. Oil prices, for instance, are 13% higher than just before the invasion, and European natural gas prices are up more than 18%, after having peaked at a full 150% above the pre-invasion level just over a week after the invasion. The price of wheat has also risen steeply and has only reversed to a minimal degree.

If wheat prices remain this high, it could have severe repercussions for poorer countries, and poor harvests due to persistent fertiliser shortages could compound the problem. Furthermore, soaring natural gas prices will affect large numbers of European households that depend on natural gas imports from Russia. While Eastern Europe is particularly exposed to this risk, others are affected as well:



Russian natural gas accounts for nearly a fifth of total energy consumption in countries such as Italy and Germany. For the EU as a whole, some 40% of natural gas, one-fourth of oil, and half of coal imports to the region originate in Russia. As a result, the impact would be severe if further sanctions were imposed and energy importation from Russia were cut back or halted entirely. The implications for Russia would be no less profound, as Europe buys more than 70% of the country's gas exports, half of its oil exports, and a third of its coal exports. Presumably, the price of these energy sources would rise still further, and it could prove necessary to impose restrictions or rationing of energy on certain sectors. Offsetting this somewhat, the inventory situation is more favourable than previously anticipated, owing to relatively mild winter weather in Europe. Increased supply of oil and gas from other countries, such as the US and Iran, could mitigate the problem as well.

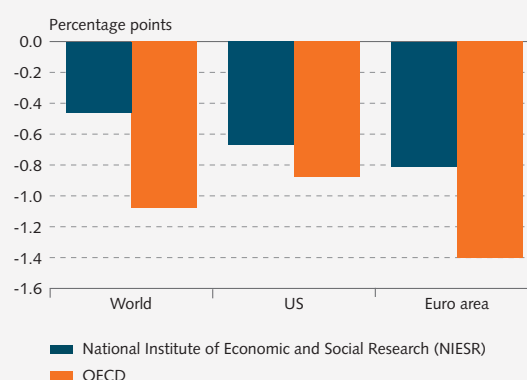
Global economic impact

The magnitude of the war's impact on the global economic outlook is highly uncertain but will probably be considerable, and not least in mainland Europe. Recent analysis suggests, for instance, that global GDP growth could be lowered by ½-1 percentage point in 2022 as a result (see, for example, Liadze *et al.*, 2022, and OECD, 2022). The impact on output growth in the eurozone would be even greater, at 1-1½ percentage points (Chart 5). Inflation would also be strongly affected: global inflation could be pushed as much as 3 percentage points higher this year, and inflation in the eurozone could be 2-2½ percentage points higher (Chart 6). The effects could be exacerbated even further if the situation deteriorates and Russia's energy exports are further reduced. If this happens, commodity prices – and inflation – will probably climb even higher, amplifying the adverse effects on household purchasing power and demand.²

The war could also have a long-term impact on the global economy if it results in a permanent shift in global energy trade and causes a lasting change in the structure of important supply chains. Further partitioning of international payment intermediation could make international trade more costly, and an increase in cross-border disputes could further dampen world trade and impede the sharing of knowledge, thereby permanently reducing long-term potential output at the global level.

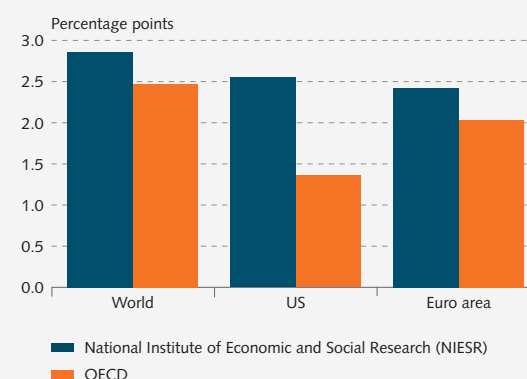
2 According to an analysis by the IMF (2022), global output could contract by an additional 2% through 2023 if broader sanctions than are currently envisioned are imposed on Russia. This would lead to even more commodity price hikes and would contribute to more severe and protracted supply-chain disruptions. Global inflation would increase by an additional 1 percentage point in 2022 and 2023.

Chart 5
Impact of the war in Ukraine on global GDP growth¹



1. Estimated impact of the war on 2022 GDP growth (National Institute of Economic and Social Research, NIESR), or for a full year from the initial invasion (OECD).
Sources: Liadze *et al.* (2022), OECD (2022).

Chart 6
Impact of the war in Ukraine on global inflation¹



1. Estimated impact of the war on 2022 inflation (National Institute of Economic and Social Research, NIESR), or for a full year from the initial invasion (OECD).
Sources: Liadze *et al.* (2022), OECD (2022).

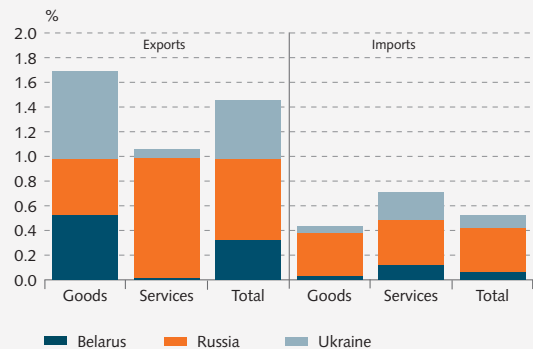
Economic impact in Iceland

Like other advanced economies, Iceland conducts relatively little trade with Russia; as Chart 1 shows, about 0.5% of Iceland's goods exports are sold to Russia (as of 2020). Iceland's trade with Russia diminished significantly after Russia invaded Crimea and reciprocal sanctions were imposed, and it declined even further with the onset of the pandemic. A similar share of Iceland's exports are sold to Belarus and Ukraine, although exports to these countries have increased in recent years, following the Russian import ban in 2015. In particular, marine products previously sold to Russia have been exported increasingly to Belarus and Ukraine. In all, about 1.7% of Iceland's goods exports are sold to these three countries (Chart 7). Around 1.1% of Iceland's services exports and 1.5% of combined goods and services exports (totalling 14.5 b.kr.) go to these three countries. Some 0.5% of Iceland's goods and services imports (5.5 b.kr.) come from the same three countries. Used ships, miscellaneous industrial products, and food manufacturing equipment have been the mainstay of exports to Russia, while marine products – particularly pelagics and farmed fish – weigh heaviest in exports to Ukraine and Belarus. Tourists from Russia accounted for the largest share of services exports to the three countries, although their numbers fell markedly after the pandemic struck. Other services exports increased, however, especially tech services and other business services.

If all of Iceland's trade with Russia, Belarus, and Ukraine were halted, the direct loss of export revenues could come to 15-20 b.kr. The actual loss could exceed this amount, however, as marine products and aquaculture products valued at around 5 b.kr. have been exported annually from Iceland to Ukraine via Lithuania in recent years. In addition, domestic sellers hoped to sell a portion of this year's sizeable capelin quota to the Ukrainian market. It will probably be possible, however, to sell these products in other markets, although it might take longer and bring lower prices. In addition, the outlook is for other marine products, particularly demersals, to rise in price because of stronger demand for Icelandic fish and fish products in response to proposed higher import tariffs and Russia's reduced access to international markets for its own marine products. Moreover, Russia has been temporarily expelled from the International Council for the Exploration of the Sea (ICES). The Russians could respond by closing their fishing waters to other countries. This would affect Iceland, which has had a bilateral agreement with Russia on fishing in the Barents Sea, although it does not account for a large share of Iceland's total catch.

In addition, it will presumably be possible to obtain inputs previously bought from these countries – such as

Chart 7
Iceland's trade with Belarus, Russia, and Ukraine¹



1. Imports and exports to Belarus, Russia, and Ukraine as a share of the respective totals for 2020.

Source: Statistics Iceland.

reinforcing steel, timber, and plywood – from other markets, although the price may be higher. In some instances, however, it could prove difficult to find comparable goods elsewhere, prolonging supply-chain disruptions and pushing prices even further upwards.

It is difficult to project what effect the war will have on Iceland's tourism sector. It is unlikely to have a strong direct impact this year, however, as the vast majority of tourists who visit Iceland are expected to come from the US and Western Europe. That said, the war could dampen appetite for travel in some cases. Elevated inflation, declining purchasing power, and higher airfares due to rising oil prices could reduce tourist numbers, even though appetite for travel has been strong since pandemic-related travel restrictions have been lifted. Nor is it likely that disruptions to air travel due to the closure of Russia's airspace will have much effect in Iceland, as large numbers of tourists from Asia are not expected this year.

All things considered, it does not appear likely that the war will have a profound negative impact on Iceland's external trade, although individual companies and sectors could be markedly affected. Indirect effects in the form of steeply rising energy and other commodity prices will be felt widely in Iceland, though, as they will be elsewhere. Firms' costs will increase, import prices will rise, and households' living costs will rise accordingly, adversely affecting demand for goods and services. Furthermore, increased uncertainty about the economic outlook may well weaken domestic households' and businesses' proclivity to spend and invest, although Icelandic households have strong net worth and significant accumulated savings that they can tap in response to rising prices. The effects on households' cost of living will also be less pronounced here than in mainland Europe, as hydroelectric energy and geothermal power are used far more widely for home heating and electricity production in Iceland than oil and natural gas are. Higher prices for important export products such as aluminium and marine products will also offset the negative impact of steeply rising oil and commodity prices on Iceland's terms of trade (see Chapter I).

Furthermore, the war will probably have a limited effect on the domestic financial system, as Iceland's financial ties to Russia and the conflict zone are negligible (see also Box 1 in *Financial Stability 2022/1*). The domestic banks have ample liquidity, the Central Bank has abundant international reserves, and Iceland's external position is strong. As a result, the domestic financial system should be well prepared to face the potential negative side effects of the war. Even though the CDS spread on Iceland has held broadly unchanged since the war broke out, credit spreads on the Treasury's foreign

obligations and those of the domestic commercial banks have risen. This should not greatly affect the sovereign in the short run, however, as it does not have an urgent need for refinancing. Icelandic firms and commercial banks that need to refinance foreign bond issues in the coming term may feel the effects more keenly, however. Furthermore, risk premia on the Icelandic króna could rise because of increased global economic uncertainty, and the króna could therefore be weaker in coming months than otherwise.

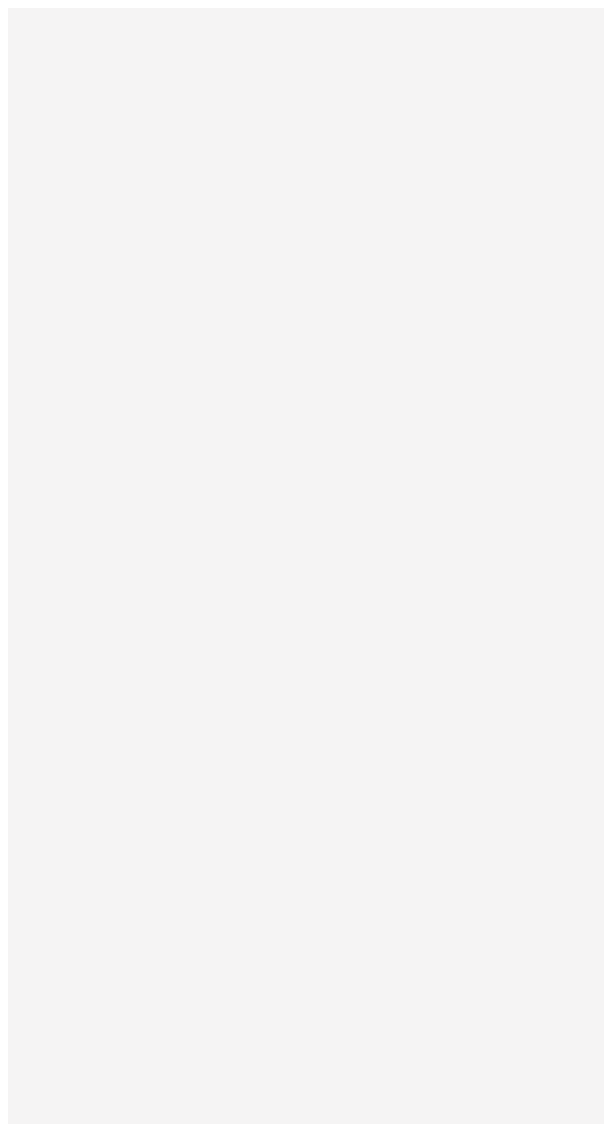
On the whole, the war will cause inflation to be higher and more persistent than it would have been otherwise, and private consumption growth will be accordingly slower. GDP growth among Iceland's main trading partners will be weaker as well, and exports from Iceland therefore more sluggish, although this will be offset by improved terms of trade. Because of this, GDP growth in Iceland will be weaker than was anticipated before the war broke out. The economic outlook is highly uncertain, however, and the magnitude of the impact will be determined by global developments.

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Appendix

Forecast tables

Table 1 Key economic variables¹

	2020	2021	2022	2023	2024
Private consumption	-2.9 (-3.0)	7.6 (6.8)	3.1 (3.5)	3.0 (3.9)	2.7 (3.8)
Public consumption	4.2 (4.5)	1.8 (2.0)	1.9 (1.8)	1.7 (1.7)	1.7 (1.6)
Gross capital formation	-9.5 (-8.7)	13.6 (12.8)	6.9 (5.2)	-0.5 (-1.2)	3.1 (2.2)
Business investment	-16.4 (-14.1)	23.1 (21.0)	9.5 (3.4)	-5.3 (-4.7)	1.8 (3.2)
Residential investment	1.2 (1.2)	-4.4 (-4.9)	5.5 (9.7)	13.7 (10.2)	7.8 (4.1)
Public investment	-2.2 (-5.2)	12.4 (14.2)	0.3 (5.2)	-3.5 (-6.0)	-0.1 (-4.5)
National expenditure	-2.4 (-2.2)	7.2 (6.8)	3.5 (3.3)	1.9 (2.2)	2.5 (2.9)
Exports of goods and services	-30.2 (-30.2)	12.3 (14.2)	15.9 (17.6)	5.2 (4.7)	5.7 (4.4)
Imports of goods and services	-21.6 (-22.5)	20.3 (19.2)	12.4 (13.3)	3.5 (4.9)	5.7 (5.1)
Gross domestic product (GDP)	-7.1 (-6.5)	4.3 (4.9)	4.6 (4.8)	2.6 (2.1)	2.5 (2.5)
GDP at current prices (ISK billion)	2,928 (2,941)	3,233 (3,257)	3,645 (3,595)	3,869 (3,779)	4,083 (3,981)
Contribution of net trade to GDP growth (percentage points)	-4.8 (-4.4)	-2.9 (-1.9)	1.1 (1.5)	0.8 (-0.1)	0.0 (-0.3)
Exports of goods	-8.6 (-8.5)	7.6 (7.7)	4.4 (3.7)	-1.7 (-0.6)	2.6 (1.4)
Exports of services	-50.5 (-50.5)	20.3 (24.9)	34.6 (39.4)	14.7 (11.2)	9.2 (7.5)
Unemployment (LFS, % of labour force) ²	6.4 (6.4)	6.0 (6.0)	4.3 (4.7)	4.2 (4.5)	4.2 (4.3)
Registered unemployment (% of labour force) ³	7.9 (7.9)	7.7 (7.7)	4.5 (4.9)	3.7 (4.2)	3.6 (3.9)
Output gap (% of potential output)	-5.6 (-5.3)	-0.9 (-0.4)	0.5 (0.8)	0.0 (0.2)	-0.3 (0.1)
Current account balance (% of GDP)	0.8 (0.9)	-2.8 (-1.2)	-0.9 (0.5)	-1.4 (-0.4)	-1.8 (-1.5)
Trade-weighted exchange rate index ⁴	201.0 (201.0)	196.1 (196.1)	191.5 (193.6)	194.1 (193.2)	194.1 (193.8)
Inflation (consumer price index, CPI)	2.8 (2.8)	4.4 (4.4)	7.4 (5.3)	5.0 (3.4)	2.9 (2.9)
Inflation in main trading partners ⁵	0.7 (0.7)	2.8 (2.8)	5.8 (3.5)	2.5 (2.0)	1.9 (1.9)
GDP growth in main trading partners ⁵	-5.0 (-5.0)	5.6 (5.5)	3.1 (4.0)	2.3 (2.5)	1.9 (1.9)

1. Year-on-year change (%) unless otherwise specified (figures in parentheses are from the forecast in MB 2022/1).

2. Unemployment according to the Statistics Iceland Labour Force Survey (LFS).

3. Registered unemployment is from the Directorate of Labour and excludes persons on the partial unemployment benefit programme.

4. 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.

5. Forecast based on Consensus Forecasts, IHS Markit, IMF and OECD.

Sources: Consensus Forecasts, Directorate of Labour, IHS Markit, International Monetary Fund, OECD, Refinitiv Datastream, Statistics Iceland, Central Bank of Iceland.

Table 2 Quarterly inflation forecast (%)¹

<i>Quarter</i>	<i>Inflation (year-on-year change)</i>	<i>Inflation (annualised quarter-on-quarter change)</i>
Measured value		
2021:2	4.4 (4.4)	6.7 (6.7)
2021:3	4.3 (4.3)	3.8 (3.8)
2021:4	4.8 (4.8)	5.9 (5.9)
2022:1	6.2 (5.8)	8.3 (6.7)
Forecasted value		
2022:2	7.5 (5.6)	12.1 (5.9)
2022:3	8.1 (5.3)	6.0 (2.7)
2022:4	8.0 (4.7)	5.6 (3.7)
2023:1	6.7 (3.7)	3.5 (2.6)
2023:2	5.2 (3.5)	6.0 (4.8)
2023:3	4.3 (3.2)	2.3 (1.5)
2023:4	3.8 (3.1)	3.4 (3.4)
2024:1	3.2 (2.9)	1.0 (2.1)
2024:2	3.0 (2.9)	5.3 (4.7)
2024:3	2.8 (2.9)	1.4 (1.4)
2024:4	2.8 (2.9)	3.4 (3.3)
2025:1	2.8 (2.7)	1.2 (1.6)
2025:2	2.7	4.8

1. Figures in parentheses are from the forecast in MB 2022/1.

Sources: Statistics Iceland, Central Bank of Iceland.

