II The global economy and terms of trade

The GDP growth outlook for the global economy and Iceland's main trading partners has deteriorated slightly since August, and growth has become less balanced between countries. Escalating tariffs and international trade disputes have put a damper on growth in world trade, which also affects trading partners' imports. Global inflation has picked up, concurrent with rising oil prices, although core inflation is still low in many economies. Iceland's terms of trade have deteriorated this year, with rising global energy prices, and the real exchange rate has fallen after rising steeply in the past several years.

Global economy

GDP growth has softened slightly in trading partner countries ...

GDP growth measured 2.1% among Iceland's main trading partners in H1/2018 (Chart II-1), below the forecast in the August Monetary Bulletin and the 2017 growth rate of 2.4%. Growth turned out weaker than was projected in August in most trading partner countries, and differences in growth rates from one country to another have widened again.

GDP growth in the euro area has softened after picking up in 2017, partly because of weaker export growth, but also due to a contraction in private consumption, which in turn is due in part to higher oil prices. Unemployment continues to fall, however, and is now at its lowest since late 2008 (Chart II-2). GDP growth has also softened in Japan, measuring 1.2% in H1/2018, as in the UK, where adverse weather in Q1 temporarily affected economic activity. In spite of this, unemployment in the UK is at its lowest in over forty years, and in Japan it is close to a twenty-year low. Output growth has weakened in Norway and Denmark as well but has held its ground in Sweden. In the US, however, it has gained momentum and is at a three-year high. Domestic demand growth has picked up even further in the wake of tax cuts and increased government spending. The recovery of the labour market has also proven robust, and unemployment is at its lowest in over fifty years.

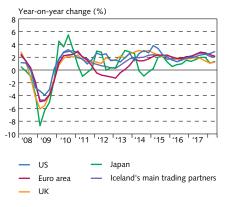
...and global output growth has eased

Global output growth measured 3.7% in 2017, the strongest since 2011, but it lost ground slightly in H1/2018, owing mainly to GDP growth in advanced economies, which declined from 2.8% in H2/2017 to 2.3% in H1/2018. In emerging market economies, however, economic activity has continued on the whole to grow at broadly the same pace as in 2017, and global output growth is sustained largely by these countries.

Indicators imply that GDP growth has begun slowing in many advanced economies ...

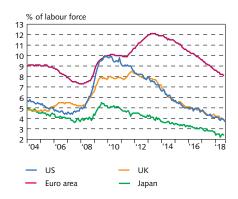
Leading indicators and GDP growth forecasts continue to suggest robust growth in advanced economies, although the outlook has deteriorated since early this year. Forecasts for the euro area suggest

Chart II-1 Global GDP growth Q1/2008 - Q2/2018



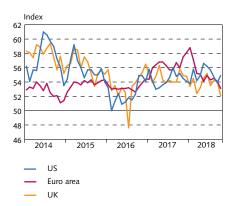
Sources: Thomson Reuters, Central Bank of Iceland

Chart II-2 Unemployment rate1 January 2004 - October 2018



1. Seasonally adjusted figures

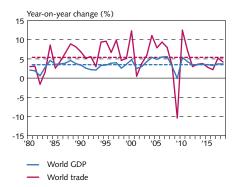
Chart II-3 Leading indicators of GDP growth¹ January 2014 - October 2018



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

Source: Thomson Reuters

Chart II-4 World GDP and trade 1980-2018¹



1. Broken lines show average of 1980-2017. The values for 2018 are based on IMF's forecast (World Economic Outlook, October 2018). Sources: International Monetary Fund, Central Bank of Iceland.

that GDP growth will be more sluggish this year than had previously been projected, owing primarily to weaker-than-expected growth in H1. Leading indicators have also been below market expectations, and the purchasing managers' index (PMI) for manufacturing and services has fallen even further after tumbling in the spring (Chart II-3). Furthermore, pessimism has increased among consumers and companies in the eurozone, even though the labour market has continued to firm up. Indicators for the UK have been well in line with market expectations in the recent past; however, the outlook for the year as a whole is weaker because GDP growth in H1 was disappointing, as it was in the euro area. Even though the PMI for the US has fallen marginally in the recent term, optimism has increased still further among households and businesses, and the GDP growth outlook for 2018 as a whole is broadly unchanged.

... and the global output growth outlook has deteriorated

The International Monetary Fund's (IMF) most recent forecast estimates global GDP growth at 3.7% in 2018 and 2019, or some 0.2 percentage points below its April and July forecasts, reflecting weaker-than-projected economic activity in advanced economies in H1/2018 and the negative impact of the trade disputes between the US and other leading countries. Reduced global output growth is also attributable to a poorer outlook for emerging and developing economies, many of which are heavily indebted in US dollars and have faced tighter financial conditions, partly as a result of rising US interest rates and the appreciation of the dollar. Among other things, this has caused some capital outflows and a currency depreciation in the countries affected.

International trade disputes hinder growth in world trade

World trade grew by just over 5% in 2017 and appears set to measure slightly more than 4% this year, somewhat less than was previously forecast (Chart II-4). The escalating trade disputes between the US and several other countries, China in particular, and growing support for protectionist policies around the world has put a damper on trade. However, the US, Mexico, and Canada have agreed on a new treaty to replace the North American Free Trade Agreement (NAFTA). Considerable uncertainty remains about the impact of these trade disputes and whether they will escalate still further (for further discussion, see Chapter I).

Outlook for GDP growth and demand in trading partner countries has deteriorated slightly since August ...

In line with a weakening global GDP growth and trade outlook, growth in output and imports among Iceland's main trading partners is now projected to be weaker than was assumed in the Bank's August forecast. Trading partners' GDP growth is forecast at 2.2%, which is 0.1 percentage points less than was assumed in August. The main factor here is the prospect of weaker growth in the eurozone, the UK, and the Nordic countries, whereas GDP growth in the US is forecast

at 2.9%. Forecasts for trading partners' imports have been revised similarly, with import growth now projected at 3.9% in 2018, down from 4.1% in August.

... but inflation in trading partner countries has risen more than expected

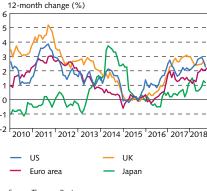
Inflation has been on the rise this year in Iceland's main trading partner countries, reflecting in particular the surge in oil prices in Q2 and Q3. Trading partner inflation averaged 1.8% in H1 but had risen to 2.2% in Q3, exceeding expectations (Chart II-5). Inflation rose more than expected in the euro area, Canada, Sweden, and Norway but was lower than projected in the US, the UK, and Denmark. Core inflation is still widely low, however, and in the eurozone it is still below the European Central Bank's (ECB) inflation target. In the US, however, core inflation is slightly above target. Headline inflation among Iceland's trading partners is forecast to average 2% this year, 0.1 percentage points more than was forecast in August.

Central bank interest rate differential among developed countries widens further

The US Federal Reserve raised its policy rate by 0.25 percentage points in September, to 2-2.25%, in line with market expectations (Chart II-6). Interest rates in the US have been raised by 0.75 percentage points in 2018 to date, as the slack in the US economy has disappeared and inflation has risen. Interest rates are also beginning to rise in a number of other advanced countries. For example, the Bank of Canada raised its policy rate for the third time this year, to 1.75%, and Norges Bank raised its rate by 0.25 percentage points in September, its first rate hike since spring 2011. The Bank of England raised its policy rate to 0.75% in early August, its second rate hike since the onset of the financial crisis. The ECB has held its key interest rate steady at 0%, however, and has signalled that it will remain unchanged at least until autumn 2019.

As GDP growth rates in the US and other advanced economies diverge, the interest rate spread has widened, and it appears likely to grow still larger in the coming term. The Federal Reserve has signalled a possible additional rate hike of 0.25 percentage points this year, followed by a hike of 0.75 percentage points in three steps next year, bringing its policy rate to 3-3.25% by end-2019. This is broadly reflected in forward interest rates in the market (Chart II-6). In addition, the Federal Reserve has continued to scale down its bond holdings, which is considered one of the main reasons term premia on long-term bonds have increased. Bond rates have therefore risen west of the Atlantic (Chart II-7), and the US dollar has appreciated by 41/2% year-to-date in effective terms. Market agents expect smaller rate hikes in the UK and continued low rates in the euro area. Longterm interest rates in Germany have fallen again even though the ECB scaled down its net monthly bond purchase programme in October and has announced its intention to stop it entirely at the end of December. Bond rates in Japan have also remained low, and the Bank of Japan aims to keep long-term rates around 0%.

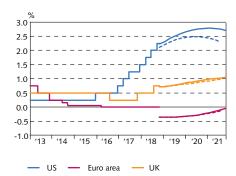
Chart II-5 Inflation in selected industrialised countries January 2010 - September 2018



Source: Thomson Reuters

Chart II-6 Policy rates in selected industrialised economies1

January 2013 - December 2021

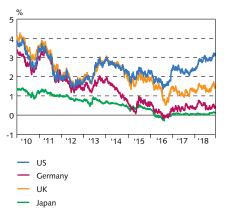


1. Daily data 1 January 2013 through 2 November 2018, and quarterly data Q4/2018 through Q4/2021. US interest rates are the upper bound of the US Federal Reserve bank's interest rate corridor, and rates for the of the OS received Neserve Bank's interest rate control, and rates for teuror area are the European Central Bank's key rate. Forward rates are based on overnight index swaps (OIS) and the Euro Overnight index Average (EONIA) for the euro area. Solid lines show forward curves from 2 November 2018 onwards and the broken lines from 24 August 2018 onwards.

Chart II-7

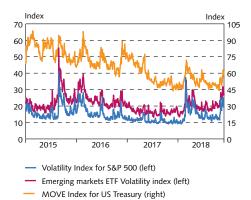
10-year government bond yields in selected industrialised countries

1 January 2010 - 2 November 2018



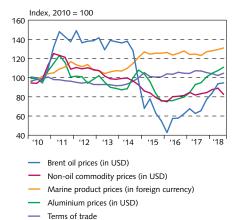
Source: Thomson Reuters

Chart II-8 Global market volatility¹ 1 January 2015 - 2 November 2018



 The VIX and MOVE volatility indices indicate the implied volatility of financial products.
Source: Thomson Reuters.

Chart II-9 Commodity prices and terms of trade¹ Q1/2010 - Q3/2018



1. Foreign currency prices of marine products are calculated by dividing marine product prices in Icelandic krónur by the trade-weighted exchang rate index. USD prices of aluminium products are calculated by dividing aluminium prices in Icelandic krónur by the exchange rate of the USD. Terms of trade in Q3/2018 are based on the Central Bank baseline

 $\it Sources: Statistics Iceland, Thomson Reuters, World Bank, Central Bank of Iceland.$

Financial market turbulence and falling asset prices

Volatility in global financial markets has increased in 2018, after having been relatively limited in H2/2017 (Chart II-8). It spiked noticeably in Q1 and then again in October, alongside a marked drop in asset prices, although volatility has receded to a degree. The increased volatility is thought to stem from uncertainty about the trade disputes between the US and other countries, China in particular, and the impact on world trade and global GDP growth, where the outlook has worsened, as is mentioned above. By the same token, the volatility stems from uncertainty about the effect that rising interest rates in the US will affect the country's economic recovery, whether the adjustment to the neutral rate will be too rapid, and whether private sector financial conditions will tighten too quickly, thereby hindering the recovery excessively. Weaker output growth in the US and China could cause spillovers into other economies, owing to the two countries' large share in global demand. In addition, interest rate increases in the US have created uncertainty about global capital flows, as a rapid rise in US rates could lead to further contractions in capital inflows, particularly to emerging economies, with the associated exchange rate volatility.

Export prices and terms of trade

Export prices set to rise more in 2018 than was forecast in August

Foreign currency prices of marine products have rebounded this year, after a slight decline in 2017, and nearly all types of products have risen in price, owing to strong demand in foreign markets. Prices rose by 3½% in H1/2018, and preliminary figures suggest a continued increase in Q3 (Chart II-9). The outlook for marine product prices has therefore improved since August. It is now assumed that prices will rise by 5% in 2018 as a whole, instead of the 3½% provided for in the August forecast, while the outlook for 2019 is broadly unchanged.

Global aluminium prices have held relatively stable in recent months, in the range of approximately 2,000-2,100 US dollars per tonne (Chart II-9). Icelandic aluminium companies' export prices are higher, however, as buyers pay a premium on the global market price. The premium varies from company to company and from month to month. The year-on-year rise in aluminium prices is projected to average about 16%, somewhat more than was forecast in August. The outlook for 2019 is slightly poorer than in August, however.

Oil prices up sharply year-to-date

Oil prices have been quite volatile in recent months, and near-term developments are uncertain. Prices rose by over a fourth between mid-August and the beginning of October, when they reached just over 86 US dollars per barrel. They had tapered off by the end of October, however, to 75 dollars, about a fourth above the prices seen a year earlier, and three times the January 2016 low (Chart II-9). The recent surge is due mainly to strong demand in the market, including from the petrochemical industry, and declining inventories (Chart II-10). At the same time, there are increased concerns about a contrac-

tion in oil supply. These are due mainly to the US government's trade embargo on Iran and the political situation in Venezuela, which have cut into the supply of oil from these countries. This contraction was finally addressed with an increase in supply from OPEC countries and a few non-OPEC oil producers, which caused prices to fall again in October. It has also emerged that the largest oil-producing countries, particularly the US, have ample inventories, and furthermore, unused production capacity in Saudi Arabia has turned out to be underestimated. Although futures prices indicate that oil prices have peaked, the outlook is for prices to be 38% higher, on average, this year than in 2017, and higher than was forecast in August. The outlook according to futures prices is that oil prices will fall to about 70 dollars per barrel by end-2021, somewhat above the August forecast. The outlook is unusually uncertain, however, owing primarily to the impact of the aforementioned trade embargo on Iran and the US-China trade dispute (for further discussion, see Chapter I).

Non-oil commodity prices have fallen

Non-oil commodity prices rose virtually without interruption from the beginning of 2016, after having fallen in the years beforehand (Chart II-9). They continued to rise in the first five months of 2018 but then lost ground again, falling by 9.5% between May and end-September. Virtually all types of commodities have fallen in price, although the largest declines have been in food and beverage prices. The decline reversed in part in October, and prices are expected to rise by just under 1% in Q4, to a level about 2.5% above 2017 prices, although this is a smaller increase than was forecast in August. The outlook for 2019 is broadly unchanged, however.

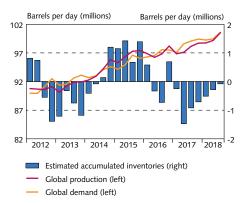
Terms of trade have deteriorated in 2018, after a marked improvement in recent years

After a nearly continuous improvement from Q4/2013 onwards, terms of trade for goods and services worsened by 4.5% year-on-year in Q2/2018 (Chart II-9), owing mainly to a steep rise in oil and nonoil commodity prices, particularly a spike in alumina prices caused by reduced production at the Norsk Hydro plant in Brazil. Import prices in general have also risen. Terms of trade are expected to deteriorate by 1.9% in 2018 as a whole, broadly as was forecast in August. They are expected to remain unchanged in 2019 instead of improving by 2%, as was forecast in August, owing mainly to higher oil prices, although the prospect lower aluminium prices and a smaller decline in alumina prices play a part as well.

Real exchange rate declines after a steep rise in recent years

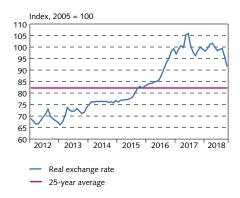
The real exchange rate in terms of relative consumer prices remained relatively stable from H2/2016 through August 2018, after surging during the preceding years (Chart II-11). In September, however, the króna began to depreciate (see Chapter III), and by October the real exchange rate had fallen by 7.7% since August, to its lowest point since August 2016. Even so, it is still 11.5% above its twenty-fiveyear average. The past few years' strong increase in the real exchange

Chart II-10 Oil demand and supply1 Q1/2012-Q3/2018



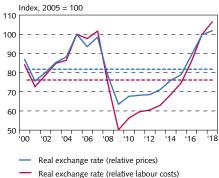
 Petroleum and other liquid fuels. Estimated accumulated inventories are the difference between estimated global supply and global demand. Source: U.S. Energy Information Administration.

Chart II-11 Real exchange rate1 January 2012 - October 2018



1. Real exchange rate in terms of relative prices. Source: Central Bank of Iceland.

Chart II-12 Real exchange rate 2000-20181



Real exchange rate (relative labour costs)

1. Broken lines show 25-year average (1993-2017). Central Bank of Iceland baseline forecast 2018. Source: Central Bank of Iceland

rate reflects a rise in the equilibrium real exchange rate; i.e., the real exchange rate consistent with internal and external equilibrium (see, for example, Box 3 in *Monetary Bulletin* 2016/2). Because of weaker terms of trade and slower export growth, the equilibrium real exchange rate is now estimated to be somewhat lower than it was in August.

Domestic wage costs rise more than in other advanced economies

According to the Bank's baseline forecast, the real exchange rate in terms of relative consumer prices is projected to be about 2½% lower, on average, in 2018 than in 2017. This would be the first year-on-year reduction since 2009 (Chart II-12). The real exchange rate in terms of relative unit labour costs is expected to remain broadly unchanged from last year.