

## II The global economy and terms of trade

Global output growth has picked up and the outlook for 2018 has improved. Forecasts for year-2018 GDP growth in Iceland's main trading partner countries have been revised upwards since February. Investment growth in trading partner countries is expected to continue recovering; therefore, the outlook is for their imports to grow faster than previously assumed. Global inflation has picked up, although underlying inflation is low in many economies. There are signs that Iceland's terms of trade will deteriorate marginally this year, alongside rising global energy and commodity prices. The real exchange rate has been stable in the recent term, after a steep rise in recent years. This is considered to reflect the economy's adjustment to a higher equilibrium real exchange rate concurrent with an improved external position.

### Global economy

#### GDP growth gains momentum in trading partner countries ...

GDP growth among Iceland's main trading partners measured 2.4% in 2017, the strongest since 2010 (Chart II-1). It outpaced the previous year's growth rate in nearly all trading partner economies. Improved growth has been driven by a rebound in investment, further supported by favourable financial conditions and growing optimism among households and businesses. The recovery of the labour market has been strong in the US and in the UK, in spite of a slowdown in GDP growth in the latter country (Chart II-2). In Japan, GDP growth has picked up, with the current cyclical upswing the longest in three decades and unemployment at a twenty-five-year low. Output growth measured 2.3% in the euro area last year, the strongest in a decade. Investment and an increased contribution from net trade were the main drivers, but private consumption growth eased as the year progressed. For the first time in a decade, GDP growth was positive in all of the countries in the euro area, and over 2% in an increasing number of them (Chart II-3). Growth also picked up in Norway, measuring 1.8% for the year, while in Denmark and Sweden it was just over 2%.

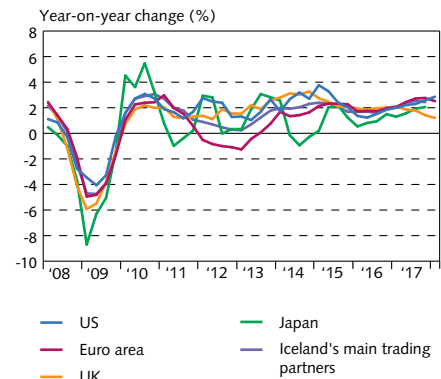
#### ... and global GDP growth rose to a six-year high

Global output growth measured 3.8% in 2017, the strongest since 2011, reflecting the economic recovery in both advanced and emerging market economies. In advanced economies, the average growth rate was 2.3%, the strongest in seven years. It was up by 0.6 percentage points from 2016 and slightly above the twenty-five-year average. Growth gathered pace in emerging market economies as well, rising to a four-year high of 4.8%. Emerging market economies account for the vast majority of global output growth, particularly China and India, where growth measured nearly 7%.

#### Signs of broadly unchanged GDP growth in advanced economies

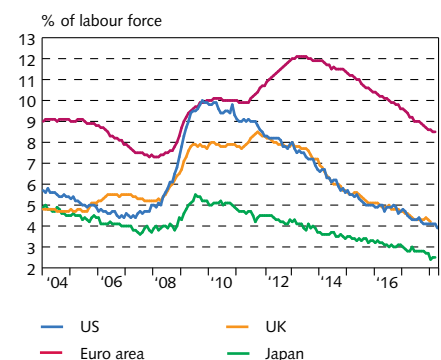
Forecasts for the euro area indicate that GDP will grow at about the same rate in 2018 as in recent quarters. This is an improvement since February, when it was assumed that growth would slow down in early

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



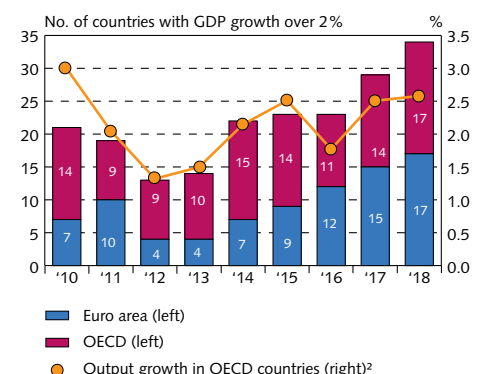
Sources: Thomson Reuters, Central Bank of Iceland.

Chart II-2  
Unemployment rate<sup>1</sup>  
January 2004 - April 2018



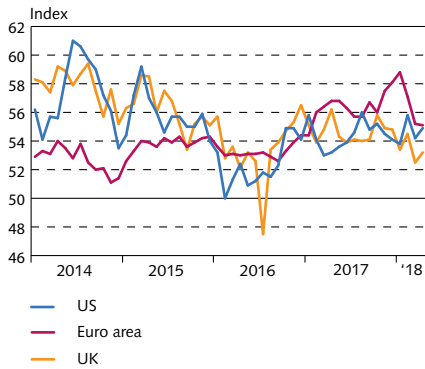
1. Seasonally adjusted figures.  
Source: Thomson Reuters.

Chart II-3  
Output growth in OECD countries<sup>1</sup>



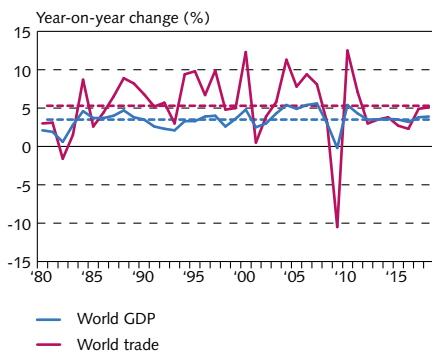
1. Including Lithuania, Malta, and Cyprus, which belong to the euro area but not the OECD. 38 countries in all. 2. The 2018 value is based on IMF's forecast (*World Economic Outlook*, April 2018).  
Sources: International Monetary Fund, OECD.

Chart II-4  
Leading indicators of GDP growth<sup>1</sup>  
January 2014 - April 2018



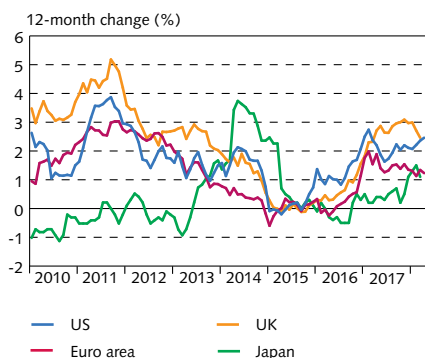
1. Markit composite purchasing managers' index (PMI). The index is published monthly and is seasonally adjusted. An index value above 50 indicates month-on-month growth, and a value below 50 indicates a contraction.  
Source: Thomson Reuters.

Chart II-5  
World GDP and trade 1980-2018<sup>1</sup>



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

Chart II-6  
Inflation in selected industrialised countries  
January 2010 - April 2018



Source: Thomson Reuters.

2018. Although conditions in the labour market have improved and consumers are more upbeat, economic indicators imply that private consumption was weak at the beginning of the year, partly because of the severe weather that is considered a factor in the abrupt decline in the Markit composite purchasing managers' index (PMI) in March (Chart II-4). The appreciation of the euro is expected to weigh on export growth, although the recent uptick in global GDP growth may partly offset it. Leading indicators for the UK have been in line with market agents' expectations, but inclement weather is expected to have a temporary effect on Q1 data, as was the case in the euro area. The manufacturing PMI for the US measured higher in Q1, on average, than it has since Q3/2014, and measures of consumer and corporate sentiment have risen to new highs in the wake of the recent tax cuts affecting households and businesses.

### Output growth outlook for advanced economies improves ...

The new forecast from the International Monetary Fund (IMF) is more upbeat about the short-term economic outlook, but the Fund is of the view that the long-term outlook is highly uncertain, and it still considers the risk profile to be tilted to the downside in the next few years. Global output growth is expected to gain momentum, measuring 3.9% this year and next year. For both years, the GDP growth outlook has improved by 0.2 percentage points since the IMF's October forecast, with the improvement concentrated more in advanced economies than elsewhere. The tax cuts in the US early this year are an important factor, as they explain about half of the revision of the Fund's GDP growth projections since its October forecast. The tax cuts are expected to stimulate corporate investment in the US in the near future, but they will also increase the budget deficit and exacerbate the country's sizeable current account deficit.

### ... and stronger growth in world trade is expected

Concurrent with the rise in investment, world trade has picked up again. It started to gain strength as 2017 progressed, measuring 4.9% for the year as a whole (Chart II-5). The IMF expects it to grow by 5.1% this year, well above the Fund's October forecast, owing mainly to increased investment in the US. If the forecast materialises, growth in world trade will outpace global output growth for the second year in a row, although there are uncertainties afoot, owing to growing support for protectionist policies in many economies and the danger of a trade war between the US and China.

### Outlook for GDP growth and demand in main trading partner countries has improved since February ...

In line with an improving global GDP growth and trade outlook, growth in output and imports among Iceland's main trading partners is now projected to be stronger than was assumed in the Bank's February forecast. Trading partners' GDP growth is forecast at 2.4%, which is 0.2 percentage points more than was assumed in February. This is due primarily to the prospect of stronger growth in the US and the euro area.

There is generally a strong correlation between growth in world trade and investment. Indicators imply that trading partners' GDP growth will continue to be investment-driven; therefore, import growth among trading partners appears set to remain well above GDP growth during the forecast horizon. Trading partners' imports are projected to increase by 4.4% this year, as opposed to 4.1% according to the February forecast. The improved outlook primarily reflects stronger demand growth in the US.

### ... and inflation in trading partner countries is slightly above expectations

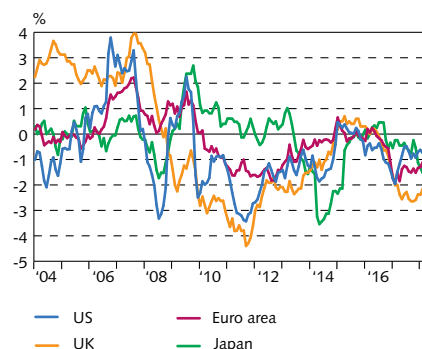
In Q1, inflation in Iceland's main trading partner countries measured 1.7% – for the fourth quarter in a row. Developments differed from one country to another, however: inflation was lower than anticipated in the euro area, Denmark, and Brazil, while it rose more than expected in Japan, Canada, and the UK, and particularly in the US (Chart II-6). In the US, underlying inflation measured 2.1% in April, for the second month in a row, the highest since February 2017. Spare capacity in the US economy is expected to be absorbed later this year, and underlying inflation to rise still further. On the other hand, underlying inflation is still low in most advanced economies apart from the UK. Headline inflation among Iceland's trading partners is forecast to average 1.8% this year, 0.1 percentage points more than was forecast in February.

### Central bank interest rate differential widens among advanced economics

At the beginning of May, the Bank of England kept its key interest rate unchanged at 0.50%. The decision was in line with market expectations, as was the US Federal Reserve's 0.25 percentage point rate hike in late March. Real rates in advanced economies are widely very low, but spare capacity in those economies is expected to be fully absorbed later this year (Chart II-7). The US Federal Reserve has continued to normalise its bond holdings, which is considered one of the main reasons term premia on long-term bonds have risen. Long-term interest rates in the US have therefore risen, and the interest rate differential vis-à-vis other advanced economies has widened (Chart II-8). In spite of this, the US dollar had by mid-April depreciated by 15% versus the euro and the pound sterling in the past twelve months.

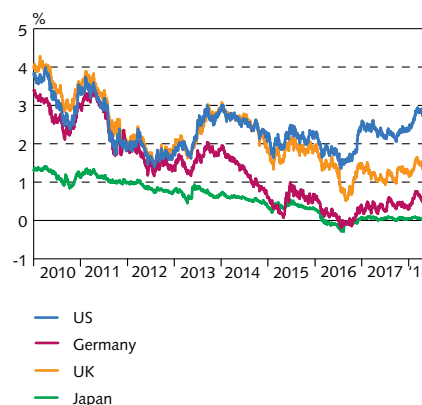
The outlook is for the interest rate differential between major advanced economies to widen still further. Forward interest rates suggest that investors expect three more rate hikes in the US this year, bringing the policy rate up to 2.5% by the end of 2019 (Chart II-9). Market agents expect interest rates to rise more slowly in the UK and project that the Bank of England's key rate will be 1% by end-2019. Among other advanced economies, Norges Bank is expected to begin raising rates in the near future, and further rate hikes are anticipated in Canada. On the other hand, it is expected that the monetary stance will remain accommodative in the euro area, as well as in Sweden, Switzerland, and Japan, where it appears that the key interest rate will remain negative for a while to come.

Chart II-7  
Real central bank interest rates  
January 2004 - April 2018



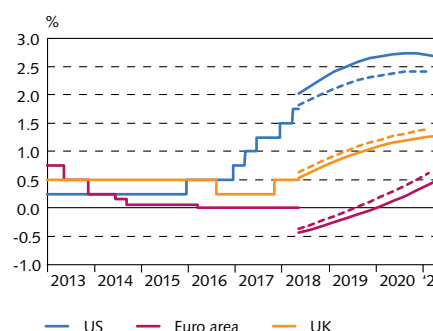
Source: Thomson Reuters.

Chart II-8  
10-year government bond yields in selected industrialised countries  
1 January 2010 - 11 May 2018



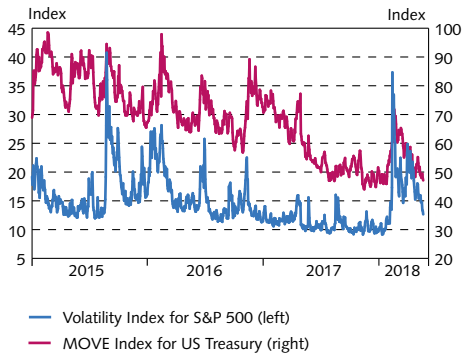
Source: Thomson Reuters.

Chart II-9  
Policy rates in selected industrialised economies<sup>1</sup>  
January 2013 - June 2021



1. Daily data 1 January 2013 through 11 May 2018, and quarterly data Q2/2018 through Q2/2021. 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 key rate. Forward rates are based on six-month overnight index swaps (OIS) and the Euro Overnight Index Average (EONIA) for the euro area. Solid lines show forward curves from 11 May 2018 onwards and the broken lines from 2 February 2018 onwards.  
Sources: Bloomberg, Thomson Reuters.

Chart II-10  
Global market volatility<sup>1</sup>  
1 January 2015 - 11 May 2018



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

**Asset prices rising again after market turbulence early in the year**  
Global financial market volatility has subsided again after spiking in Q1/2018, concurrent with the fall in asset prices following the US president's announcement of his intention to impose tariffs on imported aluminium and steel products from China (Chart II-10). The increased volatility in asset prices was also thought to be connected to market agents' expectations that inflation would rise faster in the US in the wake of the recent tax cuts, which would call for more rapid monetary tightening than previously expected. The improved global GDP growth outlook has also prompted investors to consider how normalisation of major central banks' monetary policy will influence financial markets. Yields are negative on a large amount of outstanding government bonds, and many sovereigns and private sector borrowers are heavily indebted. As a result, asset prices are expected to become more volatile as central banks reduce stimulative measures and abandon unusually accommodative monetary policy.

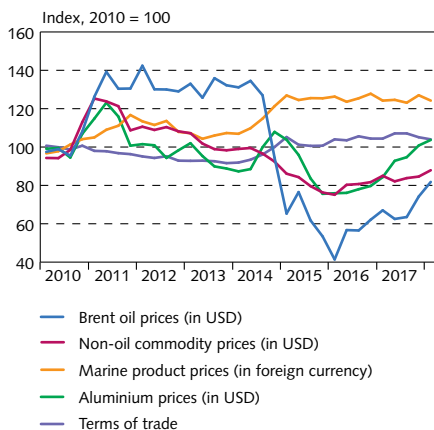
## Export prices and terms of trade

### Foreign currency prices of exports have risen more than previously forecast in 2018

Foreign currency prices of marine products declined by 0.8% in 2017, after having risen marginally in 2016 (Chart II-11). Key market agents are of the opinion that marine product prices are on the rise. They consider the outlook good and expect reduced fishing quotas in the Barents Sea to support demersal fish prices this year. Fish meal and fish oil prices are also expected to rise more than was forecast in February. Marine product prices are expected to rise by 3.5% this year and 2.7% next year, an improvement from the February forecast.

Global aluminium prices have risen steeply since end-2015, when they were just over 1,400 US dollars per tonne (Chart II-11). After climbing uninterrupted for nine quarters, the average price was 2,150 US dollars per tonne in Q1/2018, a year-on-year rise of 16%. Aluminium prices have been unusually volatile in recent weeks, in connection with the US' announcement of tariffs on steel and aluminium imports from China and with US-imposed sanctions affecting Russian company UC Rusal, the world's second-largest aluminium manufacturer. Prices rose above 2,600 US dollars per tonne in April, the highest since mid-2011. Futures prices and analysts' assessments indicate that the spike in April will reverse to some extent. Prices are expected to be close to 2,250 dollars per tonne at the end of this year. If this materialises, the average 2018 price will be 13% above the 2017 average and the increase will be 4 percentage points larger than was forecast in February. Aluminium prices are expected to rise slightly more over the rest of the forecast horizon, in response to steadily increasing demand.

Chart II-11  
Commodity prices and terms of trade<sup>1</sup>  
Q1/2010 - Q1/2018



1. Foreign currency prices of marine products are calculated by dividing marine product prices in Icelandic krónur by the trade-weighted exchange 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 Q1/2018 are based on the MB 2018/2 baseline forecast.  
Sources: IMF, Statistics Iceland, Central Bank of Iceland.

### Fuel prices up strongly year-to-date, but the long-term outlook is unchanged

Oil prices have risen steadily since mid-2017, with the twelve-month increase measuring 22% in Q1/2018. Prices have fluctuated in the

recent past, owing partly to increased geopolitical tension, particularly in the Middle East. In mid-May, the price of oil has risen to 77 dollars per barrel, the highest since year-end 2014. The year-on-year rise in oil prices is projected to average 20% this year, a full 7 percentage points more than was forecast in February. Futures prices and foreign analysts' forecasts suggest that crude oil prices will slide again beginning in mid-2018, owing mainly to increased production from non-OPEC countries, which is expected to cause supply to outstrip demand. The increase is the greatest in the US, where a 15% rise in production is expected this year, making the US the largest crude oil producer in the world, with about 13% of global production (Chart II-12). As in the Bank's February forecast, oil prices are projected at just over 60 US dollars per barrel towards the end of the forecast horizon, which corresponds to a decline of 3% next year and another 2% in 2020.

### Non-oil commodity prices have risen by nearly a fifth from the January 2016 trough

Non-oil commodities prices have risen since the beginning of 2016, although they are still much lower than before the downturn started in mid-2014 (Chart II-11). Metals prices rose last year, whereas agricultural product prices declined slightly. Agricultural prices began to rise in Q1/2018, however, with a larger-than-expected increase in food prices, particularly grain and meal. Because of this and the surge in metals prices, which was much larger than was forecast in February, non-oil commodities prices have risen more year-to-date than the Bank had previously projected. Commodities prices are expected to remain relatively stable for the rest of the year at around 5.6% above 2017 prices, which is 4 percentage points above the Bank's February forecast.

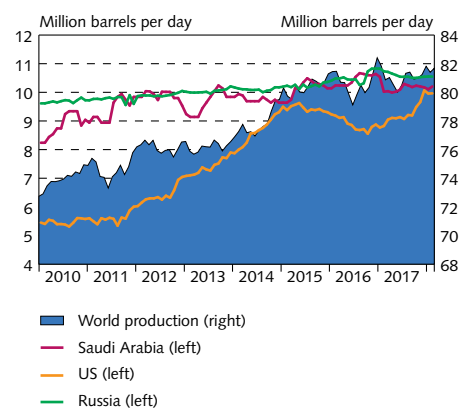
### Terms of trade to deteriorate slightly in 2018, after a strong improvement in recent years

Terms of trade for goods and services have improved virtually unimpeded since Q4/2013. According to preliminary figures from Statistics Iceland, they improved by 0.7% year-on-year in Q4/2017 (Chart II-11) and by 1.7% over the year as a whole. At that point, they had improved by 15% since end-2013. However, in spite of this marked improvement, they were still nearly 10% below the pre-crisis peak. There are signs that terms of trade have deteriorated slightly in 2018 to date, as the price of fuel and other imported commodities rose more than the price of exports in Q1. They are expected to deteriorate by 0.4% in 2018 as a whole but then improve again in 2019 and 2020, alongside a rise in marine export prices and a decline in imported oil prices.

### Rise in real exchange rate eases

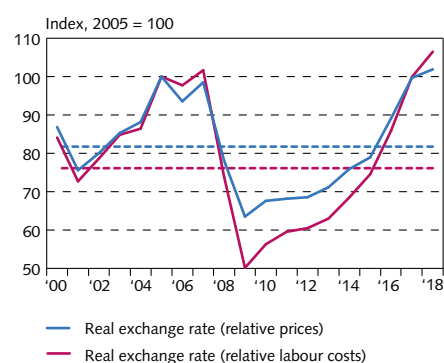
The real exchange rate in terms of relative consumer prices has been relatively stable in the recent term, after a steep increase in the past few years. It rose between Q4/2017 and Q1/2018 and, by April, was up 1.8% year-on-year and just under 24% above the twenty-five-year

Chart II-12  
Crude oil production  
January 2010 - February 2018



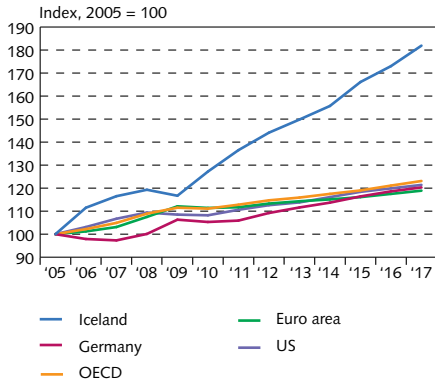
Source: Thomson Reuters.

Chart II-13  
Real exchange rate 2000-2018<sup>1</sup>



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

Chart II-14  
Unit labour costs in developed countries  
2005-2017



Sources: Thomson Reuters, Central Bank of Iceland.

average (Chart II-13). The rise in the real exchange rate mainly reflects a rise in the equilibrium real exchange rate; i.e., the real exchange rate consistent with internal and external balance (see, for example, Box 3 in *Monetary Bulletin* 2016/2).

### Wage costs have risen much more in Iceland than in other advanced economies, eroding the competitive position

If the forecast in this *Monetary Bulletin* materialises, the real exchange rate in terms of relative consumer prices will be 2.2% higher this year than in 2017. The rise in the real exchange rate in terms of relative unit labour costs is greater, however, at 6½%. Icelandic firms' wage costs have risen well above the OECD average (Chart II-14), and the competitive position of companies in Iceland's tradable sector has therefore deteriorated in the past few years.