

## II The global economy and terms of trade

The GDP growth outlook for Iceland's main trading partners has deteriorated since the publication of the Bank's February forecast. It is also more ambiguous. In 2015, global GDP growth fell to a six-year low, and the outlook is for growth in world trade to be below global output for the second year in a row. Global inflation is still low and is expected to rise more slowly than previously assumed. Global financial markets have suffered repeated bouts of turmoil, most recently at the beginning of the year, but have then abated, in part due to broad-based measures taken by central banks. Iceland's terms of trade have improved substantially since mid-2014 and are expected to improve further this year, albeit less than was forecast in February. The real exchange rate has also risen markedly, particularly in terms of relative unit labour costs.

### Global economy

#### Trading partners' economic recovery slowed somewhat in H2/2015 ...

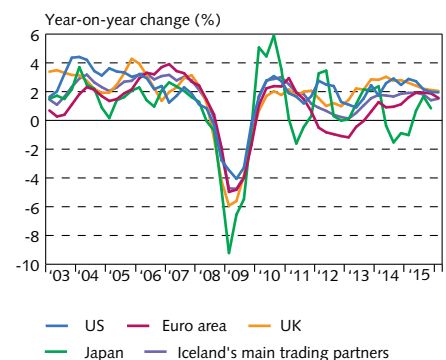
GDP growth among Iceland's trading partners measured 1.8% in 2015, about the same as in the prior year and in line with the forecast in the February *Monetary Bulletin*. Growth slowed in most developed countries in the latter half of the year, and trading partners' year-on-year growth rate was only 1.4% in Q4/2015 (Chart II-1). For the two years prior to that, trading partners' GDP growth had gradually gained ground and was approaching its thirty-year average of 2.1%. In the US, year-2015 GDP growth was unchanged from 2014, at 2.4%, and in the euro area growth rose between years, to 1.6%. Private consumption has picked up on both sides of the Atlantic, and the recovery of the labour market in the US has remained rather robust. The effects of the appreciation of the US dollar and the drop in oil prices can be seen in a declining contribution from both net trade and investment in the energy sector. In Japan, GDP growth measured 0.5% in 2015 in spite of a contraction in domestic demand, after having been flat in 2014.

None of the Nordic countries experienced a contraction last year, for the first time since 2011. Sweden recorded strong GDP growth, the long contraction in Finland appears to be at an end, and growth in Denmark measured just over 1% for the second year in a row. However, the plunge in oil prices has had a profound effect in Norway, where GDP growth has slowed markedly.

#### ... and global GDP growth is at its weakest since the financial crisis

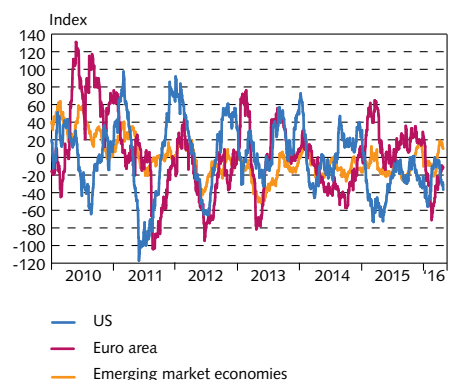
Global GDP growth measured 3.1% in 2015, the slowest rate of growth since 2009. The downturn reflects the continued weakness of the economic recovery in developed countries and declining GDP growth in emerging market economies, where growth averaged only 4%, over 1½ percentage points below the average for the preceding five years. GDP growth in emerging market economies has been declining since 2010, when it measured 7.4%. The lion's share of global

Chart II-1  
Global GDP growth  
Q1/2003 - Q1/2016



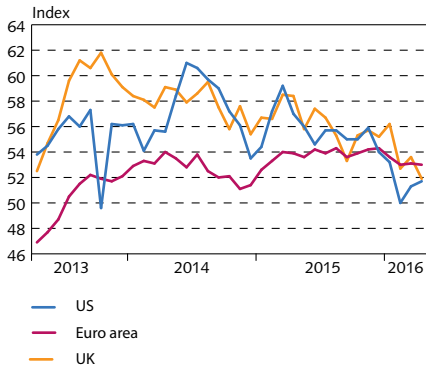
Sources: Macrobond, Central Bank of Iceland.

Chart II-2  
Economic surprise index<sup>1</sup>  
Daily data 4 January 2010 - 6 May 2016



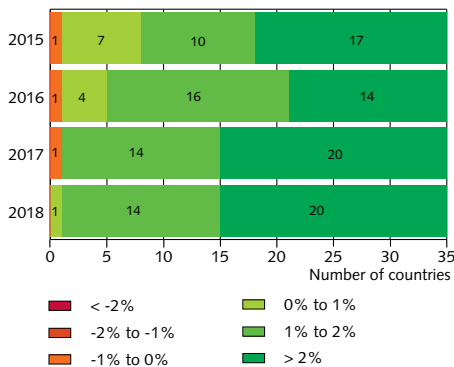
1. When the index is below 0, the indicators are worse than expected; when the index is above 0, the indicators are better than expected. The index does not imply that the indicators are positive or negative.  
Source: Macrobond.

Chart II-3  
Leading indicators of GDP growth<sup>1</sup>  
April 2013 - April 2016



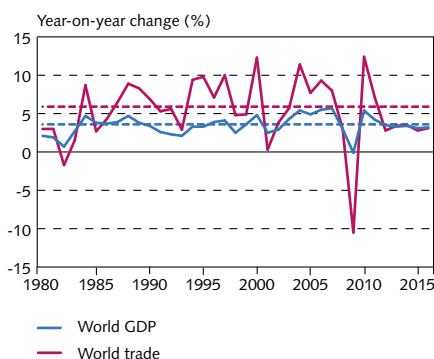
1. Markit composite purchasing managers' index (PMI). The index is published monthly and is seasonally adjusted. An index value above 50 indicates month-on-month growth, and a value below 50 indicates a contraction.  
Source: Bloomberg.

Chart II-4  
Distribution of GDP growth among  
35 industrialised countries



Source: International Monetary Fund.

Chart II-5  
World GDP and trade 1980-2016<sup>1</sup>



1. Broken lines show 30-year average (1980-2015).  
Sources: International Monetary Fund, Central Bank of Iceland.

output growth still comes from emerging market economies, however. Two major commodity importers, China and India, recorded about 7% growth or more, whereas there was a contraction of nearly 4% in Russia and Brazil, in part because of the drop in oil and commodity prices.

### Weaker-than-expected economic indicators fuelled concerns about global GDP growth early in the year

In late 2015 and so far in 2016, economic indicators for the US turned out weaker than was expected by markets (Chart II-2). Indicators for the eurozone turned out similar but with some lag. Concerns about the GDP growth outlook therefore increased, playing a part in the global financial market unrest at the beginning of the year, as is discussed below. On the whole, indicators imply that a weak economic recovery will continue (Chart II-3).

### Outlook for reduced global GDP growth during the forecast horizon ...

According to the International Monetary Fund's (IMF) most recent GDP growth forecast, global growth is projected at 3.2% this year, nearly ½ a percentage point below the thirty-year average. The worsening outlook has affected the Fund's forecasts since the middle of 2015. About a year ago, the IMF expected GDP growth in 2015 and 2016 to be a total of a percentage point more than is forecast now, and twice as many countries were expected to record year-2016 GDP growth over 2% as are currently expected to do so (Chart II-4). The main difference here is reduced growth in developed countries, many of which are still tackling legacy issues from the financial crisis, weak productivity growth, and slow growth in the working-age population. In the wake of the recent plunge in oil prices, demand has contracted more in oil-exporting countries and increased less in importing countries than historical experience has given cause to expect. The drop in oil prices therefore appears not to have provided the anticipated boost to global GDP growth.

The IMF projects global GDP growth at 3.5% next year, primarily due to increased growth in emerging market economies. However, this is predicated on a gradual improvement in the countries that have experienced sharp contractions, particularly to include Brazil and Russia, and on a relatively smooth adjustment to changed GDP growth drivers in China. This is highly uncertain, however, and the Fund now considers it more likely that GDP growth will be weaker in coming years than it did in January.

### ... and for growth in world trade to be weaker than growth in global output for the second year in a row

The IMF forecasts weaker growth in world trade in 2016 than in global output, as was the case in 2015. Since 1980, there have only been two instances where this has happened in two consecutive years, and both of them were in connection with deep economic contractions in 1982 and 2009 (Chart II-5).<sup>1</sup> Whether weak growth in world trade reflects a weak global economy or whether the period of ever-increasing

1. See Box 1.1 in International Monetary Fund (2009). *World Economic Outlook*, April 2009.

globalisation of trade has come to an end is subject to debate.<sup>2</sup> In the recent term, growth in world trade has been particularly weak in emerging market economies, which have rapidly reduced trade in investment goods as investment activity has declined.

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

In Iceland's main trading partner countries, the outlook is for weaker growth in output and demand than was forecast in February, in line with the worsening outlook for global GDP growth and world trade. Trading partners' GDP growth is projected at 1.6% this year, a reduction of 0.3 percentage points since February, but is expected to measure 2% per year in the next two years. Trading partners' import growth will also be weaker this year than was forecast in February, averaging 3%. The reduction is due in part to base effects, however, as trading partners' demand turned out nearly ½ a percentage point stronger in 2015 than was assumed in the last *Monetary Bulletin*, owing mainly to stronger demand in the UK, Sweden, and the eurozone.

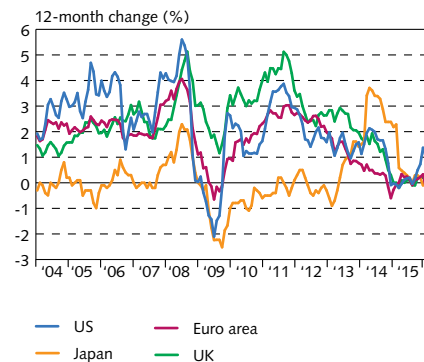
### ... and inflation looks set to rise more slowly than previously assumed

Global inflation remains low (Chart II-6). The drop in oil and commodity prices is a major factor, but low underlying inflation is widespread, as there is still a sizeable output slack in many developed countries. In the euro area, deflation returned in April. Inflation rose to 0.5% in the UK in March, the highest inflation rate in about fifteen months, following a period of deflation last autumn. Inflation has tapered off in the US, however, to 0.9% in March. Trading partners' inflation is projected to measure 0.9% this year, which is below the February forecast but is still higher than inflation measured a year ago.

### Unrest in global financial markets and doubts about central banks' scope for further action

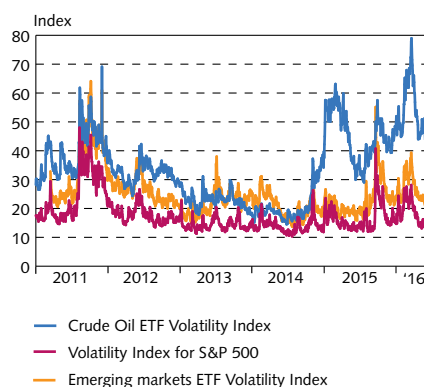
Under conditions of declining GDP growth in emerging market economies, a continued weak recovery in developed countries, the end of a long upswing in commodity markets, a stronger US dollar, and protracted strain on monetary policy in major economies, global financial markets can be sensitive to shocks. Because of market agents' limited confidence in governments' ability to control the situation, unrest can easily develop when, for example, indicators suggest that the outlook for GDP growth and inflation is deteriorating. When global market volatility increased a year ago, many central banks responded to disinflation and falling inflation expectations with broad-based measures to ease monetary policy. Turbulence resurfaced in late summer and again at the beginning of 2016, owing in both instances to developments in China. In all of these cases, the situation calmed down again, partly in response to action taken by governments and central banks (Charts II-7 and II-8).

Chart II-6  
Inflation in selected industrialised countries  
January 2004 - April 2016



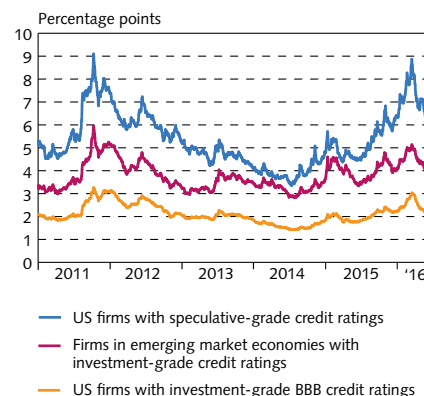
Source: Macrobond.

Chart II-7  
Global market volatility<sup>1</sup>  
Daily data 3 January 2011 - 6 May 2016



1. The VIX volatility indices indicate the implied volatility of financial products.  
Source: Federal Reserve Bank of St. Louis Federal Reserve Economic Data (FRED) database.

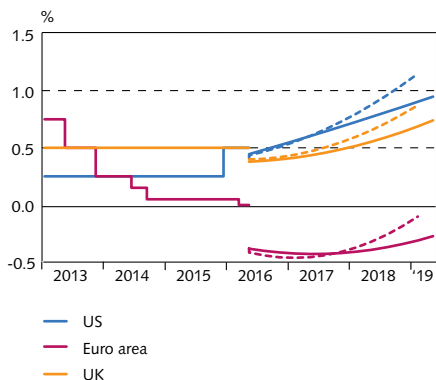
Chart II-8  
Interest premia on corporate US dollar bonds  
in global markets<sup>1</sup>



1. According to Bank of America Merrill Lynch bond indices.  
Source: Federal Reserve Bank of St. Louis Federal Reserve Economic Data (FRED) database.

2. See, for example, B. Hoekman (2015). *The Global Trade Slowdown: A New Normal?* Washington: Center for Economic and Policy Research Press; and Box 1.1 in International Monetary Fund (2016). *World Economic Outlook*, April 2016.

Chart II-9  
Policy rates in selected industrialised  
economies<sup>1</sup>  
January 2013 - May 2019



1. Daily data 1 January 2013 through 6 May 2016, and quarterly data Q2/2016 through Q2/2019. 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 6 May 2016 onwards and the broken lines from 5 February 2016 onwards.

Sources: Bloomberg, Macrobond.

During the unrest at the beginning of the year, market agents' attention was drawn primarily to the status of emerging market economies following the drop in commodity prices, declining capital flows to these economies, the appreciation of the US dollar, and their widespread dollar-denominated corporate debt. A little later, however, market agents became increasingly concerned about the position of financial institutions, particularly in Europe and Japan, owing to the effects of negative central bank interest rates on these institutions' profits. European banks were already dealing with widespread default and the need to strengthen their capital and liquidity positions in order to satisfy tighter requirements. A number of market agents and analysts were concerned that further central bank measures would undermine financial institutions' operating position to an even greater degree. The aim of the measures taken by the European Central Bank (ECB) in early March – to ease the monetary stance still further – appears to have been achieved, however. In addition, the ECB seems to have strengthened the financial position of the banking system by granting banks access to long-term funding on extremely favourable terms. Forward interest rates indicate that investors expect interest rates of major central banks to be held low for a longer period than was anticipated in February (Chart II-9).

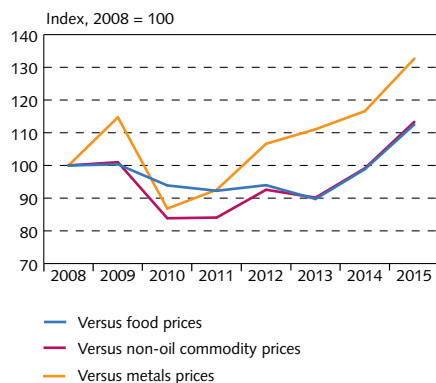
## Export prices and terms of trade

### Marine product prices have risen sharply in the past two years, while aluminium prices have fallen

Marine product prices have risen by over 19% in the past two years, led by demersal prices. The rise in prices slowed down in the first two months of 2016 but still measures about 3.5% year-on-year. Marine export prices have risen significantly relative to other commodity prices, and there has been steady demand for Icelandic demersal products (Chart II-10). Some adjustment is expected, however, and marine product prices are projected to fall by a total of 4% over the next two years (Chart II-11).

Global aluminium prices have fallen steadily from mid-2014, however, and the average price in Q1/2016 was down about 16% year-on-year. The outlook is for aluminium prices to fall by almost 13% this year, after adjusting for the expected price premium from foreign buyers to the Icelandic aluminium companies. In the following two years, however, they are expected to recover somewhat, rising by a total of just over 4% (Chart II-11).

Chart II-10  
Ratio of marine export prices to global  
commodity prices 2008-2015<sup>1</sup>



1. All prices in US dollars.

Sources: International Monetary Fund, Macrobond, OECD, Statistics Iceland.

### Petrol prices fell sharply in 2015 but are expected to rise in the coming year

Oil prices fell 47% year-on-year in 2015, concurrent with a steep increase in overall supply, Iran's entry into the oil market, and declining global GDP growth. They have risen somewhat in the recent past, however, from about 26 US dollars per barrel in mid-January to about 45 dollars just before the publication of this *Monetary Bulletin*. They are still some 60% lower than they were just before they began to tumble in late 2014. Oil prices are expected to be down about a fourth year-on-year in 2016, a somewhat smaller decline than was assumed

in February. They are expected to rise by another fourth year-on-year in 2017 and then by 11% in 2018, which is broadly in line with the forecast in the February *Monetary Bulletin* (Chart II-11).

### Non-oil commodity prices have fallen 30% since 2011

Non-oil commodity prices fell by 17.5% in 2015 and were down by 30% from 2011, owing to increased supply and a downturn in demand. Food prices rose at the beginning of the year, however, due to the El Niño effect. Metals prices rose year-on-year in February, for the first time in five months, but then declined again in March. Commodity prices are expected to fall still further this year but remain relatively stable from 2017 onwards (Chart II-11).

### Terms of trade have improved markedly

Terms of trade for goods and services have improved year-on-year without interruption since Q2/2014, and the terms of trade effect has been much more positive in Iceland than in many other industrialised countries, particularly in comparison with other industrialised commodity exporters (see Box 1). According to preliminary figures from Statistics Iceland, terms of trade improved by 0.7% year-on-year in Q4 (Chart II-12). Over 2015 as a whole, the improvement measured 6.8%, in line with the February forecast. In spite of this improvement, terms of trade in 2015 were still nearly 14% below the pre-crisis peak. Indicators imply that they have improved even further year-to-date. They are expected to improve by nearly 2% in 2016 as a whole, followed by a slight deterioration in the following two years.

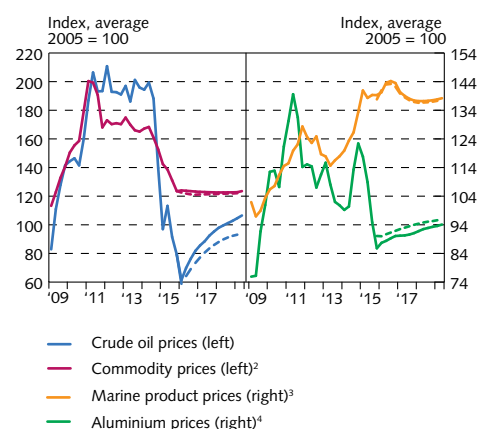
### Real exchange rate above its thirty-year average ...

In Q1/2016, the real exchange rate in terms of relative consumer prices rose to its highest since the beginning of 2008 (Chart II-12). The increase from the same quarter in 2015 measured 9.6%, as the nominal exchange rate rose by 8.5% and domestic inflation was just over a percentage point above the trading partner average. The real exchange rate thus measured is therefore nearly ½ above its thirty-year average. As is discussed in Box 3, it is likely that the equilibrium real exchange rate has risen somewhat in the recent term and that this appreciation reflects to some extent the adjustment of the real exchange rate to a higher equilibrium level.

### ... eroding Iceland's competitive position

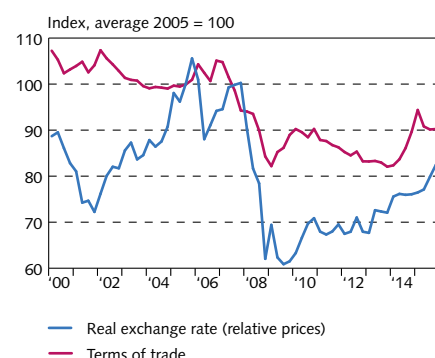
If the forecast in this *Monetary Bulletin* materialises, the real exchange rate in terms of relative consumer prices will be nearly 8% higher this year than in 2015. In terms of relative unit labour costs, it is expected to rise even more – by over 16% year-on-year – owing to the large pay increases provided for in recent wage settlements (see Chapter V). Icelandic firms' wage costs have risen considerably more than those in competitor countries in recent years (Chart II-13), and Iceland's competitive position has therefore deteriorated. The outlook for wage developments in coming years suggests an even weaker competitive position during the forecast horizon. Other things being equal, this will have a negative effect on Iceland's external trade (see Box 2 in *Monetary Bulletin* 2015/4).

Chart II-11  
Prices of marine products, aluminium, oil, and commodities<sup>1</sup>  
Q1/2009 - Q2/2019



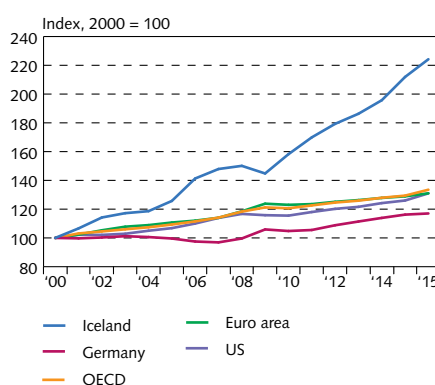
1. Central Bank baseline forecast Q2/2016-Q2/2019. Broken lines show forecast from MB 2016/1. 2. Non-oil commodity prices in USD. 3. Foreign currency prices of marine products are calculated by dividing marine product prices in Icelandic krónur by the export-weighted trade basket. 4. Foreign currency prices of aluminium products are calculated by dividing aluminium prices in Icelandic krónur by the exchange rate of the USD.  
Sources: Bloomberg, Statistics Iceland, Central Bank of Iceland.

Chart II-12  
Real exchange rate and terms of trade<sup>1</sup>  
Q1/2000 - Q1/2016



1. Terms of trade and real exchange rate in Q1/2016 according to Central Bank baseline forecast.  
Sources: Statistics Iceland, Central Bank of Iceland.

Chart II-13  
Unit labour costs in developed countries  
2000-2015



Sources: Macrobond, Central Bank of Iceland.