Globální ekonomický výhled - duben 2017

Česká národní banka; Sekce měnová; Odbor vnějších ekonomických vztahů
2017

GLOBAL ECONOMIC OUTLOOK - APRIL

2017

Monetary Department
External Economic Relations Division

CZECH NATIONAL BANK

Cut-off date for data
14 April 2017

CF survey date
10 April 2017

GEO publication date
21 April 2017

Notes to charts
ECB and Fed: midpoint of the range of forecasts.
The arrows in the GDP and inflation outlooks indicate the direction of revisions compared to the last GEO. If no arrow is shown, no new forecast is available. Asterisks indicate first published forecasts for given year. Historical data are taken from CF, with exception of MT and LU, for which they come from EIU.
Leading indicators are taken from Bloomberg and Datastream.
Forecasts for EURIBOR and LIBOR rates are based on implied rates from interbank market yield curve (FRA rates are used from 4M to 15M and adjusted IRS rates for longer horizons). Forecasts for German and US government bond yields (10Y Bund and 10Y Treasury) are taken from CF.

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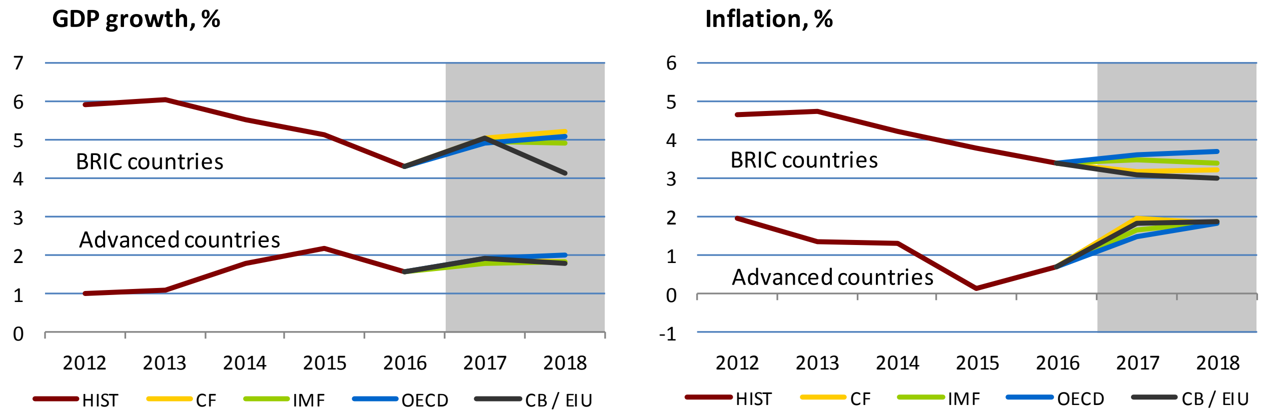
The April issue of Global Economic Outlook presents the regular monthly overview of recent and expected developments in selected territories, focusing on key economic variables: inflation, GDP growth, leading indicators, interest rates, exchange rates and commodity prices. In this issue, we also discuss the risks to global economic growth in the medium term. Global growth is currently being threatened above all by non-economic factors (environmental risks, large-scale migration, terrorism). Economic risks may continue to hinder world growth, but they no longer dominate the global risks in the way they did immediately after the global crisis broke out.

Compared to the previous month, the outlooks for annual GDP growth in our selected advanced countries recorded a slight increase for this year in the euro area and Germany, but also in Japan. The outlooks for the other countries were unchanged. The USA is thus still expected to record economic growth of just under 2.5% at the end of next year. This is still visibly higher than the rate of growth expected for the euro area and Germany (its strongest economy) in this period, and also visibly higher than the estimates for the UK. A comparison of the countries we monitor with Japan reveals an even larger difference, as the Japanese economy is expected to show growth of only about 1% over the same horizon. The expected inflation figures for the individual countries for both this year and the next remain close to the economic growth figures given above and the same as the March outlooks. The exception is the euro area, which is expected to show moderately lower inflation this year and has thus moved away from the notional 2% ideal. Inflation in the USA and the UK is expected to hover about 0.5 pp above the 2% level. In Japan, inflation will probably struggle to reach 1%.

The annual GDP growth outlooks for the BRIC group saw no visible revisions in April. As for the fast-growing economies of India and China, a gradual slowdown in Chinese economic growth continues to be expected, whereas the Indian economy is expected to maintain impressive growth of about 7.5%. This is satisfactory news not only for these two large economies, but also for the global economy as a whole. Both the countries hit by slumpflation (Russia and Brazil) recorded a slight decrease in expected GDP growth and consumer price inflation this year. In the case of Brazil, an increase was recorded for the economic growth outlooks for 2018, when the Brazilian economy is expected to accelerate markedly.

The outlooks for euro area interest rates remain very low. They dropped slightly compared to the previous month in response to inflation in the euro area and communications by ECB representatives. By contrast, US rates can be expected to increase two more times this year – by the standard amount of 0.25 pp each time. According to CF, the US dollar will depreciate moderately against the euro but appreciate slightly against the other currencies at the one-year horizon. The price of Brent crude oil is expected to average around USD 56 a barrel this year and the next, i.e. a higher level than signalled by the February outlooks. Prices of non-energy commodities are expected to rise very slightly at the one-year horizon, due mainly to food commodities, with prices of wheat, rice and corn expected to go up.

GDP growth and inflation development and outlook in monitored countries



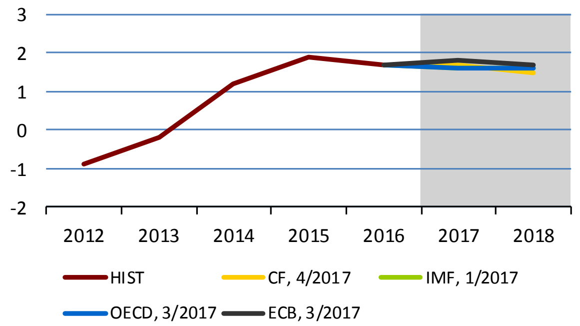
Note: The figures represent the weighted averages of historical series / outlooks in individual countries. The weights are based on nominal GDP measured in USD during 2011–2015 (source: EIU). Advanced countries: euro area, United States, United Kingdom, Japan. BRIC countries: China, India, Russia, Brazil.

II.1 Euro area

The euro area continues to recover at a solid pace. According to the third Eurostat estimate, quarterly GDP growth was 0.5% at the end of last year. It continued to be driven by domestic demand, with marked growth in fixed investment and private consumption being recorded. By contrast, net exports made a negative contribution to growth. Monthly data from the start of the year suggest continuing robust growth. However, the published data lag behind leading indicators, which are at several-year highs despite political uncertainty associated with the upcoming elections in France and Germany. The PMI in manufacturing, for example, is near a six-year high, reflecting faster expansion in Germany, Italy and France. By contrast, industrial production dropped unexpectedly in February (by 0.3% month on month), due mainly to a fall in energy sector output. Nonetheless, retail sales rose at a solid rate of 0.7% month on month in February, reflecting an improving situation in the labour market, where unemployment fell further to 9.5%. The relatively favourable data recorded at the start of the year are mirrored in the new CF GDP outlook, which was revised to 1.7% for 2017. Next year, the euro area economy is expected to grow by about 1.5%.

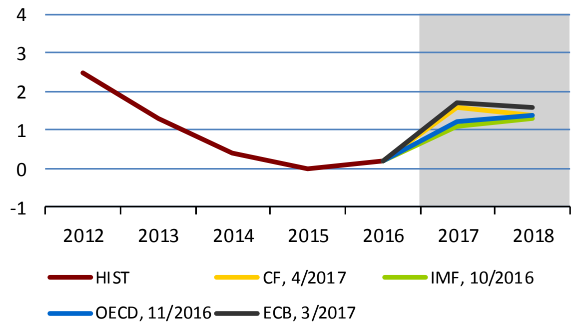
Headline HICP inflation fell by 0.5 pp to 1.5% in March, due mainly to lower growth in energy and food prices. However, core inflation dropped as well (from 0.9% to 0.7%). Lower inflation than at the start of the year is also expected over the outlook horizon, as the previous energy price growth is predicted to gradually fade away. The euro area recovery, coupled with a weaker euro, should conversely have an inflationary effect. The monitored outlooks thus expect inflation of just above 1.5% this year and a modest decline next year. The current drop in inflation and its outlook below the ECB target is thus likely to dampen views of a rapid end to the ECB's asset purchases, which will last at least until the year-end. ECB representatives also confirmed at the April press conference in Frankfurt that the deposit rate will not go up until the purchase programme ends. The market outlook for the EURIBOR rate responded by falling.

GDP growth, %



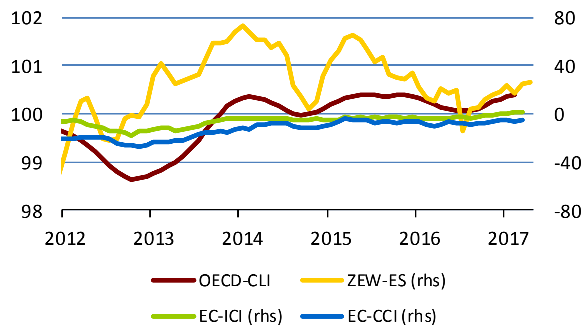
	CF	IMF	OECD	ECB
2017	1.7	1.6	1.6	1.8
2018	1.5	1.6	1.6	1.7

Inflation, %



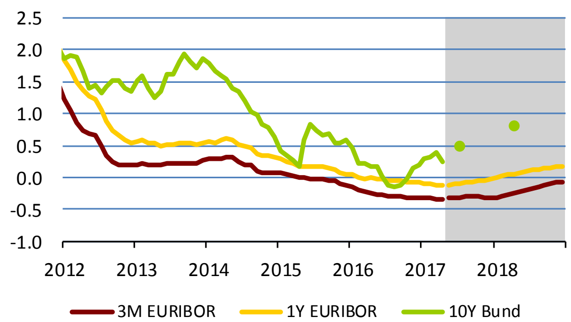
	CF	IMF	OECD	ECB
2017	1.6	1.1	1.2	1.7
2018	1.4	1.3	1.4	1.6

Leading indicators



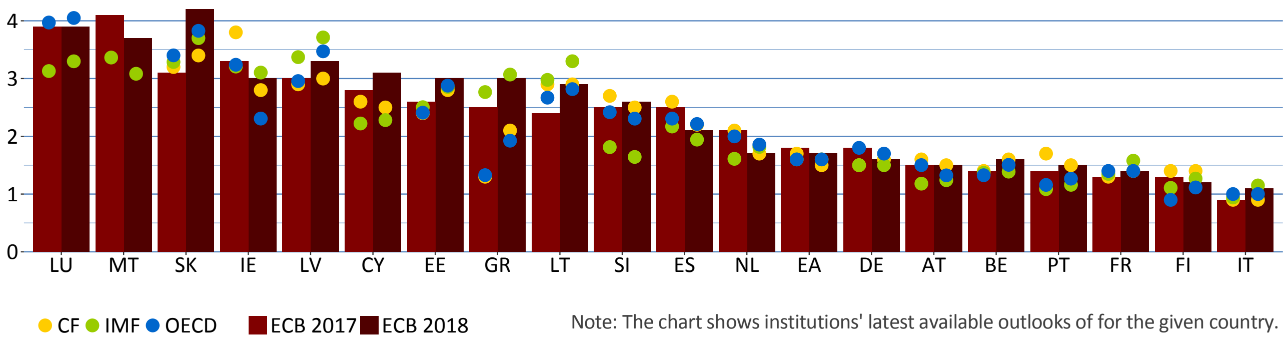
	OECD-CLI	ZEW-ES	EC-ICI	EC-CCI
2/17	100.4	17.1	1.3	-6.2
3/17		25.6	1.2	-5.0
4/17		26.3		

Interest Rates, %

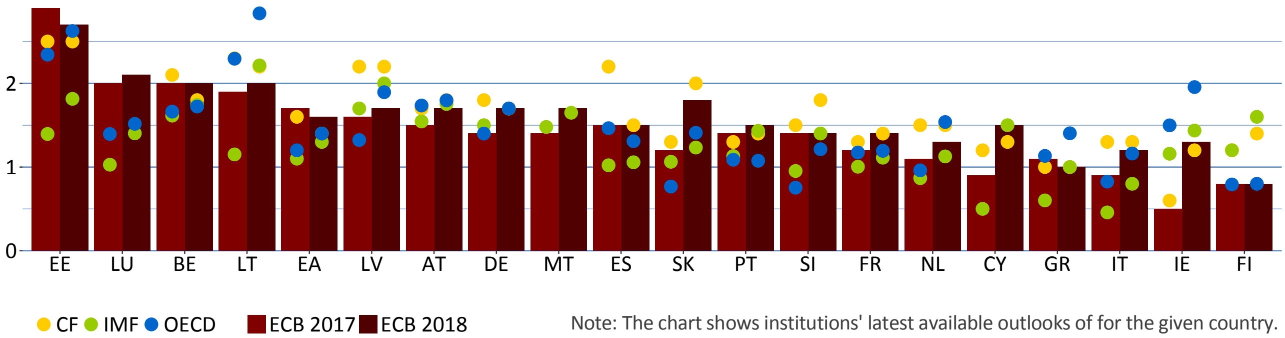


	03/17	04/17	07/17	04/18
3M EURIBOR	-0.33	-0.33	-0.31	-0.24
1Y EURIBOR	-0.11	-0.11	-0.09	0.06
10Y Bund	0.39	0.25	0.50	0.80

GDP growth outlooks in the euro area countries in 2017 and 2018, %



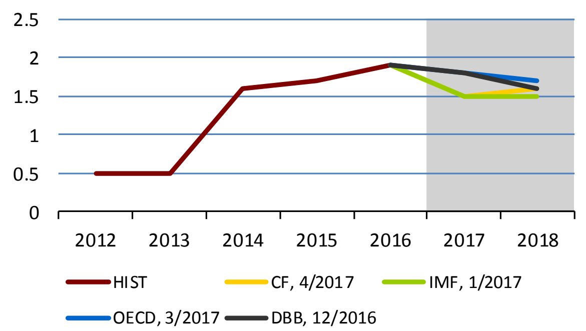
Inflation outlooks in the euro area countries in 2017 and 2018, %



II.2 Germany

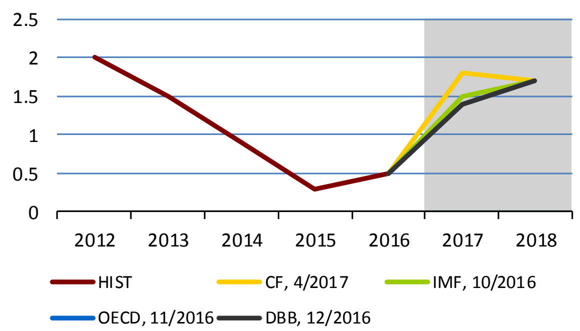
The CF GDP growth outlook for this year improved slightly (to 1.5%). The Bundesbank and the OECD are even more optimistic, expecting a similar growth rate as last year. GDP grew by 1.8% year on year in 2016 Q4, driven by private and government consumption. The German economy has been recording favourable developments so far this year. The PMI in manufacturing has been gradually rising, reaching 58.3 in March. In addition, the ZEW economic sentiment indicator improved markedly in April. This is reflected in good results for industrial production and retail sales for February. Moreover, a further drop in the unemployment rate and related growth in private consumption are expected. The inflation outlook was unchanged from the previous month. Inflation of below 2% is still expected for this year and the next. HICP inflation slowed to 1.5% in March. As in the previous month, prices were affected mainly by year-on-year growth in energy prices.

GDP growth, %



	CF	IMF	OECD	DBB
2017	1.5	1.5	1.8	1.8
2018	1.6	1.5	1.7	1.6

Inflation, %



	CF	IMF	OECD	DBB
2017	1.8	1.5	1.4	1.4
2018	1.7	1.7	1.7	1.7

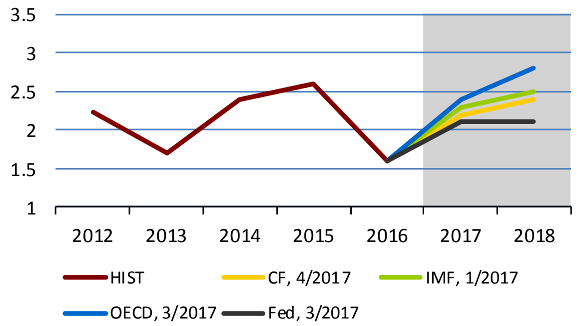
II.3 United States

GDP growth in 2016 Q4 was revised upwards slightly in the third estimate – to 2.1% (quarter on quarter, annualised). This was due mainly to considerably higher consumer spending. Record-high imports acted in the opposite direction. The latest data, particularly the retail sales figures, suggest that the US economy slowed further in 2017 Q1. According to the Atlanta Fed, it will grow at a rate of 1.2%.

The March labour market data were a lot worse than in previous months, but growth in wage costs remains robust. Non-farm payrolls rose by just 98,000 (versus an expected 180,000). However, the unemployment rate dropped to 4.5% and the average hourly wage rose by 2.7% year on year. According to the Conference Board survey, consumer confidence increased further in March (to the highest level since December 2000). Consumers' assessments of current labour market conditions and the short-term outlook improved further. Retail sales grew by 5.7% in March. Sales dropped compared to the previous month, mainly because of lower spending on cars and fuels. Industrial activity in the USA surged in March thanks to oil and gas production, and the leading PMI indicator remains in the expansion band (57.2). According to the survey results, demand and sales remain strong but companies are keeping a watchful eye on rising prices.

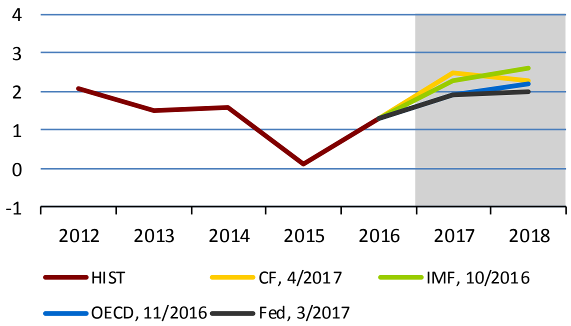
Headline annual inflation in the USA slowed in March to 2.4% for the first time since mid-2016. Core inflation fell to 2%. Even before the data were released, concerns had been sparked in financial markets by inflation expectations (both market and consumer), which fell back in March from the record levels attained in early 2017. The form of further tightening of monetary conditions in the USA after the March rate hike was then signalled by the minutes of the FOMC meeting, which discussed ending the reinvestment of proceeds from maturing bonds. The US central bank might start to reduce the size of its balance sheet as early as the end of this year. The April CF brought no change in outlook.

GDP growth, %



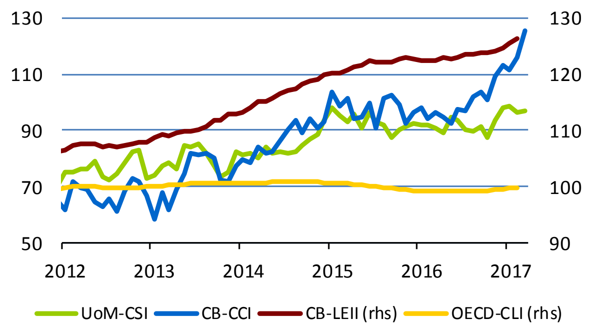
	CF	IMF	OECD	Fed
2017	2.2	2.3	2.4	2.1
2018	2.4	2.5	2.8	2.1

Inflation, %



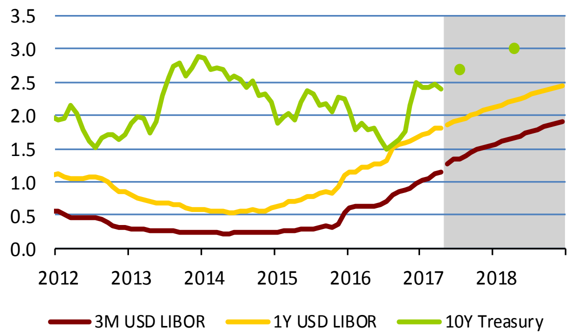
	CF	IMF	OECD	Fed
2017	2.5	2.3	1.9	1.9
2018	2.3	2.6	2.2	2.0

Leading indicators



	UoM-CSI	CB-CCI	CB-LEII	OECD-CLI
1/17	98.5	111.6	125.5	99.7
2/17	96.3	116.1	126.2	99.8
3/17	96.9	125.6		

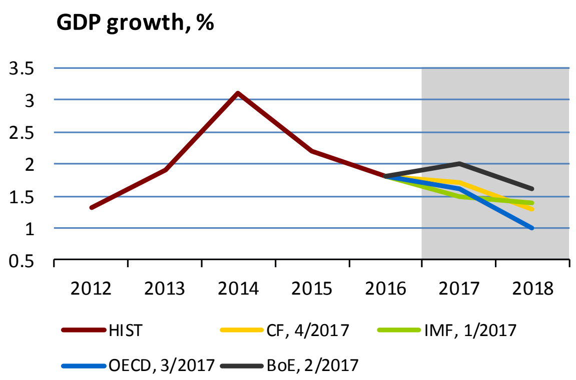
Interest Rates, %



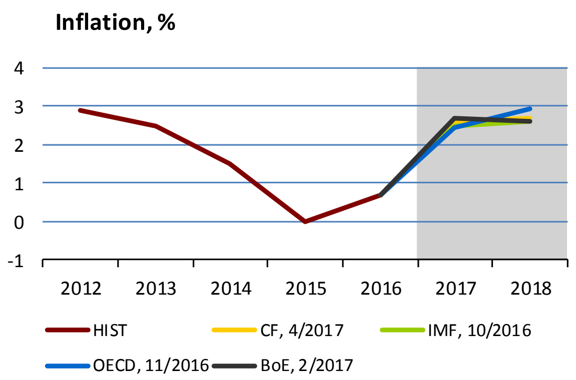
	03/17	04/17	07/17	04/18
USD LIBOR 3M	1.13	1.15	1.34	1.66
USD LIBOR 1R	1.81	1.81	1.93	2.22
Treasury 10R	2.48	2.39	2.70	3.00

II.4 United Kingdom

The annual growth rate of the UK economy in 2016 Q4 was revised downwards slightly to 1.9% in the final data. The quarterly growth (0.7%) was not revised. In 2017 Q1, it slowed only slightly to 0.5% according to estimates from the London-based NIESR. This was due probably to a drop in industrial production in January and February (of 0.3% and 0.7% month on month respectively). Retail sales, by contrast, came as a positive surprise, rising by 1.4% in February after three months of falls. The outlook for the next quarter is also optimistic – the PMI rose to 55 in services in March and remains only slightly lower in manufacturing. Annual consumer price inflation rose to 2.3% in February (the highest level since September 2013) and stayed there in March. However, increased expectations of future monetary policy tightening were slightly dampened by core inflation, which fell to 1.8% in March (from 2.0% in February). The exchange rate of the pound remains stable, showing no response to the triggering of Article 50 of the Lisbon Treaty.



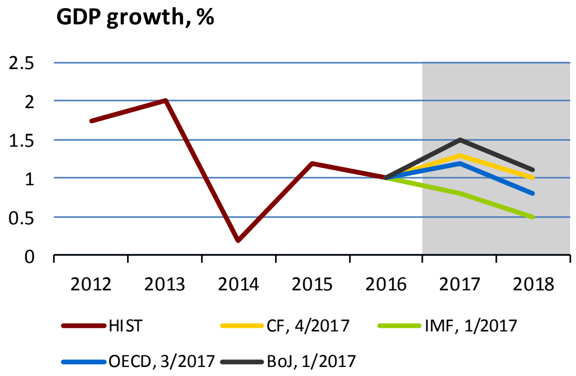
	CF	IMF	OECD	BoE
2017	1.7	1.5	1.6	2.0
2018	1.3	1.4	1.0	1.6



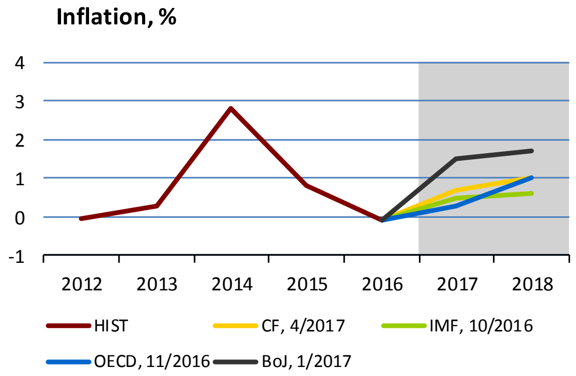
	CF	IMF	OECD	BoE
2017	2.6	2.5	2.4	2.7
2018	2.7	2.6	2.9	2.6

II.5 Japan

Economic developments in Japan have been mixed in recent weeks. Unemployment fell to its lowest level since 1994 in February (2.8%). The year-on-year change in retail sales decreased markedly, thanks in part to an increasing fall in household spending and continuing subdued wage growth. Growth in industrial production strengthened in February due to growth in mining output and manufacturing and chemical production. However, the PMI in manufacturing unexpectedly dropped in March, with growth in output, new orders and exports slowing according to purchasing managers' assessments. By contrast, consumer confidence improved in March. The April CF raised its GDP prediction for this year by 0.1 pp. Annual inflation edged down to 0.3% in February. This was due to a continuing slowdown in fresh food prices, which, however, are still the main inflationary factor. The inflation outlooks remained unchanged.



	CF	IMF	OECD	BoJ
2017	1.3	0.8	1.2	1.5
2018	1.0	0.5	0.8	1.1

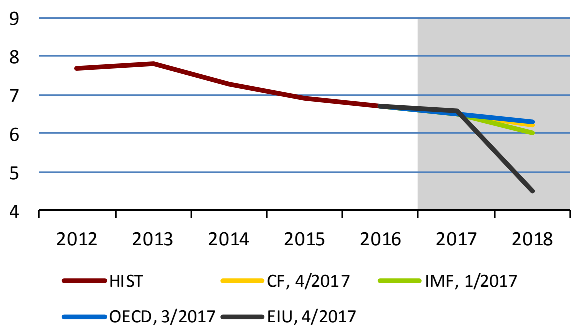


	CF	IMF	OECD	BoJ
2017	0.7	0.5	0.3	1.5
2018	1.0	0.6	1.0	1.7

III.1 China

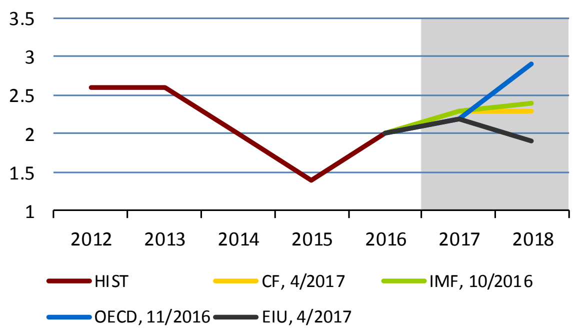
According to the flash estimate, the Chinese economy recorded annual growth of 6.9% in 2017 Q1, the highest figure since 2015 Q3. Higher government spending on infrastructure and continuing expansion in the property market helped increase the output of the industrial sector. The Chinese economy thus remains very dependent on support measures. These, however, are causing the property market to overheat. Producer price inflation slowed to 7.6% in March, due mainly to lower prices of steel and coal, while consumer inflation remains low – below 1%. The April CF outlook was unchanged from the previous month, while the new EIU forecast expects higher GDP growth in both 2017 and 2018. Inflation was revised down for 2017 and up for 2018.

GDP growth, %



	CF	IMF	OECD	EIU
2017	6.5	6.5	6.5	6.6
2018	6.2	6.0	6.3	4.5

Inflation, %

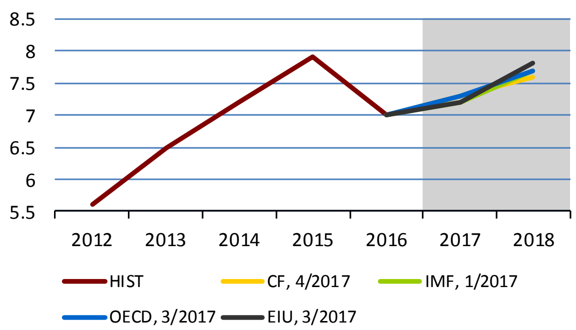


	CF	IMF	OECD	EIU
2017	2.3	2.3	2.2	2.2
2018	2.3	2.4	2.9	1.9

III.2 India

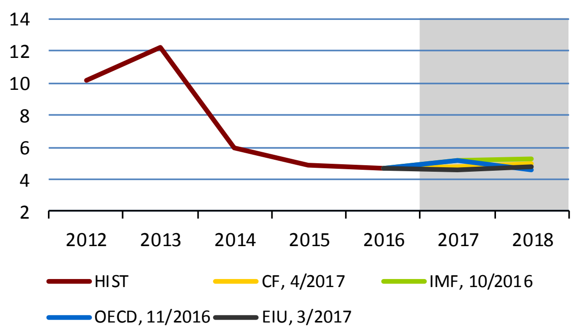
The situation in the Indian industrial sector is very unstable, mainly reflecting developments in manufacturing. Industrial production slumped by 5.2% in February (and by 1.2% year on year) after two months of growth. However, the Nikkei PMI in manufacturing rose further in March. According to purchasing managers, the dynamics of output, new orders, exports and employment are favourable. The monitored institutions left their outlooks unchanged. Inflation went up to 3.8% in March despite growth in food prices beginning to slow. CF and the EIU raised their inflation predictions for fiscal year 2017/2018 by 0.1 pp and 0.2 pp respectively. The EIU cut its inflation outlook for 2018/2019 by 0.3 pp. The Reserve Bank of India assesses the risks to the outlook as mostly inflationary. At its April meeting, it left its key interest rate at 6.25% as expected.

GDP growth, %



	CF	IMF	OECD	EIU
2017	7.3	7.2	7.3	7.2
2018	7.6	7.7	7.7	7.8

Inflation, %

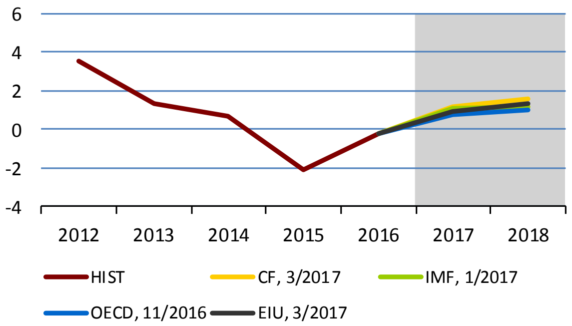


	CF	IMF	OECD	EIU
2017	4.8	5.2	5.2	4.6
2018	5.0	5.3	4.6	4.8

III.3 Russia

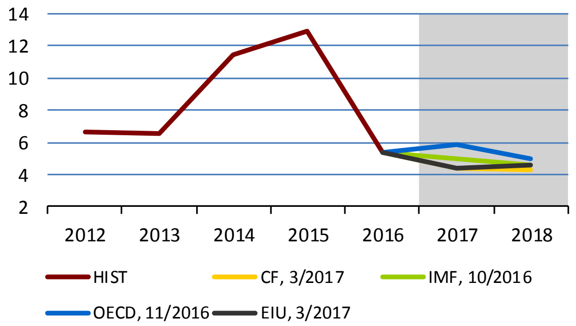
Russian quarterly GDP at current prices showed positive growth of 0.3% year on year (flash estimate) at the end of 2016, for the first time since December 2014. The growth was driven mainly by net exports, with both exports and imports rising (by 3.7% and 0.3% respectively). Another favourable factor was the smallest drop in household consumption in two years (-3.2%). The rate of decline in government consumption was unchanged at 0.5% for the third quarter. Gross fixed capital formation fell by 0.3%. CF revised its growth outlooks for this year downwards. However, it has probably not yet fully taken into consideration the latest data published at the very end of March. The Russian central bank lowered its policy rate by 0.25 pp to 9.75% in the last week of March and is not ruling a further cut in Q2. According to the latest available CF and EIU outlooks, inflation will gradually fall this year, reaching 4.4% in December. By comparison, prices grew at a rate of 4.6% in Q1.

GDP growth, %



	CF	IMF	OECD	EIU
2017	1.2	1.1	0.8	0.9
2018	1.6	1.2	1.0	1.3

Inflation, %

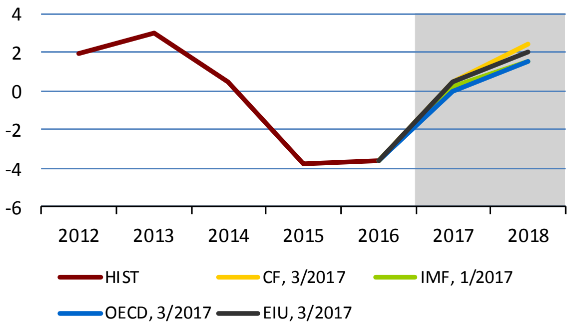


	CF	IMF	OECD	EIU
2017	4.4	5.0	5.9	4.4
2018	4.3	4.6	5.0	4.6

III.4 Brazil

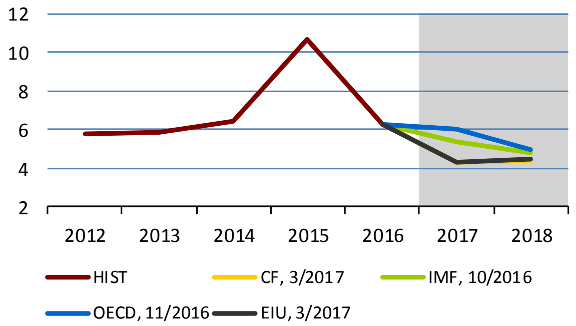
The contraction of the Brazilian economy accelerated further in 2016 Q4, contrary to expectations. GDP fell by 0.9% after a previous drop of 0.7%. It thus seems that Brazil is not heading out of recession yet. The drop was caused mainly by household consumption, but also by higher import growth. Unemployment continued rising in February. The annual consumer price inflation rate slowed slightly compared to the previous month: 4.6% in March, as against 4.8% in February. Although inflation is slowing, the Brazilian economy is not showing any major signs of recovery yet. Leading indicators of business confidence and the PMI in manufacturing and services improved in March. However, the last two indices remain in the contraction band. As expected, the Brazilian central bank cut its key SELIC rate by 1 pp to 11.25%. According to the latest outlooks, the economic situation will start to improve gradually. Both CF and the EIU expect GDP growth of 0.5% in 2017. Both institutions cut their inflation outlooks for this year to 4.3%.

GDP growth, %



	CF	IMF	OECD	EIU
2017	0.5	0.2	0.0	0.5
2018	2.4	1.5	1.5	2.0

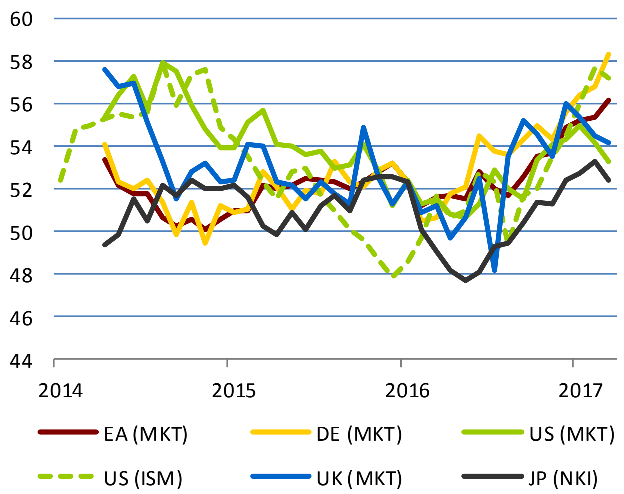
Inflation, %



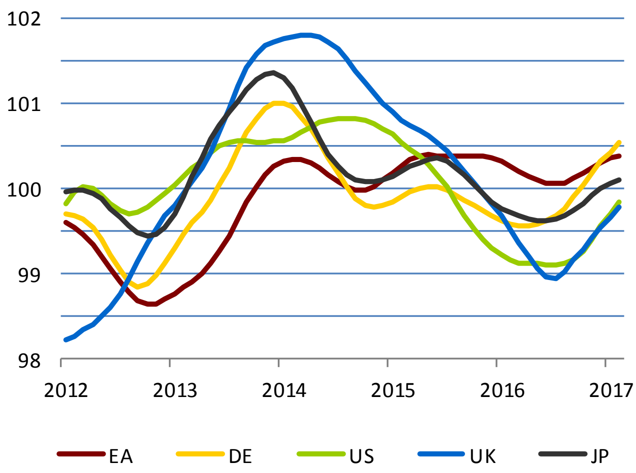
	CF	IMF	OECD	EIU
2017	4.3	5.4	6.0	4.3
2018	4.4	4.8	5.0	4.5

IV.1 Advanced economies

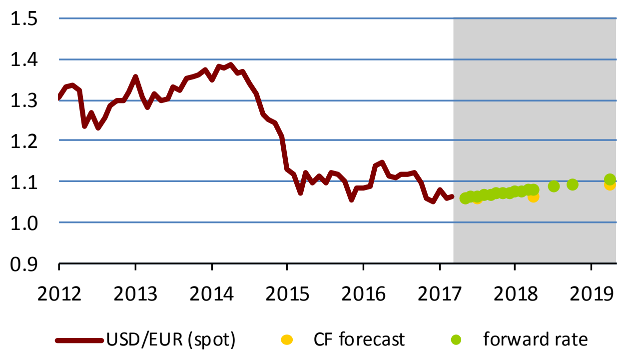
PMI in manufacturing



OECD-CLI

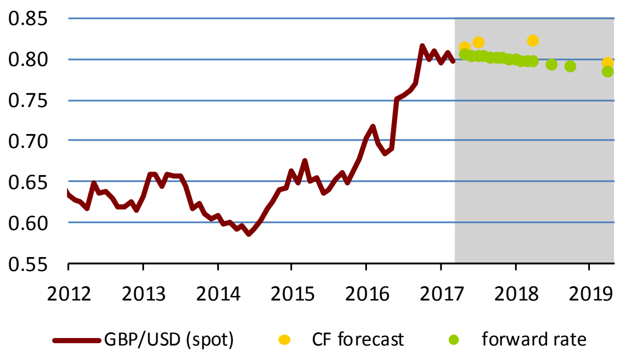


The US dollar (USD/EUR)



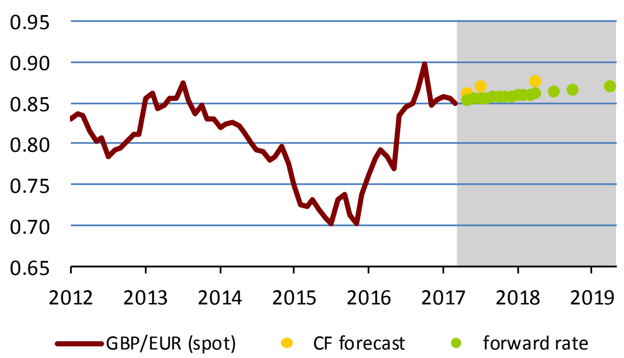
	10/4/17	05/17	07/17	04/18	04/19
spot rate	1.060				
CF forecast		1.060	1.060	1.065	1.094
forward rate		1.061	1.064	1.081	1.107

The British pound (GBP/USD)



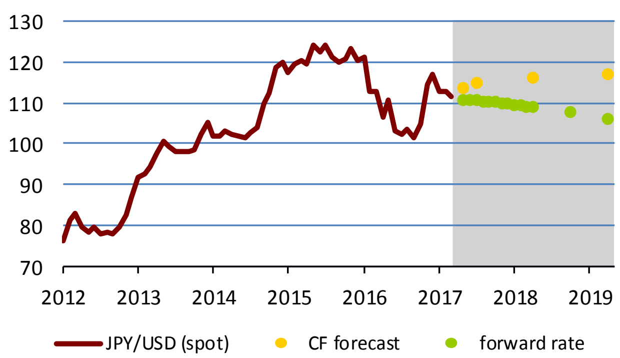
	10/4/17	05/17	07/17	04/18	04/19
spot rate	0.805				
CF forecast		0.813	0.821	0.822	0.795
forward rate		0.805	0.803	0.796	0.785

The British pound (GBP/EUR)



	10/4/17	05/17	07/17	04/18	04/19
spot rate	0.853				
CF forecast		0.862	0.870	0.876	0.870
forward rate		0.854	0.855	0.861	0.869

The Japanese yen (JPY/USD)

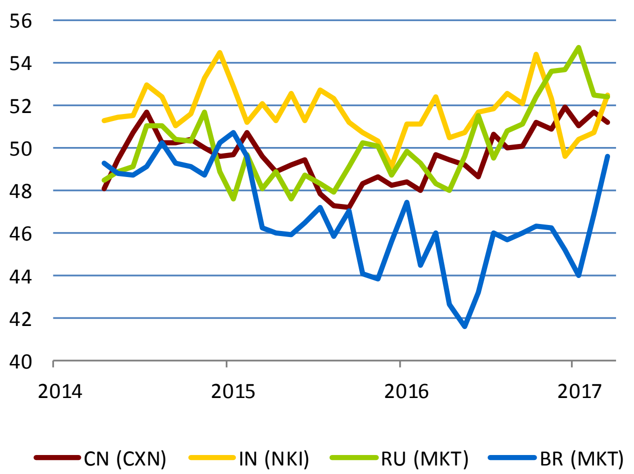


	10/4/17	05/17	07/17	04/18	04/19
spot rate	111.1				
CF forecast		113.5	114.7	115.9	116.9
forward rate		110.8	110.5	108.9	106.2

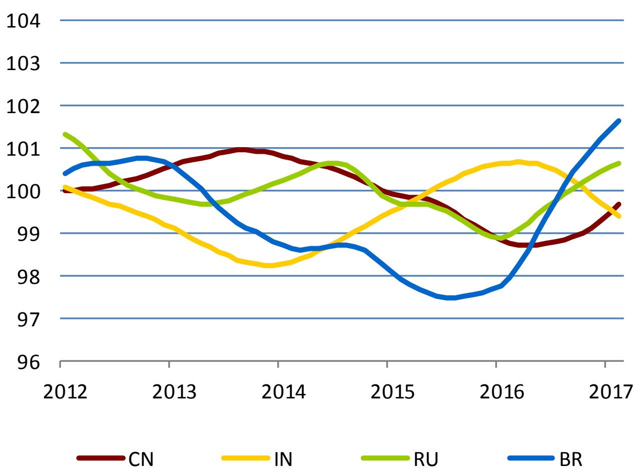
Note: Exchange rates as of last day of month. Forward rate does not represent outlook; it is based on covered interest parity, i.e. currency of country with higher interest rate is depreciating. Forward rate represents current (as of cut-off date) possibility of hedging future exchange rate.

IV.2 BRIC countries

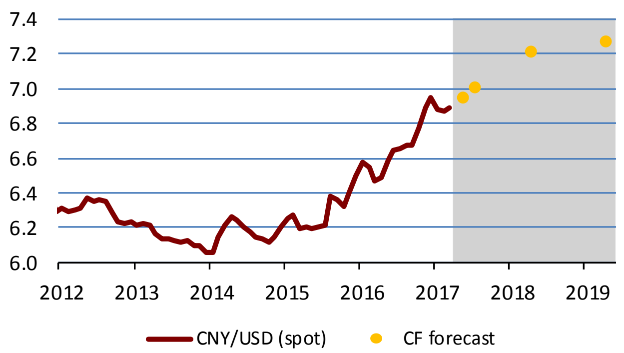
PMI in manufacturing



OECD-CLI

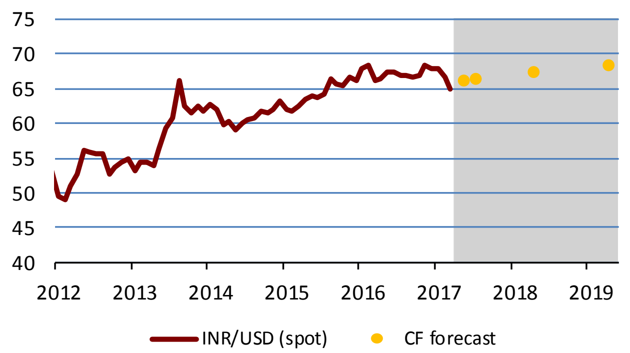


The Chinese renminbi (CNY/USD)



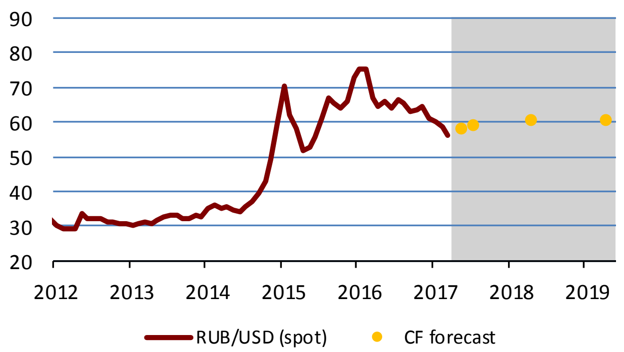
	10/4/17	05/17	07/17	04/18	04/19
spot rate	6.905				
CF forecast		6.948	7.006	7.208	7.276

The Indian rupie (INR/USD)



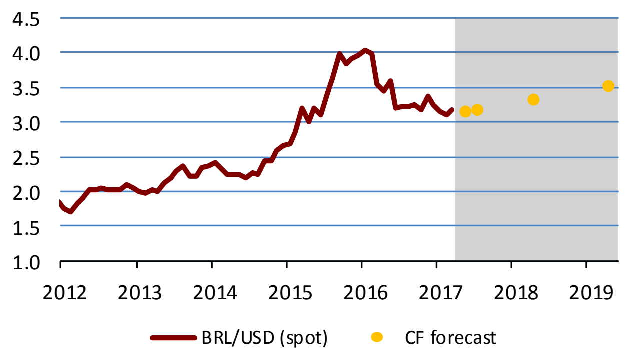
	10/4/17	05/17	07/17	04/18	04/19
spot rate	64.55				
CF forecast		66.07	66.45	67.44	68.27

The Russian rouble (RUB/USD)



	10/4/17	05/17	07/17	04/18	04/19
spot rate	57.29				
CF forecast		57.89	58.9	60.34	60.69

The Brazilian real (BRL/USD)



	10/4/17	05/17	07/17	04/18	04/19
spot rate	3.147				
CF forecast		3.146	3.18	3.328	3.515

Note: Exchange rates as of last day of month.

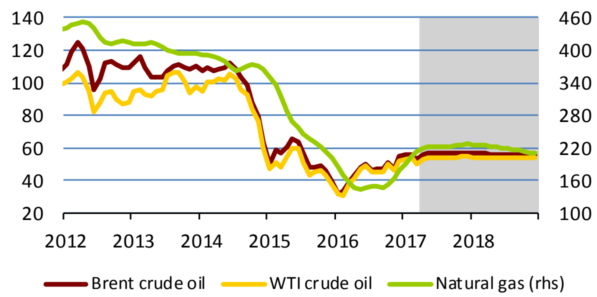
V.1 Oil and natural gas

Crude oil prices fell rapidly by about USD 5/bbl in the first half of March after having fluctuated in a narrow range of USD 55–57/bbl for three months. The drop in the WTI price was larger, driven mainly by news of growth in drilling activity and oil production in the USA and hence also by further growth in US oil stocks to new historical highs. However, oil prices started rising again at the end of March due to outages in Libya and signals that OPEC might extend the agreement to cap output into the second half of the year. However, an official decision will not be made until the May OPEC meeting. Until then, the oil price is likely to keep fluctuating around current levels in response to news about US and global oil stocks and extraction volumes of large oil producers. The risk of a major price movement has declined as speculative funds have cut their net long positions in past weeks.

As of the April CF survey date, the market futures curve had returned to the level of previous months after a drop in March. It is virtually horizontal, implying an average Brent crude oil price of USD 56/bbl for both this year and the next. The EIA forecast expects a lower price for this year (USD 54/bbl). For 2018, by contrast, it predicts a slight rise to USD 57/bbl. The April CF forecasts a price of USD 55.6/bbl at the one-year horizon, in line with the market curve.

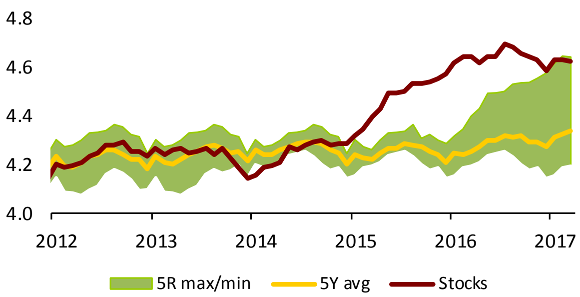
The price of natural gas in the USA rose because of a cold snap in mid-March. In Europe, by contrast, spot prices of gas fell sharply due to warmer weather, while prices of long-term contracts were relatively flat. Coal prices had been falling since February due to higher output in China after mining limits were cancelled. They edged up at the end of March after some mines in Australia were closed due to a cyclone threat.

Outlook for prices of oil (USD/barrel) and natural gas (USD / 1000 m³)

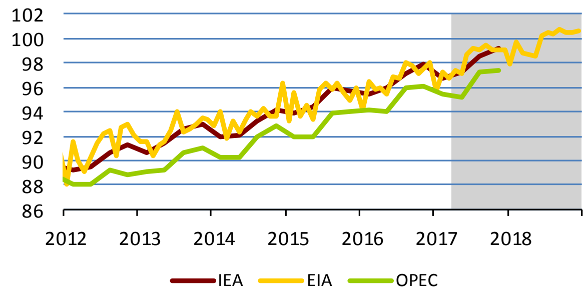


	Brent	WTI	Natural gas
2017	56.08	53.48	217.78
2018	56.05	53.97	218.84

Total stocks of oil and oil products in OECD (bil. barrel)

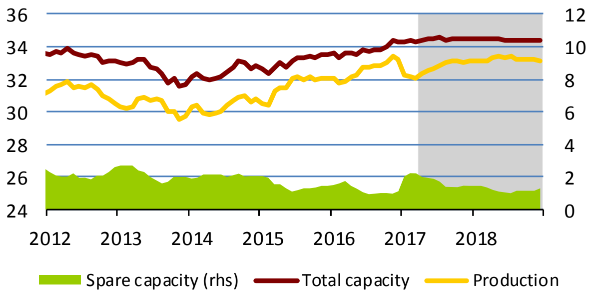


Global consumption of oil and oil products (mil. barrel / day)



	IEA	EIA	OPEC
2017	97.96	98.16	96.30
2018		99.79	

Production, total and spare capacity in OPEC countries (mil. barrel / day)



	Production	Total capacity	Spare capacity
2017	32.69	34.44	1.76
2018	33.24	34.44	1.21

Source: Bloomberg, IEA, EIA, OPEC, CNB calculation
Note: Oil price at ICE, price of Russian natural gas at German border – IMF data, smoothed by the HP filter. Future oil prices (grey area) are derived from futures and future gas prices are derived from oil prices using model. Total oil stocks (commercial and strategic) in OECD countries – IEA estimate. Production and extraction capacity of OPEC – EIA estimate.

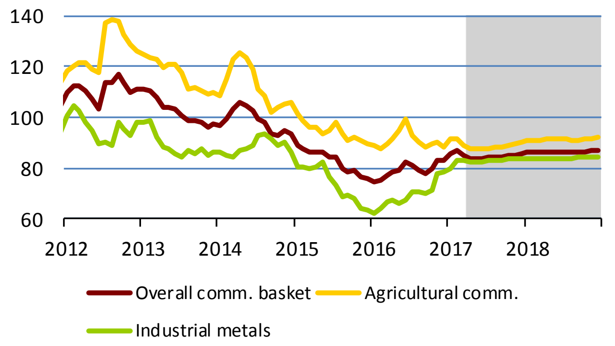
V.2 Other commodities

The average monthly non-energy commodity price index dropped for the first time in March after a series of five consecutive increases. It continued to decline in the first half of April. The industrial metals price sub-index rose by 34% between January 2016 and February 2017, but its fast growth halted in March and in the first half of April. By contrast, the food commodity price sub-index has been fluctuating close to its lowest level in many years since September 2015 (except for a short period between May and July 2016). In the first half of April it hit its lowest level since June 2010. The outlooks for all three indices are slightly rising.

Prices of basic metals continue to be supported by favourable manufacturing trends. The global JP Morgan PMI remains at a 69-month high and the PMI in China is also signalling positive developments (despite dropping from 51.7 to 51.2 in March). Metal prices are also benefiting from a further rise in property prices in China. By contrast, optimism about expected growth in infrastructure investment in the USA is receding due to problems of the new US administration. Growth in copper prices halted after a mine strike in Chile was ended. In addition, copper stocks on the LME rose by 44% during March. Prices of other basic metals (except aluminium) also stopped rising. However, only the nickel price fell strongly in March when the government in Indonesia approved higher exports. The price of iron ore also dropped in early April. The rubber price partly reversed its previous growth and has been falling sharply since February due to rising stocks in China.

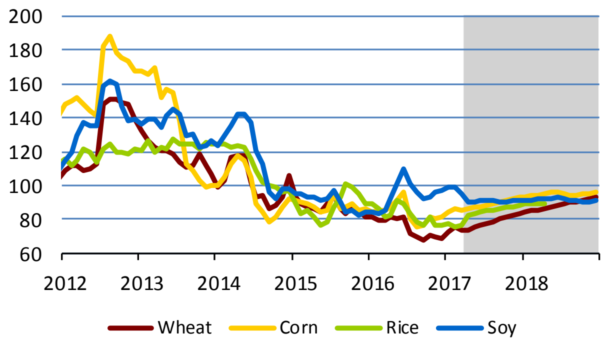
Turning to food commodities, the price of rice went up, while the prices of soy and sugar tumbled due to expected production growth in Brazil. By contrast, the previous slump in cocoa prices halted. Meat prices were broadly flat.

Non-energy commodities price indicies



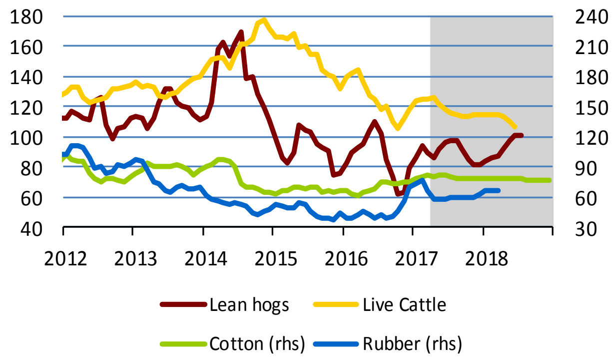
	Overall	Agricultural	Industrial
2017	84.9	89.1	82.8
2018	86.6	91.4	84.0

Food commodities



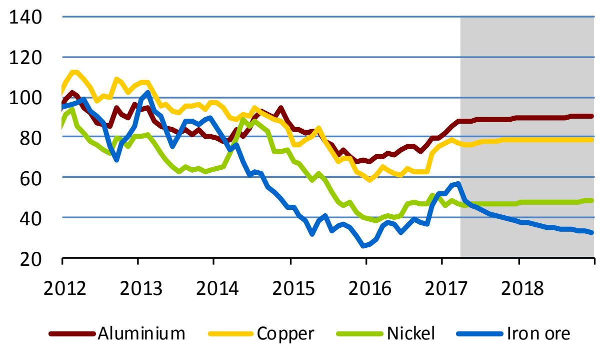
	Wheat	Corn	Rice	Soy
2017	77.6	88.5	83.2	92.5
2018	88.6	94.9	89.2	91.6

Meat, non-food agricultural commodities



	Lean hogs	Live Cattle	Cotton	Rubber
2017	90.1	118.9	79.8	62.7
2018	92.7	112.4	77.9	66.9

Basic metals and iron ore



	Aluminium	Copper	Nickel	Iron ore
2017	87.8	77.6	46.9	45.7
2018	89.8	78.7	47.7	34.9

Source: Bloomberg, CNB calculations.

Note: Structure of non-energy commodity price indices corresponds to composition of The Economist commodity indices. Prices of individual commodities are expressed as indices 2010 = 100.

Risks to global economic growth in the medium term[1]

The pace of global economic growth last rose significantly in 2010, when it rebounded to the pre-crisis level. Since then, however, it has continued to slow. No major recovery can be expected in the coming years either. The current fragile growth, accompanied by relatively high uncertainty, is prompting analysts to examine potential risks that might exacerbate the situation. This article focuses on risks to global growth that are large primarily in the medium term, i.e. the key time frame for monetary policy decision-making. A brief overview of the most frequently mentioned potential barriers to growth reveals that global economic growth is currently being threatened above all by non-economic risks. Economic risks may continue to hinder world growth, but they no longer dominate the global risks in the way they did during the first few years after the global crisis broke out.

1 Introduction

Forecasts of future economic developments (and of anything else) are always associated with a high degree of uncertainty, which increases as the forecast horizon lengthens. However, it is not just the mathematical accuracy of the calculations that matters. It is crucial to thoroughly consider various factors ("risks") which, if they materialised, could improve ("upside risks") or worsen ("downside risks") the current forecast. Overall, the risks of overestimating economic growth currently outweigh the risks of underestimating it. The recovery of the global economy is still fragile and is being hampered by growing political uncertainty, tighter global financial conditions and increasing protectionism. Conversely, the fiscal stimuli being rolled out in key economies, particularly the USA, can currently be considered a major factor supporting global GDP growth. These stimuli may foster stronger economic activity than the latest outlooks currently foresee.

Many significant risks persist over the long term (e.g. the risk of environmental degradation, which began to increase sharply at the start of the Industrial Revolution, and geopolitical risks, including wars and military conflicts, which have existed since the dawn of human history). However, the level of severity we currently assign to their potential impact on global economic growth changes over time. Likewise, new, previously unnoticed risks emerge and existing risks cease to be regarded as a threat. So, each year brings interesting changes in the phenomena we identify as the main uncertainties that may deflect the world economy from its expected path. In its *Global Risks Report 2017*, the World Economic Forum (WEF) published its twelfth annual ranking of global risks in the current year. The risks were grouped into five categories (economic, environmental, geopolitical, social and technological) and then evaluated in terms of their likelihood, their potential impact (the extent of their possible consequences) and the interconnections between them.

Generally speaking, all the risks are (more or less) interconnected – they reinforce one another in their effect on the economy (cases of mutual weakening are less frequent) – and are related mainly to several long-term trends, the most important, according to the WEF, being:

- *rising income and wealth disparity* – an increasing socioeconomic gap between rich and poor in major countries or regions;
- *climate change and environmental degradation* – caused by human activity and leading to deterioration in the quality of air, soil and water, atmospheric changes and substantial natural climate variability;[2]
- *rising cyber dependency* – significant growth in digital interconnection of people, things and organisations, linked with an increased risk of cyberattacks and data fraud or theft;
- *increasing polarisation of societies and increasing national sentiment* – and potentially also diverging values and political or religious views; the current tendencies are mainly towards closure of economies and protectionist policies, which may lead to a slowdown in international trade and a decline in investment;
- *population ageing* – driven by falling birth rates in advanced countries[3] and continuously increasing life expectancy worldwide (WEF, 2017).

Environmental risks[4] dominate among the top five risks both this year and the next, and not only in terms of the perceived likelihood of them materialising, i.e. actually affecting the global economy, where they rank first and third, but also in terms of their estimated potential impact. Another major risk is large-scale

[1] Author: Iveta Polášková. The NiGEM simulations were carried out by Filip Novotný. The views expressed in this article are those of the author and do not necessarily reflect the official position of the Czech National Bank.

[2] This is happening despite efforts to reduce the impact of human activity on natural resources and climate conditions through international climate agreements (global or regional), as failure to observe these agreements is a frequent problem. However, most countries are trying to tighten their environmental policies.

[3] The problem of low birth rates is apparent mainly in advanced countries, where the birth rate is in most cases below the replacement level of demographic growth (2.1) and is often close to the threshold of long-run population sustainability (1.3).

[4] Examples include problems with extreme, often unpredictable weather events, scarcity of high-quality water and frequent natural disasters.

involuntary migration. However, its likelihood fell slightly compared to the previous year. The risk of large-scale terrorist attacks was also rated as high (fourth place) for 2017. Terrorist attacks are usually reflected in consumer and business sentiment[5] and affect US and European stock markets, through which they can significantly influence the global economy. The last of the top five risks in terms of likelihood mentioned by the WEF is a massive incident of data fraud or theft. Technological risks do not yet rank among the most serious in terms of their possible impacts on the world economy, but their potential impact on global growth can be expected to rise in the future. This type of threat also has a broader reach, as large-scale cyberattacks or data abuse would not only cause economic damages, but also raise geopolitical tensions and potentially lead to widespread loss of trust in the internet.

Unlike at the time of the global financial crisis and particularly in the post-crisis years, economic risks are no longer the most prominent in terms of either likelihood or potential impact.[6] Table 1 shows the ranking of the main economic risks for 2017. According to the WEF, the biggest economic threat is unemployment, which also has a relatively large potential negative impact. In particular, long-term unemployment and unemployment among women and young people are a problem. Although high jobless rates are usually observed in developing and emerging countries, some advanced countries also remain constrained by double-digit unemployment rates. However, global growth may also be hampered by underutilisation of employees' productive capacity or shortages of skilled workers (underemployment). The second most likely risk is that of fiscal crises in key world economies due to high debt burdens. Both these economic risks are significantly linked with the trends of population ageing and rising income and wealth disparity.

In terms of impact	In terms of likelihood
1. Unemployment (or underemployment)	1. Illicit trade
2. Fiscal crises	2. Asset bubbles
3. Failure of a financial mechanism or institution	3. Unemployment (or underemployment)
4. Asset bubbles	4. Fiscal crises
5. Energy price shock	5. Failure of a financial mechanism or institution
6. Failure of critical infrastructure	6. Energy price shock
7. Deflation	7. Deflation
8. Illicit trade	8. Failure of critical infrastructure
9. Unmanageable inflation	9. Unmanageable inflation

Table 1 Ranking of significant economic risks in 2017

Source: World Economic Forum (2017).

A potential energy price shock, which could occur if, for example, the OPEC agreement to limit oil output is not observed, also remains a significant risk to the world economy. This could be triggered by growing geopolitical risks or opposition to oil production caps in some countries. Other major economic risks at present include failure of a major financial mechanism or institution, growth in illicit trade (illicit financial flows, tax evasion, human trafficking, organised crime, counterfeiting, etc.), failure or shortfall of critical infrastructure (in particular failure to adequately invest in, upgrade and secure energy, transport and communication infrastructure networks) and asset bubbles. This last risk has the potential to ignite another global crisis, especially if commodity, housing or share prices rise sharply. A drop in investment in the oil sector, which would be reflected in a sharp increase in oil prices in the future, could also be a problem.[7]

The economic risk of prolonged deflation, which has been reduced by unconventional policies, is currently seen as less likely. However, these same policies could in the future increase the opposite economic risk, namely unmanageable inflation, whose likelihood is very low at present (EIU, 2017b; WEF, 2017). For this year, though, this risk is evaluated as the least dangerous and thus should not pose a significant threat to global growth.

We will now give a brief overview of the risks stemming from selected key economies and complement it with a quantification of their potential impacts based on NIGEM simulations.

2 A marked slowdown of the Chinese economy

China ranked among the fastest growing economies in 2000–2007 (with growth averaging 10.5%). Its rising share in global GDP meant it rapidly became one of the main drivers of global growth and a major contributor to growth in international trade. Although the Chinese economy is still performing solidly

[5] This was apparent, for example, after the April 2016 attacks in Brussels, which affected consumer and business sentiment in Germany and Belgium. An even greater drop in consumer and business sentiment was observed in France and other EU countries after the attacks in Paris in November 2015.

[6] This is confirmed not only by the report (WEF, 2017), but also, for example, by EIU (2017b) and IMF (2017).

[7] Given developments in this sector, however, this risk is considered to be very low, albeit with a potentially large impact on the global economy.

compared to advanced economies, the surge has been replaced by a gradual slowdown. The risk of the Chinese economy slowing further is still rated as high, with a potentially large impact on the entire world.

The Chinese economic slowdown is due to continuing structural changes towards a market-oriented economy and to rebalancing, which involves, for example, a shift from an investment- and export-driven economy (high-growth GDP components, particularly exports) towards a consumption-based economy (with a traditionally lower rate of growth) and a switch in focus from an industry-based economy towards a service-oriented economy. The main risk to Chinese GDP growth at the moment is the slowdown in investment there. This risk is being exacerbated by continuing capital outflows and a surge in debt, particularly of households. The Chinese government is nonetheless continuing to support economic growth with fiscal stimuli, mainly by investing in infrastructure and cutting the tax burden on firms, in an effort to moderate the economic slowdown. Despite that, the growth of the Chinese economy could slow sharply in 2018 to as low as 4.2% according to some estimates (EIU, 2017b).

The potential impact of a Chinese economic slowdown on other countries can be quantified in the NIGEM model. In our simulation, we assume that Chinese GDP growth in 2018 will be 2 pp lower than estimated in the current CF prediction (and will thus be only 4.3%) due to a drop in private and government investment.[8] Chart 1 shows the effect that such a marked Chinese slowdown would have on the GDP growth of the main world economies in terms of deviations from the baseline scenario. Growth in the euro area and Germany would fall by an average of 0.2 pp in both cases (to 1.3% in the euro area and 1.4% in Germany). The US economy would slow by about 0.1 pp to 2.3%. The Chinese economic slowdown would have the biggest impact on Japanese GDP growth, which would drop by 0.25 pp to 0.75%. The effect of the sharp slowdown of the Chinese economy on global growth would then fade out in early 2019, although Chinese GDP would continue to grow at a slower rate.

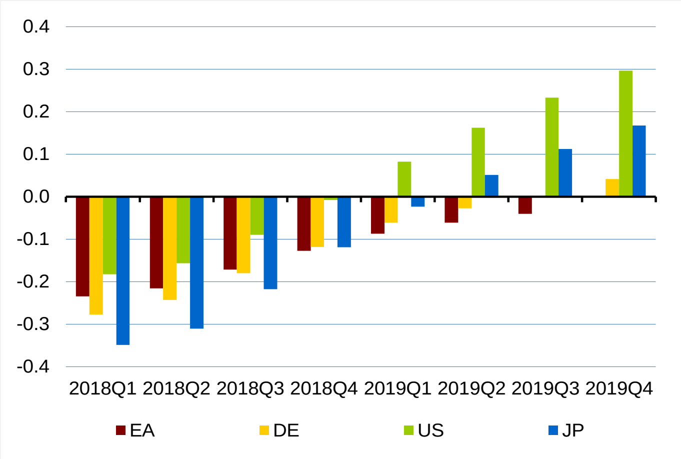


Chart 1 Simulation of the impact of a marked slowdown of the Chinese economy on GDP growth in selected economies

Source: Calculation based on a NIGEM simulation

Note: A slowdown of the Chinese economy in 2018 of 2 pp more than expected by CF; deviations of GDP growth from the baseline scenario in pp.

Besides changes in economic structure, Chinese economic growth could also be slowed markedly by any expansion by China into the South China Sea. This risk is a moderate one, but has a potentially large impact on the global economy. The situation in this area has been escalating in recent years and the current deterioration in geopolitical conditions could upset the already fragile balance. China might then become more aggressive in asserting its historical rights in this region. This not only would affect life on the local islands, but could ultimately lead to a no-fly zone being imposed over this territory, or even to armed conflict. The situation in the area controlled by South Korea and Japan, where China is also claiming some territories, is not favourable either (EIU, 2017b; IMF, 2017; World Bank, 2017).

3 A European crisis

The global economy could also be significantly affected by adverse developments in Europe. These go beyond Brexit and the situation in Greece. Additional uncertainties have emerged recently, such as the banking sector crisis in Italy, the risk of countries leaving the euro area, and the future course of the EU as a whole, which could lead to fragmentation into smaller factions.

The problems of Greece, whose government debt is falling only very slowly, have again come to the fore in political and, of course, economic terms in recent months. The country is still plagued by high unemployment[9] and rising poverty. Moreover, the measures that have been taken are ineffective. In February, the IMF and euro area representatives agreed that the IMF would act as unofficial adviser in Greece. Talks about further cuts and reforms are now under way with Greek representatives so that the country can receive further rescue programme funding in July. However, even if the negotiations with Greek representatives turn out positively, the return of the Greek crisis to the news may affect the forthcoming elections in EU countries and hence also the future course and prosperity of the EU.

[8] For this year we do not consider any change compared to the baseline scenario, as the monitored institutions do not differ significantly in their outlooks for Chinese GDP growth this year.

[9] The unemployment rate has long exceeded 20%. The most recent figure (for December 2016) was 23.1%. However, the rate has come down gradually, albeit slightly, from its July 2013 peak. High youth unemployment remains a problem.

Growth in the influence of populist parties could increase uncertainty about the future of the euro area and the EU as a whole. If such parties succeed in this year's elections, referenda on exiting the euro area could take place in some countries, such as Italy or France. In addition, Italy is now dealing with a crisis in its banking sector. Its banks are facing problems with unsecured loans, and the Italian government has had to weigh in. The French extreme right is proposing a return to national currencies and a system where national currencies and a common monetary unit of account exist side by side.[10] Another euro area reform proposal is a two-speed euro. This would mean dividing the currency into a strong northern euro and a weaker southern one, although their exchange rates would be interlinked.

Internal and external pressures leading to a division of Europe into factions could also strengthen. This risk is increasing due to rising nationalism, which began to intensify when the wave of migration struck.[11] If borders and border controls were renewed, trade flows would be restricted and economic cooperation would decrease, which could even result in disintegration of the EU. More EU exit referenda could also take place in the wake of Brexit. Problems may also arise as a result of the constant push by some Spanish autonomous areas and Belgian regions to gain independence. The risks of countries leaving the EU or the EU splitting into factions are generally assessed as moderate, but their impact on economic growth in the euro area and the EU, and in turn on the global economy, would be very strong.

On the occasion of the 60th anniversary of the signing of the Treaties of Rome, the European Commission decided to answer the growing calls for reform of the EU by issuing a White Paper containing five possible scenarios that the EU could follow to avert the risk of future disintegration. This year, these scenarios will be complemented with further papers contributing to the debate on the EU's future, on topics such as harnessing the potential of globalisation and deepening the Economic and Monetary Union.

The first of the five scenarios for the EU's future is *Carrying on*. This would mean maintaining the status quo, with the union focusing solely on implementing the already specified reform programme. This programme includes strengthening of the single market, incremental progress on improving the functioning of the euro area and improved coordination of internal and external security. Given the degree of dissatisfaction of individual member states with the current functioning of the EU, this least ambitious scenario (in the sense of reforming the EU) does not seem to be the solution. The second scenario consists in gradual changing the EU's orientation to *Nothing but the single market*, which would be strengthened in the areas of goods and capital. By contrast, free movement of services and people would be restricted and cooperation in the euro area would be limited, which would increase its vulnerability. The third option is *Those who want more do more*, i.e. a deepening of multi-speed union. This is in fact the first scenario except with states interested in deeper cooperation in some areas (e.g. taxation, social standards, justice policy, military coordination) creating "islands" of deeper integration much more often. The fourth scenario is *Doing less more efficiently*, with attention focused on more efficient cooperation in selected policy priority areas (e.g. trade, innovation, security, border management, asylum policy, counter-terrorism, defence and foreign policy) but less active cooperation in others. However, the member states would have real difficulty in agreeing on specific priorities. The last scenario is *Doing much more together* across all policy areas, with member states sharing more power, resources and decision-making. The course the EU will take will become clearer in the months ahead, but scenarios 3[12] and 4 currently seem the most likely (EIU, 2017b; European Commission, 2017; IMF, 2017).

4 The future course and economic policy of the USA

The newest risk to global growth is uncertainty about the future course and economic policy of the USA.[13] The actions and statements of the current US president are feeding this uncertainty and affecting the entire world economy. The withdrawal of the USA from the Trans-Pacific Agreement and the likely non-completion of the Transatlantic Agreement are adversely affecting world trade. World trade and global investment may also be hindered by other protectionist measures, which can be expected given the current US approach to foreign policy.[14] A weakening of US international commitments is also expected, although this could be offset by a strengthened position of other countries, such as China or Russia, in the world economy.

[10] As in the European Monetary System in 1979–1999, during the existence of the European currency unit (ECU).

[11] Moreover, massive forced migration might continue this year; this risk is ranked second in terms of likelihood, thus posing a potential threat to global economic growth (WEF, 2017).

[12] Representatives of the four largest EU economies – Germany, France, Italy and Spain – back a multi-speed union (see Reuters: http://www.reuters.com/article/us-france-summit-idUSKBN16D2LW).

[13] The severity of this risk stems from the USA's position in the world economy. From the global GDP perspective, the USA is the world's biggest economy and the US dollar is still the main reserve currency. The USA's share in global growth and trade is substantial. It has a significant influence on the global economy in terms of GDP growth, financial markets and monetary and fiscal policy.

[14] Its name – America First – clearly suggests that US interests, not those of other economies or the world economy, are of primary importance. The NAFTA free trade agreement is also likely to be recast (see The White House: https://www.whitehouse.gov/america-first-foreign-policy).

Changes are also planned for immigration policy,[15] energy policy and health care. By contrast, global growth should be supported by planned fiscal stimuli (e.g. tax cuts and higher infrastructure investment).

The speed of normalisation of US monetary policy is another risk to global growth, mainly because of its impact on emerging economies. Higher US rates are leading to an outflow of capital from these economies and depreciation of their currencies and are increasing the risk of a debt crisis via growth in borrowing costs. Such a crisis could trigger panic on global capital markets. Moreover, volatility on global financial markets or lower potential growth would impair the ability of emerging and developing economies to absorb shocks, including the impact of lower-than-expected growth in the main advanced economies. Falling potential output growth is also reducing the available fiscal space. This could be destructive in emerging and developing economies given their already restricted response space.[16] Nevertheless, the rise in global interest rates should eventually have a positive impact on global growth, provided that it does not set off the said domino effect.

The appreciation of the US dollar is having a similar effect on the global economy as the increase in US interest rates. The dollar is likely to appreciate further if the tariffs implied by the new US president's plans are implemented. Although the strong dollar is having a stimulative effect on export-oriented economies and mitigating the impacts of China's slowdown on global growth, it is raising the cost of servicing US-dollar-denominated debt and thus increasing financial instability, especially in emerging economies.

Chart 2 shows the results of a model simulation of an appreciation of the US dollar by almost 20% due to tighter monetary policy of the US Federal Reserve, supported by the introduction of tariffs by the USA. As a result of the appreciation, the US economy would slow by 1.4 pp compared to the current CF outlook in 2017 and 2018 (to 0.8% and 1% respectively). GDP growth in Japan would slow by 0.3 pp this year (to 1%) because of the stronger dollar. Given its close links with the US economy, the effect on the Chinese economy would be mostly indirect and associated mainly with capital outflows. It would manifest itself most strongly in 2018 as a slowdown in Chinese GDP growth of 0.8 pp to 5.4%.

On the other hand, the appreciation of the US dollar would have a positive impact on growth in the euro area and Germany. Euro area growth would thus increase to 1.7% and 1.8% respectively in 2017 and 2018. This is 0.1 pp higher in 2017 and 0.2 pp higher in 2018 than the current CF forecast. In Germany, the appreciation of the dollar would affect growth mainly in 2018, increasing it by 0.2 pp (to 1.8%).

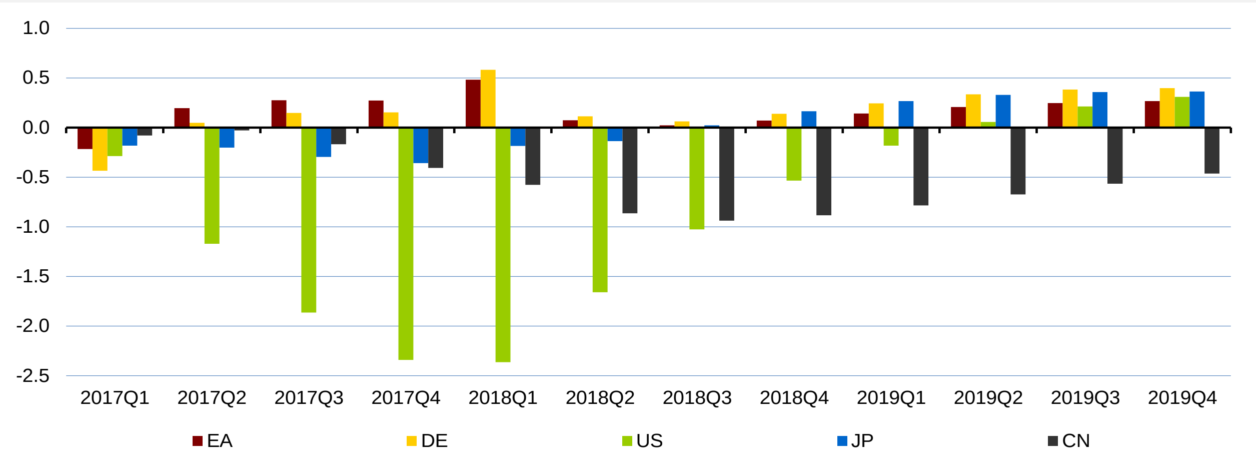


Chart 2 Simulation of the impact of an appreciation of the US dollar of almost 20% on GDP growth in selected economies

Source: Calculation based on a NIGEM simulation

Note: Deviations of GDP growth from the baseline scenario in pp.

5 Conclusion

The risks to global growth are predominantly on the downside again in 2017. However, the negative net risk has decreased compared to 2016, as significant upside risks have also emerged. For example, the world economy could be significantly affected by a sharper slowdown in Chinese growth, the exit of member states from the euro area, disintegration of the EU or extreme weather changes. However, certain global economic risks, such as unemployment or asset price bubbles, could also pose a threat. Conversely, the global economy could be supported by fiscal stimuli, more intensive world trade or a rise in investment

[15] The new US immigration policy is likely to have the biggest impact on Mexico and Central American countries.

[16] The response space in OECD countries was discussed in the March 2017 issue of GEO (see Komárek, 2017).

supporting a global recovery. However, the chance of these positive risks materialising is being lowered by rising populism and nationalism and related protectionist measures.

Regardless of the above risks, whose potential effect on the global economy is mostly negative, the world economy looks set to grow at a solid pace this year. The IMF predicts growth of 3.4% (IMF, 2017). According to the OECD forecast, global growth will reach 3.3% (OECD, 2017). The World Bank and the EIU expect the global economy to grow by 2.7% and 2.5% respectively in 2017 (World Bank, 2017; EIU, 2017a). Chart 3, which proxies global growth using a weighted average of economic growth (and its outlooks) for the world's eight largest economies, as regularly monitored in GEO, confirms these outlooks.

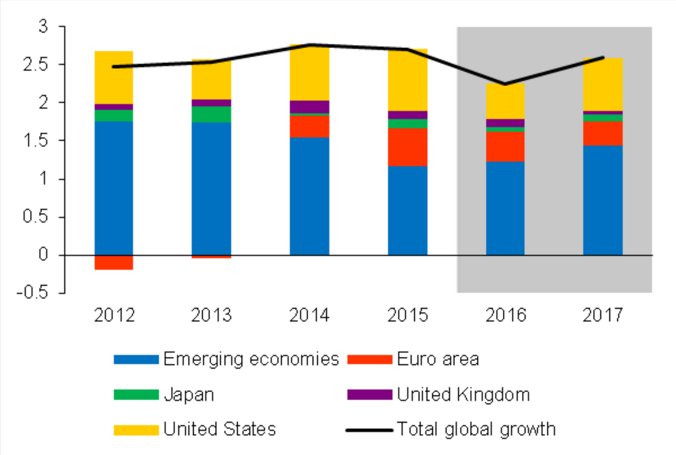


Chart 3 Contributions of the main world economies to global growth

Source: Author's calculations

Note: Global growth is proxied by growth in the eight largest economies, which account for around 75% of world GDP. The weights of the individual economies are calculated on the basis of nominal GDP in USD in 2010–2015; emerging economies consist of the BRIC countries.

To sum up, we must repeat that the risks are all interconnected and often related to several specific long-term trends amplifying the global risks and increasing their potential effect on global growth. A set of risks which alone would have relatively minor impacts may eventually – if bolstered by any of the fundamental long-term trends – cause much bigger problems in the world economy than would correspond to the simple sum of the expected impacts of the individual risks.

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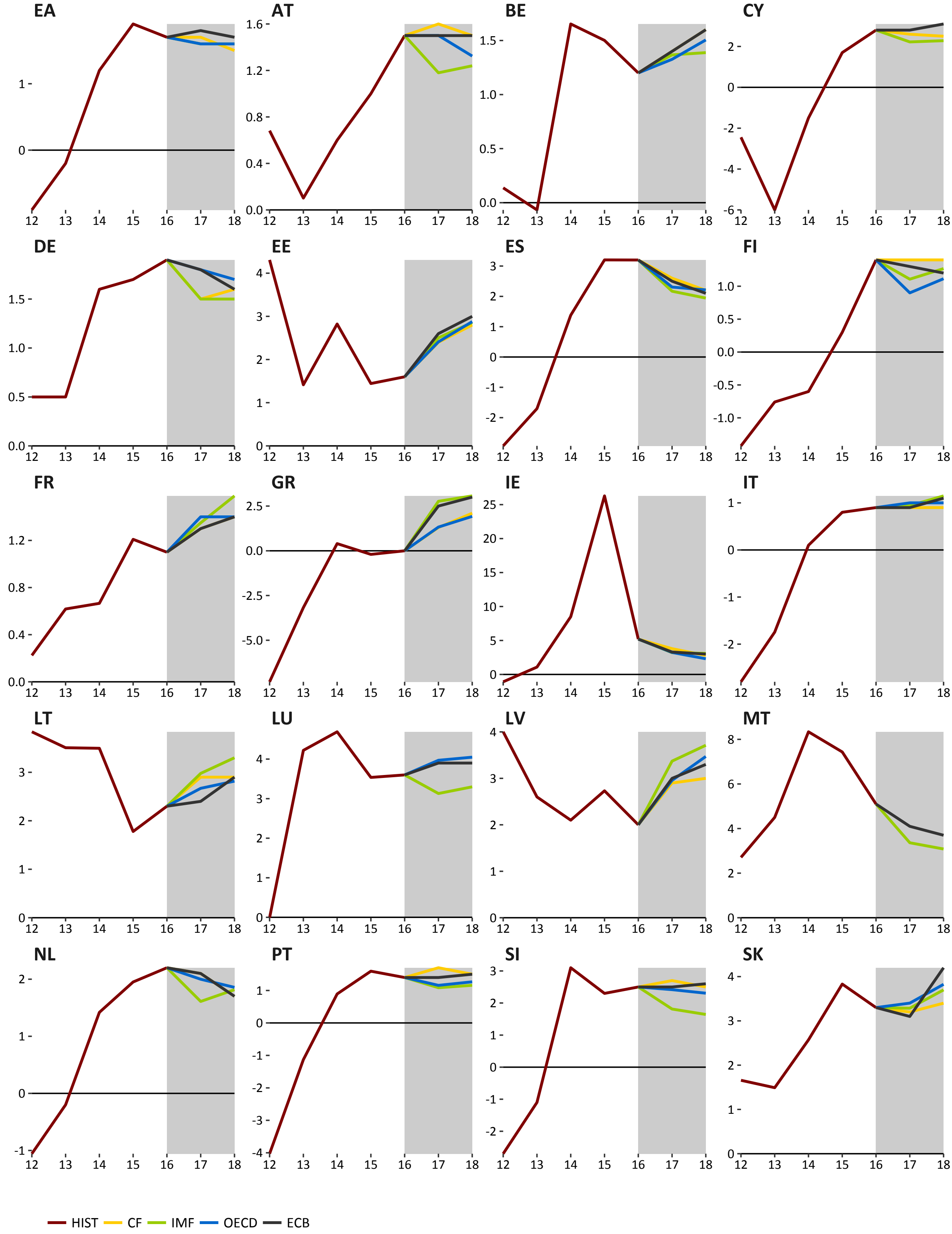
A1. Change in GDP predictions for 2017

	CF		IMF		OECD		CB / EIU	
EA	+0.1	2017/4 2017/3	+0.1	2017/1 2016/10	0	2017/3 2016/11	+0.1	2017/3 2016/12
DE	+0.1	2017/4 2017/3	+0.1	2017/1 2016/10	+0.1	2017/3 2016/11	+0.2	2016/12 2016/6
US	0	2017/4 2017/3	+0.1	2017/1 2016/10	+0.1	2017/3 2016/11	0	2017/3 2016/12
UK	0	2017/4 2017/3	+0.4	2017/1 2016/10	+0.4	2017/3 2016/11	+0.6	2017/2 2016/11
JP	+0.1	2017/4 2017/3	+0.2	2017/1 2016/10	+0.2	2017/3 2016/11	+0.2	2017/1 2016/11
CN	0	2017/4 2017/3	+0.3	2017/1 2016/10	+0.1	2017/3 2016/11	+0.2	2017/4 2017/3
IN	0	2017/4 2017/3	-0.4	2017/1 2016/10	-0.3	2017/3 2016/11	0	2017/3 2017/3
RU	-0.1	2017/3 2017/2	0	2017/1 2016/10	+0.3	2016/11 2016/6	0	2017/3 2017/2
BR	-0.2	2017/3 2017/2	-0.3	2017/1 2016/10	0	2017/3 2016/11	0	2017/3 2017/3

A2. Change in inflation predictions for 2017

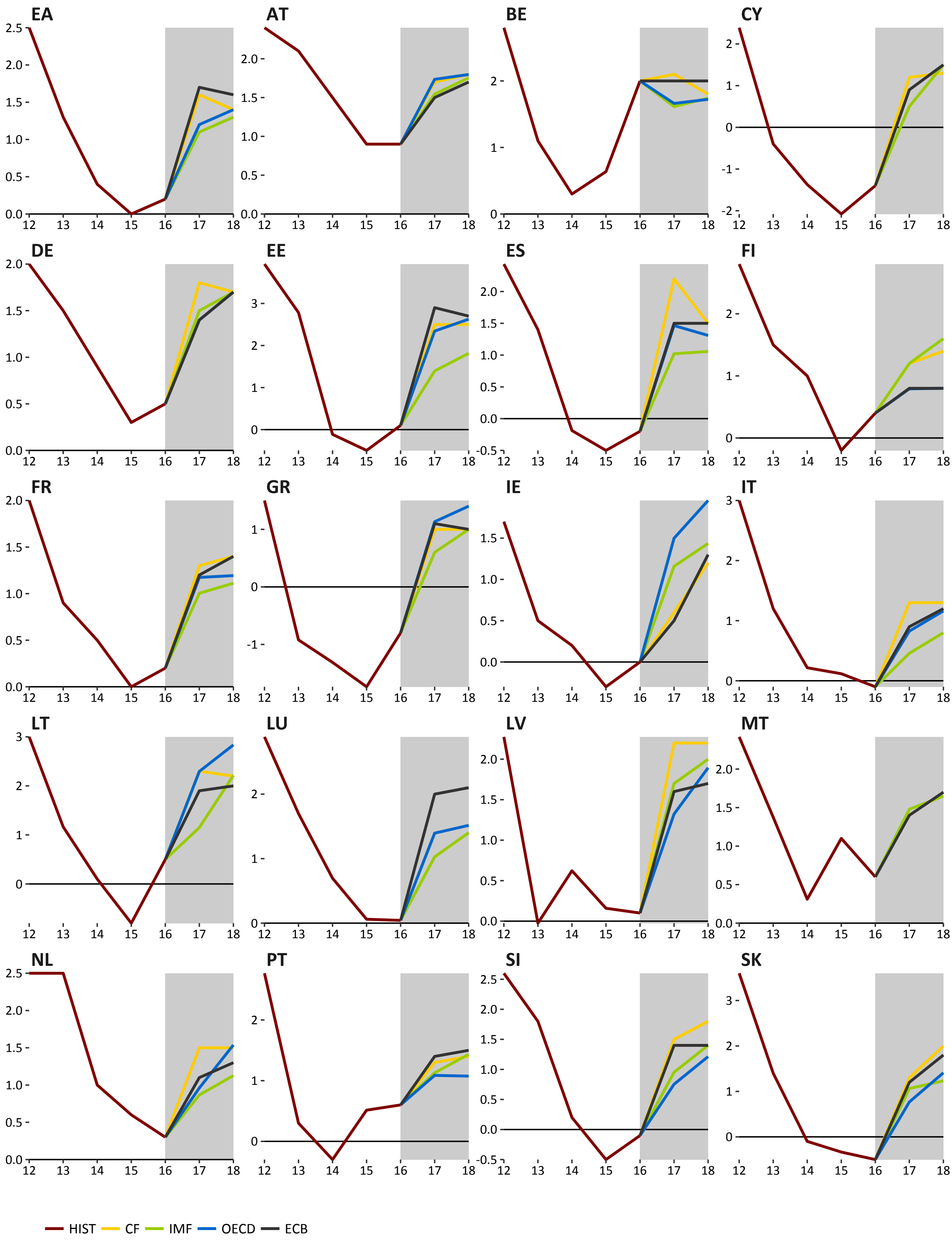
	CF		IMF		OECD		CB / EIU	
EA	-0.1	2017/4 2017/3	0	2016/10 2016/4	0	2016/11 2016/6	+0.4	2017/3 2016/12
DE	0	2017/4 2017/3	+0.1	2016/10 2016/4	-0.1	2016/11 2016/6	-0.1	2016/12 2016/6
US	0	2017/4 2017/3	+0.8	2016/10 2016/4	-0.1	2016/11 2016/6	0	2017/3 2016/12
UK	0	2017/4 2017/3	+0.6	2016/10 2016/4	+0.8	2016/11 2016/6	0	2017/2 2016/11
JP	0	2017/4 2017/3	-0.7	2016/10 2016/4	-1.8	2016/11 2016/6	0	2017/1 2016/11
CN	0	2017/4 2017/3	+0.3	2016/10 2016/4	-0.8	2016/11 2016/6	-0.1	2017/4 2017/3
IN	+0.1	2017/4 2017/3	-0.1	2016/10 2016/4	+0.6	2016/11 2016/6	+0.2	2017/3 2017/3
RU	-0.1	2017/3 2017/2	-1.5	2016/10 2016/4	+0.6	2016/11 2016/6	-0.2	2017/3 2017/2
BR	-0.3	2017/3 2017/2	-0.7	2016/10 2016/4	+0.3	2016/11 2016/6	-0.7	2017/3 2017/3

A3. GDP growth in the euro area countries



Note: The chart shows institutions' latest available outlooks of for the given country (in %).

A4. Inflation in the euro area countries



Note: The chart shows institutions' latest available outlooks of for the given country (in %).

A5. List of abbreviations

AT	Austria
bbl	barrel
BE	Belgium
BoE	Bank of England
BoJ	Bank of Japan
bp	basis point (one hundredth of a percentage point)
BR	Brazil
BRIC	countries of Brazil, Russia, India and China
BRL	Brazilian real
CB	central bank
CB-CCI	Conference Board Consumer Confidence Index
CB-LEII	Conference Board Leading Economic Indicator Index
CBR	Central Bank of Russia
CF	Consensus Forecasts
CN	China
CNB	Czech National Bank
CNY	Chinese renminbi
CXN	Caixin
CY	Cyprus
DBB	Deutsche Bundesbank
DE	Germany
EA	euro area
ECB	European Central Bank
EC-CCI	European Commission Consumer Confidence Indicator
EC-ICI	European Commission Industrial Confidence Indicator
EE	Estonia
EIA	Energy Information Administration
EIU	Economist Intelligence Unit
ES	Spain
EU	European Union
EUR	euro
EURIBOR	Euro Interbank Offered Rate
Fed	Federal Reserve System (the US central bank)
FI	Finland
FOMC	Federal Open Market Committee
FR	France
FRA	forward rate agreement
FY	fiscal year
GBP	pound sterling
GDP	gross domestic product
GR	Greece
ICE	Intercontinental Exchange
IE	Ireland
IEA	International Energy Agency
IMF	International Monetary Fund
IN	India
INR	Indian rupee
IRS	Interest Rate swap
ISM	Institute for Supply Management
IT	Italy
JP	Japan
JPY	Japanese yen
LIBOR	London Interbank Offered Rate
LME	London Metal Exchange
LT	Lithuania
LU	Luxembourg
LV	Latvia
MKT	Markit
MT	Malta
NIESR	National Institute of Economic and Social Research
NKI	Nikkei
NL	Netherlands
OECD	Organisation for Economic Co-operation and Development
OECD-CLI	OECD Composite Leading Indicator
PMI	Purchasing Managers' Index
pp	percentage point
PT	Portugal
QE	quantitative easing
RU	Russia
RUB	Russian rouble
SI	Slovenia
SK	Slovakia
TLTRO	targeted longer-term refinancing operations
UK	United Kingdom
UoM-CSI	University of Michigan Consumer Sentiment Index
US	United States
USD	US dollar
USDA	United States Department of Agriculture
WEO	World Economic Outlook
WTI	West Texas Intermediate (crude oil used as a benchmark in oil pricing)
ZEW-ES	ZEW Economic Sentiment