

GLOBAL ECONOMIC OUTLOOK - MARCH

Monetary Department
External Economic Relations Division

2019

I. Introduction	2
II. Economic outlook in advanced countries	3
II.1 Euro area	3
II.2 Germany	4
II.3 United States	5
II.4 United Kingdom	6
II.5 Japan	6
III. Economic outlook in developing countries	7
III.1 China	7
III.2 Russia	7
IV. Leading indicators and outlook of exchange rates	8
IV.1 Advanced economies	8
IV.2 Developing countries	9
V. Commodity market developments	10
V.1 Oil and natural gas	10
V.2 Other commodities	11
VI. Focus	12
How heavy a fiscal burden are we carrying to interest rate base camp? The fiscal and monetary space in OECD countries	12
A. Annexes	17
A1. Change in predictions for 2019	17
A2. Change in predictions for 2020	17
A3. GDP growth in the euro area countries	18
A4. Inflation in the euro area countries	19
A5. List of abbreviations	20

Cut-off date for data

15 March 2019

CF survey date

11 March 2019

GEO publication date

22 March 2019

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.

Authors

Luboš Komárek	Pavla Růžičková	Tomáš Adam	Filip Novotný	Soňa Benecká
Editor-in-chief I. Introduction VI. Focus	Editor II.4 United Kingdom	II.1 Euro area	II.2 Germany	II.3 United States III.1 China
Oxana Babecká	Jan Hošek			
II.5 Japan III.2 Russia	V.1 Oil and natural gas V.2 Other commodities			

The key issue in March is without doubt the UK's fast-approaching exit from the EU and the manner of that exit, which is still shrouded in uncertainty. A disorderly Brexit would, at least in the short term, have substantial impacts both at corporate level and on the economy as a whole, including an overall worsening of sentiment. Other resonant issues include the potential delay in the signing of a trade deal between the USA and China, the weakening German economy and the further easing of monetary policy by the ECB.

The 2019 growth outlooks for all the advanced countries we monitor were reduced compared with the previous month. The inflation outlooks were revised similarly (except that for the UK, due probably to stagflation tendencies in the event of a disorderly Brexit). The dollar will appreciate slightly against the renminbi and the rouble at the one-year horizon. Conversely, it is expected to depreciate against the euro, sterling and the yen. The outlook for the 3M Euribor moved lower at the longer horizon and remains

negative at the end of 2020. The Brent crude oil price outlook moved only slightly higher at the 12-month horizon to just above USD 66/bbl.

The March GDP growth and inflation outlooks for the monitored countries

HDP	EA	DE	US	UK	JP	CN	RU
2019	1,2	1,0	2,4	1,3	0,7	6,2	1,5
2020	1,4	1,5	2,0	1,5	0,4	6,1	1,8

Inflace	EA	DE	US	UK	JP	CN	RU
2019	1,3	1,5	1,8	2,0	0,7	2,1	4,7
2020	1,5	1,6	2,2	2,1	1,0	2,1	4,1

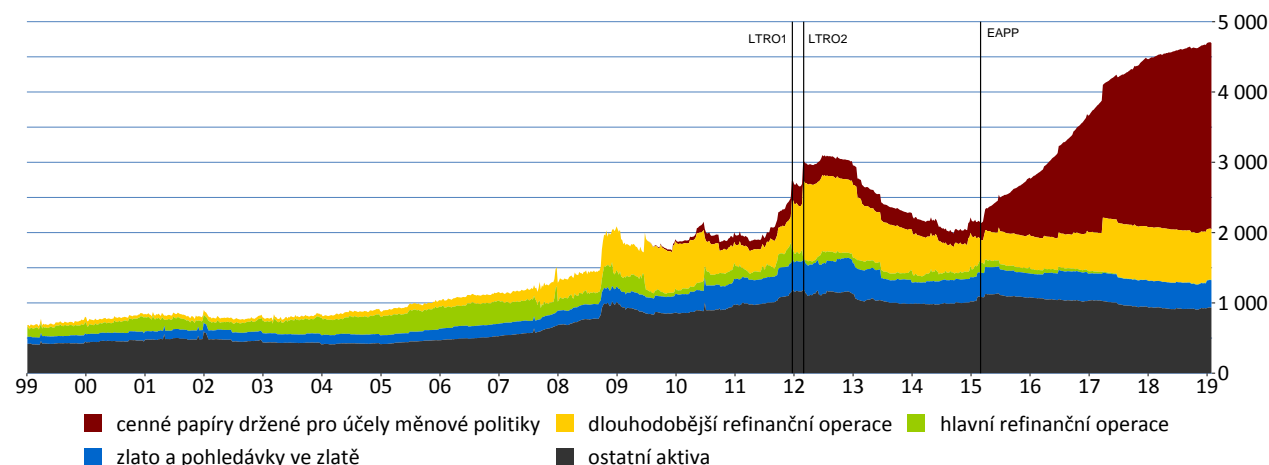
Source: Consensus Forecasts (CF)

Note: The arrows indicate the direction of the revisions of the newly published forecasts compared to the previous issue of GEO.

The chart in this issue shows the Eurosystem central banks' balance sheet over the monetary union's 20-year history. The visible growth in the balance sheet is due to the use of unconventional monetary policy instruments. The first major increase in the balance sheet was recorded after two extraordinary longer-term refinancing operations in late 2012 and early 2013 (LTRO1

and LTRO2; see the yellow area in the chart). These operations were gradually repaid and in April 2015 were replaced as the main contributor to the ECB's balance sheet growth by securities purchases under the Extended Asset Purchase Programme (EAPP), consisting mainly of government bond purchases by the ECB and national central banks (see the brown area in the chart). Net purchases under this programme were terminated at the end of last year. However, the era of accommodative ECB monetary policy is not over yet, as evidenced by measures approved this month (see the *Euro area* section). Reinvestments of the principal payments from securities purchased under the APP will thus probably continue in the years ahead. In addition, a new series of quarterly targeted longer-term refinancing operations (TLTRO-III) will counteract any decline in the ECB's balance sheet. The question is, however, whether these operations will ensure that the ECB's long-undershot inflation target is achieved.

The size of the Eurosystem central banks' balance sheet (assets, in EUR billions)



Source: ECB

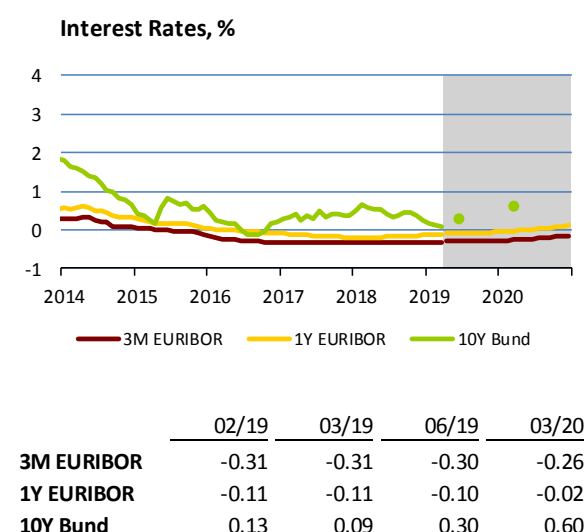
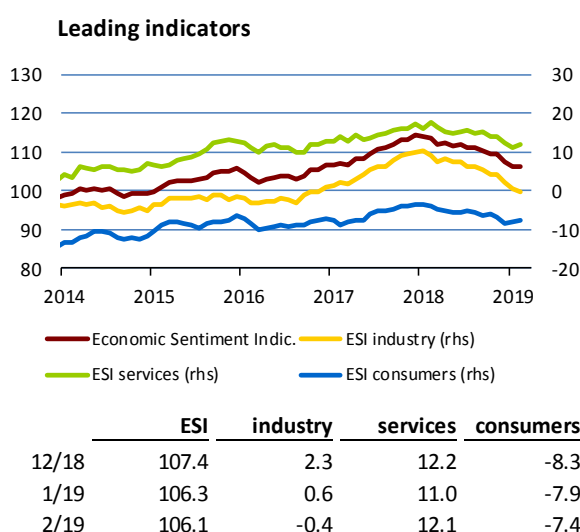
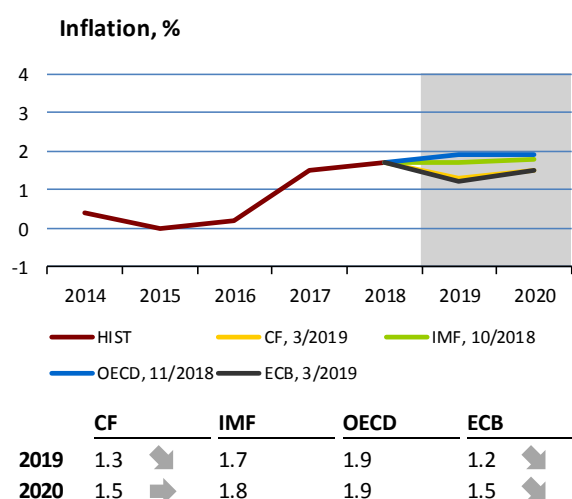
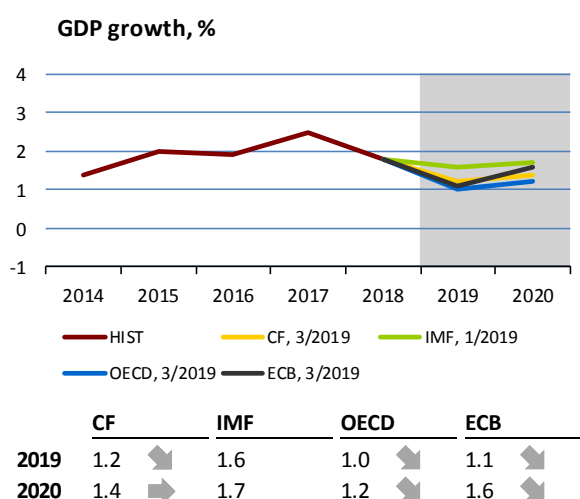
Note: LTRO1, LTRO2 (Longer-Term Refinancing Operations), EAPP (Expanded Asset Purchase Programme), APP (Asset Purchase Programmes) containing the CSPP (Corporate Sector Purchase Programme), PSPP (Public Sector Purchase Programme), ABSPP (Asset-Backed Securities Purchase Programme) and CBPP3 (Third Covered Bond Purchase Programme).

The March issue also contains an analysis [How heavy a fiscal burden are we carrying to interest rate base camp? The fiscal and monetary space in OECD countries](#). The article estimates the current monetary and fiscal space in OECD countries in the context of the monetary policy normalisation process. It finds that interest rate normalisation has yet to create a safe monetary policy response space in numerous OECD countries. In many of them, this is being exacerbated by adverse fiscal developments in the post-Lehman period.

II.1 Euro area

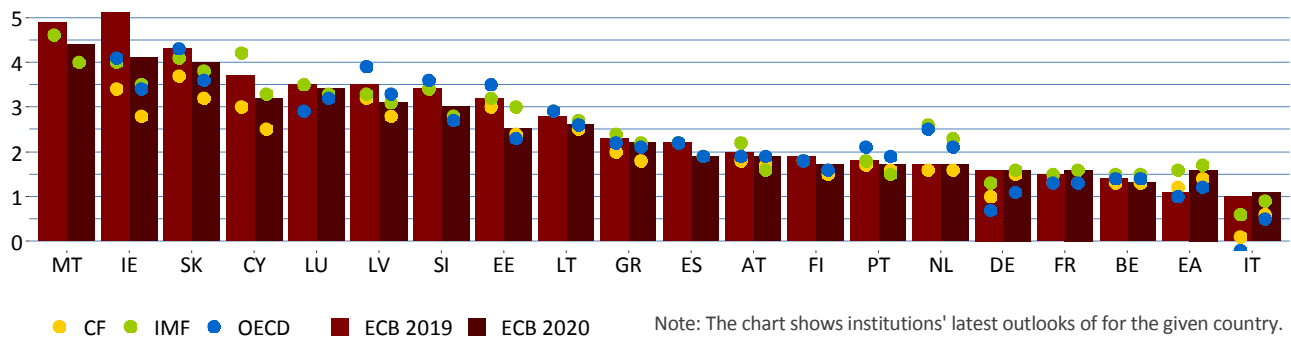
Most of the monitored economic growth outlooks in the euro area were revised downwards. They thus reflect the latest developments, which are increasing the likelihood that the sharp slowdown observed in 2018 H2 will continue. The economy is being affected by the still high uncertainty related to protectionist measures in international trade, the outcome of Brexit negotiations and the slowdown of the Chinese economy. Industrial production recovered in January after two months of decline, but in Germany it recorded a further drop. The PMI in manufacturing edged down again, slipping into the contraction territory for the first time in five years (49.3). It is thus unclear whether the temporary factors that have affected manufacturing in recent months have subsided. By contrast, retail sales recorded a positive result, rising by 1.3% in January. The labour market situation also remains positive, with unemployment reaching its lowest level since November 2007 (8.1%). The monitored outlooks expect GDP growth to slow to 1.0%–1.2% in 2019 as a whole; next year the growth is expected to accelerate slightly.

Headline HICP inflation rose slightly to 1.5% in February due to larger contributions from energy and food prices. By contrast, core inflation fell to 1.0%. The outlooks expect inflation to average less than 1.5% this year and around 1.5% next year. The ECB revised its inflation outlook significantly (by 0.4 pp for this year and 0.2 pp for the next two years). The Governing Council announced several changes to monetary policy at its March meeting. It extended its commitment to keep key rates at the current levels at least until the end of 2019 (the rates were originally to stay there only until summer); the expected end of reinvestments of the principal payments from maturing securities held by the ECB was thus also postponed. The ECB also announced a new series of targeted longer-term refinancing operations (TLTRO-III) as from September 2019. The 3M Euribor market rate outlook thus edged lower and remains in negative territory at the end of 2020.

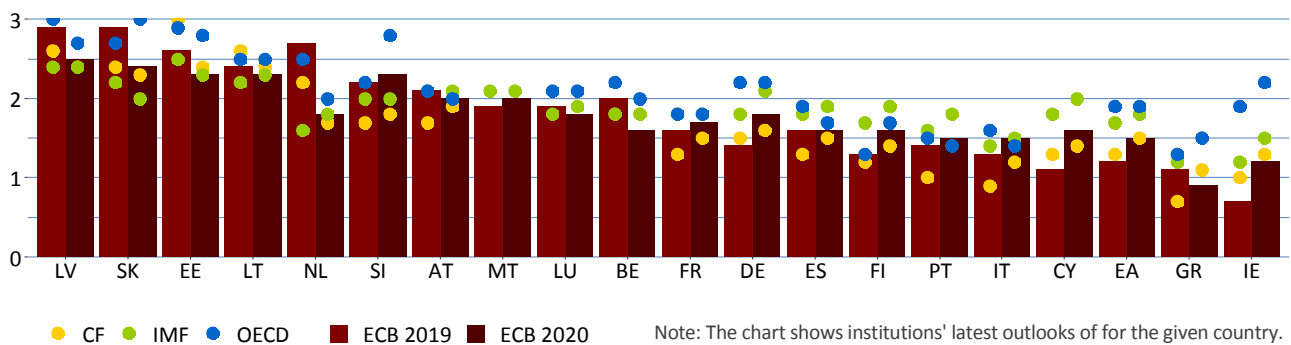


II. ECONOMIC OUTLOOK IN ADVANCED ECONOMIES

GDP growth outlooks in the euro area countries in 2019 and 2020, %

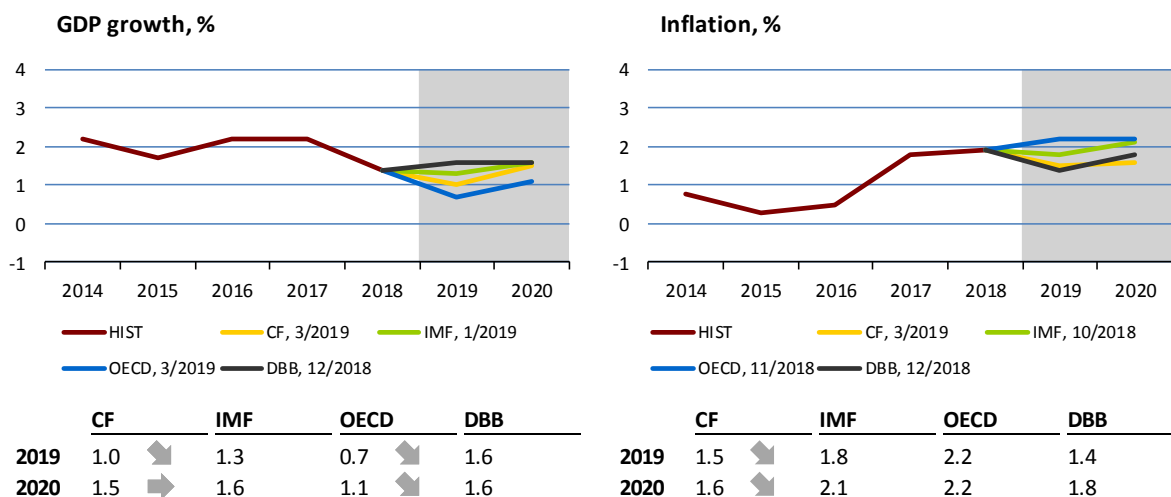


Inflation outlooks in the euro area countries in 2019 and 2020, %



II.2 Germany

The GDP growth and inflation outlooks for Germany were revised down. The OECD expects economic growth of just 0.7% this year. Some CF analysts foresee even lower growth. The Germany economy was flat in year-on-year terms in 2018 Q4, avoiding technical recession. Industrial production fell in January, whereas retail sales grew. The leading PMI indicator in manufacturing also declined further in February. It has been in the contraction band for two months in a row now. The leading IFO and ZEW indicators also dropped again. Economic growth can therefore be expected to be subdued at least in 2019 H1. HICP inflation was 1.7% for the third straight month in February. The lower inflation compared with the previous period was due mainly to a drop in the contribution of energy prices. CF lowered its inflation outlook for this year and the next to well below the 2% level. The Bundesbank expects similarly low inflation.

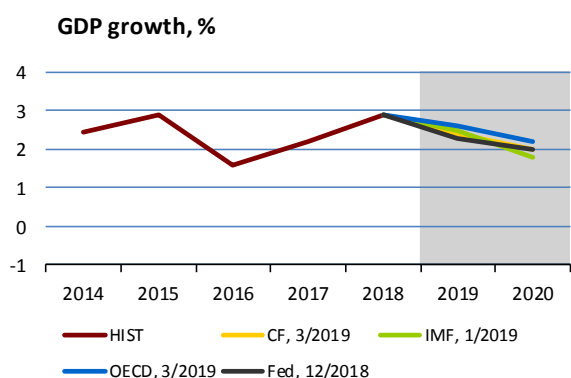


II.3 United States

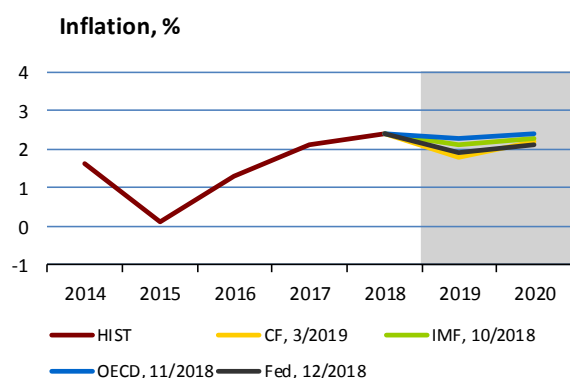
US economic growth reached 2.6% in 2018 Q4 (in quarter-on-quarter annualised terms), positively surprising the financial markets, which had expected a worse figure. Corporate inventories and investment in equipment contributed positively to the growth; private consumption was boosted by growth in employment and wages. The partial shutdown of government agencies, the longest in history (35 days), had the opposite effect, reducing quarterly growth by 0.1 pp. Economic expansion was also dampened by financial market volatility at the year-end, the fading effect of President Trump's tax reform and the ongoing US-Chinese trade disputes. According to President Trump, the talks were making substantial progress, so the increase in tariffs on Chinese goods imports planned for the start of March did not occur. The signing of a deal is being held back mainly by a US demand for the inclusion of intellectual property protection.

A number of indicators suggest a further slowdown in economic growth in 2019 Q1. According to the Atlanta Fed's latest estimate, GDP will grow by just 0.4% (in quarter-on-quarter annualised terms). The expected growth reflects the effect of a data publication delay and one-off effects (colder weather and the partial government shutdown). The message as regards industrial sectors is mixed. The leading indicator for manufacturing fell further, but orders remain strong in many sectors. Annual industrial output growth slowed to 3.8% in January amid a drop in capacity utilisation. Retail sales grew year on year in January (by 2.3%), but consumer confidence fell sharply, especially in the expectations component. Non-farm payrolls rose by just 20,000 in February, but unemployment fell slightly. Overall inflation pressures declined moderately, with headline inflation being affected by a drop in energy prices. Consumer prices rose by 1.5% year on year in February, while core inflation slowed slightly to 2.1%.

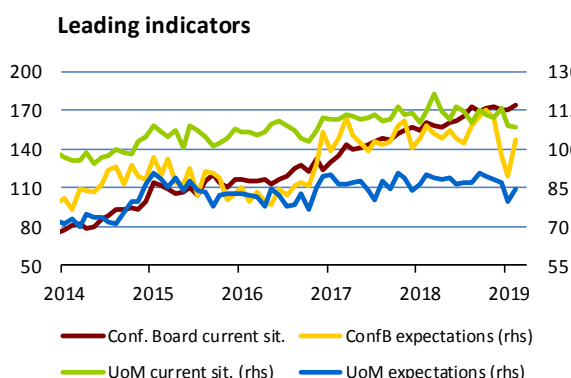
The March CF revised down both its growth and inflation outlooks for this year, whereas the growth forecast for 2020 is slightly more optimistic. The OECD outlooks shifted in the same direction.



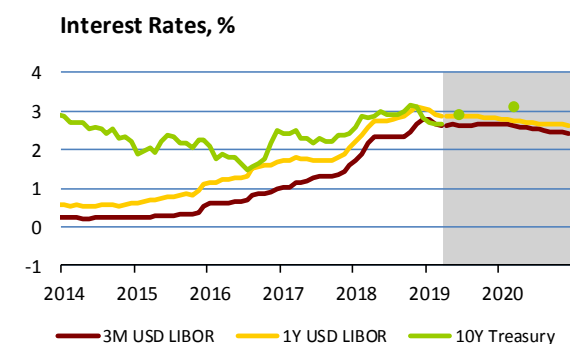
	CF	IMF	OECD	Fed
2019	2.4	2.5	2.6	2.3
2020	2.0	1.8	2.2	2.0



	CF	IMF	OECD	Fed
2019	1.8	2.1	2.3	1.9
2020	2.2	2.3	2.4	2.1



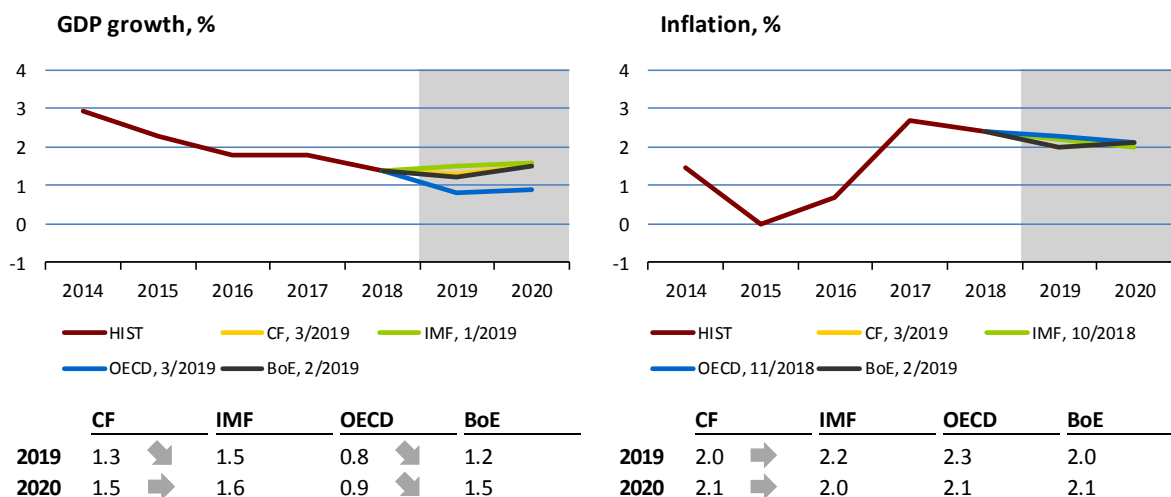
	ConfB curr.	ConfB exp.	UoM curr.	UoM exp.
12/18	169.9	97.7	116.1	87.0
1/19	170.2	89.4	108.8	79.9
2/19	173.5	103.4	108.5	84.4



	02/19	03/19	06/19	03/20
USD LIBOR 3M	2.68	2.60	2.63	2.62
USD LIBOR 1R	2.91	2.91	2.87	2.75
Treasury 10R	2.68	2.67	2.90	3.10

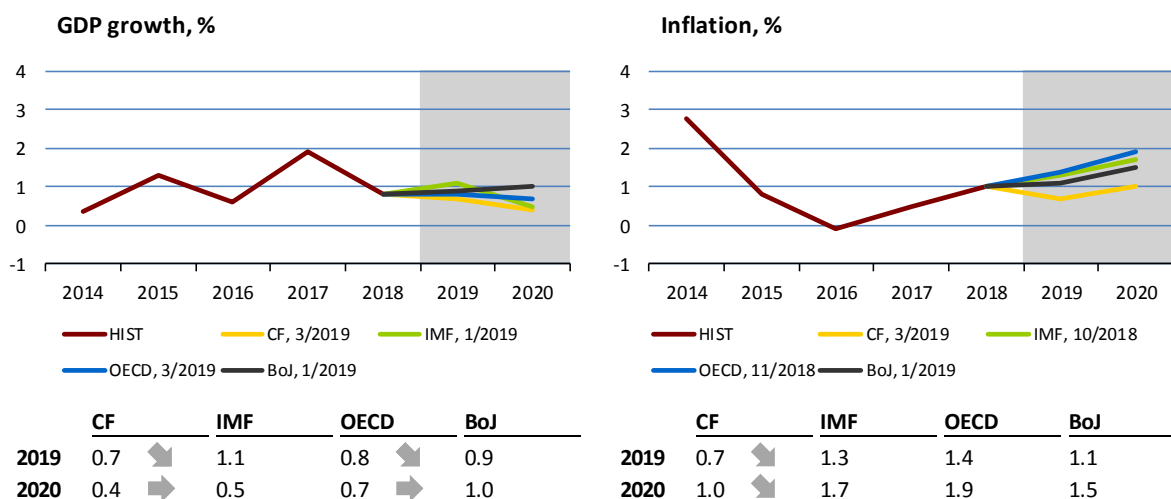
II.4 United Kingdom

The Brexit turmoil in the UK Parliament is having no immediate effect on the real economy, but the protracted uncertainty is now having a visible impact on the country's macroeconomic condition. UK economic growth remains lacklustre. GDP rose by 0.5% month on month in January, with all economic sectors recovering (industrial output grew for the first time since July 2018), but this basically only offset the December fall. Leading indicators are also suggesting only a slight expansion. The PMI stood at 51.3 points in services and dropped to 52 points in manufacturing. According to a NIESR estimate, the economy will grow by just 0.2% in Q1 (the same as at the end of last year). The estimates for both this year and the next were revised downwards. The new OECD forecast expects annual growth of just 0.8% this year (assuming a smooth Brexit) and CF lowered its outlook to 1.3%. In addition to the enormous Brexit-related uncertainty, slowing growth in the euro area is dragging on the economy.



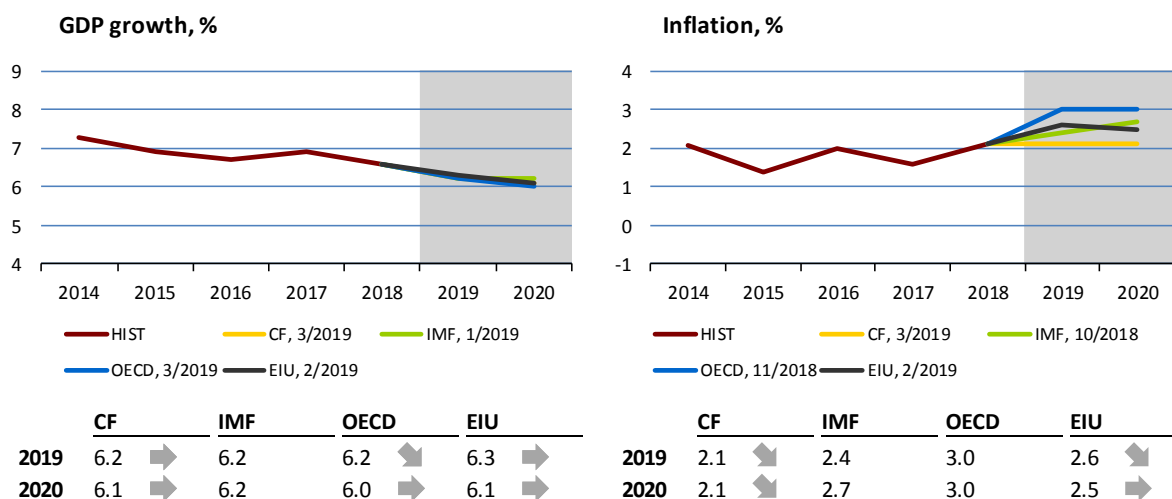
II.5 Japan

Japanese industrial production fell month on month in January. The fall was milder than that recorded in January of the previous year. However, negative figures dominated industrial output throughout last year. Leading indicators are indicating no major changes either. The Nikkei PMI in manufacturing fell sharply for the second consecutive month. It slumped to 48.5 in February, the worst result in two and a half years. By contrast, services are raising hopes. The PMI for this sector rose for the third straight month, reaching 52.3 in February. New orders grew the fastest in almost six years. According to the outlooks, GDP growth will initially stabilise at roughly last year's level but then slow slightly. According to the new CF outlook, inflation will not maintain its upward trend over the outlook horizon and its average level will drop to 0.7% this year.



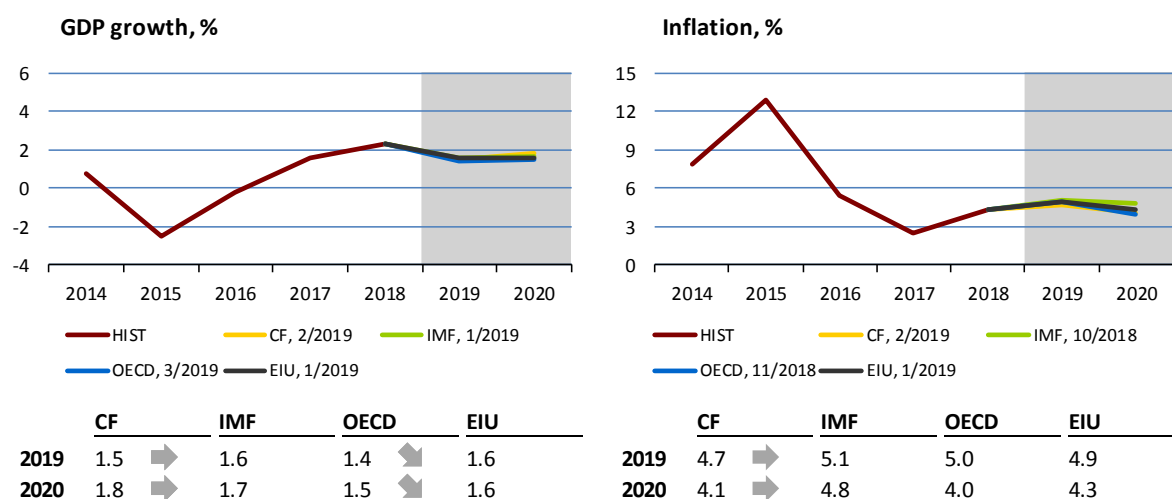
III.1 China

Signs of a slowdown of the Chinese economy can be seen in industry, while the impact on consumer demand and investment is so far limited. Annual industrial output growth slowed to a 17-year low in January and February (5.3%) and leading indicators have yet to confirm a major change in trend. Foreign trade is declining; Chinese exports slumped by 20% year on year in February. The stocking-up effect has faded and the tariff effect has materialised in full. Car sales in China have been falling for eight months in a row now (by 13.8% year on year in February). However, growth in retail sales remained stable (at 8.5% year on year). The Chinese authorities have announced a raft of stimulation measures – from car purchase subsidies through tax relief to large infrastructure projects. The central bank is also expected to take further steps to boost liquidity and funding. The March CF revised its inflation forecast downwards for both years. The OECD’s GDP growth outlook also shifted slightly.



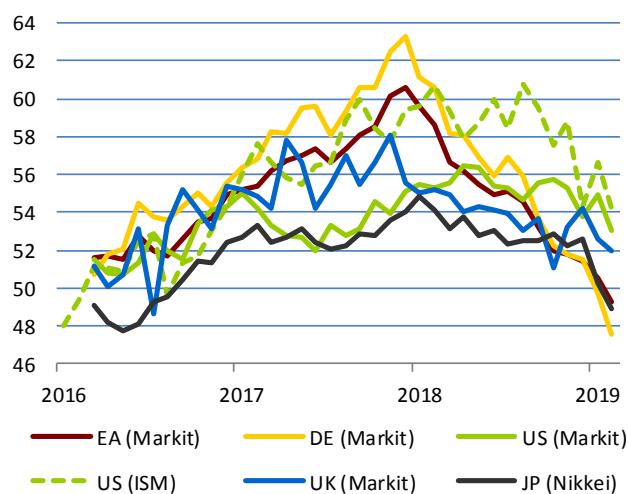
III.2 Russia

The January industrial output and labour market figures were strongly affected by a period of holidays in the first half of the month. The message of the leading indicators is mixed. The PMI in manufacturing dropped for the third consecutive month in February to just above the dividing line between the economic expansion and contraction bands. The indicator recorded its worst result in five months due to weak growth in both output and new orders and the fastest fall in export orders since April 2017. By contrast, the PMI in services rose to a three-month high of 55.3 in February. Inflation has been accelerating gradually for eight months now, reaching 5.2% in February. The monitored outlooks agree on GDP growth of around 1.5%–1.6% this year; inflation is expected to return below 5% at the end of the year.

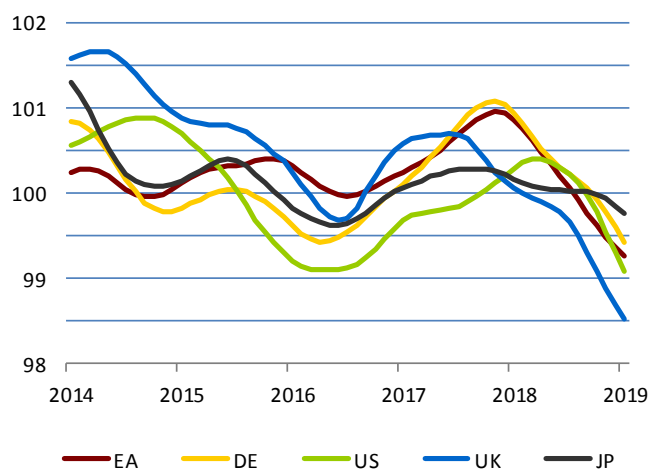


IV.1 Advanced economies

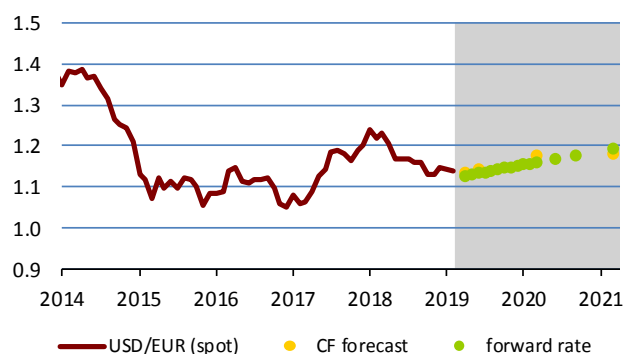
PMI in manufacturing



OECD Composite Leading Indicator

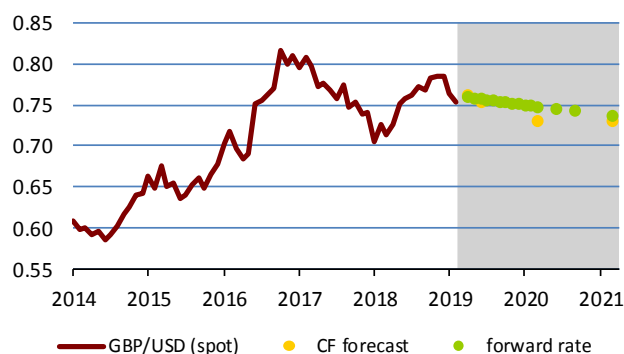


The US dollar (USD/EUR)



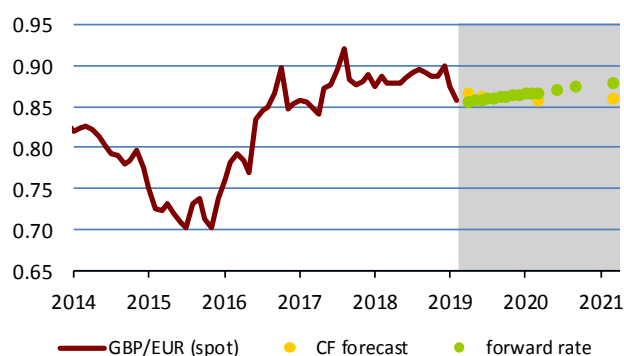
	11/3/19	04/19	06/19	03/20	03/21
spot rate	1.122				
CF forecast		1.136	1.143	1.176	1.179
forward rate		1.128	1.133	1.160	1.194

The British pound (GBP/USD)



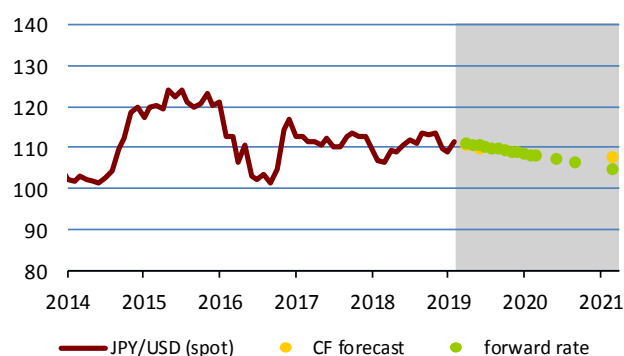
	11/3/19	04/19	06/19	03/20	03/21
spot rate	0.763				
CF forecast		0.762	0.754	0.729	0.729
forward rate		0.759	0.757	0.747	0.737

The British pound (GBP/EUR)



	11/3/19	04/19	06/19	03/20	03/21
spot rate	0.856				
CF forecast		0.865	0.861	0.858	0.860
forward rate		0.856	0.858	0.867	0.879

The Japanese yen (JPY/USD)

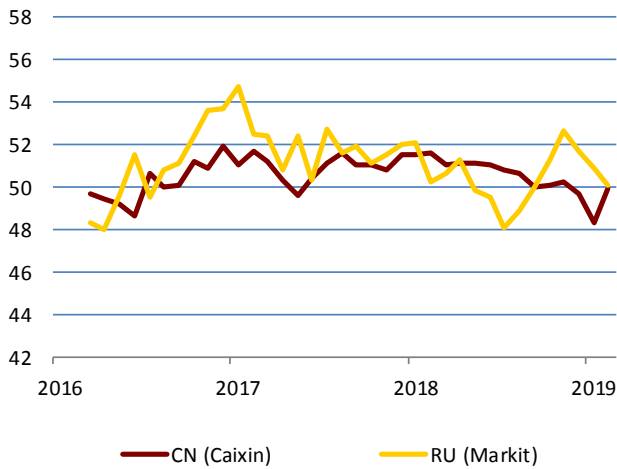


	11/3/19	04/19	06/19	03/20	03/21
spot rate	111.2				
CF forecast		110.4	109.9	108.1	107.8
forward rate		110.9	110.4	108.0	104.7

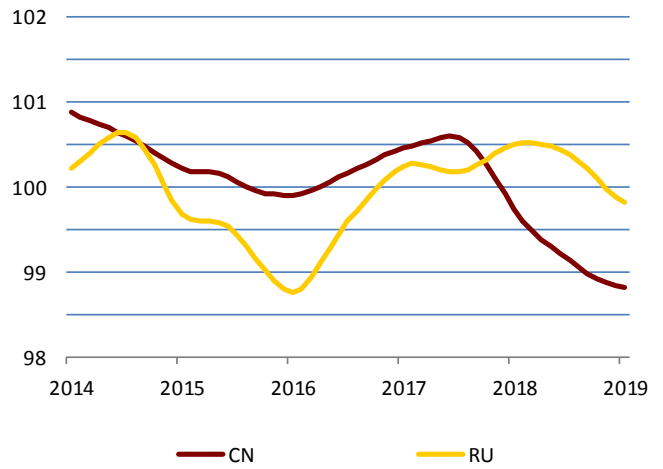
Note: Exchange rates as of last day of month. Forward rate does not represent outlook; it is based on covered interest parity, i.e. currency of country with higher interest rate is depreciating. Forward rate represents current (as of cut-off date) possibility of hedging future exchange rate.

IV.2 Developing countries

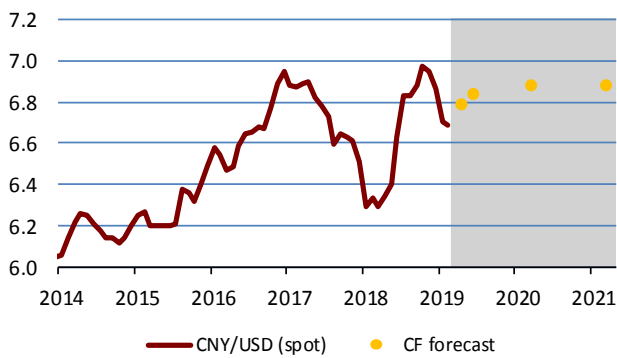
PMI in manufacturing



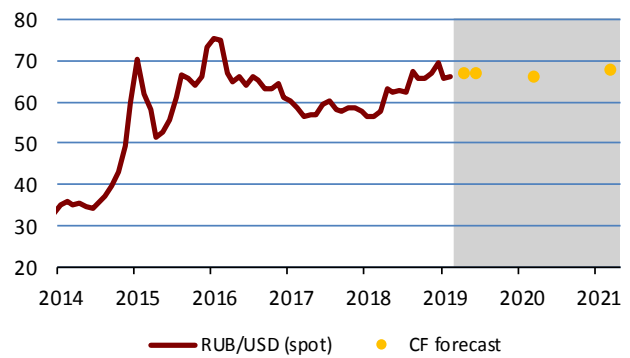
OECD Composite Leading Indicator



The Chinese renminbi (CNY/USD)



The Russian rouble (RUB/USD)



	11/3/19	04/19	06/19	03/20	03/21
spot rate	6.726				
CF forecast		6.785	6.835	6.879	6.877

	11/3/19	04/19	06/19	03/20	03/21
spot rate	66.02				
CF forecast		67.00	66.82	66.14	67.58

Note: Exchange rates as of last day of month.

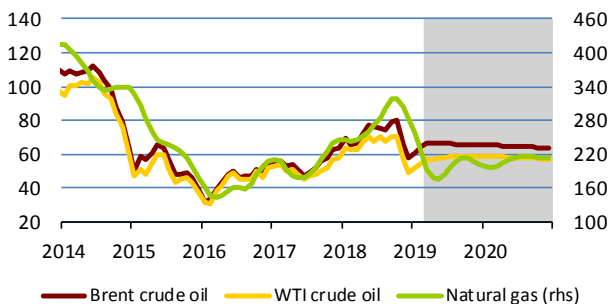
V.1 Oil and natural gas

After a relatively calm month, the Brent crude oil price jumped up by USD 5/bbl in early February and has since been fluctuating around USD 66/bbl with no visible trend. The growth was due to a statement made by the Saudi Arabia energy minister that the country was planning further large output cuts in March. In addition, President Trump admitted that he might delay the imposition of higher tariffs on Chinese goods if the talks between the USA and China were to head towards agreement. This eventually happened. Since then, a higher oil price has been supported by compliance with the output reduction deal signed by OPEC and its allies in December 2018, an expected further drop in oil output in Iran and Venezuela due to US sanctions and growing optimism about the US-China trade deal. Oil prices could receive a new stimulus in April, when exemptions from the sanctions on purchases of Iranian oil expire and OPEC could decide at its meeting to extend the output reduction deal.

The market futures curve shifted higher compared with the previous month. It is slightly falling, implying an average Brent crude oil price close to USD 65/bbl for this year and the next. The March CF forecast is similar, expecting a Brent price of USD 66.5/bbl at the one-year horizon. By contrast, the EIA estimates an average price of just US 63/bbl this year and USD 62/bbl the next. According to the EIA, world inventories will grow by an average 0.2 million and 0.4 million barrels a day this year and the next respectively. Together with growth in OPEC's reserve output capacity and a rise in US oil exports, this will prevent major growth in Brent prices.

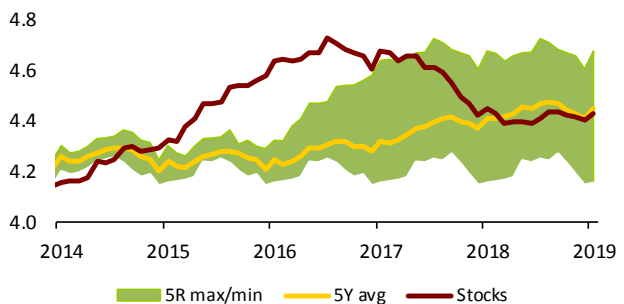
The average price of natural gas in Europe fell by 17% to USD 6/MMBtu and is 37% down from September. This is due to continued mild weather in Europe and Asia, which is also pushing down LNG and coal prices.

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

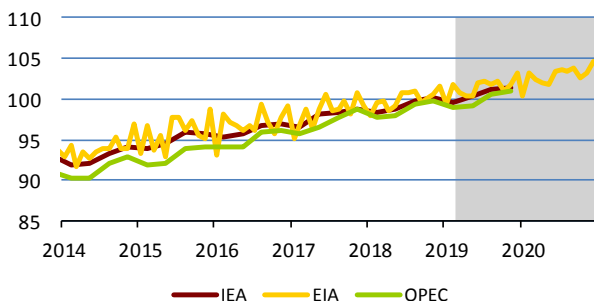


	Brent	WTI	Natural gas
2019	65.43 ↗	57.34 ↗	203.86 ↘
2020	64.63 ↗	57.88 ↗	209.01 ↘

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

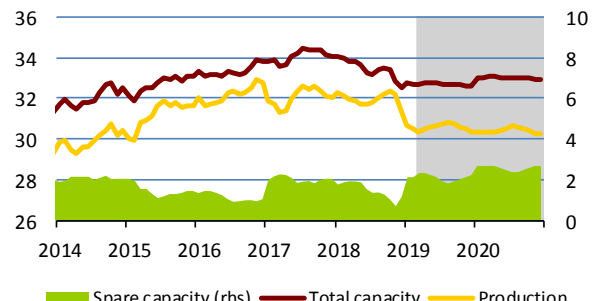


Global consumption of oil and oil products (mil. barrel / day)



	IEA	EIA	OPEC
2019	100.60 ↘	101.39 ↘	99.95 ↘
2020		102.85 ↘	

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



	Production	Total capacity	Spare capacity
2019	30.59 ↘	32.70 ↘	2.11 ↗
2020	30.43 ↘	33.01 ↘	2.58 ↗

Source: Bloomberg, IEA, EIA, OPEC, CNB calculation

Note: Oil price at ICE, average gas price in Europe – World Bank 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.

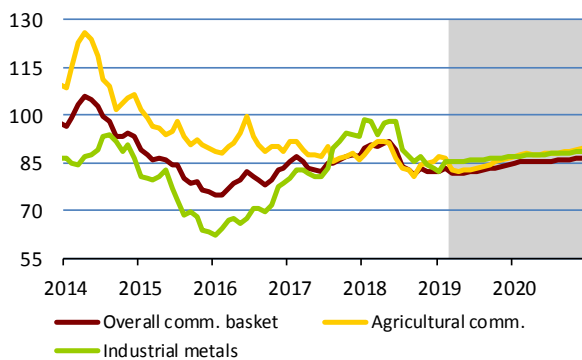
V.2 Other commodities

The aggregate non-energy commodity price index continues to fluctuate along a horizontal trend amid mixed developments of its components. Its outlook is slightly rising. The base metals price sub-index rose by 4% in February on expectations that the Chinese government’s stimulation measures and progress with the US-Chinese trade talks would support global economic growth, and maintained its gains in the first half of March. By contrast, the food commodity price sub-index dropped, due mainly to a 20% decline in prices of wheat, which started in mid-February. However, the outlooks for both indices are rising.

The growth in the base metals price index has been fostered since mid-February mainly by the price of copper. Copper stocks on the LME kept falling and were down 60% year on year. Demand continues to exceed supply and the market thus remains tight. The price of nickel also continued to rise. After strong growth in early February, the price of iron ore remained elevated due to problems at, and lower output from, mines in Brazil. However, stronger growth in base metal prices cannot be expected, as the outlook for global manufacturing continues to worsen. The J.P.Morgan Global Manufacturing PMI fell further in February, from 50.8 to 50.6, with the components of new orders and new exports most deteriorating.

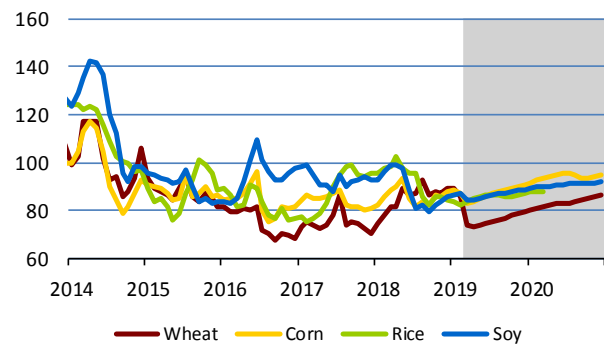
The price of wheat is facing negative sentiment from speculative funds and increased international competition. Stocks are high at the start of the new season, and the favourable outlook for the new harvest should comfortably meet demand. As for other food commodities, coffee and cocoa prices also fell. By contrast, the beef price kept rising to a seasonal high but should start to fall again in the weeks ahead.

Non-energy commodities price indices



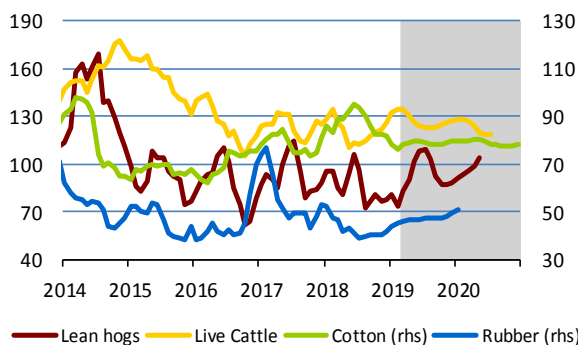
	Overall	Agricultural	Industrial
2019	82.7 ↘	84.4 ↘	85.7 ↗
2020	85.7 ↘	88.2 ↘	87.7 ↗

Food commodities



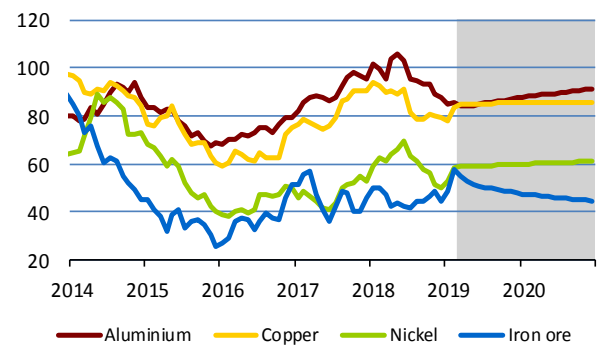
	Wheat	Corn	Rice	Soy
2019	77.9 ↘	87.3 ↘	85.5 ↗	86.6 ↘
2020	83.3 ↘	94.0 ↘	87.6 ↗	90.8 ↘

Meat, non-food agricultural commodities



	Lean hogs	Live Cattle	Cotton	Rubber
2019	92.0 ↗	127.3 ↗	78.6 ↗	46.8 ↗
2020	96.4 ↗	123.5 ↘	78.9 ↗	51.2 ★

Basic metals and iron ore



	Aluminium	Copper	Nickel	Iron ore
2019	85.6 ↘	84.4 ↗	58.7 ↗	50.9 ↘
2020	89.6 ↘	85.7 ↗	60.5 ↗	46.0 ↘

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.

How heavy a fiscal burden are we carrying to interest rate base camp? The fiscal and monetary space in OECD countries¹

The article sets out to estimate the current monetary and fiscal space in OECD countries in the context of the monetary policy normalisation process. Such space is necessary to provide for a situation where the business cycle requires a macroeconomic (monetary and fiscal) response (including a potentially stronger anti-crisis response). The monetary space can be expressed by the positive level of interest rates and the fiscal space by the positive difference between the sustainable debt-to-GDP ratio and the current debt ratio. The article finds that interest rate normalisation has yet to create a safe monetary policy response space in many OECD countries. No comfort can be drawn from the fiscal area either, as most countries have reduced their fiscal space in the post-Lehman period.

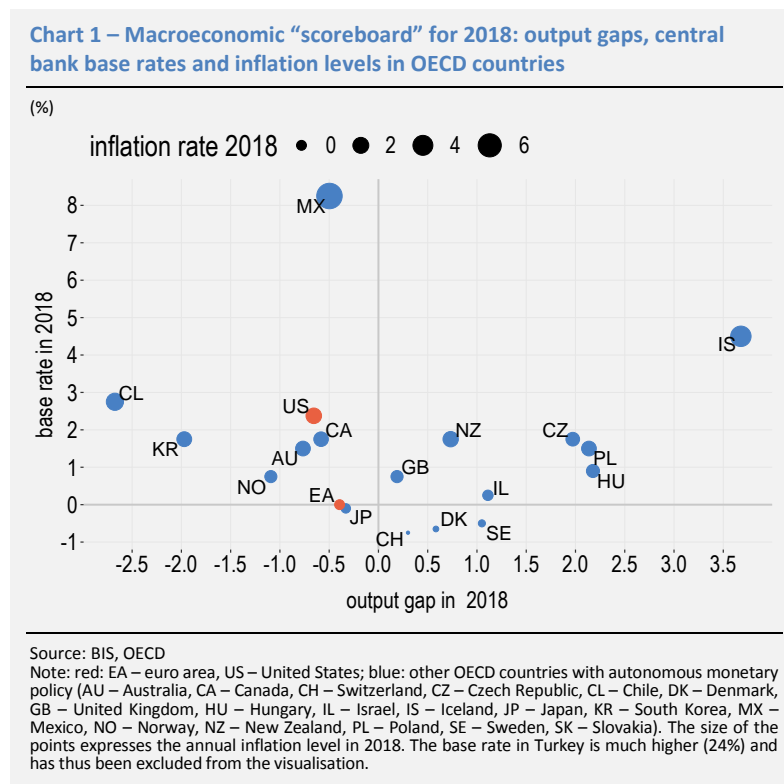
Interest rate normalisation and the current monetary space

More than ten years since the global financial crisis broke out, the global economy has gradually got back into decent condition in terms of economic growth and inflation. This applies to both advanced and developing countries. In OECD countries, which we focus on in this article, the output gap can be evaluated as generally closed (see Chart 1). On the other hand, the economies of some countries (especially Chile, South Korea and Norway, and to some extent also the USA, the euro area and Japan) are

still falling short of their potential output levels. Inflation in numerous OECD countries is close to 2%, the level generally regarded by economists as the inflation ideal (see Chart 1).

However, still low interest rates are a complicating and somewhat concealed feature of the condition of the global economy and advanced (OECD) countries.² In many advanced countries, nominal interest rates are distinctly lower than inflation, i.e. real rates are manifestly negative. This may be unsustainable for many reasons. If the cost of money stays low for an extended period, it fosters overvaluation of both real assets (real estate) and financial assets (equities and bonds). If authorities fail to respond (with macroprudential instruments, for example), or if the response is too soft, it can lead to economic agents, including governments, becoming over-leveraged.³

The first general condition for growth in interest rates is fulfilment of the price stability target and an improvement in macroeconomic conditions in general, not just in those



linked with the business cycle. The current signs of a slight slowdown in global growth, which started in 2018 and will probably last until the end of 2020, might foster a slower return of interest rates to their neutral level, i.e. a postponement of the start of the planned increase in rates. This slowing outlook is due mainly to the effects of previous interest rate increases (especially by the US Fed; see below) and to persisting uncertainty (including that linked with Brexit) caused by growing barriers to global trade.

The second – in essence necessary – condition for potential growth in interest rates is for central banks to discontinue their unconventional monetary policy instruments. These most often include quantitative and qualitative easing operations affecting the structure and size of central banks' balance

¹ Author: Luboš Komárek. The views expressed in this article are those of the author and do not necessarily reflect the official position of the Czech National Bank. The author would like to thank Tomáš Adam, Vít Bárta, Jan Brůha, Pavla Růžicková and Jan Vlček from the Czech National Bank for valuable discussions.

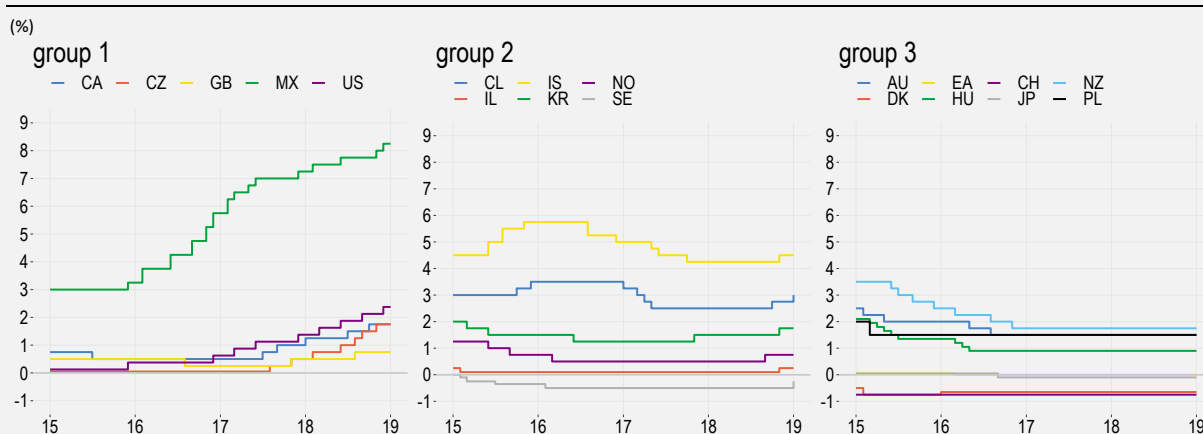
² The very low interest rates in advanced countries are fostering growth in property prices, which – given their insufficient inclusion in consumer prices – is apparently distorting “actual” inflation downwards.

³ This may be negatively amplified in developing countries by potential depreciation of their currencies against the reserve ones (particularly the US dollar), which further (and often very quickly) worsens a country's fiscal position.

sheets, forward guidance for particular economic variables, foreign exchange interventions, “helicopter money” (which has yet to be tested in practice) and negative central bank base (monetary policy) rates. Central bankers do not like to implement unconventional tools, but they are the only way of temporarily substituting for the acute impossibility of easing monetary conditions in the standard way, i.e. by lowering interest rates in positive territory. The standard monetary policy potential of interest rates is thus exhausted when they reach the zero lower bound. The ECB officially ended its quantitative easing at the end of last year (although the repercussions of this policy will still be felt due to reinvestment of assets). However, it is still operating with a negative deposit rate. Besides the ECB, the only other OECD countries using unconventional tools – all in the form of negative policy rates – are Switzerland, Denmark, Sweden and Japan.

Interest rates remain below their neutral level not only in the obvious cases of the ECB and OECD countries that have negative policy rates, but also at the now long normalising Fed. The neutral level can differ slightly from economy to economy, and calculating it is not a trivial exercise.⁴ The neutral policy rate is not usually constant and corresponds to the “normal” level of capacity utilisation and inflation close to the target. Estimates of it can even be negative under certain circumstances (see, for example, those for the euro area). The neutral rate is also affected by changes in the exchange rate trend. If the domestic currency is strengthening (weakening) against the reference currency (the dollar or the euro), real growth converted into the reference currency is higher, and that reduces (increases) the neutral rate. In simplified terms, assuming smooth fulfilment of inflation targets (which are mostly equal to inflation of 2% or very slightly higher in advanced countries, the author considers nominal interest rates of at least 3%–4%, i.e. real rates of 1%–2%, as the ideal state or rule of thumb.

Chart 2 – Base rates of OECD central banks



Source: BIS

Note: AU – Australia, CA – Canada, CH – Switzerland, CZ – Czech Republic, CL – Chile, DK – Denmark, GB – United Kingdom, HU – Hungary, EA – euro area, IL – Israel, IS – Iceland, JP – Japan, KR – South Korea, MX – Mexico, NO – Norway, NZ – New Zealand, PL – Poland, SE – Sweden, SK – Slovakia, US – United States. The base rate in Turkey is much higher (24%) and has thus been excluded from the visualisation.

The process of interest rate normalisation, i.e. the return to equilibrium rate levels, was started in late 2015 by the US Federal Reserve, followed almost immediately by the Mexican central bank. These two pioneers were joined by two other central banks – those of Canada and the Czech Republic – in summer 2017, and the Bank of England followed suit in autumn of the same year (see Chart 2, group 1). These self-confident central banks form the first group of OECD countries to have visibly lifted their interest rates from the notional trough. Simplifying somewhat, the hawkish nature of their policy rate decisions was motivated primarily by the domestic macroeconomic situation⁵ and the need to dampen a potential overheating of their economies. This played out in the context of global economic developments, including, for example, fluctuations in dollar prices of crude oil and other commodities, which most countries cannot influence directly and thus only take. The exception in this regard is the US, whose economic strength is reflected in many global economic variables. At the end of last year, these rate normalisation pioneers were joined by five other central banks: Iceland, South Korea, Norway, Chile and Israel, at the beginning of this year Sweden joined the group (see Chart 2, group 2). The interest rates of the other OECD central banks remain parked at post-crisis lows (see Chart 2, group 3).

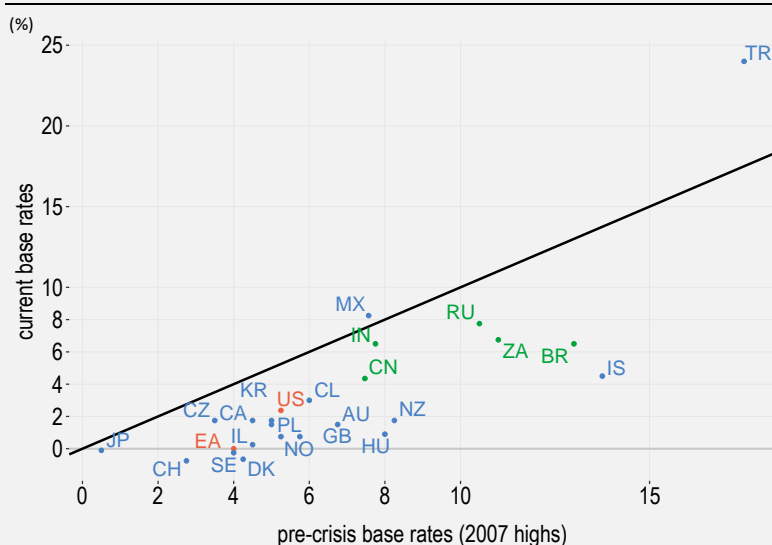
⁴ See, for example, Laubach and Williams (2015) and Hlédik and Vlček (2018).

⁵ The interest rate increase in the UK reflected both the reaction to the adversely affected growth potential after the Brexit referendum (the economy was showing signs of overheating despite GDP growth being much lower than previously) and the Bank of England’s stabilisation response to the inflation pressures generated by the depreciation of sterling. The interest rate hike in Mexico was motivated even more by inflation stabilisation due to the weakening Mexican peso and also by growth in President Trump’s protectionist measures – both implemented and discussed – between Mexico and the USA.

The Fed's interest rate decisions create the largest "externalities"⁶ in the global economy, as they also indirectly affect monetary conditions outside the US with varying intensity. This is due to the general position of the dollar,⁷ which is the notional global "number one" among reserve currencies and the most frequently used currency outside home territory, i.e. outside the USA. One example is developing economies with high dollar debt levels, where the interest rate normalisation process in the USA is simultaneously leading, through the uncovered interest parity channel, to depreciation of their currencies against the dollar and hence to growth in their domestic currency debt. This in turn is putting pressure on their public budgets, which have to withstand higher debt payments. This may generate social tension if fiscal restrictions significantly affect people's incomes.

The growth in interest rates has not led to a return to pre-crisis levels in the vast majority of OECD countries. This is illustrated by Chart 3, which compares OECD central banks' maximum base (monetary policy) rates before the outbreak of the last financial crisis (2007) with current interest rate levels. With the exception of Turkey and Mexico, all countries are below the notional diagonal, i.e. they have yet to raise the interest rate component of the monetary conditions to the pre-crisis level. Turkey's result cannot, of course, be evaluated as positive, as the interest rate there reflects the fight against the economic crisis which flared up in this specific country in August 2018.

Chart 3 – Interest rate normalisation: pre-crisis and current levels



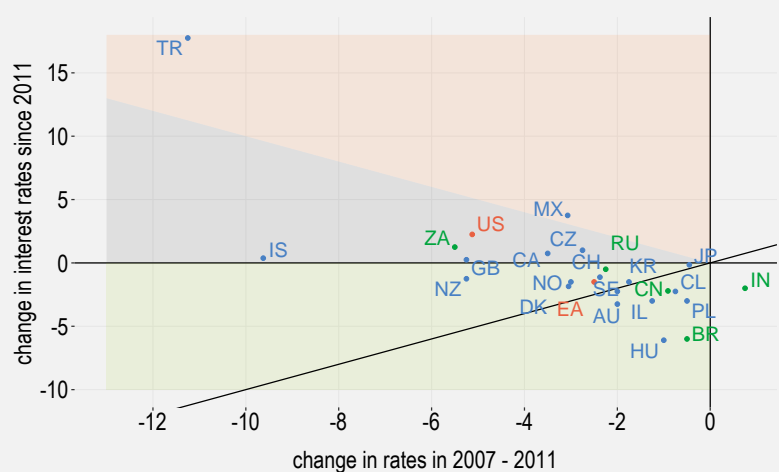
Source: BIS, EIU

Note: red: EA – euro area, US – United States; blue: other OECD countries with autonomous monetary policy (AU – Australia, CA – Canada, CH – Switzerland, CZ – Czech Republic, CL – Chile, DK – Denmark, GB – United Kingdom, HU – Hungary, IL – Israel, IS – Iceland, JP – Japan, KR – South Korea, MX – Mexico, NO – Norway, NZ – New Zealand, PL – Poland, SE – Sweden, SK – Slovakia, TR – Turkey); green: selected developing countries (BR – Brazil, CN – China, IN – India, ID – Indonesia, RU – Russia, ZA – South Africa).

Chart 4 – Changes in central banks' base rates

(percentage points)

area 1 area 2 area 3



Source: BIS, EIU

Note: red: EA – euro area, US – United States; blue: other OECD countries with autonomous monetary policy (AU – Australia, CA – Canada, CH – Switzerland, CZ – Czech Republic, CL – Chile, DK – Denmark, GB – United Kingdom, HU – Hungary, IL – Israel, IS – Iceland, JP – Japan, KR – South Korea, MX – Mexico, NO – Norway, NZ – New Zealand, PL – Poland, SE – Sweden, SK – Slovakia, TR – Turkey); green: selected developing countries (BR – Brazil, CN – China, IN – India, ID – Indonesia, RU – Russia, ZA – South Africa).

The notional monetary space for potentially easing monetary conditions via interest rates thus remains pretty small. Chart 4 attempts to illustrate this by comparing the cumulative easing of the interest rate component of monetary conditions (i.e. the amount in percentage points by which the country cut interest rates) between 2007 and 2011 with the cumulative subsequent monetary policy tightening (i.e. the amount in percentage points by which interest rates have been raised from their 2011 lows to the present level). Three areas crystallise from the chart. The first again shows that most of the countries under review (all those lying below the horizontal axis) have yet to start raising rates at all. The second (blue) area contains countries that have started raising rates but have yet to reach the pre-crisis levels. Only Mexico

⁶ This is a term used in economic theory to refer to activity through which an agent (in this case the central bank) causes other agents (in this case other central banks) involuntary costs or benefits without other compensation via the functioning of the market.

⁷ See, for example, Komárek (2015).

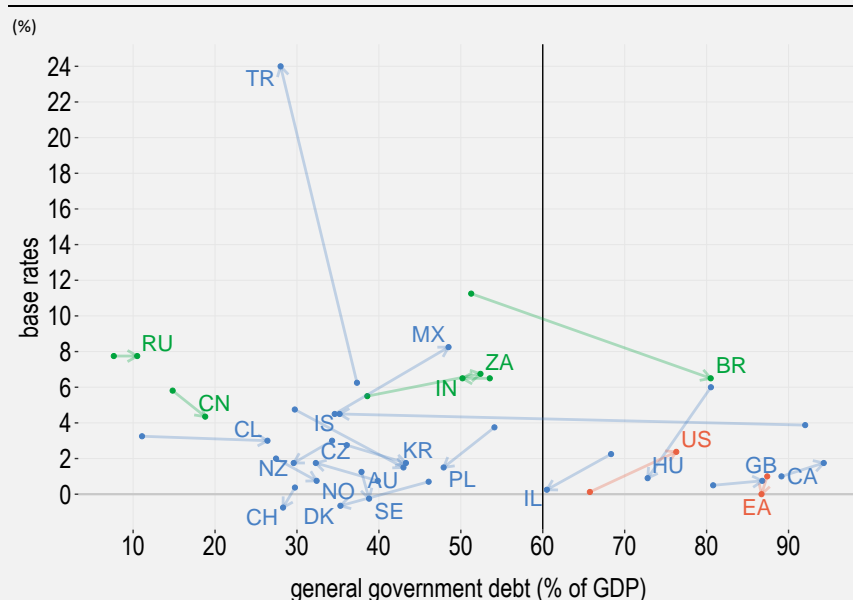
and Turkey have reached and exceeded the pre-crisis levels. They lie in the notional third (red) area. However, as noted above, the increase in rates in Turkey cannot be interpreted as positive.

Fiscal space and the need to consolidate public finances

If a country has sufficient fiscal space to potentially stimulate its economy, it has a much greater chance of stabilising it. This holds both for “normal” recessions caused by the natural cycle of the market mechanism and for sudden crises of a global nature affecting a series of other economies. The academic literature contains many interesting findings in this regard. For example, Reinhart and Rogoff (2009) show that the ratio of government debt to GDP very often rises after a crisis, reflecting a decline in revenues and, unless the fiscal authority is simultaneously passive, an increase in expenditure. This is substantiated by Mendoza and Ostry (2008), who show that the lower the debt-to-GDP ratio, the greater the propensity towards activist (expansionary) fiscal policy. Romer and Romer (2017) find that if the debt-to-GDP ratio reaches around 130%, there is no longer any room for economic stimulus through fiscal policy.

Like the monetary space, the current fiscal space in the large group of OECD countries is very limited. This is shown in Chart 5, which illustrates how the usable fiscal and monetary space for a potential economic policy response has changed since 2011. The vertical axis shows the interest rate level, which forms the notional monetary space in its positive territory. An upward movement therefore expresses an increase in the monetary space. The horizontal axis shows the debt-to-GDP ratio. A left-to-right movement represents growth in the debt-to-GDP ratio, i.e. a decrease in the potential fiscal space. The chart shows

Chart 5 – Change in the relative fiscal and monetary space



Source: BIS, EIU

Note: red = EA – euro area, US – United States; blue = other OECD countries with autonomous monetary policy (AU – Australia, CA – Canada, CH – Switzerland, CZ – Czech Republic, CL – Chile, DK – Denmark, GB – United Kingdom, HU – Hungary, IL – Israel, IS – Iceland, JP – Japan, KR – South Korea, MX – Mexico, NO – Norway, NZ – New Zealand, PL – Poland, SE – Sweden, SK – Slovakia, TR – Turkey); green letters: selected developing countries (BR – Brazil, IN – India, ID – Indonesia, RU – Russia, ZA – South Africa); green letters: selected developing countries (BR – Brazil, CN – China, IN – India, ID – Indonesia, RU – Russia, ZA – South Africa). Japan has been excluded from the visualisation due to the size of its debt (about 250% of GDP)

that during the economic boom, numerous countries have increased their debt instead of creating a fiscal buffer for resolving any future problems. The fiscal space has thus diminished in good times, which is not good news. The case of the euro area illustrates that it is very difficult to increase the fiscal space. Despite a series of debt-reducing measures leading to a slowdown in economic growth (especially in the southern euro area countries), the debt of the euro area as a whole has fallen only marginally.

If a sudden recession or deep crisis were to hit the global economy, it would be difficult for many countries to find a cure in either the monetary or the fiscal area. We can therefore conclude that the economic policy options for responding to the potential need to stimulate the economy are very limited for many countries.

In the monetary policy area, the above-mentioned unconventional tools can theoretically be used in an emergency. As for fiscal policy, though, there are de facto no unconventional tools, unless we treat unrealistic promises linked with the election cycle as such tools. Moreover, the latest developments in international relations suggest that the potential for agreeing on coordinated steps to stimulate the global economy⁸ is decreasing. It is therefore possible that, in the event of an economic downturn, individual countries would not be able to benefit from the externalities linked with coordinated responses to economic shocks as they did during the last economic crisis.

Conclusion

The article looked at the latest trends in monetary policy normalisation (with an emphasis on OECD countries) in the context of the degree of public finance sustainability. The still limited monetary policy options are unlikely to be replaced by fiscal policy, as many OECD countries have exhausted their “safe” debt space for potential fiscal expansion. Both types of space are thus in very short

⁸ Examples include the limits on the provision of Fed swap lines currently under debate in the US Congress.

supply and steps leading to their growth should be promoted. There is perhaps no need to remind ourselves of what the collapse of monetary and fiscal policy in the 1930s, for example, led to. However, future worse times, which will come sooner or later, are more likely to have the nature of a classic recession, which is a natural feature of the functioning of the market mechanism via the multiplier and accelerator principles. A financial crisis similar to the previous one should not represent a threat now, as much has been done to increase financial stability. Banks are better capitalised than they were before the crisis and many past uncovered risks have been addressed by new regulations, so any liquidity and solvency problems are more likely to affect individual institutions than the financial sector as a whole.

References

- Hlédik, T., Vlček, J. (2018): "Quantifying the Natural Rate of Interest in a Small Open Economy – The Czech Case." CNB Working Paper 7/2018.
- Komárek, L. (2016): "The Closing of the Output Gap in OECD Countries in the Current Low Inflation Environment." Global Economic Outlook 9/2016, CNB.
- Komárek, L. (2015): "The US Dollar's Position in the Global Financial System." Global Economic Outlook 3/2015, CNB.
- Laubach, T., Williams J. C. (2015): "Measuring the Natural Rate of Interest Redux." Working Paper 2015-16, Federal Reserve Bank of San Francisco.
- Mendoza, E. G., Ostry, J. D. (2008): "International Evidence on Fiscal Solvency: Is Fiscal Policy 'Responsible'?" *Journal of Monetary Economics* 55(6): 1081–1093.
- Reinhart, C. M., Rogoff, K. S. (2009): "This Time Is Different: Eight Centuries of Financial Folly." Princeton, NJ: Princeton University Press.
- Romer, C. D., Romer, D. H. (2017): "New Evidence on the Aftermath of Financial Crises in Advanced Economies." *American Economic Review* 107(10): 3072–3118.

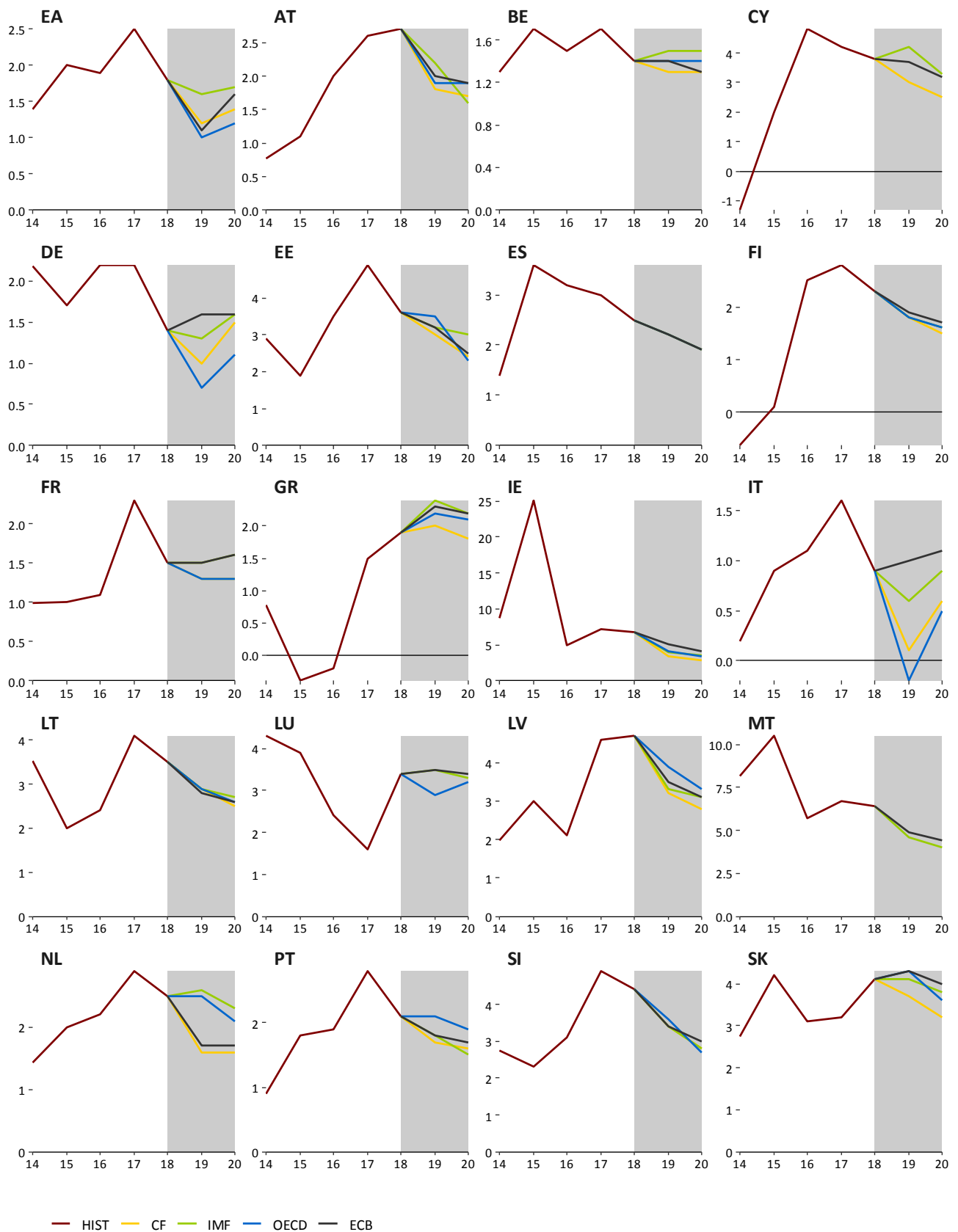
A1. Change in predictions for 2019

	GDP growth, %				Inflation, %											
	CF	IMF	OECD	CB / EIU	CF	IMF	OECD	CB / EIU								
EA	-0.1	2019/3	-0.3	2019/1	-0.8	2019/3	-0.6	2019/3	-0.1	2019/3	+0.1	2018/10	+0.1	2018/11	-0.4	2019/3
		2019/2		2018/10		2018/11		2018/12		2019/2		2018/4		2018/5		2018/12
DE	-0.2	2019/3	-0.6	2019/1	-0.9	2019/3	-0.3	2018/12	-0.2	2019/3	+0.1	2018/10	+0.2	2018/11	-0.3	2018/12
		2019/2		2018/10		2018/11		2018/6		2019/2		2018/4		2018/5		2018/6
US	-0.1	2019/3	0	2019/1	-0.1	2019/3	-0.2	2018/12	-0.1	2019/3	-0.3	2018/10	0	2018/11	-0.1	2018/12
		2019/2		2018/10		2018/11		2018/9		2019/2		2018/4		2018/5		2018/9
UK	-0.1	2019/3	0	2019/1	-0.6	2019/3	-0.5	2019/2	0	2019/3	0	2018/10	+0.1	2018/11	-0.1	2019/2
		2019/2		2018/10		2018/11		2018/11		2019/2		2018/4		2018/5		2018/11
JP	-0.2	2019/3	+0.2	2019/1	-0.2	2019/3	+0.1	2019/1	-0.1	2019/3	+0.2	2018/10	-0.1	2018/11	-0.8	2019/1
		2019/2		2018/10		2018/11		2018/10		2019/2		2018/4		2018/5		2018/10
CN	0	2019/3	0	2019/1	-0.1	2019/3	0	2019/2	-0.1	2019/3	-0.2	2018/10	+1.0	2018/11	-0.1	2019/2
		2019/2		2018/10		2018/11		2019/2		2019/2		2018/4		2018/5		2019/2
RU	0	2019/2	-0.2	2019/1	-0.1	2019/3	0	2019/1	0	2019/2	+1.3	2018/10	+1.0	2018/11	+0.4	2019/1
		2019/1		2018/10		2018/11		2018/12		2019/1		2018/4		2018/5		2018/12

A2. Change in predictions for 2020

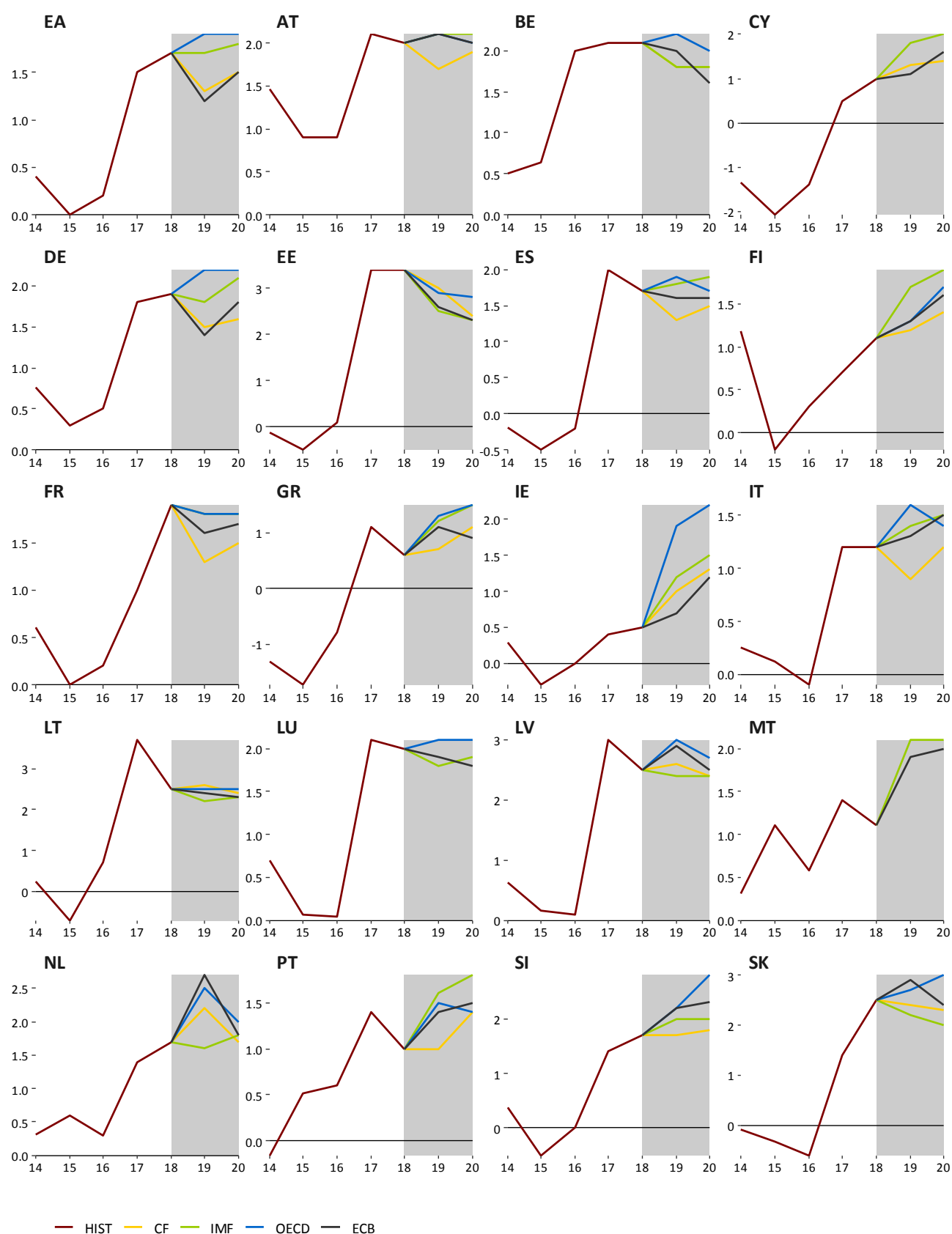
	GDP growth, %				Inflation, %											
	CF	IMF	OECD	CB / EIU	CF	IMF	OECD	CB / EIU								
EA	0	2019/3	0	2019/1	-0.4	2019/3	-0.1	2019/3	0	2019/3	0	2018/10	---	2018/11	-0.2	2019/3
		2019/2		2018/10		2018/11		2018/12		2019/2		2018/4		---		2018/12
DE	0	2019/3	0	2019/1	-0.3	2019/3	0	2018/12	-0.1	2019/3	0	2018/10	---	2018/11	0	2018/12
		2019/2		2018/10		2018/11		2018/6		2019/2		2018/4		---		2018/6
US	+0.1	2019/3	0	2019/1	+0.1	2019/3	0	2018/12	0	2019/3	+0.2	2018/10	---	2018/11	0	2018/12
		2019/2		2018/10		2018/11		2018/9		2019/2		2018/4		---		2018/9
UK	0	2019/3	+0.1	2019/1	-0.2	2019/3	-0.2	2019/2	0	2019/3	0	2018/10	---	2018/11	0	2019/2
		2019/2		2018/10		2018/11		2018/11		2019/2		2018/4		---		2018/11
JP	0	2019/3	+0.2	2019/1	0	2019/3	+0.2	2019/1	-0.2	2019/3	0	2018/10	---	2018/11	-0.5	2019/1
		2019/2		2018/10		2018/11		2018/10		2019/2		2018/4		---		2018/10
CN	0	2019/3	0	2019/1	0	2019/3	0	2019/2	-0.1	2019/3	0	2018/10	---	2018/11	0	2019/2
		2019/2		2018/10		2018/11		2019/2		2019/2		2018/4		---		2019/2
RU	0	2019/2	-0.1	2019/1	-0.3	2019/3	0	2019/1	0	2019/2	+0.8	2018/10	---	2018/11	0	2019/1
		2019/1		2018/10		2018/11		2018/12		2019/1		2018/4		---		2018/12

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	IFO	Leibniz Institute for Economic Research at the University of Munich
bbl	barrel	IMF	International Monetary Fund
BE	Belgium	IRS	Interest Rate swap
BoE	Bank of England (the UK central bank)	ISM	Institute for Supply Management
BoJ	Bank of Japan (the central bank of Japan)	IT	Italy
bp	basis point (one hundredth of a percentage point)	JP	Japan
CB	central bank	JPY	Japanese yen
CBR	Central Bank of Russia	LIBOR	London Interbank Offered Rate
CF	Consensus Forecasts	LME	London Metal Exchange
CN	China	LT	Lithuania
CNB	Czech National Bank	LU	Luxembourg
CNY	Chinese renminbi	LV	Latvia
ConfB	Conference Board Consumer Confidence Index	MKT	Markit
CXN	Caixin	MT	Malta
CY	Cyprus	NIESR	National Institute of Economic and Social Research (UK)
DBB	Deutsche Bundesbank (the central bank of Germany)	NKI	Nikkei
DE	Germany	NL	Netherlands
EA	euro area	OECD	Organisation for Economic Co-operation and Development
ECB	European Central Bank	OECD-CLI	OECD Composite Leading Indicator
EE	Estonia	OPEC+	member countries of OPEC oil cartel and 10 other oil-exporting countries (the most important of which are Russia, Mexico and Kazakhstan)
EIA	Energy Information Administration	PMI	Purchasing Managers' Index
EIU	Economist Intelligence Unit	pp	percentage point
ES	Spain	PT	Portugal
ESI	Economic Sentiment Indicator of the European Commission	QE	quantitative easing
EU	European Union	RU	Russia
EUR	euro	RUB	Russian rouble
EURIBOR	Euro Interbank Offered Rate	SI	Slovenia
Fed	Federal Reserve System (the US central bank)	SK	Slovakia
FI	Finland	UK	United Kingdom
FOMC	Federal Open Market Committee	UoM	University of Michigan Consumer Sentiment Index - present situation
FR	France	US	United States
FRA	forward rate agreement	USD	US dollar
FY	fiscal year	USDA	United States Department of Agriculture
GBP	pound sterling	WEO	World Economic Outlook
GDP	gross domestic product	WTI	West Texas Intermediate (crude oil used as a benchmark in oil pricing)
GR	Greece	ZEW	Centre for European Economic Research
ICE	Intercontinental Exchange		
IE	Ireland		
IEA	International Energy Agency		

