GLOBAL ECONOMIC OUTLOOK - SEPTEMBER

Monetary Department
External Economic Relations Division

2019

CNB CZECH NATIONAL BANK

Cut-off date for data
13 September 2019

CF survey date
9 September 2019

GEO publication date
20 September 2019

Notes to charts
ECB, Fed, BoE and BoJ: 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 Refinitiv 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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I. Introduction

No overall decline in geopolitical risks was seen in September. Mutually positive moves were recorded in the US-China trade dispute: China decided to postpone its tariffs on some US products by a year, while the USA announced a two-week delay in its planned tariff increase to mid-October. The situation in Hong Kong stabilised but remained fragile. Market optimism is not being aided by the Brexit situation. On the UK political scene, the House of Commons and Prime Minister Boris Johnson are engaged in a battle which is now being scrutinised by the Supreme Court. A motion to hold early elections on 15 October was voted down again. The highlight was the ECB's return to the use of unconventional monetary policy instruments to steer inflation back sufficiently close to 2%. The geopolitical risks were also increased by an attack on the world's largest oil facility in Saudi Arabia, which could lead to a jump in oil prices.

The GDP growth outlooks have again mostly shifted lower since August, the exception being a slight increase in the outlook for Japan this year. However, minimal growth is expected in Japan in 2020, so the developments there cannot be assessed as positive overall. The outlooks for the USA for next year are visibly lower as well. This may give Fed representatives cause to vote for a rate cut. The euro area growth outlook remains just above 1%, reflecting a particularly weak outlook for this year for its largest economy Germany. According to CF, German GDP will grow by just 0.5%, one of the lowest rates across the countries under review. The Chinese economy will also slow gradually and is not expected to maintain 6% growth rates next year. The expected performance of the Russian economy was not revised.

September GDP growth and inflation outlooks for monitored countries, in %

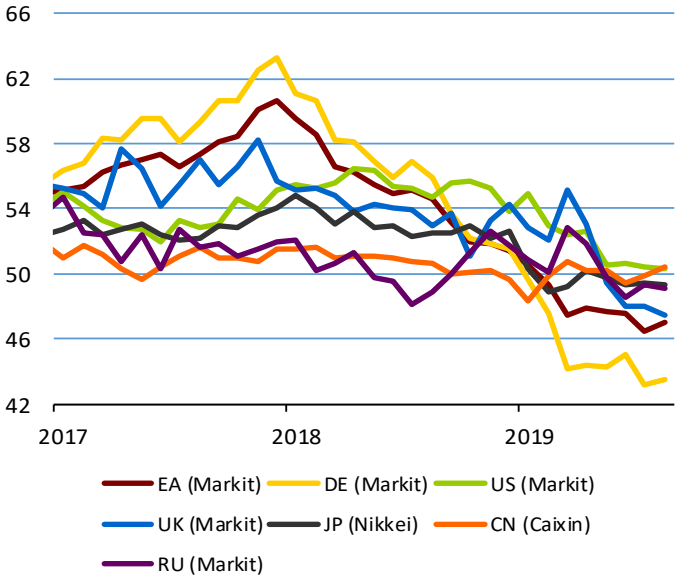
GDP	EA	DE	US	UK	JP	CN	RU
2019	1.1 →	0.5 ↘	2.3 →	1.2 →	1.0 ↗	6.2 →	1.1 →
2020	1.1 ↘	1.0 ↘	1.8 ↘	1.1 ↘	0.2 ↘	5.9 ↘	1.9 →

Inflation	EA	DE	US	UK	JP	CN	RU
2019	1.3 →	1.4 ↘	1.8 →	2.0 ↗	0.6 ↘	2.4 →	4.3 ↘
2020	1.3 ↘	1.5 ↘	2.1 →	2.1 ↗	0.8 →	2.3 →	4.0 →

Source: Consensus Forecasts (CF)
Note: The arrows indicate the direction of revisions compared with the last GEO.

The inflation outlooks for 2019 have been lowered slightly since August for Germany, Japan and Russia and raised for the UK. Next year, inflation in the advanced countries we monitor should be above the levels expected for this year, except in the euro area, where CF expects the same price growth as in 2019. The dollar will weaken slightly against the euro, sterling and the yen at the one-year horizon. By contrast, it will strengthen slightly against the renminbi and the rouble. The CF outlook for the Brent crude oil price moved slightly lower to USD 61.6/bbl (highest estimate down to USD 71/bbl, lowest estimate flat at USD 55/bbl) relative to August. However, these figures do not reflect the recent attack on the Saudi Arabian oil facilities at Abqaiq and Khurais. The outlook for 3M USD LIBOR market rates is still slightly falling, while 3M EURIBOR rates will remain negative over the entire outlook horizon, in line with the ECB's latest meeting.

PMI in manufacturing



Source: Bloomberg

The chart in the September issue illustrates the worsening sentiment of managers in the manufacturing industry in the countries we monitor from the point of view of the PMI. As the chart shows, Germany has recorded the largest decrease in the index since the start of 2018, and China the smallest.

The September issue also contains an analysis: *Current account modelling – long-term trends and cyclical factors.* It analyses current account dynamics in selected Central European countries. It shows that the current account is influenced both by long-term trends linked with the convergence progress and by cyclical factors of the external environment, and should be modelled accordingly.

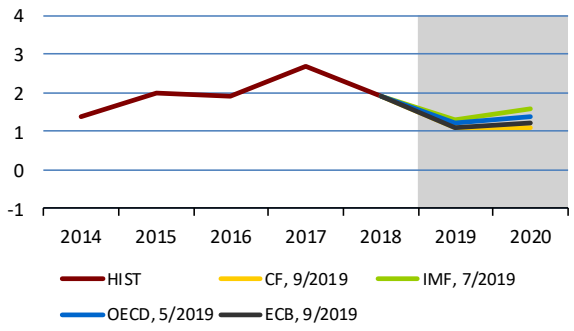
II.1 Euro area

Economic growth in the euro area slowed in Q2, dampened by developments in Germany and Italy. Quarterly GDP growth stood at just 0.2%. Household consumption growth slowed sharply, but the fall in its contribution to total economic growth was almost fully offset by faster growth in fixed investment. The resulting slowdown of the euro area was thus due to a decline in net exports. Its causes are linked with the growing shift of global powers away from free international trade, examples of which include the gradually escalating uncertainties regarding Brexit and the trade war between the USA and China. Only two economies recorded lower growth than the euro area as a whole: Germany, whose GDP dropped by 0.1%, and stagnating Italy, which due to their size overshadowed the good results of many other countries.

The available indicators suggest a further slight slowdown in economic growth in Q3. The international trade situation is weighing negatively on manufacturing. Although the month-on-month decline in industrial production eased significantly in July (to -0.4%), output has been falling for nine consecutive months now in year-on-year terms. By contrast, the labour market situation continues to improve gradually. Year-on-year wage growth accelerated to 2.7% in Q2 and the unemployment rate (7.5% in July) is falling steadily. The composite PMI increased in August; even the manufacturing index went up, but it remains in the contraction band (a continued decline in orders being particularly worrying). A slight improvement in sentiment is also suggested by the European Commission's ESI leading indicator.

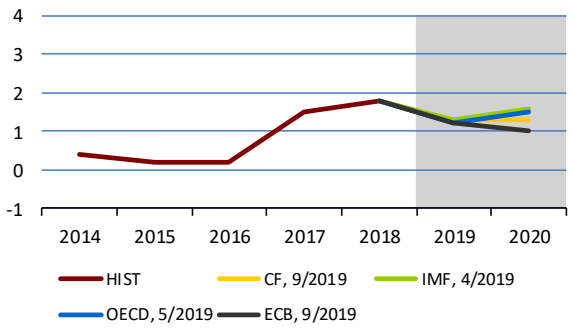
Economic growth in the euro area will be lower this year than in 2018. CF left its outlook for this year unchanged at 1.1% and expects the same growth in 2020. The outlooks for Germany, Spain and Slovakia, for example, deteriorated. Among the larger euro area economies, expected growth was revised upwards only for the Netherlands (see the annex). The new ECB forecast contained a lower euro area growth outlook (for both years), but unlike CF it still expects economic growth to pick up slightly next year.

GDP growth, %



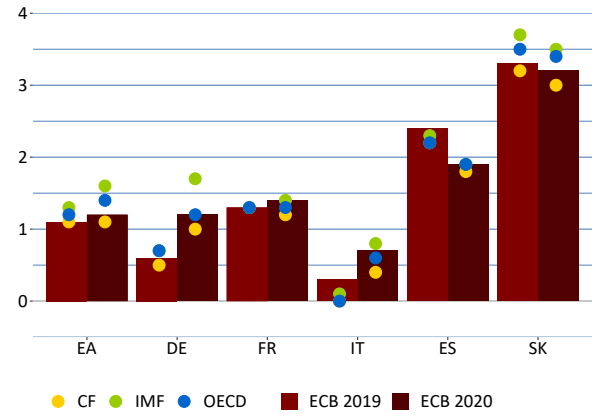
	CF	IMF	OECD	ECB
2019	1.1	1.3	1.2	1.1
2020	1.1	1.6	1.4	1.2

Inflation, %

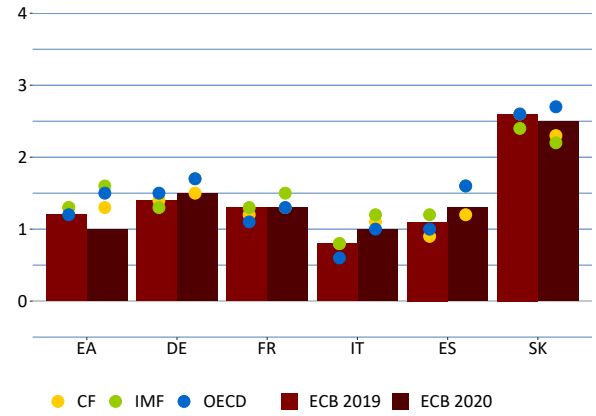


	CF	IMF	OECD	ECB
2019	1.3	1.3	1.2	1.2
2020	1.3	1.6	1.5	1.0

GDP growth in selected euro area countries in 2019 and 2020, %



Inflation in selected euro area countries in 2019 and 2020, %

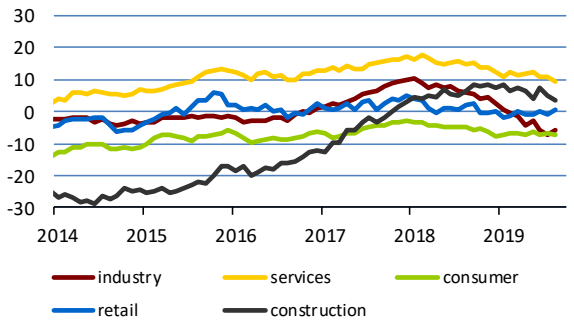


Note: Charts show institutions' latest available outlooks of for the given economy.

Inflation in the euro area remains low and well below the ECB's target. According to preliminary figures, headline HICP inflation stayed at 1% in August. A switch of the contribution of energy prices to negative levels (for the first time since 2016) was roughly offset by a slightly higher contribution of services prices. Core inflation also remained at the previous month's level (0.9%). Similarly low inflation figures can be expected in the months ahead. Upward pressures on oil and energy prices remain absent and the future path of core inflation is uncertain. While wages are rising at a solid rate, uncertainty regarding the economic growth outlook and lower external demand are anti-inflationary factors. The outlooks we regularly monitor expect inflation of 1.2%–1.3% this year. According to the new ECB forecast, it will fall to 1% next year. As regards the large economies, CF revised downwards its outlooks for consumer inflation in Germany and also in France in 2020 compared with last month.

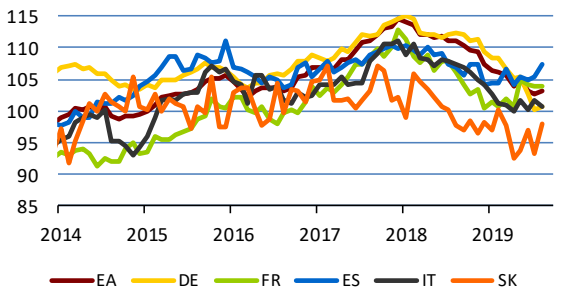
The subdued inflation outlook and uncertainty regarding the economic growth outlook led the ECB to ease monetary policy further. The ECB's Governing Council lowered the deposit rate by 0.1 pp to -0.5% at its meeting in September. At the same time, it announced it would restart the asset purchase programme at a monthly pace of EUR 20 billion as from November. Reinvestment of the principal payments from maturing securities will continue well past the date when the ECB starts raising the key interest rates. The conditions for a new series of quarterly targeted longer-term refinancing operations (TLTRO III) were modified and a new two-tier system for remunerating excess liquidity holdings will be introduced, in which part of excess liquidity holdings will be exempt from the negative deposit facility rate. The sharp fall in five-year swap-based inflation expectations came to a halt in early summer in response to a change in the ECB's communication, and expectations are now close to historical lows. This points to undesirable anchoring of inflation expectations well below the ECB's target. Government bond yields mostly stopped declining. The exception was Italy, where the 10Y bond yield even dropped below 1%. However, the outlooks for yields continued to fall across countries. A yield of -0.3% is now expected for the 10Y German government bond at the one-year horizon.

ESI leading indicators



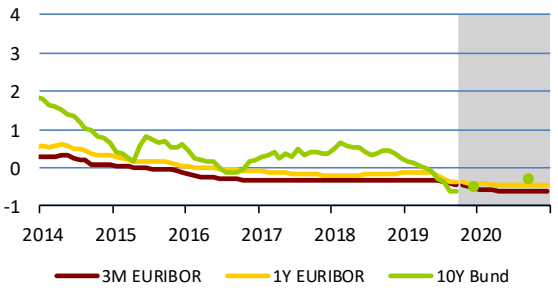
	industry	services	consum.	retail	constr.
6/19	-5.6	11.0	-7.2	0.1	7.6
7/19	-7.3	10.6	-6.6	-0.7	5
8/19	-5.9	9.3	-7.1	0.5	3.7

ESI leading indicators



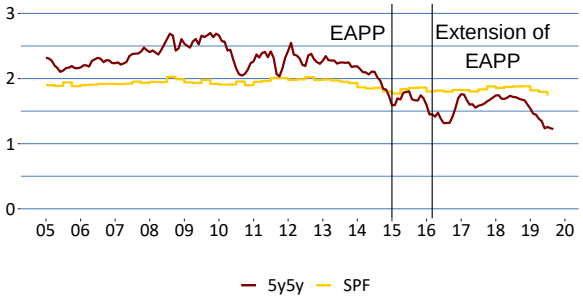
	EA	DE	FR	ES	IT	SK
6/19	103.3	102.6	104.1	104.8	100.2	97.0
7/19	102.7	100.2	103.9	105.4	101.6	93.4
8/19	103.1	100.6	104.0	107.3	100.7	97.9

Interest Rates, %



	8/19	9/19	12/19	9/20
3M EURIBOR	-0.41	-0.44	-0.54	-0.63
1Y EURIBOR	-0.36	-0.37	-0.41	-0.44
10Y Bund	-0.62	-0.59	-0.50	-0.30

Inflation expectations in the euro area, %



Note: Inflation expectations based on 5year inflation swap and SPF

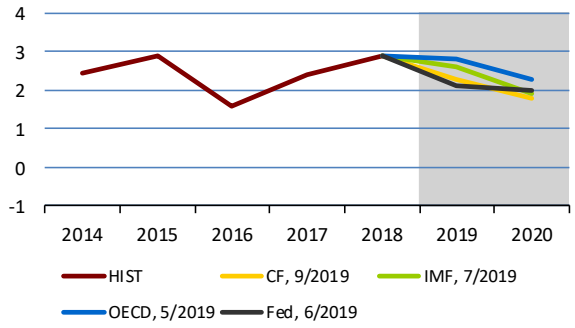
II.2 United States

The US-China trade war continues in full force, and more ammunition is being prepared. China responded to the introduction of tariffs by the US in August with tariffs of its own. The US started applying a 15% duty on goods worth USD 112 billion, while China introduced a 5%–10% duty on USD 75 billion of goods. The diplomatic shootout also continued, rattling the financial markets. China filed a protest with the WTO, requesting assistance in negotiations with the US. The two sides subsequently agreed to renew negotiations in early October. As a show of goodwill, US President Donald Trump postponed for two weeks (to 15 October) a planned increase in duty from 25% to 30% on goods worth USD 250 billion. Almost all remaining Chinese imports to the USA will be subject to a 15% tariff as of December.

Besides the impact on foreign trade, a drop in expenditures and output is evident in the USA. Industrial output grew only slightly in July (by 0.5% y-o-y), with capacity utilisation falling. The leading ISM PMI indicator remains near 50 points, with expectations regarding new orders being particularly negative. Above all, car producers reported lower demand in surveys. The trade deficit also decreased slightly in July, though trade with Germany saw its biggest drop since August 2015. A series of negative reports then led to a sharp decrease in the nowcast for GDP growth in Q3 to 1.5%. For now, however, the September CF only lowered the GDP growth outlook by 0.1 pp for 2020.

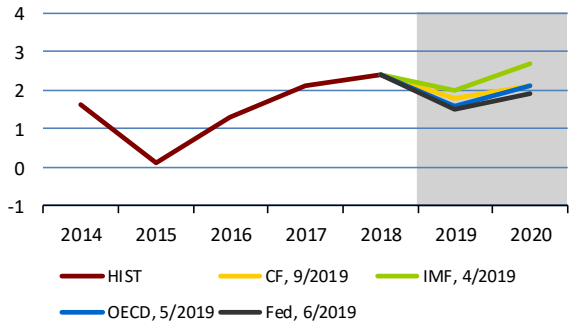
The Fed fears a situation when the uncertainties in foreign trade manifest in full in other parts of the economy. The labour market remains robust, though. Non-farm payrolls rose by 130,000 in August, amid year-on-year wage growth of 3.2%. Consumer demand is also strong, so the central bank will continue to carefully monitor data from the economy. A lack of consensus among the FOMC members somewhat lowered expectations of another rate cut in September, but according to CF, analysts are expecting this step with 86.3% certainty.

GDP growth, %



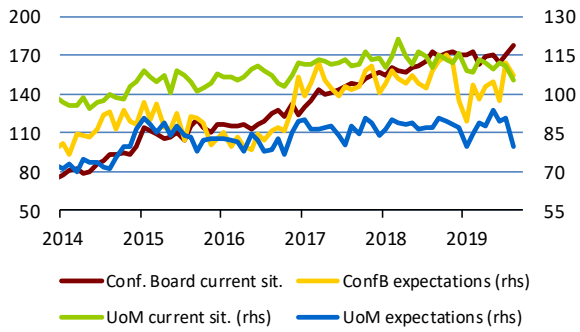
	CF	IMF	OECD	Fed
2019	2.3	2.6	2.8	2.1
2020	1.8	1.9	2.3	2.0

Inflation, %



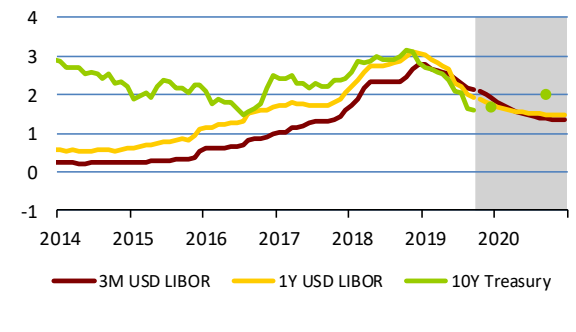
	CF	IMF	OECD	Fed
2019	1.8	2.0	1.6	1.5
2020	2.1	2.7	2.1	1.9

Leading indicators



	ConfB curr.	ConfB exp.	UoM curr.	UoM exp.
6/19	164.3	97.6	111.9	89.3
7/19	170.9	112.4	110.7	90.5
8/19	177.2	107.0	105.3	79.9

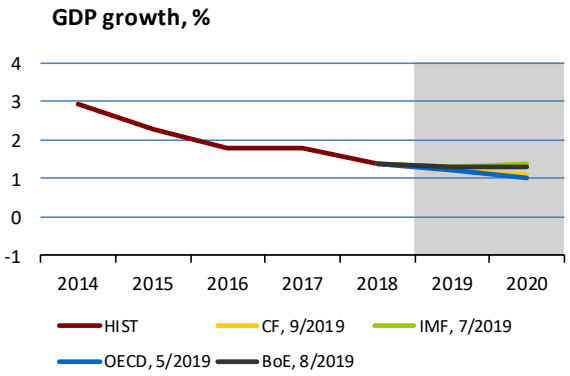
Interest Rates, %



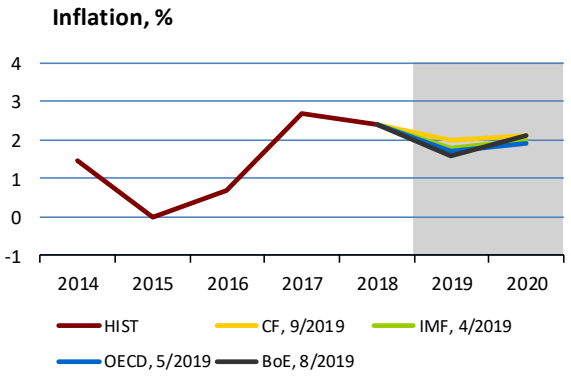
	8/19	9/19	12/19	9/20
USD LIBOR 3M	2.16	2.13	1.91	1.39
USD LIBOR 1R	2.00	2.00	1.75	1.49
Treasury 10R	1.62	1.61	1.70	2.00

II.3 United Kingdom

Political uncertainty continues to affect both the current and future path of the UK economy. The official monthly GDP data show an increase of 0.3% in July, compensating for the previous drop. Economic growth expectations for Q3 increased to 0.3% (NIESR). The British economy's key sector, services, which has been stagnating since February, finally grew in July, supporting GDP growth significantly. The financial market grew by 1.5% month on month. Consumer price inflation (2.1% in July) is holding near the BoE's inflation target (2%), and CF expects this to continue. The situation surrounding the form of Brexit is still unclear despite the approaching end-of-October deadline. Sterling has been weakening against the euro and the dollar since mid-August. The composite PMI fell again in August. CF lowered its GDP growth outlooks for 2020 and expects the economy to slow from 1.2% this year to 1.1% next year.



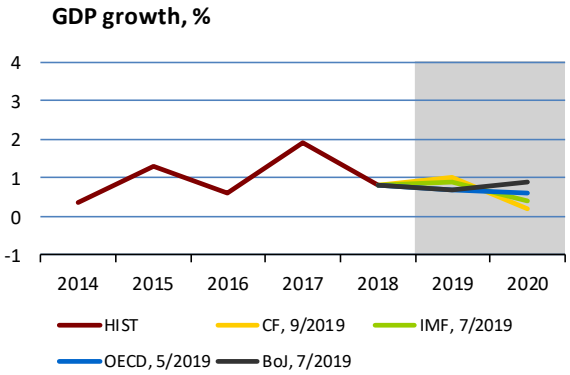
	CF	IMF	OECD	BoE
2019	1.2	1.3	1.2	1.3
2020	1.1	1.4	1.0	1.3



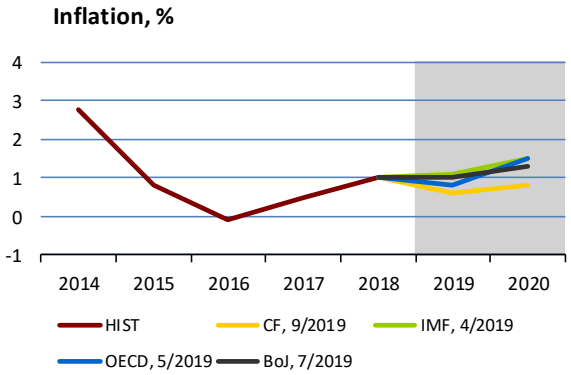
	CF	IMF	OECD	BoE
2019	2.0	1.8	1.7	1.6
2020	2.1	2.0	1.9	2.1

II.4 Japan

Japan's economic situation remains mixed and adversely affected by the outside environment. At 0.3%, the revised calculation of Japanese GDP growth in Q2 was 0.1 pp lower than the preliminary estimate. This means 0.2 pp lower year-on-year growth than in the first quarter. In annualised terms, the economy grew at a pace of 1%. Exports have been falling for eight months in a row. Japanese manufacturing has been contracting since February this year and declined by 3.8% year on year in June. The July manufacturing data are not yet available, but industrial production saw positive year-on-year growth (of 0.7%) in July for the first time since January. The August PMI is in the recession band for manufacturing (49.36) but is indicating a clear expansion for services (53.3). The September CF again increased its GDP outlook for this year, whereas a slightly greater slowdown is expected next year compared with the August outlook.



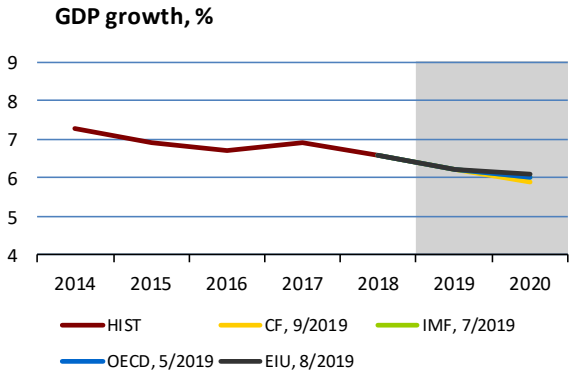
	CF	IMF	OECD	BoJ
2019	1.0	0.9	0.7	0.7
2020	0.2	0.4	0.6	0.9



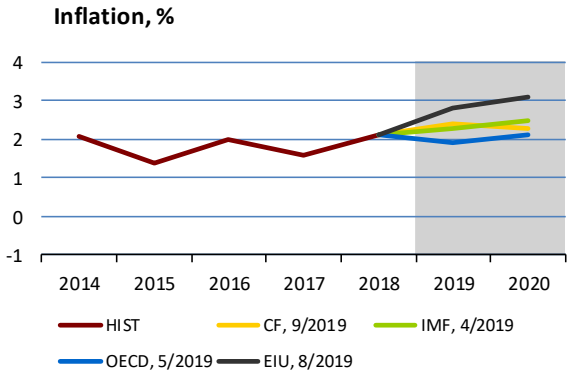
	CF	IMF	OECD	BoJ
2019	0.6	1.1	0.8	1.0
2020	0.8	1.5	1.5	1.3

II.5 China

The trade wars worsened the Chinese economy's export performance again. Total exports from China fell year on year in August, mainly due to a more than 16% decrease in exports to the USA. Imports from the US dropped by 22.4% year on year. China's exports lagged significantly behind expectations, which had assumed counterbalancing effects from a weaker renminbi against the US dollar and a willingness of companies to stock up. In August, meanwhile, the Chinese currency recorded its biggest slump since the introduction of the managed float in July 2005, probably due to efforts by the central bank to mitigate the impacts of the trade war. With the same intent, the bank reduced the reserve requirement in September (by 50 bp). The next round of new tariffs by the US (in October and December) and the growth in foreign trade uncertainties are having a negative impact on foreign orders, so a further fall in foreign trade can be expected in the coming months.



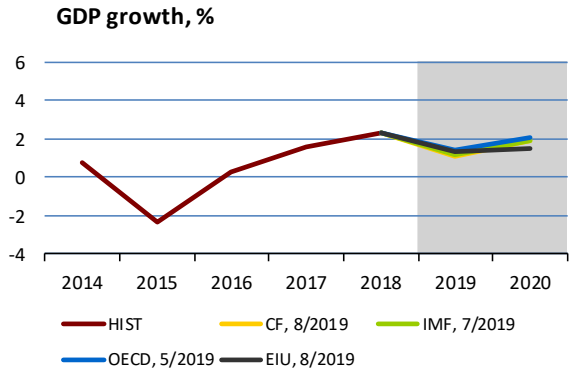
	CF	IMF	OECD	EIU
2019	6.2	6.2	6.2	6.2
2020	5.9	6.0	6.0	6.1



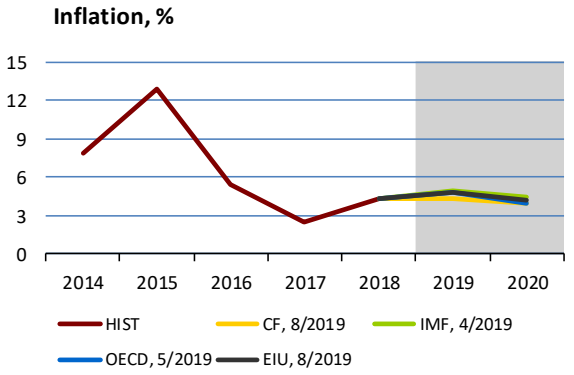
	CF	IMF	OECD	EIU
2019	2.4	2.3	1.9	2.8
2020	2.3	2.5	2.1	3.1

II.6 Russia

Despite a slight acceleration of GDP in Q2, the economic situation remains fragile. First GDP growth estimate for Q2 was confirmed by the preliminary data (0.9% y-o-y). The Russian mining industry (3.3%) and passenger transport (8.4%) fared best. In quarter-on-quarter terms, the economy grew by 8.1%, in line with the traditionally weaker performance in Q1 due to public holidays. Looking ahead, as the August PMI suggests, manufacturing will contribute to further weakening (PMI 49.1). New orders, including export orders, and a drop in output for the fourth month are keeping the PMI in this sector in the recession band. The total index will then remain in the expansion band months thanks to services. According to CF, this year's GDP outlook is unchanged and is currently in line with the Russian central bank's forecast (0.8%–1.3%). The increasing risk of a global economic slowdown was also one of the motivations for a further reduction in the key interest rate (to 7%) in the first week of September.



	CF	IMF	OECD	EIU
2019	1.1	1.2	1.4	1.3
2020	1.9	1.9	2.1	1.5



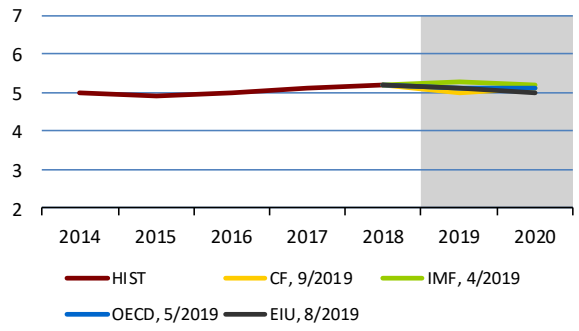
	CF	IMF	OECD	EIU
2019	4.3	5.0	4.8	4.8
2020	4.0	4.5	4.0	4.2

II.7 Developing countries in the spotlight

The economy of Indonesia, one of the world's most populous countries, with countless tectonically active islands, has shown solid growth for several years now amid reasonably low inflation. Indonesia can be characterised as a politically stable nation, though parliamentary elections in May resulted in protests accompanied by violence in some agglomerations. The stability and potential of the Indonesian economy makes it popular with investors, particularly in Singapore, Japan and China. Its biggest export items are traditional commodities such as crude oil, natural gas, coal and palm oil. Indonesia also exports products typical for Asia such as textiles, footwear, items made from tropical woods, and paper. A gradual upward trend is observable in exports of industrial and consumer goods with a higher added value, along with rubber products, reflecting the development of the Indonesian economy. The Indonesian economy primarily imports machinery, electrical equipment, iron, steel, plastics and plastic products.

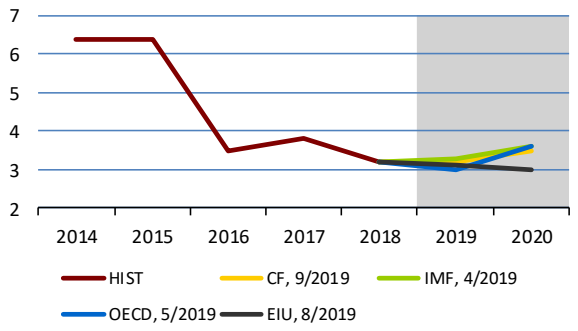
The main drivers of the over 5% growth in local GDP are the economy's potentially huge internal consumption (almost 250 million people) and exports of natural resources. Inflation of 3.5% is expected this year and the next (right in the middle of the 2.5%–4.5% inflation target band). This can still be seen as commensurate with the solid growth of the real economy. The stable inflation can be attributed to the successful application (since 2005) of inflation targeting. The official unemployment rate has long been just above 5%, although this measure is more relevant to urban agglomerations than to the majority rural areas. The official statistics show Indonesia to be an exemplary country in terms of fiscal discipline. Its debt has been fluctuating just above 30% of GDP in the recent past, and the outlooks are at similar levels. Given the predominantly USD-denominated debt, though, a potential significant depreciation of the Indonesian currency could alter perceptions of the sustainability of Indonesia's debt, and not just in the eyes of investors. Indonesia is almost the only emerging and developing country we monitor whose currency appreciated against the US dollar during the period under review. The key interest rate has gradually fallen to a current level of 5.50%.

GDP growth, %



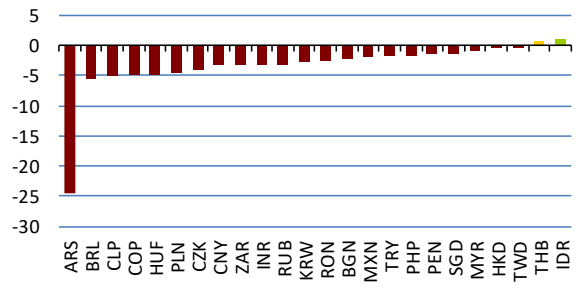
	CF	IMF	OECD	EIU
2019	5.0	5.3	5.1	5.1
2020	5.1	5.2	5.1	5.0

Inflation, %



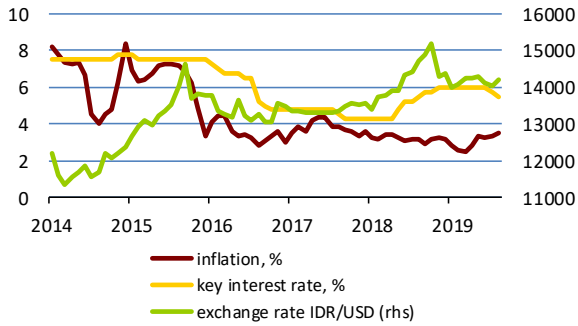
	CF	IMF	OECD	EIU
2019	3.2	3.3	3.0	3.1
2020	3.5	3.6	3.6	3.0

Currency performance vis-à-vis USD



% change over 1/7/2019 to 12/9/2019 period

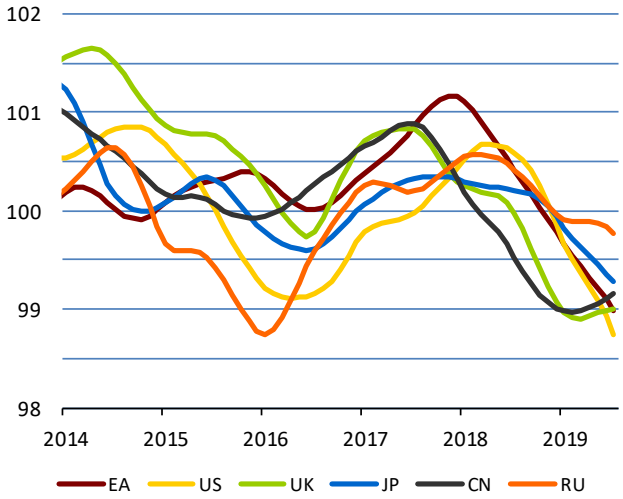
Selected indicators



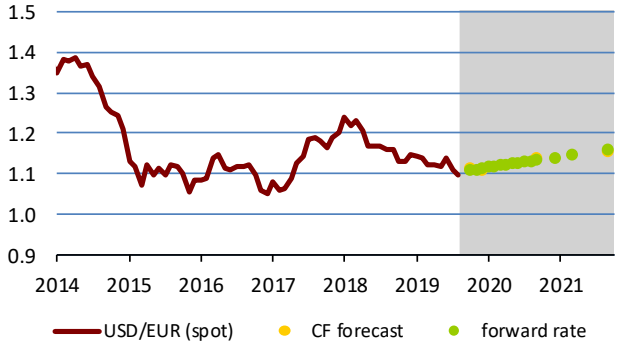
	inflation, %	interest rate, %	IDR/USD
6/2019	3.28	6.00	14 128
7/2019	3.32	5.75	14 017
8/2019	3.49	5.50	14 185

III. Leading indicators and outlook of exchange rates

OECD Composite Leading Indicator

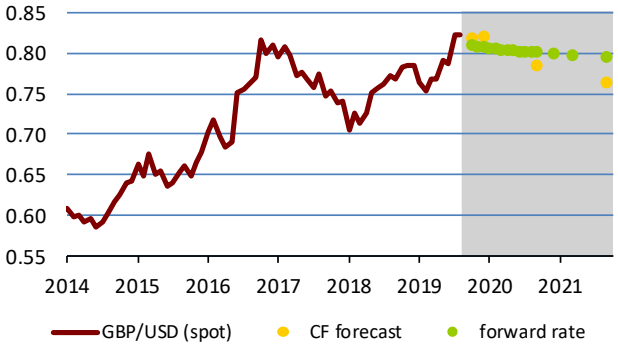


The US dollar (USD/EUR)



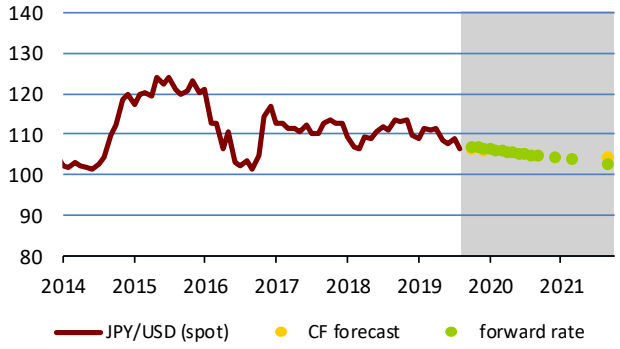
	9/9/19	10/19	12/19	9/20	9/21
spot rate	1.106				
CF forecast		1.112	1.111	1.137	1.155
forward rate		1.107	1.112	1.134	1.159

The British pound (GBP/USD)



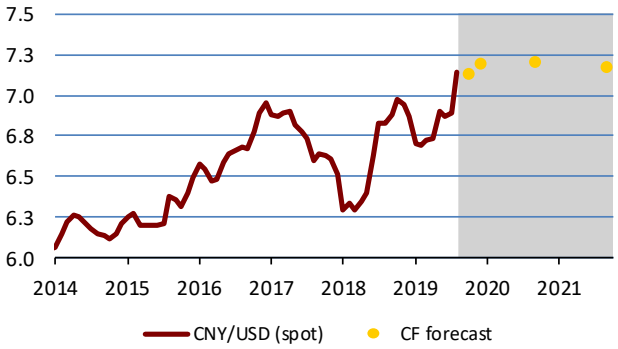
	9/9/19	10/19	12/19	9/20	9/21
spot rate	0.810				
CF forecast		0.818	0.821	0.786	0.763
forward rate		0.809	0.807	0.801	0.795

The Japanese yen (JPY/USD)



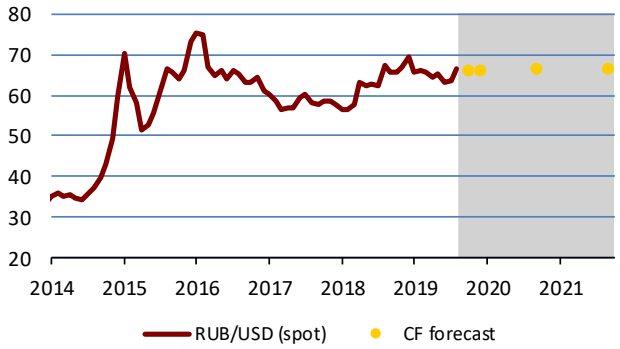
	9/9/19	10/19	12/19	9/20	9/21
spot rate	107.2				
CF forecast		106.3	105.8	104.6	104.5
forward rate		107.0	106.6	104.7	102.7

The Chinese renminbi (CNY/USD)



	9/9/19	10/19	12/19	9/20	9/21
spot rate	7.129				
CF forecast		7.129	7.193	7.203	7.177

The Russian rouble (RUB/USD)



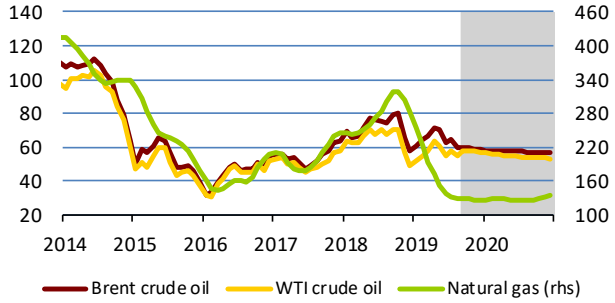
	9/9/19	10/19	12/19	9/20	9/21
spot rate	65.51				
CF forecast		65.91	66.03	66.61	66.55

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.1 Oil and natural gas

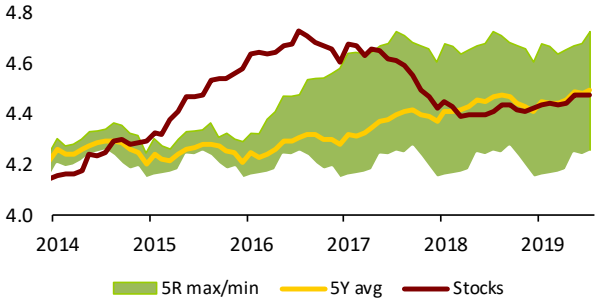
The average monthly price of Brent crude oil fell below USD 60/bbl in August for the first time this year and rose only slightly in the first half of September. The volatile oil price path is currently being determined primarily by non-fundamental factors, in particular the US-China trade dispute. Some estimates indicate that this trade war is depressing the oil price by up to USD 15/bbl. However, the price is also being pushed down by weaker economic data from China, the USA and Germany and by the strengthening dollar. Nevertheless, the market futures curves are downward-sloping (backwardation) for all types of oil, indicating that there is currently no oil surplus on the market, and a renewed oil inventories decline in the USA suggests that the reduced oil production in OPEC+ countries is bearing fruit. However, most institutions are continuing to revise their oil price outlooks downward, fearing weakening growth of the global economy. For example, according to EIA, the Brent crude oil price will fluctuate around USD 60/bbl in Q4 and will average USD 62/bbl next year, in line with the conclusions of the September CF. The market curve is signalling an even lower price (USD 57.5/bbl). However, these outlooks do not take into account the recent attack on the Saudi Arabian oil facilities at Abquaiq and Khurais. The replacement of the White House security adviser could reduce the political tensions between the USA and Iran, which in turn would drive oil prices down further. On the other hand, space for more pronounced growth in oil prices is significantly limited due to Saudi Arabia's high reserve capacity. However, the new energy minister there intends to continue the current policy of limited output. Greater oil price growth would only occur if there was a major breakthrough in the US-China trade negotiations, a slowdown in US shale extraction or a conflict in the Middle East. Natural gas prices in Europe stopped declining and stabilised at a very low level.

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

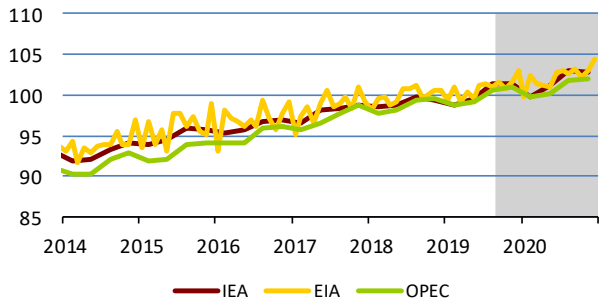


	Brent	WTI	Natural gas
2019	63.11	57.17	158.46
2020	57.48	54.66	128.28

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

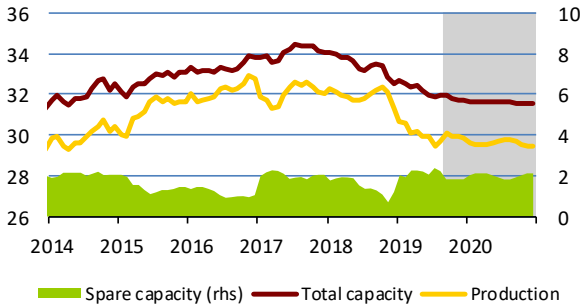


Global consumption of oil and oil products (mil. barrel / day)



	IEA	EIA	OPEC
2019	100.28	100.83	99.84
2020	101.67	102.22	100.91

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



	Production	Total capacity	Spare capacity
2019	30.04	32.09	2.06
2020	29.60	31.61	2.01

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.

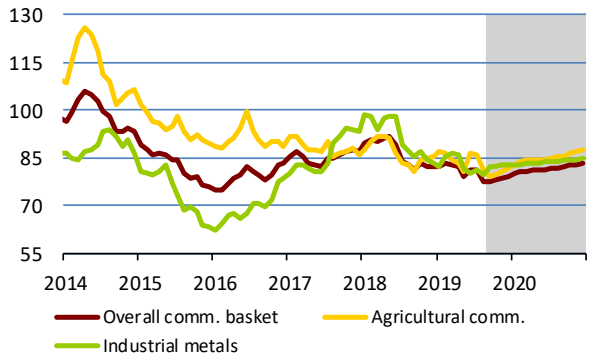
IV.2 Other commodities

The aggregate non-energy commodity price index dropped sharply in August, with both components contributing. In the first half of September it was flat, with food prices decreasing and metals prices recovering. The outlooks for both sub-indices are rising, but stronger growth is expected for prices of food commodities.

Prices of most basic metals continued to fall in August due to the escalation of the trade war between China and the US and the strengthening dollar. Manufacturing surveys moreover continue to signal a worsening situation. However, the J.P.Morgan Global Manufacturing PMI rose slightly in August (from 49.3 to 49.5). This, together with the modestly optimistic developments in Sino-US trade relations, halted the fall in metals prices at the end of August. The biggest losers in the trade war are copper prices, which are also being pushed down by rising stocks at the LME and the still gloomy manufacturing outlook. Nickel was the exception among metals; its price kept rising in August after Indonesia banned nickel ore exports from 2020 (the ban had originally been expected to come in two years later). The nickel price has risen by 30% since June. By contrast, the price of iron ore plummeted in early August (by more than 20%) after exports from Brazil resumed, despite strong growth in imports of iron ore to China.

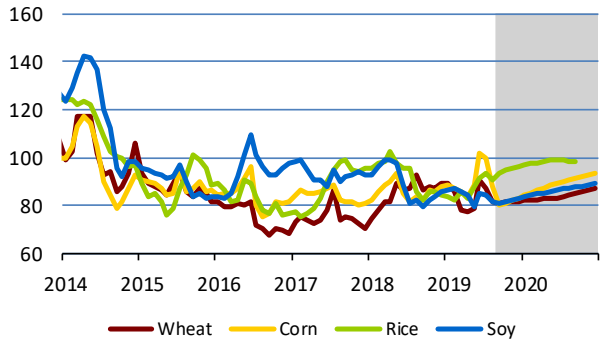
Food commodity prices have been falling across the index over the past month, with corn and cocoa prices falling the most. Beef and pork prices also dropped markedly. As for non-food agricultural commodities, the price of cotton dropped, while the price of rubber increased slightly.

Non-energy commodities price indicies



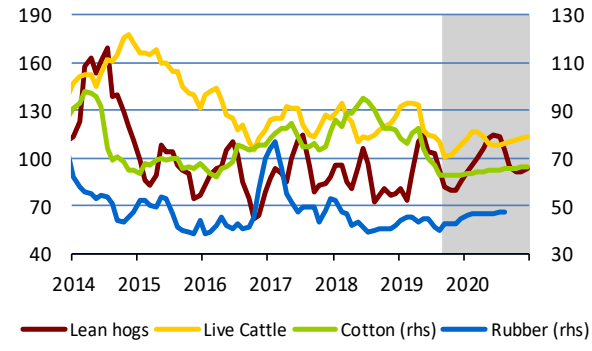
	Overall	Agricultural	Industrial
2019	80.3	83.1	82.7
2020	81.6	84.9	83.8

Food commodities



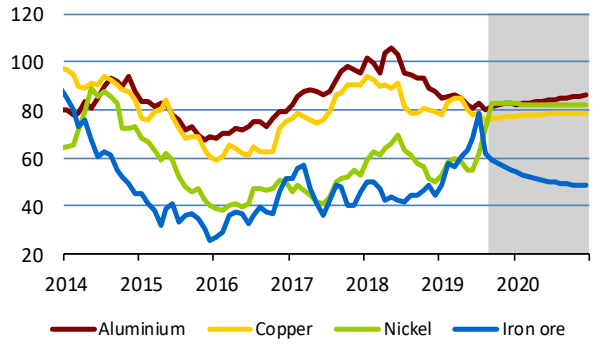
	Wheat	Corn	Rice	Soy
2019	82.9	87.6	90.0	83.4
2020	83.9	89.3	98.3	86.5

Meat, non-food agricultural commodities



	Lean hogs	Live Cattle	Cotton	Rubber
2019	91.4	117.1	70.2	43.3
2020	100.9	111.7	65.0	46.7

Basic metals and iron ore



	Aluminium	Copper	Nickel	Iron ore
2019	83.1	79.2	67.1	60.3
2020	84.3	78.3	82.3	50.5

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.

Current account modelling – long-term trends and cyclical factors[1]

This article focuses on current account dynamics in selected Central European countries. We document that the current account is influenced both by long-term trends linked with the convergence process and by cyclical factors of the external environment. On this basis, we argue that both these factors – long-term and cyclical – should be taken into account in current account modelling, and we introduce an empirical model that can incorporate them consistently. We demonstrate this model on the example of the Czech Republic.

The current account is an important indicator of external sustainability

The current account balance is the sum of the balances on the goods and services account and the primary and secondary income accounts. Goods and services surpluses contribute to the current account surplus. The credit side of the primary income balance consists mainly of residents' income from employment abroad and their earnings on investments abroad, while the debit side comprises non-residents' income from employment in the home country and their earnings on investments in the home country. Secondary income is income which does not affect foreign liabilities.

A current account deficit means that the country consumes or invests more than it saves and thus indicates a deterioration in its international investment position. Many global and regional macroeconomic and financial crises are preceded by current account imbalances.[2] These crises are usually accompanied by sharp changes in the current account, especially in countries whose current accounts have long been in deficit. Such changes in the current account can be achieved either through redirection of expenditure or through a sharp fall in domestic demand, i.e. private and public consumption and investment. A sharp drop in consumption has negative impacts on consumers' welfare and social cohesion, while a decline in investment may undermine future economic growth.[3]

International and private institutions therefore monitor the current account as an indicator of an economy's external sustainability. The European Commission uses the three-year average of the current account balance-to-GDP ratio as one of the indicators included in the Macroeconomic Imbalance Procedure for assessing the risks of imbalances in EU Member States.[4] In its External Sector Report, the IMF regularly assesses current accounts and real exchange rates for possible risks of external imbalances.[5] The central banks of open economies also regularly comment on the current account. Private institutions such as rating agencies likewise pay close attention to the current account and its dynamics.

The current account is affected by various factors acting over various time scales. Some factors are long-term and affect long-term balance of payments trends. The literature usually gives demographic structure as one of these factors, as a higher proportion of persons of retirement age implies, *ceteris paribus*, lower domestic savings and deficit pressures on the current account. Another long-term factor is the structure of the economy, which affects a country's export potential. Other factors act at business cycle frequencies; the domestic and foreign business cycle, which affects exports and imports of goods and services, is a major cyclical factor.[6] Finally, there are one-off factors which affect the current account in one period but have no longer-term effects (such as one-off transfers between countries). Devadas and Loayza (2018) provide a literature review of factors determining the current account.

This article discusses current account modelling for Central European countries. We focus on the countries which joined the EU in 2004, namely the Visegrad Four (the Czech Republic, Hungary, Poland and Slovakia), the Baltic countries (Estonia, Lithuania and Latvia) and Slovenia. We document that the current account dynamics in these countries have been influenced by the convergence process and are significantly affected by cyclical factors. We argue on this basis that these influences should be distinguished for current account modelling and modelled separately. The rest of the article is structured as follows. The following section describes the long-term current account dynamics in the eight countries mentioned above. We also document the cyclical properties of each component of the current account. The article concludes by

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[1] Author: Oxana Babecká Kucharčuková and Jan Brůha. The views expressed in this article are those of the authors and do not necessarily reflect the official position of the Czech National Bank.

[2] For example, Ca'Zorzi et al. (2012) and Lane and Milesi-Ferretti (2012) convincingly document the existence of current account imbalances in the lead-up to the global financial crisis. Davis et al. (2014) confirm that current account imbalances are a predictor of financial crises in both developed and developing economies.

[3] The latter – less favourable – scenario is unfortunately more common. This is carefully documented by Lane and Milesi-Ferretti (2012) on the example of European countries.

[4] More details can be found at https://ec.europa.eu/info/business-economy-euro/economic-and-fiscal-policy-coordination/eu-economic-governance-monitoring-prevention-correction/macroeconomic-imbalance-procedure_en.

[5] https://www.imf.org/en/Publications/SPROLLs/External-Sector-Reports. This contains a link to the External Balance Assessment (EBA) model used by the IMF for this purpose.

[6] Babecká Kucharčuková and Brůha (2018) document a high income elasticity of foreign trade. Although this elasticity might have decreased a little recently, it remains higher than 1.

presenting – by way of an example – a quantitative model of the current account for the Czech Republic, which is based on replicating the long-term and cyclical factors identified.

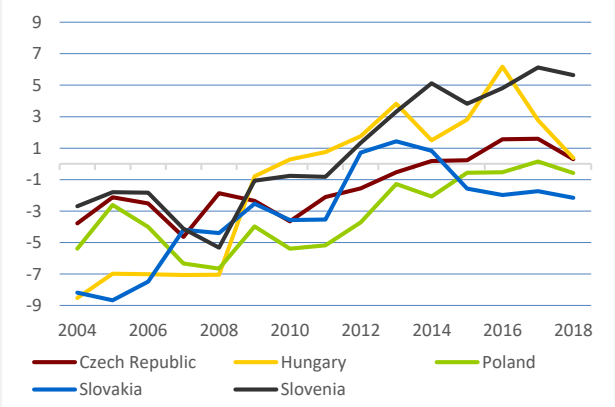
Current account dynamics in converging economies

The convergence process has been a major long-term current account determinant in Central European countries. Unlike in other regions, the long-term trend in the current account and its components has been affected by specific fundamentals linked with economic transformation and subsequent convergence towards the advanced EU countries. The current accounts in these economies were negative at the start of the transformation. There were numerous reasons for this. First, these economies were highly undercapitalised, and the low capitalisation led to investments being imported. Goods produced in these economies were initially uncompetitive, further widening the net export deficit. As time went on, the situation began to change. Capitalisation, total factor productivity and goods quality all increased. As documented by Brůha and Podpiera (2011), this process not only fostered a rise in total exports, but also improved the terms of trade and shifted the entire current account towards positive levels.

The current account dynamics differed across countries during the global crisis. In the Visegrad Group countries and Slovenia, the current account ratios continued to trend up during the crisis, whereas in the Baltic countries they turned negative before the crisis and corrected sharply after it (see Charts 1 and 2).[7] The different current account dynamics reflect different types of macroeconomic adjustment during the crisis, when domestic demand dropped sharply in the Baltic countries.

Chart 1 – Current accounts of the V4 countries and Slovenia

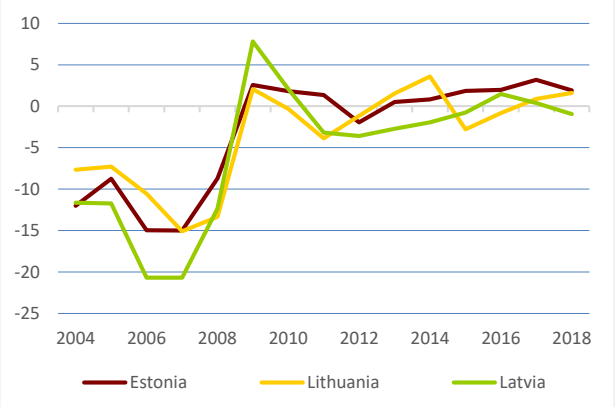
(percentage points; ratio to GDP)



Source: Eurostat, authors' calculation

Chart 2 – Current accounts of the Baltic countries

(percentage points; ratio to GDP)



Source: Eurostat, authors' calculation

The trends seen in the converging countries' current accounts reflect their unique experience, so conventional principles may not apply to them. An example of this is the relationship between the demographic dependency ratio (measured as the ratio of senior citizens of inactive age to the total population) and the current account. This relationship is expected to be negative: a rising demographic dependency ratio should cause the current account balance to worsen, as it puts downward pressure on savings and upward pressure on debt in the economy. However, this does not apply to the countries under review: all of them saw simultaneous growth in their demographic dependency ratios and their current account-to-GDP ratios between 2004 and 2018. This is illustrated by Chart 3 – the changes in both variables are positive. This "stylised fact" was thus completely obscured by the convergence story.

While the trend dynamics reflect the convergence process, the current account is also affected by standard cyclical factors. Both exports and imports are correlated with the domestic and external demand cycles in the countries under review after EU entry. The components of primary income also exhibit cyclical correlation with economic growth.

A trend-cycle model of the current account for the Czech Republic

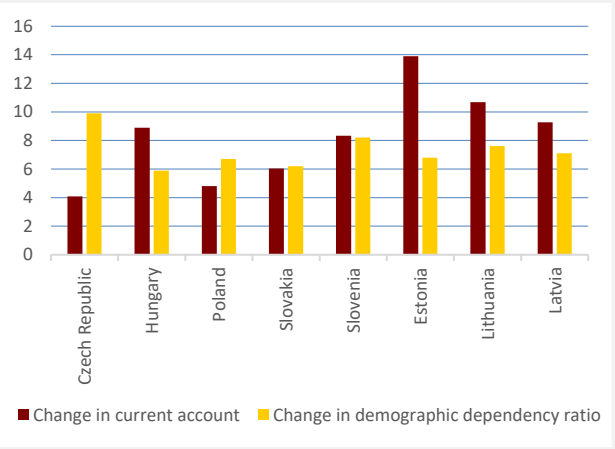
For proper empirical modelling of the current account, the long-term path and cyclical component of the current account must be captured separately. Models of time series with unobserved components (Harvey, 1989) are a useful tool for separately modelling the trend (long-term), cyclical and short-term components of the current account. A recent paper in the field of econometric modelling (Andrle and Brůha, 2018) shows how an empirical model of this type can be constructed and estimated effectively.

[7] The different dynamics can be verified by cluster analysis. Babecká Kucharčuková and Brůha (2017) developed a statistical method for classifying countries based on selected macroeconomic time series. When we apply this method to the current account time series in Central European countries, we find there are two groups within which the current account dynamics are qualitatively similar. One group is made up of the Visegrad Group and Slovenia and the other of the Baltic countries.

Each component of the current account is captured separately in the empirical model. The long-term component of the current account is captured using a flexible trend model (Harvey and Jaeger, 1993), which can be used to model a wide range of dynamics. The cyclical part is captured using a linear vector autoregression model that links the cyclical components of the current account to the cyclical components of the exogenous variables. The empirical model also contains a high-frequency part modelling short-term current account movements that cannot be explained by the long-term trend or by the position of the economy in the cycle. These short-term movements can arise from one-off transactions or may reflect measurement errors, historical data revisions and other non-systematic items. The important thing is that these components are not identified *a priori* by statistical filtration but are derived in a model-consistent manner using the Kalman filter (Harvey, 1989).[8] In addition to the trend implied by the model, the chart shows the Hodrick-Prescott trend with the usual smoothing parameter. These two trends turn out to be very different for the period 2016–2018. This is because our current account model takes into account the favourable cyclical developments abroad and thus assesses the net goods exports gap in 2016–2017 as rather positive. This shows the advantage of model-consistent filtration over statistical one-dimensional filters (multi-dimensional model-consistent filtrations are discussed in a clear manner by Andrle, 2013).

Chart 3 – Change in the demographic dependency ratio and the current account

(percentage points; difference between 2004 and 2018)



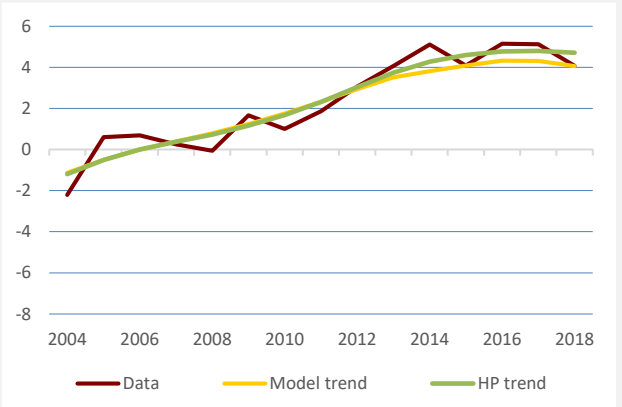
Source: Eurostat, authors' calculation

This model was constructed and used to identify the trend components of the current account for the Czech economy. We estimated the model on Czech data for the period from 2004 to the present. The cyclical components of the current account are linked to the cyclical components of domestic and foreign variables using a vector autoregression model. The major domestic variables used to identify the cycle include retail sales, domestic absorption components (investment in particular) and unemployment. As for foreign variables, the cycle is identified by euro area exports and imports, industrial orders in Germany and IFO indicators.

The goods balance has been on an upward trend since the Czech Republic joined the EU. The steady-state goods balance as viewed by the model was slightly negative in 2004 but started to rise to positive levels in 2005 (see Chart 4). This upward trend was the dominant driver of this item for most of the period under analysis and can be explained by Czech firms' engagement in global production chains (Babecká Kucharčuková and Brůha, 2018). The growth trend has halted in recent years and the steady-

Chart 4 – Goods balance: data and trend

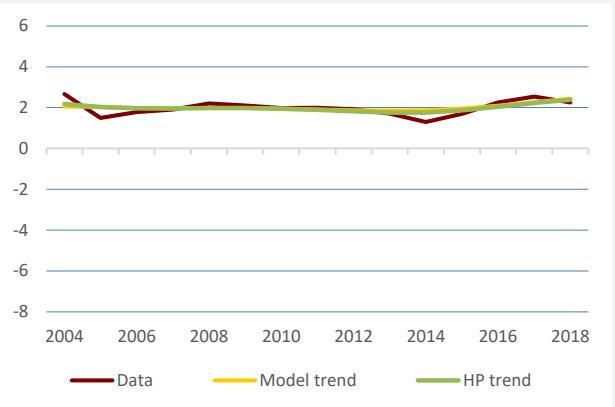
(percentage points; ratio to GDP)



Source: CNB, authors' calculation

Chart 5 – Services balance: data and trend

(percentage points; ratio to GDP)



Source: CNB, authors' calculation

[8] Another advantage of using the Kalman filter to estimate the long-term and cyclical components is that it allows expert judgement to be incorporated very easily. If, for example, there is an expert opinion that some part of the current account is a one-off factor, this information can be introduced fairly easily into the model filtration by expanding the state space (Andrle and Brůha, 2018). It is thus straightforward to combine the model approach and expert judgement.

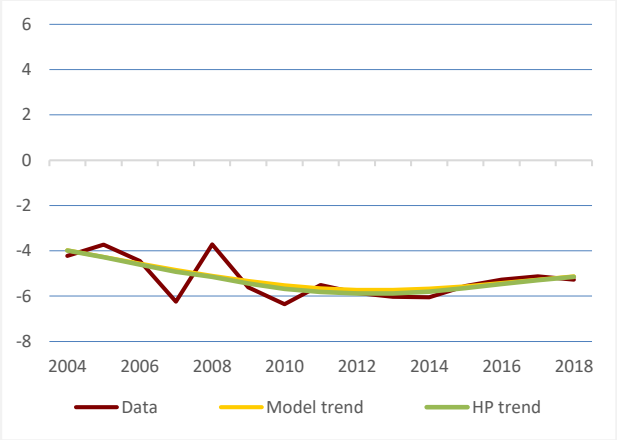
state goods balance remains positive at around 4% of GDP. Conversely, cyclical factors, especially the cyclicality of external demand, are starting to play a greater role in the dynamics of the goods balance.

On the other hand, the services balance has started to show an upward trend only recently. The steady-state services balance was almost constant at 2% of GDP until 2015. At present, however, the model identifies a slight rise to around 2.5% (see Chart 5). The equilibrium primary income trend is broadly constant, fluctuating around -5% of GDP (see Chart 6).

The goods and services balance has been the dominant trend driver of the current account since EU entry. Trend growth in these items (for goods until 2014 and for services from 2015) fosters trend growth in the entire current account. As viewed by the model, the current account equilibrium is currently slightly positive, with the current account standing just below its trend level (see Chart 7). In 2016 and 2017, by contrast, the current account levels are higher than the trend identified, reflecting the favourable effect of the foreign business cycle.

Chart 6 – Primary income balance: data and trend

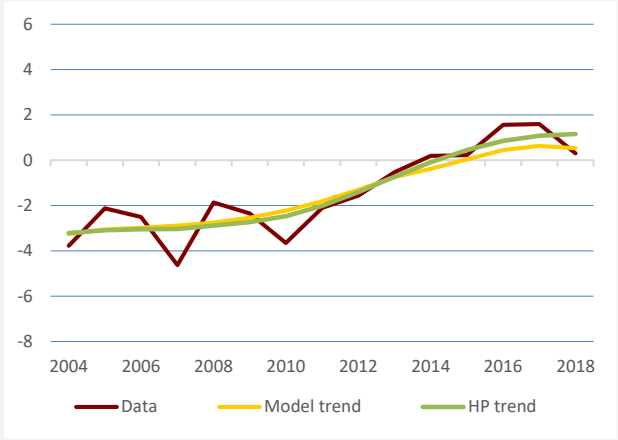
(percentage points; ratio to GDP)



Source: CNB, authors' calculation

Chart 7 – Current account

(percentage points; ratio to GDP)



Source: CNB, authors' calculation

Conclusion

The current account is an important macroeconomic indicator and is affected by factors acting over various time scales. Different factors act at different horizons. The structure of the economy, demographics and the convergence process affect the current account in the long run. On the other hand, the domestic and foreign business cycles act via standard channels in the medium term.

It is therefore necessary to distinguish the individual factors and their horizons when modelling the current account. This article proposed an empirical model that can break down the current account into its trend, cyclical and high-frequency components. This model was estimated for the Czech Republic. It turns out that the current account is currently on its long-term path.

The model presented here can be used as an alternative to estimates of equilibrium current account levels based on regression models. The usual approach to estimating current account equilibrium is based on panel regressions using a large sample of countries (Coutinho et al., 2018; Phillips et al., 2013). The deviation of the current account from the prediction based on panel regression is then interpreted as an indicator of external misalignment. A potential problem with this approach is that the countries used in the estimates may be heterogeneous and their historical experience different. This is particularly relevant for converging countries, which have gone through unique macroeconomic developments over the last 30 years. The model presented here estimates the long-term trend path in a flexible manner using the Kalman filter and is thus able to take the unique experience of each country into account. It may therefore be applied as a useful and interesting alternative to the usual approach.

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Keywords:

current account, convergence process, international trade

JEL Classification

C51, F32, F44

A1. Change in predictions for 2019

GDP growth, %

	CF		IMF		OECD		CB / EIU	
EA	0	2019/9 2019/8	0	2019/7 2019/4	+0.2	2019/5 2019/3	-0.1	2019/9 2019/6
US	0	2019/9 2019/8	+0.3	2019/7 2019/4	+0.2	2019/5 2019/3	0	2019/6 2019/3
UK	0	2019/9 2019/8	+0.1	2019/7 2019/4	+0.4	2019/5 2019/3	-0.2	2019/8 2019/5
JP	+0.1	2019/9 2019/8	-0.1	2019/7 2019/4	-0.1	2019/5 2019/3	-0.1	2019/7 2019/4
CN	0	2019/9 2019/8	-0.1	2019/7 2019/4	0	2019/5 2019/3	0	2019/8 2019/6
RU	0	2019/8 2019/7	-0.4	2019/7 2019/4	0	2019/5 2019/3	0	2019/8 2019/7

Inflation, %

	CF		IMF		OECD		CB / EIU	
EA	0	2019/9 2019/8	-0.4	2019/4 2018/10	-0.7	2019/5 2018/11	-0.1	2019/9 2019/6
US	0	2019/9 2019/8	-0.1	2019/4 2018/10	-0.7	2019/5 2018/11	-0.3	2019/6 2019/3
UK	+0.1	2019/9 2019/8	-0.4	2019/4 2018/10	-0.6	2019/5 2018/11	0	2019/8 2019/5
JP	-0.1	2019/9 2019/8	-0.2	2019/4 2018/10	-0.6	2019/5 2018/11	-0.1	2019/7 2019/4
CN	0	2019/9 2019/8	-0.1	2019/4 2018/10	-1.1	2019/5 2018/11	-0.1	2019/8 2019/6
RU	-0.1	2019/8 2019/7	-0.1	2019/4 2018/10	-0.2	2019/5 2018/11	0	2019/8 2019/7

A2. Change in predictions for 2020

GDP growth, %

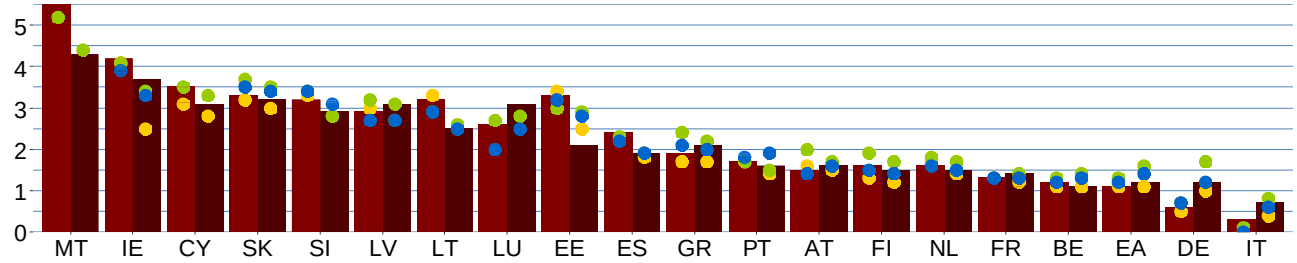
	CF		IMF		OECD		CB / EIU	
EA	-0.1	2019/9 2019/8	+0.1	2019/7 2019/4	+0.2	2019/5 2019/3	-0.2	2019/9 2019/6
US	-0.1	2019/9 2019/8	0	2019/7 2019/4	+0.1	2019/5 2019/3	+0.1	2019/6 2019/3
UK	-0.1	2019/9 2019/8	0	2019/7 2019/4	+0.1	2019/5 2019/3	-0.3	2019/8 2019/5
JP	-0.1	2019/9 2019/8	-0.1	2019/7 2019/4	-0.1	2019/5 2019/3	0	2019/7 2019/4
CN	-0.1	2019/9 2019/8	-0.1	2019/7 2019/4	0	2019/5 2019/3	0	2019/8 2019/6
RU	0	2019/8 2019/7	+0.2	2019/7 2019/4	+0.6	2019/5 2019/3	0	2019/8 2019/7

Inflation, %

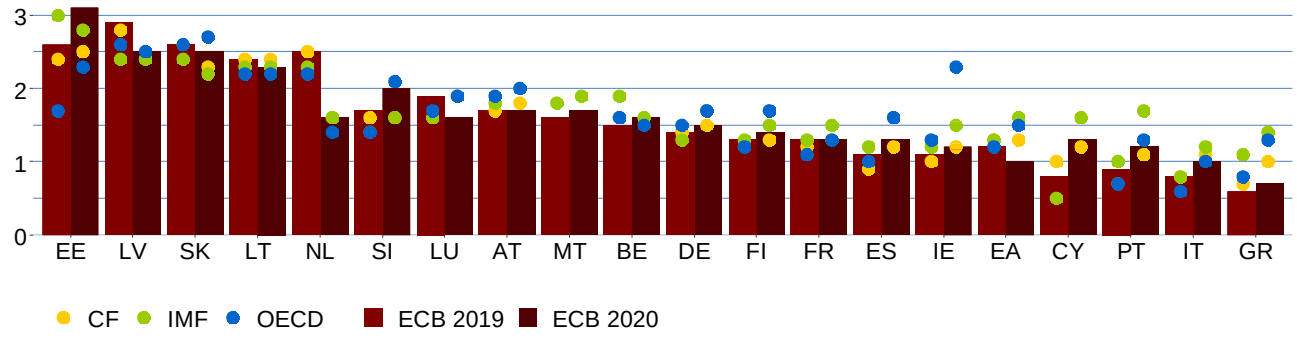
	CF		IMF		OECD		CB / EIU	
EA	-0.1	2019/9 2019/8	-0.2	2019/4 2018/10	-0.4	2019/5 2018/11	-0.4	2019/9 2019/6
US	0	2019/9 2019/8	+0.4	2019/4 2018/10	-0.3	2019/5 2018/11	-0.1	2019/6 2019/3
UK	+0.1	2019/9 2019/8	0	2019/4 2018/10	-0.2	2019/5 2018/11	+0.1	2019/8 2019/5
JP	0	2019/9 2019/8	-0.2	2019/4 2018/10	-0.4	2019/5 2018/11	-0.1	2019/7 2019/4
CN	0	2019/9 2019/8	-0.2	2019/4 2018/10	-0.9	2019/5 2018/11	0	2019/8 2019/6
RU	0	2019/8 2019/7	-0.3	2019/4 2018/10	0	2019/5 2018/11	0	2019/8 2019/7

A3. GDP growth and inflation outlooks in the euro area countries

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



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

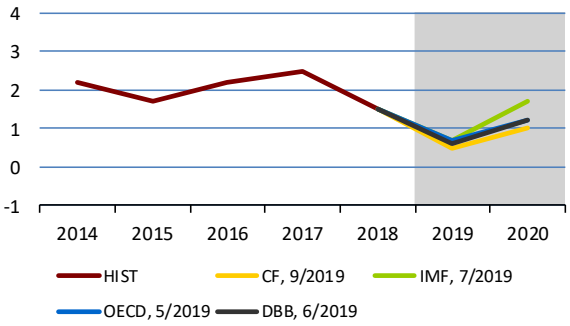


Note: Charts show institutions' latest available outlooks of for the given country.

A4. GDP growth and inflation in the individual euro area countries

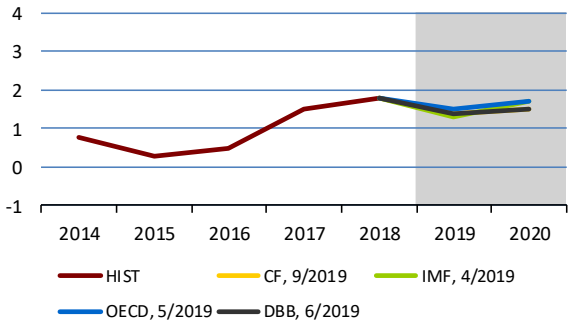
Germany

GDP growth, %



	CF	IMF	OECD	DBB
2019	0.5	0.7	0.7	0.6
2020	1.0	1.7	1.2	1.2

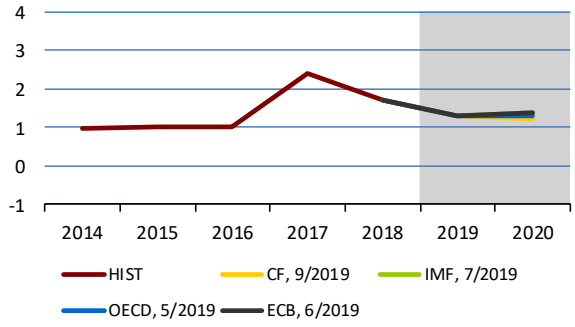
Inflation, %



	CF	IMF	OECD	DBB
2019	1.4	1.3	1.5	1.4
2020	1.5	1.7	1.7	1.5

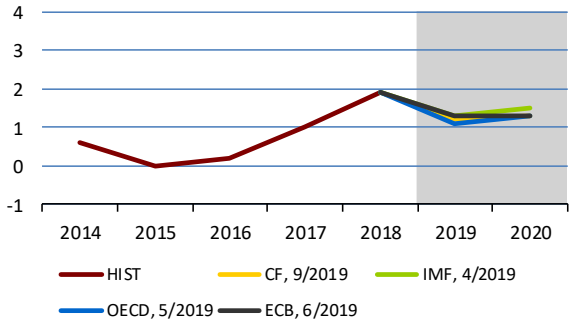
France

GDP growth, %



	CF	IMF	OECD	ECB
2019	1.3	1.3	1.3	1.3
2020	1.2	1.4	1.3	1.4

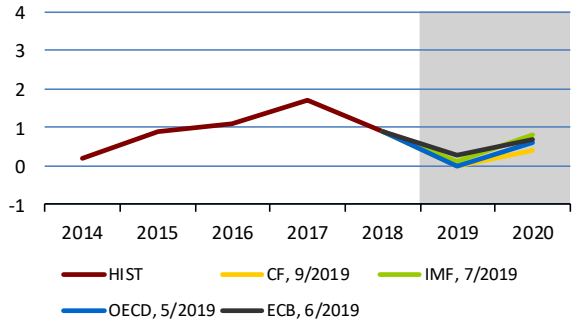
Inflation, %



	CF	IMF	OECD	ECB
2019	1.2	1.3	1.1	1.3
2020	1.3	1.5	1.3	1.3

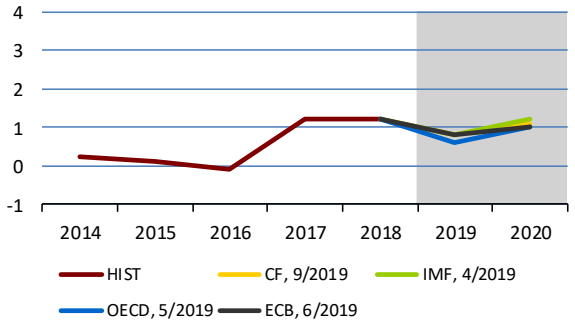
Italy

GDP growth, %



	CF	IMF	OECD	ECB
2019	0.0	0.1	0.0	0.3
2020	0.4	0.8	0.6	0.7

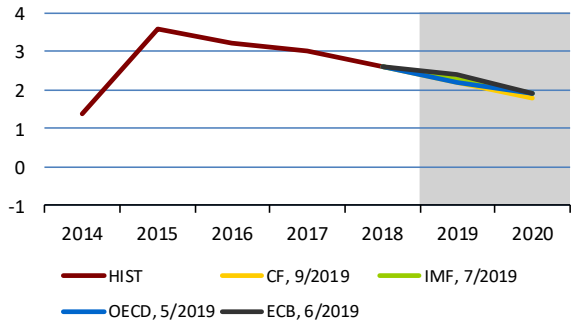
Inflation, %



	CF	IMF	OECD	ECB
2019	0.8	0.8	0.6	0.8
2020	1.1	1.2	1.0	1.0

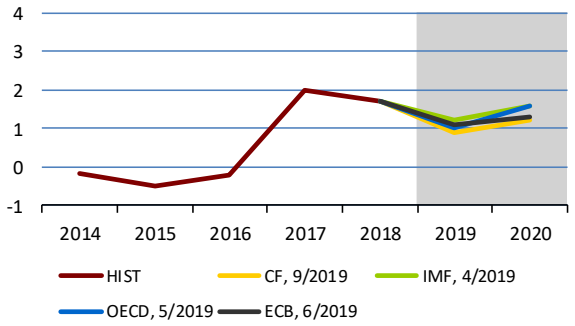
Spain

GDP growth, %



	CF	IMF	OECD	ECB
2019	2.2	2.3	2.2	2.4
2020	1.8	1.9	1.9	1.9

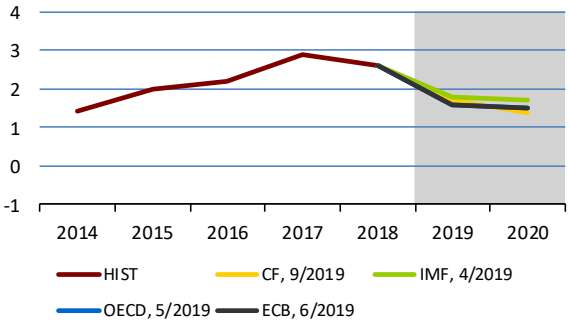
Inflation, %



	CF	IMF	OECD	ECB
2019	0.9	1.2	1.0	1.1
2020	1.2	1.6	1.6	1.3

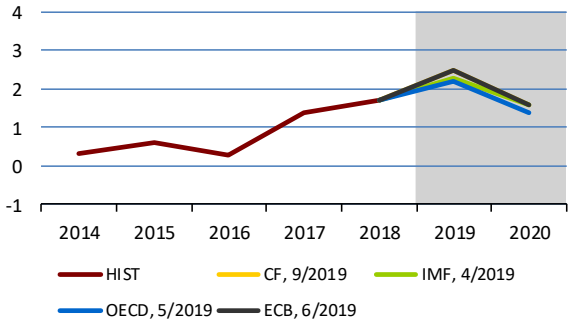
Netherlands

GDP growth, %



	CF	IMF	OECD	ECB
2019	1.7	1.8	1.6	1.6
2020	1.4	1.7	1.5	1.5

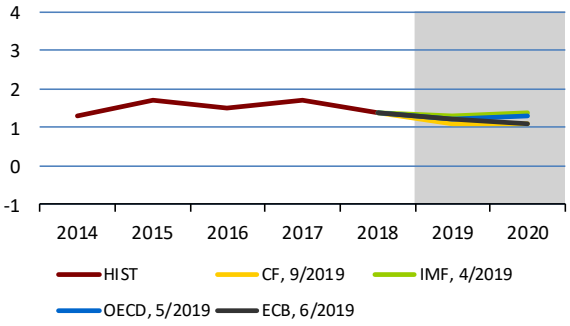
Inflation, %



	CF	IMF	OECD	ECB
2019	2.5	2.3	2.2	2.5
2020	1.6	1.6	1.4	1.6

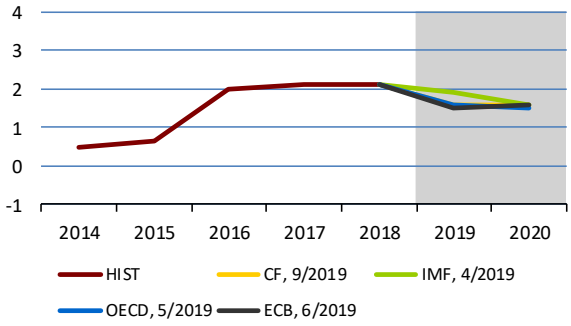
Belgium

GDP growth, %



	CF	IMF	OECD	ECB
2019	1.1	1.3	1.2	1.2
2020	1.1	1.4	1.3	1.1

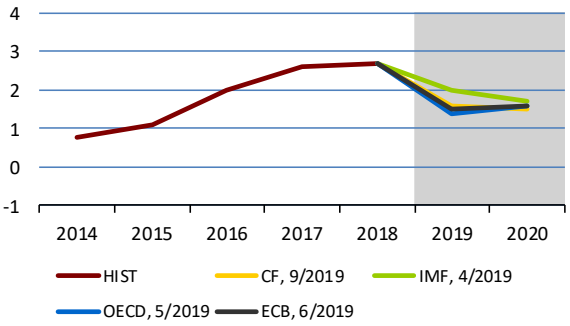
Inflation, %



	CF	IMF	OECD	ECB
2019	1.6	1.9	1.6	1.5
2020	1.6	1.6	1.5	1.6

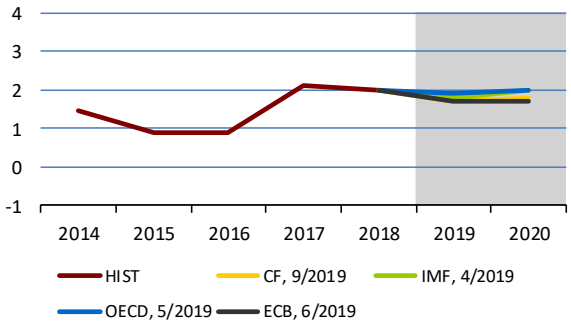
Austria

GDP growth, %



	CF	IMF	OECD	ECB
2019	1.6	2.0	1.4	1.5
2020	1.5	1.7	1.6	1.6

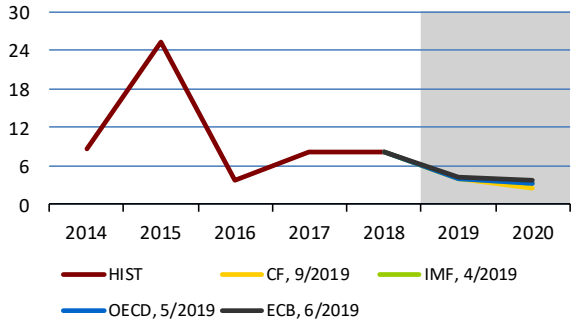
Inflation, %



	CF	IMF	OECD	ECB
2019	1.7	1.8	1.9	1.7
2020	1.8	2.0	2.0	1.7

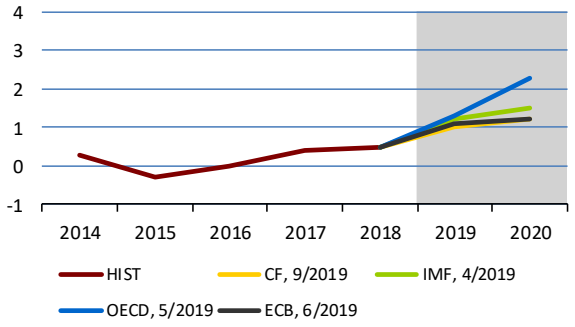
Ireland

GDP growth, %



	CF	IMF	OECD	ECB
2019	4.1	4.1	3.9	4.2
2020	2.5	3.4	3.3	3.7

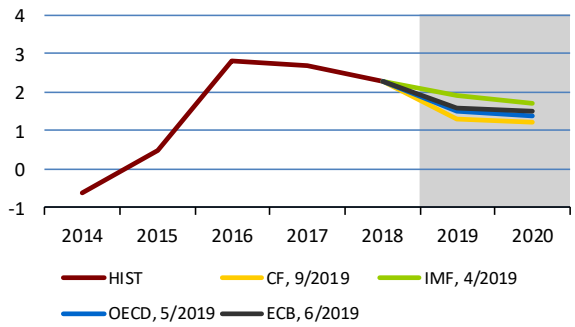
Inflation, %



	CF	IMF	OECD	ECB
2019	1.0	1.2	1.3	1.1
2020	1.2	1.5	2.3	1.2

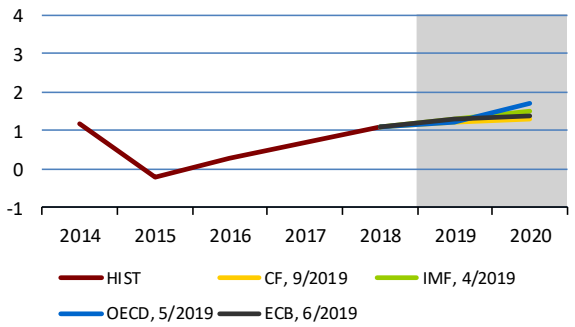
Finland

GDP growth, %



	CF	IMF	OECD	ECB
2019	1.3	1.9	1.5	1.6
2020	1.2	1.7	1.4	1.5

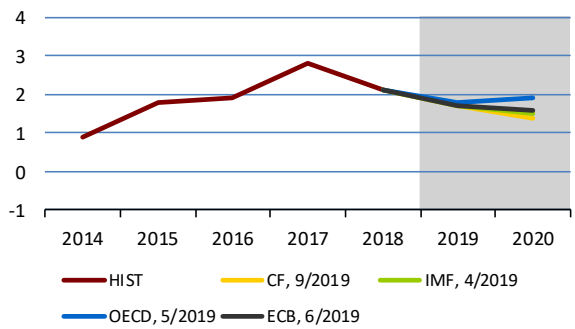
Inflation, %



	CF	IMF	OECD	ECB
2019	1.2	1.3	1.2	1.3
2020	1.3	1.5	1.7	1.4

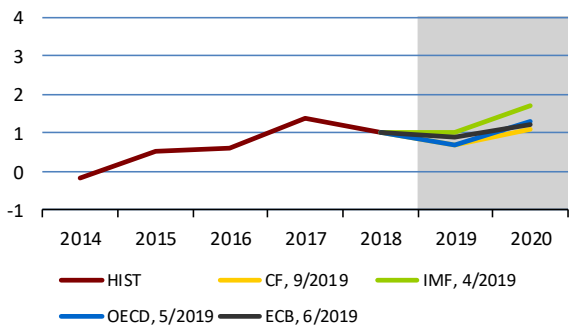
Portugal

GDP growth, %



	CF	IMF	OECD	ECB
2019	1.7	1.7	1.8	1.7
2020	1.4	1.5	1.9	1.6

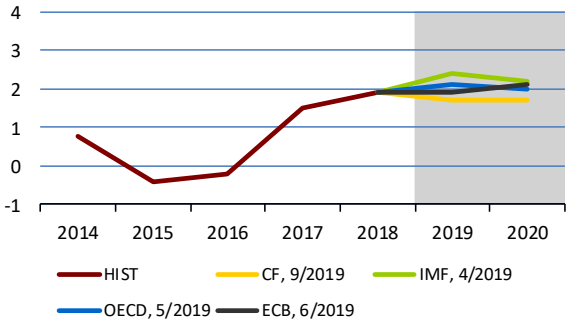
Inflation, %



	CF	IMF	OECD	ECB
2019	0.7	1.0	0.7	0.9
2020	1.1	1.7	1.3	1.2

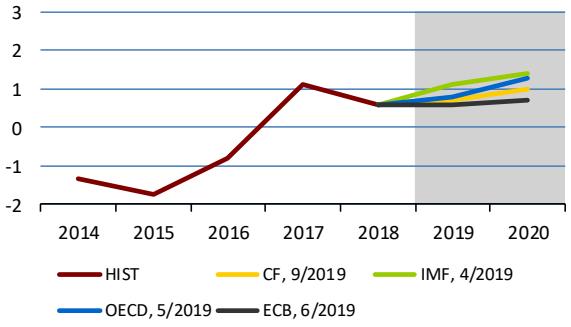
Greece

GDP growth, %



	CF	IMF	OECD	ECB
2019	1.7	2.4	2.1	1.9
2020	1.7	2.2	2.0	2.1

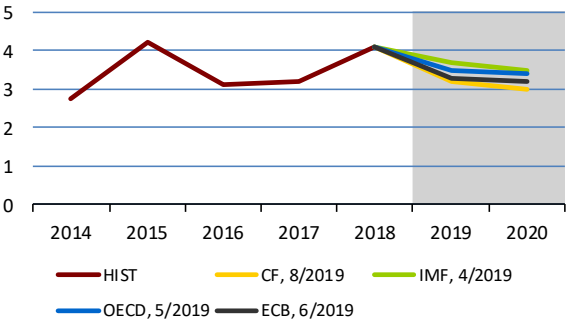
Inflation, %



	CF	IMF	OECD	ECB
2019	0.7	1.1	0.8	0.6
2020	1.0	1.4	1.3	0.7

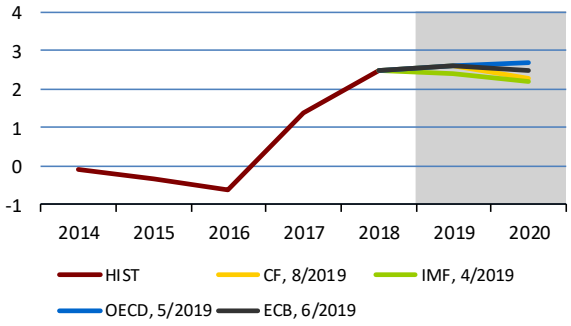
Slovakia

GDP growth, %



	CF	IMF	OECD	ECB
2019	3.2	3.7	3.5	3.3
2020	3.0	3.5	3.4	3.2

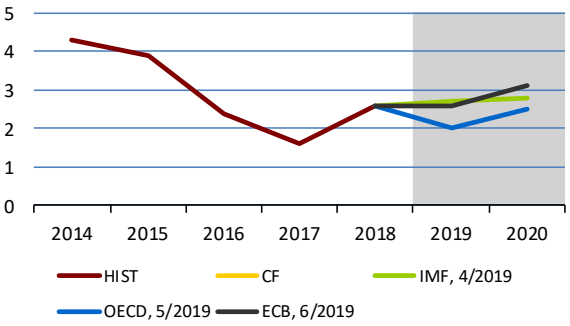
Inflation, %



	CF	IMF	OECD	ECB
2019	2.6	2.4	2.6	2.6
2020	2.3	2.2	2.7	2.5

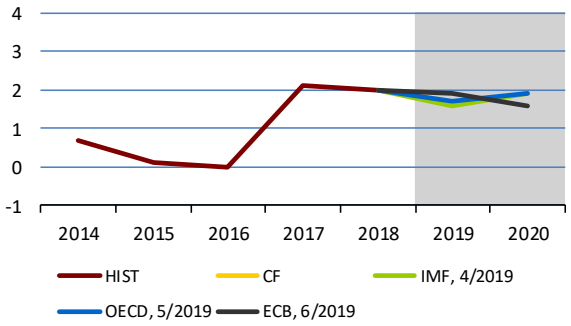
Luxembourg

GDP growth, %



	CF	IMF	OECD	ECB
2019	n. a.	2.7	2.0	2.6
2020	n. a.	2.8	2.5	3.1

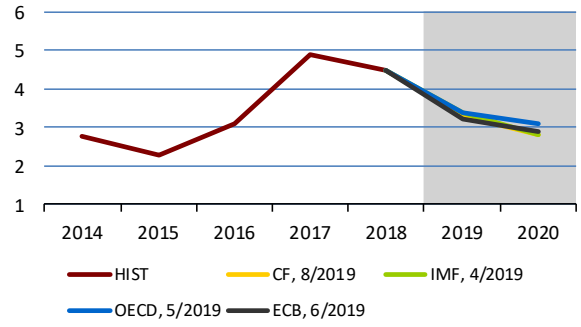
Inflation, %



	CF	IMF	OECD	ECB
2019	n. a.	1.6	1.7	1.9
2020	n. a.	1.9	1.9	1.6

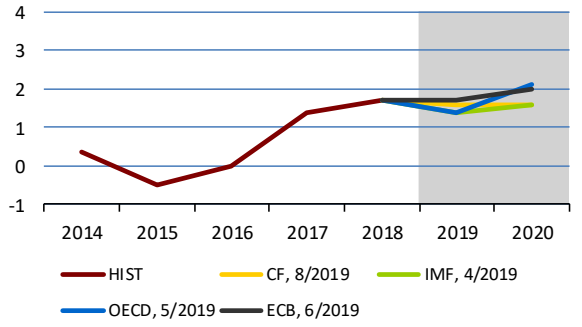
Slovenia

GDP growth, %



	CF	IMF	OECD	ECB
2019	3.3	3.4	3.4	3.2
2020	2.8	2.8	3.1	2.9

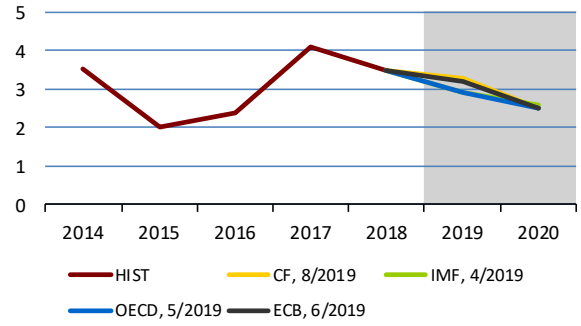
Inflation, %



	CF	IMF	OECD	ECB
2019	1.6	1.4	1.4	1.7
2020	1.6	1.6	2.1	2.0

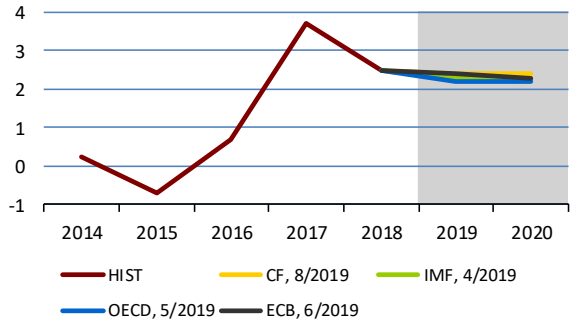
Lithuania

GDP growth, %



	CF	IMF	OECD	ECB
2019	3.3	2.9	2.9	3.2
2020	2.5	2.6	2.5	2.5

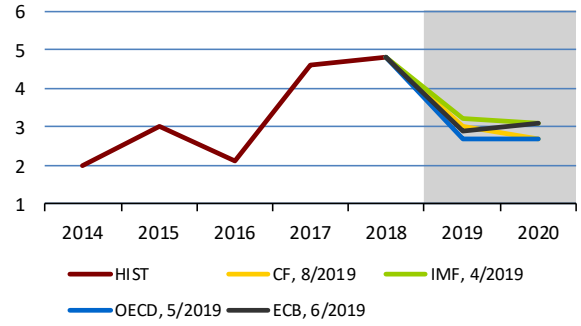
Inflation, %



	CF	IMF	OECD	ECB
2019	2.4	2.3	2.2	2.4
2020	2.4	2.3	2.2	2.3

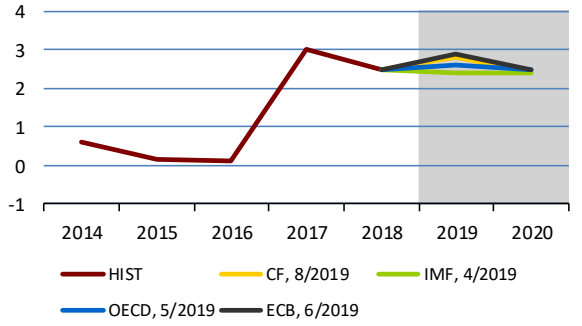
Latvia

GDP growth, %



	CF	IMF	OECD	ECB
2019	3.0	3.2	2.7	2.9
2020	2.7	3.1	2.7	3.1

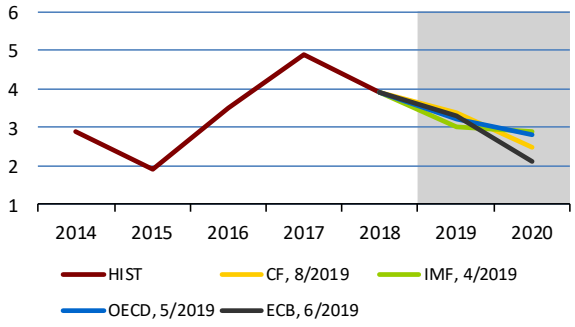
Inflation, %



	CF	IMF	OECD	ECB
2019	2.8	2.4	2.6	2.9
2020	2.4	2.4	2.5	2.5

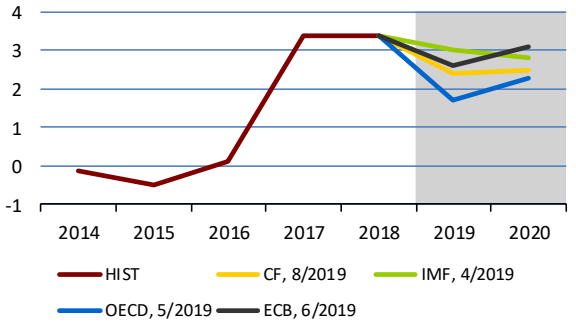
Estonia

GDP growth, %



	CF	IMF	OECD	ECB
2019	3.4	3.0	3.2	3.3
2020	2.5	2.9	2.8	2.1

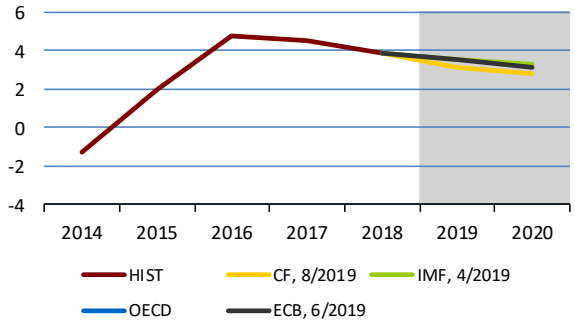
Inflation, %



	CF	IMF	OECD	ECB
2019	2.4	3.0	1.7	2.6
2020	2.5	2.8	2.3	3.1

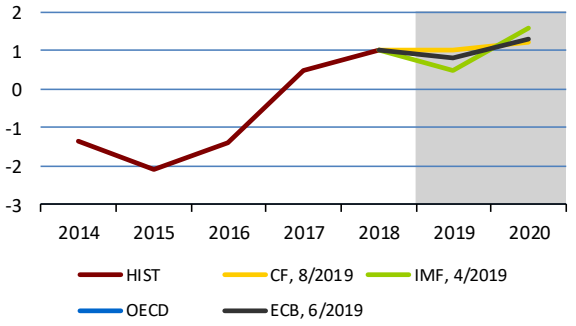
Cyprus

GDP growth, %



	CF	IMF	OECD	ECB
2019	3.1	3.5	n. a.	3.5
2020	2.8	3.3	n. a.	3.1

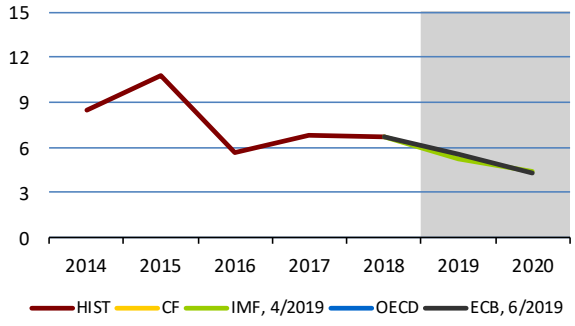
Inflation, %



	CF	IMF	OECD	ECB
2019	1.0	0.5	n. a.	0.8
2020	1.2	1.6	n. a.	1.3

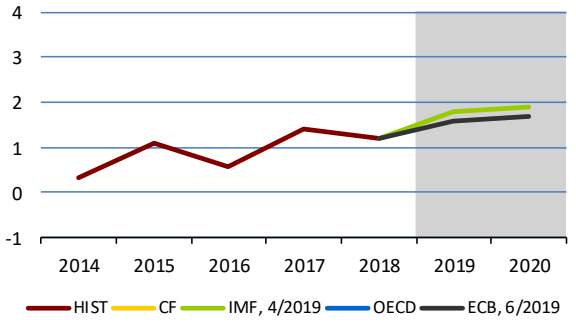
Malta

GDP growth, %



	CF	IMF	OECD	ECB
2019	n. a.	5.2	n. a.	5.5
2020	n. a.	4.4	n. a.	4.3

Inflation, %



	CF	IMF	OECD	ECB
2019	n. a.	1.8	n. a.	1.6
2020	n. a.	1.9	n. a.	1.7

A5. List of abbreviations

AT	Austria
bbl	barrel
BE	Belgium
BoE	Bank of England (the UK central bank)
BoJ	Bank of Japan (the central bank of Japan)
bp	basis point (one hundredth of a percentage point)
CB	central bank
CBR	Central Bank of Russia
CF	Consensus Forecasts
CN	China
CNB	Czech National Bank
CNY	Chinese renminbi
ConfB	Conference Board Consumer Confidence Index
CXN	Caixin
CY	Cyprus
DBB	Deutsche Bundesbank (the central bank of Germany)
DE	Germany
EA	euro area
ECB	European Central Bank
EE	Estonia
EIA	Energy Information Administration
EIU	Economist Intelligence Unit
ES	Spain
ESI	Economic Sentiment Indicator of the European Commission
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
IFO	Leibniz Institute for Economic Research at the University of Munich
IMF	International Monetary Fund
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 (UK)
NKI	Nikkei
NL	Netherlands
OECD	Organisation for Economic Co-operation and Development
OECD-CLI	OECD Composite Leading Indicator
OPEC+	member countries of OPEC oil cartel and 10 other oil-exporting countries (the most important of which are Russia, Mexico and Kazakhstan)
PMI	Purchasing Managers' Index
pp	percentage point
PT	Portugal
QE	quantitative easing
RU	Russia
RUB	Russian rouble
SI	Slovenia
SK	Slovakia
UK	United Kingdom
UoM	University of Michigan Consumer Sentiment Index - present situation
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	Centre for European Economic Research