

# GLOBAL ECONOMIC OUTLOOK – JANUARY

Monetary and Statistics Department  
External Economic Relations Division

2013

<b>CONTENTS</b>	<b>2</b>
<b>I SUMMARY</b>	<b>3</b>
<b>II GDP AND INFLATION FORECASTS</b>	<b>4</b>
<b>II.1 GDP outlook in advanced countries</b>	<b>4</b>
<b>II.2 GDP outlook in BRIC countries</b>	<b>4</b>
<b>II.3 Inflation outlook in advanced countries</b>	<b>6</b>
<b>II.4 Inflation outlook in BRIC countries</b>	<b>6</b>
<b>III LEADING INDICATORS</b>	<b>8</b>
<b>IV INTEREST RATE AND EXCHANGE RATE OUTLOOK</b>	<b>9</b>
<b>IV.2 Interest rate outlook in the euro area and the USA</b>	<b>9</b>
<b>IV.3 Outlook for selected exchange rates</b>	<b>9</b>
<b>V COMMODITY MARKET DEVELOPMENTS</b>	<b>11</b>
<b>V.1 Oil and natural gas</b>	<b>11</b>
<b>V.2 Other commodities</b>	<b>11</b>
<b>VI FOCUS</b>	<b>13</b>
<b>Economic potential of the BRIC countries</b>	<b>13</b>
<b>ANNEXES:</b>	<b>20</b>
<b>A1. Change in GDP predictions for 2013</b>	<b>20</b>
<b>A2. Change in inflation predictions for 2013</b>	<b>20</b>
<b>A3. Abbreviations</b>	<b>20</b>
<b>A4. List of thematic articles published in GEO</b>	<b>21</b>

## EDITORS AND AUTHORS:



**Luboš Komárek**

Editor-in-Chief,  
Focus,  
Summary  
Lubos.Komarek@  
cnb.cz



**Oxana Babecká**

Editor,  
II.1 & II.3 GDP and  
inflation forecasts  
Oxana.Babecka-  
Kucharcukova@  
cnb.cz



**Tomáš Adam**

Editor  
Tomas.Adam@  
cnb.cz



**Viktor Zeisel**

Focus  
II.2 & II.4 GDP and  
inflation forecasts  
Viktor.Zeisel@  
cnb.cz



**Milan Klíma**

III. Leading  
indicators  
Milan.Klima@cnb.cz



**Soňa Benecká**

IV.1 & IV.2 Interest  
rate and exchange  
rate outlook  
Sona.Benecka@  
cnb.cz



**Jan Hošek**

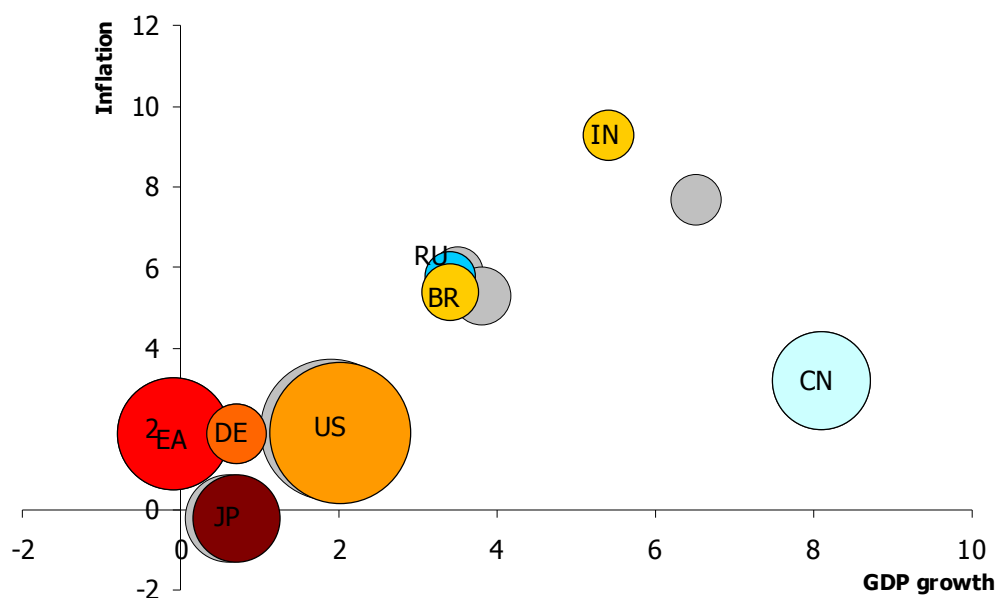
V.1 & V.2  
Commodity market  
developments  
Jan2461.Hosek@  
cnb.cz

The January issue of Global Economic Outlook presents its regular overview of recent and expected developments in selected territories (for the first time including Japan, Brazil, Russia and India), focusing on key economic variables such as GDP, inflation, leading indicators, interest rates, exchange rates and commodity prices. In this issue, we also focus on presenting the current and future economic potential of the BRIC countries, which rank among the world's ten largest economies and which together are home to 40% of the earth's population. Not only are these countries major contributors to current global economic growth, they also promise future growth potential for the world economy.

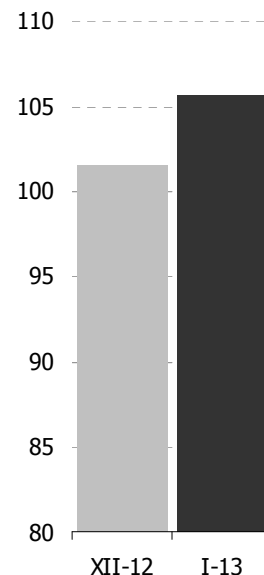
The global economic outlooks for 2013 – especially those for the advanced economies – are again not very optimistic. The euro area is expected to remain in recession this year, reflecting very low growth of the German economy, previously the economic engine of the single currency area. Japan's economy is expected to slow but gradual extricate itself from the feared deflation. Consequently, moderate optimism can be derived only from the data on the US economy. However, this is conditional on at least a medium-term solution being found to the USA's fiscal problems. Overindebtedness and lack of fiscal discipline are the general limiting factors for most of the advanced economies (see the figure), where solid economic growth is being hindered by consolidation processes in the short run. Most emerging economies, including the BRIC countries, are expected to maintain robust growth rates, although these are reflected in higher expected inflation rates.

The interest rate outlooks at the one-year horizon point to a slight increase in the euro area and stagnation in the USA. In 2013, the dollar is expected to strengthen against the main currencies of the advanced countries (the euro, the yen, the Swiss franc and the British pound) as well as some emerging economies' currencies (the Brazilian real and the Russian rouble). By contrast, it is expected to weaken against the Indian and Chinese currencies. The outlook for dollar prices of oil and natural gas indicates a slight decline towards the end of this year, as in the case of food commodities. A modest price increase is expected for metals and non-food agricultural commodities.

**Outlook for the global economy in 2013**



**Outlook for Brent crude oil prices in December 2013**



**Public debt (% GDP)**

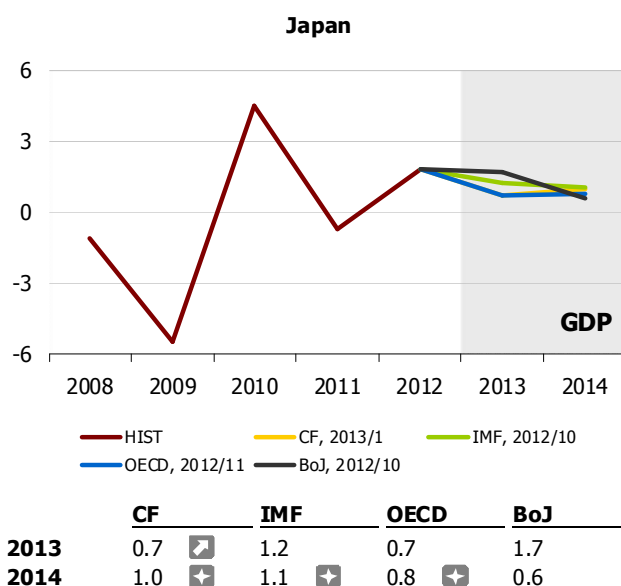
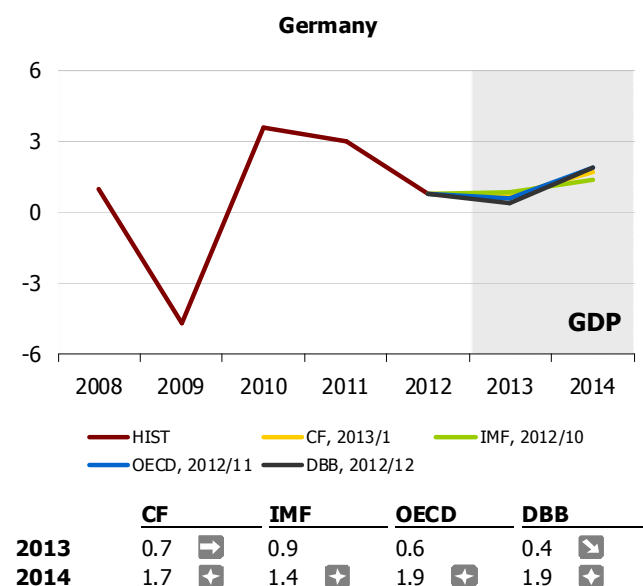
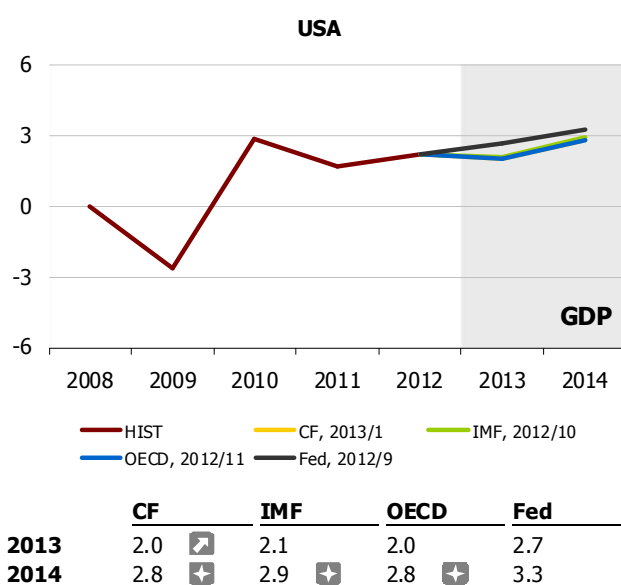
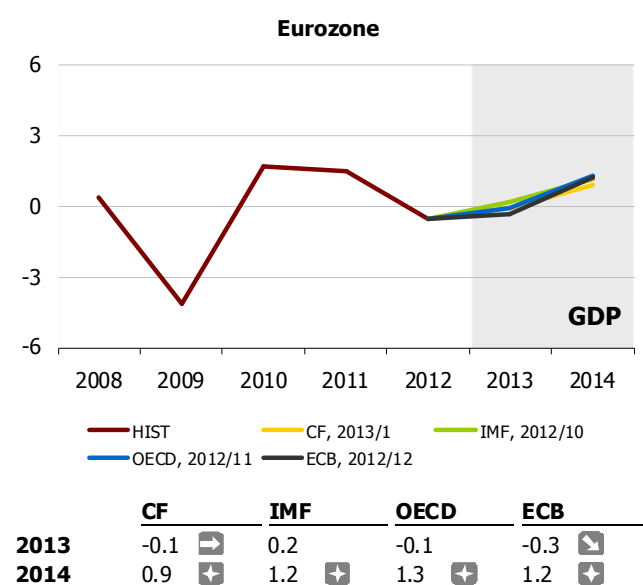


Note: The size of each point represents the size of the country/region according to nominal GDP in US dollars in 2011. The points are coloured according to the size of the public debt-to-GDP ratio in 2011. The grey colour is the CF forecast (GDP, inflation) or Bloomberg survey (oil price) from the previous month. [Cut-off date for data: 18 January 2013]

Source: Bloomberg, EIU, Consensus Economics, CNB calculations.

### II.1 GDP outlook in advanced countries

As regards the four advanced economies under review, moderate optimism can be derived only from macroeconomic data from the USA, but the outlook there is surrounded by a high degree of uncertainty. The approval of the budget reform has averted the immediate threat of cuts, but it is not a solution to the USA's fiscal woes. In fact, it only means that the key agreement on the debt ceiling for the US economy has been put off for another two months. Compared to December, the January CF sees slightly better potential for GDP growth this year and has raised its outlook for the USA in 2013 by 0.1 pp (see the Annex). The same revision has been made to Japan's GDP. Economic growth may be supported by an expected improvement in export demand, especially in the euro area and China, which dropped sharply last year. The Japanese government's pro-growth package for infrastructure investment may also be a positive stimulus. The CF forecast for the euro area and Germany was unchanged from the previous outlook. Euro area GDP growth will stay negative this year, with economic activity gradually recovering from 2013 H2 onwards.



Note: Legend shows latest forecast data in format "Source, year/month" of forecast publication. HIST: historical value. ECB and Fed: midpoint of range. Arrow indicates direction of revision of newly published forecast. If no arrow is shown, no new forecast is available by cut-off date in either current or previous month. Asterisk indicates first published forecast for given year.

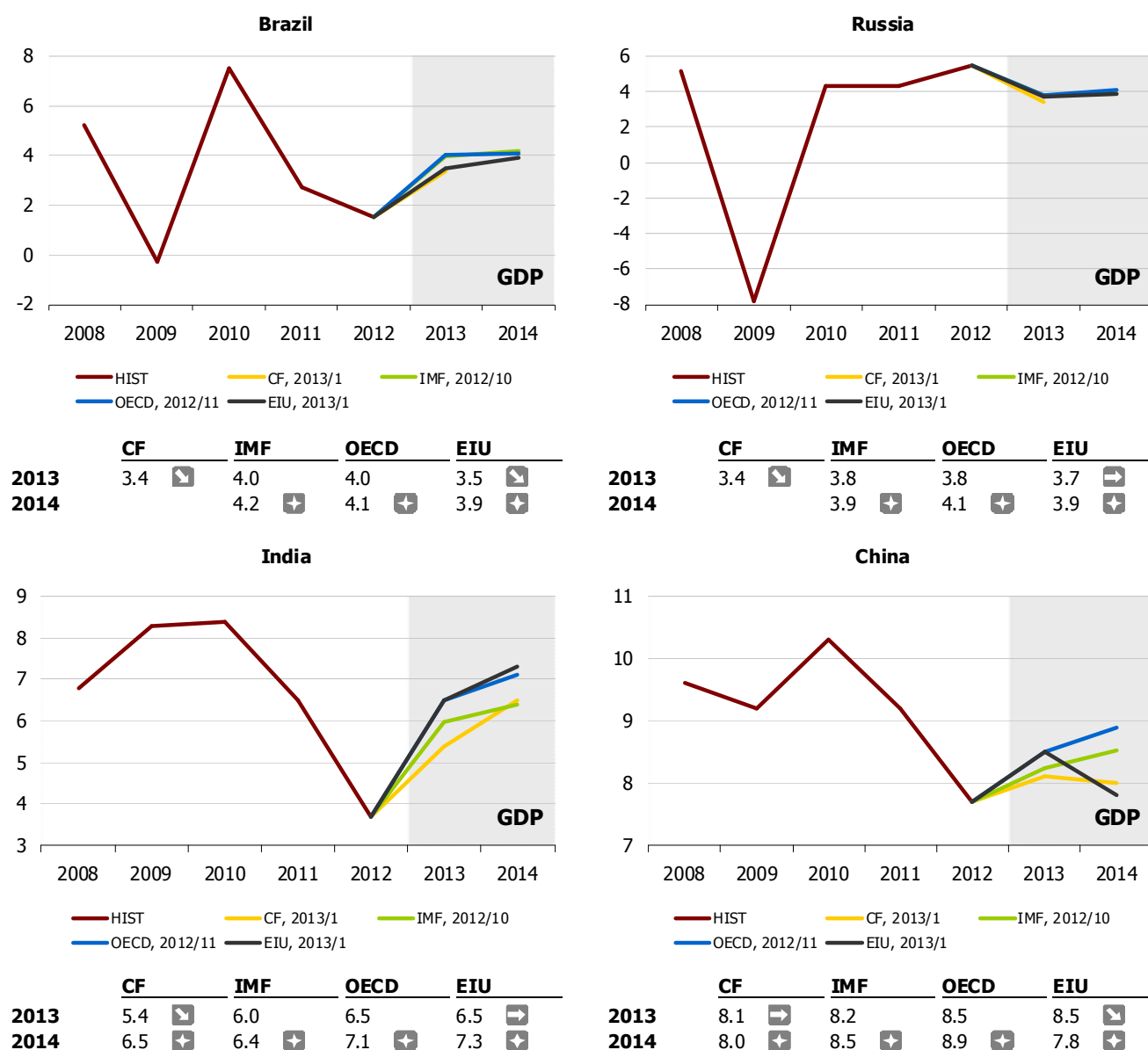
[Cut-off date for data: 18 January 2013]

Source: CF, IMF, OECD, ECB, Fed, DBB, BoJ, CNB calculations.

## II.2 GDP outlook in BRIC countries

The economic trend in the emerging economies depends largely on demand from advanced countries and therefore also on economic growth in the USA and the euro area. According to current outlooks, rising external demand in 2013 should be reflected in faster growth in China, Brazil and India. China will also maintain the highest GDP growth rate among the BRIC countries. In 2013 it will grow by 8.1%–8.5% according to the new CF and EIU estimates. India's economic growth will also pick up pace to 5.4%–6.5%. By contrast, the Russian economy will slow to 3.4%–3.7%. Brazil will grow at a similar rate, recording growth of 3.4%–3.5% according to the new estimates.

According to the IMF, the OECD and the EIU, growth in Russia and Brazil will remain similar in 2014 (3.9%–4.1%). India will see a stronger pick-up in economic growth, rising to 6.4%–7.3%. China will again record the strongest growth, with its GDP growing by 7.8%–8.9%. However, the dispersion of these forecasts is the highest, hence the uncertainty regarding the future is also the highest.



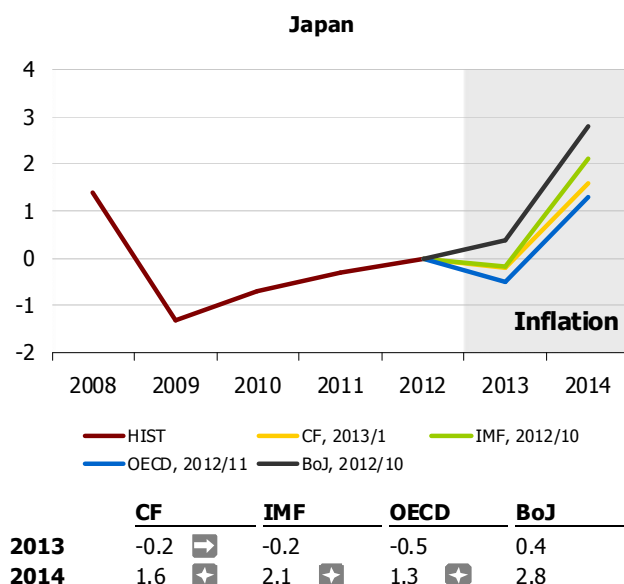
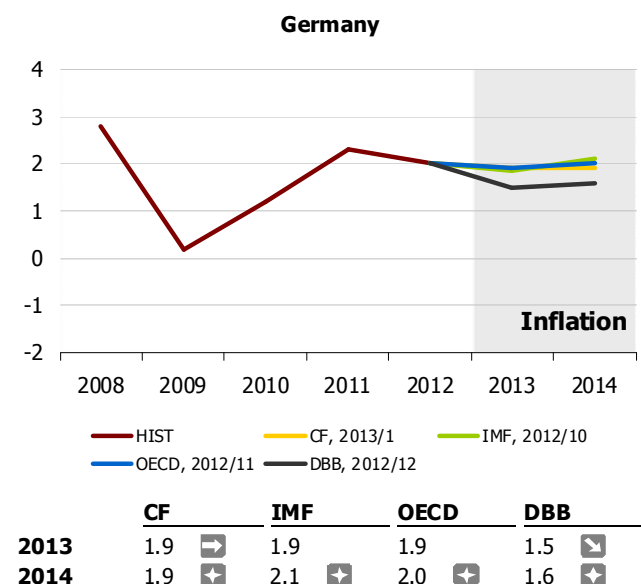
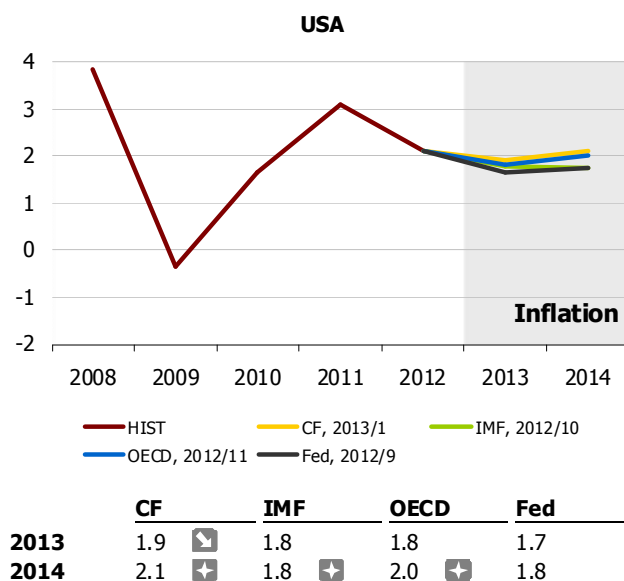
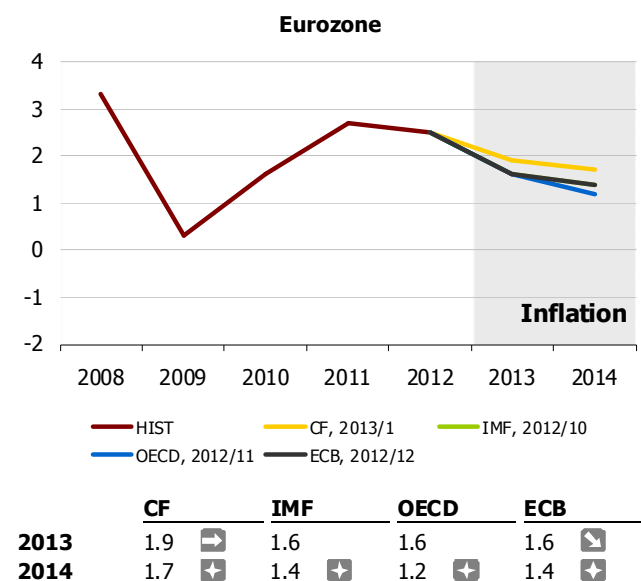
Note: Legend shows latest forecast data in format "Source, year/month" of forecast publication. Arrow indicates direction of revision of newly published forecast. If no arrow is shown, no new forecast is available by cut-off date in either current or previous month. Asterisk indicates first published forecast for given year.

[Cut-off date for data: 18 January 2013]

Source: CF, IMF, OECD, EIU, CNB calculations.

### II.3 Inflation outlook in advanced countries

Inflation is heavily influenced in all the advanced economies under review by the global economic downturn. Falling prices of oil and other commodities are another factor contributing to the slowdown in inflation. However, differences between the individual economies are visible. While the euro area inflation outlook at the two-year horizon is slightly falling overall, Japan should overcome the current deflation and its inflation rate should be comparable to the other economies in 2014. At the same time, Japan has the broadest range of outlooks, i.e. the greatest uncertainty regarding consumer price inflation, at the end of the monitored horizon. According to the current outlooks, inflation in Germany and the USA will slow slightly in 2013 and then return to its current levels or slightly exceed them. In January, CF revised its outlook by 0.1 pp towards weaker growth for the USA. The other outlooks were left unchanged (see the Annex).



Note: Legend shows latest forecast data in format "Source, year/month" of forecast publication. HIST: historical value. ECB and Fed: midpoint of range. Arrow indicates direction of revision of newly published forecast. If no arrow is shown, no new forecast is available by cut-off date in either current or previous month. Asterisk indicates first published forecast for given year.

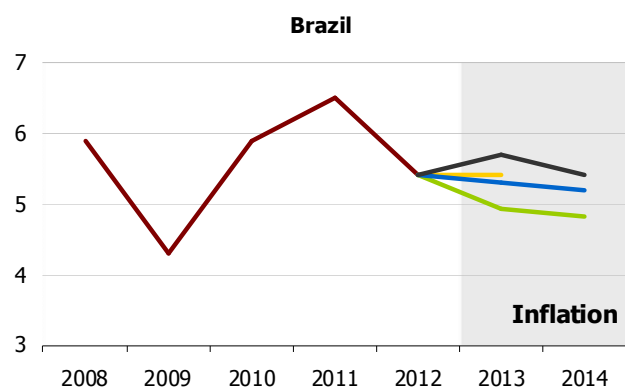
[Cut-off date for data: 18 January 2013]

Source: CF, IMF, OECD, ECB, Fed, DBB, BoJ, CNB calculations.

### II.4 Inflation outlook in BRIC countries

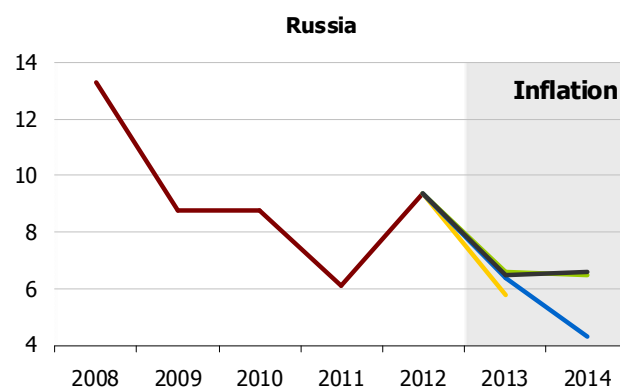
Inflation in the BRIC countries will remain above the average for the advanced economies in the years ahead. In 2013, India will record the highest inflation among the emerging economies, with prices rising by 8.2%–9.3% according to the new CF and EIU estimates. The forecasts for China vary widely, expecting consumer price inflation of between 1.5% and 4.3%. Inflation will remain below 6% in Russia and Brazil.

Inflation will slow in the BRIC countries in 2014. The largest slowdown will be recorded by India, where inflation will be between 6.6% and 8.3%. Inflation in China will be little changed from 2013 (between 1.4% and 4.1%). In Brazil and Russia, consumer price inflation will edge further away from 5% and 6% respectively.



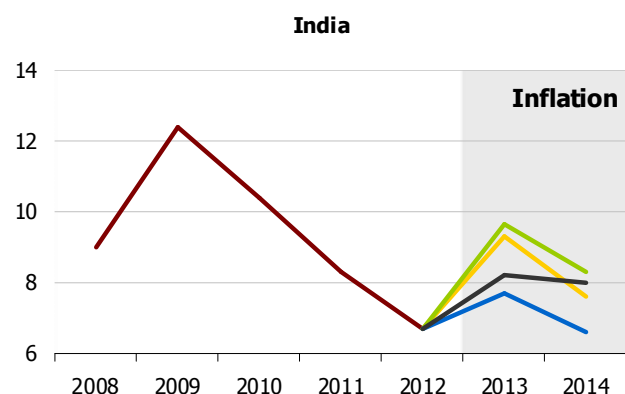
— HIST — CF, 2013/1 — IMF, 2012/10  
— OECD, 2012/11 — EIU, 2012/10

	CF	IMF	OECD	EIU
2013	5.4 ↗	4.9	5.3	5.7 ↘
2014		4.8 ↗	5.2 ↗	5.4 ↘



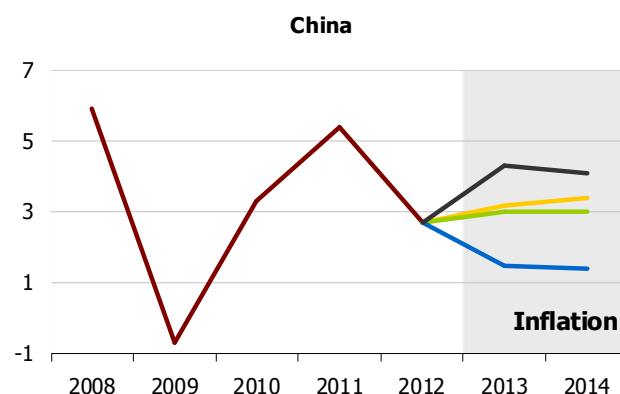
— HIST — CF, 2013/1 — IMF, 2012/10  
— OECD, 2012/11 — EIU, 2013/1

	CF	IMF	OECD	EIU
2013	5.8 ↘	6.6	6.4	6.5 ↘
2014		6.5 ↗	4.3 ↗	6.6 ↘



— HIST — CF, 2013/1 — IMF, 2012/10  
— OECD, 2012/11 — EIU, 2013/1

	CF	IMF	OECD	EIU
2013	9.3 ↗	9.6	7.7	8.2 ↘
2014	7.6 ↗	8.3 ↗	6.6 ↗	8.0 ↘



— HIST — CF, 2013/1 — IMF, 2012/10  
— OECD, 2012/11 — EIU, 2013/1

	CF	IMF	OECD	EIU
2013	3.2 ↘	3.0	1.5	4.3 ↘
2014	3.4 ↗	3.0 ↗	1.4 ↗	4.1 ↘

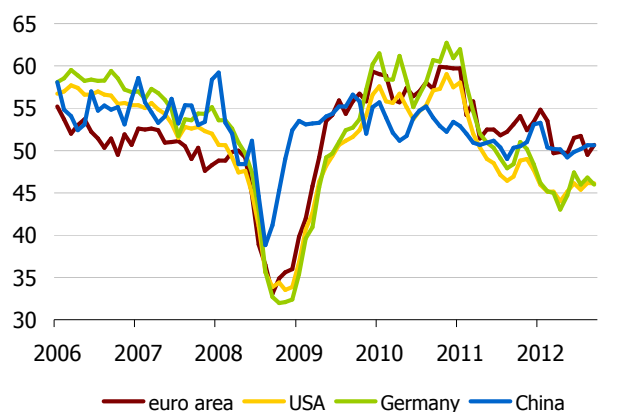
Note: Legend shows latest forecast data in format "Source, year/month" of forecast publication. Arrow indicates direction of revision of newly published forecast. If no arrow is shown, no new forecast is available by cut-off date in either current or previous month. Asterisk indicates first published forecast for given year.

[Cut-off date for data: 18 January 2013]

Source: CF, IMF, OECD, EIU, CNB calculations.

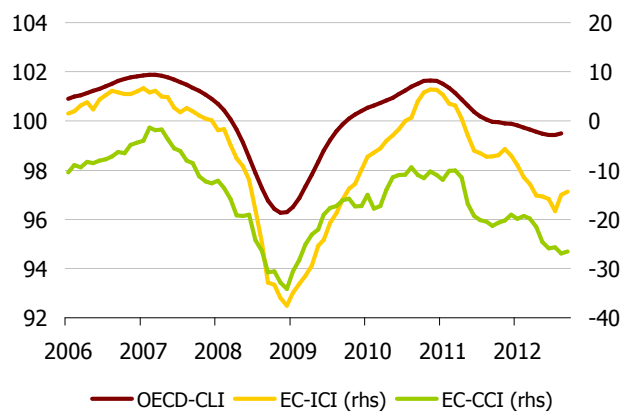
The US PMI (Purchasing Managers' Index) returned above the 50 point level, while the composite leading indicators were flat and both consumer confidence indicators fell. The relatively strong economic growth can therefore be expected to continue in the first half of this year and may even accelerate further. The euro area PMI was flat and remained below 50 points for the seventeenth consecutive month. The composite leading indicator was unchanged and the confidence indicators rose slightly. In 2013 H1 the economy can be expected to weaken slightly further rather than improve. The German PMI decreased again, staying below 50 points for the eighth consecutive month. The business climate indicator increased, but both monitored consumer confidence indicators dropped somewhat. Economic growth cannot be expected to accelerate in early 2013 in Germany either; rather, it will remain at a low level (around 0.5% year on year).

**PMI IN MANUFACTURING**



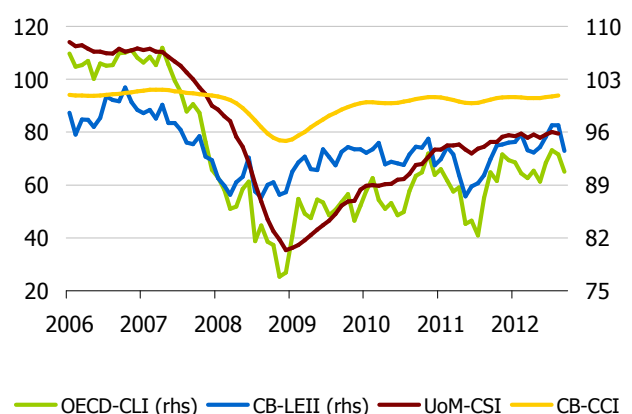
	EA	US	DE	CN
10/12	51.70	45.40	46.00	50.20
11/12	49.50	46.20	46.80	50.60
12/12	50.70	46.10	46.00	50.60

**EURO AREA**



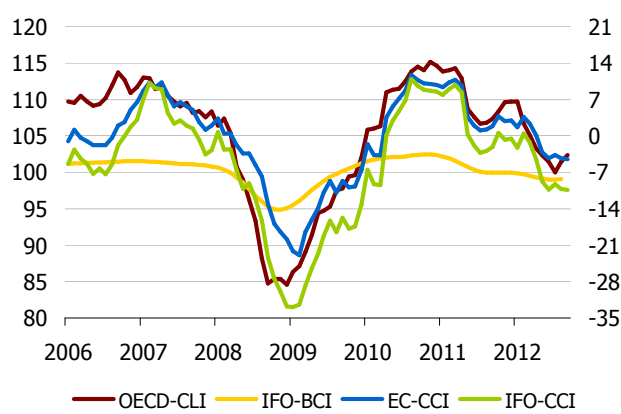
	OECD-CLI	EC-ICI	EC-CCI
10/12	99.44	-18.3	-25.7
11/12	99.5	-15.00	-26.90
12/12		-14.40	-26.50

**USA**



	OECD-CLI	CB-LEII	UoM-CSI	CB-CCI
10/12	96.00	100.751	73.1	82.6
11/12	95.8	100.85	71.50	82.70
12/12			65.10	72.90

**GERMANY**



	OECD-CLI	IFO-BCI	IFO-CCI	EC-CCI
10/12	100.00	98.99	-9.3	102.4
11/12	101.4	99.05	-10.20	101.90
12/12	102.4		-10.40	101.80

Note: OECD-CLI stands for OECD Composite Leading Indicator, EC-ICI (right-hand scale) for European Commission Industrial Confidence Indicator, EC-CCI (right-hand scale) for EC Consumer Confidence Indicator, CB-LEII for Conference Board Leading Economic Indicator Index, CB-CCI for CB Consumer Confidence Index, UoM-CSI for University of Michigan Consumer Sentiment Index, IFO-BCI for Institute for Economic Research – Business Climate Index, and IFO-CCI for IFO Consumer Confidence Index. [Cut-off date for data: 18 January 2013]

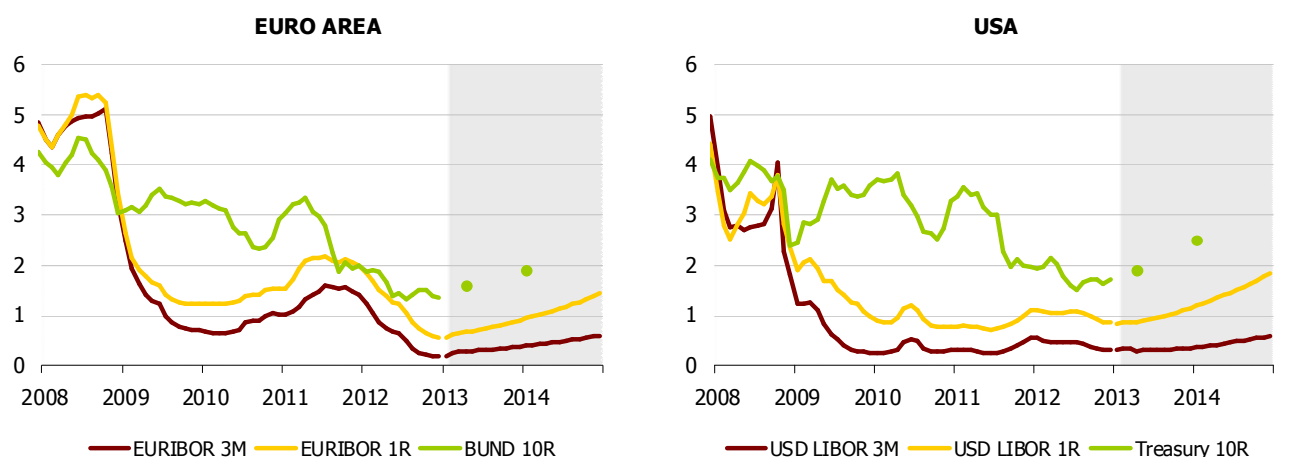
Source: OECD, EC, IFO, Conference Board, University of Michigan, CNB calculations.



### IV.1 Interest rate outlook in the euro area and the USA

The decline in 3M and 1Y EURIBOR rates came to a halt at the close of 2012. In January the rates even rose slightly to their November level. In line with the recent trend, the forecast based on implied rates shifted upwards compared to the previous month. At the two-year horizon, the 1Y rate should rise from 0.5% to 1.5%. The upward shift of the outlook was influenced by the clear opinion of the ECB board that no further rate cuts can be expected in the near future. However, the CF outlooks for the 3M rate and the 10Y German government bond yield were unchanged.

By contrast, the 3M and 1Y USD LIBOR rates were flat in the period under review and the outlook based on implied rates was also little changed. The overcoming of the fiscal cliff was reflected in US bond rates, but no further increase in rates can be expected. On the other hand, direct bond purchases by the Fed as well as the Bank of Japan's foreign exchange intervention policy continues to provide demand for bonds.



	12/12	01/13	06/13	12/13	06/14	12/14
<b>3M EURIBOR</b>	0.19	0.19	0.30	0.38	0.48	0.60
<b>1Y EURIBOR</b>	0.55	0.55	0.72	0.91	1.13	1.43
	12/12	04/13	01/14			
<b>10Y Bund</b>	1.36	1.6	1.9			

	12/12	01/13	06/13	12/13	06/14	12/14
<b>3M USD LIBOR</b>	0.31	0.30	0.30	0.36	0.46	0.58
<b>1Y USD LIBOR</b>	0.85	0.83	0.91	1.15	1.45	1.85
	12/12	04/13	01/14			
<b>10Y Treasury</b>	1.71	1.9	2.5			

Note: 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. [Cut-off date for data: 14 January 2013] Source: Thomson Reuters (Datastream), Bloomberg, Consensus Forecasts, CNB calculations.

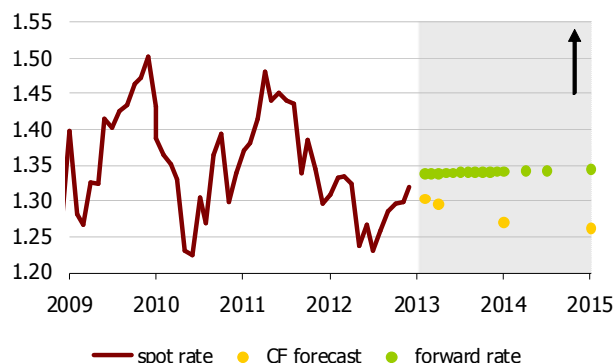
### IV.2 Outlook for selected exchange rates

The US dollar weakened further against the euro at the end of 2012, reflecting not only concerns about the fiscal cliff, but also a substantial calming of the situation in the euro area. The euro area outlook remains much less optimistic, so the January CF continues to expect the euro to depreciate against the dollar. However, its path shifted slightly downwards compared to a month earlier. The significant change in Japan's monetary policy in 2012 Q4 affected the dollar-yen exchange rate. By the close of the year the yen had depreciated by more than 10% compared to early October. There is even speculation that the yen has lost its safe haven status, and the new outlook expects no change in trend. The British pound and Swiss franc will also weaken against the dollar. New data from the UK economy suggest that growth turned negative again in Q4. At the close of the year, the exchange rate of the franc against the euro was below than the official threshold as tensions in the euro area eased.

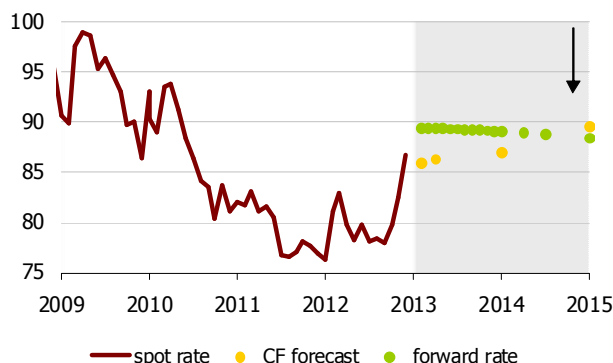
The free-floating Brazilian real weakened by more than 15% in the first eleven months of 2012 as the government tried to support domestic industry. However, the currency started to appreciate in late 2012 on the back of central bank interventions, and the two-year outlook remains stable at the current level. The Russian rouble remains in a managed float regime, with the central bank using a currency basket (45% euros and 55% dollars) as a guideline and setting a floating operational band. The bank has made sizeable interventions in the past to keep the exchange rate within this band. The rouble is expected to weaken gradually against the dollar in 2013 and 2014. In the case of the Indian rupee, the central bank follows the real effective rate and corrects any deviations using interventions. The Indian currency had been on a depreciation trend since the autumn owing to slowing growth, persisting inflation and financial imbalances. At the end of the year, the foreign investment rules were relaxed and long-term growth support plans were announced, and this stabilised the currency. The new CF outlook also indicates further appreciation against the dollar. The Chinese renminbi has stayed within a managed band since 2005. The pace of appreciation is

being affected to a large extent by foreign exchange interventions. Further appreciation is expected in 2013 as economic growth picks up again.

**US\$ per Euro**



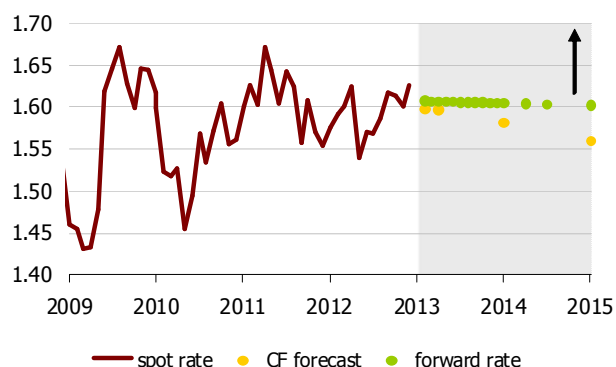
**Yen per US\$**



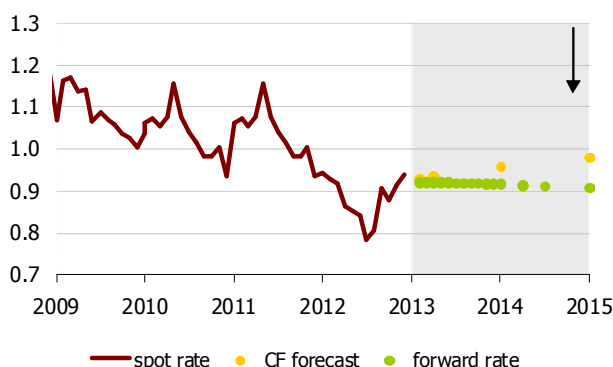
	14/01/13	02/13	04/13	01/14	01/15
<b>spot rate</b>	1.338				
<b>CF forecast</b>		1.303	1.296	1.271	1.262
<b>forward rate</b>		1.339	1.339	1.342	1.345

	14/01/13	02/13	04/13	01/14	01/15
<b>spot rate</b>	89.48				
<b>CF forecast</b>		85.99	86.33	87.00	89.60
<b>forward rate</b>		89.46	89.41	89.12	88.45

**US\$ per UK£**



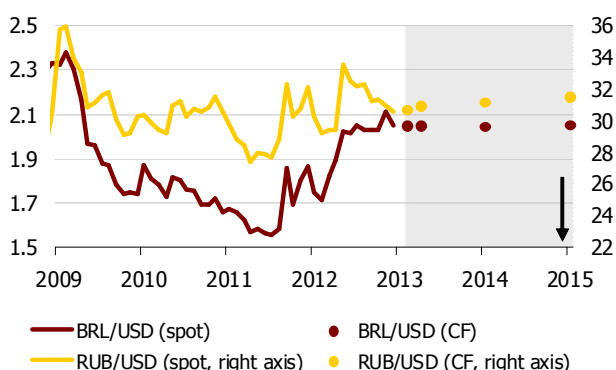
**Swfr per US\$**



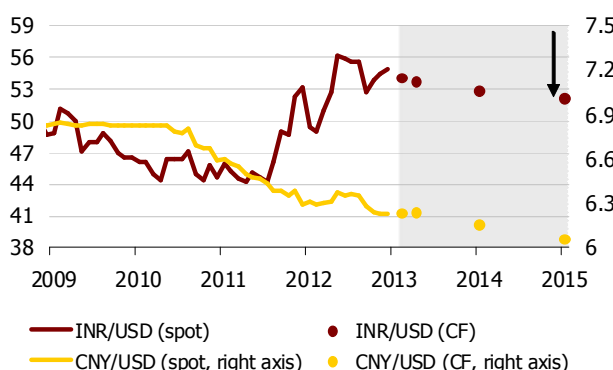
	14/01/13	02/13	04/13	01/14	01/15
<b>spot rate</b>	1.608				
<b>CF forecast</b>		1.598	1.597	1.582	1.560
<b>forward rate</b>		1.608	1.607	1.605	1.602

	14/01/13	02/13	04/13	01/14	01/15
<b>spot rate</b>	0.922				
<b>CF forecast</b>		0.929	0.935	0.959	0.981
<b>forward rate</b>		0.922	0.921	0.917	0.908

**BRAZILIAN REAL, RUSSIAN ROUBLE**



**INDIAN RUPEE, CHINESE RENMINBI**



	14/01/13	02/13	04/13	01/14	01/15
<b>BRL/USD (spot)</b>	2.05				
<b>BRL/USD (CF)</b>		2.05	2.05	2.05	2.05
<b>RUB/USD (spot)</b>	31.64				
<b>RUB/USD (CF)</b>		30.70	30.94	31.16	31.49

	14/01/13	02/13	04/13	01/14	01/15
<b>INR/USD (spot)</b>	54.97				
<b>INR/USD (CF)</b>		54.04	53.71	52.81	52.10
<b>CNY/USD (spot)</b>	6.23				
<b>CNY/USD (CF)</b>		6.24	6.24	6.16	6.06

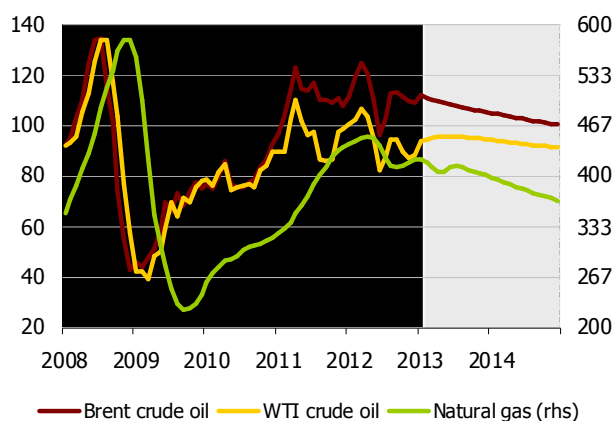
Note: Arrow indicates currency appreciation against US dollar. Exchange rates as of last day of month. Forward rate does not represent outlook; it is based on covered interest parity, i.e. currency of country with higher interest rate is depreciating. Forward rate represents current (as of cut-off date) possibility of hedging future exchange rate. [Cut-off date for data: 14 January 2013]

Source: Thomson Reuters (Datastream), Bloomberg, Consensus Forecasts, CNB calculations.

## V.1 Oil and natural gas

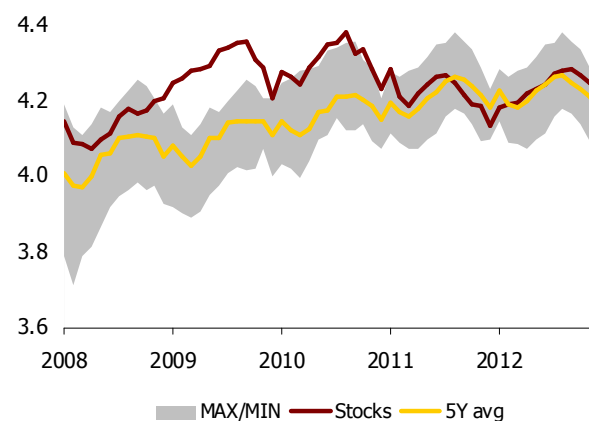
The Brent crude oil price has been stable between USD 107 and USD 112 a barrel since mid-October. Geopolitical risks in the Middle East were offset by the still subdued global economy. The price outlook based on futures is falling owing to expected growth in extraction outside OPEC and therefore also in OPEC's reserve capacity. However, the new CF expects the price to stagnate at just over USD 110 a barrel at the one-year horizon. In October, stock levels in OECD countries stopped rising after seven months of growth, and fell seasonally in the rest of 2012. Throughout 2012, however, commercial stocks stayed at 59 days of future consumption (and total stocks at 92 days, i.e. roughly 2 days above the long-term average).

### OUTLOOK FOR PRICES OF OIL AND NATURAL GAS

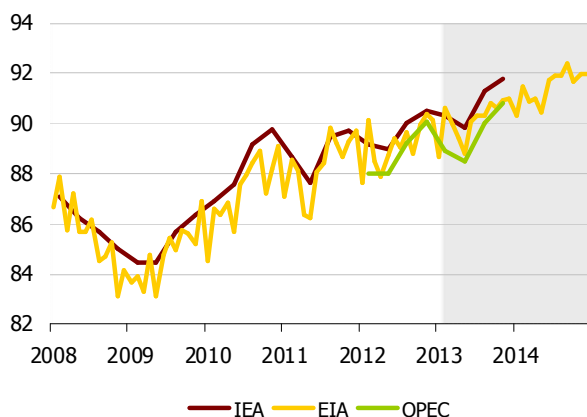


	Brent	WTI	Natural gas
2013	-3.14	0.87	-5.08
2014	-5.33	-2.63	-6.70

### TOTAL STOCKS OF OIL AND OIL PRODUCTS IN OECD

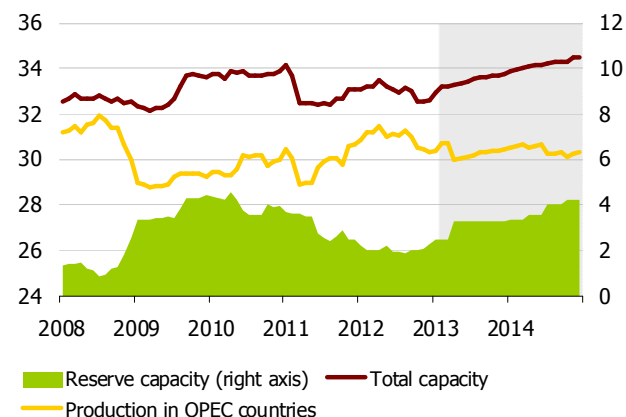


### GLOBAL CONSUMPTION OF OIL AND OIL PRODUCTS



	IEA	EIA	OPEC
2013	1.28	1.07	0.82
2014		1.49	

### PRODUCTION, TOTAL AND SPARE CAPACITY IN OPEC COUNTRIES



	Production	Total capacity	Spare capacity
2013	-2.02	1.32	51.96
2014	0.27	2.26	21.69

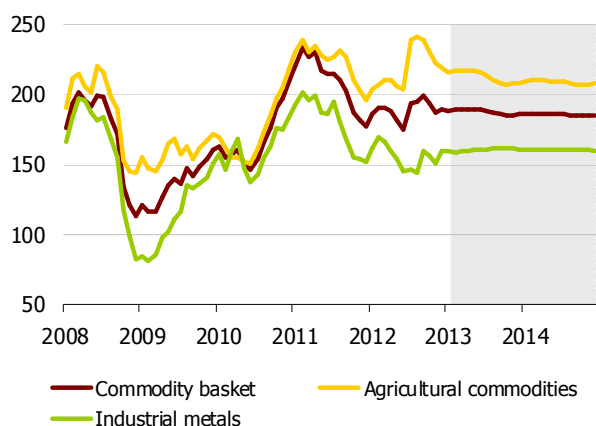
Note: Oil price in USD/barrel, price of Russian natural gas at German border in USD/1,000 m<sup>3</sup> (IMF data, filtered using HP filter). Future oil prices (grey area) are derived from futures and future gas prices are derived from oil prices using model. Tables show annual percentage changes. Total oil stocks (commercial and strategic) in OECD countries including average, maximum and minimum in past five years in billions of barrels. Global consumption of oil and oil products in millions of barrels a day. Production and extraction capacity of OPEC in million barrels a day (EIA estimate). [Cut-off date for data: 18 January 2013]

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

## V.2 Other commodities

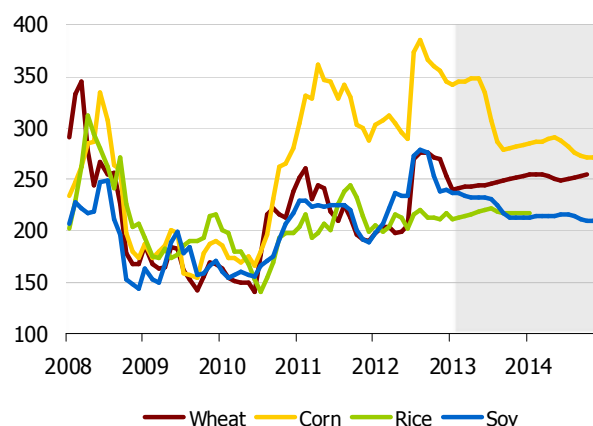
Prices of agricultural commodities continued to fall in December, owing chiefly to food commodities. The forecast for the new harvest improved and a sell-off is under way on futures markets. This is also reflected in the forecast based on futures. By contrast, industrial metals benefited from improved sentiment in Chinese industry and better US data. Following a decrease in November, their index rose by almost 5% in December. Beef prices are again attacking new highs, while pork prices are expected to reach new highs in mid-2013. Technical crops also recorded a modest price rise in December.

**PRICES OF NON-ENERGY COMMODITIES**



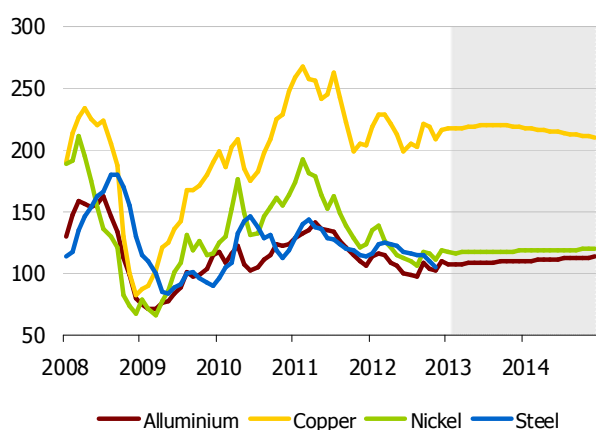
	Overall comm. basket	Agricultural comm.	Industrial metals
<b>2013</b>	-0.9	-2.9	2.8
<b>2014</b>	-1.0	-2.0	0.1

**FOOD COMMODITIES**



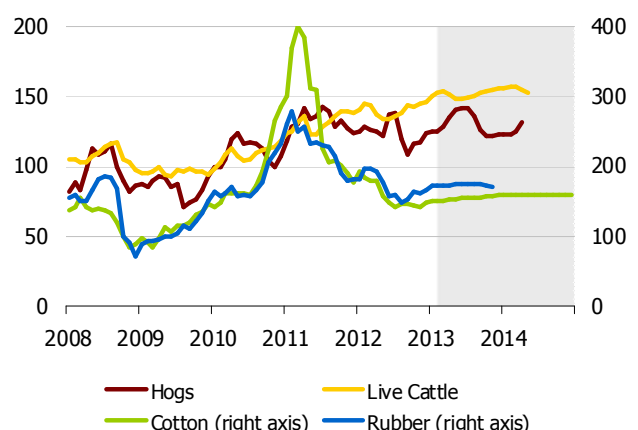
	Wheat	Corn	Soy	Rice
<b>2013</b>	4.5	-5.3	2.8	-6.3
<b>2014</b>	2.7	-10.9	0.2	-5.8

**METALS**



	Aluminium	Copper	Nickel
<b>2013</b>	1.8	1.8	-1.4
<b>2014</b>	2.8	-2.3	1.3

**MEAT, NON-FOOD AGRICULTURAL COMMODITIES**



	Lean hogs	Live Cattle	Cotton	Rubber
<b>2013</b>	5.1	8.2	-2.9	1.3
<b>2014</b>	-3.4	2.3	3.3	

Note: Structure of non-energy commodity price indices corresponds to composition of The Economist commodity indices. All prices are given as indices, 2005 = 100. [Cut-off date for data: 18 January 2013].

Source: Bloomberg, CNB calculations.

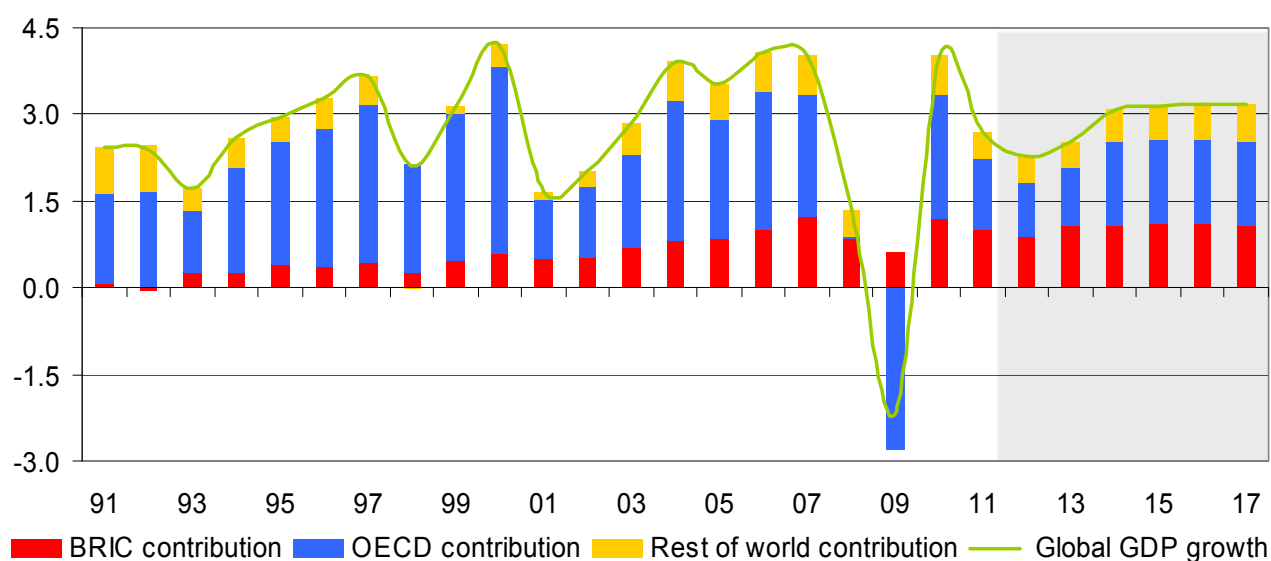
## ECONOMIC POTENTIAL OF THE BRIC COUNTRIES<sup>1</sup>

The BRIC countries (Brazil, Russia, India and China) are fast growing emerging economies which, given their size and wealth of natural resources, are gaining significant economic strength and influence on the global economy. The BRIC countries are home to more than 40% of the earth's population, cover a quarter of the earth's surface, rank among the world's ten largest economies,<sup>2</sup> contribute significantly to global economic growth and trade, and have major growth potential. For these reasons, we have decided to include in GEO not only this introduction to the BRIC countries' economic potential, but also regular monitoring of their economic development.

### Common features of the BRIC countries

The BRIC acronym was coined in 2001 by Goldman Sachs analyst Jim O'Neill as a label for the world's four largest emerging economies (Brazil, Russia, India and China). These economies show many common features despite having different economic structures<sup>3</sup> and despite not being economically integrated in a trading or monetary union. All four rank among the ten biggest economies and are large in both area and population. At present, almost 3 billion people, i.e. more than 40% of the earth's population, live in the BRIC countries, on a territory covering more than 25% of the earth's surface. The BRIC countries together create 20% of global nominal GDP, compared to just over 8% at the start of the millennium. They accounted for over one-third of global GDP growth in the last decade (see Figure VI-1).

**Figure VI-1:** Contributions of BRIC countries to world real GDP growth (y-o-y, in %)



Source: Economist Intelligence Unit, CNB calculations.

<sup>1</sup> The authors are Luboš Komárek (lubos.komarek@cnb.cz) and Viktor Zeisel (viktor.zeisel@cnb.cz). The opinions expressed in this article are those of the authors and do not necessarily reflect the official position of the Czech National Bank.

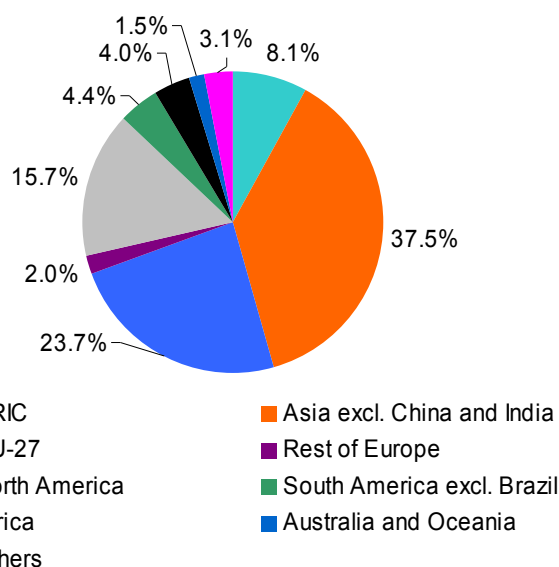
<sup>2</sup> According to preliminary IMF data on nominal GDP in 2012, China ranks second (USD 8.25 billion), Brazil seventh (USD 2.43 billion), Russia ninth (USD 1.95 billion) and India tenth (USD 1.94 billion).

<sup>3</sup> In June 2006, Dow Jones introduced the BRIC 50 Index, covering the 50 largest share issues listed on stock exchanges in China, Russia, India and Brazil. In September of the same year, the BRIC foreign ministers met at the initiative of Russia, thereby establishing informal cooperation. The first official BRIC summit took place in Ekaterinburg in June 2009. At the end of 2010, China invited South Africa to join the enlarged BRICS. This expanded the group's presence to four continents.

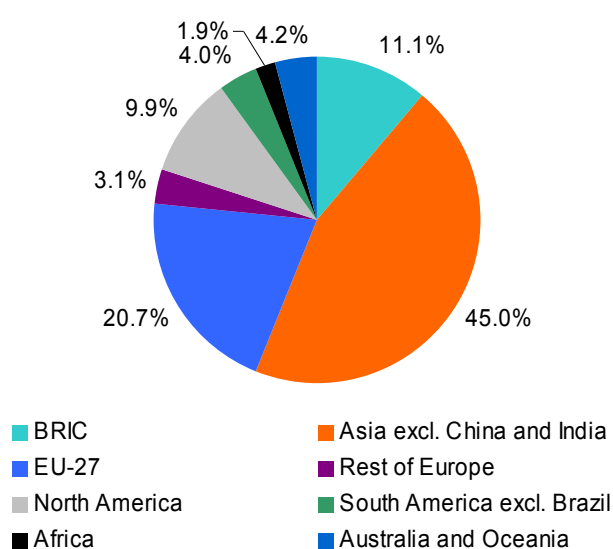
The BRIC countries are still the main driving force of global economic growth, as the global financial crisis has generally only slowed their high growth rates. According to long-term forecasts, the present growth rates will be maintained in Brazil and Russia, decrease noticeably in China and pick up in India, amid acceptable inflation rates.

The BRIC countries account for almost 16%<sup>4</sup> of world trade. Asia has the largest share in their external trade (see Figures VI-2 and VI-3). However, the individual BRIC countries differ considerably in economic structure. Brazil benefits from its agricultural base, Russia's economic strength lies in its rich natural resources, India specialises in providing services and China has become a manufacturing power. All four countries, with the slight exception of Russia, have outdated infrastructure. To lay the groundwork for long-term growth, the BRIC countries will all have to invest massively in infrastructure development. At the same time, all of them are resisting full liberalisation of their markets and opening up to the global economy. Underdeveloped labour markets and high income inequality are other common features.

**Figure VI-2: BRIC exports**



**Figure VI-3: BRIC imports**



Source: International Trade Center, CNB calculations.

## 1. China

In 2009, China overtook Germany to become the world's largest exporter. Foreign trade accounts for 54.5% of China's GDP. In 2010, China surpassed Japan as the world's second largest economy (in terms of nominal GDP), having maintained average annual economic growth of over 9% for the last 20 years. In the pre-crisis years, however, this growth was accompanied by higher inflation and an overheating property market. The Chinese economy is driven by advanced industry, which creates almost half of China's GDP and almost one-fifth of global industrial output.<sup>5</sup> China is also one of the world's biggest commodity importers.

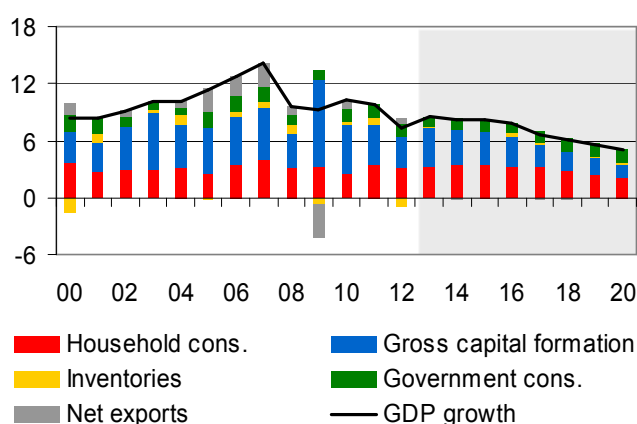
Owing to its heavy dependence on exports, the Chinese economy was hit significantly by the global financial crisis. The decline in US demand for Chinese goods had a noticeable effect on the ratio of Chinese trade to GDP, which dropped by more than 20 percentage points during the financial crisis. This fall was much larger than the average global trade contraction (see Figure VI-5). At the start of the crisis, the Chinese government was

<sup>4</sup> Data sources: International Trade Center and CNB calculations.

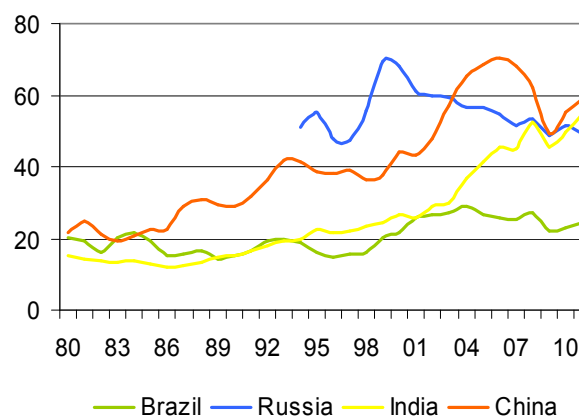
<sup>5</sup> IHS Global Insight, data for 2010.

limited in what action it could take by the still high inflation that had accompanied the previous boom. Once inflation had been brought down to an acceptable level, the government was able to react to the fall in external demand with massive fiscal stimuli. These were channelled mostly into new infrastructure investment. Investment thus made the biggest contribution to GDP growth in the 2000s (45% of China's GDP growth in 2011; see Figure VI-4). According to Ahuja and Nabar (2012), however, this massive increase in investment is not due to Chinese government spending alone. Social housing construction and capacity building in high-end manufacturing are also contributing to investment growth. This investment is also being accompanied by shifts in import structure. The share of machinery imports is declining, while that of commodity imports is rising. China is thus becoming an important link in the supply chain, a link its smaller regional partners are increasingly dependent on.

**Figure VI-4:** Chinese GDP growth, components and forecast (y-o-y in %) **Figure VI-5:** BRIC trade (% of GDP)



Source: Economist Intelligence Unit.



Source: World Bank (WDI).

The biggest challenges for the Chinese leadership include improving the country's infrastructure and reducing income inequality. Unemployment remains high in cities (while demand for cheap labour from rural regions is strong and wages in this category are rising quickly). Another potential complication for sustainable economic growth in China is the property market, which is again tending to overheat. Such a trend would prevent wider monetary easing and larger fiscal stimuli, which the Chinese economy will need to offset the fall in demand for its exports with domestic demand.<sup>6</sup>

## 2. India

In the first half of the 2000s, India was one of the fastest growing countries in the world. In 2008, however, the growth slowed sharply to 6.8%. The economy is mostly based on services, a sector supported by a relatively well educated labour force with a good knowledge of English.

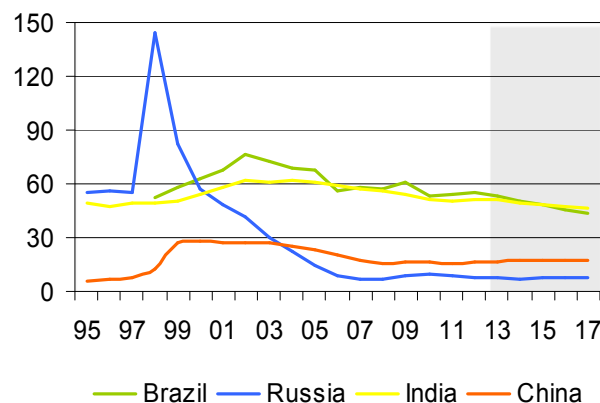
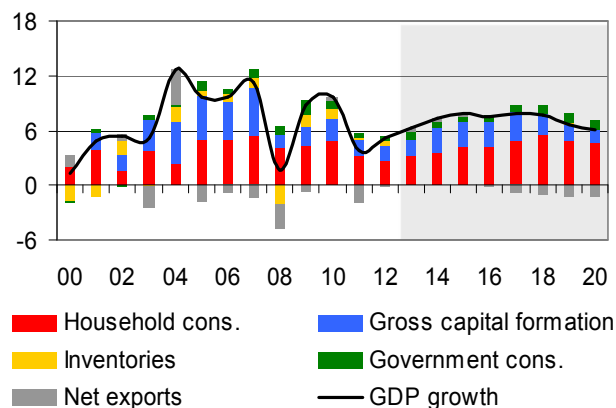
In the early 1990s India introduced market reforms and opened up to international trade. It privatised a large part of its industry and liberalised the rules for foreign investment inflows. The country started investing in infrastructure development.

The Indian economy is driven by the service sector, which accounts for 57.2% of GDP, while industry accounts for 28.6% and agriculture for 14.6%. Although agriculture makes the smallest contribution to GDP, most of the population (52.6%) is employed in that sector. Around 34% of the population works in services and only 14% in industry.

<sup>6</sup> We described the monetary policy of the Chinese central bank in the May 2011 issue of GEO.

The service sector is also growing apace, particularly in up-and-coming branches of IT, where India is becoming a world power.

**Figure VI-6:** Indian GDP growth, components and forecast (y-o-y in %) **Figure VI-7** BRIC debt-to-GDP ratios (in %)



Source: Economist Intelligence Unit.

India was hit hard by the economic crisis. Economic growth fell from 11% before the crisis to below 6% in 2012 and industrial production decreased as well. On the demand side, the Indian economy is being driven by exports despite worse conditions in Europe, India's largest trading partner. The weakening of the Indian economy is also visible in the domestic component of demand, in both investment and consumption (see Figure VI-6). The weak domestic demand together with a depreciating currency are reducing imports and helping to reduce the external imbalance. In 2011, the current account deficit reached 4.2% of GDP. The OECD expects it to decline to 3.2% this year.

The pre-crisis situation in India was accompanied by high inflation caused by soaring food prices. The surge in prices limited the authorities' ability to help the economy by easing monetary policy or applying larger fiscal stimuli. The inflation rate reached the 10% level in 2011 before falling back to just above 7%. Another problem limiting the possible response of the Indian government is the country's relatively high debt and continuing state budget deficits (see Figure VI-7). Owing to lower-than-expected state budget revenues, the Indian government will probably not meet its target of reducing the deficit-to-GDP ratio.<sup>7</sup> The high national debt and budget deficit are stopping India from implementing larger fiscal stimuli. According to the World Bank, however, India can rationalise government spending by redirecting resources from subsidies to investment. Investment in infrastructure could attract more private investors.

### 3. Russia

Russia's main wealth consists of mineral resources, in particular oil, natural gas and precious metals. Russia is a heavily industrialised country and enjoys the most advanced infrastructure of all the BRIC countries.

In 1995, Russia went through a deep financial crisis and became insolvent. The Russian rouble devalued from a pre-crisis six roubles to the dollar to 20 roubles to the dollar. Inflation exceeded 50% and GDP dropped by more than 5%.<sup>8</sup> However, Russia recovered relatively quickly from the crisis (see Figure VI-8), thanks in part to significantly improved tax collection and expenditure control. Russia was hit the hardest

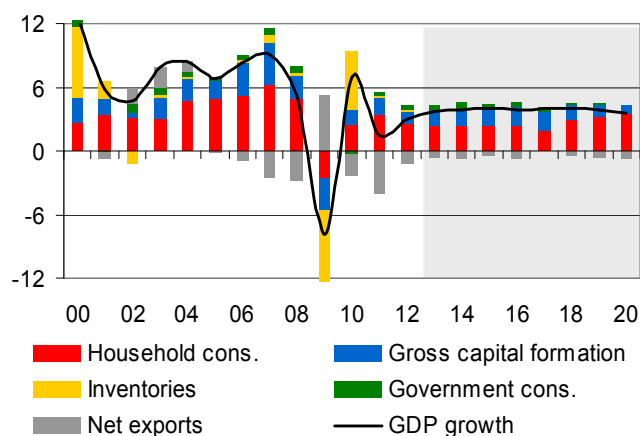
<sup>7</sup> The OECD expects the deficit to rise to 8.5% of GDP in fiscal year 2012/2013.

<sup>8</sup> For details, see, for example, Kolman (2008).



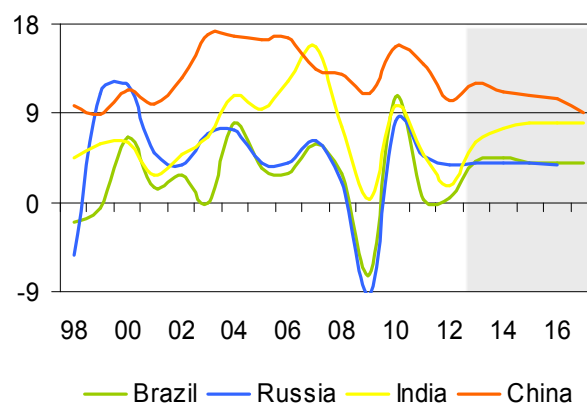
of all the BRIC countries by the recent crisis, with GDP falling by almost 8% in 2009. At present, however, it is growing at a solid pace of around 4%, outperforming all the EU countries. After 18 years of negotiations, Russia became a member of the WTO in 2012.

**Figure VI-8:** Russian GDP growth, components and forecast (y-o-y in %)



Source: Economist Intelligence Unit.

**Figure VI-9:** BRIC industrial production (y-o-y in %)



Source: Economist Intelligence Unit.

Mineral commodities are Russia's greatest source of wealth. Its exports are dominated by natural gas and oil, of which Russia – alongside Saudi Arabia – is the largest exporter in the world. Russia has the largest natural gas reserves and the eighth largest black coal reserves in the world. It is also a major exporter of gold and minerals. Russia is expected to expand its energy resources as soon as global warming enables it to access oil deposits near the North Pole. On the other hand, its economy is too dependent on commodity prices on world markets. The Russian economy also suffers from the symptoms of Dutch Disease,<sup>9</sup> such as real depreciation, a slowdown in manufacturing growth, an acceleration in service sector growth and an increase in the wage level.<sup>10</sup> However, Russia is not rich in raw materials only. One-fifth of all the world's forests are located on its territory, although it accounts for only 4% of global timber trade.

Russia is still a heavily industrialised country, but it is not investing enough in most industries and is therefore losing competitiveness in this sector and is not developing as dynamically as China or India (see Figure VI-9). However, it remains at the cutting edge in mining, defence and aviation. The defence industry employs 20% of the labour force in manufacturing, and Russia is the second largest arms exporter in the world. The aviation industry accounts for half of its arms exports. The World Bank also notes that the Russian national debt is only around 10% of GDP (see Figure VI-7), unemployment is at its lowest level in 20 years and the number of persons living below the poverty line is the lowest since the start of the transformation process. The longer-term challenges for Russia include tackling population ageing and the shrinkage of its labour force, reducing its excessive dependence on extraction of oil and other commodities, and significantly increasing its competitiveness in other sectors.<sup>11</sup>

<sup>9</sup> A situation where the discovery of a natural resource or another factor stemming from a subsector of the domestic economy leads to appreciation of the domestic currency, hence causing lower export sales in other sectors, amid upward domestic pressures on wages.

<sup>10</sup> For details, see, for example, Oomes and Kalcheva (2007).

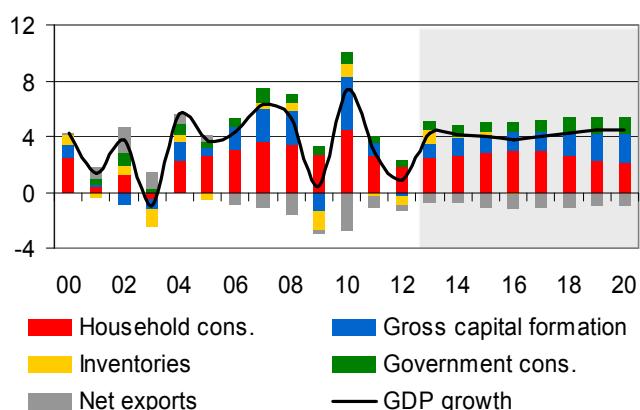
<sup>11</sup> We described the monetary policy of the central bank of the Russian Federation in the October 2011 issue of GEO.

#### 4. Brazil

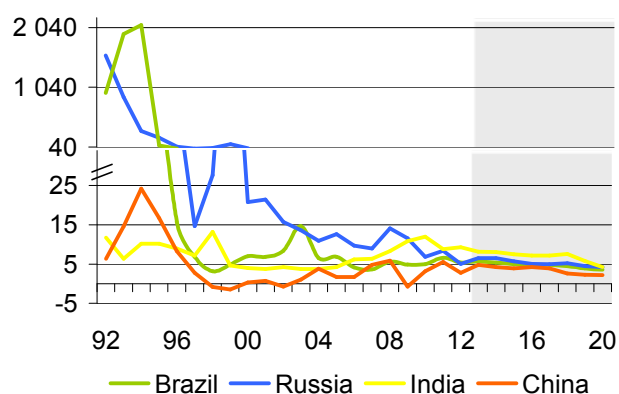
Brazil is the largest economy of Latin America, the second largest economy in the Western Hemisphere and the seventh largest economy in the world as measured by nominal GDP (USD 2.43 trillion) and by GDP at purchasing power parity (USD 2.29 trillion). It is rich in mineral resources, has high agricultural potential and ranks among the countries with the highest productivity in sectors relating to rural areas and also, for example, in the aviation industry.

However, Brazil entered the 1990s with a 4% contraction in GDP accompanied by record-high hyperinflation of almost 3,000%. This forced the Brazilian government to introduce economic reforms (a new currency, reductions in customs duties, privatisation) aimed at bring down inflation and laying the groundwork for sustainable growth. Brazil also opened up significantly to international trade. The economic stability associated with the end of the hyperinflation period created conditions for medium-term growth and increased the living standards of a large part of the population. Since the start of the millennium, Brazil has been one of the fastest growing economies in the world, maintaining average annual real GDP growth of over 5% (see Figure VI-10) and a similar rate of inflation (see Figure VI-11).

**Figure VI-10:** Brazilian GDP growth, components and forecast (y-o-y in %) **Figure VI-11:** BRIC inflation (%)



Source: Economist Intelligence Unit.



Source: Economist Intelligence Unit.

Brazil, too, was hit hard by the global crisis. Even the relative closedness of its economy failed to protect it. Following a long period of export surpluses, Brazilian trade recorded a deficit in 2009. Exports declined by 29%, with those to the EU falling by 27% and those to the USA by as much as 36%. Brazil experienced a consumer credit boom in the pre-crisis period, with consumer credit growing by 20% year on year. Brazilian banks were very benevolent in providing such credit. As a result, the default rate surged during the crisis. The Brazilian government responded to the crisis with a strong monetary and fiscal stimulus. The recession thus lasted only three quarters and Brazil leapt to record-high growth in 2010, driven mainly by domestic demand. The appreciating Brazilian real prevented major inflation pressures, but was also responsible for the negative contribution of net exports to GDP growth (see Figure VI-10).

Brazil currently has a very low unemployment rate. Industrial production is starting to go up again and both business and consumer confidence are rising. This has so far been accompanied by inflation inside the Brazilian central bank's target band. In order to maintain long-term economic growth, Brazil will have to get more involved in international trade and increase its investment rate (see Figures VI-5 and VI-9). The low investment rate in Brazil is due mainly to low saving by the population. Reform of the

pension system coupled with a lower bank reserve requirement and deregulation of savings accounts could create an incentive for a higher saving rate. The ongoing reform of the tax system should also have a positive effect.

### Conclusion

The BRIC countries are true global players who not only affect the other countries in their regions, but are now having an indisputable effect on the entire global economy. Current long-term economic forecasts for the BRIC countries indicate that their economic potential and impact on the global economy will continue to grow. These countries already create one-fifth of global nominal GDP and are expected to overtake the G6 countries in terms of economic strength before 2035.<sup>12</sup>

### References

- Ahuja, A. – Nabar, M. (2012): Investment-Led Growth in China: Global Spillovers, IMF Working Papers 12/267, International Monetary Fund.
- Central Intelligence Agency: The World Factbook, <https://www.cia.gov/library/publications/the-world-factbook/> .
- Goldman Sachs (2007): BRICs and Beyond, Goldman Sachs Global Economics Group.
- International Monetary Fund (2012): Report for Selected Countries and Subjects, World Economic Outlook Database, October 2012.
- Kolman V. (2008): Deset let od propuknutí ruské měnové krize, Mezinárodní politika, rubrika: Ekonomický obzor (22.9.2008).
- Molano, W. (2009): Economic Crisis and the BRIC Countries. J. Int'l Bus. & L., 8, 17.
- OECD, OECD Economic Surveys, <http://www.oecd.org/eco/surveys/oecdeconomicsurveyslistbycountry.htm>.
- Oomes, N. – Kalcheva, K. (2007): Diagnosing Dutch Disease: Does Russia Have the Symptoms? IMF Working Papers 07/102, International Monetary Fund.
- World Bank: Country Profiles, <http://data.worldbank.org/data-catalog/country-profiles>.

---

<sup>12</sup> See Goldman Sachs (2007).

**A1. Change in GDP predictions for 2013**

	CF		IMF		OECD		CB / EIU	
<b>EA</b>	0.0	2013/1 2012/12	-0.5	2012/10 2012/7	-0.3	2012/11 2012/5	-0.8	2012/12 2012/9
<b>US</b>	0.1	2013/1 2012/12	-0.2	2012/10 2012/7	-0.1	2012/11 2012/5	-0.3	2012/9 2012/6
<b>DE</b>	0.0	2013/1 2012/12	-0.5	2012/10 2012/7	0.1	2012/11 2012/5	-1.2	2012/12 2012/6
<b>JP</b>	0.1	2013/1 2012/12	-0.3	2012/10 2012/7	-0.6	2012/11 2012/5	0.0	2012/10 2012/7
<b>BR</b>	-0.4	2013/1 2012/12	-0.6	2012/10 2012/7	-1.7	2012/11 2012/5	-0.7	2013/1 2012/10
<b>RU</b>	-0.1	2013/1 2012/12	-0.1	2012/10 2012/7	-1.1	2012/11 2012/5	0.0	2013/1 2012/10
<b>IN</b>	-1.1	2013/1 2012/12	-0.5	2012/10 2012/7	-2.7	2012/11 2012/5	0.0	2013/1 2012/10
<b>CN</b>	0.0	2013/1 2012/12	-0.3	2012/10 2012/7	-0.7	2012/11 2012/5	-0.1	2013/1 2012/10

**A2. Change in inflation predictions for 2013**

	CF		IMF		OECD		CB/EIU	
<b>EA</b>	0.0	2013/1 2012/12	0.0	2012/10 2012/4	-0.3	2012/11 2012/5	-0.3	2012/12 2012/9
<b>US</b>	-0.1	2013/1 2012/12	-0.1	2012/10 2012/4	-0.1	2012/11 2012/5	-0.1	2012/9 2012/6
<b>DE</b>	0.0	2013/1 2012/12	0.1	2012/10 2012/4	-0.1	2012/11 2012/5	-0.1	2012/12 2012/6
<b>JP</b>	0.0	2013/1 2012/12	-0.2	2012/10 2012/4	-0.3	2012/11 2012/5	-0.2	2012/10 2012/7
<b>BR</b>	0.1	2013/1 2012/12	-0.1	2012/10 2012/4	0.0	2012/11 2012/5	0.0	2013/1 2012/10
<b>RU</b>	-0.1	2013/1 2012/12	0.2	2012/10 2012/4	0.6	2012/11 2012/5	0.0	2013/1 2012/10
<b>IN</b>	1.6	2013/1 2012/12	2.3	2012/10 2012/4	0.6	2012/11 2012/5	-0.1	2013/1 2012/10
<b>CN</b>	0.0	2013/1 2012/12	0.0	2012/10 2012/4	-1.3	2012/11 2012/5	-0.5	2013/1 2012/10

**A3. Abbreviations**

BoJ	Bank of Japan
BR	Brazil
BRIC	Brazil, Russia, India and China
CB-CCI	Conference Board Consumer Confidence Index
CB-LEII	Conference Board Leading Economic Indicator Index
CBOT	Chicago Board of Trade
CF	Consensus Forecasts
CN	China
CNB	Czech National Bank
DBB	Deutsche Bundesbank
DE	Germany
EA	euro area
EC	European Commission
ECB	European Central Bank

EC-CCI	European Commission Consumer Confidence Indicator
EC-ICI	European Commission Industrial Confidence Indicator
EIU	The Economist Intelligence Unit database
ES	Spain
EU	European Union
EUR	euro
EURIBOR	Euro Interbank Offered Rate
Fed	Federal Reserve System (the US central bank)
FRA	forward rate agreement
GBP	pound sterling
GDP	gross domestic product
GR	Greece
CHF	Swiss franc
ICE	Intercontinental Exchange
IE	Ireland
IFO	Institute for Economic Research
IFO-BCI	IFO – Business Climate Index
IFO-CCI	IFO – Consumer Confidence Index
IMF	International Monetary Fund
IN	India
IRS	interest rate swap
IT	Italy
JP	Japan
JPY	Japanese yen
LIBOR	London Interbank Offered Rate
N/A	not available
OECD	Organisation for Economic Co-operation and Development
OECD-CLI	OECD Composite Leading Indicator
PMI	Purchasing Managers' Index
PT	Portugal
RU	Russia
UoM	University of Michigan
UoM-CSI	University of Michigan Consumer Sentiment Index
US	United States
USD	US dollar

#### **A4. List of thematic articles published in GEO**

##### **2013**

	Issue
Economic potential of the BRIC countries (Luboš Komárek and Viktor Zeisel)	2013-1

##### **2012**

	Issue
Global trends in the services balance 2005–2011 (Ladislav Prokop)	2012-12
A look back at the 2012 IIF annual membership meeting (Luboš Komárek)	2012-11

	Issue
The relationship between the oil price and key macroeconomic variables (Jan Hošek, Luboš Komárek and Martin Motl)	2012-10
US holdings of foreign securities versus foreign holdings of securities in the US: What is the trend? (Narcisa Kadlčáková)	2012-9
Changes in the Czech Republic's balance of payments caused by the global financial crisis (Vladimír Žďárský)	2012-8
Annual assessment of the forecasts included in the GEO (Filip Novotný)	2012-7
A look back at the IIF spring membership meeting (Filip Novotný)	2012-6
An overview of the world's most frequently used commodity indices (Jan Hošek)	2012-5
Property price misalignment around the world (Michal Hlaváček and Luboš Komárek)	2012-4
A macrofinancial view of asset price misalignment (Luboš Komárek)	2012-3
The euro area bond market during the debt crisis (Tomáš Adam and Soňa Benecká)	2012-2
Liquidity risk in the euro area money market and ECB operations (Soňa Benecká)	2012-1

## 2011

	Issue
An empirical analysis of monetary policy transmission in the Russian Federation (Oxana Babecká)	2011-12
The widening spread between prices of North Sea Brent crude oil and US WTI crude oil (Jan Hošek and Filip Novotný)	2011-11
A look back at the IIF annual membership meeting (Luboš Komárek)	2011-10
Where to look for a safe haven currency (Soňa Benecká)	2011-9
Monetary policy of the central bank of the Russian Federation (Oxana Babecká)	2011-9
Increased uncertainty in euro area financial markets (Tomáš Adam and Soňa Benecká)	2011-8
Eurodollar markets (Narcisa Kadlčáková)	2011-8
Assessment of the forecasts monitored in the GEO (Filip Novotný)	2011-7
How have global imbalances changed during the crisis? (Vladimír Žďárský)	2011-6
Winners and losers of the economic crisis in the eyes of European investors (Alexis Derviz)	2011-5
Monetary policy of the People's Bank of China (Soňa Benecká)	2011-4
A look back at the IIF spring membership meeting (Jan Hošek)	2011-3

	Issue
The link between the Brent crude oil price and the US dollar exchange rate (Filip Novotný)	2011-2
International integration of the Chinese stock market (Jan Babecký, Luboš Komárek and Zlatuše Komárková)	2011-1