GLOBAL ECONOMIC OUTLOOK – FEBRUARY

2014

Monetary and Statistics Department
External Economic Relations Division

CZECH NATIONAL BANK

Cut-off date for data
10 - 14 February 2014

CF survey date
10 February 2014

GEO publication date
21 February 2014

Notes to charts

ECB and Fed: midpoint of the range of forecasts.
The arrows in the GDP and inflation outlooks indicate the direction of revisions compared to the last GEO. If no arrow is shown, no new forecast is available. Asterisks indicate first published forecasts for given year.

Forecasts for EURIBOR and LIBOR rates are based on implied rates from interbank market yield curve (FRA rates are used from 4M to 15M and adjusted IRS rates for longer horizons). Forecasts for German and US government bond yields (10Y Bund and 10Y Treasury) are taken from CF.

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The February issue of Global Economic Outlook presents its regular overview of recent and expected developments in selected territories, focusing on key economic variables: inflation, GDP growth, leading indicators, interest rates, exchange rates and commodity prices. In Focus we examine the topical question of how real the threat of deflation is in the euro area and what its impact might be on the so far fragile recovery of the European economy. Using the example of the two lost decades of the Japanese economy, we describe the potential dangers of deflation and the ECB's options for dealing with them.

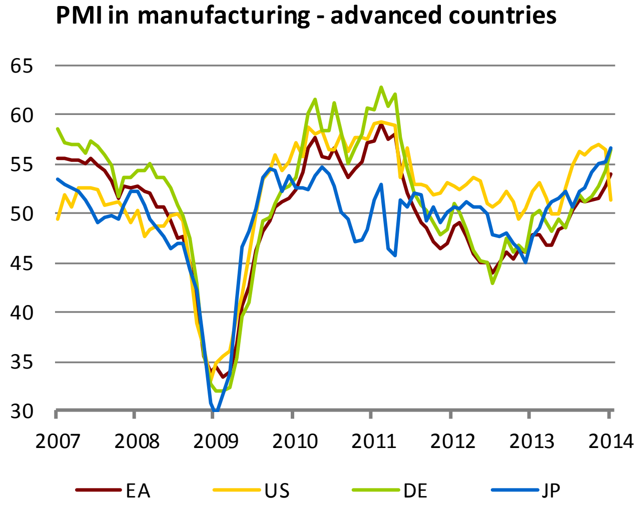
The economic trends in advanced countries continue to get better, and the outlook is for further improvement. According to the current GDP data, the euro area economy recorded a further recovery in 2013 Q4, although the year-end data were less favourable. The outlooks concur that economic growth will gradually accelerate. This is confirmed by continued improvements in leading indicators in industry (see the charts below). By contrast, consumer confidence is broadly flat and the future path might also be threatened by weaker demand from emerging markets and by low inflation, which declined further in January. A further pick-up in economic growth is also expected in the US, where, in contrast to the euro area, growth is being driven mainly by consumer demand. The low inflation outlook is allowing the Fed to continue its policy of low rates and only gradually taper the monetary stimulus. The Japanese economy is also faring well, although its industry will have to cope with a strengthening yen.

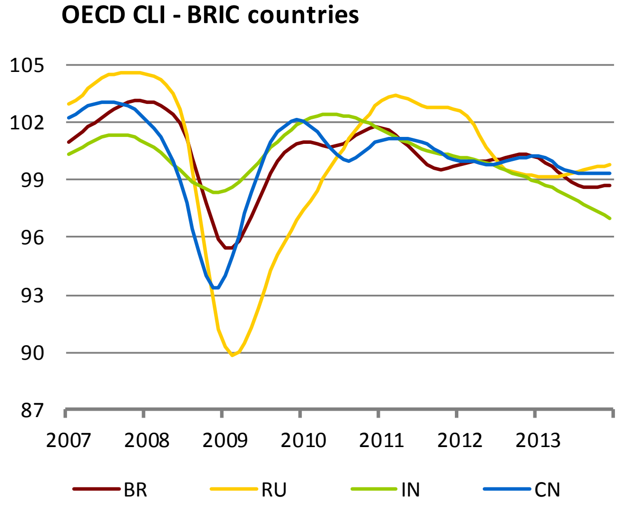
The interest rate outlooks for this year remain low and stable in both the euro area and the USA. Rates are expected to start going up next year, with the USA recording a faster rise. According to CF, the US dollar will appreciate against the euro and the Japanese yen due to the gradual tapering of the quantitative easing programme in the USA.

The emerging economies are trying to deal with the growth slowdown recorded in 2011–2012. Although the decline in GDP growth slowed last year, the outlook remains uncertain. The latest outlooks for the closely observed Chinese economy expect even lower GDP growth this year than in 2013. The growth outlooks for the Indian and Russian economies have improved only slightly on average. Brazil's GDP growth is expected to reach approximately the same levels as in 2013. The currencies of the BRIC countries (except for China) have been weakening since mid-2011, a fact reflected in increased inflation levels in those countries. According to CF, however, the depreciation pressures are expected to fade away. The Chinese currency, after faltering to some extent in January and February, should continue to appreciate, keeping inflation at an acceptable level.

Despite rapid growth in oil extraction in North America, the Brent crude oil price remains relatively high owing to renewed demand growth and dwindling oil stocks in OECD countries. Chinese demand is also expected to pick up this year. In spite of that, the outlook for the Brent crude oil price remains falling. The situation on other commodity markets has more or less stabilised, especially in the case of industrial metals prices. Prices of food commodities might decrease further during this year's harvest season.

Available PMI time series for countires followed in the GEO



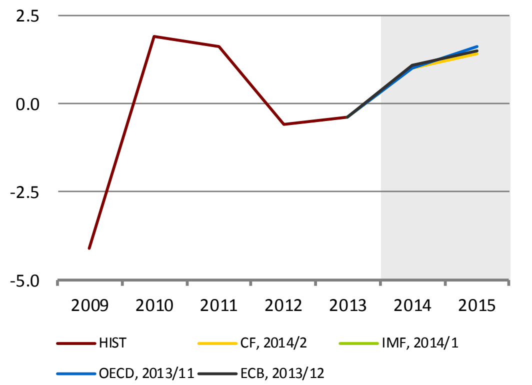


II.1 Euro area

Incoming data from the euro area point to a modest and fragile recovery, although euro area economic activity moderated in December 2013 according to the available indicators. Industrial production fell by 0.7% month on month, but posted quarter-on-quarter growth of 0.3% for the quarter as a whole. Retail sales fell by 1.6% in December, but the quarter-on-quarter decrease in Q4 was smaller (at 0.7%). The labour market stabilised, as indicated by the unemployment rate, which remained at a high 12% for the third consecutive month. Leading indicators in the production sector remain positive; for example, the PMI in manufacturing reached its highest level in almost three years in January. By contrast, consumer confidence indicators are flat or slightly worse. In spite of weaker data in the close of 2013, the newly published flash estimate of GDP growth in Q4 was surprisingly high at 0.3% (up by 0.5% year on year). There is a new risk to the outlook stemming from developments in the emerging markets, which could lead to lower demand for exports from the euro area or worse financing conditions. However, the euro area bond and money markets currently remain almost isolated from this risk. The economic growth outlooks remain stable, concurring that euro area growth should be around 1% this year and accelerate to 1.5% next year.

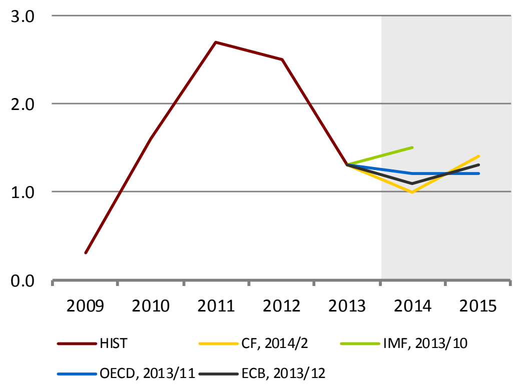
Annual inflation in January came as a negative surprise, falling to 0.7% from 0.8% in December. According to Mario Draghi, the ECB sees this decline as being driven by temporary factors (falling prices of energy and food) as well as by the adjustment of periphery economies. He again emphasised that the ECB is ready to react to changes in long-term inflation expectations that might endanger price stability and the fragile recovery in the euro area. Inflation this year is expected to fluctuate just above 1%.

GDP growth, %



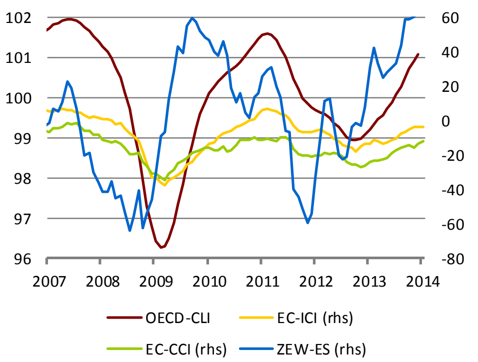
	CF	IMF	OECD	ECB
2014	1.0	1.0	1.0	1.1
2015	1.4	1.4	1.6	1.5

Inflation, %



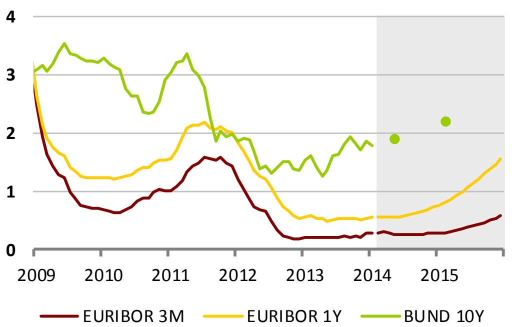
	CF	IMF	OECD	ECB
2014	1.0	1.5	1.2	1.1
2015	1.4		1.2	1.3

Leading indicators



	OECD-CLI	EC-ICI	EC-CCI	ZEW-ES
11/13	100.9	-3.9	-15.4	60.2
12/13	101.1	-3.4	-13.5	68.30
1/14		-3.9	-11.7	73.30

Interest Rates

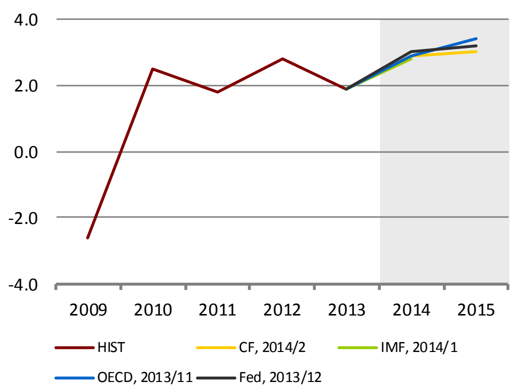


	01/14	02/14	06/14	12/14	06/15	12/15
3M EURIBOR	0.29	0.29	0.26	0.28	0.38	0.58
1Y EURIBOR	0.56	0.55	0.57	0.73	1.07	1.55
	01/14	02/14	05/14	02/15		
10Y Bund	1.79		1.9	2.2		

II.2 United States

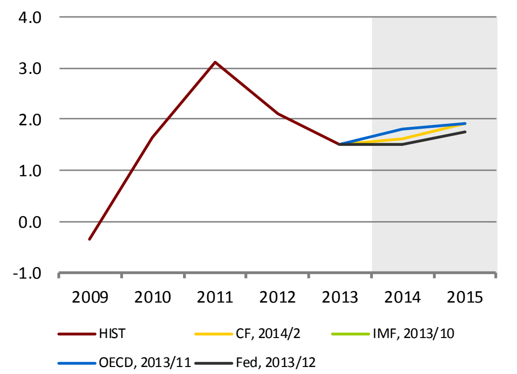
Annual GDP growth in the USA accelerated to 2.7% in the last quarter of 2013, and quarterly GDP growth continued at a relatively rapid rate of 0.8%. The improving economic situation was reflected in a decrease of the unemployment rate to 6.6% in January, taking the rate close to the Fed's quantitative target of 6.5%. Consumer confidence indicators remained at solid levels in January, confirming the significant role of personal consumption in the overall recovery. On the other hand, the manufacturing PMI in industry recorded a significant decline in January, although this is associated with a fall in freight transport due to the severe winter in North America. Overall, according to CF, industrial production growth will accelerate this year. Based on the forecasts under review, GDP growth is also expected to rise to 3.0% this year, and a further modest acceleration is expected for 2015. The gradual recovery is being accompanied by relatively subdued inflationary pressures. Consumer prices increased by a mere 1.5% year on year in December, the same as in 2013 as a whole. According to the forecasts under review, inflation should not exceed 2% this year or the next. This is allowing Fed to continue tapering its bond purchases, which it started doing in December and continued in January. In total, the monthly purchases have so far been reduced by USD 20 billion to USD 65 billion. As a result of the Fed's monetary policy tightening, the dollar is expected, according to CF, to appreciate against the euro to USD 1.29 one year ahead from the current USD 1.36. The outlook for short-term interest rates nevertheless indicates that they will stay at record-low levels this year and start rising only in 2015, in line with official announcements by Fed representatives. Ten-year interest rates are expected to increase to 3.5% at one year owing to the exit from quantitative easing.

GDP growth, %



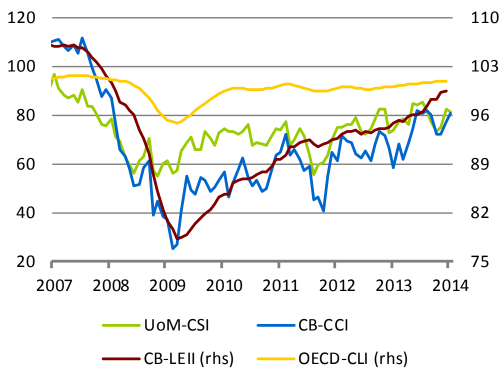
	CF	IMF	OECD	Fed
2014	2.9	2.8	2.9	3.0
2015	3.0	3.0	3.4	3.2

Inflation, %



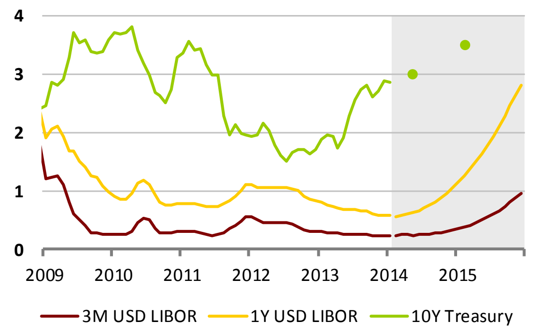
	CF	IMF	OECD	Fed
2014	1.6	1.5	1.8	1.5
2015	1.9		1.9	1.8

Leading indicators



	CB-LEII	OECD-CLI	UoM-CSI	CB-CCI
11/13	99.3	100.9	75.1	72.0
12/13	99.4	100.9	82.5	77.5
1/14			81.2	80.7

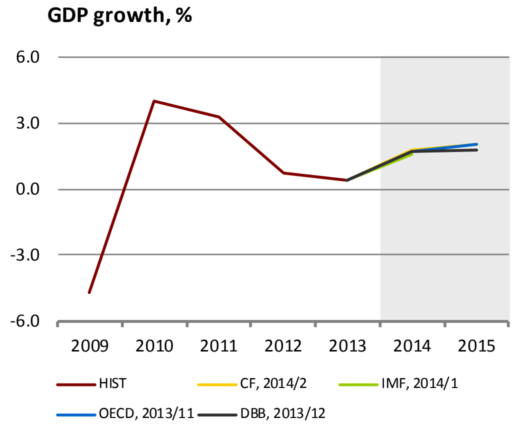
Interest Rates



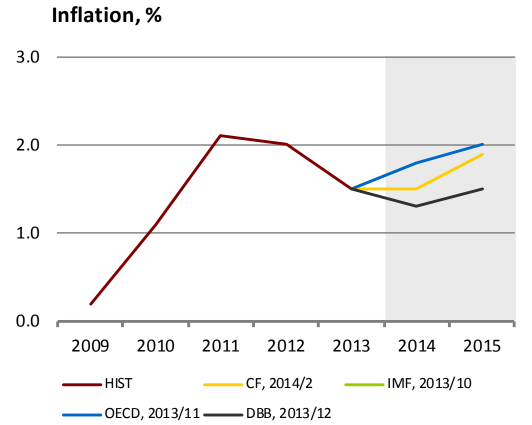
	01/14	02/14	06/14	12/14	06/15	12/15
3M USD LIBOR	0.24	0.24	0.25	0.34	0.55	0.96
1Y USD LIBOR	0.58	0.56	0.67	1.06	1.79	2.81
	01/14	02/14	05/14	02/15		
10Y Treasury	2.85		3.0	3.5		

II.3 Germany

According to the flash estimate, quarterly economic growth in Germany edged up by 0.1 pp to 0.4% in 2013 Q4. Growth in exports and investment contributed to the growth, while shrinking household consumption and inventories slowed it down. According to the forecasts of CF02 and the German government, economic growth for the whole of 2014 will increase to 1.8% (from 0.4% in 2013). Domestic demand should be its main driver, with a decrease in net exports having a contrary effect. This outlook is supported by improvements in almost all the leading indicators under review in January and February – the PMI in industry and the Ifo index recorded their highest levels since 2011. Inflation fell slightly to 1.3% in January and has been fluctuating around this level for five months now. According to CF02, inflation will rise slightly from that level and average 1.5% for 2014 as a whole.



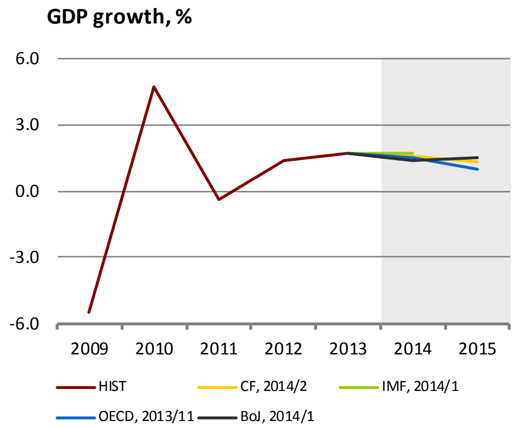
	CF	IMF	OECD	DBB
2014	1.8	1.6	1.7	1.7
2015	2.0	1.4	2.0	1.8



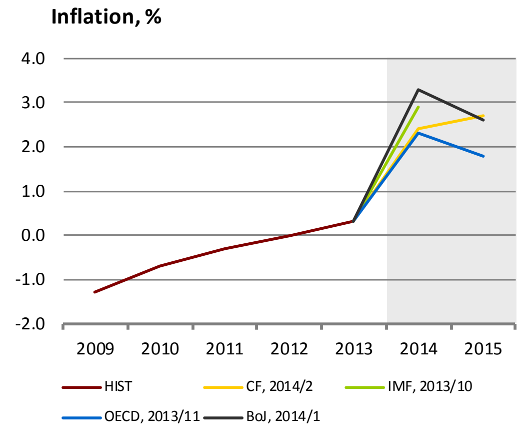
	CF	IMF	OECD	DBB
2014	1.5	1.8	1.8	1.3
2015	1.9		2.0	1.5

II.4 Japan

New data from the Japanese economy continue to indicate a positive effect of the reforms on economic growth and inflation. According to surveys, however, demand is being driven largely by planned increases in taxes in April and October. Annual inflation in Japan accelerated further in December (to 1.6%), while industrial production increased by 1.1% compared to November. Demand for labour is also rising, but the impact on wages is still negligible. The government is therefore continuing to encourage employers and trade unions to show greater willingness to increase wages. The outlook for industry is also optimistic, with the PMI in manufacturing reaching an eight-year high. On the other hand, sell-offs in emerging economies' currency markets fostered appreciation of the Japanese yen against the euro and the dollar. The CF outlook for economic growth has been revised down slightly to 1.6% and that for inflation up slightly to 2.4%. The IMF expects the growth this year to be 0.5 pp higher than in the October forecast. In its new forecast, the BoJ only revised its economic growth forecast for 2014, nudging it down to 1.4%.



	CF	IMF	OECD	BoJ
2014	1.6	1.7	1.5	1.4
2015	1.3	1.0	1.0	1.5

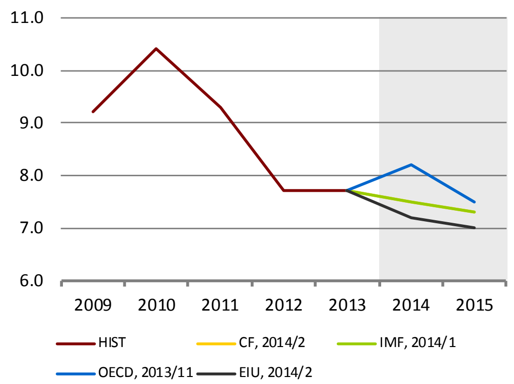


	CF	IMF	OECD	BoJ
2014	2.4	2.9	2.3	3.3
2015	2.7		1.8	2.6

III.1 China

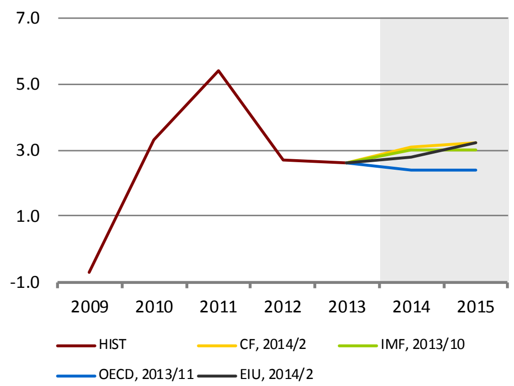
A decrease in the Chinese PMI to a six-month low in late January fostered an increase in risk aversion on global financial markets. Growth in China's industrial production also slowed at the end of 2013. The new CF, IMF and EIU outlooks also point to a slowdown of the largest emerging economy, with all expecting slightly weaker economic growth this year (7.2%–7.5%) compared to last year's 7.7% (preliminary figure). Inflation will also slow, reaching 2.8%–3.1% in 2014 according to the new outlooks. Before the Chinese new year started on 31 January 2014, short-term interest rates surged on the interbank market. As a result, the Chinese central bank increased the supply of liquidity to the market. In mid-January the Chinese currency stopped appreciating against the US dollar, and in mid-February the renminbi weakened slightly. Looking ahead, however, the renminbi is expected to appreciate further.

GDP growth, %



	CF	IMF	OECD	EIU
2014	7.5	7.5	8.2	7.2
2015	7.3	7.3	7.5	7.0

Inflation, %

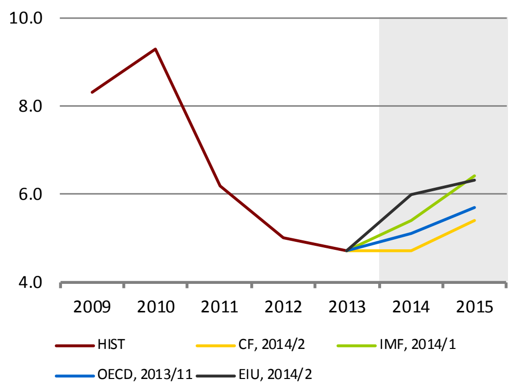


	CF	IMF	OECD	EIU
2014	3.1	3.0	2.4	2.8
2015	3.2	3.0	2.4	3.2

III.2 India

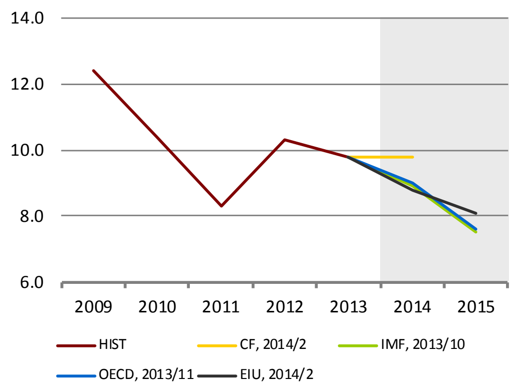
Compared to the previous outlook, Consensus Forecasts has reduced its GDP forecast for 2014 to 4.7%. Inflation remains high and consumers are troubled particularly by strong growth in food and fuel prices. The new February CF and EIU outlooks for this year have revised consumer price inflation expectations up to 8.8%–9.8%. Following large fluctuations in 2013, the local currency is expected to stabilise at around 62.2–63.0 rupees to the US dollar. Economic developments will also depend on the outcome of the May elections, in which a fifth of the electorate will be between 18 and 22 years of age.

GDP growth, %



	CF	IMF	OECD	EIU
2014	4.7	5.4	5.1	6.0
2015	5.4	6.4	5.7	6.3

Inflation, %

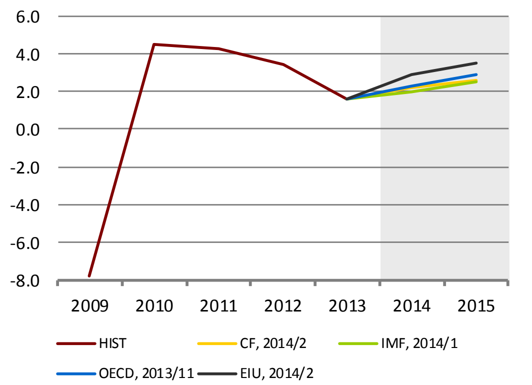


	CF	IMF	OECD	EIU
2014	9.8	8.9	9.0	8.8
2015	8.3	7.5	7.6	8.1

III.3 Russia

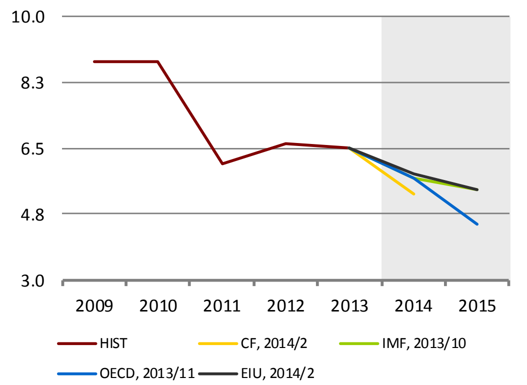
Although the preliminary data on GDP growth in 2013 Q4 are rather more optimistic, supported by renewed year-on-year growth in industrial production in December, the Russian economy recorded a slowdown in 2013 overall. The new CF and IMF outlooks expect only modest growth of 2.2%–2.9% for this year, down slightly from previous forecasts, while the EIU outlook is unchanged. Russia did not escape the increase in uncertainty in late January and early February caused by growth in global financial market volatility. The rouble continued to weaken and by mid-February had reached levels last seen in early 2009. In late January and early February, the Russian central bank significantly increased its interventions several times in order to reduce the volatility of the rouble vis-à-vis the USD-EUR basket and keep the rouble inside the tolerance band. Its international reserves meanwhile decreased to USD 490.2 billion (as at 7 Feb 2014), compared to USD 509.6 billion on 1 January 2014.

GDP growth, %



	CF	IMF	OECD	EIU
2014	2.2	2.0	2.3	2.9
2015	2.6	2.5	2.9	3.5

Inflation, %

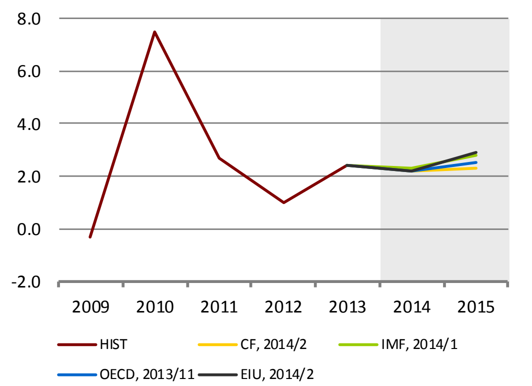


	CF	IMF	OECD	EIU
2014	5.3	5.7	5.7	5.8
2015	5.1	5.4	4.5	5.4

III.4 Brazil

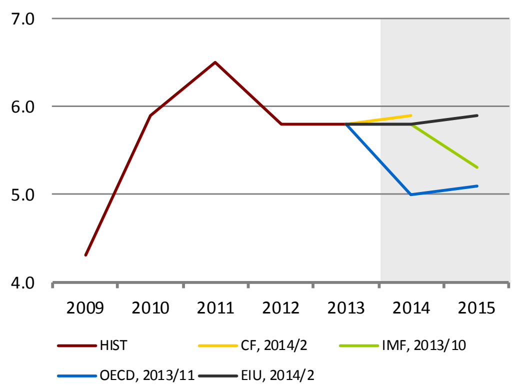
According to the new CF, IMF and EIU outlooks, GDP growth in Brazil will only just exceed 2% in 2014, while consumer price inflation will reach 5.8%–5.9%. Although annual inflation slowed in late 2013, the current extreme temperatures and exceptional drought (especially in São Paulo) represent not only a risk to GDP growth, but also a threat of significant inflationary pressures. The Brazilian central bank continued to tighten monetary policy, raising its key interest rate by another 0.5 pp to 10.5% in mid-January. Like many other emerging economies, Brazil was hit by negative market sentiment before Fed's January meeting. This was reflected in outflows of foreign capital from the country. As a result, the real weakened further. The Brazilian currency will probably depreciate slightly further at the three-month horizon. The outlook is subsequently stable, although it is subject to considerable uncertainty regarding the country's economic and political situation and the external environment.

GDP growth, %



	CF	IMF	OECD	EIU
2014	2.2	2.3	2.2	2.2
2015	2.3	2.8	2.5	2.9

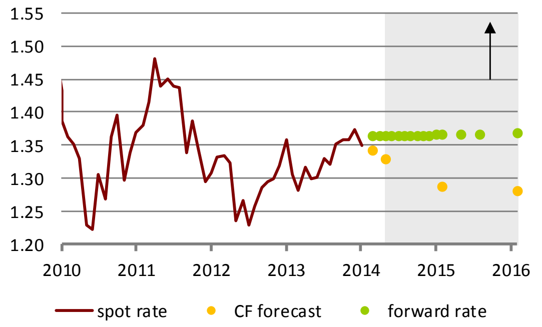
Inflation, %



	CF	IMF	OECD	EIU
2014	5.9	5.8	5.0	5.8
2015	5.6	5.3	5.1	5.9

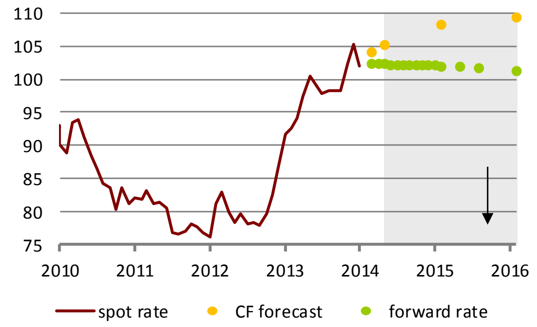
IV. Outlook of exchange rates vis-à-vis the US dollar

THE EURO



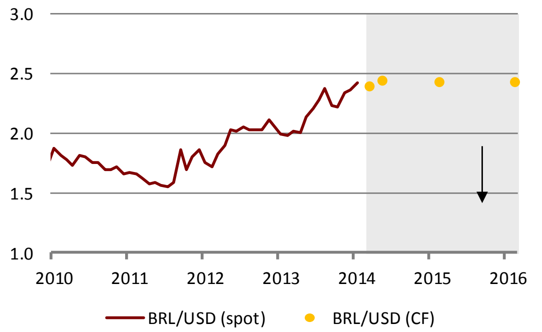
	10/02/14	03/14	05/14	02/15	02/16
spot rate	1.365				
CF forecast		1.342	1.328	1.287	1.281
forward rate		1.365	1.365	1.365	1.369

THE JAPANESE YEN



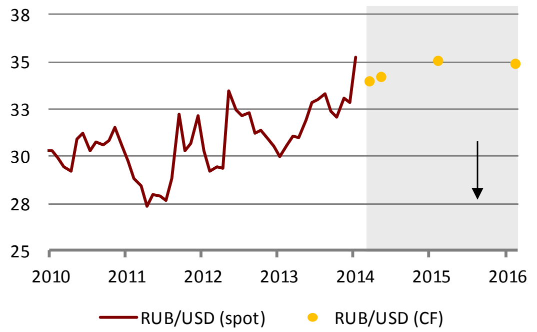
	10/02/14	03/14	05/14	02/15	02/16
spot rate	102.00				
CF forecast		104.00	105.10	108.30	109.40
forward rate		102.25	102.21	101.97	101.15

THE BRAZILIAN REAL



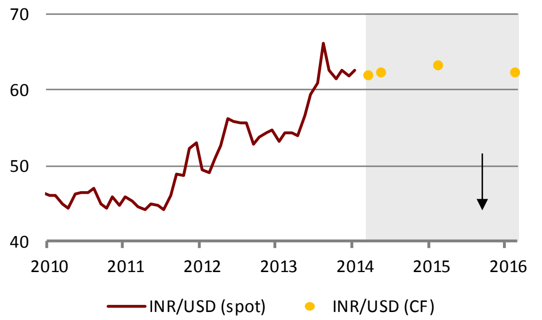
	10/02/14	03/14	05/14	02/15	02/16
spotový kurz	2.40				
předpověď CF		2.39	2.43	2.42	2.43

THE RUSSIAN ROUBLE



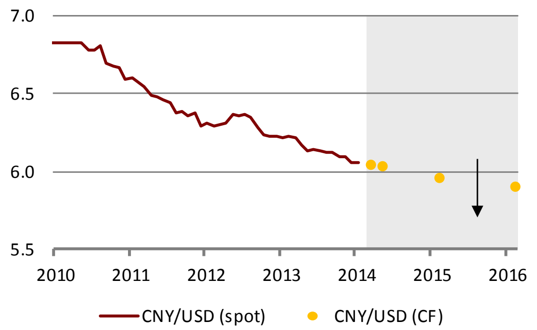
	10/02/14	03/14	05/14	02/15	02/16
spotový kurz	34.81				
předpověď CF		34.00	34.19	35.05	34.93

THE INDIAN RUPIE



	10/02/14	03/14	05/14	02/15	02/16
spotový kurz	62.36				
předpověď CF		61.94	62.24	63.20	62.23

THE CHINESE RENMINBI



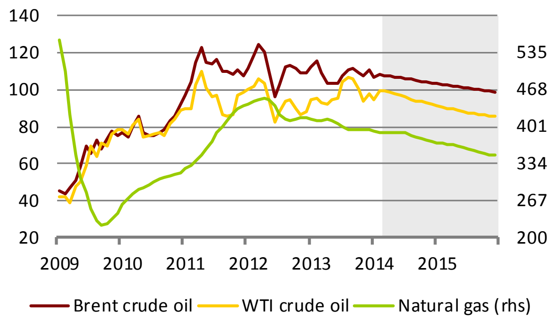
	10/02/14	03/14	05/14	02/15	02/16
spotový kurz	6.06				
předpověď CF		6.05	6.04	5.96	5.90

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.

V.1 Oil and natural gas

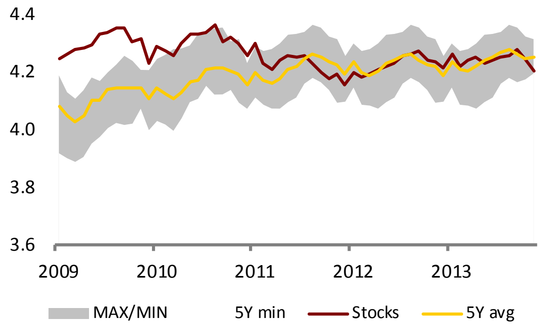
After a sharp fall at the start of January, the price of Brent crude oil stayed within a narrow range around USD 107 a barrel for the whole month. Only at the end of the second week of February did the price increase slightly, to above USD 108 a barrel. By contrast, the WTI oil price surged from USD 92 a barrel in mid-January to USD 100 by mid-February in response to the southern section of the Keystone Pipeline going online. This link takes excess oil from the Cushing inland terminal to the Gulf Coast. Strong demand in the US (due to the economic recovery and later also to extreme frosts) and extraction shortfalls in some OPEC countries are keeping oil prices high. According to the IEA, total industrial stocks of oil and oil products fell sharply in December, and for the whole of 2013 Q4 there was a drop of 1.5 million barrels a day, the fastest rate of decrease since 1999. Low stocks in OPEC countries (103 million barrels below the five-year average at the end of December and the lowest since 2008 according to the IEA) and increased forecasts of global oil consumption growth from all three energy agencies (IEA, EIA, OPEC) currently provide strong support for oil prices staying at their current high levels. On top of that, oil consumption in China, where last year's growth of around 2.3% was the lowest since 2009, is expected to start rising again this year. Growth in Chinese consumption is expected to rise to 3.7% this year. The February CF slightly increased its forecast, expecting the Brent price to stagnate above USD 106 a barrel one year ahead. EIA left its forecast for 2014 unchanged at an average of USD 105 a barrel and slightly lowered the expected average price for next year to USD 101 a barrel, basically in line with futures-based market forecasts.

OUTLOOK FOR PRICES OF OIL AND NATURAL GAS

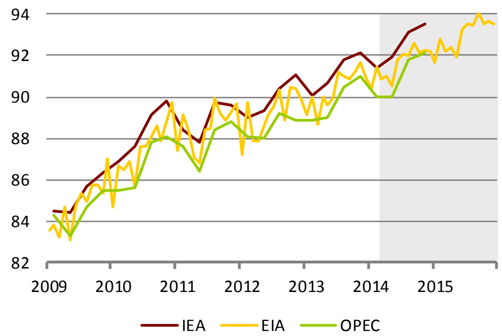


	Brent	WTI	Natural gas
2014	-2.36	-2.17	-4.36
2015	-4.68	-8.01	-6.54

TOTAL STOCKS OF OIL AND OIL PRODUCTS IN OECD

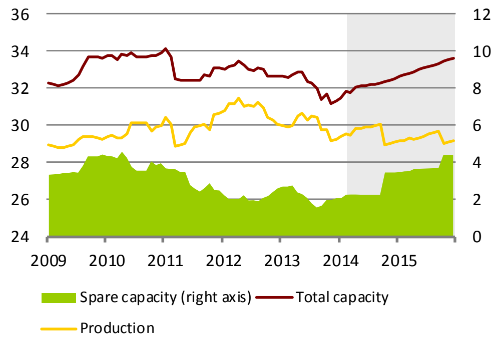


GLOBAL CONSUMPTION OF OIL AND OIL PRODUCTS



	IEA	EIA	OPEC
2014	1.42	1.40	1.25
2015		1.50	

PRODUCTION, TOTAL AND SPARE CAPACITY IN OPEC COUNTRIES



	Production	Total capacity	Spare capacity
2014	-1.41	-0.13	17.72
2015	-0.93	3.11	50.15

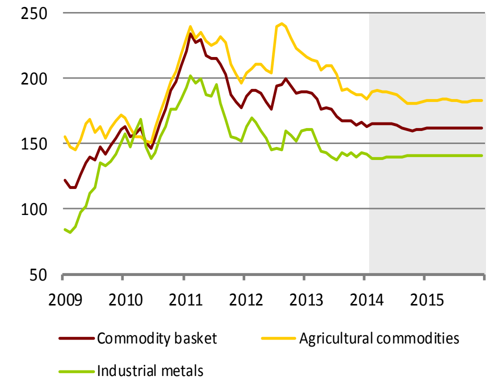
Note: Oil price in USD/barrel, price of Russian natural gas at German border in USD/1,000 m3 (IMF data, smoothed by the HP filter). Future oil prices (grey area) are derived from futures and future gas prices are derived from oil prices using model. Tables show annual percentage changes. Total oil stocks (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).
Source: Bloomberg, IEA, EIA, OPEC, CNB calculations

V.2 Other commodities

The commodity market situation more or less stabilised. The overall non-energy commodity price index has been following a horizontal trend for three months now with only slight volatility, and the outlook is for no change. A slight decrease is expected only in the latter half of this year owing to the new agricultural harvest. The average food commodity price index continued to go down in January, recording its lowest level since August 2010. In February, however, it increased slightly, and it is expected to stay at this level for around six months before the new soy and rice crops reduce its level further. The most stable index is the industrial metals index, which has been horizontal for ten months now with only slight volatility, and the outlook is similar.

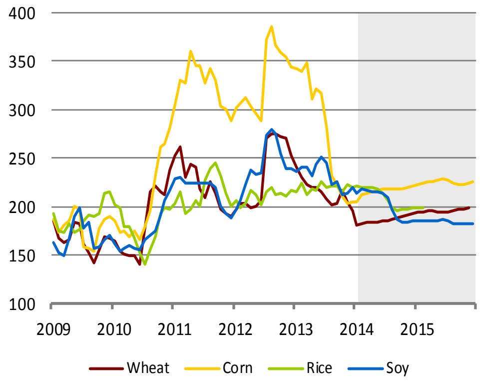
Turning to food commodities, the price of wheat continued to fall slowly until the end of January, but went up in early February on concerns about the extreme frosts damaging this year's crop in the USA. The outlook remains slightly rising. The maize price switched to modest growth in mid-January and its outlook is also rising. By contrast, a sharp decrease in prices is expected with the new crops of soy and partially also rice. The more than three month long decline in the sugar price came to a halt in early February, and coffee prices also rose sharply. Beef prices rose to a historical high in January and are expected to decrease somewhat. Pork prices were flat but are also expected to rise seasonally to a historical high by May before falling back to their current levels. As for non-food agricultural commodities, the price of rubber declined further, reaching its lowest level since mid-2009, while the price of cotton was broadly flat. Industrial metals prices decreased slightly in January across the whole index.

PRICES OF NON-ENERGY COMMODITIES



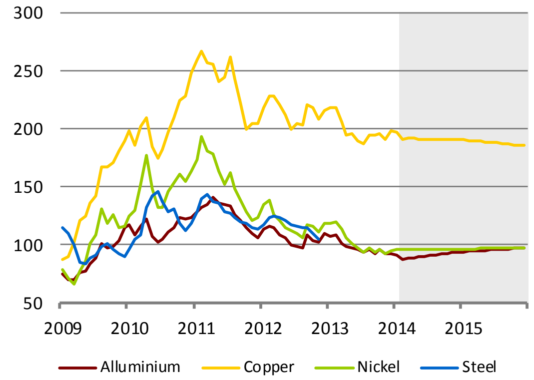
	Overall	Agricultural	Industrial
2014	-6.6	-7.9	-3.8
2015	-0.7	-1.4	0.7

FOOD COMMODITIES



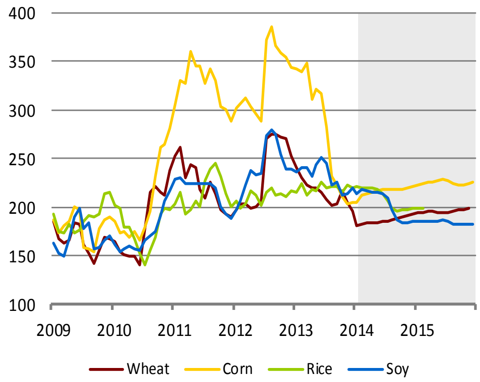
	Wheat	Corn	Rice	Soy
2014	-13.2	-22.2	-4.8	-12.4
2015	4.9	4.1	-5.1	-9.4

METALS



	Aluminium	Copper	Nickel
2014	-6.7	-3.5	-5.5
2015	5.4	-2.0	0.6

FOOD COMMODITIES



	Wheat	Corn	Rice	Soy
2014	-13.2	-22.2	-4.8	-12.4
2015	4.9	4.1	-5.1	-9.4

Note: Structure of non-energy commodity price indices corresponds to composition of The Economist commodity indices. All prices are given as indices, 2005 = 100 (charts) and percentage changes (tables).
Source: Bloomberg, CNB calculations.

Is the threat of deflation real?[1]

Inflation in the euro area slowed last year and is currently well below the central bank's target and definition of price stability. The decline in inflation is partly due to cyclical factors (in particular commodity prices, exchange rate appreciation and external developments), which may fade away as the global economy recovers. However, inflation outlooks suggest that inflationary pressures will remain muted over the next two years. Consequently, the threat that the euro area will be hit by deflation (a fall in the average price level), which would strongly impact on the fragile economic recovery, is increasingly being discussed. The European Central Bank and its unconventional policy instruments will play a key role. However, resolving the structural problems associated with the high debt ratios in some economies and with the condition of the financial sector remains a major challenge. The Japanese experience has taught us that delaying major reforms in the financial sector (and elsewhere) contributes significantly to deflation, which for Japan resulted in two "lost decades".

1 Deflation

Deflation is defined as a general decrease in the price level. In other words, it is the opposite of inflation. It is measured as an absolute year-on-year decline in the consumer price index (negative inflation). Most advanced economies prefer modest but stable growth in the price level (usually at a rate of around 2%). Deflation is usually a consequence of a recession or a banking or some other crisis. It may also result from a shortage of liquidity (official money) or anti-inflationary cost shocks due, for example, to rising commodity prices or to technological progress – a sharp rise in productivity generates a sharp fall in prices, as the US economy experienced in the 19th century.

If, however, deflation persists and affects all economic sectors, it can develop into a deflationary trap or spiral: falling prices (both consumer and producer) lead to shrinking income and profits of firms, which are then forced to cut costs. This usually leads to a rise in unemployment accompanied by a fall in employees' wages. The rising unemployment and falling wages in turn reduce households' demand for goods and services, putting further downward pressure on prices.

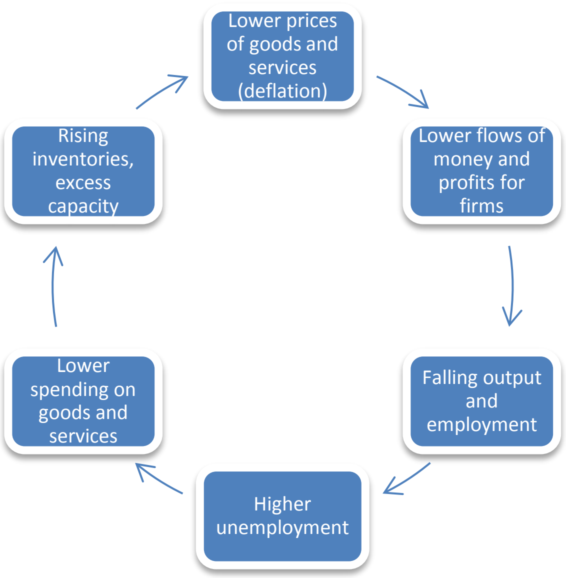
The deflationary spiral is also fuelled by the fact that a falling price level means a rising real value of money. By delaying purchases consumers can buy more goods for the same money in the future. This leads to lower purchases in the present and causes the deflationary spiral to accelerate. At the same time, simply holding money can start to be more profitable in real terms than investing in productive capital, so investment declines. If, therefore, consumers and firms observe this phenomenon for an extended period, their expectations can change significantly and the deflation becomes sustained in nature. Even a short episode of deflation is thus a major challenge for central banks.

First of all, deflation leads to *postponement of consumption and investment*, as is evident from the description of the deflationary spiral. Subsequently, *unemployment goes up* and *wages go down*. A falling price level also has implications for debt. In a deflationary environment, *wealth is redistributed from debtors to creditors* (because the real value of the debt goes up) and, with interest rates falling or negative, *banks' willingness to lend falls*. Savers are less willing to deposit with banks and a rising proportion of debtors are unable to repay their debts. This can result in the financial

[1] Written by Soňa Benecká (sona.benecka@cnb.cz) and Luboš Komárek (Lubos.Komarek@cnb.cz). The views expressed in this contribution are those of the authors and do not necessarily reflect the official views of the CNB.

system collapsing. Similarly, *all other things being equal governments face a decline in tax revenues* (which depend on the price level). Governments thus have less room to cut debt or implement fiscal measures to support the economy and break the deflationary spiral. Efficient capital allocation is compromised as well. All these facts make it difficult to break free from a deflationary trap.

Figure VI-1: The deflationary spiral mechanism (excluding the financial and government sectors)



The mechanism whereby deflation originates has of course attracted the attention of academics. Two concepts have gained prominence. One stresses the role of credit/debt or the credit/debt cycle in the economy, while the other is based on the idea of a liquidity trap, with consumers and firms preferring to hold cash.[2] The Great Depression in the USA and the two lost decades in Japan are examples of devastating deflation. We will comment briefly on the Japanese experience.

2 The two lost decades in Japan and the treatment applied

Japan experienced a long period of deflation in its recent history. In the 1980s, prices of houses, land, stocks and other assets surged. Japanese households and firms felt increasingly wealthy and gradually started buying not only out of need, but also in speculation of further price increases. Japanese society borrowed to fund these purchases, thereby starting a price bubble. The early 1990s, however, saw a necessary sobering-up and the bubble burst. Stock prices were the first to be affected, followed soon after by property prices. Japan thus faced a general fall in prices and a decline in share and property prices. Deflation was the main factor underlying the slowdown of the Japanese economy. In the mid-1990s, just when it seemed that Japan was over the worst, the Asian (1997) and Russian (1998) crises brought this export-oriented country

[2] The current literature tries to link these two concepts (see, for example, Giraud and Pottier, 2013) and identifies two potential scenarios. The first occurs when the central bank succeeds in warding off deflation by additionally easing the monetary conditions, thereby greasing the wheels of the economy and raising prices. This scenario materialises if the financial sector is relatively sound and a sufficiently large additional amount of liquidity is provided. In the second, opposite, scenario, the economy experiences debt-deflation, which can start a vicious cycle of falling prices. It is this scenario which central banks most fear.

back to its knees. The poor overall performance of the Japanese economy in the recent past was probably also due to Japanese households' lower propensity to spend,[3] stemming from their higher-than-usual sense of responsibility for repaying their debts.[4] At the time, the Japanese economy was undergoing structural changes, which disrupted previously functioning linkages in production. Another difference is the long-running stagnation of Japan's working-age population.

The treatment applied to the Japanese economy was long and varied. The Japanese central bank (like the CNB now) was hampered in stimulating the economy by the fact that it had reached the zero lower bound on interest rates. It therefore gradually tried to be active in the financial markets, but the level of aggression chosen – despite being relatively low from the present perspective – did not produce the desired results. Only after the outbreak of the financial crisis in 2008 did the central bank start to act more aggressively. This led, among other things, to a marked depreciation of the yen in late 2012/early 2013, an exit from the deflation zone and a recovery of the economy.

The following experiences are important from the euro area perspective. First, Japan was in a difficult situation after suffering two very strong shocks (asset prices and the exchange rate). Underestimation of the risks and low central bank aggression were significant as well. A fundamental resolution of the problems in the banking sector was also lacking. The situation in Japan was therefore very specific. However, the question is whether we can find any similar specific features of the euro area economy which might lead to a deflation trap. In the next two sections we will describe inflation developments in the euro area and their main underlying factors.

3 Price developments in the euro area and inflation expectations

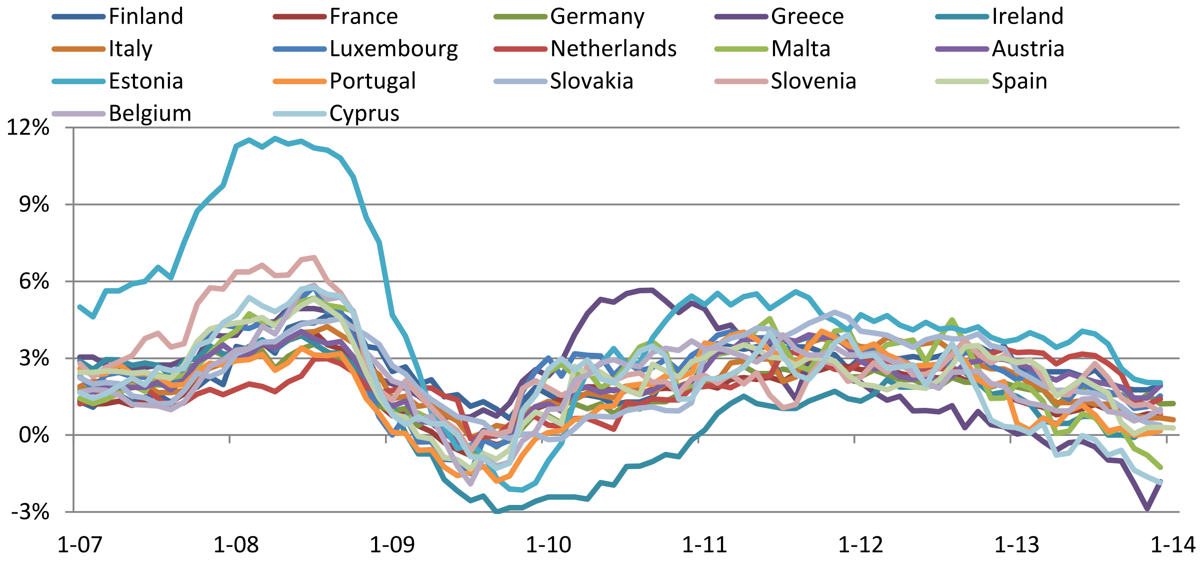
Inflation in the euro area has been slowing gradually since the start of 2012 (see section II). In January 2013, annual HICP inflation stood at 0.7%. Core inflation, which excludes volatile items such as food and energy prices, was close to historical lows (0.8%). In some euro area countries (Portugal and Spain) headline inflation was close to zero. Greece has been experiencing deflation since the start of 2013 (see Figure VI-2). Negative HICP growth can now also be seen in Cyprus and Malta.

Disinflation, which in several countries is now turning into deflation, certainly influenced the ECB's decision to further lower its policy rate in November 2013. The central bank has so far not reacted to the further drop in inflation, because in its own words long-term (five-year) inflation expectations in the euro area are firmly anchored. It is still prepared to take further steps to avert deflation if expectations change or inflation decreases further. However, as the example of the Japanese economy shows, an economy can fall into a deflation trap even when inflation expectations are anchored.

[3] Japanese society is based on Confucianism, which among other things honours the principle of responsibility.

[4] The debt of the Japanese economy exceeds 220% of GDP and is the highest in the world. Most of the debt, however, is held by Japanese entities, which reduces the risk of financial instability.

Figure VI-2: Inflation in euro area countries (annual HICP growth, monthly)



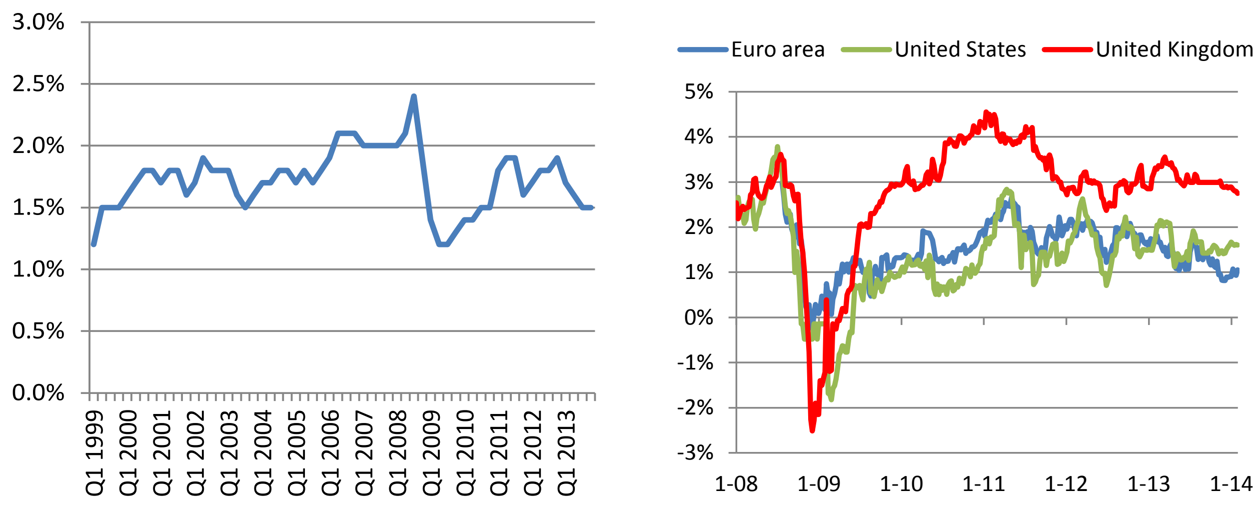
Source: Datastream.

However, short-term inflation expectations have declined and, according to the Survey of Professional Forecasters (SPF), should remain at around 1.5% one year ahead (see Figure VI-3). The inflation swap-based outlooks (one-year) even indicate a decline to 1%, which is much lower than in the USA and the UK. CF02 also expects inflation to be 1.1% this year. Inflation will therefore be within a range where it will be closely monitored by the ECB. A sustained decline below 1% would require additional measures, according to the ECB.

Figure VI-3: Short-term inflation expectations in the euro area and other economies

Survey of Professional Forecasters (SPF), one-year, quarterly data

Inflation swaps, one-year, monthly data



Source: Datastream.

4 Explanation of current price developments and the threat of deflation

The inflation developments in the euro area in 2013 reflected several factors. The first was a side-effect of the reforms made in some euro area economies. The debt crisis in the euro area periphery countries was tackled using a whole range of fiscal austerity measures aimed at consolidating public budgets. Many countries are also grappling with a loss of competitiveness. Internal devaluation by definition requires a decrease in the price level, and thus also deflation, and is accompanied by subdued economic growth and rising unemployment. However, the size of the present economic contraction (the output gap) is a subject of debate. According to OECD estimates it is much larger than according to ECB estimates. This may further increase the deflationary pressures.

In this environment, moreover, the total debt level is not falling, as can be seen in highly indebted euro area economies, so the primary structural problem and the cause of the debt crisis persist. The falling price level is meanwhile increasing the real debt burden, which, in the case of Greece, had to be dealt with by writing off part of its government debt. On the other hand, the ECB succeeded – via its programmes – in preventing the crisis from spreading to the banking sector, thus buying time for deleveraging. This prevented a wave of defaults in the financial sector, which would have been devastating for the economy.

In addition, the euro area is strongly interconnected economically and so a spillover of deflationary pressures cannot be ruled given the subdued domestic demand. Synchronisation of price movements in the monetary union is also apparent from Figure VI-1. However, the spillover effect applies to other economies as well. Inflation is also falling in the USA, and in the UK it has dropped from elevated levels to near the central bank's target. Among the EU countries, Bulgaria is facing deflation and Sweden and Croatia are facing low inflation below 0.5%.

At the global level, China, and to some extent also South Korea, may be acting as overall exporters of industrial price deflation. Both economies are benefiting from export-oriented domestic policies based on price competitiveness. In 2013, for example, annual industrial producer price inflation was negative in both China and South Korea.

In the past, on the other hand, high demand in these export-oriented economies had been pushing commodity prices and inflation upwards. Last year, however, this effect was only weak. Besides lower demand and higher supply (oil extraction in the USA), there was less interest in investing in commodities as a hedge against inflation. This was because market expectations that the major central banks' unconventional monetary instruments would lead to rising inflation did not materialise.

Last year's disinflation was also a result of appreciation of the euro against a number of global currencies, most notably the US dollar and the Japanese yen. This trend was linked to a large extent with a calming of the situation on euro area bond markets. On the other hand, the tapering of the quantitative easing programme by the Fed amid renewed growth in the US economy caused an outflow of capital from emerging economies to the advanced economies, and flows of capital into the euro area might foster further appreciation of the euro.

The commodity price and exchange rate trends may change as the global recovery gains momentum, but the prospects for further debt reduction and financial sector strengthening are much less encouraging. A wave of defaults (according to the model in section 1) may generate large-scale debt-deflation. In this respect, the ECB's measures (particularly LTROs) have acted both to stabilise the debt and to prevent a domino effect in the banking sector. However, the liquidity provided is returning to the ECB – excess liquidity fell to a historical low of EUR 131 billion in mid-January.

The euro area financial market is still fragmented and the transmission mechanism not fully operational. Any further monetary easing by the ECB aimed at fostering growth and tackling low inflation thus represents a great challenge. Besides further refinancing operations and downward changes in the policy rate, direct purchases of assets have been discussed (see, for example, the speech given by Mario Draghi at the World Economic Forum in Davos in January). From the debt perspective, asset purchases seem to be the logical choice, but there are legislative and practical barriers to their implementation (we will examine this issue in a future edition of *Focus*). However, even this unconventional instrument cannot be considered strongly inflationary, as the US experience shows. In the current conditions, therefore, deflation in the euro area remains a risk to the fragile recovery.

References

Giraud, Gaël and Pottier, Antonin (2012): *Debt-Deflation Versus the Liquidity Trap: The Dilemma of Nonconventional Monetary Policy*, Documents de Travail du Centre d'Economie de la Sorbonne, Université Panthéon-Sorbonne (Paris 1), Centre d'Economie de la Sorbonne.

A1. Change in GDP predictions for 2014

	CF		IMF		OECD		CB / EIU	
EA	0.0	2014/2 2014/1	0.0	2014/1 2013/10	-0.1	2013/11 2013/5	0.1	2013/12 2013/9
US	0.1	2014/2 2014/1	0.2	2014/1 2013/10	0.1	2013/11 2013/5	0.0	2013/12 2013/9
DE	0.0	2014/2 2014/1	0.2	2014/1 2013/10	-0.2	2013/11 2013/5	0.2	2013/12 2013/6
JP	-0.1	2014/2 2014/1	0.5	2014/1 2013/10	0.1	2013/11 2013/5	-0.1	2014/1 2013/11
BR	-0.1	2014/2 2014/1	-0.2	2014/1 2013/10	-1.3	2013/11 2013/5	0.0	2014/2 2014/1
RU	-0.1	2014/2 2014/1	-1.0	2014/1 2013/10	-1.3	2013/11 2013/5	0.0	2014/2 2014/1
IN	-0.8	2014/2 2014/1	0.3	2014/1 2013/10	-1.3	2013/11 2013/5	0.0	2014/2 2014/1
CN	0.0	2014/2 2014/1	0.2	2014/1 2013/10	-0.2	2013/11 2013/5	-0.1	2014/2 2014/1

A2. Change in inflation predictions for 2014

	CF		IMF		OECD		CB/EIU	
EA	-0.1	2014/2 2014/1	0.0	2013/10 2013/4	0.0	2013/11 2013/5	-0.2	2013/12 2013/9
US	0.0	2014/2 2014/1	-0.2	2013/10 2013/4	-0.1	2013/11 2013/5	-0.1	2013/12 2013/9
DE	-0.1	2014/2 2014/1	0.1	2013/10 2013/4	-0.2	2013/11 2013/5	-0.2	2013/12 2013/6
JP	0.1	2014/2 2014/1	-0.1	2013/10 2013/4	0.5	2013/11 2013/5	0.0	2014/1 2013/11
BR	-0.1	2014/2 2014/1	1.1	2013/10 2013/4	-0.2	2013/11 2013/5	0.1	2014/2 2014/1
RU	0.1	2014/2 2014/1	-0.5	2013/10 2013/4	0.3	2013/11 2013/5	0.0	2014/2 2014/1
IN	1.8	2014/2 2014/1	-1.8	2013/10 2013/4	2.1	2013/11 2013/5	0.0	2014/2 2014/1
CN	0.0	2014/2 2014/1	0.0	2013/10 2013/4	-0.2	2013/11 2013/5	-0.6	2014/2 2014/1

A3. List of 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
EEA	European Economic Area
ES	Spain
EU	European Union

EMI	European Monetary Institute	**JP**	Japan
EURIBOR	Euro Interbank Offered Rate	**JPY**	Japanese yen
Fed	Federal Reserve System (the US central bank)	**LIBOR**	London Interbank Offered Rate
FRA	forward rate agreement	**N/A**	not available
GBP	pound sterling	**OECD**	Organisation for Economic Co-operation and Development
GDP	gross domestic product	**OECD-CLI**	OECD Composite Leading Indicator
GR	Greece	**PMI**	Purchasing Managers' Index
CHF	Swiss franc	**PT**	Portugal
ICE	Intercontinental Exchange	**RU**	Russia
IE	Ireland	**UoM**	University of Michigan
IFO	Institute for Economic Research	**UoM-CSI**	University of Michigan Consumer Sentiment Index
IFO-BE	IFO Business Expectations	**US**	United States
IMF	International Monetary Fund	**USD**	US dollar
IN	India	**ZEW-ES**	ZEW Economic Sentiment
IRS	interest rate swap		
IT	Italy		

A4. List of thematic articles published in the GEO

2014

	Issue
Is the threat of deflation real? (Soňa Benecká and Luboš Komárek)	2014-2
Forward guidance – another central bank instrument? (Milan Klíma and Luboš Komárek)	2014-1

2013

	Issue
Financialisation of commodities and the structure of participants on commodity futures markets (Martin Motl)	2013-12
The internationalisation of the renminbi (Soňa Benecká)	2013-11
Unemployment during the crisis (Oxana Babecká and Luboš Komárek)	2013-10
Drought and its impact on food prices and headline inflation (Viktor Zeisel)	2013-9
The effect of globalisation on deviations between GDP and GNP in selected countries over the last two decades (Vladimír Žďárský)	2013-8
Competitiveness and determinants of travel and tourism (Oxana Babecká)	2013-7
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Selected leading indicators for the euro area, Germany and the United States (Filip Novotný)	2013-4
Financial stress in advanced economies (Tomáš Adam and Soňa Benecká)	2013-3
Natural gas market developments (Jan Hošek)	2013-2
Economic potential of the BRIC countries (Luboš Komárek and Viktor Zeisel)	2013-1

2012

2011