



GLOBAL ECONOMIC OUTLOOK – SEPTEMBER

Monetary and Statistics Department
External Economic Relations Division

2014

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Cut-off date for data

8 - 12 September 2014

CF survey date

8 September 2014

GEO publication date

19 September 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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II.3 Germany	II.4 Japan III.2 India III.4 Brazil	V. Commodity market developments	

The September 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 this issue, we also analyse the competitiveness and dynamics of goods exports from Central European EU member states. We find, among other things, that the current dependence of Central and South-Eastern European countries on global demand is higher than in the final pre-crisis years.

Economic growth in advanced countries will continue to be driven by the US economy, which is expected to grow by more than 3% next year. The PMI also indicates a solid rate of growth. In Europe, both the euro area as a whole and its strongest economy, Germany, are expected to maintain their current rates of growth. Despite that, GDP growth in the euro area is expected to be only about half that in the USA in 2015. The threat of deflation in Europe seems to have been averted for the time being, although consumer price inflation in the euro area, unlike in the USA, will remain visibly distant from 2%. The outlooks for the Japanese economy are also a cause for some concern, as the optimistic outlook for an economic recovery has yet to materialise and a further step towards fiscal sustainability is thus endangered. The outlooks for Japanese inflation are showing the opposite trend. After rising this year, inflation is expected to head towards 2% in 2015.

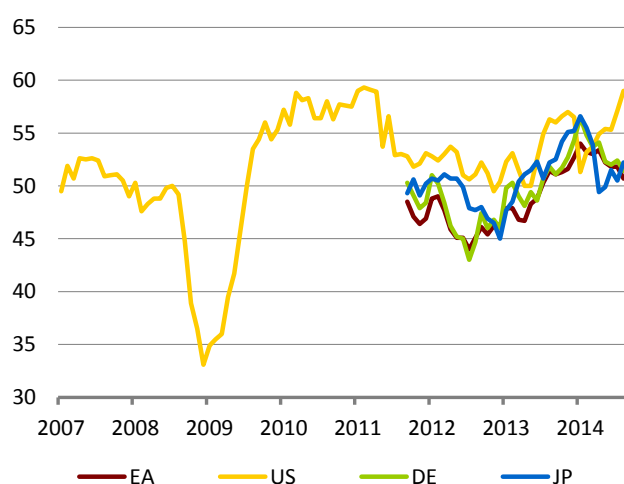
The outlooks for the BRIC countries remain mixed. Despite none-too-optimistic news, the Chinese economy will remain able to keep its rate of growth above 7% amid relatively low inflation. By contrast, the Russian economy will record the lowest growth, largely because of the conflict with Ukraine and the related economic sanctions imposed by international community. The Russian economy is thus on the brink of recession in a situation of rising inflation. Similarly, the outlooks for Brazil are still none too bright. Its GDP growth rate is very low for an emerging economy amid rising inflation and a weakening exchange rate of the real. By contrast, the outlooks for the Indian economy are mostly positive, with growth expected to increase gradually and inflation expected to decrease to the (still elevated) level of 7% at the end of 2015.

The outlooks for euro area interest rates declined further due to a further easing of monetary policy by the ECB and are very low with no clear reversal in trend. As for the USA, the day is approaching when the Federal Reserve will start to raise interest rates. According to Consensus Forecasts, the US dollar will appreciate against all the monitored currencies over the one-year horizon, except for a modest weakening against the Chinese renminbi.

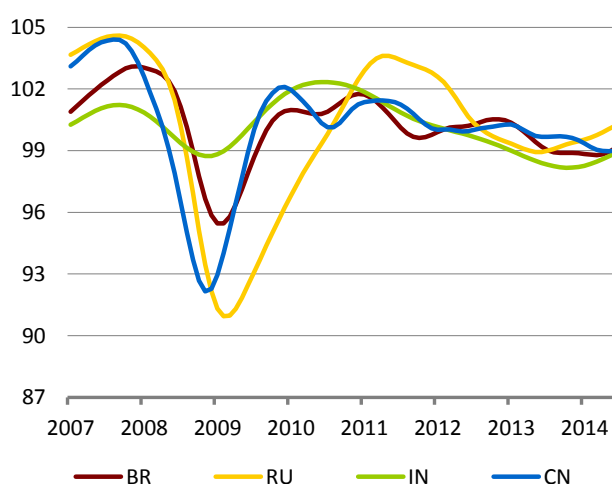
The outlooks for oil prices should stabilise just above USD 100 a barrel by the end of 2015 provided that geopolitical tensions and oil demand stabilise. Agricultural commodity markets recorded a decline in prices thanks to a good harvest worldwide, although the current outlook for the end of 2015 is slightly rising. Industrial metals prices, by contrast, rose slightly further last month and have a flat outlook.

Available PMI time series for countries monitored in the GEO

PMI in manufacturing - advanced countries



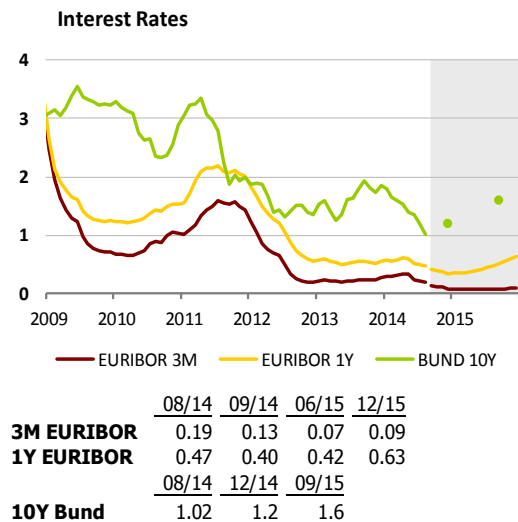
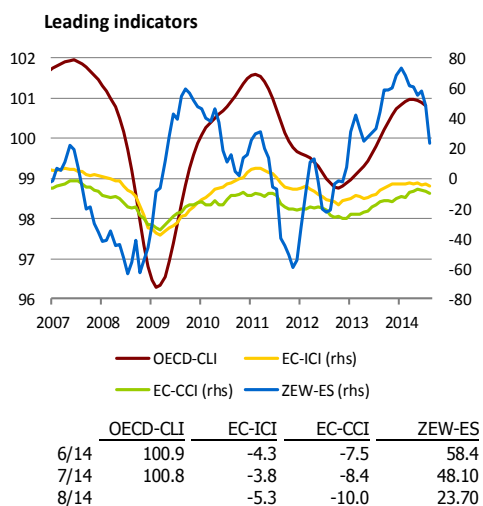
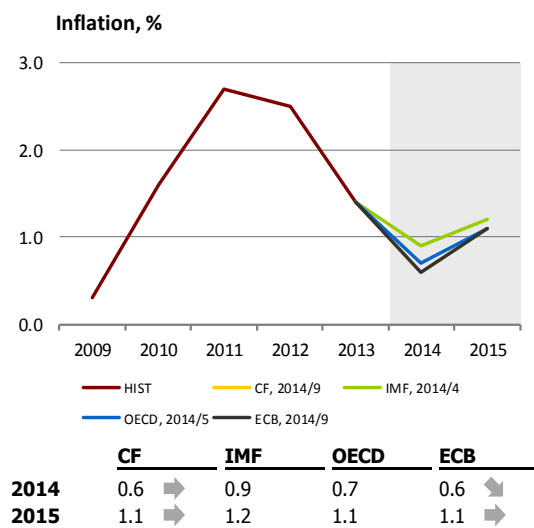
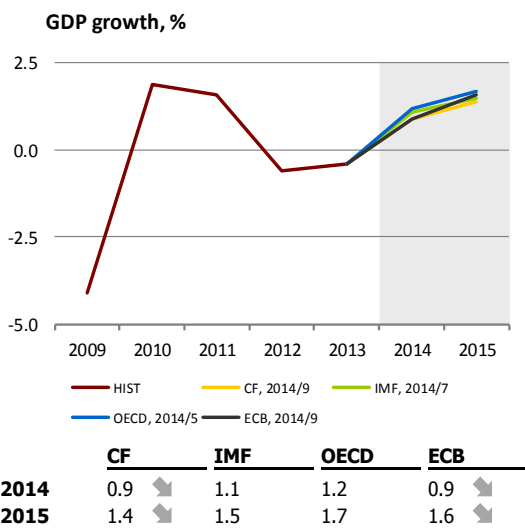
OECD CLI - BRIC countries



II.1 Euro area

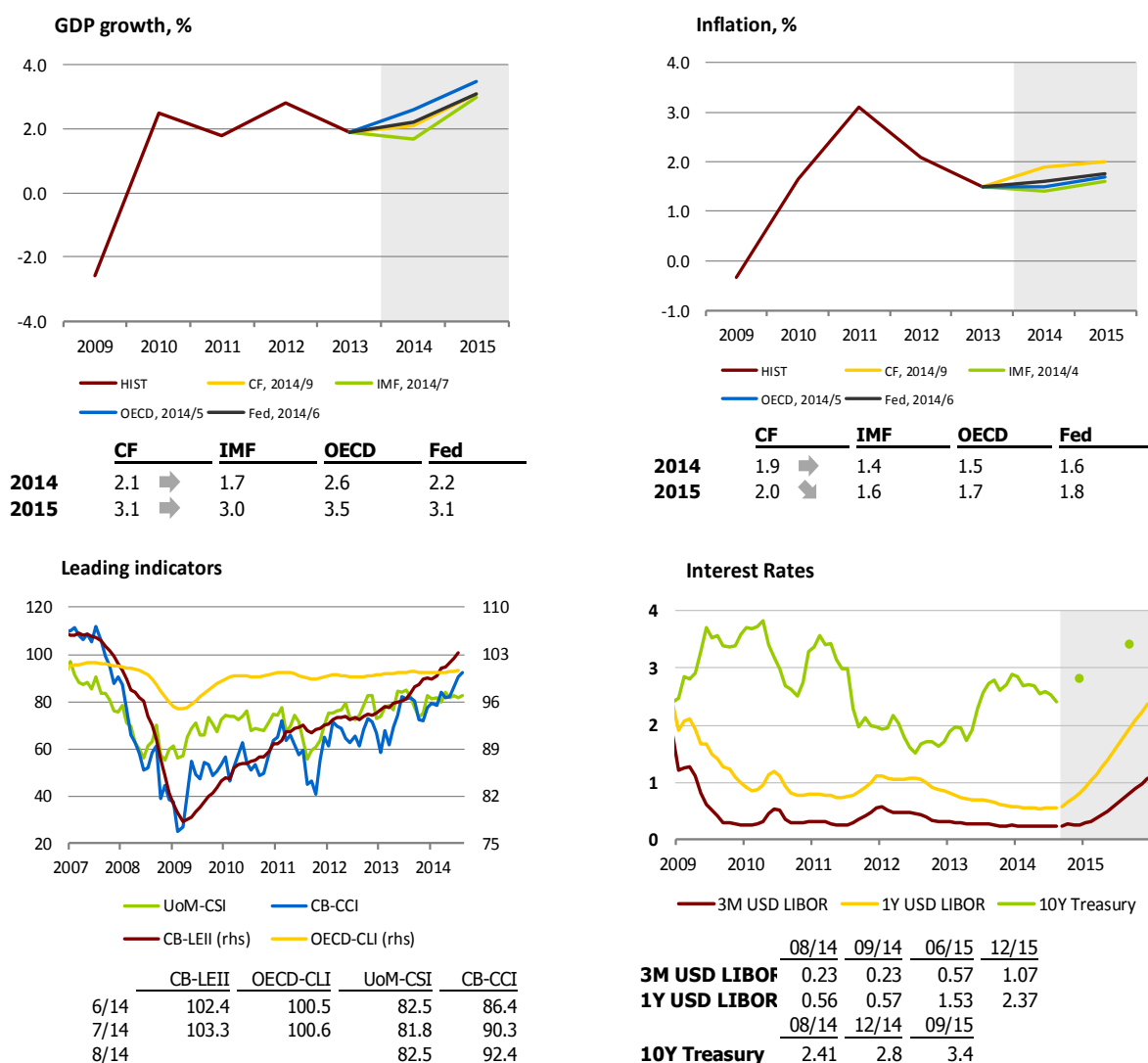
The second estimate of euro area GDP growth in 2014 Q2 was unchanged from the flash estimate and Eurostat thus expects the economy to stagnate. The worse outcome is linked with technical factors (a mild winter leading to a shift of some construction investment from Q2 to Q1) and to uncertainty related to the geopolitical situation in Ukraine and the sanctions imposed on Russia. The early-Q3 data have been mixed so far – industrial production rose significantly in July, but retail sales went down. As in previous months, leading indicators continued falling, but are still above the expansion threshold or the long-term average and are thus signalling a continued recovery in 2014 Q3. Similarly, the PMI in manufacturing in the euro area dropped (to a 13-month low of 50.7), but is still signalling an expansion. The September CF revised its August outlook for growth in the euro area economy downwards (to 0.9% this year and 1.4% in 2015). The ECB’s September forecast was revised in the same direction (to 0.9% and 1.6% respectively this year and the next; the outlook for 2016 remained unchanged at 1.9%).

According to Eurostat’s flash estimate, HICP inflation dropped to 0.3% in August (from 0.4% in July). The further decline in inflation was fostered by a marked decrease in energy prices (of 2%), while the year-on-year change in the prices of other consumer basket items was similar to that observed in previous months. The September CF outlook was unchanged from the August CF, expecting inflation to stay at 0.6% this year and then increase to 1.1% in 2015. The ECB lowered its inflation outlook for this year and expects the same inflation figures as CF in both 2014 and 2015. In 2016, inflation is expected to increase to 1.6%. The ECB responded to the prolonged period of low inflation, lower medium-term financial market inflation expectations and uncertainties associated with the geopolitical situation by further easing monetary policy. It shifted the corridor for its interest rates downwards and unveiled an asset-backed securities purchase programme (ABSPP) and a covered bond purchase programme (CBPP3). The path of the interest rate outlook reacted by declining over the entire horizon.



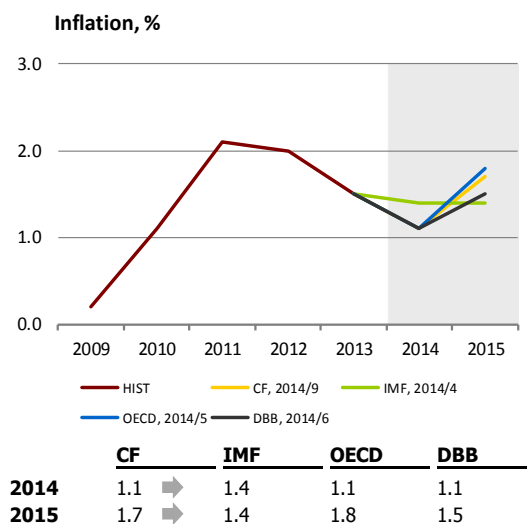
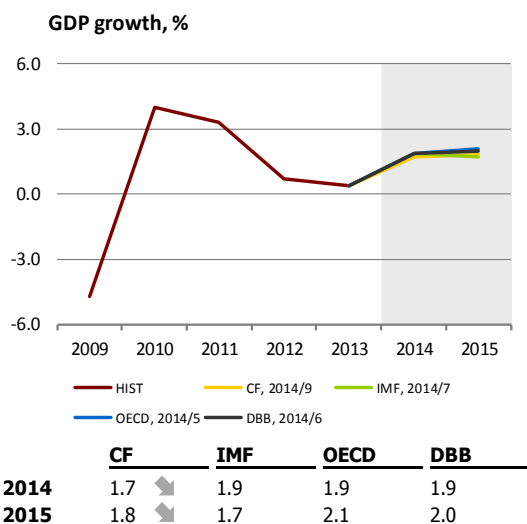
II.2 United States

Quarter-on-quarter GDP growth rebounded in 2014 Q2 (and was even higher than the previously released figure after revision) following a decrease in Q1 owing to the cold winter. Month-on-month industrial production growth in July also maintained the pace recorded in June. By contrast, nominal retail sales were flat month on month. Nonetheless, the August consumer confidence and consumer sentiment indicators suggest an improvement in the situation. This is supported by a further increase in the PMI leading indicator in industry. Economic growth expectations in the USA thus remained at the previous month's relatively high levels. As the economy gradually recovers, inflation expectations remain well anchored below the Fed's 2% inflation target. Annual inflation fell slightly in July compared to the previous two months, to 2%. The Fed plans to completely end its asset purchases (QE) this year, so there is much speculation about when it might start raising rates. According to updated market outlooks for short-term interest rates, the first rise is expected around mid-2015. Divergence of ECB and Fed monetary policy (a further monetary easing by the ECB in September) led to the dollar appreciating against the euro to a more-than-one-year high. The dollar is expected to strengthen slightly further over the one-year horizon.



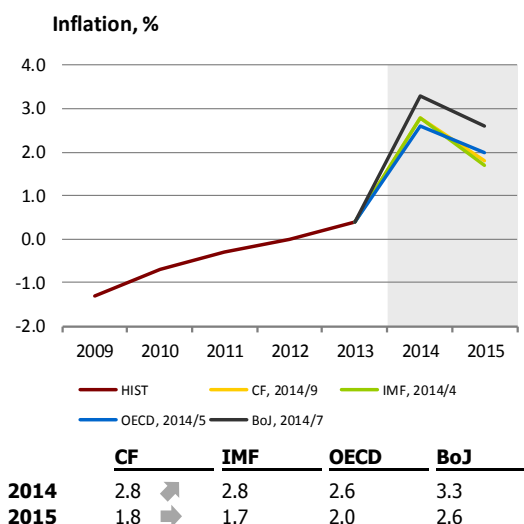
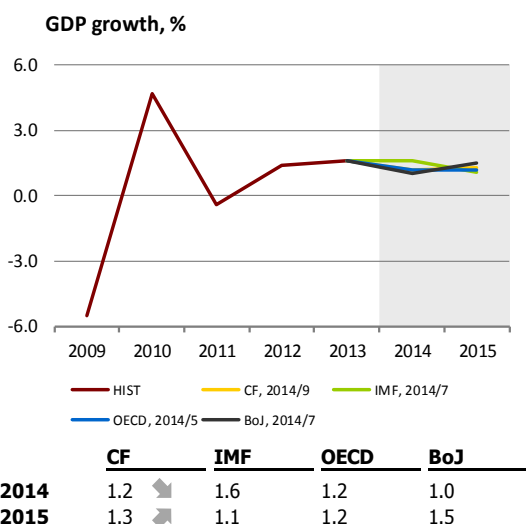
II.3 Germany

Economic growth in Germany weakened significantly in 2014 Q2 compared to Q1. The quarterly growth of 0.7% turned into a 0.2% decline and annual growth dropped by 0.9 pp to 1.3%. The overall economic downturn was due to almost all components of domestic demand, the exception being a modest annual rise in government consumption. The strong growth recorded in Q1 cannot be expected to return in the second half of this year. According to the September CF, the quarter-on-quarter increases should fluctuate around 0.4%. An economic downturn is also signalled by a decline in almost all leading indicators. Compared to the August issue, the September CF lowered its GDP growth estimate for 2014 from 2.0% to 1.7%. Inflation in Germany remained at 0.8% in August, the lowest level in more than four years. The September CF expects it to rise gradually over the rest of this year and in 2015, reaching almost 2%.



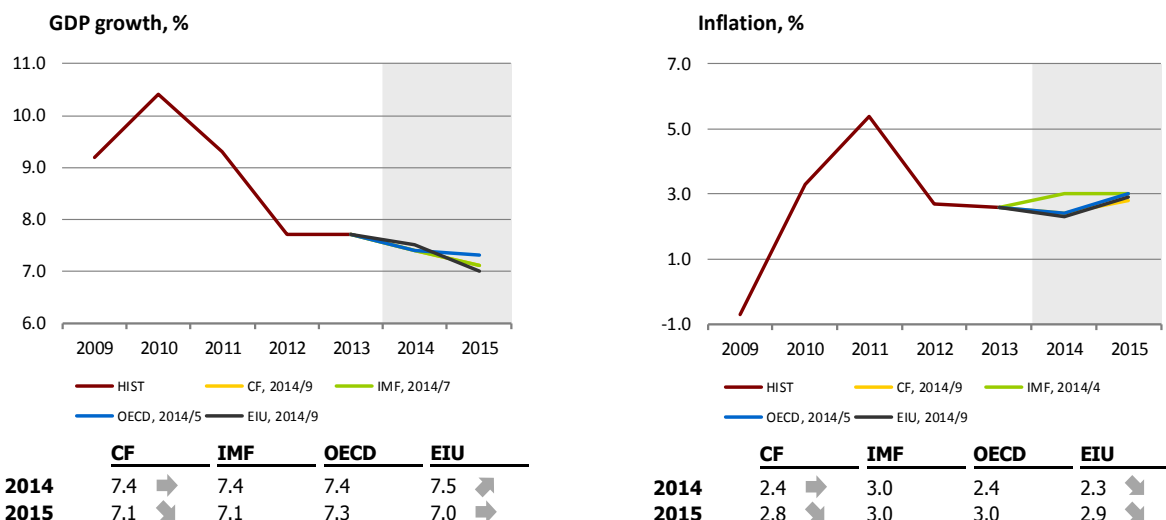
II.4 Japan

As expected, the Japanese economy contracted in Q2 (by 1.8% compared to Q1). Domestic demand and capital expenditure fell as a result of a VAT hike in April. Another tax increase is planned for October 2015, although the Japanese government will have to make the final decision in December 2014 (based on the GDP growth data for Q3). However, the optimistic outlook for an economic recovery has yet to materialise, so a further step towards fiscal sustainability is endangered. If taxes are not increased, it would be a clear signal that domestic economic policy has failed and there would also be an immediate effect on bond markets. Industrial production rose by just 0.2% year on year in July, and unemployment also went up slightly. Headline inflation remains above 3%, but adjusted for tax effects it was just 1.4%. The economic developments were also reflected in the dollar-yen exchange rate, as the yen depreciated in August for the first time since the start of this year. CF lowered its GDP growth outlook for 2014 by 0.3 pp and increased that for 2015 by 0.1 pp. The inflation forecast was increased by 0.1 pp in 2014 only.



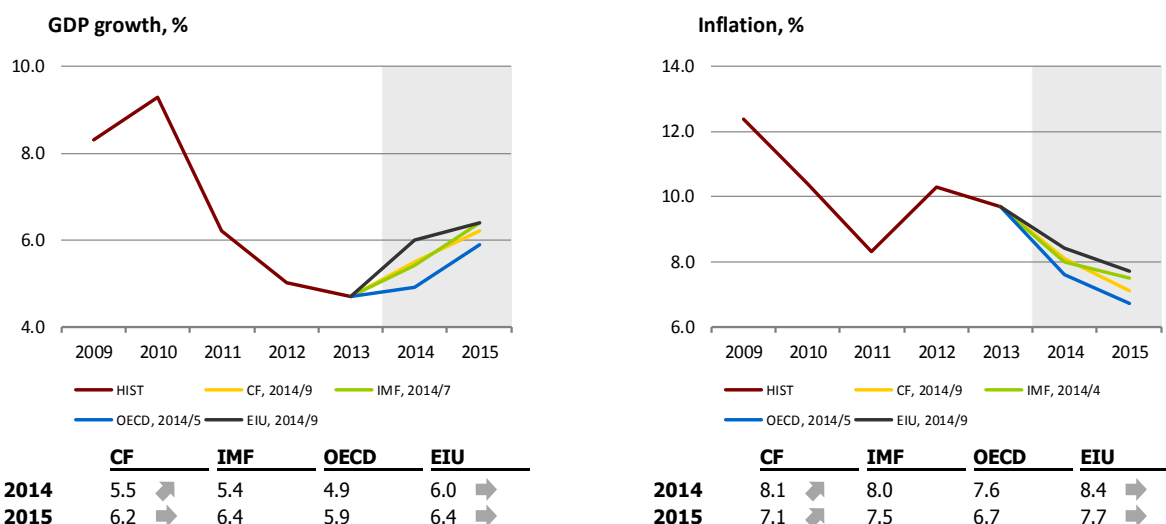
III.1 China

The August macroeconomic data from China suggest a modest weakening of domestic demand. Imports fell unexpectedly by 2.4% year on year. The HSBC PMI in industry also dropped to 50.2 in August. A slowdown in car sales growth to a six-month low was further bad news. However, Premier Li Keqiang does not expect a “hard landing” for the Chinese economy and has confirmed target GDP growth of about 7.5%. The new CF and EIU outlooks (according to which economic growth will reach 7.4%–7.5%) so far expect this objective to be achieved. A further slowdown in the Chinese economy is also indicated by weaker inflation pressures. For example, the industrial producer price index dropped by 1.2%, while a Bloomberg survey of analysts had expected a fall of 1.1%. Consumer price inflation had been expected to reach 2.0%–2.7% in August but came in at just 2%. CF and the EIU expect inflation of 2.3%–2.4% for this year as a whole.



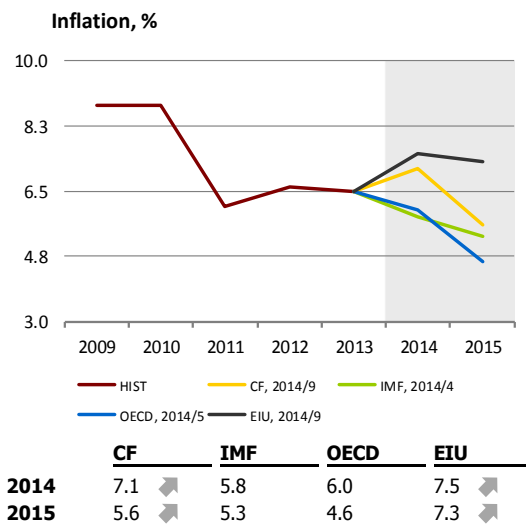
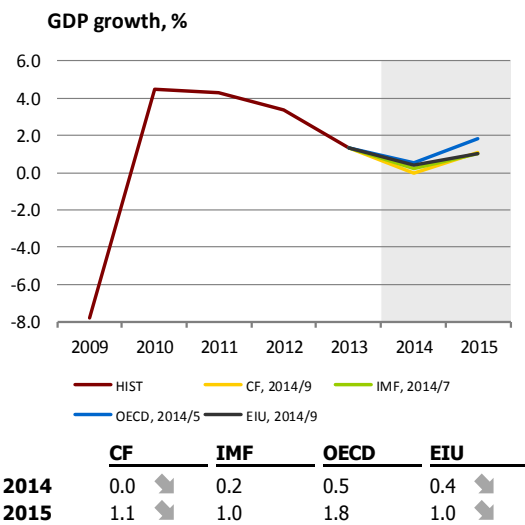
III.2 India

Inflation in India remained below 8% in July, but remains high owing to supply side rigidities. Food prices, whose growth has been bolstered by this year’s drought, are causing particular concerns. On the other hand, the Indian economy recorded its highest rate of growth in two and a half years (5.7%). The positive data were supported not only by capital inflows, but also by the domestic stock market, whose main index has surged by 28% in the last six months. However, industrial production recorded slower annual growth in July (at 1.8%) and the PMI leading indicator for manufacturing also points to slowing activity in manufacturing. CF increased its GDP growth outlook for 2014 by 0.1 pp and its inflation forecast by 0.2 pp in both years. The EIU forecasts for both indicators were unchanged.



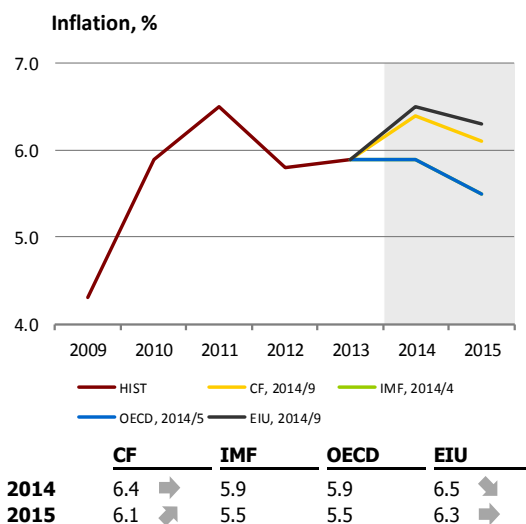
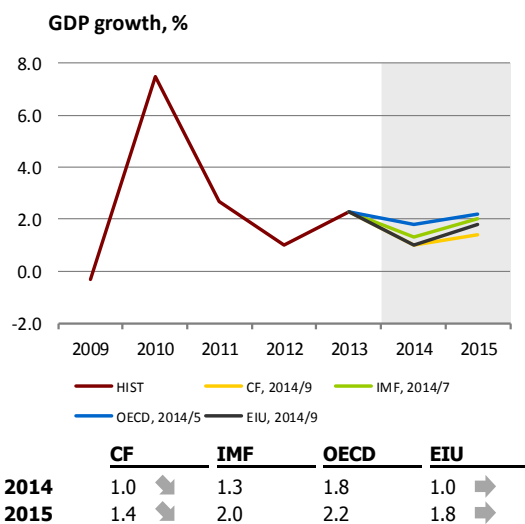
III.3 Russia

The escalation of the conflict in Ukraine and the further expansion of sanctions imposed on Russia resulted in worse September outlooks for the economic situation in Russia. Although the flash estimate of GDP growth in 2014 Q2 indicates 0.8% annual growth, CF for the first time lowered its GDP growth outlook for this year to zero. The EIU also reduced its outlook, but expects an “optimistic” 0.4%. Despite stagnating economic activity, tax income surprisingly increased by 14% in the first eight months of this year compared to the same period of 2013. However, this “paradox” was caused by high inflation (7.6% in August – up by 1.1 pp compared to annual consumer price inflation in August 2013). Prices increased mainly in the case of food owing to the ban imposed by Russia on food imports. Milk and dairy product prices rose by 18%–22% year on year, while meat, egg, fish and sugar prices went up by 13%–15%. Inflation was also fostered by a 10% increase in medicine prices, a 12% rise in insurance prices, a 13% increase in alcohol prices and a 30% rise in cigarette prices. At the end of this year, inflation will be 7.1% according to CF. According to the EIU, prices will rise by 7.5% for the year as a whole.



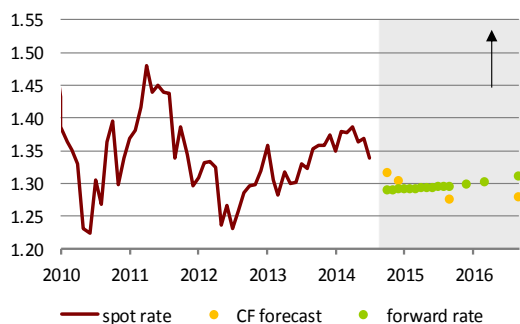
III.4 Brazil

The Brazilian economy slipped into recession in Q2, recording quarterly GDP growth of -0.6%. Investment declined sharply and the prospects for Q3 are not optimistic either. Annual industrial production growth remained negative in July. Retail sales fell by 1.1% in July compared to June, the biggest decline seen since October 2008. Inflation showed no improvement either. In July and August, inflation in Brazil was flat at 6.5%, which is the upper boundary of the central bank’s target band. Future economic developments will be greatly affected by the outcome of the October presidential election. The prospects of the incumbent president Dilma Rouseff have worsened following a series of news from the economy. CF lowered its growth outlook for both 2014 and 2015 by 0.1 pp and revised its inflation forecast upwards by 0.1 pp in 2015 only. The EIU lowered its inflation outlook for 2014 but left its other forecasts unchanged.



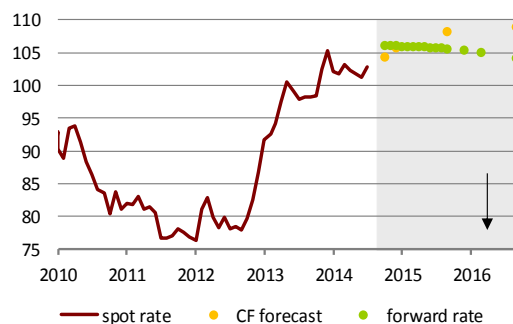
IV. Outlook of exchange rates vis-à-vis the US dollar

THE EURO



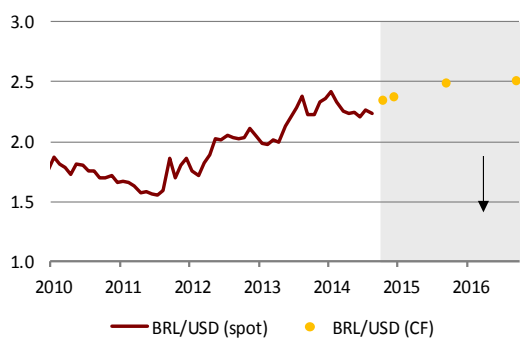
	08/09/14	10/14	12/14	09/15	09/16
spot rate	1.295				
CF forecast		1.316	1.304	1.275	1.278
forward rate		1.290	1.291	1.295	1.311

THE JAPANESE YEN



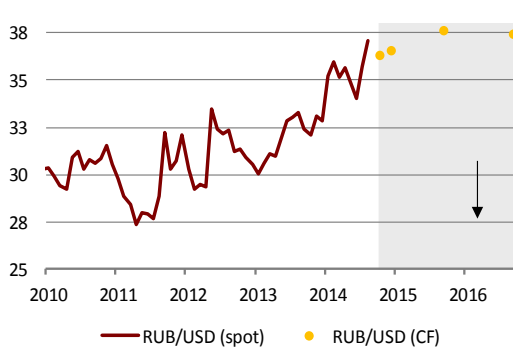
	08/09/14	10/14	12/14	09/15	09/16
spot rate	105.40				
CF forecast		104.30	105.60	108.20	108.80
forward rate		106.00	105.95	105.53	104.05

THE BRAZILIAN REAL



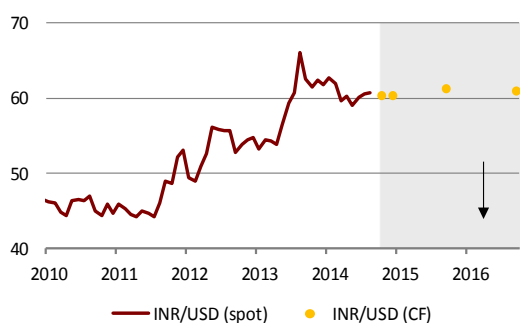
	08/09/14	10/14	12/14	09/15	09/16
spot rate	2.25				
CF forecast		2.34	2.37	2.49	2.50

THE RUSSIAN ROUBLE



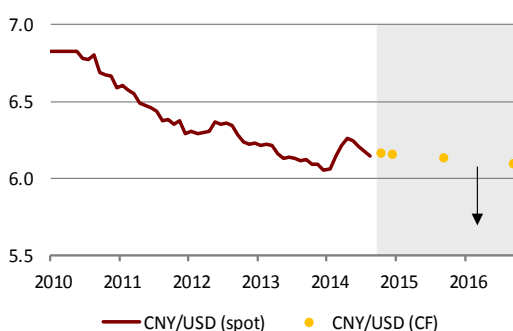
	08/09/14	10/14	12/14	09/15	09/16
spot rate	37.04				
CF forecast		36.28	36.51	37.61	37.42

THE INDIAN RUPEE



	08/09/14	10/14	12/14	09/15	09/16
spot rate	60.27				
CF forecast		60.22	60.26	61.12	60.93

THE CHINESE RENMINBI



	08/09/14	10/14	12/14	09/15	09/16
spot rate	6.14				
CF forecast		6.17	6.15	6.13	6.09

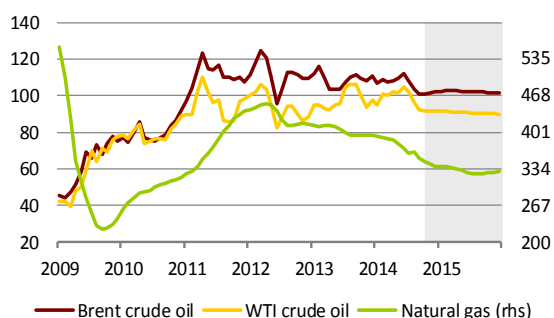
Arrow indicates currency appreciation against US dollar. Exchange rates as of last day of month. Forward rate does not represent outlook; it is based on covered interest parity, i.e. currency of country with higher interest rate is depreciating. Forward rate represents current (as of cut-off date) possibility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

V.1 Oil and natural gas

The marked downward trend in oil prices continued into August and the first half of September, mainly due to still strongly rising extraction in North America and further signs of a cooling of the global economy, particularly in Europe and China. A role was also played by the appreciating dollar and a sharp reduction in net long positions in futures markets by speculative investors as it became apparent that the conflicts in Iraq and Ukraine would not endanger oil supplies from Iraq and Russia for the time being, and exports from Libya increased at the same time. There is now a physical surplus in the market for light sweet Brent crude oil due to weak demand from European and Asian refineries. The Brent futures curve is thus in “contango” (prices of near futures are lower than those of more distant contracts). However, OPEC expects prices to rise gradually because of a seasonal rise in demand at the year-end and is not currently planning any across-the-board reduction of extraction limits. According to market forecasts, too, the price of Brent crude oil should increase to USD 104 a barrel (bbl) in the rest of the year. In 2015, the average price is expected to be USD 102/bbl. The September CF expects a price of USD 103.4/bbl one year ahead.

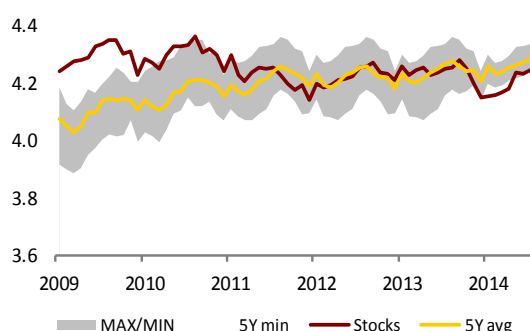
Spot prices of natural gas in Europe have been rising since July on concerns about a cut in Russian supplies, thus offsetting the strong fall recorded in the first half of this year. Long-term contracts for Russian natural gas (at the German border) increased in August, returning to the June level after a strong decline in July. By contrast, natural gas prices in the USA fell slightly further owing to cool weather in the summer, which allowed stocks there to be replenished at a record pace. Coal prices were flat after having risen modestly at the end of July and fell back slightly at the start of September. The outlook is slightly rising.

OUTLOOK FOR PRICES OF OIL AND NATURAL GAS

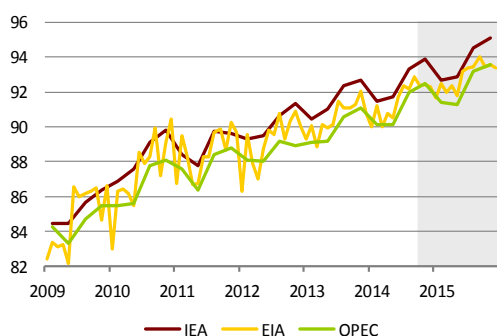


	Brent	WTI	Natural gas
2014	-2.69 ↘	-0.36 ↘	-8.77 ↗
2015	-3.37 ↘	-6.97 ↘	-10.26 ↘

TOTAL STOCKS OF OIL AND OIL PRODUCTS IN OECD

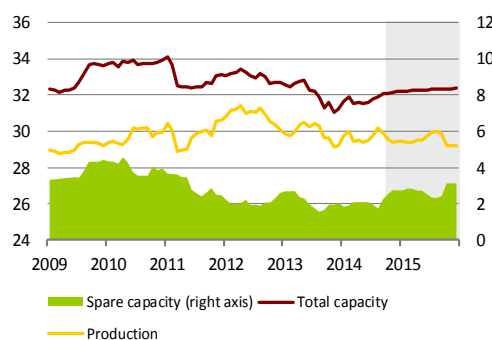


GLOBAL CONSUMPTION OF OIL AND OIL PRODUCTS



	IEA	EIA	OPEC
2014	1.06 ↘	1.15 ↘	1.31 ↗
2015	1.30	1.46 ↘	1.32

PRODUCTION, TOTAL AND SPARE CAPACITY IN OPEC COUNTRIES



	Production	Total capacity	Spare capacity
2014	-0.89 ↗	-0.72 ↗	1.60 ↗
2015	-0.37 ↘	1.45 ↘	26.06 ↗

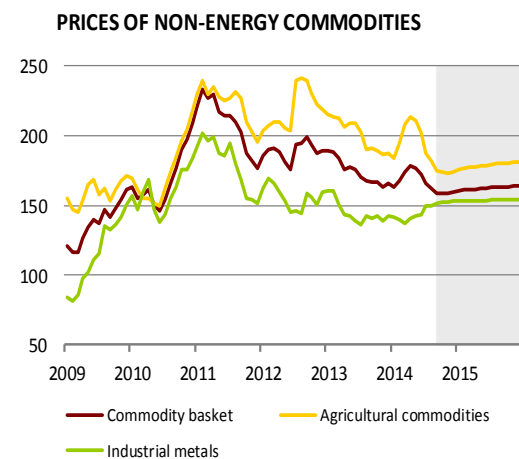
Note: Oil price in USD/barrel, price of Russian natural gas at German border in USD/1,000 m³ (IMF data, smoothed by the HP filter). Future oil prices (grey area) are derived from futures and future gas prices are derived from oil prices using model. Tables show annual percentage changes. Total oil stocks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

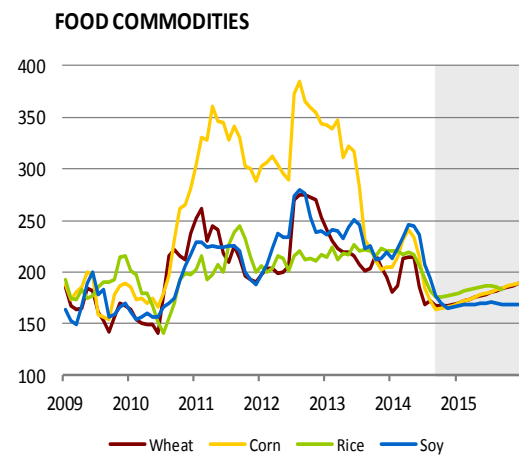
V.2 Other commodities

The non-energy commodity price index fell further, mainly due to a continued decline in the food commodity price index, while the average industrial metals price index edged up until mid-September after having been flat in August. Food commodity prices declined overall in August and the first half of September, albeit more slowly than in the previous two months. This year's favourable weather – a mild winter in Europe and a cool summer in the USA – led the USDA to forecast a bumper harvest. This pushed cereals prices down to four-year lows. Rainy weather in Western Europe, however, raises a question about the quality of this year's wheat from this region, and the conflict in Ukraine poses a risk to cereals deliveries from the Black Sea region. The decline in wheat prices has thus halted and the outlook (as in the case of corn) is rising. Pork prices increased in the past month after having fallen sharply in mid-August. However, they should move away from their recent historical high, as the outlook is declining markedly. Beef prices rose as well, again attacking their recent all-time high, and are expected to fall slightly in the outlook.

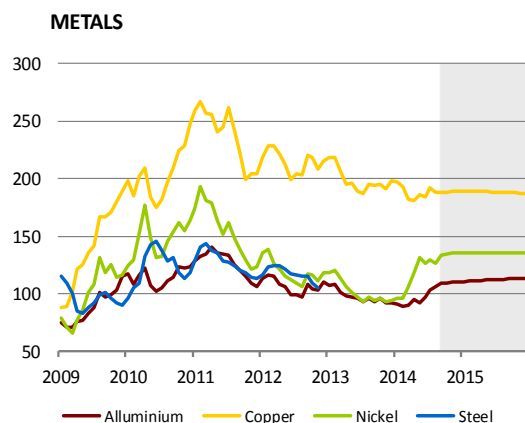
Industrial metals prices were pushed down by the appreciating dollar and the faltering recovery in Europe and China. The index thus increased thanks only to rising prices of aluminium in response to shrinking capacity in the sector. This process will continue, as suggested by a rising forecast for the aluminium price. Prices of other industrial metals were more or less flat. Imports of copper from Indonesia were renewed and the ban on exports of nickel ore from that country is already reflected in nickel prices. The cotton price stopped falling and went up slightly. By contrast, the price of rubber fell sharply again after a temporary stagnation and is approaching the low recorded in December 2008.



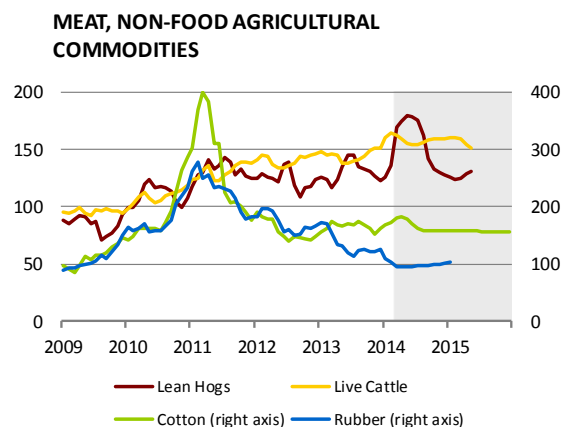
	Overall	Agricultural	Industrial
2014	-4.5	-5.6	0.9
2015	-2.3	-5.9	5.0



	Wheat	Corn	Rice	Soy
2014	-14.5	-29.3	-9.5	-11.0
2015	-2.4	-8.3	-7.4	-18.2



	Aluminium	Copper	Nickel
2014	3.0	-5.3	20.0
2015	11.7	0.1	10.9



	Lean hogs	Live Cattle	Cotton	Rubber
2014	17.2	9.5	1.1	-26.5
2015	-16.9	-0.9	-6.1	

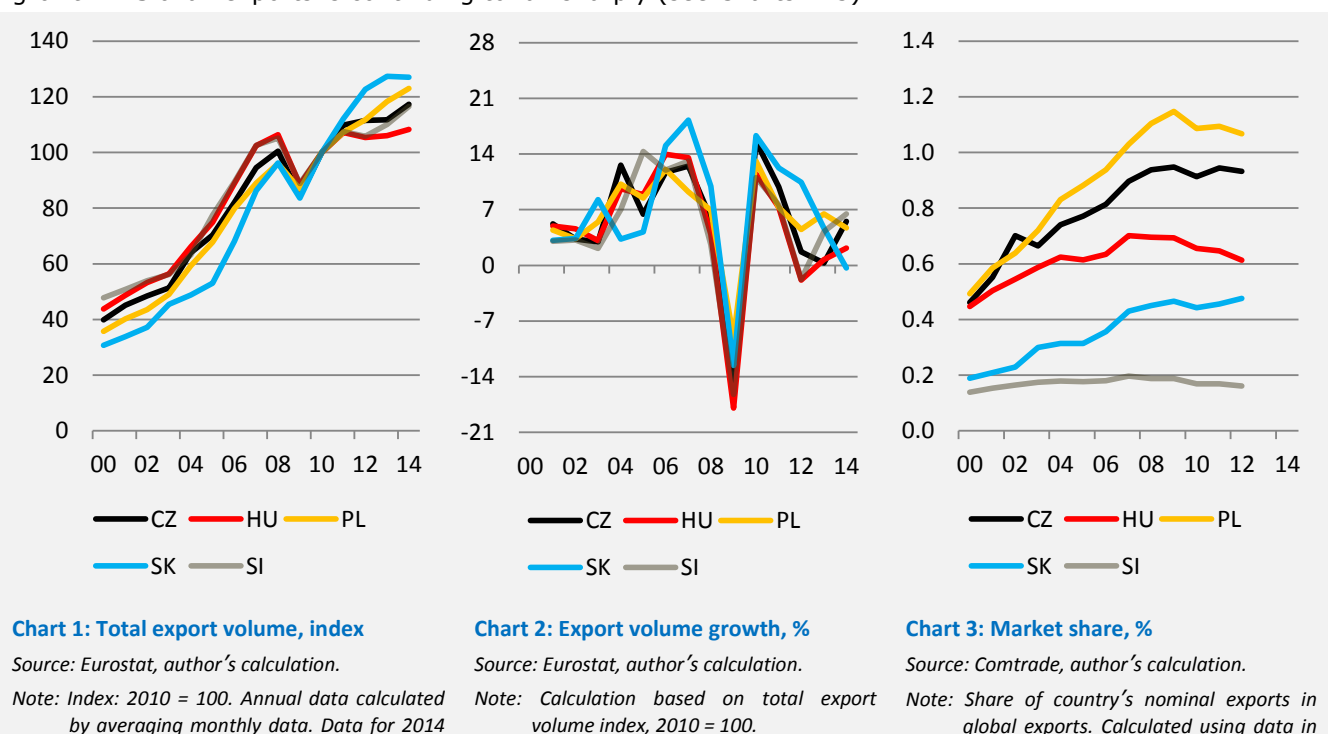
Note: Structure of non-energy commodity price indices corresponds to composition of The Economist commodity indices. All prices are given as indices, 2005 = 100 (charts) and percentage changes (tables).

Source: Bloomberg, CNB calculations.

Competitiveness and export growth in selected Central European countries¹

Following the onset of the global economic and financial crisis, the rapid growth in exports from the Visegrad Four and Slovenia switched to a sharp decline. Although the return to growth was relatively swift, export growth rates soon started sinking steadily towards zero in 2010. The data for 2014 so far indicate mixed trends. The decomposition of growth in total exports using the constant market share method points to different impacts of individual factors before the crisis and in 2010–2012. For example, we can see greater dependence of the countries under review on global demand than in the final few pre-crisis years as well as a negative contribution of specialisation in terms of both territorial and commodity structure. Moreover, constant market share analysis² reveals a drop in competitiveness for Poland and Hungary. The decomposition of growth in the most important export item – exports of manufactured goods to Germany – also shows different developments. Before the crisis, the Czech Republic was the most dependent of the five countries on German demand. At the time, Poland had the best competitive position and the largest benefits from specialisation. In recent years, however, the importance of competitiveness in the decomposition of export growth by source has declined and the positive contribution of specialisation has turned slightly negative. In the Czech Republic and Slovakia, the share of German demand in the decomposition of export growth has fallen in favour of competitiveness and, to a lesser extent, a positive effect of specialisation in the manufactured goods category.

Following EU entry, the Visegrad Four and Slovenia³ showed strong and stable growth in exports supported by massive inflows of foreign direct investment. When the crisis began, the fall in external demand caused growth in their foreign trade to slow, culminating in a sharp drop in 2009. Export growth returned to the pre-crisis level the next year but then started to slow gradually and almost halted. A decline in export share on the global market is also visible for Poland and Hungary. The only exception is Slovakia, whose export share has been rising in recent years. The data for the first four months of 2014 point to renewed growth in exports from Slovenia, the Czech Republic and Hungary. Growth in Polish exports is slowing gradually and growth in Slovak exports is continuing to fall sharply (see Charts 1–3).



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² This article uses an indicator of competitiveness calculated on the basis of constant market share analysis.

³ This article focuses on selected countries that entered the EU in 2004: the Czech Republic (CZ), Hungary (HU), Poland (PL), Slovakia (SK) and Slovenia (SI).

are average for January–April.

USD.

A decline in a country's global share, even just a marginal one, is a warning sign of a probable loss of competitiveness.⁴ It is important to know which factors accelerate or decelerate export growth by international comparison and to compare the changes in their significance over time. The methods for assessing the sources of export growth and, more generally, a country's competitiveness include constant market share analysis, which was proposed by Leamer and Stern (1970). It is based on the assumption that a country's share in global exports is constant over time. In other words, the exports of all countries should rise at the same pace. Observed deviations from the global average are due to several factors: (1) commodity structure – the country mostly exports goods for which demand is growing relatively slowly; (2) territorial structure – the country exports primarily to comparatively stagnating regions; (3) the country is unable to maintain market share because of a change in competitiveness. The contributions of all these factors can be described using a simple statistical identity (see Box 1).

Box 1: Decomposition of exports using constant market share analysis

We introduce the following notation: X are exports from country A ; WX are exports from all other countries; X_{ij} are exports of good i from country A to country j and X_i are exports of good i from country A to all other countries (trading partners); r is growth in global exports for the period from 0 to t and r_i is growth in global exports of good i in the same period. Leamer and Stern (1970) propose to decompose the change in exports ($X^t - X^0$) from country A into four sources using the following identity:

$$X^t - X^0 = \sum_{i=1}^K r X_i^0 + \sum_{i=1}^K (r_i - r) X_i^0 + \left(\sum_{i=1}^K \sum_{j=1}^N r_{ij} X_{ij}^0 - \sum_{i=1}^K r X_i^0 \right) + \left(\sum_{i=1}^K \sum_{j=1}^N X_{ij}^t - \sum_{i=1}^K \sum_{j=1}^N X_{ij}^0 - \sum_{i=1}^K \sum_{j=1}^N r_{ij} X_{ij}^0 \right) \quad (1)$$

$\sum_{i=1}^K r X_i^0$ is the hypothetical value of exports of the selected country in period t , which would be achieved assuming that the country's exports rise at a pace equal to the global average;

$\sum_{i=1}^K (r_i - r) X_i^0$ is the contribution of the commodity structure, i.e. the country's specialisation in exports of goods whose global exports are rising at an above-average pace. Its significance is due to the differences in the growth rates of individual categories of goods and to the global growth rate of exports;

$\sum_{i=1}^K \sum_{j=1}^N r_{ij} X_{ij}^0 - \sum_{i=1}^K r X_i^0$ is the rise/fall in exports due to territorial specificities of exports, i.e. above-average or below-average export growth;

$\sum_{i=1}^K \sum_{j=1}^N X_{ij}^t - \sum_{i=1}^K \sum_{j=1}^N X_{ij}^0 - \sum_{i=1}^K \sum_{j=1}^N r_{ij} X_{ij}^0$ is the rise/fall in exports due to rising/falling competitiveness. A negative (positive) sign indicates a fall (rise) in competitiveness. As (1) is an identity, "competitiveness" is basically the residual – the part of the change in export growth which is not explained by other factors. The residual is given by (2):

$$X_A^t - X_A^0 \left(\frac{X_A^t + X_W^t}{X_A^0 + X_W^0} \right). \quad (2)$$

On the basis of the elasticity of substitution between exports from country A and the rest of the world W , the relationship between the quantity of goods q and their price p is described by the following equation:

$$\frac{q_A}{q_W} = f \left(\frac{p_A}{p_W} \right). \quad (3)$$

By multiplying both sides of equation (3) by p_A/p_W and rearranging, we obtain:

$$\begin{aligned} \frac{p_A q_A}{p_A q_A + p_W q_W} &= \left(1 + \frac{p_W q_W}{p_A q_A} \right)^{-1} \\ &= \left\{ 1 + \left[\frac{p_A f(p_A/p_W)}{p_W} \right]^{-1} \right\}^{-1} \\ &= g \left(\frac{p_A}{p_W} \right) \end{aligned} \quad (4)$$

Equation (4) implies that the market share of country A remains constant and only p_A/p_W changes.

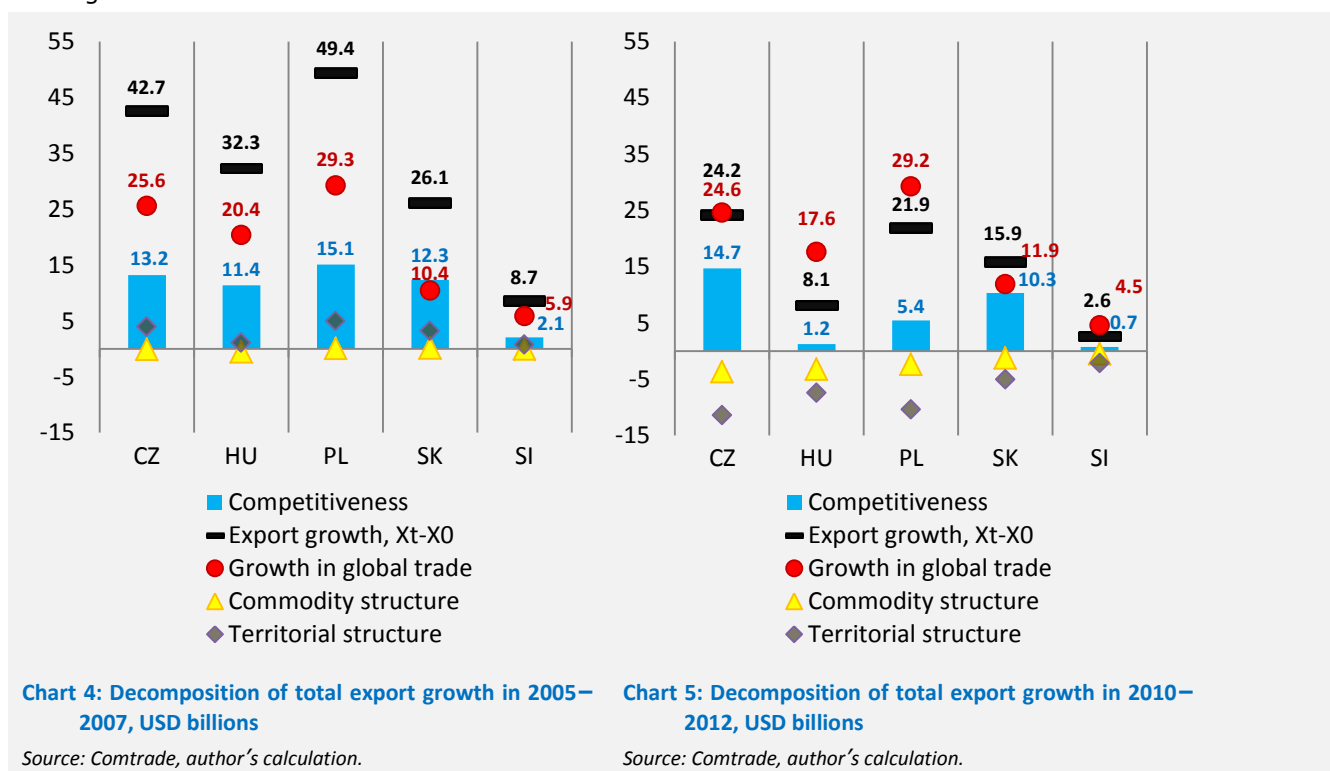
By dividing (2) by $X_A^t + X_W^t$ and combining (2) and (4), we obtain

⁴ As data on global exports are not available at constant prices, market shares can only be calculated on the basis of nominal prices. A decrease in market share can therefore mean either a decrease in volume, i.e. an actual decrease in market size and a loss of competitiveness, or slower price growth (or a price decline) compared to the global average. Conversely, if the price component records a relative decrease and the share of exports remains unchanged, the overall decline in market share indicates better competitiveness achieved through a rise in price competitiveness. It is also important to bear in mind that growth in market share is mostly reported by countries which previously had relatively low foreign trade. Take, for example, the economies of the former Communist bloc, whose foreign trade increased significantly following the start of transformation process. On the other hand, even if the market share of a very advanced country in terms of foreign trade changes only slightly over time, the change is substantial in absolute terms.

$$\frac{x_A^t}{x_A^t + x_W^t} - \frac{x_A^0}{x_A^0 + x_W^0} = g\left(\frac{p_A^t}{p_W^t}\right) - g\left(\frac{p_A^0}{p_W^0}\right). \quad (5)$$

Equation (5) links the value that can be calculated from the residual with the price conditions in each period.

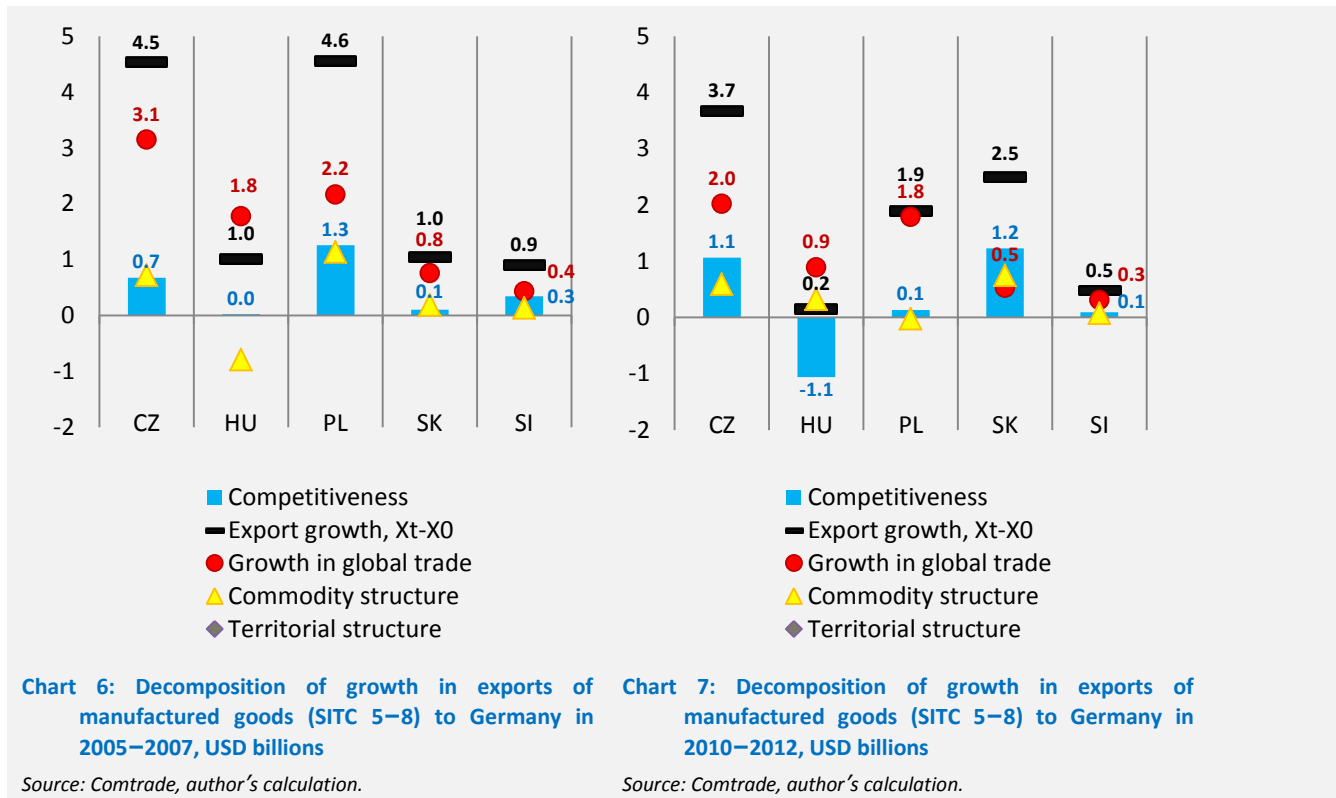
The decomposition of exports by factor is performed for two periods: (1) the increase in the last pre-crisis year (2007) relative to 2005, and (2) the increase in exports in 2012 (the most recent year for which data are available for all countries) relative to 2010, i.e. the year of the return to growth. Annual data on exports of goods from the five monitored countries broken down by one-digit SITC code and destination country were used for the empirical analysis.⁵ In 2010–2012, export growth was much weaker than in 2005–2007, with an apparent drop in the contribution of competitiveness to export growth in Hungary and Poland and to a lesser extent also in Slovakia (see Charts 4 and 5). The importance of competitiveness in Slovakia declined in absolute terms (from USD 12.3 billion to USD 10.3 billion), but its share in the overall change went up (from 47% to 65%). The Czech Republic was the only country to record a rise in the contribution of competitiveness in both absolute terms (from USD 13.2 billion to USD 14.7 billion) and relative terms (from 31% to 61%). The absolute importance of growth in global trade, i.e. global demand, is roughly the same for both periods, but as a result of the significantly lower export growth in 2010–2012 and a decline in the contribution of the territorial and commodity structure its percentage share of total growth is about double the figure observed in 2005–2007.



Germany dominates the territorial structure of exports of all five countries by a large margin. Its share of total exports is between 21% and 31%. For comparison, the share of the second most important trading partner is only between 5% and 14% for all five countries. Specialisation in exports of manufactured goods is another common feature of these countries. Therefore, the following analysis focuses on the relationship with the largest European economy and examines the most important export item of Central European economies – exports of manufactured goods to Germany. Charts 5–6 show the sources of growth in exports to Germany in SITC groups 5–8.⁶

⁵ The “intensive” component of export growth, i.e. export items observed both in 2005 (2010) and 2007 (2012), was used for the calculation. Export flows absent in one period are not included in the calculation of total exports in the other period either. Their share of the total is insignificant for all the data in the detailed breakdown used in this article.

⁶ SITC stands for the Standard International Trade Classification, which consists of ten main groups (0–9). Manufactured goods are included in the following groups: 5 – Chemicals and related products, n.e.s., 6 – Manufactured goods classified chiefly by material, 7 – Machinery and transport equipment, and 8 – Miscellaneous manufactured articles. The calculation is based on data in the most detailed (five-digit) SITC breakdown.



The contribution of competitiveness to growth in exports of manufactured goods to Germany is much smaller – and in the case of Hungary even zero or negative – than the importance of competitiveness in the breakdown of total exports. By contrast, the contribution of the commodity structure is mostly positive (but mostly negative for total exports). The absolute contribution of German demand fell significantly for growth in exports from the Czech Republic and Hungary. Its relative importance, however, grew several times in the case of Hungary. In the Czech Republic, by contrast, the percentage share of German demand in total growth went down, although it remained dominant. The largest contributions of German demand can also be observed for Polish and Slovenian exports. As regards Slovakia, external demand was the most important source of exports in 2005–2007, but was replaced by competitiveness in 2010–2012. The contribution of competitiveness to total growth in Slovak manufacturing exports to Germany was the largest in this period in both absolute and percentage terms. The Czech Republic and Slovakia are the strongest countries in terms of competitiveness as defined in the constant market share analysis. However, succeeding on the German market is quite a tough task for Central and South-Eastern European countries. The importance of international trade is strongly asymmetrical: Germany is the most important trading partner country for all five countries, but the share of each of them in German imports is small. Overall, Germany has a very differentiated import structure, so each trading partner has a relatively small share. For example, the share of Germany's largest trading partner – France – is less than 10%. Market share can thus change relatively quickly in favour of countries which already account for a large proportion of German imports and whose exports to Germany are recording high growth rates.

Chart 8 shows the sizes and growth rates of manufactured goods exports to Germany from its major trading partners excluding core EU countries and Switzerland. China was the biggest exporter among these countries. Its SITC 5–8 exports amounted to USD 65 billion in 2013. Italy (USD 54 billion), the Czech Republic (USD 46 billion) and Poland (USD 40 billion) followed some way behind. Exports from other countries did not exceed USD 25 billion. With the exception of Italy, the biggest exporters also recorded strong nominal export growth between 2007 and 2013. However, exports from Slovakia and Romania grew at the fastest pace. If Romania maintains its high export growth rate, it could affect the market shares of Central European economies in the future. Germany's share in total goods exports from China and other Asian economies does not exceed 3% (see Chart 9). However, given the importance of manufactured goods imports from China in absolute terms, China represents the biggest risk in terms of competitiveness for Central European economies, which are the most dependent on German demand. To arrive at a firm conclusion, however, we would need to conduct a detailed analysis comparing the countries' specialisations – an analysis of potential competitors, unit labour costs, infrastructure development, administrative and legislative support for investment, and many other factors.

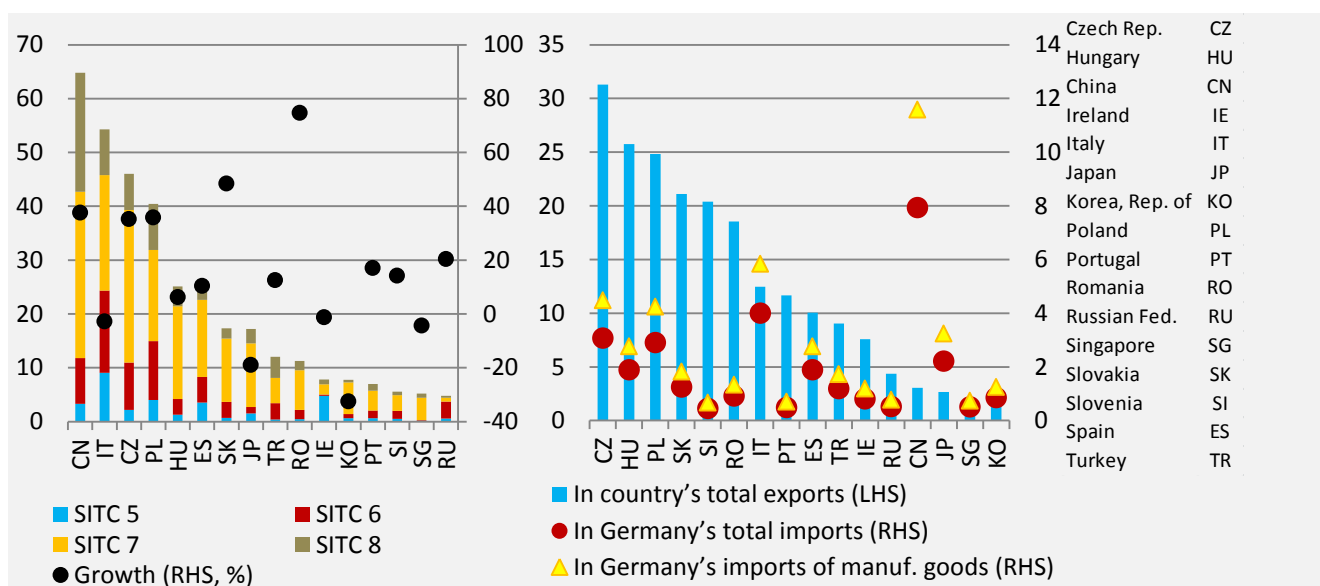


Chart 8: Exports to Germany in 2013, USD billions **Chart 9: Share of manufacturing exports to Germany in 2013, %**

Source: Comtrade, author's calculation.

Note: Export growth (Chart 8) is calculated for 2007–2013. Data for Austria, Brazil, Mexico and many other countries were not available at the time this article was prepared.

To conclude, constant market share analysis and a simple comparison of export growth rates show that the Czech Republic and Slovakia maintained a relatively strong competitive position despite a visible slowdown in 2010–2012. They were followed by Poland and Slovenia in terms of competitiveness. Although constant market share analysis suggests a potential decline in Poland's competitiveness in recent years, the significant growth in Polish exports compared to the pre-crisis period still makes a return to growth possible. The outlook for Hungary is somewhat worse. Alongside a drop in export growth it recorded a fall in competitiveness. Greater importance of global demand (i.e. global factors) than before the crisis can now be observed in all the Central European countries under review. It must be stressed, however, that this competitiveness analysis is based only on selected indicators and so does not represent a comprehensive analysis of each country's competitiveness.

References:

Leamer, Edward E., and Stern, Robert M., (1970): *Quantitative International Economics*. Boston: Allyn and Bacon, chapter 7, pp. 171–183.

A1. Change in GDP predictions for 2014

	CF		IMF		OECD		CB / EIU	
EA	-0.1	2014/9 2014/8	-0.1	2014/7 2014/4	0.2	2014/5 2013/11	-0.1	2014/9 2014/6
US	0.0	2014/9 2014/8	-1.1	2014/7 2014/4	-0.3	2014/5 2013/11	-0.7	2014/6 2014/3
DE	-0.2	2014/9 2014/8	0.2	2014/7 2014/4	0.2	2014/5 2013/11	0.2	2014/6 2013/12
JP	-0.3	2014/9 2014/8	0.2	2014/7 2014/4	-0.3	2014/5 2013/11	-0.1	2014/7 2014/4
BR	-0.1	2014/9 2014/8	-0.5	2014/7 2014/4	-0.4	2014/5 2013/11	0.0	2014/9 2014/8
RU	-0.2	2014/9 2014/8	-1.1	2014/7 2014/4	-1.8	2014/5 2013/11	-0.2	2014/9 2014/8
IN	0.1	2014/9 2014/8	0.0	2014/7 2014/4	-0.2	2014/5 2013/11	0.0	2014/9 2014/8
CN	0.0	2014/9 2014/8	-0.1	2014/7 2014/4	-0.8	2014/5 2013/11	0.2	2014/9 2014/8

A2. Change in inflation predictions for 2014

	CF		IMF		OECD		CB/EIU	
EA	0.0	2014/9 2014/8	-0.6	2014/4 2013/10	-0.5	2014/5 2013/11	-0.1	2014/9 2014/6
US	0.0	2014/9 2014/8	-0.1	2014/4 2013/10	-0.3	2014/5 2013/11	0.1	2014/6 2014/3
DE	0.0	2014/9 2014/8	-0.4	2014/4 2013/10	-0.7	2014/5 2013/11	-0.2	2014/6 2013/12
JP	0.1	2014/9 2014/8	-0.1	2014/4 2013/10	0.3	2014/5 2013/11	0.0	2014/7 2014/4
BR	0.0	2014/9 2014/8	0.1	2014/4 2013/10	0.9	2014/5 2013/11	-0.1	2014/9 2014/8
RU	0.4	2014/9 2014/8	0.1	2014/4 2013/10	0.3	2014/5 2013/11	0.8	2014/9 2014/8
IN	0.2	2014/9 2014/8	-0.9	2014/4 2013/10	-1.4	2014/5 2013/11	0.0	2014/9 2014/8
CN	0.0	2014/9 2014/8	0.0	2014/4 2013/10	0.0	2014/5 2013/11	-0.1	2014/9 2014/8

A3. List of abbreviations

BoJ	Bank of Japan	DE	Germany
BR	Brazil	EA	euro area
BRIC	Brazil, Russia, India and China	EC	European Commission
CB-CCI	Conference Board Consumer Confidence Index	ECB	European Central Bank
CB-LEII	Conference Board Leading Economic Indicator Index	EC-CCI	European Commission Consumer Confidence Indicator
CBOT	Chicago Board of Trade	EC-ICI	European Commission Industrial Confidence Indicator
CF	Consensus Forecasts	EIU	The Economist Intelligence Unit database
CN	China	EEA	European Economic Area
CNB	Czech National Bank	ES	Spain
DBB	Deutsche Bundesbank	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

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