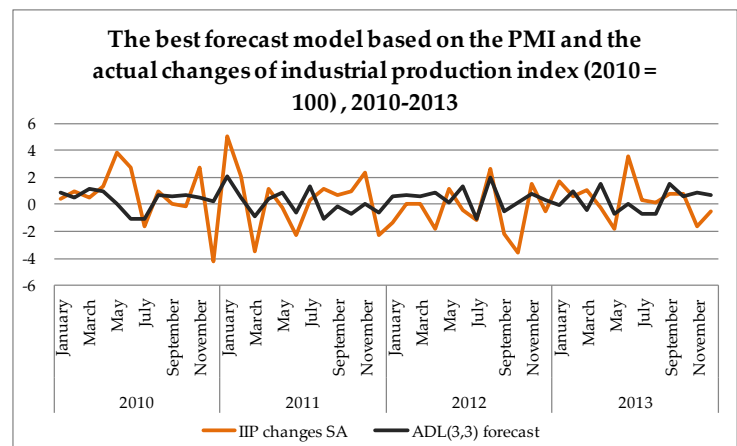
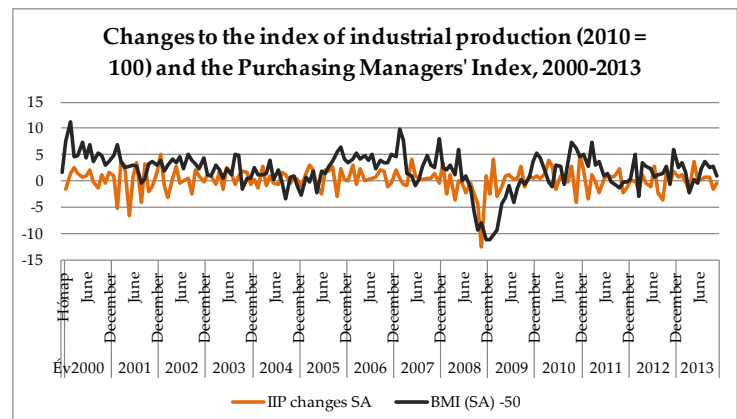
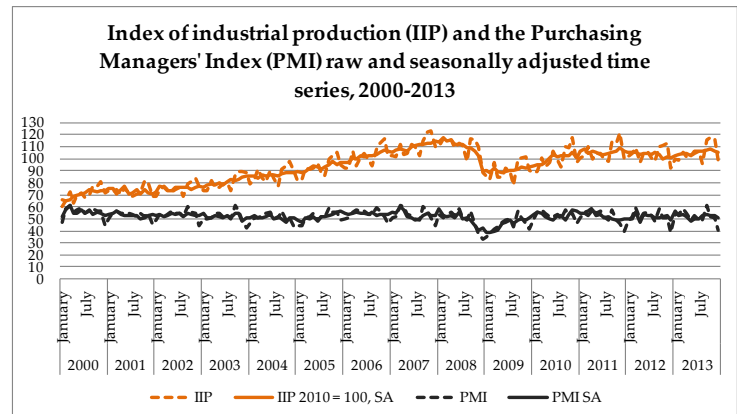


The latest study from HCCI IEER examined the predictive strength of the Purchasing Managers' Index (PMI). Concerning the direction of change of industrial production, PMI forecasts are more accurate in the case of growth while in the case of decline its forecasts are less accurate. However when examining the extent of changes, it can be seen that t+3 months changes in the values of industrial production are significantly connected to the changes in the PMI.

The latest analysis of HCCI IEER examined whether the Purchasing Managers' Index (PMI) published by the Hungarian Association of Logistics, Purchasing and Inventory Management (MLBKT in Hungarian) is able to predict the industrial production volume index of the Hungarian economy. The PMI is a business climate indicator of the Hungarian economy which is based on a monthly survey of one hundred and ten manufacturing company managers responsible for purchases.

One objective of the analysis was to examine in what extent the PMI can predict the direction of change in industrial production for (an equivalent or later) month(s). This may be considered as a measure of success of the indicator. Our results show that the PMI was significantly more accurate for those months in which the volume of industrial production increased. For the PMI indicator it was more difficult to predict an aggregate decline in industrial production. During the pre- and post-crisis periods, different performance was observed: in general after the crisis the forecasting ability of the PMI worsened, both in terms of growth and contraction, but this isn't independent from the number of delays.

According to regression forecast models based on time series, however, it was found that there is a significant partial correlation between the volume index of industrial production and the three months earlier PMI value, which reinforces the forecast indicator aspect of the PMI. If the seasonally adjusted growth of the PMI increases by 1 point compared to the growth of the previous month – *ceteris paribus* – a 0.24 percentage point increase can be seen in industrial production volume (2010 = 100) three months later. Overall, therefore, it can be concluded that with the help of PMI values it is possible to forecast – to a limited extent – changes in the volume of industrial production, however it is more appropriate for predicting positive change as opposed to negative change.



Macroeconomic trends: Growth prospects remain subdued. Quarterly forecast of Ifo, Insee, and Istat institutes

According to the quarterly forecast of Ifo, Insee, and Istat institutes, in Q3 2014 economic activity of the Eurozone is expected to increase again, but only moderately, as geopolitical concerns are still strong and seem to affect investors' confidence. GDP is projected to increase by 0.2% in the third and fourth quarter, and expand by 0.3% in Q1 2015. This masks increasing asymmetries across euro area economies. The recovery is expected to be mainly driven by a gradual improvement in domestic demand conditions. Private investment is expected to restart over the forecast horizon triggered by improved liquidity conditions and lower cost of capital, after the sharp adjustment following the financial crisis. The rise in production activity and increasing demand for new production capacity will be the main factor underpinning the recovery. Consumption prospects remain positive, albeit subdued, as the recovery in the labor market is projected to be gradual. Under the assumptions that the oil price stabilises at USD 97 per barrel and that the dollar/euro exchange rate fluctuates around 1.28, the headline inflation is expected to increase only marginally over the next two quarters, remaining significantly below the threshold of 2%. Key downside risks to this scenario comprise the effective recovery of investment and the increases in the savings rate of private households owing to deleveraging. A weaker external demand from emerging economies, especially from Asia and Latin America, as well as a greater impact of international tensions in Eastern Europe and the Middle East, might also be a drag on the exports and investment.

Slight rebound in Industrial Production

In the face of rising geopolitical uncertainties, and after a disappointing Q2 2014 in terms of activity, recent consumer and business surveys for the Eurozone have deteriorated. They are however still compatible with a mild output growth in the Eurozone.

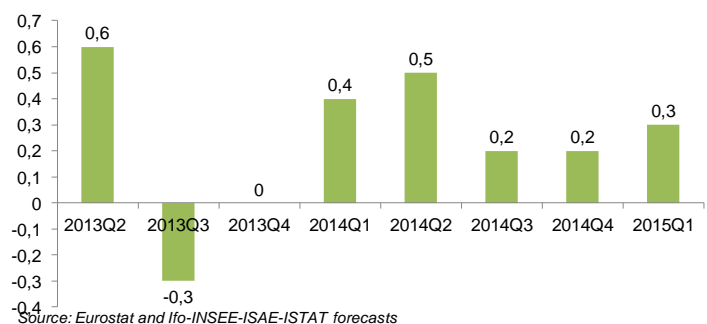
In line with expectations, industrial production in the Eurozone bounced back in July (+1.0% after -0.3% in June and -1.0% in May). The negative results reported in May and June were mainly due to calendar effects, with most countries experiencing bridge days in Q2 2014. For the next three quarters, industrial output growth is forecasted to return to a subdued positive pace (+0.2% in Q3 2014 and Q4 2014, +0.3% in Q1 2015).

GDP – low growth in sight

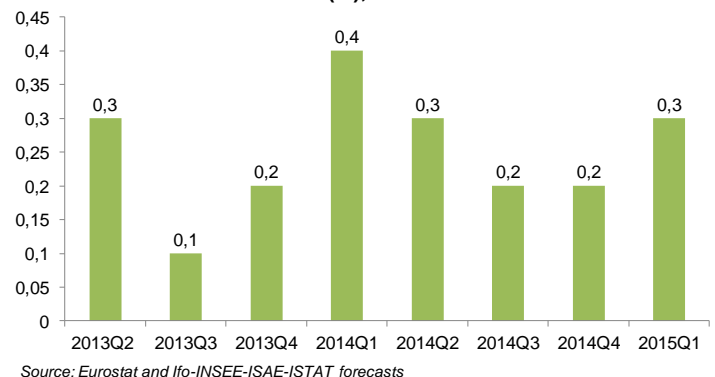
GDP growth is expected to remain subdued in Q3 2014 and Q4 2014 – with geopolitical uncertainty inducing a wait-and-see position by economic agents –, before increasing slightly in Q1 2015. The recovery is however characterised by regional asymmetries, driven by growth in Spain and Germany.

GDP growth is forecasted to increase to +0.2% in Q3 and Q4 from 0.0% in the previous quarter, and to reach +0.3% in Q1 2015. Accordingly, GDP growth for the Eurozone is expected to be +0.8% in 2014, still below potential output expansion.

Forecasted increase in industrial production compared to previous quarter, Eurozone (%), 2013Q2-2015Q1



Forecasted GDP growth compared to previous quarter, Eurozone (%), 2013Q2-2015Q1



According to the current levels of business and consumer surveys, consumption and investment are expected to expand moderately in Q3 2014 (+0.1% and +0.3% respectively).

During the next two quarters, the recovery in the labor market is expected to continue, albeit at pace too low to significantly allow a marked decline in the unemployment rate. As wages continue to grow – especially in real terms with inflation remaining subdued –, real disposable income will support consumption in the Eurozone. The expansion of consumption will therefore slightly pick up, growing by +0.2% in Q4 2014 and by +0.3% in Q1 2015.

On the back of a gradual improvement of domestic demand prospects, positive external demand and increasing capacity utilisation, investment growth should pick up over the forecast horizon (+0.4% in Q4 2014, +0.5% in Q1 2015).

However, the acceleration of investment will be mainly driven by business equipment, while construction spending is expected to remain weak over the forecast horizon.

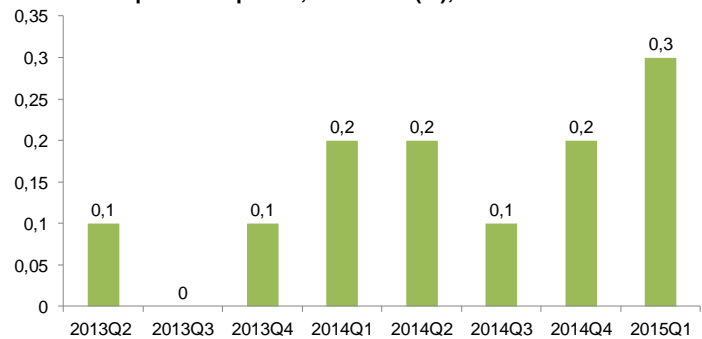
Inflation increases only marginally

In September 2014, inflation hit a year-on-year growth of +0.3% which is a further reduction from the +0.6% reported in Q2 2014. Under the assumptions that the oil price stabilises at USD 97 per barrel and that the dollar/euro exchange rate fluctuates around 1.28 over the coming quarters, the headline inflation is expected to increase marginally in Q3 (+0.3%), Q4 2014 (+0.5%) and Q1 2015 (+0.6%).

This trend partly reflects impulses from energy and food prices, while domestic price pressures are expected to remain subdued: given the relatively weak demand and a persistently high unemployment, core inflation is not expected to rise.

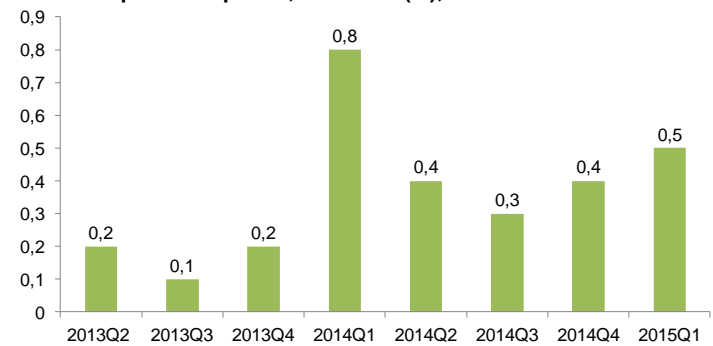
Source: Euro-zone Economic Outlook. October 6, 2014 (<http://www.cesifo-group.de/ifoHome/facts/Forecasts/Euro-zone-Economic-Outlook/Archive/2014/eeo-20141006.html>)

Forecasted increase in consumption compared to previous quarter, Eurozone (%), 2013Q2-2015Q1



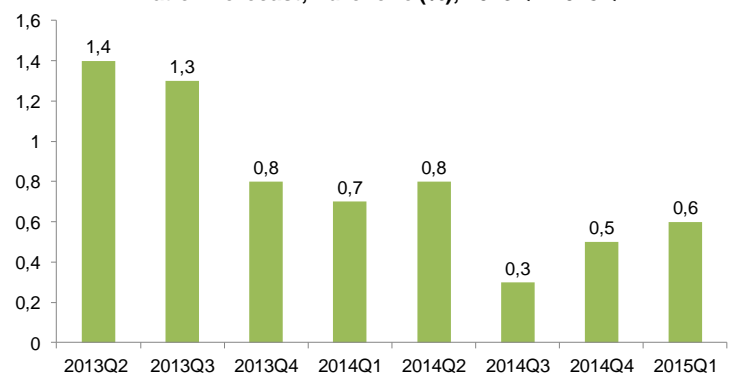
Source: Eurostat and Ifo-INSEE-ISAE-ISTAT forecasts

Forecasted increase in investment compared to previous quarter, Eurozone (%), 2013Q2-2015Q1



Source: Eurostat and Ifo-INSEE-ISAE-ISTAT forecasts

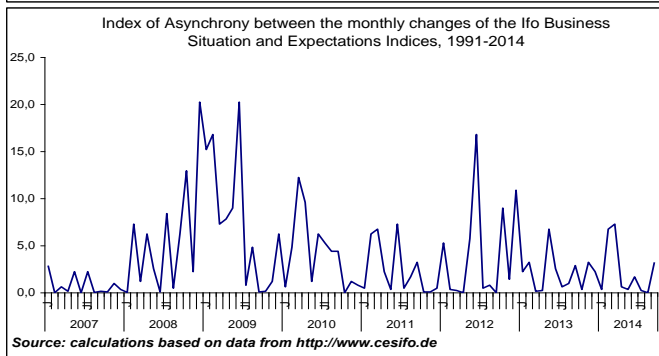
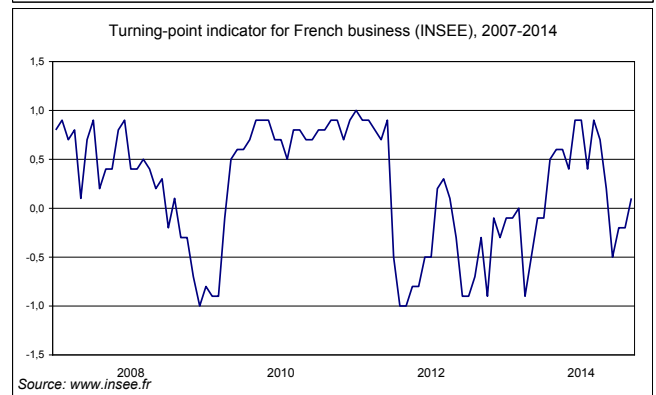
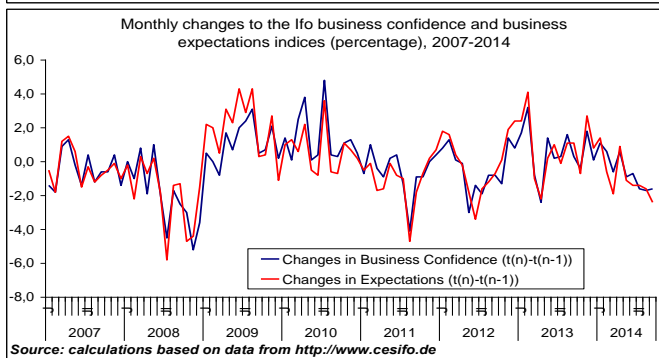
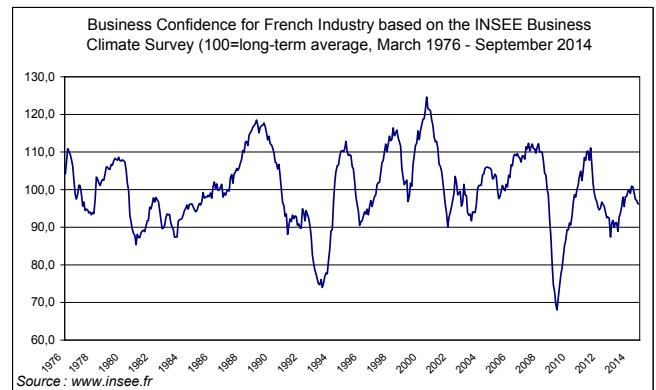
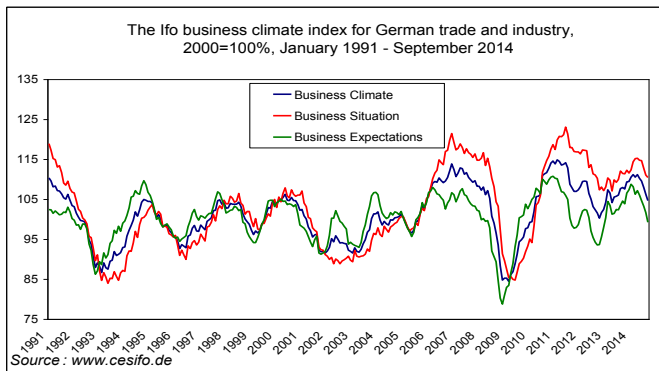
Inflation Forecast, Eurozone (%), 2013Q2-2015Q1



Source: Eurostat and Ifo-INSEE-ISAE-ISTAT forecasts

The Ifo Business Climate Index for industry and trade in Germany fell in September to 104.7 points from 106.3 points in the previous month. The index dropped to its lowest level since April 2013. Assessments of the current business situation were once again less favourable than last month. Expectations with regard to the six-month business outlook fell to their lowest level since December 2012. The gap between the current business situation and the expected developments, as calculated by the IEER Index of Asynchrony, increased in September, so the business confidence index showed higher uncertainty than in the previous month. According to Ifo analysts, the German economy is no longer running smoothly. (Source: Ifo, <http://www.cesifo-group.de>)

According to the business managers surveyed in September 2014, the business climate in French industry is stable compared to the previous month. The composite indicator stands at four points below its long-term average. The turning-point indicator is nearly stable compared to August and is in the zone indicating an economic uncertainty. The balance of opinion on past change in production has decreased by five points and is below its long-term average. The balance of opinion on personal production expectation has sharply gone up after several consecutive months decline: it is now slightly below its long-term average. The balance on general production expectations, which represents business managers' opinion on French industry as a whole, has recovered, but remains below its long-term average. (Source: INSEE, <http://www.insee.fr>)



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In case of publication please cite as follows:
IEER Monthly Bulletin of Economic Trends,
October / 2014, Budapest,
2014-11-12