

CECIMO Statistical Toolbox

November 2015



cecimo
European Association of
the Machine Tool Industries

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Glossary

The items in grey are not available in this edition of the Statistical Toolbox.

Introduction

The European Commission paints a relatively positive picture of the next two years. In its latest forecast, the euro area's real GDP is estimated to grow by 1.6% in 2015, rising to 1.8% in 2016 and 1.9% in 2017. For the EU as a whole, the real GDP is expected to rise from 1.9% this year to 2.0% in 2016 and 2.1% in 2017. Domestic demand is strengthening this year in most Member States part of the euro area, and economic activity should increase across the EU in 2016 and 2017. Private consumption is growing thanks to nominal incomes' rising and inflation remaining low. Investment is also expected to strengthen somewhat because the households' disposable incomes are increasing, corporations' profit margins are improving, the financing conditions are favourable and the outlook for demand is brighter.

On the other hand, risks related to the global economic outlook have increased related to, for instance, lower growth in emerging markets, in particular in China, the expected normalisation of US monetary policy. These could have a more negative impact than currently expected on investment and economic activity in Europe. So far, the euro area's exports have largely been spared from the deterioration in global trade, mainly thanks to the euro's low exchange rates, but these effects are limited and export growth is expected to slow down in 2016 before rising slightly in 2017.

The European machine tool industry has clearly profited from favourable exchange rates. In 2015, the sector estimates the shipments of machine tools reach to 18.6 billion euro which is the second best result of all times. Nevertheless, the CECIMO Business Climate Barometer reflects uncertainty similar to those recorded in the global economy. In the latest Barometer, European machine tool companies are considerably more pessimistic about the future than last July.

The European economic sentiment indicator has been relatively stable during the last months. The indicator remained broadly unchanged in October. Amongst the largest European economies, the sentiment brightened in France (+1.6 percentage points) and Italy (+0.9), while it decreased in Germany (-0.7) and Spain (-0.7) and, more markedly, in the Netherlands (- 2.4). Among different sectors, industry shows flat development, confidence index increasing 0.3 percentage points.

Trade negotiations are clearly an opportunity to boost global trade. In October, the European Commission and the US Trade representative held the eleventh round of TTIP negotiations in Miami. The negotiating teams discussed three of the negotiations' pillars: market access, regulatory cooperation, and rules. To support the efforts of negotiating parties, CECIMO and our American colleagues, the AMT, issued a common statement on the views of the sector on the TTIP. The main points are:

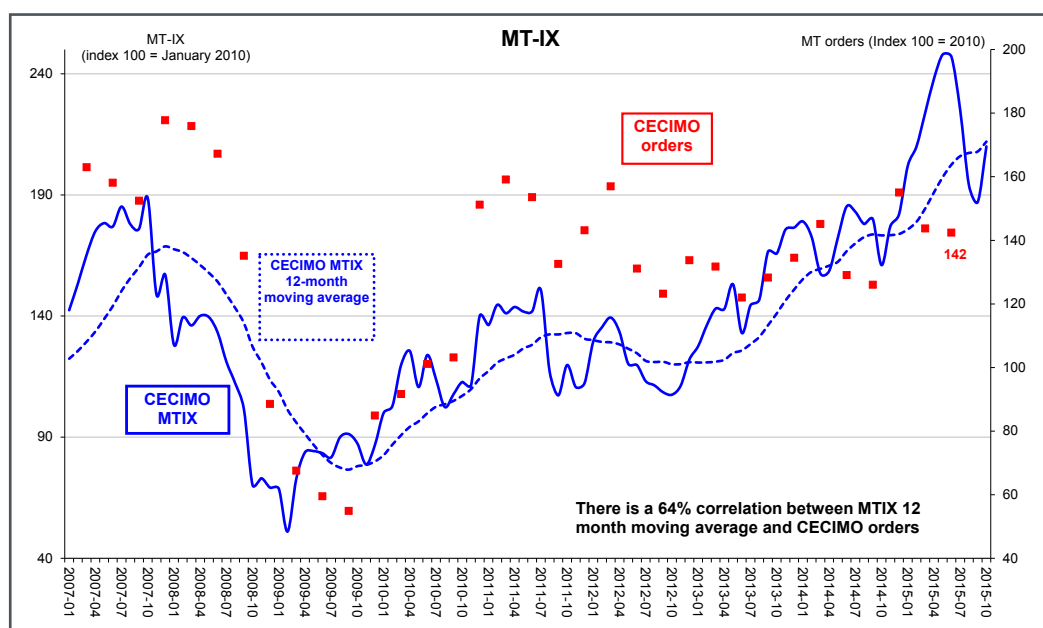
- Policymakers should make efforts to standardise the testing procedures and authorisation processes. The present different requirements force companies to invest time and resources in duplicative procedures in order to demonstrate compliance.
- European and American legislators equally prioritise the safety of machines, the safety of shop floors. Therefore, negotiating parties should aim for the mutual recognition of technical requirements for machine tools in line with the international consensus-based standards.
- TTIP should improve SME's access to information and markets.
- A transparent and predictable regulatory environment is crucial for the future of the industry.

1. Data specific to the European machine tool market

▲ 1.3 MT-IX ⁱ

In October, the MT-IX increase of 12.3%. The index gained 23 points compared to September's value, and posted at 210 points in October 2015.

The market value of machine tool companies decreased in Taiwan and the United Kingdom. In the euro area and Switzerland, the market capitalisation of machine tool companies booked more varied results. The market capitalisation of companies increased in Brazil, Japan, South-Korea and the United States.

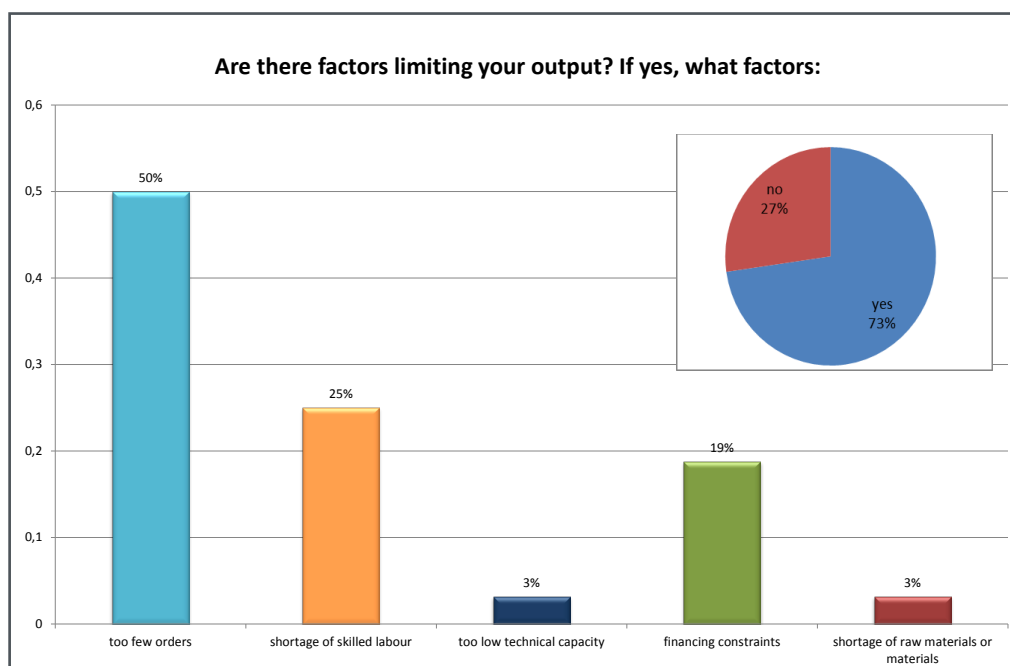
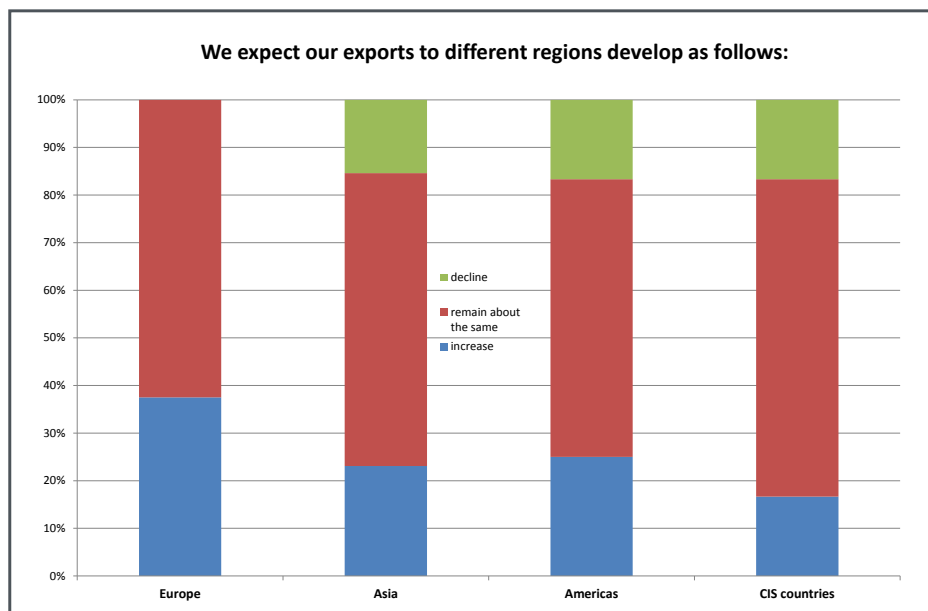
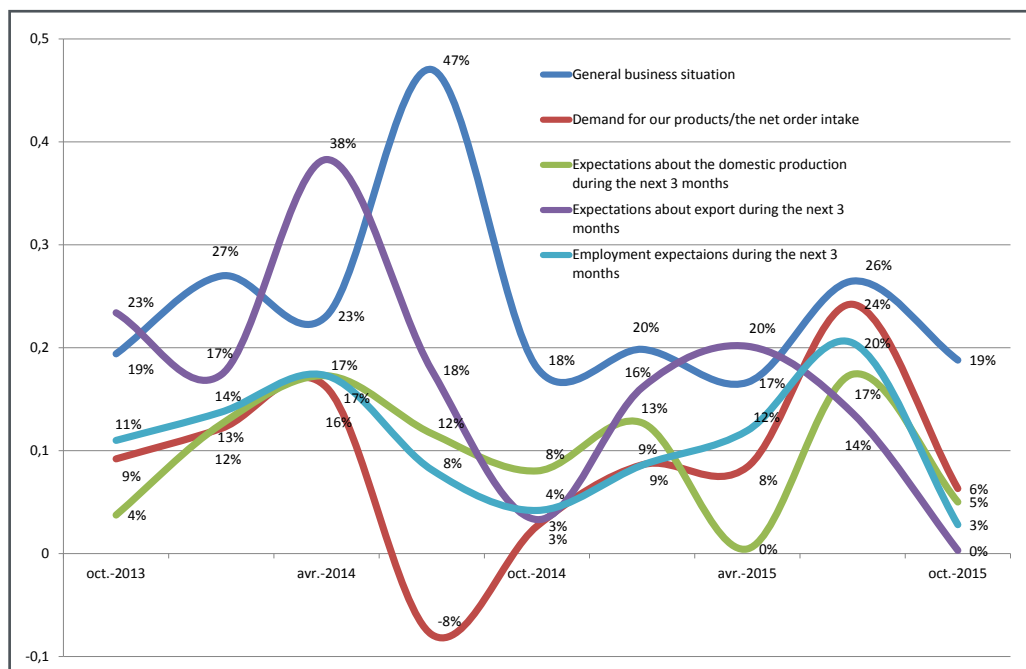


▼ 1.6 CECIMO Business Climate Barometer

In October, the CECIMO Business Climate Barometer clearly shows that the European economy is cooling down. The survey included 71 machine tool companies in Europe and was distributed to the respondents between 19 October and 20 November 2015. The responses to questions in the CECIMO Business Climate Barometer are analysed as the difference ("net percentage") between the share of companies reporting increase and the share of companies reporting decrease in their business activities.

The net percentage of companies reporting a good business situation declined to 19% in October from 26% in July 2015. Expectations about the demand for machine tools and production volumes dropped as well. European machine tool builders are cautious about hiring additional workers.

The export opportunities have been further reduced because of the global growth's slowdown. The net percentage of companies expecting the exports to increase during the next 3 months dropped to 0% compared to 14% in July. Europe is the export market with the most potential, not a single respondent forecasts its exports to Europe to decline. Machine tool builders are less positive about the Americas and Asia. The CIS countries remain the export markets with the least opportunities for European companies, since they often produce high-end machines falling under dual use classification.

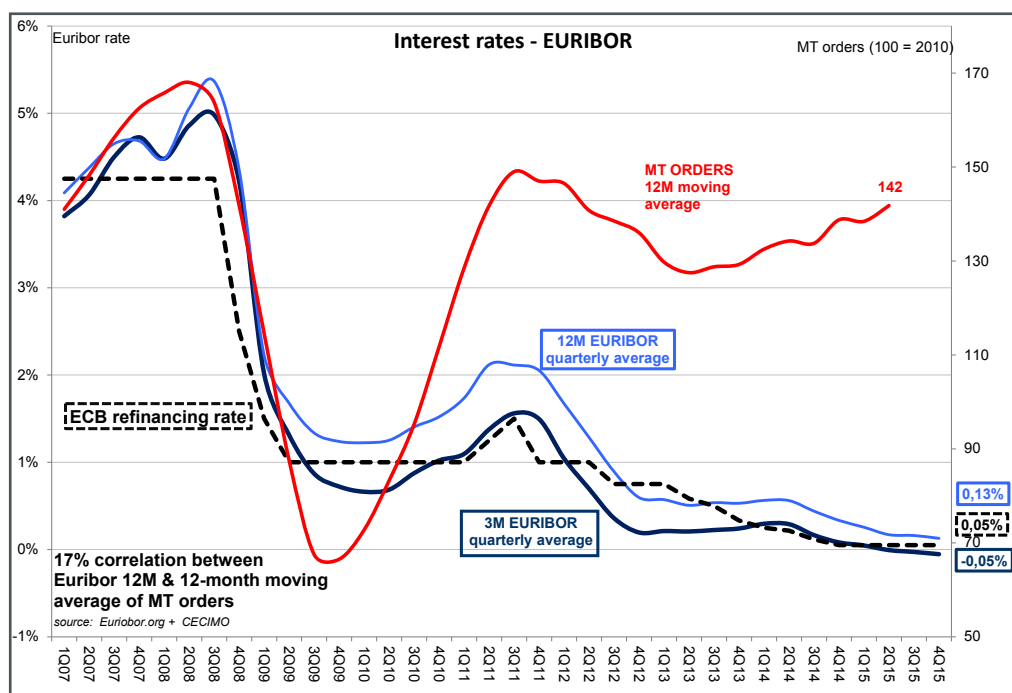


2. Macroeconomic data in relation with machine tool orders

▼ 2.2 Interest rates – EURIBOR ^①

The average 3-month Euribor and 12-month Euribor recorded respectively -0.05% and 0.13% in October. Compared to September, the average 3-month Euribor decreased by 1 percentage point and the average 12-month Euribor by 2 percentage points. The European Central Bank kept its key interest rates unchanged.

The euro area annual inflation was 0.1% in October 2015, up from -0.1% in September. Despite the upturn of inflation, the European economy struggles to increase growth and economic activity. The European Central Bank will very likely do something in December to further stimulate the eurozone's economy, by extending or enlarging its experiment in unconventional monetary policy.



▼ 2.3 Industrial production index ^①

In September 2015 compared with August 2015, the seasonally adjusted industrial production fell by 0.3% in the euro area and by 0.1% in the EU28, according to estimates from Eurostat, the statistical office of the European Union. In August 2015, industrial production fell by 0.4% and 0.2% respectively.

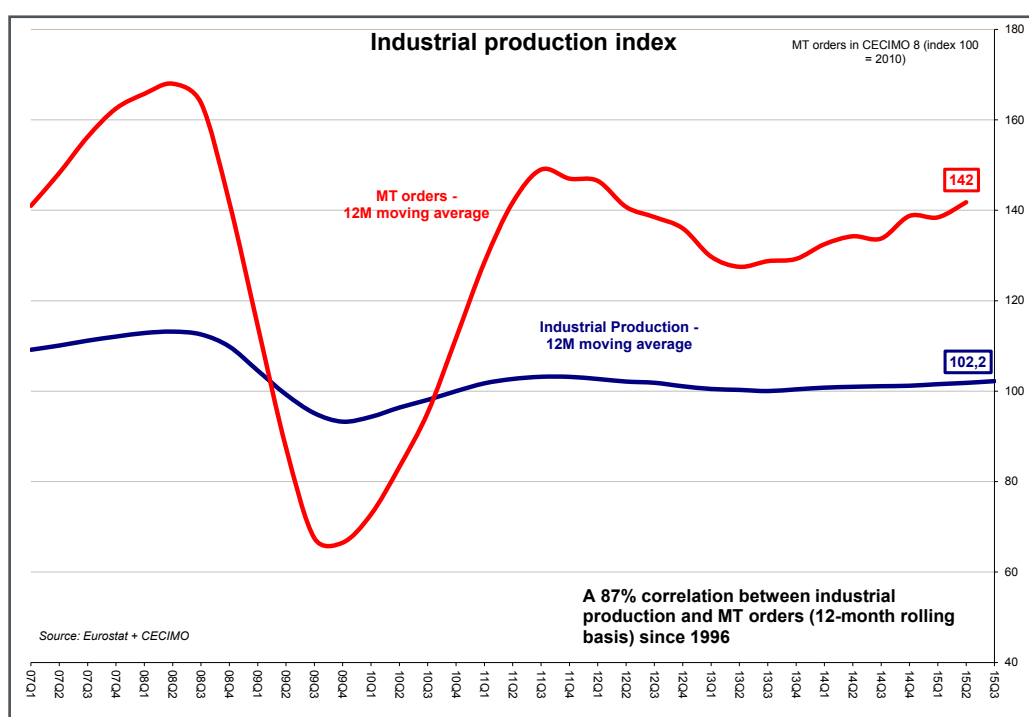
The decrease in the euro area is due to the production of durable consumer goods falling by 3.9%, the production of non-durable consumer goods by 1.0% and the production of capital goods by 0.3%, while the production of intermediate goods remained stable and the production of energy rose by 1.2%. In the EU28, the decrease is due to the production of durable consumer goods falling by 2.5%, the production of non-durable consumer goods by 0.6% and the production of energy by 0.2%, while the production of both capital goods and intermediate goods rose by 0.1%.

Among Member States for which data are available, the largest decreases in industrial production were registered in Ireland (-2.4%), Lithuania (-2.3%) and

Greece (-1.9%), and the highest increases in Croatia (+5.9%), Hungary (+2.9%), the Czech Republic (+2.6%) and Slovakia (+2.2%).

In September 2015 compared with September 2014, industrial production increased by 1.7% in the euro area and by 1.8% in the EU28. The increase in the euro area is due to the production of durable consumer goods rising by 2.6%, the production of capital goods by 2.2%, the production of non-durable consumer goods by 2.1% and the production of intermediate goods by 1.8%, while the production of energy fell by 1.4%. In the EU28, the increase is due to the production of capital goods rising by 2.7%, the production of both durable and nondurable consumer goods by 1.7%, the production of intermediate goods by 1.4% and the production of energy by 0.1%.

In yearly comparison among Member States for which data are available, the highest increases in industrial production were registered in Ireland (+14.6%), Hungary (+7.9%), Slovakia (+7.2%) and Sweden (+7.1%). Decreases were observed in the Netherlands (-5.6%), Estonia (-4.1%) and Lithuania (-0.6%).

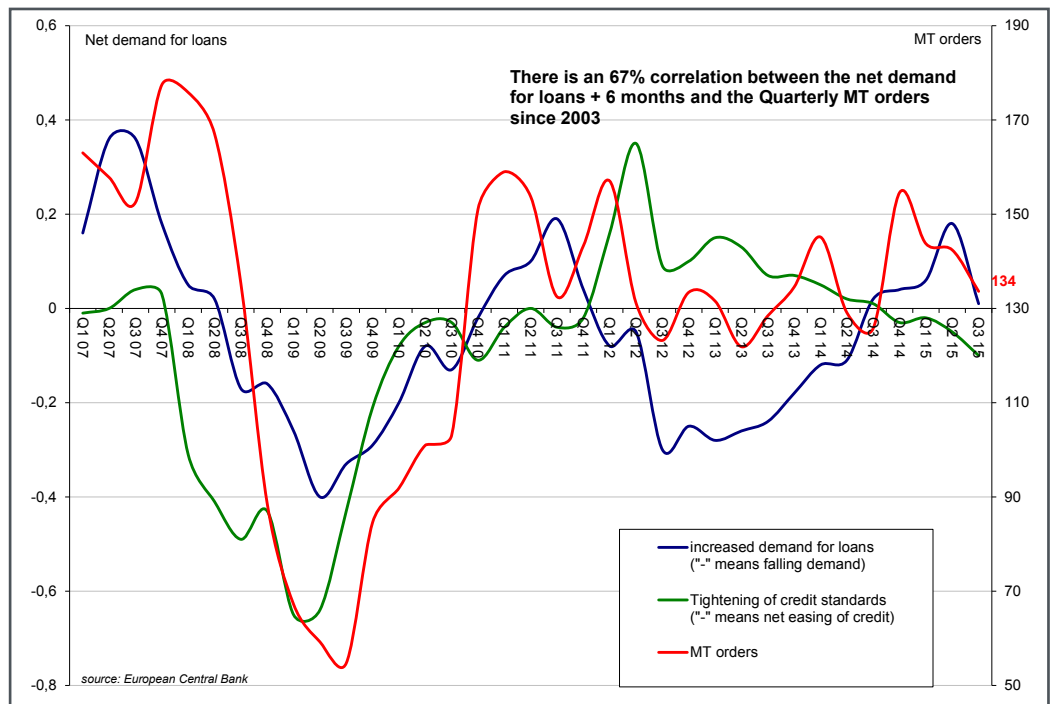


▼ 2.6 Bank lending survey ^①

In the third quarter of 2015, credit standards on loans to enterprises eased further, thereby supporting the recovery of loan growth. Banks reported a continued net easing of credit standards on loans to enterprises in the third quarter of 2015 (-4%, after -3% in the previous quarter, which was stronger than expected in the previous survey round). Across firm size, credit standards were eased mainly on loans to small and medium-sized enterprises (SMEs) and were broadly unchanged for large firms. Banks continued to ease their terms and conditions on new loans across all categories. The net easing of credit standards on long-term loans recorded -4% compared to the -3% in previous quarter. The standards for short-term loans were eased by the same net percentage as previous quarter: -4%. Looking ahead to the fourth quarter of 2015, euro area banks expect the flexibility of credit standards to continue increasing for loans to enterprises.

The net demand for loans to enterprises (i.e. the difference between the sum of the percentages of banks reporting an increase and that of banks reporting a decline in demand) increased. The net percentage of banks reporting an increase

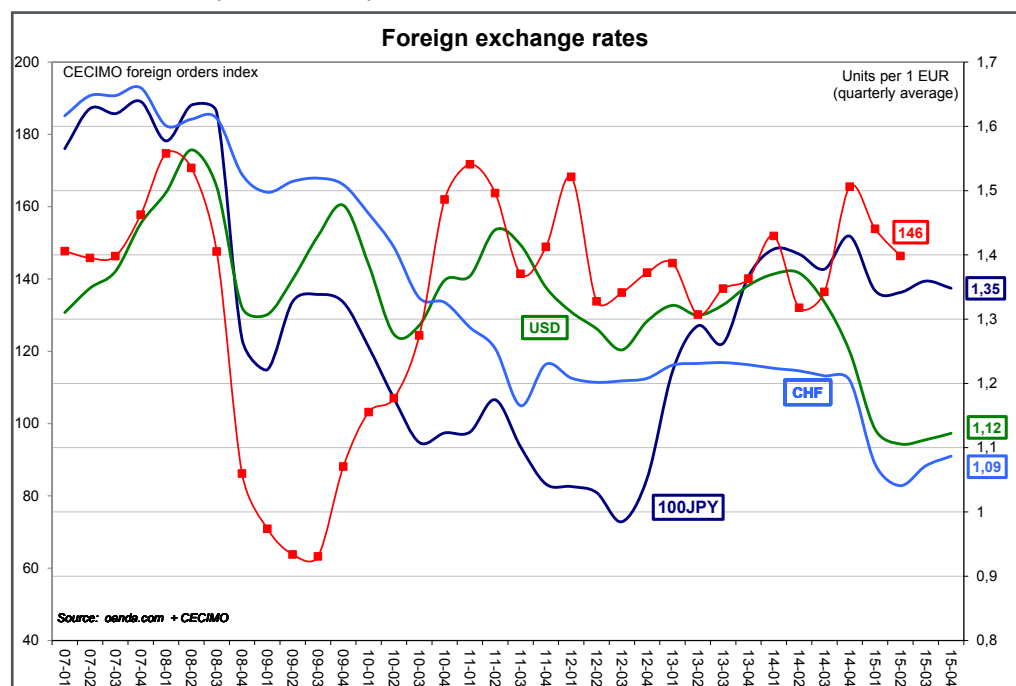
in demand was 16%, up from 13% in the previous quarter. While this was below banks' expectations, they expect again a considerable increase in demand for loans to enterprises in the fourth quarter of 2015. The general level of interest rates contributed most, while fixed investment, inventories and working capital, and other financing needs also supported the demand.



2.7 Foreign exchange rates

The statements of the ECB suggesting further interventions of the Bank to stimulate the European economy brought down the euro exchange rate in October. The nominal effective exchange rate of the euro, as measured against the currencies of 19 of the euro area's most important trading partners, stood in October 0.2% below September's rate and 5.5% below its level one year earlier.

On bilateral level, the average euro exchange rate depreciated against both the US dollar and the Japanese yen by 1.0% and against the Swiss franc by 0.4% in October compared to the previous month.

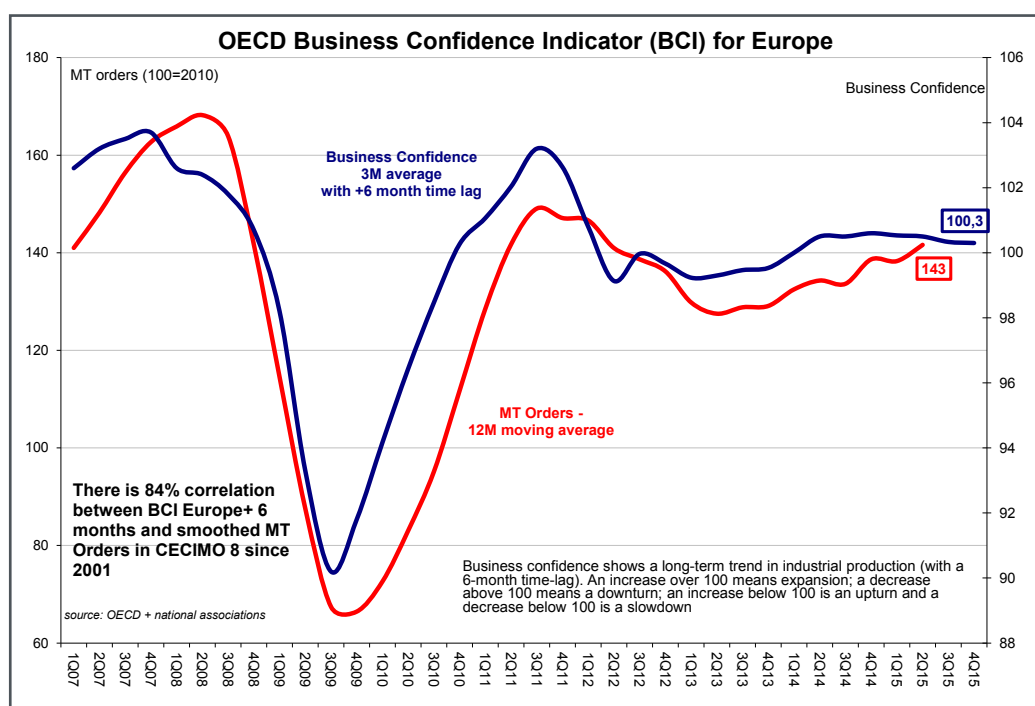


▲ 2.9 OECD Business Confidence Indicator (BCI) for Europe ^①

Business confidence indicators (BCIs), designed to anticipate turning points in economic activity relative to trend, show signs of a moderating growth outlook in several major economies. The BCI for the OECD area points to growth easing, with a loss of growth momentum anticipated in the United Kingdom and the United States, albeit from relatively high levels. The BCI for Japan points to stable growth above the long term trend.

On the other hand, in the euro area and broader Europe, firming growth is forecasted. In Germany and Spain a stable growth momentum is anticipated while the growth is picking up in Italy and France.

BCIs continue to point to a loss of growth momentum, below the long-term trend, in China. A stable growth momentum is expected in Brazil, India and Russia.



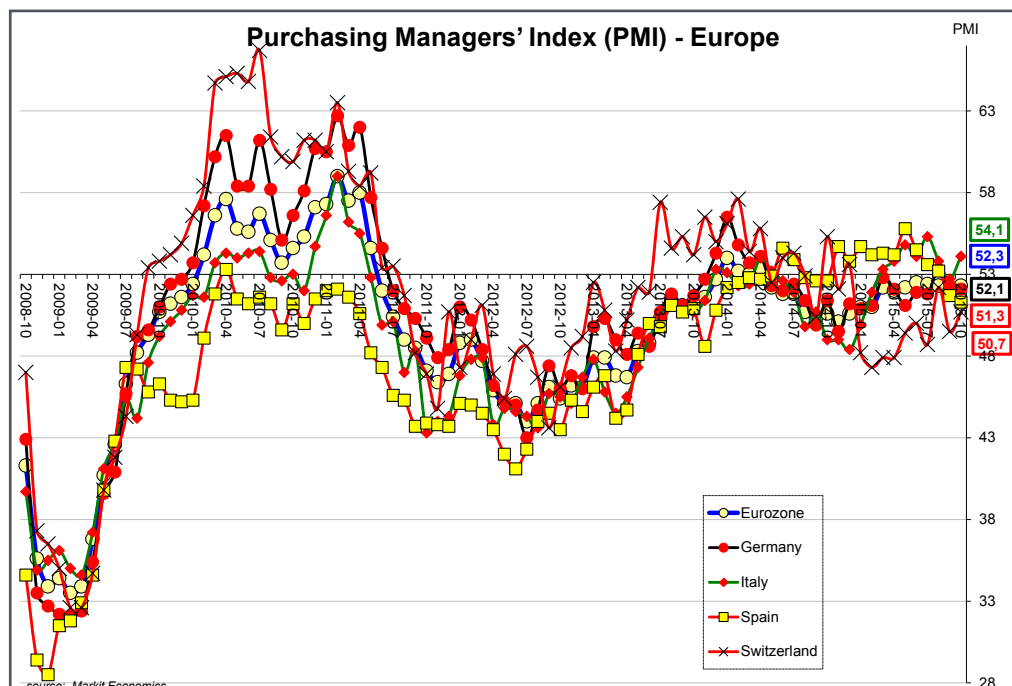
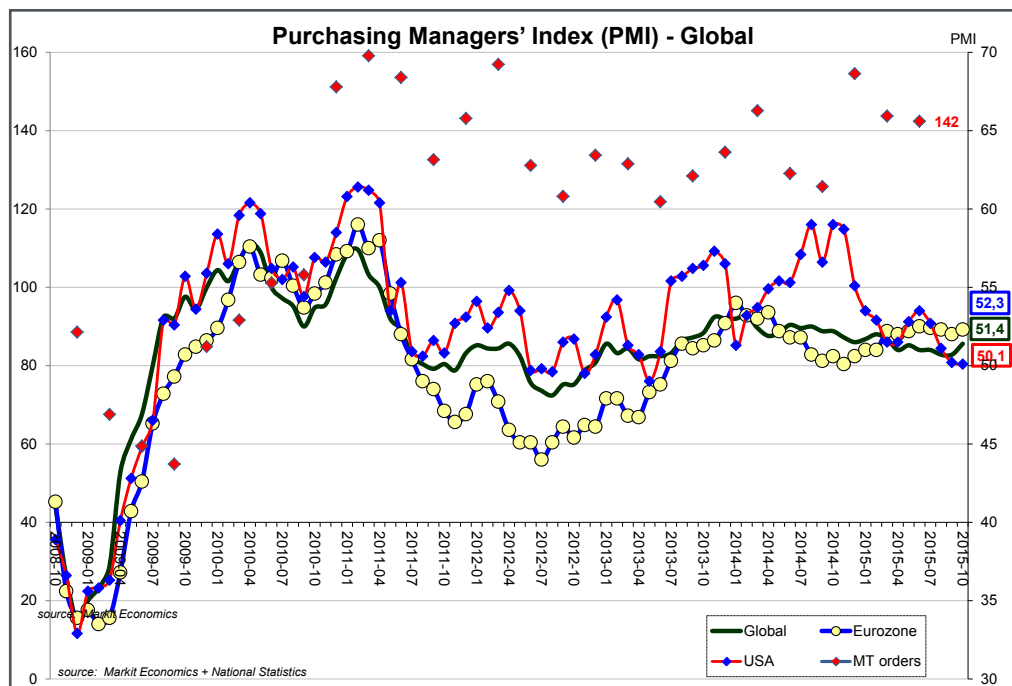
▲ 2.10 Purchasing Managers' Index (PMI) ^①

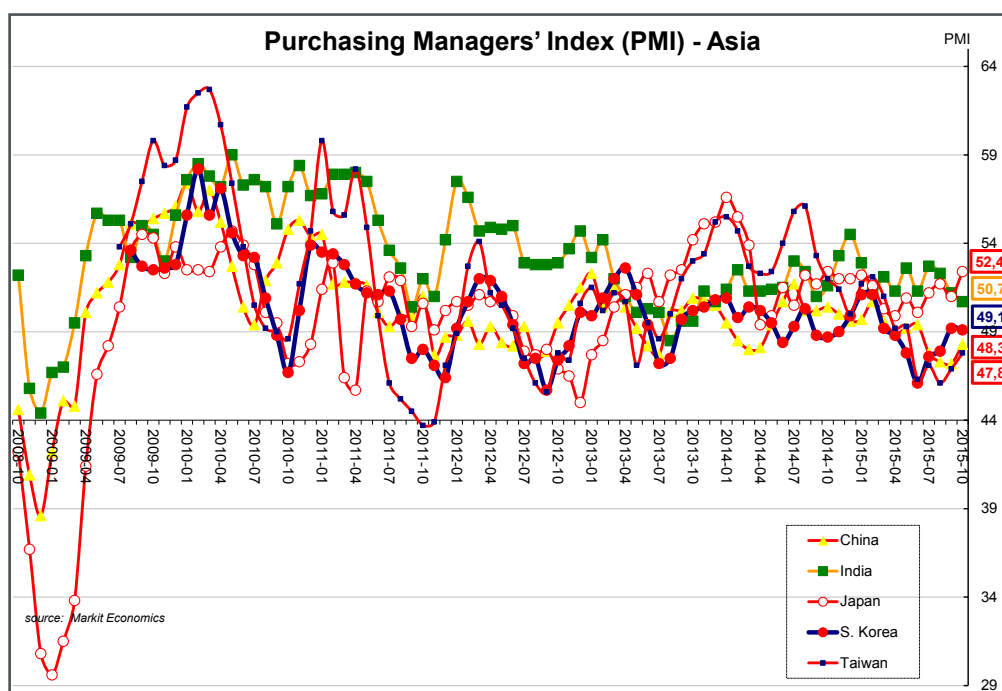
The global PMI lifted up to 51.4 in October, almost a point higher than September's 50.7 and above the 50-mark that divides contraction from growth. It is the highest level since March and provided a little encouragement after falling to a two-year low in August and September. The growth was led by the developed world, as emerging markets remained in recession for a seventh successive month.

China's manufacturing activity decreased for an eighth month but at a slower pace as export orders increased. The Chinese PMI edged up to 48.3 from 47.2 in September, which fuels hopes that the industry's long slump may be bottoming out. Japanese PMI rose to 52.4 in October, slightly less than the flash estimate of 52.5 but a solid improvement from 51.0 in September. Manufacturing in Central and Eastern Europe also kept a good pace in October. The Polish manufacturing PMI rose to 52.2 from 50.9 in September. The Czech PMI recorded a contraction but has remained above the 50 point mark since May 2013.

The Euro area PMI was 52.3 in October, only slightly up from September. It has, however, been above the 50 mark that separates growth from contraction for over two years. On the other hand, the ECB's massive stimulus program has done little to spur manufacturing growth in the euro zone, as manufacturing faces falling output prices and sluggish hires. Growth in German manufacturing eased a little in October but remained solid overall, suggesting the economy outweighed the Volkswagen scandal and a slowdown in China. The PMI fell to 52.1 from 52.3 in the previous month. Faster growth was signalled in Austria, Italy and the Netherlands.

"The eurozone manufacturing recovery remains disappointingly insipid. The October survey is signalling factory output growth of only 2% per annum, a lacklustre performance given the amount of central bank stimulus in place. With factory production lacking vigour, employment growth sagging to an eight-month low and output prices falling at the fastest rate since February, it's easy to see why the ECB are considering additional stimulus. There were some bright spots in the survey, however, with export orders showing the largest monthly gain for four months, which may help allay fears that weaker growth in China and other emerging markets is derailing the eurozone's recovery," commented Markit.





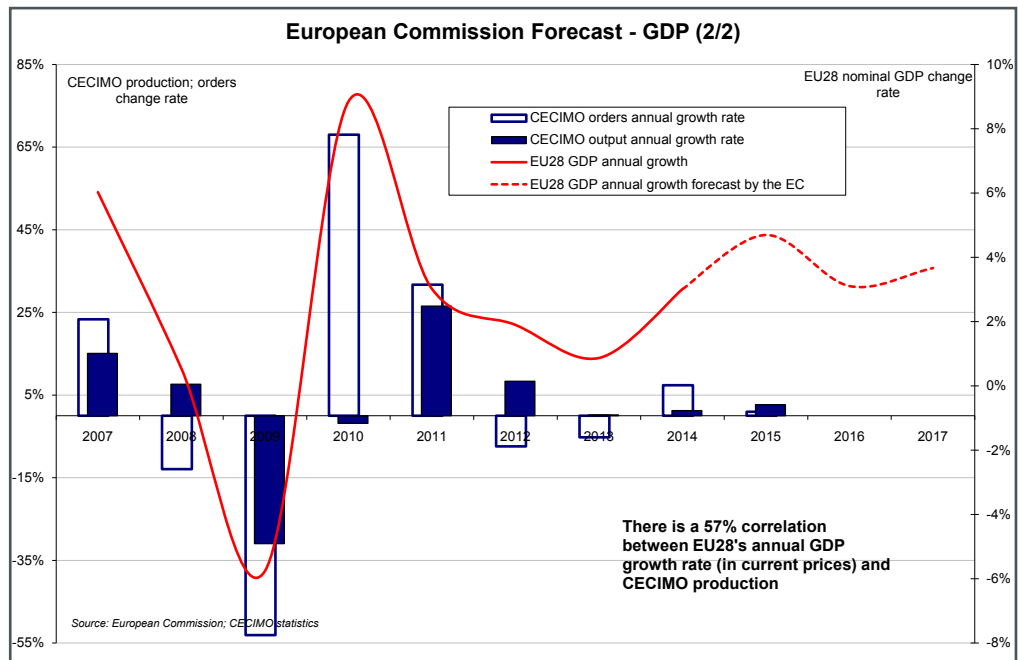
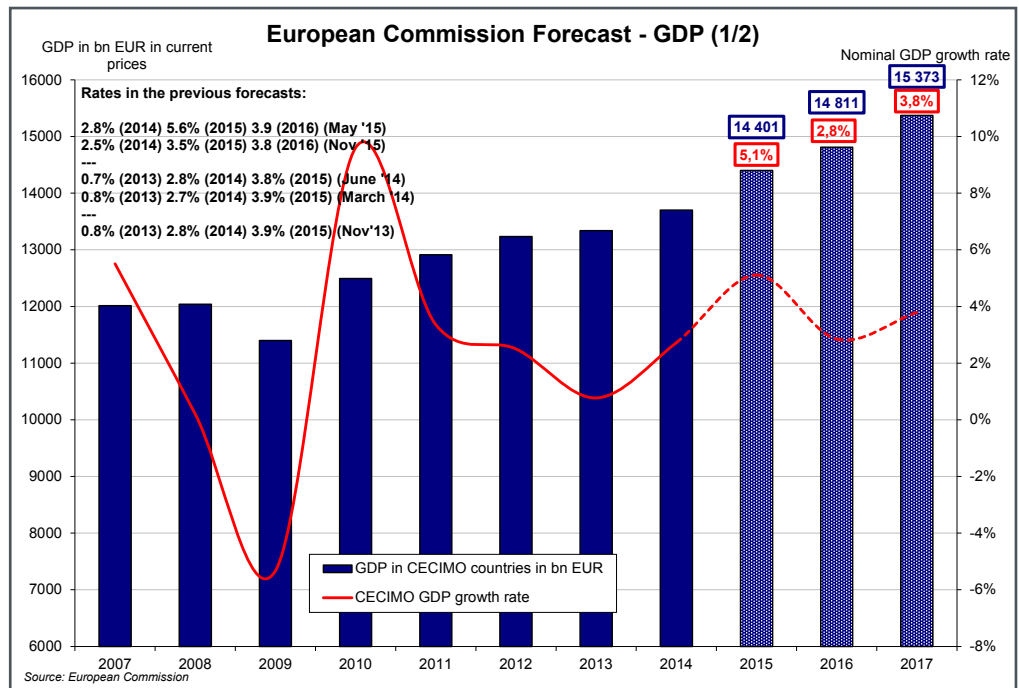
▲ 2.11 European Commission's Forecast ⁱ

The economic recovery of the EU is forecast to continue. Thanks to declining oil prices, accommodative monetary policy and a relatively weak external value of the euro, the economic recovery this year has been resilient and widespread across Member States. It has, however, remained slow. The real GDP in the euro area is estimated to grow by 1.6% in 2015, to pick up to 1.8% in 2016 and 1.9% in 2017. In the EU, the GDP growth is forecasted to rise from 1.9% in 2015 to 2.0% in 2016 and 2.1% in 2017.

On the other hand, the slowdown in economies in emerging markets, the sharp fall in global trade, the increased global uncertainty and persistent geopolitical tensions increase the risks for downgrades of the European economy's outlook. The euro's past depreciation has so far helped to sustain euro area exports but the fall in global trade growth is likely to weigh on foreign demand and investment in the coming quarters. As a result, private consumption has been fuelling the pick-up in domestic demand and is expected to maintain its growth momentum in the near term. A continued rise in nominal incomes and the increased purchasing power brought by lower energy prices will support it. The improved labour market conditions and the increased household spending, as a result of higher real wages, should support the domestic consumption even more.

The gradual recovery in advanced economies is not powerful enough to offset a sharp slowdown in emerging economies and oil-exporting countries. The global growth is expected to slow from 3.7% in 2014 to 3.3% this year, before strengthening gradually to 3.8% in 2016. The economic recovery in the US is expected to continue at a robust pace, supported by low energy prices, improving fiscal conditions, and a monetary policy that is still supportive. In China, given the difficulties in steering a reorientation of growth drivers, the real GDP growth is expected to slow down somewhat more than before. Economic growth in China is now projected to slow from 6.8% in 2015 to 6.2% in 2017.

(See graphs on next page)



Glossary

1.3 MT-IX

MTIX is an index based on the capitalization of 23 leading, publicly listed machine tool producing companies. The capitalization of the companies included is weighted by the share of machine tool turnover in total revenues. The total capitalization calculated in that way is weighted then by an estimated share of the European companies in the world total output in 2010.

2.2 Interest rates - Euribor

Euribor® (Euro Interbank Offered Rate) is the rate at which euro interbank term deposits are being offered by one prime bank to another within the EMU zone.

<http://www.euribor-ebf.eu/>

2.3 Industrial production index

The objective of the production index is to measure changes in the volume of output at close and regular intervals, normally monthly. It provides a measure of the volume trend in value added over a given reference period. The production index is a theoretical measure that must be approximated by practical measures. Value added at basic prices can be calculated from turnover (excluding VAT and other similar deductible taxes directly linked to turnover), plus capitalised production, plus other operating income plus or minus the changes in stocks, minus the purchases of goods and services, minus taxes on products which are linked to turnover but not deductible plus any subsidies on products received. The division of production in construction between building construction and civil engineering is based on the classification of types of construction (CC). Statistical population: Production: sections B, C, D of NACE (D353 excluded); Base period: Year 2010 = 100.

http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/EN/is_esms.htm

2.6 Bank lending survey

The bank lending survey is addressed to senior loan officers of a representative sample of euro area banks. Its main purpose is to enhance the understanding of bank lending behaviour in the euro area. The questions distinguish between three categories of loan: loans or credit lines to enterprises; loans to households for house purchase; and consumer credit and other lending to households. For all three categories, questions are posed on credit standards for approving loans; credit terms and conditions; and credit demand and the factors affecting it. The responses to questions related to credit standards are analysed in this report by focusing on the difference ("net percentage") between the share of banks reporting that credit standards have been tightened and the share of banks reporting that they have been eased. A positive net percentage indicates that a larger proportion of banks have tightened credit standards ("net tightening"), whereas a negative net percentage indicates that a larger proportion of banks have eased credit standards ("net easing"). Likewise, the term "net demand" refers to the difference between the share of banks reporting an increase in loan demand and the share of banks reporting a decline. Net demand will therefore be positive if a larger proportion of banks have reported an increase in loan demand, whereas negative net demand indicates that a larger proportion of banks have reported a decline in loan demand.

<http://www.ecb.eu/stats/money/surveys/lend/html/index.en.html>

2.9 OECD Business Confidence Indicator (BCI) for Europe

The Composite leading indicators (CLI), which BCI is part of, comprises a set of component series selected from a wide range of key short-term economic indicators to ensure that the indicators will still be suitable when changes in economic structures occur in future. While theory says that a turning point in the CLI signals a turning point in the reference series, such turning points, in reality, are determined by a complicated process. Therefore, one often needs to wait for several periods to draw a more definite conclusion. A useful way to exploit the information in CLIs is to take their year-on-year growth rate.

The standardised BCIs represent only the manufacturing sector. BCI shows a long-term trend in industrial production (with a 6-month time-lag). An increase over 100 means expansion; a decrease above 100 means a downturn; an increase below 100 is an upturn and a decrease below 100 is a slowdown.

<http://stats.oecd.org/mei/default.asp?lang=e&subject=5>

2.10 Purchasing Managers' Index (PMI)

The Global Report on Manufacturing is compiled by Markit based on the results of surveys covering 9,000 purchasing executives in 30 countries. Together these countries account for an estimated 86% of global manufacturing output. Questions are asked about real events and are not opinion based. Data are presented in the form of diffusion indices, where an index reading above 50.0 indicates an increase in the variable since the previous month and below 50.0 a decrease.

<http://www.markiteconomics.com/Survey/Page.mvc/AboutPMIData>

2.11 European Commission economic forecast

European Commission Directorate General for Economic and Financial Affairs produces short-term macroeconomic forecasts twice a year, in the spring and autumn. These forecasts concentrate on the Member States, the euro area and the EU, but also include outlooks for candidate countries as well as some non-EU countries. Each forecast has at least a two-year time horizon (with an additional year added each autumn) covering the current year and the next. The forecasting process considers a total of 180 variables and is the result of several iterative rounds.

The forecasts are not based on a centralised econometric model. Instead, they result from analyses made by the DG ECFIN country desks, each of which uses statistical methods to varying degrees. The forecasts are checked for consistency, in particular as regards trade flows. The EU and euro-area variables are not a direct forecast, but are obtained by aggregating the individual Member State forecasts.

In between the fully-fledged spring and autumn forecasts, interim forecasts are produced in which an update of real GDP growth and inflation is estimated for the seven largest Member States and for the current year only. The interim forecasts are largely prepared using indicator-based models.

http://ec.europa.eu/economy_finance/eu/forecasts/index_en.htm

The weights of the Member States in the EU and euro area aggregates can be found through the link below.

<http://circa.europa.eu/Public/irc/dsis/ebt/library?>

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