

# CECIMO Statistical Toolbox

July 2016




**cecimo**  
European Association of  
the Machine Tool Industries

# Table of content

## Introduction

### 1 Data specific to the European machine tool market

- 1.1 CECIMO8 orders
- 1.2 Peter Meier's forecast
- 1.3 MT-IX
- 1.4 CECIMO trade
- 1.5 CECIMO production
- 1.6 CECIMO Business Climate Barometer 

### 2 Macroeconomic data in relation with machine tool orders

- 2.1 GDP
- 2.2 Interest rates - Euribor
- 2.3 Industrial production index
- 2.4 Gross Fixed Capital Formation (GFCF)
- 2.5 Capacity utilisation in the invest. goods sector
- 2.6 Bank lending survey
- 2.7 Foreign exchange rates
- 2.8 Industrial employment
- 2.9 OECD Business Confidence Indicator for Europe
- 2.10 Purchasing Managers' Index (PMI)
- 2.11 European Commission economic forecast

## Glossary

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

# Introduction

The economic landscape has not changed much over the last month, but the results of the UK referendum held on 23 June have modified the way ahead. The 'leave' vote has resulted in financial market volatility, abrupt exchange rate changes and a substantial increase in uncertainty. These developments and the expected start of the exit negotiations have the potential to damage the EU's economic recovery. While uncertainty is expected to diminish over time, forthcoming changes in the economic and political relationships between the UK and Member States could have an impact on the medium to long-term economic outlook.

Uncertainty describes the inability of consumers, investors, politicians to form clear expectations about future economic developments. In the context of the UK's 'leave' vote, for instance, the future set-up of trade relationships after the UK has exited the EU is unclear. If the causality between uncertainty and economic activity is not well defined, we can nevertheless assume that households would be more cautious with their consumption and companies would at least postpone their investment plans as far as possible.

Increased uncertainty has resulted in a deterioration of the growth outlook for the UK but also for the rest of the EU in 2016 and 2017. Before the UK's referendum, the GDP growth in the euro area would have been expected to reach 1.7% in both 2016 and 2017. However, the UK's 'leave' vote is expected to slow private consumption and investment and impact on foreign trade. Taking into account the results of scenario analyses, growth in the euro area is expected to moderate in 2016 (to 1.5% 1.6%) and in 2017 (to 1.3%-1.5%). This implies a loss of GDP of 0.25 to 0.5% by 2017, which is less than the loss expected in the UK (1 to 2.75%).

It is clear that the European Union has to concentrate on reforms and modernisation of the alliance. For example, the euro area is failing because of a divergence of economic performance. Years after the 2008 crisis the Italian banking system is in trouble and waiting an urgent recapitalisation. Several other banks are haunted by toxic asset suspicions. The euro area will require a higher degree of political and market integration. On the other hand, there are countries that can happily live with less integration. Therefore, the reforms could increase the flexibility to accommodate the different needs of countries or, in other words, create a more integrated euro area and a less integrated EU.

One area where European countries could benefit from political cooperation is international trade relations, where forming a common block can add important weight and negotiating power. Following the 2015 first draft for an engineering annex in the Transatlantic Trade and Investment Partnerships (TTIP), the European Commission has published its revised proposal on the topic in July 2016. The proposal stresses the need to take the ISO and IEC standards into account while developing the agreement's technical requirements and standards. The draft includes also a joint regulatory cooperation work plan which sets out short- and medium-term priorities for regulatory cooperation. While the final outcome of the negotiations is obviously not clear, CECIMO and the European engineering sector hope that the extensive and ambitious TTIP will come into existence, paving the road for a new standard for the 21st century's trade agreements.

# 1. Data specific to the European machine tool market

## ▲ 1.2 Peter Meier's forecast

Overall situation:

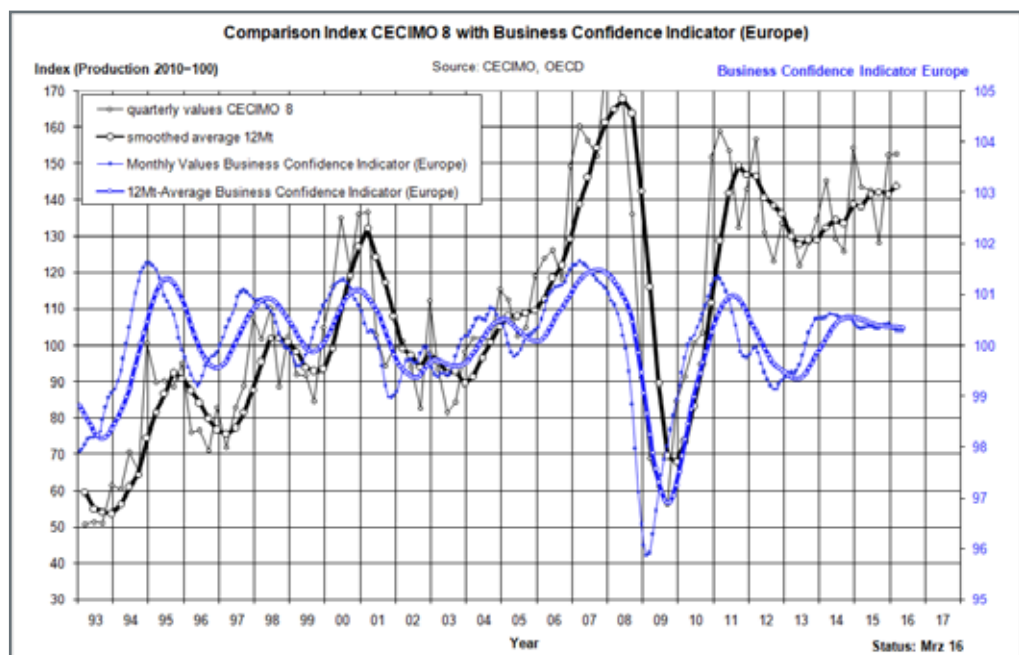
The industry cycle is currently in a trough. Since the industrial cycle is globalized, this applies to all world markets. Signs that we will overcome the low point soon, however, are only to make out in the US, where, the business confidence recovered significantly in the past few months. In Europe, the first signs of recovery appear in Germany, while Asian markets are still in the trough. The industrial cycle is strongly correlated with the demand for capital goods so a recovery leads sooner or later, depending on the industry, to an increase in demand.

The industrial cycle is supported by consumption, which is developing very differently depending on the world market. In the US, consumer demand is growing only slowly, which has led in recent months to a sharp decline in industrial production. In Japan, consumption and industrial production has been stagnating for years, only exports give an impetus from time to time. China continues to experience strong growth in consumption but the growth rates decelerate. Exports, a key growth driver of the Chinese economy, decrease due to rising labour costs, resulting in a fall in industrial production.

In Europe, consumption has been growing significantly for the last two years. It finally exceeded the level of 2007. However, industrial production is stagnating since 2013 and it is still well below the level of 2007. Therefore, overcapacity exists here and there, which inhibits the propensity to invest. Nevertheless, positive stimuli are likely to emanate from Europe in the second half of 2016, which will drive the demand for capital goods. Since Europe is the most important market for many companies, orders are likely to grow, even if the demand from America or Asia is held back.

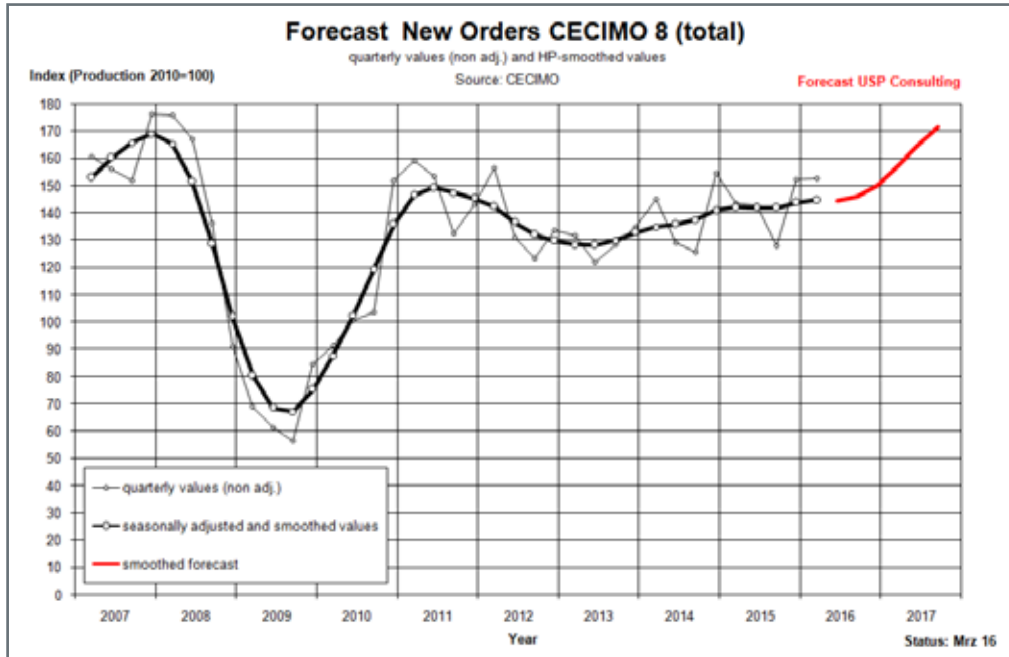
### **Business Confidence:**

The 12month average of the CECIMO order volume (thick black curve) moves more or less sideways. The Business Confidence Indicator (Europe) also moves sideways, but is still above the mark 100, i.e. in the expanding area.



### CECIMO 8 Forecast:

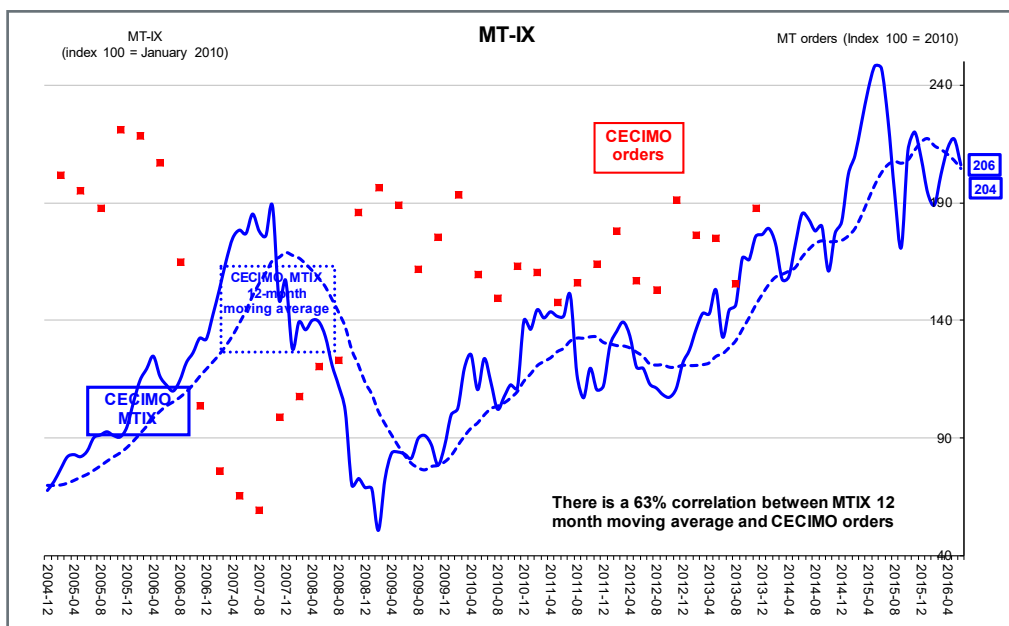
As in the Q4 2015, new orders were somewhat above expectations in the Q1 2016. The latest economic indicators pushed the expected upturn back into 2017. The demand will most probably remain at the actual level until the end of 2016.



### ▼ 1.3 MT-IX <sup>i</sup>

In June, the MT-IX decreased by 5.1% and posted at 206 points. The index lost 11 points compared to May's value.

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



## ▼ 1.4 CECIMO trade

The value of goods traded around the world in 2015 decreased the most since the global financial crisis. While European machine tool exports recorded quite good results last year, the slower trends are feeding to the beginning of 2016. The value of CECIMO total exports to other regions dropped by 6% to 3.9 billion euro compared to the first quarter of 2015. The exports increased only to the Americas and Africa, which is a much smaller market. Europe, that accounts for 50% of CECIMO's exports, posted a decline of 5% to 2.0 billion euro. In Asia, the economic slowdown has cut the flows of goods by 3%. However, the most drastic decline is observed in Russia and CIS, where a combination of low oil prices and economic sanctions have brought the exports down by 48%.

CECIMO total imports declined by 3% to 2.2 billion euro in the first quarter of 2016, reflecting the more cautious mind-set of European manufacturers. Companies from CECIMO countries prefer to do business with partners from neighbouring countries, so the imports declined less than the global average, 2% to 1.4 billion euro. The second most important machine tool supplier is Asia, where imports contracted 4% to 648 million euro. Together, Europe and Asia account for 95% of all machine tool imports to CECIMO.

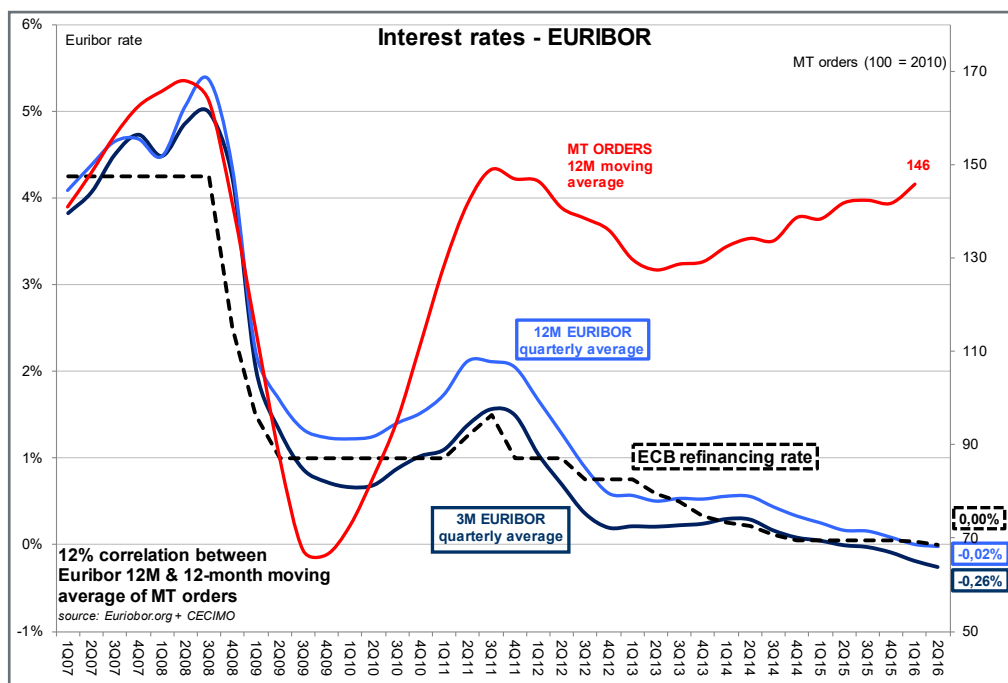
CECIMO exports and imports per zones - 2015Q3					
EXPORTS					
Zone	2016Q1	2015Q1	2016Q1/ 2015Q1	Share 2016Q1	Share 2015Q1
I. ASIA	965 696	996 550	-3%	25%	24%
II. AMERICAS	653 225	651 541	0%	17%	16%
III. EUROPE	1 992 044	2 094 621	-5%	51%	50%
CECIMO	1 573 551	1 672 494	-6%		
non CECIMO	418 493	422 127	-1%		
IV. Russia + CIS	122 855	237 905	-48%	3%	6%
V. AFRICA	71 485	65 697	9%	2%	2%
VI. OTHERS	193 105	198 219	-3%	5%	5%
<b>TOTAL EXPORTS</b>	<b>3 926 926</b>	<b>4 178 836</b>	<b>-6%</b>		
IMPORTS					
Zone	2016Q1	2015Q1	2016Q1/ 2015Q1	Share 2016Q1	Share 2015Q1
I. ASIA	647 783	674 555	-4%	30%	30%
II. AMERICAS	99 754	107 711	-7%	5%	5%
III. EUROPE	1 419 324	1 452 143	-2%	65%	64%
CECIMO	1 362 504	1 388 391	-2%		
non CECIMO	56 820	63 752	-11%		
IV. Russia + CIS	1 973	2 792	-29%	0%	0%
V. AFRICA	1 103	726	52%	0%	0%
VI. OTHERS	14 300	14 229	1%	1%	1%
<b>TOTAL IMPORTS</b>	<b>2 183 134</b>	<b>2 251 430</b>	<b>-3%</b>		

## 2. Macroeconomic data in relation with machine tool orders

### ▼ 2.2 Interest rates – EURIBOR <sup>①</sup>

The average 3-month Euribor and 12-month Euribor recorded respectively -0.27% and -0.03% in June 2016. Compared to May 2016, the average 3-month Euribor decreased by 1 percentage point and the average 12-month Euribor by 3 percentage points. The policy rates of the European Central Bank were also maintained at their previous levels.

Euro area annual inflation was 0.1% in June 2016, up from -0.1% in May and -0.2% in April. The increasing price level mostly reflects higher service prices. A rebound in energy prices is pushing the inflation upward in the coming months and, within a year, the price level will likely increase 1.3-1.5% annually which is considerably closer to the ECB target. Meanwhile, the bank continues to support the economy through its low policy rates and monthly asset purchases.



### ▼ 2.3 Industrial production index <sup>①</sup>

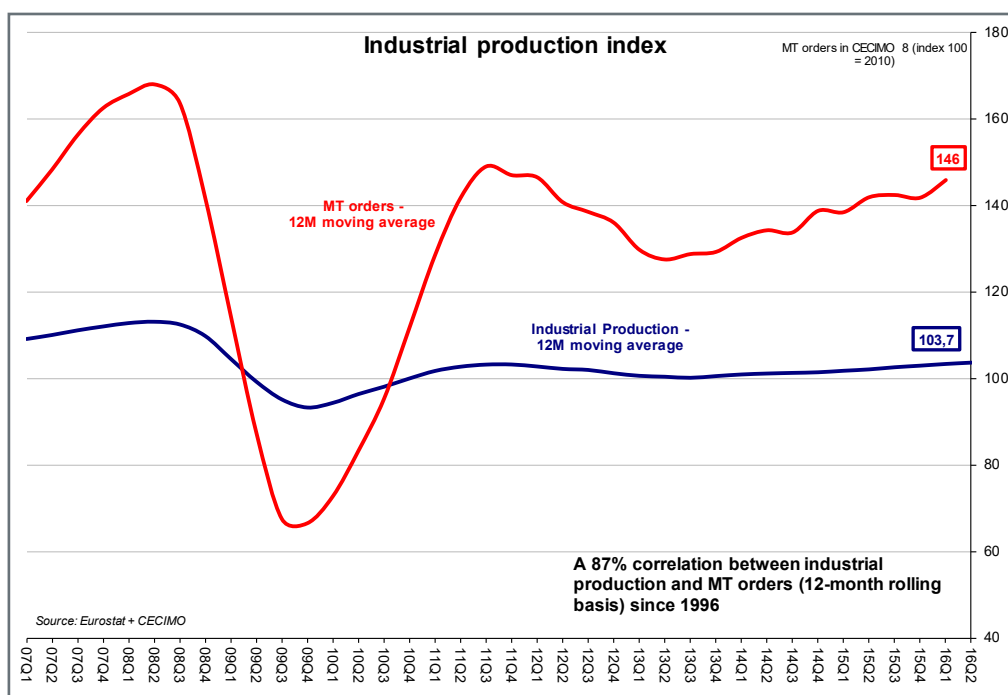
In May 2016 compared with April 2016, the seasonally adjusted industrial production fell by 1.2% in the euro area (EA19) and by 1.1% in the EU28, according to estimates from Eurostat, the statistical office of the European Union. In April 2016, industrial production rose by 1.4% in the euro area and by 1.5% in the EU28.

The decrease of industrial production in the euro area is due to the production of energy falling by 4.3%, the production of capital goods by 2.3%, the production of durable consumer goods by 1.4%, the production of intermediate goods by 0.4% and the production of non-durable consumer goods by 0.1%. In the EU28, the decrease is due to the production of energy falling by 3.3%, the production of capital goods by 2.0%, the production of durable consumer goods by 0.7%, the production of intermediate goods by 0.5% and the production of non-durable consumer goods by 0.3%.

Among Member States for which data are available, the largest decreases in industrial production were registered in the Netherlands (-7.8%), Portugal (-4.4%), Greece (-4.3%) and Romania (-4.0%), while increases were recorded in Lithuania (+3.9%), Latvia (+2.4%), Slovenia (+0.6%) and Malta (+0.3%). →

In May 2016 compared with May 2015, industrial production increased by 0.5% in the euro area and by 1.1% in the EU28. The increase in the euro area is due to the production of both intermediate goods and non-durable consumer goods rising by 0.8% and the production of capital goods by 0.3%, while the production of energy fell by 1.1% and the production of durable consumer goods by 0.9%. In the EU28, the increase is due to the production of non-durable consumer goods rising by 1.5%, the production of capital goods by 1.0% and the production of both intermediate goods and durable consumer goods by 0.8%, while the production of energy fell by 2.0%.

In yearly comparison, among Member States for which data are available, the largest decreases in industrial production were registered in Malta (-3.7%), Bulgaria (-3.3%) and Portugal (-2.4%) and the highest increases in Slovakia (+6.0%), Ireland (+5.8%), Latvia (+5.1%) and Slovenia (+5.0%).



## ▲ 2.4 GFCF

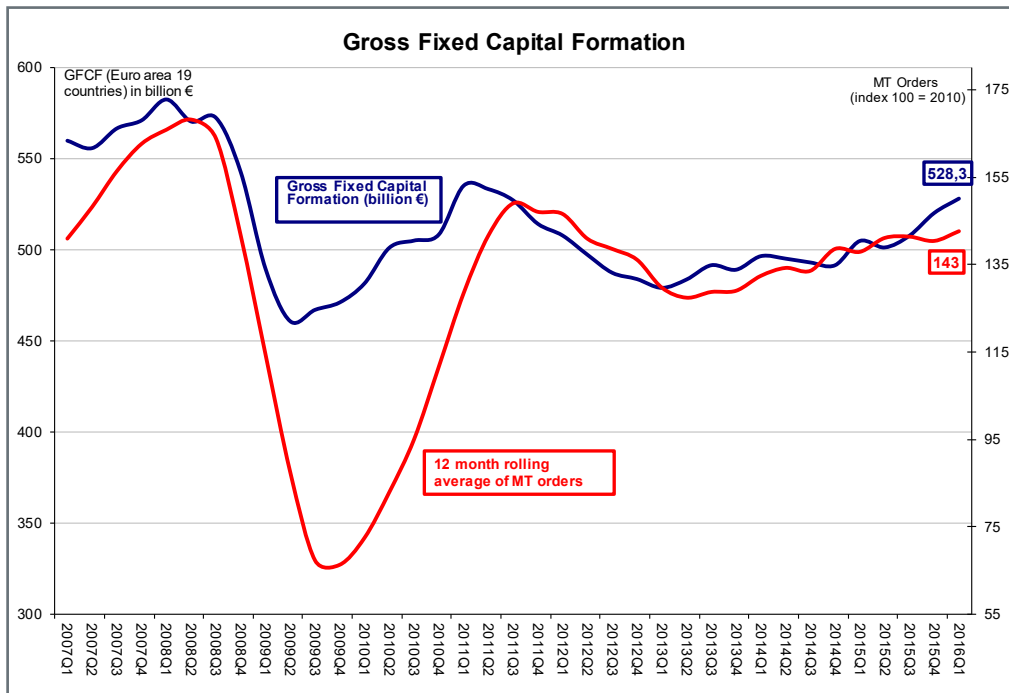
The seasonally adjusted GFCF rose by 0.8% in the euro area and by 0.5% in the EU28 during the first quarter of 2016, compared with the previous quarter, according to an estimate published by Eurostat. In the fourth quarter of 2015, the GFCF grew by 1.4% and 1.1% respectively. Compared with the same quarter of the previous year, the seasonally adjusted GFCF rose by 2.9% in the euro area and by 2.6% in the EU28 in the first quarter of 2016, after +3.6% and +3.7% respectively in the previous quarter.

Among Member States for which data are available for the first quarter of 2016, Malta (+15.9%), Sweden (+7.8%), the Netherlands (+6.8%), Romania (+5.8%) and Spain (+5.2%) recorded the highest growth compared with the previous quarter. Decreases were registered in Luxemburg (-15.0%), Latvia (-13.3%), Slovenia (-9.1%), Estonia (-5.5%) and Belgium (-5.1%).

During the first quarter of 2016, GFCF in the United States decreased by 0.1% compared with the previous quarter (after +0.1% in the fourth quarter of 2015). Compared with the same quarter of the previous year, the GDP grew by 2.2% (after +3.1% in the previous quarter).

**See graph on next page**

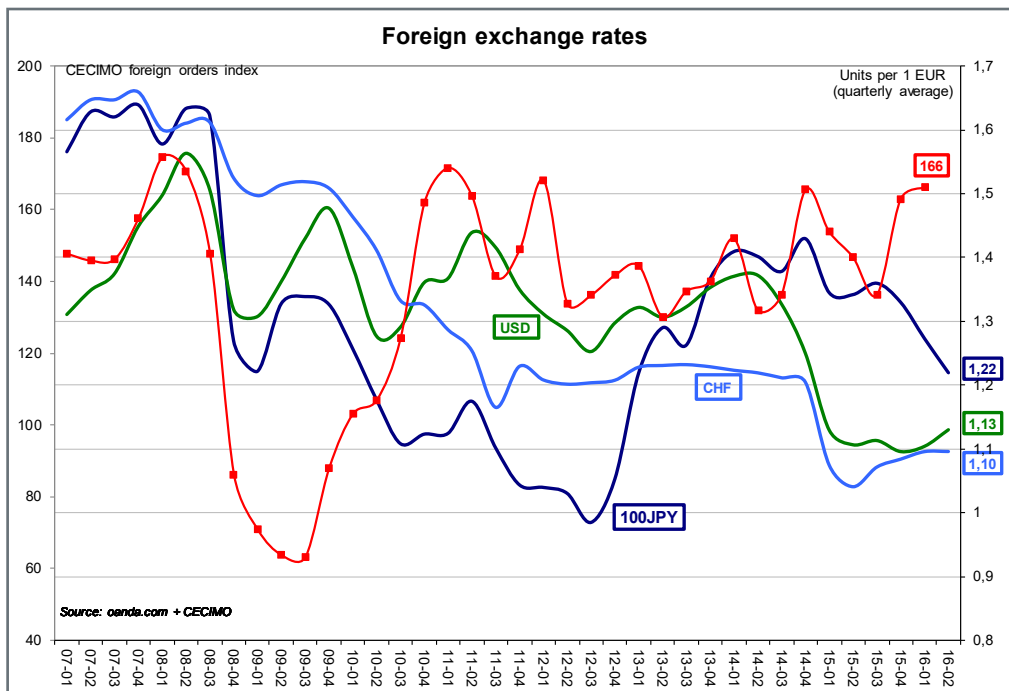




## 2.7 Foreign exchange rates

In foreign exchange markets, the euro weakened modestly over the last month. 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 June at 0.3% below May's rate and 3.6% above its level one year earlier. The depreciation of the euro reflected market expectations regarding monetary policy stances across major economies and Great Britain's referendum results at the end of the month.

In bilateral terms, the average euro exchange rate depreciated against the Japanese yen by 3.7%, against the Swiss franc by 1.5% and against the US dollar by 0.5% and in April compared to previous month.

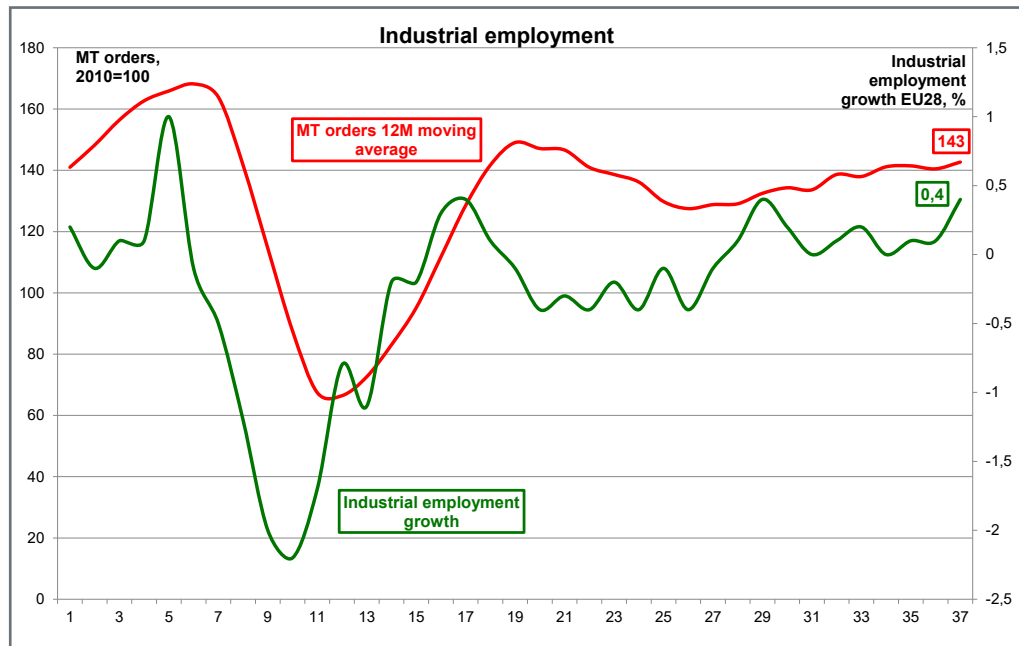


## ▲ 2.8 Industrial employment

The number of persons employed increased by 0.3% in both the euro area and the EU28 in the first quarter of 2016 compared with the previous quarter, according to national accounts estimates published by Eurostat. In the fourth quarter of 2015, employment increased by 0.3% in the euro area and by 0.4% in the EU28. These figures are seasonally adjusted.

Compared with the same quarter of the previous year, employment increased by 1.4% in both zones in the first quarter of 2016 (after +1.2% in the euro area and +1.3% in the EU28 in the fourth quarter of 2015). Eurostat estimates that, in the first quarter of 2016, 231.3 million men and women were employed in the EU28, of which 152.6 million were in the euro area. These are the highest levels since the third quarter of 2008 in the EU28, and the fourth quarter of 2008 in the euro area. These quarterly data on employment provide a picture of labour input consistent with the output and income measure of national accounts.

Among Member States for which data are available, the Czech Republic (+1.5%), Lithuania (+1.3%) and Hungary (+1.0%) recorded the highest increases in the first quarter of 2016 compared with the previous quarter. Poland (-0.5%), Greece, Latvia and the Netherlands (all -0.1%) recorded decreases.



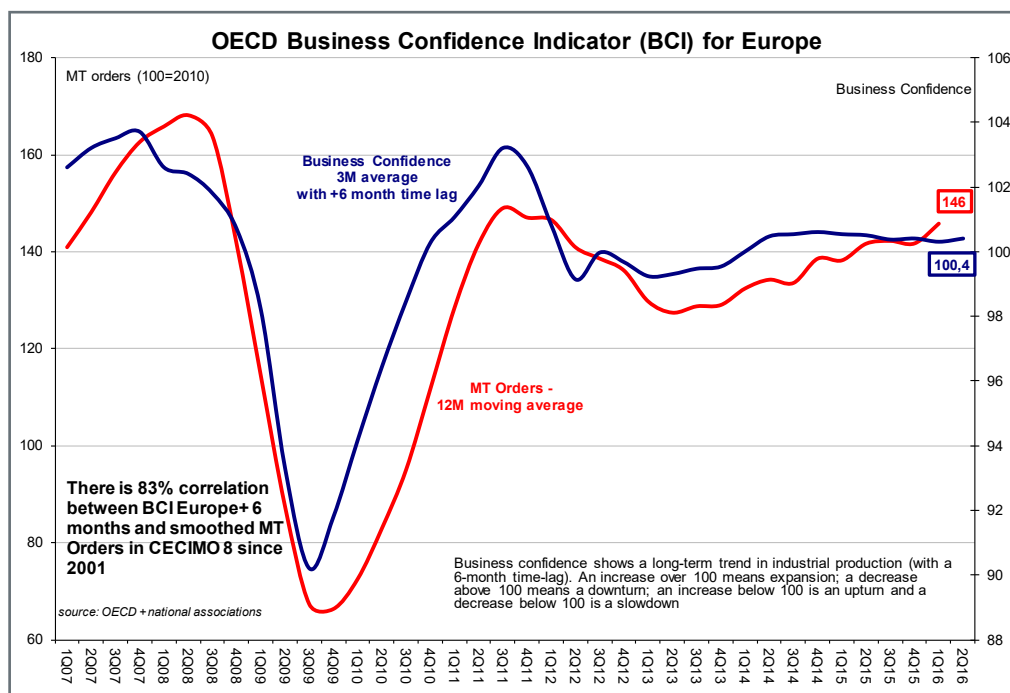
## ▬ 2.9 OECD Business Confidence Indicator (BCI) for Europe <sup>ⓘ</sup>

Business confidence indicators (BCIs), designed to anticipate turning points in economic activity relative to trend, point to firming growth in the OECD area as a whole.

In the euro area, the BCI points to a stable growth momentum. In Europe as a whole and in Germany, the outlook is for firming growth. A stable growth momentum above long term average is anticipated in Italy and Spain. The BCI for France shows the easing growth. The BCI of the United Kingdom points to an increasing growth momentum.

Among other developed countries, the growth is gathering pace in the United States and in Japan, the BCI continues to point to easing growth. →

Among major emerging economies, the BCI for Brazil confirms the signs of positive change in its growth momentum. The BCIs continue to point to stable growth momentum in India and China. The growth outlook for Russia has moderated over the last month.



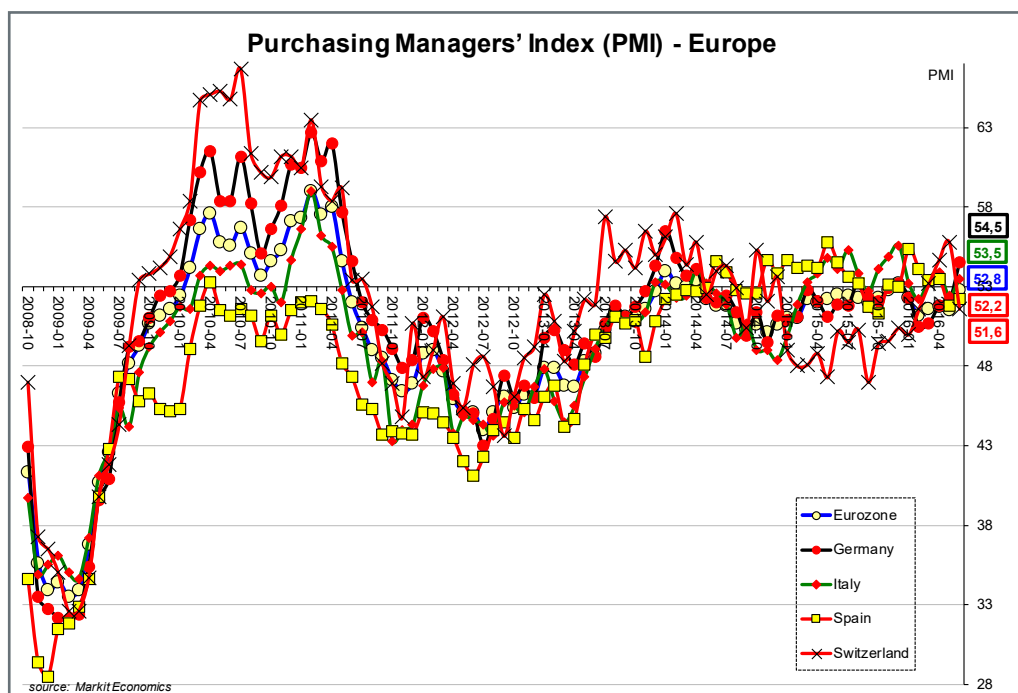
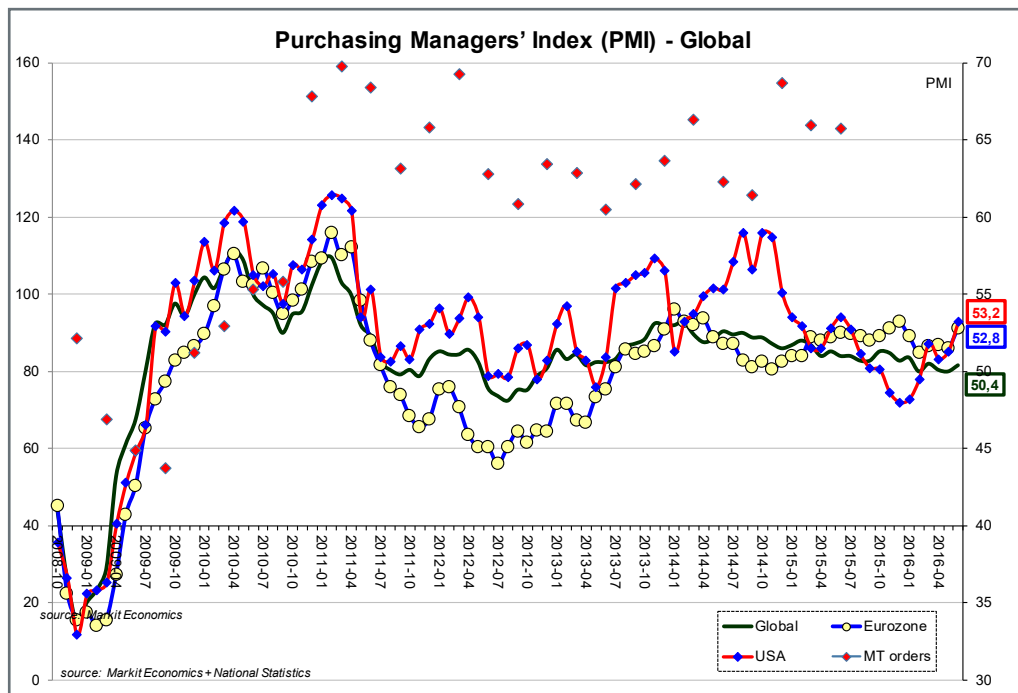
## ▲ 2.10 Purchasing Managers' Index (PMI) <sup>①</sup>

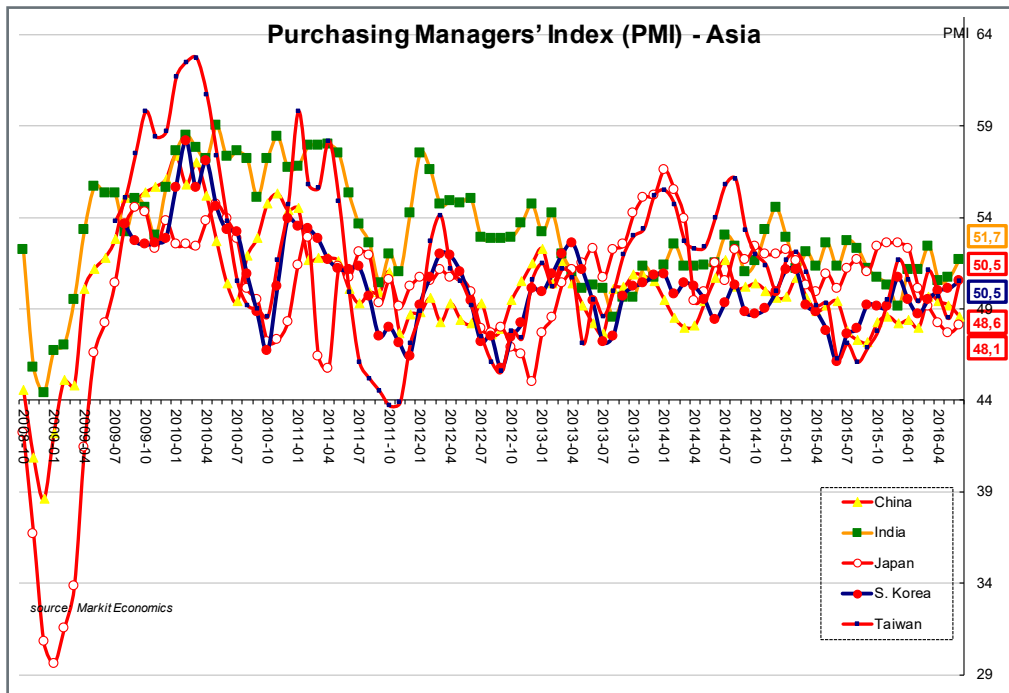
Global manufacturing grew only marginally in June, to 50.4 from 50.0 in May and remained above the 50 threshold that separates contraction from expansion. However, the manufacturing output remains weighed down by a weak global growth outlook that is made even more morose following the Brexit vote. China's manufacturing activity shrank more than expected, as a drop in new orders prompted factory owners to cut back production and shed more jobs. The PMI fell to 48.6 from May's reading of 49.2.

The Japanese PMI edged up to 48.1 in June on a seasonally adjusted basis, versus 47.7 in May. The Japanese manufacturing activity shrank in June for the fourth consecutive month. The PMI of South Korea reached a six-month high, yet at 50.5 it was just barely into expansionary territory. The US PMI indicates an improvement in the country's business condition. It stood at 53.2 compared to 51.3 in May. The UK PMI rose to 52.1 in June from 50.4 in May. That was the strongest reading since January, but 99% of data was collected before Britons voted to leave the European Union.

June was also stronger across the euro area, where the manufacturing activity expanded at its fastest rate this year. Discounting helped drive up new orders and output, encouraging companies to hire more people to meet the demand. The PMI for the euro zone climbed to 52.8 from May's 51.5, but manufacturers will be worried that demand in both domestic and foreign markets could be significantly weakened by the heightened uncertainty brought by the UK's vote. Rising domestic and foreign demand, mainly from the U.S. and China, lifted the German factory activity to a 28-month high in June, signalling that manufacturers are set to increase production in the coming months. The PMI rose to 54.5 from 52.1 in May. Manufacturing also showed good pace in Austria compared to other Eurozone countries. Italy, Spain, and Ireland contributed to rising the euro area's manufacturing activity. However, France's manufacturing output declined. →

“Euro area manufacturers enjoyed their strongest growth so far this year in June. An upturn in the rate of production growth signals factory output is expanding at a near 2% annual pace, which should help to drive further modest economic growth in the second quarter. New orders and exports also rose at faster rates, prompting a welcome upturn in hiring. However, the data were collected prior to the UK EU referendum result, so any Brexit impact is yet to be seen in the PMI. The PMI would have likely been even higher had it not been for strikes in France, which look to have disrupted business activity in many cases. With Greece enjoying a welcome return to growth, France was the only country to see a deterioration in manufacturing conditions in June. All other countries saw faster rates of expansion except the Netherlands. Given the uncertainty caused by the prospect of Brexit, it seems likely that business and consumer spending will be adversely affected across the euro area in the short term at least, pulling growth down in coming months,” commented Markit.





# 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](http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/EN/is_esms.htm)

## 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>



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