

CECIMO Statistical Toolbox

January 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 year 2016 has not started with the overload of positive news. The International Monetary Fund revised its global growth forecast down to 3.4 percent in 2016 and 3.6 percent in 2017. The pickup in global growth is weak and uneven across economies, with the emerging markets now presenting more risks. Advanced economies will see a modest recovery, while emerging market and developing economies face slower growth, a new reality for them.

Growth in advanced economies is projected to rise to 2.1 percent this year and hold steady in 2017, a slightly weaker pickup than in previous forecast. Overall, the activity remains robust in the United States, while growth in Japan is expected to pick up on the back of fiscal support, lower oil prices and accommodative financial conditions. In the euro area, stronger private consumption, supported by lower oil prices and good financial conditions, is outweighing the net exports' diminution.

Growth forecasts for most emerging market and developing economies reveal a slower pickup than previously estimated by the IMF. Growth is projected to increase from 4 percent in 2015, the lowest rate since the 2008–09 financial crisis, to 4.3 and 4.7 percent in 2016 and 2017 respectively. Still, there is a considerable difference between countries in this group. India and parts of Asia are estimated to grow at a robust pace. On the other hand, Latin America will see a contraction again in 2016, reflecting the recession in Brazil and economic stress elsewhere in the region.

While the global economy is quite sound, the markets face considerable volatility and uncertainty. Serious financial turbulence in China marked the start of 2016. As an effect, the competence of its leadership was called into question. Chinese officials have admitted that poor communication contributed to creating anxiety on the global market following China's falling currency. Quite obviously, open communication does not make up an essential part of the country's economic policies. As stressed by the IMF, Chinese authorities have to clarify their intentions, the country needs to establish clear and credible communication channels with the markets to avoid further overreactions.

Volatility in Asia has its effects on European manufacturing. In December 2015, the business climate indicator increased slightly but in January, the consumer confidence decreased in the euro area and the EU compared to December. The outlook for business sentiment trends is also negative, taking into account that German business confidence fell to its lowest level in 11 months in January. The uncertainty caused by the possibility of a slowdown in global trade and a weaker Chinese economic growth certainly has an impact on the machine tool industry. Even if low interest rates and falling unemployment continue to support domestic demand, the uncertainty weighs heavily on businesses and their investment decisions.

One way for policy makers to provide businesses with resilience against global headwinds is to support the regulatory framework for international trade and investment. While the World Trade Organisation ministerial conference, taking place in December in Nairobi, concentrated on agriculture and development agenda, the European Commission met Chinese colleagues to discuss the investment agreement. The EU and China agreed in particular that the future deal should improve the investors' market access by establishing a genuine right to invest and by providing a guarantee against

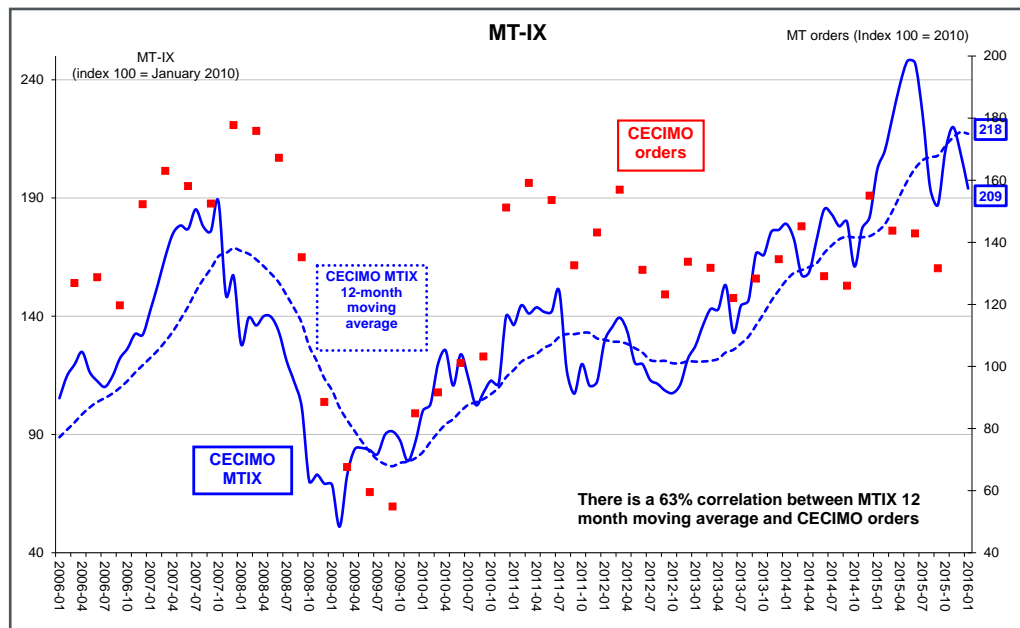
discrimination. The EU and China also committed to address key challenges of the regulatory environment, including those related to transparency, licensing and authorisation procedures, and to provide for a high and balanced level of protection for investors and their investments. The agreement will also include rules on environmental and labour-related dimensions of foreign investment. The EU-China talks were launched at the end of 2013 and this is a major step forward on the way to the final investment agreement.

1. Data specific to the European machine tool market

▼ 1.3 MT-IX ⁱ

In December, the MT-IX decreased by 5.0% and posted at 209 points. The index lost 11 points compared to November's value.

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



▲ 1.4 CECIMO trade

Economic recovery in Europe drove CECIMO exports to 4.6 billion euro (6% increase) in the third quarter of 2015. Europe is the most important market for European machine tool builders and this importance is increasing even further, almost half of the CECIMO's exports were shipped to Europe in the period considered. Modern, highly productive European machine tools are also in great demand in the Americas and Asia. The exports to those regions grew both 3% and together the two markets account for 41% of the CECIMO's exports.

Among the most important single export markets, the United States and Russia recorded declines 3% and 22%. The machine tool market of the United States has been performing well but is probably showing some saturation, while the sanctions on Russia have curbed the business opportunities in the country. On the other hand, exports to China increased by 4% to 671 million euro in the third quarter of 2015. The weak euro exchange rate points to a good export performance from European machine tool builders.

Despite the weak euro, CECIMO imports follow an increasing trend. Strong European machine tool sales increased CECIMO imports by 14% to 2.4 billion euros in the third quarter of 2015. Taking into account the backlogs, the machine tool imports to the euro area are very likely to slow down in the near future. CECIMO's main suppliers, accounting for 95% of all imported machines, are from Europe or Asia. CECIMO's imports from Europe increased by 17% to 1.5 billion euro. Imports from Asia rose 9% to 0.7 billion euro. The main suppliers to the European industry outside the EU are Japan, Taiwan and China.

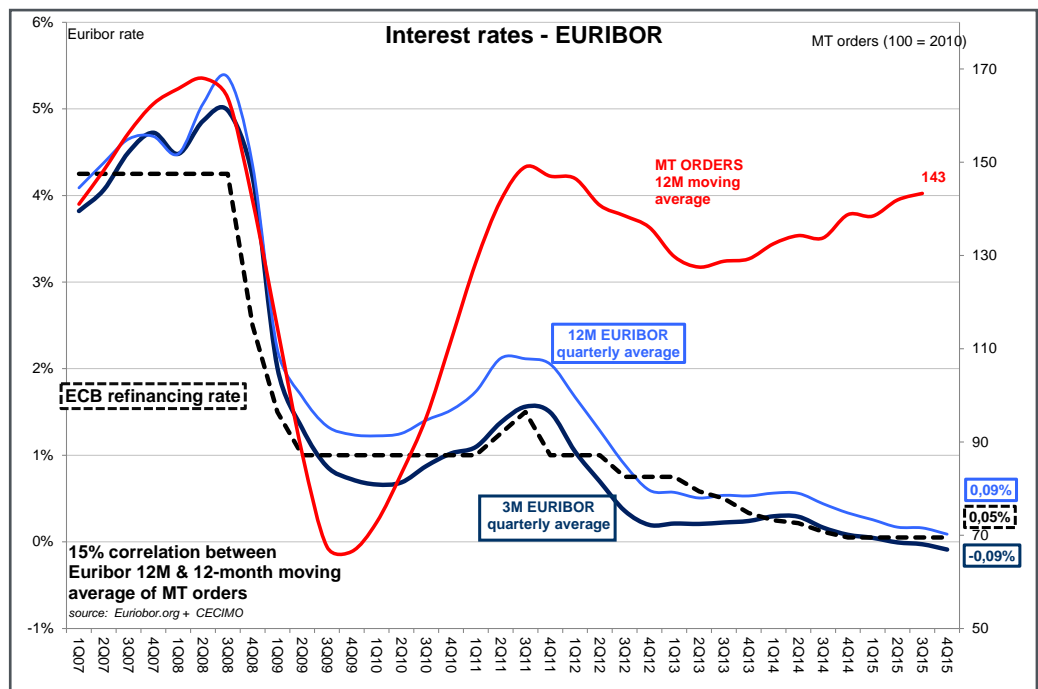
CECIMO exports and imports per zones - 2015Q3					
EXPORTS					
Zone	2015Q3	2014Q3	2015Q3/ 2014Q3	Share 2015Q3	Share 2014Q3
I. ASIA	1 151 759	1 122 503	3%	25%	26%
II. AMERICAS	762 895	737 706	3%	16%	17%
III. EUROPE	2 262 417	1 951 464	16%	49%	45%
CECIMO	1 761 063	1 550 807	14%		
non CECIMO	501 354	400 657	25%		
IV. Russia + CIS	218 082	305 461	-29%	5%	7%
V. OTHERS	231 713	229 330	1%	5%	5%
TOTAL EXPORTS	4 626 866	4 346 464	6%		
IMPORTS					
Zone	2015Q3	2014Q3	2015Q3/ 2014Q3	Share 2015Q3	Share 2014Q3
I. ASIA	706 894	647 178	9%	30%	31%
II. AMERICAS	112 396	99 407	13%	5%	5%
III. EUROPE	1 532 101	1 312 075	17%	65%	63%
CECIMO	1 476 915	1 259 159	17%		
non CECIMO	55 186	52 916	4%		
IV. Russia + CIS	3 700	2 344	58%	0%	0%
V. OTHERS	13 557	13 663	-1%	1%	1%
TOTAL IMPORTS	2 368 648	2 074 667	14%		

2. Macroeconomic data in relation with machine tool orders

▼ 2.2 Interest rates – EURIBOR [ⓘ]

The average 3-month Euribor and 12-month Euribor recorded respectively -0.13% and 0.06% in December. Compared to November, the average 3-month Euribor decreased by 4 percentage points and the average 12-month Euribor by 2 percentage points. In December, the European Central Bank (ECB) kept unchanged its interest rate on the main refinancing operations as well as the rate on the marginal lending facility. The ECB decided to lower the interest rate on the deposit facility by 10 basis points to -0.30%.

The euro area annual inflation was 0.2% in December 2015, up from 0.1% in November. Despite a slight improvement in inflation performance, some experts believe it is a matter of time before the global economic conditions force the ECB to unleash a fresh round of monetary stimulus. The actions could include another cut to the deposit rate, which is levied on a portion of banks' deposits parked at central banks in the euro area, as well as an expansion of the ECB's quantitative easing scheme.



▼ 2.3 Industrial production index ⁱ

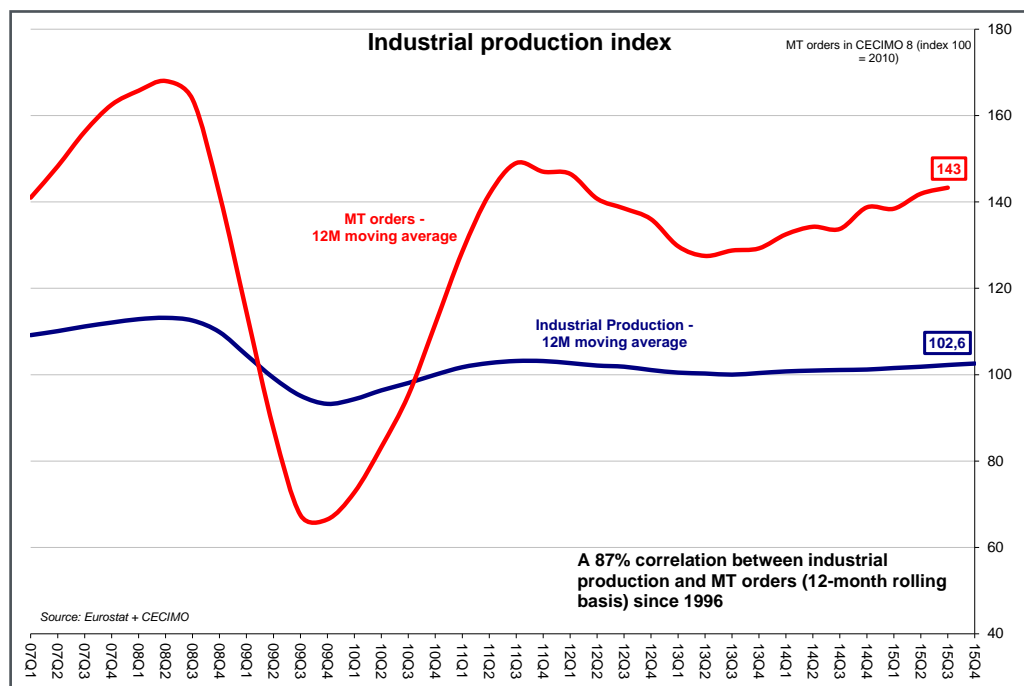
In November 2015 compared with October 2015, the seasonally adjusted industrial production fell by 0.7% in the euro area and by 0.6% in the EU28 according to estimates from Eurostat, the statistical office of the European Union. In October 2015, the industrial production rose by 0.8% and 0.6% respectively.

In the euro area, the decrease of 0.7% in industrial production is due to the production of energy falling by 4.3%, the production of capital goods by 1.9% and the production of durable consumer goods by 1.0%, while the production of non-durable consumer goods rose by 0.1% and the production of intermediate goods by 0.7%. In the EU28, the decrease is due to the production of energy falling by 3.5%, the production of capital goods by 1.3%, the production of durable consumer goods by 0.3% and the production of non-durable consumer goods by 0.1%, while the production of intermediate goods rose by 0.5%.

Among Member States for which data are available, the largest decreases in industrial production were registered in Portugal (-4.9%), Malta (-3.7%), the Netherlands (-3.1%), Estonia and Lithuania (both -2.6%), and the highest increases in Greece (+3.3%) and Slovakia (+1.9%).

In November 2015 compared with November 2014, industrial production increased by 1.1% in the euro area and by 1.4% in the EU28. The increase in industrial production in the euro area is due to the production of intermediate goods rising by 2.1%, the production of durable consumer goods by 1.7% and the production of both capital goods and non-durable consumer goods by 1.2%, while the production of energy fell by 2.8%. In the EU28, the increase is due to the production of capital goods rising by 2.0%, the production of intermediate goods by 1.8%, the production of durable consumer goods by 1.7% and the production of non-durable consumer goods by 0.8%, while the production of energy fell by 1.2%.

In yearly comparison among Member States for which data are available, the highest increases in industrial production were registered in Ireland (+14.2%), Slovakia (+11.9%) and Hungary (+7.1%), and the largest decreases in the Netherlands (-8.0%) and Estonia (-6.2%).

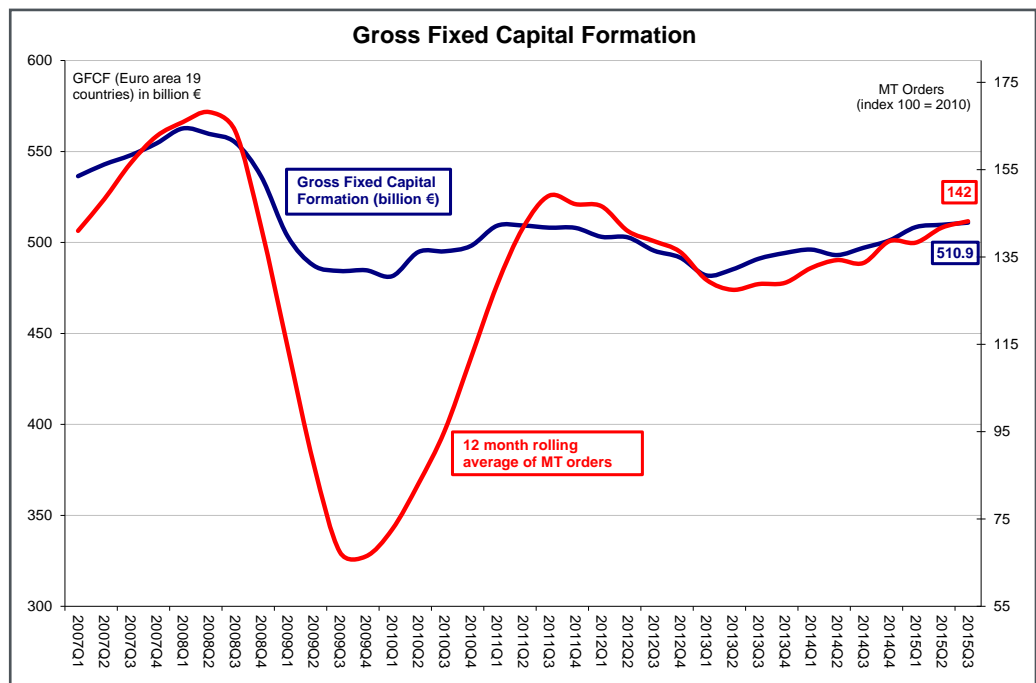


▲ 2.4 Gross Fixed Capital Formation (GFCF)

During the third quarter of 2015, gross fixed capital formation (GFCF) remained stable in the euro area and rose by 0.3% in the EU28 compared with the previous quarter, according to a second estimate published by Eurostat. In the second quarter of 2015, GFCF grew by 0.1% and 0.4% respectively. Compared with the same quarter of the previous year, the seasonally adjusted GFCF rose by 2.2% in the euro area and by 2.7% in the EU28 in the third quarter of 2015 after increasing 2.6 % and 3.1% respectively in the previous quarter.

Among Member States for which data are available for the third quarter of 2015, Lithuania (+12.4%), the Netherlands (+9.8%), Sweden (+7.6%) and Spain (+6.5%) recorded the highest growth compared with the previous quarter. Decreases were registered in Greece (-12.9%), Belgium (-5.9), Finland (-4.0%) and Estonia (-3.9%).

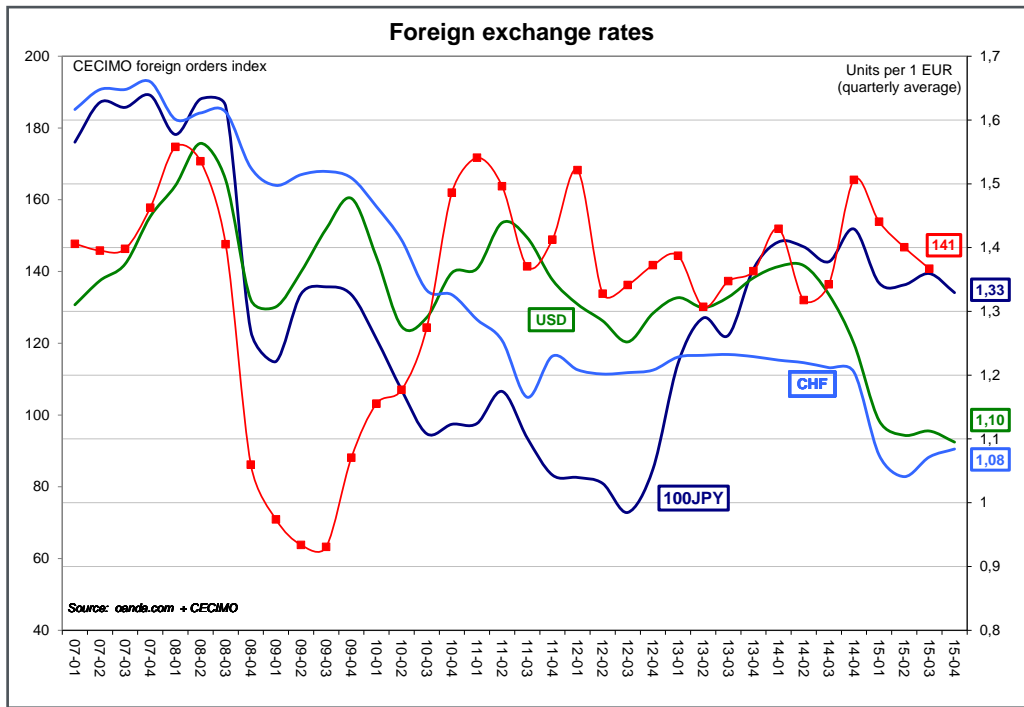
During the third quarter of 2015, GFCF in the United States increased by 1.0% compared with the previous quarter (after +0.5% in the second quarter of 2015). Compared with the same quarter of the previous year, the GDP grew by 3.6% (after +2.2% in the previous quarter).



▲ 2.7 Foreign exchange rates

The euro exchange rate increased in December. 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 December at 1.6% above November's rate, but 6.6% below its level one year earlier.

On bilateral level, we can see more variable trends. The average euro exchange rate appreciated against the US dollar by 1.5% and against the Japanese yen by 0.7% in December compared to previous month. At the same time the euro depreciated against the Swiss franc by 0.1%. -See graph on next page.-

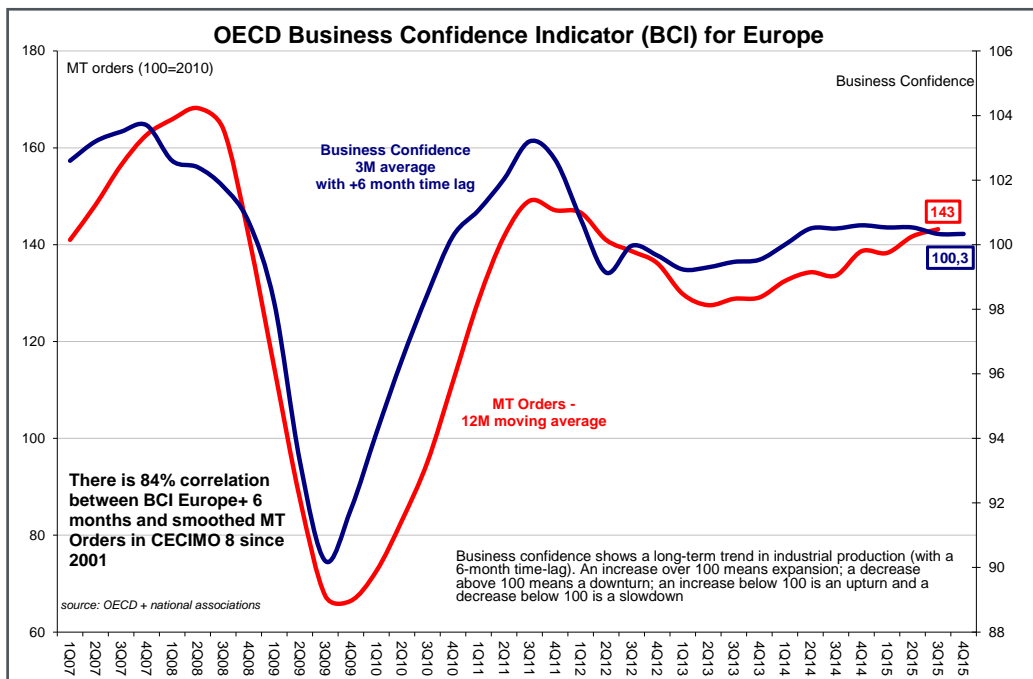


▲ 2.9 OECD Business Confidence Indicator (BCI) for Europe ⁱ

Business confidence indicators (BCIs), designed to anticipate turning points in economic activity relative to trend, point to stable growth momentum in the OECD area as a whole but to diverging patterns across major emerging economies.

The outlook is for stable growth momentum in the euro area as a whole and in France. The BCIs signal firming growth in broader Europe, Germany and Spain. The BCIs for Italy and the United Kingdom show a loss of growth momentum albeit from relatively high levels.

In the United States, the BCI points to easing growth while stable growth momentum is anticipated in Japan. Amongst the major emerging economies, the BCI of Brazil confirm the tentative signs of stabilisation flagged in last month. In China, the BCI point to stable growth, but below a long-term trend. In Russia and India, the BCIs indicate growth losing momentum.

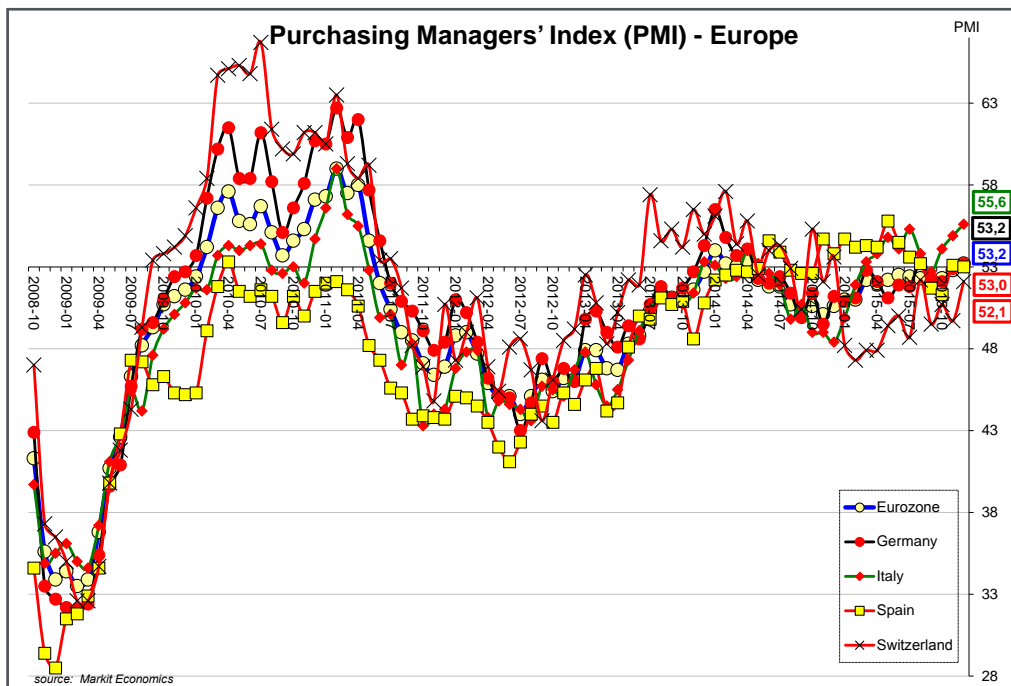
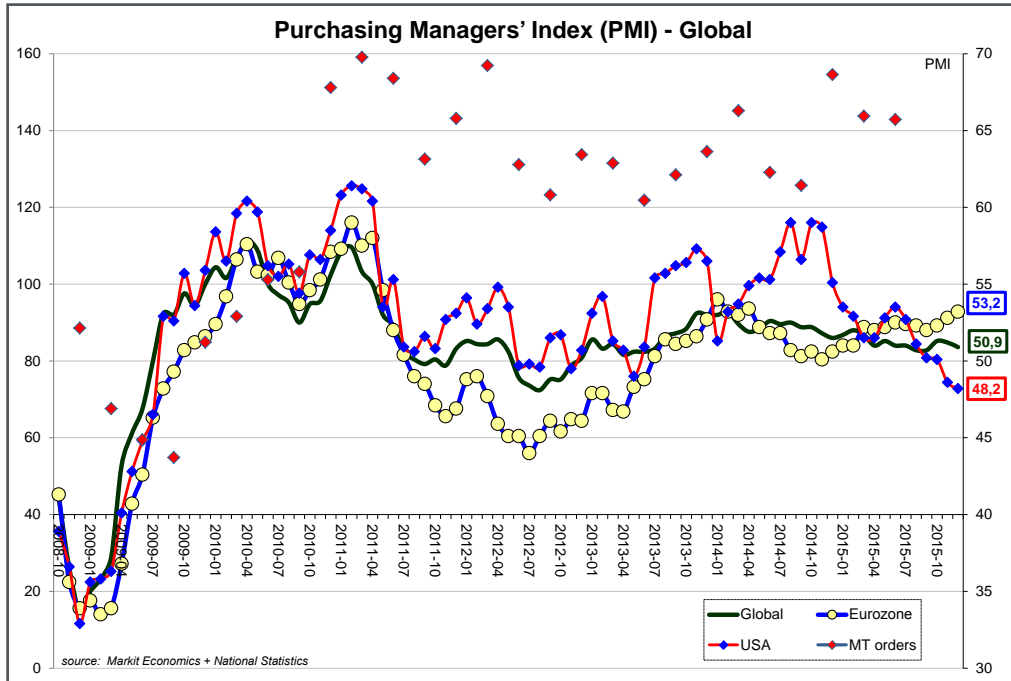


▲ 2.10 Purchasing Managers' Index (PMI) ^①

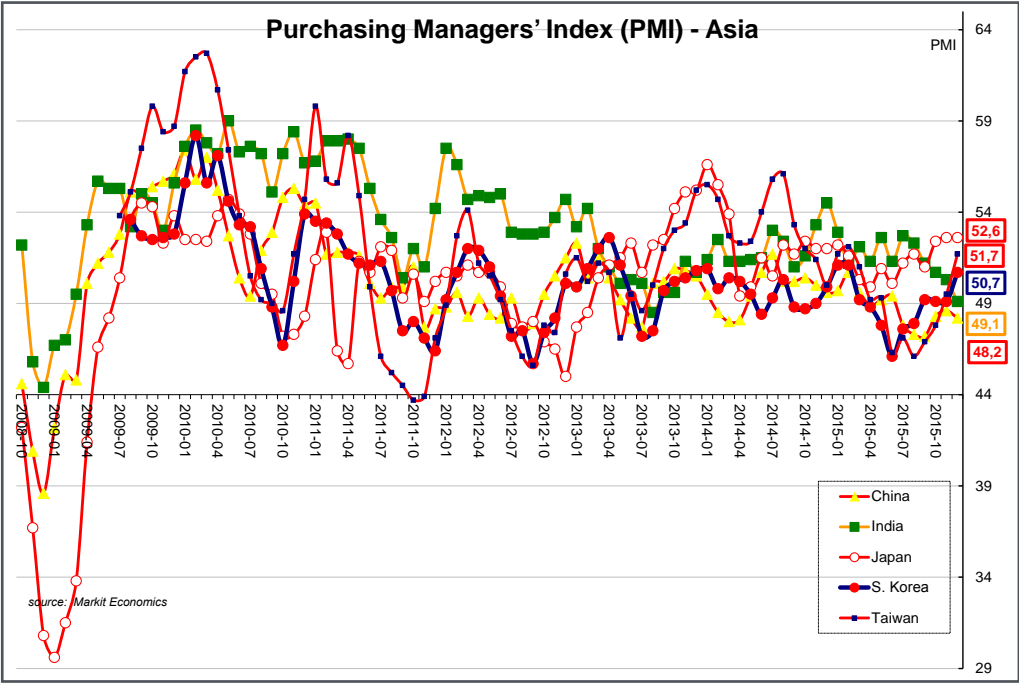
The global expansion rates in production and the new orders both slowing in December brought down the manufacturing PMI. The global index recorded 50.9 in December, down from 51.2 in November. Weighed down by a weak demand at home and abroad, its factory overcapacity and investments slowing down, the China PMI slipped to 48.2 down from 48.6 in November. The Indian manufacturing activity also contracted in December for the first time in more than two years, hurt by its softening domestic demand. The Indian PMI fell to 49.1 in December from November's 50.3. The PMIs in South Korea and Taiwan edged above the 50 mark, though more thanks to a pick-up in domestic demand than any revival in exports. The US index of national factory activity fell to 48.2 from 48.6 in November and is now at its lowest level since June 2009. Manufacturing, which accounts for 12 percent of its economy, has also been hammered by a strong dollar, as well as slower global demand and efforts by American businesses to reduce an excessive inventory build, which are keeping downward pressure on new orders

The Euro area manufacturing activity ended 2015 in expansion, suggesting that manufacturing growth over the year as a whole averaged above the previous three. The final PMI rose to a 20-month high of 53.2 in December and above November's 52.8. It has held above the 50 mark that separates growth from contraction for well over two years. The German business activity expanded at its quickest pace in last four months with its PMI reaching 53.2. Italian manufacturing growth hit its highest in almost five years, the PMI recording 55.6. The PMIs of Spain and the Netherlands showed good pace in manufacturing, but at lower levels than in previous month.

"The end of 2015 saw the eurozone manufacturing recovery gain further traction, with rates of expansion in production and new orders over the final quarter besting those of quarter three. The sector is therefore likely to make a meaningful positive contribution to the euro GDP numbers for quarter four. Survey data also indicate that manufacturing growth over 2015 as a whole averaged above those achieved in each of the previous three years. Furthermore, with the Greek PMI rising back into growth territory in December, we are now seeing concurrent expansions signalled in all of the surveyed nations for the first time since April 2014. Italy remained the leading light in December, while accelerated growth in Germany and France added welcome buoyancy to the region's manufacturing performance. Solid job creation in the sector should also help chip away at the sustained high levels of unemployment still being experienced by some nations. While there is much to be positive about in these figures, the underlying picture is still one of solid yet unspectacular expansion. With eurozone manufacturing still some 9% off its pre-crisis peak, it looks as if the sector still has some distance to travel before the climb back to full recovery is completed," commented Markit.



-See graph 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

2.9 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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