CECIMO Statistical Toolbox

October 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 Inflation
2.4 Industrial production index
2.5 Gross Fixed Capital Formation
2.6 Capacity utilisation in the investment goods sector
2.7 Bank lending survey
2.8 Foreign exchange rates
2.9 Industrial employment
2.10 OECD Business Confidence Indicator for Europe
2.11 European Commission Economic Sentiment Indicator
2.12 Purchasing Managers' Index

Glossary

The items in grey have not been updated since the CECIMO Statistical Toolbox's last edition.

Introduction

The global economy is expected to grow at a slower pace this year than in 2015 and to see a slight uptick next year. Poor growth expectations could not only further fuel anti-trade sentiment, but also make the expansion of international trade, investments and productivity more difficult in the coming future.

Most forecasts for this year' growth have been revised. The World Bank cut its growth estimate down to 2,4% from the 2,9% expected in the January forecast. The International Monetary Fund, in the latest update of its World Economic Outlook, keeps unchanged its July global economy growth of 3,1% but has lowered the prevision for the advanced economies from 1,8% to 1,6%, highlighting a 1.6% forecasted slowdown in US growth, weaker than the 2.2% predicted in July. For 2017, the IMF also revised its forecast (3,4%) down by 0,1 percentage point compared to six months ago. Among the underlying factors of the subdued global growth: weak international trade growth, low commodity prices, diminishing capital flows and lower-than-expected growth in advance economies, which remains modest at an expected rate of 1,6% for 2016, 0,5 percentage points lower than previous year' growth. In the euro area, the low levels of investments over the past years are currently weighing on potential growth, which is thought to be close of 1,7% this year and 1,5% next year. On the contrary, emerging markets and developing economies will grow at an average rate of around 4,5% next year.

As consequence of the expectations of a persistently weak growth and the anticipated easy monetary policy response to support growth, interest rates are still low and even negative. Deflation risks have receded. In the euro area and the European Union, the inflation rate is expected to increase further towards the end of 2016 and reach values close to 1,5% in 2017, partly due to the high likelihood of gradual increase in energy prices. OPEC countries, which represent 43% of global production, 81% of reserves and 51% of exports, seem to be supporting an increase in prices. Pending the agreement on the distribution of the freezing oil production among OPEC members, Russia declared joining the strategy. After having increased its crude extraction up to 11,1 million barrels per day in September, 400.000 more than in August, Mr. Putin told the World Energy Congress in October that Russia, which accounts for more than 12% of global crude oil production and for 6,5% of world crude distillation capacity, was willing to join OPEC's scheme to limit production. With this supply cut and the demand showing rising levels, oil prices are projected to boost during the following months.

Regarding Brexit, the IMF warns on the potential consequences of Brexit and protectionism measures advocated by Donald Trump. UK Prime Minister Theresa May publicly repeated that she will trigger the formal process to exit the EU by March next year. Sterling keeps depreciating, partly as compensation in the short term for the expected loss in British competitiveness, as apparently it will become costlier for British firms to sell goods and services to the EU. The PM accepted to hold a debate at the UK Parliament but without a vote at the end. On top of that, some others argue that the British government should not be able to use royal prerogative to invoke article 50 but it should secure parliamentary approval before. In other words, as the referendum was not binding but consultative, it would not be possible to begin Britain's official withdrawal from the EU until the majority of MPs votes in favour of it. In fact, one recent UK High Court decision ruled that the Government does not have power to trigger Article 50 without parliamentary approval. Whatever the outcome of these claims and lawsuits is, voices for greater parliamentary control over Brexit are growing.

1. Data specific to the European machine tool market

1.1 CECIMO8 orders

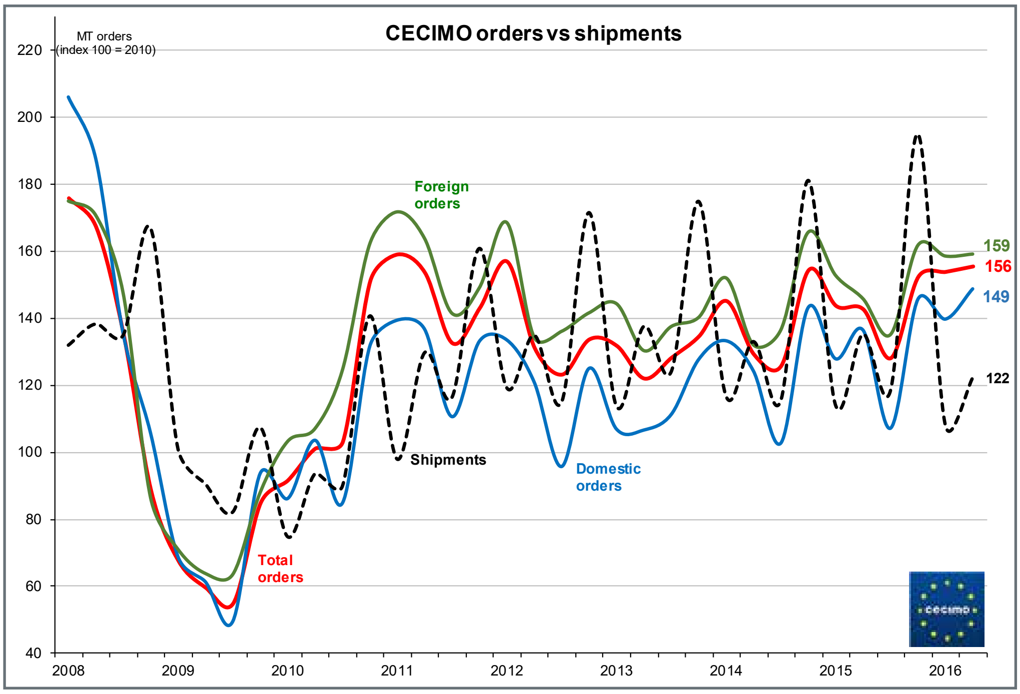
In the second quarter of 2016, the CECIMO8 total orders decreased 7%, but the seasonally adjusted index suffered a slight quarterly decrease of only 2%, a smoother downward movement than in previous years with the exception of 2015. The highest quarterly drop was recorded in Italy, with a 34% drop quarter-on-quarter and 5,8% decrease compared with the same period of the previous year. Austria (-15%) and the United Kingdom (-14%) also recorded falls in the second quarter this year compared with the period January-March 2016. On the contrary, in quarter-on-quarter terms, orders increased in Spain (+27%) and Germany (21%).

Domestic orders are doing better than foreign ones: while national purchases remained stable in the second quarter, the orders from abroad declined by 2%. In spite of that, domestic and foreign orders were 9% and 4% higher than one year ago. According to the latest data available for the second quarter, domestic orders keep outperforming foreign ones, but both of them show better figures than at the beginning of this year. Foreign orders to CECIMO8 countries remain at similar levels to those of the first quarter, and domestic orders increased 6% in comparison with the previous quarter. In inter-annual terms, orders in CECIMO8 increased 9% in the second quarter this year. This means that, when adding together the second quarterly numbers for Austria, Germany, Italy, Czech Republic, the United Kingdom, France, Switzerland and Spain, the total orders have risen 9% over the same period in the previous year. The sharpest orders declines took place in Czech Republic (-10%) and Italy (-6%), while Germany and France recorded annual increases of 16% and 12% respectively. This fact, again, shows clear signs of recovery in the European economy, which is performing relatively well this year within the global context.

In year-to-year comparison, CECIMO production is expected to increase 1% in 2016. Among CECIMO countries, the latest forecast on production shows rises of production in all CECIMO countries except for Belgium (-22%), UK (-19%), Switzerland (-8%) and Austria (-4%). Upward trends can be observed above all in France (+8%), Italy (+6%), Finland (+4%) and Germany (+2%).

On the international sphere, the Japanese MT production has reached its lowest level since the beginning of 2013, suffering from a relatively weak domestic demand. The domestic U.S. orders in the first half of 2016 are not in a good momentum neither, as they are at the lowest level of the last 6 years.

See graph on next page



1.2 Peter Meier's forecast

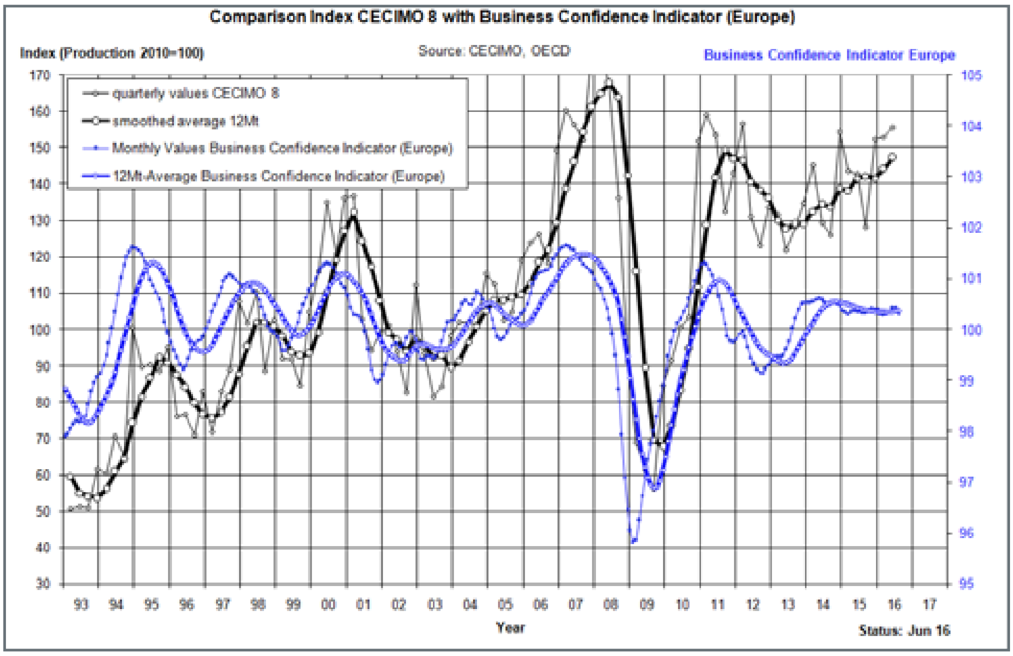
Overall situation:
In contrast to the fears of various economists (the OECD suspended the publication of its leading indicators temporarily), the European mainland's industry responds in a relaxed manner to the Brexit-vote of the British. Two reasons mainly led to this fact: First there is, besides the increased uncertainty, currently no direct impact of the Brits' EU withdrawal. Secondly, we are in a stable economic situation: global indicators are rising again. In Europe, the consumption of private households has increased significantly in recent months and business confidence has risen. However, industrial production is recovering only very slowly. The industry's sceptical attitude is reflected in relatively low inventory levels and a restrained willingness to invest. But stocks are about to grow as the economy picks up. Different subcontractors already enjoy an increased demand.

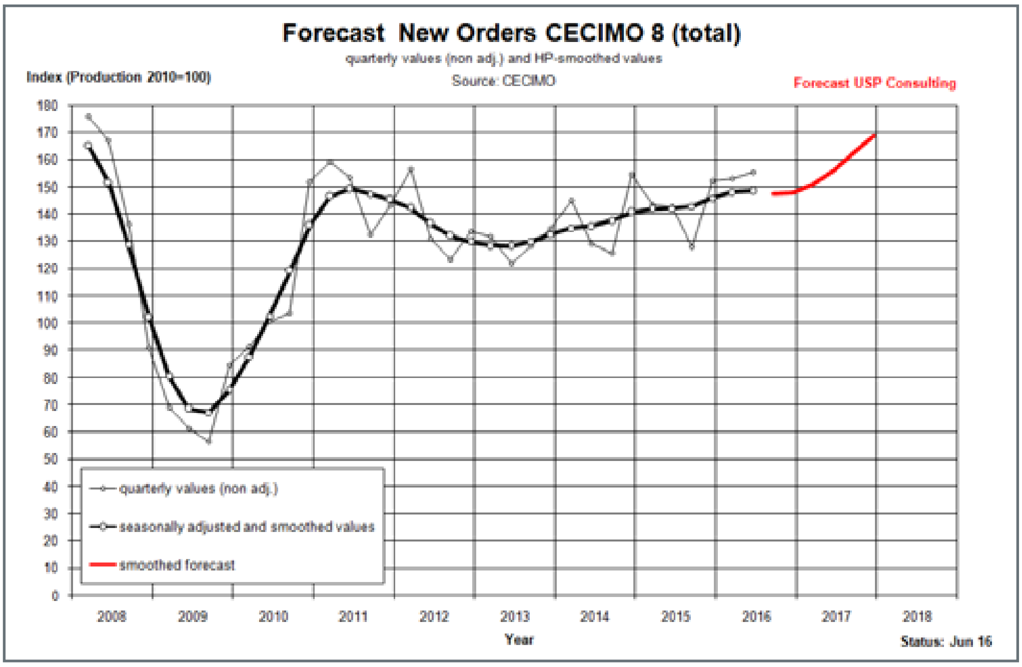
For the last two years, the US household consumption developed in a somewhat restrained way. Industrial production has been falling since 2015, but reached the bottom only in recent months. The business confidence has been developing very positively since the beginning of the year, so one can hope for a positive economic momentum in the second half. However, the demand for capital goods is expected to stagnate or even decline until the presidential election. Currently, new passenger car registrations are declining.

Asia shows a mixed picture: household consumption heads for a new peak, driven by China. At the same time, the consumption in Japan decreases. Due to rising labour costs, exports from China recede, which also influences investment negatively. For example, the demand for machine tools declined significantly in China, which directly affected Japanese machine tool exports. On the other hand, the demand for German or Swiss machine tools could, up to now, hold on a comparatively high level.

Continued ▶

All in all, it is assumed that in the second half of 2016 positive economic stimuli will show up, mainly in Europe. As a result, the demand for capital goods is expected to increase next year. The various incidents in recent months, such as terrorist attacks, the attempted coup in Turkey or the presidential campaign in the United States, however, have left their mark on recent indicators. The expected recovery in 2017 will probably be somewhat more moderate than previously predicted.

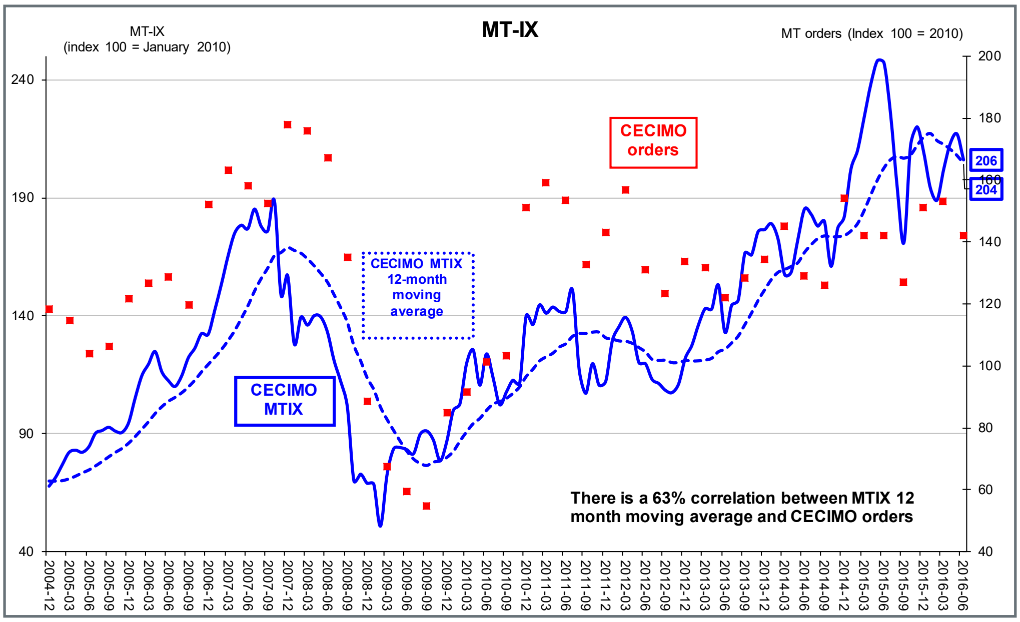




▲ 1.3 MT-IX ⓘ

Over the last months, the machine tool companies' market value increased and reached pre-crisis levels. The MT-IX index jumped almost 7% compared to previous quarter' value, gaining 14 points and posting at 220 points.

The machine tool companies' market value increased during the summer throughout the globe, especially in Brazil and Korea. Only Taiwan booked a slight decrease, and the market capitalisation of companies in the United States was stable.



▼ 1.4 CECIMO trade

The unfavourable situation for international trade applies to the machine tools sector as well. Both imports and exports have decreased and reported yearly falls of 3% and 6% respectively. Africa, which represent a residual percentage of CECIMO machine tools global trade, is the only region escaping this trend with 9% increase of imports from CECIMO countries and 52% of exports. Russia, that accounted for 6% of CECIMO exports in the first quarter of 2015, represented half of it one year later, and its MT exports to CECIMO countries fell by 30%. Furthermore, exports from CECIMO countries to China, which represent two thirds of CECIMO market in Asia, dropped 3% on quarterly basis and 29% on yearly basis.

In the second quarter, CECIMO imports and exports follow the above-described trend for the first quarter. Intra-European trade clearly remains the most important for CECIMO members, as the European market accounts for a bit more than half of total CECIMO exports, and attracted one third of world exports. The later data was even greater (38%) when considering the first half of the year. The recovery of CECIMO imports from Russia, which recorded 83% higher than the second quarter of 2015, is to be highlighted. Almost 90% of total CECIMO imports from the Commonwealth of Independent States (CIS) comes from Russia. In the second quarter of 2016, MT exports from CECIMO to the CIS are 10% lower than one year ago, but that rate was close to 50% in the first quarter of the year. 82% of CECIMO exports to the CIS goes to the Russian Federation.

Continued ▶

It should be noted that, even if MT international trade has also been affected by global trade trends, CECIMO countries are coping with that negative context pretty well. In the second quarter of 2016, while machine tools' global exports have declined around 12-13% quarter-on-quarter, those coming from CECIMO are just suffering a 4% decrease. Furthermore, MT purchases from CECIMO countries to foreign countries (including Europe) have decreased a mere 2%. Data from the first half of 2016 yields similar results. In a context of sharp declines of global MT trade (-9% and -11% for imports and exports), CECIMO countries' trade is suffering quite less intense contractions, 4% and 2% of their imports and exports respectively. It represents drops of 5 percentage points less than the world MT imports decline and 9 percentage points less than global exports of machine tools fall.

Finally, but of equal importance, CECIMO market shares in the second quarter in comparison with the previous one have experienced a considerable increase in Asia (from 30,3% in the second quarter last year to 35,3% in the period from April to June this year) and Americas (from 34% to 39,5%). Taking a look at the six first months of 2016, it is clearly seen that CECIMO position in the Asian market is stronger. Taking into consideration the official data of imports provided by Asian countries, and despite the 5% decline in CECIMO exports to Asia when comparing the values of the first half this year with the same period of the previous one, more than 1 out of 2 machine tools imported by Asia are coming from CECIMO. As for CIS and Africa, exports from CECIMO countries also account for more of their global imports.

Companies are relatively optimistic about exports in the coming future. According to data provided by the European Commission, 20% of the EU industry expect its exports to increase and only 10% forecast a short-term decline.

CECIMO exports and imports per zones - 2016Q2
in million euro. Export destinations and import origins

EXPORTS

Zone	2016Q2	2015Q2	2016Q2/ 2015Q2	Share 2016Q2	Share 2015Q2
I. ASIA	1 011,4	1 087,1	-7%	22%	23%
II. AMERICAS	750,8	732,8	2%	17%	16%
III. EUROPE	2 328,4	2 436,1	-4%	51%	52%
CECIMO	1 858,1	1 923,0	-3%	41%	41%
non CECIMO	470,3	513,1	-8%	10%	11%
IV. Russia + CIS	182,9	203,0	-10%	4%	4%
V. AFRICA	92,4	89,8	3%	2%	2%
VI. OTHERS	149,4	134,8	11%	3%	3%
TOTAL EXPORTS	4 526,3	4 695,0	-4%		

IMPORTS

Zone	2016Q2	2015Q2	2016Q2/ 2015Q2	Share 2016Q2	Share 2015Q2
I. ASIA	666,5	704,2	-5%	30%	31%
II. AMERICAS	89,9	148,6	-40%	4%	7%
III. EUROPE	1 637,6	1 683,1	-3%	74%	75%
CECIMO	1 562,9	1 613,6	-3%	71%	72%
non CECIMO	74,7	69,5	7%	3%	3%
IV. Russia + CIS	5,8	3,5	66%	0,3%	0,2%
V. AFRICA	0,8	0,9	-16%	0,0%	0,0%
VI. OTHERS	6,7	5,8	15%	0,3%	0,3%
TOTAL IMPORTS	2 211,9	2 248,1	-2%		

See graph on next page

CECIMO exports and imports per zones - 2016H1
in million euro. Export destinations and import origins

EXPORTS

Zone	2016H1	2015H1	2016H1/ 2015H1	Share 2016H1	Share 2015H1
I. ASIA	1 977,2	2 083,7	-5%	23%	23%
II. AMERICAS	1 404,4	1 384,6	1%	17%	16%
III. EUROPE	4 389,4	4 530,4	-3%	52%	51%
CECIMO	3 471,0	3 594,7	-3%	41%	41%
non CECIMO	918,4	935,7	-2%	11%	11%
IV. Russia + CIS	304,1	440,9	-31%	4%	5%
V. AFRICA	163,7	155,5	5%	2%	2%
VI. OTHERS	262,0	256,7	2%	3%	3%
TOTAL EXPORTS	8 508,4	8 873,3	-4%		

IMPORTS

Zone	2016H1	2015H1	2016H1/ 2015H1	Share 2016H1	Share 2015H1
I. ASIA	1 313,1	1 378,8	-5%	30%	31%
II. AMERICAS	191,4	256,3	-25%	4%	6%
III. EUROPE	3 046,7	3 131,9	-3%	69%	70%
CECIMO	2 914,4	2 998,4	-3%	66%	67%
non CECIMO	132,3	133,5	-1%	3%	3%
IV. Russia + CIS	7,7	6,3	23%	0,2%	0,1%
V. AFRICA	1,8	1,6	11%	0,0%	0,0%
VI. OTHERS	14,8	20,0	-26%	0,3%	0,4%
TOTAL IMPORTS	4 423,8	4 496,2	-2%		

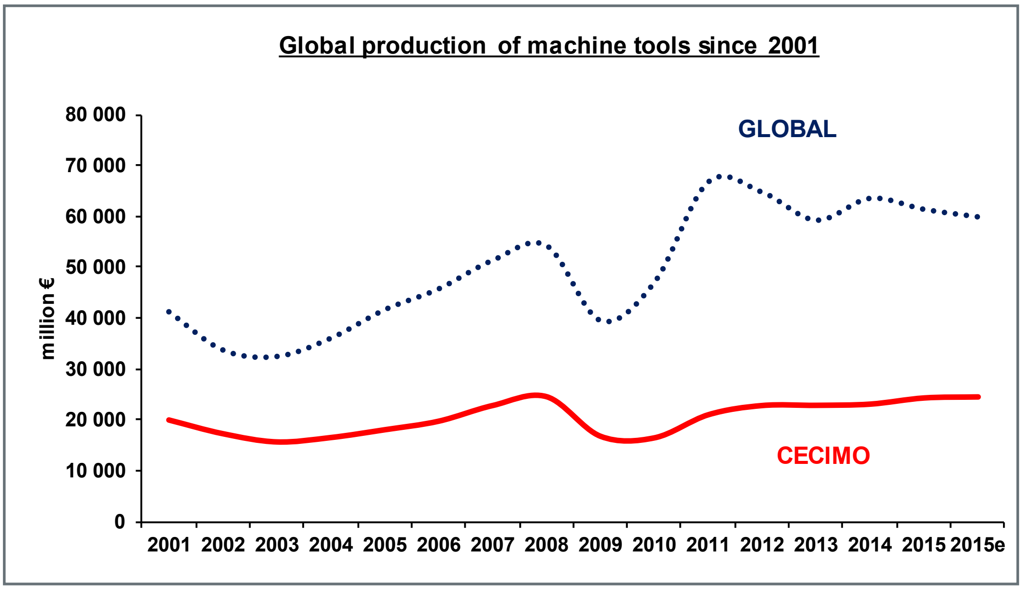
1.5 CECIMO production

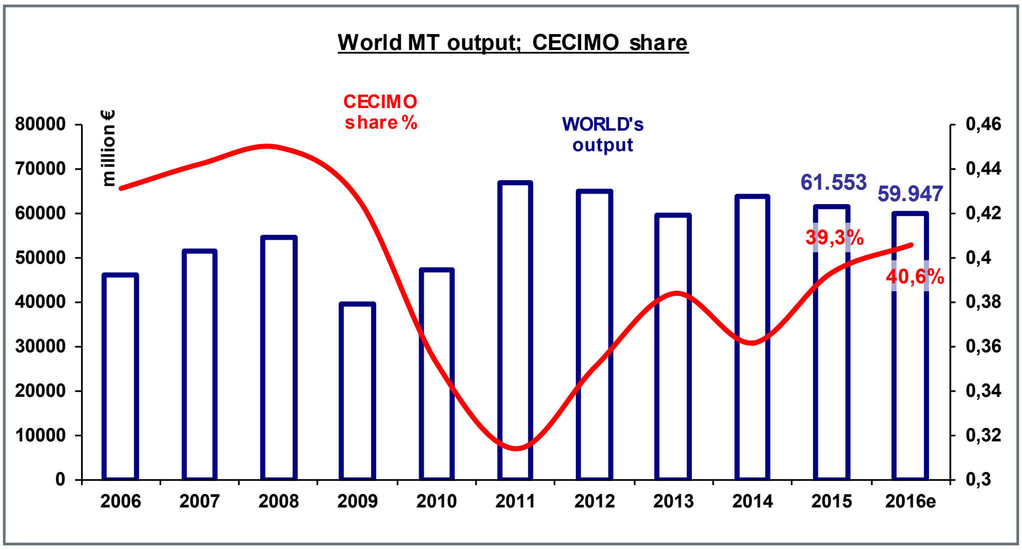
On yearly basis, 2016 CECIMO MT production is expected to very slightly increase, while the global production is forecasted to fall of 4%.

The production of the 15 CECIMO member countries grew by 5% to 24,1 billion euros in 2015. Despite the declining global machine tool market, the European machine tool industry has been able to keep its competitive position. The low euro rates are making European machines cheaper on foreign markets while domestic consumption and some previously postponed investments drive local machine tool sales. This, combined with the declining output in the global context, lead to think that CECIMO production will keep growing its market share and suggest that its MT output will remain above 24 billion euro in the near future. Still, the increasing uncertainty and geopolitical tensions keeps the industry from having a highly positive future outlook.

Germany, which together with Italy accounts for more than two thirds of CECIMO machine tool output, is, by far, the biggest CECIMO MT producing country with 46.2 percent of its total production last year. Italy and Switzerland represent respectively 19,3 and 12,0%, followed by Spain (3,9%), Austria (3,5%) and the UK (3,4%). The three major CECIMO MT producers accounts for more than three quarters of the MT production in this group of countries. No significant changes in these percentages are currently expected for 2016.

See graph on next page





	2016e		2016e/2015
	% share	Mio. €	% change
CECIMO	**40,6%**	**24 336**	**0,8%**
China (offic.)	25%	16 078	-4,5%
Japan	19%	12 295	0,1%
S. Korea	5%	2 900	-20,0%
USA	5%	2 923	-16,6%
Taiwan	5%	3 073	0,1%
India	1%	759	9,9%
Canada	1%	390	-3,6%
Russia	1%	356	-3,6%
Thailand	1%	350	-3,6%
Singapore	1%	330	-3,6%
Poland	0%	199	-3,6%
Others	1%	781	-3,6%
TOTAL	**100%**	**59 947**	-2,4%

1.6 CECIMO Business Climate Barometer

For the latest CECIMO Climate Barometer, please refer to the May 2016 edition of the CECIMO Statistical Toolbox.

2. Macroeconomic data in relation with machine tool orders

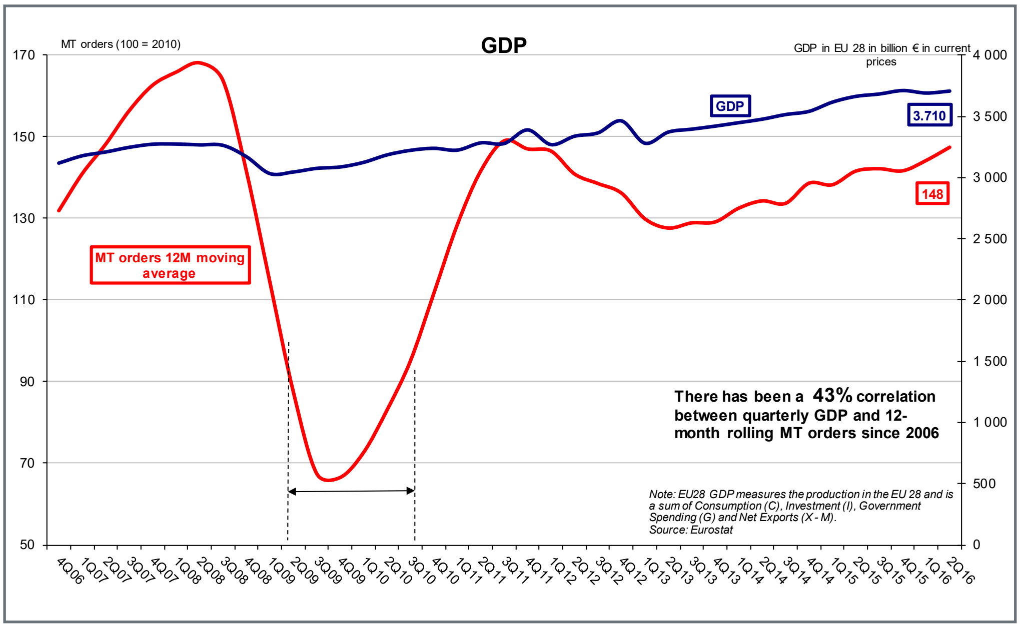
2.1 GDP

According to the latest estimation published by Eurostat, the seasonally adjusted nominal gross domestic product in the EU and the Euro area rose by 0.4% and 5.6% respectively in the second quarter of 2016 versus the previous one. In the first quarter of 2016, the GDP grew by 0.6% in the Euro area and by 0.5% in the EU28. The real GDP in the Euro area increased by 0.3% quarter on quarter, at a slightly smaller rate than the 0.5% in the first quarter.

Economic studies carried out by the European Commission reveals its estimations of above 3% annual real GDP growth for 2016 in Ireland, Spain, Luxembourg, Malta and Slovakia. On the negative side, Italy, Finland and Portugal are expected to grow at a lower rate than 1% this year in comparison with 2015. The biggest downgrades are for the Baltics (their forecasts has been cut by 0,8-0,9 percentage points), Ireland (its growth rate has been brought down from 4,9% to 4,1%), Italy (from 1,1% to 0,7%), Portugal (from 1,5% to 0,9%), Poland (from 3,7% to 3,1%).

As a result, the overall EU real GDP will rise 1.8%-2% this year. For 2017, the EU growth is forecasted at 1,6%, 0,1 percentage points more than the rate for the euro area. On the contrary, US and Japan are growing slightly lower than expected, and are expected to record growth rates of 1,6% and 0,7% respectively. Chinese estimates of 6,6% GDP growth seems clearly plausible, after expanding its economy by 6,7% in three quarters in a row this year. The World GDP rise will be about or just a little over 3%.

During the third quarter of 2016, according to data released by the US Department of Commerce in late October, the GDP in the United States expanded at 2,9% annual rate, significantly better than the 1.4% recorded the previous quarter, and above the 1.2% in August and 1.1% in July. In the second quarter of 2016, consumer spending remained robust, and exports and corporate investments exceeded expectations. US economy recorded 1% growth in the first half of 2016. The acceleration in real GDP growth in the third quarter is partly due to an upturn in private inventory investment, an acceleration in exports, a smaller decrease in state and local government spending, and an upturn in federal government spending. The large rise of imports partly offset this growth.

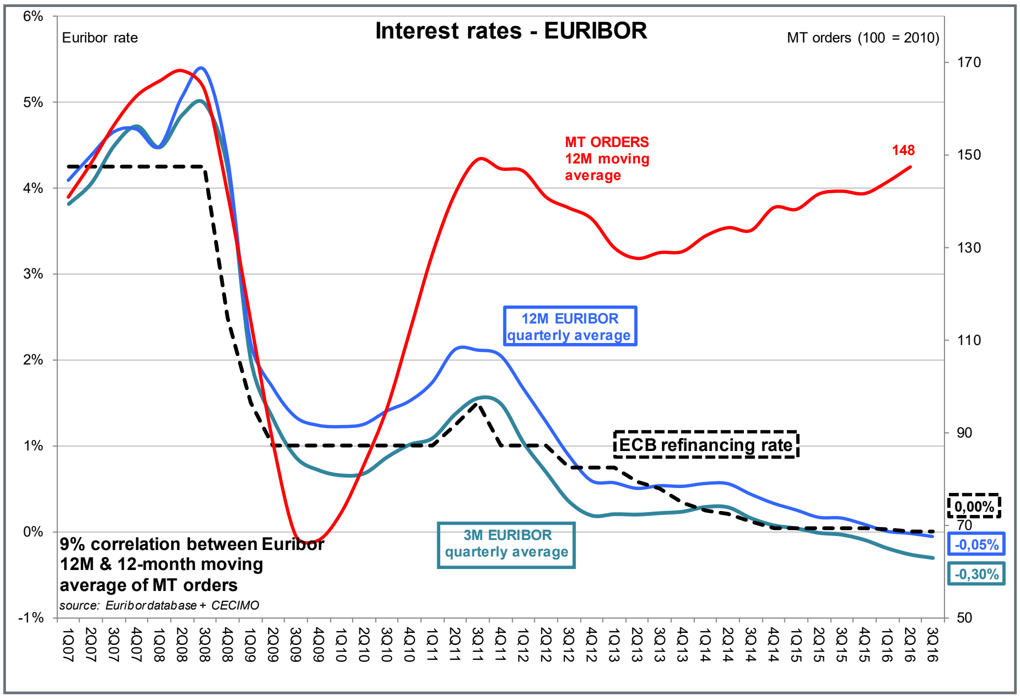


2.2 Interest rates – EURIBOR ⓘ

The Reserve Bank of India, in the first meeting chaired by the new governor, Urjit Patel, cut its repurchase rate by a quarter of a point, to a 6-year low of 6.25%.

The European Central Bank kept interest rates on hold as expected. That is, the rate on the deposit facility continue at -0,4%, while the rate on the marginal lending facility and the interest rate on the main refinancing operations remains unchanged since March at 0,25% and 0% respectively. Mario Draghi, ECB' president, calmed markets saying that an abrupt end to the bond-buying programme was unlikely, and even it would continue beyond March 2017 if necessary.

The average 3 months Euribor interest rate in October went down to -0.309% from its September value of -0.302%. For the 12 months Euribor interest rate, this drop was from -0,057% to -0.069%. Similar trend took place for loans for almost every maturity.



2.3 Inflation

According to Eurostat, annual inflation in the euro area and the European Union was 0,4% in September. The value was higher than in previous months: in the case of the EA, it went up from 0,2% in August and July, while the annual inflation in the EU28 was 0,3% in August and 0,2% in July. Compared with August 2016, annual inflation fell in nine Member States, remained stable in two and rose in sixteen. The lowest annual rates were recorded in Bulgaria (-1,1%) and Croatia (-0.7%), and the highest values were registered in Belgium (+1,8%) and Estonia (+1,7%).

According to the latest flash estimate from Eurostat, EA annual inflation is expected to be 0,5% in October 2016.

2.4 Industrial production index ⓘ

Accounting for 19% of total gross value added, the industry sector is still the largest economic activity in the EU and accounts for the 15% of employment. In August 2016 compared with July 2016, seasonally adjusted industrial production rose by 1.6% in the euro area and by 1.4% in the EU28. On yearly basis, industrial production grew by 1.8% both in the EA19 and the EU28. However, in September the industrial production fell by 0,8% in the EA19 and by 0,7% in the EU28, with the highest decreases registered in Denmark (-8,1%) and Norway (-5,6%).

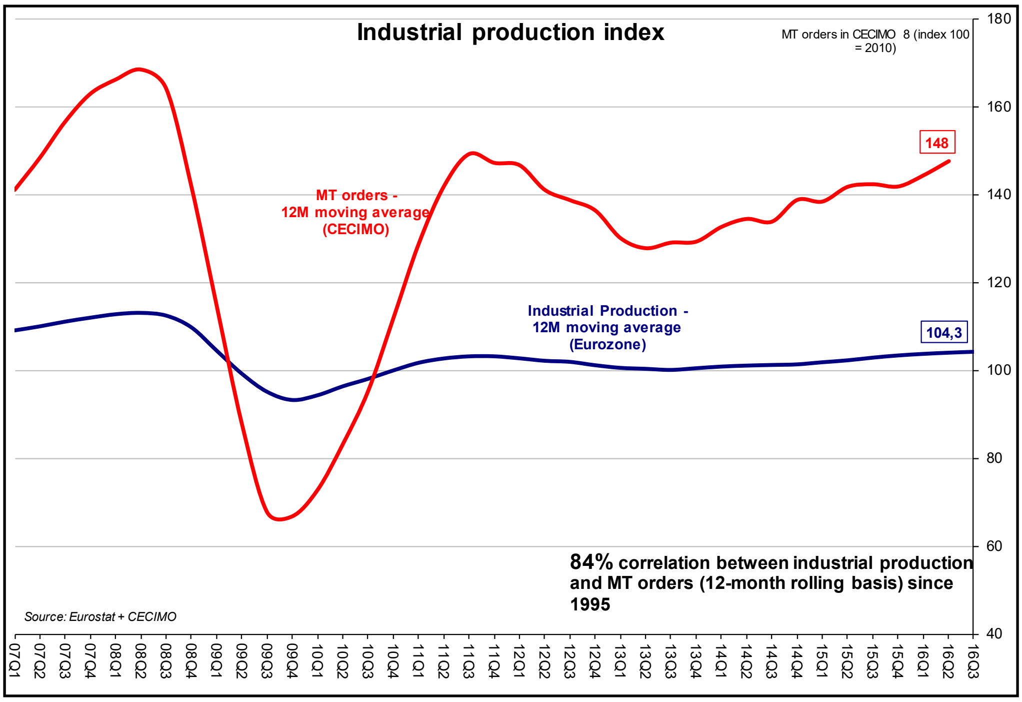
In the euro area, the industrial production of capital goods rebounded 1,4 percentage points in the second quarter of 2016 in comparison with the same quarter of 2015. The production of capital goods throughout the EA displayed a weak growth in July and August. In month-on-month annual percentage change terms, the production rose 3,5 percentage points in August, after declining 1,9 in July and increasing 1,7 in June. Industrial production as a whole, excluding construction, grew strongly in August 2016 following a smaller decline in July.

Industrial production
(percentage change compared with the same month of 2015)

	EA19		EU28	
	August 2016	July 2016	August 2016	July 2016
Total industry	1.6%	-0.7%	1.4%	-0.7%
Capital goods	3.5%	-1.9%	3.8%	-2.4%
Intermediate goods	1.4%	-0.3%	0.9%	-0.4%
Energy	3.3%	0.3%	1.9%	1.0%
Durable consumer goods	4.3%	-1.0%	2.7%	-0.9%
Non-durable consumer goods	-0.6%	0.4%	-0.5%	0.6%

Among EU Member States for which data are available, the largest decreases in industrial production were registered in in Ireland (-8.5%), Sweden (-6.2%) and Malta (-3.9%), and the highest increases in Czech Republic (+7.7%), Slovenia (+5.9%) and Poland (+5.1%).

In the US, manufacturing output edged up 0,9% and industrial production rose in the third quarter of 2016 at an annual rate of 1,8%. Following the rise of 0,6% in July, US industrial production decreased 0,5% in August and was little-changed (+0,1%) in September.



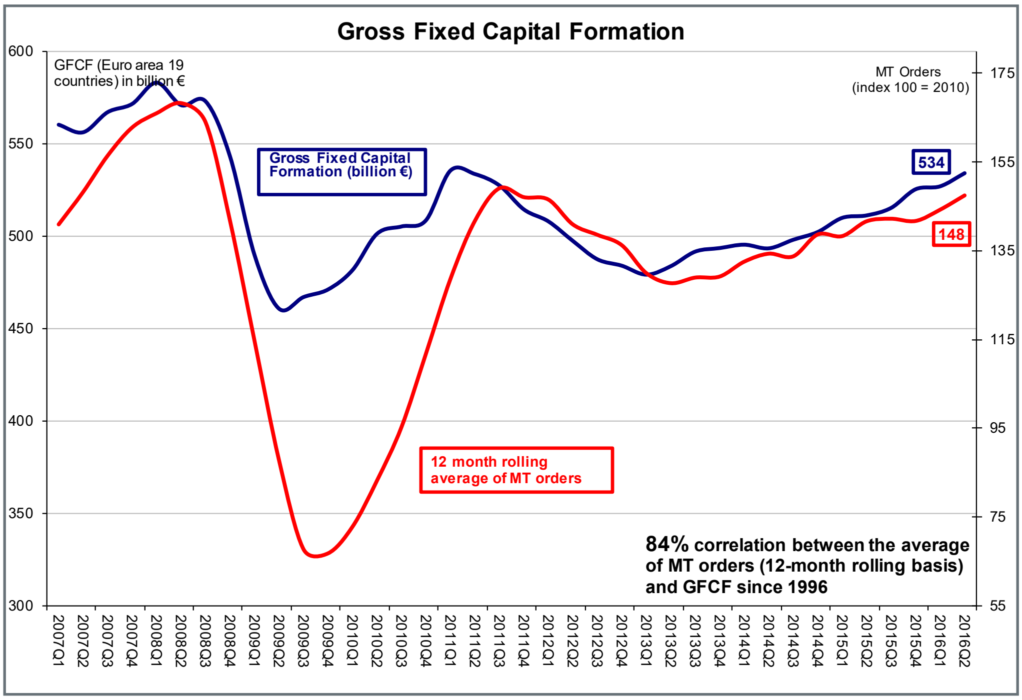
2.5 Gross Fixed Capital Formation

Business investment grew moderately in the third quarter of 2016 and this trend is expected to continue beyond the next quarter thanks to a demand upturn, replacement needs, and accommodative monetary policy and favourable financing conditions.

The Gross Fixed Capital Formation (GFCF), formerly known as Gross Domestic Fixed Investment, reveals that investments in fixed assets remains under the targeted levels which would be consistent with sustainable growth, but the euro area's business investments are now back to the pre-crisis peak recorded in 2008. Furthermore, the ratio of EA real business investment to value added has now surpassed its long-term average. Since the slow recovery of investment levels in the EA, which began in 2013, the level of business investment has registered an almost 15% increase, with great inequalities between the different countries. So, the largest contributors to that upturn in investments have been Germany, Spain and France.

This is an important indicator for MT builders. In fact, 81% of correlation has been observed between orders (measured on rolling orders average) and GFCF since 1996.

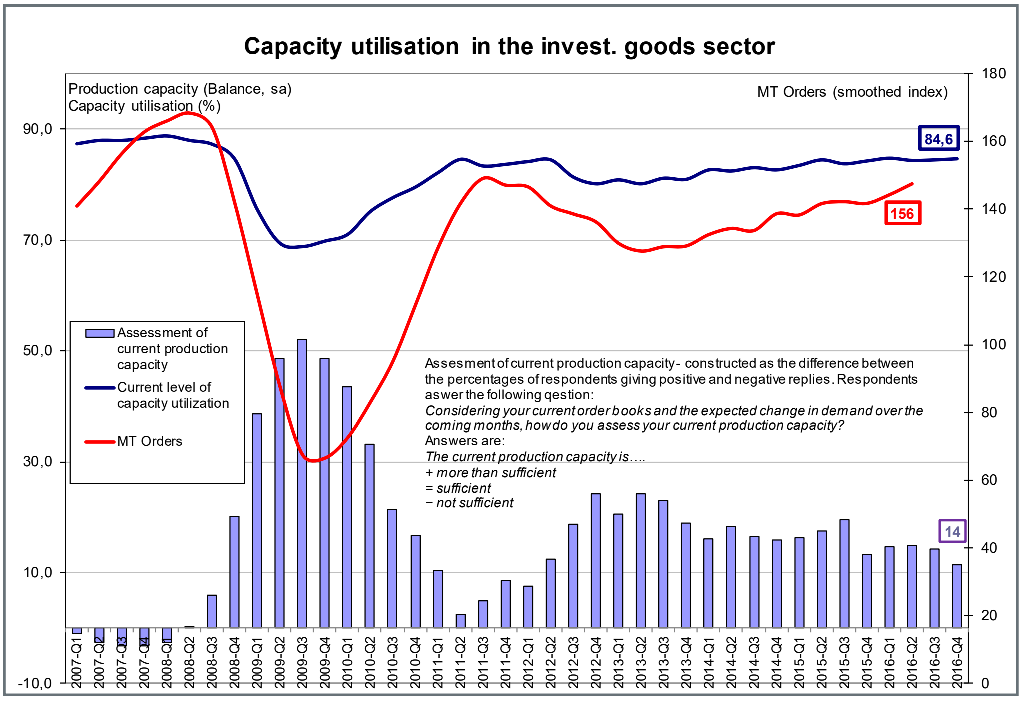
There are some goods prospects for the near future. For instance, it is well known that these investments are highly correlated with the economic sentiment, and the latter is increasing on basis of the Economic Sentiment Indicator (ESI) published by the European Commission or the Business Climate Indicator (BCI) provided by the OECD. Please find further information under the sections 2.10 and 2.11.



2.6 Capacity utilisation in the investment goods sector ⓘ

In the EU, the capacity utilization so far this quarter (84,6%) is higher than in the previous one (84,4%), but slightly below the year's first quarter level (84,7%). The highest correlation between the evolution of level of capacity utilization and machine tools orders is observed when calculated using one quarter lag. In that case, the correlation is almost 44% in the period 1996-2016. That correlation is around 5,5 percentage points higher than that one calculated by including orders without any lag (38%) or with a lag of 2 quarters (36,5% approximately). In the EU19, the capacity utilization in the third quarter rose to 81.6%.

In the US, recently published data indicates that capacity utilization was 75.3% in August, 0,5 percentage point lower than in July and June. Capacity utilization for the industrial sector climbed 0,1 pp in September to 75,4%, a rate that is 1 pp less than in September last year and 4.6 pp below its long-run (1972–2015) average.

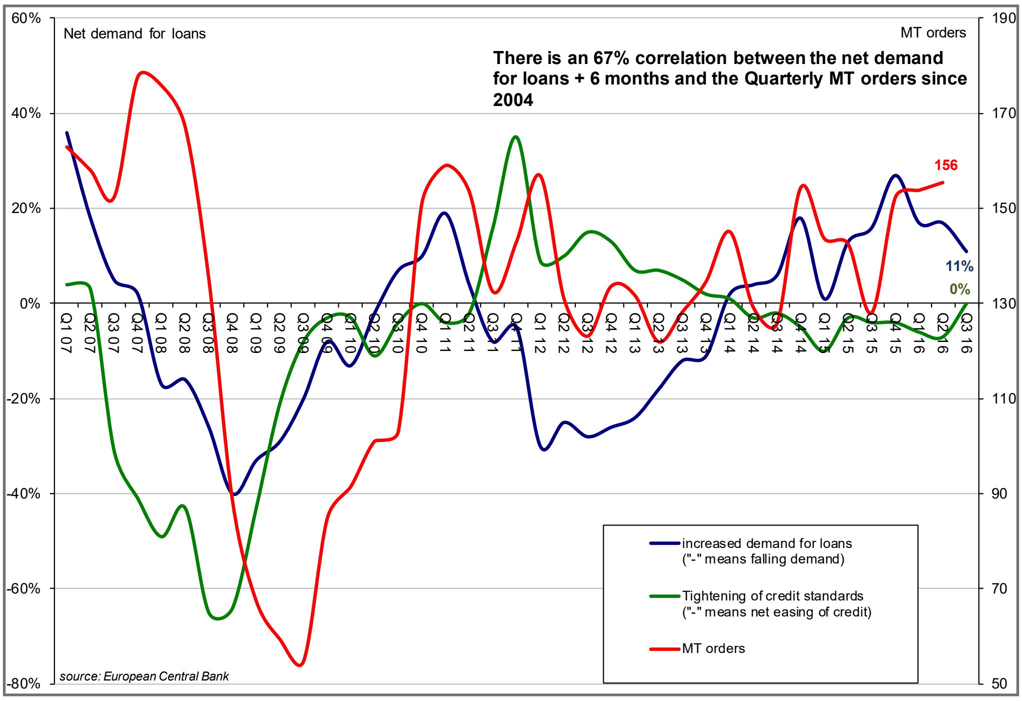


2.7 Bank lending survey ⓘ

The credit standards of banks of the EU19 on loans to enterprises remained unchanged in the third quarter of 2016 (net percentage of reporting banks of 0%, compared with -7% in the previous quarter and -6% in the first quarter this year), in line with expectations. For the fourth quarter of 2016, banks expect a 4% net tightening of credit standards for loans to enterprises.

The loan demand by enterprises keeps increasing and registered a rate growth of 11% in the third quarter of 2016, following a 17% rate in the previous one. It is expected to rise further in the fourth quarter.

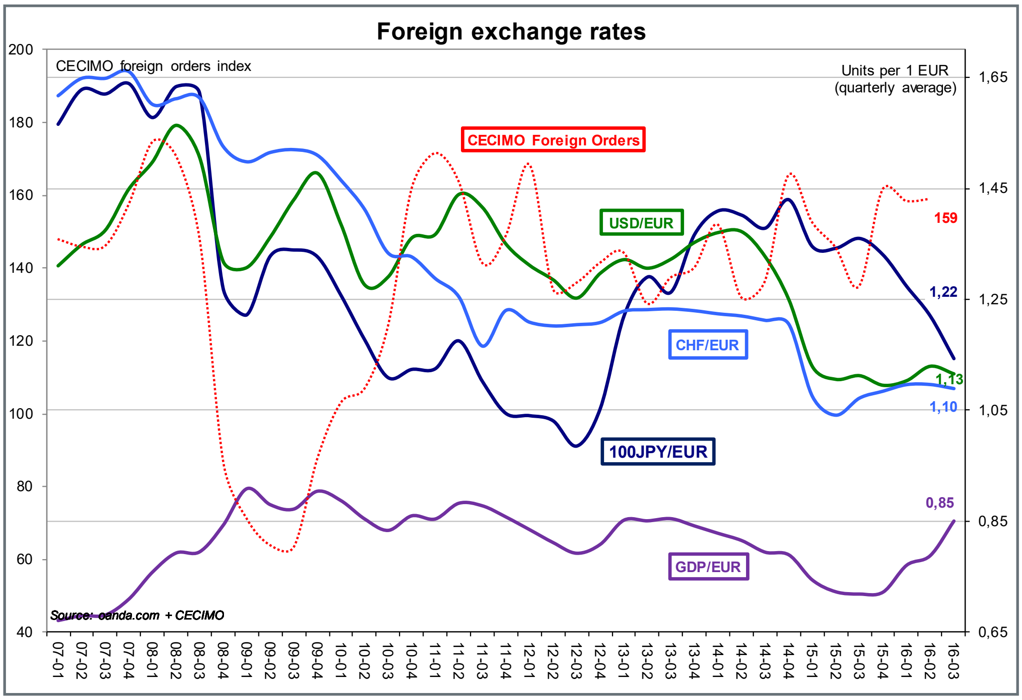
See graph on next page



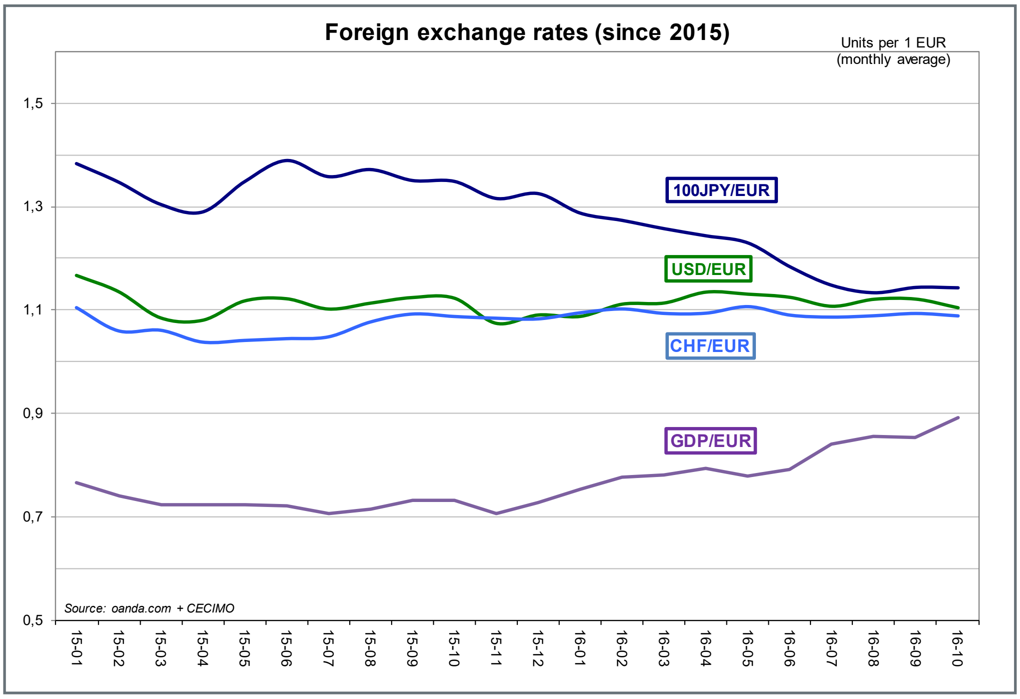
2.8 Foreign exchange rates

The euro keeps appreciating further against the pound sterling and the currencies of most non-EA EU countries. The pound fell to a 31-year low against the dollar on concerns that the UK would suffer from the so-called “hard Brexit”. On 17 October 2016, the average daily GDP/EUR exchange rate was almost 0.905. While the last 10-year average GDP/EUR exchange rate is 0,809, in October 2016 and on average terms, 0,8926 sterling were exchanged for 1 euro in the markets versus 0,8525 GDP per EUR in the previous month. This pound sterling’ recent weakness is thought to be partly a consequence of a reduction in the likelihood for UK to retain access to the Single Market in the future.

The euro depreciated vis-à-vis most major currencies in the world, including those of developing countries. Since the beginning of September to late October, the euro depreciated by 2,8% against the US dollar, by 1,1% against the Japanese yen and by 0,6% against Swiss franc. However, in trade-weighted terms, the euro was broadly stable.



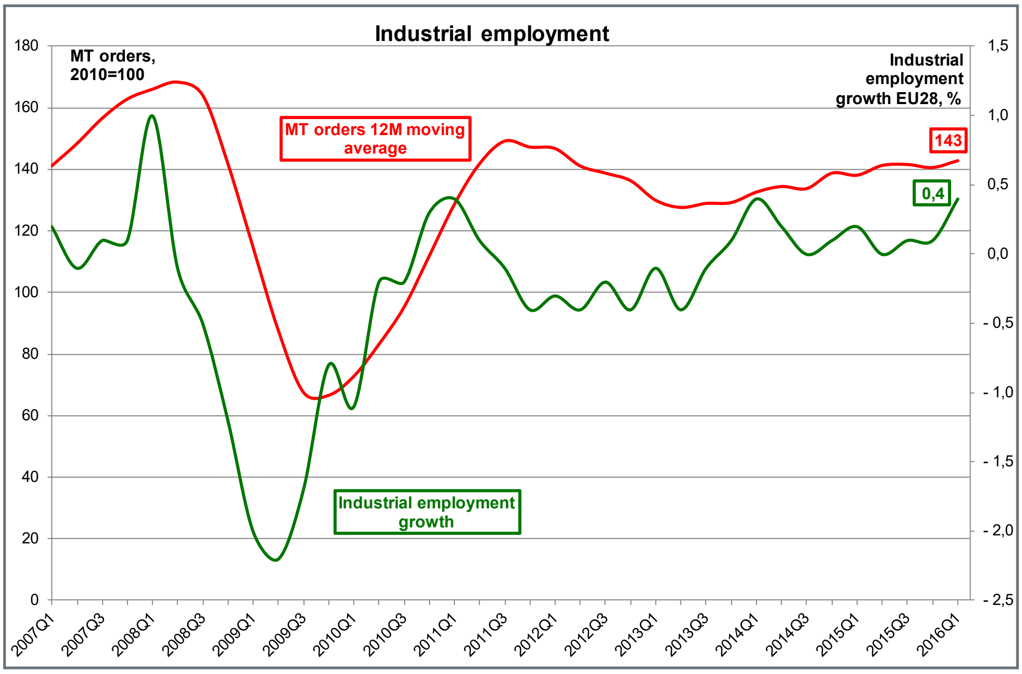
See graph on next page



2.9 Industrial employment

Industrial employment growth picked up in the first quarter of 2016 both in the EU and the EA. The European Union recorded the highest growth rate since the first quarter of 2014 (0,4%), while the Euro area increased its level of employment at 0,3%, the highest rate since the beginning of 2008. The correlation between machine tool orders and the industrial employment is slightly higher than 51% in the EU and 56% in the Eurozone.

The general unemployment in the euro area and the EU was stable compared with the previous month, showing a more optimistic picture than one year ago. The EA19 seasonally-adjusted rate went down from 10,6% in September 2015 to 10% in September 2016, while that rate for the EU was 8,5% in September 2016, down from 9,2% one year before. These are the lowest rates since June 2011 for the EA and since February 2009 for the EU.

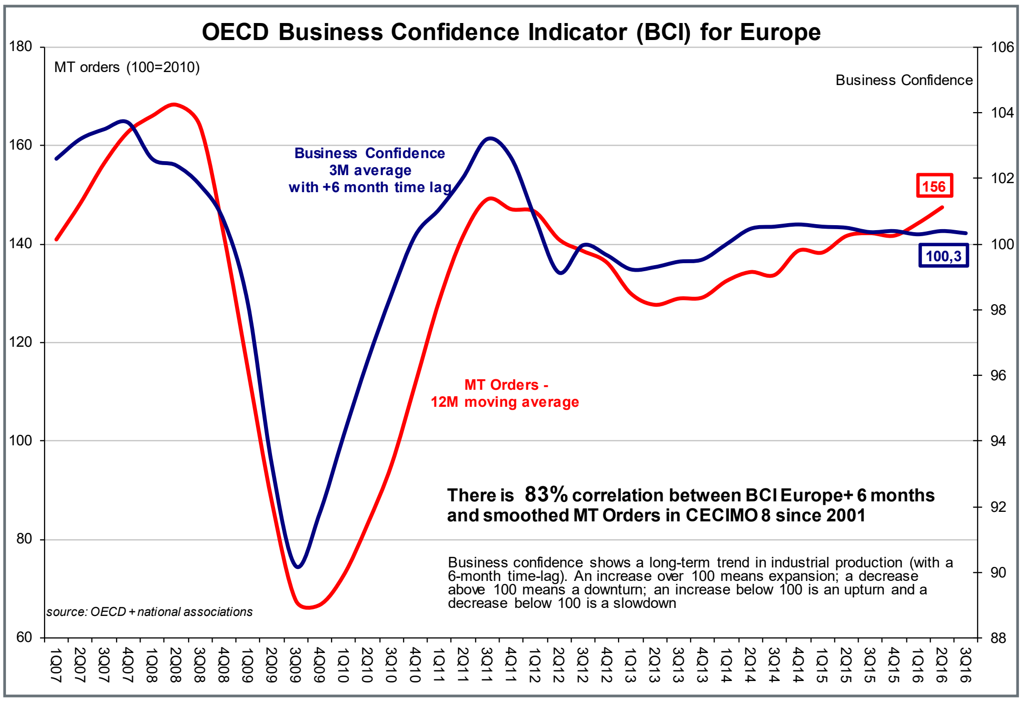


2.10 OECD Business Confidence Indicator for Europe ⓘ

Business confidence indicators (BCIs) show an outlook for relatively firming growth in the OECD area, even if, on average, the confidence in the capital goods sector was relatively lower in the third quarter than in the second quarter this year. In Europe, the BCI points to a stable growth momentum, particularly in Germany and France.

Among other developed countries, the BCIs indicate a stable growth momentum in the United States, Japan and Canada, the OECD Composite Leading Indicators indicate growth picking up.

Among major emerging economies, the BCIs for Brazil and Russia confirm that upturn is gathering strength. BCIs continue to point to stable growth in China. The index for India recorded a month on month change of 0,2%. Firming growth is forecasted there.



2.11 European Commission Economic Sentiment Indicator ⓘ

In October 2016, the Economic Sentiment Indicator (ESI) increased by 1,4 points to 106,3 for the euro area and to 106,9 in the EU. The same positive trend was recorded in September 2016, with increases of 1,4 and 1,8 points for the EU and the EA respectively after three months of negative growth, stagnation or very modest developments. The major increases were registered in the same countries than in September: Spain (+2,6), Germany (+1,6), Italy (+1,5) and the Netherlands (+1.0). With the only exception of France, where the index lost 0,3 points in October after gaining 0,9 in September.

Industry confidence, which is weighted at 40 per cent in the calculation of the ESI, increased around 1,2 points in comparison with the previous month, following a rise of 2 points in September. The underlying factors driving the index up have been a market increase in managers’ production expectations, and improved assessments of the stocks of finished books and overall orders.

Continued ▶

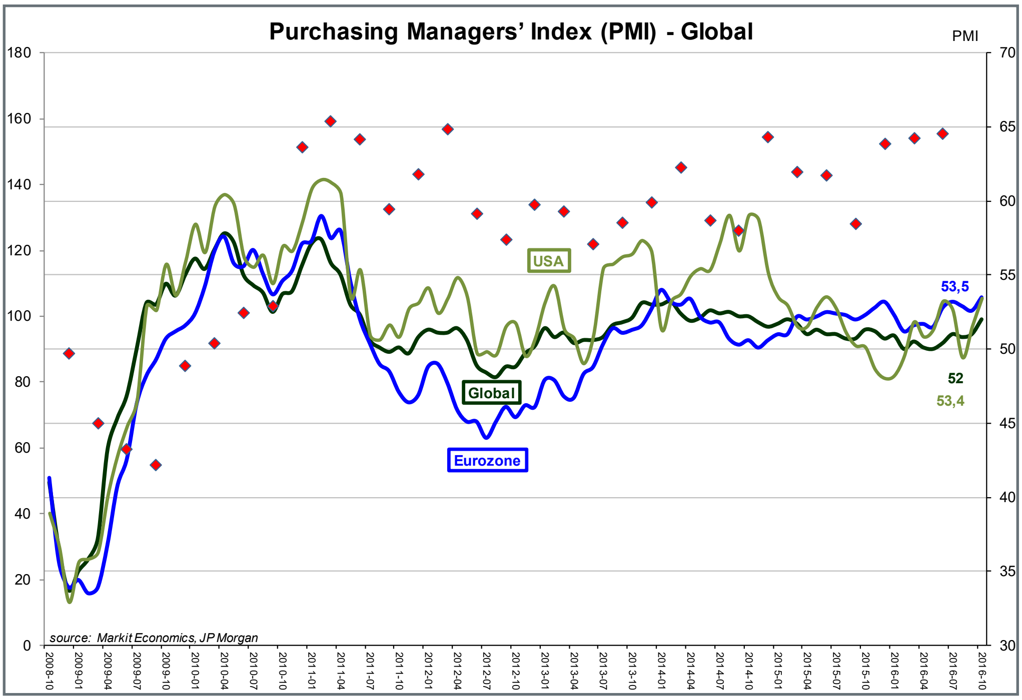
These results are in line with the data gathered in surveys implemented and processed by the European Commission. The business climate in the euro area increased, the indicator used to measure it increased by 0,11 points to +0,55.

2.12 Purchasing Managers' Index ⓘ

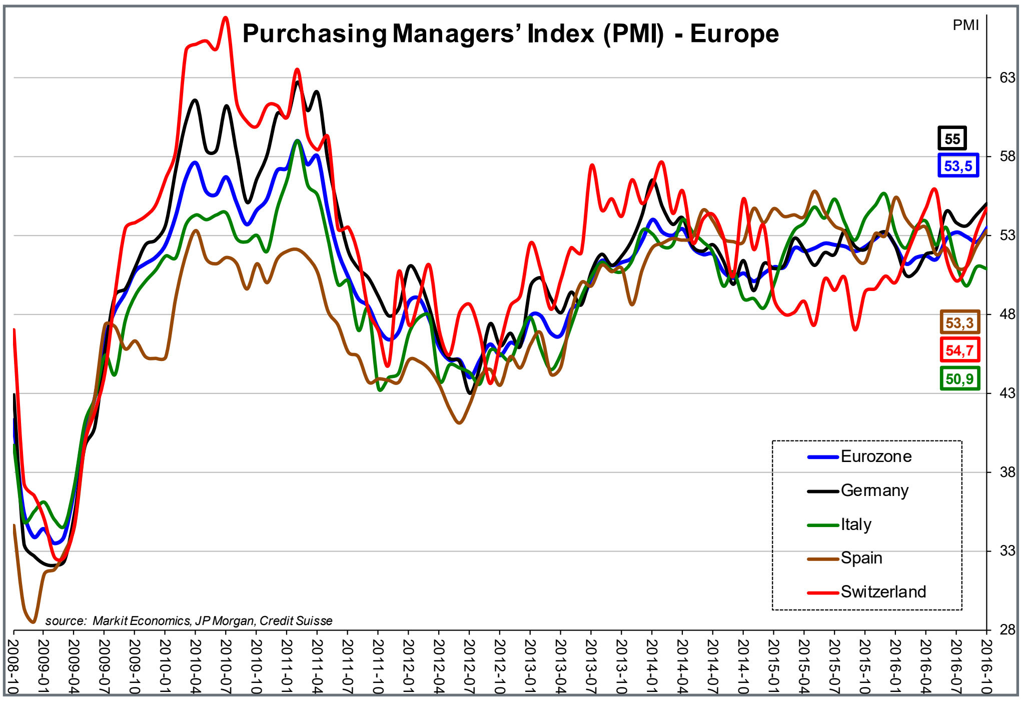
Global manufacturing shows strength, above all across the consumer, intermediate and investment goods sectors. 22 out of 31 countries analysed by HIS market and J.P. Morgan in October registered improved operating conditions.

In the Eurozone, the Manufacturing Purchasing Managers' Index keeps posting above the neutral 50,0 threshold. At 53,5 up from September's 52,6, the sharpest expansion of production since April 2014 was indicative of the good momentum for the manufacturing sector. New orders, output and new export businesses rose at some of the fastest rates achieved over the past three years. With very few exceptions such as the United Kingdom (its PMI index fell from in September to in October) and Greece (it posted 48,6 at the start of the fourth quarter, down from 49,2), most of the EU countries' PMI readings signalled a broad-based expansion. Among them, German Manufacturing PMI rose from 54,3 to 55, reflecting the strongest improvement in manufacturers' operating conditions since the second quarter of 2014. Switzerland (54,7 up from 53,2), the Netherlands (55,7 up from 53,4) and Spain (53,3 up from 52,3) followed a similar trend. The Swiss index is the highest since May, Spain registered the greatest improvement since April, and in the Netherlands, the latest index reading was the highest in 15 months. France saw an increase for the first time in three months.

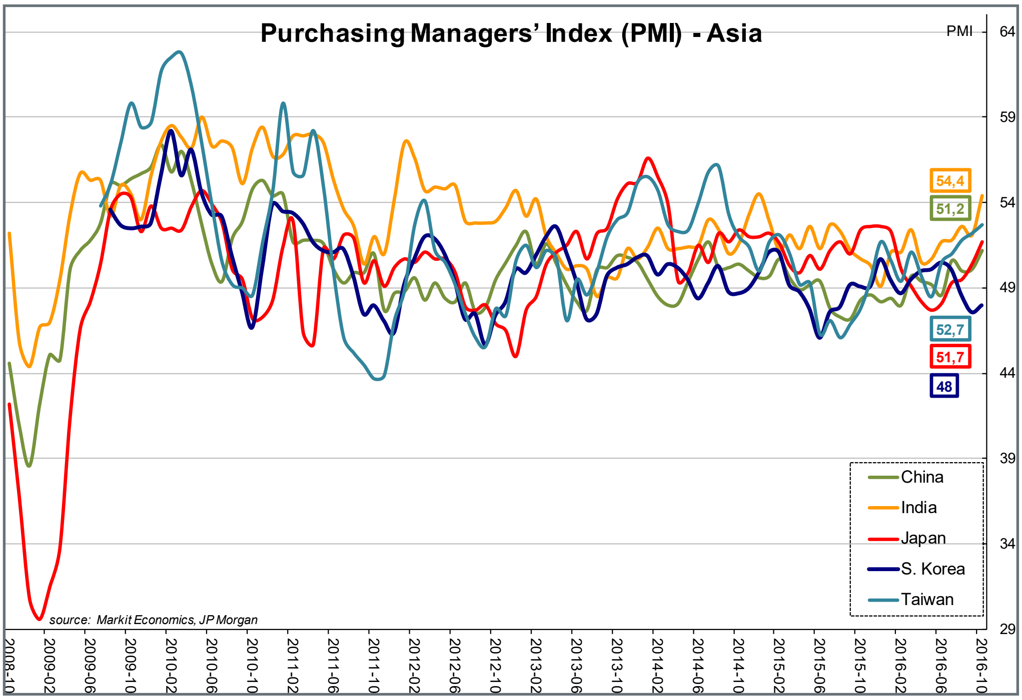
"*On the price front, inflationary pressures in the manufacturing sector showed further signs of recovery. Input costs rose at the quickest clip in 15 months on the back of increased commodity prices, especially for energy and oil-related products. These cost pressures may be starting to trickle further along the supply chain, as firming demand allowed manufacturers to raise output charges in October for the first time since August last year*", commented Markit.



See graph on next page



Purchasing Managers' Index (PMI) - Europe
PMI
63
58
53
48
43
38
33
28
55
53,5
53,3
54,7
50,9
Eurozone
Germany
Italy
Spain
Switzerland
source: Markit Economics, JP Morgan, Credit Suisse
2008-10
2009-01
2009-04
2009-07
2009-10
2010-01
2010-04
2010-07
2010-10
2011-01
2011-04
2011-07
2011-10
2012-01
2012-04
2012-07
2012-10
2013-01
2013-04
2013-07
2013-10
2014-01
2014-04
2014-07
2014-10
2015-01
2015-04
2015-07
2015-10
2016-01
2016-04
2016-07
2016-10



Purchasing Managers' Index (PMI) - Asia
PMI
64
59
54
49
44
39
34
29
54,4
51,2
52,7
51,7
48
China
India
Japan
S. Korea
Taiwan
source: Markit Economics, JP Morgan
2008-10
2009-02
2009-06
2009-10
2010-02
2010-06
2010-10
2011-02
2011-06
2011-10
2012-02
2012-06
2012-10
2013-02
2013-06
2013-10
2014-02
2014-06
2014-10
2015-02
2015-06
2015-10
2016-02
2016-06
2016-10

Glossary ⓘ

1.1 CECIMO8 orders

This section presents the “new orders received index” showing the development of the machine tool demand as an indication of future production. An order is defined as the value of the contract linking a producer and a third party in respect of the provision by the producer of goods and services.
The CECIMO8 orders index combines the relevant indexes of Austria, the Czech Republic, France, Germany, Italy, Spain, Switzerland and the United Kingdom. The weights of the different indexes correspond to the countries shares in total production of the eight countries in 2010. The new orders received are split according to the origin of the order, based on the change of ownership. This identification is the basis for domestic and foreign new orders. The origin is determined by the residency of the third party that has made the order.

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 and 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/

2.4 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.
Industrial production is compiled as a fixed base year Laspeyres type volume-index. 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

2.5 Gross Fixed Capital Formation

The Gross Fixed Capital Formation (GFCF) consists of resident producers´ aquisitions, less disposals, of fixed tangible or intangible assets. This covers in particular machinery and equipment, vehicles, dwellings and other buildings. The GFCF is a key determinant of both aggregate demand and supply.
Source: Eurostat and ECB.

2.6 Capacity utilization in the investment goods sector

Population: Investment goods producers. Data covered: Assessment of current production capacity, measured as a balance (seasonally adjusted); Current level of capacity utilization, measured in % (seasonally adjusted). More than 38.000

industrial firms are surveyed every month, while the biannual investment survey includes over 44.000 units. Answers obtained from the surveys are aggregated in the form of “balances”. Balances are constructed as the difference between the percentages of respondents giving positive and negative replies. The Commission calculates EU and euro-area aggregates on the basis of the national results and seasonally adjusts the balance series.
http://ec.europa.eu/economy_finance/db_indicators/surveys/documents/userguide_en.pdf

2.7 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

2.10 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. CLIs are calculated for 33 OECD countries (Iceland is not included), based on enterprises’ assessment of production, orders and stocks, together with its current position and expectations for the near future. These indexes are designed to anticipate turning points in economic activity relative to trend. 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. Turning points in the detrended reference series are usually found about 4 to 8 months in advance. 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

2.11 European Commission Economic Sentiment Indicator

The Economic Sentiment Indicator (ESI) is a composite indicator made up of five sectoral confidence indicators with different weights: Industrial confidence indicator, Services confidence indicator, Consumer confidence indicator, Construction confidence indicator Retail trade confidence indicator. Confidence indicators are arithmetic means of seasonally adjusted balances of answers to a selection of questions closely related to the reference variable they are supposed to track (e.g.

industrial production for the industrial confidence indicator). Surveys are defined within the Joint Harmonised EU Programme of Business and Consumer Surveys. The economic sentiment indicator (ESI) is calculated as an index with mean value of 100 and standard deviation of 10 over a fixed standardised sample period. Data are compiled according to the Statistical classification of economic activities in the European Community, (NACE Rev. 2). The industry confidence is weighted at 40 per cent in the calculation of the ESI.
Source: DG ECFIN

2.12 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

CECIMO aisbl
66, avenue Louise
1050 Brussels
Belgium

Tel: +32 2 502 70 90
Fax: +32 2 502 60 82
www.cecimo.eu

For more information:
information@cecimo.eu