CECIMO Statistical Toolbox

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cecimo

European Association of
the Machine Tool Industries

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

Introduction

The international economic recovery is still somewhat precarious but it's gaining strength. The global growth is projected to decelerate to nearly 2.5 - 3 per cent this year and to rebound to around 3.5 per cent in 2017 and 2018. Emerging economies will account for over three-quarters of forecasted global growth in 2016. Advanced economies markets are still suffering from weak demand and they cannot rely on Chinese imports with the same intensity as over the last years. They will expand at a rate below 2% both in 2016 and 2017.

The overall momentum for trade remains weak, with 1.7% expected expansion this year, and the ratio of trade growth to global GDP is forecasted to fall to a 15 years record-low of 0.8. The growth of political mainstream critics of globalization is the major barrier to free trade at present. Anti-immigrant and anti-trade rhetorics are gaining ground in both sides of the Atlantic, which are making more difficult to advance in trade liberalization measures and they are encouraging the return of some protectionist ones. Pending work to do for enhancing a further and more effective participation of SMEs in world markets will ultimately help the global integration to fully benefit larger sections of society.

Some topics are currently crucial in the world economy and they will play an important role in the months to come: among others, the rebalancing of China towards a consumption-led economy, the fall of commodity prices (partially recovered with the strongest price increases for coal and oil) which struggles commodity net exporters countries through weakening export income, the retraction of global value chain, geopolitical tensions and the upward pressures on oil prices. The price level of fuel and metals is growing. In the third quarter, metal prices rose by 4% with a sharp increase of 11.5% in November. In late November, the OPEC (the Organization of the Petroleum Exporting Countries) agreed to crude oil production cuts from 33.7 to 32.5 million barrels per day. On top of the 1,2m barrels a day (b/d) removed from global oil production, Russia could contribute further by deciding in December to shorten its production in 600,000 b/d. Brent oil prices already rose to above 50 USD per barrel.

Unemployment is still one of the main economic and social concerns for the European countries. Even though there is some improvement in the employment figures, this has been reflected largely in part-time rather than full time work. Wage inequality is also an issue of concern, more importantly for women. The extent of wage inequality is not as pronounced in the EU as in other regions of the world, but the situation widely differs across the Member States. The top 10 percent of best paid employees in Europe take on average 25% of the total wages paid in their respective countries. Baltic countries experimented the highest real wage growth in 2015 (5.5-7%) among European countries (1.9%). On a global scale, the slowdown of wage growth in developing countries, where real wage growth fell from 6.6% in 2012 to 2.5% in 2015, led to the weakest salaries global increase (1.7%) over the last 4 years. Even the upward pressure on wages in some countries of the EU and US is not sufficient to offset the downturn or trend reverse in the emerging countries.

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Central banks of many advanced economies will probably keep backing ease monetary policies to promote growth and diminishing deflationary risks, but they will be likely less dovish. Accommodative monetary policy in the Eurozone is expected to remain in place. The European Central Bank will decide whether to keep its stimulus program of quantitative easing in December. It will be probably extended but maybe by scaling down its monthly purchases. This bond-buying programme, which aims at stimulating the economy, started in March 2015 and expanded several time. At present it reached almost 2.3 trillion euros, two times the original figure. Moreover, following a decline in investments in 2011-12, real business investment has recovered visibly since early 2013. Construction investment, after its correction during the crisis, has also joined this trend since 2015 contributing to the increase in total fixed capital investment.

In the United Kingdom, the long-term effects of the outcome of the so-called "Brexit" referendum remain to be seen. Although there is no immediate observable downturn in the economic activity and in the short term some signs of improvement are detected, there is larger volatility of foreign exchange rate and a persistent uncertainty about the nature of the withdrawal agreement to be eventually concluded between the UK and the EU. In a nutshell, at this stage, the process following the UK vote in favour of leaving the European Union is still unfolding and its ultimate impact is somehow unclear.

In the US, the dollar has been strengthening against most world currencies during the last times and, most notably, after the presidential elections. This sharp surge can be explained by the expectation of a fiscal boost (i.e. cuts to corporate taxes and increases of public spending in infrastructure) once Mr Trump will take office, as well as by the high amount of dollar-borrowings over the past years. Furthermore, a stronger dollar might encourage the US administration to adopt protectionist measures. In addition to it, the appreciation of the dollar, as it has the supremacy as means of exchange and store of value, could lead to larger public debts, especially in virtue of the high amounts of dollar-lending occurred while the currency was weaker. In this regard, according to the Bank for International Settlements, by the end of last year one third of the dollar-issued debt was owned by borrowers in emerging markets. This could make central banks in these countries to raise interest rates to contain the inflation and prevent further depreciation of the national currency. Moreover, the expectation of a stronger dollar in the future could trigger a scenario where companies briskly pay off their dollar debts at the expense of investments and jobs.

1. Data specific to the European machine tool market

1.1 CECIMO8 orders ⓘ

According to the latest available data for the second quarter, figures of orders to CECIMO countries showed a better picture in interannual terms, as domestic and foreign orders were 8% and 6% higher than one year ago. Foreign orders to CECIMO8 countries remain at similar levels to those of the first quarter, and domestic orders increased 7% 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 (+16%), Switzerland and France recorded annual increases above 10%.

In the third quarter of 2016, the overall situation for MT orders to CECIMO countries enfeebled. Without current available information on the third quarter for France and Austria, CECIMO8 total orders decreased 15% quarter-on-quarter. It represents a more pronounced downward movement than in the previous years, similar to the one recorded in the third quarter of 2011. This plunge leads to a quarterly drop of 6% in the seasonally adjusted index, following a rebound of 2% in the second quarter. This quarterly plummet was distributed relatively equally among Italy (-19%), Switzerland (-18%), Germany (-15%) and Spain (-15%). United Kingdom (-4%) and Czech Republic (-3%) suffered from smoother decreases. The highest quarterly drop was recorded in Italy, with a 34% fall 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 wanes in the second quarter compared with the period January-March 2016. In year-on-year terms, the least positive data among CECIMO8 countries came from the United Kingdom and Czech Republic, where orders fell by -27% and -13% respectively.

However, on the international sphere, this is a better picture than what it is observed in other non-EU countries, such as Japan and Taiwan. In the former case, orders of metal-cutting machine tools weakened over the recent quarters with a 23% drop year-on-year in the second quarter of 2016, which corresponds to the same yearly drop experimented by the Taiwanese MT industry. Despite a downward movement of 2% of orders of Japanese metal-cutting MT in the third quarter this year, the year-on-year change of -12% is half the decline with respect to the previous quarter. The Japanese MT production has reached its lowest level since the beginning of 2013, suffering from a relatively weak domestic demand. However, data of metal cutting machine tools orders to Japanese enterprises in the third quarter are less downbeat, showing a 9% upward movement. In the U.S., the domestic orders in the first half of 2016 are not in a good momentum either, as they are at the lowest level in the last 6 years.

Following a pronounced quarterly fall of 16%, domestic orders to CECIMO8 countries are now 9% below year ago levels in Q3 2016, while foreign orders, in spite of a 6% decrease quarter-on-quarter in Q3 2016, are 8% above its level a year ago.

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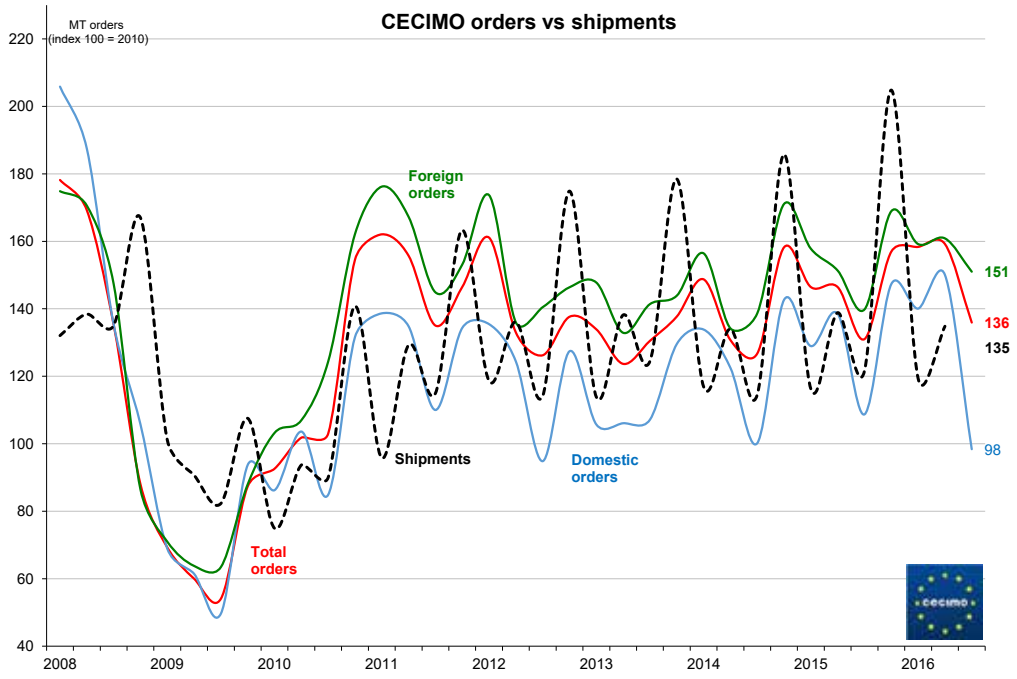
Concerning global production, in year-to-year comparison, the global machine tool production will decrease slightly (around 2% - 3%) from 61.5 billion euro in 2015 to 60 billion in 2016 but CECIMO is projected to defeat this trend with a slightly increase up to just over 24.2 billion euro in 2016. Among CECIMO countries, the latest forecast on production shows production in all CECIMO countries to raise or remain fairly stable this year, except for the United Kingdom (-19% in euro -13% measured in sterling pounds), Switzerland (-7.6%), Belgium (-6.7%), Austria (-4%), Czech Republic (-8%) and Turkey (almost -5%). Upward trends can be observed above all in France (+7.6%), Italy (+5.6%), Sweden (+4.2%) and Spain (+3%).



1.2 Peter Meier's forecast

Overall situation:
Because of the Brexit, the OECD suspended the leading indicators during the summer months. After the outcome of the US elections, the question whether one should suspend again these indicators arises. Anyway, the leading indicators since September have been showing an upward in all major world markets.

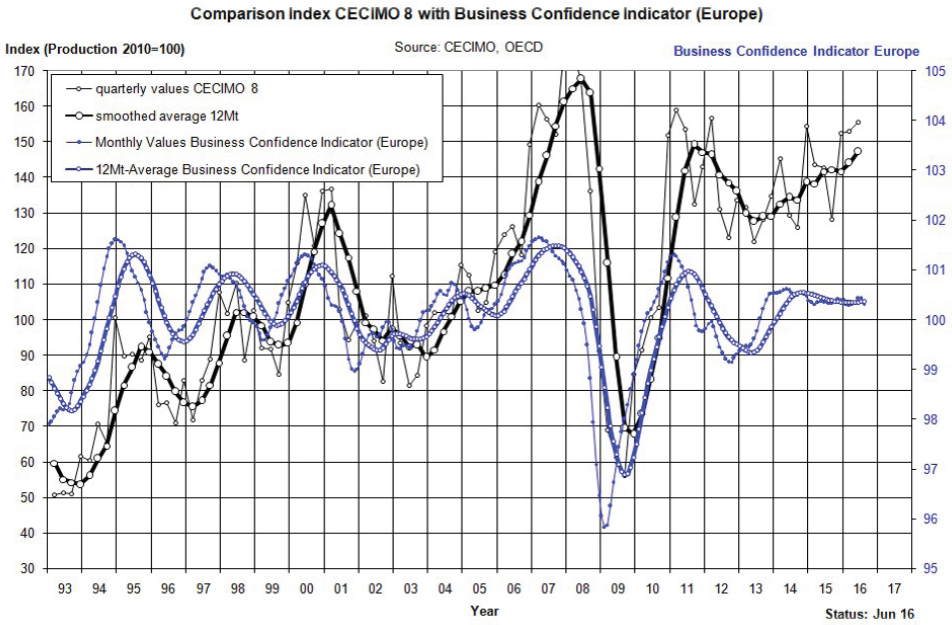
After a brief decline in summer, business confidence in the US has now recovered. Since the beginning of 2015, however, it has been running below 100 points, which means in the contraction area. This is confirmed by the sluggish investment activity that the country has recorded for some time. Consumer sentiment, even if it has been gradually declining since mid-year, is still in the expansion area and it might be registered a increase after the election. This would have a positive effect on the industrial production, which just crossed a trough.

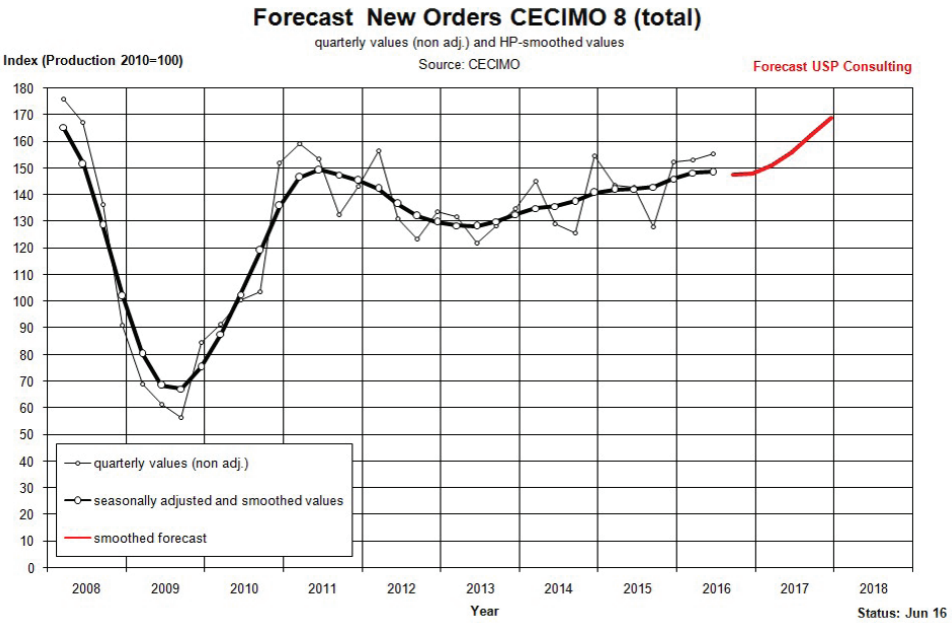
After a prolonged but rather restrained growth, the leading indicators in Asia have gained momentum since summer. Consumer spending has improved significantly in China in the recent months, and business confidence has also improved. Although consumption and industrial production continue to be on a backward movement in Japan, the indicators for Asia suggest a moderate recovery.

Since the slump of the euro crisis in 2012, the leading indicators in Europe have been steadily rising. Business confidence and consumer confidence have been

expanding since 2013. Such a development is atypical, as usually the process is characterized by constant ups and downs. Apparently, expectations and reality are not entirely tuned. One possible reason: although consumption in Europe has exceeded the level of 2007, industrial production has not reached it yet. In other words, the industry doesn't operate at full capacity, which explains the restraint in investments. It looks as if industrial production will reach the level of 2007 again next spring. Subsequently the demand for capital goods is likely to rise.

The following graph clearly shows that the European Business Confidence Indicator has been in the expanding area since the end of 2013. It is worth to keep it in mind, as the rise of this indicator usually has a positive effect on the propensity to invest in machinery, yet with a lag of several months.
New orders in Q3 were clearly below expectations. This reflects a seasonal effect, which can be observed also in former years. The latest economic indicators didn't change the forecast, a sign that the business cycle is now in a rather stable phase. The forecast points on a growing demand for 2017.

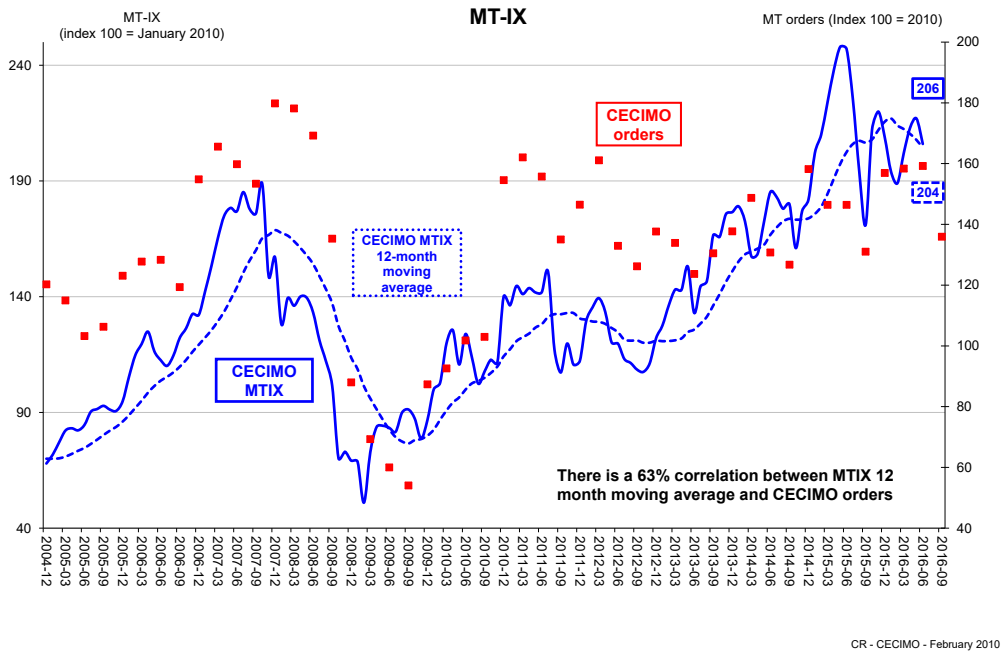




1.3 MT-IX

In the second quarter of 2016, MT-IX index jumped almost 7% compared to the previous quarter's value, gaining 14 points and posting at 220 points. The annual average of the index reached its maximum at the end of 2015 and it is still above pre-crisis levels. The September value of the MT-IX index was 220.5, which shows a rise of 6.8% in comparison with its level of three months ago.

The machine tool companies' market value increased during the summer throughout the globe, especially in Brazil and Korea. The market capitalisation of companies based in CECIMO countries increased more than 5%, while the aggregated market cap of companies in the United States remained more or less stable. Among all countries included in this index, only Taiwan booked a slight decrease.



1.4 CECIMO trade

The unfavourable situation for international trade applies to the machine tools sector as well. Nevertheless, data for the first half of the year gives a relatively better picture than the latest update for the first quarter of the year. Our latest forecast projects CECIMO countries to remain stable this year at 18.7 billion euro. This clearly illustrates 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 declined around 12-13% year-on-year, those coming from CECIMO are suffering just a 4% decrease. Data from the first half of 2016 yields similar results. In a context of sharp declines of global MT trade (-9% for imports and -11% for 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.

In the first six months of 2016, both imports and exports decreased and reported yearly falls of approximately 1.5% and 4% respectively. Africa, which represents a residual percentage of CECIMO machine tools global trade, is the only region escaping this trend with 5% increase of imports from CECIMO. Exports to Russia, heavily impacted by the EU trade sanctions and which accounted for 6% of CECIMO exports in the first quarter of 2015, represented half of it one year later. Russian MT exports to CECIMO countries fell by 30%. In the second quarter this year the situation didn't deteriorated further and took a little breath, but exports to Russia from CECIMO countries were still 11% lower than one year ago. In addition to, it is worth to mention the recovery of CECIMO imports from Russia, which recorded an annual increase of 83% in the second quarter. Almost 90% of total CECIMO imports from the Commonwealth of Independent States (CIS) comes from Russia, and 82% of CECIMO exports to the CIS goes to the Russian Federation. Furthermore, exports during the first half of 2016 from CECIMO countries to China, its main Asian market as it accounts for two thirds of CECIMO market in the region, dropped almost 5% on yearly basis, with a 7.5% decrease quarter-on-quarter in Q3.

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 attracts one third of the world exports. The later data is even greater (38%) when considering the first half of the year.

Finally, it should be stressed that the importance of CECIMO countries in MT international trade is increasing. Sales from CECIMO (including those to other CECIMO countries) were half of the global MT foreign transactions in the second quarter of 2016. The fifteen countries represented by CECIMO accounted for around 47% of 2015 global international machine tool sales, and CECIMO expects to see a low-single-digit increase in the whole year value. An analysis of some of the biggest markets shows that CECIMO market shares in the second quarter - compared to the previous one - 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%). It is clear that CECIMO position in the Asian market is stronger over the first months of 2016. According to the official data provided by Asian countries, more than 1 out of 2 machine tools imported by Asia are coming from CECIMO. This is despite the 5% decline in CECIMO exports to Asia (vs 14% fall in the global context) when comparing the values of the first half this year with the same period of the previous one. As for CIS and Africa, exports from CECIMO countries account for an undoubtedly important percentage of their global imports. At present, they are responsible for 30% of purchases to foreign countries worldwide. Only the value registered at the end of last year was close to that market share.

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

See graph on next page

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%		

CECIMO exports and imports per zones - 2016H1

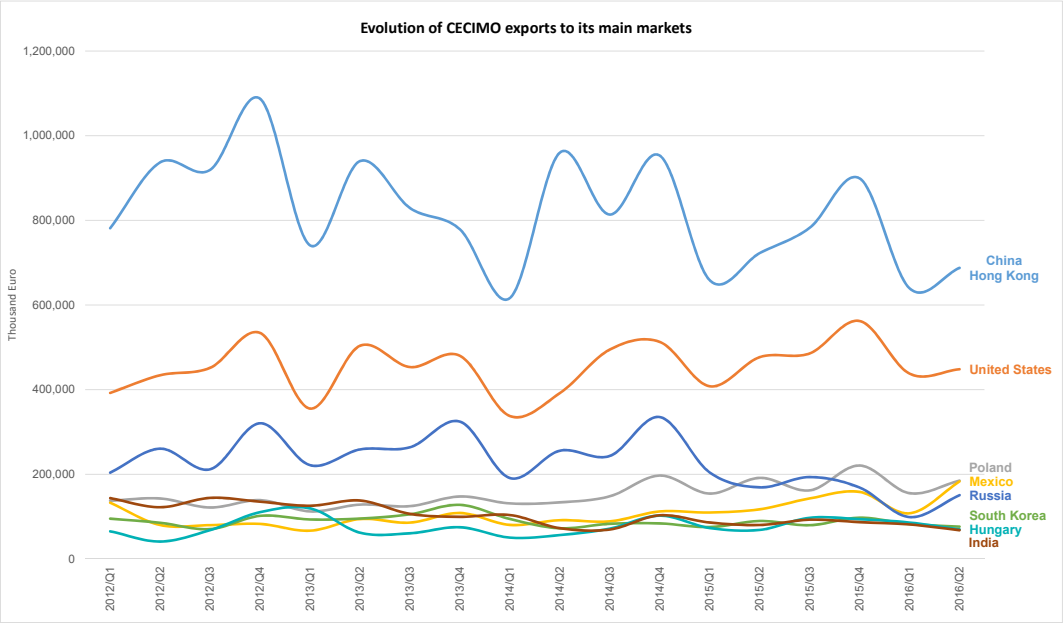
in million euro. Export destinations and import origins

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%		



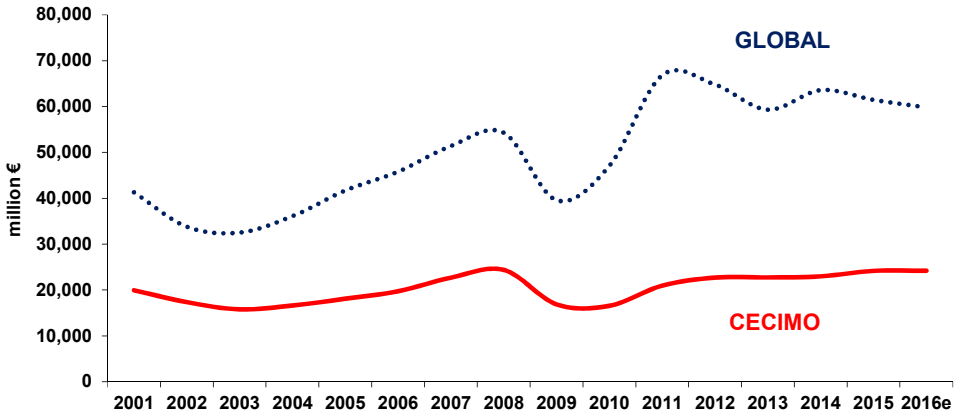
1.5 CECIMO production

After a 5% growth in last year production of the 15 CECIMO countries, 2016 CECIMO MT production is expected to a scarce increase in comparison with last year, and overpasses the level of 62 billion euro. It is important to highlight that this fact is taking place in a negative international context, as global production is forecasted to fall 4% from 61.5 billion euro in 2015 to 60 billion in 2016. Consequently, CECIMO market share of production will increase beyond 40% this year.

Thus, despite the declining global machine tool market, the European machine tool industry has been able to keep its competitive position. Digitisation improvements in the European manufacturing sector are making machine tools exported by CECIMO countries more attractive abroad. In addition, some previously postponed investments are positively influencing local machine tool sales.

A country-by-country analysis indicates that the European MT sector doesn't expect any significant change in the market shares for 2016. 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 UK (3.4%). The three major CECIMO MT producers account for more than three quarters of the MT production in this group of countries.

Global production of machine tools since 2001



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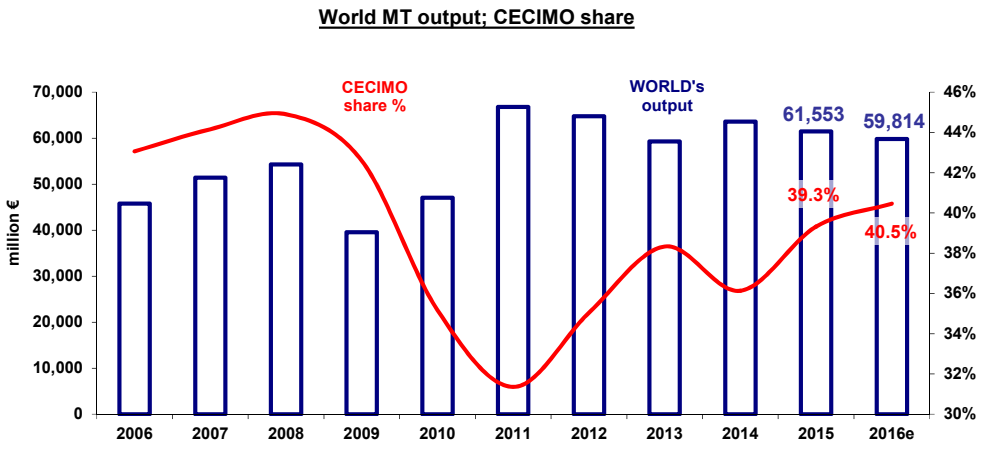

1.6 CECIMO Business Climate Barometer

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 Eurostat estimates , the seasonally adjusted nominal gross domestic product in the European Union (EU) and the Euro area (EA) fell by 0.8%, while the EA alone registered a GDP growth of 0,4% in the third quarter of 2016 versus the previous one. In the second quarter of 2016, the GDP grew by 0.4% in the EU and by 5.6% in the Euro area. The real GDP in the Euro area increased by 0.3% quarter on quarter, a slightly smaller rate than the 0.5% in the first quarter. Year-on-year growth slowed down slightly to 1.8% in the EU and to 1.6% in the EA.

Economic studies carried out by the European Commission reveal its estimations of 1.7-1.8% annual real GDP growth for the EU and the EA, though the picture in Europe is relatively mixed. The European Commission forecasts the real GDP to grow in 2016 above 3% 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 from the EC Spring projections 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%). For 2017, the EU growth is forecasted at 1.6%, 0.1 percentage points more than the rate for the Euro area.

UK will probably finish this year as the fastest growing economy of the seven leading nations belonging to the G7. With its economy forecasted to grow at 0.5 per cent during the final quarter of the year and its annual real GDP growth expected at around 2%, Britain should be ahead of the US, France, Germany, Italy, Japan and Canada. Britain's Autumn Statement given by the Chancellor of the Exchequer to Parliament in late November revealed that the Office for Budget Responsibility (OBR) forecasts growth to slow and inflation to rise over the next two years and announced that the government set new fiscal targets of 2% underlying deficit and debt falling by 2020. According to the British fiscal watchdog, by 2020 the UK economy will grow by 2.4 percentage points less than it predicted before the Brexit referendum, which took place on 23 June 2016. It means around 830 GDP decrease of the average real earnings in 4 years' time.

As for other major economies, US and Japan are growing slightly lower than expected, and are expected to record growth rates of 1.7% and 0.7% respectively this year, and at 0.5 and 0.1 percentage points higher rates next year. The second estimate for the US GDP, which was released in late November by the Department of Commerce, upgraded the forecast from 2.9% to 3.2%, as the increase in personal consumption expenditures was larger than previously estimated. It is a significant better rate than the 1.4% recorded in the previous quarter, and above the 1.2% in August and 1.1% in July. Among other underlying factors behind this growth, it is worth to mention the acceleration in exports (partly offset by an increase of imports) and an upturn beyond expectations in public spending and private inventory investment. On the other hand, Chinese estimate 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 2.5 - 3%.

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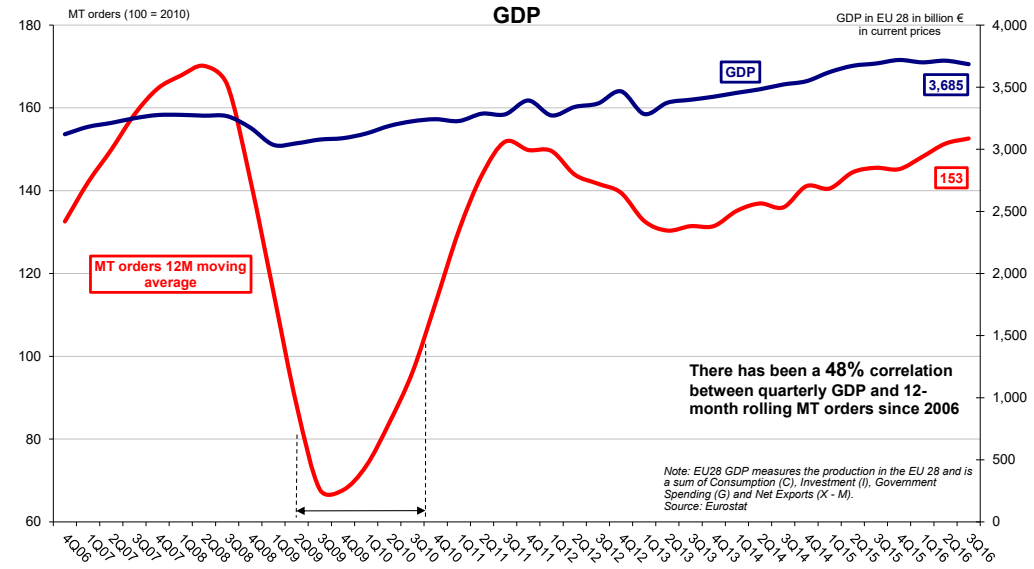
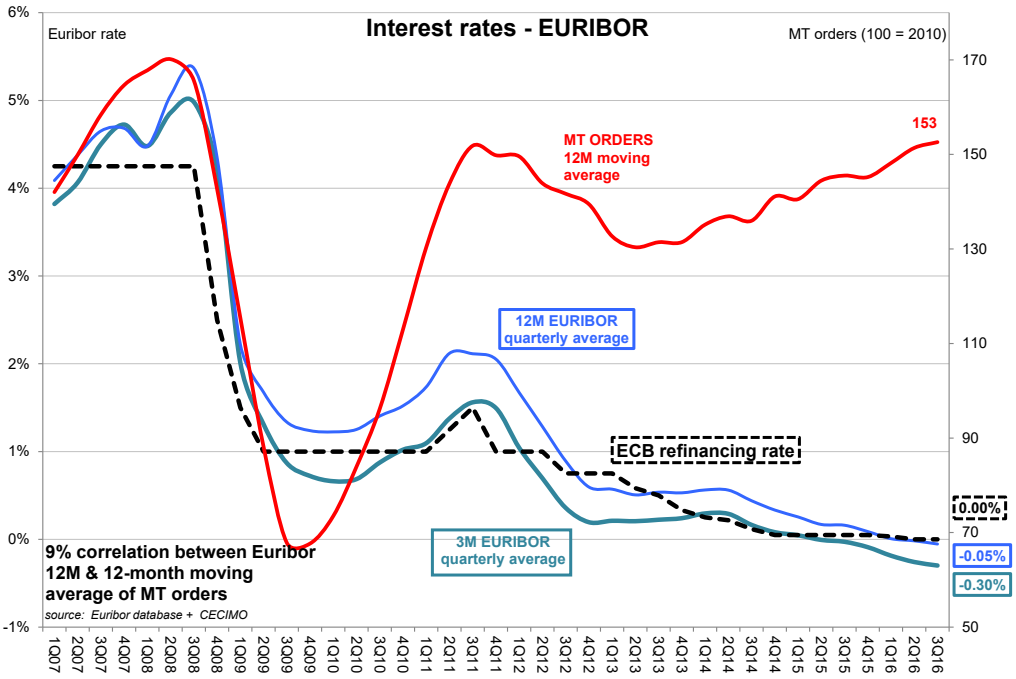


2.2 Interest rates – EURIBOR ⓘ

As expected, the key European Central Bank interest rates for the euro area were kept on hold by the Governing Council. That is, the rate on the deposit facility continues at -0.4%, while the rate on the marginal lending facility and the interest rate on the main refinancing operations remain 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 it would continue even beyond March 2017 if necessary.

In November the average 3 months Euribor interest rate went down to -0.313% from its October value of -0.309% and the September value of -0.302%. The 12 months Euribor interest rate dropped from -0.057% in September to -0.074% in November, 0.005 percentage points more negative than in October. A similar trend took place for loans of almost every maturity.

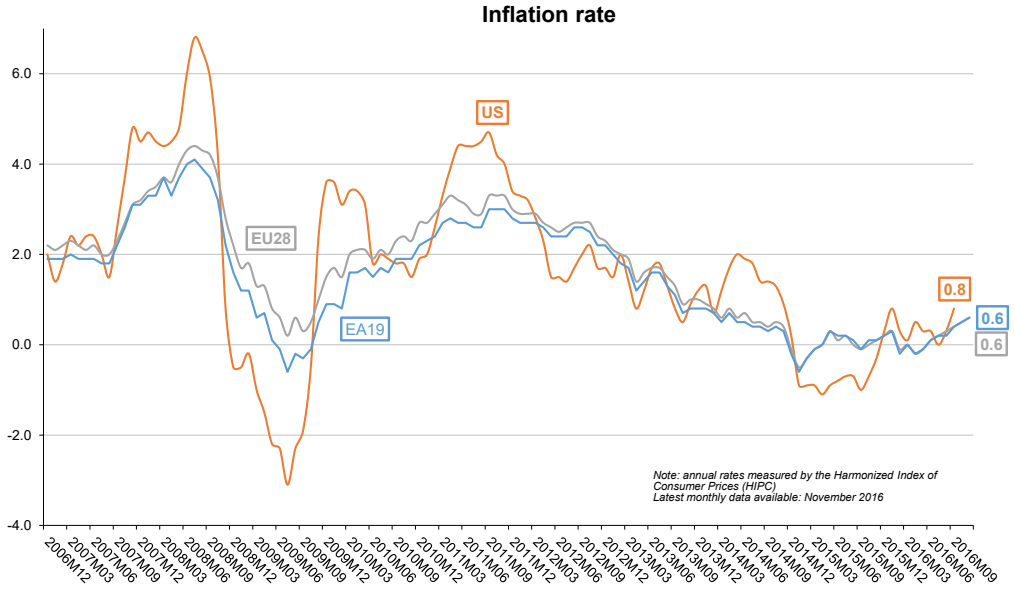


2.3 Inflation

The inflation in the euro area in the second quarter was negative but it picked up in the third one. Positive base effects in energy inflation and a stronger economic activity will make pressure for an increase of the Harmonised Index of Consumer Prices (HICP) next year. This fact is illustrated quite well when taking a quick look at the energy annual inflation, which is down from -7.3% in November last year to -1.1% this year.

The overall annual inflation this year both in the EU and the EA is still forecasted at 0.3% but it is expected to gradually increase to record 1.4% and 1.6% in the EA and the EU respectively next year. According to Eurostat, annual inflation in the Euro area and the European Union was up to an annual rate of 0.6% in November from 0.5% in October and 0,4% in September. Compared with October 2016, annual inflation fell only in five Member States, namely Belgium, Greece, Luxembourg, Portugal, Romania. The lowest annual rates were recorded in Bulgaria and Cyprus (both -0.8%), and the highest values were registered in Belgium (1.7%), Czech Republic (1.6%) and Austria (1.5%). In the UK, inflationary pressure continues. The weak pound keeps affecting imports for the service sector, driving up costs such as fuel prices and food. Costs in businesses have been rising steeply for the last two months at the highest rate in the past five years and a half.

According to the latest estimates from the statistical office of the European Union, industrial producer prices rose by 1% and 0.8% in the EU and the Euro area respectively. The main driver by far was the energy sector with 2.6% increase in prices.



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 September 2016 compared with August 2016, seasonally adjusted industrial production fell by 0.8% in the EA and by 0.7% in the EU. On yearly basis, industrial production grew by 1.2% both in the EA and the EU. Capital goods production rose by 0.9% in annual comparison. The highest monthly decreases were registered

Continued ▶

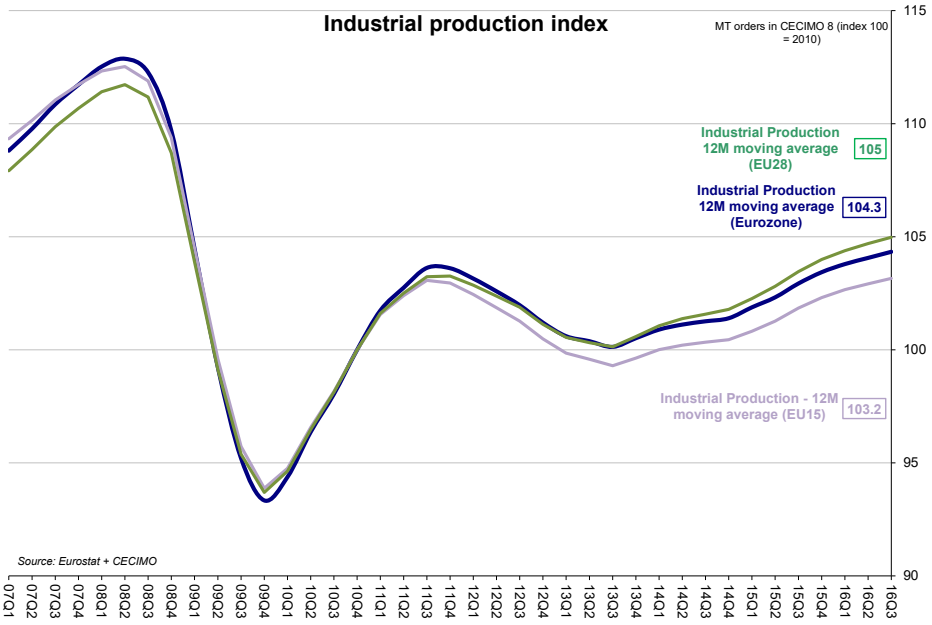
in Denmark (-8.1%) and Norway (-5.6%), while Sweden (+7.6%), Ireland (+6.4%) and Estonia (+5.2%) experienced the largest increases. Year-on-year, industrial production increased the most in Lithuania (+7.9%), Slovenia (+7.4%) and Estonia (+6.5%), and decreased 3.2% in Denmark, 1% in France and 0.9% in Ireland. In October 2016, the EA19 industrial production fell by 0.1% on monthly basis, while this drop was of 0.3% in the EU28.

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

	EA19		EU28	
	Sept. 2016	August 2016	Sept. 2016	August 2016
Total industry	-0.8%	1.8%	-0.7%	1.6%
Capital goods	-2.2%	4.2%	-1.6%	4.3%
Intermediate goods	-0.7%	1.8%	-0.1%	1.2%
Energy	-0.2%	2.5%	-0.6%	1.2%
Durable consumer goods	-5.6%	4.8%	-3.7%	3.1%
Non-durable consumer goods	0.3%	-0.6%	-0.4%	-0.5%

Among the EU Member States for which data are available, the largest decreases in industrial production were registered in in Denmark (-3.2%), France (-1.0%) and Ireland (-0.9%), and the highest increases in Lithuania (+7.9%), Slovenia (+7.4%) and Estonia (+6.5%).

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%. The US industrial production declined 0.4 percent in November, after edging up 0.1% in October and decreasing 0.2% in September, far away of the rises of 0.6% in July and 0.5% in August.



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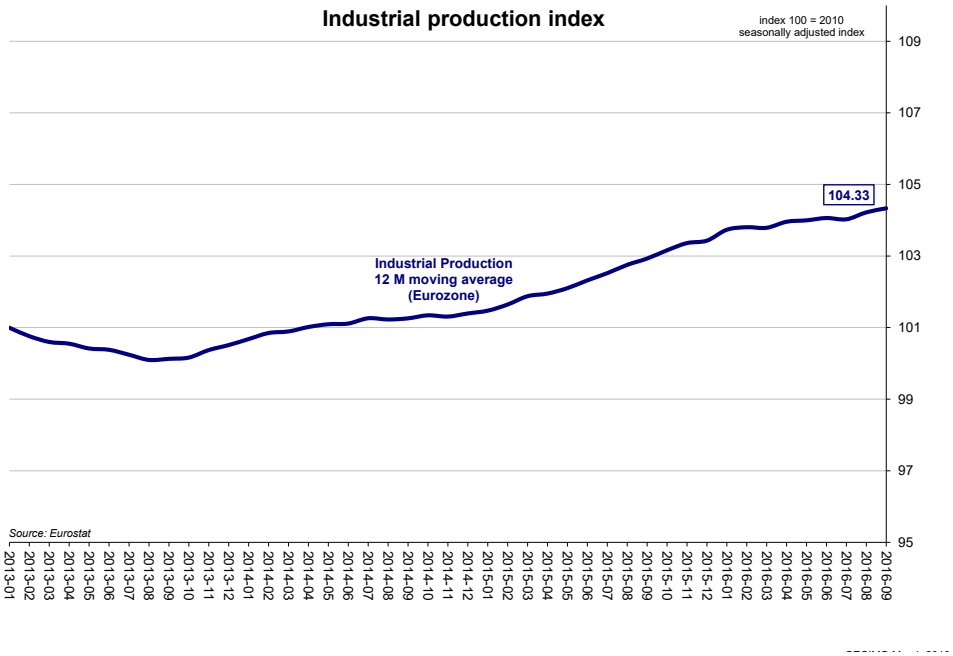
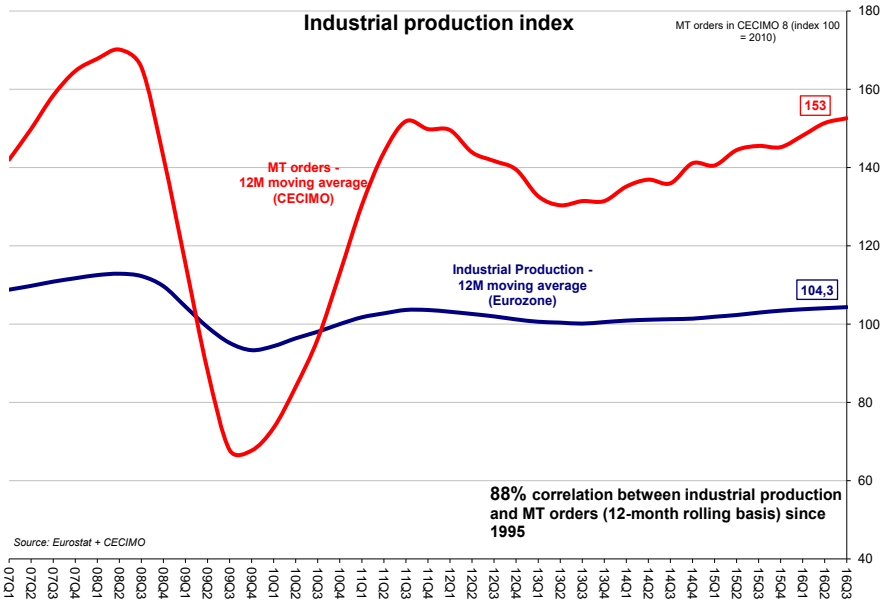




2.5 Gross Fixed Capital Formation ⓘ

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

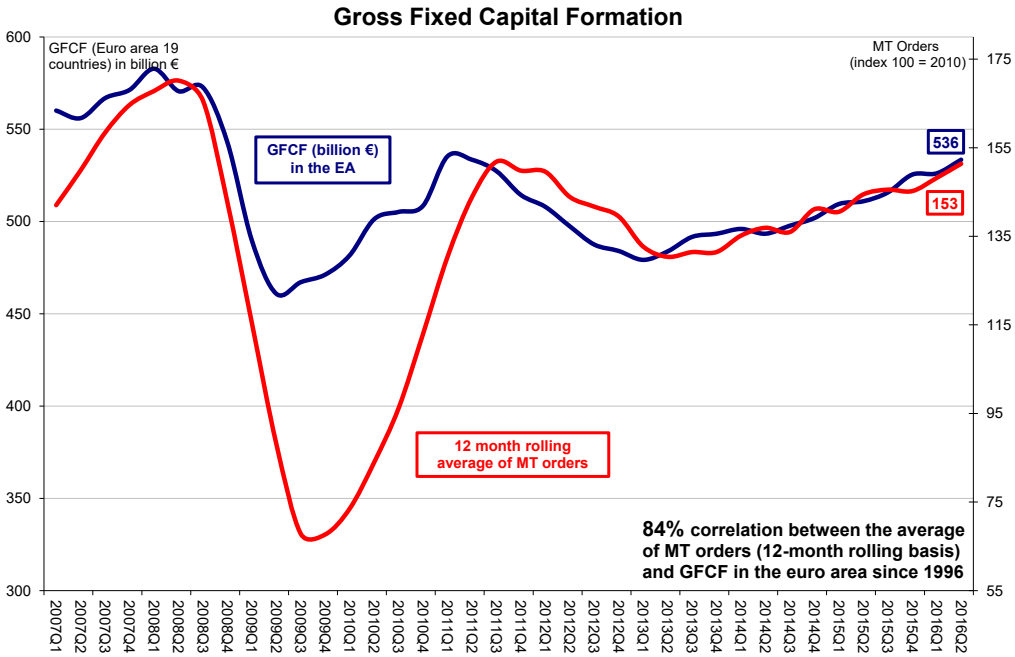
The Gross Fixed Capital Formation (GFCF), formerly known as Gross Domestic Fixed Investment, reveals that investments in fixed assets remain under the targeted levels, which would be consistent with sustainable growth, but the euro area's business investments are now back to the pre-crisis peak recorded 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

Continued ▶

the EA, begun in 2013, the level of business investment has registered an almost 15% increase with great inequalities among the different countries. The largest contributors to this upturn in investments have been Germany, Spain and France.

The net increase in fixed assets is an important indicator for MT builders. In fact, 84% of correlation has been observed between orders (measured on rolling orders average) and GFCF in the euro area 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, which the Economic Sentiment Indicator (ESI) published by the European Commission or the Business Climate Indicator (BCI) provided by the OECD show as increasing. 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 has been so far higher in this quarter (84.6%) 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 this case, the correlation is almost 44% in the period 1996-2016, which is around 5.5 percentage points higher than the 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 for the industrial sector was 75% in November, 0.4 percentage point lower than in October and 5 percentage points below its long-run average (1972-2015). Capacity utilization for manufacturing declined 0.1 percentage point in November to 74.8%, which is 3.7 percentage points below its long-run average rate.

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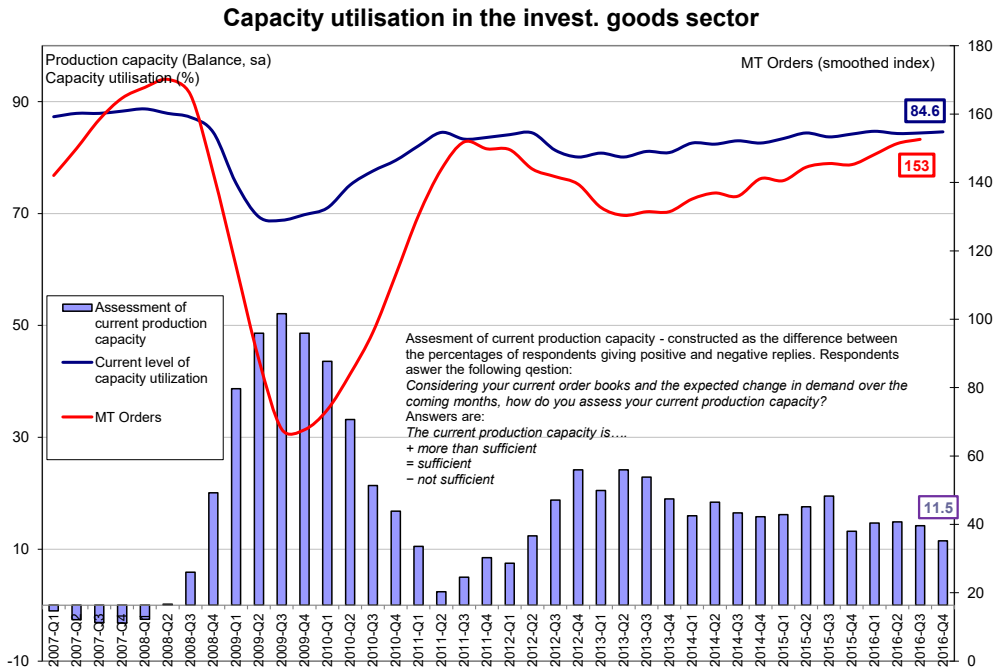


2.7 Bank lending survey ⓘ

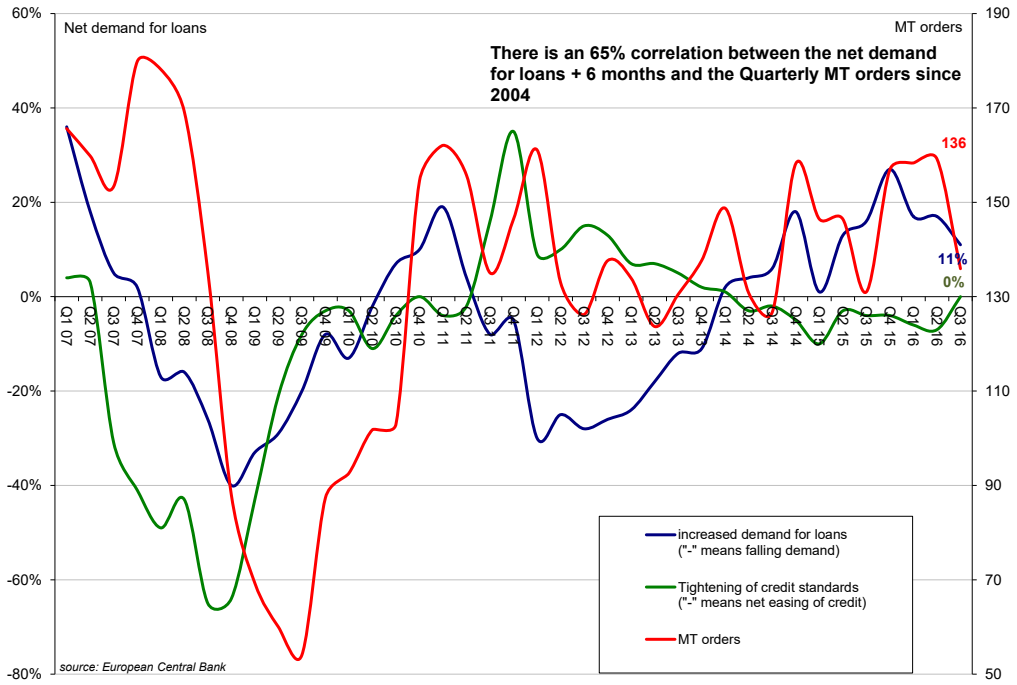
Euro area banks continued to further reduce their rejection rate for loan applications from enterprises at a -7% quarterly rate in the third quarter of 2016 from a -4% in the previous one. In line with expectations, the overall credit standards of banks of the EU19 on loans to enterprises remained unchanged in the third quarter (net percentage of reporting banks of 0%, compared with -7% in the previous quarter and -6% in the first quarter this year). For the fourth quarter of 2016, banks expect a 4% net tightening of credit standards for loans to enterprises.

Slight easing of credit standards were observed in loans to large companies. On a country by country analysis, Germany was the only large euro area country where credit standards on loans to businesses eased. Competitive pressures on the sector and reduced risk perceptions contributed in a larger extent to facilitate credit in France and the Netherlands. In Spain, the impact of banks' risk tolerance offset the impact of the pressure from competition.

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.

Credit conditions on emerging markets could be tightened as a direct consequence of the strengthening of the dollar, as companies with great access to global markets and borrowings in dollar play sometimes an important financial role within the domestic economy.

See graph on next page



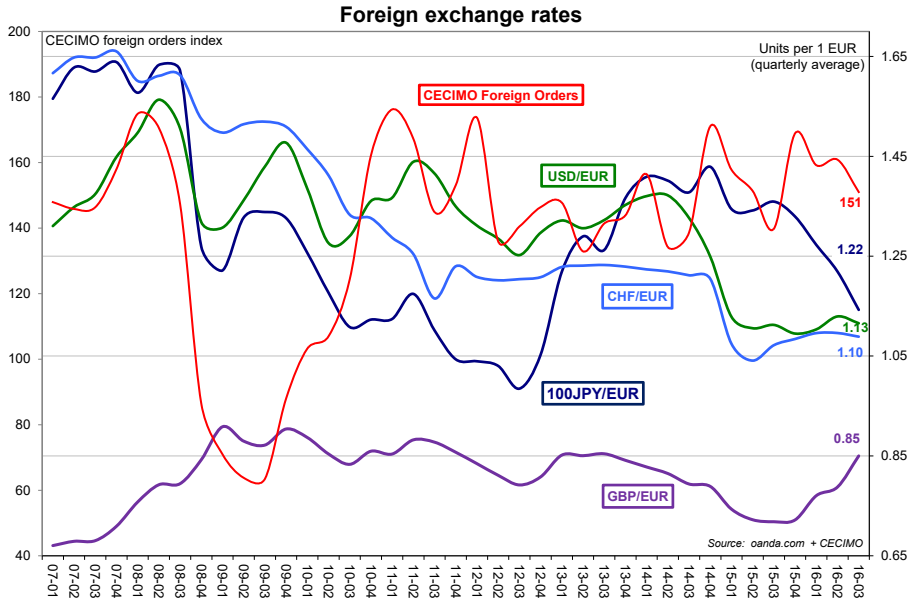
2.8 Foreign exchange rates

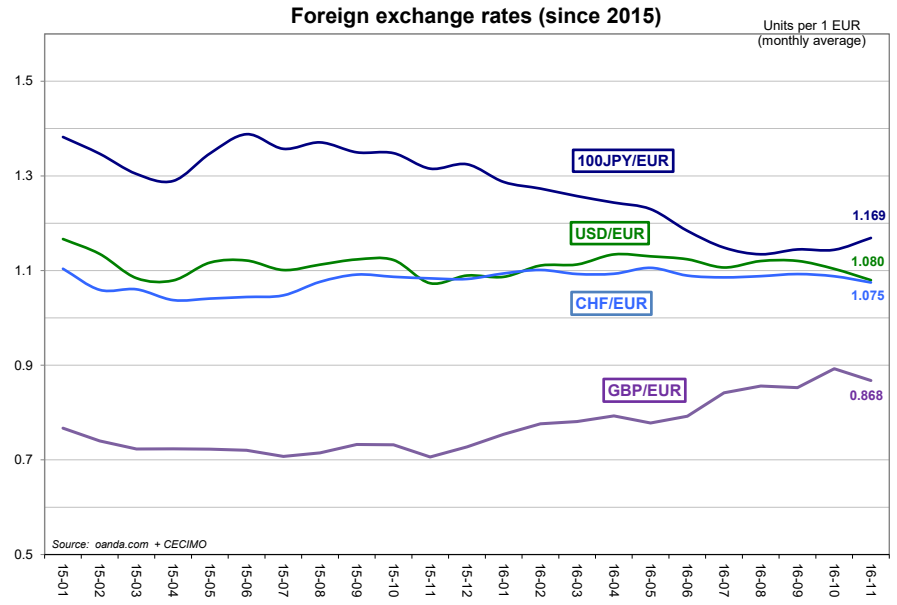
In November, the euro depreciated further vis-à-vis the US dollar. After a depreciation of 1.5% against USD in October, the Euro area currency weakened an additional 2.2%. Concerning other major world currencies, the official currency of the eurozone appreciated 2.2% against the Japanese yen and depreciated 2.8% and 1.2% versus the sterling pound and the Swiss franc respectively.

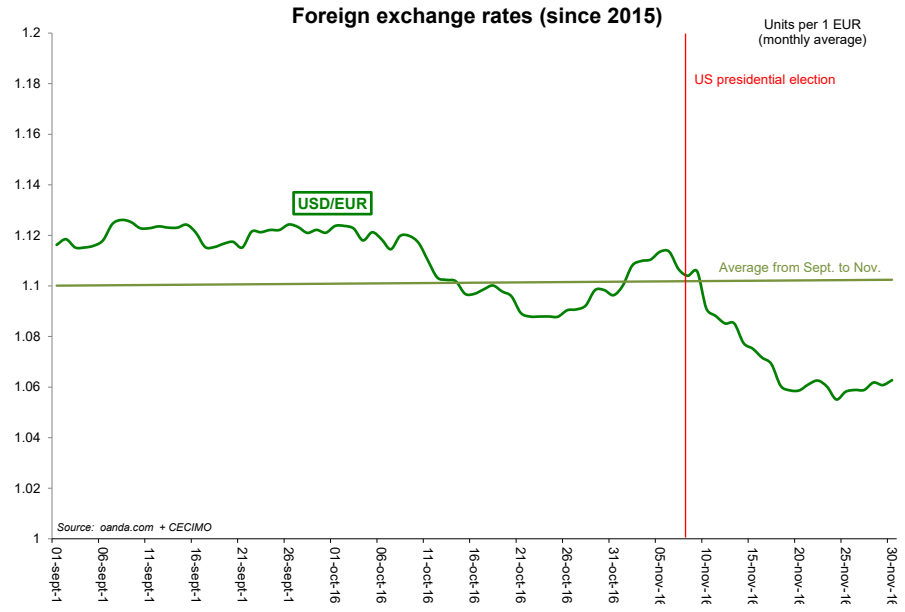
Currently 40% above its lows in 2011, the dollar experienced a sharp rise following Donald Trump's victory. It has strengthened not only relative to developed market currencies (3.7% appreciation against Euro during the last three weeks of November) but also to emerging ones. The dollar has been rising, quite dramatically since the presidential election. Investors expect a different policy mix in America: on one hand, a loose fiscal policy in the form of promised taxes cut and boost of investment in infrastructure, and on the other hand, a tightening of monetary policy involving a faster rise of interest rates. Among the risks of a very strong dollar, it is worth highlighting the much higher loan repayments some countries would face, notably emerging economies that borrowed dollars in abundance while the currency was weak. According to the Bank for International Settlements (BIS), governments and businesses outside America racked up $9.7trn of debts denominated in dollars by the end of 2015. Apart from these financial consequences, America trade deficit could be greater, which would make more likely the elected president to implement protectionist measures as a way of reversing that deficit. The question remains to which extent Trump will boost fiscal policy and increase public spending.

Following the biggest monthly fall of Chinese foreign-exchange reserves in November, there is an increasing concern that China might let its currency to fall sharply.

See graph on next page


Foreign exchange rates
CECIMO foreign orders index
Units per 1 EUR
(quarterly average)
CECIMO Foreign Orders
USD/EUR
CHF/EUR
100JPY/EUR
GBP/EUR
151
1.22
1.13
1.10
0.85
Source: oanda.com + CECIMO


Foreign exchange rates (since 2015)
Units per 1 EUR
(monthly average)
100JPY/EUR
USD/EUR
CHF/EUR
GBP/EUR
1.169
1.080
1.075
0.868
Source: oanda.com + CECIMO

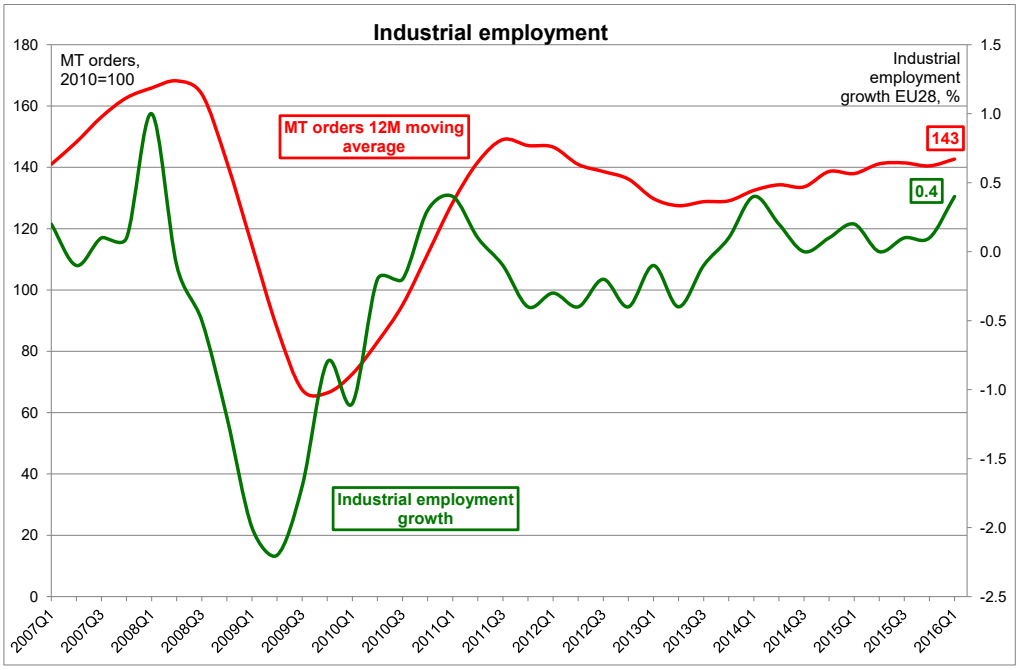

Foreign exchange rates (since 2015)
Units per 1 EUR
(monthly average)
US presidential election
USD/EUR
Average from Sept. to Nov.
Source: oanda.com + CECIMO

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 has recorded the highest growth rate since the first quarter of 2014 (0.4%), while the Euro area has increased its level of employment at 0.3%, 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.

General employment growth kept strengthening in the second quarter of 2016, both in the EU (+0.3%) and EA (+0.4%), which led to June unemployment rates of 8.6% for the EU and 10.1% for the EA. A similar trend took place in the third quarter. The official seasonally-adjusted unemployment rate in October 2016 was 9.8% in the Euro area and 8.3% in the European Union, down from 10.6% and 9.1% respectively in the same period last year, but far away from the approximate 5% registered in the US both last October and this time last year. In November, employment registered an upward movement of 0.2% both in the EU and the EA.

Representative data of European countries responsible for more than 95% of the machine tool sector employment across CECIMO countries last year shows that, in overall terms, employment in the MT sector is projected to increase 0.7% this year.

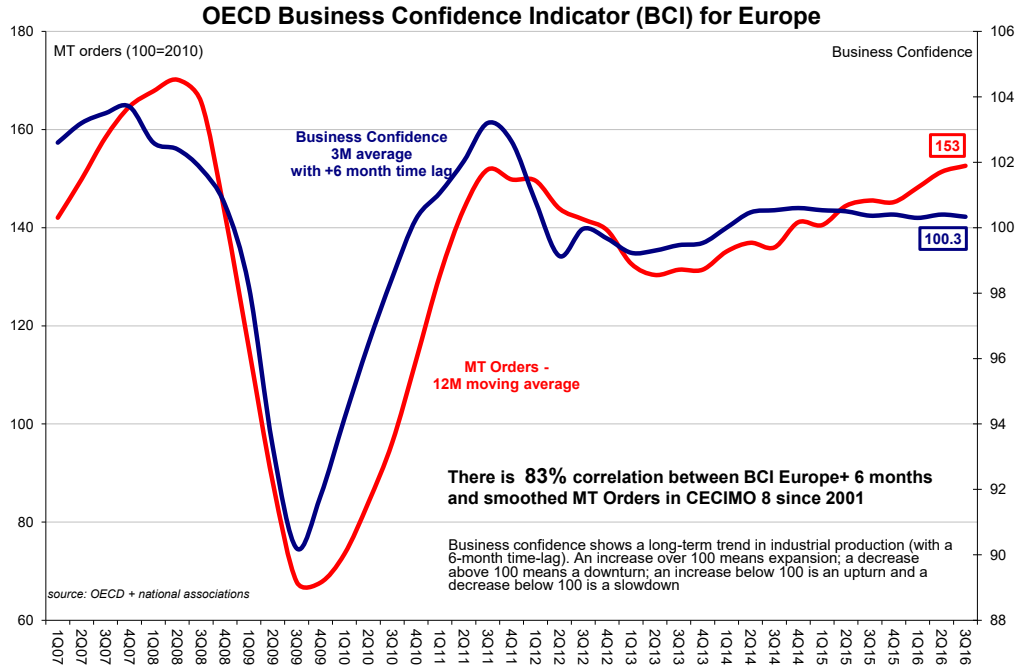


2.10 OECD Business Confidence Indicator for Europe ⓘ

Business confidence indicators (BCIs) show an outlook for relatively firm 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 shows signs of short term improvements in the United Kingdom and it points to a stable growth momentum, particularly in Germany and France. The OECD Composite Leading Indicators also points to an improved growth momentum in the major emerging economies.

Among other developed countries, the BCIs indicate a stable growth momentum in the United States and Japan, and the gaining growth momentum in Germany and Canada.

Among major emerging economies, the BCIs picture an optimistic growth outlook for China, India, Brazil and Russia, although recognize that these two latter countries grow from low levels. The index for India recorded a month on month change of 0,2%, where firm growth is forecasted.



2.11 European Commission Economic Sentiment Indicator ⓘ

In November 2016 the EC Economic Sentiment Indicator (ESI) rose to its highest level this year (+0.4 points to 107.3, 0.8 above the Euro area), in line with the trend recorded in recent months but at a slower pace. The difference between ESI values in the Euro area and the European Union is largely due to the improved sentiment in the largest European economies outside the Euro area. The ESI for the UK came back to its pre-Brexit level, registering an upward movement of +1.5. In October 2016, the Economic Sentiment Indicator 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 November increases were registered in France (+1.5) and Spain (+0.8), in contrast with the values recorded in Germany (-0.7) and Italy (-0.8).

Industry confidence, weighted at 40 per cent in the calculation of the ESI, moved down 0.5 points in comparison with the previous month, following a rise of 1.2 points in October and 2 points in September. The underlying factors driving the index up were a marked increase in managers' production expectations, and improved assessments of stocks and overall orders. The slight deterioration of this index is not driven by production expectations, but by the current level of orders and a more downbeat assessment of the stocks of finished products.

In November, managers' assessments of the past production were more downbeat. The business climate weakened a little in the Euro area, as shown by the 0.14 points decline to +0.42 of its Business Climate Indicator.

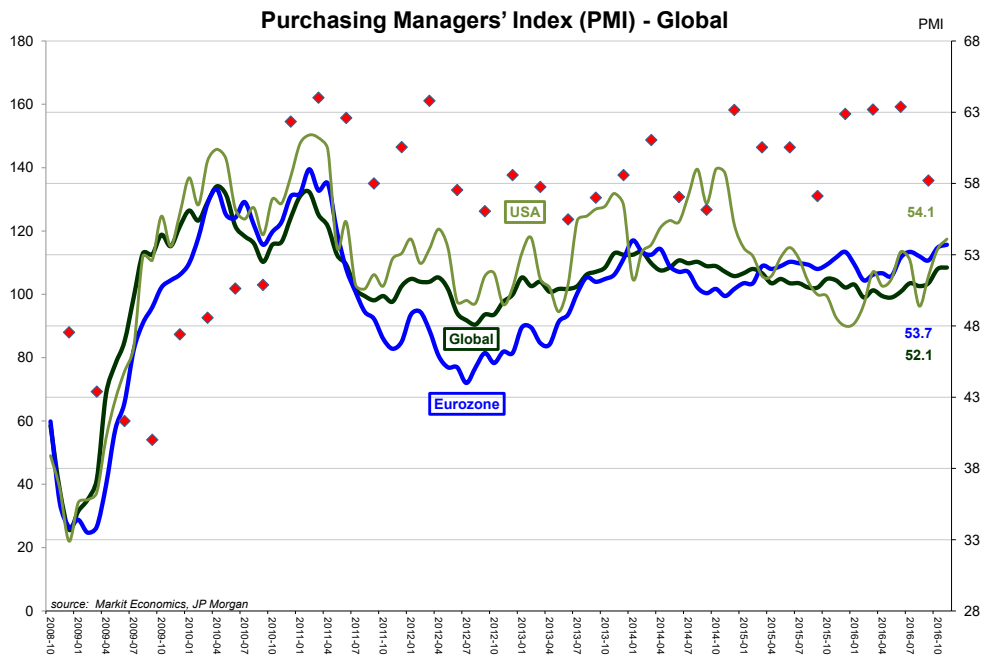
2.12 Purchasing Managers' Index ⓘ

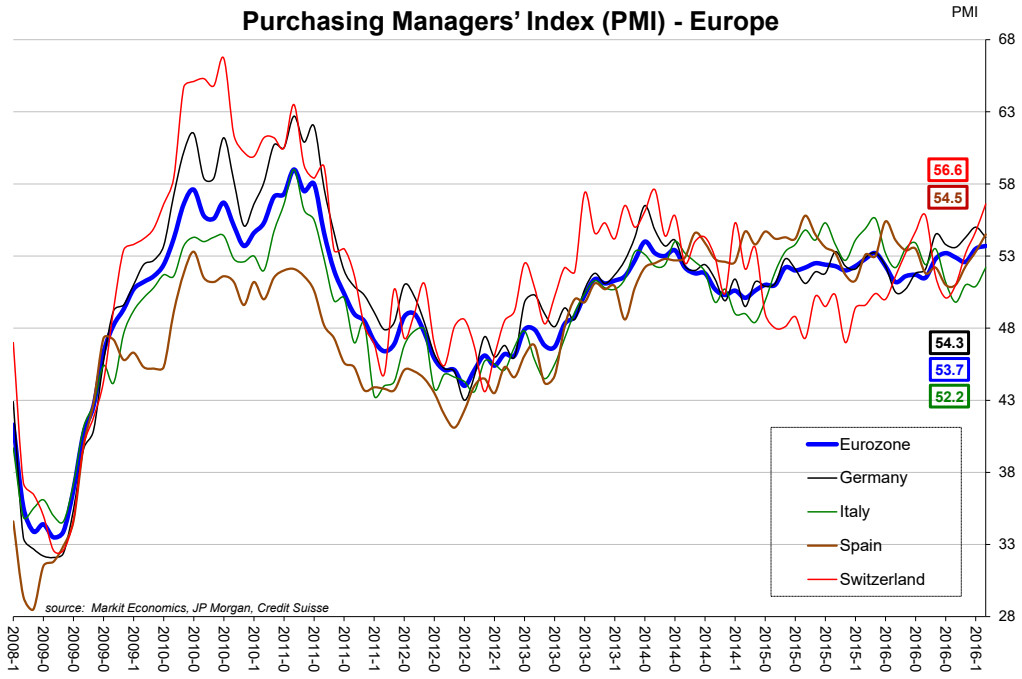
Global manufacturing shows strength and posted at a 27-month high of 52.1 in November, above all across the consumer, intermediate and investment goods sectors. 22 out of 30 countries analysed by HIS market and J.P. Morgan in October registered improved operating conditions, according to the PMI readings available to date. New orders have accelerated to the strongest since summer 2014, thanks mainly to gains in the Eurozone, UK, US and Japan. The global production rose for the sixth month in a row.

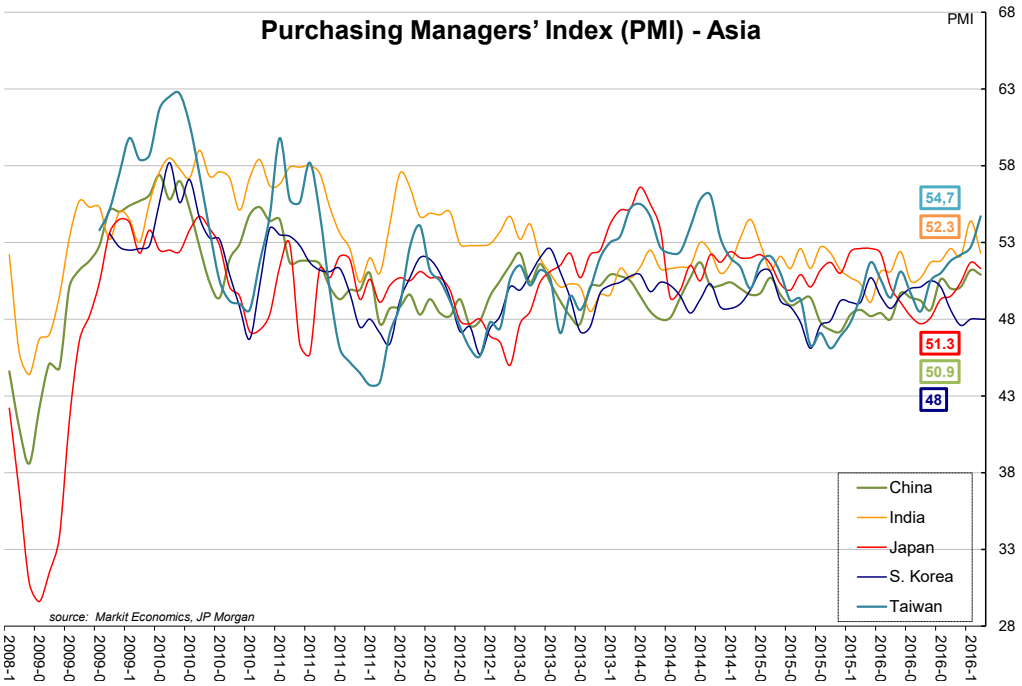
In the Eurozone, the Manufacturing Purchasing Managers' Index keeps posting above the neutral 50.0 threshold. The rate of expansion slightly eased at 53.7 in November, up from October's 53.5 and September's 52.6, but the continuous growth of production is a clear sign of the best improvement in business conditions over the past three years. Such amelioration reflected in the labour market too (further info can be found in the introduction of the present report). The increase in output was also driven by new export business, which grew at a 33-month peak and, in addition, the weaker euro contributed to input cost pressure and strengthen exports. "*Manufacturing output price inflation is currently running at its highest for over five years, which will inevitably translate into higher consumer prices in coming months*", commented Markit. As previously mentioned in the epigraph 2.3, prices are going up, including those of raw materials, such as metals and oil.

With regard to CECIMO countries, the industrial production in Germany scaled up (54.3 in November), as orders intakes rose robustly: it is the 16th successive month of increase of orders to German companies. Furthermore, a flash estimate for December shows that goods production will sharply rise leading the overall manufacturing PMI to climb to a near three-year high. The Italian PMI index is at its average of the current year (52.2 up from 50.9). As for Switzerland, the Purchasing Managers' Index posted at 56.6, which is the greatest value since the beginning of 2014. In the UK, the latest report of its PMI brings optimism: it reveals that the volume of outstanding business in the service sector increased for the third time in four months in November. Service sector accounts for 80% of the British economy, so these results suggest that the activity is growing at a faster pace than expected by analysts and businesses. However, a fall by 0.8 points in November to 53.4 was registered in the manufacturing sector.

In Japan the survey has signaled the greatest improvement in manufacturing conditions since January, and the PMI index shows that ASEAN countries as a whole remain within the contraction area.







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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. Monthly data are calculated as averages of daily values from the banks with the highest volume of business in the euro area money markets.
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

Geographical information

CECIMO countries

The European Association of the Machine Tool Industries (CECIMO) bring together 15 national associations of machine tool builders from the following countries: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Italy, the Netherlands, Portugal, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Euro area (EA)

The euro area (EA19), also called Eurozone, consists of those Member States of the European Union that have adopted the euro as their currency. It includes Belgium, Germany, Estonia, Ireland, Greece, Spain, France, Italy, Cyprus, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Austria, Portugal, Slovenia, Slovakia and Finland.

European Union (EU)

The European Union (EU28) includes Belgium, Bulgaria, the Czech Republic, Denmark, Germany, Estonia, Ireland, Greece, Spain, France, Croatia, Italy, Cyprus, Latvia, Lithuania, Luxembourg, Hungary, Malta, the Netherlands, Austria, Poland, Portugal, Romania, Slovenia, Slovakia, Finland, Sweden and the United Kingdom.

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Fachverband Metalltechnische Industrie
www.fmti.at

Belgium: AGORIA
Federatie van de Technologische Industrie
www.agoria.be

Czech Republic: SST
Svazu Strojírenské Technologie
www.sst.cz

Denmark: The Manufacturing Industry
a part of the Confederation of Danish Industry
ffi.di.dk

Finland: Technology Industries of Finland
www.teknologiateollisuus.fi

France: SYMOP
Syndicat des Entreprises de Technologies de Production
www.symop.com/fr

Germany: VDW
Verein Deutscher Werkzeugmaschinenfabriken e.V.
www.vdw.de

Italy: UCIMU
Associazione dei costruttori Italiani di macchine utensili robot e automazione
www.ucimu.it

Netherlands: FPT-VIMAG
Federatie Productie Technologie / Sectie VIMAG
www.ftp-vimag.nl

Portugal: AIMMAP
Associacâo dos Industriais Metalúrgicos, Metalomecânicos e Afins de Portugal
www.aimmap.pt

Spain: AFM - Advanced Manufacturing Technologies
Asociación española de fabricantes de máquinas-herramienta, accesorios, componentes y herramientas
www.afm.es

Sweden: MTAS
Machine and Tool Association of Sweden
www.mtas.se

Switzerland: SWISSMEM
Die Schweizer Maschinen-, Elektro- und Metall-Industrie
www.swissmem.ch

Turkey: MIB
Makina Imalatcilari Birligi
www.mib.org.tr

United Kingdom: MTA
The Manufacturing Technologies Association
www.mta.org.uk

cecimo is the European Association representing the common interests of the Machine Tool Industries globally and at EU level. We bring together 15 National Associations of machine tool builders, which represent approximately 1300 industrial enterprises in Europe (EU + EFTA + Turkey), over 80% of which are SMEs. CECIMO covers 98% of total Machine Tool production in Europe and about 36% worldwide. It accounts for almost 150,000 employees and a turnover of nearly €24 billion in 2016. Approximately 75% of CECIMO production is shipped abroad, whereas around half of it is exported outside Europe. CECIMO assumes a key role in determining the strategic direction of the European machine tool industry and promotes the development of the sector in the fields of economy, technology and science.