

CECIMO Economic and Statistical Toolbox

May - June 2017




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

To the positive trend of world trade at the end of last year is added the fact of a continuous improvement also in the first quarter of 2017. Trade flows keep markedly improving, with 1.8% quarter-on-quarter increase in January-March 2017.

In Europe, the economic recovery is ongoing, becoming more robust and showing resilience. The key driver of output expansion in the Eurozone is the domestic demand, but exports are also growing. Among other things, the accumulated euro past depreciation and the gradual recovery of world trade are contributing to it. The monetary policy remains accommodative in the Eurozone. Recent mildly expansionary fiscal policy to support GDP growth has been observed, and it is expected to remain like that this year and the next one. The general mood among European businesses is quite positive, with strong improvement in business conditions in the Eurozone. The economic sentiment and consumer confidence keep improving, registering marked rises in recent months. Nevertheless, investment is still lagging behind and remaining well below its pre-crisis peak and its historical trend. Furthermore, apart from the above mentioned uncertainty, low productivity growth and inequality remain some of the issues to be further addressed. With regard to cost pressure, it is generally rising and inflation has been recovering from the very low levels seen in 2016, largely owing to higher energy price increases. After reaching 2.0% in February, euro area annual HICP inflation declined to 1.5% in March 2017. The risk of deflation has dissipated but, unlike headline inflation, core inflation remains subdued. Employment is also edging up but the average hours per worker are diminishing, which points to a higher number of part-time working.

Having said that, it cannot be circumvented that the fragile and uncertain political climate, result of Brexit or the expected (but largely unknown yet) rise of protectionism in the US, are clearly risks surrounding the present and future outlook. Europe is facing this year multiple general elections, including those in three of the EU founding members: the Netherlands, France and Germany. In the US, the uncertainty remains at high levels, with protectionism and anti-immigration policy discussions as potential risks, but deregulation, tax cuts and an increase of infrastructure spending generally welcomed by the industry. The emergence of protectionist tendencies around the world could ultimately end up in more anti-globalization political stance, which would undermine international trade and growth. On top of that, as the EU Trade Commissioner Cecilia Malmström signalled, “G20 countries are maintaining the highest number of trade barriers”. A recently published report of the European Commission points out that the ten countries with the largest number of barriers to trade are all part of the G20 with Russia topping the ranking, followed by Brazil, China and India. EU-based exporters reported a 10% higher number of trade barriers during 2016 versus 2015. Therefore, protectionism is still on the rise.

In a nutshell, it can be concluded that the momentum is good and the global economy is picking up but moderately –stable at +0.9% in the G20 area during the first quarter. The global upturn is far from being robust or assured to follow the current trend in coming years. Hence, the recovery is under way but it is not solid yet.

1. Data specific to the European machine tool market

▲ 1.1 CECIMO8 orders ^①

The level of orders of machine tools at the start of 2017 was positive compared to one year ago. According to the latest available data, limited to some countries, for the first quarter of 2017, Italy orders intake markedly increased. With 40% more orders than during the previous quarter, the indicator increased to the greatest extent since the beginning of 2008, booking pre-crisis orders level. Italy overpassed by 6% its own reading of the first quarter of 2016. That high level of ordering was strongly driven by domestic demand (+50%), but the foreign one showed also an above 25% quarter-on-quarter increase. Spain, following a boost at the end of last year, saw its level of orders back to the average of the second and third quarter last year, but still 15% above than one year ago. Germany and Czech Republic registered quite similar levels of orders to the previous quarter: a slight drop of 2% in Germany and a minor increase of 2% in Czech Republic. The latter received more orders from abroad (+20%), while the domestic demand weakened 40%. In Spain, following a sharp rise at the end of last year, orders value came back to late-2015 ones, still 15% above the reading during the first quarter of 2016. For its part, the United Kingdom orders intake suffered a modest quarterly fall of 4% during the three first months this year, reaching a level which is 7% inferior to one year ago. Finally, Austria saw its level of orders decrease by 8% but, in interannual terms, the level of ordering is 5% higher.

The international picture is a bit more mixed. For instance, following a timid 2% rise of orders of metal cutting machine tools in Japan and a 5% decrease of metal forming MT at the end of last year, the demand of the former category rose 14% during the first three months of 2017, while the orders of Japanese metal forming MT strengthened 20% during the same period. Orders intake in Taiwan booked a slight 2% decline, following a quarterly increase of almost 30% in the last quarter of 2016. In the United States the situation is weak: MT orders from domestic manufacturers fell 41% from December 2016 to January 2017, after recovering to the late 2015 levels in the third quarter of 2016 and further increasing at the year-end. The total of January 2017 represents a 11.4% drop from January 2016. In quarterly terms, demand of US machine tools edged down by 14% during the period January-March 2017, levelling at just 1%.

This relatively good news continues the positive trend of last year. As we have already informed in previous editions of this report, the overall level of orders intake of CECIMO-based companies increased last year, and the demand for machine tools strengthened during the last quarter of 2016, compared to the previous one. CECIMO8 total orders increased 20% quarter-on-quarter. It is true that, due to the cyclical activity of the machine tool sector, the fourth quarter is usually better in terms of orders than the third one. However, it is equally true that orders of MT reached a level that is more than 4% higher in interannual terms towards the end of the year. The level of orders MT companies based on CECIMO8 countries received in the last quarter of 2016 is slightly better than in 2015 and 2014, while markedly higher than in previous years. To see such high level of orders one should go back as far as the year 2011.

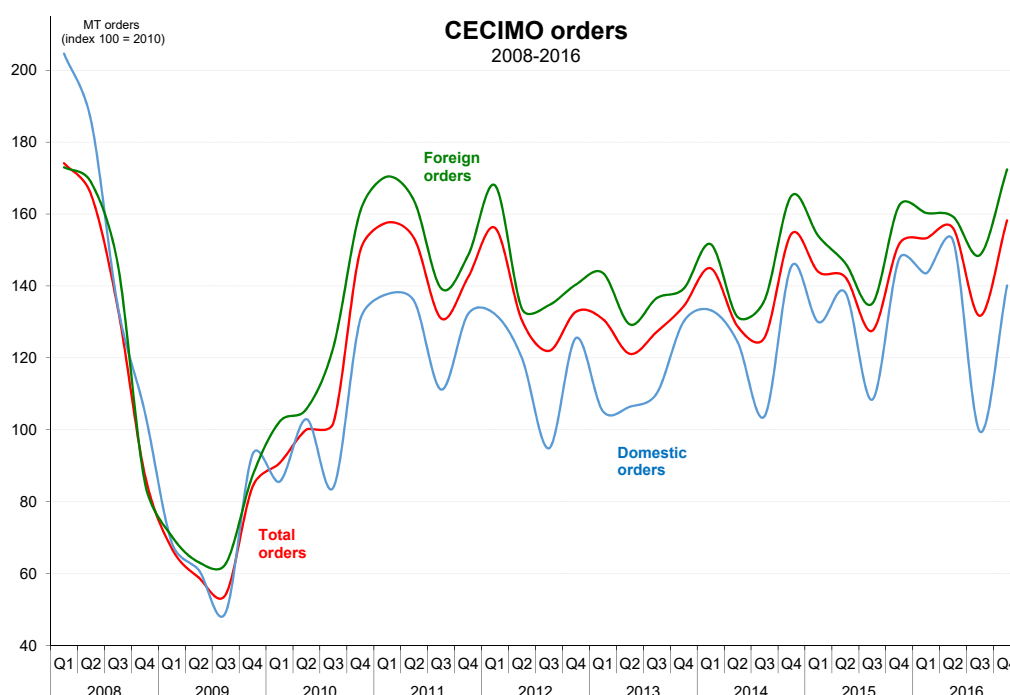
That quarterly increase was driven by Spain (+84%) and Italy (+41%). At a lesser degree, Austria, Switzerland and France registered a quarterly increase ranging

from 25% to 30%. United Kingdom (+18%) and the remaining countries also experimented a higher level of new machine tool orders compared to the previous one. The MT orders rebound leads to a quarterly rise of 6% in the seasonally adjusted index and follows a drop of 7% in the third quarter.

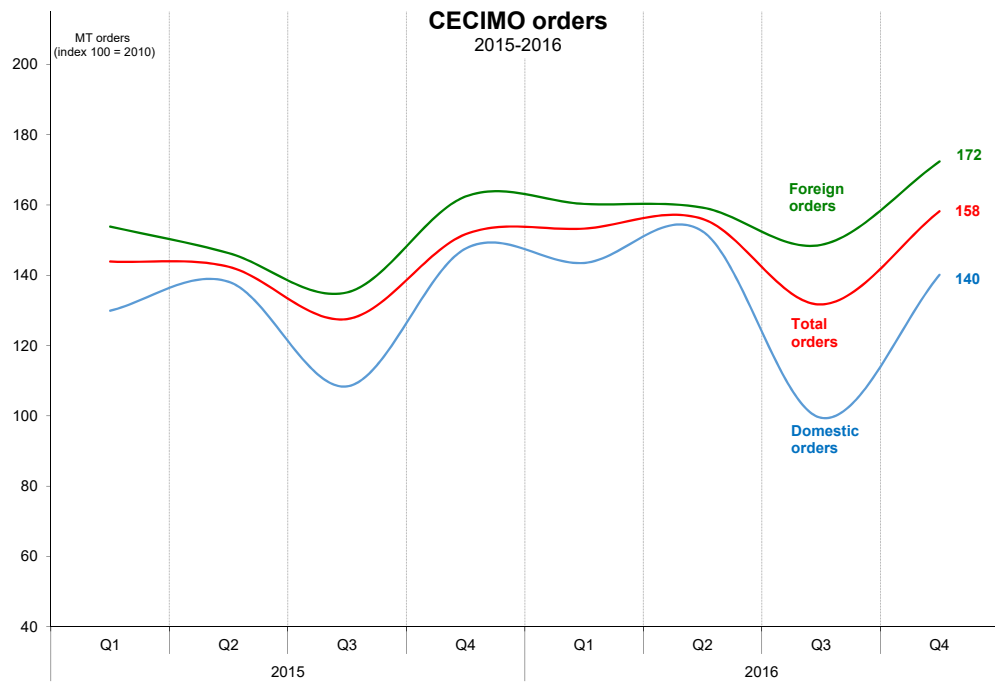
Comparing the fourth quarter of 2016 to the one of 2015, the highest hikes in purchase orders were recorded in Spain (+69%), Austria (+41%) and Switzerland (+26%) and the United Kingdom (+15%). The only drops were seen in Czech Republic (-25%) and, at a lesser extent, in France (-6%) and Germany (-4%).

It is worth to mention that this positive picture was led by the 40% quarterly boost of domestic orders. The countries which performed particularly well in terms of domestic orders were Italy, Spain and Czech Republic. These two first countries received around 65% more orders than in 2010, while the latter saw that value doubled. Austria and Switzerland registered quarterly increases. On the other hand, machine tools' orders from abroad augmented 16% in that same period. Once again, Spain showed an outstanding increase of more than 90% in comparison with the previous quarter. The trend in every country with updated data of the last quarter 2016 was quite positive: Austria (+46%), France (+42%), Czech Republic (+31%), United Kingdom (+30%), Italy (+13%), Germany (+5%), Czech Republic (+1%). If we compare these values with those of the previous year, Spain (+75%), Austria (+50%) and United Kingdom (+25%) led the rise of CECIMO orders.

For the months ahead, some positive signs arise, for instance, from important indicators when analysing MT orders such as car sales (+5.8% globally in the first quarter), production (+2.7%) and registrations (+7.2%) -source: ACEA report June 2017-.



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▲ 1.2 Peter Meier's forecast

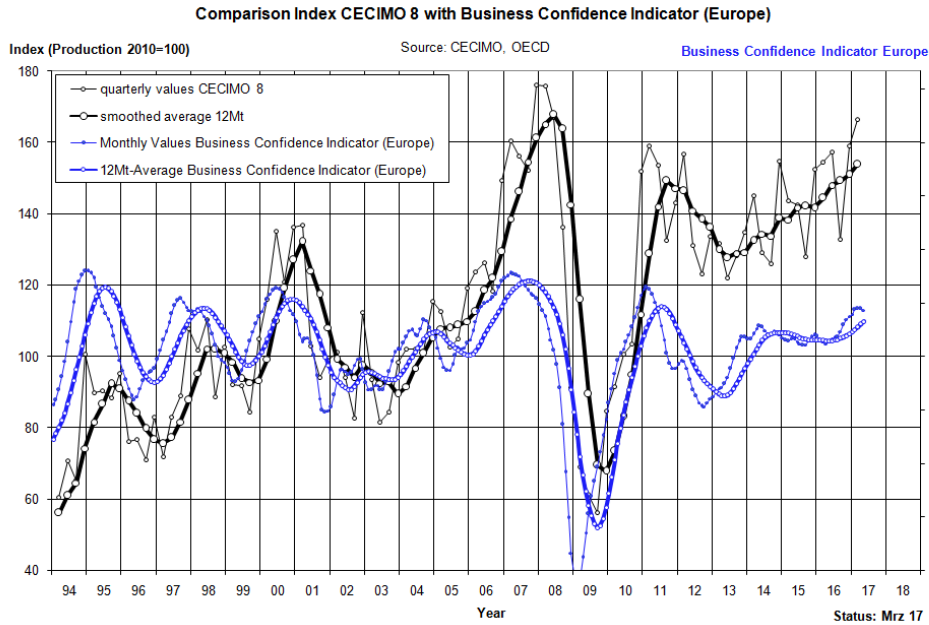
In Europe consumption is going strengthening. Also in the US, it has picked up noticeably since mid-last year after a period of restrained growth. In both markets, consumption has now clearly exceeded the level of 2007. On the other hand, the long-term growth remains very modest, at just under one percent per year. Apart from cyclical ups and downs, consumption in Japan has not grown at all for 25 years. At least since the last crisis, saturation has been evident in developed economies. In the emerging markets, too, consumer growth is slowly weakening. However, the official figures of China still show respectable values, with around 9% growth per year.

Industrial production has barely reached the level of 2007 in Europe and the USA, while it is still far below that in Japan. It is therefore not surprising that capital expenditures only grow hesitatingly, since the capacities built up during the boom years of 2006/07 are still sufficient in most cases today. The replacement only needs to gradually develop. Most of the capital equipments are not thrown on the scrapheap after 10 to 15 years of service. However, some optimism is showing up: industrial production has left the trough in all important markets. Hence capacity utilization improves, which will have a positive impact on investments.

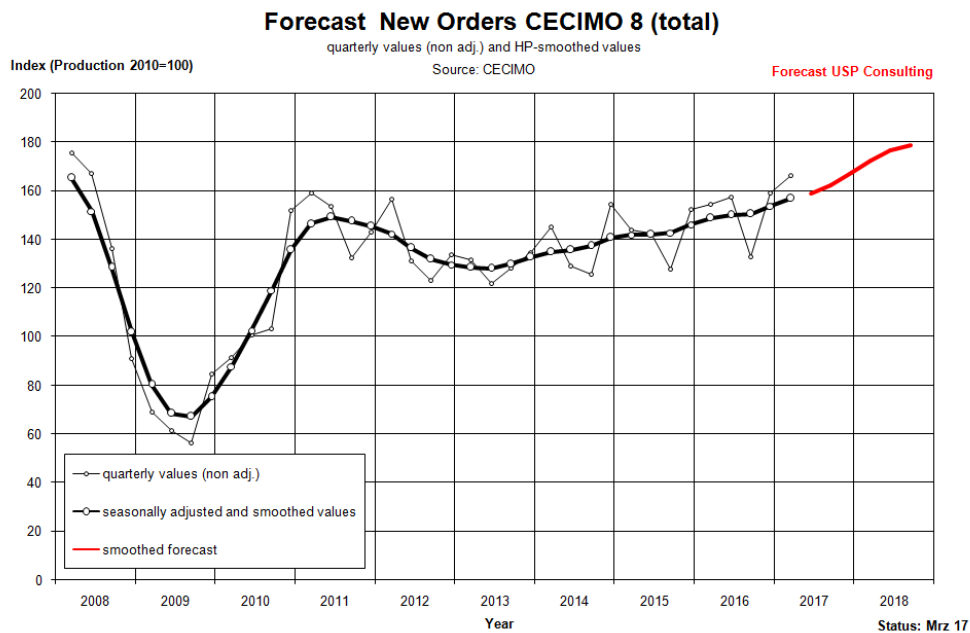
The sentiment indicators show a rather optimistic view. In all world markets business confidence now reaches values, which we have not seen since 2011, and consumer confidence has never been so high since the last crisis. In short: sentiment is good, but there is still reluctance to invest. There are exceptions: the demand in certain markets, e.g. in semiconductor production equipment, is currently at an all-time high, driven by technological innovations. In the course of the year, however, good sentiment is likely to lead to an overall increase in investment.

The following graph clearly shows that the European Business Confidence Indicator has been rising in all important world markets since the autumn of 2016,

but in the last three months it has been showing signs of saturation. In the US it even fell back. Nevertheless the indicator is on a relatively high level in the expanding area. With a lag of several months new orders for machine tools will most probably stagnate as well.



New orders in Q1 2017 were again above expectations. The latest economic indicators had little effect on the forecast, a sign that the economic situation is relatively stable at this time. Most probably the demand will gradually grow in the coming months, but in mid-2018 the growth could come to an end.

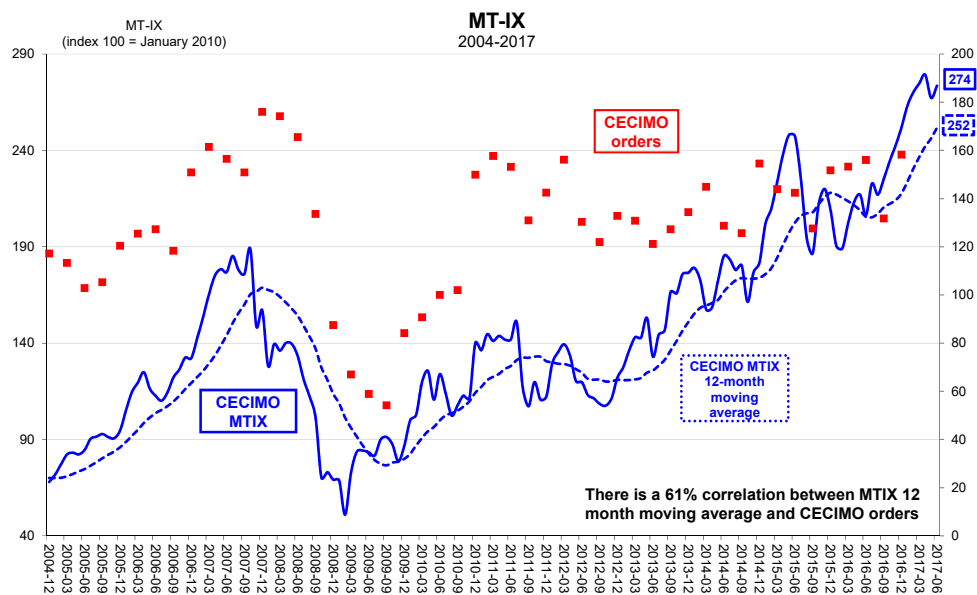


▲ 1.3 MT-IX ⁱ

Following a quite positive 2016 in terms of market capitalization of the main companies in the machine tool sector, the trend is still upwards but, somehow, it slowed down the path.

In 2016, the CECIMO MT-IX jumped 20%, performing particularly well since last summer, moment from which this indicator has showed an uninterrupted uptrend. Looking at the situation during 2016 and taking the value registered in January 2010 as the reference one (100 points), it is worth mentioning that this indicator gained more than 40 points during the whole year and placed 250 points in December. The MT-IX index rose 9% in the third quarter of last year and 12% in the fourth, leading to an increase of 22% in the MT companies' market value during the whole second half of 2016. At the beginning of this year, the trend was broadly the same, with an increase of 9% during the first quarter and almost 11% in the four first months of the year. The monthly increment rates slowed down from 4.5% in January to less-than-half afterwards. The peak was booked in April, it rebounded to 267 points in May before increasing to 274 in June. Therefore, the second quarter has seen quite more modest evolution, posting in June at a very similar level than at the end of the first quarter.

The contribution of the CECIMO-based businesses to this positive picture is significant. The sub MT-IX for these companies revealed an above 6.5% increase in value during the period July-December 2016, and 10.5% when only considering Switzerland in the calculation. At the beginning of 2017, it continued to grow but only registered similar rates to the second half of 2016 average in March. With the only exception of April, in the other months the expansion rate was 2% or below. This continuous increments led to an almost 17% augmentation of the MT-IX for CECIMO companies during the first half of 2017, growing at double the average of the MT sector worldwide.



▲ 1.4 CECIMO trade

Exports of machine tools from CECIMO countries showed positive trend during the first quarter of 2017, with an interannual amelioration of 8.3%. CECIMO MT exports in the first three months of the year were 4.34 billion euro, versus 4 billion euro in the same period one year ago. In almost every country within CECIMO, exports of machine tools increased. The steepest interannual increases in the Q1 of this year occurred in Spain (+50.0%), Belgium (+25.7%) and Denmark (+33.4%), but other countries such as Sweden (+18.9%), the Netherlands (+11.6%), France (+9.2%) and Germany (+8.2%) registered considerable upturns too. Only Portugal (-20.1%), Finland (-11.0%) and Czech Republic (-7.8%) suffered from decreases in their total exports of machine tools, including the sales to CECIMO countries.

One out of four machines tools exported by companies based in CECIMO countries is destined to another country member of this association. According to preliminary data for the first quarter concerning intra-CECIMO trade, commerce within this group kept improving. The largest rises correspond to CECIMO aggregated exports to Portugal (+53%), Finland (+51.7%), Denmark (+32.2%), Czech Republic (+26.7%), Sweden (+22.9%) and Switzerland (+22.5%). Other countries such as United Kingdom (+12.4%), the Netherlands, France (both +11.6%), Spain (+10.0%), Belgium (+5.6%), Austria (+3.7%) and Germany (+4.6%) experimented more moderate increases. The only drops of exports were registered in Italy (-12.9%) and Turkey (-6.1%).

The trade balance improved but just slightly, as the imports increment of 5.1% in the first quarter partially offsets the above mentioned raise of exports of more than 8%. The sharpest rises of MT imports took place in Portugal (+36.8%), Denmark (+27.7%), Spain (+27.5%), Sweden (+24.7%), Czech Republic (+22.1%) and Finland (+22.0%). Austria imported machine tools worth 17.8% more than in the first quarter of 2016, while Switzerland (+13.6%) and Italy (11.3%) showed double digit increases too. The only important weakening of import activity in the MT sector was seen in Turkey (-15.5%), while other countries such as the UK, the Netherlands and Germany saw minor declines in value of imported MT during the period January-March 2017 in comparison with one year before.

Taking into account the positive business sentiment (see section 2.10, 2.11 and 2.12) and the results yielded by the CECIMO Barometers in our sector (see section 1.7), exports from CECIMO countries are likely to increase this year and amount to around 19 billion euro.

After giving an overview of the situation in 2017, the reader could find it useful to take a look at what happened last year. As stated in the analysis of 2016 MT trade in the previous edition of this toolbox, the European machine tool builders are coping well with the feeble international context, showing a trade performance above the world average. Despite a little below projections, exports of machine tool from CECIMO-based companies to the rest of the world diminished by 3-3.5% last year, which is half of the MT global trade deterioration. CECIMO countries' exported machine tools were worth some 18.3 billion euro in 2016, accounting almost half of MT world exports. The region that suffered a hardest contraction in MT exports was Asia, which experimented 13.3% annual negative growth in 2016. The four countries that account for more than 90% of Asian exports of machine tools suffered from large reductions: -17.7% in Japan, -13.7% in South Korea, -8.6% in Taiwan and around -5.5% in China.

On a market-by-market analysis, CECIMO saw a fall in the Asian demand of machine tools of 6.8% in 2016. This was the market that hit the numbers the most, taking into account the whole year. This negative development was led by

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the 10.5 percent annual plunge in exports to China, which represents the 65% of the total Asian market for CECIMO companies. Despite all this, CECIMO has a stronger position in Asia, with a market share of 33.5%, which is two points higher than in 2014. A quick look at other big markets reveals that MT exports to the United States remained stable above 1.9 billion euro, while those to the Americas decreased 3%. Similarly to the CECIMO market share in Asia, the one in the Americas outpaced 36% up from 35% in 2015. Again, on the negative side, we could point out that CECIMO exports of machine tools to Russia kept markedly falling at impressive annual rates (-33% in 2016). This is certainly not a surprise, as the economic situation and the EU-Russia sanctions are clearly affecting the European MT sector.

On the imports' side, they amounted to 9.8 billion euro in 2016, a bit below estimates. Again, this reduction of 1% compared to 2015 was weaker than the global one. CECIMO countries are responsible for more than one quarter of MT purchases worldwide.

European countries reduced trading with the rest of the world, while strengthening their own commercial exchanges. The fact that this trade relationship better resists the weaknesses of the current environment is confirmed again: Europe is the only region of the world with which CECIMO trade flows incremented compared to 2015 (+0.3%). Consequently, the market share of the European market swelled from 50% in January 2016 to more than 53-53.5% one year later. In other words, half of machine tools foreign sales (in value) by CECIMO countries was destined to a European country. Hence, intra-European trade clearly remains the most important for CECIMO members.

Within CECIMO, 60% of total exports of machine tools in 2016 were originated in Germany and Italy. Germany accounted for 41.7% of total CECIMO exports in 2016. It is, alongside with Italy (16.8%) and Switzerland (12.5%), the most important European MT builder. Belgium, France, Spain and, at a lesser extent, the Netherlands, increased their share of exports within this group of countries. In terms of imports, almost 40% of MT purchases abroad were made by Germany (25.5%) and Italy (12.6%). These countries, together with Turkey (9.7%), France (9.1%) and Belgium (8.5%), account for two thirds of CECIMO machine tool imports.

CECIMO exports and imports per zones - 2017Q1

in million euro. Export destinations and import origins

EXPORTS

Zone	2017Q1	2016Q1	2017Q1/ 2016Q1	Share 2017Q1	Share 2016Q1
I. ASIA	972.7	966.5	1%	22%	24%
II. AMERICAS	757.6	653.9	16%	17%	16%
III. EUROPE	2,259.2	2,071.4	9%	52%	52%
CECIMO	1,773.9	1,634.1	9%	41%	41%
non CECIMO	485.3	437.3	11%	11%	11%
IV. Russia + CIS	142.4	121.3	17%	3%	3%
V. AFRICA	86.4	73.5	17%	2%	2%
VI. OTHERS	113.4	113.0	0%	3%	3%
TOTAL EXPORTS	4,338.7	4,005.3	8%		

IMPORTS

Zone	2017Q1	2016Q1	2017Q1/ 2016Q1	Share 2017Q1	Share 2016Q1
I. ASIA	687.8	646.6	6%	29%	29%
II. AMERICAS	118.3	100.3	18%	5%	5%
III. EUROPE	1,514.8	1,457.3	4%	65%	66%
CECIMO	1,444.3	1,392.9	4%	62%	63%
non CECIMO	70.5	64.4	9%	3%	3%
IV. Russia + CIS	4.9	2.0	150%	0%	0%
V. AFRICA	1.2	1.2	-1%	0%	0%
VI. OTHERS	5.4	8.0	-33%	0%	0%
TOTAL IMPORTS	2,338.1	2,220.1	5%		

CECIMO exports and imports per zones - 2016H2

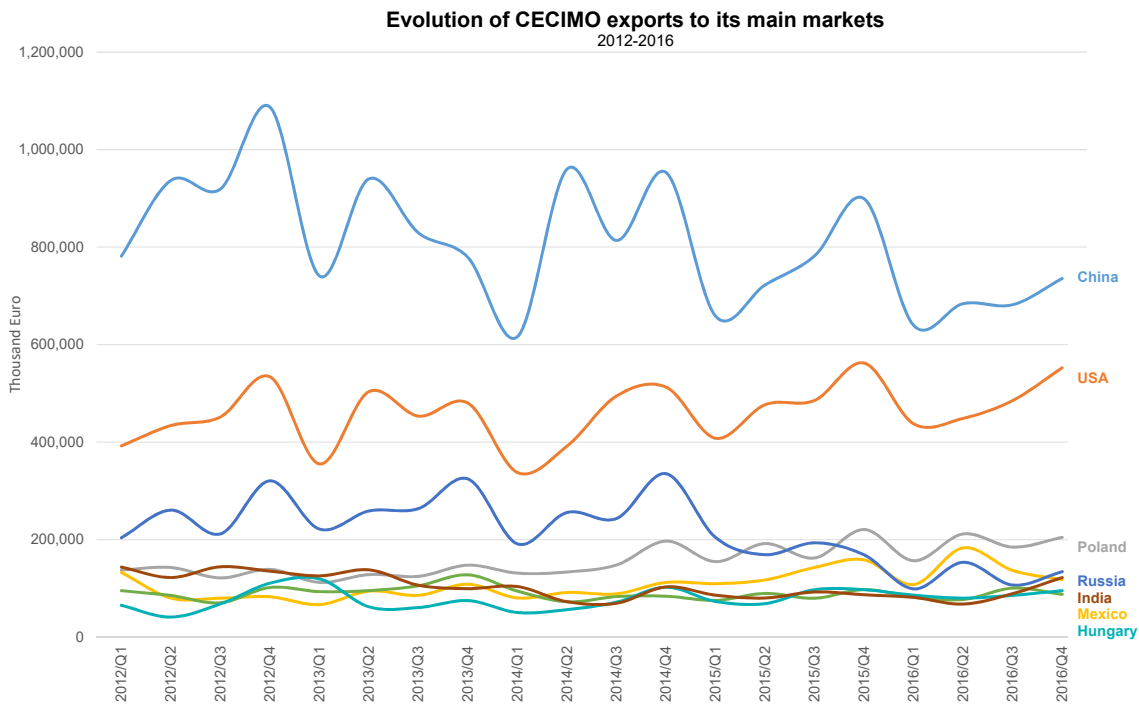
in million euro. Export destinations and import origins

EXPORTS

Zone	2016H2	2015H2	2016H2/ 2015H2	Share 2016H2	Share 2015H2
I. ASIA	2,286.9	2,487.9	-8%	24%	25%
II. AMERICAS	1,532.3	1,632.4	-6%	16%	16%
III. EUROPE	5,081.7	5,023.1	1%	53%	50%
CECIMO	4,015.1	3,870.5	4%	42%	39%
non CECIMO	1,066.6	1,152.7	-7%	11%	11%
IV. Russia + CIS	320.7	414.9	-23%	3%	4%
V. AFRICA	158.6	182.0	-13%	2%	2%
VI. OTHERS	224.3	277.4	-19%	2%	3%
TOTAL EXPORTS	9,618.0	10,030.9	-4%		

IMPORTS

Zone	2016H2	2015H2	2016H2/ 2015H2	Share 2016H2	Share 2015H2
I. ASIA	1,409.2	1,430.6	-1%	27%	27%
II. AMERICAS	214.0	225.5	-5%	4%	4%
III. EUROPE	3,404.0	3,493.9	-3%	65%	65%
CECIMO	3,266.5	3,370.8	-3%	63%	63%
non CECIMO	137.5	123.1	12%	3%	2%
IV. Russia + CIS	12.1	6.1	98%	0%	0%
V. AFRICA	3.6	2.9	23%	0%	0%
VI. OTHERS	12.2	15.6	-22%	0%	0%
TOTAL IMPORTS	5,209.8	5,334.2	-2%		



▲ 1.5 CECIMO production

The machine tool production by European builders exceeded 24.3 billion euro in 2016, slightly surpassing the estimates. This year, it is projected to grow at an annual rate close to 4% and hit more than 25 billion euro.

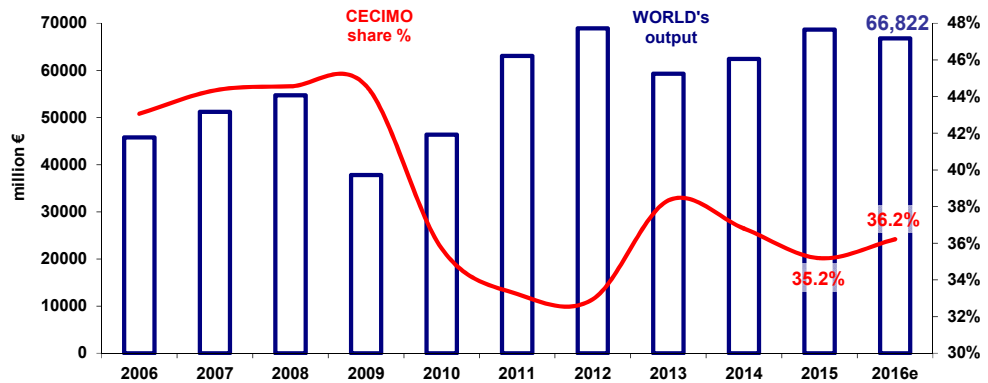
It proves that the European machine tool builders are coping well with the feeble international context and are strengthening their competitive position. Conversely, global production is suffering from an annual decline of nearly 3%. Following a flat trend in 2016, company based in CECIMO countries are forecasted to produce machine tools worth some 25.2 billion euro in 2017 and CECIMO market share of production will increase beyond 36%. Among other things, the European MT industry is benefiting from their digitalization improvements, with growing acceptance and speed. The modernisation of production equipment and previously postponed investments will likely continue to contribute to a rise in machine tool sales and production.

Among CECIMO countries, Italy and France performed quite well in this respect, with a production 7% and 8% higher than the one of the previous year. On the negative side, Czech Republic suffered from a 12% drop in production and Switzerland saw his production numbers eroded by around 5%. As for 2017, the latest forecast on production shows a rise in most CECIMO countries for which specific forecasts are available. So, Spain (+7.5% rise in MT production expected for 2017), Italy (+6.6%), Czech Republic (+6.2%) and Finland (+5.8%) stand out. Strong upward trends can be also observed in other CECIMO countries such as Germany, Austria and France.

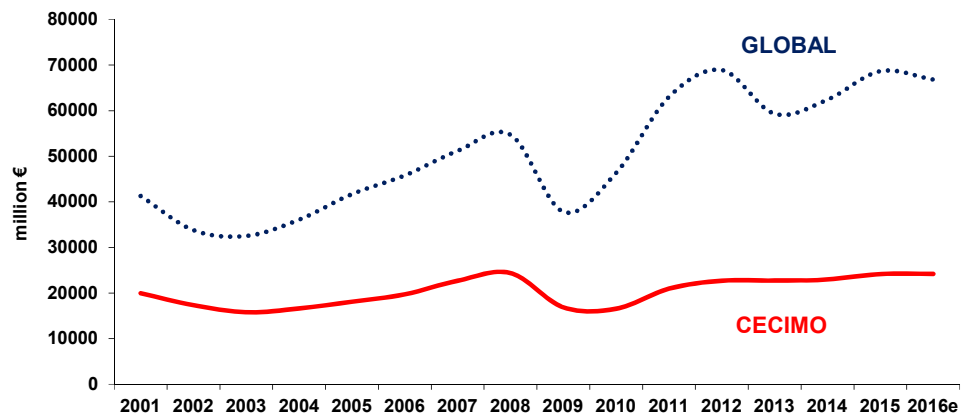
A country-by-country analysis indicates that the European MT sector doesn't expect any significant change in the market shares for 2017. Germany, which together with Italy accounts for more than two thirds of CECIMO machine tool output, is, by far, the biggest CECIMO MT producing country with more than 45 percent of its total production last year. Italy and Switzerland represent respectively 21 and 12 percent, followed by Spain (4%), Austria (3.5%) and UK (3%). The three major CECIMO MT producers account for more than three quarters of the MT production in this group of countries.

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World MT output: CECIMO share



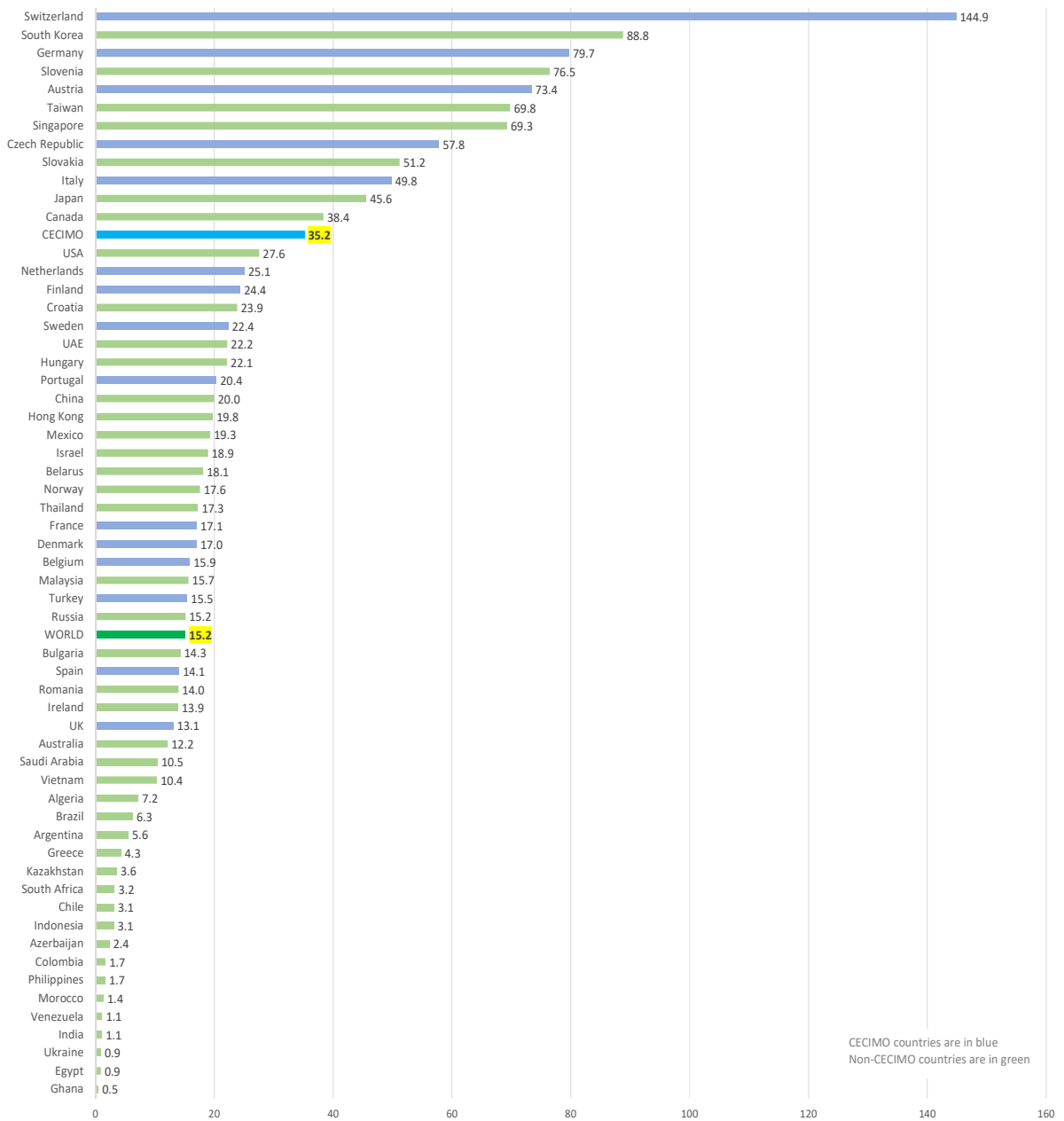
Global production of machine tools since 2001



▲ 1.6 CECIMO consumption

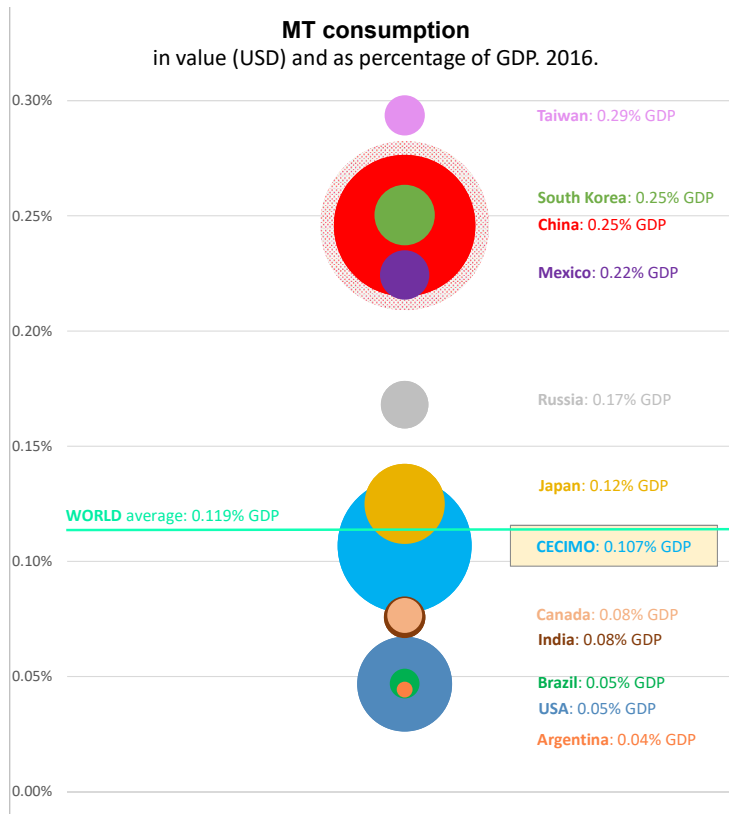
Despite the contraction of global consumption, and in line with what has been told on global MT trade, the consumption of machine tool in CECIMO countries is showing some signs of optimism. The European consumption is expected to pass 18 billion euro in 2017 and to retain a solid market share in global MT consumption above 26%. Within CECIMO countries, looking at the whole year 2016, the consumption increased nearly 3% with respect to the previous year. By country analysis, the countries which showed the highest consumption growth rates were Portugal (+24.8%), Italy (+18.6%), Austria (+13.6%) and France (+6.7%). It contrasts with the annual evolution in Czech Republic (-27.5%), Belgium (-18.8%) or Switzerland (-16.4%). Moreover, CECIMO aggregated consumption of machine tools per capita is markedly higher than the global average

Machine Tool Consumption per Capita in 2015



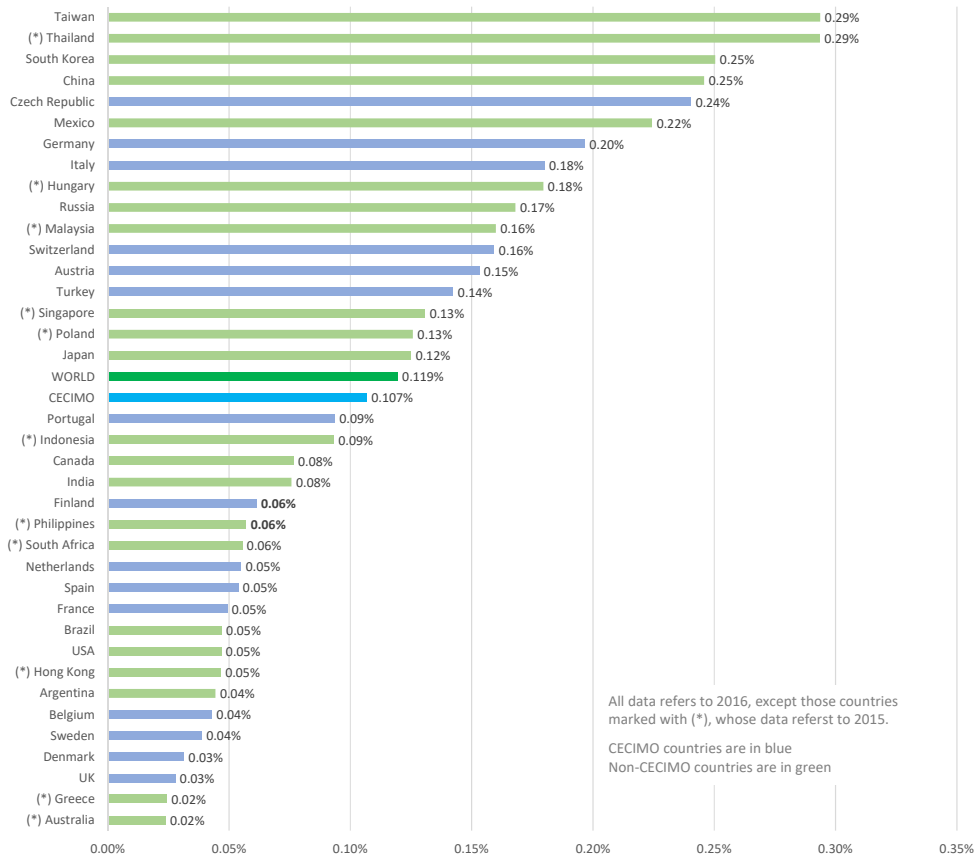
In terms of Gross Domestic Product, the consumption of machine tool in CECIMO countries is in line with the world average. This is also the case of the Gross Value Added share of manufacturing, as it can be seen in the figures below.

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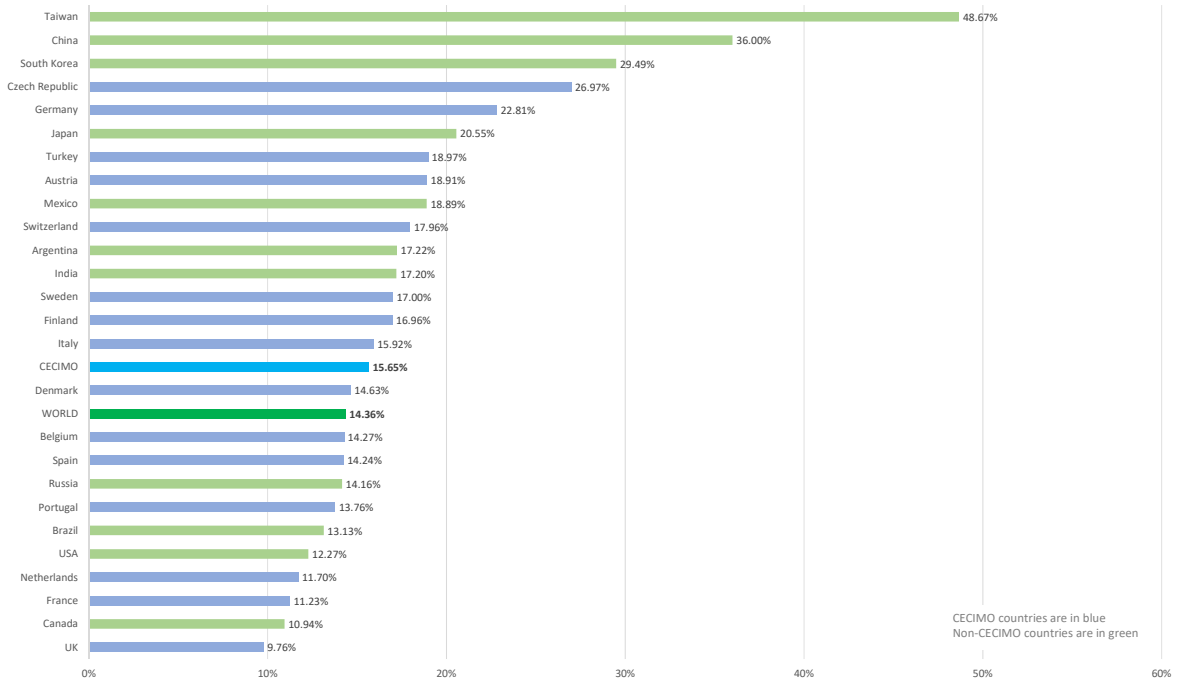


GDP share of MT consumption

2015-2016

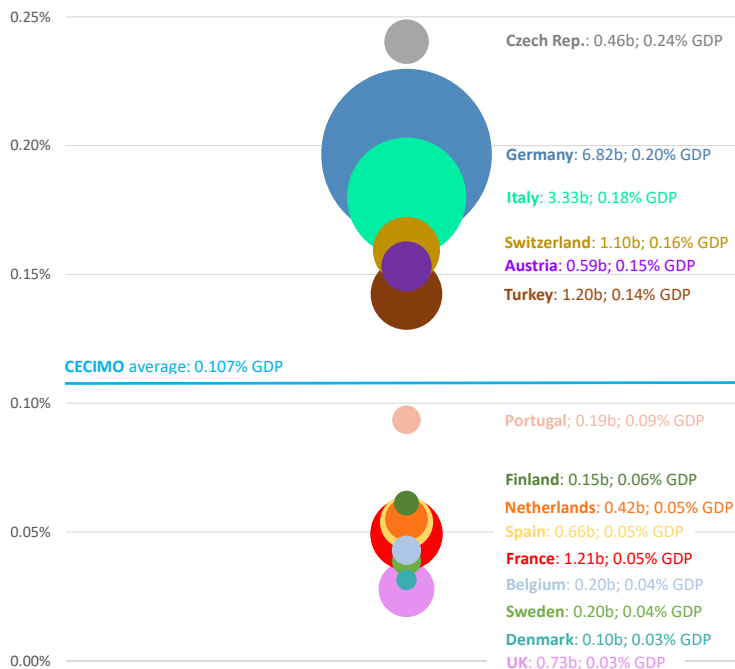


GVA share of Manufacturing 2015



Taking a look at the following graph on the CECIMO MT consumption in 2016 (in USD and as percentage of GDP), two groups of countries can be observed: those above the average –blue line– (namely Germany, Italy, Switzerland, Czech Republic, Austria and Turkey) and the remaining ones. Therefore, the picture is a little mixed among CECIMO countries: the consumption as percentage of GDP ranges from values around or above 0.2% such as in Czech Republic, Germany, Italy and Switzerland, to lower ones below 0.05% as in the cases of Belgium, Sweden, Denmark and the United Kingdom. Through the analysis of the figures, it follows that the countries that consume machine tools the most, are generally those with the highest values of MT consumption as percentage of GDP. Germany, Italy, Turkey and Switzerland are well above the average. France and the United Kingdom would be somewhat the exceptions to this conclusion.

CECIMO MT consumption in value (USD) and as percentage of GDP. 2016.



▲ 1.7 CECIMO Business Climate Barometer

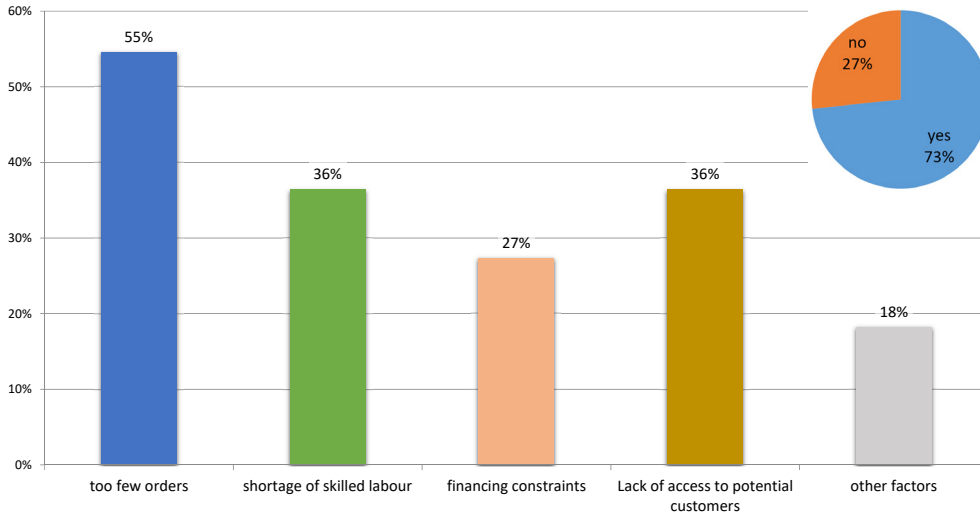
The latest edition of the CECIMO Business Climate Barometer keeps reflecting the improvement of the economic sentiment in Europe and in the machine tool sector. The collection of replies to the survey firstly distributed in mid-February 2017 took place until 31 April 2017. The data gathers altogether replies to the CECIMO questionnaire, responses sent by national associations from their own sources and, in the case of German companies, it takes into account data from the Ifo Institute. The responses in the CECIMO Business Climate Barometer are analysed as the difference (net percentage) between the share of companies reporting an increase and the share of companies reporting a decrease in their business activities, or their perceptions about the reality.

More than one third of the companies in the European machine tool sector, measured as net percentage, reported a good business situation. This value is slightly better than the one obtained in the previous Barometer last year. This broadly unchanged assessment of the companies' performance becomes a bit more cautious outlook, once looking ahead for the demand in January-March 2017, compared with the views expressed in November. Nonetheless, the projections are still quite positive and the predictions of the demand have improved in Germany in recent months. Moreover, the forecasts on exports during the first quarter ameliorated.

The net percentage of companies expecting the demand for their products to increase was 14%, versus 30% in the previous months. For its part, the estimates on the production for the same period moderately weakened from 41% to 24%, and the index of companies stating to have too few orders decreased from 62 in April to 55 late last year and, more importantly, to 31% in January 2017. Furthermore, it seems greater the role of foreign demand: the net percentage of businesses that are optimistic about their exports improved to 22% in the first quarter this year. On the other side, the overall level of employment is projected to move upwards, but at a slower pace than predicted at the end of last year: a net percentage of 18% informed about plans of increasing the company staff, versus 34% in the November edition of this survey. Just a marginal percentage of respondents expressed plans of reducing its labour force. In this respect, it is worth to mention that more than half of participants found their company limited by shortage of skilled labour. Concerning the companies' current rate of operation as a percentage of full (100%) capacity, half of them are operating 70% or 80% -one third of managers surveyed reported a rate of operation of 80%-, 15% is at full capacity and more than one tenth is working overtime.

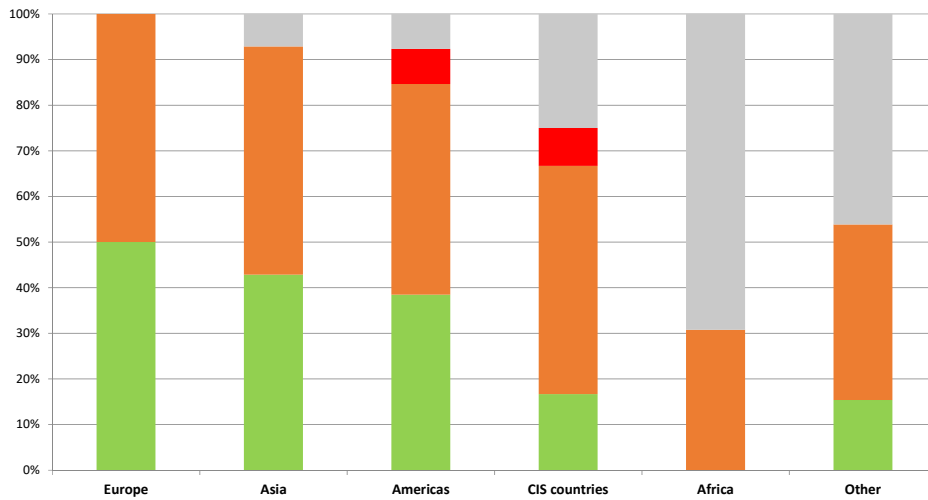
In general terms, it can be concluded that the trend and sentiment in the machine tool sector remain positive, and some improvements in some of these indicators can be reasonably expected in the coming months. From a market perspective, once again, Europe confirms its prominent place of European MT trade, but the survey also reveals that MT companies in the old continent are confident that their sales in Asia and Americas will increase in the short term.

Are there factors limiting your output? If yes, what factors:



■ we do not export to the region
■ decline
■ remain about the same
■ increase

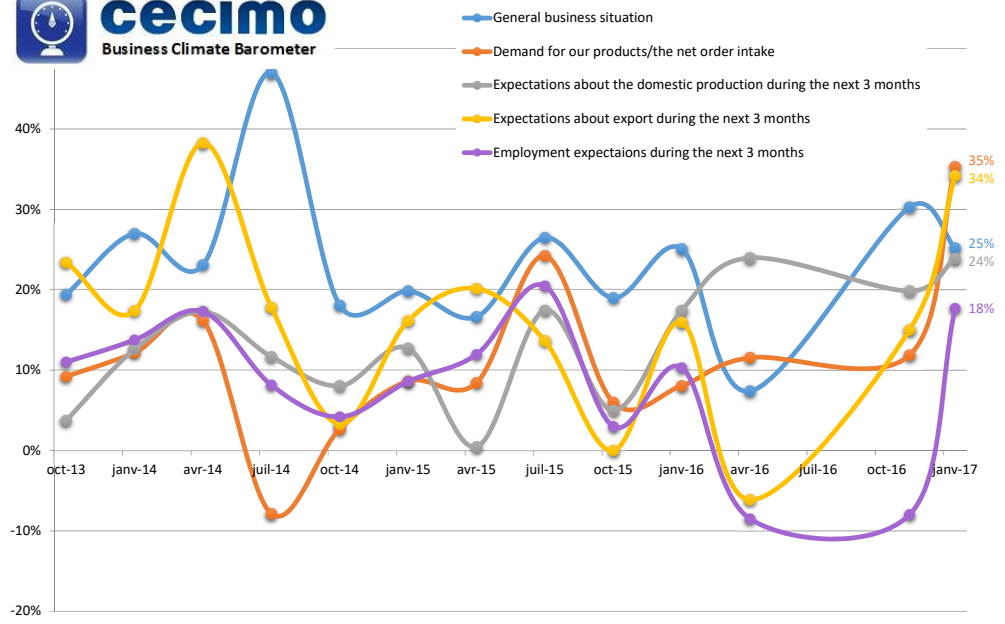
We expect our exports to different regions develop as follows:



See graphs on next page



cecimo Business Climate Barometer



2. Macroeconomic data in relation with machine tool orders

▲ 2.1 GDP

The world economy grew by 2.8% in the October-December 2016 period in comparison with the same quarter of 2015. The global economy is forecasted to gain momentum, rising at 2.5-3.5% during this and next year, and adding around 0.5 percentage points of expansion in 2018. So the pickup in the economic activity is likely to continue. Some analysts and institutions slightly reviewed the growth forecasts up. The outlook is positive, but some serious downside risks such as the public opinion less in favour of globalization, immigration and multilateral engagements are present and on the horizon.

The international picture greatly varies from region to region, and even among countries. Those set out to lead the world economic growth are the emerging markets and developing economies with rates of 4.5-5% (more than double than the advanced countries). China expanded by almost 7% at the end of 2016 and is performing better than expected. Although its growth slowed down a bit, China will probably raise above 6% both in 2017 and 2018, still accounting for two-fifths of world growth. Russia and Brazil will likely return to growth after 2 years of recession: Russia's growth rate is 1.4%, while Brazil's 0.2% this year and 1.7% in 2018. The cyclical positive impact on manufacturing and the trade recovery, alongside with the expected fiscal stimulus in the US, are some important underlying factors of the 0.4 percentage points upward revision for the growth pick up of advanced economies (1.6% versus 2%).

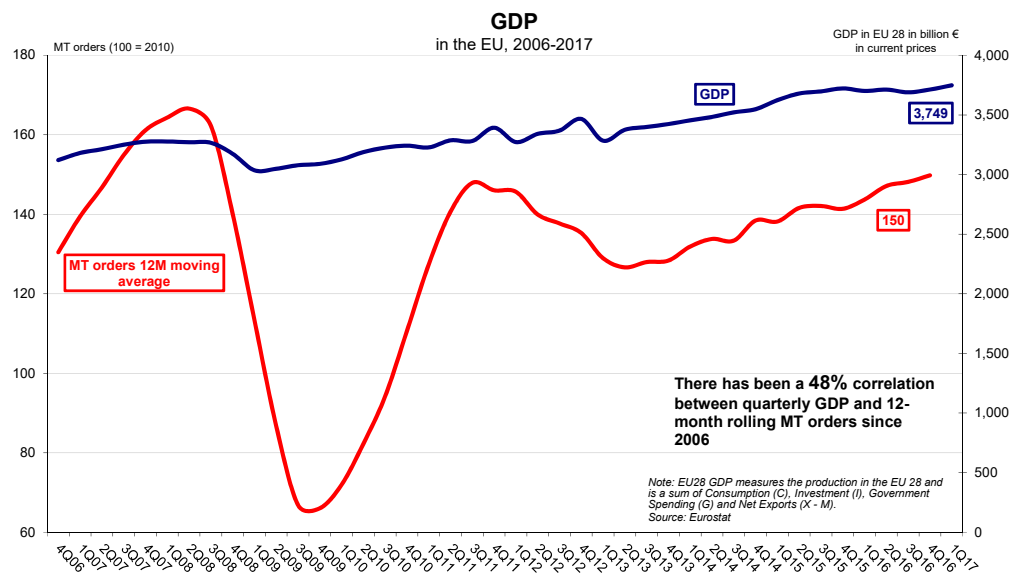
The Eurozone is speeding up and, according to the figures of the fourth quarter of last year, it outpaced the US. As it is going to be analysed more in detail in sections 2.10, 2.11 and 2.12 of the present report, manufacturing grew at 6-years high rate in the Euro Area, while the economic sentiment rose to levels seen one decade ago. Therefore, it does not come as a surprise that the projections for the real GDP acceleration in 2017 and 2018 in Europe improved: according to the latest European Commission and ECB forecasts, it is set to be 1.9-2%. As regards the latest evolution of this indicator, and according to the latest data published by Eurostat, the gross domestic product increased by 1% during the first quarter this year (0.6% seasonally adjusted) both in the European Union and the Euro Area, which is a faster pace than the one registered during the third and fourth quarter of 2016 (0.5% in the EU, 0.4% in the EA –both seasonally adjusted–). In interannual terms, data for the first quarter of 2017 reveals that the seasonally adjusted GDP quarterly rose by 1.9% in the EA and by 2.1% in the EU, which is a boost 0.1-0.2 percentage points higher than in the previous quarters. Among the EU Member States for which data is already available for the first quarter this year, Romania, Latvia, Slovenia and Lithuania are topping the ranking with GDP growth rates of 1.7-1.4% q/q. On the opposite side, United Kingdom recorded a modest quarterly increase of 0.2%. By GDP components, household final consumption expenditure quarterly increased by 0.3% during the first quarter of 2017, while GFCF (see section 2.5) and imports rose 1.3%. In real terms, GDP rose between 1.6% and 1.9%, taking into consideration the whole 2016. It rose at a quarterly rate of 0.3% in July-September last year, thanks to the contributions from the domestic demand. The European Commission projects the real GDP to accelerate at a yearly pace of 1.8% in 2017 and 2018, while the European Central Bank revised upwards its projections to 1.9% in 2017, 1.8% in 2018 and 1.7% in 2019. On a country-by-country analysis, Estonia is expected to top the 2017 ranking with a growth rate close to 2.8%, while Belgium, Germany, Spain, Latvia, Lithuania and Luxembourg will see a rise of their output of around 2%. On the negative side, Slovakia and Ireland are likely to grow at 1% rate or less. As for the official figures

Continued ►

for the first quarter this year, not still available in all EU countries at the time this report is drafted, the GDP quarterly increased around 1% in Austria and Lithuania, 0.7% in the Netherlands, 0.6% in France and 0.3% in Germany.

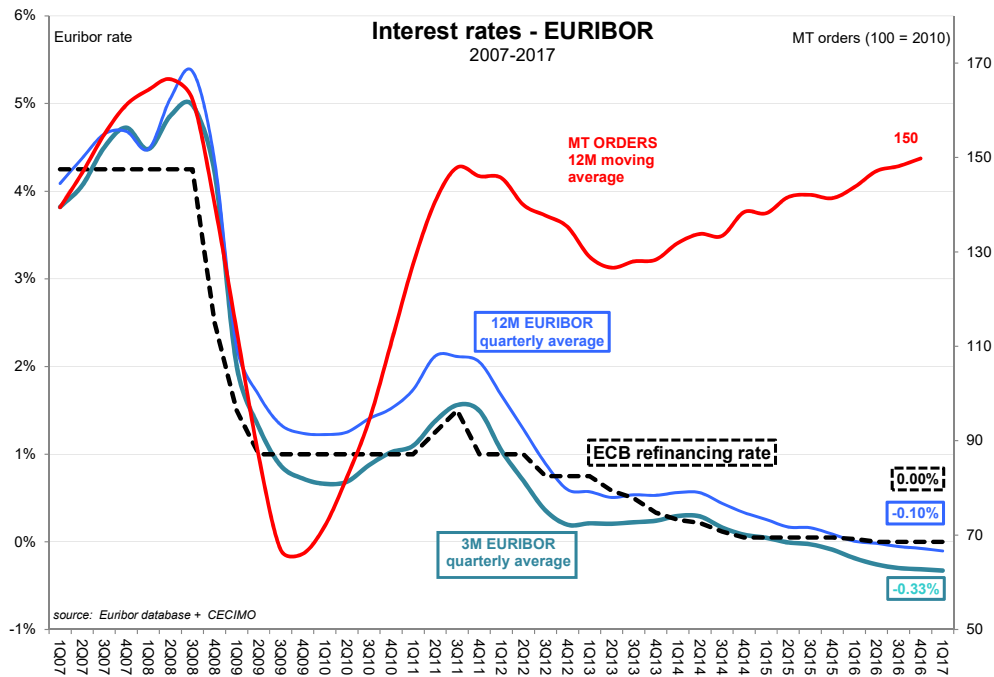
In the US, the real GDP growth continued to slow down and experimented an annual increase of 1.2% in the first quarter of 2017, better than the first estimate but almost one percentage point less than in the fourth quarter of 2016. This deceleration primarily reflected a downturn in primary consumption expenditure and private inventory investment. On the other hand, exports and non-residential fixed investments showed an upturn.

China is expected to grow above 6.5% this year, gradually slowing down its rate, which is consistent with the rebalancing of the economy. Investment and industrial activity are forecasted to somewhat decelerate towards 2020, while consumption and service sector will see faster expansion.



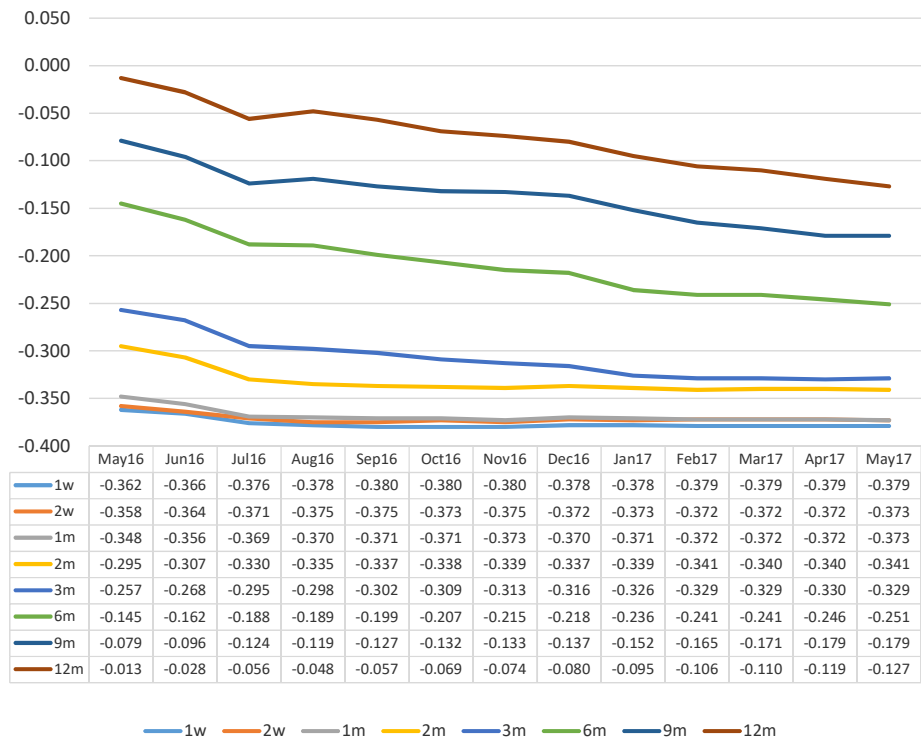
▼ 2.2 Interest rates – EURIBOR ⁱ

At its last meeting on 8 June, the Governing Council of the European Central Bank preserved quite favourable financing conditions by keeping the key interest rates for the Euro Area unchanged. Thereby, 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 have remained unchanged since March 2016 at 0.25% and 0% respectively. There is no interest rate increase in sight: the institution, which is responsible for managing the euro, defining and implementing monetary policy for the EA, does not foresee to raise interest rates for a while and, instead, expects them to remain at current or lower levels –the same level, but lower if “things were to worsen”– well past the end of this year and the horizon of the net asset purchases. Furthermore, the ECB keeps reaffirming its commitment to the asset purchase programme at a pace of 60 billion euro until December 2017 or beyond in case of need, due to, for instance, unwarranted tightening of financial conditions or an important deterioration of economic growth.



In 2017, the Euribor keeps falling down beyond its 2016 average of -0.265% (maturity of 3 months) and -0.035% (maturity of 1 year). The average 3-months Euribor reached -0.329% in May, down from -0.326% registered at the beginning of the year. The 12-months Euribor interest rate also continued its downward trend: its average value in May 2017 was -0.127%, lower than the -0.119% in April, -0.110% in March, -0.106% in February, -0.95% in January, -0.080% in December and 0.074% in November. A similar trend was registered for loans of other maturities, as shown in the figure below.

EURIBOR 2016-17



In the US, the Fed, although likely to raise interest rates at a pace faster than previously expected, could cool down this hike if growth forecasts ease.

▲ 2.3 Inflation

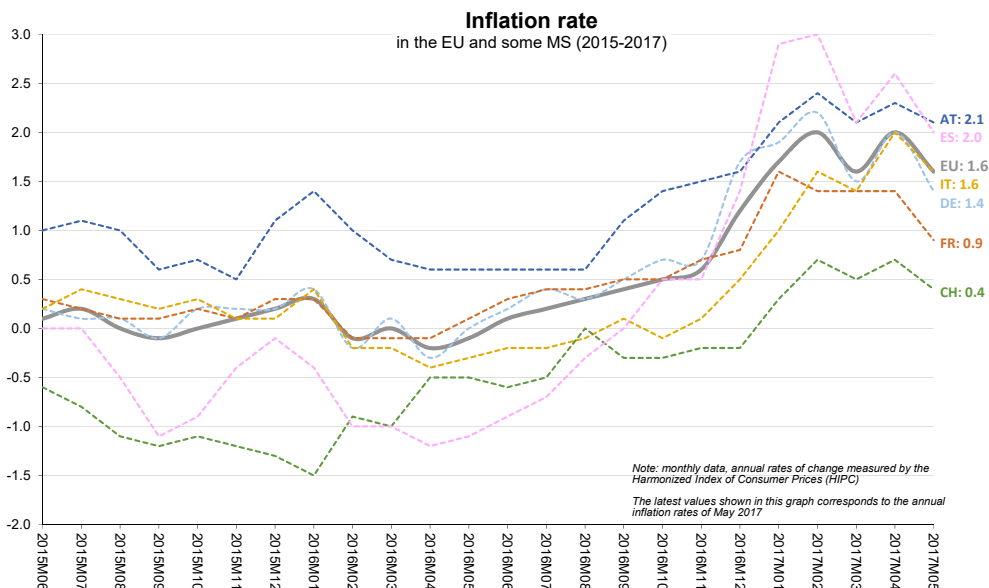
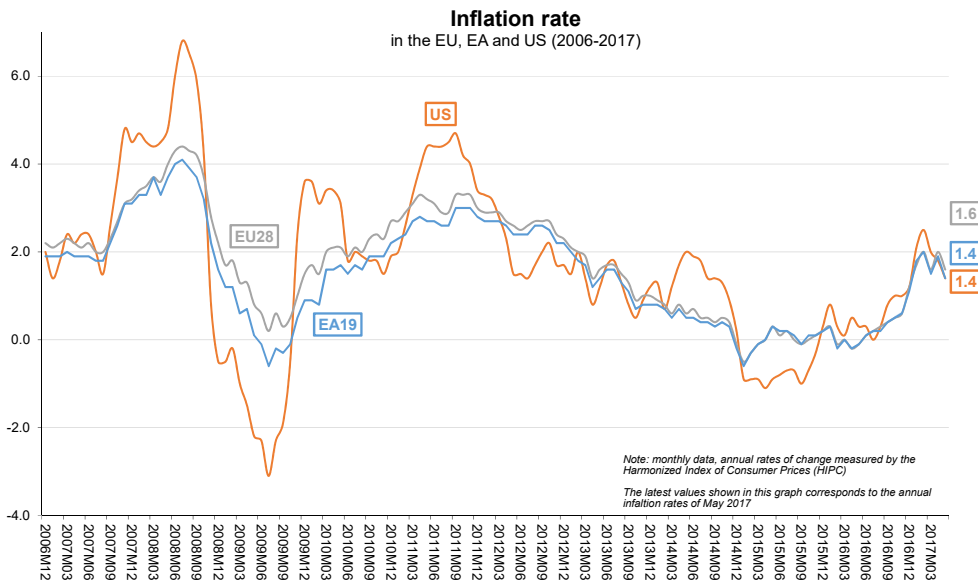
Deflation risks have disappeared in Europe but the annual inflation rather eased a bit. In May, the yearly rate of inflation in the Euro Area was 1.4%, down from 1.9% in April. In the EU, it was 1.6%, down from the April value of 2%. Among the Member States, the lowest recording were those of Ireland (0%), Romania (0.5%), Denmark and the Netherlands (both 0.7%), while the highest ones were registered in Estonia (3.5%), Lithuania (3.2%) and the United Kingdom (2.9%). The annual inflation measured in May only rose in Czech Republic (2.5%, up from 2.1% in April), Slovakia (1.1%, up from 0.8% in April) and the United Kingdom (2.9%, up from 2.7% in April). As for the previous months, the only European country that registered a negative annual rate in May was Iceland (-2.5%). For the near future, the European Central Bank foresees the inflation rate to end up this year at an annual rate of 1.5%, before lessening its growth to 1.3% in 2018. This downward revision mainly resulted from lower oil prices. Despite the subdued underlying inflation pressure, inflation is on the way back and continues its upward trend from the very low values showed until mid-2016, mostly supported by energy and food price inflation. Having said that, the underlying inflation pressure is subdued, and one important reason behind this flat low path is the weak nominal wage growth. Therefore, the inflation recovery, which is mostly driven by the price of oil and foods, is still not solid: it has not reaching yet the ECB target of a price index below but close to 2% over the medium term. However, the tails risks on the path of inflation have gone away, so the way towards a normalisation of the inflation rate in Europe is moving forward.

Therefore, the annual inflation continues to move up, recovering from the lows of 2016 but, on the other hand, the underlying inflation is contained. The energy inflation continues to be the key driver in the prices upward trend, with an annual inflation of 4.5% in May (down from around 7.5% in April and March). The reduction in the rise of energy prices largely reflects the upturn of oil production in the United States. Due to the delay of wages in catching up with rising prices, the households could lose purchasing power, at least in the short term, which will be negatively affecting private consumption.

In the coming years, the pressure on prices in emerging and developing countries (4-4.5%) is estimated to approximately double the one in the advanced markets (around 2%).

In the industrial sector, the swift of trend is also observed. Production prices remained stable in April, after scaling down 0.3% in the EA and 0.2% in the EU during March compared with February. The minor impulse from the energy sector was the main reason behind this trend. In interannual terms, industrial producer prices rose by 4.3% in the EA and 4.8% in the EU. Being 2010 the base year, the March-April level of producer prices for the total industry was 104.5 in the EA (up from 100.2 one year ago) and 105.2 in the EU (up from 100.4 the same month last year).

In the United States, the monthly inflation rate in March was 0.08%, less by 0.23 and 0.35 percentage points than it was in February 2017 and March 2016 respectively. Year-on-year, consumer prices fell 0.1% in May, due primarily to the decline of the energy index (-2.7% in May following a 1.1% increase in April). It accentuated the slow-down trend from 2-2.5% values in recent months. Taking out food and energy from the calculation, prices increased 0.1% both in April and March.



▲ 2.4 Industrial production index ⁱ

The industry sector is the largest economic activity in the EU. It accounts for 16% of the total gross value added (17% in the EA), while the GVA share of manufacturing in the World is just over 14%. It generates 24% of gross domestic product and 20% of employment. On average terms, the volume of industrial production (excluding construction) for the full year 2016 rose by 1.4% in the European Union and 1.3% in the Euro Area. Furthermore, the employment in more advanced technology manufacturing is growing, and it represented 37% of total manufacturing workforce in 2015.

The industrial production has been going up since the end of last year, with the exception of the flat trend registered in February (monthly seasonally adjusted values). In April 2017, in comparison with the previous month, it rose by 0.2% in the EU and 0.5% in the EA, following monthly increases in March of 0.3% and 0.2% respectively. This upturn was driven by a larger energy production (+4.7% in the EA, +3.6% in the EU) and, at a lesser extent, of non-durable consumer goods (+0.6%). On the opposite side, the production of capital goods decreased by 0.7%.

Continued ►

Among the EU member states, the sharpest declines were registered in Slovakia (-10.9%), Luxembourg (-3.1%) and Greece (-2.9%), while the largest increases were booked in Ireland (+7.7%), Malta (+2.9%) and Portugal (+2.0%). When comparing the production of industry in April 2017 with the ones of the same month of 2016, the overall increase for the EU was 1.4%, with above-9% rises registered in Latvia and Estonia, and above-3% falls in Luxembourg and Slovakia. In this period, capital good production went up by 1% for the first quarter this year, not still available in all EU countries at the time this report is drafted, the GDP quarterly increased around 1% in Austria and Lithuania, 0.7% in the Netherlands, 0.6% in France and 0.3% in Germany.

In the US, the real GDP growth continued to slow down and experimented an annual increase of 1.2% in the first quarter of 2017, better than the first estimate but almost one percentage point less than in the fourth quarter of 2016. This deceleration primarily reflected a downturn in primary consumption expenditure and private inventory investment. On the other hand, exports and non-residential fixed investments showed an upturn.

China is expected to grow above 6.5% this year, gradually slowing down its rate, which is consistent with the rebalancing of the economy. Investment and industrial activity are forecasted to somewhat decelerate towards 2020, while consumption and service sector will see faster expansion.

In the United States, the industrial production maintained its level in May after moving 1% in April and increasing more modestly in March and February. For its part, manufacturing output, which also registered a large increase in April, fell 0.4% in May.

Industrial production

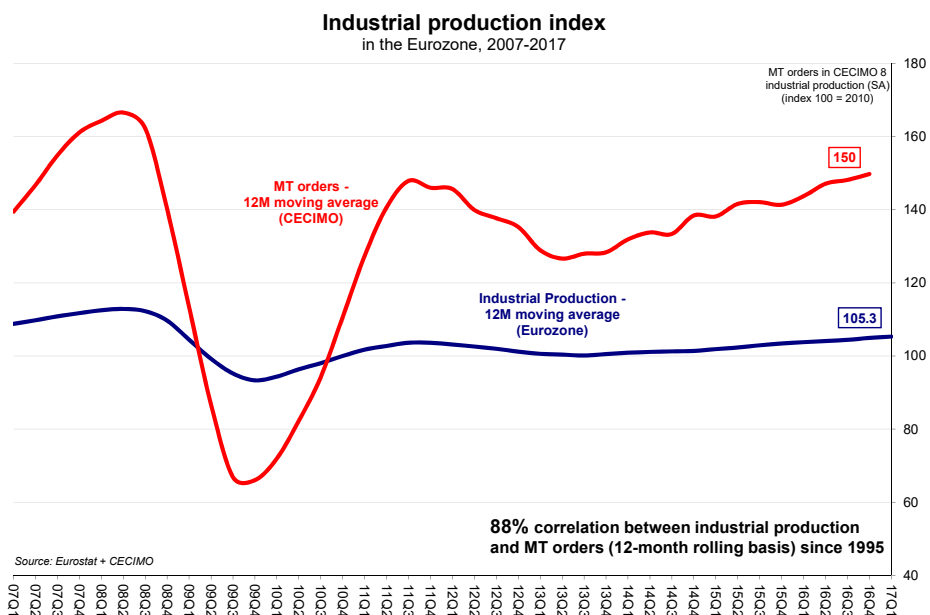
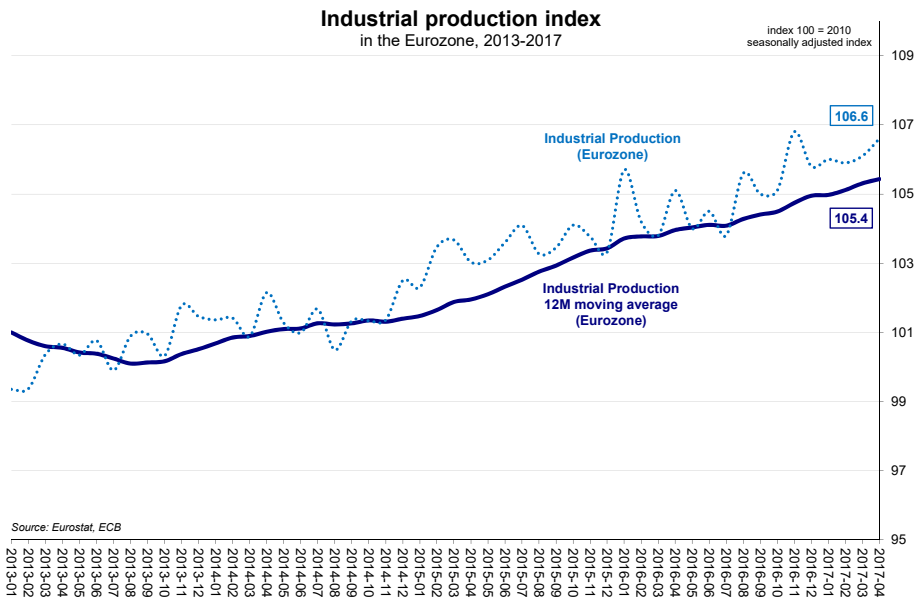
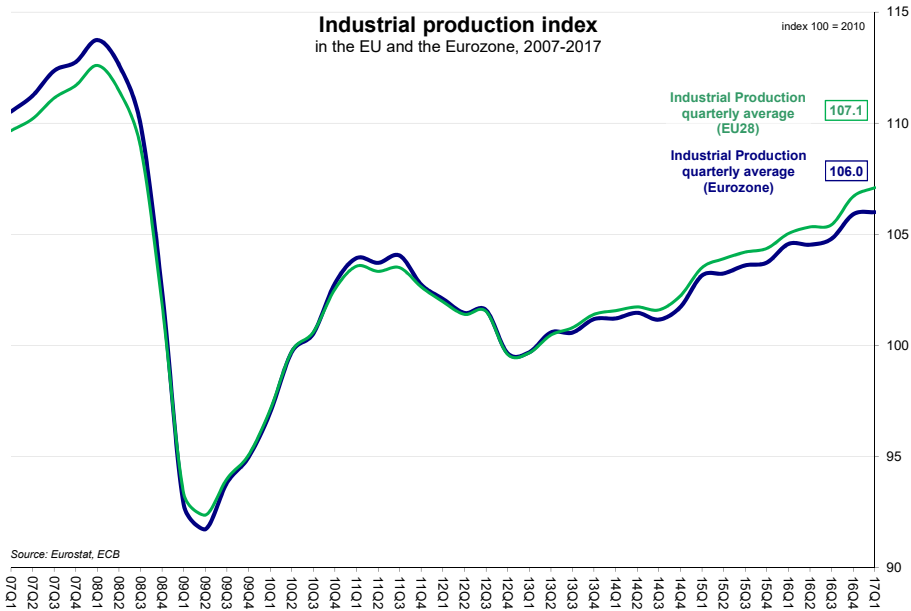
(percentage change compared with the previous month)

	EA19			EU28		
	February 2017	March 2017	April 2017	February 2017	March 2017	April 2017
Total industry	-0.1	0.2	0.5	0.0	0.3	0.2
Capital goods	1.2	0.9	-0.7	1.2	0.7	-0.8
Intermediate goods	1.2	0.6	0.1	0.8	0.7	0.0
Energy	-4.6	-4.0	4.7	-3.9	-3.3	3.6
Durable consumer goods	0.6	2.1	0.6	0.8	1.8	-0.1
Non-durable consumer goods	-1.2	1.7	0.2	-1.0	1.6	0.2

Industrial production

(percentage change compared with the same month of the previous year)

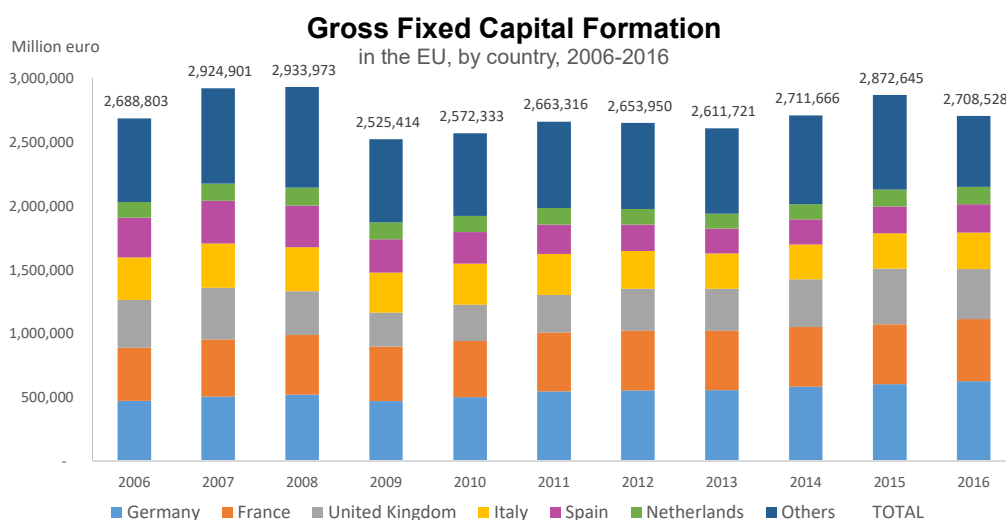
	EA19			EU28		
	February 2017	March 2017	April 2017	February 2017	March 2017	April 2017
Total industry	1.6	2.2	1.4	2.2	2.7	1.4
Capital goods	1.7	3.7	1.0	3.1	4.4	1.7
Intermediate goods	2.0	3.6	3.0	2.4	4.0	3.8
Energy	3.4	-5.1	-0.1	2.6	-4.4	-0.9
Durable consumer goods	2.0	5.7	4.6	2.4	5.7	3.7
Non-durable consumer goods	-2.0	1.6	0.6	-1.2	1.9	0.2



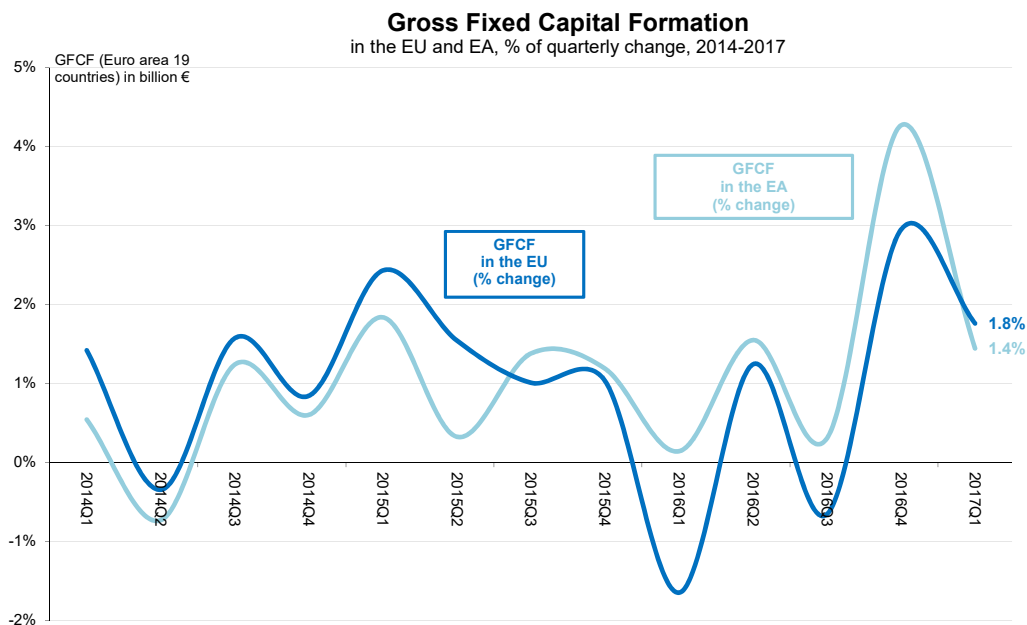
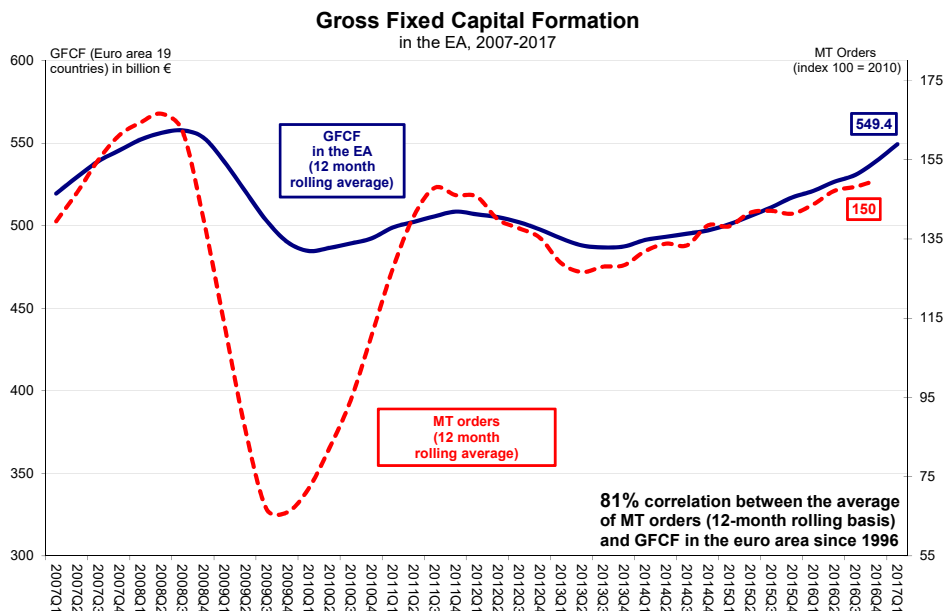
▲ 2.5 Gross Fixed Capital Formation ^①

The Gross Fixed Capital Formation (GFCF) in the EU machinery sector accounted for 6.2% of the total GDP (versus 6% in 2015). In the fourth quarter of 2016, the GFCF in machinery registered an increase in the EA of more than 4% in comparison with the period July-September and amounted to 166.9 billion euro. This is nothing but positive news, especially taking into account the observed 81% correlation between orders (measured on rolling orders average) and GFCF in the Euro Area since 1996.

In general terms, the GFCF improved during the fourth quarter at a quarterly growth rate of 4.3% in the EA and 2.9% in the EU. This optimistic outcome is expected to continue beyond 2016, thanks to demand upturn, replacement needs, improving profits, accommodative monetary policy, positive consumer sentiment –with consumer spending at higher than expected levels– and favourable financing conditions (see sections 2.7, 2.10 and 2.11 for further information on the last two). Years of subdued fixed capital formation should encourage investment levels to recover and move up. Investment is still benefiting from very supportive financing conditions and better corporate profitability. Furthermore, the brisk job creation is positively affecting the real disposable income and the private consumption.



In 2016, among the Member States of the European Union, the largest investors were Germany (627 billion euro), France (486 billion euro), United Kingdom (394 billion euro), Italy (284 billion euro) and Spain (222 billion euro). In terms of percentage of GDP, the countries that devoted a larger portion of their output to GFCF in 2016 were Ireland (29.3%), Czech Republic (24.6%), Sweden (24.2%), Romania (23.4%), Belgium (23%) and Austria (22.9%). In contrast, the countries that occupied the last positions in this ranking were Greece (11.4%) and Portugal (14.8%). In the UK (16.7%), investment stagnated but private consumption grew in the last quarter of 2016. Brexit-related uncertainty is likely to increase next year, which is already affecting firms' investment and hiring decisions.



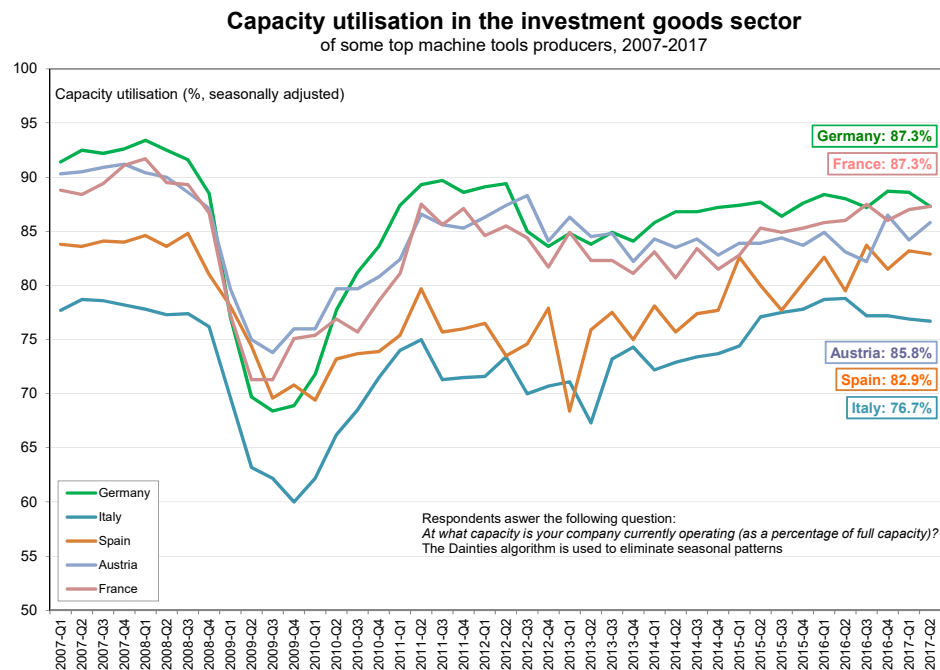
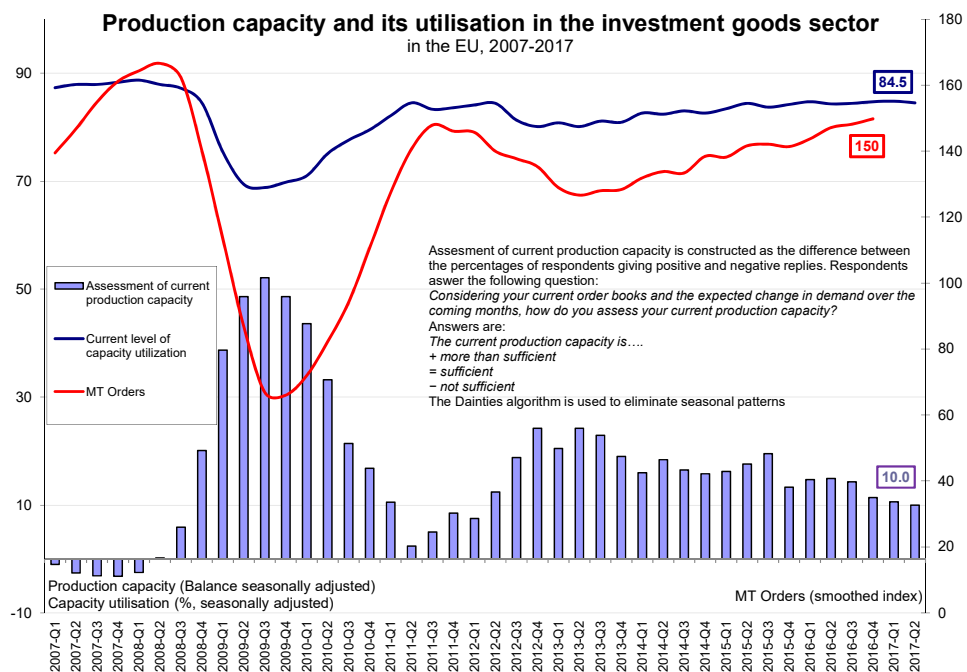
▲ 2.6 Capacity utilisation in the investment goods sector ⁱ

The capacity utilisation in the EU contracted 0.3 percentage points from 84.8 in the first quarter of this year to 84.5 in the second one. It is a little over the recording of one year ago (84.3), and just under the average pre-crisis levels (mean from 2000 to 2008: 84.7%). This reading occurs after an increase of this indicator for three quarters in a row: from 84.3% to 84.7% at the end of last year, and to 84.8% at the beginning of 2017. The highest correlation between the evolution of the level of capacity utilization and machine tools orders is observed when using one quarter time lag. In this case, the correlation is beyond 44% in the period 1996-2017. The capacity utilization in the EA showed the same trend but accentuated: companies in the EA forecast that the capacity utilization during the second quarter will be 84.6%, while it was 85.2% at the beginning of the year. This fall and the value itself are almost identical to the ones registered a year ago in the Eurozone. Among all EU Member States, the business surveys conducted by the European Commission

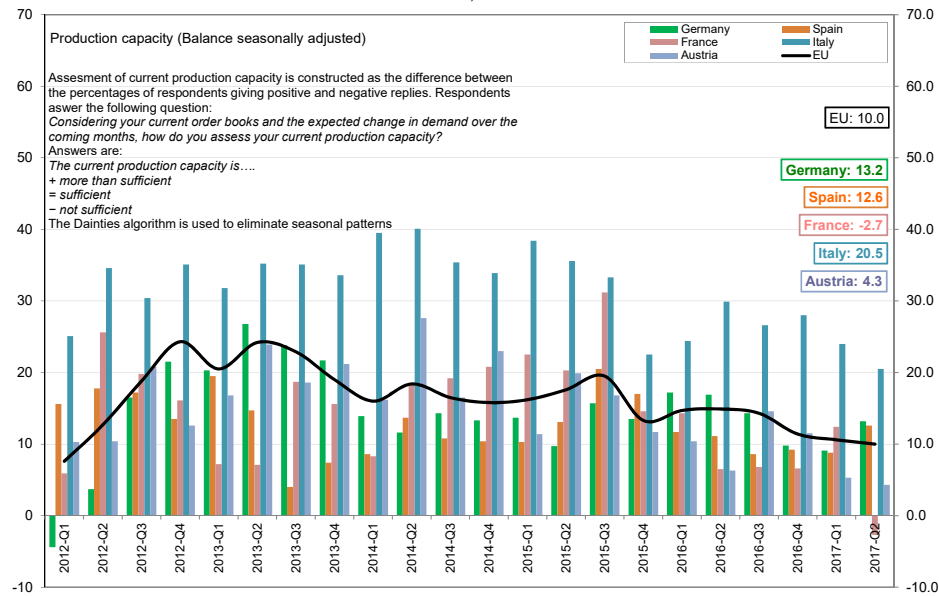
See graphs on next page

revealed that the highest capacity utilizations are in Slovenia (88.4% projected for April-June 2017, up from 83.7% % in the first quarter this year), Germany (87.3%, down from 88.6%), France (87.3%, up from 87.0%), United Kingdom (86.6%, up from 85.1%) and Austria (85.8%, up from 84.2%), while the weakest levels are in Greece (53.3%, down from 66.2%), Cyprus (61.1%, down from 63.6%) and Malta (65.0%, down from 81.8%). Italy, the second biggest producer of machine tools in Europe, marked a value below 77% (76.7, down from 76.9).

In the US, the capacity utilization for the industrial sector showed a flat trend in May (76.6%) following an acceleration from 76.1% in March to 76.7% in April. The current capacity utilization has significantly ameliorated and it is 0.8 percentage points above the value of this indicator in May last year. Still, it is more than 2.5 percentage points below its long-run average. For the manufacturing sector, the capacity utilization rose 0.8 percentage points in April and decreased 3 pp to 75.5% in May, a rate that is almost 3 pp below its long-run mean.



Production capacity in the investment goods sector in the EU, 2012-2017

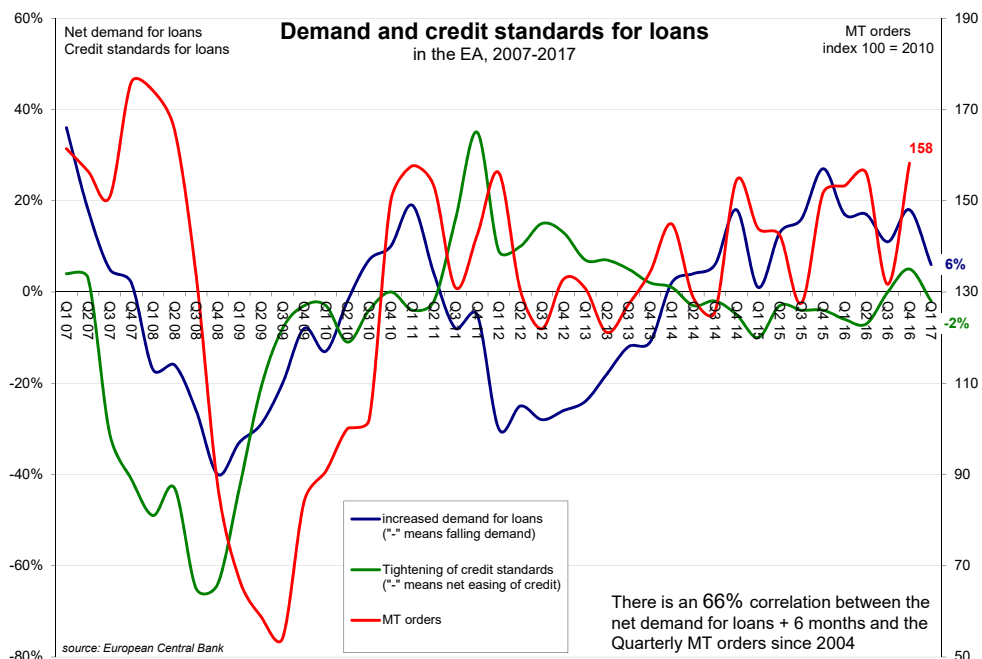


▲ 2.7 Bank lending survey ^①

In the Eurozone, loans to non-financial corporations and households increased in April at an annual rate of almost 2.5%. The positive trend of bank loans to EA businesses has been lasting already 3 years. The loan-to-deposit ratio continues its downward trajectory, posting 107.1% during the first quarter of 2017, and principally reflecting an important increase in household deposits. In net terms, Euro Area banks eased slightly their credit standards for loans to enterprises (-2%) but projects a +2% tightening during the second quarter. Furthermore, the net demand of loans from businesses increased 6% in January-March 2017, while the share of rejected loan applications from enterprises keeps decreasing across all loan categories. This rejection rate fell in Italy and Spain, but remained unchanged in France, the Netherlands and Germany.

Competitive pressure and lower willingness of banks to tolerate risks were the two main forces working in opposite direction, the latter having tightening impact, and the former having easing impact on loan approval criteria. Among the largest Euro Area economies, the picture is a bit heterogeneous. France showed flat developments both in credit standards and demand for loans. The criteria for granting loans tightened the most in Spain (+10%), far away from the 14% easing in Italy. Regarding loan demand, the biggest increased during the first quarter of 2017 was recorded in Germany (+13%), while the largest decrease was booked in the Netherlands (-20%). The negative deposit facility rate of the European Central Bank (see section 2.2) is reported to positively affect the volume of bank lending but not their net interest income. The overall terms and conditions for loans or credit lines to enterprises remain broadly unchanged, except the net 12% easing in Germany.

See graphs on next page



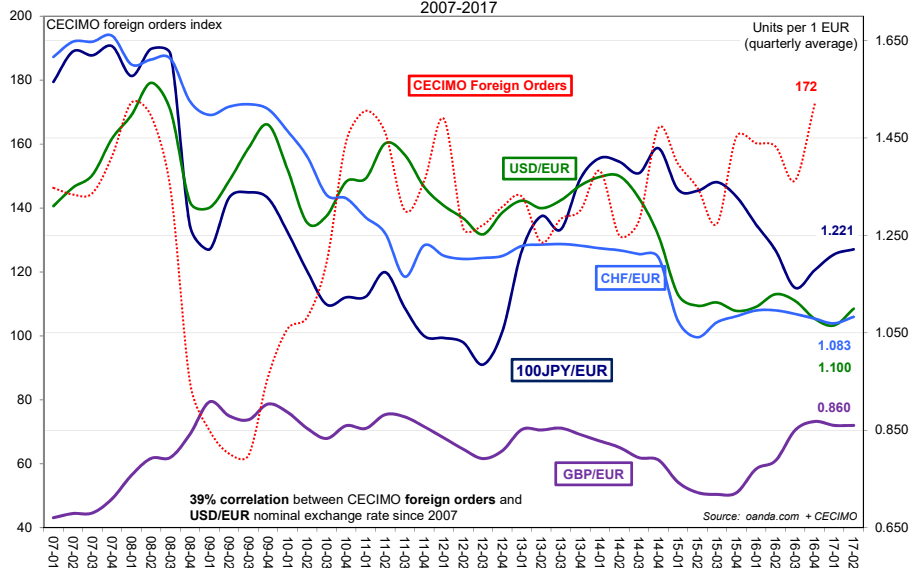
▼ 2.8 Foreign exchange rates

The EA currency has strengthened since early March this year. The nominal effective exchange rate of the euro (i.e. the weighted average of the euro exchange rate relative to a basket of currencies of the EA most important trading partners, non-adjusted for the effects of inflation) increased during the last months. According to the ECB, taking into consideration the period which goes from 9 March to 7 June, this appreciation in trade-weighted terms has been of 2.5% (4.4% from 1 March to 30 June), and it was the trend showed against most other major currencies, particularly vis-à-vis the US dollar (6.3%) and the Chinese renminbi (4.6%). The Euro also appreciated against the Japanese yen (1.5%) or the Swiss franc (1.3%). When observing one year period of time, the euro appreciation is also around the same value (2.7%). Among currencies of emerging economies and non-Euro Area Member States, the registered trend is quite similar, with the exception of the currencies of some eastern European countries such as Czech Republic, Poland or Hungary.

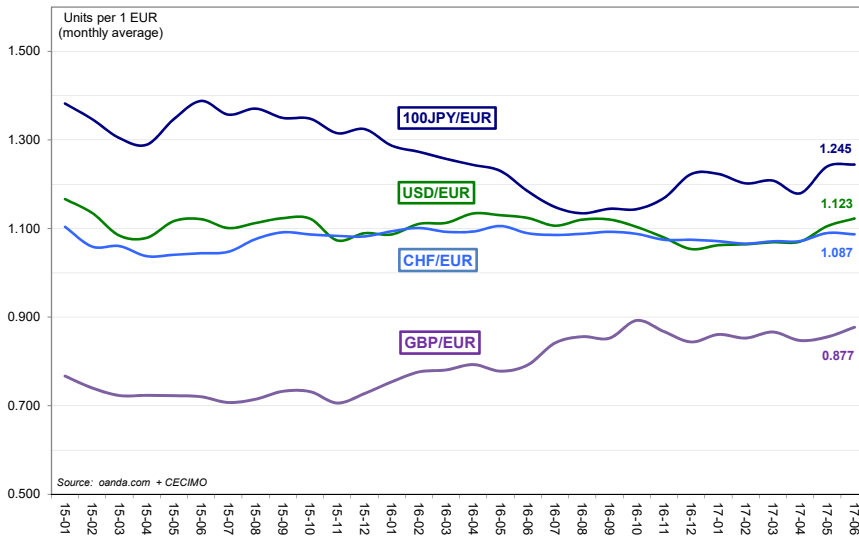
In nominal and bilateral terms, in May and June 2017 the euro appreciated 5.5% against the yen and almost 5% vis-à-vis the United States dollar, as well as 3.5% and 1.4% with respect to the sterling pound and the Swiss franc.

The US dollar recent depreciation this year was partly due to the rising market doubts on how much the Fed could increase interest rates this year. In a nutshell, the expectations of a faster pace of monetary policy normalisation are slowing down, in a relatively weak inflation scenario with the Consumer Price index at an annual rate of 1.9% in May (-0.1%), falling below 2 percent for the first time since late 2015.

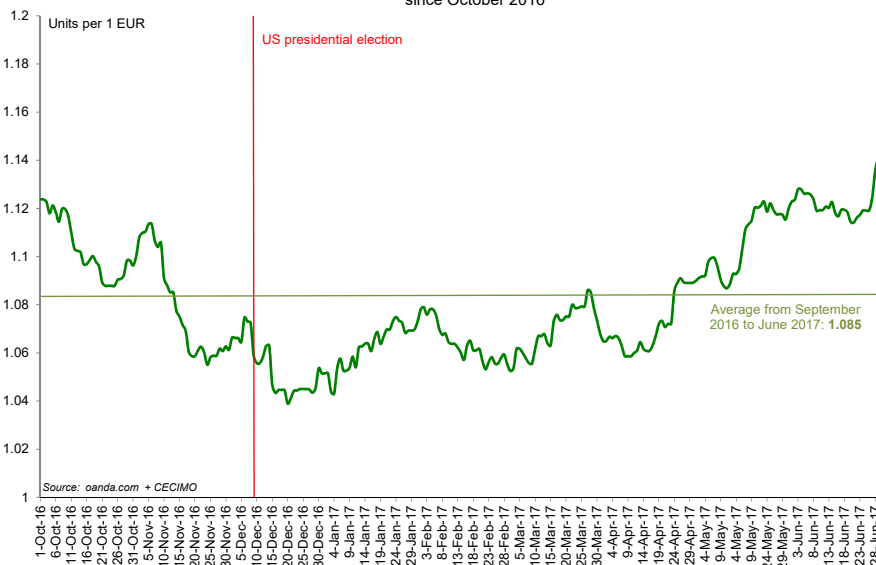
Foreign exchange rates



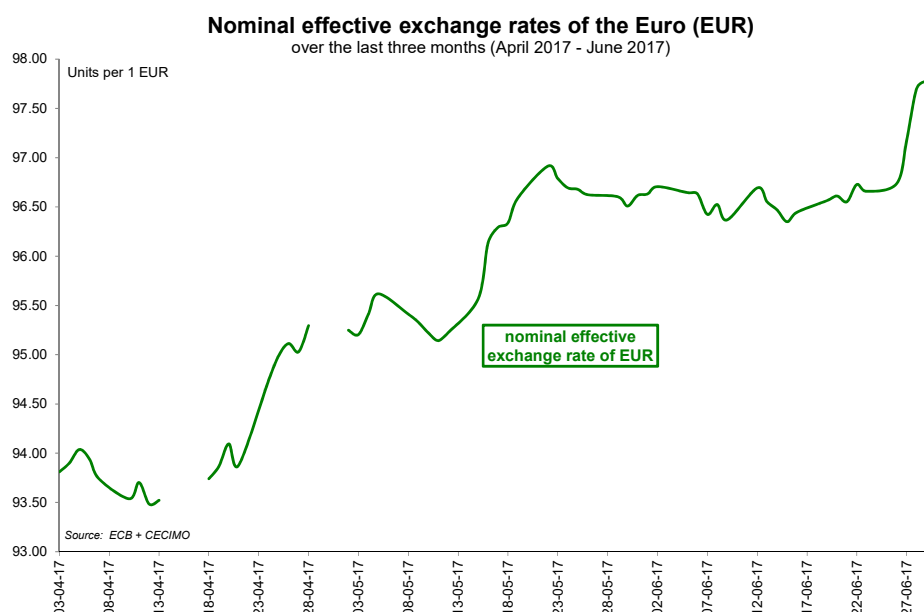
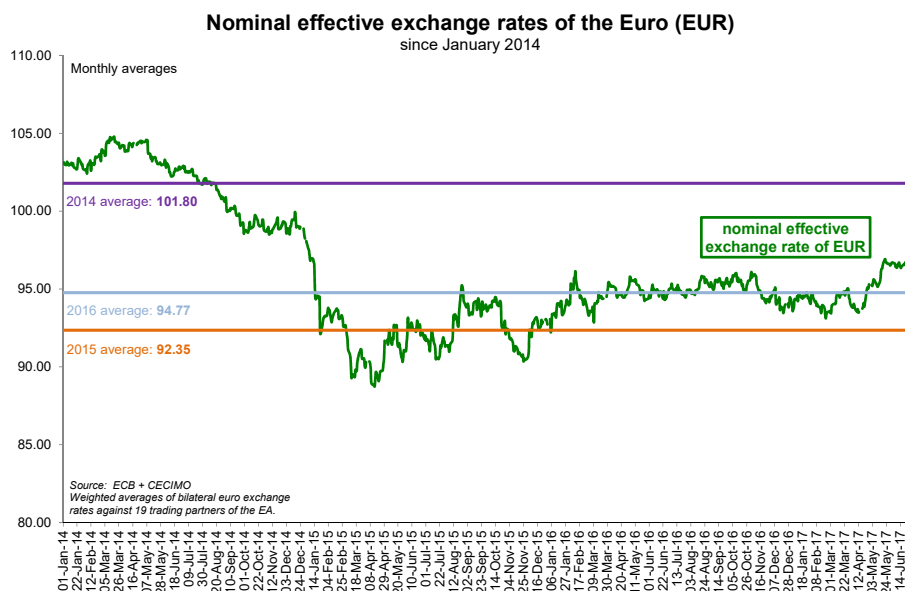
Foreign exchange rates since 2015



Nominal exchange rates Euro (EUR) to US Dollar (USD) since October 2016



See graphs on next page



▲ 2.9 Industrial employment

Data on employment rate are the most promising ones since late 2008 - early 2009, although it is still a major concern, especially the youth and long-term unemployment. The general unemployment continues to fall down and it is in its lowest levels since March 2009. Specifically, in seasonally-adjusted terms, following a first quarter where the employment increased by around 1.5%, the EA unemployment in May and April 2017 was 9.3%, down from 10.2% one year ago. In the EU, this variable also edged down from 8.1% in February and 7.9% in March this year to 7.8% in April and May. It is the most positive value since December 2008. This positive trend also applies to youth unemployment –meaning jobless population aged 15 to 24 as a percentage of the labour force of that same age–, which moved down in the EU from 19.0% in May 2016 to 16.9% one year later, and from 21.3% to 18.9% in the EA.

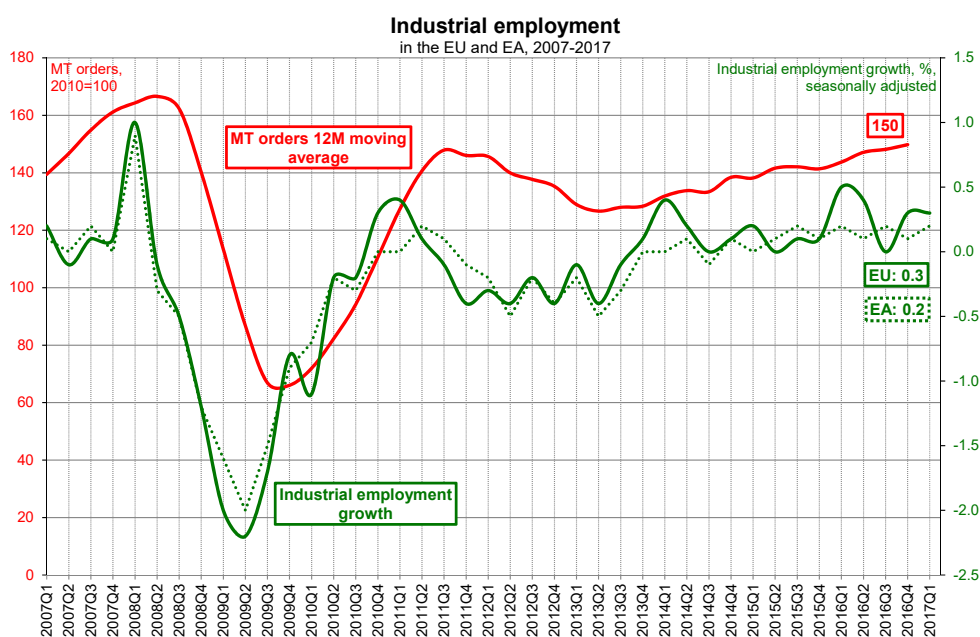
The situation in the different EU Member States varies considerably. In May 2017, it ranged from 3.0% in Czech Republic and 3.9% in Germany to 17.7% in Spain and around 22.5% in Greece. However, more importantly, the unemployment levels are lower in all EU countries, without exception, than they were one year ago.

Croatia, Spain and Ireland registered the largest drops of 2-3 percentage points each.

In the short-medium term, the general unemployment in the EA is expected to post at 9.3-9.4% this year and just below 9% in 2018, down from 10% in 2016. In the Euro Area the forecasted rate is 8% this year and 7.7% the next one, down from the 2016 value of 8.5%. Therefore, despite the continuous decline of unemployment, it will remain high in the years to come.

Last but not least, alongside with the above-explained positive trend of employment rate and plans of firms to step up hiring, the labour productivity is foreseen to accelerate 0.5% in 2017 and 0.7 in 2018.

In general, industrial employment made a very positive start to 2016, growing at rates not seen since the outbreak of the crisis (1.0% with no adjustment, +0.5% seasonally adjusted), and somewhat slowed down afterwards (+0.7%, -0.1% after adjustment). The correlation between machine tool orders and the industrial employment is 50.6% in the EU and 55% in the Eurozone. According to recent surveys conducted and published by the European Commission, managers' employment plans in industry and services remain broadly flat at the beginning of 2017, but somewhat more optimistic in the EU than in the EA. From a sectorial point of view, manufacturing employment quarterly rose by 0.2% in January-March 2017.



▲ 2.10 OECD Business Confidence Indicator for Europe ⁱ

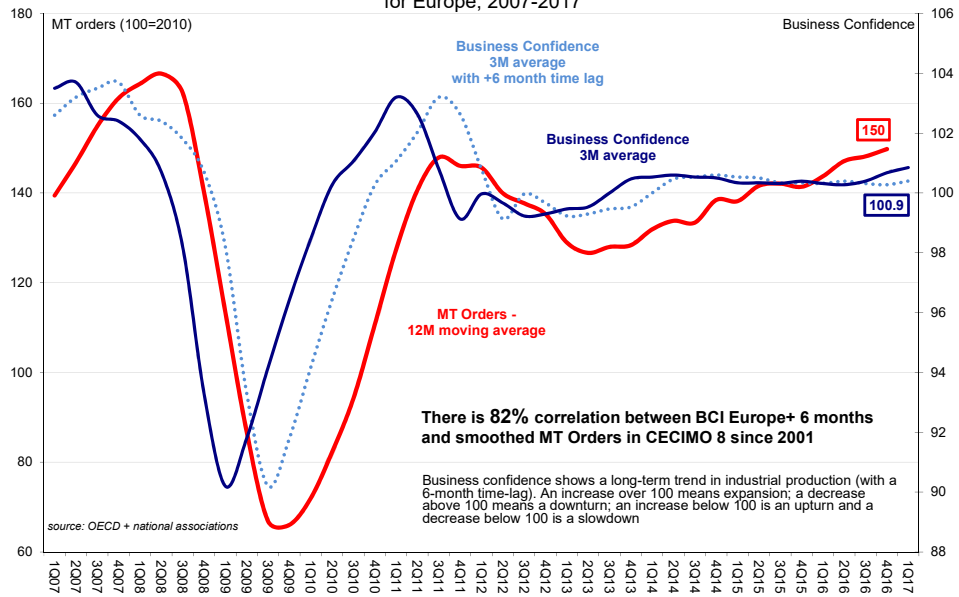
The Business Confidence Indicators (BCIs) continue to reveal positive growth prospects, signalling growth gaining momentum in Germany and pointing to a stable one in the UK, US, Canada and Japan. The growth cycle outlook in the Euro Area and in the OECD as a whole is stable. CLIs for the EA showed a monthly flat trend in April and an interannual increase of 0.50%. In the OECD, the month-on-month change was +0.04%, while the year-on-year increase was 0.4%.

Among the major emerging economies, Brazil and Russia are gaining growth momentum, while China and India show stable growth outlook, as it can be concluded on the basis of the latest readings of the BCIs published by the Organisation for Economic Co-operation and Development.

See graphs on next page

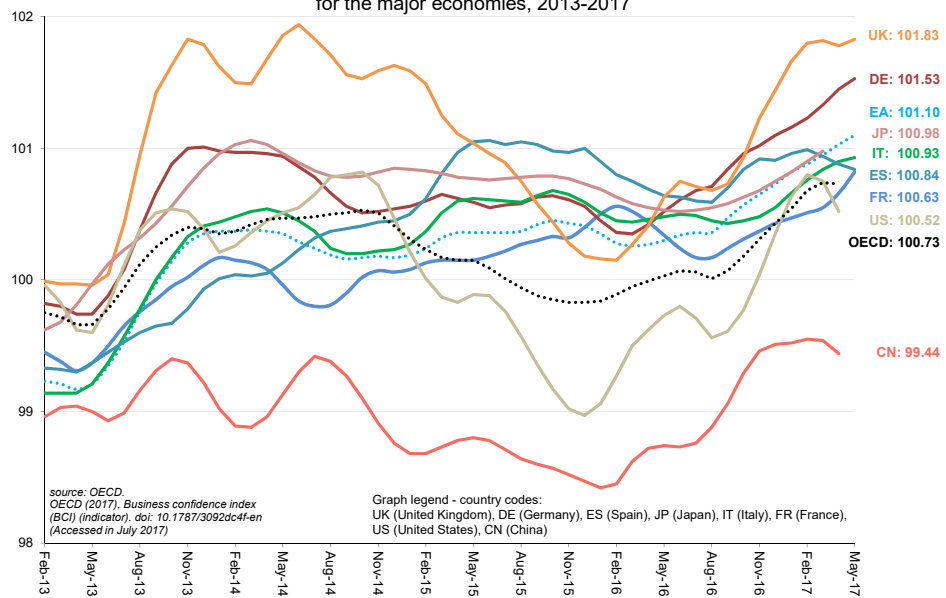
OECD Business Confidence Indicator (BCI)

for Europe, 2007-2017



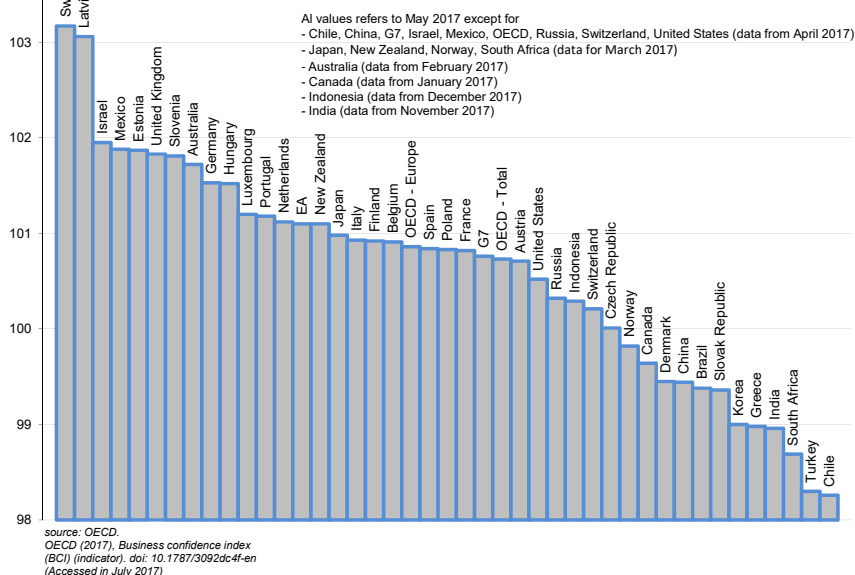
OECD Business Confidence Indicator (BCI)

for the major economies, 2013-2017



OECD Business Confidence Indicator (BCI)

for the major economies, 2017



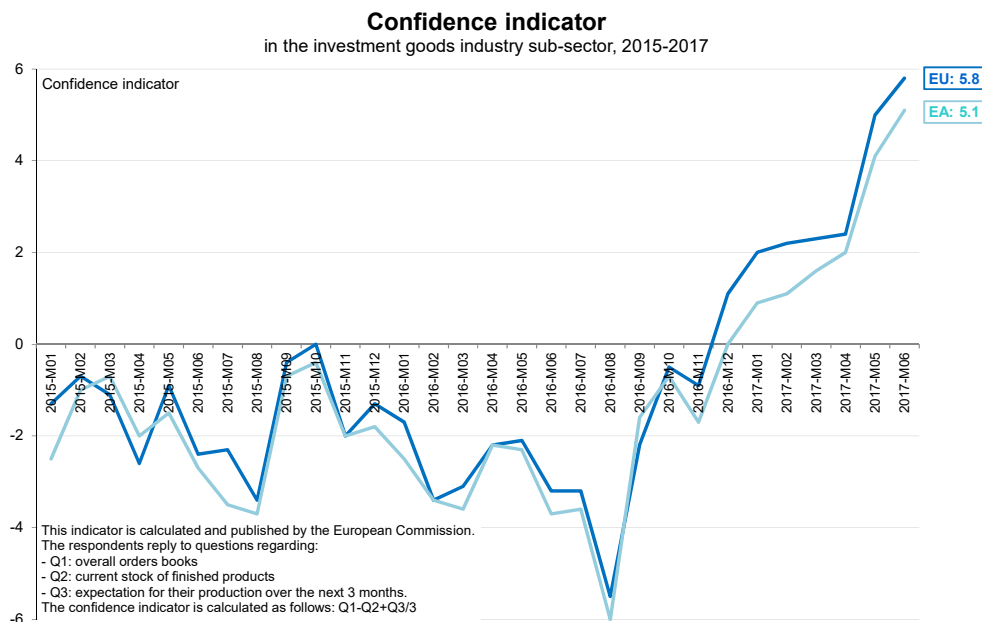
▲ 2.11 European Commission Economic Sentiment Indicator ^①

Following sideways movement at the beginning of 2017, the EC Economic Sentiment Indicator (ESI) significantly improved during the second quarter. In April, the indicator for the EA noticeably increased by 1.6 and posted 109.6 points, before easing 0.5 points in May. In May, it softened a bit, above all in non-EA countries such as the United Kingdom (-2.3) and Poland (-0.9). As a result, the general indicator for the EA and the EU decreased by -0.5 and -1 points respectively. However, confidence in industry remained at high levels. In June, the improvement in Europe regained strength, with the ESI at the highest levels since August 2007. The EA ESI overall index posted at 111.1 (+1.9 points in comparison with May), while the EU equivalent reached 111.3 (+1.6 points regarding the previous month). Taking out everything but the industry –which is weighted 40 per cent in the calculation of the ESI–, the index strongly rose almost 2 points in the EU (+1.9) and the EA (+1.7).

Among all EU Member States, the confidence and economic sentiment in Industry, as measured by the ESI in June, deteriorated only in Belgium (-3.0 in June), Bulgaria (1.0), Slovakia (-0.2) and Cyprus (2.5). On the opposite side, the largest increases were registered in Denmark (+7.1, from -5.7 in May to 1.4 in June), Malta (+4.2, from 7.6 to 11.8), Germany (+3.1, from 5.3 to 8.4), Austria (+3.1, from 2.0 to 5.1), United Kingdom (+3.1, from 9.9 to 13.). Estonia (+3.1, from 6.6 to 9.7), Lithuania (+3.1, from -6.9 to -3.8) and Greece (+2.9, from -10.4 to -7.3).

For its part, consumer confidence also registered markedly increases in June compared to May in both the EU (+1.1 points to -2.2) and the EA (+2.0 points to -1.3).

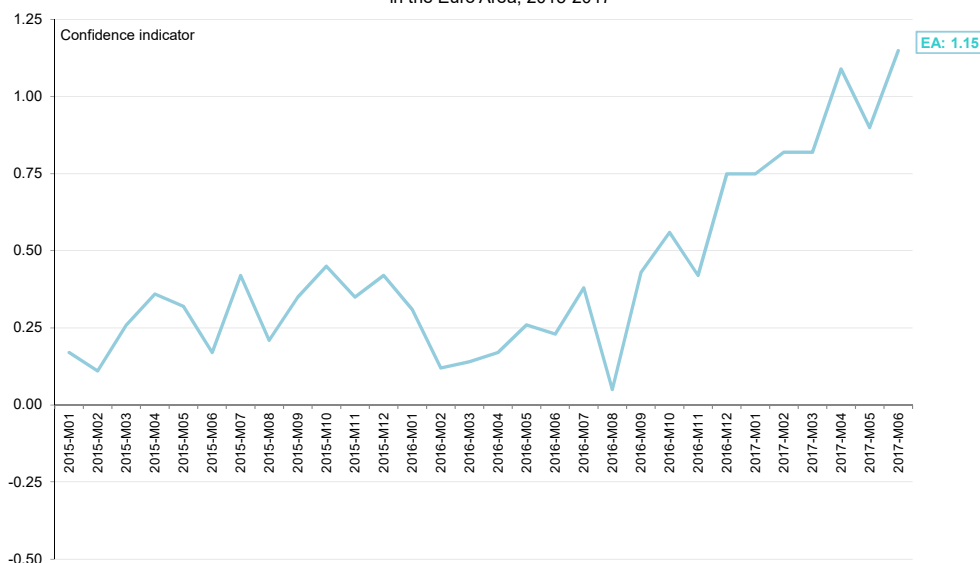
In the US, a drop in expectations and consumer confidence is signalled in June.



The Business Climate Indicator (BCI) also points out a solid growth momentum in the second quarter of 2017, driven by an upbeat assessment of orders and stocks. The improvement also applies to the past production, while the expectations are more or less the same than in previous surveys. The index for the Eurozone moved up 0.25 points to 1.15, after a similar pick up in May.

See graphs on next page

Business Climate Indicator in the Euro Area, 2015-2017



▲ 2.12 Purchasing Managers' Index ⁱ

Purchasing managers' indices remained solid during the first half of 2017, well above the neutral 50.0 mark for almost the last 1.5 years. In the second quarter, it posted at a quarterly average of 52.63, down fractionally from 52.87 of the period between January and March. The Global Manufacturing PMI index in June was in line with that seen in May, which in turn was almost identical to the one registered in April. The readings this year are about the same as the one at the closing of 2016 (52.7), value lastly recorded at the beginning of 2014.

All monthly global results indicate expansion of the economic activity and signal a robust and further steady improvement in the manufacturing operating conditions, especially in developed markets such as the Eurozone.

In the Euro Area the manufacturing sector gathered momentum and the PMI increased to a six-years high, with a job creation path reaching record levels of at least the last 20 years and new orders rising nearly throughout the past 3 years. In fact, the orders rate of expansion is the quickest since the opening half of 2011, unlike the global orders, which eased to a seven-month low rate of increase. It is the fourth year in a row in which the PMI reveals an improvement in business conditions in the EA. This acceleration of growth is led by Germany (59.5 in May, 59.6 in June), Austria (58.0, 60.7) and Netherlands (57.6, 58.6), all of them at their highest in three years. As regards the other members of the Euro zone, all countries covered by the survey are in the expansionary territory, including Greece (49.6 in May but moved back to the expansion area in June –50.5–), and with growth accelerating in Ireland, France and Italy. Among the optimism that comes from the latest readings, it is important to highlight that the output expectations of Eurozone manufacturers for one year ahead are very positive (mid-2012 level) and business confidence is really strong in France and close to peaks in Germany, Netherlands and Austria. So the demand is growing and, consequently, purchasing activity is at record highs of the last six years. On the other side, cost pressures are taking a break –mainly as a result of lower prices for oil– but remain above their long-run average. Once again, the economic sentiment and business conditions in Europe are improving, as can be portrayed by the June indexes of markets with PMI above 55 points, like Austria, Czech Republic (56.4, above the same than in May), Italy (55.2, slightly higher than for May), Netherlands (58.6, up from 57.6 in the preceding month), Switzerland (60.1, up from 55.6) and Ireland (56, quite similar to the reading of May). As HIS Markit explains, this demand rise

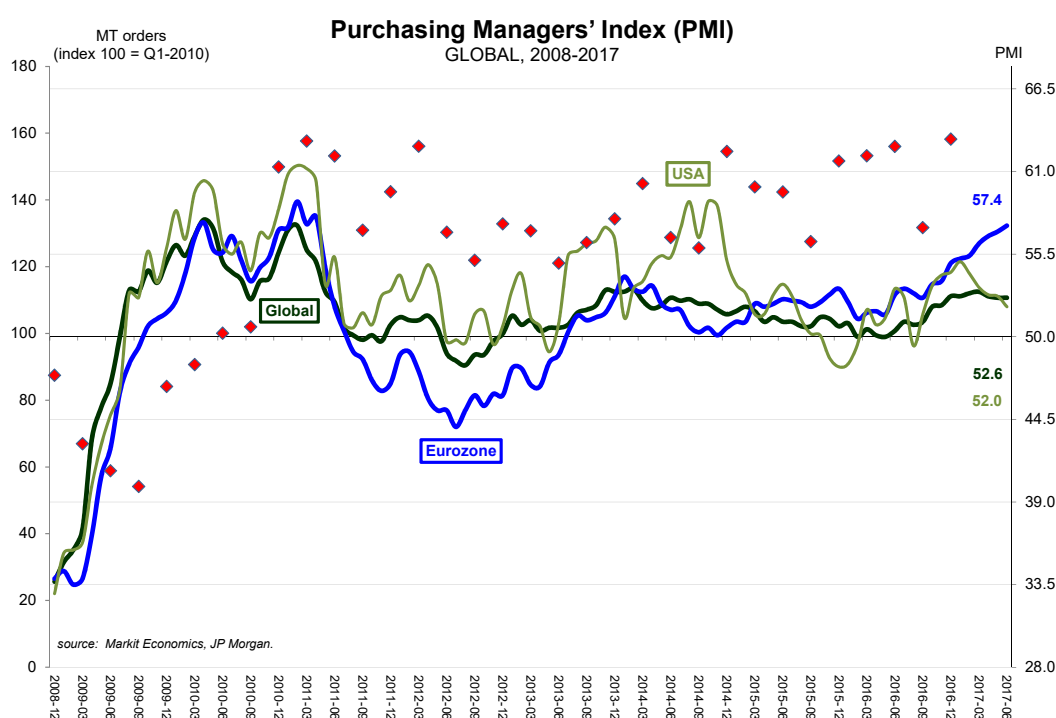
in the Eurozone is both from domestic and foreign markets: “Exports continue to play a major role in driving the expansion, increasing in recent months at rates not seen for six years, buoyed in part by the weak euro. But it’s also clear that factories are benefitting from ongoing strong demand from domestic customers”.

Global Manufacturing PMI (April – June 2017)

	April 2017	May 2017	June 2017
Output	53.6	53.5	53.3
New orders	53.6	53.5	53.3
New exports	52.5	52.4	52.6
Employment	51.6	51.5	51.7
Input prices	59.0	55.0	54.2
Output prices	52.9	51.6	51.8
Future output	63.8	63.6	63.8

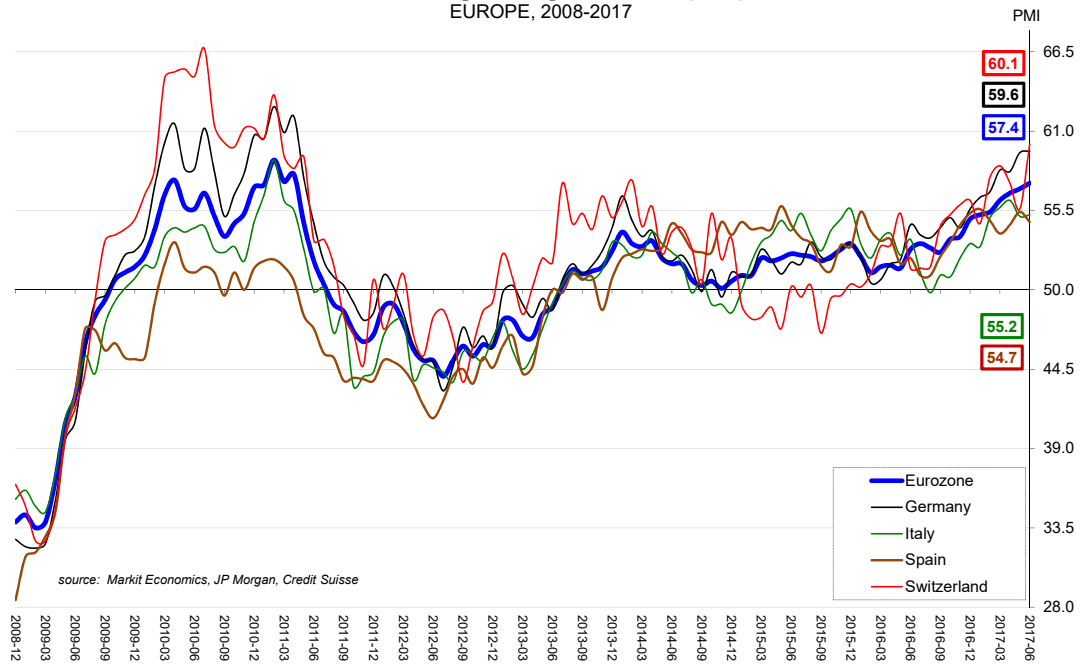
In the United States, following a peak during the early part of the year, the business sentiment weakened in recent months. The PMI dropped from the January value of 55 to 52 in June, declining for six months in a row. Still, it is in the growth territory. On the positive side there is recovery of the level of confidence towards the year ahead, but this pickup is probably not taking place any time soon. As for the inflation, it eased also in the US.

Chinese business outlook went back into the expansion area (up from 49.6 in May to 50.4 in June), but the optimism for the next 12 months is at its lowest in 2017 to date. Regarding inflation, it increased after some months of decline. The stagnation in South Korea (50.1 in June) is broadly reflecting a reduction in demand from China. In India, the growth in the manufacturing sector is slowing down (50.9 in June, down from 51.6 in May), with production increase easing for the third month in a row.

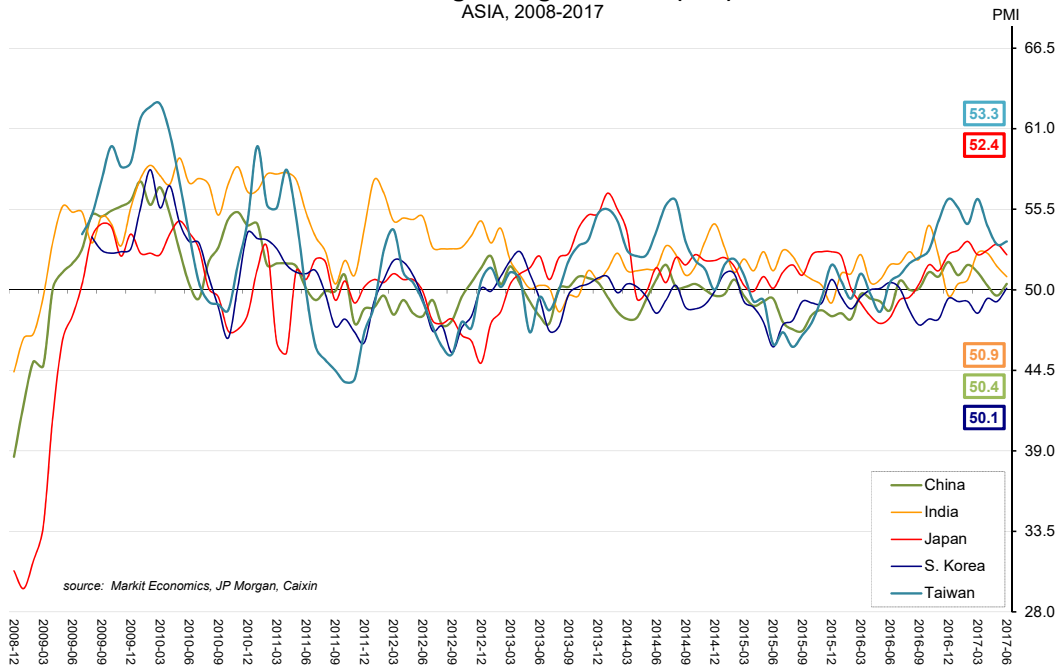


See graphs on next page

Purchasing Managers' Index (PMI) EUROPE, 2008-2017



Purchasing Managers' Index (PMI) ASIA, 2008-2017



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 an estimated share of the European companies in the world total output in 2010.

2.2 Interest rates - Euribor

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

The deposit facility rate is the one the banks receive for depositing money with the central bank overnight.

The so-called main refinancing rate, minimum bid rate or rate for the main refinancing operations (MROs) is the interest rate which banks do have to pay when they borrow money from the ECB for a period of one week.

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.

Base period: Year 2010 = 100.

Source: Eurostat.

2.5 Gross Fixed Capital Formation

The Gross Fixed Capital Formation (GFCF) consists of resident producers' acquisitions, 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) and several regional aggregates, 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, on average 6 to 9 months before they happen. 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.

Typical indicators in the CLI include orders and inventories changes, financial market indicators, business confidence surveys and data on key sectors and trend in the main trade partners.

The standardised BCIs represent only the manufacturing sector. It is based on companies’ assessment of production, orders, stocks and its current position and

expectations. 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 IHS Markit and J.P. Morgan in association with ISM and IFPSM 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, below 50,0 a decrease and equal to 50.0 means no change on prior month. All the indices are seasonally adjusted at the national sector level.

<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. EU15 refers to the 15 countries forming the European Union before the enlargements of 2004, 2007 and 2013.

Other symbols and acronyms

GDP

Gross Domestic Product

Billion

Billion means one thousand million

US

United States

Q1, Q2, Q3, Q4

1st quarter, 2nd quarter, 3rd quarter, 4th quarter

EUR / €

Euros

USD / \$

United States Dollar(s)

CHF

Swiss Franc(s)

ECB

European Central Bank

Fed

Federal Reserve (System), the US Central Bank

GBP

Great Britain Pound(s), the pound sterling

IMF

International Monetary Fund

WB

World Bank

MT

Machine tools

CECIMO countries

Countries whose machine tool sector is represented by CECIMO

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Member Associations

Austria: FMTI
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.fpt-vimag.nl

Portugal: AIMMAP
Associação 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 Imalatçilari Birliği
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.