# CECIMO Economic and Statistical Toolbox

March - April 2018





### **Table of content**

### Introduction

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

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

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

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

### Glossary (i)

### **Geographical Information**

### Other symbols and acronyms

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

### Introduction

The latest data confirms that Europe concluded the first quarter of 2018 in a continuously expansionary mood, although at a slower pace if compared to the previous quarter. Accordingly, J.P. Morgan and Goldman Sachs revised the GDP gains downwards, signalling fading optimism for the first quarter. If the projections held, it would be the best quarter since mid-2009.

Looking back at 2017, the Eurozone concluded the year with a 0.6% quarterly GDP pick up, supported by recovering investment. Consequently, annual figures show a final 2.4% growth rate in both EU and Euro-area economies. Machine tools (MT) manufacturers used the momentum to rebound trade by strengthening exports, and to mark a robust recovery of production. CECIMO-based MT manufacturers, specifically, registered a 6.2% gain in output.

Recently, political turbulences have been under the spotlight, but markets are yet to react to threats of trade protectionism and the failure of the Italian government to comply with its fiscal obligations. Therefore, the economic climate is still hyped up. Oxford Economics' baseline predictions for the Eurozone hint at a 2.3% growth rate in 2018 and 1.8% in 2019, or 1.9% in 2018 and 1.5% in 2019 if taking into account US protectionism. Analysts from Focus Economics more optimistically forecast robust growth of 2.4% in 2018 and 1.9% in 2019, as it seems that the common currency bloc will sustain recovery.

The European Central Bank (ECB) intends to maintain accommodative interest rates, and safeguard a prudent and persistent monetary policy to further foster investment and satisfy demand, with expectations of hard evidence of a sustained recovery. The ECB's bond-buying programme will last at least until September 2018, with the possibility of extension.

Central and Eastern Europe registered an eleven-year high in 2017 – which was pushed along by the Czech Republic, Hungary and Poland – against all odds and political concerns. Hungary and Poland's outstanding success in the fourth quarter is largely due to EU investment fund inflows and wage increases. Households in both countries benefited from rising incomes. At present, however, Brussels is avoiding the additional friction that would come from suspending EU budgetary funds. Furthermore, the long-term prospects still offset the economic upturn, as private investment tend to avoid faulty rule of law systems. In the short term, however, the expectations are bright. Favourable borrowing conditions, new employment and foreign demand should support the activity.

A cloud of uncertainty is hanging over the US and its major trading partners, who face the possibility of a trade war. On 23 March, having gained news of US president Donald Trump's move towards protectionist measures, the EU published a list of products subject to retaliatory import tariffs. Subsequently, Mr. Trump decided to temporarily exempt the EU from tariffs on aluminium and steel. Later, in April, he threatened China with an additional \$100 billion in import tariffs, which triggered Beijing to release its own list.

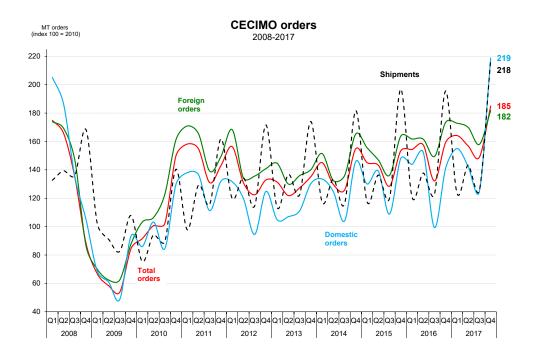
Although Trump's protectionist actions could be perceived as well-intentioned, they are unlikely to prompt any behavioural change in Chinese trade and intellectual property practices. Rather, they are likely to unleash a domino effect of retaliation lists of tariffs from the global trade operators. In addition, 30% of goods value exported from China to the US is added at the level of other smaller open Asian economies, such as Taiwan, Singapore, South Korea, or Japan, which export goods to China that end up in the US. By damaging the two largest economies in a trade war, other economies might suffer what The Economist magazine nicknamed the "supply-chain pain".

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

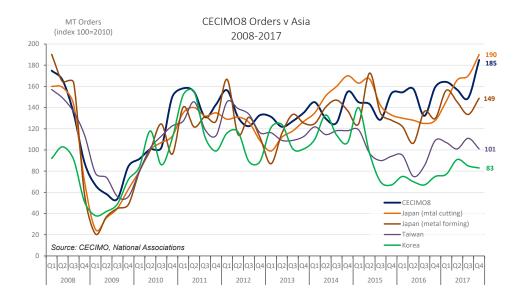
### ▼ 1.1 CECIMO8 orders <sup>①</sup>

The buoyant economic morale at the end of 2017 marked an extremely good closure of the year for machine tool builders. The total orders skyrocketed to an unprecedented score of 185, well above pre-crisis levels. Therefore, CECIMO 8 orders for the fourth quarter marked a 24% increase quarter-on-quarter, and a 16% increase compared to the same quarter in 2016. A solid 38% increase, compared to the previous quarter, was registered in Spain, although it did not reach its 2016 levels. France saw an improvement, yet the order levels were -45% lower than in the same period last year.

The UK, on the other hand, saw a -5% decrease in total orders, compared to the third quarter, and a -2% decrease compared to the same quarter of 2016. The Czech Republic registered a mild decrease from quarter three, as imports by machine tool users grew over 2017. The indicator still picked up +6% from the fourth quarter of 2016, which is a more modest rate compared to other positive change rates within CECIMO. Among our members, the total orders in Italy show the steepest increase, 49%, after the -21% drop previously registered. Austria, Switzerland and Germany improved their orders both quarterly (29%, 20% and 17%, respectively) and yearly (17%, 21%, and 24%, respectively). Meanwhile, the US reports a 17% stronger demand than in the previous quarter, which is 9% higher than in the fourth quarter of 2016.



The Italian increment is driven by a great expansion in domestic orders, which more than tripled from the third to the fourth quarter. These efforts mark a surge of 87% since the fourth quarter of 2016. Austria and Switzerland almost doubled their order levels, registering 97% and 86% increases over the fourth quarter, equivalent to a 46% and 56% increase compared to the end of 2016. The UK scored -4% lower on the domestic demand side compared to the third quarter of 2017, but still 17% above the levels last year. Whereas France, despite a solid 35% increment, has seen a -30% decline in domestic orders since the fourth quarter last year.



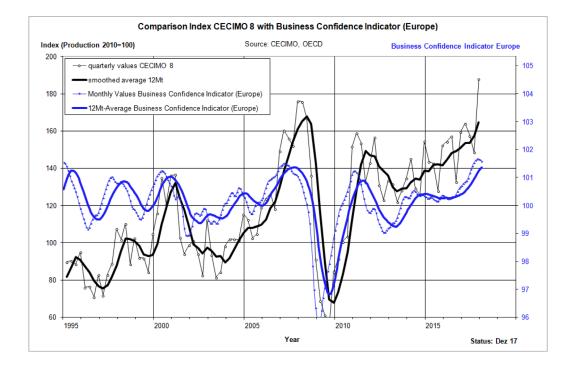
On the foreign orders front, France and Spain showed predominantly high gains, although these levels are substantially lower (-51% and -33%) compared to the fourth quarter of 2016. The UK scored worse both on a quarterly (-5%) and yearly (-12%) basis. The Czech orders decreased by -10%, also due to a deterioration of exports to Russia. Despite this, the demand was still 11% higher than in the same period last year. Germany and Austria saw an increase of foreign demand by 13% and 12%, since the last quarter, or 13% and 15% since the fourth quarter last year.

Our Asian counterparts, however, have painted a much more varied picture. On one hand, Japan reported an 11% improvement for the metal forming sector and 12% for metal cutting machines over the last quarter of 2017. This accounts for a 15% pickup for machine forming and a substantial 48% increment for metal cutting machines since the same quarter in 2016. On the other hand, Taiwan and South Korea registered a moderation of the total demand, each by -9% and -2% since the third quarter. These levels are still -7% lower than last year for Taiwan, but +11% better for South Korea. The deterioration of demand for Taiwanese machine tools comes from a -8% fall on the domestic side, accentuated by a -10% fall from foreign clients. It might suggest the country's exposure to negative external developments in economic and trade conditions. In the case of South Korea, the downward pressure on orders is rather due to the deterioration of foreign demand in the fourth quarter, although it has recorded a 24% higher level since the fourth quarter last year. This can probably be explained by a slowdown of Chinese demand and challenges in the external environment, compensated by enduring expectations of business investment.

#### ▲ 1.2 Peter Meier's forecast

The high spirits in the industrialised countries is gradually being transferred to consumption and industrial production. Stock markets react to good sentiment and rising profit expectations – especially in the US. At the same time, it appears the investors are aware of the risks entailed by this bubble, so the boom will most probably not last too long.

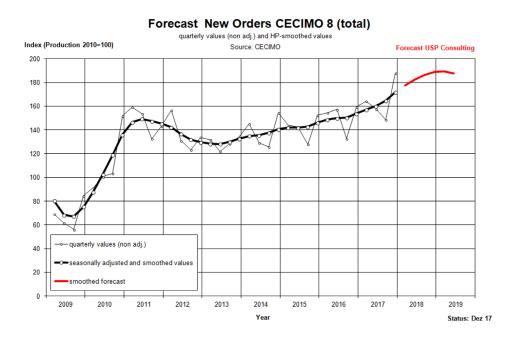
The demand for capital goods is at record high levels compared to the previous years. Moreover, given that the purchases from 2003 and 2005 are reaching their end of service life, there is a growing need for replacements. This means that both capacities and the demand for capital goods are growing in industrialised countries.



The Business Confidence Indicator for Europe is still at a record high, but might have reached its peak. The machine tool demand, which usually follows the indicator with two-to-three quarter lags, is expected to increase further in 2018.

### **CECIMO 8 Forecast**

The orders in the fourth quarter scored far above the expectations (see the thick black line above the red forecast line). In 2018, the demand is foreseen to grow at 10%, but is likely to reach its peak by the end of 2018 to spring 2019.



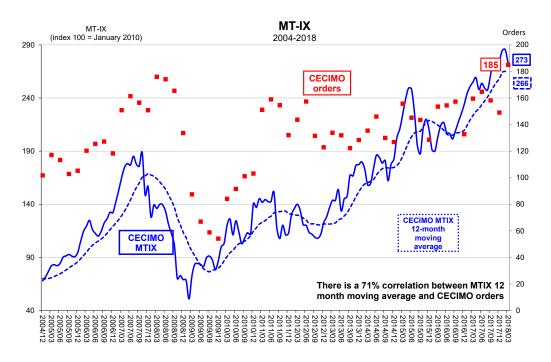
As for the emerging countries, the market picture varies. Chinese consumer sentiment is at its highest point, but consumption growth rates have been falling in real terms over the last decade – indicating around 8% per year. India shows robust production increases, although investments are still lagging behind. The Russian consumption collapse, due to embargoes, hasn't yet recovered. Brazil, despite its critical economic situation, managed to push industrial production upwards. Altogether, the demand for capital goods in emerging countries appears to be remaining high.

### **▼** 1.3 MT-IX <sup>①</sup>

From February until March, the MT-IX dropped by 4.4% after a flat growth of 0.3% in the previous month, thereby recording a level of 273 points. The falling market capitalisation of the Japanese and Swiss-listed machine tool builders has put downward pressure on the index by 8% and 5%, respectively. Japanese companies have seen a decreasing market cap for the second month in a row, whereas Swiss machine tool manufacturers have not registered a market cap decline since November last year.

Continued ▶

CECIMO-based companies recorded a flat market cap growth in March, following a 9% increase in February – rather unaffected by the global negative change. Therefore, the CECIMO-based MT-IX mirrored the market capitalisation developments and equally registered a flat growth.



CR - CECIMO - February 2010

#### ▲ 1.4 CECIMO trade

Towards the end of 2017, CECIMO trade saw an astonishing rebound. In the fourth quarter, our machine tool builders exported more than €5.6 million worth of machine tools, which is 16% higher compared to the third quarter. Although some of the improvement is cyclical, these levels are 9% higher than in the same quarter of the previous year.

Based on the latest Eurostat figures, in 2017, CECIMO reached an all-time record-high total export volume of around €20 billion, therefore registering a 9.5% annual growth rate – above the forecasts, but well in line with the euphoric economic sentiment and business indicators towards the end of 2017 - beginning of 2018. There are several positive factors that drove up the yearly growth. Exports to all regions considerably improved during 2017. Intra-European exports (including but not limited to CECIMO countries), which account for 52% of the total exports in 2017, grew by 9% over the year. Exports to our Asian destination markets – with a 24% of market share – also increased by 11%.

The Americas imported 12% more of CECIMO-built machine tools than in 2016. Moreover, our exports to Russia and CIS countries registered a 13% yearly growth rate, which was due, to some extent, to the settlement of a number of market access and trade barriers in Russia during 2017.

Similarly, in 2017, CECIMO members imported €10.7 million worth of machine tools, equal to an 8.8% yearly improvement compared to 2016. It seems that this growth was conditioned mainly by a 19% gain in import volume from Asia – an import origin that accounts for 31% of our total import market – and a more moderate improvement of 4% of machines originating from European countries. Curiously, throughout 2017, CECIMO members imported 40% fewer machine tools from Russia and CIS countries, pointing to a further deterioration of European-Russian trade flows.

See below the quarterly trade flows for the fourth quarter compared to the previous one and to the same quarter last year, per region.

### CECIMO exports and imports per zones - 2017Q4/2017Q3

#### EXPORTS

ZONE	2017Q4	2017Q3	2017Q4/	Share	Share
		2017Q3	2017Q3	2017Q4	2017Q3
I. ASIA	1,206.0	1,246.3	-3%	21%	26%
II. AMERICAS	891.3	811.5	10%	16%	17%
III. EUROPE	3,090.6	2,490.2	24%	54%	51%
CECIMO	2,457.4	1,962.7	25%	43%	40%
EU	2,823.7	2,316.8	22%	50%	47%
IV. Russia + CIS	236.8	151.3	57%	4%	3%
V. AFRICA	108.5	60.9	78%	2%	1%
VI. OTHERS	137.9	122.7	12%	2%	3%
TOTAL EXPORTS	5 671	4 883	16%		

ZONE	2017Q4	2017Q3	2017Q4/	Share	Share
	2017Q4	2017Q3	2017Q3	2017Q4	2017Q3
I. ASIA	982.3	871.5	13%	31%	34%
II. AMERICAS	117.7	125.1	-6%	4%	5%
III. EUROPE	2,032.4	1,586.4	28%	64%	61%
CECIMO	1,946.7	1,519.8	28%	62%	58%
EU	1,603.4	1,223.9	31%	51%	47%
IV. Russia + CIS	2.6	2.8	-8%	0%	0%
V. AFRICA	1.9	0.8	130%	0%	0%
VI. OTHERS	14.2	12.2	17%	0%	0%
TOTAL IMPORTS	3,151	2,599	21%		
Source: Eurostat					

#### CECIMO exports and imports per zones - 2017Q4/2016Q4

#### EXPORTS

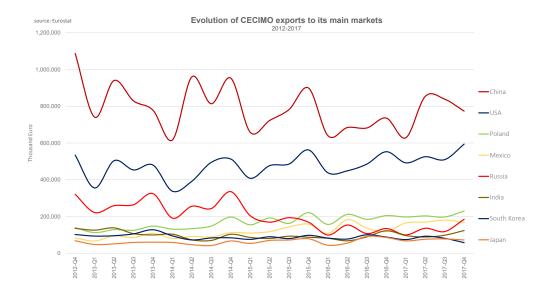
ZONE	2017Q4	2016Q4	2017Q4/	Share	Share
		2016Q4	2016Q4	2017Q4	2016Q4
I. ASIA	1,206.0	1,204.5	0%	21%	23%
II. AMERICAS	891.3	822.3	8%	16%	16%
III. EUROPE	3,090.6	2,775.1	11%	54%	53%
CECIMO	2,457.4	2,192.6	12%	43%	42%
EU	2,823.7	2,412.3	17%	50%	47%
IV. Russia + CIS	236.8	173.5	36%	4%	3%
V. AFRICA	108.5	76.5	42%	2%	1%
VI. OTHERS	137.9	135.4	2%	2%	3%
TOTAL EXPORTS	5,671	5,187	9%		

#### IMPORTS

ZONE	2017Q4	2016Q4	2017Q4/	Share	Share	
	2011 41	20.00	2016Q4	2017Q4	2016Q4	
I. ASIA	982.3	752.2	31%	31%	27%	
II. AMERICAS	117.7	116.6	1%	4%	4%	
III. EUROPE	2,032.4	1,905.1	7%	64%	68%	
CECIMO	1,946.7	1,833.7	6%	62%	66%	
EU	1,603.4	1,527.9	5%	51%	55%	
IV. Russia + CIS	2.6	10.2	-75%	0%	0%	
V. AFRICA	1.9	2.7	-27%	0%	0%	
VI. OTHERS	14.2	10.5	36%	0%	0%	
TOTAL IMPORTS	3,151	2,797	13%			

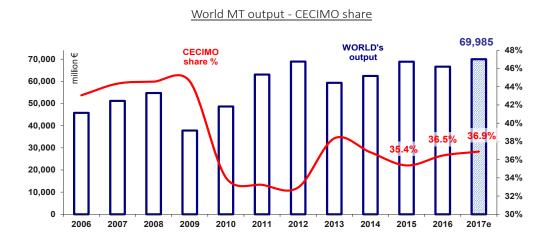
Although the chart indicates minor recessions of exports to important export destinations, such as China, the annual figures register robust growth rates. The yearly export volume to China, for instance, increased by 13%. Exports to the US, Mexico and Brazil improved by 10%, 24% and 31% respectively. Exports to the Asian markets showed considerable growth rates, except for South Korea, where we see a -14% drop over the year.

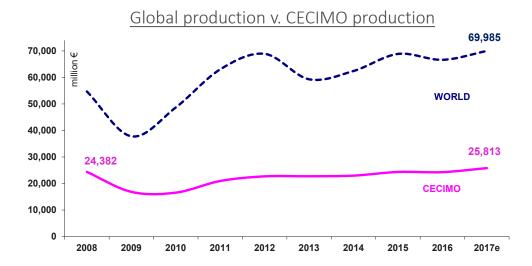
See chart on next page ▶



### 1.5 CECIMO production

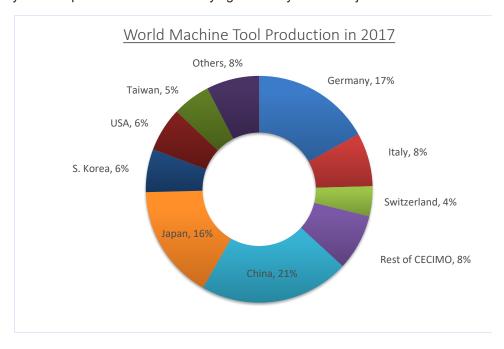
The early figures for 2017 point to a strong recovery for European machine tool production. 2017 has been a great year for our manufacturers, as well as for the global expansion of the economy. After the mild drop in 2016, CECIMO members saw a +6.3% increase in output last year, thereby registering a turnover of about €25.8 billion (based on our latest data exchanges). Once again, CECIMO-based machine tool builders did not only show robustness when coping with the feeble international context, but also an aptness to use the momentum of an economy in high spirits.





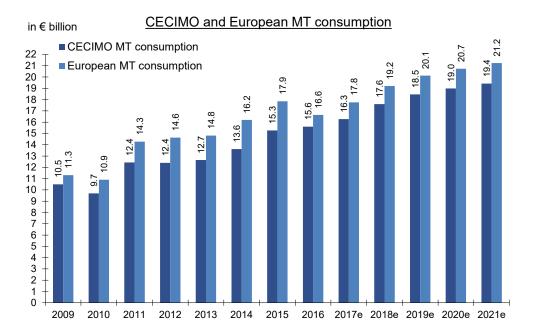
CECIMO remains the leader in global machine tool production, holding about 37% of the market share, which has been confidently recovering since 2015, following a two-year consecutive drop. Based on the most recent data for 2017, China has held its market share at 21% (or 31% according the official Chinese statistics). Note that the representation below uses adjusted data for Chinese production. Similarly, the US stands at 6.3% of the global market share in the same period. Japan, South Korea and Taiwan have increased their weight in global output by a fraction of a percent since 2016. However, in the bigger picture, the shares of the pie remained relatively equal for global producers from 2016 to 2017. Note that Japanese and South Korean levels of machine tool production are comparable with those of Germany and Italy in Europe.

Within CECIMO, in 2017, most of the members enhanced their national production in absolute terms, with Belgium registering the most impressive year-on-year growth rate at 36%. Denmark and the UK recovered by 11% and 10% after the previous year's shortfall. Germany, Italy and Spain increased their national production by 6.6%. Italy has been doing equally well for two years in a row. The Czech Republic, conversely, has registered a -2% drop in production, possibly due to decreasing foreign orders from Russia and despite the beneficial national economic context in 2017. Switzerland registers a milder +4.3% expansion, recovering after previous year's drop. Some national activity figures are yet to be adjusted.



### 1.6 CECIMO consumption

Our latest estimates point to an apparent 5% gain in machine tool consumption in 2017. This is a good sign for a recovery in global demand, driven by important increases in consumption on behalf of our Asian counterparts. China, as always, leads the world demand for high-end European machine tools. Its yearly consumption rose to €26.5 billion during 2017, which is more than €1 billion higher than in 2016. Japan and South Korea consumed €5.4 billion and €3.5 billion – levels that are comparable to Germany (€6 billion) and Italy (€3.5 billion) in Europe.



Throughout 2017, CECIMO's consumption reached about €16 billion – 2% higher than in 2016. The Czech Republic raised its consumption significantly, by 20.8%. Italy also showed an 11% higher consumption in 2017, due to higher imports from abroad, possibly suggesting foreign machine tool builders outperformed the national ones. But the figures of the national machine tool industry are in high spirits: both foreign and domestic demands are strong. These developments level up the decreases in Turkish, Belgian and Danish consumption.

In absolute terms, Germany and Italy are the main drivers of CECIMO-based consumption. Their joint consumption accounts for about 60% of the CECIMO aggregate for 2017. A revision of the national activity figures is yet to take place, to adjust the production and consumption data.

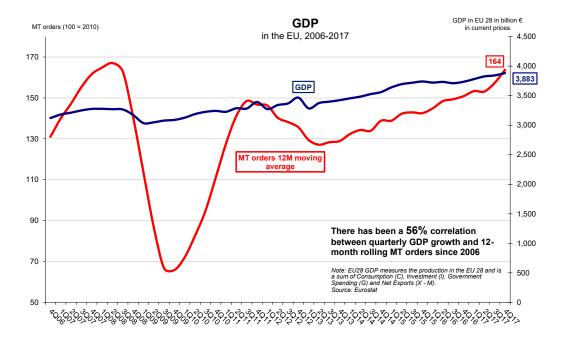
### 2. Macroeconomic data in relation to machine tool orders

### ▲ 2.1 GDP

The seasonally-adjusted Gross Domestic Product (GDP) shows a 0.6% increase for both the EA19 and EU28 in the last quarter of 2017, following 0.7% growth in the third quarter. Compared to the quarterly GDP of the period last year, its levels grew by 2.7% in the Euro-area (EA) and 2.6% in the EU overall.

The aggregate figure concludes 2017 with a 2.4% annual growth rate, which falls in line with the estimations of the 2018 Winter Interim Economic Forecast. Strong demand, high capacity utilisation and supportive financing conditions favoured investment and put upward pressure on the growth rate.

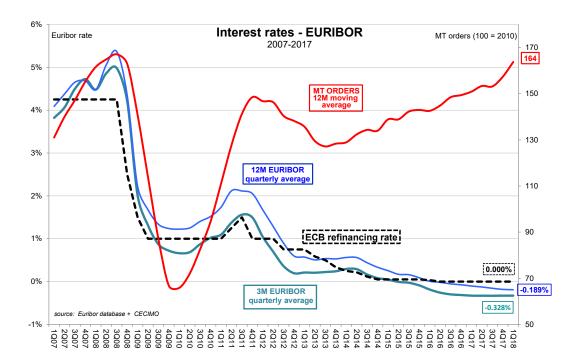
The US economy grew by 0.6% in the fourth quarter compared to the previous one, after a +0.8% increase in the third quarter of 2017. Whereas, compared to the same quarter of 2016, the GDP levels increased by 2.5%. On an annual basis, the European economy is expanding at a faster pace (+2.4%) than the US (+2.3%). The hope now is that 2018 will deliver further sustainable growth and confidence. Annual real GDP is foreseen to increase by 2.4% in 2018, 1.9% in 2019 and 1.7% in 2020.



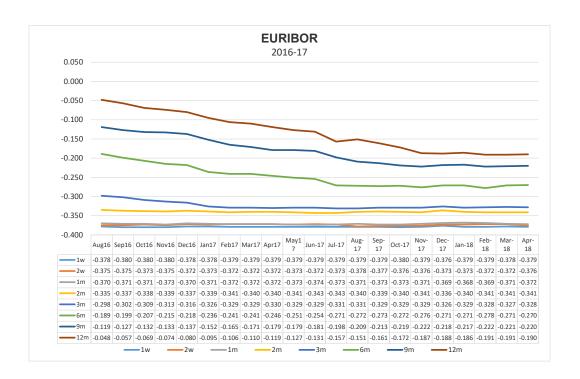
### 2.2 Interest rates – EURIBOR <sup>(1)</sup>

The European Central Bank 's (ECB's) monetary policy will remain prudent and persistent, based on the latest speech of the bank's President, Mario Draghi. We have already observed clear results of the quantitative easing programme, as all Euro-area confidence indicators have been at a record level high since the creation of the monetary union. The ECB estimates that the growth rate of bank lending to firms in the EA would only have been half as strong without the non-standard monetary policy measures. Banks report that policy support in asset purchasing improved their liquidity and market financing conditions, which lead to a significant economic recovery. Business investment is also gaining momentum, setting aside uncertainties and outpacing the pre-crisis level of 7%.

But despite the outlook of economic expansion that is even more independent of asset purchases, there are signs of demand for investment and consumption yet to be satisfied. Therefore, an accommodative policy will keep accompanying the recovery, and interest rates are expected to remain low.



In April, we can observe that with shorter maturity periods – such as one week, two weeks or one month – Euribor rates decreased. Two and three-month maturity rates also dropped slightly since the beginning of the year. Conversely, longer maturity rates, such as six, nine and twelve months are higher. This pick up reflects maturity, given the higher levels registered throughout these periods. An overall drop of the Euribor rate put downward pressure on savings accounts, variable rate loans or deposits, which means it might be the opportune time to make further investments and take advantage of the lower margins charged by banks.



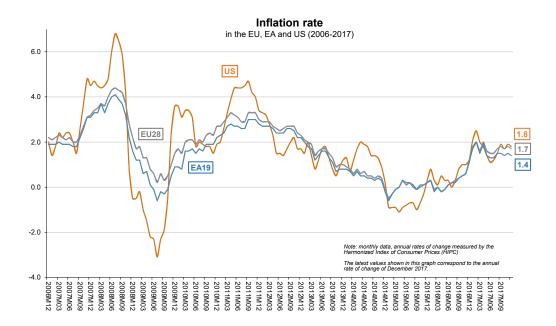
#### 2.3 Inflation

The Euro-area's annual inflation rate fell to 1.1% in February – below the 1.3% registered in January. Similarly, for the European Union overall, the inflation dropped to 1.3% in February, down from 1.6% at the beginning of the year. These levels are considerably lower compared to February 2017, when the annual inflation rate for both the EU28 and EA19 reached 2.0%.

Denmark and Italy were among the countries that registered the lowest annual rates. Overall, falling inflation was observed in eighteen of the EU's member states. The highest inflation rates were observed in Romania (3.8%), Estonia and Lithuania (3.2%); likely reflecting salary-to-price catch-up gaps, despite the disinflationary spill-over from Eurozone members.

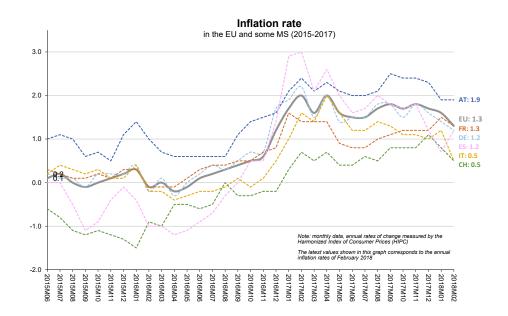
In March, it is expected to catch up to 1.4%, driven by the high annual rates on food, alcohol and tobacco (2.2%), energy (2.0%), services (1.5%), while non-energy industrial goods are expected to have a rather neutral impact on Euro-area inflation.

Continued ▶



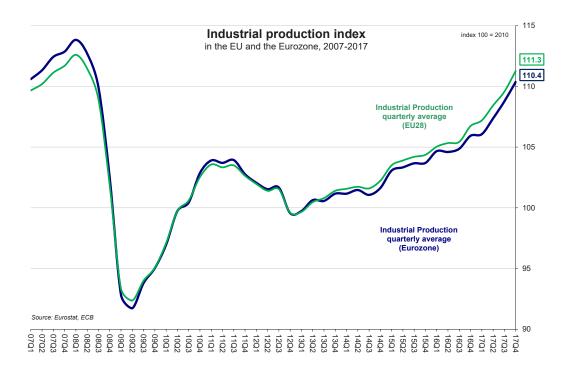
Since 2012, we note disinflationary dynamics across all EU members, including the ones outside the Eurozone, which register higher annual inflation rates. Although the integration process is expected to enable more convergence in the long term.

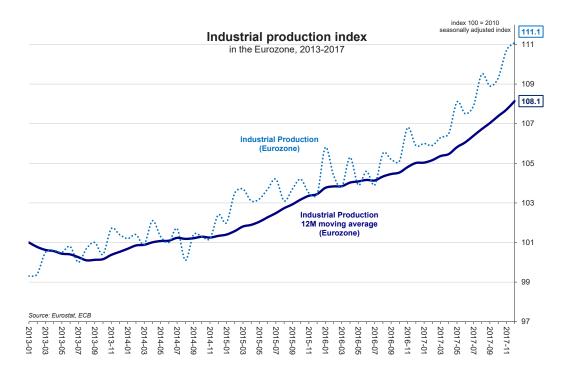
The ECB has continuously adapted its asset purchasing programme to accompany economic recovery. As a result, growth picked up and exceeded the estimates. Between 2016 and 2020, the overall impact on EA inflation is estimated to be 1.9%. It is yet to be seen how prices will pick up following the increasing demand. Even though inflation appears to be moving in the right direction, policymakers are cautious. Mario Draghi, the President of the ECB, intends to continue the non-standard monetary policy until there is stronger evidence of a sustained upward trend. Latest ECB projections foresee a 1.4% increase in 2018 and 1.7% in 2020.



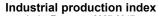
### 2.4 Industrial production index <sup>(1)</sup>

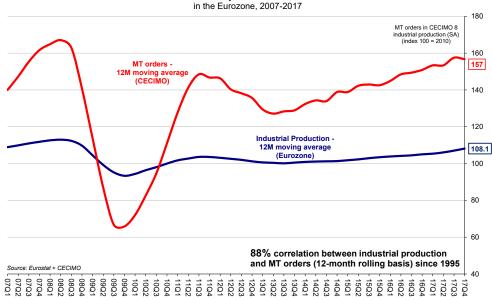
In January 2018, the industrial production index registered a -1% fall in the Euroarea and a -0.7% fall in the EU compared to the modest pickups of 0.4% in EA and 0.3% in the EU in December 2017. Since January 2017, industrial production increased by 2.7% in EA and by 3.0% in the EU.





Continued ▶





The -1% month-to-month decrease in the EA19 was driven by a plunge of energy production (-6.6%) and a decline in the production of durable consumer goods (-1.9%) and intermediate goods (-1.0%). The recovery, since the previous month, of capital goods and non-durable goods production only partially compensated the declines in other industrial groupings.

The EU -0.7% downturn is due to falling production across all industrial groupings, except for capital goods production, which increased for the fourth month consecutively, by 1.2%. The largest drops in industrial production were registered in the Netherlands (-5.7%) and Spain (-2.5%), whereas Portugal and Denmark improved their industrial production by 2.5% and 1.8% respectively.

Industrial Production

(percentage change compared with the previous month)

	EA			EU28			
	Nov17/ Oct17	Dec17/ Nov17	Jan18/ Dec18	Nov17/ Oct17	Dec17/ Nov17	Jan18/ Dec18	
Total industrial production	1.10%	0.40%	-1.00%	0.90%	0.30%	-0.70%	
Capital goods	3.40%	-1.10%	1.20%	2.70%	1.00%	1.20%	
Durable consumer goods	1.50%	1.70%	-1.90%	1.20%	-0.60%	-1.40%	
Intermediate goods	0.70%	1.10%	-1.00%	0.70%	-0.70%	-0.60%	
Energy	2.50%	1.00%	-6.60%	2.00%	1.80%	-3.30%	
Non-durable goods	0.00%	-0.10%	0.10%	0.20%	0.10%	-0.30%	

Source: Eurostat

#### Industrial Production

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

	EA			EU28			
	Nov17/ Nov16	Dec17/ Dec16	Jan18/ Jan 17	Nov17/ Nov16	Dec17/ Dec16	Jan18/ Jan 17	
Total industrial production	3.70%	5.30%	2.70%	3.80%	4.70%	3.00%	
Capital goods	7.80%	7.90%	8.50%	8.00%	7.80%	8.30%	
Durable consumer goods	4.60%	5.90%	3.80%	4.40%	5.50%	4.20%	
Intermediate goods	5.00%	6.10%	5.10%	5.00%	5.80%	5.10%	
Energy	-1.00%	1.00%	-10.40%	-0.50%	0.20%	-7.40%	
Non-durable goods	0.10%	2.20%	3.00%	0.40%	1.80%	2.70%	

Source: Eurostat

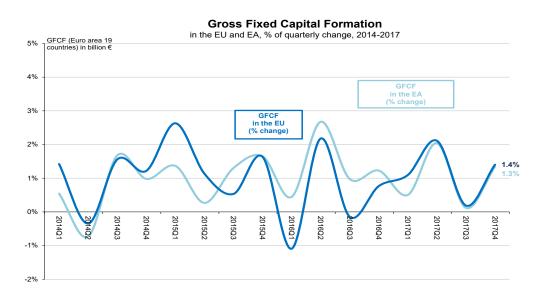
Compared to January last year, the EA recorded a +2.7% rise in industrial production, pushed by important capital goods production pickups (+8.5%), followed by intermediate goods (+5.1%), durable consumer goods (+3.8%), and non-durable consumer goods (+3.0%). The production of energy fell sharply, by -10.4% over the last 12 months.

A higher (+3.0%) increase in the EU is also due to higher capital goods production (+8.3%), improvements in intermediate goods (+5.1%), consumer goods (4.02%) production and, to a lesser extent, non-durable goods production (+2.7%). Moreover, the energy production downturn was less drastic (-7.4%).

Sweden is one of the countries registering the highest pickups of industrial production (+7.1%), while the Netherlands is amongst those with the largest decreases (-6.6%).

### ▲ 2.5 Gross Fixed Capital Formation <sup>①</sup>

Over the fourth quarter of 2017, the gross fixed capital formation (GFCF) increased by 1.4% in the EU and by 1.3% in Euro-area, following a flat growth of 0.2% and 0.1% in the third quarter respectively. Compared to the fourth quarter of 2016, these levels are 4.9% higher in the EU and 4.1% higher in the EA, slightly better than the 4.2% and 3.9% rates registered in the previous quarter.

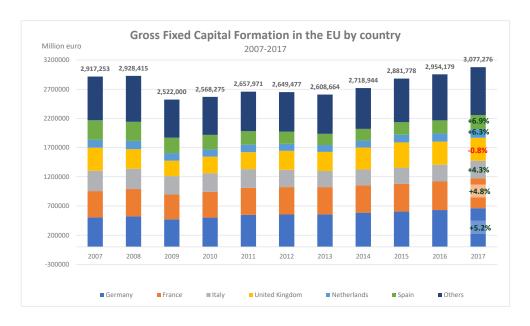


Continued ▶

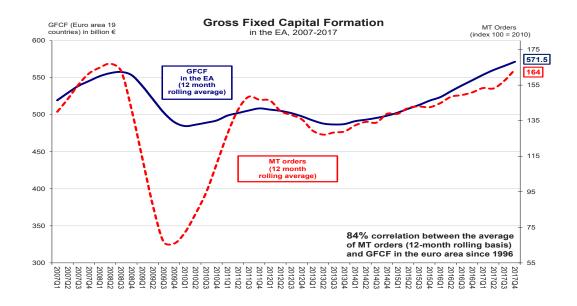
Henceforth, the aggregate EU28 GFCF for 2017 adds up to €30.8 billion, corresponding to an annual pickup of 4.2%, after a less impressive annual growth rate of +2.5% in 2016.

In 2017, the most attractive investment destinations remained Germany and France, leading far ahead with €662.7 billion and €512.7 billion respectively. The UK, Italy and Spain follow with €391.9 billion, €300.6 billion and €239.2 billion respectively. The countries with the largest share of GFCF in the national GDP were the Czech Republic and Sweden, with 25.2% and 24.9% each. Portugal and the UK, on the other hand, have the smallest GFCF share to GDP, with 16.1% and 16.9%. Among the CECIMO members that experienced sound investment reinforcements, Portugal. Sweden and Austria stand out with +10.1%. +9.7% and +8.5% each.

Among the CECIMO members that experienced sound investment reinforcements, Portugal, Sweden and Austria stand out with +10.1%, +9.7% and +8.5% each, whereas the UK registered a negative rate of -0.8%. The sharpest improvements in GFCF were registered in Cyprus (+27.9%), Hungary (+21.5%) and Latvia (+17.9%). Ireland saw a -20.8% collapse in investment.



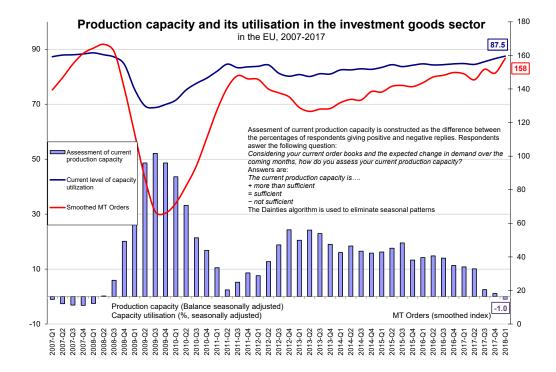
A growing GFCF is a good sign for machine tool (MT) manufacturers, given its strong correlation with the MT orders. There is still investment demand to be satisfied and this could be the appropriate time for investment.



### 2.6 Capacity utilisation in the investment goods sector <sup>(1)</sup>

In the first quarter of 2018, the balance of the current production capacity in the EU was assessed at -1%, suggesting a rather insufficient production capacity with regards to the current books and expected changes in demand. The balance was assessed at -1.2% in the Euro-area for the same quarter. The modest decreases are in line with the Commission's Business Climate Indicator for the EA pointing to a slight deterioration of past production, stocks of finished products, order books and export order books.

The capacity utilisation across the EU picked up by 0.9 percentage points (pp), reaching 87.5%, the highest since pre-crisis levels in the beginning of 2008. The EA mirrors the pattern, reaching 87.7%, 1.2 pp higher than in the fourth quarter of 2017 and the highest capacity utilisation since the second quarter of 2008.



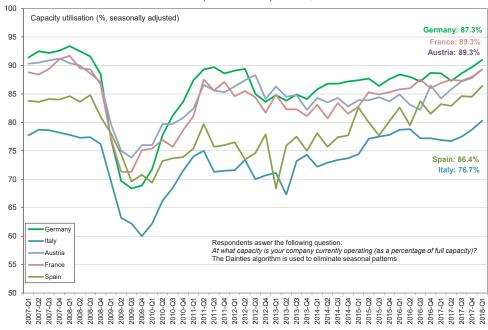
Among CECIMO members, the countries seeing the largest improvements in capacity utilisation are Portugal, posting 83.2% (+5.2pp , up from 78.0%), and the Czech Republic, with 87.6% (+5.1 pp up from 82.5%).

The UK, on the other hand, registered a deterioration of -3.8pp in capacity utilisation, sliding to 86.4%, down from 90.2%. The highest capacity utilisation among our members was registered in Germany (91%), France and Austria (both 89.3%). Conversely, Italy and Portugal declared the lowest production capacity within CECIMO, 80.3% and 83.2% respectively.

Continued ▶

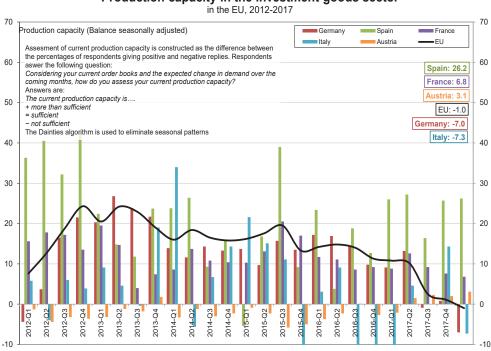
### Capacity utilisation in the investment goods sector

of some top machine tools producers, 2007-2017



The US production capacity across the industry showed gains of 0.7 pp in February 2018, after a -0.4pp drop in January. Its total industry reading for February is at 78.1%. In manufacturing, specifically, the capacity utilisation was assessed at 76.9%, 0.69pp higher than in January and 0.8pp higher than in February 2017. The factory operating rate increased by 1.3pp over the past 12 months and is at its highest levels since April 2008.

#### Production capacity in the investment goods sector

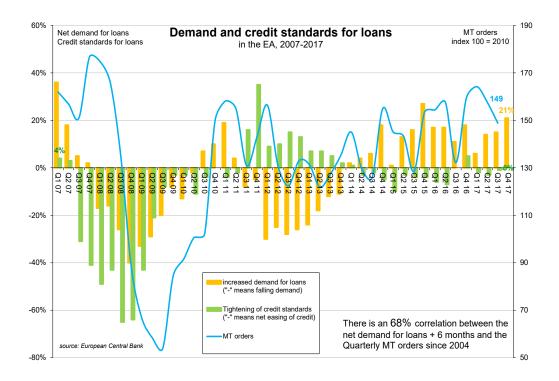


### 2.7 Bank lending survey <sup>①</sup>

The results of the EA bank lending survey for the fourth quarter of 2017 were in line with the previous quarters expectations. The credit standards on loans to enterprises remained unchanged, after a -1% easing in the third quarter. This percentage change is in line with the previous survey's expectations but also below the historical average of 2003. Although Germany reported a marginal ease of -3% and Italy reported a 10% tightening, in Spain, France and the Netherlands, the credit standards were stable. From a firm size perspective, credit standards were rather stable for SMEs (-1%), but eased by -6% on loans to large firms.

According to the banks participating in the survey, the competitive pressure and the banks' risk perceptions had an easing effect on the credit standards of loans to enterprises. On the other hand, the costs of funds and balance sheet constraints as well as the banks' risk tolerance had a neutral effect. In the first quarter of 2018, the EA banks expect a net easing of credit standards for loans to enterprises.

The terms and conditions, applicable when granting new loans and credit lines to companies, further eased in the fourth quarter of 2017. This easing was a result of an additional shrinkage of margins on average loans, whereas risky loans eased more modestly. Enterprises could benefit of better terms and conditions for loans, also due to eased collateral requirements and other terms and conditions in the last quarter of 2017. Banks report that the change in terms and conditions for loans or credit lines to enterprises was driven by competitive pressure, risk perceptions, and costs of funds and balance sheet constrains. The banks' risk tolerance didn't foster an important change in any of the EA large countries.



Continued ▶

Following the same trend, the net percentage of rejected loan applications declined by -4%, after the minor increase of +1% in the third quarter. In the fourth quarter, the share of enterprises that obtained a loan rejection decreased in Germany, Italy and Spain, while in France and Netherlands, the rejection rate increased.

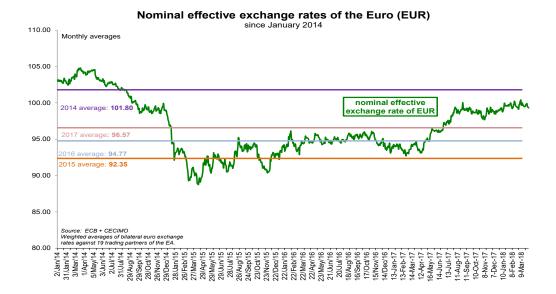
Based on the ECB's bank lending survey, the net demand for loans to enterprises continued to increase by 21%, after a 15% increase in the previous quarter. This percentage change is in line with the previous survey's expectations. This increase was driven by a rise in fixed investment of 20% after 13% in the third quarter, a 13% rise in inventories and working capital after 2% in the third quarter and a 12% increase in merger and acquisitions activity after a previous 11%. The general level of interest rates remained unchanged at 14%, and the impact of the use of alternative finance was rather neutral, reading -1% after -2% in the third quarter.

### ▲ 2.8 Foreign exchange rates

In March 2018, the Japanese yen appreciated against the single currency by 2.1%, or 3.4% since the beginning of the year. More modest increases were observed with the US dollar (0.27%), after a three-month continuous drop, and with the Chinese renminbi (0.21%), which fell. The British pound saw a rather flat appreciation in respect to the euro since December 2017, but stood strong against the US dollar. The Swiss franc dropped by 1.2% against the euro, after a 1.6% rise in February, stepping back on the path to growth.

The euro has seen an appreciation trend since 2015. Although the past appreciation did not substantially affect the external demand, it represents a cause for concern in terms of volatility in foreign exchange markets. It surged recently, prompting a wave of forecast upgrades. Based on the ECB staff calculations, an appreciation of the single currency up to \$1.36 (USD) by 2020 would readjust the GDP growth by 0.2 percentage points lower in 2018, 0.6pp lower in 2019 and 0.2pp lower in 2020. Inflation would follow with 0.2pp, 0.5pp and 0.6pp decreases in these years.

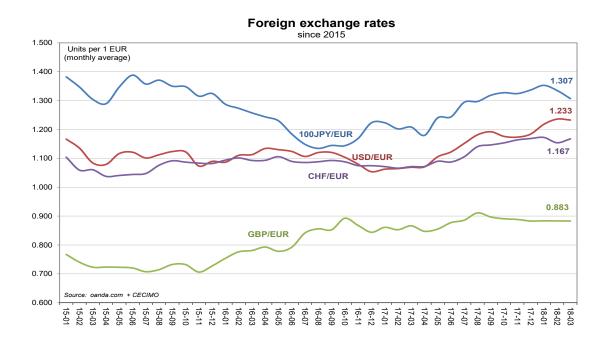
Depreciation of the currency puts upward pressure on import prices, which could encourage domestic spending, but would come at the expense of the rest of the world. With further appreciation, the net exports would decline, which is not necessarily bad for Europeans. A fiscal policy adjustment and public spending boost could do the trick to offset the effect. Nevertheless, cyclical momentum might yet push further growth.



The outlook of the pound sterling remains complicated. Although the British pound offers further strength against the US dollar, it might not be the case against the euro. The appreciation of the British currency towards the dollar might simply be due to the expectations of a continuously weakening dollar.

Despite the depreciation forecasts in late 2017, the Japanese yen is growing. The hike followed the bond purchase policy reduction of the Bank of Japan. If Japanese funds repatriate the slowly rising currency from abroad, it could force Japan to exit stimulus sooner than expected. And this effect can be exaggerated by a falling dollar.

The Chinese yuan gained about 10% against the dollar since the beginning of last year, slightly excessively in January. However, its relationship with the other major currencies remains relatively stable. It seems that China intends to apply a range-bound strategy in the yuan's relationship with the euro, to offset the dollar's weakening.

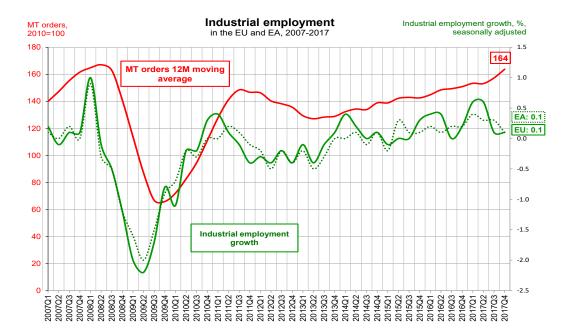


### **2.9 Industrial employment**

The fourth quarter of 2017 saw a modest pickup of employment by 0.3% in the Euro-area and 0.2% in the EU overall. Compared to the fourth quarter of 2016, the improvement accounts for 1.6% in the EA19 and 1.5% in EU28.

Industrial employment, more specifically, increased at a flatter rate of 0.1% in both EA and the EU, marking the lowest quarter-on-quarter rate this year. Nevertheless, the percentage change over the same quarter of 2016 shows 1.2% in the EA and 1.4% in the EU.

Among CECIMO members, the countries with the sharpest quarterly growth rates of industrial employment are Spain (+0.8%), Austria (+0.6%) and Finland (+0.5%), whereas Italy registered a negative growth rate (-0.5%). The absolute EU leader in industrial employment growth was Estonia, with a +2.9% improvement, following an extremely good year for industrial employment.

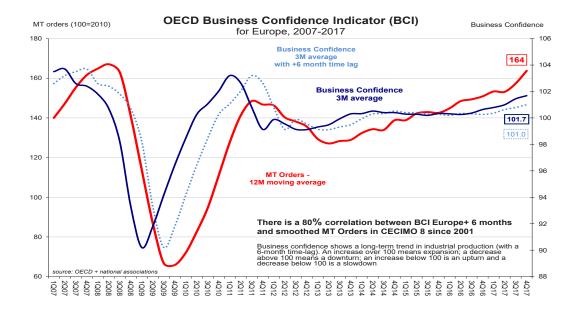


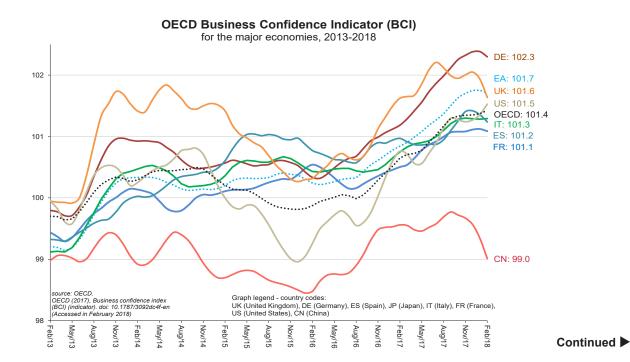
By the end of 2017, the industrial sector had employed 36.2 million people, and 32.6 million in manufacturing alone. The EA employed 23.1 million people for industrial jobs and 21.1 million in manufacturing. This means that 23% of total employment was fulfilled by the industrial sector in the EU and 15% in the EA.

### 2.10 OECD Business Confidence Indicator for Europe (1)

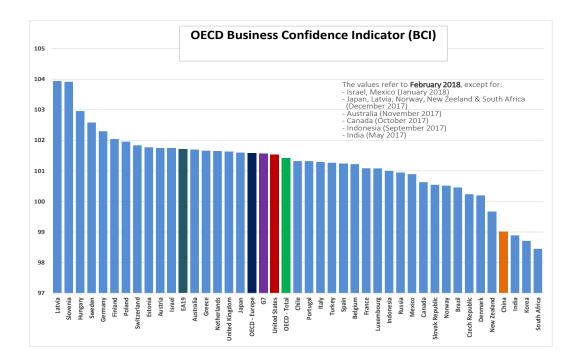
The OECD Business Confidence Indicator (BCI) registered a flat growth rate and posted 101.6 points from January to February 2018. Its reading only dropped slightly, by 0.1 points, down from the 101.7 points posted throughout the last three months of 2017. Compared to February 2017, the indicator rose by 0.8 points. BCI for the EA mirrored this trend and registered a reading of 101.7 for the fourth month in a row - 0.9 points higher than last year.

In February, the aggregate BCI for the OECD members was scored at 101.4 points, staying at the same level as in the beginning of the year and 0.1 points higher than the four consecutive months' level by the end of 2017. In January, the Composite Leading Indicator (CLI) stayed at a steady level of 100.4 points for the second month in a row, after a 0.1 point gain in September and October 2017. For the Euro-area, the average came out as 100.6 points, staying strong at its highest position for four months already.





The CECIMO members with the highest BCI are Sweden, Germany and Finland. Nevertheless, the sharpest increments were recorded by Switzerland and Belgium, while the UK saw the largest drop monthly. Compared to February 2017, the steepest BCI pickups were observed in Switzerland, Turkey (both +1.9 points) and Finland (+1.8 points). The Czech Republic scored -0.2 points lower than the same month last year.

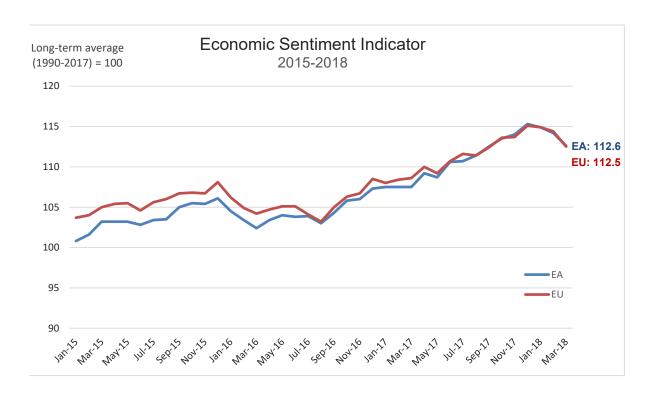


### 2.11 European Commission Economic Sentiment Indicator <sup>(1)</sup>

In March, the Economic Sentiment Indicator (ESI) significantly decreased in both the EA (by -1.6 points) and the EU (by -1.9 points), scoring 112.6 points and 112.5 points respectively.

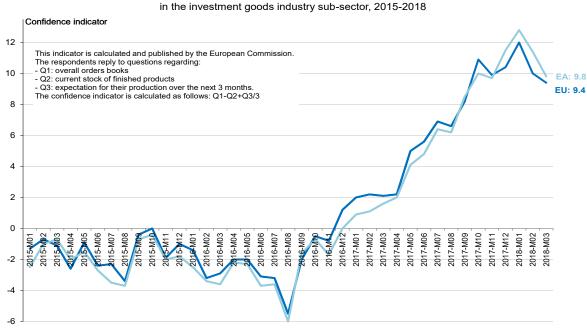
The ESI declined in all the five largest EA economies. Germany, Italy and Spain saw a steep fall of -2.4 points, -1.8 points and -1.2 points respectively and, to a lesser extent, the Netherlands and France, with -0.5 points and -0.4 points each. The worsening of the economic sentiment signals a deterioration in industry confidence, a more pessimistic assessment of production expectations, of the current level of overall order books and stocks of finished products. Service confidence, retail trade confidence also put downward pressure on the indicator, falling by -1.3 and -2.9 points each. Selling price expectations decreased in industry and services.

In the EU, the -1.9-point decrease in the indicator was driven by a sharper deterioration among non-EA economies, such as the UK (-4.2 points) or Poland (-2.0 points). The confidence markedly worsened in industry, services and retail trade sectors.



The EA BCI dropped to 1.34 points – its lowest level since September 2017 – down from 1.48 previously registered in February. The -0.14-point decrease is due to a deterioration of Managers' assessments of past production, stocks of finished products, overall order books and production expectations. We also note a small weakening of managers' evaluations of export order books. Nevertheless, the current BCI is 0.56 points higher than in March 2017.

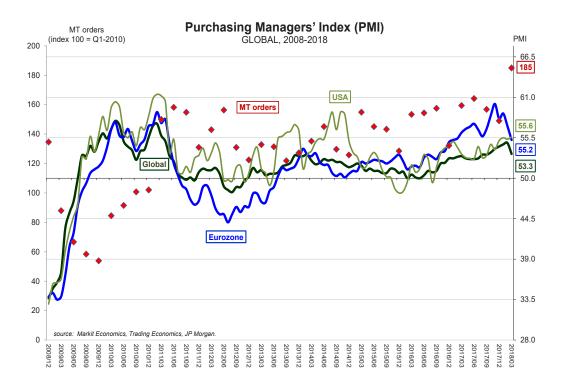
### Confidence indicator



### 2.12 Purchasing Managers' Index <sup>(1)</sup>

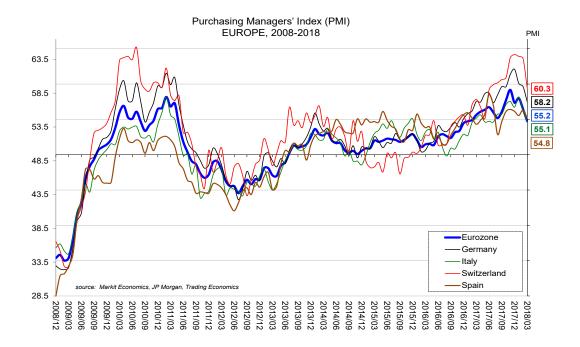
In March, the global economic expansion eased to a slower pace. The J.P.Morgan Global All-Industry Output Index slowed down to a 16-month low and posted 53.3, although the quarterly average (54.2) is still the best since the third quarter of 2014. The IHS Markit Eurozone Composite PMI expanded to its weakest pace since the beginning of 2017, due to a deterioration of new order growth, bad weather and supply-chain constraints. However, it suggests an expansion over the last 57 months.

The US, to the contrary, saw its strongest manufacturing growth since March 2015, driven by continuously increasing new orders and output and the strongest improvement in manufacturing business conditions, although the growth rate slowed down to a four-month low.



The European manufacturing sector saw its weakest pace of expansion since July 2017. In the Eurozone, the manufacturers' sentiment on future production eased to a 15-month low, although production and new business has picked up since November 2016. The expansion rates across the national manufacturing sectors decreased, according to the Markit surveys, while the inflationary pressures are strong. German PMI posted 58.2 in March, down from 60.6 in February – the weakest level since July 2017.

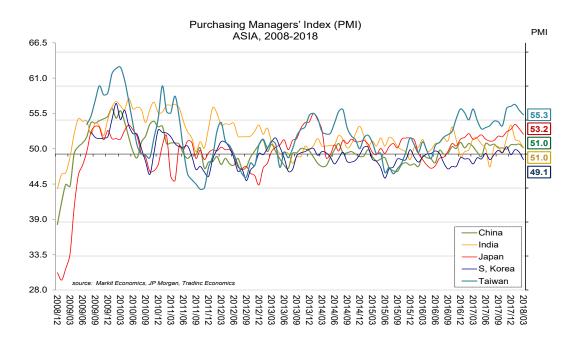
Nevertheless, it still suggests a robust improvement of business conditions. Italy saw slower market activity and constraints on the supply side (55.1, down from 56.8), although the manufacturing sector continues to grow at a steep rate. The French HIS Markit manufacturing index posted 53.7, down from 55.9 (recorded in February). It seems that the overall health of the French manufacturing is strengthening for the 18th month in a row. New foreign and domestic business is on the rise, and firms continued to expand their purchasing activity at a slower pace than in the previous month. Austrian PMI has fallen to a 10-month low, with a reading of 58.0 – down from February's 59.2 – due to further moderation in the manufacturing sector's growth. Output, new orders and exports increased at the weakest rates since the beginning of 2017, while job creation remains historically strong. Czech PMI posted 57.3, down from 58.8 in February, its lowest PMI since September 2017, but the production growth remains sharp. With greater global demand, the goods production increase marked the strongest quarterly average since the first quarter of 2011. Turkish PMI eased to 52.5, still above the series average, signalling continuous improvement of business conditions, output and employment. The UK, oppositely, secured a steady expansion pace in March posting 55.1, up from 55.0. The output growth accelerated, but was offset by a slower rise in employment and new orders.



Continued ▶

Our Asian counterparts experienced a similar slowdown trend. Japanese manufacturing PMI dropped to 53.2 in March – down from 54.1 – pointing to a further increase in new orders and job creation, but to a weaker extent. Chinese manufacturing firms reported a marginal improvement of the operating conditions, as production and total orders grew at their weakest rates in the last four months. The Chinese Manufacturing PMI posted 51.0 – down from 51.6 level in February. In parallel, employment numbers dropped at the fastest pace since August last year. Likewise, Taiwan declared a slower growth in total new work and employment, putting downward pressure on the index. Taiwanese manufacturing PMI dropped to 55.3 in March – down from the 56.0 in February – posting the lowest score in the last five months. It points, nonetheless, to a further improvement in business conditions.

In South Korea, the Manufacturing PMI declined to 49.1, from the previous level of 50.3. The operating costs rose markedly due to labour costs, as new staff were hired in anticipation of an increase in demand, which hindered further recruitment. Production and new domestic and foreign orders declined, resulting in a closure of the first quarter with a mild deterioration of the operating conditions. India saw a rise in output and new orders, though at a slower pace, posting a PMI of 51.0, down from 52.1. Its manufacturing conditions improved for the eighth month in a row. The Russian PMI, instead, registered a marginal gain, reading 50.6, after 50.2 in February, which was below the long-term average. This suggests a modest improvement of operating conditions, due to a weak upturn in new orders and output.



### Glossary <sup>①</sup>

#### 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' 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) 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 indictors 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 Britan 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

### CREDITS

**CECIMO Economic and Statistical** Toolbox

> <u>Publisher</u> Filip Geerts

**Author** Olga Chilat

Copyediting and production Giorgia Zia



# cecimo

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

Avenue Louise 66, 1050 Brussels, Belgium Tel: +32 (0)2 502 70 90 Fax: +32 (0)2 502 60 82 www.cecimo.eu

### **Member Associations**

Austria: FMTI

Fachverband Metalltechnische Industrie

www.fmti.at

Belaium: 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

Associação dos Industriais Metalúrgicos, Metalomecãnicos 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.