

## Economic & Statistical Toolbox

Third Quarter 2019

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**INDUSTRIAL ORDERS** income decreases worldwide.

Business climate reaches **CONTRACTION LEVELS** in key international markets.

Industrial production and **TRADE** suffer yearly drops.

Financial conditions and **MONETARY POLICY** in Europe remain supportive of SMEs.



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# Introduction

The European machine tool industry finishes Q3 2019 with weaker outlook than the previous quarter.

- Total CECIMO **orders** record a -23% year on year drop, due to decreasing intakes in both domestic and foreign orders.
- CECIMO's competitors also display weaknesses in order income, which shows industrial activity worldwide is consistently slowing down.

CECIMO world exports and world imports both decrease in Q3 2019, while sales and purchases from key regional market fall. Previous gains, such as the recovery in exports to the Russian-CIS economic area of Q2 2019, are shadowed by a general under performance.

As to machine tool production, recent estimates suggest that CECIMO output will decrease slightly compared to 2018 production levels. In the meantime, global MT output is expected to drop as well.

## Demand

- Consumption should decrease in 2019 according to forecasts, but it would eventually rebound at a strong pace as of 2020.
- Even though industrial orders suggest that manufacturing is facing short-term difficulties, the reduction in order intake will slow down and start to recover by late 2020.

Industrial production in the Euro area and the European Union slowly increase in the short-term, but production levels fall if compared to 2018 data.

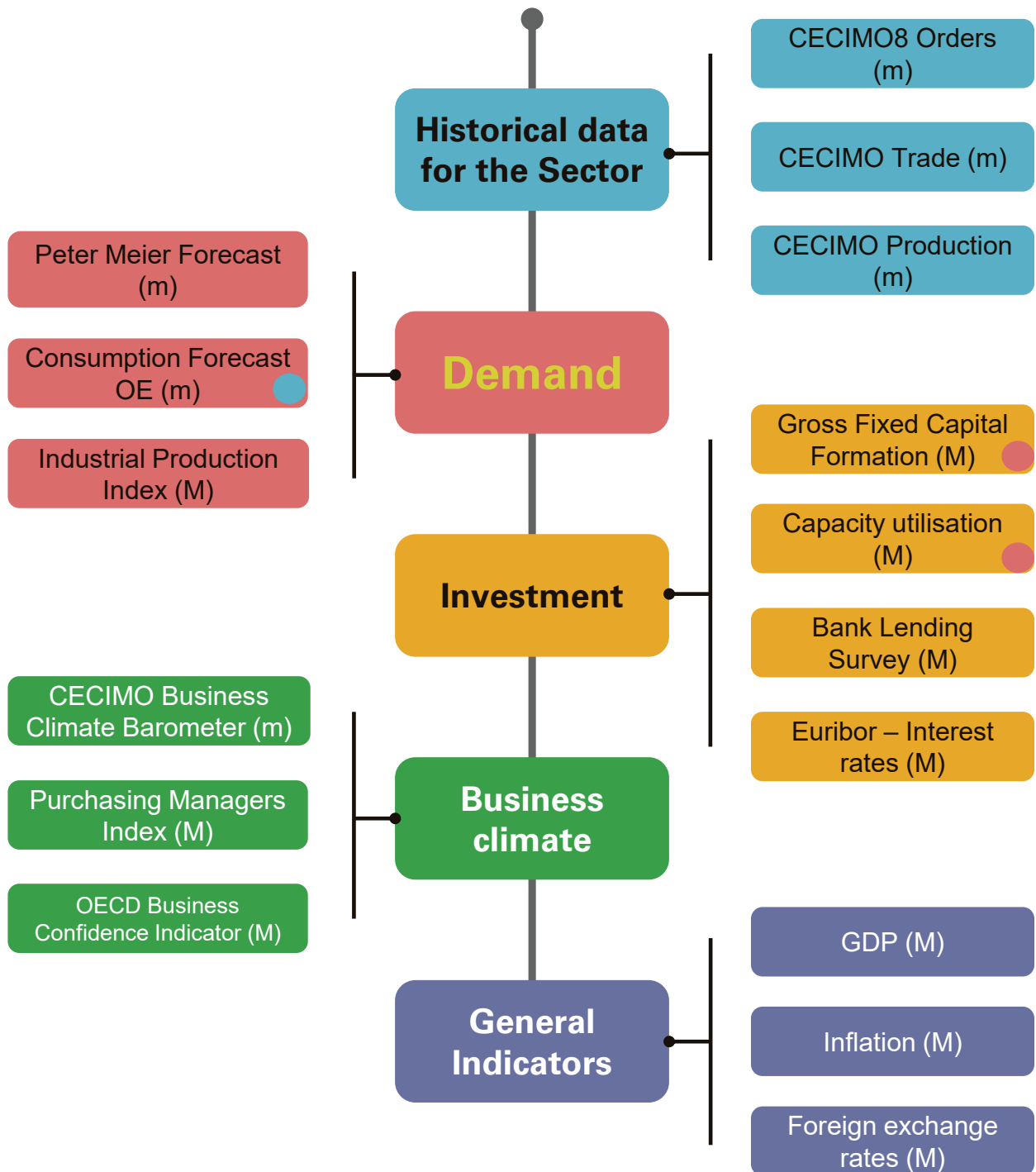
Gross Fixed Capital Formation in the European Union weakens slightly on short term basis, but investment continues to grow consistently on yearly terms. European capacity utilisation registers further quarterly decreases. Credit standards ease for SMEs and general financial conditions remains favourable to companies.

The global business climate is weak, indicating that managers expect an economic tightening. The OECD Business Confidence Indicator records average values below the 100-point threshold.

GDP growth is flat in the EU, while the US rate is below the forecasted one and China grows at a slower pace. Japan's GDP improves on the expected results.

The Euro exchange rate continues to appreciate in foreign markets.

# Toolbox Mind Map



# 1. Historical Data for the Sector

## 1.1 Orders (m)

### Domestic Orders

CECIMO8 domestic orders decreased -23% in Q3 2019, compared to Q3 2018. It continues the yearly downward trend in domestic order income, as seen in the two previous quarters. On a quarterly basis, Q3 2019 registered the steepest drop so far: -20% against Q2 2019. It is the third consecutive quarter with negative growth.

Individually, Q3 2019 orders data shows significant yearly decreases in most CECIMO countries: Austria (-2%), Italy (-18%), Switzerland (-12%), France (-13%), Germany (-29%). Some steeper decreases were seen in the Czech Republic (-49%) and Spain, with a -69% yearly drop, the largest among CECIMO8 members.

The United Kingdom registers the only domestic orders yearly increase in CECIMO8, with a 20% growth rate.

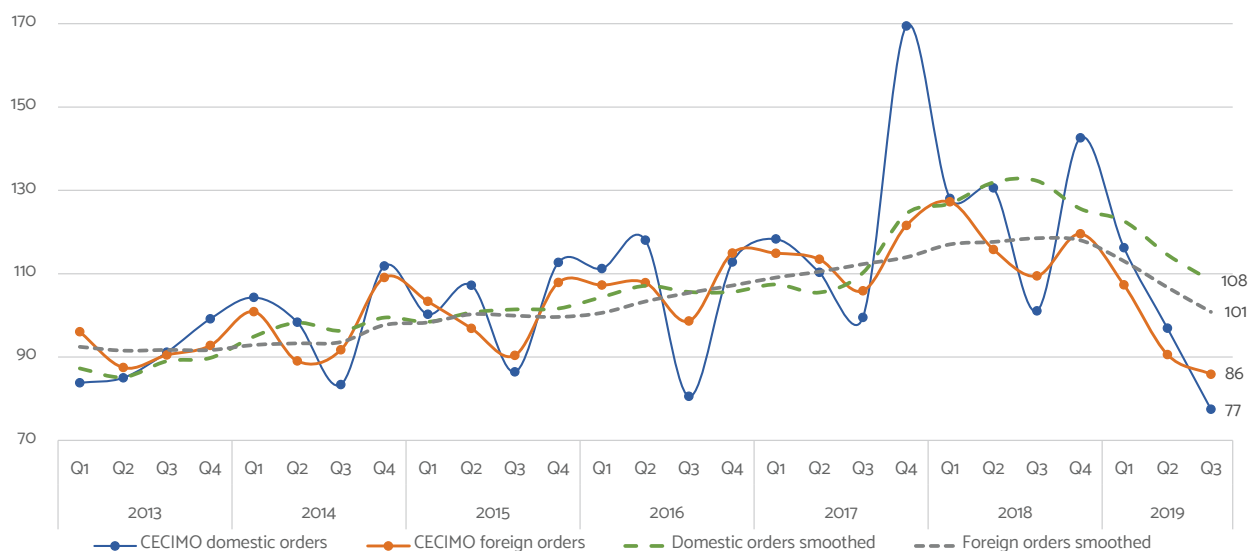
### Foreign Orders

In terms of foreign orders intake, Q3 2019 sees a -22% yearly decrease for CECIMO8. Like domestic orders, CECIMO8 foreign orders have been sliding down towards negative growth since Q4 2018, with the latest yearly change (Q3) identical to Q2 2019.

Considering the quarterly rates, negative growth is once again present in the short term for CECIMO8 foreign orders, but there are notable variations. The latest rate, a -5% drop Q3, is an improvement compared to the -16% quarterly decrease of Q2 2019. Nevertheless, as stated, foreign orders intake is negative since Q1 2019.

CECIMO members also witness individual yearly decreases in foreign orders intake. Germany (-4%), Austria (-9%) and the United Kingdom (-5%) suffer light drops, while Switzerland and Spain see sharp erosions, -20% and 24% respectively.

The Czech Republic and Italy are the only two CECIMO countries whose foreign orders intake grow on a yearly basis in Q3 2019, with a 5% increase in the Czech machine tool sector and a 15% increase in the Italian one.

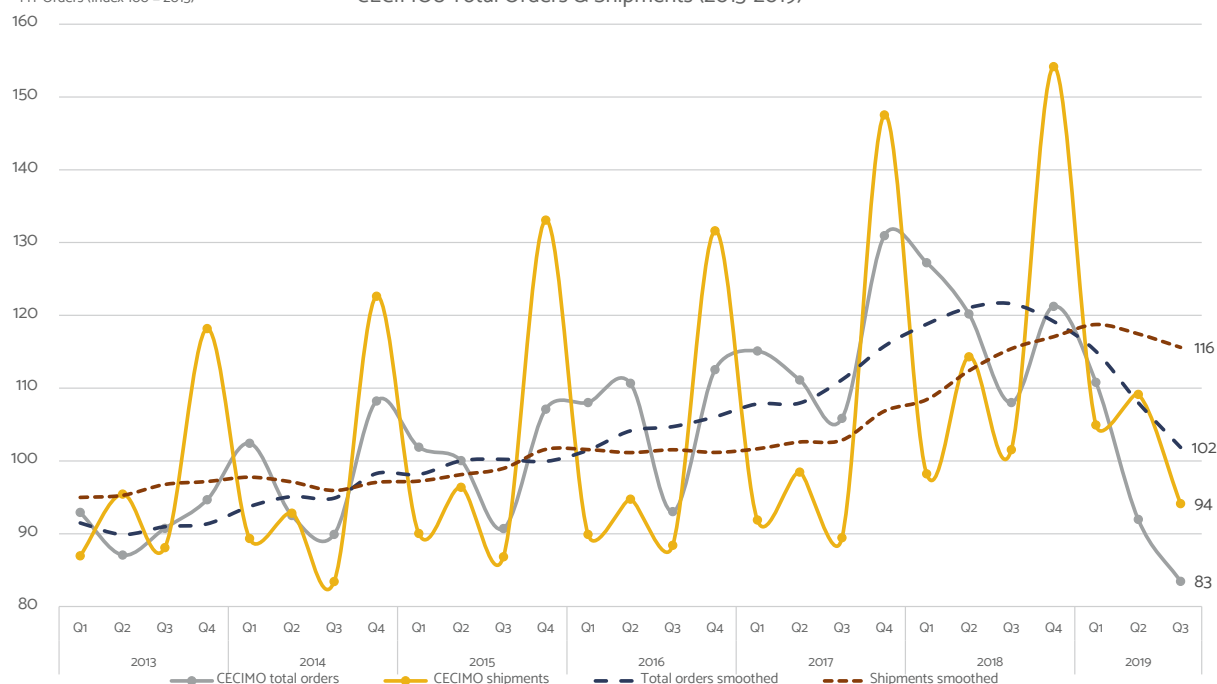


### Total Orders

Total orders fall by -23% in Q3 2019 on a yearly basis, the same rate as Q2 2019. As total orders intake is determined by the performance of domestic and foreign orders, a general downward trend is also clearly visible here. Q3 2019 is the fourth consecutive quarter with yearly negative growth rates.

The quarterly change for Q3 is also negative: -9% against Q2 2019. It is the third consecutive quarter with negative growth, but with a more moderate growth rate than the one from the previous quarter (Q2 2019).

At a national level, total orders intake generally remains at negative growth levels. Austria registers a relatively moderate decrease of -5%, while sharper drops are seen across CECIMO8 members: Italy (-18%), Czech Republic (-24%), Germany (-25%), Switzerland (-25%), and Spain (-37%). The United Kingdom's total orders intake grows at a yearly rate of 4%, due in great part to its strong domestic orders performance.



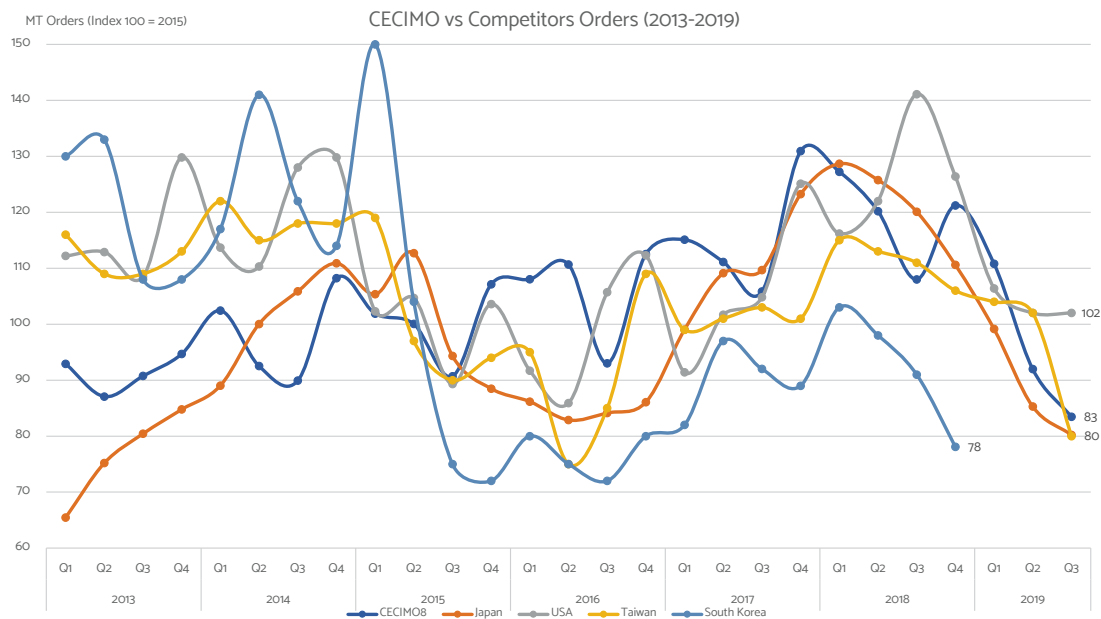
## Foreign competitors

Total orders intake for Japanese metal forming companies decrease -22% in Q3 2019 against Q3 2018. Domestic orders fall -25% on the same basis, while foreign orders go down -16%.

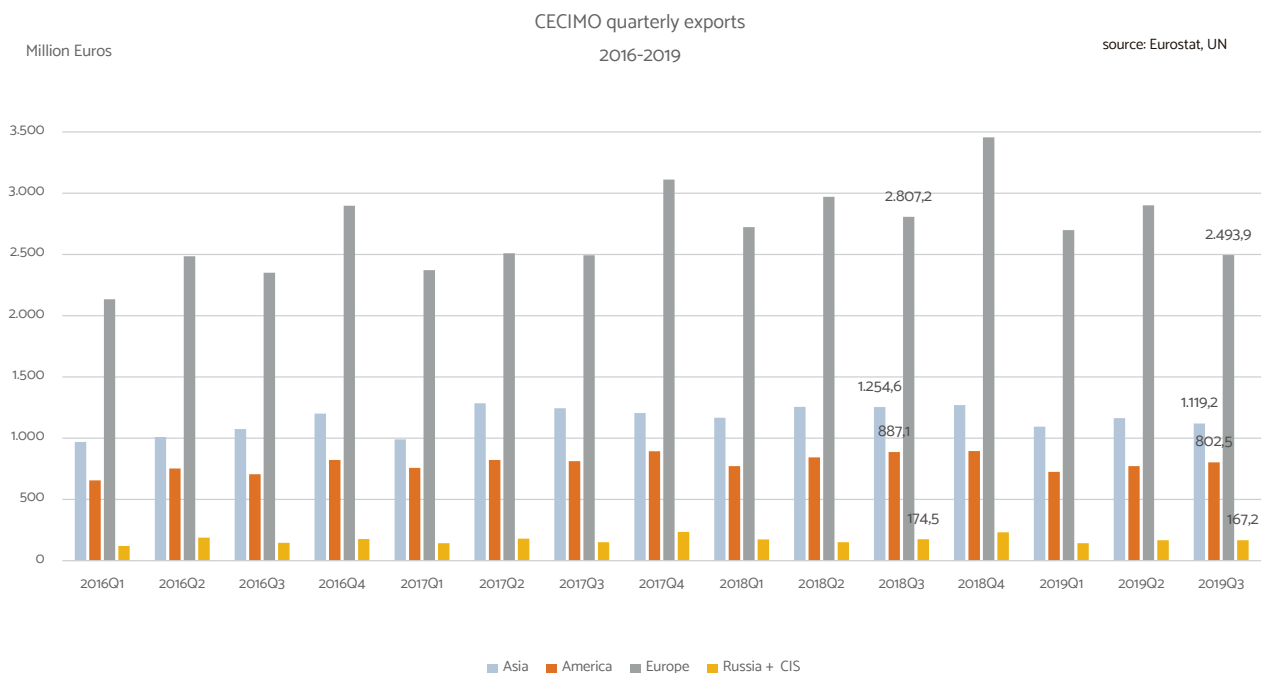
For Japanese metal cutting companies, total orders intake also decreases -35% on a yearly basis in Q3 2019. This sharp yearly erosion is explained by significant drops in domestic orders (-36%) and foreign orders (-35%) in Q3 2019 against Q3 2018.

United States domestic orders also follow a downward trend, as Q3 2019 registers a -27% drop compared to Q3 2018 data. It is the sharpest decrease in order intake registered this year for the US machine tool sector.

Taiwanese total order intake decreases -28% in Q3 2019 compared to the same quarter in the previous year. This drop echoes the downward trend in both domestic and foreign orders, which fell -27% and -28%, respectively, on a yearly basis in Q3 2019.

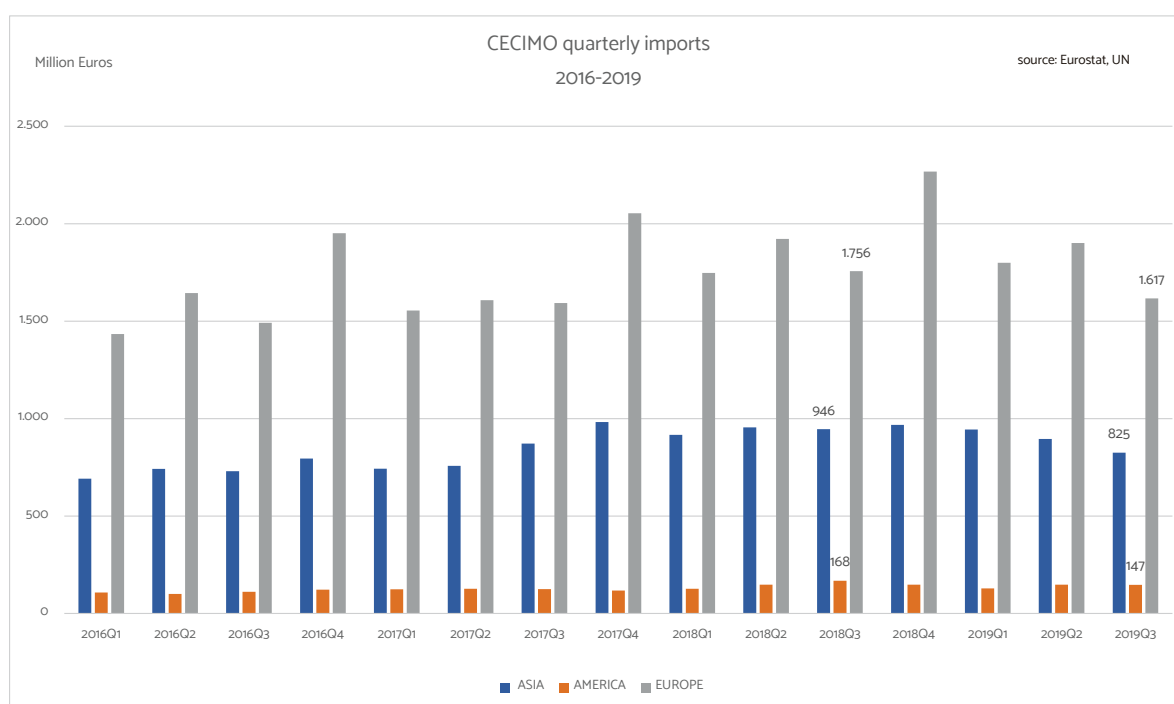


## 1.2 CECIMO Trade (m)



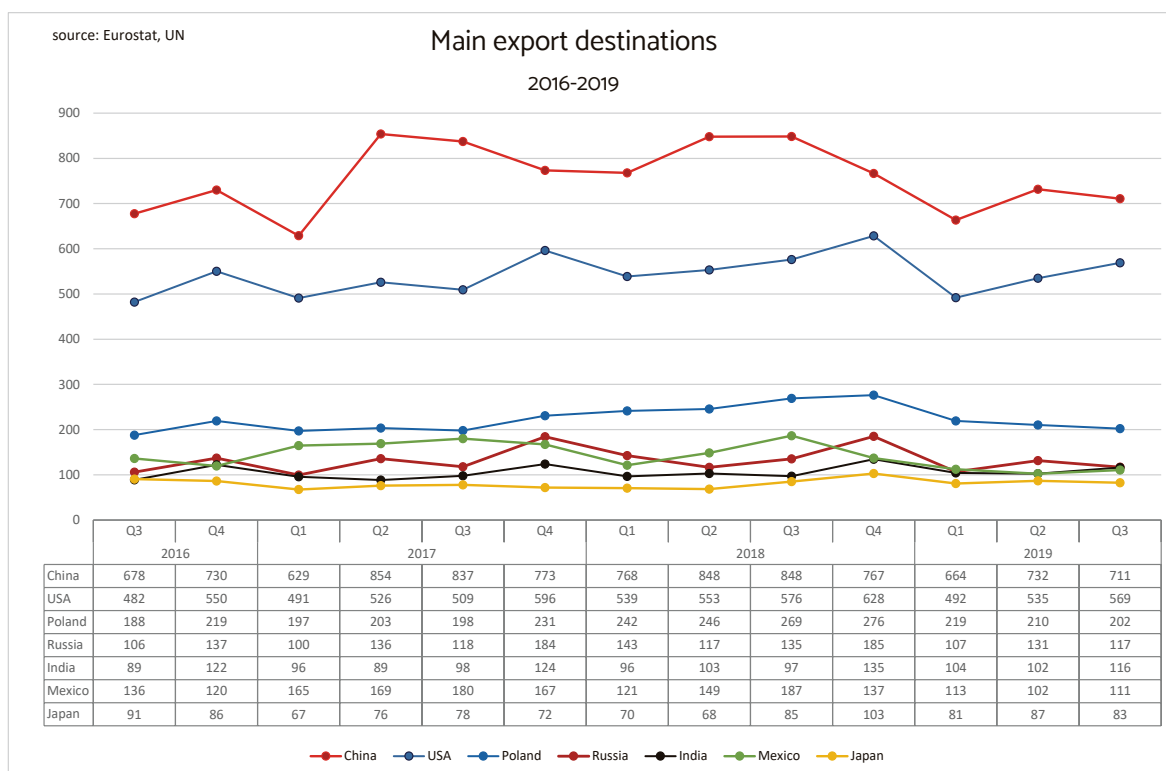
## CECIMO quarterly exports in Q3 2019 compared to Q3 of 2018

- CECIMO World MT exports registered a total volume of 4.77 billion euros in Q3 2019. It is the lowest figure for 2019, after the upwards review of Q1 2019 world exports data (which now stands at 4.85 billion euros). Moreover, it is the first decrease in CECIMO world exports volume since the beginning of 2019.
- On a yearly basis, CECIMO MT world exports decreased -10% in Q3 2019. Exports outside of CECIMO countries decrease as well on the same basis, with a -8% drop in Q3 2019 compared to the same quarter of the previous year.
- In regional terms, CECIMO exports to key geographical areas experience yearly decreases, in line with the world trend: Asia (-11%), America (-10%), and Europe (-12%).
- Exports to Russia and CIS countries show a year on year negative growth rate of -4% in Q3 2019, a slight drop after a 10% growth rate in Q2 2019 (compared to Q2 2018).



## CECIMO quarterly imports in Q3 2019 compared to Q3 of 2018

- CECIMO imports in Q3 2019 stood at 2.5 billion euros, the lowest volume registered so far in 2019.
- CECIMO world imports decreased -10% in Q3 2019 against Q3 2018, following the negative growth rate of Q2 2019 (-3%). This latest drop is the largest in CECIMO world imports volumes in more than a year.
- Considering regional data, imports from relevant supplying markets decrease as well, showing a further erosion of the results from Q2 2019. Imports from Asia fall -13% in Q3 2019, while European imports decrease -8%.
- Imports from American markets decrease -13% as well in Q3 2019, after two consecutive quarters of flat growth.



## CECIMO Main Export destinations in Q3 2019

Out of CECIMO's total world exports in Q3 2019, 40% goes to national or regional markets outside of the CECIMO area.

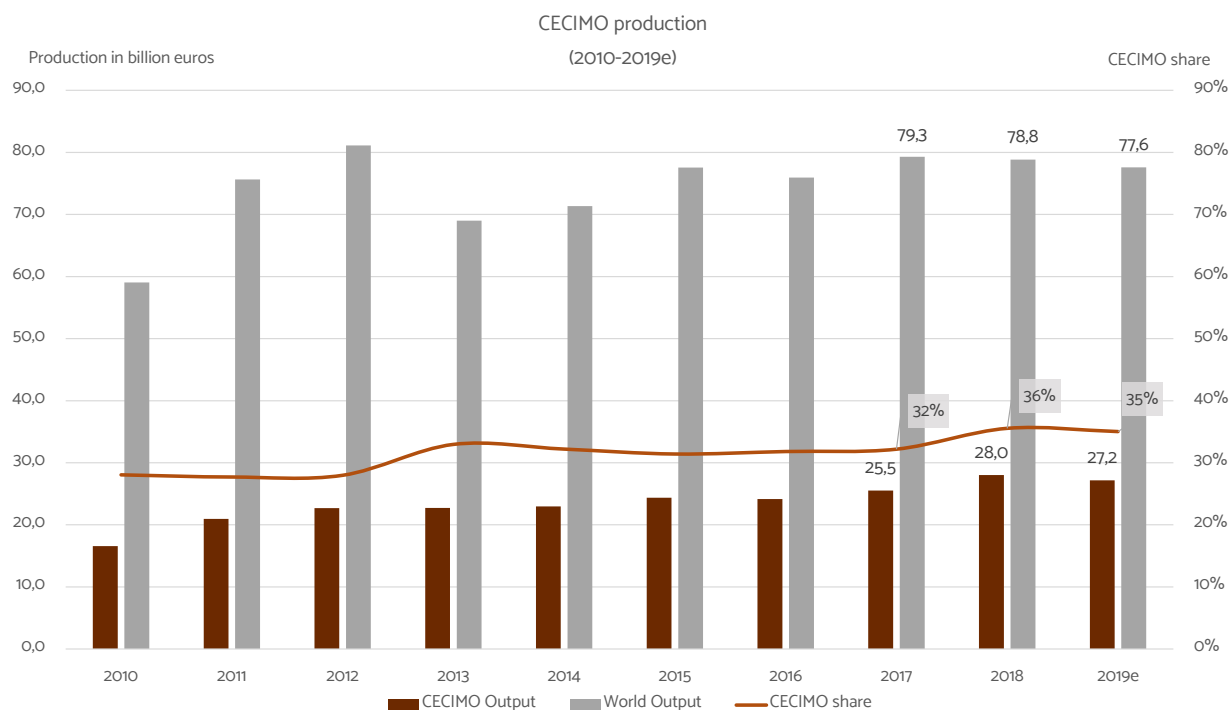
China remains the top export destination for CECIMO MT builders, with an absolute sales volume of 710 million euros. Although the figure is high, it is worth noting that exports have decreased both on a quarterly and a yearly basis. Compared to Q2 2019, CECIMO exports to China have decreased -3%, while the yearly change (against Q3 2018) shows a negative growth rate of -16,2%, indicating a downward trend.

CECIMO exports to the US market were worth 568 million euros. In quarterly terms, CECIMO exports have increased 6,4% in Q3 2019, a slower rate than in the previous quarter (8,8%) but nonetheless a symptom of short-term growth in CECIMO export activity. However, exports have decreased -1,2% in Q3 2019 against Q3 2018. This latest rate is better than the one from Q2 2019 (-3,4%), which might suggest the US market conditions are slowly improving.

Poland is, in Q3 2019, the third main export market for CECIMO countries. Its position has however eroded over time, as export volumes have dropped to 202 million euros this quarter (the lowest so far). It is the third consecutive quarter with negative growth rates on a quarterly basis, with the latest rate standing at -3,8%. The trend is also negative if the year on year change is considered, as CECIMO export decrease almost 25% this quarter.

The Russian market seemed to have recovered for CECIMO exports in Q2 2019, with strong quarterly and yearly increases registered this period. The situation has however changed this quarter, as exports have shrunk -11% on a quarterly basis and -13,5% against Q3 2018.

## 1.3 Production (m)



As of Q3 2019, CECIMO production estimates for 2019 stand at 27,1 billion euros. It is a -0,6% decrease against 2018 production levels (of around 28 billion euros in value). World MT output estimates suggest production will drop to 77,5 billion euros in 2019, a -1,6% decrease compared to the previous year.

CECIMO production share over total world output remains at 35% in 2019, only one point lower than 2018's share.

2018 and 2019 production has suffered a year on year slowdown, registering negative growth rates for the first time since 2016.

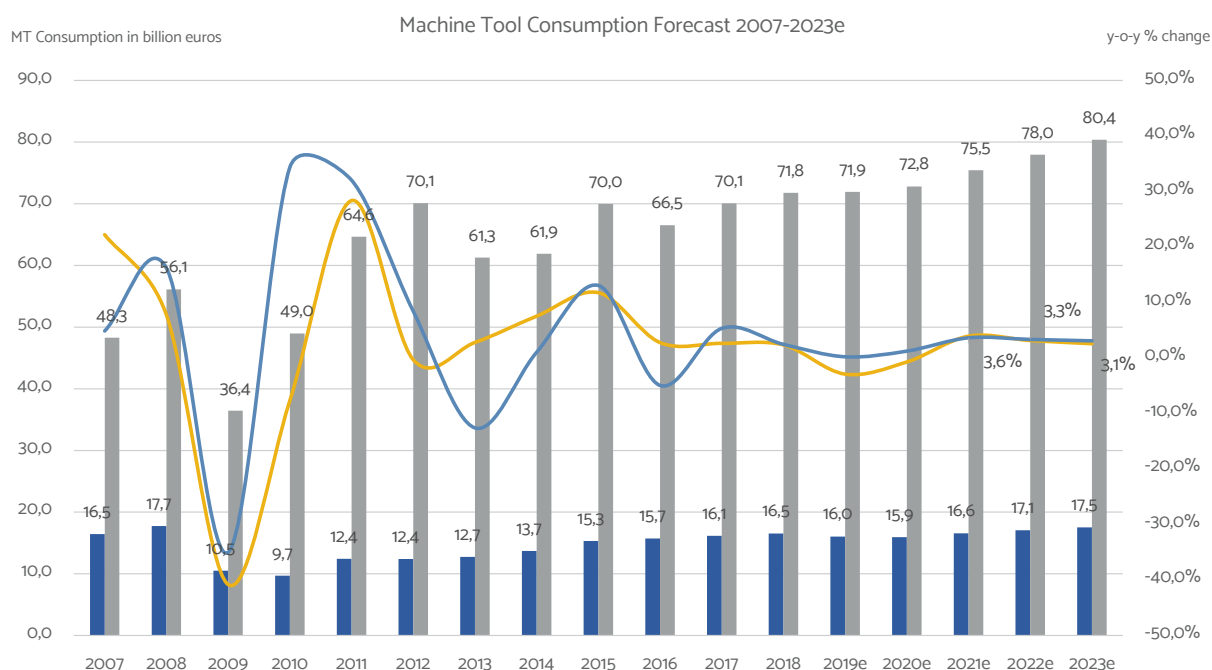
# 2. Demand

## 2.1 CECIMO Consumption (m)

### Oxford Economics Consumption Forecast

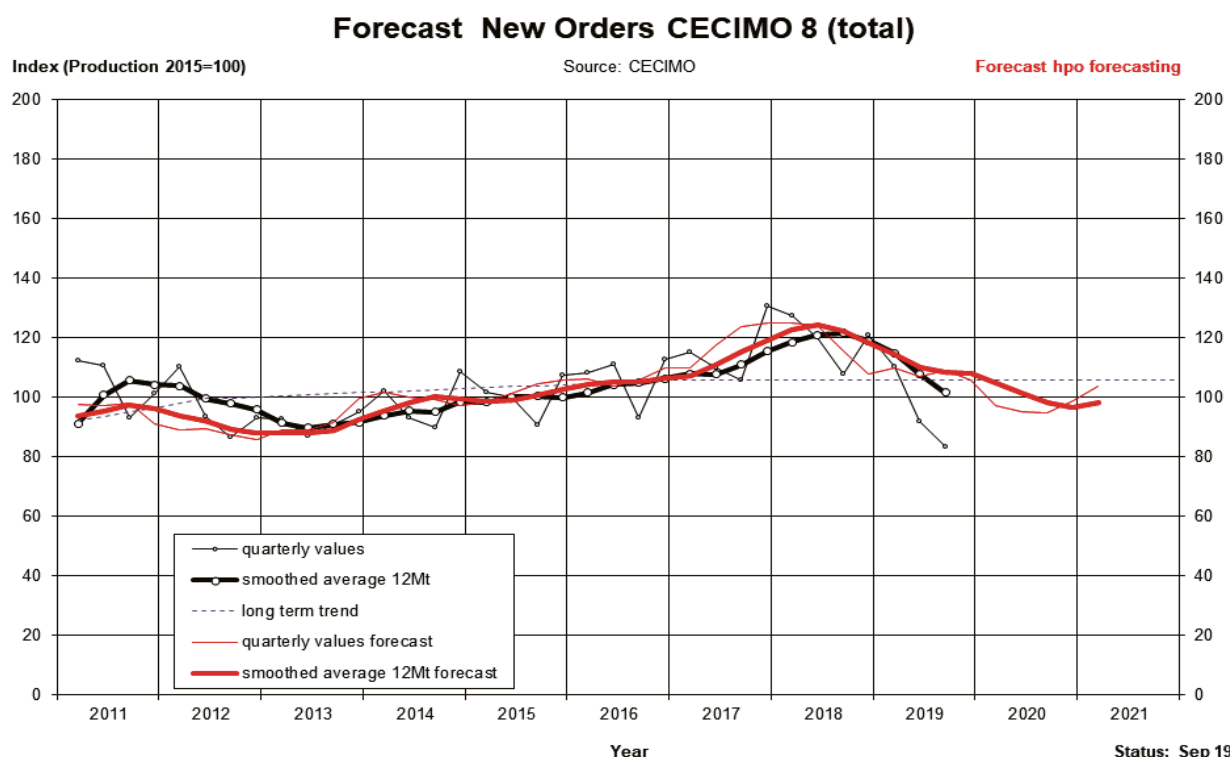
As stated in the previous iteration of the CECIMO Economic and Statistical Toolbox, CECIMO machine tool consumption for 2018 was 16.5 billion euros, which represents a 2,3% increase from 2017. World consumption grew 23%, reaching a total volume of 71.7 billion euros that same year.

- According to Oxford Economics Forecasts, 2019 estimates suggest a -2,9% negative growth rate compared to 2018, with a total consumption volume of 16 billion euros.
- From 2020 to 2023, CECIMO machine tool consumption will still experience negative growth rates at first (2020, -0,1%), but should rebound strongly from 2021 onwards, with consecutive yearly increases (2021: 3,9%; 2022: 3,1%; 2023: 2,6%).
- World machine tool consumption for 2019 would reach 71.9 billion euros. This is a 22% increase compared to 2018.
- Machine tool consumption worldwide should follow a strong and steady upwards trend as of 2020, with growth rates consistently above 2,1%.



## 2.2 Peter Meier / HPO CECIMO8 Orders Forecast (m)

In the third quarter order intake fell again, widening the gap between the actual values and the quarterly forecast curve. The 12mt average also decreased and fell below the 12mt forecast as well as the long-term trend.

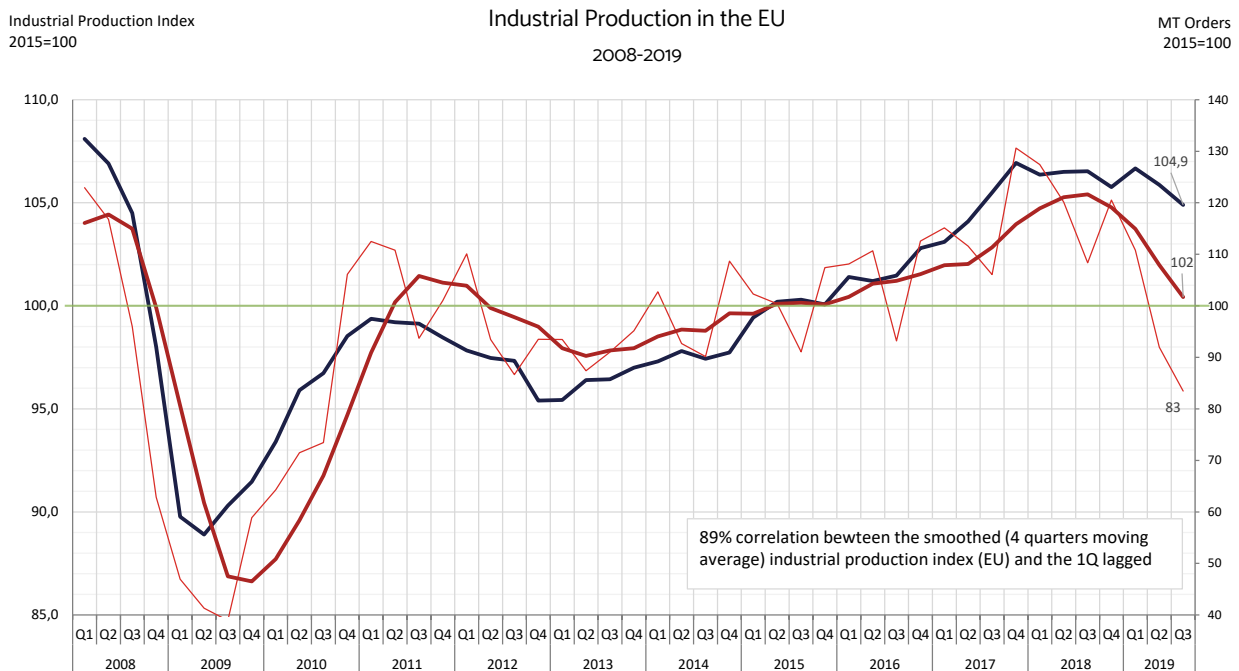


Actual values are currently two quarters ahead of the forecast. It is therefore likely that the reduction in order intake will slow down and start to recover towards the end of 2020.

- The decline in industrial production in Europe and Asia previously reported in economic commentaries continued unabated in the third quarter of 2019. The sharp declines in incoming orders in individual sectors in the third quarter mean that no recovery can be expected in the coming months.
- The consumption cycle presents a different picture in Europe and the USA than in Asia. While consumption in the West is still strong, the Asian markets seem to be slowly approaching a low point (which is expected to arrive over the course of 2020).
- The downward trend in the OECD's Business Confidence Index (BCI) continued in all three major economic regions in the third quarter. All regions are now clearly in the contractionary zone (below the 100 points mark).
- Since 2008, the global automotive industry has benefited from the strong growth in automobile sales in China, while the automotive markets in the USA, Europe, and Japan have long been saturated. However, China's automobile sales have declined since 2018. China appears to have reached saturation point.
- Vehicle sales in the USA, Europe, and China will continue to decline in 2020, which is likely to be even more accentuated than in 2019.

## 2.3 Industrial Production Index (M)

In September 2019 industrial production rose by 0.1% in the euro area (EA19) and by 0.2% in the EU28, compared to August 2019. If compared to September 2018, industrial production decreased by -1.7% in the euro area and by -1.2% in the EU28.



### Monthly comparison:

- For CECIMO members, industrial production decreased in September 2019 in Belgium (-1,7%), Germany (-1,2%), Spain (-0,9%), Italy (-0,4%) and the United Kingdom (-0,3%). The largest decrease is seen in Portugal, with a -2,6% monthly drop.
- Industrial production has in the meantime increased significantly in Switzerland (2,6%), Denmark (2,1%) and the Netherlands (1,3%).
- It is important to note that industrial production growth rates are generally weak or negative among CECIMO countries in Q3 2019.

### Yearly comparison:

- Considering the year on year change (against September 2018), the highest decreases among CECIMO members were observed in Germany (-5,6%), Italy (-2,2%), Austria (-2,1%) and the United Kingdom (-1,4%).
- The highest yearly increases in industrial production were registered in Switzerland (10,7%), Belgium (6,1%), Denmark (4,5%) and Sweden (1,7%).

The highest industrial indices for CECIMO countries in September 2019 were those of Switzerland (118,6), Finland (114,3) and Belgium (113,8). Germany stands at 99,1, below the 100 mark.

EU 28	Jan 2019/ Jan 2018	Feb 2019/ Feb 2019	Mar 2019/ Mar 2018	Apr 2019/ Apr 2018	May 2019/ May 2018	June 2019/ June 2018	Jul 2019/ Jul 2018	Aug 2019/ Aug 2018	Sep 2019/ Sep 2018
<b>Total industrial production</b>	-0,4%	0,3%	0,4%	-0,1%	-0,1%	-1,8%	-1,3%	-2,0%	-1,2%
Capital goods	-2,4%	0,5%	1,5%	-1,6%	-0,8%	-3,2%	-2,3%	-2,9%	-1,0%
Durable consumer goods	-0,1%	0,7%	0,1%	0,2%	0,8%	-0,8%	1,8%	0,1%	0,8%
Intermediate goods	-1,2%	0,4%	0,8%	-0,1%	-1,5%	-3,0%	-2,3%	-2,7%	-3,3%
Energy	2,9%	-4,4%	-6,2%	-0,6%	1,4%	0,3%	-1,5%	-2,9%	-2,5%
Non-durable consumer goods	1,4%	3,1%	1,7%	2,8%	2,9%	1,2%	1,7%	0,0%	2,4%

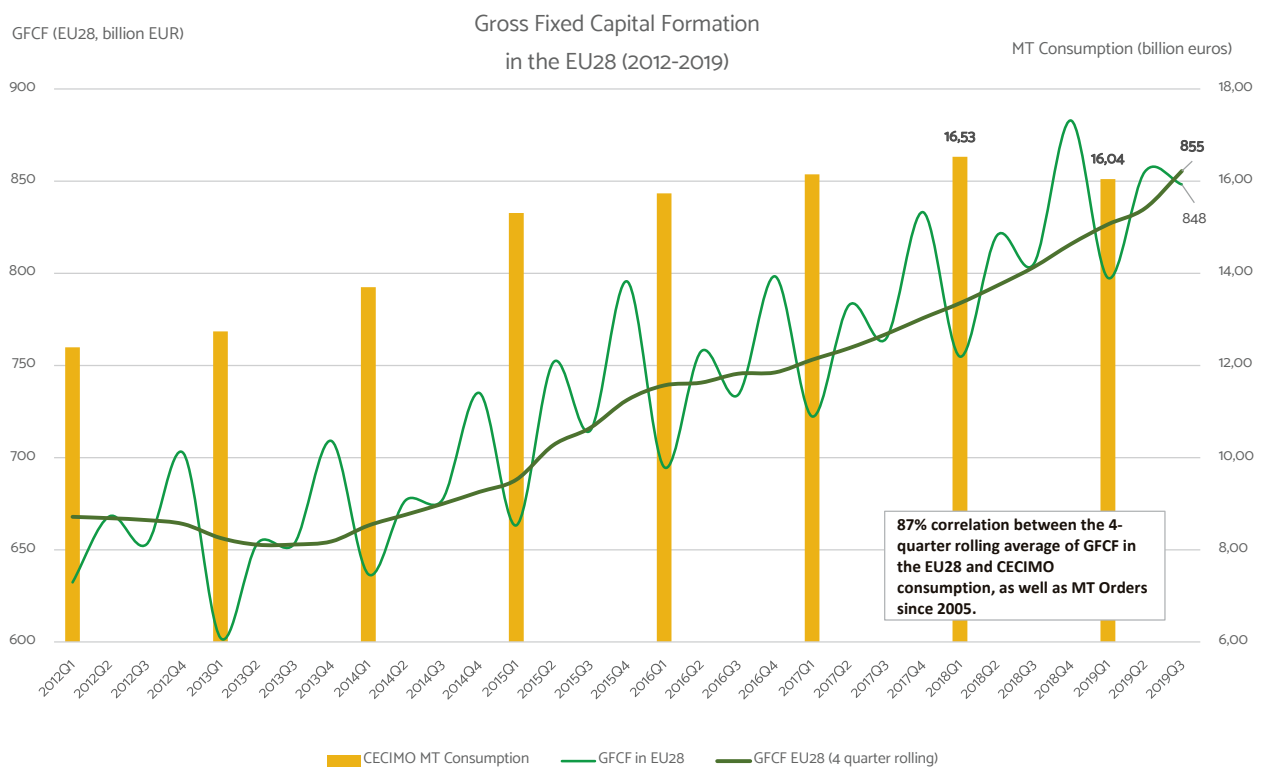
# 3. Investment

## 3.1 Gross Fixed Capital Formation (M)

EU 28 Gross Fixed Capital Formation decreased -5% in Q3 2019 against Q2 2019, with absolute volumes now standing at 848 billion euros. However, on a yearly basis, GFCF has increased in the European Union 6%.

GFCF has experienced consistent year on year growth since Q1 2017, with relatively strong rates. Q3 2019 rate is so far the lowest of the year (Q2 2019 saw 10% growth rate), but it remains higher than those of 2018.

GFCF levels in 2019 remain higher than those originally forecasted by the European Commission in Spring.

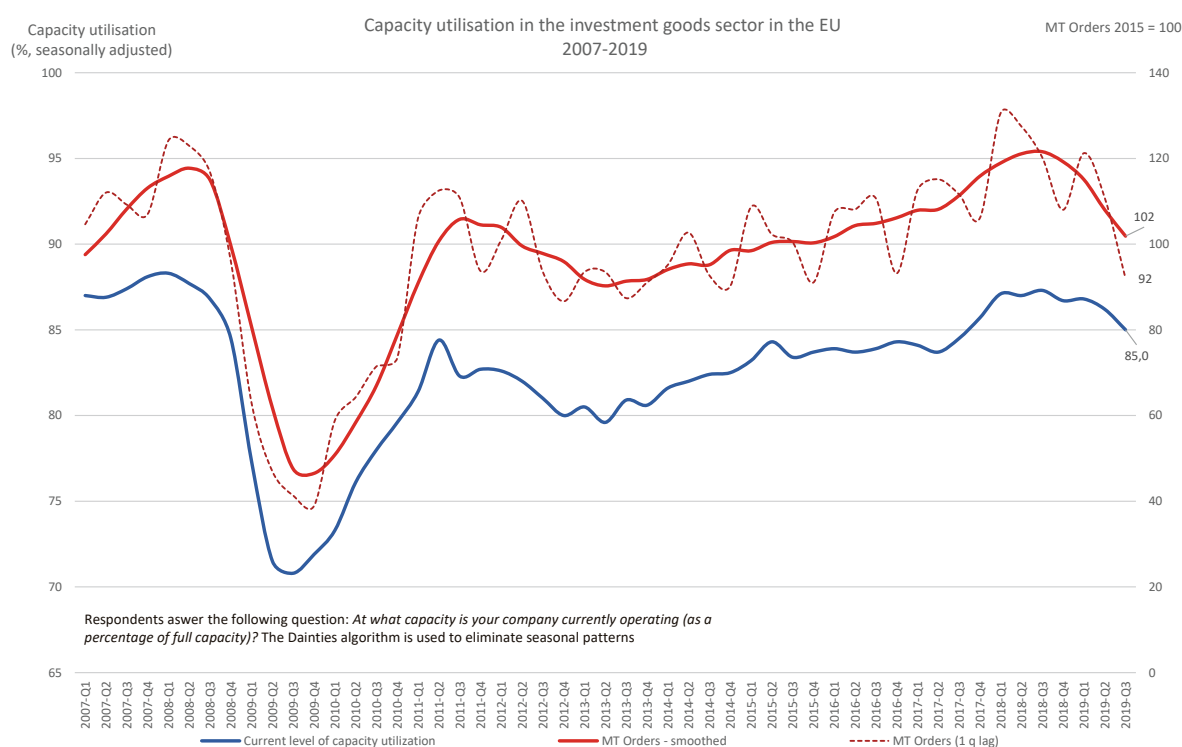


## 3.2 Capacity Utilisation in the Investment Goods Sector (M)

Capacity utilisation in the European Union continues its slow downward trend. Regarding the quarterly change, capacity utilisation levels dropped -1,4%. Since Q2 2018, quarterly changes have been either flat or negative. Moreover, from Q3 2018 to Q3 2019, capacity utilisation has dropped on a quarterly average of -0,5%.

The year on year variation shows a -3% negative growth rate. Since Q1 2019, which witnessed a stagnant yearly growth of 0%, capacity utilisation has decreased consistently this year and at a faster pace.

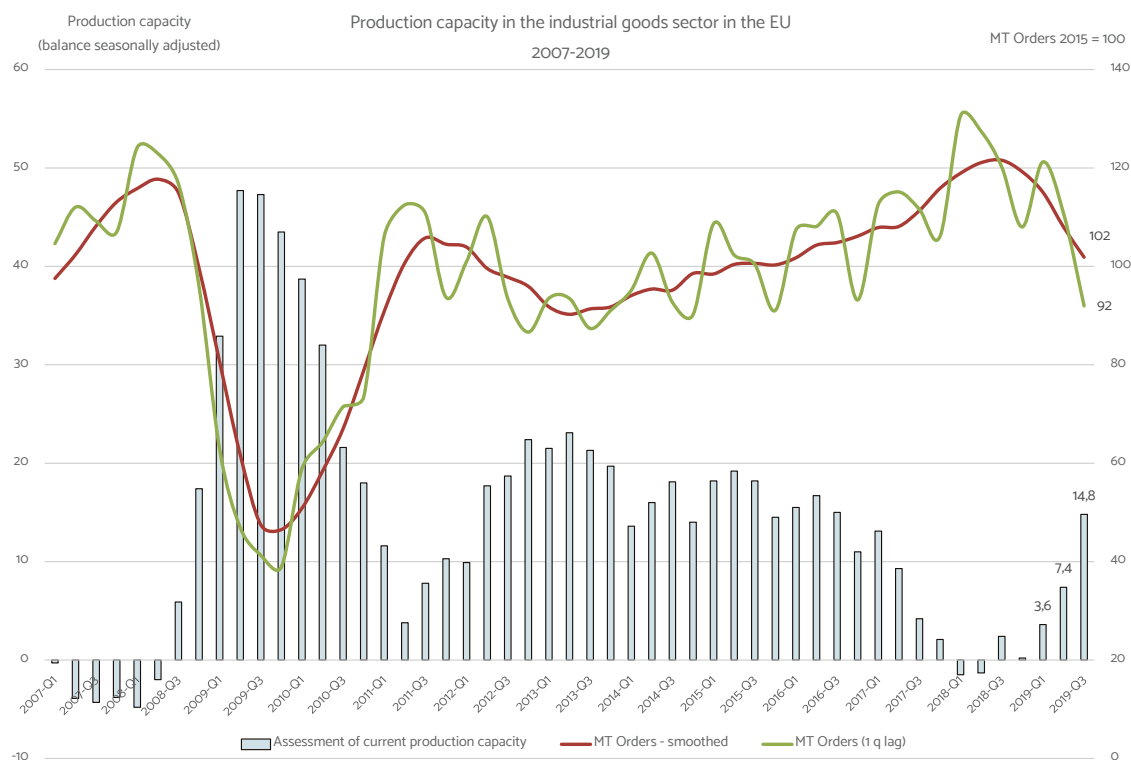
Correlation between capacity utilisation and CECIMO orders remains at 96%, therefore, as stated in a previous number of the Statistical Toolbox, a decreasing rate of capacity utilisation might suggest a deceleration of demand for machine tools, as investment in capital goods is not deemed necessary by companies. A recovery in orders does not seem likely in the short run, as stated by our forecasting partners.



### Capacity Utilisation (% of total capacity)

	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Q3 2019
Austria	88,3	89,6	85,8	87,8	87,3
Czech Republic	88,5	89,8	87,8	85,5	85,4
France	89,5	89,2	89,0	88,3	87,3
Germany	91,1	88,9	89,9	89,5	87,9
Italy	79,1	79,8	79,9	78,7	77,8
Spain	86,7	85,5	86,4	87,5	87,5
United Kingdom	84,4	85,8	82,6	81,2	80,0

In terms of the assessment of production capacity, in Q3 it increased to 14,5%. Current levels of production are thus considered sufficient by companies in light of the general business environment. This would be consistent with the general economic outlook that has been described here.



### Production Capacity (balance in %)

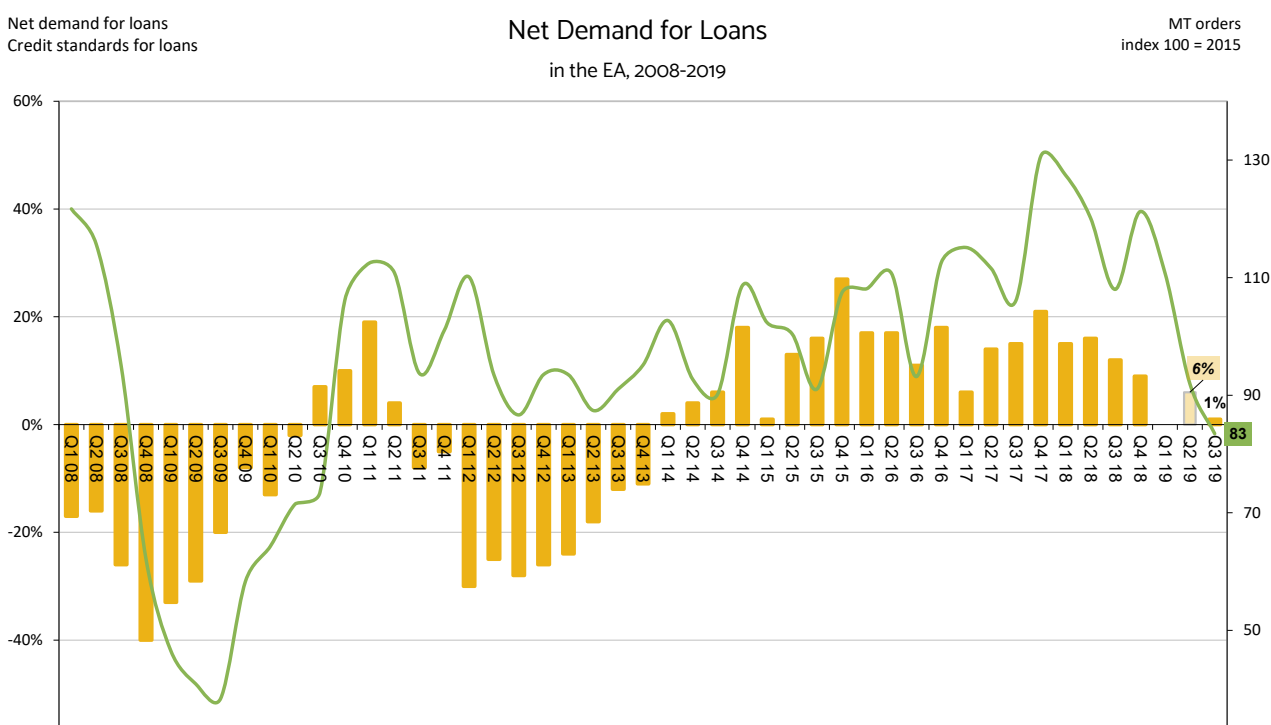
	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Q3 2019
Austria	-2,6	-3	0	6,1	11,7
Czech Republic	14,9	12,7	11,2	27,4	27
France	-9,6	-16,8	-13,3	-11,4	-4,7
Germany	0,1	-1,3	1,5	9,6	22,1
Italy	17,2	19,9	19,2	20,7	24,6
Spain	6,4	12,9	4,4	0,4	-2,1
United Kingdom	10	-3,2	23,9	14	25,7

## 3.3 Bank Lending Survey (M)

### Credit standards

In the third quarter of 2019, credit standards have eased slightly, with a net percentage of reporting banks of -2%, (in the previous quarter, the rate was 5%). The banking sector expects the situation to remain unchanged.

- Credit standards slightly eased for loans to SME (-2%)
- Loans to large firms have not changed substantially, with a credit easing of -1%
- Net easing of credit standards has been driven by the competition between banks, as in the previous quarters.
- Credit standards have eased in Italy and the Netherlands, while they remain unchanged in Spain. Conditions have however tightened in France and continue to do so in Germany.
- Looking ahead to Q4 2019, Eurozone banks foresee no short-term change in credit standards.



### Overall terms and conditions

In Q3 2019, overall terms and conditions continued to tighten after an extended period of easing. Across the Eurozone, overall terms and conditions on new loans to enterprises tightened only in France, while they remained unchanged in other EA countries.

### Rejection rate for loans to enterprises

The net percentage share of rejected loan applications continued to increase for loans to euro area enterprises in the third quarter of 2019. The rate currently stands at 7%. Across the Eurozone, the net rejection rate increased in Germany and the Netherlands, while it remained unchanged in France, Italy and Spain.

### Net demand for loans to enterprises

Net demand for loans to enterprises remained unchanged in Q3 2019. The net percentage this quarter is 1%, against 6% recorded in Q2 2019. Net demand slightly increased for loans to SMEs but decreased for loans to larger firms.

Across the Euro Area, net demand for loans to enterprises increased in France and Germany, while it declined in Italy and Spain, and to a lesser extent in the Netherlands.

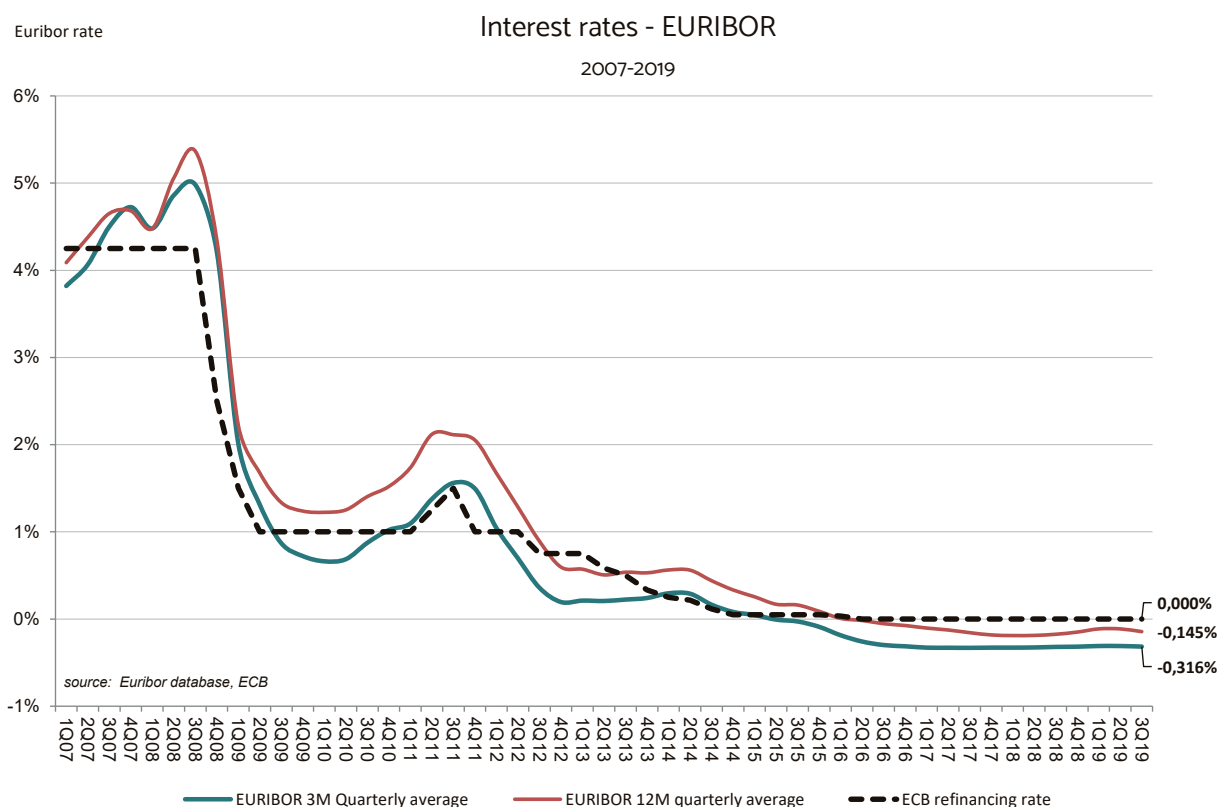
Demand for loans to enterprises was mainly supported by the low general level of interest rates and, to a lesser extent, other financing needs.

Low level of interest rates have supported loan demand in most major countries, except in Italy where it remained unchanged and the Netherlands, where, on the contrary, it has had a negative impact. Fixed investment continued to support demand in France and Germany, but dragged it down in Italy, Spain and the Netherlands.

For Q4 2019, banks expect loan demand from enterprises to remain at 1% net percentage rate. As to correlations - relevant to understand how different parts of the economy evolve over the same period - CECIMO MT Orders have a 72% correlation 2-quarter lagged demand for loans. As credit standards ease slightly and net demand for loans registers a flat growth in Q3 2019, financial conditions are not as favourable as in previous periods but show that MT companies would still be capable of acquiring loans to finance investments in capital goods.

## 3.4 Euribor - Interest Rates (M)

- The Euribor 3-month average for Q3 2019 is -0,316%, while the 12-month average stand at -0,145%.
- The ECB refinancing rate remains unchanged: 0,00%
- ECB monetary policies during Q3 2019 were taken to **preserve the favourable financing conditions** that are still needed for a sustained return of inflation rates towards levels that are below, albeit close to 2%. An additional monetary stimulus has been provided by additional net asset purchases (part of the asset purchasing programme), a sizeable stock of acquired assets and forthcoming reinvestments, and by ECB forward guidance on interest rates.



# 4. Business Climate

## 4.1 CECIMO Business Climate Barometer (m)

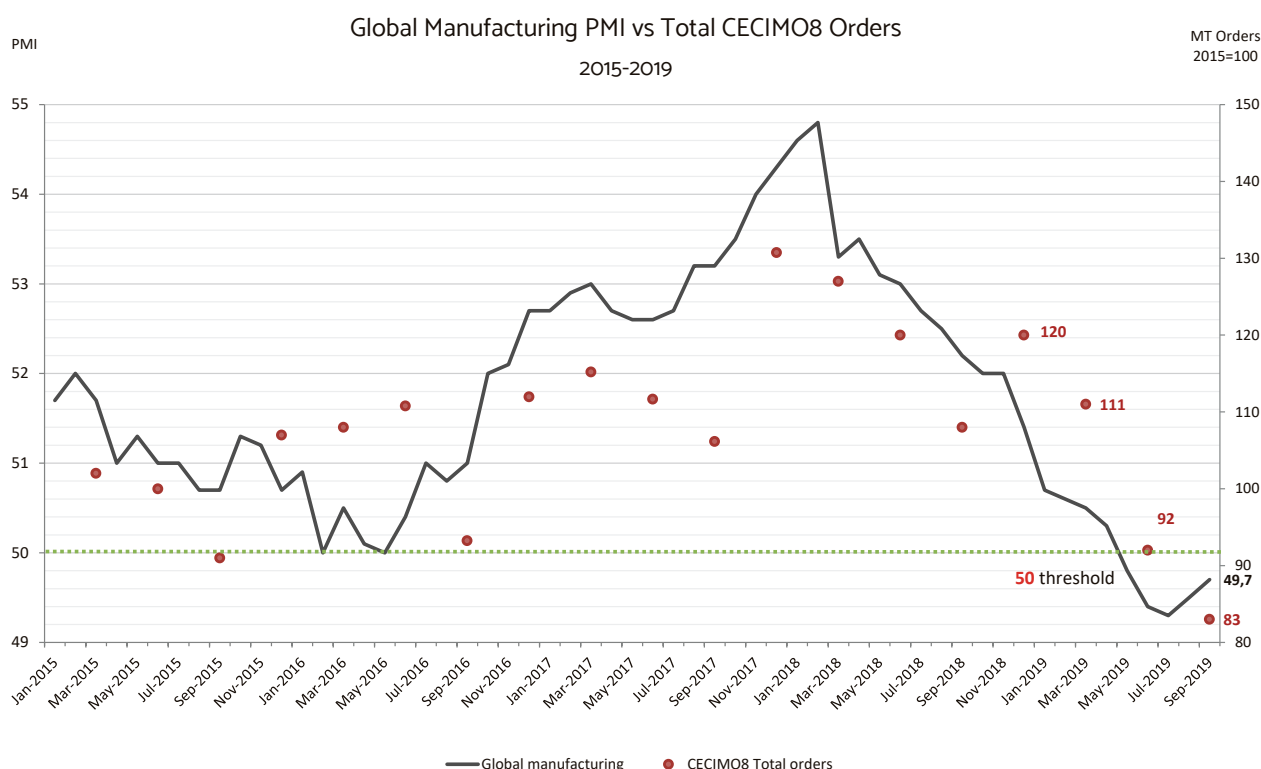
The Business Climate Barometer is a quarterly survey that assesses CECIMO-based companies' current business sentiment and expectations for the next quarter.

The Business Climate Barometer will not be published in this edition of the Statistical Toolbox, as it is under review. The CECIMO Economic Department is modifying the survey in order to collect data more efficiently and reviewing the methodology, so that the results are both meaningful and relevant for CECIMO members.

The CECIMO Economic Department expects to publish a new and improved Business Climate Barometer soon.

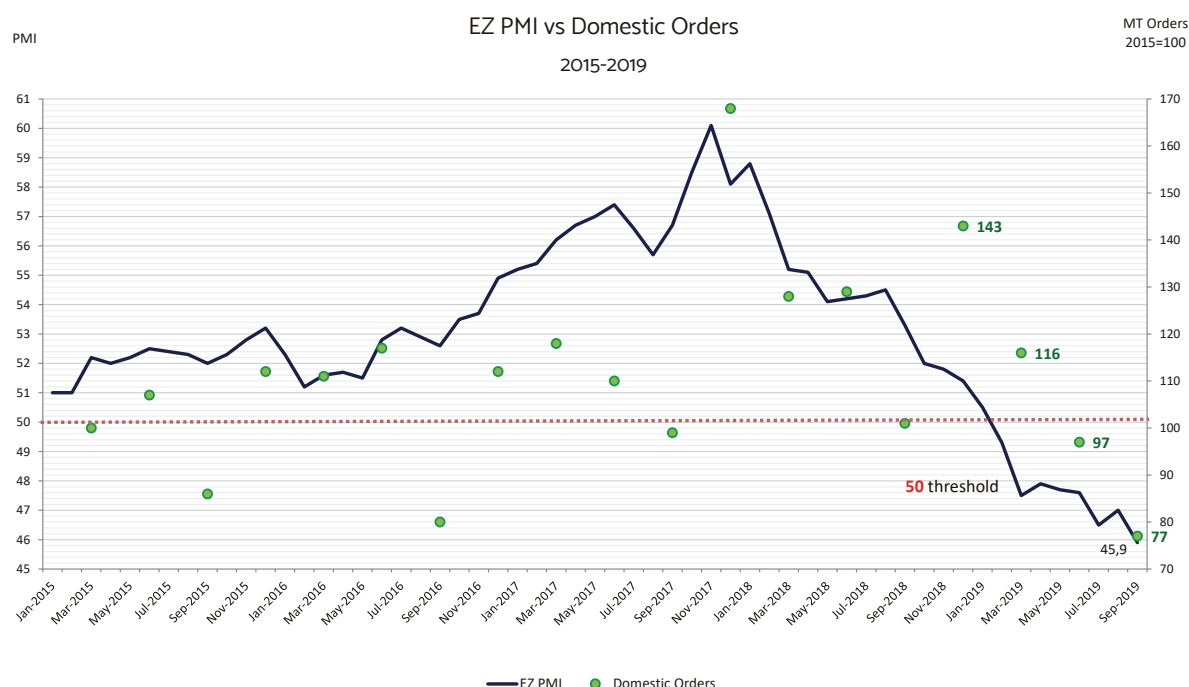
## 4.2 Purchasing Managers Index (M)

In Q3 2019, the global manufacturing PMI stands below the 50-point threshold. In July 2019, the index for global manufacturing confidence was 49,3 and 49,5 in August 2019. By September 2019, this index increased to 49,7.

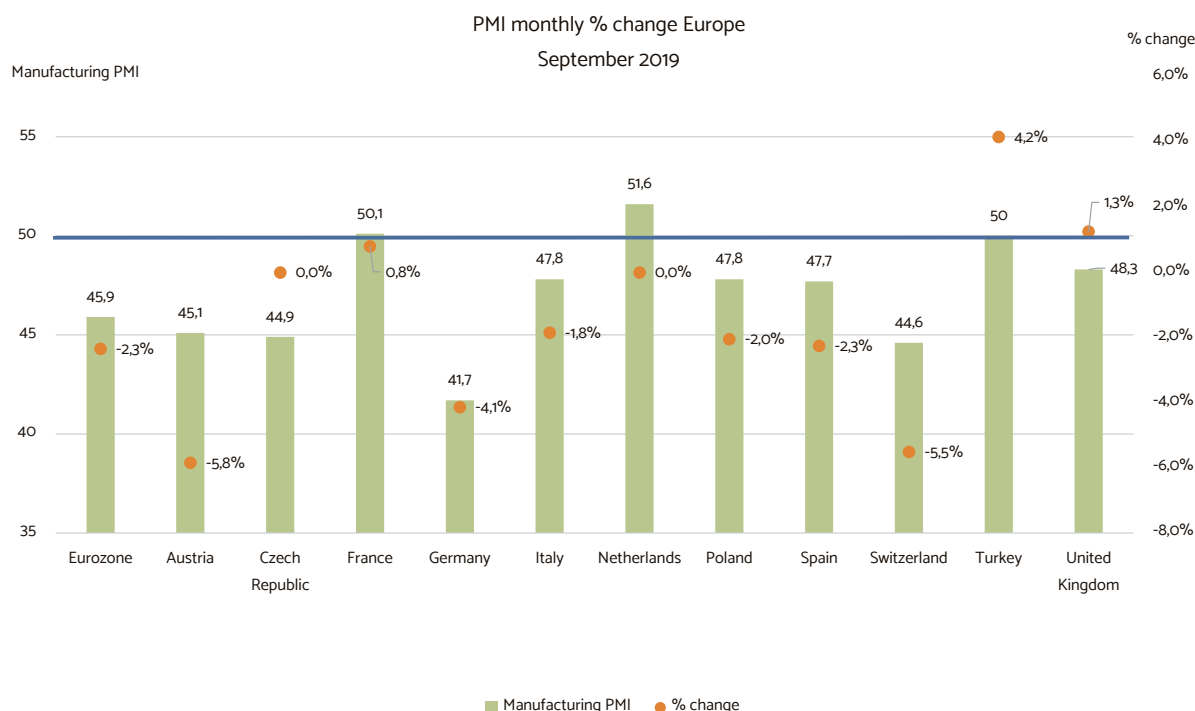


- Short term increases in global manufacturing confidence contrast with a stagnating global production.
- New industrial orders decrease as international trade volumes weaken.
- Downturns continued in the intermediate and investment goods sub-industries in September, with both seeing contractions in production and new order intakes. The consumer goods industry fared better, as output and new businesses both increase.
- Manufacturing managers' confidence grew in China, USA, India, Canada and the Netherlands, as well as in France and Turkey, albeit slightly weaker.
- Confidence levels go down however in the United Kingdom, Italy, Spain, Russia, the Czech Republic, Austria and Germany.

In the Eurozone, manufacturing manager's confidence had an index value of 45,9 in September 2019, the lowest mark since July 2012. The confidence index among Eurozone manufacturers follows a clear downward trend since the beginning of the current year, when the flash readings registered values below the 50-point mark.



- The Eurozone economy came close to stalling at the end of the third quarter as demand for goods and services fell at the fastest rate in over six years.
- The slowdown was mainly driven by a decrease in new orders for goods and services for the first time since January. It dropped at the sharpest rate since June 2013.
- The deteriorating picture in September was led by a deepening manufacturing downturn, where output fell for an eighth straight month.
- The overall eurozone figures were dragged down by a board deterioration in the German manufacturing outlook.
- Ongoing concerns about trade wars and geopolitical stress, namely Brexit, have worsen manufacture's economic expectations, leading to a gloomier economic growth and demand prospects in the Eurozone.



### Austria

Manufacturing PMI in Austria slipped to an 83-month low of 45,1 in September 2019 from a 47,9 in the previous month. New orders dropped for the ninth consecutive month and the rate of decline was the quickest seen since October 2012; output also fell at the fastest rate since October 2012.

### Czech Republic

Czech Manufacturing PMI stood at 44,9 in September 2019, unchanged from August. Despite production and industrial orders slow down at a slower pace than previously, unemployment has increased at a fastest pace since November 2009. Manager's confidence concerning production over the next 12 months was at levels of late 2012, mostly due to an uncertain trade scenario and a sluggish industrial demand.

### Germany

Germany's Manufacturing PMI was revised to 41,7 in September. It shows that confidence decreased compared to August's 43,5. It is the steepest contraction in the sector since June 2009, led by a sharp decrease both in output and in new orders and by a further decline in backlog work. German manufacturing managers seem strongly pessimistic about the general economic outlook.

### Spain

Spanish Manufacturing PMI fell to 47,7 in September 2019 from 48,8 in August. It is the lowest level since January 2013. The latest reading pointed to the sharpest deterioration in the Spanish manufacturing sector since April 2013, amid the steepest decline in turnover and international orders in six and a half years and following an international sales drop like the one seen in the third quarter of 2012. Manager's confidence has also been affected by political and economic uncertainties, both at a national level and abroad.

### France

Manufacturing PMI in the French economy decreased to 50,1 in September 2019 from 51,1 in the previous month. With a weak domestic market, production and industrial orders have decreased, while the job creation pace has lessened slightly. Export volumes have nonetheless remained unchanged.

## Italy

Italian Manufacturing PMI dropped to 47,8 in September 2019 from 48,7 in August. The last month of Q3 was the 12th consecutive month of contraction in the manufacturing sector's confidence. It also recorded the strongest deterioration in business conditions in six months, mostly driven by a declining production and order intake. Moreover, Italian international sales dropped as well, as European and United States industrial demand weakens.

## Switzerland

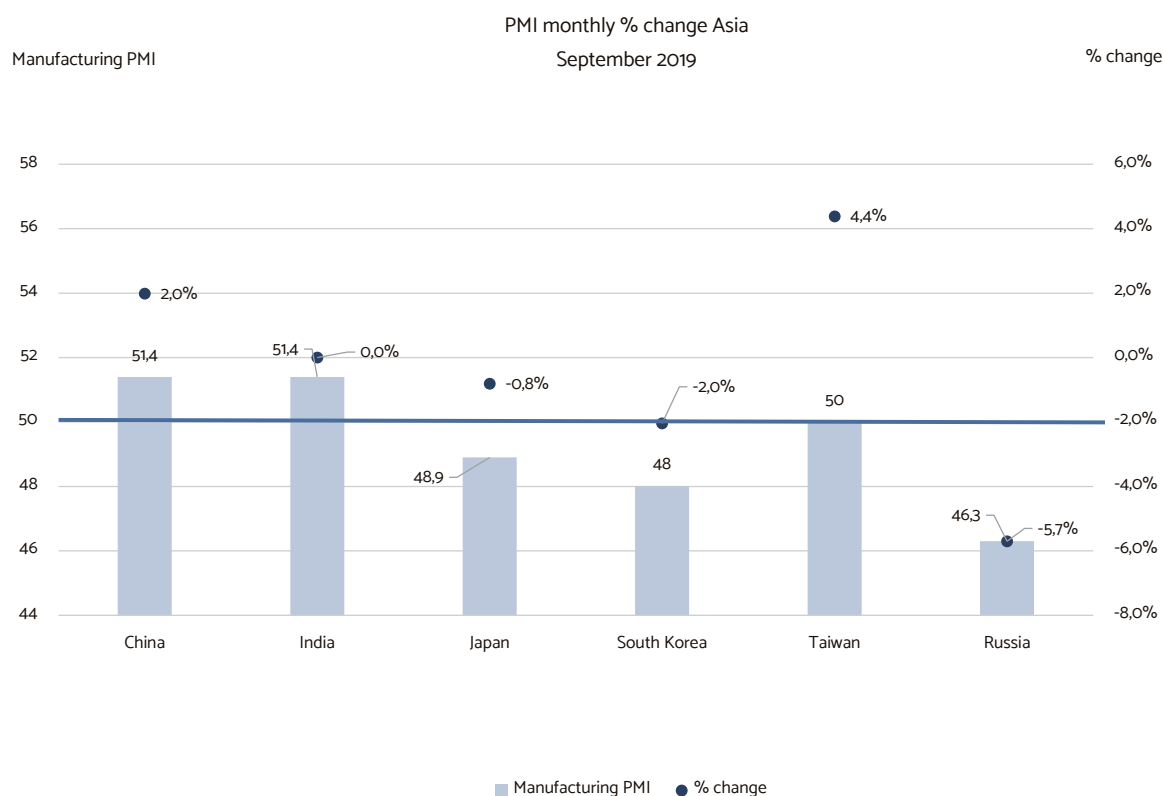
The Swiss Manufacturing PMI fell to 44.6 in September 2019 from 47.2 in the previous month. It is the steepest contraction in sectorial confidence sector since July 2009, mainly driven by concurrent and significant decreases in production levels, industrial orders intake, consumption and stock purchases.

## Turkey

The Turkish PMI Manufacturing Index rose to 50 in September 2019 from 48,0 in the previous month, pointing to a stabilisation of the sector after 17 consecutive months of tightening. This increase was driven mainly by improving employment levels, an increasing order intake for the first time in more than a year (even though Turkish exports have fallen, and production is somewhat stagnant).

## United Kingdom

British Manufacturing PMI rose to 48,3 in September 2019 from August's 47,4 (the lowest in six and a half years). Over the last five months, British manufacturers confidence has remained below 50, its longest run since mid-2009. Production has fallen due to a decreasing order intake from the domestic and foreign markets. Furthermore, companies have reported that capacity has dwindled due to a softer demand for industrial goods. As Brexit talks restart, input buying levels have increased.



## **China**

The General Manufacturing PMI for China has unexpectedly risen to 51,4 in September 2019 from 50.4 in August, above the market expectations set at 50,2. It is the strongest pace of expansion in China manufacturing confidence since February 2018. Such increase has been driven mainly by a year-high surge in production and a hike in the growth's pace of orders intake. This takes place in the middle of a decrease in overseas sales. Backlog work went up at the fastest rate since the beginning of 2018. Even though the manufacturing context has improved slightly, business expectations in China are weak, as doubts about the ongoing China-US trade talks linger.

## **India**

Indian Manufacturing PMI came in at 51,4 in September 2019, unchanged from August's 15-month low value. Indian production grew at its slowest pace since March 2018, while order intake increases at its slowest pace in almost two years. Exports edge closer to stagnation and purchasing volumes fall, leading to subsequent drops in input stocks.

## **Japan**

Japan's Manufacturing PMI was 48,9 in September 2019, against August's to a final 49,3 index value. This decrease signals the further deterioration of Japanese manufacturing confidence and performance. Production and orders decrease, while overseas sales to key markers (China, the US and Europe) decline at a faster rate. Japanese have curtailed their input purchasing during the slowdown. Global trade woes and a weak domestic market are significantly hampering Japanese manager's confidence.

## **South Korea**

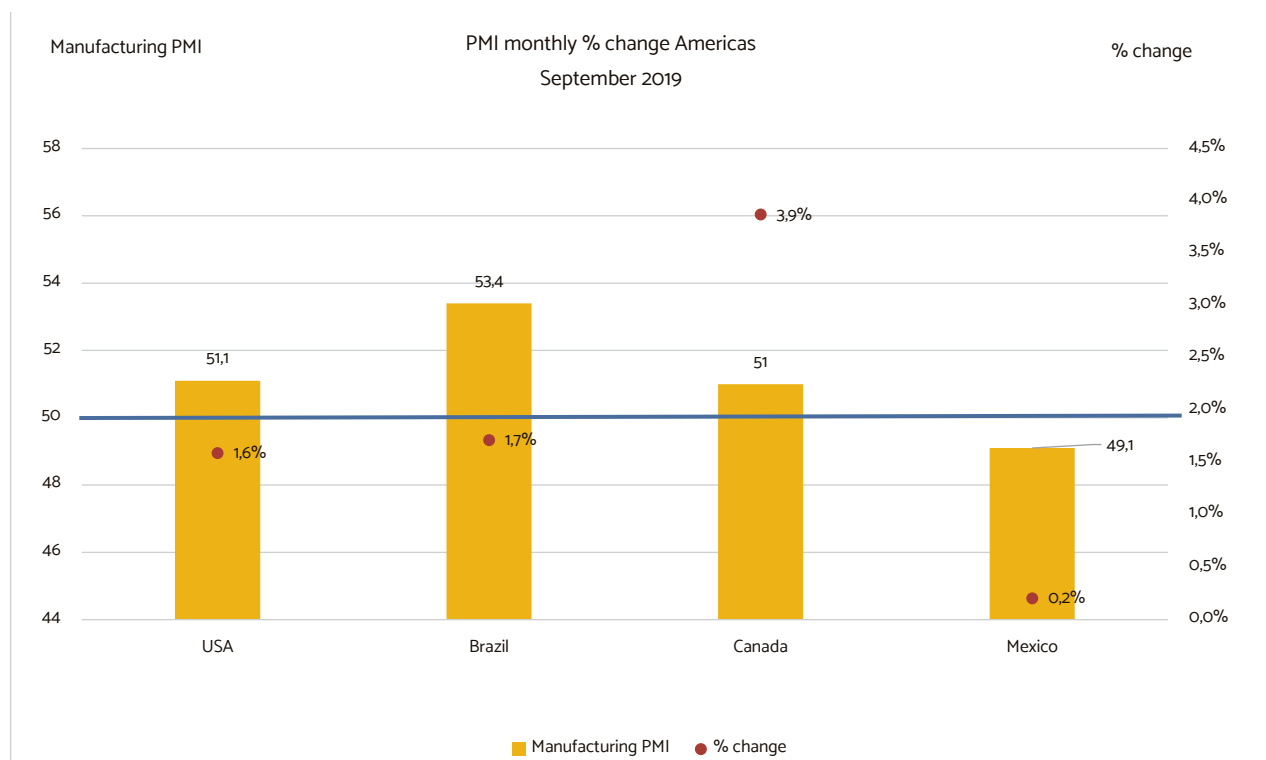
South Korean Manufacturing PMI declined to 48 in September 2019 from 49 in the previous month. It is the fifth consecutive month of contraction in the manufacturing sector, mainly due to a slow-moving domestic market. In terms of foreign markets, South Korean sales abroad decreased for the eleventh straight months, especially to Europa, Japan and China. In the meantime, industrial orders stabilise after a downward period. As in Japan, business confidence remains weak due to the internal market's sluggishness and the contraction in global trade.

## **Taiwan**

Taiwanese Manufacturing PMI rose to 50 in September 2019 from 47,9 in August. As confidence reaches the 50-point threshold, operating conditions in the Taiwanese manufacturing sector seem to stabilise. This increase ends an 11 month long downward trend in managerial confidence, yet it takes place during a slowdown in production and order intake rates, as well as decreasing exports and imports. Meanwhile, backlogs of work increased for the first time in four months. Foreign trade uncertainties are a top concern among manufacturing managers.

## **Russia**

Manufacturing PMI in Russia declined to 46,3 in September 2019 from 49,1 In August. It is the fifth consecutive month of contraction and the sharpest drop of the year. Industrial production shrinks and order intake falls at a greater rate, with exports decreasing and backlog work quickly depleting.



## US

US Manufacturing PMI was revised slightly higher to 51,1 in September 2019. It improves on the previous month's ten-year low value of 50,3. It is the highest reading since April, but the overall business condition in the US manufacturing sector is modest at best. If considered on a yearly basis, Q3 2019 shows the worst performance across the sector since Q3 2009.

## Canada

Canadian Manufacturing PMI rose to 51 in September 2019 from 49,1 in August. It is the sharpest expansion since February, driven by an increasing industrial production (the first in six months) and a slowly advancing order intake. Exports and job creations have also contributed to this improvement.

## Mexico

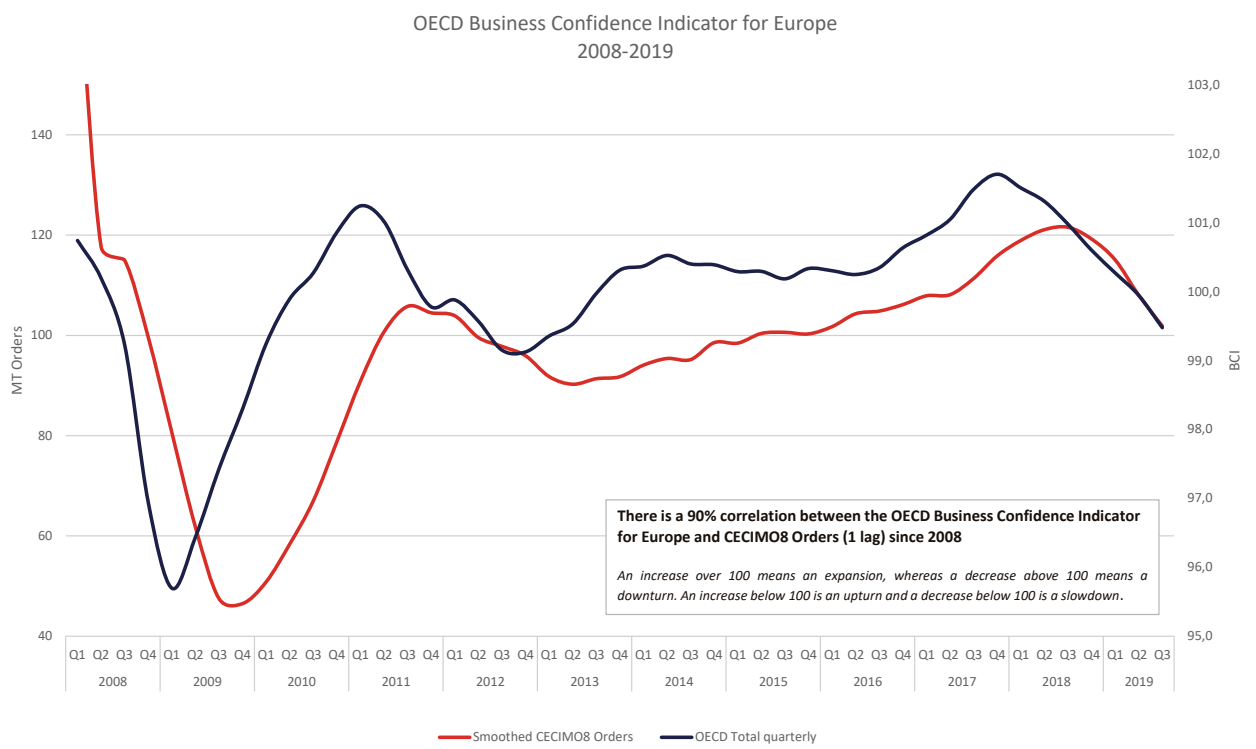
Manufacturing PMI in Mexico rose to 49,1 in September 2019 from 49 in August. Manufacturing manager's confidence goes down due to a shrinking factory activity, as production drops, demand weakens, and general economic condition turns increasingly negative. Additionally, new export orders shrink due to downward revisions to sales projections and weak demand from US companies.

## Brazil

Brazilian Manufacturing PMI increased to 53,4 in September 2019 from 52,5 in the previous month. September saw the strongest expansion in factory activity since November 2017, as new orders and production increased at the fastest rates in one-and-a-half years. Strong job creation and stable price levels, both for inputs and output, further strengthen this trend.

## 4.3 OECD Business Confidence Indicator (M)

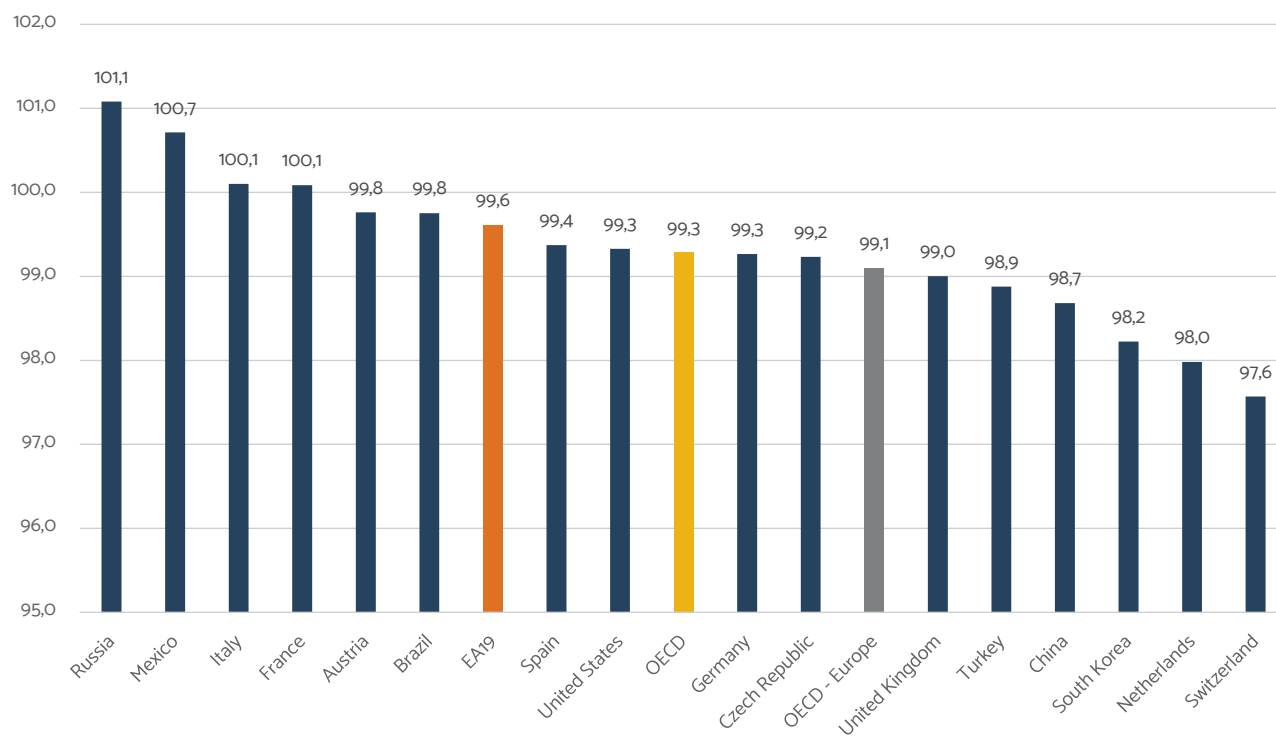
In September 2019, the OECD Business Confidence Indicator for Europe registered a value of 99,3 (below the 100-point mark), which represents a -0,25% drop from August's 99,5 index. The BCI has consistently decreased since April 2019.



- The OECD BCI average in September 2019 is 99,3, below the 100-point mark. Business confidence deteriorated this quarters against the previous quarter.
- Russia registers again the highest business confidence mark, with an index value of 101,1. Confidence among Russian businesses remains however somewhat stagnant.
- CECIMO countries above the OECD average are Italy (100,1), France (100,1), Austria (98,8) and Spain (99,4). Other relevant countries with an above-average confidence climate are Mexico (100,7) and Brazil (99,8). The Eurozone also has a better than average confidence level (99,6), albeit below the 100-point threshold.
- The United States and Germany are both in line with the September 2019 OECD average (99,3).
- Weaker indexes are registered in the Czech Republic (99,2), the United Kingdom (99), Turkey (98,9), China (98,7), South Korea (98,2) and the Netherlands (98).
- Switzerland recorded the worst result among CECIMO countries, with a BCI of 97,6.

# OECD Business Confidence Indicator (BCI)

September 2019

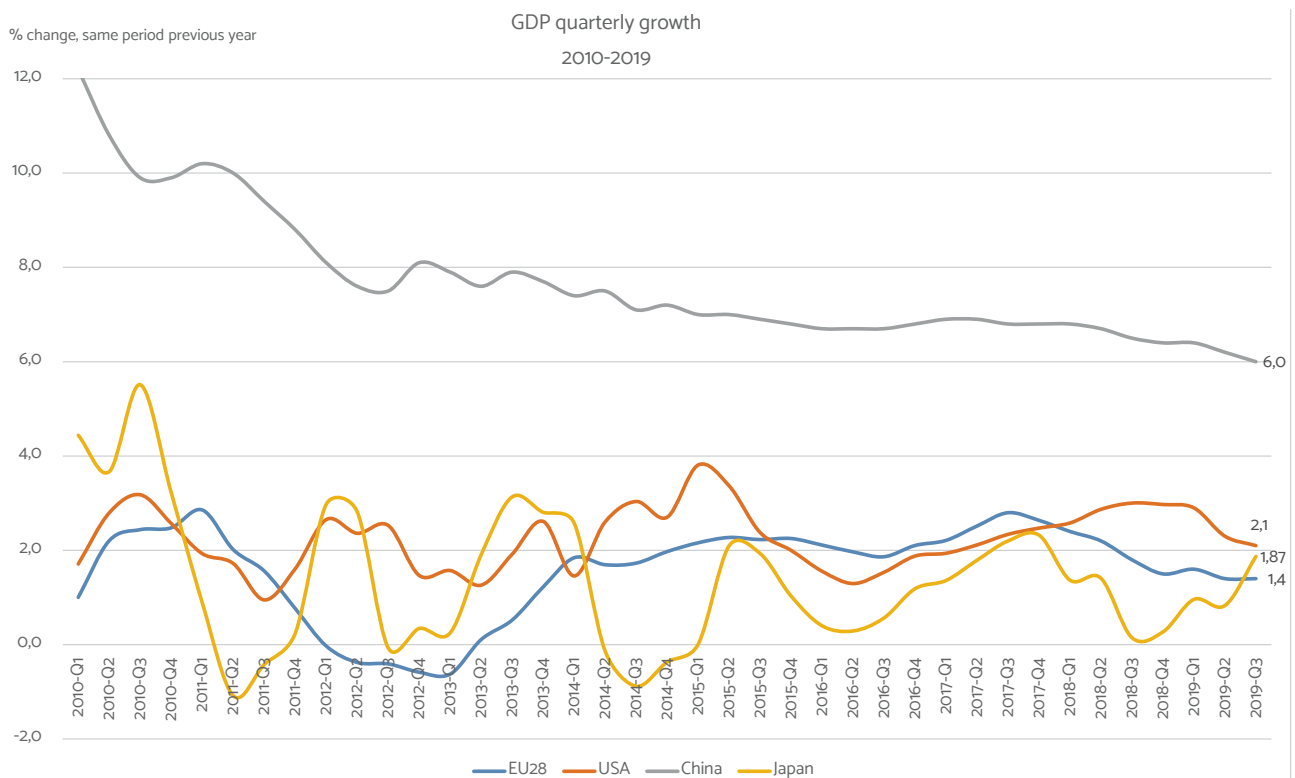


# 5. General Indicators

## 5.1 GDP (M)

### Year-on-year quarterly GDP growth in Q3 2019:

- For EU 28, GDP yearly growth rate in Q3 2019 is 1,4%, as in Q2 2019.
- United States yearly GDP growth in the meantime was 2,1%, slightly below the originally forecasted values. The pace of growth decreases for the third consecutive quarter.
- Chinese GDP stands at 6% in Q3 2019. The yearly growth rate continues to slow down.
- Japanese GDP registers a significant increase in Q3 2019: it grew at a 1,9% rate on a yearly basis as opposed to Q2 2019's 0,8%. The Japanese economy fared better than the forecasted 1,4% yearly growth rate.

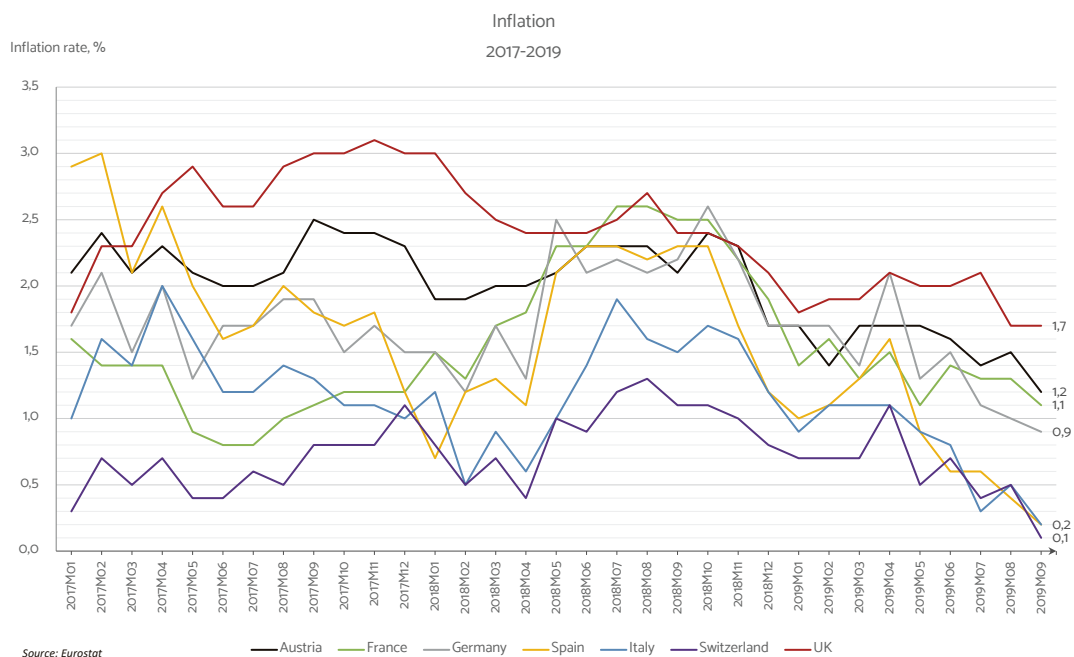
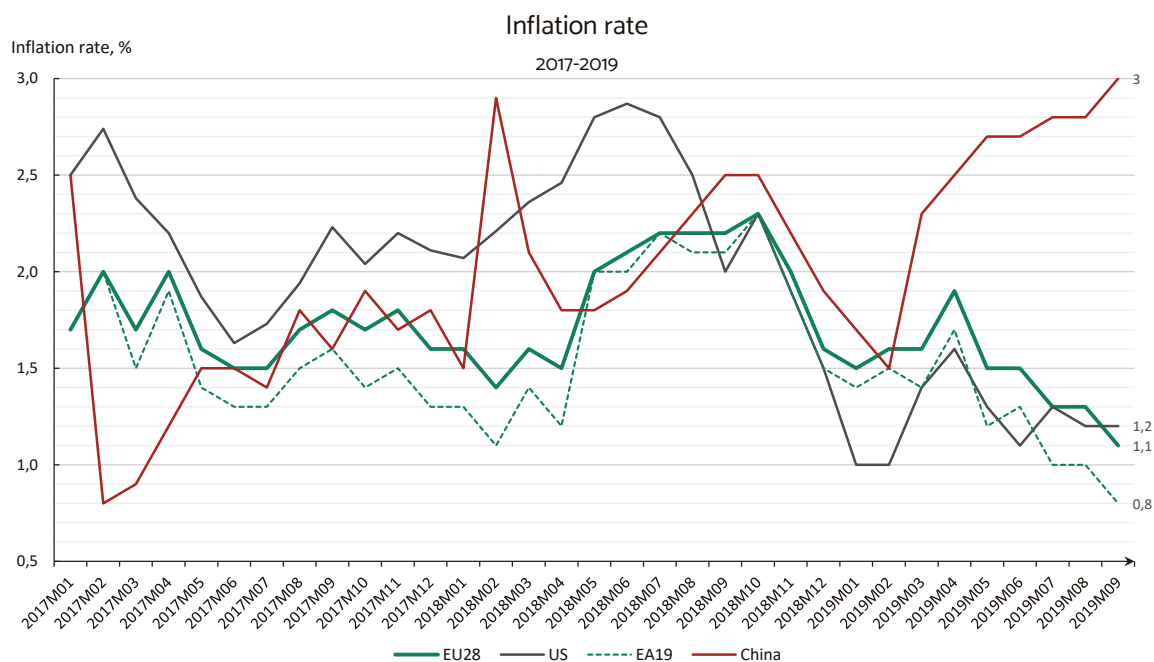


## 5.2 Inflation (M)

In September 2019, at the end of Q3 2019, the EU inflation rate was 1,1%, a decrease from July's 1,3%. For the Eurozone, the recorded inflation rate was 0,8%, down from the 1,0% rate from July.

In Q3 2019, the inflation average for EU 28 was 1,2% and for the Euro Area, 0,8%.

In the US, the average inflation rate in Q3 2019 was 1,2%, while the quarterly average price levels in Switzerland is 0,3%. The Chinese inflation rate for this specific period is 2,9%, based on Eurostat data.

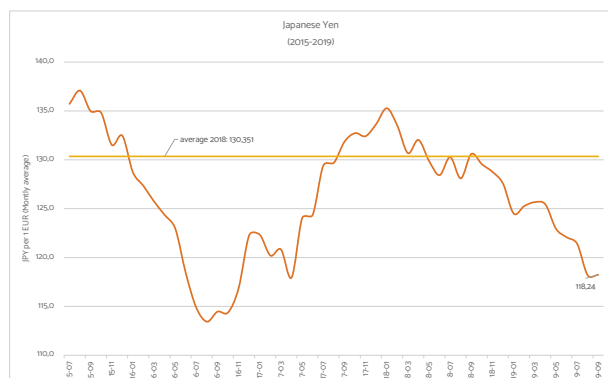


#### Monthly Inflation (%)

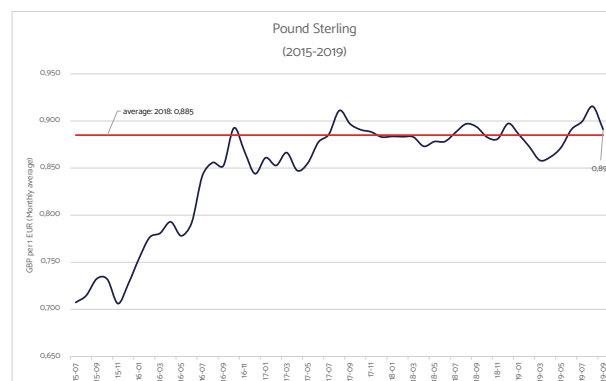
	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19
United Kingdom	1,8	1,9	1,9	2,1	2,0	2,0	2,1	1,7	1,7
Austria	1,7	1,4	1,7	1,7	1,7	1,6	1,4	1,5	1,2
France	1,4	1,6	1,3	1,5	1,1	1,4	1,3	1,3	1,1
Germany	1,7	1,7	1,4	2,1	1,3	1,5	1,1	1,0	0,9
Spain	1,0	1,1	1,3	1,6	0,9	0,6	0,6	0,4	0,2
Switzerland	0,9	1,1	1,1	1,1	0,9	0,8	0,3	0,5	0,2
Italy	0,7	0,7	0,7	1,1	0,5	0,7	0,4	0,5	0,1

## 5.3 Foreign Exchange Rates (M)

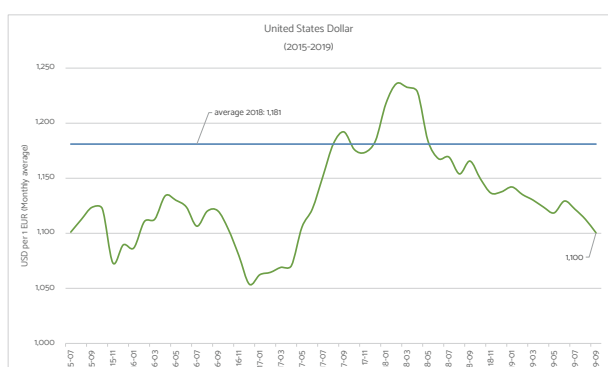
According to the European Central Bank, the effective exchange rate of the euro in September 2019 appreciated moderately compared with the June 2019 projections, reflecting the relative strength of the euro against the pound sterling as well as against the Chinese renminbi and other emerging market currencies.



The Japanese Yen exchange rate was, on a quarterly average, 119,3 per euro. The currency continues to drop below the 2018 average line (130,3) in Q3 2019.



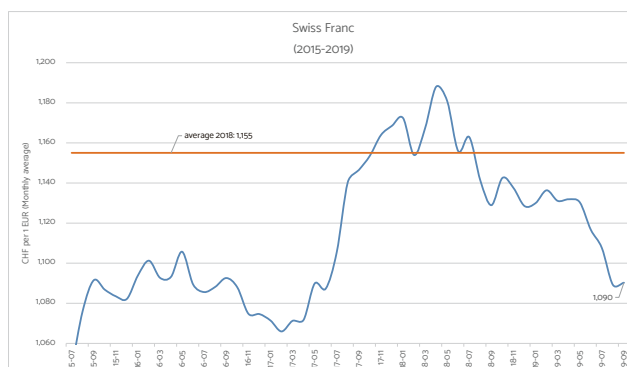
The Pound Sterling is valued above the 2018 average, with an exchange rate of 0,89 pence per euro. The market is largely sceptical the EU will agree to Britain's latest offer.



In September 2019, the US Dollar benefited from seasonal demand and uncertainty around the US-China trade war. Conversely, the euro lost significant value against the greenback as the European economy appears to slow down. It is expected that demand for the US dollar moving forward to Q4 2019 would help strengthen this currency against the Euro.



The Chinese Yuan strengthens in Q3 2019. The monthly value in September 2019 (7,85 yuan per euro) is greater than the yearly average of 2018. This however means the currency is above the 7,00 yuan limit, which could potentially make Chinese export more costly.



The Swiss franc approaches parity in Q3 2019 against the Euro. The outlook for the Swiss economy grows increasingly uncertain, in line with the general economic situation of the European Union, the Confederation's main trade partner.

# Glossary <sup>i</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.

## 2.3 Industrial Production Index

The objective of the production index is to measure changes in the volume of output at close and regular intervals, normally monthly. It provides a measure of the volume trend in value added over a given reference period. The production index is a theoretical measure that must be approximated by practical measures. Value added at basic prices can be calculated from turnover (excluding VAT and other similar deductible taxes directly linked to turnover), plus capitalised production, plus other operating income plus or minus the changes in stocks, minus the purchases of goods and services, minus taxes on products which are linked to turnover but not deductible plus any subsidies on products received. Industrial production is compiled as a fixed base year Laspeyres type volume-index.

Base period: Year 2010 = 100.

Source: Eurostat.

## 3.1 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.

## 3.2 Capacity Utilisation 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](http://ec.europa.eu/economy_finance/db_indicators/surveys/documents/userguide_en.pdf)

### 3.3 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>

### 3.4 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.

### 4.2 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>

### 4.3 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>

# Geographical Information

## **CECIMO countries**

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

## **Euro area (EA) / Eurozone (EZ)**

The euro area (EA19), also called the Eurozone, consists of 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.

# Other Symbols and Acronyms

## **M / m (Toolbox headings)**

M = Macro-economic. non-caps (m) = microeconomic.

## **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





# cecimo

European Association of the Machine Tool Industries  
and related Manufacturing Technologies

## Member Associations

### CREDITS

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[www.metalltechnischeindustrie.at](http://www.metalltechnischeindustrie.at)

Belgium: AGORIA  
Federatie van de Technologische  
Industrie  
[www.agoria.be](http://www.agoria.be)

Czech Republic: SST  
Svazu Strojírenské Technologie  
[www.sst.cz](http://www.sst.cz)

Danish Manufacturing Industries  
Cooperation  
A part of the Confederation of Danish  
Industry  
[www.isa.di.dk](http://www.isa.di.dk)

Finland: Technology Industries of  
Finland  
[www.teknologiateollisuus.fi](http://www.teknologiateollisuus.fi)

France: SYMOP  
Syndicat des Entreprises de  
Technologies de Production  
[www.symop.com/fr](http://www.symop.com/fr)

Germany: VDW  
Verein Deutscher  
Werkzeugmaschinenfabriken e.V.  
[www.vdw.de](http://www.vdw.de)

Italy: UCIMU  
Associazione dei costruttori  
Italiani di macchine utensili robot e  
automazione  
[www.ucimu.it](http://www.ucimu.it)

Netherlands: FPT-VIMAG  
Federatie Productie Technologie /  
Sectie VIMAG  
[www.fpt-vimag.nl](http://www.fpt-vimag.nl)

Portugal: AIMMAP  
Associação dos Industriais  
Metalúrgicos, Metalomecânicos e  
Afins de Portugal  
[www.aimmap.pt](http://www.aimmap.pt)

Spain: AFM - Advanced  
Manufacturing Technologies  
Asociación española de fabricantes  
de máquinas-herramienta,  
accesorios, componentes y  
herramientas  
[www.afm.es](http://www.afm.es)

Sweden: SVMF  
Machine and Tool Association of  
Sweden  
[www.svmf.se](http://www.svmf.se)

Switzerland: SWISSMEM  
Die Schweizer Maschinen-, Elektro-  
und Metall-Industrie  
[www.swissmem.ch](http://www.swissmem.ch)

Turkey: MIB  
Makina Imalatçileri Birliği  
[www.mib.org.tr](http://www.mib.org.tr)

United Kingdom: MTA  
The Manufacturing Technologies  
Association  
[www.mta.org.uk](http://www.mta.org.uk)

# EMO

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**cecimo** is the European Association representing the common interests of the Machine Tool Industries and related manufacturing technologies globally and at EU level. We bring together 15 National Associations of machine tool builders, which represent approximately 1500 industrial enterprises in Europe (EU + EFTA + Turkey), over 80% of which are SMEs. CECIMO covers more than 98% of total machine tool production in Europe and more than one third worldwide. 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.