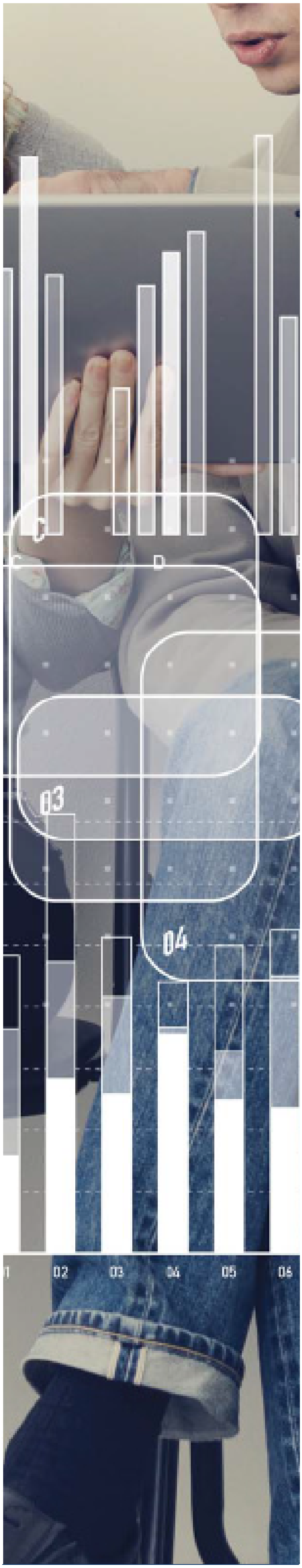
cecimo

European Association of the Machine Tool Industries
and related Manufacturing Technologies

Economic & Statistical Toolbox

Third Quarter 2020



In this issue:

- European and global manufacturing recover partially in the third quarter of 2020 but the overall yearly trends remain negative.
- CECIMO domestic, foreign, and total orders decrease at a slower pace.
- Investment levels fall in Europe and banks become more sensitive to risks. Business sentiment boosts in the short-term despite the negative business outlook.
- New GDP forecast shows greater divergence between key industrial markets.

cecimo

www.cecimo.eu

Table of Contents

Introduction

The first wave of lockdown measures aimed at containing the coronavirus pandemic began to ease during the third quarter of 2020, following a three-month period of sharp output, demand and supply chain cutbacks. Indicators for the current quarter show a near-term improvement of European manufacturing yet the overall juncture remains on the downside, as uncertainty and a probable second round of lockdowns dampen overall business and investment prospects and push industrial demand further down.

As to the performance of European machine tool sector, Q3 2020 order intake improves compared with the previous quarter but, overall, orders continue to contract on a yearly basis. Compared to Q3 2019, CECIMO8 domestic orders have dropped by -35% while foreign orders have registered a -30% drop. Total orders have gone done by -32% on the same basis.

CECIMO **MT production** levels are also down, as early estimates show output decreasing by more than 30% in 2020 due to the pandemic. In absolute volumes, machine tool production is expected to drop to 18,7 billion euros in 2020. This is the worst score for CECIMO aggregated machine tool output since the 2009 financial crisis.

The weak performance of the machine tool industry is but one narrative of the broader industrial woes currently taking place in the European market. EU27's **Industrial Production Index** continue to decrease in the third quarter of 2020. The European economy's average IPI quarterly reading is currently 99,3, a -5% decrease compared to the same period of the previous year. In sectoral terms, the investment goods sector reports double-digit decreases during this three-month period.

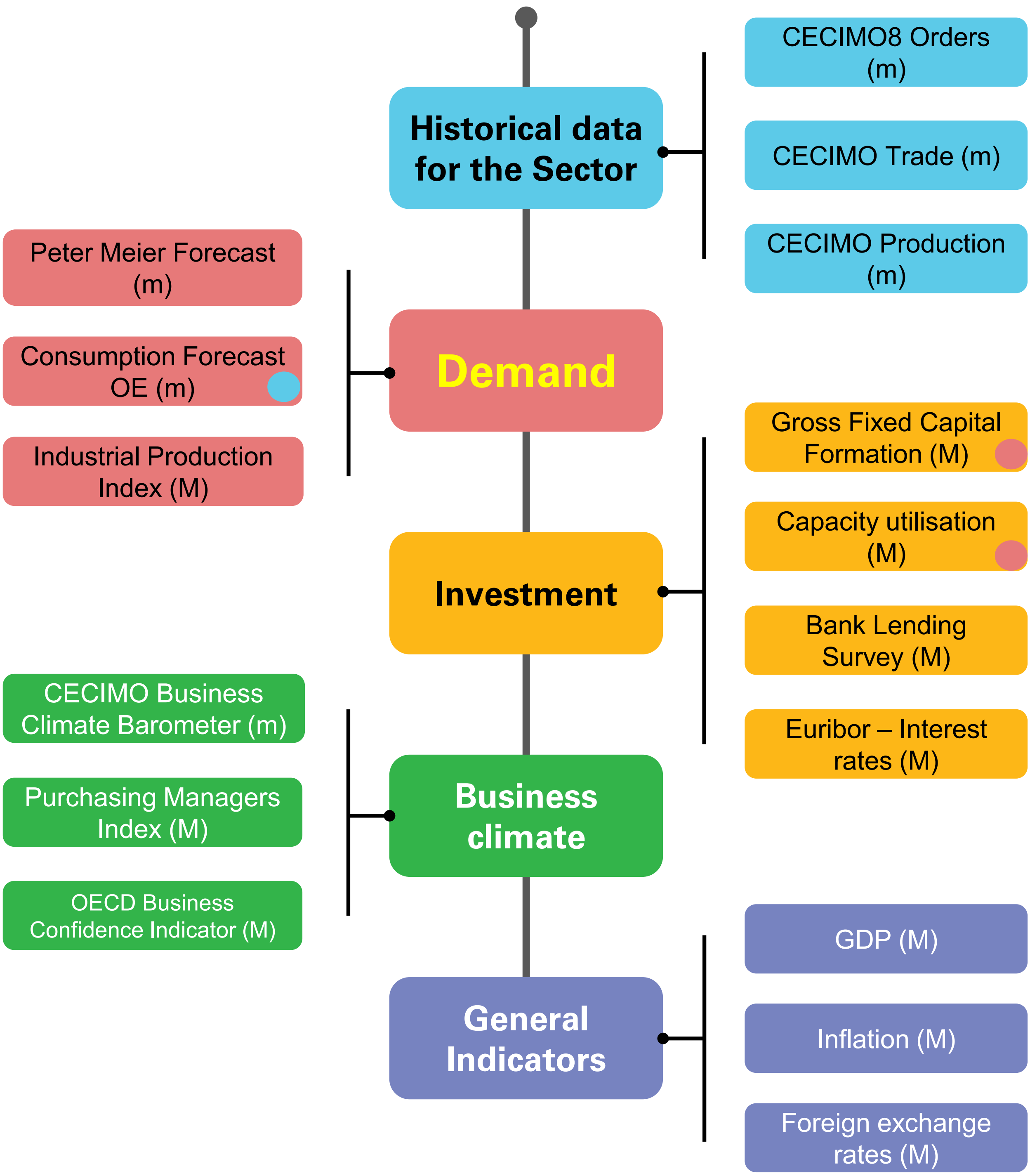
European **MT consumption** will go through a two-stage recovery following the first wave of the pandemic. In 2020, MT demand is expected to go down by -33% and rebound partially by 23% in 2021. OE estimates indicate that the European recovery will be the strongest, yet it will not offset the losses of the previous year. In terms of volumes, European consumption will go down to 13,3 billion euros from 19,8 billion euros in 2019. By 2024, consumption levels would total 18,8 billion euros.

Gross fixed capital formation decreased further in the third quarter of 2020, yet investment has decreased at a slower pace (-4% against Q3 2019 figures). **Capacity utilisation** in the European investment goods sector jumped to 72% in Q3 2020, up from a 25-year low of 64,6% in Q2 2020. It is a short-term improvement that stems from the easing of lockdown and the near-term manufacturing rally across Europe. Despite the upturn, capacity utilization is estimated to remain below pre-crisis levels in Q4 2020. According to the European Central Bank (ECB)'s **Bank Lending Survey**, credit standards and overall terms and conditions of new loans for both SMEs and large firms tighten significantly. Eurozone banks are becoming less tolerant of firm-related risks, given the negative economic outlook for Europe. While this shift in lending takes place, the **ECB's monetary policy** remains unchanged, still focused on supporting lending to firms and household.

Global manufacturing PMI at the end of Q3 2020 outlines a positive outlook, suggesting potential growth in industrial firms' activity, in the midst of the near-term improvement of manufacturing conditions in key markets. **OECD's Business Climate Indicator**, however, depicts a more moderate narrative, wherein business sentiment is comparatively better than that seen in Q2 2020 yet the business environment in the advanced economies remains shrouded in uncertainty, with weak growth expectation, especially in Europe.

Lastly, this new edition of the Economic and Statistical Toolbox includes new GDP estimates for Europe, the United States, Japan and China, which show apparently diverging growth trends between these markets.

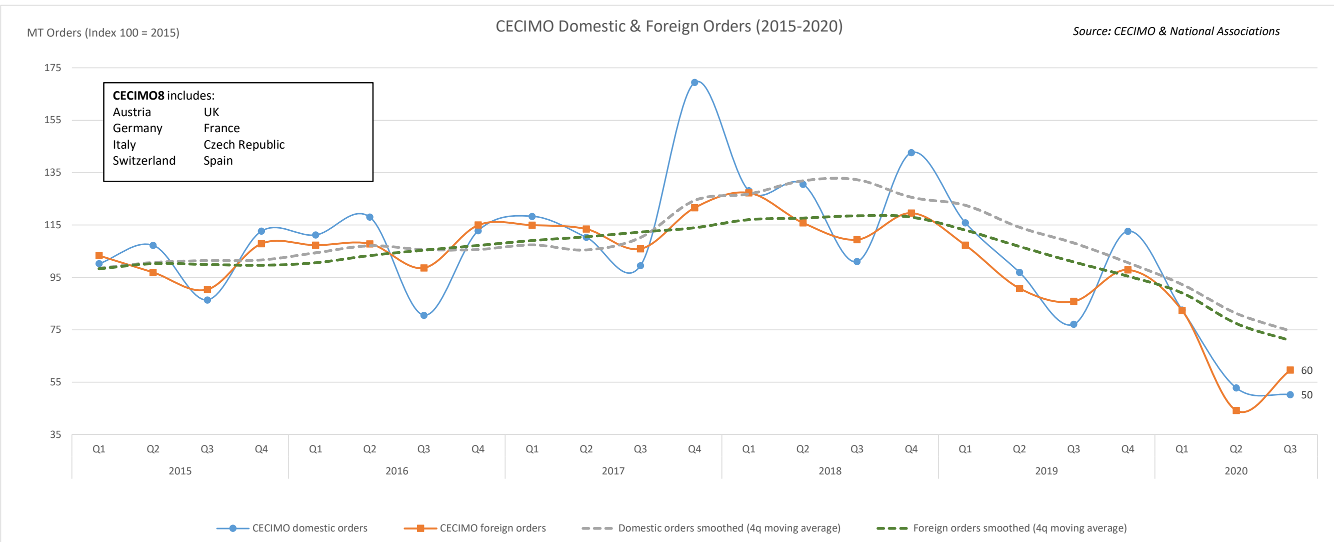
Toolbox Mind Map



1. Historical Data for the Sector

1.1 CECIMO8 Orders (m)

CECIMO8 orders have decreased in the third quarter of 2020. Compared with Q3 2019, CECIMO domestic orders have dropped by -35% while foreign orders have registered a -30% drop. Total orders have gone done by -32% on the same basis. European machine tool order intake weakens further in the aftermath of the first wave of the coronavirus contagion. The situation is comparatively better than the previous quarter, but the overall scores show that the industry is suppressed by the fallout of the coronavirus pandemic.

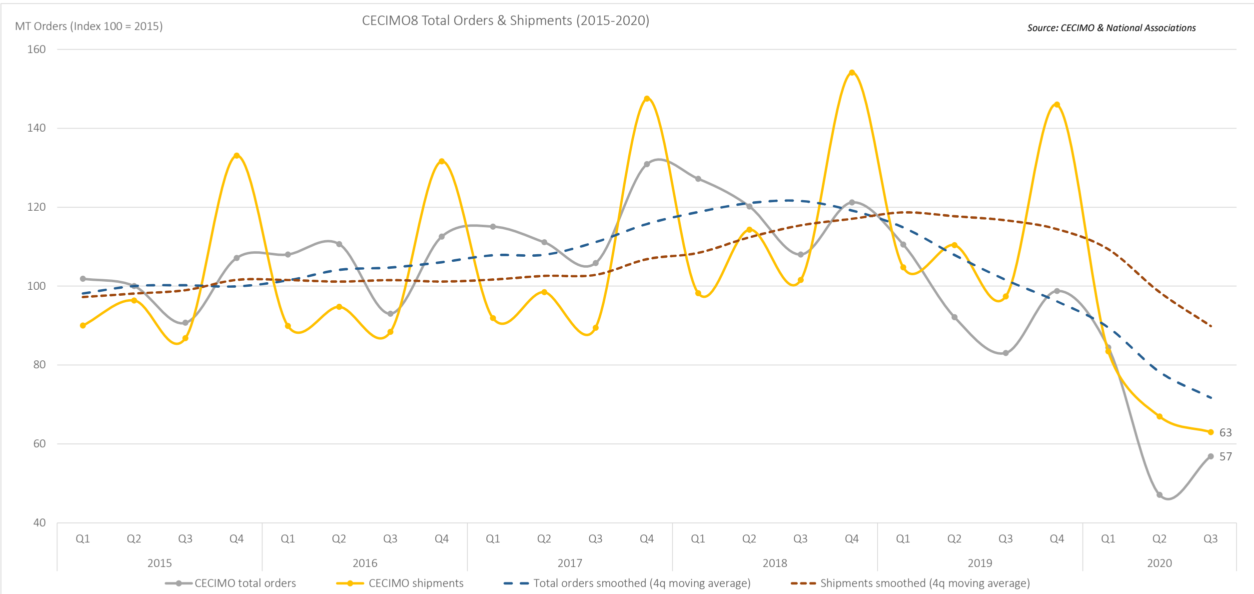


Domestic orders:

- French domestic orders plummet by -74% in Q3 2020 against Q3 2019 values. It is a slight improvement from Q2 2020's bleak reading (-94% yearly growth rate), yet it shows the deep impact the pandemic has had on the French machine tool sector.
- The British domestic market registers a steep yearly drop in Q3 2020, as domestic order intake rolls back by -57%.
- Domestic orders also drop significantly in Switzerland (-39%), Germany (-26%) and Italy (-24%).
- Conversely, domestic order intake has increased slightly in the Czech Republic, by 7% against Q3 2019, and in Spain, which registered a very significant yearly growth of 41%.

Foreign orders:

- Foreign orders intake falls drastically in France (-57%) compared to Q3 2019, as external demand for French machine tools contracts strongly, in line with domestic demand.
- Very significant yearly drops are also reported in the Switzerland (-36%), UK (-33%), Germany (-30%), Czech Republic (-30%) and Spain (-27%).
- Even though the Italian industry is still in a downturn, like other European markets, Italian foreign orders decrease by a moderate -6% in the third quarter of 2020 (after a -37% yearly drop in Q2 2020).

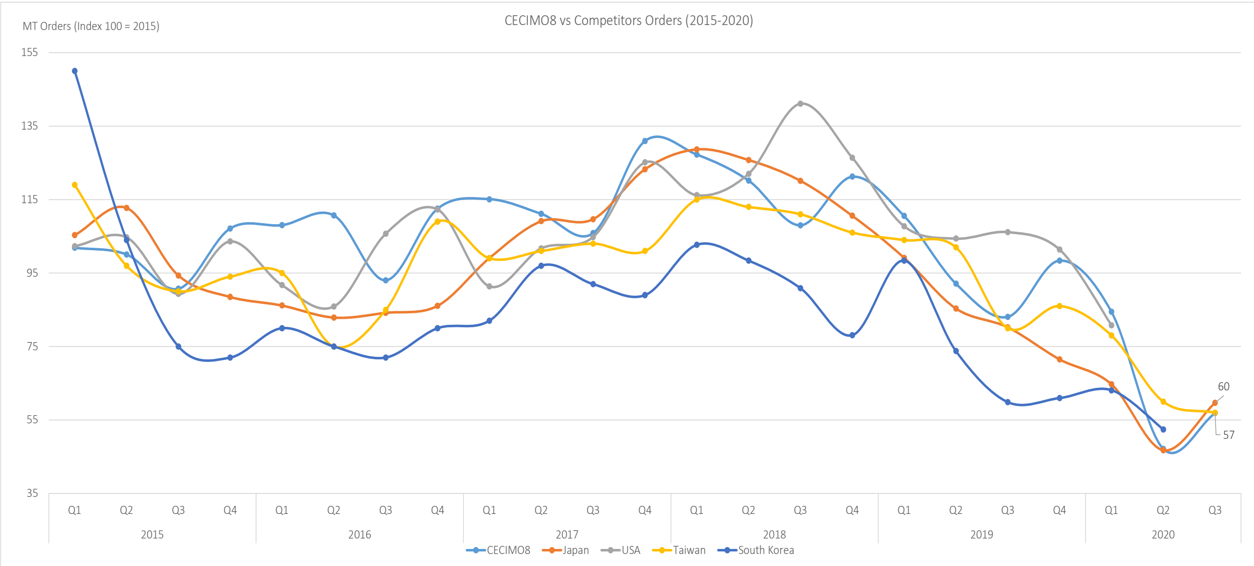


Total orders:

- France (-50%) and UK (-43%) record the highest yearly drops in total orders during Q3 2020. Swiss total orders go down by -37%.
- Other significant decreases are registered in Germany (-29%), Czech Republic and Spain (-22% each).
- Italy reports a more moderate -11% yearly drop.

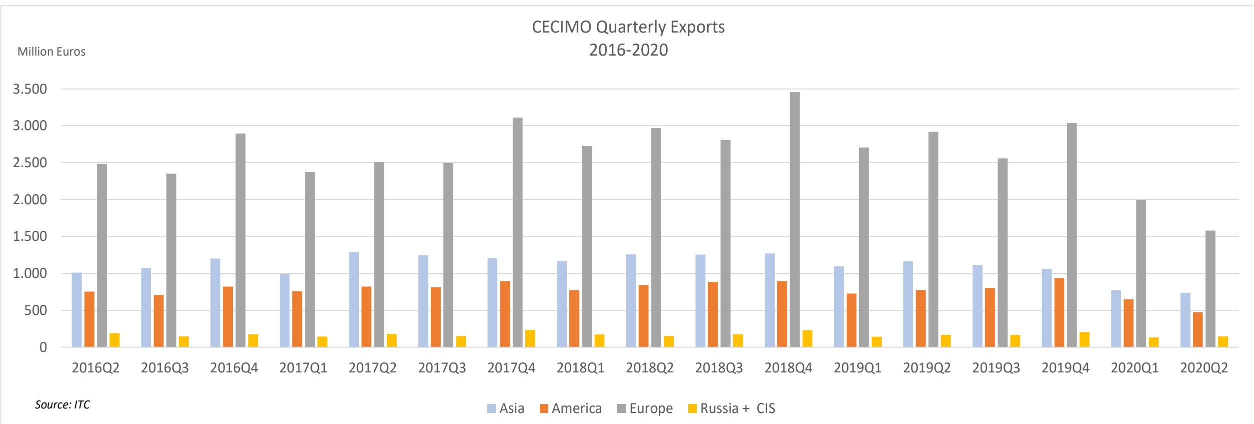
CECIMO competitors:

- Japanese metal forming industries also record significant cutbacks in all orders categories. Domestic orders decrease by -29% while foreign orders go down sharply, by a yearly -54%. In terms of total orders, metal forming machine orders roll back by -38%.
- Japanese metal cutting companies fare comparatively better than their metal forming counterparts, albeit suffering the effects of the coronavirus-driven downturn. The domestic line of orders falls by a notable -38%. Foreign orders decrease as well, by a slower pace (-12%). Total orders drop by -23%.
- Taiwanese domestic and foreign both decrease at very similar rates (-28% and -29%, respectively). Total orders fall by -29%.



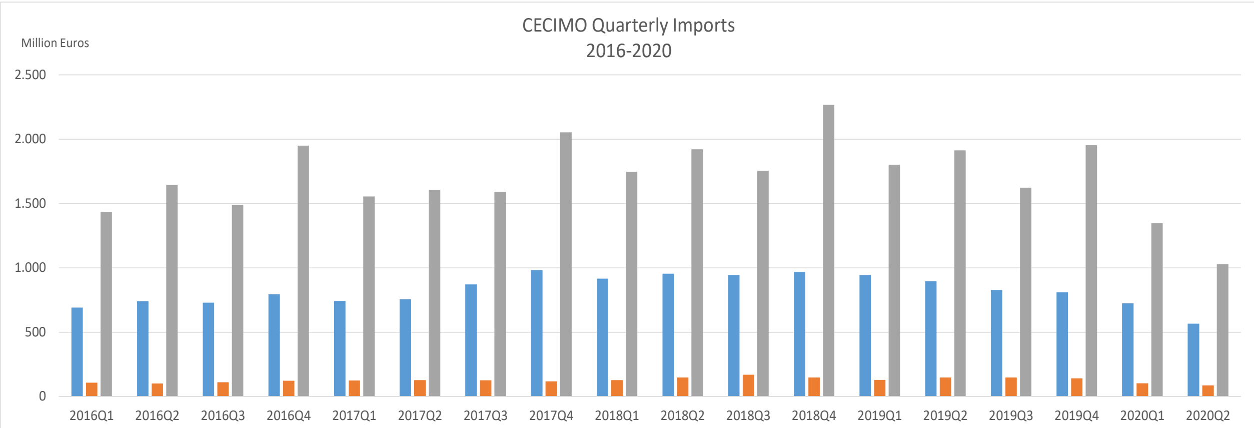
1.2 CECIMO Trade (m)

*Note: *The following analysis refers to Q2 2020 machine tool trade figures. ITC Q3 2020 data is not fully available by the time of publication of this report.*



Q2 2020 exports compared to Q2 2019

- During the second quarter of 2020, a phase of rapid decline of industrial demand and production amid the outbreak of the first coronavirus wave, CECIMO machine tool exports decreased by -41% against Q2 2019 volumes. Total MT exports amounted to 30 billion euros during this period. It is the sixth consecutive quarter of yearly contractions for CECIMO MT exports.
- Exports to key markets decrease notable over the three-month period. MT exports to Asia fell by -37% on the same yearly basis while MT sales to American markets decreased by -39%.
- The deepest drop in MT export flows was recorded in the broader European region. CECIMO's natural market still amounts to more than 50% of the group's quarterly exports (1,57 billion euros worth), but it is clearly in a downward spiral, as exports decrease by -46% against Q2 2019 values.
- Exports to Russia and CIS countries also decrease but at a slower pace compared to larger markets (-13% against Q2 2019 figures).

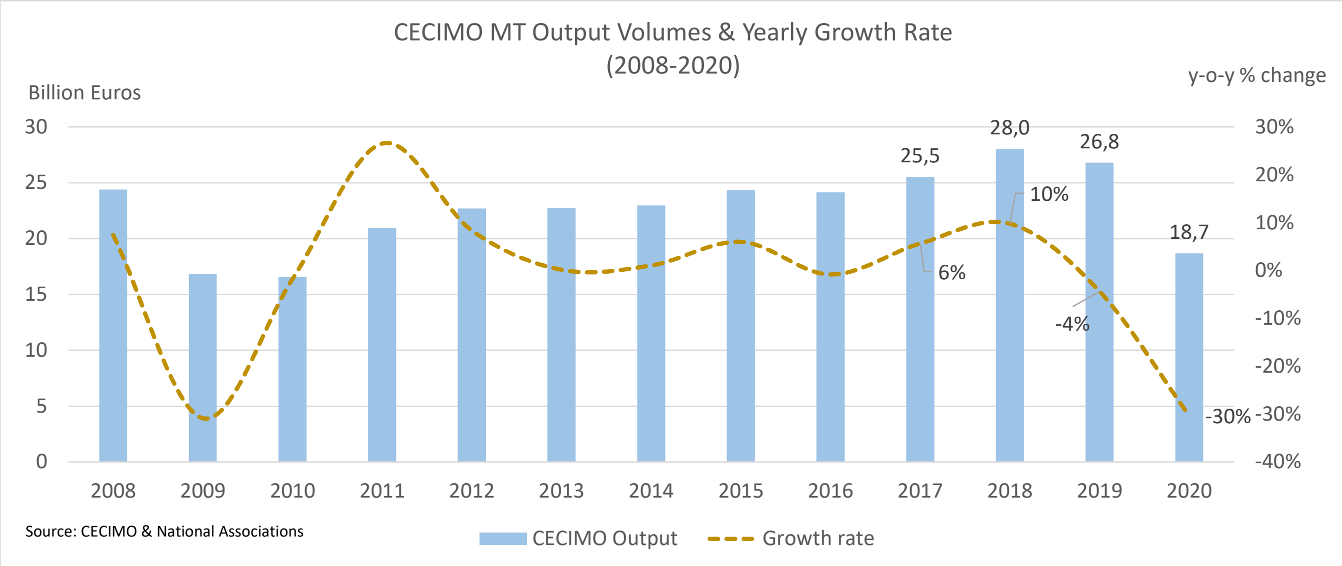


Source: ITC

Q2 2020 imports compared Q2 2019

- CECIMO total imports fall by -43%. Total quarterly imports to the CECIMO area reach 1,7 billion euros. It is the fifth quarter in row in which MT imports to CECIMO register year-on-year losses.
- Imports from Asia, the largest supplying market barring Europe, fell by -37%. Quarterly MT import values stand at 566 million euros at the end of the quarter.
- Regarding the Americas, transatlantic MT imports fell by -42%. Meanwhile, imports from Russia and the CIS economic area decreased by -39%.
- Once again, the steepest decrease in import activity takes place in Europe. European MT imports to CECIMO countries contracts by -46%, as total quarterly import volumes go down to 1 billion euros.

1.3 Production (m)



CECIMO's output data has been adjusted and updated in the wake of the December 2020 General Assembly. 2019 global production levels have been revised downwards, from 26,9 billion euros to 26,7 billion. Furthermore, provisional data submitted by the national associations shows that 2020 CECIMO machine tool production figures will decrease substantially.

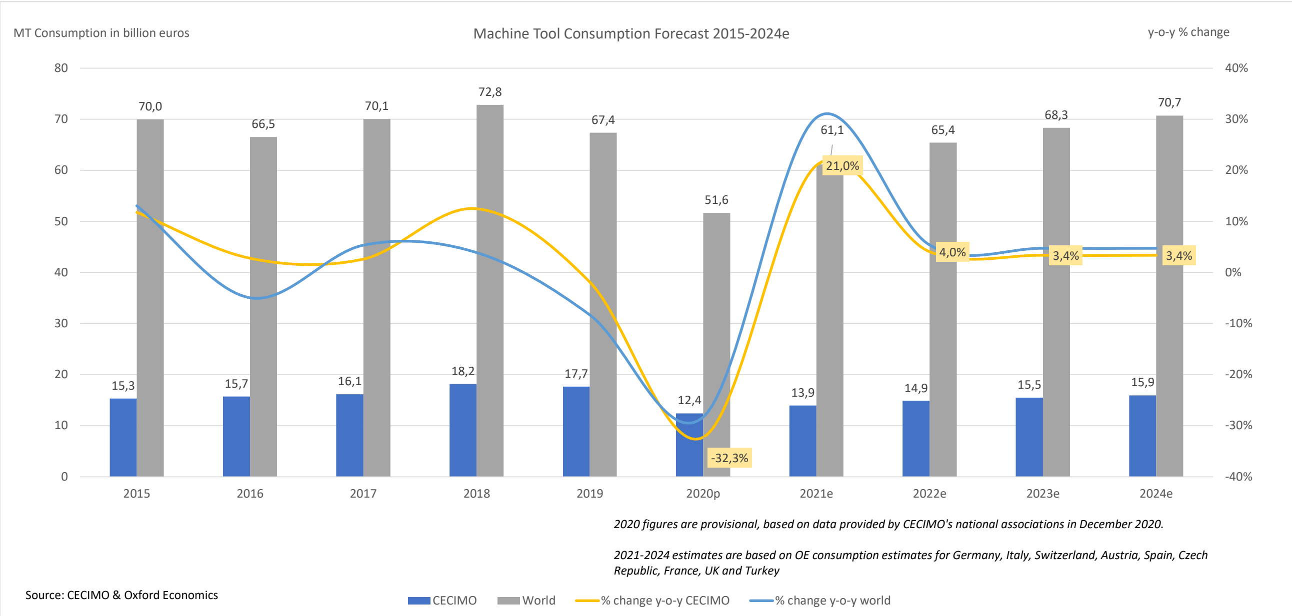
Estimates show CECIMO machine tool output plummeting to 18,7 billion euros due to the novel coronavirus pandemic, which has caused countless strains and cutbacks across different industrial sectors and at different levels of the global manufacturing supply stream. This score would mean a decrease of -30,2% against 2019 volumes.

This is the worst reading for CECIMO global machine tool output since 2009, at the onset of the global financial crisis. Machine tool production decreased then from 24,2 billion in 2008 to 16,8 billion in 2009 (a -30,8% yearly tightening of output levels).

2. Demand

2.1 CECIMO Consumption (m)

Oxford Economics Consumption Forecast



CECIMO MT consumption data, considering the new machine tool activity data submitted by the national associations, has also been updated. 2019 global machine tool consumption now stands at 17,6 billion euros, slightly below the previously reported figures. As to 2020 levels, CECIMO's aggregated MT consumption totals 12,4 billion euros (a -29,8% decrease compared with 2019 levels).

Oxford Economics (OE) new estimates, published in October 2020, outlines different trends in global machine tool consumption between 2020 and 2024.

Firstly, OE foresees a two-stage recovery for the global MT industry. The first phase would be that of a strong mechanical rebound in Q3 2020, as economies "restart" following the lockdown-induced contraction in the first half of 2020. A more gradual recovery would take place from Q4 2020 through the first half 2021. Global MT demand would go down by -18,5% in 2020 and recover by 18,2% in 2021. Global industrial production is estimated to remain below pre-crisis levels until mid-2021.

MT Demand should continue to increase between 2022 and 2024, but at a slower pace, as the rebound momentum fades away and output remains significantly constrained across key manufacturing sectors.

Aside from the global MT picture, the recovery is also expected to be uneven in key markets.

European MT consumption will potentially go through a two-stage recovery, as the one explained above. In 2020, MT demand is expected to go down by -33% and rebound partially by 23% in 2021. OE estimates suggest that the European recovery will be the strongest compared to other regions, yet it will not counterbalance the loses of the previous year. Furthermore, European apparent MT consumption is expected to continue growing from 2022 onwards yet the growth rate should flatten. Europe would not return to pre-crisis consumption levels in the forecasted period (2020-2024).

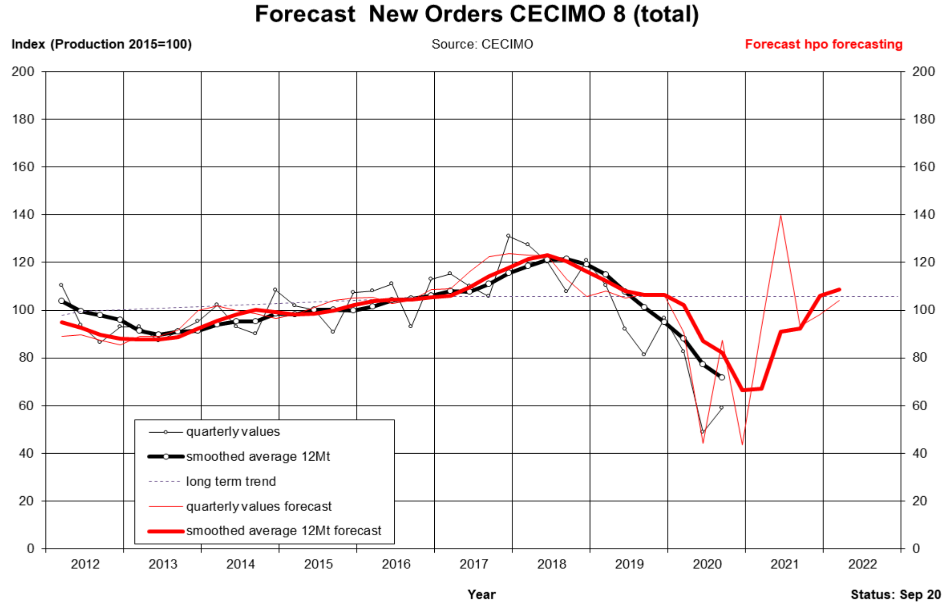
In terms of volumes, European consumption will go down to 13,3 billion euros from 19,8 billion euros in 2019. By 2024, consumption levels would stand at 18,8 billion euros.

As to CECIMO's own MT consumption levels, OE forecasts an analogue cycle to that of the broader European region. Considering the volumes of nine countries (see note on the relevant chart), CECIMO consumption is estimated to drop by more than -34% in 2020 (down to 11 billion euros) due to the pandemic and recovery partially in 2021. Consumption should continue to grow throughout the remainder of the period, albeit losing speed as years progress. In 2024, consumption should stand at 15,9 billion euros, a billion shy from 2019's score (16,9 billion euros).

The US, like other advanced economies, is expected to go through a two-stage recovery: firstly, a short-term, mechanical rebound in Q3 2020, prompted by a restart industrial activity as state containment policies ease; secondly, a more moderate period of growth as of 2021. MT consumption levels in the US will decrease 24,5% in 2020, but rebounding strongly in 2021, almost making up for the previous year's loses.

Lastly, after two years of consecutive yearly drops (2019-2020), Chinese MT consumption should pick up steadily as of 2021, reaching 2019 MT consumption levels and even improving on them (22,6 billion USD) that same year. Apparent consumption should continue to increase, albeit at a more gradual pace from that point on.

2.2 HPO CECIMO8 Orders Forecast (m)



HPO's analysis highlights the quarterly rally of CECIMO orders. The new order intake values, however, are the lowest since 2009. The coronavirus shock is slowly disappearing, positively impacting the forecast. Despite the shock and the relative bounce-back, the long-term trend outlined by the forecasting group remains unchanged, as the 12mt average benchmark slowly returns to the estimated path.

Quarterly analysis:

The industry has suffered greatly due to the pandemic, worsening an already sluggish performance of many branches of the capital goods industry. In Europe, the manufacturing output downturn, measured from its absolute low point during the lockdown, was much lower than in consumption.

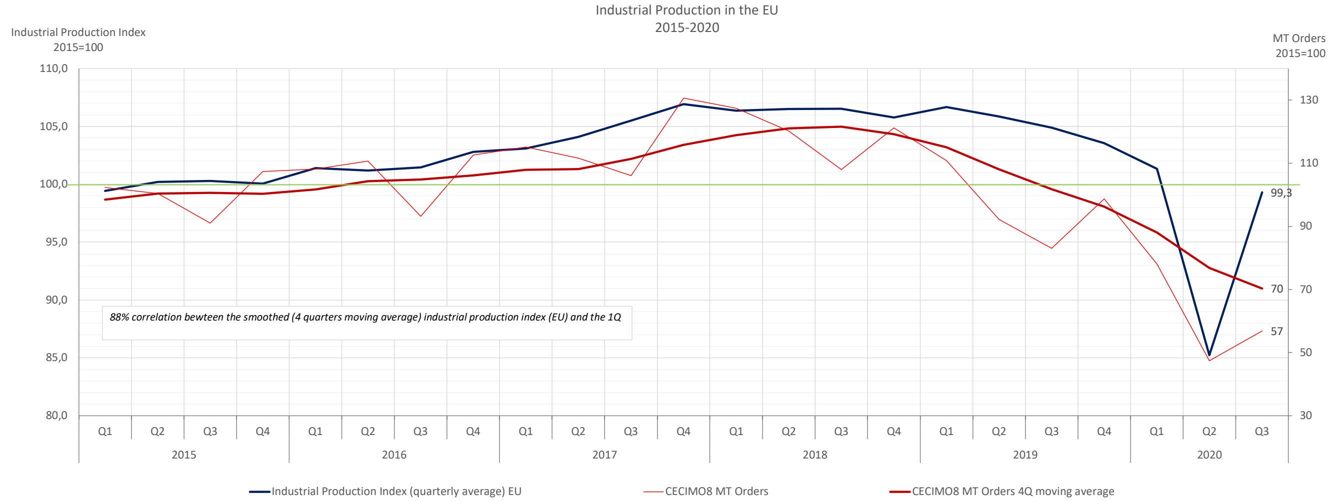
Meanwhile, Industrial production in the United States fell at about the same rate as retail sales, while the decline in consumption was more severe in China. The recovery of industrial production, on the other hand, was very rapid in China and much slower and less pronounced in Europe and the USA than in retail sales.

Considering the economic duress global manufacturing is undergoing, HPO calculations signal a low level of dynamism for the 2021. However, it is important to note that developments in individual sectoral may vary considerably.

One of the very few industrial sectors for which HPO foresees strong growth in the coming year is the semiconductor industry, which is already well advanced in the economic cycle.

Industries affected most by the crisis, such as the machine tool industry, can expect a partial recovery and individual months with strong incoming orders in 2021. However, the overall level is likely to remain far below the pre-crisis level of 2018.

2.3 Industrial Production Index (M)



Source: Eurostat + CECIMO

Following a strong decline of industrial output in Q2 2020 due to the outbreak (registering a -20% negative growth rate against Q2 2019's index), EU27's industrial values continue to decrease in the third quarter of 2020.

The European economy's average quarterly IPI reading is 99,3 points, slightly below the 100-point reference. It confirms a -5% yearly decrease for Q3 2020.

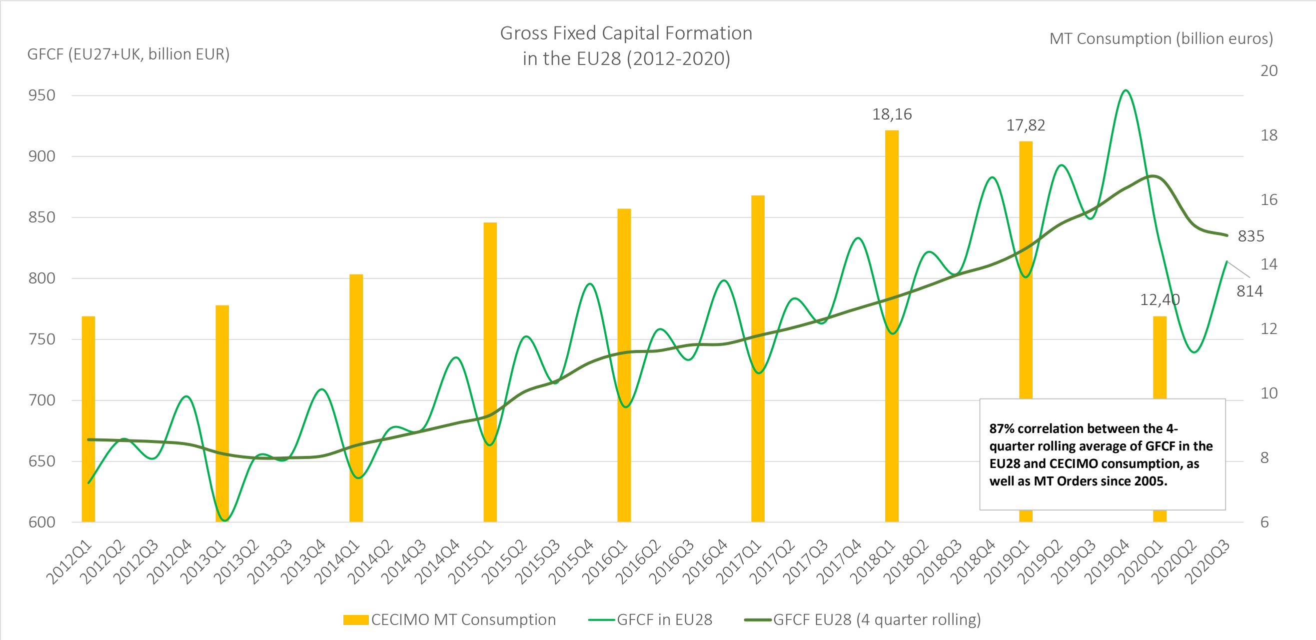
The current score is an improvement compared to Q2 2020's 85,2 reading, which would indicate a near-term recovery of the European industry, in line with the forecast assumptions outlined in the previous edition of this report. Despite this relative upturn, the European industry is, to date, still lagging due to the effects of the pandemic. Furthermore, the overall trend in European manufacturing is a negative one, as EU 27 IPI has logged six quarters (from Q2 2019 to Q3 2020) of uninterrupted tightening of EU industrial activity.

In sectoral terms, the hardest hit manufacturing sector is that of European capital or investment goods, which sees double-digit yearly drops throughout the third quarter of 2020. The durable goods sector, however, seems to have recovered slightly in August 2020, as lockdown measures are lifted across the content, but the pace of this temporary upturn seems to be wearing out. Other key industrial sectors' output also decrease during this three-month period.

EU 28 (y-o-y % change)	Jan 2020/ Jan 2019	Feb 2020/ Feb 2019	March 2020/ March 2019	Apr 2020/ Apr 2019	May 2020/ May 2019	June 2020/ June 2019	July 2020/ July 2019	Aug 2020/ Aug 2019	Sep 2020/ Sep 2019
Total industrial production	**1,5%**	**-1,3%**	**-11,8%**	**-27,2%**	**-20,5%**	**-12,3%**	**-7,3%**	**-6,2%**	**-5,8%**
Capital goods	-2,0%	-3,1%	-20,0%	-27,3%	-29,5%	-16,4%	-10,2%	-12,3%	-11,9%
Durable consumer goods	2,6%	1,5%	-21,7%	-27,8%	-23,2%	-7,5%	-2,0%	5,5%	0,7%
Intermediate goods	-1,5%	-0,2%	-10,1%	-14,9%	-18,5%	-11,9%	-8,7%	-4,6%	-2,8%
Energy	-5,8%	-1,7%	-6,4%	-5,0%	-10,6%	-9,1%	-6,6%	-4,0%	-4,8%
Non-durable consumer goods	1,3%	0,5%	-0,3%	-10,7%	-13,4%	-6,0%	-2,5%	-3,0%	-1,7%

3. Investment

3.1 Gross Fixed Capital Formation (M)



European Gross Fixed Capital Formation, which CECIMO calculates as an aggregate of EU27 and UK quarterly GFCF absolute volumes, decreased further in the third quarter of 2020, yet the pace of said contraction slowed down notably in the short term. During this period, investment values have gone down by -4% against Q3 2019 figures.

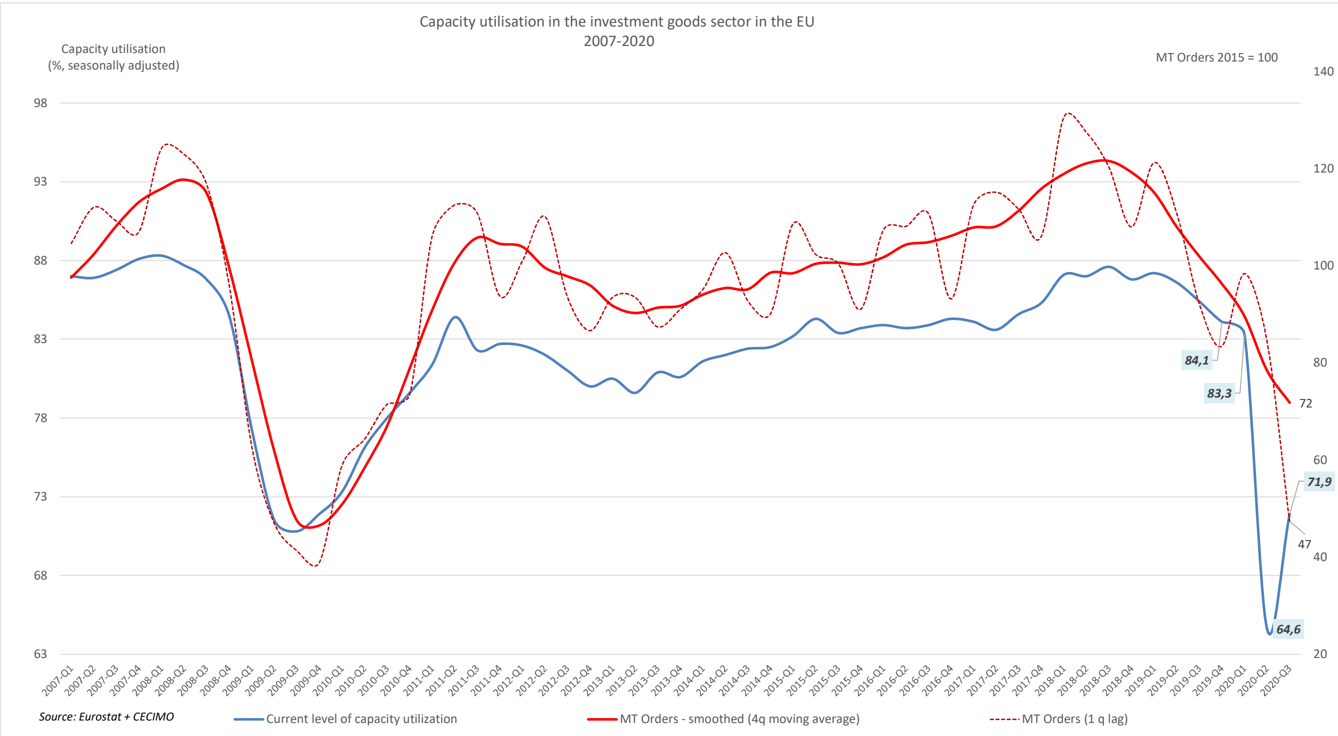
The latest European GFCG results show investment levels standing at around 814 billion euros. It is a short-term improvement of the overall investment sentiment, following a -17% yearly drop in the previous quarter which saw investment volumes drop to 740 billion, the lowest yield since Q1 2017.

3.2 Capacity Utilisation and Production Capacity (M)

In the third quarter of 2020, capacity utilisation in the European investment goods sector stood at 72%, up from 64,6% in the previous quarter. It is a short-term improvement that stems from the easing of lockdown and social distancing measures across the continent and the reopening of firms and factories after almost three months of economic hibernation.

Capacity utilisation, despite the quarterly upturn, remains below pre-crisis levels (84% in Q4 2019). Furthermore, results from the latest survey show that capacity utilisation will improve further in Q4 2020 -reaching 78%-, although it will remain below the Q4 2019 threshold.

The near-term recovery of manufacturing activity would therefore be partial.

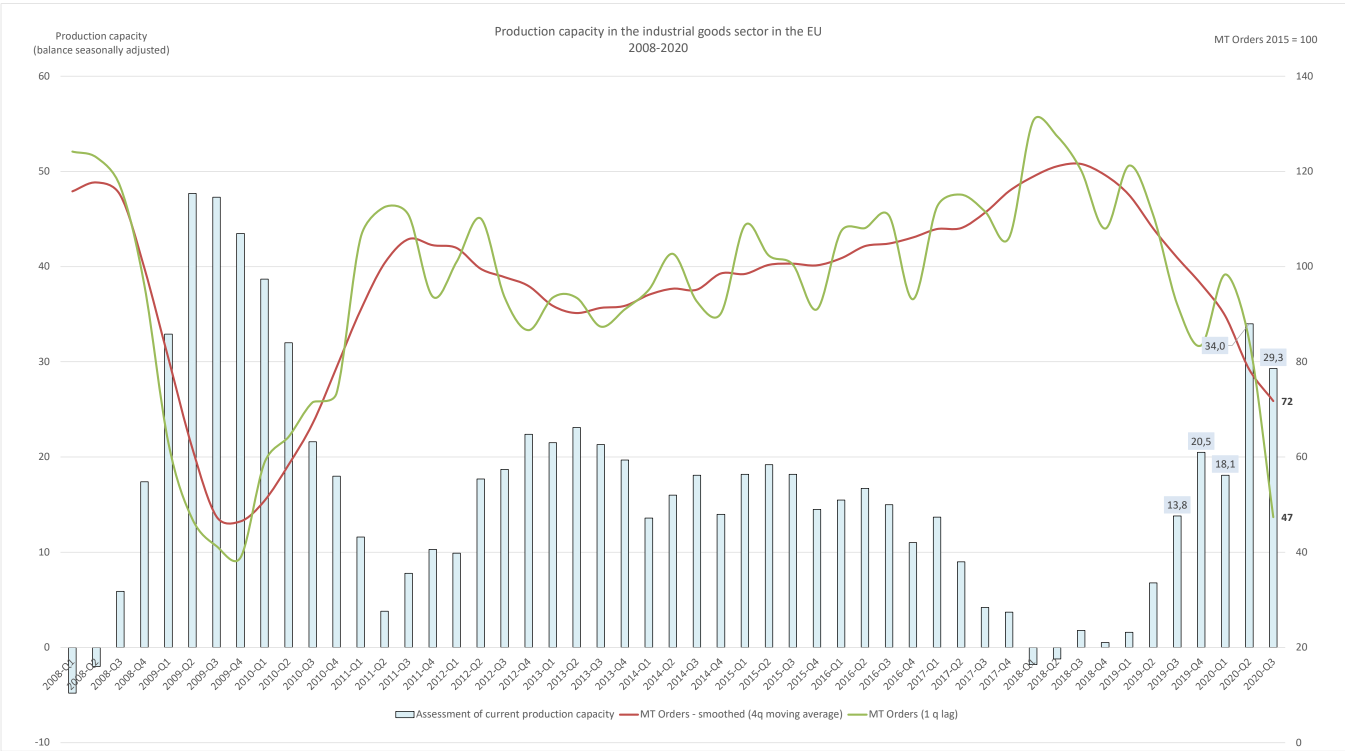


Capacity Utilisation (% of total capacity)

	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020	Q3 2020
Austria	87,8	87,3	86,2	85,4	74,2	76
Czech Republic	85,5	85,4	86,9	86,9	47,7	74,8
France	88,3	87,3	85,7	84	62	70,9
Germany	89,5	87,9	85,5	85,5	65,9	72,7
Italy	78,7	77,8	77,9	76,9		65,7
Spain	87,5	87,5	87,9	85,4	81,8	78,5
United Kingdom	81,2	80,0	82,9	82,9	57,5	65,7

In terms of production capacity, whereby business managers asses their current levels of production as sufficient or not, considering the changes in the orderbook and demand of capital goods, production in European manufacturing companies is deemed adequate at this stage (29,3%), given the many cutbacks in industrial order intake.

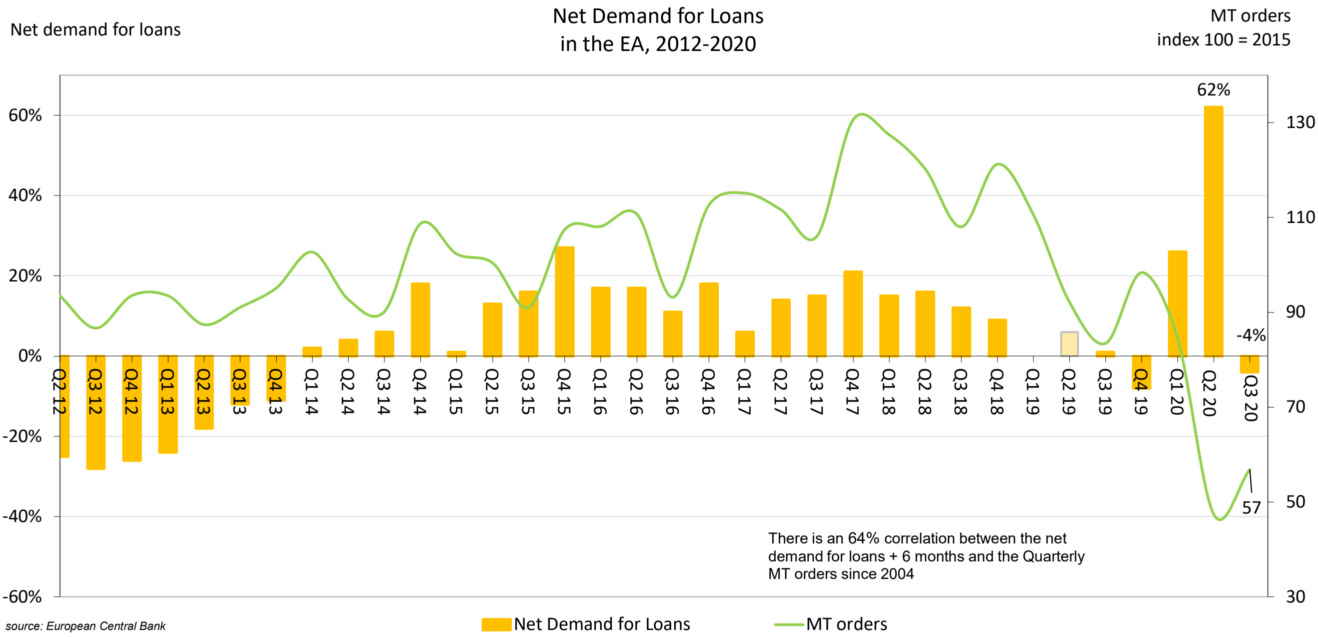
However, it is worth noting that production capacity seems to have peaked in Q2 2020, as the reading decreased in Q3 2020 compared to the previous quarter and again in Q4 2020, with a final score of 26,3%. Moreover, the assessment of production capacity, during this critical period, has yielded more moderate results than those seen during the 2009 economic crisis, which saw a peak of more than 47%.



Production Capacity (balance in %)

	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020	Q3 2020
Austria	6,1	11,7	22,5	18,7	35,8	42,7
Czech Republic	27,4	27	28,9	33,5	19,2	25,4
France	-11,4	-4,7	-4	-1,1	15,8	2,2
Germany	9,6	22,1	33	25,7	46,5	44,4
Italy	20,7	24,6	25,5	27,6		28,7
Spain	0,4	-2,1	13,2	7,8	13,7	26,5
United Kingdom	14	25,7	41,2	0,3	47,1	37,8

3.3 Bank Lending Survey (M)



- **Credit standards** - banks' loan approval criteria- for loans to enterprises tightened in the third quarter of 2020 (a net percentage at 19%, up from 1% in Q2 2020). Moreover, European banks reported a net tightening of credit standards for loans to SMEs (18%) and large enterprises (16%). It was also reported that their credit standards tightened for both short-term loans (18%) and long-term loans (20%).

- The main reason for the tightening of the lending guidelines is risk perception, directly linked to the weak performance of the European economy. Risk tolerance among bank is therefore down. Market finance conditions, and favourable bank balance sheets prevented a further stiffening of the lending requirements. Furthermore, the ECB's low interest rate monetary policy remains highly supportive of channelling financial resources to companies.

- Across the largest euro area countries, credit standards on loans to enterprises tightened in Germany, Spain and France, while they remained unchanged in Italy in the third quarter of 2020.

- As a forward-looking assessment, Euro zone banking groups expect a significant net tightening of credit standards on loans to firms in the fourth quarter of 2020, due to the uncertainties around the economic recovery.

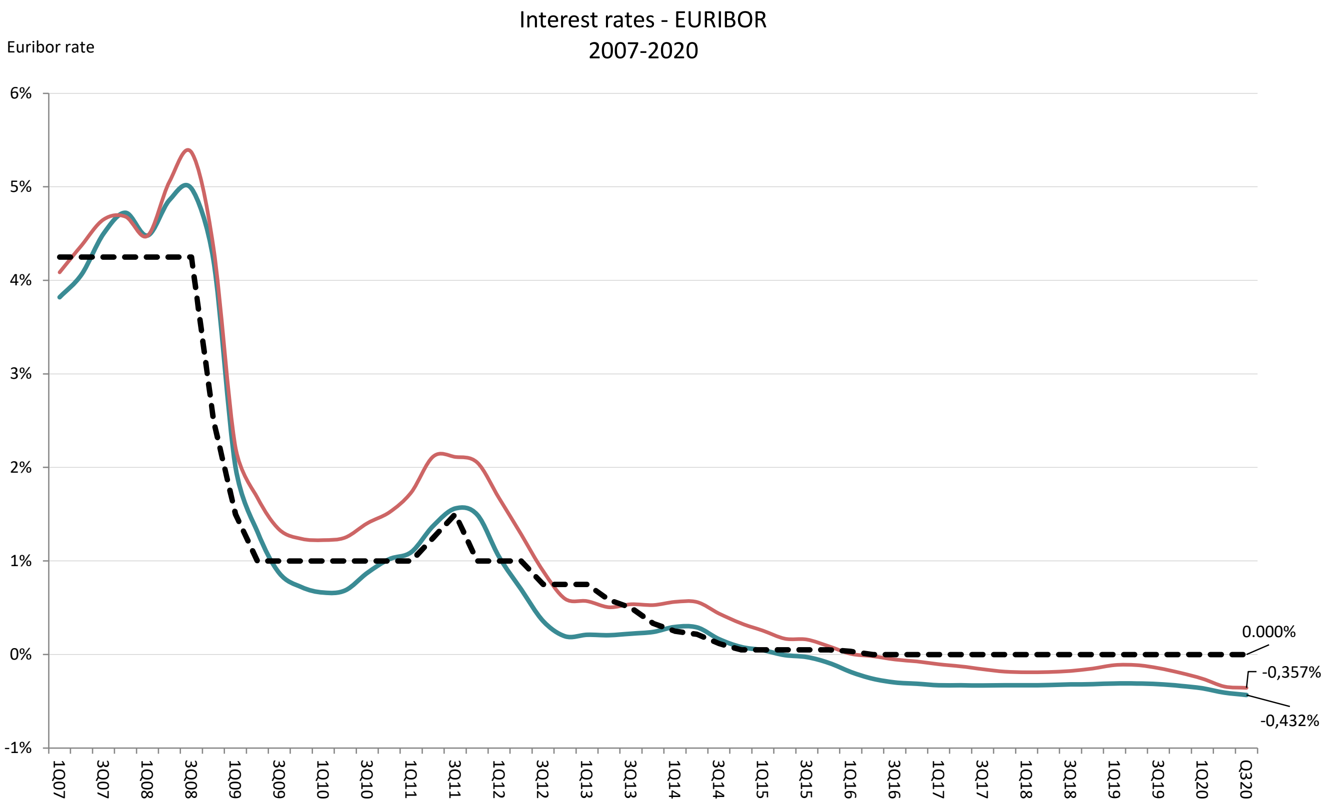
- Banks' **overall terms and conditions of new loan contracts** tightened in the third quarter of 2020 (a net percentage of 8%, up from 2% in Q2 2020). Banks' collateral requirements for loans to firms increased significantly, signaling the Eurozone banks' growing concerns about the European business cycle. As in the case of credit standards, risk perception continued to be the main contributor to the net tightening of overall terms and conditions.

- The **rejection rate for loans** to euro area enterprises increased slightly in the third quarter of 2020 (3%, after -12% in the previous survey round of the ECB's Bank Lending Survey).

- **Firms' demand for loans** declined moderately in the third quarter of 2020, with a net percentage of banks reporting an increase in loan demand at -4%, after 62% surge in the second quarter of 2020. Contrary to the previous quarters, banks reported a significant weakening in demand for financing needs for inventories and working capital. This factor, however, is still one of the main drivers of loan demand. Other key factors are debt refinancing and restructuring. Fixed capital investment-related financing need and loans for merger dampen loan demand.

- The decline in loan demand was similar for both SMEs (-4% net percentage) and large firms (-3% net percentage). Short-term loans demand decreases as the need for precautionary or emergency liquidity among firms is contained. Eurozone banks expect that net demand for loans to firms will increase less in Q4 2020 (net percentage of 17%), especially for SME, as they are more dependent on banks than larger firms.

3.4 Euribor - Interest Rates (M)



source: Euribor database, ECB

During the third quarter of 2020, the ECB refinancing rate remains unchanged at 0,00%. The EURIBOR 3-month average is -0,432%, while the 12-month average stands at -0,357%.

The European Central Bank has stated that Eurozone interest rates will remain at their present or lower levels until it has seen the inflation outlook robustly converge to a level close to -but below- 2%, as per the Bank's statutory mandate.

The ECB will continue to implement its 1,3 trillion-euro pandemic emergency purchase program (PEPP). These purchases aim to counteract the downward impact of the pandemic on the projected path of inflation. The purchases will continue to be conducted in a flexible manner over time, comprising different types of assets. ECB net asset purchases under the PEPP will last until at least the end of June 2021 and, in any case, until the ECB deems the coronavirus crisis to be over.

Furthermore, purchases carried out under the asset purchase program (APP) will continue at a pace of €20 billion per month. This program will continue to run for an indeterminate amount of time, so as to guarantee favourable liquidity conditions for companies and households as well as ample monetary accommodation at market level. Said program will potentially last until the Eurozone interest rates increase.

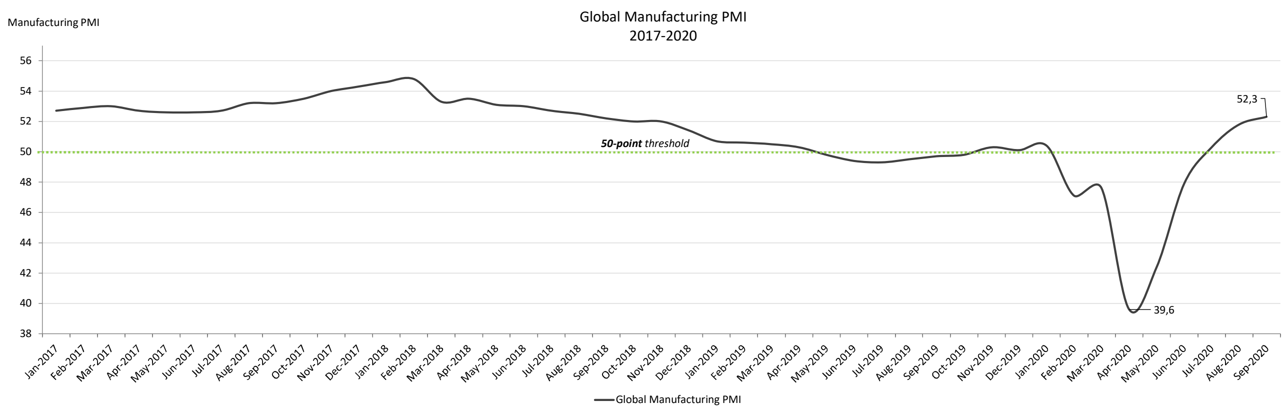
4. Business Climate

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.

Following its methodological review, The Business Climate Barometer scores will be published in a new version of this report, due in January 2021.

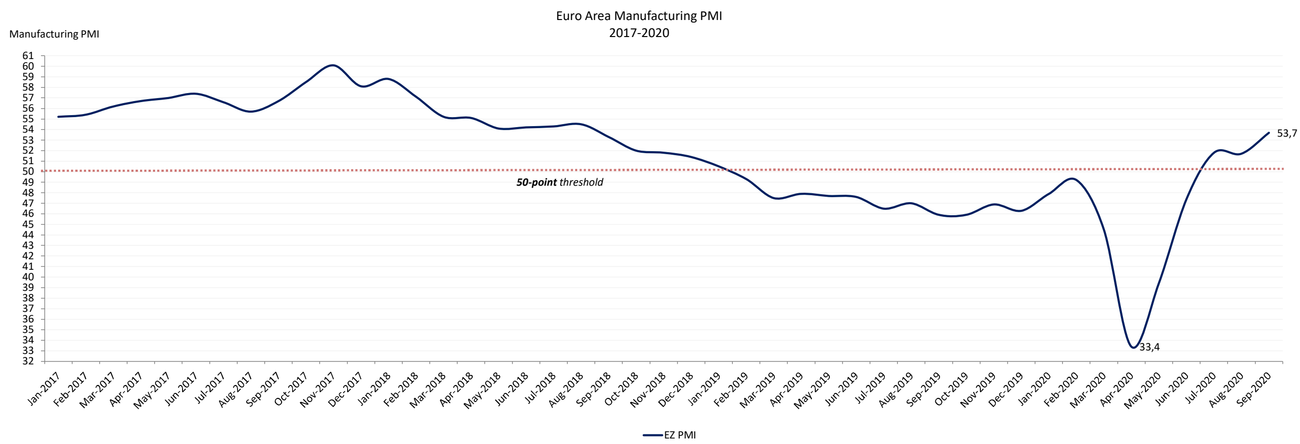
4.2 Purchasing Managers Index (M)



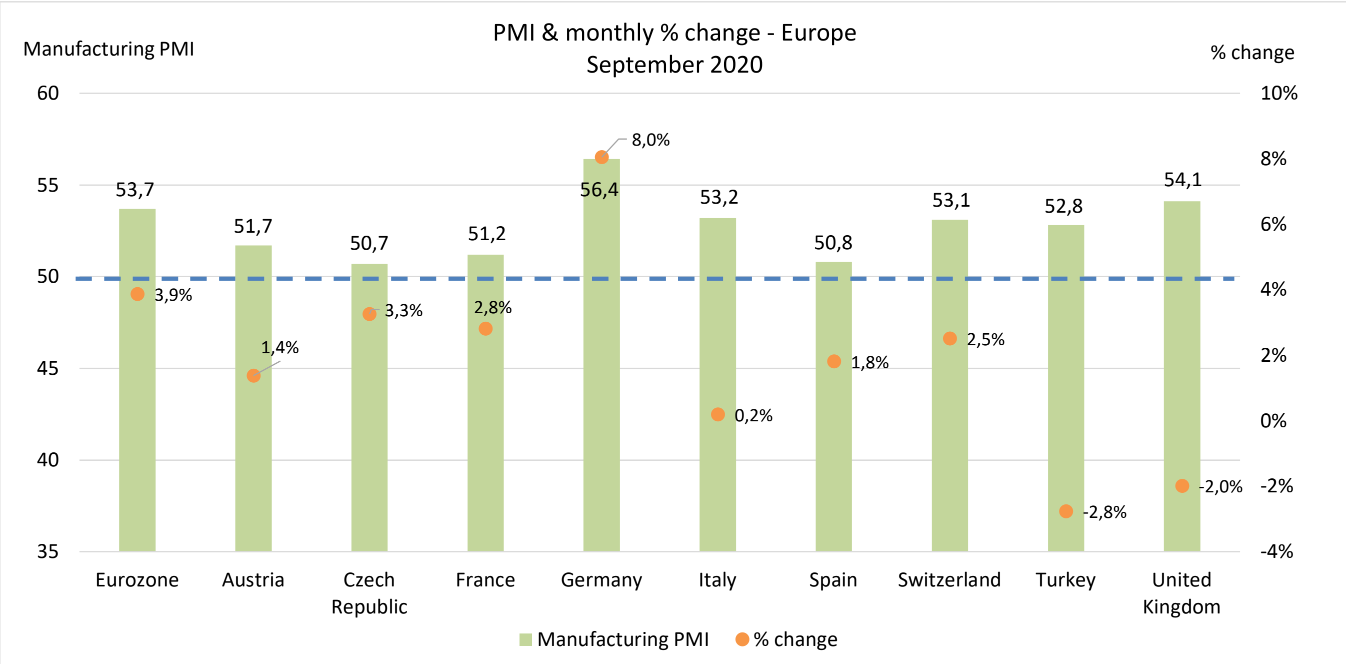
Global Manufacturing PMI

At the end of the third quarter of 2020, global manufacturing continues to recover in the aftermath of the coronavirus pandemic. Global PMI rose to 52,3 points in September, the highest score in two years, following a growth-indicative 51,8 reading in August. Output and new orders both rose for the third successive month, while new export business expanded for the first time in more than two years. In the meantime, global supply chains remained stretched by the rapid upturn in demand for inputs as manufacturing across the world restarted. Business optimism reached a 28-month high, given the strong performance of investment and intermediate manufacturing goods purchasing industries.

Eurozone Manufacturing PMI



Eurozone Manufacturing PMI increased to 53,7 in September 2020, up from 51,7 in August. The latest PMI reading signals the sharpest expansion in the European manufacturing sector since August 2018, driven by increasing levels of output, which pace of growth has reached its highest pace in more than two and half years. An improve quarter on quarter order intake performance and resurging trade in capital goods have also contributed to this much improved reading for the Eurozone. Purchasing managers' business sentiment stands at its highest point since April 2018.



Austria

Austrian Manufacturing PMI increased slightly in September 2020, to 51,7 points. The latest PMI reading is comparatively lower this July's 52,8 score. Manufacturing conditions have improved in Austria, yet only modestly since the summer period. Industrial output is expected to increase as well as orders, but the pace of growth will slow down over time.

Czech Republic

Czech Manufacturing PMI increased to 50,7 in September of 2020, up from a rather weak 49,1 reading August. The reading pointed to the first increase in manufacturing activity since November 2018. This increase was largely caused by expanding levels of production and an upturn in new orders, namely foreign orders. Industrial output is expected to continue to grow in the fourth quarter amid the strengthening of client demand.

Germany

Manufacturing PMI in Germany stood at 56,4 points in September 2020, an increased compared to August's 52,2 reading. September's PMI shows the sharpest expansion in German manufacturing since July 2018, as the economy restarts after the first wave of the coronavirus pandemic. Order income for German machinery recovered notably on a quarterly basis while exports register short term increases as well, indicating industrial demand is on rise across key client markets. Output also increased at a rate not seen in more than two years. German manufacturing managers are optimistic, given the improved industrial conditions and a rebounding demand.

Spain

Spanish Manufacturing PMI increased to 50,8 in September of 2020 from 49,9 in August. Spain's manufacturing activity expanded in September, following the restart of industrial output and trade in capital and durable goods. The improvement of Spanish industrial conditions has been, however, marginal, as new orders continue to fall. Further, Spanish industrial managers are concerned about the working capital and liquidity needs.

France

In September 2020, France registered a Manufacturing PMI score of 51,2, up from a 49,8 reading in August. French manufacturing's recovery picked up speed, as the industrial production and new orders both increased following the Q2 2020 lockdown period. French manufacturing managers are optimistic as to the coming 12 months but there is still uncertainty around the effects of the pandemic over French firms in the coming quarter.

Italy

Italian Manufacturing PMI went up to 53,2 in September of 2020 from 53,1 in August. September's reading is the highest one since June 2018. Industrial operating conditions have improved moderately given the expansion of both output and order intake. Exports have also contributed to improving the current industrial juncture in Italy. As in other key CECIMO markets, business confidence has increased, in line with the production and demand, and thanks to the easing of the strict lockdown and social distancing conditions.

Switzerland

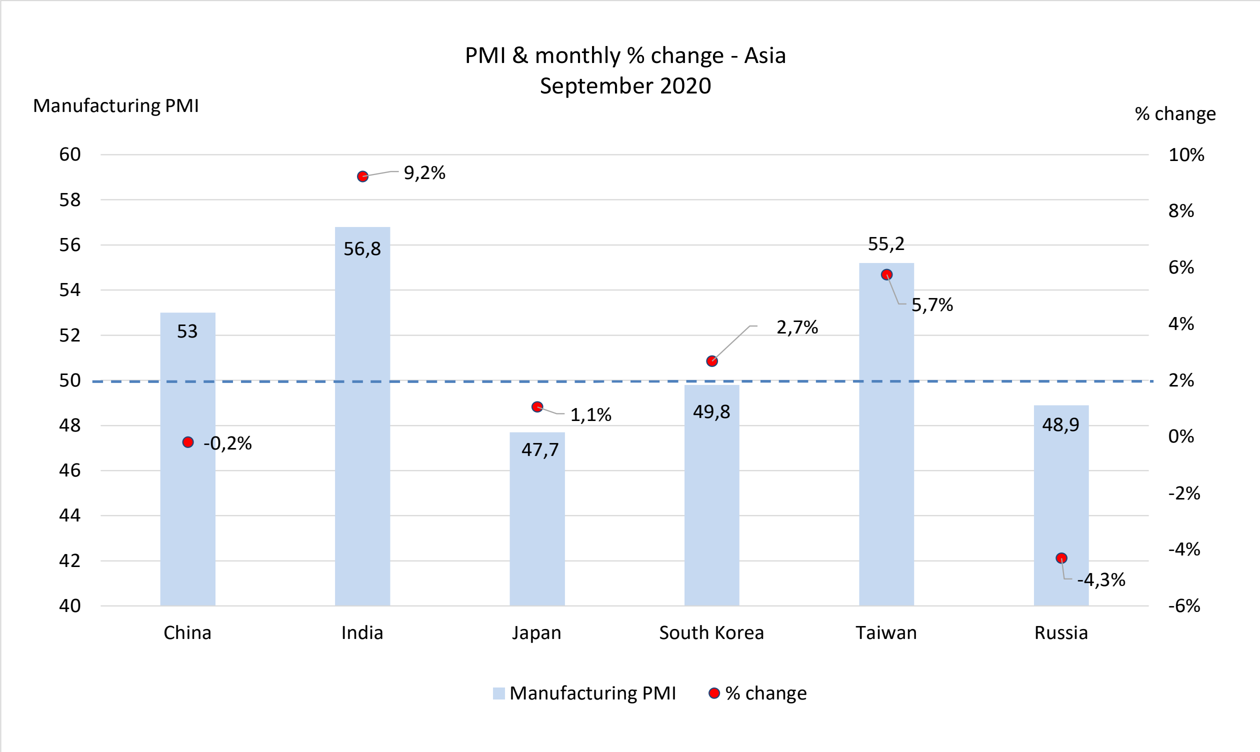
Manufacturing PMI in Switzerland rose to 53,1 in September 2020. In August, the score was 51,8. September saw the sharpest expansion in manufacturing activity since February 2019, boosted by an increasing industrial output and a busy orders book, a similar narrative to that of other key markets.

Turkey

Turkish Manufacturing PMI fell to 52,8 in September 2020, from 54,3 in August. Even though it is the second consecutive monthly PMI cutback, September's reading still indicates that Turkish business conditions are solid, despite the effects on the pandemic in the country and in client and suppling markets. Output and industrial orders have both risen, but they have done so at a slower rate than other European countries. Backlog work has also been reduced. There are nevertheless concerns as to the strength of the Turkish lira in foreign exchange markets, an issue that could negatively impact industrial prices, dampening the sector's potential.

United Kingdom

Manufacturing PMI in Britain decreased to 54,1 in September 2020, down from August's two-and-a-half year high reading of 55,2. It is the fourth consecutive month in which Britain's Industrial PMI records a reading above the 50-point benchmark. This positive streak has kept on as a result of a combination of factors, such increasing levels of industrial output and orders, the rapid restart of business activity during the summer period or a near-term surge of exports. A much-improved demand and the hopes of a sustained recovery have boosted business confidence in the UK.



China

According to the latest information from China, the country's Manufacturing PMI reading in September 2020 was 53 points, slightly below the August's 53,1 reading. This marginal change indicates that factory activity remains steady and that China's economy is recovering in the wake of the coronavirus pandemic. New industrial orders and exports have helped maintain its pace of growth. Chinese business sentiment is also high, yet managers are concerned about the second wave of the pandemic in Europe and North America. Moreover, uncertainties as to the outcome US Presidential Elections -and the trade war- are also dragging business confidence.

India

India's Manufacturing PMI surged rapidly in September 2020, reaching an 8-year high score of 56.8, after registering an already strong 52-point reading in August. Indian managers expect the economy to expand and perform better following the easing of containment policies. Output, new orders and international sales have driven the rapid expansion of business activity.

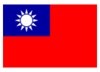
Japan

Japanese Manufacturing PMI stood at 47,7 in September 2020, a slight improvement compared to the 47,2 reading in the prior month. September's score is the highest since February 2020. Output levels have decreased, as well as new industrial orders, dragging down the overall PMI score. Meanwhile, boosting demand from neighbouring countries, namely China, has prevented further losses in new industrial orders. Business sentiment remains somewhat positive despite the industrial woes, as managers hope the effects of the pandemic will fade away in 2021.

South Korea

South Korean Manufacturing PMI stood at 49,8 in September 2020, below the 50-point threshold, indicative of economic growth. South Korean manufacturing has contracted for three consecutive quarters. Output has nevertheless expanded amid the easing of the country's confinement policies while new industrial, although still decreasing, have contracted at a slower pace. Despite the relative weakness of South Korea's industry in the aftermath of the first wave of the pandemic, business expectations remained optimistic among industrial goods producers, as firm manager foresee a rise in output over the next year.

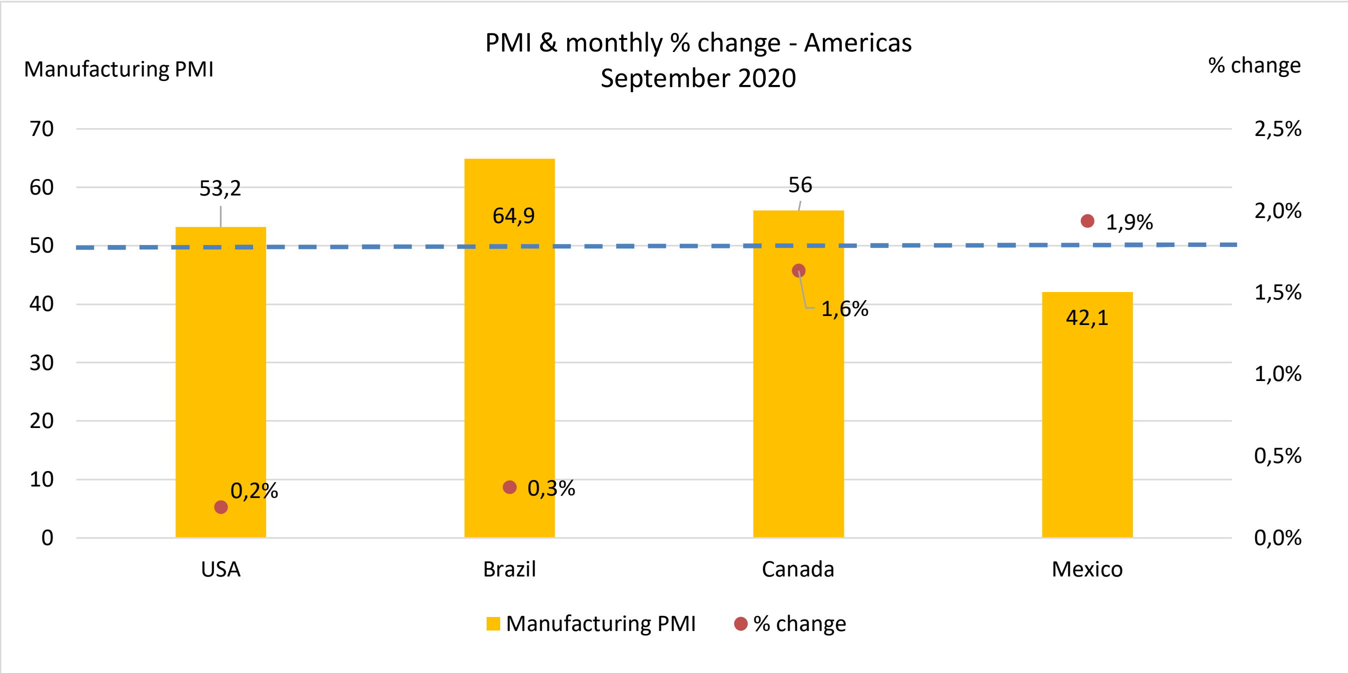
Taiwan



Manufacturing PMI for Taiwan increased to 55,2 in September 2020 from 52,2 in August. Said increase signals the strongest expansion in manufacturing activity since Q2 2018. The country continues to recover from the coronavirus pandemic. Industrial output increased at its highest pace in more than two years, while new industrial orders and exports surged. Business sentiment is generally high at this stage, but firms are building up precautionary inventories.

Russia

Russian Manufacturing PMI dropped to a below-threshold score of 48,9 in September 2020 after recording a strong 51,1 reading in August. The contraction in the Russian economy comes as new industrial order drop, signalling a weakening industrial demand. Output on the other hand has increased, as companies restart their operations as restriction measures loosen. Business sentiment is moderate, clearly below the average.



United States

US Manufacturing PMI reading for September 2020 was 53,2 points. The current reading indicates the biggest expansion in factory activity since January of 2019, which was backed by rapid increased in both industrial output and new orders. Even though the PMI score signals potential growth in industrial activity, output expectations are more moderate by late Q3 2020, given the protracted effects of the pandemic and the political stalemate in the country.

Canada

Canada's Manufacturing PMI increased to a robust 56 points in September 2020, up from an already strong 55,1 points in the previous month. It is the highest score since July 2018. Canada's manufacturing activity has expanded for the third consecutive month, due to the easing of containment policies and the ensuing restart of business activity. Output and new orders are the main driver behind the economy's recovery and a rising business sentiment.

Mexico

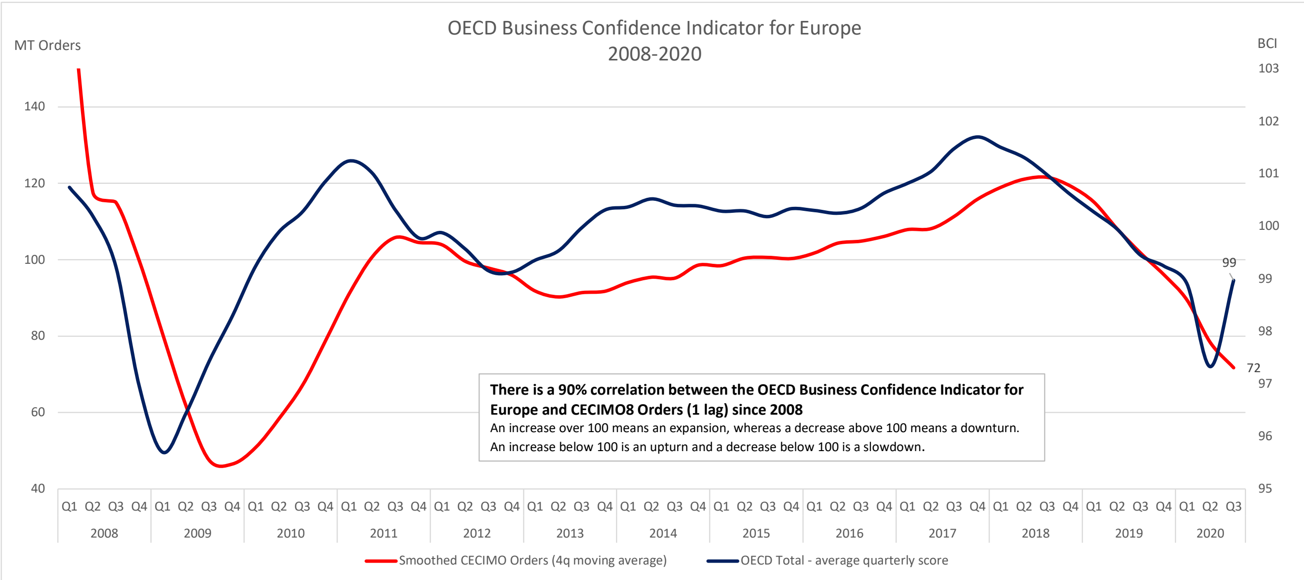
Manufacturing PMI in Mexico increased to 42,1 in September 2020, after recording a 41,3 score in August. Mexico's industry has recorded its seventh straight contraction, although the latest one is the slowest in six months. Industrial output and demand have fallen over two consecutive quarters due to the effects of the coronavirus pandemic. Industrial goods builders are nonetheless optimistic as to the future, as they hope for both a near-term easing of lockdown measures and a surge in foreign demand and exports.

Brazil

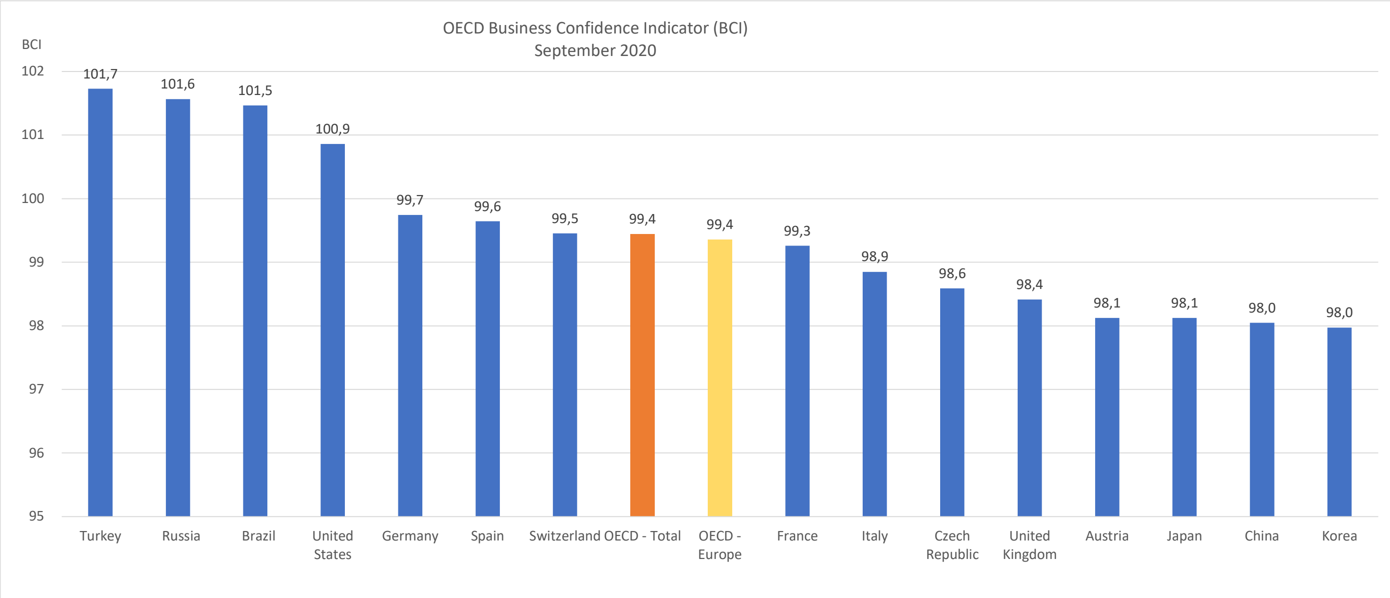
Brazilian Manufacturing PMI rose to 64,9 in September 2020, slightly up from August's 64.7 reading. Brazil's manufacturing sector has expanded over four straight months, driven rapidly expanding output and industrial order intake, the latter being particularly dynamic during Q3 2020. Finally, business sentiment among Brazilian manufacturing firms grew significantly, given the positive prospect for capital expenditure, which would underpin increasing levels of output.

4.3 OECD Business Confidence Indicator (M)

Business sentiment across OECD countries deteriorated further in Q3 2020, as manager's confidence drops by -0,5% against Q3 2019. However, the rate of decline has slowed down against Q2 2020, which saw a relatively high yearly decrease of -2,6%. Furthermore, BCI has decreased at its slowest pace in two years. Q3 2020 average BCI reading is 99, up 97,3 in Q2 2020. The main driver for this small increase is the near-term restart of economic activity during the summer period in Europe, North America and Asia.



It is important to note that this relative quarterly improvement still outlines a negative trend in terms of business sentiment in advanced economies, as the BCI average quarterly scores have been decreasing consistently on a yearly basis since Q3 2018.

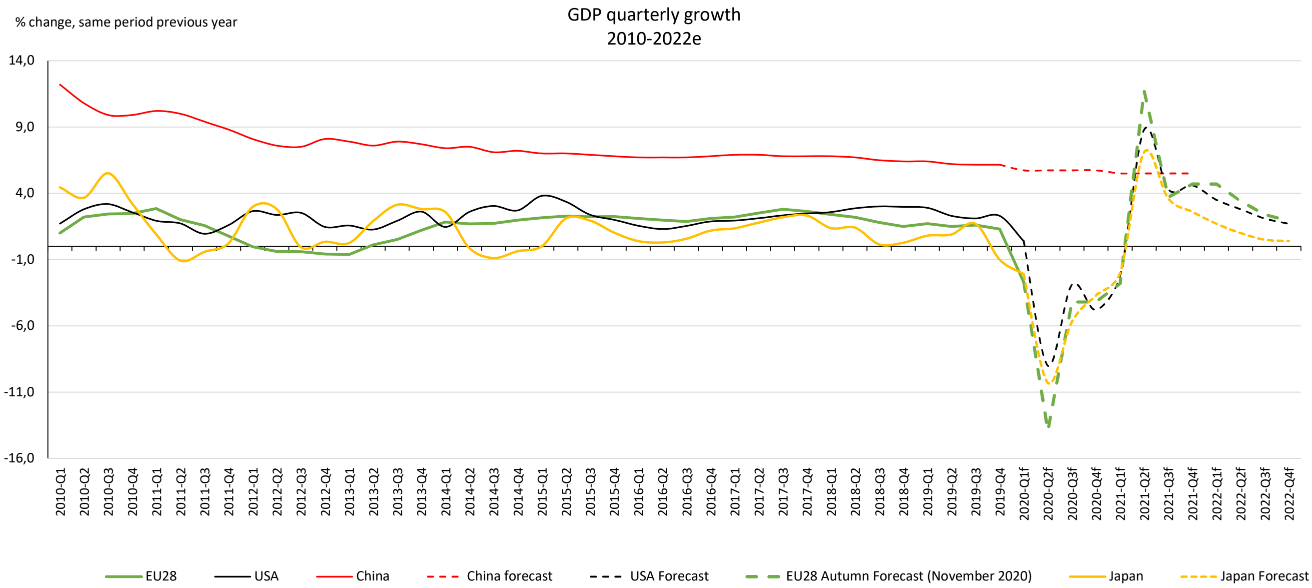


Considering September 2020's country-specific BCI readings:

- Both the OECD aggregate OECD-Europe record monthly scores below the 100-point threshold (99,4 each).
- Key European markets, such as France (99,3), Italy (98,9) and United Kingdom (98,4) show monthly values below the OECD average readings.
- Three key Asian markets (China, Japan and South Korea), record BCI scores of around 98 points, below the OECD average reading for September and two points under the 100-point mark.
- Spain, Germany, and Switzerland score above average OECD BCI reading, albeit still below the reference index values.
- The United States, Brazil, Russia and Turkey stand at or slightly above the 100-point benchmark.

5. General Indicators

5.1 GDP (M)



Year-on-year quarterly GDP percentage change in Q3 2020:

- Eurozone GDP has dropped by -4,3% in Q3 2020 against the same period in the previous year.
- EU27 overall economic output decreases -4,3% on the same yearly basis.

  Both European GDP rates show a partial, short-term recovery after a Q2 2020 -14,7% yearly drop in the Eurozone and a -13,9% drop in the European Union.

  The UK recorded a year-on-year negative growth of -9,6% in Q3 2020.

- US GDP decreased by -2,9% in Q3 2020 against Q3 2019, after at -9% yearly drop in the previous quarter.
- The Chinese economy grew by 4,9% in Q3 2020 on a year-on-year basis, improving on Q2 2020's 3,2% yearly increase. China's GDP has picked up speed after a -6,8% yearly drop in Q1 2020, as the pandemic started to disrupt business activity in the Asian country.
- Japan's GDP continues to fall in Q3 2020, as the Japanese economy contracts by -5,7% against GDP values of the same quarter in the previous year. The current growth is a slight improvement from Q2 2020's -10,3% yearly drop. It is the fourth consecutive quarter of negative growth in Japan.

European Commission's Autumn Forecast (November 2020):

The recently published Autumn 2020 Forecast by the European Commission shows new trends regarding GDP growth in the European Union and other advanced economies.

The European Union's GDP forecast remains negative, as Q4 2020 and Q1 2021 will potentially see further contractions of the European economy. European GDP should bounce back as of the second quarter of 2021, registering a 11,7% increase against Q1 2020 volumes. European pace of growth should wane as 2021 advances, but it will still be significant between the latter half of 2021 and the first half of 2022. By late 2022, European GDP growth will lose speed and flatten. Q4 2022 is expected to end with a GDP yearly increase of 1,9%. The recovery is nevertheless expected to be partial.

For the US, its GDP forecast shows a similar narrative to that of the European Union. 2020 will a down year, due in great part to the effects of the pandemics. A significant surge of economic activity should take place in 2021: first in the form of a strong yearly expansion in Q1 2021 (8,8% increase in Q2 2021), followed by a more moderate but still significant rate throughout the remainder of the year. In 2022, US growth should average 2,5%.

Japan will also go through a two-phased recovery, although registering strong changes in the GDP growth rates. Japanese GDP should expand at a notable speed in Q2 2021 (7,1% increase against Q1 2020) as momentum quickly fades away in the coming quarters. Furthermore, estimates show that the Q2 2021 surge will not be as strong as that of the EU or the US. 2022 Japanese GDP change will be close to a flat 1%, potentially reaching a somewhat meagre 0,4% in Q4 2022.

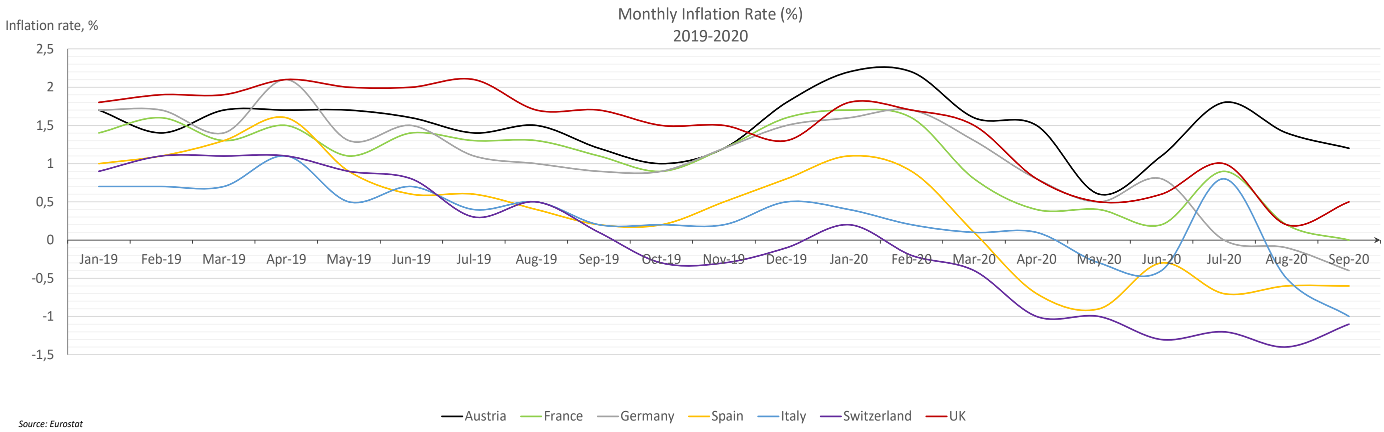
Lastly, regarding China, its economy is currently undergoing a strong economic rebound, as stated above. Estimates show that Chinese GDP will continue to increase at a stable rate of growth, though more moderate, in 2021 (average rate of 5,7% for the whole year) and in 2022 (5,5%). The forecasted GDP performance is comparatively better than the post-restart performance of other major markets.

5.2 Inflation (M)

Q3 2020 average inflation data:

- EU27: 0,5%
- Eurozone: 0,0%
- United States: 0,8%
- China: 2,3%

Key CECIMO markets continue down the deflationary path, as negative quarterly rates are recorded in Germany (-0,2%), Italy (-0,2%), Spain (-0,6%) and Switzerland (-1,2%). Inflation levels remain low in France and Austria, where prices have increased 0,4% and 1,5% respectively.

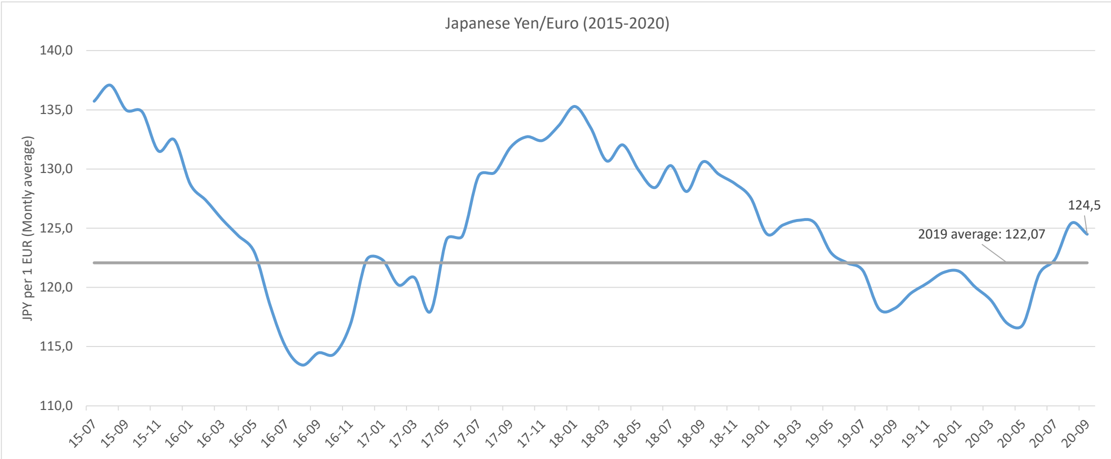


Source: Eurostat

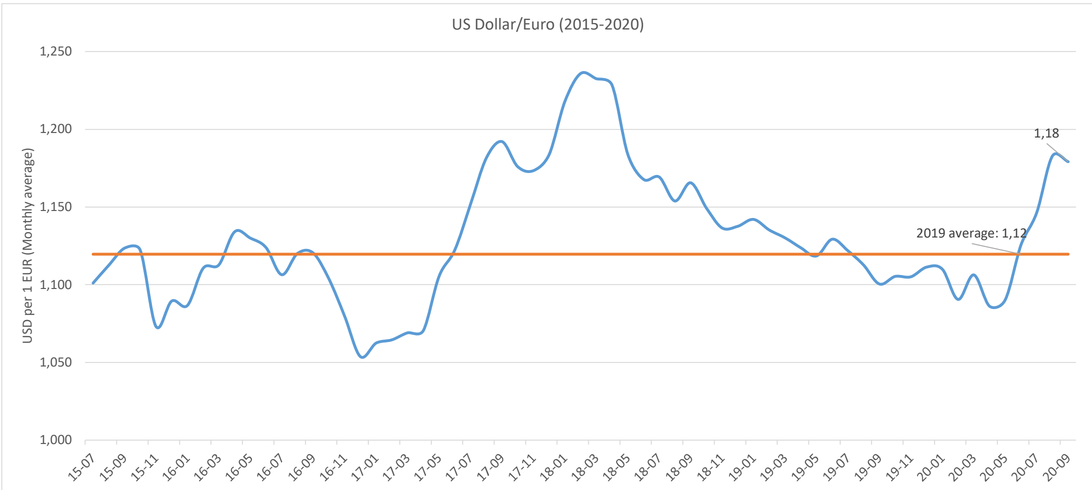
As demand and consumption levels are still low in the European Union, and given the overly negative business outlook, prices have decreased further in some key economies.

Monthly Inflation Rate (%)	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20
United Kingdom	1,8	1,7	1,5	0,8	0,5	0,6	1	0,2	0,5
Austria	2,2	2,2	1,6	1,5	0,6	1,1	1,8	1,4	1,2
France	1,7	1,6	0,8	0,4	0,4	0,2	0,9	0,2	0
Germany	1,6	1,7	1,3	0,8	0,5	0,8	0	-0,1	-0,4
Spain	1,1	0,9	0,1	-0,7	-0,9	-0,3	-0,7	-0,6	-0,6
Switzerland	0,2	-0,2	-0,4	-1	-1	-1,3	-1,2	-1,4	-1,1
Italy	0,4	0,2	0,1	0,1	-0,3	-0,4	0,8	-0,5	-1

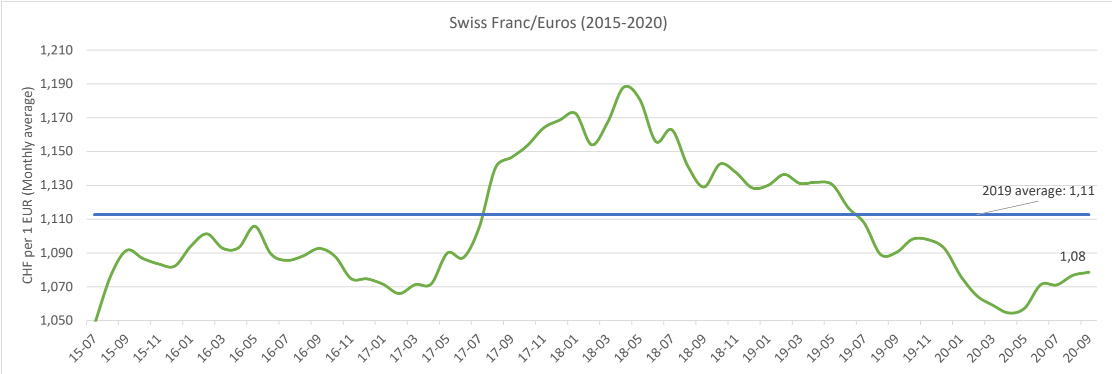
5.3 Foreign Exchange Rates (M)



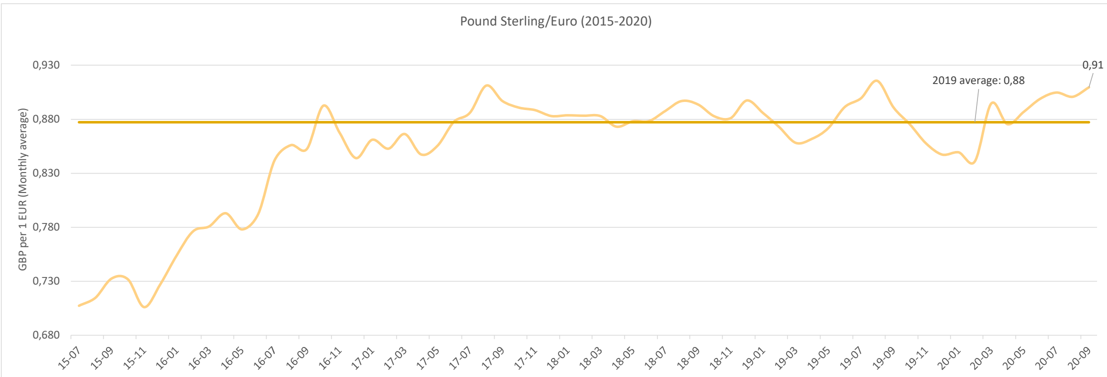
The average Q3 2020 Japanese trading price against the euro was 124,1, indicating a market appreciation of the Japanese currency, which was traded at 118,3 units per euro in the previous quarter. The spike in the Yen's value has sparked volatility in forex markets, yet the currency remains a safe-haven currency for forex investors. Analysts consider that the Bank of Japan's monetary policy, aimed at mobilizing resources toward businesses and households, during the pandemic, is leading to a steady increase of its value.



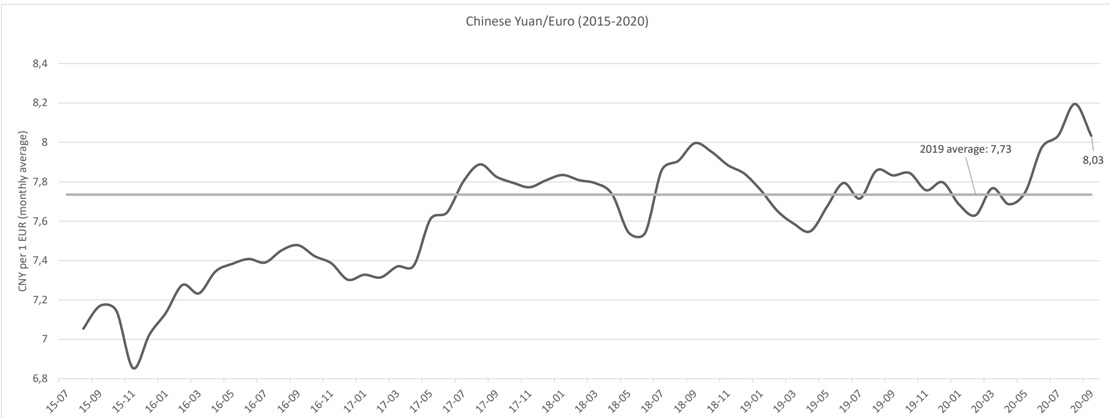
During the third quarter of 2020, the dollar was traded on average at 1,17 units per euro, up from 1,10 units in Q2 2020. Forex traders considered coronavirus cases spike in their quarterly analysis, moving away from the greenback in favor of other currencies. The uncertainty surrounding the Presidential elections and the political stalemate around the US coronavirus stimulus package has also watered-down the value of the dollar in key currency markets.



In the currency markets, the average Swiss Franc-Euro trading ratios was 1,08 francs per euro, a marginal increase from the 1,06 CHF per Euro exchange rate in Q2 2020. The Swiss economy enters its second quarter with a significant deflation rate. The appreciation of the franc takes places amid the weak performance of the European economy and the negative outlook for the latter's key sectors.



In Q3 2020, Pound Sterling was traded 0,91 pence per Euro. The Brexit deadlock ensues between the European Commission and the British Government, the British pound has had a sluggish performance in currency markets. The risk of a no-deal UK departure from the European Union is suppressing the potential of Pound Sterling abroad.



During Q3 2020, China's Yuan traded, on average, at 8,09 units per 1 euro, up from 7,80 Yuan per Euro ratio of the previous quarter. It is the third consecutive quarter in which the Yuan appreciates against the European currency. The Yuan's volatility seems to be increasing in forex markets. The value of said currency was set, in great part, by a government-run index of the Yuan against a basket of foreign currencies. However, the Chinese Central Bank has allowed market operations to set the price of the Chinese currency. In light of this presumed transition to a more flexible price-setting mechanism, traders expect the Yuan to fluctuate further.

Glossary [i]

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´ 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.

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

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 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

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

European Association of the Machine Tool Industries
and related Manufacturing Technologies

Member Associations

Austria: Metaltechnology Austria
Association of Metaltechnology Industries
www.metalltechnischeindustrie.at

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

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

Danish Manufacturing Industries Cooperation
A part of the Confederation of Danish Industry
www.isa.di.dk

Finland: Technology Industries of Finland
www.teknologiateollisuus.fi

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

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

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

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

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

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

Sweden: SVMF
Machine and Tool Association of Sweden
www.svmf.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

CREDITS

CECIMO
Economic and Statistical Toolbox

Publisher
Filip Geerts

Author
José Díaz

Copyediting & Production
Damir Glas

www.cecimo.eu

Avenue Louise 66,
1050 Brussels, Belgium
Tel: +32 (0)2 502 70 90

EMO®is a registered trade-mark of CECIMO

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.