Q3 2021

ECONOMIC AND STATISTICAL TOOLBOX

- The EU Industrial Production Index for the third quarter reflects a steady recovery in European industrial activity.
- The OECD Business Confidence Index (BCI) for Europe reached an all-time high.
- CECIMO's MT production is expected to grow by approximately 11.5% to over EUR 22.5 billion in 2021.
- New Oxford Economics forecast: The recovery of MT consumption in Europe is shifting more towards 2022.

cecimo
European Association of the Machine Tool Industries and related Manufacturing Technologies

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INTRODUCTION

This issue of the CECIMO Economic and Statistical Toolbox looks at data for the third quarter of 2021. Following a good recovery in the first half of 2021, the current (Q3 2021) **Industrial Production Index** score is 105.1, indicating a continued recovery in EU industry. However, supply chain issues, expressed by shortages of raw materials, rising input prices, transport issues and delays in deliveries resulted in limited output growth in Q3 of 2021. Furthermore, inflationary pressures and higher energy prices continue to strongly influence inputs and production costs.

Supply chain issues are expected to last until the middle of 2022. However, in case they last longer, in line with other challenges such as new COVID-19 variants and new lockdowns across Europe, growth could be slowed back.

In terms of the performance of the European Machine Tool Industry, new orders in the third quarter showed a marked improvement compared with the same period of the previous year. However, compared to the previous quarter, CECIMO8 **foreign orders** increased by 1%, while **domestic orders** decreased by 25%.

Due to the decline in domestic orders, mainly due to the sharp decline in Italian and Austrian quarter-on-quarter domestic orders, CECIMO8's **total orders** were down 5% from the previous quarter, but still 70% higher than in the third quarter of 2020. It is important to note that, based on historical data, Q3 orders continue to experience a cyclical downturn prior to stronger Q4 growth. Moreover, with positive expectations for MT demand in 2022, especially in Europe, average MT orders should remain stable in 2022.

According to the latest data update (November 2021), we revised the production expectations for 2021. CECIMO's **MT production** is now expected to grow by approximately 11.5% to over EUR 22.5 billion in 2021. The latest Oxford Economic forecast shows that after a forecasted growth of 10.5% in 2021, 15.2% in 2022 and 6.1% in 2023, **CECIMO MT Consumption** is expected to be near 2019 levels by 2023.

By measuring investment levels, **Gross Fixed Capital Formation** decreased by 3.7% in the third quarter 2021 compared to the second quarter 2021, but still higher by 3.5% compared to the same period a year earlier. The latest data for **capacity utilization** in the investment goods sector European Union, records small decline in fourth quarter of this year and at 82.1 points, stands close to the average levels between 2011 and 2019 (83.6). EU **production spare capacity** reached a level of 3% in the fourth quarter of 2021.

Euro area banks reported broadly **unchanged credit standards** for loans or credit lines to enterprises in the third quarter of 2021. Banks' **overall terms and conditions** for new firms' loans decreased again and a slight increase in **firms' demand for loans** or credit lines in the third quarter of 2021 was reported by the euro banks.

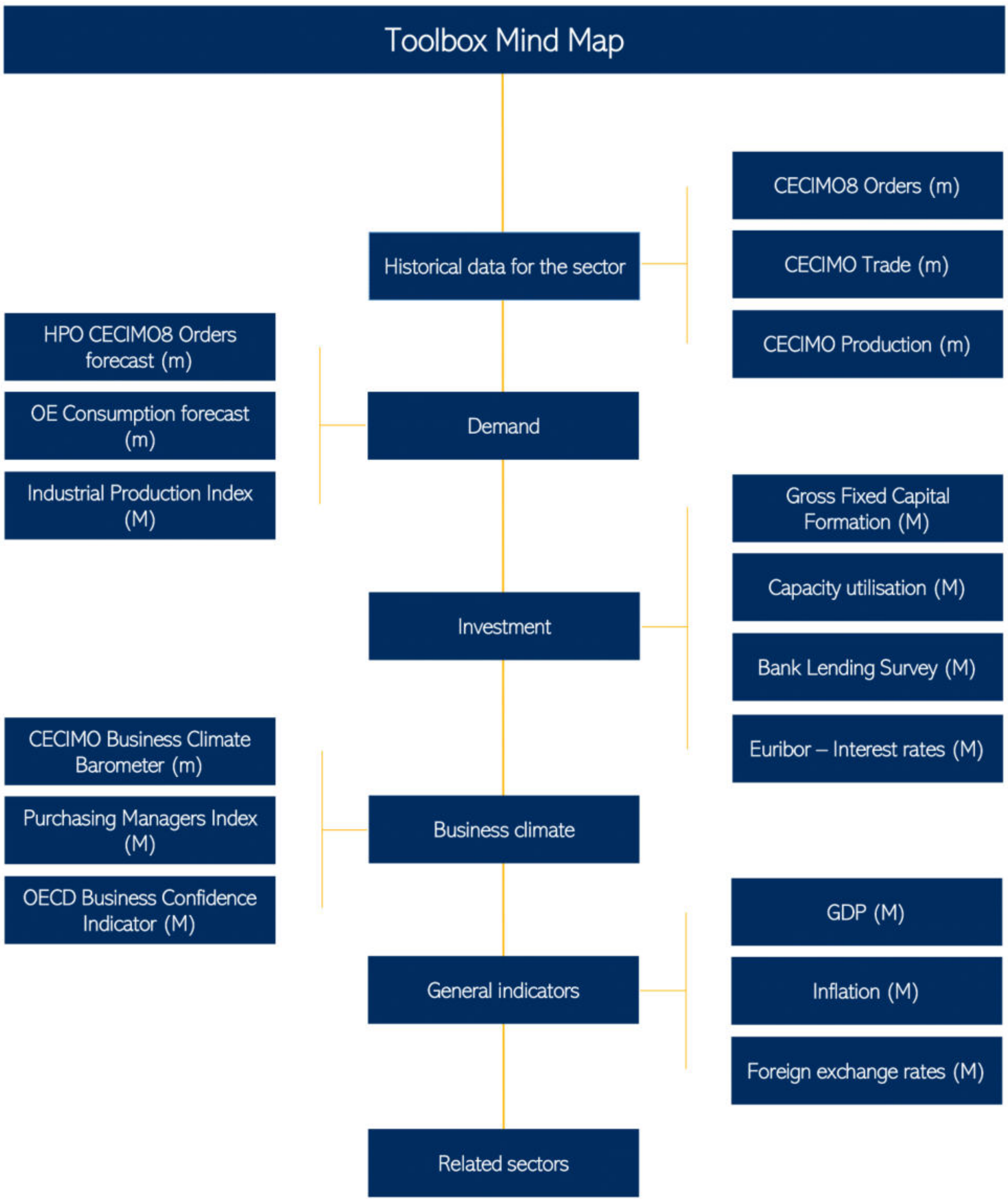
According to the Q3 CECIMO **Business Climate Barometer**, the General business climate among CECIMO member companies continues to improve in Q3 2021, and expectations for the next quarter (Q4 2021) remained very positive (+30%). Business leaders also expressed somewhat lower but still positive expectations regarding exports during Q3 survey round, while the employment outlook is very positive.

The **Global manufacturing PMI** for October and November show higher PMI values compared to August and September. At 54.2, November mirrored the 17th consecutive month of global manufacturing growth. Growth rates accelerated in the US, the Eurozone and Japan, while China returned to growth after a series of three-month declines.

The OECD Business Confidence Index for Europe continued to grow in the third quarter of 2021, reaching a historic high of 102.6 points. Furthermore, the latest figures of 102.6 points in October, shows that is clearly in expansionist territory.

Euro area **GDP** increased by 3.7% in the Q3 2021 compared to the same period of the previous year, while overall EU27 economic output recorded increase of 3,9% on the same annual basis. Other markets such as China (+4.9%), the United States (+5.0%) and Japan (+1.1%) also registered growth over the same quarter in 2020.

Related Sectors – Automotive and Aerospace still faces with numerous challenges in order to raise output. All regions (EU, US, Japan, China) saw their monthly new vehicle sales (registrations) decline from the previous year's values, as the global shortage of microprocessors and COVID-19 continued to have a negative impact on the market. The aerospace sector is showing signs of recovery and a rise in deliveries compared to previous year values but is still behind 2019 levels. New COVID-19 variant - Omicron is likely to have a negative impact on air traffic and aircraft demand in the short term. For the metals sector, steel prices fell again in the third quarter of 2021 and continued in recent months, which is not yet the case for Aluminium and Copper.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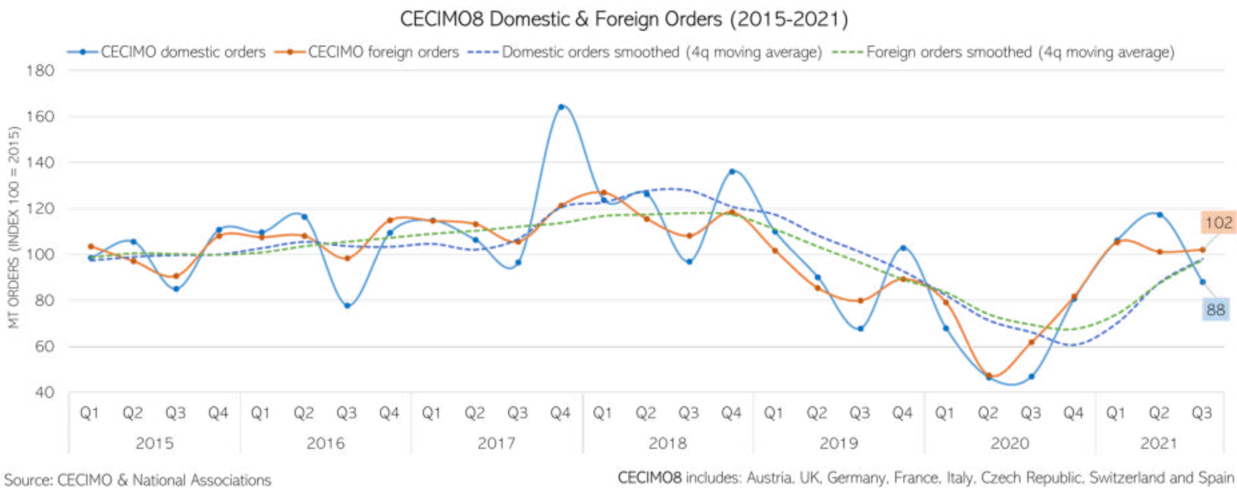
1. HISTORICAL DATA FOR THE SECTOR

1.1 CECIMO 8 ORDERS (M)

Following the recovery of domestic orders in the first half of 2021, CECIMO8 domestic orders index fell slightly in the third quarter. Even most CECIMO8 countries held steady domestic orders, with moderate growth over the previous quarter especially in Germany and France, Italy and Austria showed a sharp decline in domestic orders index. However, it is important to note that the CECIMO8 domestic orders index historically records the lowest levels in the third quarter compared to other quarters of the year. Even below the previous quarter (-25%), the index is still 87% higher than the same period in 2020 and 30% higher than the same period in 2019. Foreign orders index from CECIMO8 producers recorded 1% higher level over the previous quarter and 65% over the same period last year.

As a of negative trend in domestic orders index, CECIMO8 total orders decreased by 5% in Q3 2021 compared to the previous quarter. However, this level of index is a 70% higher than in the same period last year. Based on historical data, order levels in Q4 are usually the highest on a yearly basis, so we expect growth in the last quarter of this year. Challenges with new COVID-19 variants, new lockdowns, supply chain disruptions facing major MT buying sectors such as automotive, higher energy prices, etc., may affect the future path of CECIMO8 orders. However, with positive expectations for MT demand in 2022, especially in Europe, MT orders should remain stable in 2022.



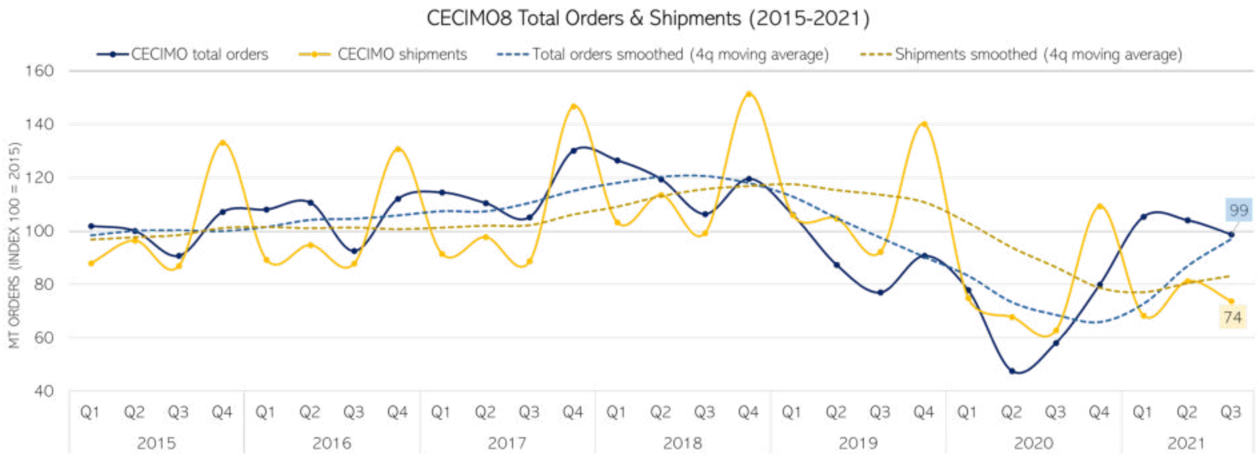
Domestic orders

- Switzerland domestic orders index continues its growth in the Q3 2021. With a quarterly increase of 2%, the Domestic Order Index reached its highest level since the Q4 2019. The Q3 level is 165% higher than in the same period last year and 12% higher than in the Q3 2019. Like in Switzerland, UK producers recorded a quarterly growth rate of 7%. At its highest level since the Q4 2019, the domestic order index also reflects a 79% increase over the same period last year.
- The increase in domestic orders in Germany continued in the Q3 2021. Compared to the previous quarter, German producers record a domestic orders index increase of 15% and compared to the same period last year, this level is 68% higher.
- After reaching a record high in the Q2 2021, domestic orders in Austria fell 36% on a quarterly basis in the Q3 2021. However, this level of the index remains 103% higher compared to the same quarter of the previous year.
- Italy recorded a quarterly decrease of 66% in the Q3 2021. Nevertheless, the positive fact is that the level of the registered index is still 165% higher than at the same period last year and significantly above the third quarter's historical levels. Spain's domestic orders followed the similar path, falling 9% on a quarterly basis, but still 64% more than at the same period last year.
- Following a 2% decline in the Q2 2021, the Czech Republic registered the same level of domestic orders index in the Q3 2021. While this level is the same as in the Q3 2019, it is still 7% lower compared to the same period in 2020.

- French domestic orders, after a strong recovery in the first half of 2021, registered steady growth in Q3. With a 17% increase over the previous quarter, French domestic orders reached their highest level since Q2 2018.

Foreign orders

- In Q3 2021, all CECIMO8 countries recorded a higher level of the Foreign Orders compared to the same period last year.
- The UK recorded the strongest quarter on quarter growth in foreign orders among CECIMO8 countries. With quarterly growth of 54%, the UK foreign orders index registered the highest level since the Q2 2011. The strong recovery in foreign orders is also confirmed if we consider that the index level in the Q3 2021 is 136% higher than in the same period last year.
- Switzerland's foreign orders increased by 14% over the Q2 2021, up 109% over the same period last year.
- Austria (+1%), Germany (-1%) and France (0%) recorded almost the same levels of the Foreign orders during the Q3 2021. It is important to note that for all three countries, the foreign order index is well above the 2019 average.
- The largest quarterly decrease was recorded in the Czech Republic (-9%), Spain (-8%) and Italy (-7%). However, these countries recorded higher level compared to same period last year. As usual for most CECIMO8 countries, the drop in order inflows in the third quarter was evident each year, so an increase is expected in the last quarter.



Source: CECIMO & National Associations

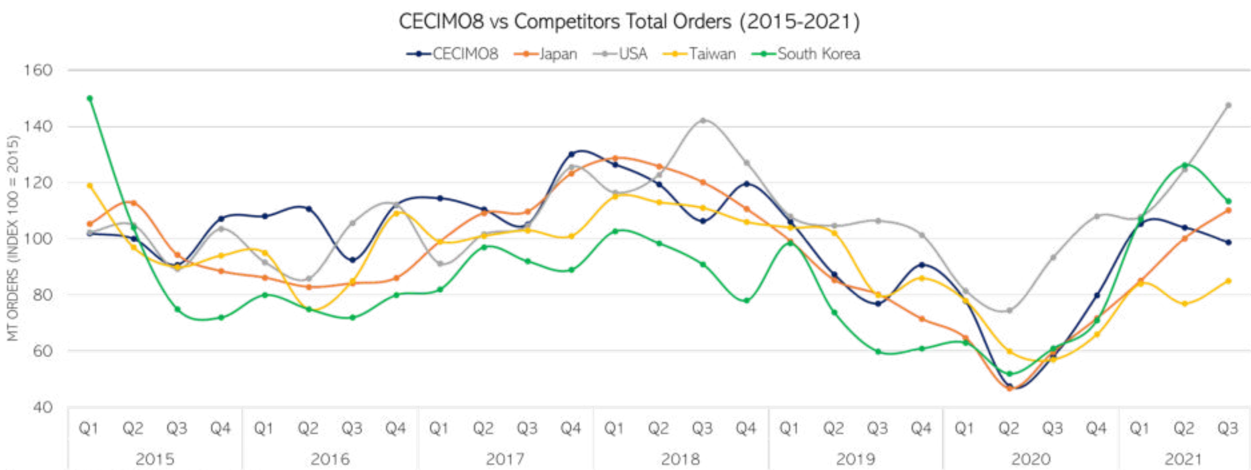
Total orders

- As expected, in the Q3 2021, all CECIMO8 countries registered a higher level of the total orders index compared with the Q3 2020.
- Thanks to the strong foreign orders, UK registered the strongest growth trend with a growth of 38% compared to the previous quarter, followed by Switzerland which registered a quarterly growth of 12%.
- Compared to the previous quarter, German producers record a domestic orders index increase of 4% and compared to the same period last year, this level is 68% higher.
- Following these two countries, the French total orders index grew by 5%. Compared to the same period last year, it was up 296%, reflecting a continued and strong upturn in French foreign orders.
- Due to a significant decline in domestic orders, total Italian orders fell in the third quarter of 2021, with a decrease of 31% compared to the previous quarter. However, this index level still stands at 50% above that of the same period last year.

- The quarter-on-quarter decline was recorded in Austria (-7%) mainly due to the slowdown in domestic orders. However, it is important to note that Austria recorded the record level for the total orders index in the previous quarter. The quarterly decrease was also recorded in the Czech Republic (-8%) and Spain (-9%), mainly because of the decline in the foreign order index.

CECIMO Competitors

- Following stronger growth in the foreign orders in Q2 2021, Japan metal cutting and metal forming companies recorded stronger growth in domestic orders in Q3. Metal cutting companies in Japan recorded a quarterly growth rate of 29% in Q3 2021 on domestic orders, while the metal forming sector, after a 10% decline in the second quarter, experienced a significant 62% growth in the third quarter. The metal forming sector continued positive trend in foreign orders (+10%), while the metal cutting sector posted a small decrease of 3% compared to previous quarter.
- Overall, Japanese total orders in the third quarter of 2021 registered a quarterly growth rate of 10% and an 85% higher than in the same period of the previous year. It is the highest level in the total index since Q4 2018.
- After a slight decrease in second quarter, Taiwan recorded an increase in the domestic and foreign orders index (q/q-1), resulting in an 10% increase in total orders in the third quarter of 2021. While the order level is higher than in the previous year, the Taiwanese sector has yet to reach the 2019 total order index average.
- Thanks to the strong fiscal stimulus provided by the Trump and Biden administrations, domestic MT demand in the United States has rebounded significantly this year. As a result, US domestic orders continued significant growth in the third quarter of 2021, up 18% over the previous quarter and 58% over the same period last year.
- South Korea's total order index decreased by 10% on a quarterly basis during the third quarter. Both domestic (-15%) and foreign (-6%) orders were lower than in the previous quarter. However, it is important to note that the level is still well above the 2019 average and both indicators showed higher values compared to the same quarter last year.

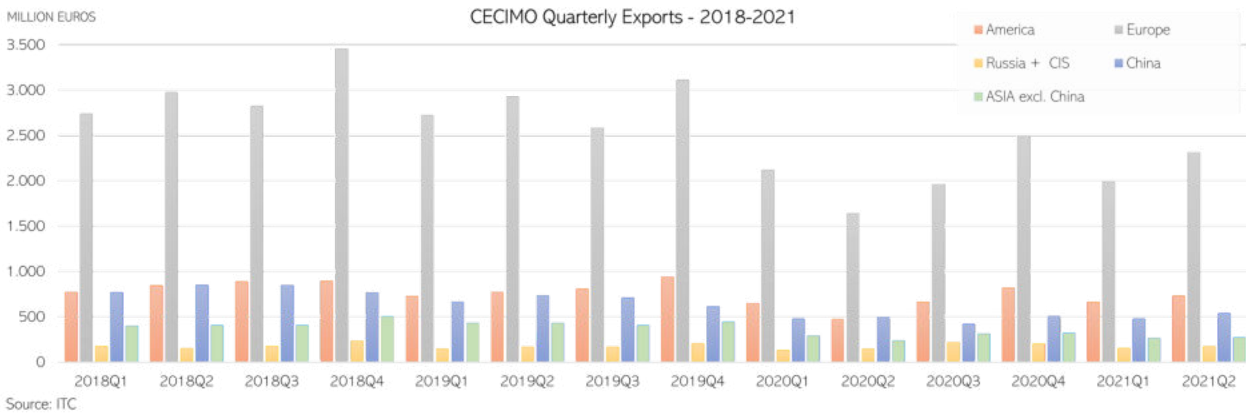


Source: CECIMO & National Associations

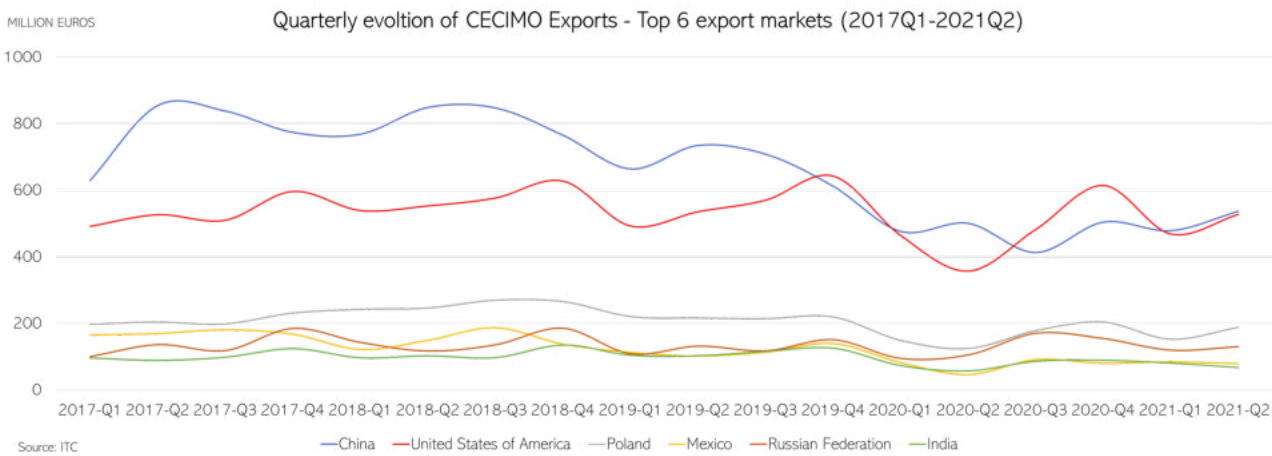
1.2 CECIMO TRADE (M)

Note: The following analysis refers to Q2 2021 machine tool trade figures. ITC Q3 2021 data is not available by the time this report was written.

Q2-2021 Exports

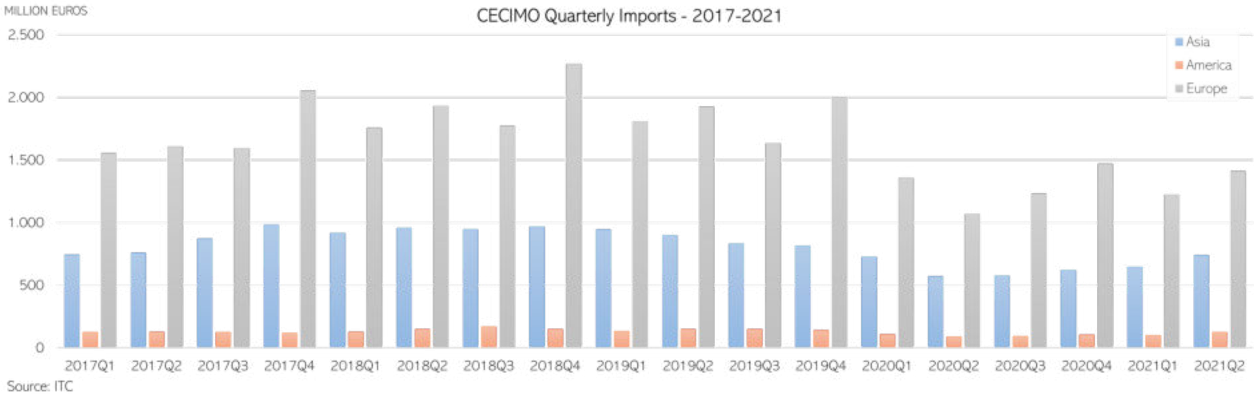


- CECIMO's Machine Tool exports in the second quarter of 2021 recorded 35% higher levels compared to the same period last year. After a quarter-on-quarter decrease in previous reporting period, CECIMO Total exports increased by 13% in Q2 2021 compared to the Q1 2021 level.
- The second quarter rebound was observed across all regions. The strongest growth in exports occurred in the Americas and Africa region, closely followed by growth in exports to Europe. Exports to Russia (CIS) continued its growth in the second quarter and increased by 13% compared to the previous quarter.
- Exports to Asia increased by 9% compared to the previous quarter. While exports to China increased by 12% compared to the previous quarter, exports to other Asian countries increased by 3%.
- All regions registered higher export levels than in the first quarter of 2021.

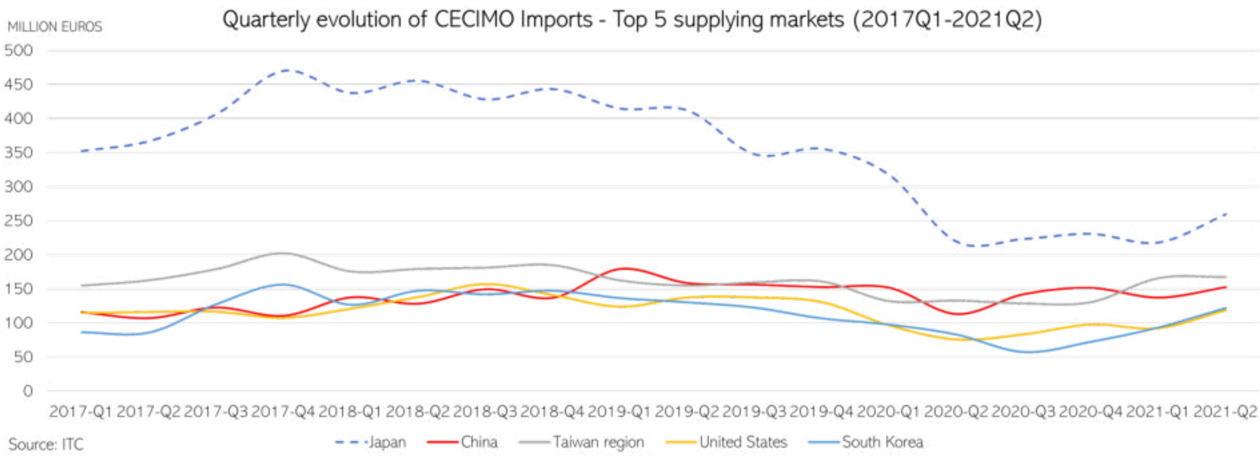


- Among the top export destinations outside of CECIMO, China remains the top destination, closely followed by the United States in Q2 2021.

Q2-2021 Imports



- In the second quarter of 2021, CECIMO Total MT imports were 32% higher than a year before and recorded a 16% increase compared to the previous quarter. After the eight quarters in which imports decreased on an annual basis (q/q-4), it is good to note that CECIMO MT imports are recovering, indicating a rebound in the European MT consumption.
- Compared to the first quarter of 2021, total CECIMO imports increased by 27% from America region, 16% from Europe and 14% from Asia.
- ·Total imports of machine tools to the CECIMO area were worth €2.3 billion euros in Q2 2021; with exports valued at €4.2 billion, the CECIMO positive trade balance was around €1.9 billion euros in this quarter.



- Among the top CECIMO supplying markets, Japan is still on the first place, followed by Taiwan region and China.

CECIMO Trade Balance (Billion EUR)

	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021
CECIMO Total Exports	5,2	4,9	5,5	3,8	3,1	3,7	4,4	3,7	4,2
CECIMO Total Imports	3,0	2,6	3,0	2,2	1,7	1,9	2,2	2,0	2,3
CECIMO Trade Balance	2,2	2,2	2,5	1,6	1,4	1,8	2,2	1,7	1,9

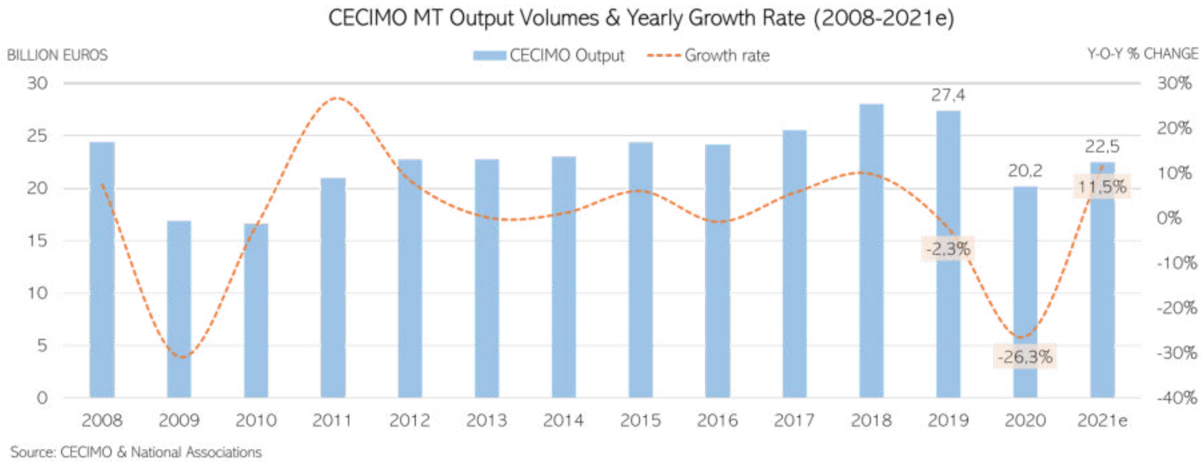
- The CECIMO region continues to record a significant positive trade balance with a positive result of about €1.9 billion in Q2 2021.

1.3 PRODUCTION (M)

As part of the preparation for CECIMO Fall Meetings we have updated the data for the CECIMO production in 2020. In addition, based on the National associations data, we updated forecasts for 2021.

According to the data for previous year, the production of machine tools in the CECIMO area fell by -26.3% in 2020 to €20.2 billion. With an output of €20.2 billion, CECIMO retains the leading position on the global MT market, with around 34% share at the end of 2020.

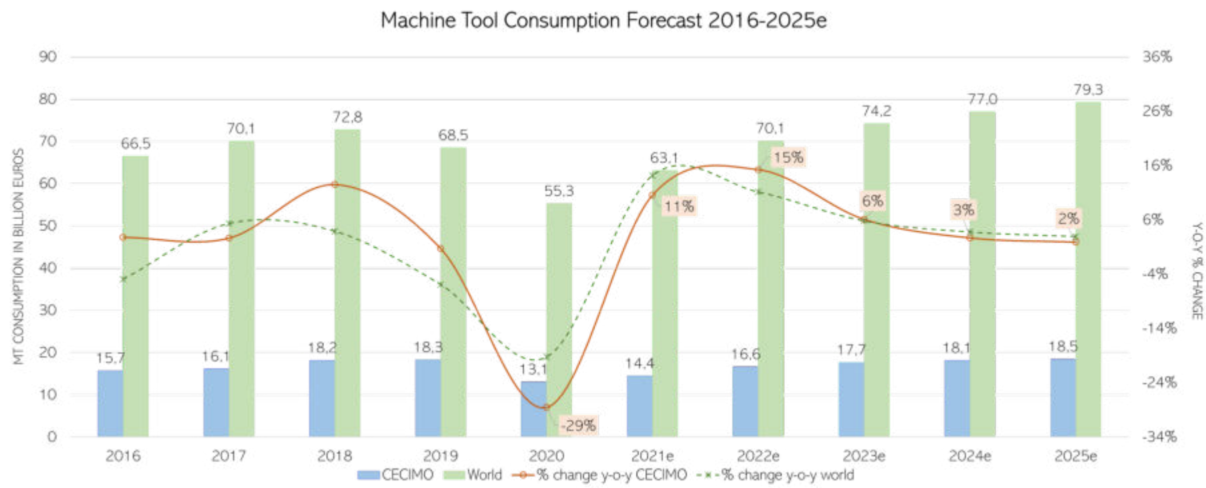
Based on recent update from National associations (mid-November), our forecasts have been revised upwards. The Machine Tool production of CECIMO countries in 2021 is expected to reach approximately 22.5 billion euros with an annual growth of about 11.5%. However, growth rates should be different across countries. Among the three major CECIMO producers, the highest production growth is expected in Italy (+20.8%), while Switzerland (+7.2%) and Germany (+5.0%) expect more moderate growth.



2. DEMAND

2.1 CECIMO CONSUMPTION (M)

According to the latest forecasts from Oxford Economics (October 2021), MT consumption in CECIMO countries is expected to reach 14.4 billion euro in 2021 and 16.6 billion euro in 2022. After a forecasted growth of 11% in 2021, 15% in 2022 and 6% in 2023, CECIMO MT Consumption is expected to reach 2019 levels in 2024.



Source: CECIMO & Oxford Economics (Sept. 2021)

2021-2025 estimates are based on OE consumption estimates for Germany, Italy, Switzerland, Austria, Spain, Czech Republic, France, UK and Turkey

In the Oxford Economics' baseline scenario, due to supply chain issues and uncertainty about delta variant in different regions, world GDP growth is expected grow 5.8% in 2021, lower than in previous forecast report. The global GDP surpassed its pre-crisis peak in Q2, but timely activity indicators, such as the global composite PMI, have begun to soften from a high level. The rise in Covid-19 cases due to the spread of the new COVID variants together with supply chain disruptions are one of the main global concerns. Supply chain disruptions are especially visible in the automotive industry (lack of chips), one of the main MT purchasing sectors. As result, Global MT Demand is expected to rise by 16.3% in 2021 and 11.1% in 2022.

The second scenario – "Long Covid", considers the spread of the COVID Delta variant that causes the restrictions to be renewed. In this case, with domestic demand limited and trade affected by supply chain disruption, global GDP growth slows sharply, and financial markets weaken. In this case, the rebound in world demand for MT is projected to be lower than the baseline scenario, with growth of 15.9% in 2021 and 8.3% in 2022.

Third scenario – "Consumer boom", gives more optimistic upside for the global economy. In this scenario, consumers are significantly reducing the substantial savings accumulated over the pandemic. As result, global demand for MT is expected to rise by 16.4% in 2021 and 12.9% in 2022.

One of the major challenges facing the European and global MT industry in coming period is of course the transition of the automotive sector from conventional to electric vehicles. According to report, the impact of generous incentives and stringent emission regulations is already visible in European countries, with the region seeing a sharp increase in EV penetration from 1% in 2019 to 4.6% in 2020 and an estimated 7.1% in 2021. While this will have an impact on MT demand in the coming years, it is not expected to have the same impact on all markets around the world.

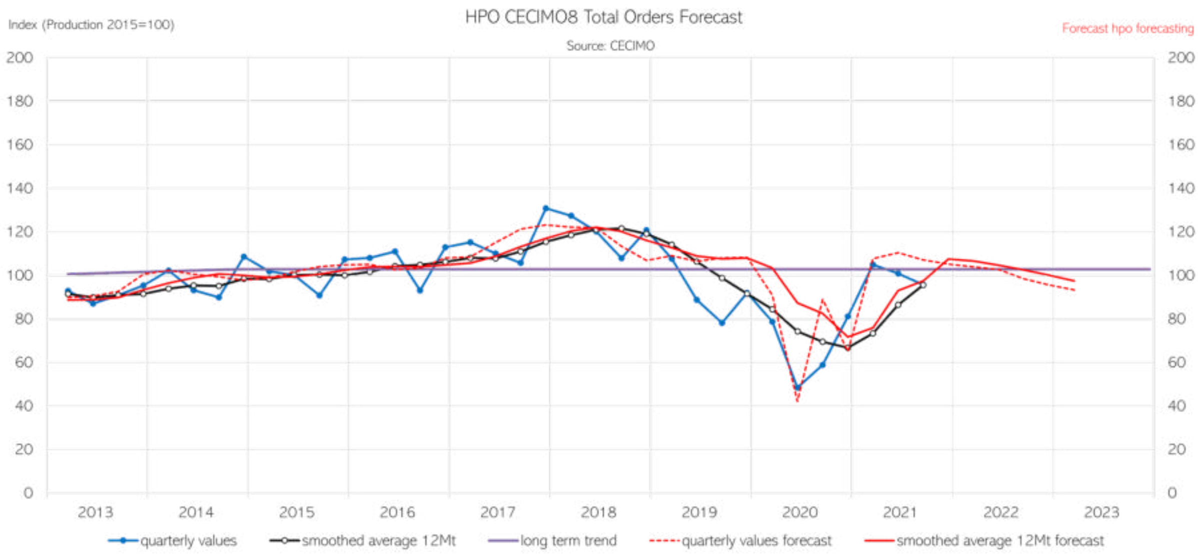
In general, according to the latest forecasts, Oxford Economics' is less optimistic regarding global MT consumption forecasts for this year than in the April report. The recovery of MT consumption in Europe is shifting more towards 2022 compared to the previous forecast. Supply chain disruptions and slower recovery in orders have hit European MT consumers (especially Automotive sector). According to the latest forecasts, GDP growth will be 5.1% in 2021 and 4.5% in 2022, with Eurozone GDP recovering to its pre-crisis level in late 2021.

China's GDP is expected to grow by 6.2% in 2021 and 4.2% in 2022, lower than previously forecast. This lower forecast is mainly led by supply chain disruptions which are taking longer than expected, which is why near-term outlook remains cautious despite strong demand. Overall, Oxford Economics forecast MT-weighted production is expected to increase by 10.8% in 2021 and 5.2% in 2022. MT demand is expected to increase by 8.8% in 2021 and 13.6% in 2022.

Considering factoring supply-side constraints, a slower inventory rebuilds, and increased caution due to the Delta variant, in latest report, Oxford Economics estimate that US GDP will grow by 5.5% in 2021 and 4.4% in 2022. However, most MT purchasing sectors are expected to return to pre-pandemic output levels before the end of the year. MT demand should rise by 14.6% in 2021 before accelerating to 20.2% in 2022 as supply-chain issues gradually wane and MT demand fully benefits from the fiscal support package.

Between the main MT purchasing sectors at global level, we see a lower forecast of growth in 2021 for the Automotive and Aerospace industry, which will be moved next year. As a result of this shift, the strongest growth in 2022 is expected in these two sectors. However, this also means that the Aerospace and Automotive sectors will take the longest to recover to 2019 average levels (Aerospace - 2023, Automotive - 2022).

2.2 HPO CECIMO8 ORDERS FORECAST (M)



According to HPO real economic cycle observations, although all sentiment indicators are currently pointing upwards, they stand by their assessment that a slowdown is to be expected again in most industries once the current compensation effects have worn off.

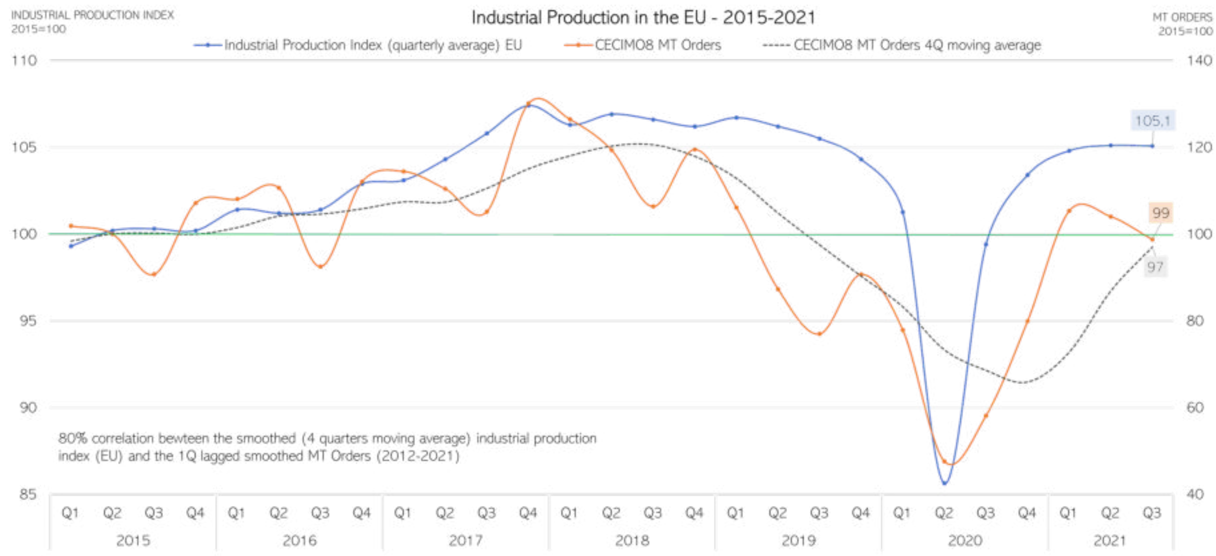
CECIMO8 Orders Forecast:

According to latest HPO CECIMO8 Orders Forecast (December 2021), new orders index recorded slow decrease to 95.7 index points in Q3 2021. As a result, the peak in the second half of 2021 was corrected downward to 107 index points in the newly calculated forecast. Overall demand is expected to remain strong until the end of the year and in the first half of next year.

According to the HPO analysis and monitoring industrial production and OECD business confidence index (BCI), if the slowdown in industrial production is confirmed in the coming months, demand in the capital goods industry must be expected to decline in 2022. Due to the debt bubble, China is not in a position to play the stabilizing role that it played during the 2008 financial crisis. But it is important to note that demand for consumer durables peaked in the United States in mid-2021 because of the stimulus packages implemented by the Trump and Biden administrations during the pandemic.

Even CECIMO8 Total orders continued to fall in the third quarter of 2021, as new economic indicators positively affect the outlook. As a result, HPO now expects the downward trend in 2022 to be noticeably flatter. At the end of 2022, the index is calculated at 100 pints, 8% higher than in the last update.

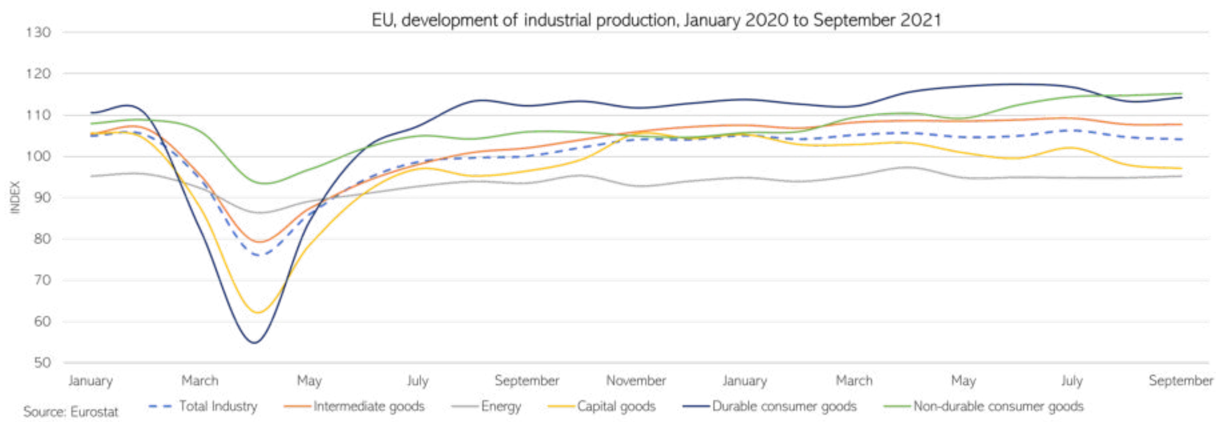
2.3 INDUSTRIAL PRODUCTION INDEX (M)



Source: Eurostat + CECIMO

Following the improvement since the third quarter of 2020, the total Industrial Production Index (IPI) slowed down in the third quarter of 2021 in the European Union (EU) and in the Eurozone (EZ).

With no change compared to the previous quarter, the IPI for the EU remains at its highest level since the second quarter of 2019. The current rating (Q3 2021), is 105.1, indicating a continued recovery in European industry. Moreover, it is important to note that it is a 6% higher index than in the third quarter of 2020.

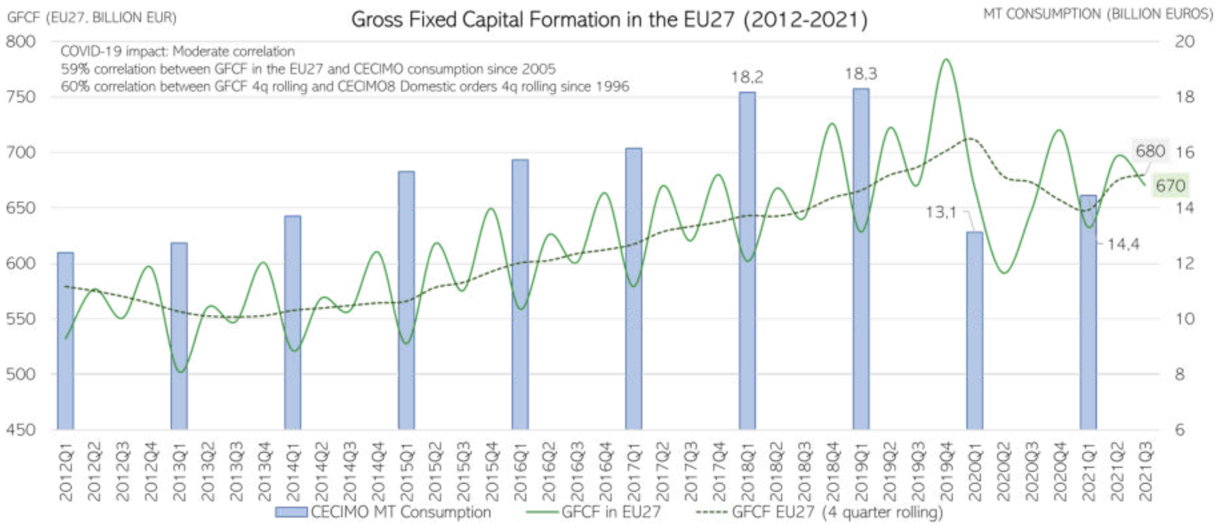


Source: Eurostat

In sectoral terms, the strongest recovery in Q3 2021 is now in Non-durable consumer goods sector. With the exception of the Non-durable consumer goods (+0.8%) and Energy (+0.1%) sectors, which recorded an increase over the previous quarter, Intermediate goods (-0.3%), Capital goods (-0.8%) and Durable consumer goods (-0.9) sectors recorded a minor decline.

3. INVESTMENT

3.1 GROSS FIXED CAPITAL FORMATION (M)



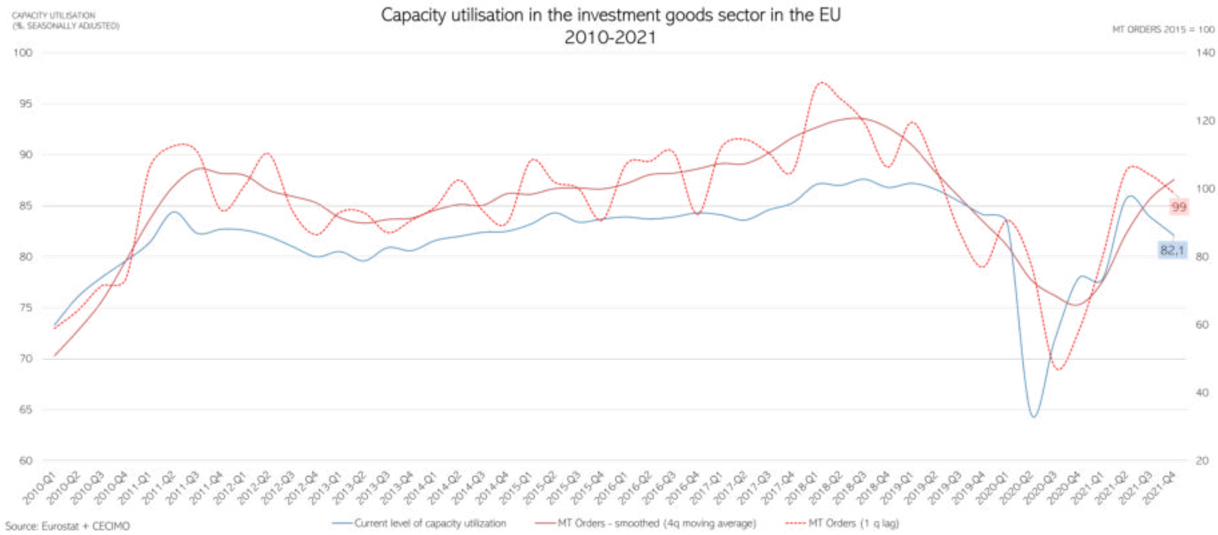
Considering the latest EU27 figures, Gross Fixed Capital Formation decreased by 3.7% in Q3 2021 against Q2 2021. However, new level is still 3.5% higher compared to the same period last year. In absolute terms, investment in the third quarter of 2021 amounted to 670.4 billion euros, a bit higher figure if we consider the 647.6 billion euros registered in the same period previous year.

The quarterly change in trend (-3.7%% in Q3 2021) shows similar cyclical movements as in previous third quarters. It is also important to note that typically, after a small decline in the third quarter, GFCF usually records the highest quarterly values in the final quarters of the year. This is consistent with the trend of CECIMO8 Domestic orders. If we look at 4 quarter moving values, we can see a slight increase compared to the last 4 quarter moving values. It is important to note that the coronavirus pandemic negatively impacted the correlation between GFCF and CECIMO consumption. However, the moderate correlation is expected to improve towards a high correlation with the improvement in CECIMO consumption levels.

3.2 CAPACITY UTILISATION AND PRODUCTION CAPACITY (M)

Methodological Note: The dates in this section refers to when the results were published; so, the Q4-2021 figures were published in Q4-2021 but reflect the position at the end of the previous quarter when the data collection took place. We will refer to the date of publication in this section but please bear in mind this adjustment.

The most recent data for capacity utilisation in the European Union's investment goods sector, following a slight q/q decline (-2%) in the third quarter of this year, shows a similar development in the fourth quarter (-2%). However, currently this indicator stands at 82.1 points, which corresponds close to the EU average levels between 2011 and 2019.



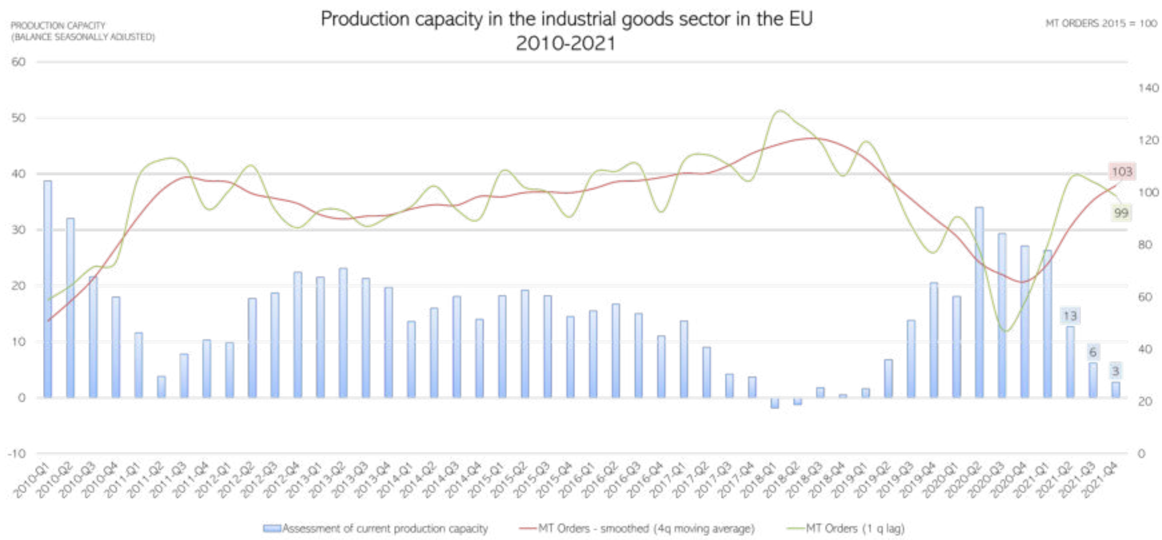
At the national level, as can be seen in the table below, the capacity utilisation level decreased in the fourth quarter compared to the previous quarter in almost all CECIMO8 countries. However, the Czech Republic registered the largest decline in capacity utilisation. Only Switzerland registered an increase, while other monitored countries registered slight declines in this indicator.

Capacity Utilisation (% of total capacity)

	Q4 2019	Q1 2020	Q2 2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021	Q3 2021	Q4 2021
Austria	86,2	85,4	74,2	76,0	79,2	82,0	86,9	90,1	87,8
Czech Republic	86,9	86,9	47,7	74,8	80,5	82,2	91,5	90,2	67,1
France	85,7	84,0	62,0	70,9	75,1	74,4	81,9	79,8	78,6
Germany	85,5	85,5	65,9	72,7	81,1	79,2	90,3	85,9	84,2
Italy	77,9	76,9	NA	65,7	73,0	75,5	79,3	82,5	79,2
Spain	87,9	85,4	81,8	78,5	80,0	81,0	80,9	82,4	82,1
Switzerland	83,7	83,0	83,6	80,9	77,0	78,3	81,7	85,6	87,2
United Kingdom	82,0	79,0	55,0	64,0	74,0	75,0	79,0	82,0	81,0

Source: Eurostat, MTA, SWISSMEM

To track production capacity, business managers are asked to assess their current levels of production as sufficient or not, considering the changes in the order book and demand of capital goods. In Q4 2021, there is further decrease in spare capacity compared to the previous reporting period. EU production spare capacity currently stands at 3%. Like in the previous reporting period, this very low level of spare capacity is expected to have a positive impact on future Machine Tool orders inflows.



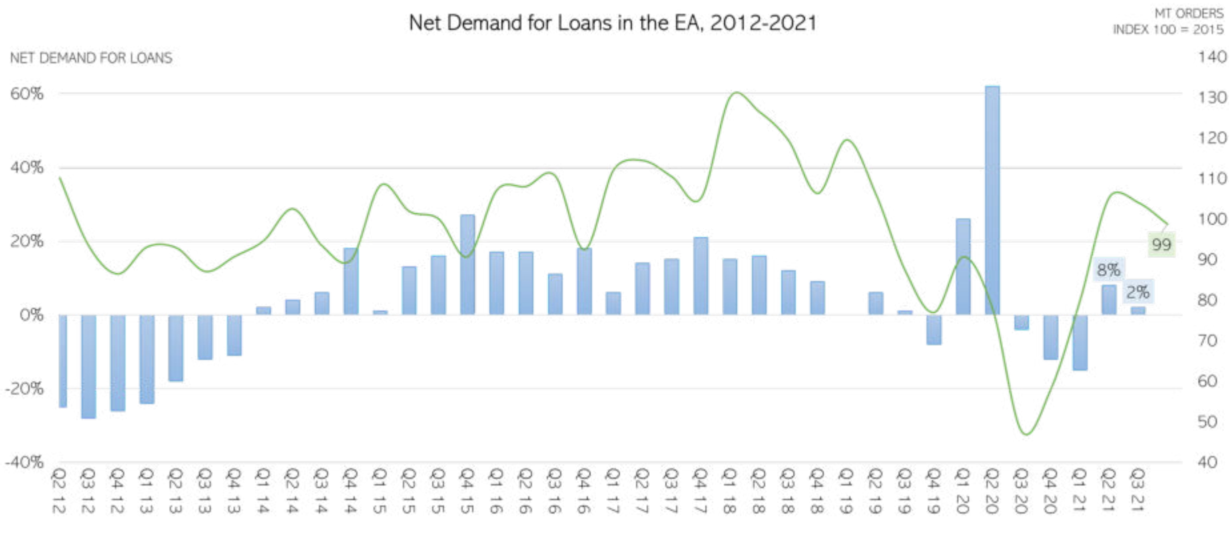
As shown in the chart below, there is a visible decrease in spare capacity in the third quarter of 2021 in Austria, France, Germany and Italy, compared to the previous quarter. The largest change was in Germany, where the percentage balance decreased from 2.1% to negative -8.6% over the quarter-on-quarter period. Austria also recorded a further decline in spare capacity, with a negative balance of -6.3 % in the fourth quarter of 2021. Italy recorded a decrease in spare capacity from 19,9 % to 16,9 %, whereas the Czech Republic and Spain recorded an increase.

Production Capacity (balance in %)

	Q4 2019	Q1 2020	Q2 2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021	Q3 2021	Q4 2021
Austria	22,5	18,7	35,8	42,7	41,9	27,6	15,4	-5,1	-6,3
Czech Republic	28,9	33,5	19,2	25,4	21,3	13,3	8,5	6,8	11,5
France	-4,0	-1,1	28,2	1,4	21,5	31,3	29,9	27	21,5
Germany	33,0	25,7	46,5	44,4	35,6	36,4	7,8	2,1	-8,6
Italy	25,5	27,6	NA	28,7	26,6	27,5	25,2	19,9	16,9
Spain	13,2	7,8	13,7	26,5	9,3	4,5	13,4	-12,1	8,7
United Kingdom	41,2	0,3	47,1	37,8	20,3	NA	NA	NA	NA

Source: Eurostat

3.3 BANK LENDING SURVEY (M)

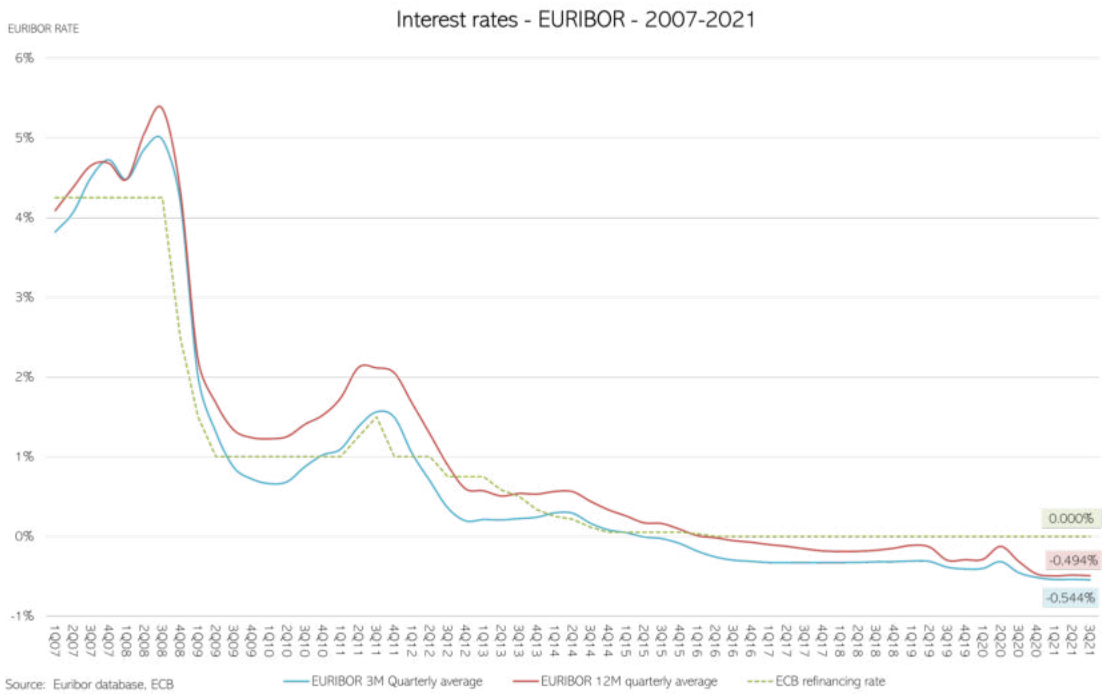


Source: European Central Bank

- **Credit standards** – euro area banks reported broadly unchanged credit standards (i.e. banks' internal guidelines or loan approval criteria) for loans or credit lines to enterprises in the third quarter of 2021 (with the net percentage of banks reporting a 1%, after -1% in the second quarter of 2021). The broadly unchanged credit standards support the banks' balanced approach to credit risk. According to ECB, credit standards remained broadly unchanged for SMEs (0%, up from -1%), and large firms (0%, up from -3%). Furthermore, credit standards also remained broadly unchanged for short-term loans (1%, after -2%) and remained and for long-term loans (1%, after 0%).
- **Banks' overall terms and conditions** (i.e. the actual terms and conditions agreed in the loan contract) for new loans to enterprises eased again in the third quarter of 2021 (net percentage of -2%, after -2%). According to ECB survey results, margins on average loans narrowed in net terms, while margins on riskier loans widened moderately. The same as in previous reporting period, margin developments are, overall, consistent with the recent favourable developments in firms' borrowing costs. Banks indicated competition as the main factor driving the overall slight easing in terms and conditions in the third quarter of 2021.
- Looking at the largest euro area countries, overall terms and conditions on loans or credit lines to enterprises eased, on balance, in Italy, while in Germany, Spain and France have remained unchanged.

- Banks reported, on balance, a **slight increase in firms' demand for loans** or credit lines in the third quarter of 2021 (net percentage of banks at 2%, after 8% in the second quarter of 2021). Furthermore, banks reported in net terms, broadly unchanged loan demand by SMEs (net percentage of 1%) and a stronger net increase for large firms (11%). While loan demand decreased on balance for short-term loans (-9%), it increased for long-term loans (5%).
- Looking at the largest euro area countries, in the third quarter of 2021 banks reported a net increase in firms' demand for loans in Germany and Spain, while they reported unchanged loan demand on balance in Italy and a small net decrease in France.
- **In the fourth quarter of 2021**, euro area banks expect a stronger net increase in firms' demand for loans (net percentage of 23%) – especially for SMEs (net percentage of 26%, compared with 23% for large firms).

3.4 EURIBOR (M)



The **ECB refinancing rate** remained unchanged at 0.0% during the third quarter of 2021. The EURIBOR 3-month average rate stands at -0.544%, while the 12-month average stands at -0,494%.

According to recent ECB statements, overall financing conditions currently remain favourable for firms, households, and the public sector. The interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 0.00%, 0.25% and -0.50% respectively.

ECB will continue to judge that favourable financing conditions can be maintained with a moderately lower pace of net asset purchases under the pandemic emergency purchase programme (PEPP) than in the second and third quarters of this year. Net purchases under the APP will continue at a monthly pace of €20 billion as long as necessary to reinforce the accommodative impact of its policy rates, and to end shortly before it starts raising the key ECB interest rates.

Concerning the inflation, rising energy prices, the recovery in demand and supply bottlenecks are currently pushing up inflation. However, while inflation will take longer to fall than expected, the ECB expects these factors to ease over the course of next year.

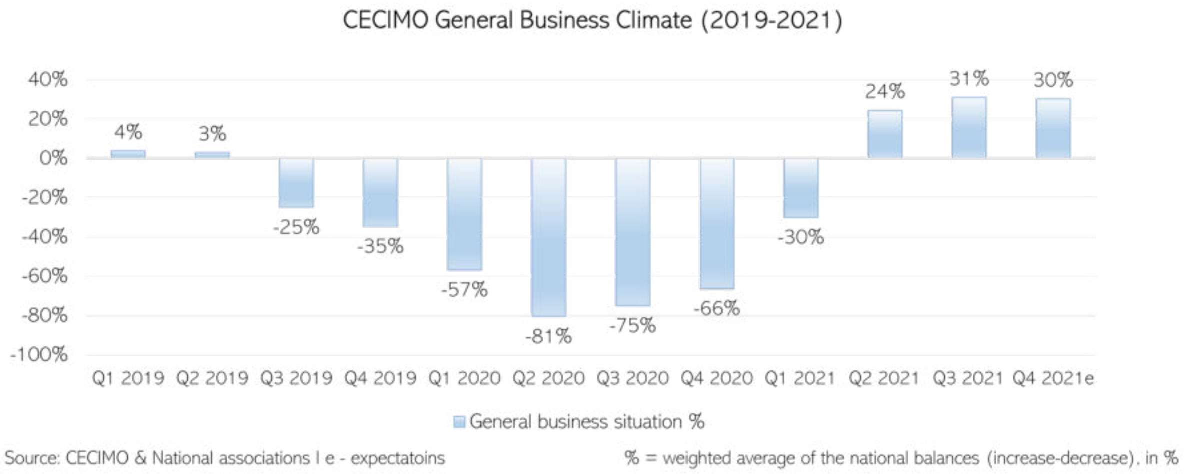
4. BUSINESS CLIMATE

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.

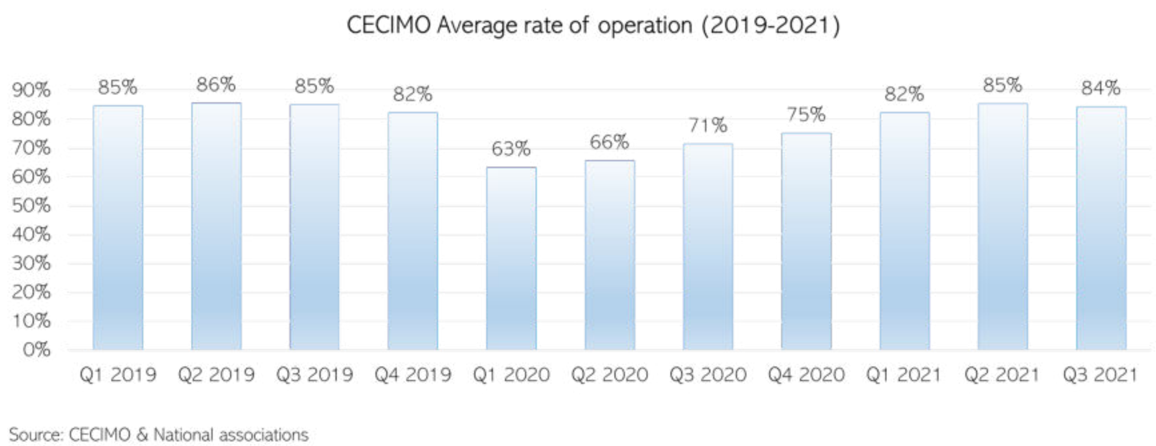
Methodology: CECIMO & National association surveyed individual companies and assessed their current business climate and their expectations (next q) in relation with demand, domestic production, export sales and employment. The responses of the CECIMO Business Climate Barometer are analyzed as the difference (net percentage) between the share of companies reporting an increase/decrease in their business activities. The results were weighted by the share of national production in 2015 among participating CECIMO countries.

Note: The results for the third quarter are based on responses from the following CECIMO countries: Germany, Austria, United Kingdom and Italy.



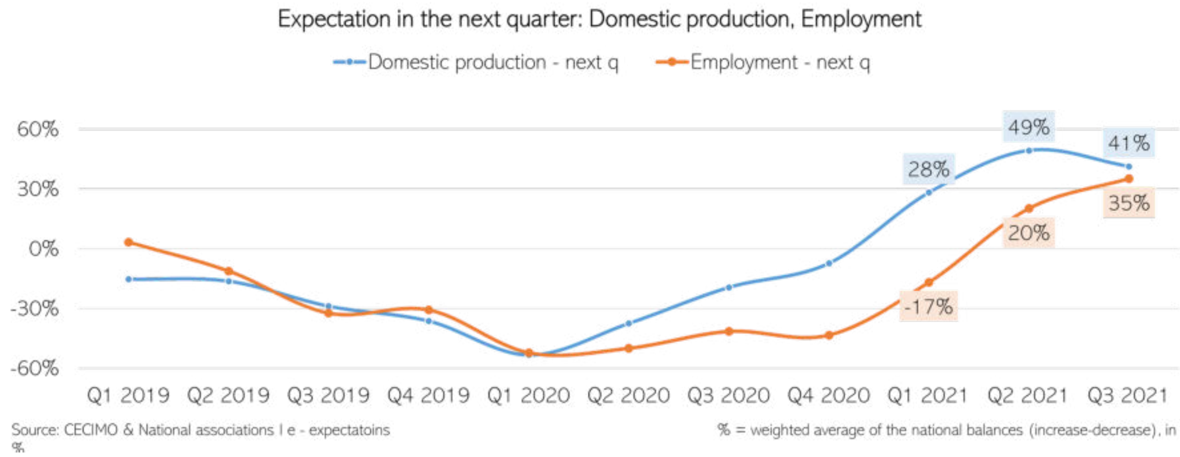
The General Business Climate among CECIMO member companies continues to improve in Q3 2021. According to the results of the CECIMO BCB survey in the third quarter, even a little lower than the expectations of the previous survey results (38%), managers expressed a very positive assessment of the business situation, reaching a positive percentage of 31%. Even this level is slightly below the forecast in the previous survey round, it is the highest positive level if we look at the period since Q4 2018. In addition, during this survey round, management's expectations of the overall business climate for the next quarter (Q4 2021) remained positive (30%).

In line with EU capacity utilization levels, in the third quarter of 2021, the average operating ratio of CECIMO companies is on the "normal levels" they were before the coronavirus's impact. According to survey, CECIMO's average operating rate reached 84%, down only 1% from the previous reporting period.



Survey results indicate that demand for products, after reaching a record level, declined slightly in the third quarter. However, this indicator remains at +21% in Q3 2021. This is consistent with the decline in new orders in the third quarter based on historical order cycles, especially in the domestic market.

Over the next three months, managers' expectations for domestic production (41%) are very positive (up) and a bit lower, but still positive for exports (16%). The employment outlook is also positive, recording a positive balance in the third quarter of 2021 (+35%).

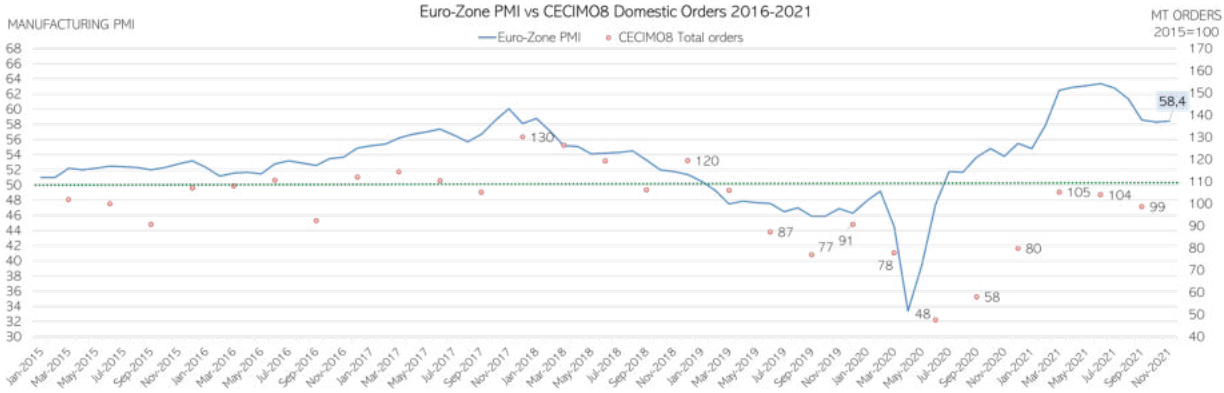


4.2 PURCHASING MANAGERS INDEX (M)

Global Manufacturing PMI

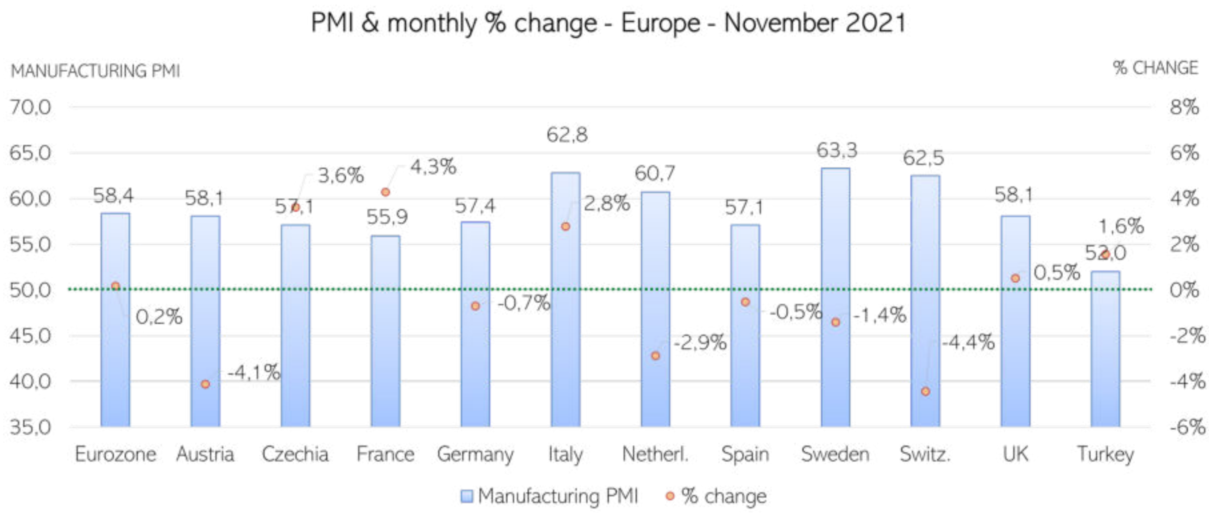
The J.P. Morgan Global Manufacturing Purchasing Managers' Index (PMI), continued clearly in expansion territory above the 50.0 mark in the Q3 2021, indicating improving operating conditions. Although the pace of improvement has slowed, the latest data for October and November show higher PMI values compared to August and September. At 54.2, November mirrored the 17th consecutive month of global manufacturing growth. Growth rates accelerated in the US, the Eurozone and Japan, while China returned to growth after a series of three-month declines. In November, managers pointed out that headwinds (including disruptions from supply chain issues and COVID-19 risks) are expected to decrease in 2022. As a result of global supply pressures, supplier delivery times have increased to one of the largest on record.

Eurozone Manufacturing PMI



Following a four-month slowdown, the euro area PMI increased in November and stabilised at 58.4. At 4.2 points above the Global PMI, it reflects a more favourable business climate in the euro area in November.

According to IHS Markit, in the euro area, new business continued to increase at a rate that was comfortably above its long-run average. Moderate output was observed in Germany, France and Austria, whereas strong performances were observed in Italy, Ireland and the Netherlands. Both purchases and stocks of inputs increased at sharper rates during November, driven by fears of ongoing shortages of inputs in coming months. The increase in stocks resulted in another substantial increase in monthly costs.



Austria

After a record high in June, November saw the Austria Manufacturing PMI fall for the fourth time in the past five months to its lowest since January. However, at 58.1 points, down from 60.6 in October, the last reading was still comfortably over the 50.0 no-change threshold. Growing concerns about increased infections and renewed containment measures weighed on managers confidence in November. Most companies still record longer delivery times on raw materials and intermediate products, while concerns about supply delays have accelerated the rate of growth in pre-production stocks to a new record.

Czech Republic

After four consecutive months of negative trend, thanks to the increases in production, new orders and stronger employment growth, the manufacturing PMI for the Czech Republic picked up to 57.1 in November, from 55.1 in October. According to IHS Markit, the rate of cost inflation was the fastest for four months, as firms noted substantial cost rises for key items such as metals, plastics, energy and fuel.

As in Austria, many companies reported an increase in purchases of inputs to build up safe stocks. Managers remain optimistic regarding the overall business climate over the coming period.

Germany

The November results for Germany indicate that output volumes continue to be strongly impacted by supply bottlenecks and rising costs. The German Manufacturing PMI fell to 57.4 in November, down from 57.8 in October, the lowest level in ten months. According to IHS market survey results, strong input competition, combined with rising energy costs, continued to exert upward pressure on manufacturers' operating expenses in November. However, employment continued to increase in November and producers were slightly more optimistic about 2022, expectations have recovered to their highest level since August.

Spain

Supply constraints and price pressures continues to impact Spanish manufacturing sector in recent months. After reaching a record high in August (59.5), the Spain Manufacturing PMI registered 57.1 in November, down from 57.4 in October. However, this is tenth successive month that the PMI has posted above the 50.0 no-change mark. Demand growth remained positive, supported by a stronger gain in new export orders. However, as in other EU countries, business input costs have increased at a record pace, largely due to supply chain constraints. Transport difficulties, particularly for sea freight, have been identified as a significant problem that has led to longer delivery of inputs.

France

The French manufacturing sector, after a downtrend since May, has seen an improvement in output, new orders and employment since October. While the increase in supplier delivery times due to material shortages and logistical issues continued to negatively impact manufacturers, France Manufacturing PMI increased in November to 55.9, from 53.6 in October. French manufacturers registered the quickest increase in new orders for three months, latest data showed. However, the problems associated with the supply of certain materials and components, such as semiconductors, would have affected certain sectors, especially in the car industry.

Italy

After seventeenth straight monthly improvement in the health of the sector, rising from 61.1 in October to a record high of 62.8 in November, Italy's manufacturing sector remained on a strong growth path. Despite growth was again held back by supply issues which continued to cause cost pressures, stronger expansions in output and new orders provided the greatest uplifts to the headline figure. Companies continued to expand their staffing levels in November and, in line with the improvement in the business situation, Italian manufacturers expressed a slightly higher level of confidence in output over the coming year.

Netherlands

In the Netherlands, according to November survey data, output growth has declined to its lowest level since December 2020. Growth has slowed slightly, mainly due to lower output and new order growth (in line with showdown of German output). However, the level of the Manufacturing PMI still remains very high, at 60.7 in November, while it is among the highest in CECIMO countries. It is worth noting that the Dutch manufacturing sector is already producing record production. According to a survey, many companies are facing shortages in staff, personnel and fixed capacity.

Sweden

Sweden Manufacturing PMI declined to 63.3 in November, down from 64.2 in October. This is seventeen consecutive months of growth in manufacturing activity, the weakest since August but still well above its long-term average (54.8). Supply chain disruptions and the spread of infection, new COVID-19 variants continue to negatively impact business climate and sector growth.

Switzerland

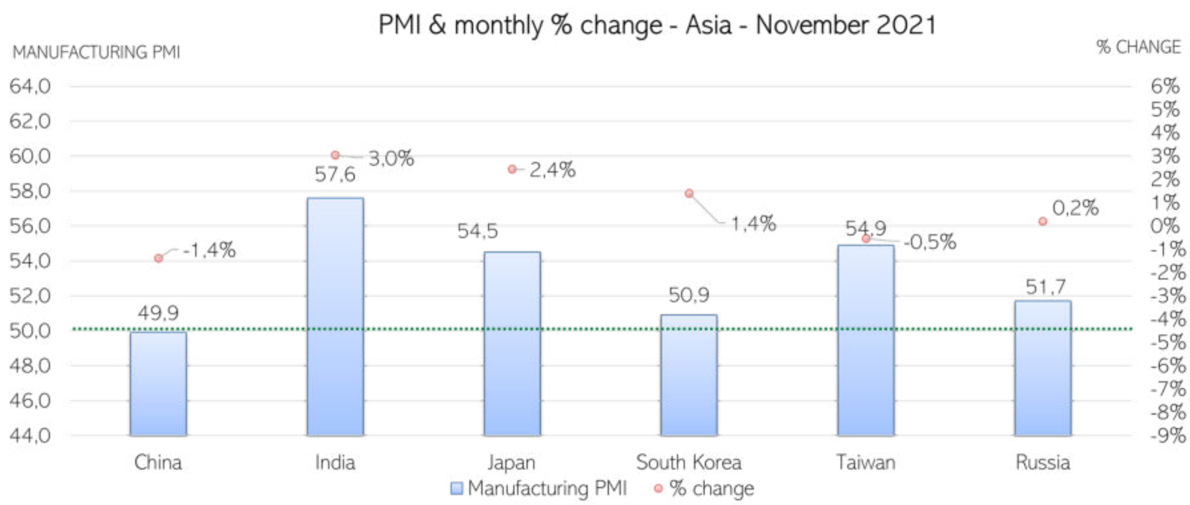
The Swiss Manufacturing Index fell to 62.5 in November from October's 65.4. Even at a very high level, the level of the Manufacturing PMI in November was the lowest since February. The fall in output, new orders, purchasing activity and employment affected the fall in the index. As in other CECIMO countries, supply limitations were a key factor holding back output growth during the month. However, the index remains strong above the 50.0 no-change mark and among the strongest compared to other CECIMO countries.

Turkey

According to latest survey data from Istanbul Chamber of Industry Turkey Manufacturing PMI was up to 52.0 in November 2021 from 51.2 in the previous month, pointing to the sixth straight month of expansion. The increase in manufacturing output was followed by another increase in employment, despite inflationary pressures and supply chain disruptions. New orders have weakened due to price rises, shortages of electronic components and issues in the automotive sector. Furthermore, it is important to note that the weakness of the currency exacerbates already high raw material prices, putting increasing pressure on the manufacturing sector.

United Kingdom

UK manufacturers, like others in Europe, faced significant pressure on input costs in recent months due to supply chain issues, component shortages and significant mismatch between demand and supply. Despite difficulties, the UK PMI rose to 58.1 in November from 57.8 in October. According the IHS Markit, the trend in new export orders worsened mainly due weaker demand from China, trade disruption with the EU (ongoing Brexit complications) and cancellation of some orders due to extended delays. However, UK manufacturers maintained a positive outlook and most companies expect output to rise over the next 12 months.



China

China General Manufacturing's PMI during the recent month indicated that overall business conditions were broadly unchanged. The PMI index for manufacturing, after falling in contraction territory in August and a slight increase in September and October, fell again just below the neutral level of 50.0 in November standing at 49.9 points. Supply in the manufacturing sector recovered, while softer demand conditions resulted in further drop in staff numbers. Despite the decline in new orders, output is growing for the first time in four months as power supply issues and inflationary pressures ease. With the improvement of the epidemic situation, the expected increase in demand and the recovery of supply chains, Chinese manufacturers have expressed positive expectations for output growth in the coming year.

India 

India’s manufacturing sector records strongest increase in production and sales since February. From 55.9 in October to 57.6 in November, India's PMI marked the largest improvement in the sector's health over the past ten months. Stronger demand, especially on the domestic market, was the main source of sales growth, as new export orders rose at a slower pace in November. Manufacturers have also increased their purchases of additional inputs, with the major threat to the positive outlook being new waves of COVID-19 and inflationary pressures.

Japan 

After lower output and new orders in August and September, the Japanese manufacturing sector recorded stronger growth in October and November. Moreover, additional pressure on capacity led Japanese manufacturers to increase employment levels for the eighth consecutive month. As a result, the manufacturing PMI rose from 53.2 in October to 54.5 in November, indicating the largest improvement in health in the sector since January 2018. However, manufacturers noted that material shortages and delivery delays in receiving inputs have contributed to the largest increase in costs over the last 13 years. Business confidence regarding output in 2022 remained positive, with sentiment supported by hope to end the COVID-19 pandemic.

South Korea 

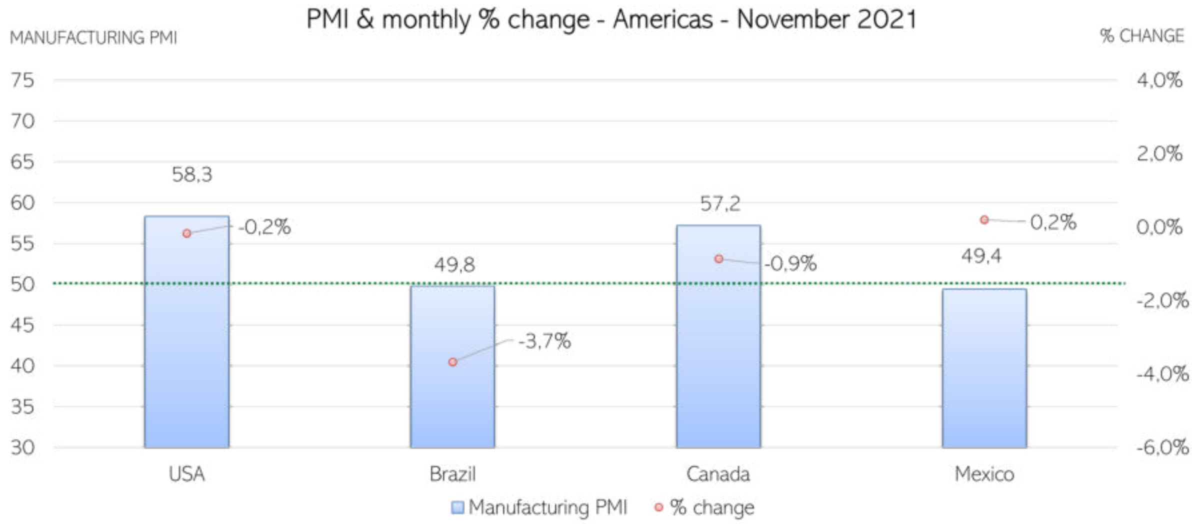
For South Korea's manufacturing sector, while the PMI rose from 50.2 in October to 50.9 in November, new order growth overall stagnated as supply shortages hit demand. Based on the manufacturer's responses, this was most evident in the automotive and semiconductor industries. As in other countries, input prices have increased due to continued shortages of raw materials and delivery delays. However, the positive sentiment for 2022 rose in November, hoping that supply chain pressure would ease and the recovery in global demand would pick up.

Taiwan 

Following an increase in the previous 16 months, manufacturing production in Taiwan declined slightly in November. Taiwanese manufacturers pointed out that supply delays and shortages of key components had weighed on production schedules, pushing up input prices, while customer demand was softer than average for 2021 so far. As result, Taiwan Manufacturing's PMI declined to 54.9 in November 2021 from 55.2 in October. However, during November, firms increased their workforce numbers and buying activity again in as firms sough to protect against future shortages and price hikes.

Russia 

After reaching a very low level in August (46.5), the PMI index for Russian manufacturing registered 51.7 in November, slightly higher than 51.6 in October. Modest output growth, supported by stronger customer demand, higher order inflows and access to new markets that boosted total new sales, were key drivers of growth in November. In addition, to increase capacity, companies increased their workforce in November, which also led to a decrease in the backlog. As in other countries, manufacturers expressed higher input costs due to higher supplier prices and raw material shortages.



United States

Although still well over 50.0, and highest in America's region, the US Manufacturing PMI recorded 58.3 points in November, down from 58.4 in October. Production growth has faced challenges such as longer lead times, supply shortages and higher energy prices. However, employment increased further in November, as firms sought to broaden capacity amid rising backlogs of work. In addition, firms significantly increased their input purchases to increase stocks, and their expectations of the production outlook in 2022 improved to a three-month high in November.

Canada

In November, the performance of Canadian suppliers deteriorated as a result of transportation delays, material shortages, port congestion and virus restrictions. However, the Canadian Purchasing Managers Index fell marginally from 57.7 in October to 57.2 in November. The index still records a very high level thanks to strong output growth, while a favourable demand environment, new orders experienced solid growth but at a slower pace in November compared to October. Demand from the US and Asia markets supported a slight month-on-month increase in exports. In general, companies remain convinced that supply issues will disappear in 2022.

Mexico

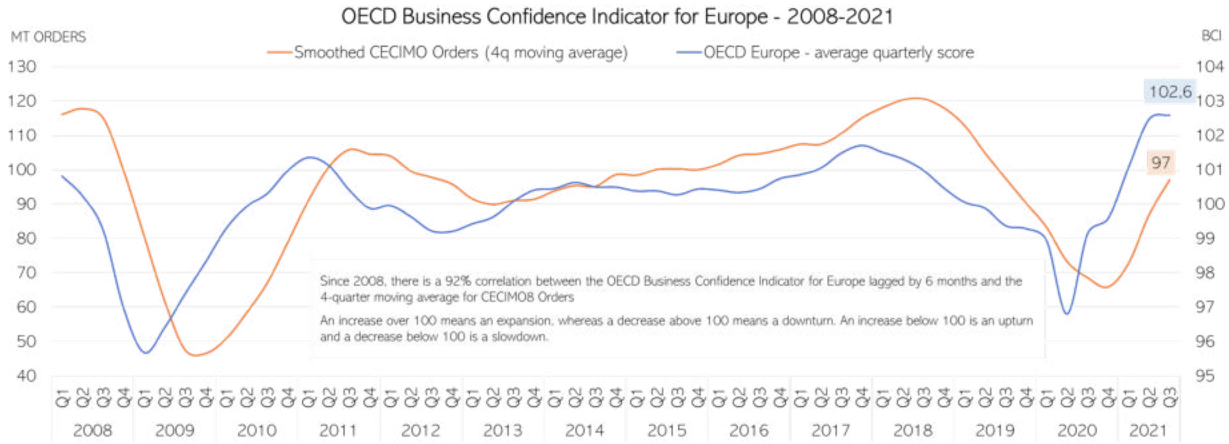
With a result of 49.4 in November, little different from 49.3 in October, the PMI for Mexico's manufacturing sector reported a further deterioration in the sector's health. Mexican manufacturers reported that shortages of raw materials and rising prices of energy, fuel, materials and transportation have led to a further sharp increase in their input costs. Companies reported challenges in receiving items from Asia and Europe in particular. Following concerns about the negative impacts of the pandemic, inflationary pressures and supply chain issues, business optimism faltered in November.

Brazil

As a result of lower orders and output, the Brazilian manufacturing sector is back in the contraction zone for the first time since May 2020. Recording 49.8 in November, compared to 51.7 in October, the IHS Markit Brazil Manufacturing PMI reflects the deterioration of the industry's health. Supply chain disruptions, intense price pressures, weak currency (against the US dollar), market uncertainty and rising interest rates were among the major challenges facing Brazilian manufacturers in November. Despite inflationary pressures, rising borrowing costs and political uncertainty, Brazilian manufacturers expect a rebound in demand that is expected to support output next year.

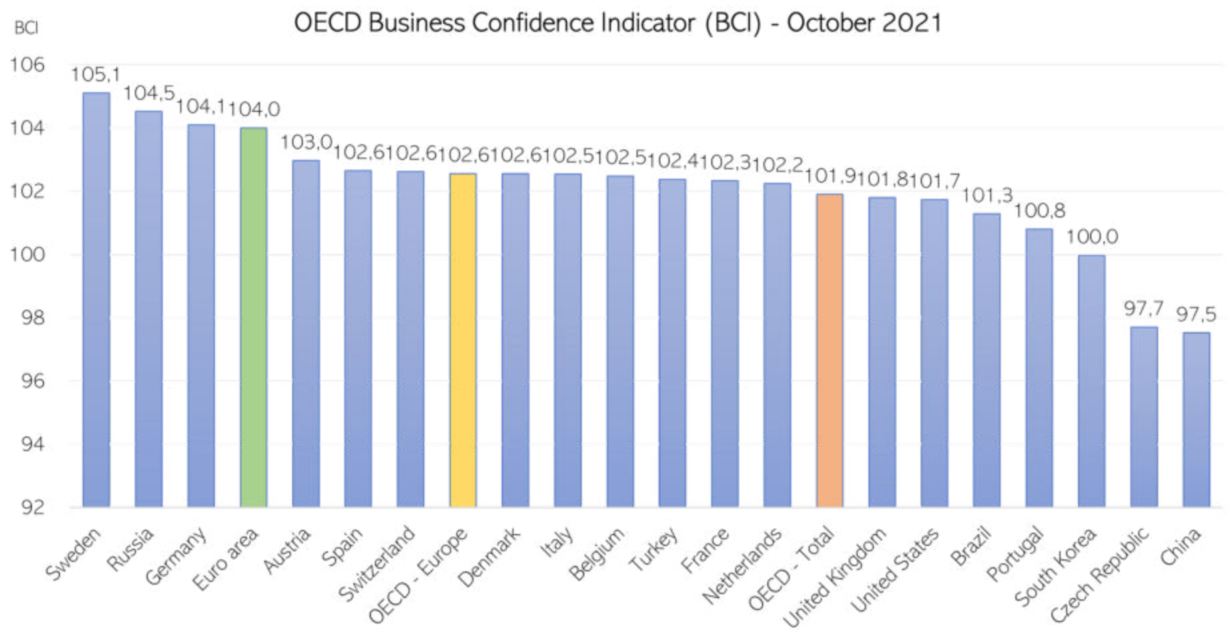
4.3 OECD BUSINESS CLIMATE INDICATOR (M)

The Business Confidence Indicator (BCI) can be used to monitor output growth and predict turning points for economic activity. Numbers above 100 suggest an increased confidence in near future business performance, and numbers below 100 indicate pessimism towards future performance.



After reaching very high levels in recent months, the BCI for Europe continues to reflect improved short-term confidence. The BCI for Europe in Q3 2021 reached 102.6 points, the all-time high. It is important to note that the euro area business confidence indicator is even slightly higher, reaching 104 points in the third quarter. However, the latest figures for October show that the BCI index for Europe stabilised at 102.6 points, indicating a favourable outlook for the business climate in Europe in the last quarter of the year.

The Business Climate Index for the OECD countries (Total) also improved and reached level of 101.9 at the end of Q3 2021. The October 2021 data (note that the previous graph refers to quarterly averages) shows a stabilization of the index where the OECD-Total aggregate is at the level of 101.9 points.

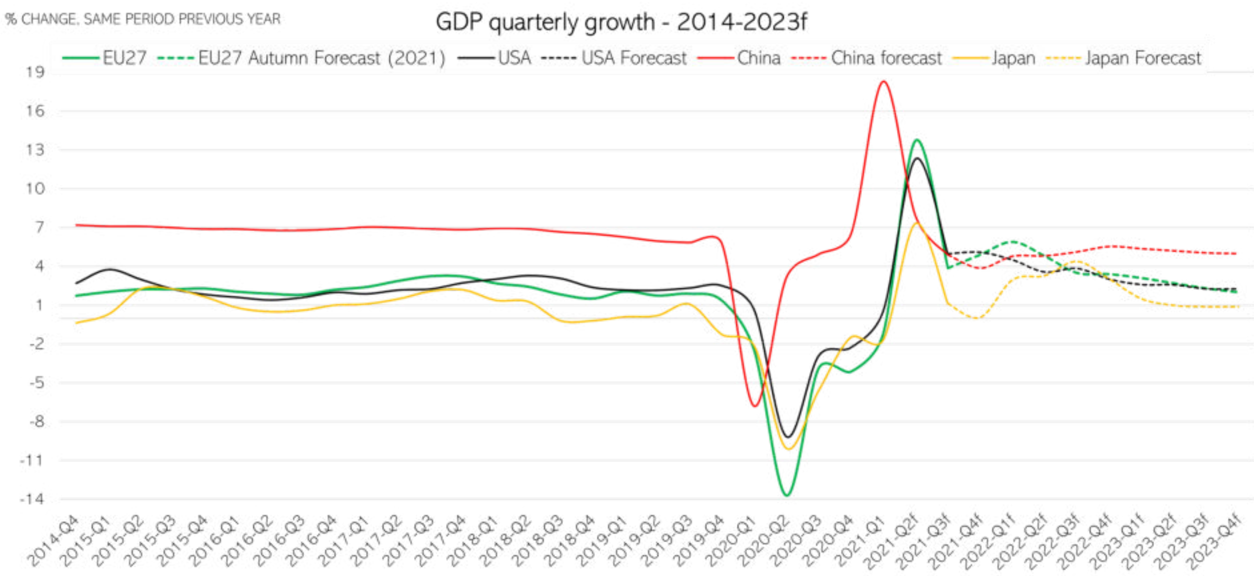


Country-specific BCI readings for October (latest available data) show:

- European markets such as Sweden (105.1), Germany (104.1), Austria (103.0), Spain (102.6), Switzerland (102.6), Denmark (102.6), Italy (102.5), Belgium (102.5), Turkey (102.4), France (102.3), and Netherlands (102.2) were above the OECD average. At 101.8, the UK BCI was lower than the OECD average, but still above the 100-point level. Across European countries, only Czech Republic in October recorded a level below 100 points.
- Between Asian markets, China and South Korea had an BCI lower than the OECD average, although South Korea BCI recorded 100.0 (no-change mark), while China BCI recorded 97.5 points, suggesting pessimism about future performance.
- Russia (104.5) was above the OECD average, while the US (101.7) and Brazil (101.3) were below the average, but still above the level of 100 points.
- Sweden, Russia, Germany recorded the highest BCI levels in October 2021, with Austria not far behind.

5. GENERAL INDICATORS

5.1 GDP (M)



Source: CECIMO, European Commission Forecast (EU), OECD (US, China, Japan)

Tracking the trend of the percentage change in GDP, comparing the latest period (Q3-2021) with the same period a year earlier:

- Euro area GDP increased by +3.7% in the Q3 2021 compared to the same period of the previous year, while overall EU27 economic output recorded increase of 3,9% on the same annual basis. Compared with previous quarter, both rates of European GDP show a continuous recovery in the second quarter +2.3% in the euro area and +2.1% in the European Union.

- China's economy registered a 4.9% increase in the third quarter of 2021 compared to the same period in 2020, and an increase of about 1.1% compared to the previous quarter.

- United States GDP in the second quarter of 2021 was 5.0% higher than in the third quarter of 2020, growing 0.5% compared to the second quarter of 2021.

- The Japanese economy in the third quarter of 2021 recorded GDP growth of 1.1% compared to the same quarter of 2020, with negative quarter-on-quarter growth of -0.8%.

European Commission's Autumn Forecast (November 2021):

Despite all the challenges, the new forecast from the European Commission shows more optimistic outlook for 2021 for EU GDP growth. The EU economy continues to grow, with output in the third quarter almost reaching its pre-pandemic level.

According to latest forecasts, increasing vaccination rates in Europe and adaptation of firms and households to living with the remaining restrictions have lowered the impact of the COVID-19 pandemic on economic activity. However, the health situation remains highly differentiated outside Europe and most emerging economies with low vaccination rates, remain vulnerable to lockdowns. While the main drivers are set to be on the domestic demand, bottlenecks and disruptions in global supply have been increasingly weighing on activity in the EU manufacturing sector. Shortages of raw materials and intermediary components (semiconductors), labour shortages, rising energy prices (notably for natural gas and electricity) have been added to the list of negative factors for the economic outlook.

According to the EU Business and Consumer Surveys (BCS), shortages of materials and/or equipment rapidly grew in importance in the course of 2021, replacing demand shortfall as the most important factor limiting production in industry. As semiconductor producers shifted production capacity to booming sectors, the automotive sector found itself with limited access to microprocessors. It is expected that energy prices will fall in 2022. However, they are expected to remain higher than their very low pre-pandemic levels, in view of the ongoing consolidation of the shipping market.

With a projected quarterly growth rate of 2.1% for the third quarter, the EU region will close the gap with its pre-pandemic output level and move from recovery to expansion. Despite headwinds, the EU is projected to keep expanding over the remainder of the year, achieving a growth rate of 5.0% for 2021 as a whole (as in the euro area), 0.2 pps. higher than expected in the previous forecast in the summer. In 2022, supply bottlenecks and energy prices are expected to ease, and growth is expected to be supported by improved labour market conditions. In addition, high savings, favourable financing conditions and the deployment of the Recovery and Resilience Fund (SRF) should have a positive impact on growth. As result, economic activity in the EU is thus projected to expand by a solid 4.3% (same as in the euro area) in 2022, before decelerating to 2.5% (2.4% in the euro area) in 2023. Following a collapse by 2.9% in 2020, the global economy (excl. EU) is projected to recover by a strong 5.8% in 2021, amid a rebound in goods trade and the reopening of domestic services. Global real GDP growth is forecast to moderate to 4.5% and 3.7% in 2022 and 2023, respectively.

Core inflation in the euro area (headline inflation excluding energy and unprocessed food) reached 1.9% in September (flash estimate of 2.1% in October), the highest rate since 2012. Inflation in the euro area is expected to peak at 3.7% in the last quarter of the year and continue recording high prints in the first half of 2022.

After reaching pre-pandemic levels in the last quarter of 2020, global trade in goods continued to grow faster than expected in the first half of 2021. However, recent data suggest a slowdown in merchandise trade growth, impacted by transportation and supply chain disruptions and a shift in spending to services. It is important to note that shipping costs surged on the back of strong demand and pandemic-related closures of factories, ports and labour shortages.

Even the impact of the pandemic on economic activity has weakened considerably the recovery is still heavily dependent on COVID-19 evolution, both within and outside the EU. Therefore, during the last CECIMO Economic Committee Meeting, Ms Laura Bardone (Head of Unit, DG ECFIN) highlighted that new COVID-19 outbreaks (and/or variations), supply-side bottlenecks lasting longer than expected and higher cost pressures are the main downside risks to the new outlook.

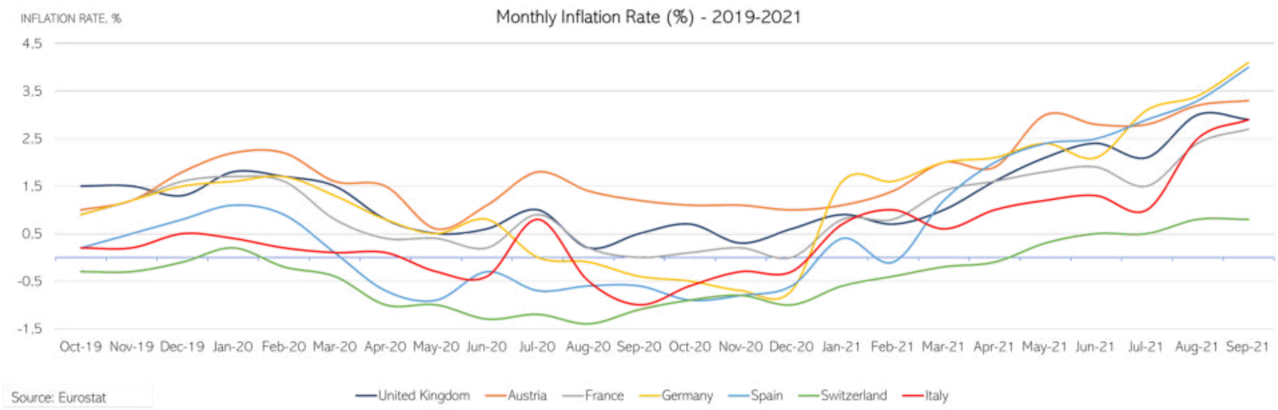
5.2 INFLATION (M)

Q3-2021 average inflation data:

- EU27: 3.10%
- Eurozone: 2.87%
- United States: 6.20%
- China: 0.83%

In the third quarter of 2021, Eurozone inflation continues to rise, averaging 2,87% year-on-year (y/y), up from 1.83% y/y in the second quarter of 2021. EU27 inflation follows a similar path, averaging 3.10% y/y, compared to the 2.17% y/y in the second quarter 2021. Continued inflation growth in 2021 can be attributed to supply-side issues (lack of raw materials, higher input prices, transportation issues) and rising energy prices. We continue to see a small but significant difference between the Euro-zone countries and the EU27.

Inflation in the U.S. rose further, averaging 6.20% y/y in the third quarter, up from 5.77% y/y in the second quarter. The rate of inflation in China, where the data comes from the OECD. after the quarterly value was on average 1.10% in the second quarter of 2021, decreased in the third quarter, averaging 0.83% annually.

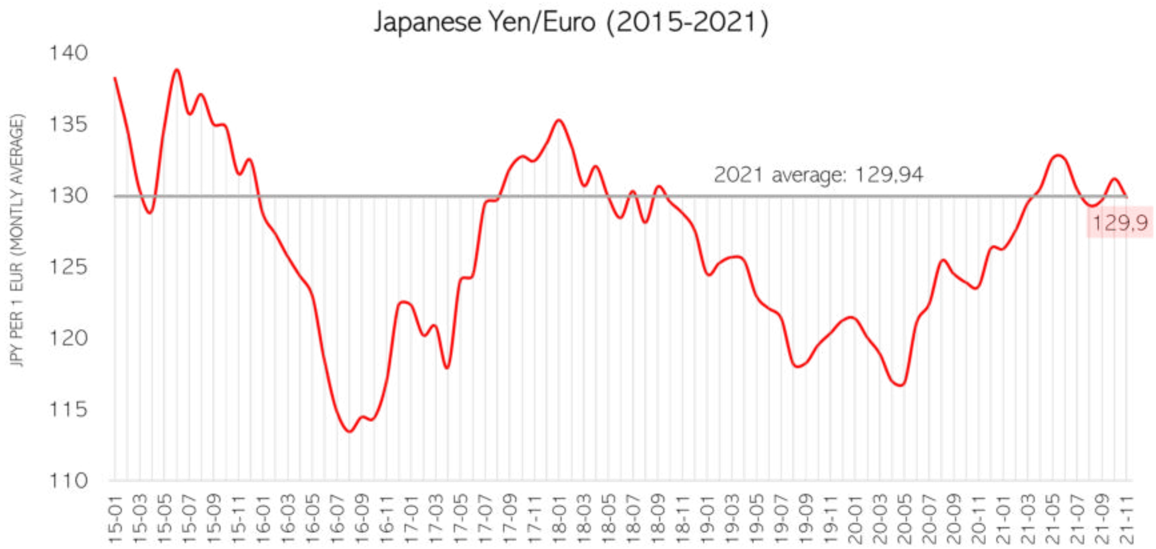


As demand continues to improve, businesses facing supply chain disruptions continue to expand their purchasing activities and build stocks in the third quarter. Consequently, with the rise in energy prices, inflation continues to rise in the third quarter of 2021 among the largest CECIMO markets. In Germany, in the third quarter of 2021, annual inflation stood at an average of 3.5%. However, according to European Commission forecasts, after picking up to 3.1% in 2021, Germany inflation is expected to decline to 2.2% in 2022. Switzerland (0.70%), the United Kingdom (2.67%), France (2.20%), Spain (3.40%) and Italy (2.13%) also registered growth in quarterly inflation average (y/y) in the third quarter.

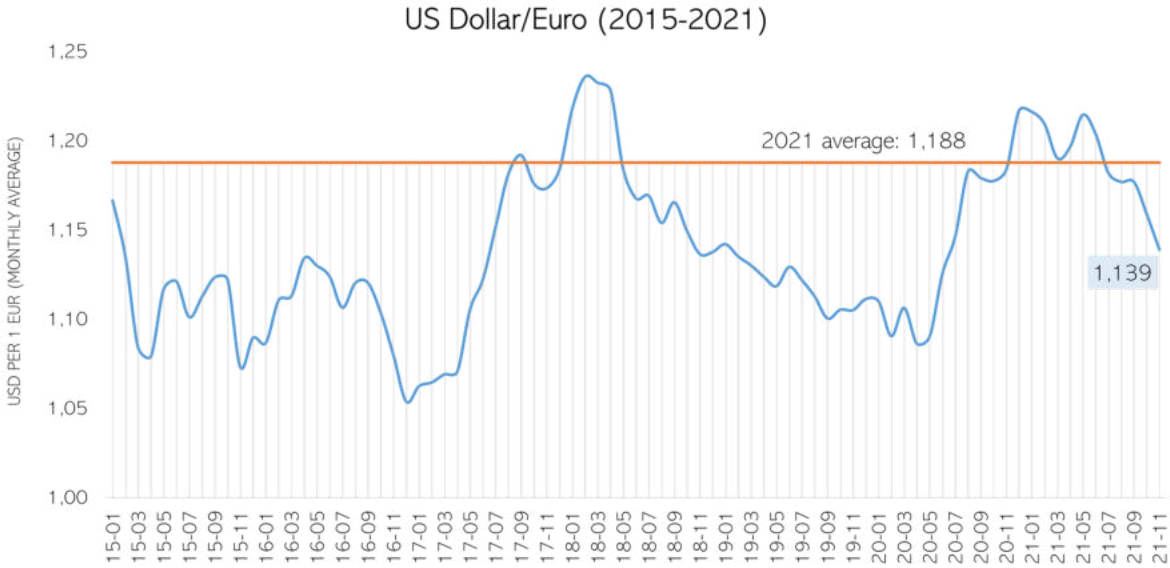
Inflation rates by Country (Sept 2020 - Sept 2021)

% change on a year earlier	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21
Austria	1,2	1,1	1,1	1,0	1,1	1,4	2,0	1,9	3,0	2,8	2,8	3,2	3,3
France	0,0	0,1	0,2	0,0	0,8	0,8	1,4	1,6	1,8	1,9	1,5	2,4	2,7
Germany	-0,4	-0,5	-0,7	-0,7	1,6	1,6	2,0	2,1	2,4	2,1	3,1	3,4	4,1
Italy	-1,0	-0,6	-0,3	-0,3	0,7	1,0	0,6	1,0	1,2	1,3	1,0	2,5	2,9
Spain	-0,6	-0,9	-0,8	-0,6	0,4	-0,1	1,2	2,0	2,4	2,5	2,9	3,3	4,0
Switzerland	-1,1	-0,9	-0,8	-1,0	-0,6	-0,4	-0,2	-0,1	0,3	0,5	0,5	0,8	0,8
United Kingdom	0,5	0,7	0,3	0,6	0,9	0,7	1,0	1,6	2,1	2,4	2,1	3,0	2,9

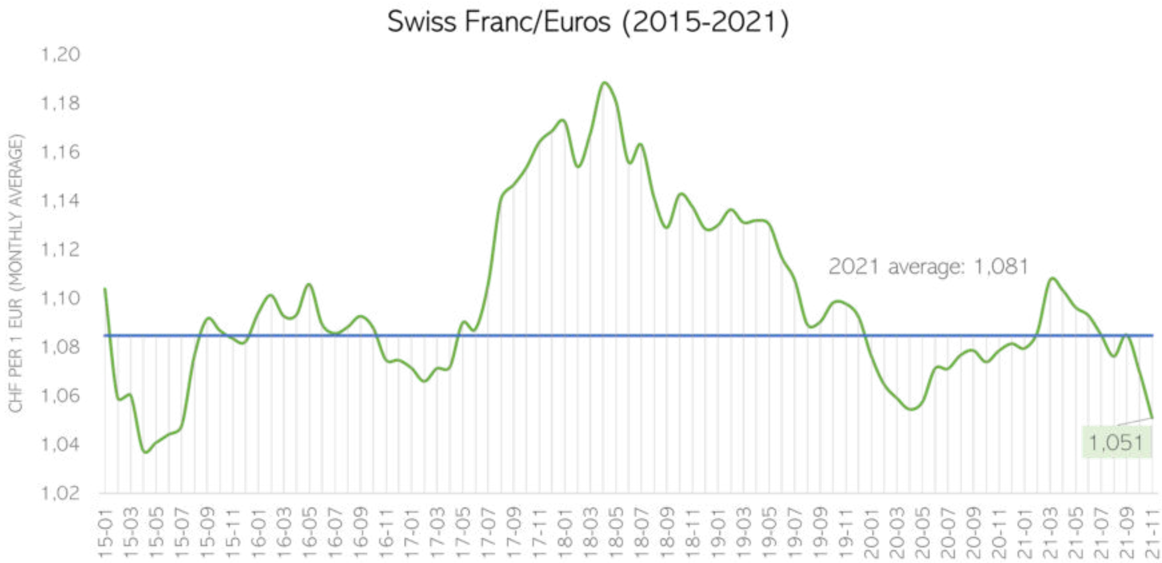
5.3 FOREIGN EXCHANGE RATES (M)



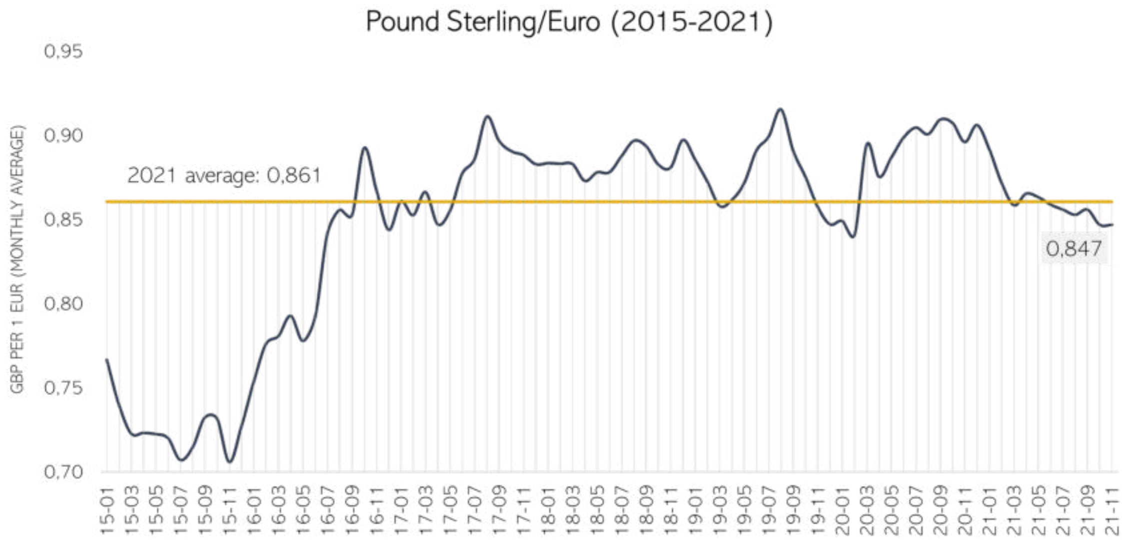
The average Q3 2021 Japanese trading prices against the euro was 129.8, indicating a market appreciation of the Japanese currency, which was trading at 131.9 units per euro in the previous quarter. The average Japanese yen price over the eleven months of 2021 stands at 129.9 and after reaching the higher level in October (131.2), the Japanese yen strengthened slightly compared to the euro in November and reached the rate of 129.9. However, it is still higher than the 2020 average (121.78).



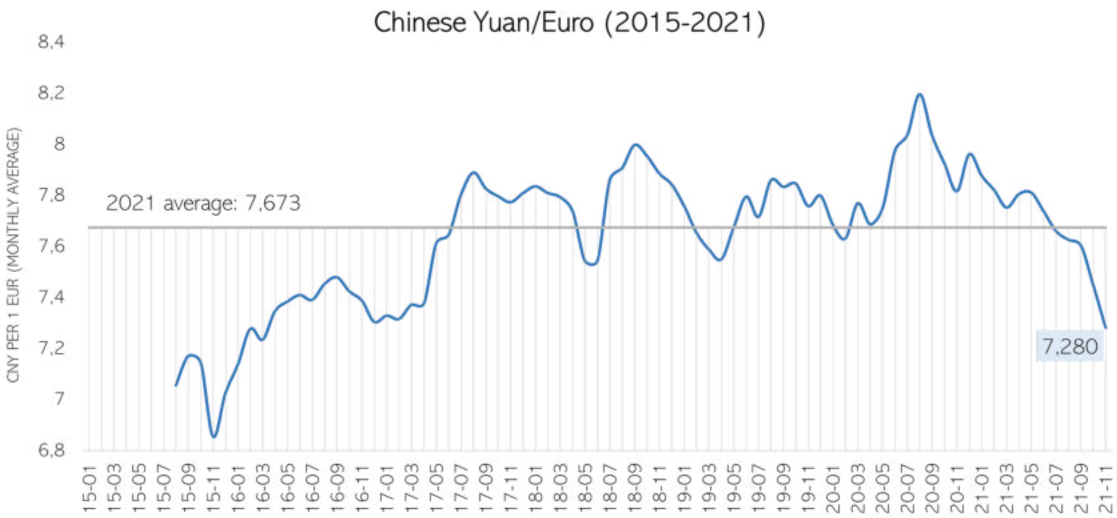
The average trading price of the US Dollar during first eleven months in 2021 was 1.188 per Euro, still above the average level that was in 2020. After a weaker US dollar against the euro in April and May, a significant appreciation of the US currency was recorded in third quarter of 2021. In November 2021, at 1.139, the rate reached its lowest level since June 2020.



The average price for the Swiss franc in 2020 was 1.070 per euro, while the average of the first 11 months of 2021 is 1.081. Following a slight depreciation of the Swiss currency in September, appreciation recovered in October and November, remaining at a rate of 1.051 in November.



The average trading price for the Pound Sterling during first eleven months of 2021 stands at 0.861 per Euro. Monthly indicators over the recent months show that the euro has weakened against the British pound in October, and the same rate (0.847) stayed during the November. It is important to note that these rates, along with the 2021 average, are below the 2020 average.



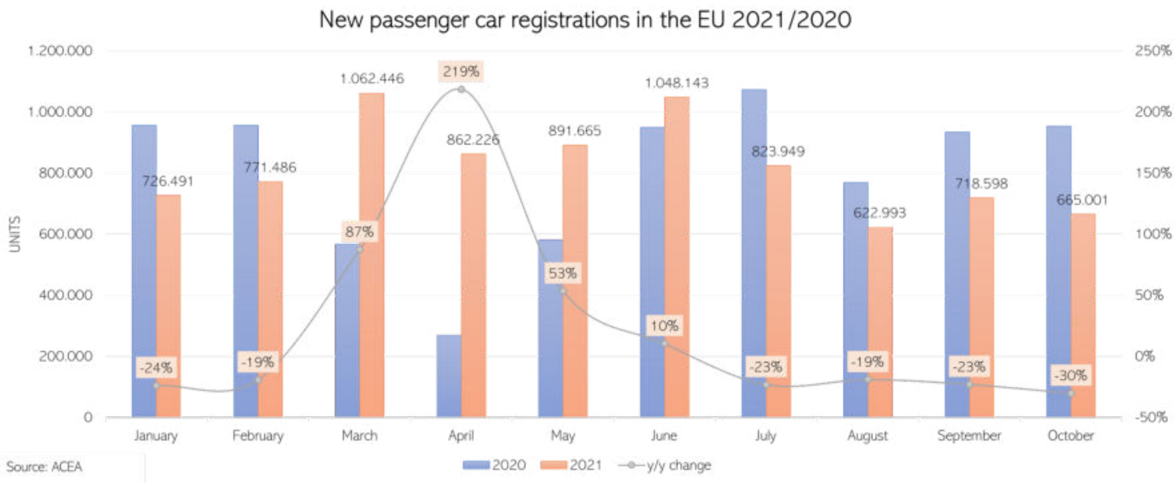
The average trading price of the Chinese Yuan during first eleven months of 2021 was 7.673 per Euro, signaling the slight weakening of the Euro compared to the previous year's average (7,871). Following a small depreciation of the Chinese Yuan in April and May. The Euro weakened against the CNY in the last seven months with the latest available rate from November of 7.280 CNY per Euro.

6. RELATED SECTORS

Compared with the previous edition, this section has been improved to include a brief overview of new passenger car sales (registrations) in China. A quarterly view of growth and share of Electric vehicles in the EU and China has also been added, as data are only available for these regions so far. The Aerospace section now has numbers on net orders for commercial aircrafts and the final section provides a brief overview of recent metal prices.

6.1 AUTOMOTIVE

The biggest challenge for the Automotive sector in 2021 was related to semiconductor microchip shortage. Supply chain disruptions have affected vehicle production worldwide and limited new vehicle production. This has resulted in a decrease in vehicle stocks on dealer lots and an increase in used car prices. According to IHS Markit's latest articles, in the third quarter of 2021, levels of disruption continued to weigh on automotive supply chains, including the shortage of semiconductors. Therefore, they revised the outlook for 2021 to a lower level. The worsening is mainly linked to Europe, due to low production levels of the region's 3 major car manufacturers (VW, Stellantis, Renault/Nissan). However, according too IHS Markit, the semiconductor supply chain is showing signs of stabilization, and this is reflected in Chinese production showing signs of bottoming out, giving hope to the more optimistic trend in 2022.



According to ACEA (European Automobile Manufacturers' Association), in October 2021, the new passenger car registration in the European Union contracted further (-30.3%) compared to same period last year, marking the fourth consecutive month of decline this year. Moreover, with 665,001 units sold across the region, this was the weakest result in volume terms for a month of October since records began.

Most EU markets suffered double-digit losses, including the four largest ones: Italy (-35.7%), Germany (-34.9%), France (-30.7%) and Spain (-20.5%). However, if we compare the first 10 months of 2021, demand remained positive in three out of the four key EU markets: Italy (+12.7%), Spain (+5.6%) and France (+3.1%), while Germany's performance has worsened (-5.2%).

Total and EV new Passenger Car registrations in the EU

	Q1 2020	Q2 2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021	Q3 2021
Total new PC registrations	2.480.130	1.801.613	2.776.425	2.882.377	2.560.423	2.802.034	2.165.540
Total (Q/Q-4)					3%	56%	-22%
EV new PC registrations	399.657	195.472	412.157	343.604	354.574	446.028	409.882
EV % of Total	16%	11%	15%	12%	14%	16%	19%
EV (Q/Q-4)					-11%	128%	-1%

EV = Electric Vehicles including BEV and PHEVs

Following the quarterly figures, after the higher level in the Q1 and Q2, the total number of new passenger car registrations in the EU decreased by 22% in the Q3 2021 compared to the same period last year. The share of new passenger electric vehicle registrations in the third quarter of 2021 was 19%. In addition, it is important to note that this group (EV), compared to total car registrations, shows a slower decline in the Q3 2021 (-1%), over the same period last year.

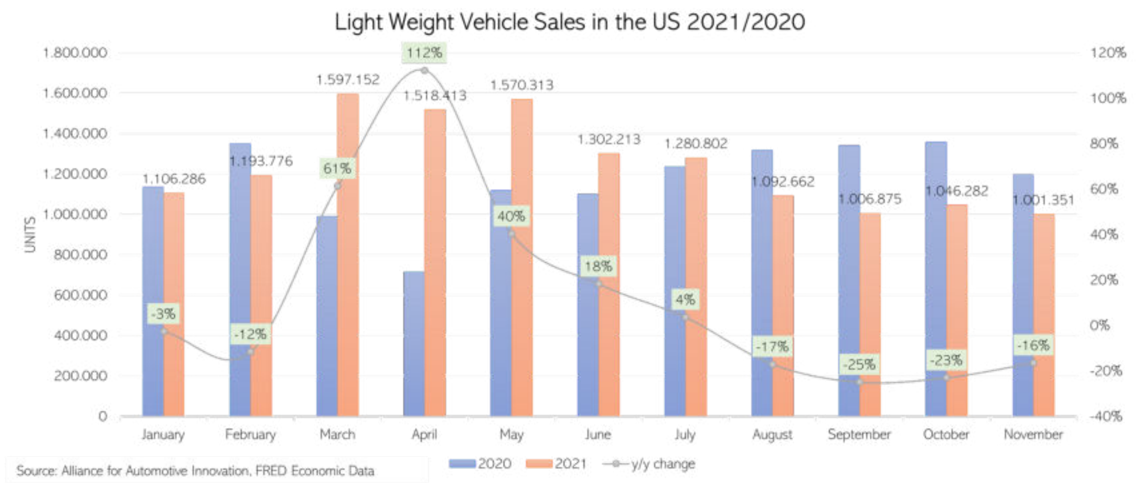
According to China Association of Automobile Manufacturers, new passenger car sales in China fell by 5% year-on-year to 2.2 million units in November of 2021, a 7th consecutive month of decline, as a global shortage of semiconductors continued to hurt the automotive sector. However, the upward trend on a monthly basis reflects the decrease in semiconductor shortages. Sales of new energy vehicles (NEVs), including BEV and PHEV, surged 130% to 427.000 units.

Total and EV new Passenger Car registrations in China

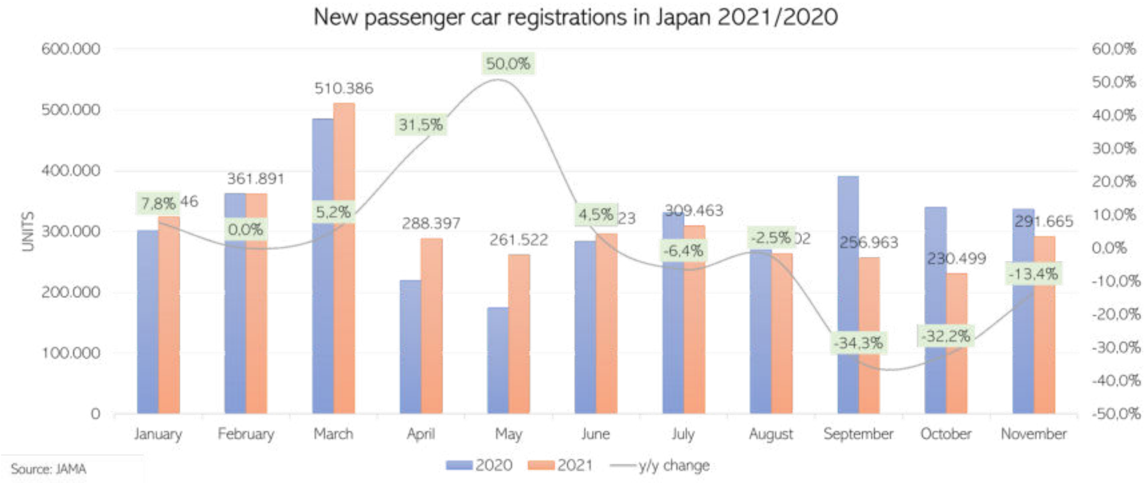
	Q1 2020	Q2 2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021	Q3 2021
Total new PC registrations	2.867.000	4.974.000	5.508.000	6.782.000	5.075.000	4.919.000	4.854.000
Total (Q/Q-4)					77%	-1%	-12%
EV new PC registrations	100.281	229.000	303.000	560.000	490.000	638.000	904.000
EV % of Total	3%	5%	6%	8%	10%	13%	19%
EV (Q/Q-4)					389%	179%	198%

EV = Electric Vehicles including BEV and PHEVs

Following the quarterly figures, after the higher level in the Q1 the total number of new passenger car sales in China remained about the same in Q2 and decreased by 12% in the Q3 2021 compared to the same period last year. The share of new passenger electric vehicle registrations in the third quarter of 2021 was 19%. It is important to note that this group, compared to total car sales, posted significant growth (+198%) in the third quarter of 2021 over the same period last year.



The US light weight vehicle sales in November totalled 1.00 million units, down 4.3% from the October, and around 16% compared to same month in 2020 while production is still slowed down by global semiconductor shortage. According to the Alliance for Automotive Innovation, the decline in November results may also be attributable to lower consumer confidence, primarily due to inflationary concerns, as well as concerns about the increase in COVID-19 cases. In addition, the greatest risk to sales in December and early 2022 is the potential impact of increased COVID-19 cases, specifically the Omicron variant.

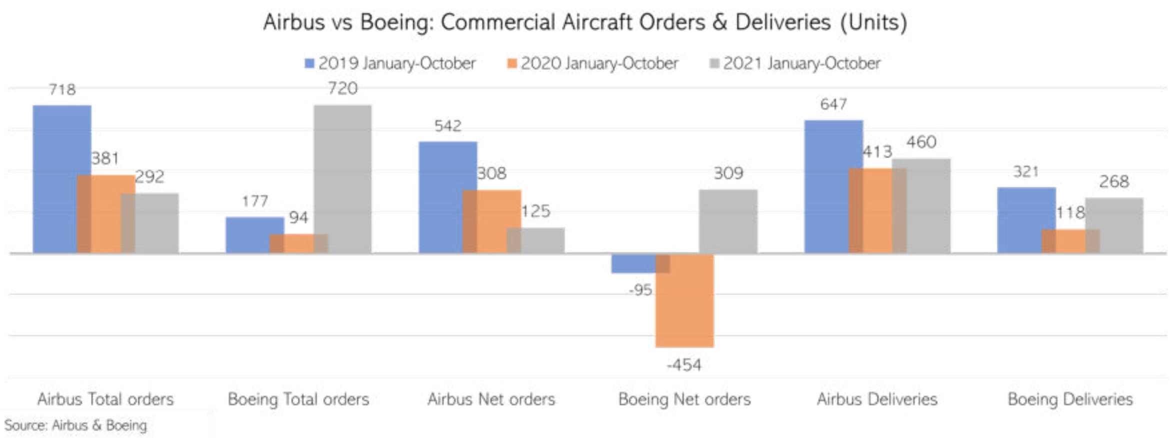


According to the Japan Automobile Manufacturers Association (JAMA), new car registration/sales in Japan in November 2021 decreased by 13.4% over the same period last year. However, after three months of downward trend, this month recorded a 27% increase over the previous month. This represents a rise from 230.499 units in October to 291.665 units in November. It is important to note that this positive movement is mainly due to the gradual reduction of the shortage of automotive components.

6.2 AEROSPACE

According to Eurocontrol, in November, flights were back to 77.2% of 2019 levels across Europe. This average, conceals a wide variation between countries and between different traffic flows for each country. However, air traffic across Europe was down 22.8% in November 2021 compared to November 2019 levels and, due to new developments related to COVID-19, is expected to decline in December 2021.

In the Aerospace sector, both global producers, Boeing and Airbus, recorded improvement in deliveries in first ten months of 2021 compared to the previous year. However, total orders and deliveries remain lower than 2019 levels.

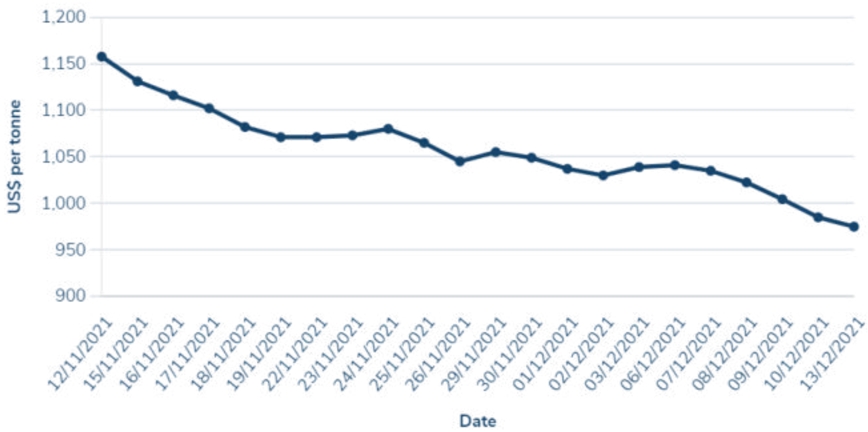


In 2021, until November, Boeing recorded 720 total orders and 411 cancellations, leading to 309 net orders. In the same period, Airbus registered 125 net orders due to 167 cancellations. Both producers recorded an increase in deliveries where Airbus delivered 460 aircraft while Boeing delivered 268 aircraft between January and October 2021. The fact is that the commercial aerospace sector has been significantly impacted by the COVID-19 pandemic and the dramatic reduction in passenger traffic negatively affected the demand for aircraft. As a result, the Aerospace industry is likely to experience the longest recovery as travel demand is not expected to return to pre-COVID levels until 2024. In the short term, new variants of COVID-19, especially Omicron, could further delay the recovery of this sector.

6.3 METAL

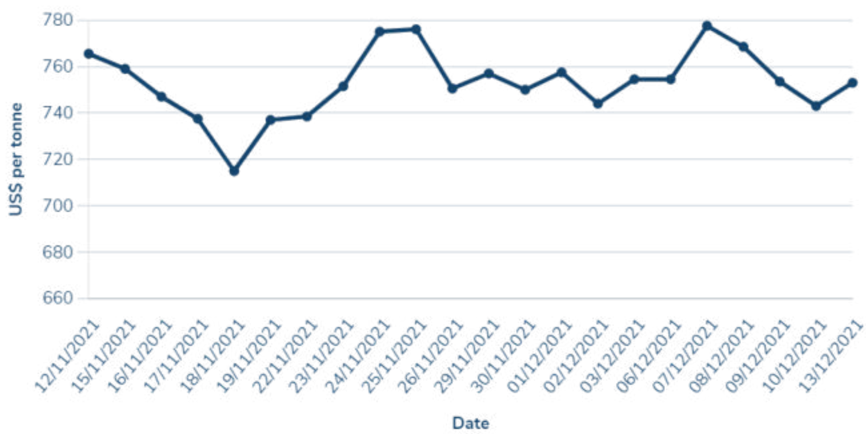
Since the Machine Tools Industry is a metal-using sector, this chapter presents a brief overview of the prices of certain metals, based on the data available on the London Metal Exchange (LME) website. The charts below were downloaded from the official website of the LME, at the time of writing this report and reflects recent closing prices of the three-month contract type.

LME Steel HRC EXW NW Europe (Argus) Closing prices graph (December 13 = 975 USD/t)



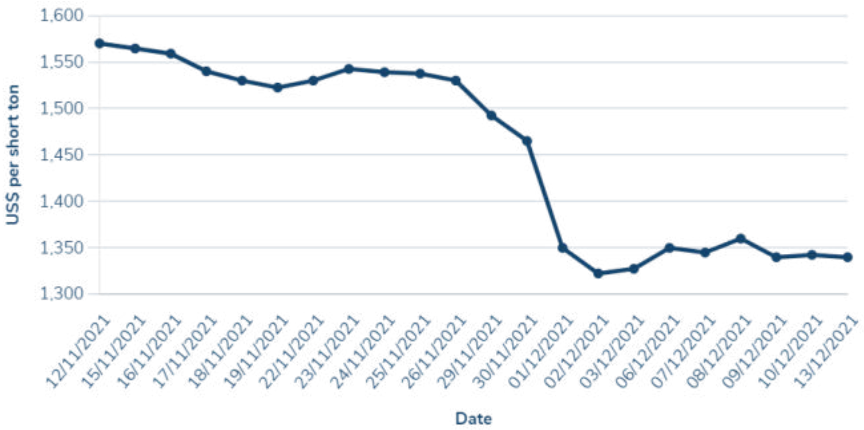
Domestic prices for hot-rolled coil in Northern Europe fell further compared to our last report when the closing price on September 20 was 1,180 USD/t, reaching a 975 USD/t on December 13. The recent decline in prices is mainly due to lack of demand from spot buyers and reduced consumption from the Automotive industry.

LME Steel HRC FOB China (Argus) Closing prices graph (December 13 = 753 USD/t)



As a result of concerns about economic data in recent months, in particular real estate figures, concerns over steel demand have negatively impacted steel prices in China. On December 13th, HRC FOB China's closing price was 753 USD/t, compared to 878.5 USD/t on September 20th.

LME Steel HRC EXW N America (Platts) Closing Prices graph (December 13 = 1.340 USD/t)



The US steel market follows the similar path and the latest figures at 1340 USD/t show lower closing price compared to the September 20 value (1714 USD/t).

LME Aluminium Closing Prices (December 13 = 2.654 USD/t)

After Reaching a very high levels in October, Aluminium prices stabilised around 2.600 USD/t during November and December. High levels due to high demand and the situation in Guinea, which surged between August and October, stabilised in November. However, prices remain high due to lower Chinese production due to restrictions on energy consumption and a halt in production. In addition, stronger demand because the forecast for lower production in northern China - to reduce pollution ahead of the Winter Olympics early next year keeps prices high among other impacts.

LME Copper Closing Prices (December 13 = 9.447 USD/t)

The Copper price shows that the metal, which is used extensively across industries from construction to automotive, energy and electronics, after reaching very high levels in October, records a slightly lower level in December. The price level remains high due to increased demand and power shortages issues in China. However, due to a large stock deficit and strong demand, most forecasts predict higher prices of this metal over the next few years.

7. GLOSSARY

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.

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 2015 = 100.
Source: Eurostat.

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.

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

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

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.

8. 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 (EU27) includes Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Romania, Slovenia, Slovakia, Spain, Sweden.

9. OTHER

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)

HF
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

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www.metalltechnischeindustrie.at

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

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

Denmark: 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, Metalomecãnicos e Afins de Portugal
www.aimmap.pt

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

Sweden: 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

CECIMO is the European Association of the Machine Tool Industries and related Manufacturing Technologies. We bring together 15 national associations of machine tool builders, which represent approximately 1500 industrial enterprises in Europe (EU + UK+ EFTA + Turkey), over 80% of which are SMEs. CECIMO covers 98% of the total machine tool production in Europe and about 34% worldwide. It accounts for approximately 150,000 employees and a turnover of around 20 billion euros in 2020. More than three quarters of CECIMO production is shipped abroad, whereas half of it is exported outside Europe.