Q2 2021

ECONOMIC AND STATISTICAL TOOLBOX

• European and global manufacturing continued its recovery in the second quarter of 2021.

• CECIMO8's Total orders index 119% higher than in the second quarter of 2020.

• Positive business climate reflects the further improvement in the European manufacturing in the third quarter.

• New European Commission forecast: the near-term outlook for the European economy looks brighter than expected in spring.

• New section: Related sectors

cecimo

European Association of the Machine Tool Industries and related Manufacturing Technologies

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INTRODUCTION

This issue of the CECIMO Toolbox looks at data for the **second quarter of 2021**. Following the start of the recovery in the first quarter of 2021, it reflects the continued improvement of the global and European manufacturing industry. Manufacturing production rose again in the second quarter. Output growth was supported by solid new orders intake, including improved international trade flows. However, stretched global supply chains have limited output growth, resulting in another significant backlog of orders in factories.

In terms of the performance of the European Machine Tool Industry, new orders in the second quarter improved significantly compared to the same period last year. However, compared to the previous quarter, CECIMO8 **domestic orders** increased by 13 , while **foreign orders** decreased by 4%.

Due to the decline in foreign orders, mainly due to the sharp decline in Italian quarter-on-quarter foreign orders, CECIMO8's **total orders** were down 1% from the previous quarter, but still 119% higher than in the second quarter of 2020. It is important to note that Italy recorded the highest quarterly growth in foreign orders in the preceding quarter. However, due to recent forecasts of new orders, the slowdown in the level of CECIMO8 total orders is expected to be only temporary and further growth is expected in the following quarters.

The figures for **CECIMO production** in 2020 have been revised. The new data shows that the production of machine tools in the CECIMO area fell by -26.3% in 2020 to €20.2 billion. In addition, according to the latest forecasts, the production of CECIMO should increase by around 9% and reach more than 22 billion euros in 2021.

The **Industrial Production Index** showed a further recovery in the second quarter of 2021 in the European Union (EU) and recorded minor decline in the Euro-zone (EZ) countries.

By measuring investment levels, **Gross Fixed Capital Formation** increased by 9.3% in the second quarter 2021 compared to the first quarter 2021, and by 17.3% compared with the same period in the previous year. The latest data for **capacity utilization** in the investment goods sector European Union after highest level in second quarter, records small decline in third quarter of this year but, if we know that between 2011 and 2019, the capacity utilization rate average 83.6, this indicator reached its “normal” level standing on 83.9 in the third quarter. EU **production spare capacity** reached a level of 5% in the third quarter of 2021.

After a moderate net tightening of **credit standards**, euro area banks reported broadly unchanged credit standards for loans or credit lines to enterprises in the second quarter of 2021. Banks’ overall **terms and conditions** for new loans to enterprises eased in the second quarter of 2021. They also reported a moderate increase in **firms’ demand** for loans.

The CECIMO **Business Climate Barometer** reflects another improvement in the second quarter and forecasts for the next quarter are generally positive.

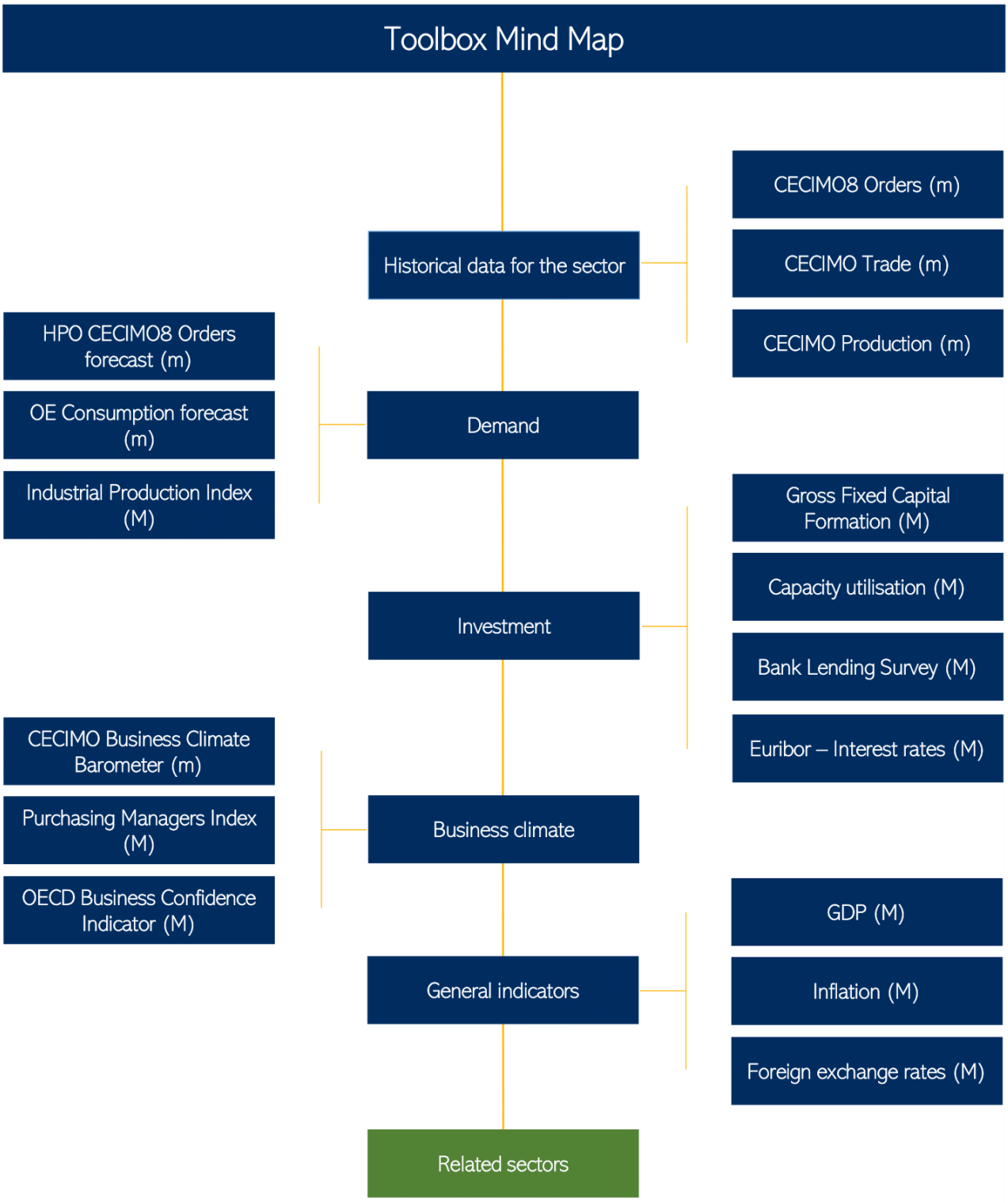
The **Global manufacturing PMI** lost further momentum during second quarter, as rates of output growth slowed down in several major markets including the US and euro area and slipped into contraction (on average) in Asia. However, with 54.1 point in August index is still in the expansion territory.

Opening measures are having an impact in Europe so the **OECD Business Confidence Indicator** rose to a very high level in the second quarter of 2021 reaching 102.2 points the all-time record high. Moreover, latest figures of 102.7 points in August, shows that is clearly in expansionary territory, and it is good input for expected orders and output in the third quarter of this year.

Compared with previous quarter, both rates of European **GDP** show a continued recovery in the second quarter with growth of 2.2% in the eurozone and 2.1% in the European Union. In the US, GDP increased by 1.6%, the Chinese economy recorded a growth of 1.3%, and Japanese economy also recorded a growth of 0.4% compared to the previous quarter.

With positive business outlook, as demand and consumption levels continue to improve in the EU, but business also faced with supply chain disruptions and shortages of raw material, **inflation** reached a higher level in the Q2 among key CECIMO markets.

The new section of Economic and Statistics Toolbox – **Related Sectors** is included in this issue. The idea is to briefly outline the related sectors that have a significant impact on the Machine Tool Industry. In this issue, you will first find recent figures for the Automotive Industry concerning new car registrations (sales) in Europe, the USA and Japan. The second part concerns the Aerospace Industry in terms of orders and deliveries of two main commercial aircraft manufacturers, Boeing and Airbus. Lastly, it provides a brief overview of recent prices in the metals sector.

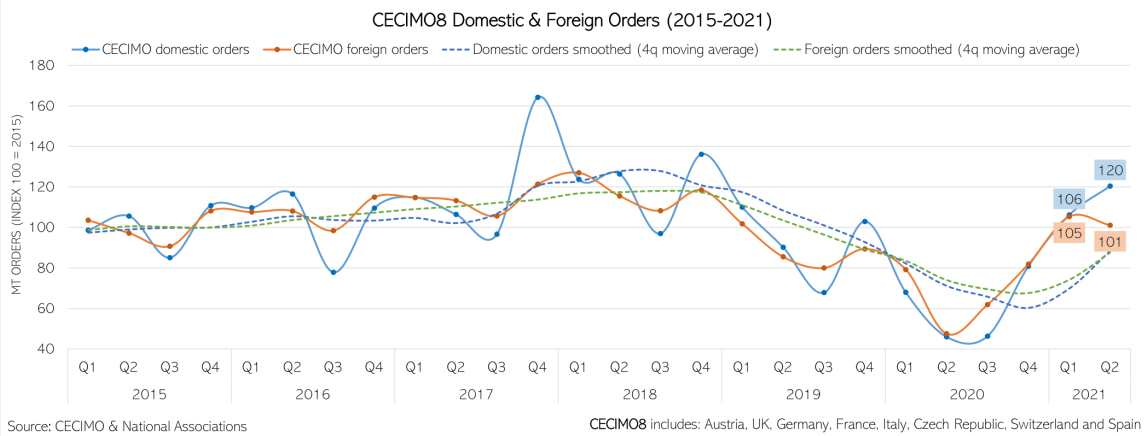

Toolbox Mind Map
Historical data for the sector
CECIMO8 Orders (m)
CECIMO Trade (m)
CECIMO Production (m)
Demand
HPO CECIMO8 Orders forecast (m)
OE Consumption forecast (m)
Industrial Production Index (M)
Investment
Gross Fixed Capital Formation (M)
Capacity utilisation (M)
Bank Lending Survey (M)
Euribor – Interest rates (M)
Business climate
CECIMO Business Climate Barometer (m)
Purchasing Managers Index (M)
OECD Business Confidence Indicator (M)
General indicators
GDP (M)
Inflation (M)
Foreign exchange rates (M)
Related sectors

1. HISTORICAL DATA FOR THE SECTOR

1.1 CECIMO 8 ORDERS (M)

After the recovery of domestic orders in the last period of 2020 and first quarter of 2021, CECIMO8 domestic orders continued their recovery in the second quarter of 2021, showing a 158% increase over the same period in 2020. Compared to the first quarter of 2020, CECIMO8 domestic orders increased by 13%. Foreign orders from CECIMO8 manufacturers showed a slight decrease of 4% compared to the previous quarter, mainly due to the significant decrease in Italian foreign orders. However, foreign orders registered a significant increase of 113% compared to the same period in 2020. It is important to note that Italy recorded the highest quarterly growth in foreign orders in the preceding quarter.

As a result, total orders for the CECIMO8 increased by 119% in Q2 2021 compared to the same period in last year. Due to the decline in foreign CECIMO8 orders, total orders recorded a 1% lower level than in the previous quarter.Given that the business climate indicators recorded very high levels in July and August in all CECIMO8 countries, growth path is expected for the next quarter.

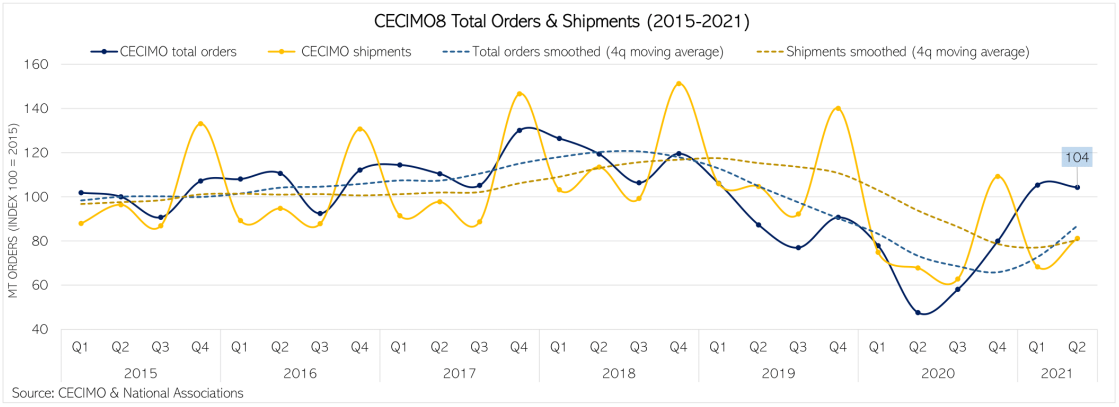


Domestic orders

- German domestic orders continued its growth in the Q2 2021 with slower growth path. However, with an increase of 5% compared to the previous quarter, German domestic orders reached their pre-coronavirus level (Q4 - 2019).
- Austrian domestic orders recorded significant growth in the second quarter of 2021, with a 41% increase over the previous quarter and 333% growth compared to the previous year.
- Italy continued its recovery in the first quarter of 2021, recording quarter-on-quarter growth of 14% reaching the highest level since 2017. Compared to the same period last year, Italian domestic orders registered an increase of 370%.
- French domestic orders after a strong increase in the first quarter of 2021, recorded more moderate growth of this index in the second quarter. With a 31% increase over the previous quarter and immeasurable growth compared to the previous year, French domestic orders were above the 2018 average.
- Following a slight quarter-on-quarter decrease in Switzerland and the United Kingdom in the first quarter of 2021, their domestic orders increased by 14% (CH) and 16% (UK) in the second quarter. Both countries registered the highest levels since the final quarter of 2019.
- The Czech Republic recorded a -2% decrease in the second quarter of 2021 and the domestic order index is 11% lower than in the same period last year.

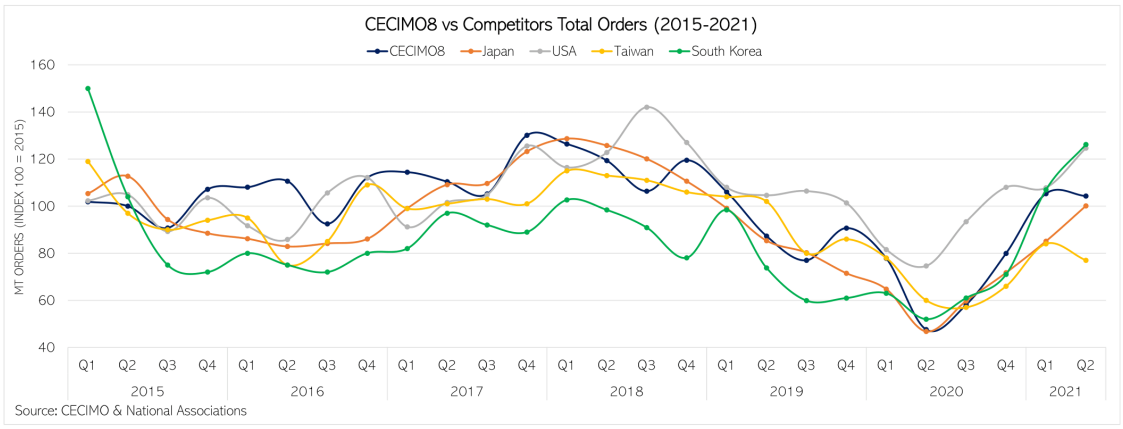
Foreign orders

- After significant growth in the previous quarter, France (-3%) and Italy (-34%) recorded decrease in their quarter-on-quarter foreign orders index. It is important to note the significant decline in foreign orders in Italy which had a strong effect on the CECIMO8 order curves.
- Germany's foreign orders recorded strong growth recording 115% higher level than in the same period last year and 9% higher than in the previous quarter. Due to a significant improvement, German foreign orders index has reached the highest level since 2018.
- With a quarter-on-quarter increase of 22% and 71% compared to the same period last year, foreign orders in Austria were at an all-time high in the second quarter 2021. Significant increase is also recorded in the Czech Republic with quarter-on-quarter growth of 28% and 53% higher level than in the same period last year.
- In United Kingdom (+11%) and Spain (+17%), foreign orders recorded growth compared with the first quarter of 2021. Spain reached its highest level since the second quarter of 2018 and the United Kingdom reached pre-coronavirus levels recorded in the second half of 2019.



Total orders

- In the second quarter, Austria registered the strongest growth trend with a growth of 26% compared to the previous quarter, followed by Check Republic which registered a growth of 22%.
- Following these two countries, the Spanish total orders index grew by 17% and the UK total orders were 13% higher than in the previous quarter.
- After the record level in the previous quarter, due to a significant decline in foreign orders, total Italian orders fell in the second quarter of 2021, with a decrease of 21% compared to the previous quarter. However, this index level still stands at 189% above that of the same period last year.
- The quarterly increase, even at a lower level, because of the slowdown in foreign orders was recorded in Germany and France. Both countries registered a significant increase compared to the same period last year and 7% compared to the previous quarter.



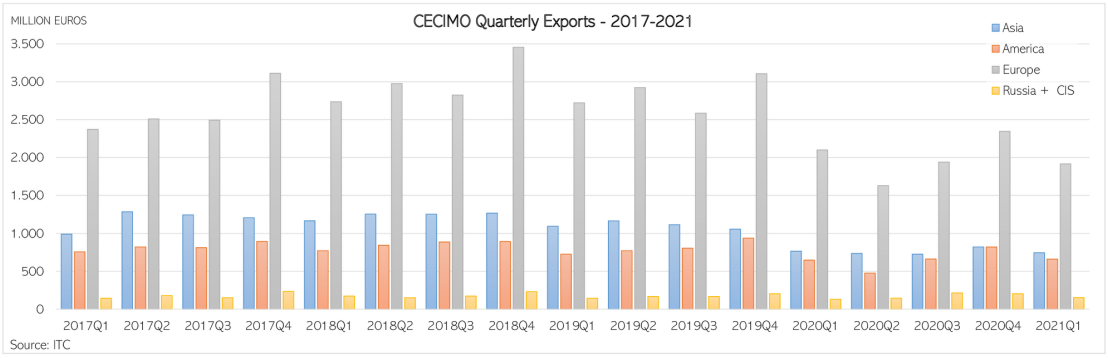
CECIMO Competitors

- Metal cutting companies in Japan recorded a quarterly growth rate of 18% in the second quarter of 2021 on domestic orders, while the metal forming sector recorded a 10% decrease. Both sectors registered a significant increase in foreign orders.
- Overall, Japanese total orders in the second quarter of 2021 registered a quarterly growth rate of 18% and a 114% higher than in the same period of the previous year. Stronger growth this time took place in the metal forming sector.
- Taiwan recorded a decrease in the domestic and foreign orders index, resulting in an 8% decrease in total orders in the second quarter of 2021. However, all indicators were considerably higher compared with the same period last year.
- US domestic orders recorded significant growth in the second quarter of 2021, growing 16% over the previous quarter, and 67% higher than the same period last year.
- Following a significant increase of 52% in the previous quarter, South Korea's total orders index continued to grow by 18% on a quarterly basis in Q2, largely driven by growth in foreign orders. As a result, total orders from South Korea rose to a record high, the highest level since 2015.

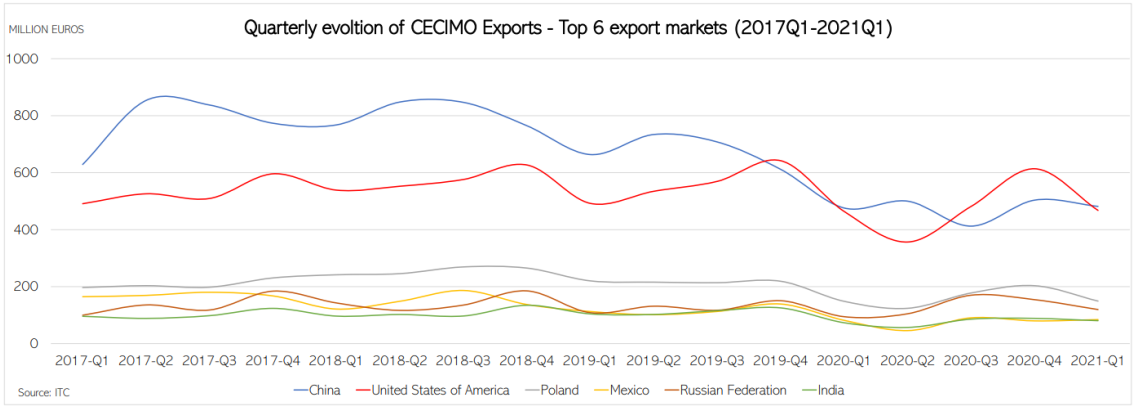
1.2 CECIMO TRADE (M)

Note: The following analysis refers to Q1 2021 machine tool trade figures. ITC Q2 2021 data is not available by the time this report was written.

Q1-2021 export trends

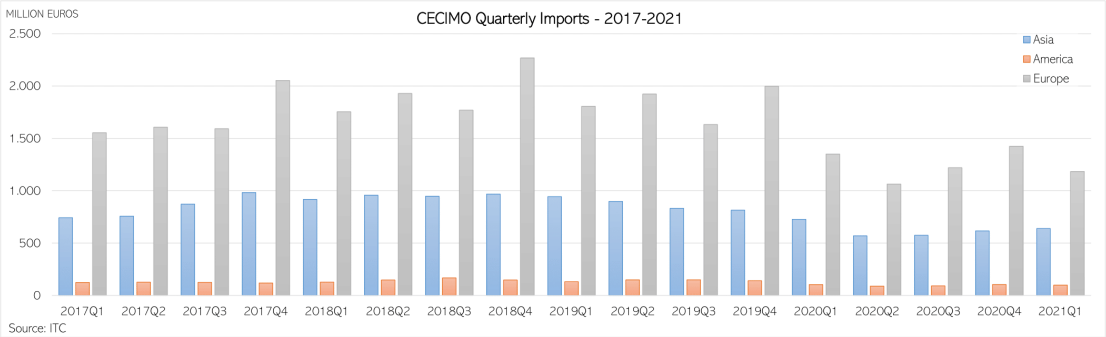


- CECIMO's machine tool exports in the first quarter recorded 4% lower levels compared to the same period last year. After a significant quarter-on-quarter growth in previous reporting period, CECIMO total exports decreased by 17% compared to the last quarter of 2020.
- The recovery in the first quarter was recorded in the regions of America, Russia CIS (Commonwealth of Independent States) and Africa, but not enough to compensate negative growth in Asia and Europe.
- All regions registered lower export levels than in the last quarter of 2020. However, with the improved business climate in the second quarter, the growth scenario is expected for the next quarter.

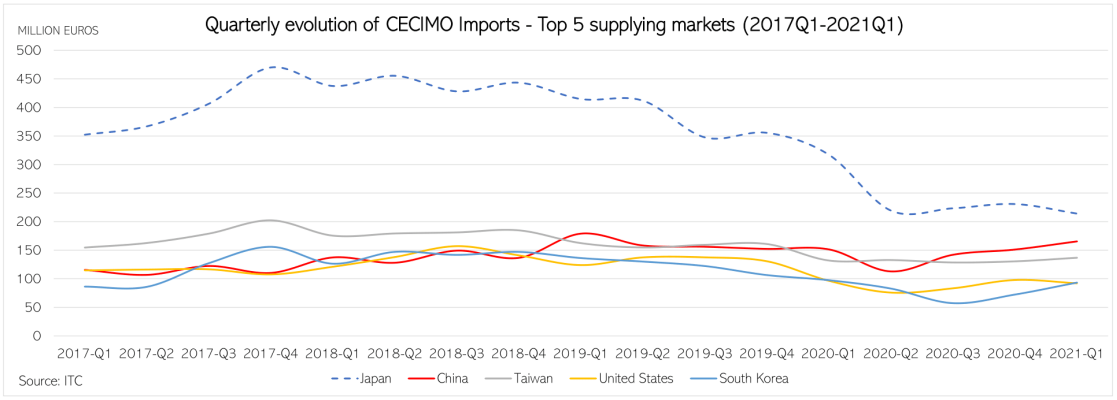


- Among the top export destinations outside of CECIMO, China was ranked first, closely followed by the US in Q1 2021.

Q1-2021 import trends



- In the first quarter of 2021, CECIMO total machine tool imports were -12% lower than a year before and recorded a 10% decrease compared to the previous quarter. This is the eight consecutive quarter when imports were lower than 4 quarters earlier, highlighting the fact that imports were falling before the effects of the pandemic were being reflected in the data.
- Compared to the last quarter of 2020, total CECIMO imports increased by 4% from Asia and 41% from Africa, while imports from other regions fell in the first quarter of 2021.
- Total imports of machine tools to the CECIMO area were worth €1.94 billion euros in Q4 2020; with exports valued at €3.64 billion, the CECIMO positive trade balance was around €1.7 billion euros in this quarter.



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

CECIMO Trade Balance (Billion EUR)

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

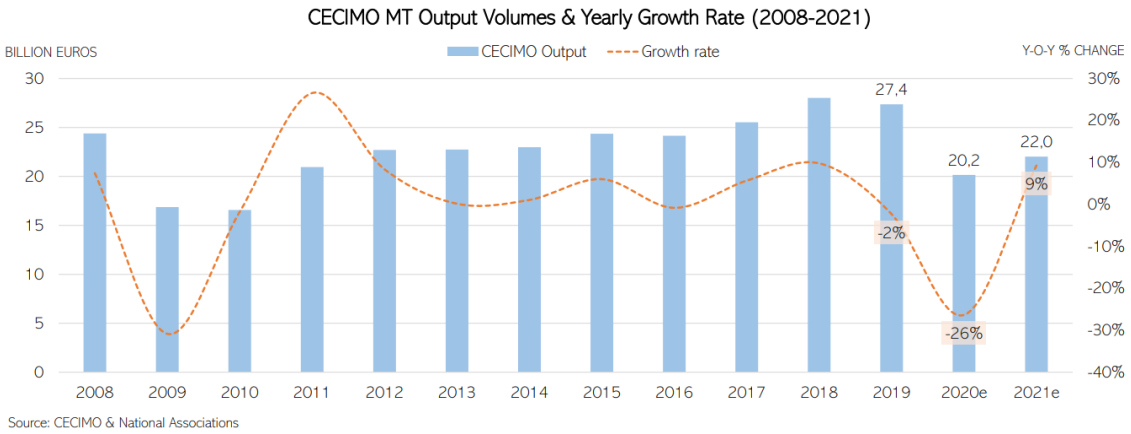
- The CECIMO region continues to record a significant positive trade balance with a positive result of about €1.7 billion in Q1 2021.

1.3 PRODUCTION (M)

As part of the preparation for EMO Milano, we have updated the data for the CECIMO production in 2020 for some of the CECIMO countries.

According to the new data, the production of machine tools in the CECIMO area fell by -26.3% in 2020 to €20.2 billion. That level of output is higher than what was estimated in the last reporting period (Q1 2021). 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.

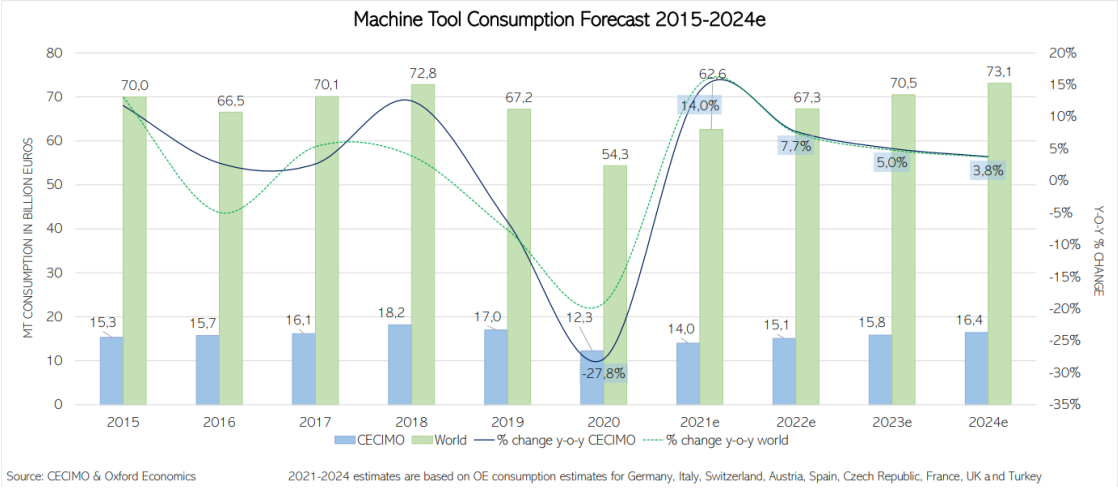
Based on the recent inputs from of the National Associations (mid-September), the production of CECIMO in 2021 should reach the level of around €22 billion with an annual growth that accounts for more than 9%.



Source: CECIMO & National Associations

2. DEMAND

2.1 CECIMO CONSUMPTION (M)

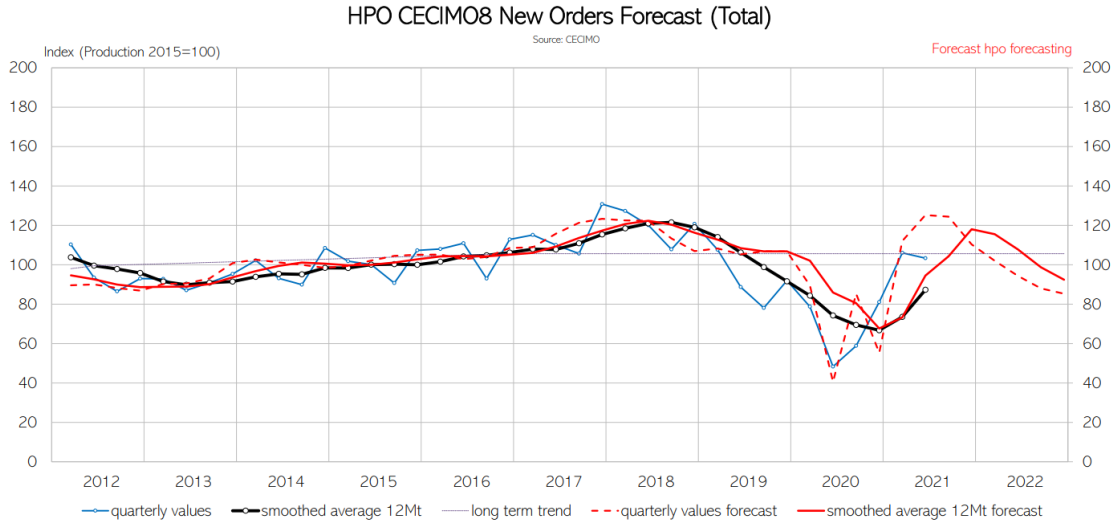


According to the latest available data, Oxford Economics April Forecast, the CECIMO Machine Tools consumption in 2020 reached €12.3 billion. This is a 27.8 percent decrease from 2019 levels. According to the April 2021 forecast, growth is expected to be around 14% in 2021.

Oxford Economics Fall 2021 forecast will be available in the upcoming **Q3 2021** Economic and Statistical Toolbox.

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.

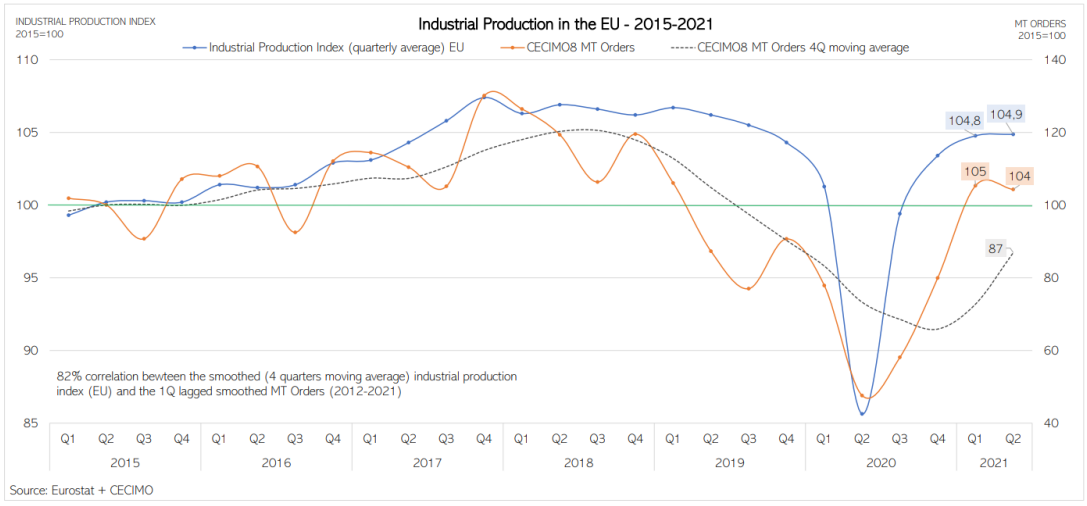


CECIMO8 Orders Forecast

According to latest HPO CECIMO8 Orders Forecast (September 2021), new orders index recorded slow decrease to 103.4 index points in Q2 2021. As a result, the peak in the second half of 2021 was corrected downward to 110 index points in the newly calculated forecast. Overall demand is expected to remain strong until the end of the year.

The growth momentum both in industrial production and specifically in the German machinery sector has recently stabilized out substantially at a high level. Therefore, according to HPO, this suggests that the decline in new order is likely to be only of a temporary nature and thanks to the strong demand it is expected their growth in the second half of the year. However, according to HPO Forecasts, once the catchup effect is exhausted, the curve points to the downward gain, with the result that expected new orders for 2022 falls back to the level seen in 2019.

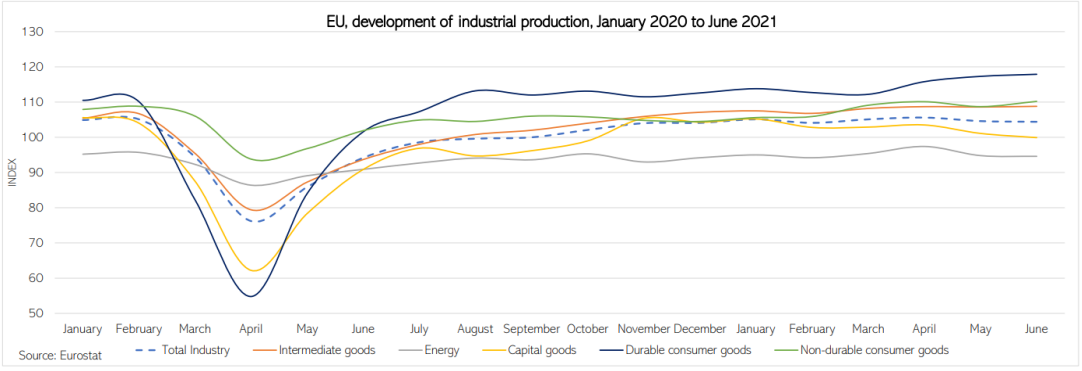
2.3 INDUSTRIAL PRODUCTION INDEX (M)



The total Industrial Production Index (IPI) showed a further recovery in the second quarter of 2021 in the European Union (EU) and recorded minor decline in the Euro-zone (EZ) countries.

The European Union IPI (EU 27) continued to recover in the first half of 2021. The IPI recovered by 4% in Q4 2020, followed by 1% in Q1 2021, and remained almost at the same level in Q2 2021. With growth of 0.1%, the IPI for the EU is at its highest level since the second quarter of 2019.

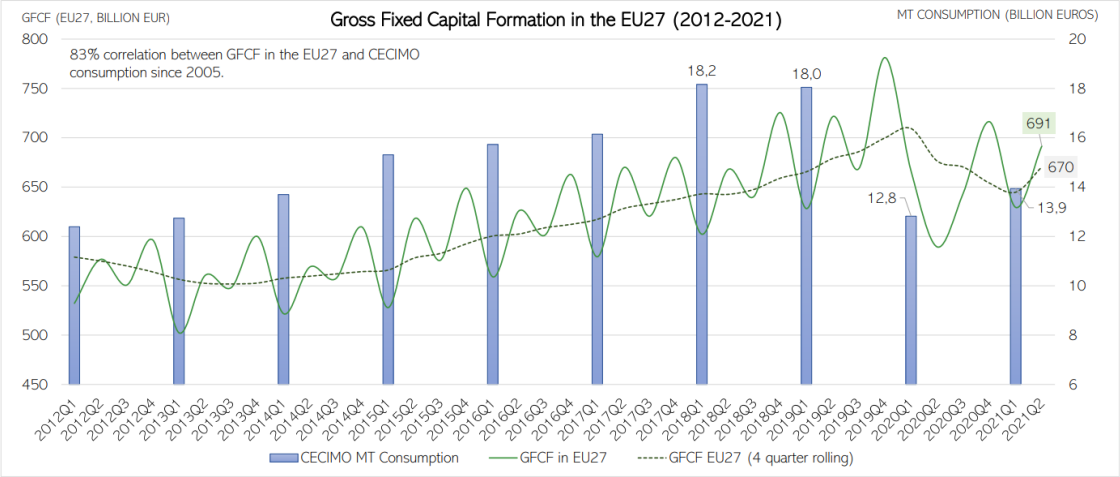
The current rating (Q2 2021) is 104.9, indicating a continued recovery in European industry, in line with the forecast assumptions made in the previous edition of this report. It is important to note that this is 22% higher index level than it was in the Q2 2020.



In sectoral terms, the strongest recovery continues to be in the durable goods sector, which experienced highest drop through the second quarter of 2020. Intermediate, durable, and non-durable consumer goods increased over this three-month period (Q2 2021), while energy and capital goods registered a slight decline.

3. INVESTMENT

3.1 GROSS FIXED CAPITAL FORMATION (M)



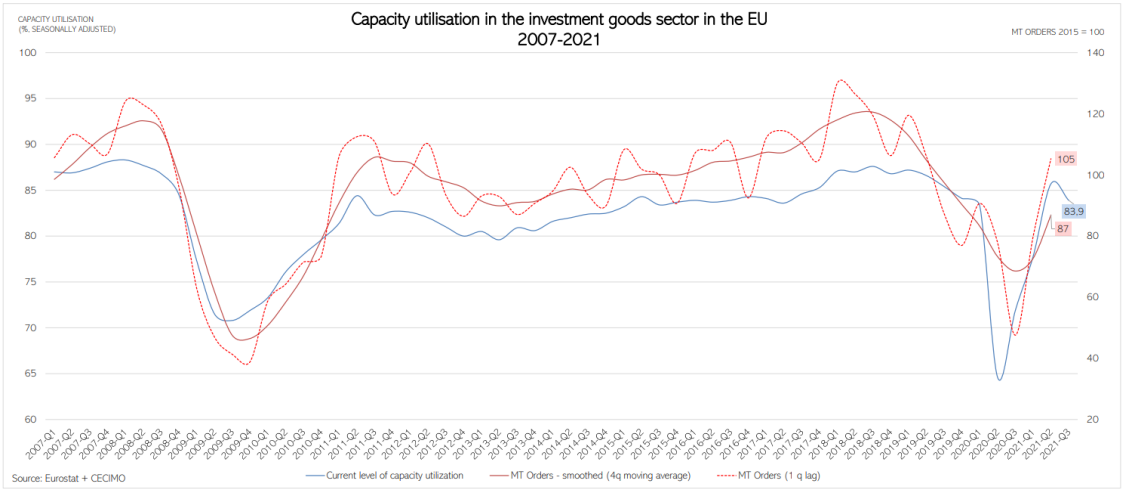
Considering the latest EU 27 figures, gross fixed capital formation increased by 9.3% in Q2 2021 against Q1 2021 and 17.3% compared to the same period last year. In absolute terms, investment in the second quarter of 2021 amounted to 691.4 billion euros, a much higher figure if we consider the 589.4 billion euros registered in the same period previous year.

The quarterly change in trend (9.3% in Q2 2021) shows similar cyclical movements as in previous second quarters. It is also important to highlight the coronavirus release measures in the second quarter in EU countries, which surely had an impact on this trend. If we look at 4 quarter moving values, we can see a slight increase compared to the last 4 quarter moving values.

3.2 CAPACITY UTILISATION AND PRODUCTION CAPACITY (M)

Methodological Note: The dates in this section refers to when the results were published; so, the Q3-2021 figures were published in Q3-2021 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 latest data for capacity utilization in the investment goods sector European Union after highest level in second quarter, records small decline in third quarter of this year but, if we know that between 2011 and 2019, the capacity utilization rate average 83.6, this indicator reached its "normal" level standing on 83.9 in the third quarter.

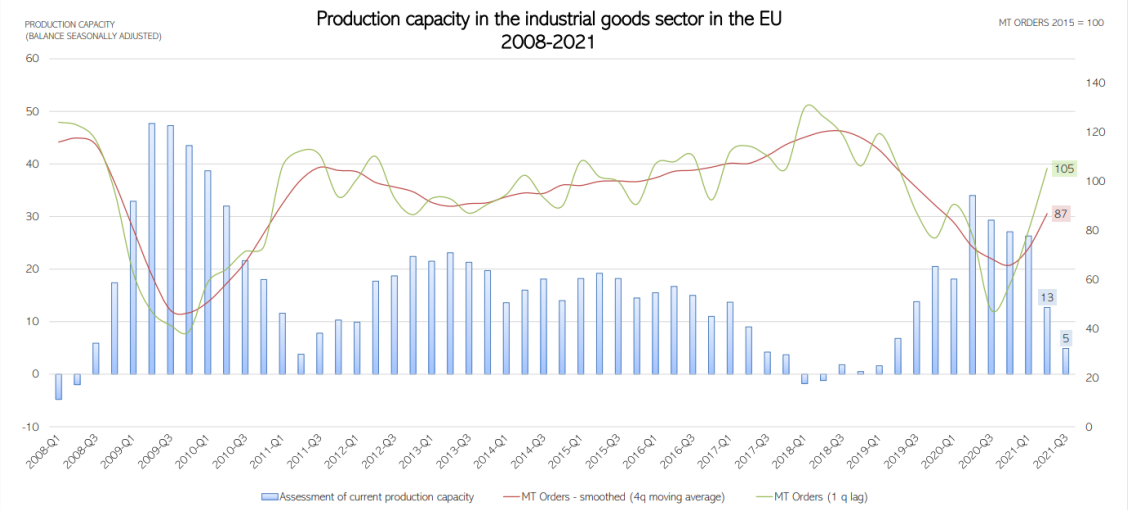


At the national level, as can be seen from the table below, capacity utilization in the third quarter improved compared to the previous quarter in Austria, Italy and Spain. On the other hand, there were slight declines in the Czech Republic, France and Germany. However, with the exception of Spain, other observed countries recorded higher levels of capacity utilisation compared to the Q4 2019.

Capacity Utilisation (% of total capacity)

	Q3 2019	Q4 2019	Q1 2020	Q2 2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021	Q3 2021
Austria	87,3	86,2	85,4	74,2	76,0	79,2	82,0	86,9	90,1
Czech Republic	85,4	86,9	86,9	47,7	74,8	80,5	82,2	91,5	90,2
France	87,3	85,7	84,0	62,0	70,9	75,1	74,4	81,9	79,7
Germany	87,9	85,5	85,5	65,9	72,7	81,1	79,2	90,3	85,9
Italy	77,8	77,9	76,9	NA	65,7	73,0	75,5	79,3	82,5
Spain	87,5	87,9	85,4	81,8	78,5	80,0	81,0	80,9	82,4
United Kingdom	80,0	82,9	82,9	57,5	65,7	68,1	NA	NA	NA

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. Given the inverse relationship with capacity utilisation, this peaked for the European Union in the Q2-2020 data and has fallen back in the following five periods. In Q3 2021, significant drop is recorded compared to the previous reporting period (-61%). EU production spare capacity currently stands at 5%. This would indicate that managers consider that their production capacity could become insufficient, and that investment in equipment might be needed. This should of course have a positive impact on future order inflows of MT, especially if production spare capacity levels fell below these levels.

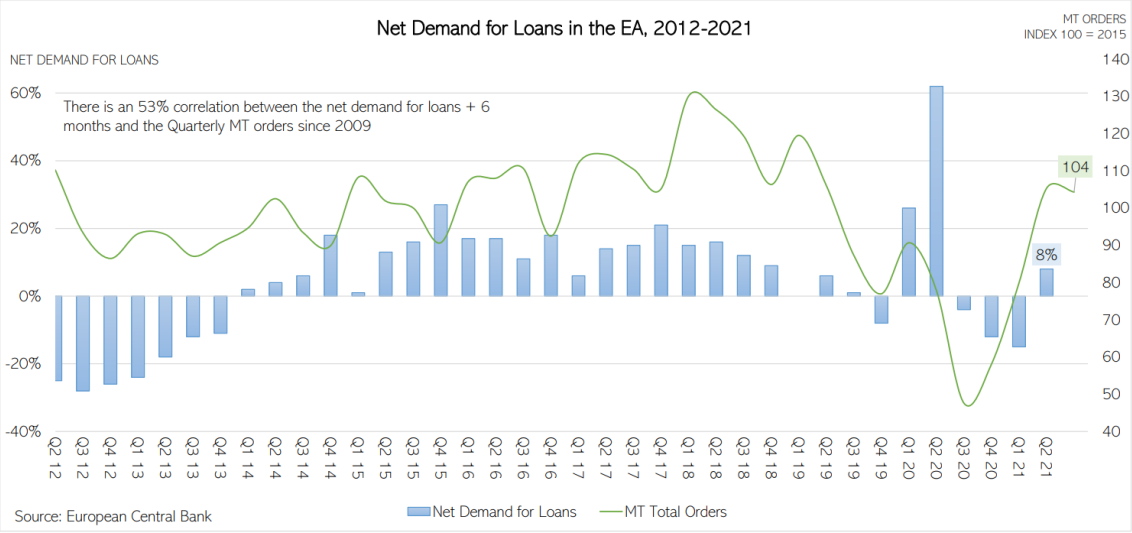


As shown in the chart below, there is a visible decrease in spare capacity in the third quarter of 2021 at all national levels, compared to the previous quarter. The largest change was in Spain, where the percentage balance decreased from 13.4% to negative -12.1% over the quarter-on-quarter period. Austria also registered a significant decrease in spare capacity, with a negative percentage balance of -5.1% in the third quarter of 2021. Germany recorded a significant decrease in spare capacity standing on 2.1% in the third quarter of 2021, followed by the CZ (6.8%) and Italy (19.9%).

Production Capacity (balance in %)

	Q3 2019	Q4 2019	Q1 2020	Q2 2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021	Q3 2021
Austria	11,7	22,5	18,7	35,8	42,7	41,9	27,6	15,4	-5,1
Czech Republic	27,0	28,9	33,5	19,2	25,4	21,3	13,3	8,5	6,8
France	-4,7	-4,0	-1,1	28,2	1,4	21,5	31,3	29,9	18,7
Germany	22,1	33,0	25,7	46,5	44,4	35,6	36,4	7,8	2,1
Italy	24,6	25,5	27,6	NA	28,7	26,6	27,5	25,2	19,9
Spain	-2,1	13,2	7,8	13,7	26,5	9,3	4,5	13,4	-12,1
United Kingdom	25,7	41,2	0,3	47,1	37,8	20,3	NA	NA	NA

3.3 BANK LENDING SURVEY (M)



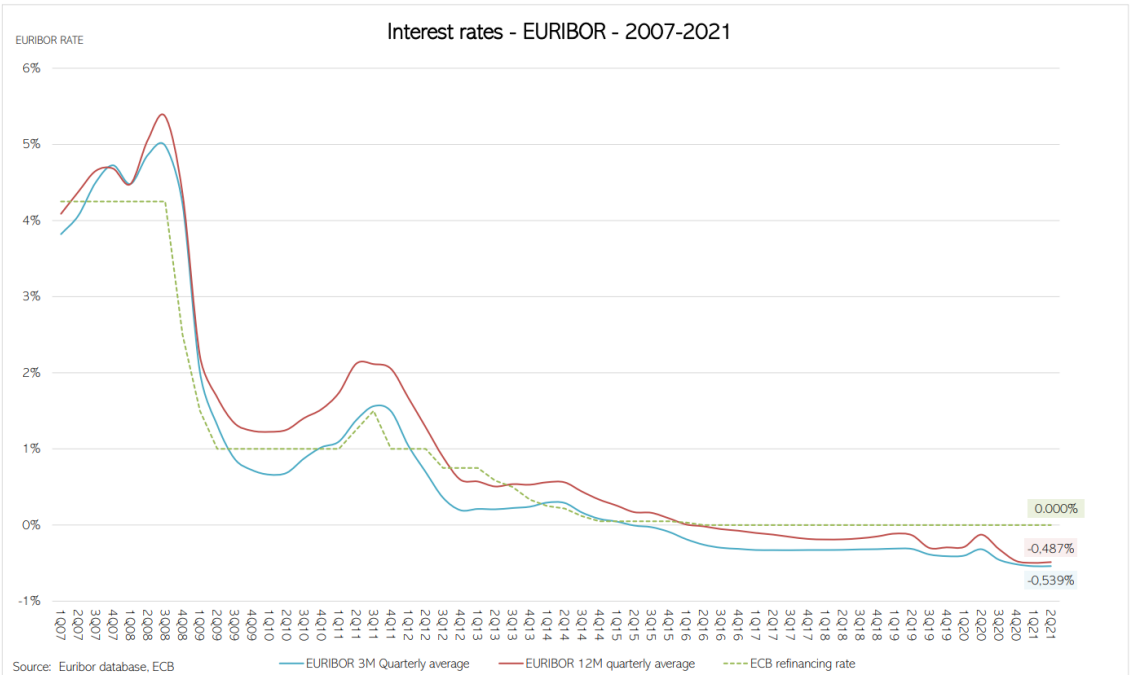
- **Credit standards** – after a moderate net tightening of credit standards, euro area banks reported broadly unchanged credit standards (i.e. banks' internal guidelines or loan approval criteria) for loans or credit lines to enterprises in the second quarter of 2021 (with the net percentage of banks reporting a tightening of standards standing at -1%, down from 7% in the first quarter of 2021). These developments reflect the overall improvements in the euro area economy. Credit standards remained broadly unchanged for SMEs (-1%, down from 7%), and eased slightly for large firms (-3%, down from 5%). Furthermore, credit standards eased slightly for short-term loans (-2%, after 6%) and remained unchanged for long-term loans (0%, after 10%).

- **Banks' overall terms and conditions** (i.e. the actual terms and conditions agreed in the loan contract) for new loans to enterprises eased in the second quarter of 2021 (net percentage of -5%, after 0%). Margins on average loans narrowed in net terms according to euro area banks, while margins on riskier loans remained unchanged. Margin developments are, overall, consistent with the recent favourable developments in firms' borrowing costs, despite some volatility in bank lending rates. The net tightening of collateral requirements became considerably weaker relative to the second half of 2020.

- Looking at the largest euro area countries, overall terms and conditions on loans or credit lines to enterprises eased on balance in Germany and France, while they tightened in Spain (following an easing in the previous quarter) and remained unchanged in Italy.

- Banks reported, on balance, **a moderate increase in firms' demand for loans** or credit lines in the second quarter of 2021 (net percentage of banks at 8%, up from -15% in the first quarter of 2021). This was the first net increase since the extraordinarily high loan demand seen in the second quarter of 2020. Banks reported net increases in loan demand for both SMEs (net percentage of 6%) and large firms (6%). While loan demand decreased on balance for short-term loans (-6%), it increased for long-term loans (10%), suggesting a shift towards longer maturities.

3.4 EURIBOR (M)



The **ECB refinancing rate** remained unchanged at 0.0% during the second quarter of 2021. The EURIBOR 3-month average rate fell to -0.539%, while the 12-month average stands at -0,487%.

The European Central Bank will keep the key ECB interest rates unchanged. They expect them to remain at their present or lower levels until the inflation outlook robustly converge to a level sufficiently close to, but below, 2 percent within their projection horizon.

According to recent statements, the European Central Bank, 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 previous two quarters.

The ECB will continue to conduct net asset purchases under the Pandemic Emergency Purchase Programme (PEPP) with a total envelope of €1,850 billion until at least the end of March 2022, and in any case, until it judges that the coronavirus crisis phase is over. Also, ECB states that net purchases under the Asset Purchase Programme (APP) will continue at a monthly pace of €20 billion to run for 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.

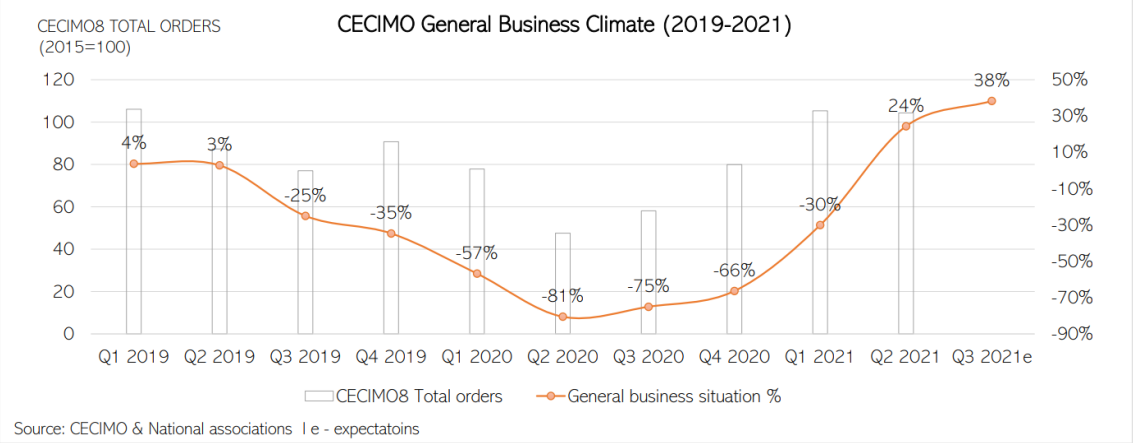
4. BUSINESS CLIMATE

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.

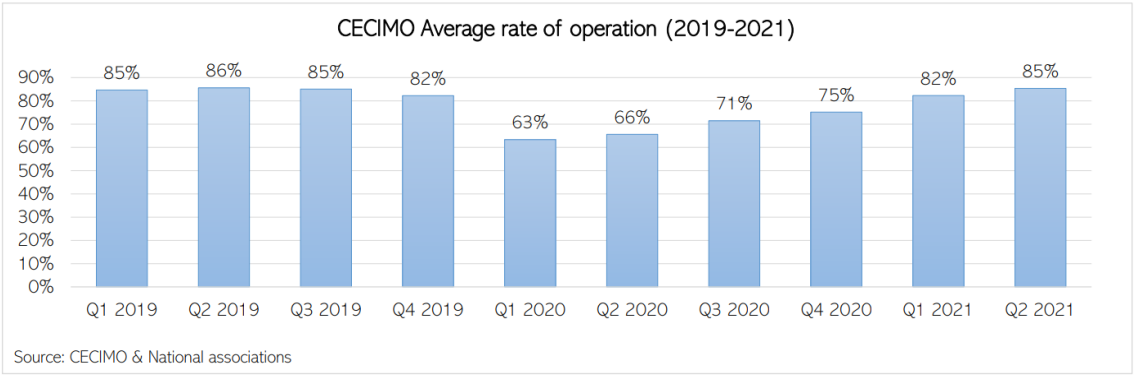
Methodology: CECIMO & National association surveyed individual companies and assessed their current business climate and their expectations (next q) in relation with demand, domestic production, export sales and employment. The responses of the CECIMO Business Climate Barometer are analyzed as the difference (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 second quarter are based on responses from the following CECIMO countries: Germany, Austria, United Kingdom, Italy and Switzerland.



Like other European business climate indicators, the CECIMO general business climate continues to improve in the second quarter of 2021. Based on the results of the second quarter CECIMO BCB survey, after seven subsequent negative assessments, managers expressed a very positive assessment of the business situation, reaching a positive percentage of 24%. 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. Furthermore, during this survey round, management expectations for the overall business climate for the next quarter (Q3 2021) were very positive (36%).

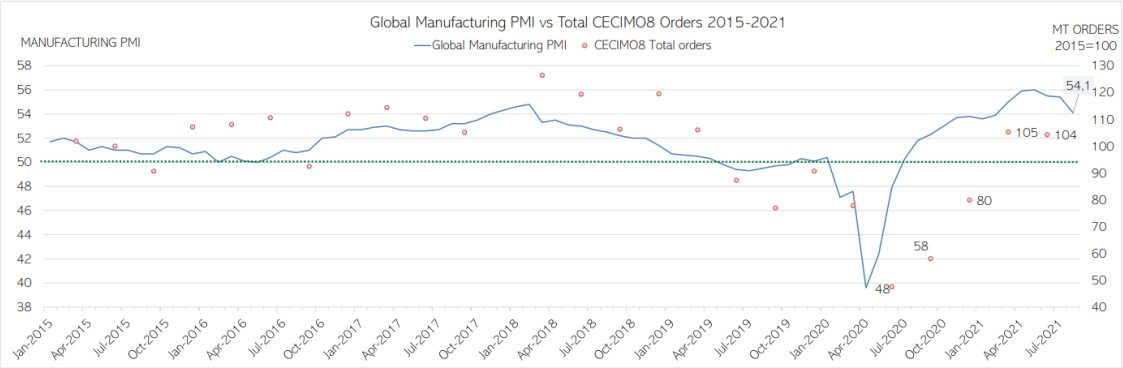
In line with EU capacity utilization levels, in the second quarter of 2021, the average operating ratio of CECIMO companies is on the "normal levels" they were before the coronavirus's impact. According to survey, CECIMO's average operating rate reached 85%, the highest level since Q3 2019.



Based on surveys results, assessment of demand for products reached record high positive level of this indicator, reaching +53% balance in Q2 2021. This is in line with the improvement of CECIMO8's domestic order, and also reflects the positive expectations expected for the second half of the year. In addition, managers have strong positive (increasing) expectations for domestic production (+49%) and exports (+42%) over the next three months. The employment outlook is also positive, recording a moderately positive balance in the second quarter of 2021 (+20%).

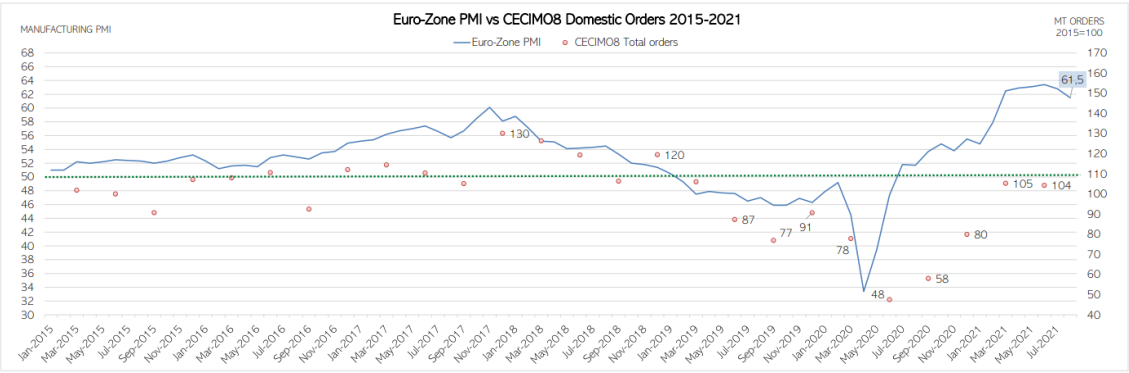
4.2 PURCHASING MANAGERS' INDEX (M)

Global Manufacturing PMI



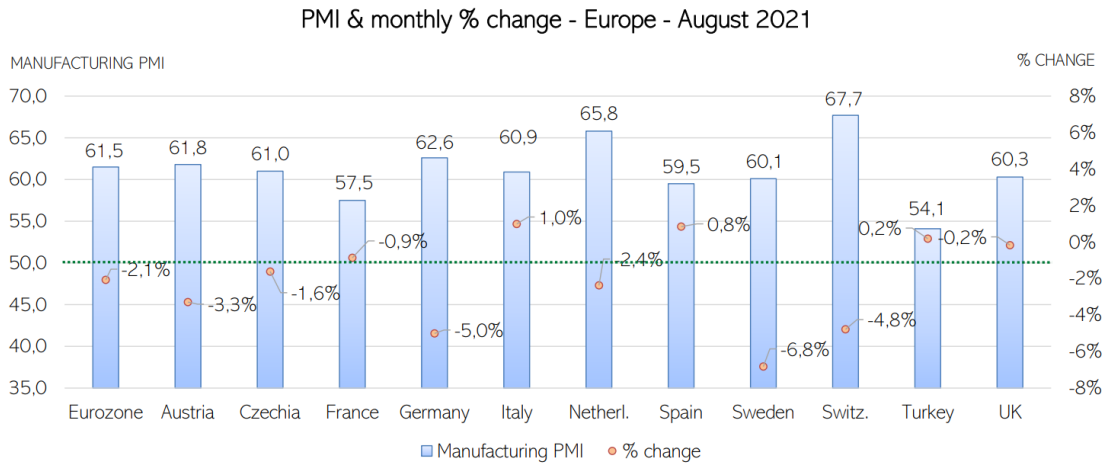
The upturn in the global manufacturing sector lost further momentum during second quarter, as rates of output growth slowed down in several major markets including the US and euro area and slipped into contraction (on average) in Asia. In any case, after 56 points in May, and 54.1 point in August index is still in the expansion territory. And according to the latest press releases, efforts to raise production further were constrained by supply chain issues and, in some cases, shortages of labour and skills. This is in line with the small decline in total machine tool orders in the second quarter of 2021, which is strongly correlated with the Global and Eurozone manufacturing PMI.

Eurozone Manufacturing PMI



After continuous growth during the first six months, the manufacturing PMI for the Euro-zone recorded a slight decline in July and August. However, the euro-zone PMI recorded 61.5 points in August, 7.4 points above the Global PMI, reflecting a very positive business climate in this region.

All three sub-sectors registered sharp, albeit weaker, improvements in operating conditions over the month. Growth at investment goods makers continued to lead over consumer goods and intermediate goods producers, as has been the case in each of the past 12 months. According to the IHS Markit, the overriding issue was again a lack of components, however, with suppliers either unable to produce enough parts or are facing a lack of shipping capacity to meet logistics demand.



Austria

After a record high in June, and small decline in July, growth of Austria's manufacturing sector showed a further loss of momentum in August, as goods producers continued to face disruption on supply side. While firms continued to link higher output to recovering levels of demand, the pace of growth was subdued by raw material and component shortages. As result Austrian Manufacturing PMI decreased from 67 points in June to 61.8 points in August. However, even with this decline, the index remained well above the critical threshold of 50.0 no-change threshold.

Czech Republic

The manufacturing PMI for the Czech Republic registered 61.0 in August, down from 62.0 in July, to signal the slowest improvement in operating condition for four months. Despite a substantial increase in new sales, production growth was slowed down by capacity shortages and serious delays in the delivery of raw materials. In August, firms struggled to process new orders due to material shortages, resulting in growing backlogs.

Germany

As in the two previous countries, even German manufacturers experienced strong demand for German goods, followed by growth in orders, production levels were constrained due to supply chain problems. As a result, the German PMI slipped to 62.6 points in August, its lowest level since February, but still well above the 50.0 no-change threshold). Supply-demand imbalances continue to drive up costs and manufacturers' concerns that higher prices are discouraging customers, reducing expectations for future production.

Spain

After reaching a record high in June and a slight decline in July, the manufacturing PMI index in Spain continued its improvement in August, reaching 59.5 points. A further improvement in demand encouraged strong growth in new orders and output during the month of August. Growth in new orders contributed to another increase in work backlogs and encouraged firms to hire additional staff. However, the disruption to the supply chain remained severe, contributing to other steep increases in input costs and sales prices.

France

In August, France recorded the seventh consecutive rise in French manufacturing output. However, the rate of expansion declined to its lowest level in six months and the PMI declined to 57.5 in August, compared to 58.0 in July. French manufacturers have also been affected by supply chain distributions followed by an increase in input costs. However, on average, firms expect an increase in production in the following period.

Italy

After a slight decrease in July, the Italian PMI experienced another substantial improvement. Reaching 60.9 points in August, from 60.3 in July, the Italian PMI reflects a fourteenth consecutive monthly improvement in the health of the sector. Growth was driven mainly by faster expansion in output and new orders. Inflation pressures, material shortages and logistical delays, followed by higher fees and prices, continue to disturb the sector. Managers' confidence in growing output remains positive.

Netherlands

The PMI fell for the third consecutive month to 65.8 in August, from July 67.4. Although the 1.6-point decline in the PMI was slightly higher than in June (-0.6) and July (-1.4), it continues to be one of the highest levels among European countries. Production was again constrained by supply shortages. Input delivery times reached record levels in August, due to insufficient transportation capacity and widespread raw material shortages due to growing global demand.

Sweden

After Sweden's PMI manufacturing index peaked in April 2021 (69.0), the index declined over the next four months. However, Standing at 60.10 index is still well above 50.0 no-change threshold. The decline in the PMI reflects the fact that the industry has largely recovered the output lost last year while shortages of raw materials and supply disruptions have become an increasingly significant challenge for the industry. In August, order inflows, followed by output and employment, contributed negatively to the PMI.

Switzerland

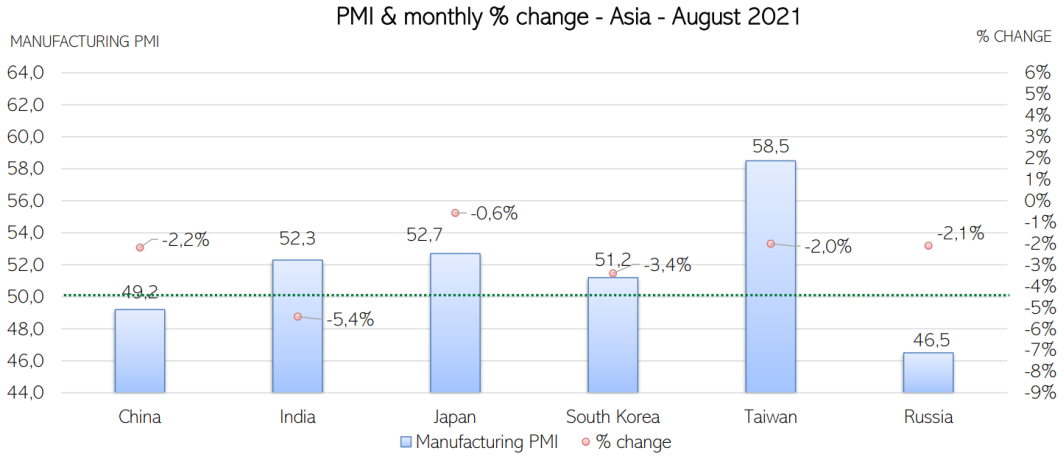
Switzerland PMI fell to 67.7 in August of 2021 from a record high of 71.1 in July. However, the index for August is the highest among European countries. The index remained well above the 50 mark but reported a weaker improvement in business conditions compared to the previous month. The slowdown was caused by weaker but still fast growth in production, new orders and purchasing activity. Employment growth accelerated, while input price inflation declined slightly but remained high.

Turkey

With improved customer demand and the recent relaxation of COVID-19 restrictions, Turkey's MIP increased to 54.1 in August, compared to 54.0 in July. This reflects a continuous improvement in the health of the manufacturing sector and the highest level since January. Efforts to secure inputs continued to be constrained by supply chain delays, contributing to a further sharp rise in input costs and producer prices. Inflationary pressures weakened over the August.

United Kingdom

Like other European countries, UK manufacturers continued to face increasing constraints caused by supply chain issues in August. The UK PMI fell to a five-month low of 60.3, below the July value of 60.4 but above the long-term average of 51.9. Input shortages and delivery delays disrupted production schedules, leading to slower output growth and significant increases in input prices. Order inflows continued for the seventh consecutive month, but a mismatch between supply and demand is impacting the UK economy. The impact of supply issues is also having an impact on rapid price inflation. Growth rates in input costs and sales prices remained close to record highs in August.



China

China General Manufacturing's PMI recorded 49.2 points in August, down from 50.3 a month earlier and fell in contractionary territory for the first time since April 2020. The new COVID-19 clusters in several regions beginning in late July have hit manufacturing activity. Manufacturing supply and demand declined while outbreaks of COVID-19 disrupted production. Indicators of production, total new orders and new export orders have all fallen in negative territory. China's manufacturers remained optimistic about business outlook, but the indicators remained below the long-term average.

India

India's manufacturing PMI recording 52.3 in August, down from 55.3 in July moved closer to the no-change mark of 50.0. However, this level is still a sign of expansion. While the recovery of the Indian manufacturing sector continued in August, growth lost momentum as demand showed some signs of weakness due to the pandemic. Input prices also increased sharply, due to strong competition for scarce raw materials and transportation issues.

Japan

Although the manufacturing PMI in Japan fell from 53.0 in July to 52.7 in August, it indicates continued expansion of the Japanese manufacturing sector midway through the third quarter. A sharp increase in COVID-19 cases in Southeast Asia was one of the key factors of the easing in demand. Both internally and externally, demand points to a weaker but still moderate improvement in the health of the manufacturing sector. Although optimistic, Japanese manufacturers remain wary of the continuing impact of the pandemic and supply chain disruption.

South Korea

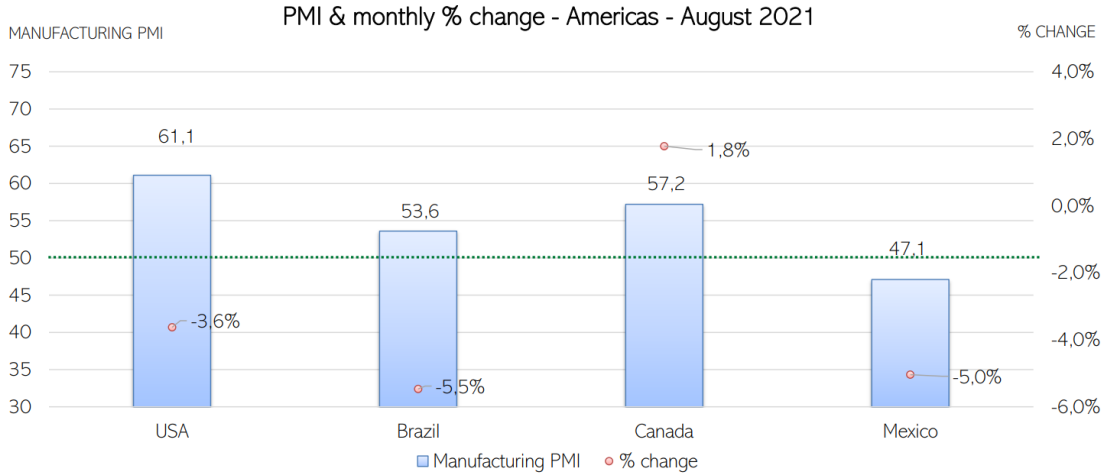
South Korea's manufacturing PMI decreased from 53.0 in July to 51.2 in August 2021. This marked the slowest rate of expansion in manufacturing activity since last October, as infections and raw materials shortages were on the rise. Output declined for the first time in a year, while new orders rose at the slowest pace in ten months. The business climate among managers has improved, with the hope that the post-pandemic economic recovery would help improve global supply chains as well.

Taiwan

The PMI of Taiwan Manufacturing fell to 58.5 in August 2021 from 59.7 in July, indicating the second lowest reading since last November. Growth in new export orders fell to a 10-month low, while pandemic-related disruptions were reported in several key markets. Output growth slowed to the second lowest in the last year, while new orders rose at a slower pace. Furthermore, manufacturing firms registered sharp increase in average input costs in August, with demand continuing to exceed supply. However, Taiwanese manufacturers remained highly confident that output would rise over the next year.

Russia

After reaching a record level in May, the PMI index for Russian manufacturing fell to 46.5 in August 2021, compared to 47.5 the previous month, signalling a third consecutive month-on-month deterioration of operating conditions across the Russian manufacturing sector. Total sales dropped at a faster rate as domestic and foreign demand deteriorated. Nevertheless, the production outlook has strengthened in the hope of a recovery in customer demand over the next few months.



United States

The U.S. Manufacturing PMI was well above 50.0 unchanged, but registered 61.1 points in August, down from 63.4 in July. Although slightly weaker than in July, growth was supported by strong increases in production and new orders. Nevertheless, output growth was reportedly hampered by capacity constraints and material shortages. The cost burdens rose significantly in August as input price inflation was the fastest in over 14 years. Nevertheless, business confidence in the production outlook over the next year strengthened in August. Greater optimism was tied to stronger growth in clients' demand.

Canada

In August, the Canadian Purchasing Managers Index increased from 56.2 in July to 57.2. The result of August was an increase in output and new orders as business continued to reopen. Employment levels have also increased, and foreign demand (particularly in the US and Europe) has improved. Ongoing severe supply chain constraints and raw material shortages remained the main causes behind historic increases in backlogs of work and lead times.

Mexico

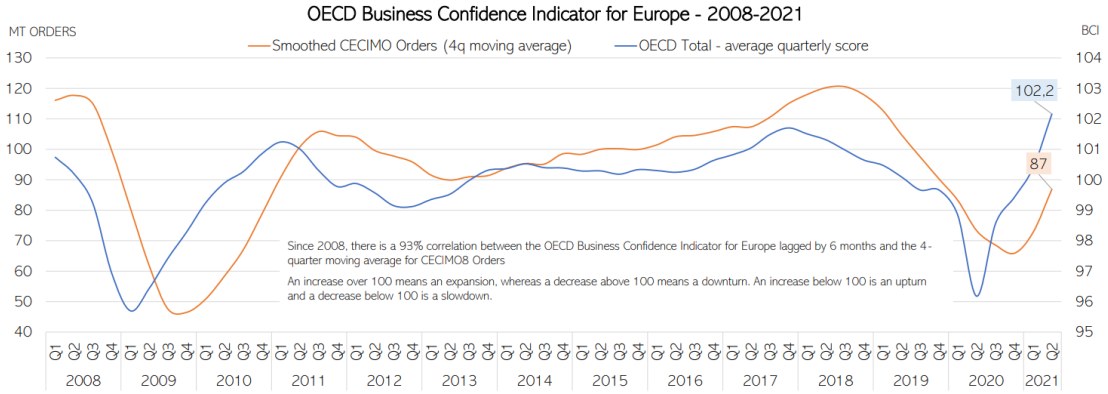
After an improvement in June, and reaching a peak in July (49.6), at 47.1 in August, Mexico's PMI and manufacturing sector slipped deeper into the contraction territory. New orders decreased for the eighteenth month in a row halfway through the third quarter, mostly due to the pandemic, business closures and subdued client demand. Supply shortages resulted in longer delivery times and an uptick in cost pressures.

Brazil

The manufacturing PMI in Brazil slipped from July's five-month high of 56.7 to 53.6 in August, pointing to a solid yet softer improvement in the health of the sector. Overall new business growth continued in August, with international orders decreasing for the first time in seven months. As the scarcity of raw materials has caused a sharp rise in input costs, companies have limited their input purchases in the hope of getting fairer prices in the future.

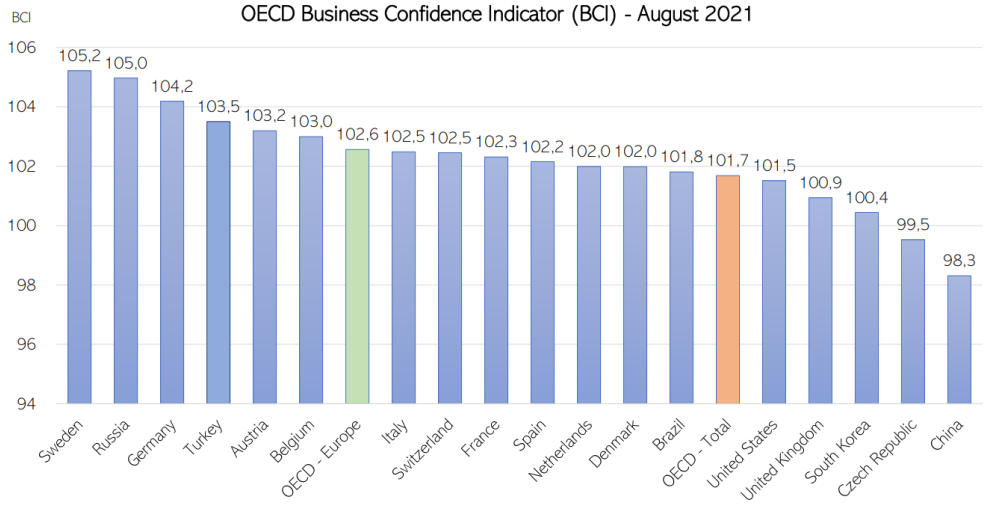
4.3 OECD BUSINESS CLIMATE INDICATOR (M)

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.



Opening measures are having an impact in Europe so the Business Confidence Indicator rose to a very high level in the second quarter of 2021 reaching 102.2 points the all-time record high. Moreover, latest figures of 102.7 points in August, shows that is clearly in expansionary territory, and it is good input for expected orders and output in the third quarter of this year.

The Business Climate Index (BCI) for the OECD countries (Total) reached level of 101.6 at the end of Q2 2021, reaching the higher level than it was in the previous quarter. The August 2021 (note that the previous chart refers to the quarterly averages) BCI readings show further improvement of OECD-Total aggregate standing on the level of 101.7 points.



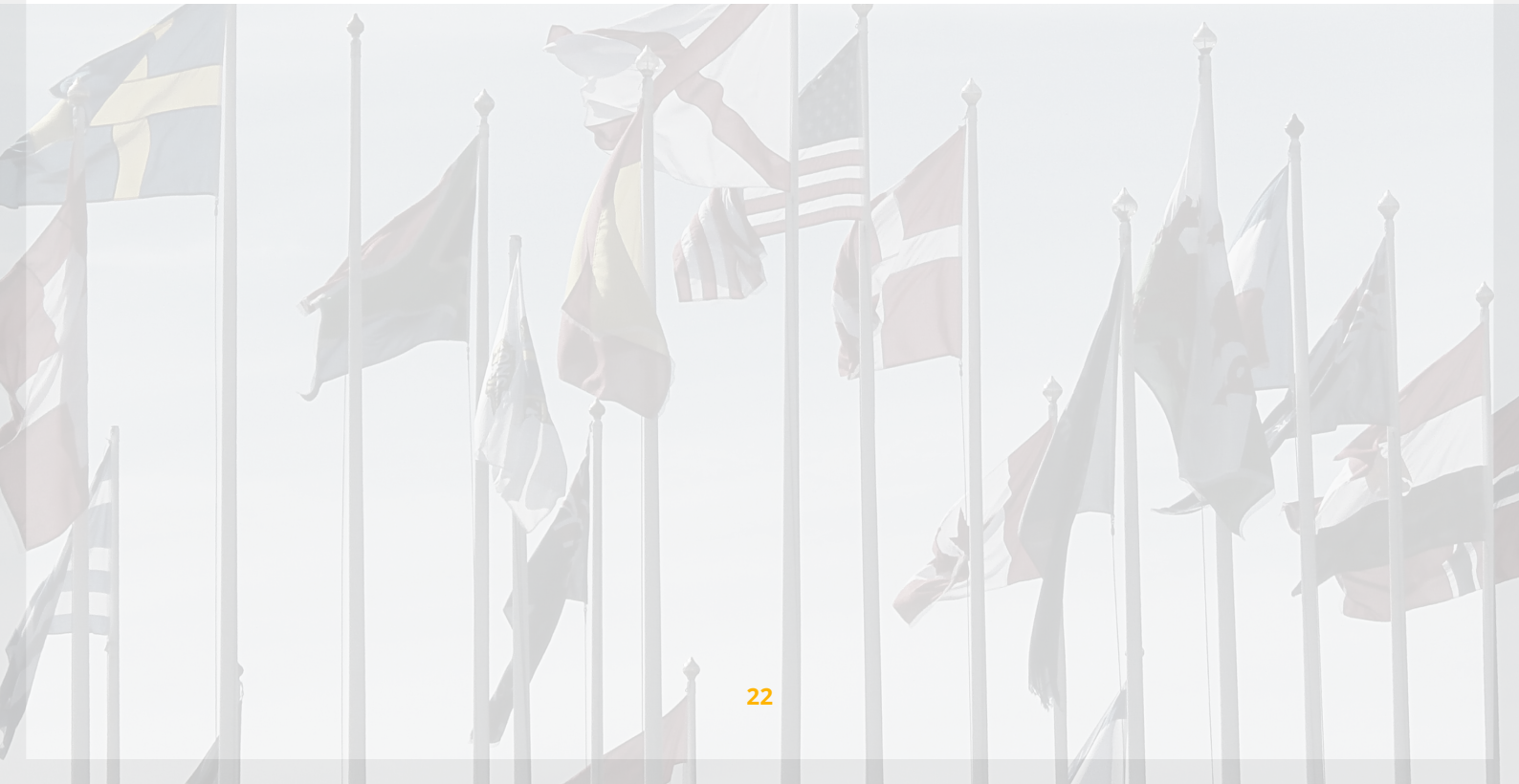
Country-specific BCI readings for August show:

- European markets such as Sweden (105.2), Germany (104.2), Turkey (103.5), Austria (103.2), Belgium (103.0), Italy (102.5), Switzerland (102.5), France (102.3), Spain (102.2), Netherlands (102.0), and Denmark (102.0) were above the OECD average. At 100.9, the UK was below the OECD average, but still above the 100-point level. Across European countries, only Check Republic in August recorded a level below 100 points.

- Between Asian markets, China and South Korea had an BCI lower than the OECD average, although South Korea (100.4) was only above 100 points, suggesting increased confidence in this market.

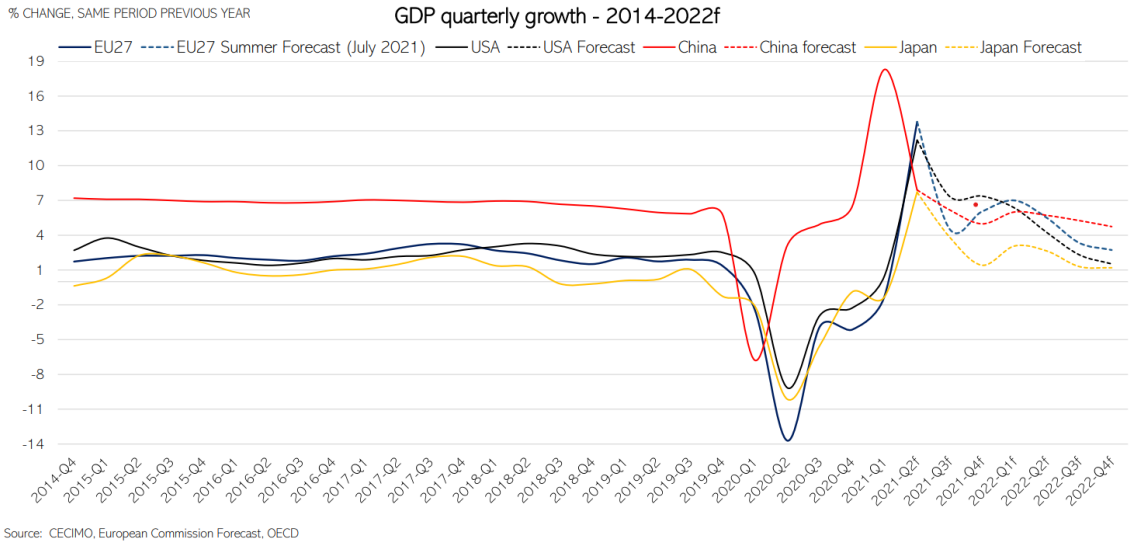
- Russia (105.0) and Brazil (101.8) were above the OECD average while the United States was below this average but still above the 100-point level.

- Sweden, Russia, Germany and Turkey recorded the highest BCI levels in August 2021, with Turkey, Austria and Belgium not far behind.



5. GENERAL INDICATORS

5.1 GDP (M)



Source: CECIMO, European Commission Forecast, OECD

Tracking the trend of the percentage change in GDP, comparing the latest period (Q2-2021) with the same period a year earlier:

- Euro area GDP increased by +14.3% in the Q2 2021 compared to the same period of the previous year, while overall EU27 economic output recorded increase of 13,8% on the same annual basis. Compared with previous quarter, both rates of European GDP show a continuous recovery in the second quarter +2.2% in the euro area and +2.1% in the European Union.
- China's economy registered a 7.9% increase in the second quarter of 2021 compared to the same period in 2020, and an increase of about 1.3% compared to the previous quarter.
- United States GDP in the second quarter of 2021 was 12.2% higher than in the second quarter of 2020, growing 1.6% compared to the first quarter of 2021.
- The Japanese economy in the second quarter of 2021 recorded GDP growth of 7.7% compared to the same quarter of 2020, followed by positive quarter-on-quarter growth of 0.4%.

European Commission's Spring Forecast (July 2021):

The recently published Summer 2021 Forecast by the European Commission shows new trends regarding GDP growth in the European Union and other advanced economies. In new forecast, the near-term outlook for the European economy looks brighter than expected in spring.

As the epidemiological situation improved, Member States embarked on a stepwise relaxation of containment measures during the second quarter, at a slightly faster pace than expected in the Spring forecast. Overall, GDP is now forecast to grow by 4.8% in 2021 and 4.5% in 2022 in both the EU and the euro area. The volume of output is projected to return to its pre-crisis level (2019-Q4) in the last quarter of 2021, which is one quarter earlier than expected in the Spring forecast for the euro area. In 2022, pressures are assumed to moderate gradually as supply constraints resolve, order backlogs clear, and demand growth moderates. Production input shortages and rising costs are estimated to weigh on certain manufacturing sectors more than previously expected, though the impact is assumed to be only transitory. Inflation in the EU is now forecast to average 2.2% this year and 1.6% in 2022 (+0.3 and +0.1 pps., respectively, compared to the Spring Forecast). In the euro area, inflation is forecast to average 1.9% in 2021 (+ 0.2 pps.) and 1.4% in 2022 (+0.1 pps.) New forecasts suggest that inflation could be higher than expected if supply constraints are more persistent and price pressures are more strongly passed on to consumer prices.

The global outlook remains broadly unchanged since the Spring Forecast. Overall, global real GDP (excluding the EU) is projected to grow by 5.9% and 4.2% in 2021 and 2022, respectively. Consumer inflation has accelerated in advanced economies, in some cases (e.g. US, Canada) to above pre-pandemic rates. Rising commodity prices and production input shortages lifted prices for some manufacturing goods. Inflation has also picked up in emerging market economies, driven by rising food and energy prices (e.g. Russia, Mexico, Brazil, India) and a depreciating currency (e.g. Turkey), leading to some monetary policy tightening (e.g. Russia, Brazil).

The volume of the global trade in goods reached pre-pandemic levels in the last quarter of 2020, mostly due to a surge in demand for consumer goods. However, recent surges in shipping costs and an increase in supply delivery times hamper global supply chains. While shipping costs are likely to remain high in the near term, they are expected to ease over the second half of 2021 as growth in goods trade slows and shipping capacity adjusts.

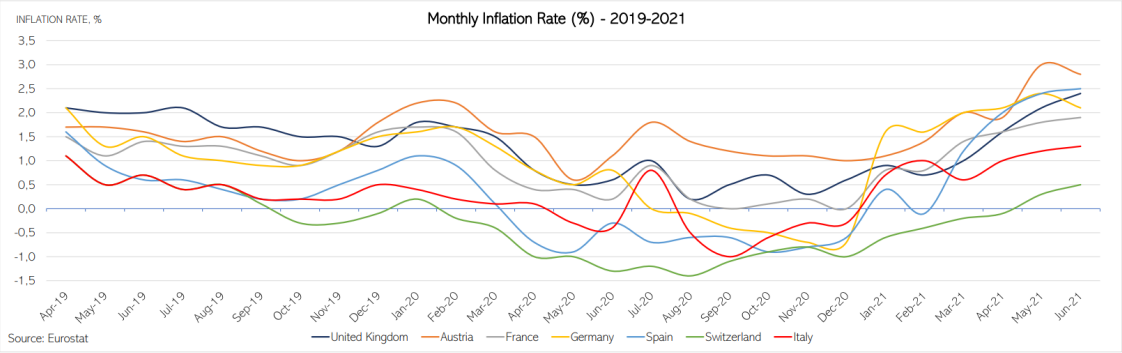
5.2 INFLATION (M)

Q2-2021 average inflation data:

- EU27: 2.17%
- Eurozone: 1.83%
- United States: 5.77%
- China: 1.10%

In the first quarter of 2021, Eurozone inflation continues to rise, averaging 1.83% year-on-year (y/y), up from 1.03% y/y in the first quarter of 2021. EU27 inflation follows a similar path, averaging 2.17% y/y, compared to the 1.40% y/y in the first quarter 2021. The rebound in inflation in 2021 can be attributed to higher prices for goods, and to a lesser extent, for services. We continue to see a small but significant difference between the Euro-zone countries and the EU27.

Inflation in the U.S. has also risen sharply, averaging 5.77% y/y in second quarter, up from 1.87% y/y in the first quarter, with an especially high level in May and June. The rate of inflation in China, where the data comes from the OECD, after the quarterly value was an average in the negative value area of -0.03% over 12 months in the first quarter, has increased in the second quarter, averaging 1.10% y/y.

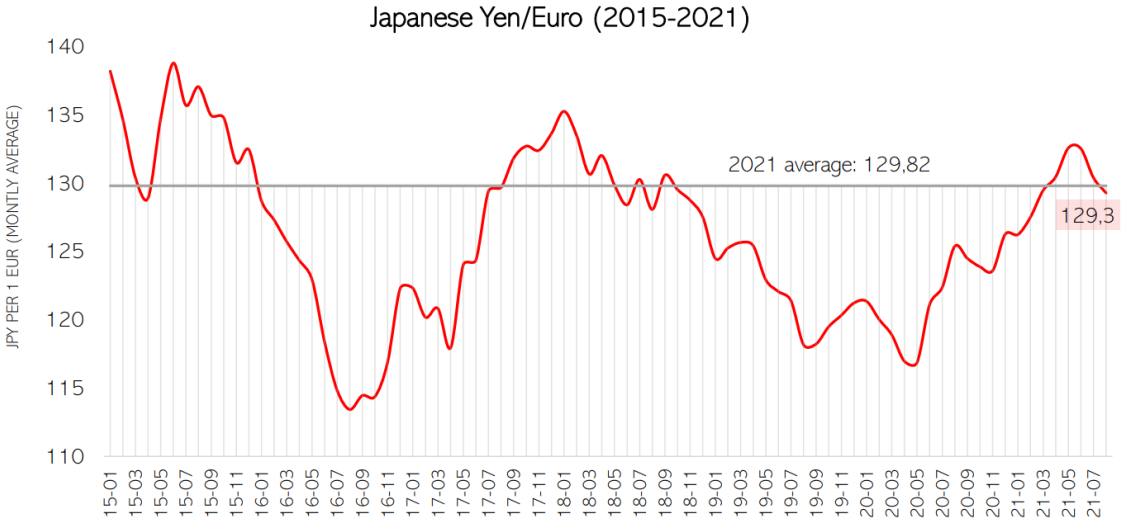


With positive business outlook, as demand and consumption levels continues to improve in the EU, but business also faced with supply chain disruptions and shortages of raw materials, prices continue to rise in the second quarter of 2021 amongst the largest CECIMO markets. In Germany, in the second quarter of 2021, annual inflation stood at an average of 2.2%. However, according to European Commission forecasts, after picking up to 2.8% in 2021, Germany inflation is expected to decline to 1.6% in 2022. After negative levels in the first quarter, Swiss average inflation rate rose to 0.23% in the second quarter (y/y). The United Kingdom (2.03%), France (1.77%), Spain (2.30%) and Italy (1.17%) also recorded a rise in annual inflation in the second quarter.

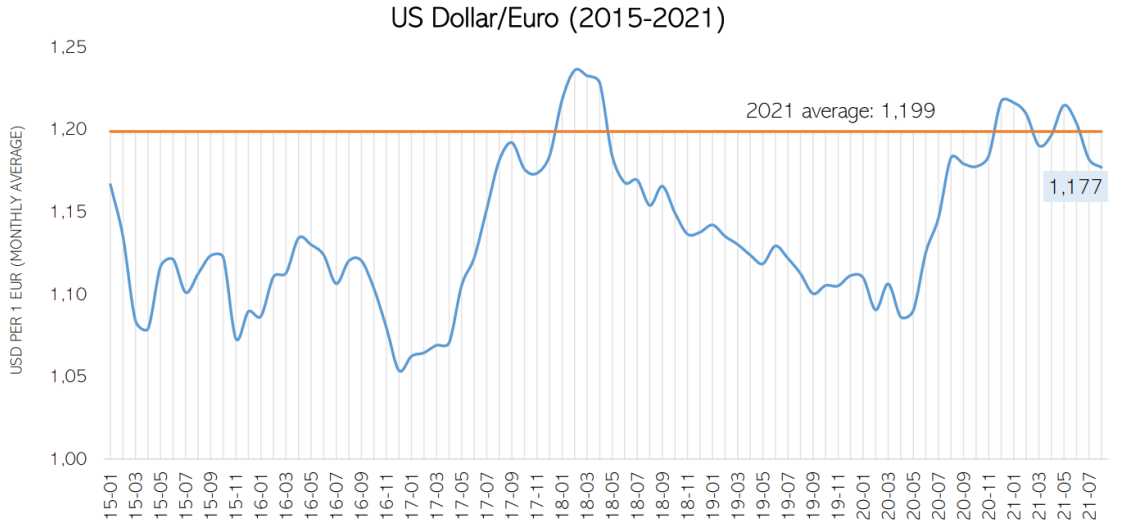
Inflation rates by Country (June 2020 - June 2021)

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

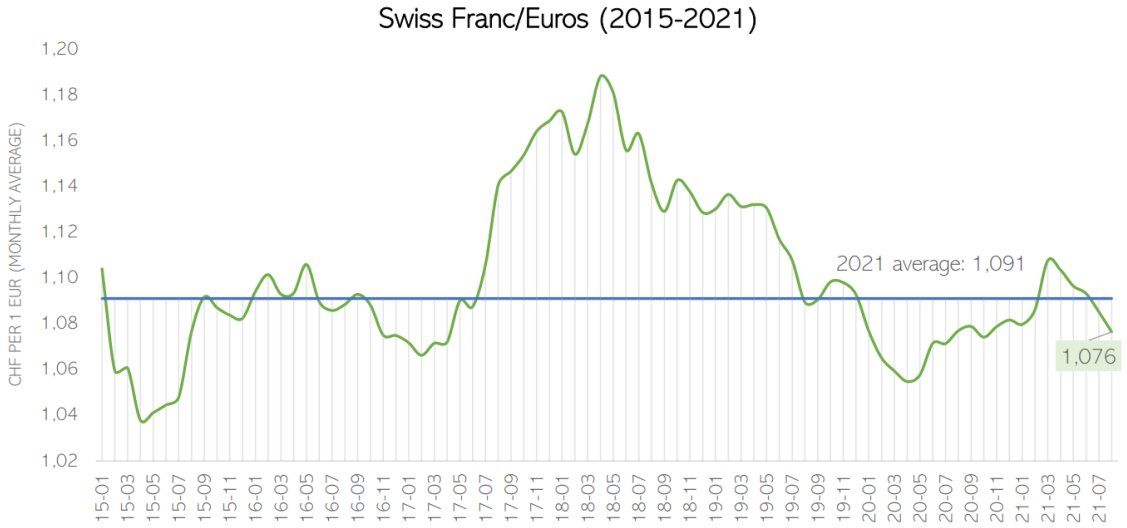
5.3 FOREIGN EXCHANGE RATES (M)



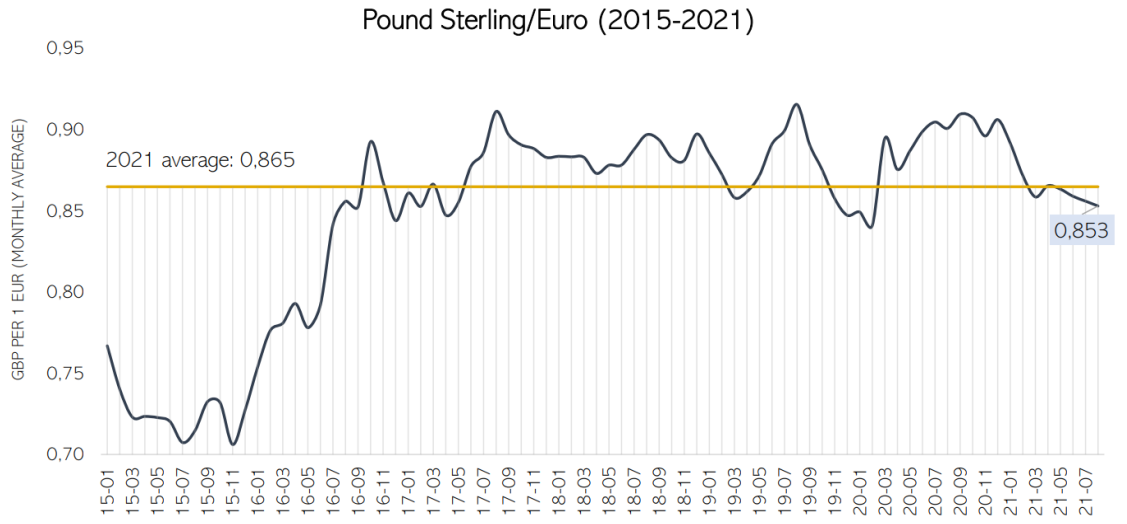
The average Q2 2021 Japanese trading prices against the euro was 131.9, indicating a market depreciation of the Japanese currency, which was trading at 127.8 units per euro in the previous quarter. The average Japanese yen price over the first eight months of 2021 was 129.8 and after reaching the highest rate in May (132.6), the Japanese yen strengthened slightly compared to the euro in June, July and August to reach the rate of 129.3.



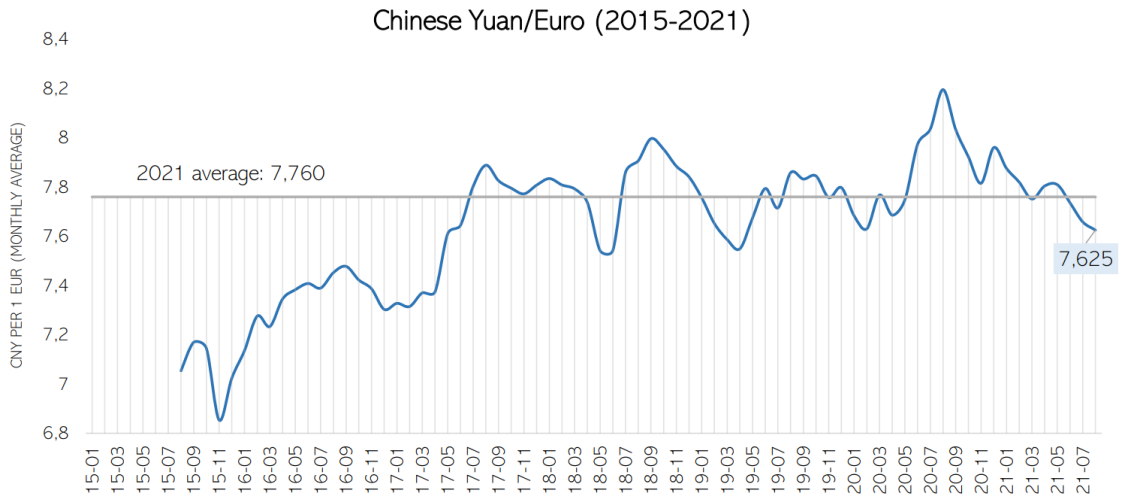
The average trading price of the US Dollar during first eight months in 2021 was 1.199 per Euro, still above the average level that was in 2020. After a weaker US dollar against the euro in April and May, similar to the first three months, a significant appreciation of the US currency was recorded in June, July and August (1.177), reaching the lowest rate since June 2020.



The average trading price for the Swiss Franc during 2020 was 1.070 per Euro. Following the significant depreciation of Swiss currency in February and March, appreciation returned in the following months, with a rate of 1.076 in August. However, for the first eight-month period of 2021 the average remains slightly above the average of 2020, standing at 1.091 CHF per Euro.



The average trading price for the Pound Sterling during first eight months of 2021 was 0.865 per Euro. Monthly indicators over the past few months show that the euro has weakened against the British pound. As such, the August rate was 0.853 due to the five-month appreciation of the British currency, reaching the lowest exchange rate since February 2020.



The average trading price of the Chinese Yuan during first eight months of 2021 was 7.760 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 June, July and August (7.625).

6. RELATED SECTORS

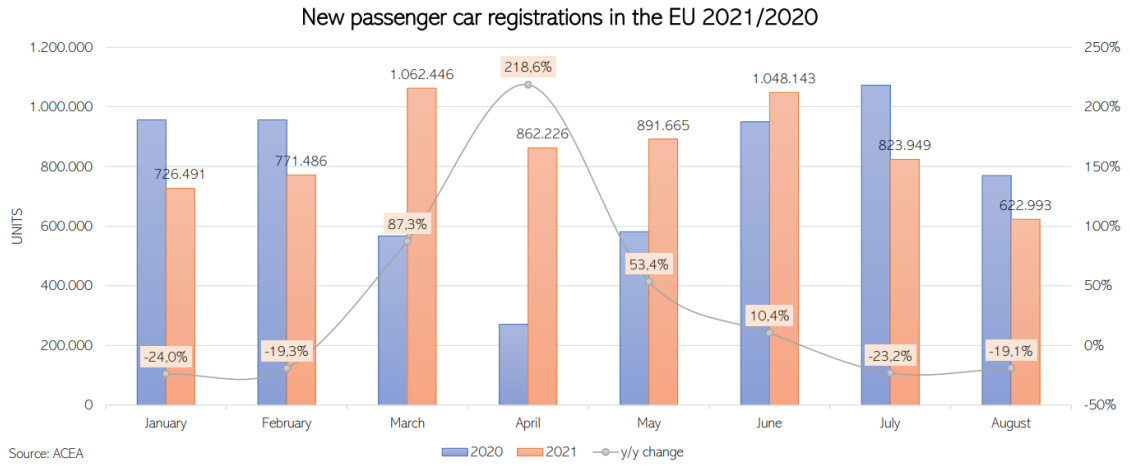
As the demand for machine tools is strongly related to the situation in the main purchasing industries, and on the production side, impacted by material stocks, the following chapters present interesting trends and facts concerning the automotive and aerospace sector, and provide a brief overview of recent prices in the metals sector.

Note: This is a new section which will be further improved in upcoming quarterly reports.

6.1 AUTOMOTIVE

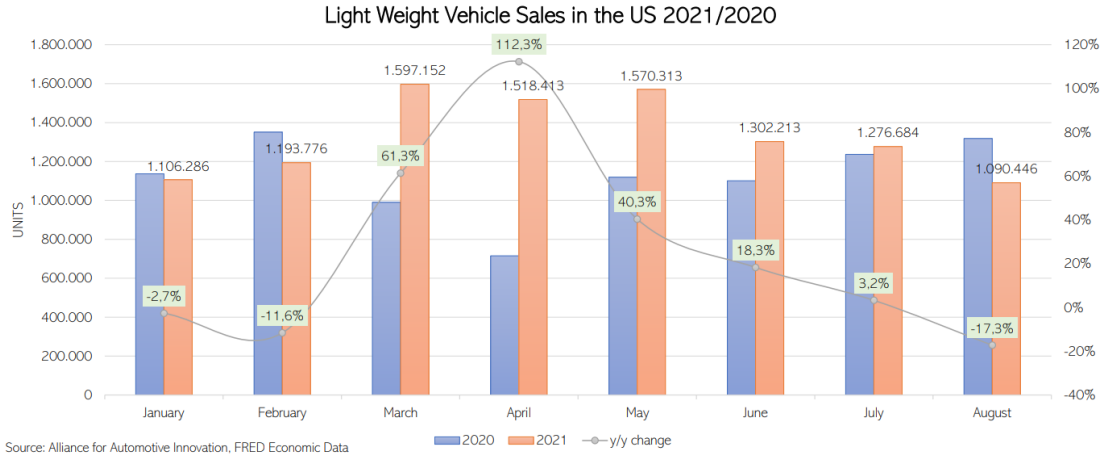
Along with other industries, the automotive industry in the process of recovery, but it continues to face a series of supply chain constraints. According to the IHS Markit latest posts, in the second quarter of 2021, the levels of disruption continued to weigh down on automotive supply chains including semiconductors shortage. In third quarter continued disruption is expected but not to the scale seen in the first or second quarter.

In the case of semiconductors, it is important to note that producers affected by the storm in Texas and the fire in Japan have returned to their pre-crisis production levels. Therefore, the automotive suppliers of semiconductor-content impacted by shortages are expected to improve in the third quarter. However, IHS Markit estimates it will be first quarter of 2022 before there will be enough capacity to keep up with demand and to begin filling missed backlog.

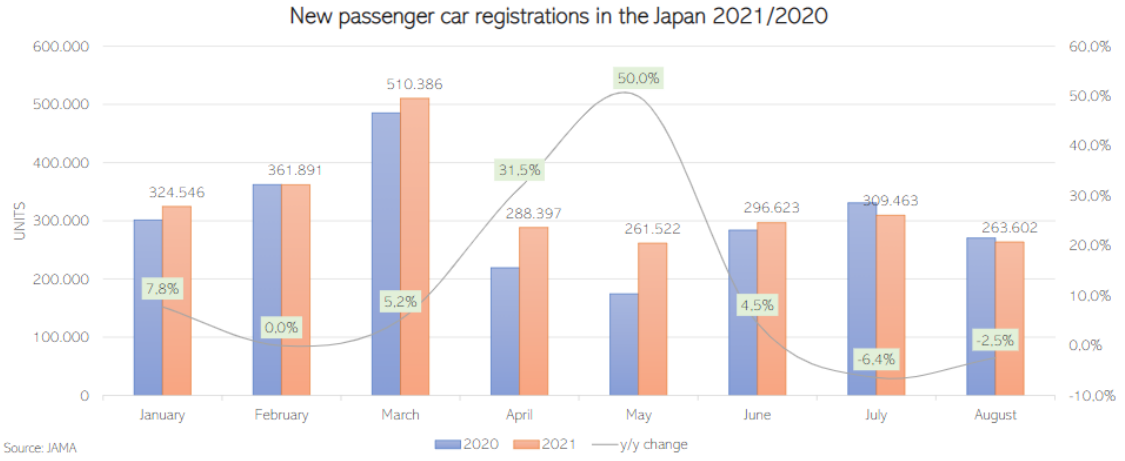


According to ACEA (European Automobile Manufacturers Association) In July 2021, the European passenger car market suffered a significant setback after four months of accelerated growth, with new registrations down 23.2% to 823,949 units. The EU's four major markets showed similar trends, all posting strong losses. France saw the steepest decrease (-35.3%) in July, followed by Spain (-28.9%), Germany (-24.9%) and Italy (-19.2%).

During the month of August, car registrations across the European Union decreased by 19.1% – compared to the same month last year. However, over the first eight months of 2021, sales volumes saw a year-on-year increase of 11.2%, counting 6.8 million new passenger cars in total.



The US light vehicle market continued to be hit by low inventories in July. Sales grew by only 3.2% YoY to 1.28 million units. Due to shortages in semiconductor parts, many American producers have had to slow down production. In August, unadjusted sales volumes were 1.09 million units, or 17.3% below its year-ago level and 26.5% lower than the August-2019 level. Microchip shortages remain a major constraint for North American automotive manufacturers. The sector was also affected by other supply chain disruptions, including increased COVID-19 restrictions across the supply chain, port delays and even labour shortages.

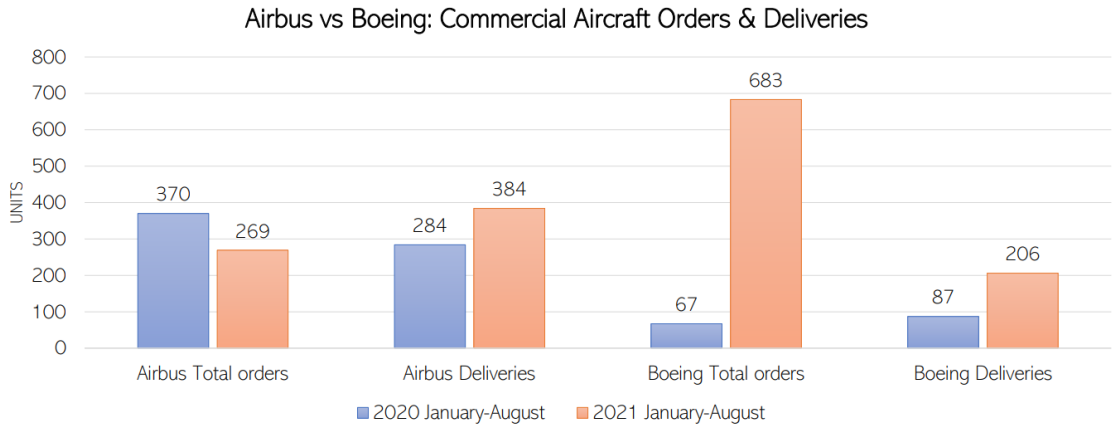


According to the Japan Automobile Manufacturers Association (JAMA), new car registration/sales in Japan in August 2021 decreased by 2.5% over the same period last year. Like in other markets, the chip shortage and supply-chain disruptions, from the spread of the virus in other parts of Asia, have resulted in further supply constraints.

6.2 AEROSPACE

According to the Eurocontrol, in August, flights were back to 71% of 2019 levels across Europe. This average, however, conceals a wide variation between countries and between different traffic flows for each country. Results for 2021 (up to August) suggest that traffic flows are more likely to follow a high immunization scenario where traffic is expected to return to 2019 levels by 2024.

In the aerospace sector, both global producers, Boeing and Airbus, recorded a slight improvement in orders in the second and third quarters compared to the previous year. However, order levels are still below 2019 levels.



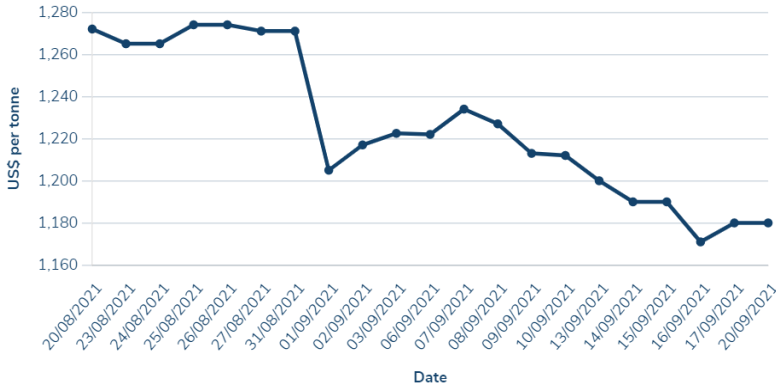
In 2021, until August, Boeing recorded a total of 683 orders and 403 cancellations, leading to 280 net orders. Airbus delivered 40 planes in August to increase their deliveries to 384 since the beginning of the year. However, Boeing continues to dominate the number of new orders while US carriers renew their fleets.

Managing global supply chains, the uncertainties of the COVID-19 pandemic, and fluctuations in the materials market are key challenges for aerospace manufacturers.

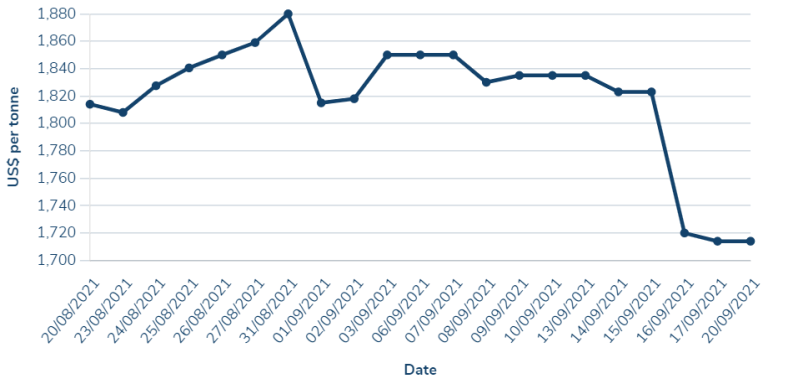
6.3 METAL

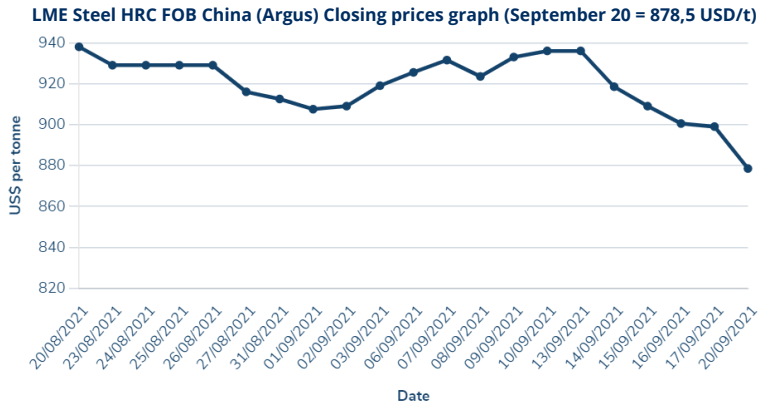
Since the machine tools industry is a metal-using sector, this chapter presents a brief overview of the prices of certain metals, based on the data available on the London Metal Exchange (LME) website. The charts below were downloaded from the official website of the LME, at the time of writing this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

LME Steel HRC EXW NW Europe (Argus) Closing prices graph (September 20 = 1.180 USD/t)

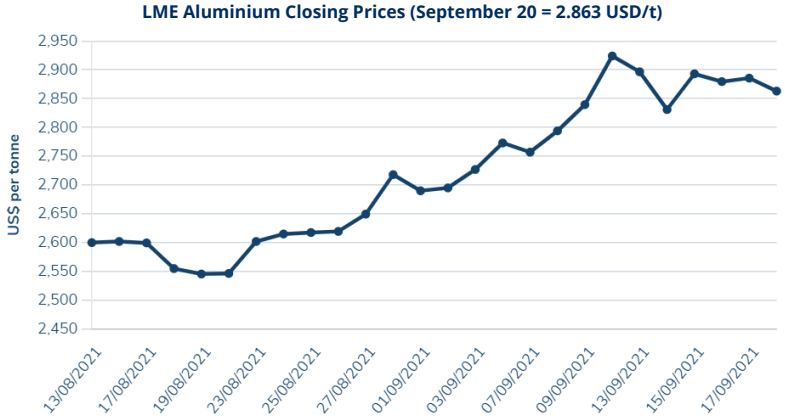


LME Steel HRC EXW N America (Platts) Closing Prices graph (September 20 = 1.714 USD/t)

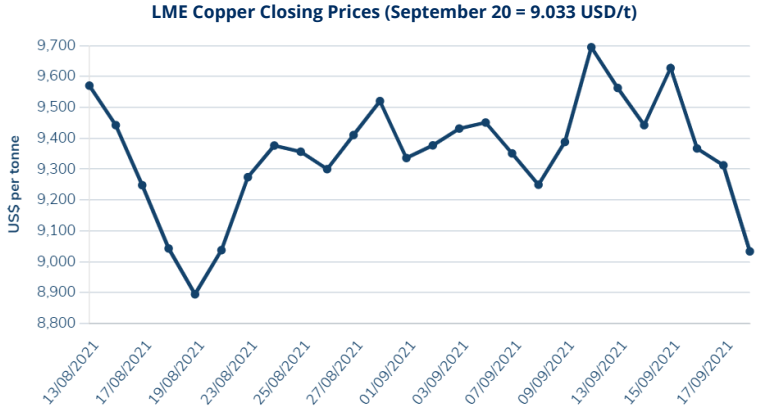




At the time of writing this report, steel prices decreased visibly during August and early September after six consecutive months of gains. A decrease in iron ore prices, a seasonal slowdown in demand and an automotive sector affected by the shortage of semiconductors have cooled steel reference prices. However, according to the IHS Markit, steel prices are still extreme and should decline in the second half of 2021.



Aluminium prices hit their highest levels in a decade in the beginning of September, mainly because of a military coup in Guinea, the world's second largest producer of raw material bauxite. As a result, the growing uncertainty around the new political regime in one of the largest bauxite-producing countries in the world has certainly put upward pressure on alumina and aluminium prices around the globe.



The growing demand and uncertainty in Chile's copper mining sector over the month of August continues to reflect on Copper prices. Due to recent news about the debt crisis to China developer Evergrande Group, copper prices, used widely in the power and construction industries, were trading near a one-month low on the 20th of September.

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 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.

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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MEMBER ASSOCIATIONS

Austria: FMTI, 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

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, 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

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.

EMO MILANO 2021 fieramilano 4-9 October

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