Q2 2023

ECONOMIC AND STATISTICAL TOOLBOX

Key Highlights

- Main Business Climate Indicators Continue to Show Unfavorable Conditions
- CECIMO Revises 2023 MT Production Estimates Slightly Downward, Expects 5.5% Growth
- Introducing the New CECIMO Project: CECIMO8 Total Orders Trend Indication
- New Oxford Economics MT Consumption forecast (October 2023)

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INTRODUCTION

The CECIMO Economic and Statistical Toolbox for **the second period of 2023** provides the latest data update for the European and global MT sector. As usual, the report covers the second quarter of 2023, but wherever possible we have included the most recent data.

In terms of the European economy, the European Commission's Summer Economic Forecasts (September 2023) show that the EU economy is still growing, albeit at a slower pace. EU economic growth has been **revised downwards to 0.8% in 2023 and 1.4% in 2024**. Overall, the weaker growth momentum in the EU is expected to persist until 2024 and the impact of tight monetary policy will continue to dampen economic activity.

Within gross fixed capital formation, **business investment** is of particular concern. The European Central Bank notes that weak domestic and global economic activity, coupled with higher interest rates and credit constraints, are expected to put significant pressure on business investment in the coming quarters. However, improving domestic and global demand and the ongoing green and digital transition are expected to be the main drivers of the gradual recovery thereafter.

While we have lowered our expectations for production growth, **we remain optimistic about the output levels of our MT builders in 2023**. However, the latest business climate indicators show a more negative business situation in recent months, pointing to a deterioration in new order demand towards the end of the year. More pessimistic expectations have also been confirmed in our latest Business Climate Barometer survey, where expectations for the near future are less optimistic.

The European BCI fell from 100.1 points in the first quarter of 2023 to 99.9 points in the second quarter, and the business confidence indicator for the 19-country euro area followed a similar trend. The latest data for July and August show a further deterioration in the index, with the European BCI falling to 99.3 points in August and the euro area BCI even lower at 98.9 points. Given the strong correlation of this index with the CECIMO8 total new orders index, a downward trend in total new orders is expected in the second half of 2023. Moreover, looking at recent months, the August PMI data for the euro area also showed a historic fall in new orders, both domestically and in export markets, pointing to severe weakness in demand. Backlogs of work continued to shrink for the 15th consecutive month, leading to a decline in manufacturing output. Although the rate of decline in output was milder than in July, it remained significant, underlining the ongoing challenges facing euro area manufacturers.

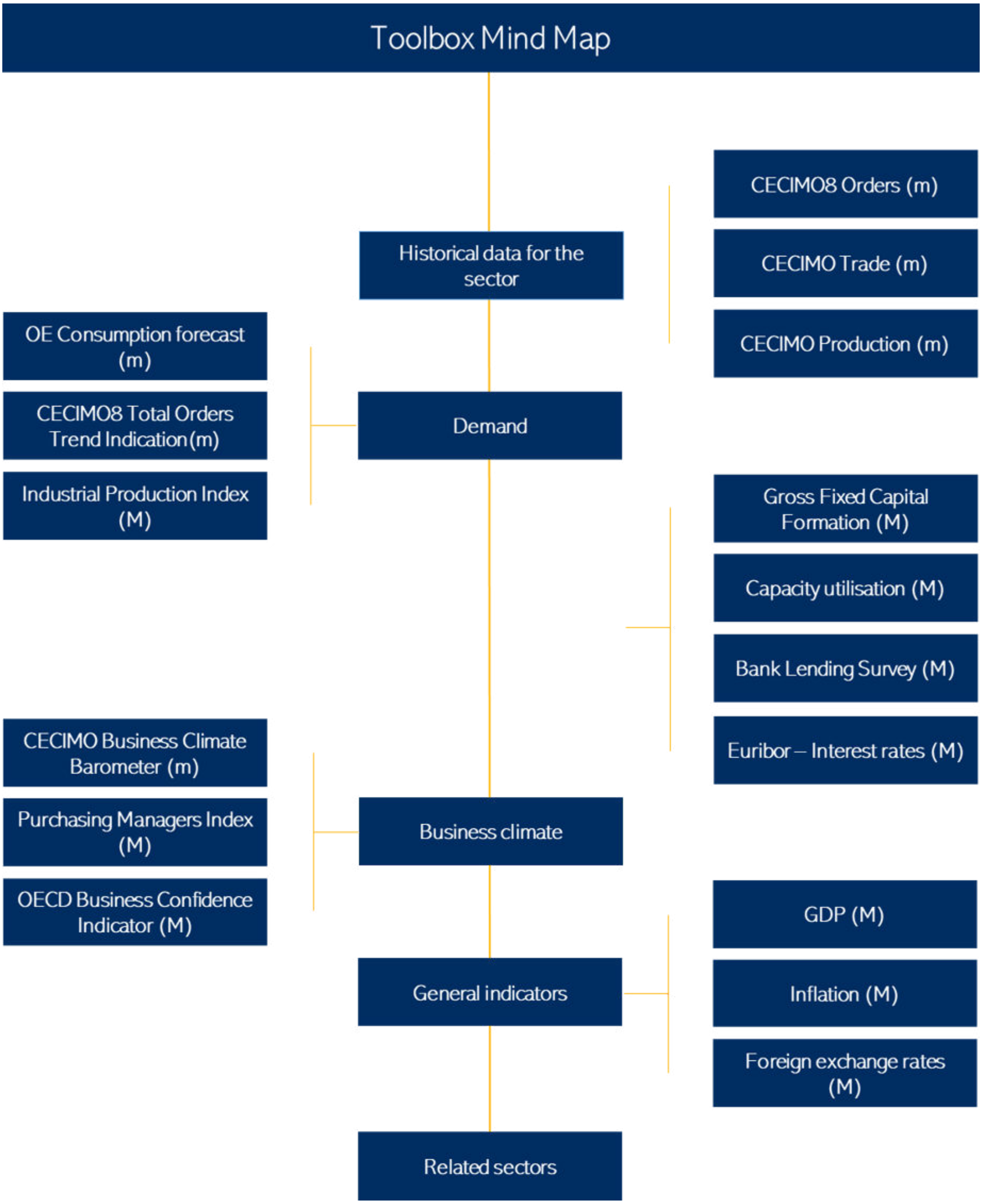
Based on developments in domestic and foreign markets, the **CECIMO8 index of total new orders** recorded a level that **was 7% lower than in the previous quarter and around 8% lower than in the same period of the previous year**. Although there is a visible decline in new orders in the CECIMO region in the first half of 2023 compared to the same period in 2022, the growth momentum in terms of production is expected to continue. Among other factors, a significant backlog of orders, a stable level of new orders and improved supply chains are expected to keep production above last year's level.

The latest estimates for CECIMO and global MT production have been included in this report, based on the latest database update (September 2023). World production of MT (machine tools) reached EUR 79.2 billion in 2022, representing an annual increase in production of 11.9%. In the same year, MT production in the CECIMO countries recorded an increase of 12.8%, reaching a level of EUR 25.3 billion, maintaining CECIMO's share of world MT production at 32%. Looking ahead to 2023, **MT production in the CECIMO countries is expected to grow by around 5.5%** to reach almost EUR 27 billion in 2023, while **global MT production is expected to remain more stable, slightly below the level of 2022 (-2.5%)**. The decrease in global MT production in 2023 is mainly due to lower MT production expectations in China, the USA and Japan.

The latest Oxford Economics Global MT Outlook of October 2023 shows a less optimistic situation in terms of MT consumption, with global MT consumption expected to decline by 3.9% in 2023 before remaining stable in 2024 (EUR values). CECIMO machine tool consumption is expected to grow by around 4.8% in 2023, remain stable in 2024, before stronger growth of 5.6% in 2025.

Looking at related sectors, recent developments show **improvements in both automotive and aerospace**. While expectations for output growth in the automotive sector are stronger in Europe and Asia, the situation in the US is less optimistic due to the UAW strike. As expected, the aerospace sector also recorded higher net orders and deliveries in the period from January to August compared with the same period last year.

According to the latest data from the World Bank, there was a **notable increase in energy prices of 7.8% in August,** mainly due to significant increases in the natural gas market in Europe, while **metal prices remained more stable.**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1. HISTORICAL DATA FOR THE SECTOR

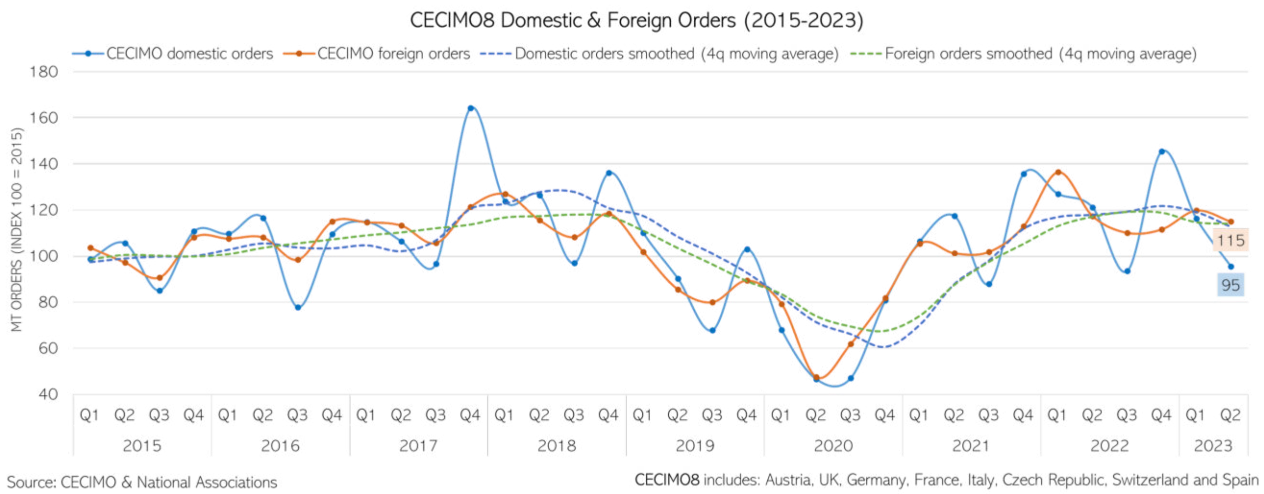
1.1 CECIMO 8 ORDERS (M)

In line with the deterioration in the business climate indicators, CECIMO8 total new orders continued their downward trend in the second quarter of 2023 compared with the previous quarter and were below the level of the second quarter of 2022. While a relatively stable level of orders from the foreign market is visible, orders from the domestic market recorded a more significant decline on a quarterly and annual basis.

Both quarter on quarter (-18%) and year on year (-21%) new domestic orders were significantly lower in the CECIMO8 region. Among the CECIMO8 countries, only France reported an increase in new domestic orders compared with the previous quarter.

After improving in the previous two quarters, the CECIMO8 level of new foreign orders fell by 4% on a quarterly basis to 115 index points in the second quarter of 2023. Compared with the same period a year earlier, the level of the index is 2% lower. Strong quarter-on-quarter improvements were recorded in Spain, while higher levels were also recorded in the Czech Republic, Switzerland and Germany. However, other countries recorded more significant falls, which affected the overall CECIMO8 index.

Based on developments in the domestic and foreign markets, the CECIMO8 index of total new orders recorded a level that was 7% lower than in the previous quarter and around 8% lower than in the same period of the previous year. As announced in the previous report, based on historical trends in order levels and the strong correlation of CECIMO8 total new orders with some business sentiment indicators, we expected a quarterly decline and a lower level of new orders in Q2 2023, and we will most likely see a similar scenario in Q3 2023.



Domestic Orders

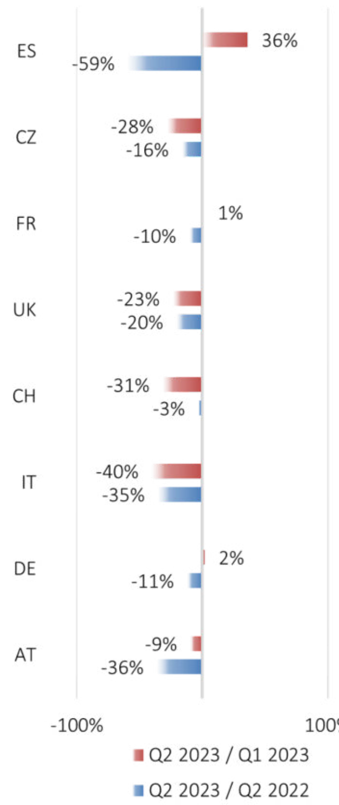
- All CECIMO8 countries recorded a fall in new domestic orders in the second quarter of 2023 compared with the same period a year before. The largest decreases were recorded in Spain (-59%), Austria (-36%) and Italy (-35%).

- The annual decline was more moderate in the Czech Republic (-16%), Germany (-11%) and France (-10%), while in Switzerland it was only 3% lower than in the same period of the previous year.

- Domestic orders in the United Kingdom were 20% down on the same period last year and 23% down on the previous quarter.

- While the annual decline was strongest in Spain, it is important to note that new orders in the second quarter were +36% up on the previous quarter.

- In addition to Spain, Germany (+2%) and France (+1%) recorded small quarterly increases in new orders.



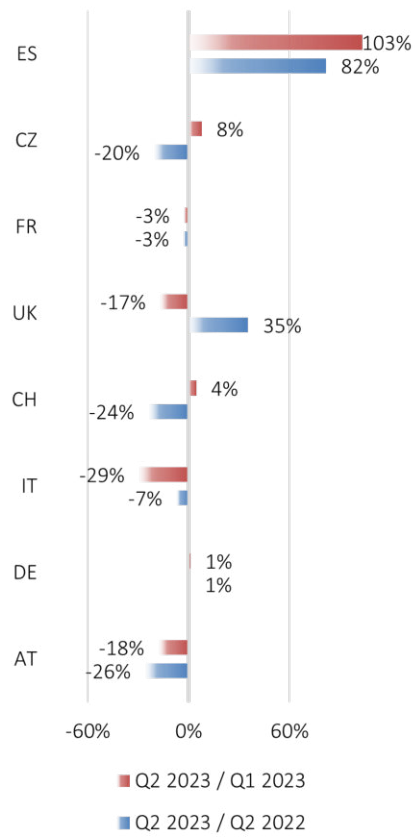
Foreign Orders

- While different trends can be observed in different countries, CECIMO8 foreign orders remained more stable than domestic orders in the second quarter of 2023.

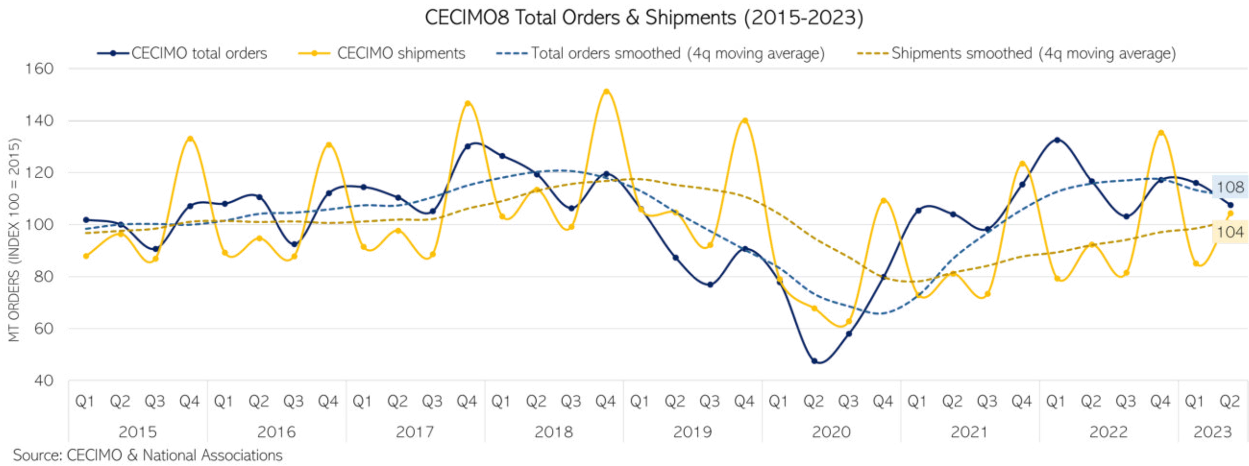
- Compared with the same period of the previous year, the level of foreign orders increased in Spain, the United Kingdom and Germany. The largest increase was recorded in Spain (+82 %), while the largest decrease was in Austria (-26%).

- Compared with the previous quarter, quarterly growth was recorded in Spain, the Czech Republic, Switzerland and Germany. The strongest quarterly improvement was recorded in Spain (+102%), while Italy (-29%) recorded the largest decrease on a quarterly basis.

- French non-domestic orders fell by 3% on both a quarterly and annual basis.



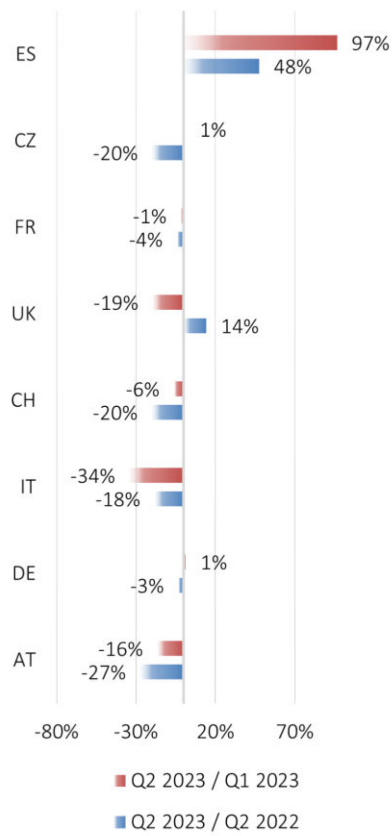
Total Orders



As it can be seen from the graph, new CECIMO8 Total orders deteriorated compared to the previous quarter, falling by 7% compared to the previous quarter (blue line). The negative trend was mainly driven by the deteriorating situation in domestic markets.

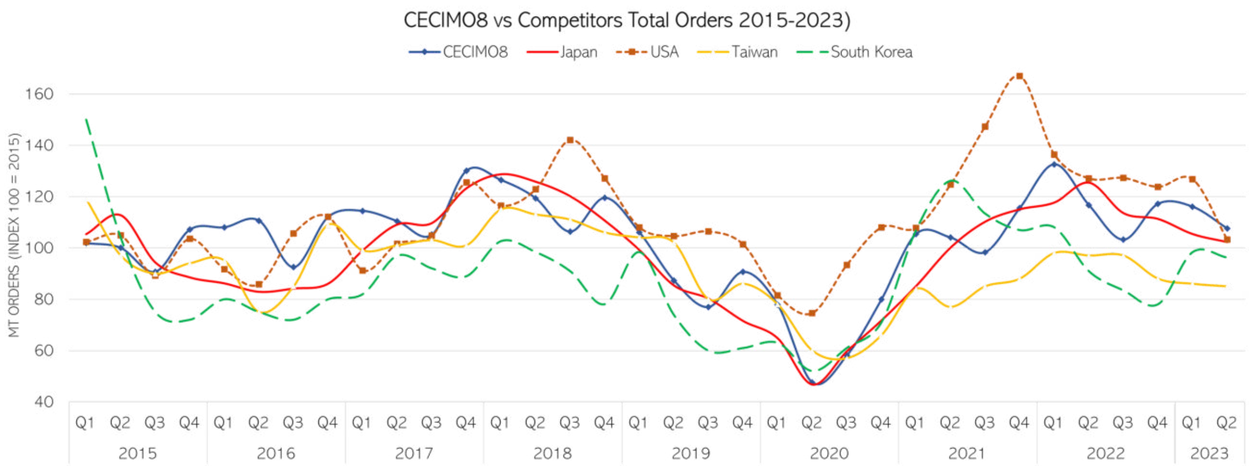
In terms of shipments, after peaking in the last quarter of 2022 and declining in the first quarter of 2023, CECIMO8 shipments increased in the second quarter of 2023 (orange line). This trend is something that is usual for this quarter if we look at the historical data. It is important to note the reduction in the gap between the smoothed curve for shipments and the smoothed curve for total new orders. This indicates a reduction in the backlog of orders in 2023, compared to the opposite situation we had at the end of 2021 and in 2022.

- The level of CECIMO8 total orders in the second quarter of 2023 was 7% down on the previous quarter and 8% down on the same period a year earlier.
- Germany (+1%), Spain (+97%) and the Czech Republic (+1%) recorded positive quarterly growth, while other countries showed negative developments.
- Compared to the same period last year, Austria recorded the largest decrease (-27%), followed by the Czech Republic (-20%), Switzerland (-20%) and Italy (-18%).
- Smaller decreases compared to the same period of the previous year were recorded in France (-4%) and Germany (-3%).
- In the UK, total orders were 19% lower than in the previous quarter, but the level of orders was 14% higher than in the same period last year.
- While the latest business climate indicators do not paint a positive picture on the demand side in the short term, we see a downward trend in new CECIMO8 orders in the second half of 2023, while we expect more stable orders in 2024.



CECIMO Competitors

- Although at a lower level than in the previous quarter, it is noticeable that the total order intake in Europe in the second quarter was a bit higher than the order intake in the rest of the world.
- Looking at total Japanese MT orders, Japanese MT producers recorded a 3% decrease in orders on a quarterly basis and a -18% lower level compared to the same period last year.
- Taiwan's total MT orders fell by 12% compared with the second quarter of 2022 and remained almost at the same level as the previous quarter (Q1 2023).
- Total new orders for South Korean manufacturers rose by around 6% on an annual basis in the second quarter. However, the level of new orders remained 2% lower than in the previous quarter.
- Following the increase in US domestic orders in Q1 2023, the second quarter brings a significant decline, with new orders falling by 19% on both an annual and quarterly basis.

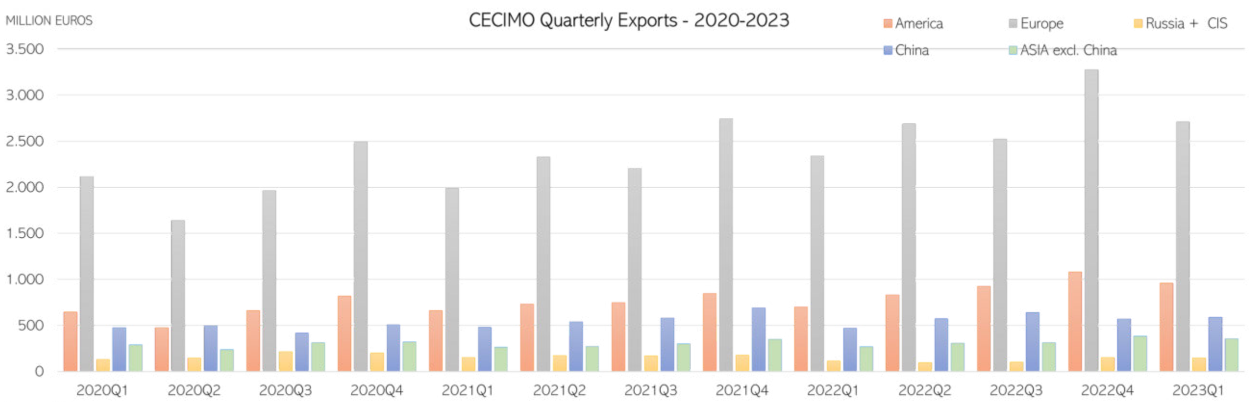


Source: CECIMO & National Associations

1.2 CECIMO TRADE (M)

Note: The following analysis refers to Q1 2023 trade figures. ITC Q2 2023 figures were not available at the time this report was written. The trade balance in the final section refers to the CECIMO total trade figures and the latest estimates for 2023.

Q1 2023 Exports



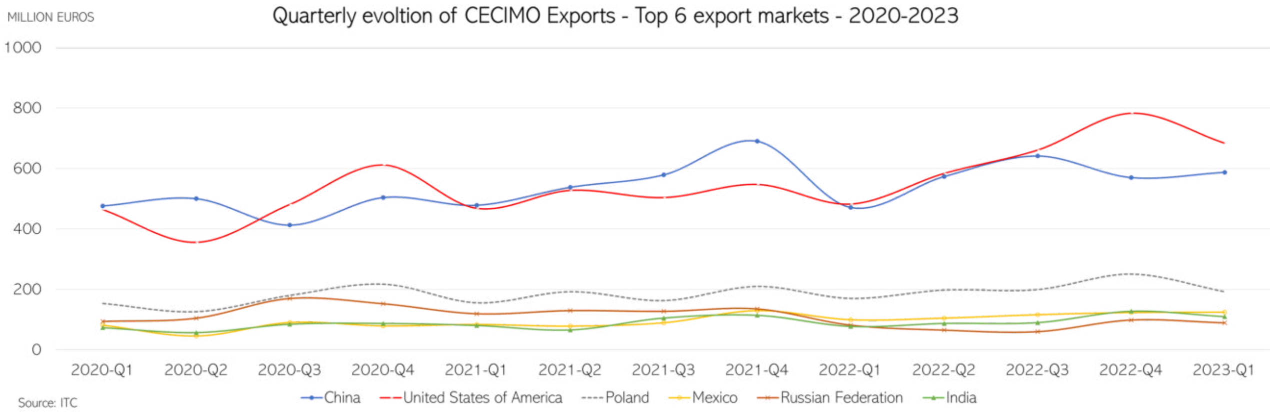
Source: ITC

- Looking at the first quarter of 2023, total CECIMO MT exports fell by 13% on a quarterly basis, but the level of exports remained 23% higher than in the same period of the previous year.

- Looking at exports between CECIMO countries, MT exports fell by 15% in the first quarter of 2023, but also remained significantly higher than in the same period of the previous year (+15%). As can be seen from the graph, exports from the CECIMO countries to all regions fell on a quarterly basis.

- Looking at Asia as a whole, exports were slightly lower than in the previous quarter, but 28% higher than a year earlier. Compared with the previous quarter, exports to China improved by 3%, while exports to the rest of Asia fell by 7%.

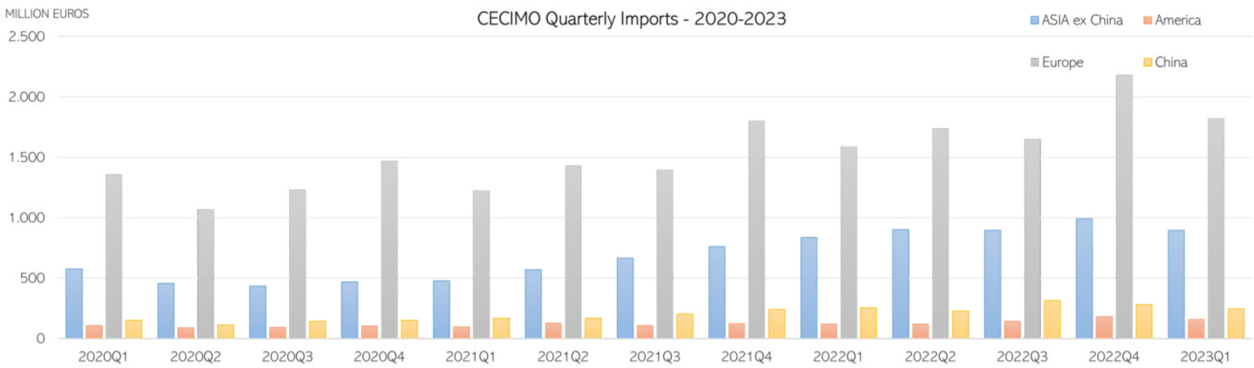
- After reaching a record high in the fourth quarter, exports to the Americas fell by 11% in the first quarter. However, the level of exports was 37% higher than in the same period last year.



Source: ITC

- As the graph above shows, the United States remained the main MT export destination for the CECIMO countries in the first quarter of 2023, closely followed by China in second place.

Q1 2023 Imports



Source: ITC

- After the record quarterly value in the last period of 2022, the first quarter of 2023 brings slightly lower total CECIMO MT imports. Although total MT imports in the CECIMO region fell by 14%, it is important to note that the level was still 12% higher than in the same period of the previous year.

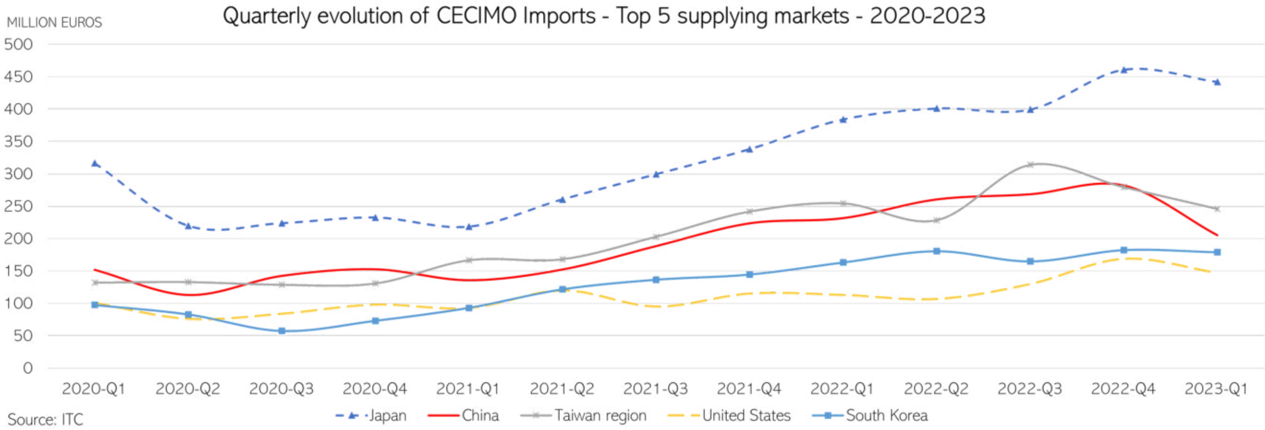
- Imports from the Americas region follow a similar quarterly trend (-12%), but with a significantly higher level of MT imports compared to the same period last year (+34%).

- Looking at Asia, imports from China also fell by 12% and imports from the rest of Asia also fell by around 10%.

- Imports from the CIS region were 70% higher than in the previous quarter, and this improvement mainly reflects an increase in MT imports from Ukraine in Q1 2023.

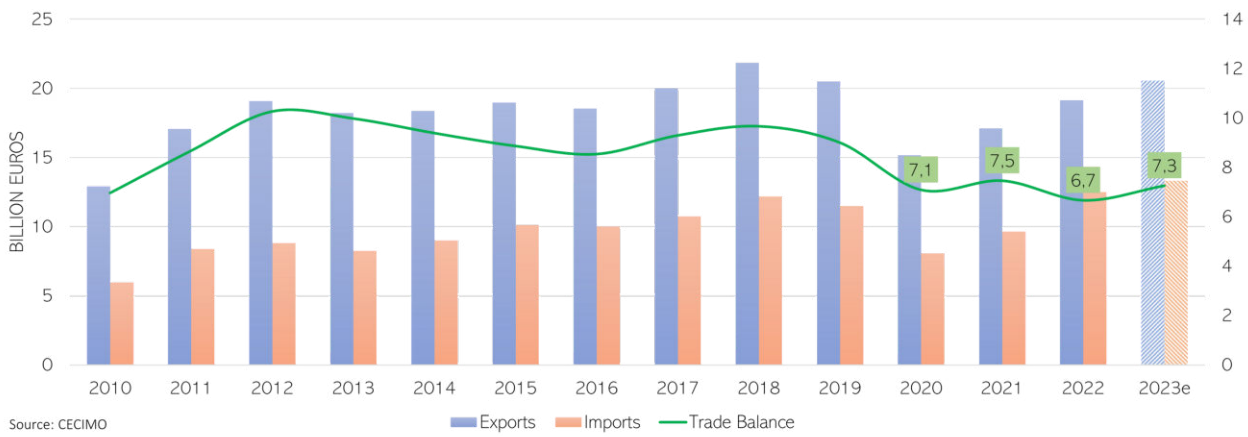
- MT Imports from the Africa region improved significantly, by 75% on a quarterly basis, and the level of imports in the first quarter of 2023 was about 37% higher than in the same period of the previous year.

- MT Imports from 'Other' countries increased significantly on both a quarterly and annual basis, mainly due to increases in imports from Australia, Iraq and Iran.



- As shown in the graph above, Japan remained the main supplying market in the first period of 2023. In addition, Taiwan was the second most important supplier for the CECIMO countries, following the significant decrease in MT imports from China in the last period of 2022 and the first period of 2023.

CECIMO Trade Balance



- The graph above shows CECIMO's latest trade balance estimates for 2023 (last updated in September 2023).

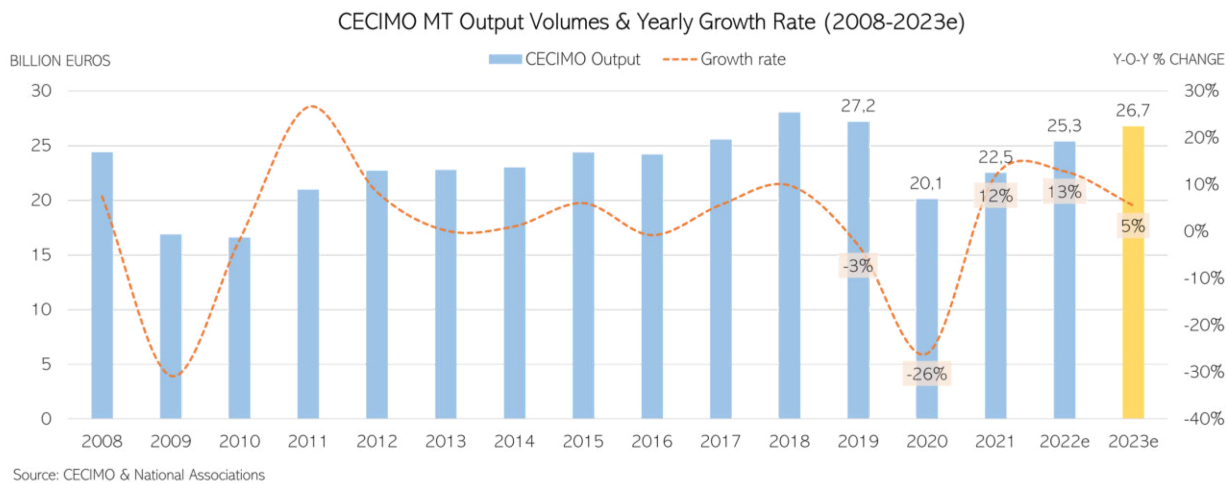
- CECIMO's total exports increased by around 12% in 2022, while imports increased by almost 30% compared to the previous year.

- Our first estimates for 2023 show an increase in total MT exports of around 7.4% and an increase in MT imports of around 6.6%. These developments should lead to a positive trade balance of around 7.25 billion EUR.

1.3 PRODUCTION (M)

According to our latest database update (September 2023), the global MT (machine tools) production reached the level of 79.2 billion EUR in 2022, which reflects an annual increase in production by 11.9%. In the same year, MT production in CECIMO countries recorded an increase in MT production of 12.8%, and with a level of 25.3 billion EUR, CECIMO maintained its share of 32% of global MT production.

Although there is a visible decline in new orders in the first half of 2023 compared to the same period in 2022 in the CECIMO region, the growth momentum in terms of production is expected to continue. Among other factors, a significant backlog of orders, a stable level of new orders and improved supply chains are expected to keep production above the level of the previous year.



During CECIMO's press conference at EMO Hannover in September 2023, the Chairman of the Economic Committee, Mr Marcus Burton, revealed the latest estimates for 2023 for global and European MT production. While he highlighted that MT production in the CECIMO countries is expected to grow by around 5.5% to reach a level of almost 27 billion EUR in 2023, global MT production is expected to remain more stable, slightly below the 2022 level (-2.5%). The decline in global MT production in 2023 is expected mainly due to lower MT production expectations in China, the USA and Japan.

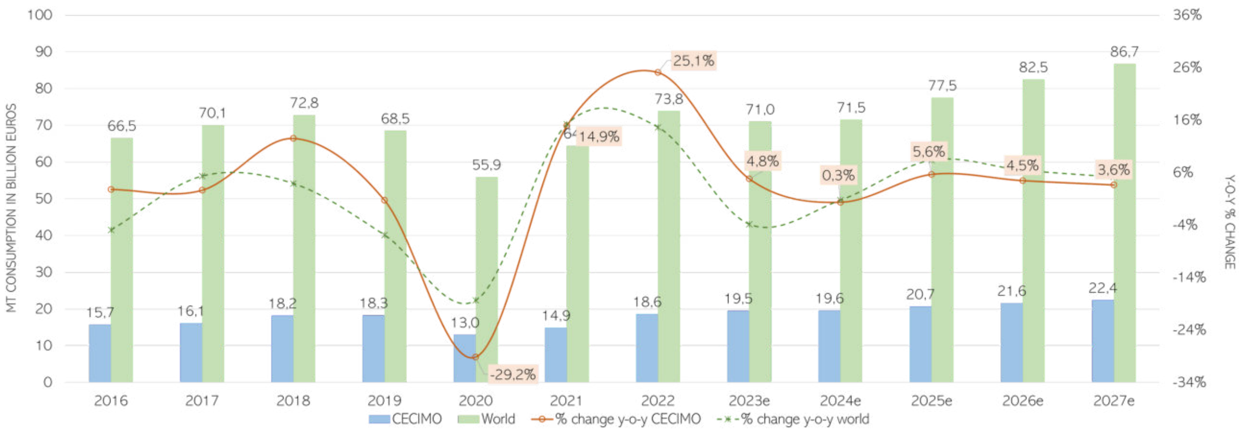
2. DEMAND

2.1 CECIMO CONSUMPTION (M)

Note: Consumption = Production + Imports - Exports

The latest Oxford Economics Global MT Outlook of October 2023 shows a less optimistic situation in terms of MT consumption, with global MT consumption expected to decline by 3.9% in 2023 before remaining stable in 2024 (EUR values). In recent quarters, domestic orders have experienced a decline in several crucial MT-producing countries. Simultaneously, reduced order backlogs and increased destocking have reduced the level of support for MT-weighted output and investment growth. Despite a lower level of inflation, the combination of tight monetary policies and sluggish global trade has placed downward pressure on the demand for MT products.

Machine Tool Consumption Forecast 2016-2027e



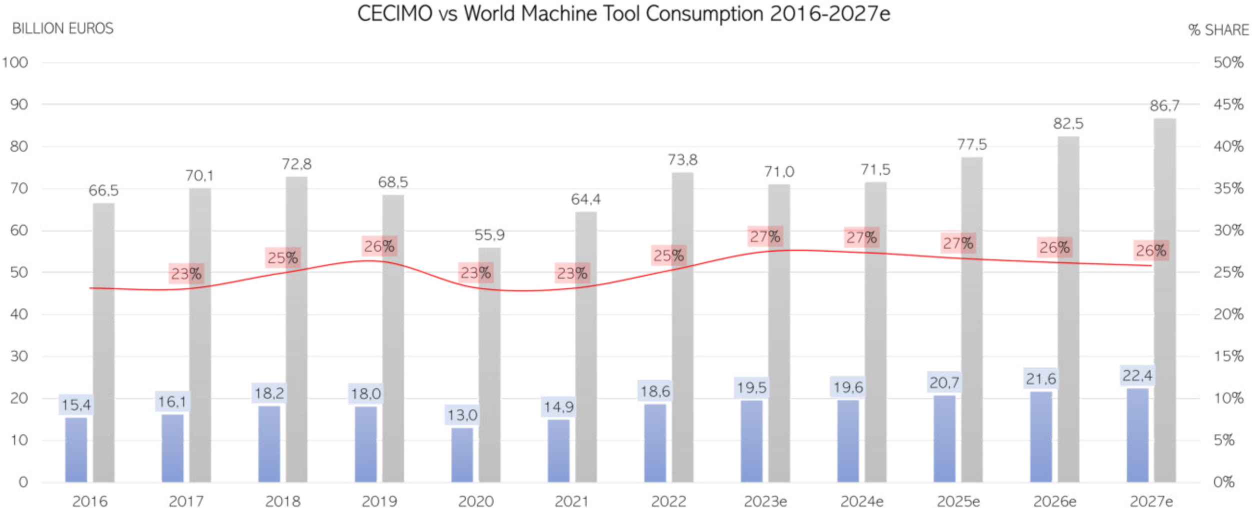
Source: CECIMO & Oxford Economics
2023-2027 estimates are based on OE consumption estimates for Germany, Italy, Switzerland, Austria, Spain, Czech Republic, France, UK and Turkey (October 2023)

As shown in the graph above, following the revision of the 2022 data and strong growth of around 25%, the forecast for the following years has been revised downwards compared to the previous update. The new data show that CECIMO machine tool consumption is expected to grow by around 4.8% in 2023, remain stable in 2024, before stronger growth of 5.6% in 2025. Thanks to the stronger growth of CECIMO consumption compared to the other regions, the share of CECIMO countries in total MT consumption is expected to increase from 25% in 2022 to 27% in 2023.

Among the major purchasing sectors, aerospace is expected to see the strongest investment growth in 2024, followed by electrical and special purpose machinery.

For more details on the GMT Outlook Report (October 2023), please visit the CECIMO extranet or contact your national association.

CECIMO vs World Machine Tool Consumption 2016-2027e

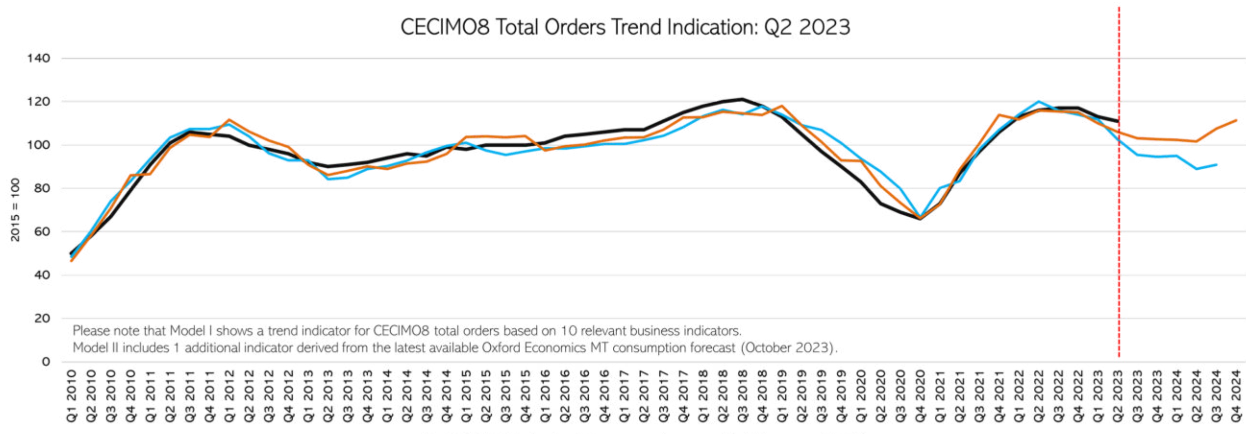


Source: CECIMO, Oxford Economics

2.2. CECIMO8 TOTAL ORDERS TREND INDICATION (TESTING PHASE)

This chapter introduces a new CECIMO project focused on providing trend expectations for CECIMO8 total MT orders. Although the models presented below are still in the testing phase, they have been evaluated several times in the past and we believe they can be used as indicators of future trends in MT orders. To develop the model, CECIMO's Economics Department carried out a thorough analysis of various indicators and selected those with the strongest correlation to CECIMO8 total orders. Particular attention was paid to indicators that correlate with new orders with a lag of two, three or four quarters, which are then used as predictors in the models.

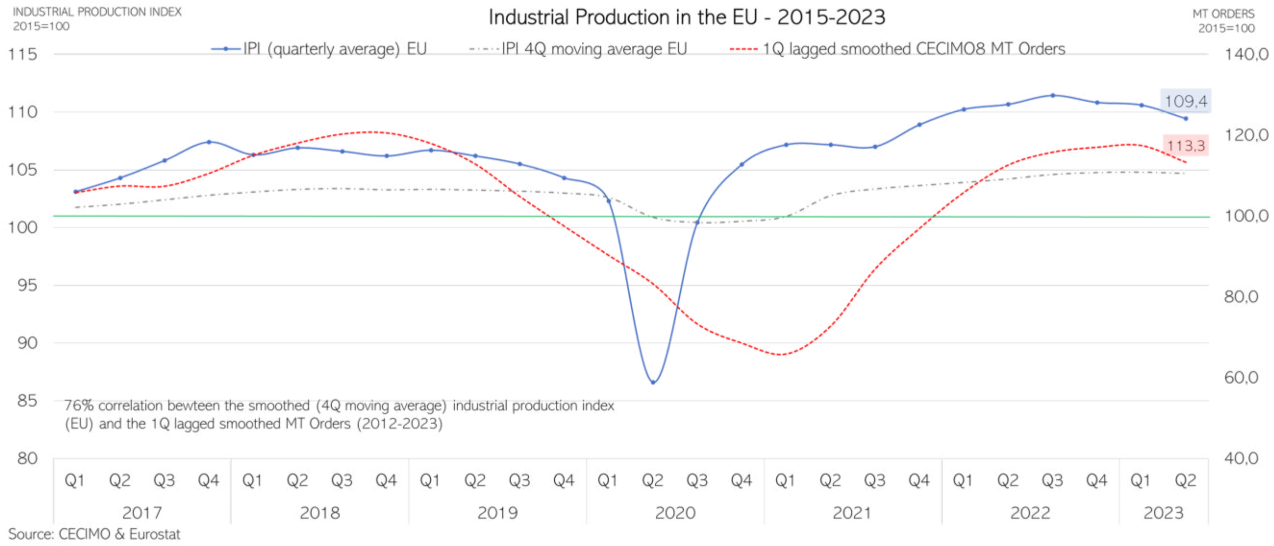
Please note that the following graph show two slightly different models: the first model is primarily based on specific business indicators and has a horizon of the next 15 months, while the second model includes the Oxford Economics MT long-term consumption forecast as an additional variable alongside the indicators and has a horizon of the next 18 months.



Source: CECIMO

With most of the business indicators closely related to our industry still showing negative trends, both models suggest a further decline in total new orders in the coming quarters, followed by a stabilisation of new orders in the second half/end of 2024.

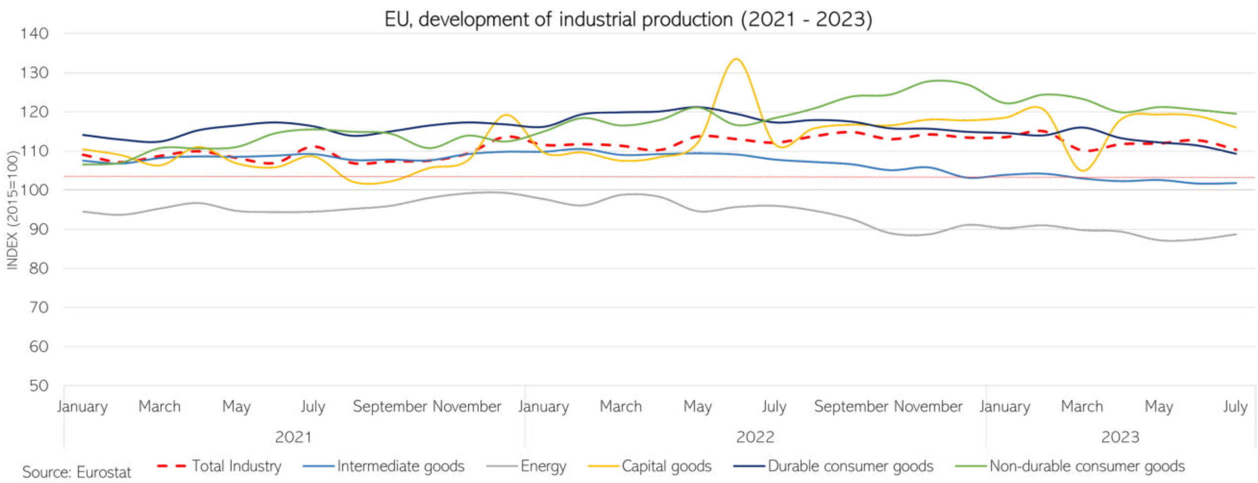
2.3 INDUSTRIAL PRODUCTION INDEX (M)



The EU Industrial Production Index (IPI) recorded a new quarterly decline in the second quarter of 2023. While the level of the index is still above its historical average, the latest data for August 2023 shows further deterioration, which brings some uncertainty for the coming period.

It is important to analyze this indicator because of its significant correlation of 76% with the level of CECIMO8 MT orders (4-quarter moving average), as shown in the chart above. Positive developments in the index lead to positive expectations for CECIMO8 new orders, while negative developments tend to have the opposite effect.

Looking at the changes compared with the same period of the previous year, it can be seen that the level of the index for both the EU and the euro area was lower by about 1%.

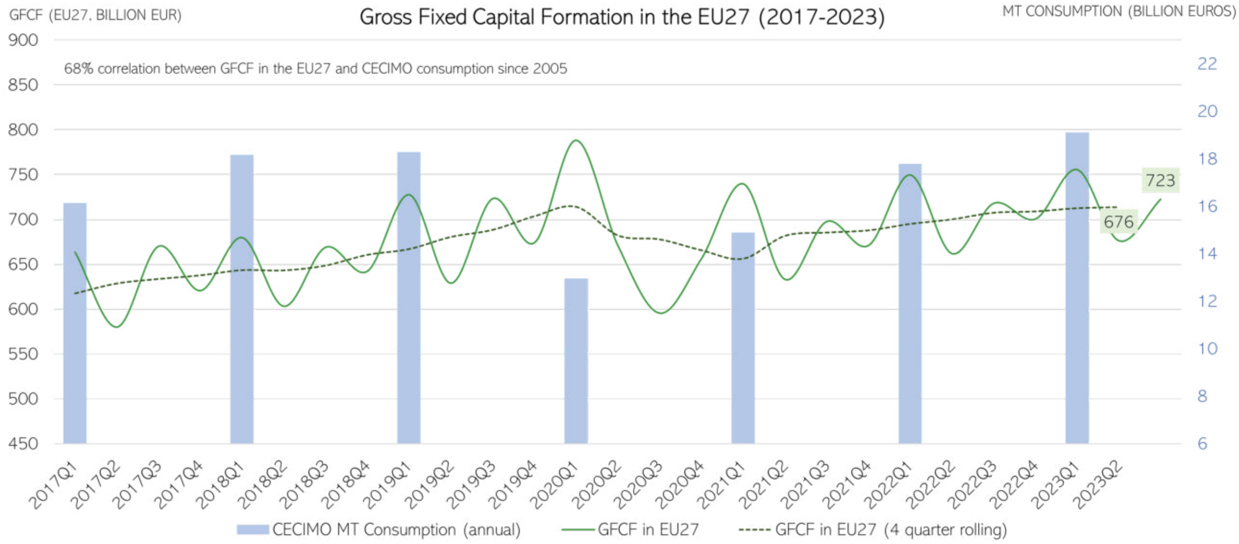


From a sectoral point of view, as in the previous quarter, the strongest quarterly decline was recorded in the energy sector (-2.6%). A similar trend can be observed in the durable consumer goods and non-durable consumer goods sectors. After a decline in the previous quarter, the capital goods sector recorded a significant improvement on a quarterly basis (+3.6%).

3. INVESTMENT

3.1 GROSS FIXED CAPITAL FORMATION (M)

Gross fixed capital formation (GFCF), also called "investment", is defined as the acquisition of produced assets, including the production of such assets by producers for their own use, minus disposals. The relevant assets relate to assets that are intended for use in the production of other goods and services for a period of more than a year (OECD).



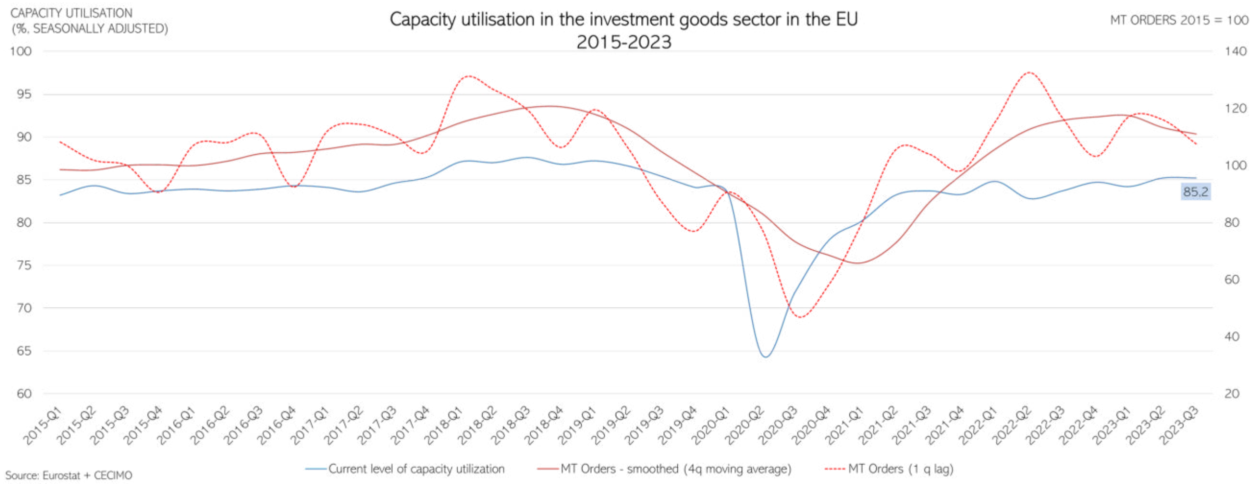
After a significant decline in the first quarter, gross fixed capital formation in the EU27 recovered with a robust increase of 6.8% in the second quarter of 2023. In absolute terms, investments amounted to 722.5 billion euro in the second quarter of 2023, a slight increase of 0.6% compared with the 718 billion euro recorded in the same period of the previous year.

Within gross fixed capital formation, business investment is of particular concern. The European Central Bank notes that weak domestic and global economic activity, coupled with elevated interest rates and credit constraints, are expected to put significant pressure on business investment in the coming quarters. However, improving domestic and global demand, as well as the ongoing green and digital transition, are expected to be the main drivers of the gradual recovery thereafter.

3.2 CAPACITY UTILISATION AND PRODUCTION CAPACITY (M)

Methodological note: The dates in this section refers to when the results were published; so, the Q3-2023 figures were published in Q3-2023 but reflect the position at the end of the previous quarter when the data collection took place (Q2 2023).

The latest data for capacity utilisation in the EU's capital goods sector show a slight deterioration in the third quarter of 2023, with a decrease of 0.5% on a quarterly basis. As a result, the indicator now stands at 84.7 points, some 2% lower than in the same period last year.



Source: Eurostat + CECIMO

At the national level, the Czech Republic recorded the highest capacity utilization rate, with a slight increase from 90% to 91%. Apart from the Czech Republic, France, Italy, and Spain also observed higher capacity utilization rates compared to the previous quarter. Austria, Germany, and the UK experienced lower levels and a decline on a quarterly basis.

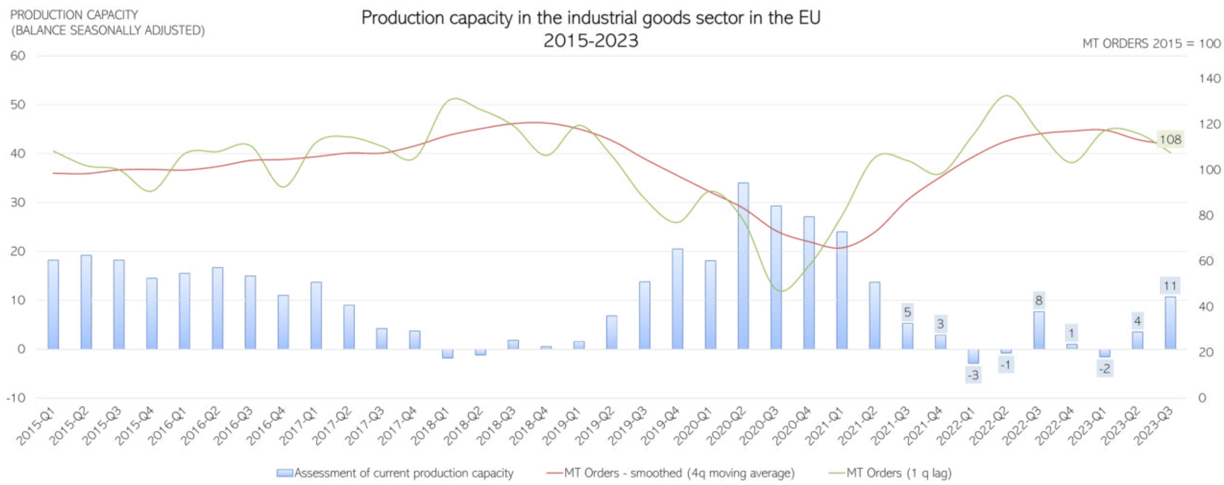
Capacity Utilisation (% of total capacity)

	Q3 2021	Q4 2021	Q1 2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023	Q3 2023
Austria	90,7	87,7	87,3	87,3	88,3	86,3	88,9	89,3	88,7
Czech Republic	92	63,2	81,1	78,3	81,0	75,4	80,6	90,0	91,0
France	80,7	80,3	81,7	80,4	80,0	80,9	82,0	84,9	86,5
Germany	85,2	85,3	89,6	83,7	86,0	87,9	87,4	88,3	87,1
Italy	81,1	79,9	80,3	81,3	80,1	79,7	79,4	78,9	79,3
Spain	82,6	82,0	80,7	85,6	85,3	86,1	84,3	81,3	83,4
Switzerland	85,6	87,2	89,8	91,9	90,3	89,5	89,6	89,5	88,2
United Kingdom	82,0	81,0	83,0	82,0	83,0	80,0	80,0	80,0	78,0

Source: Eurostat, MTA, SWISSMEM

Methodological note: 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.

Following an increase to 4% in the previous quarter, in the third quarter, spare capacity in the EU's industrial goods sector increased further, reaching 11%, the highest level since Q2 2021. The low level of spare production in the previous three quarters was, of course, a positive indicator of production growth. However, in line with lower orders in the last two quarters and a reduced backlog of orders, it is expected that spare production capacity will increase until there is a more significant recovery in domestic and foreign demand.



When analysing the selected CECIMO countries, a decrease in spare production capacity was observed in the Czech Republic and Spain. While the level of spare capacity remained negative in France and Spain, in other countries the level of spare capacity increased, particularly in Germany, where the level of spare capacity was 20% in the third quarter of 2023, the highest level since the first quarter of 2021.

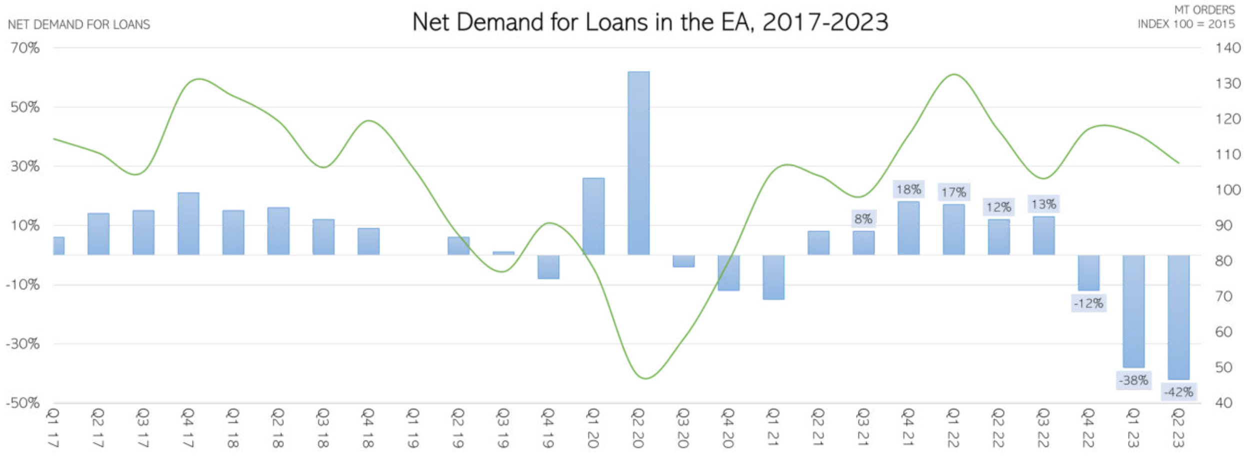
Production Capacity (balance in %)

	Q3 2021	Q4 2021	Q1 2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023	Q3 2023
Austria	-3,6	-3,3	-5,6	-2,2	-8,5	6,3	9,4	-4,2	9,1
Czech Republic	9,3	12	9,1	49,2	9,1	10,3	44,1	11,3	4,5
France	22,2	17,5	-4,1	-0,7	9,5	-14,9	-23,3	-8,2	-3,7
Germany	3,1	-8	-6,5	-5,3	14,3	4,6	-5,0	6,1	20,7
Italy	20,5	15,9	16,4	14,2	12,8	12,9	16,1	11,2	15,9
Spain	-14,3	16,8	-19,1	-6,6	2,2	-10,2	-13,2	-4,5	-5,9

Source: Eurostat

3.3 BANK LENDING SURVEY (M)

The results reported in the July 2023 bank lending survey (BLS) relate to changes observed during the second quarter of 2023 and expectations for the third quarter of 2023.



Source: European Central Bank

- **Credit standards –** In the second quarter of 2023, euro area banks tightened their credit standards for loans to enterprises, with a net share of 14% reporting a tightening, although this was less severe than in the previous quarter. Credit standards tightened more for loans to SMEs (17%) than for loans to large enterprises (13%), and for long-term loans (15%) than for short-term loans (10%). The main drivers of credit tightening were banks' risk perceptions, lower risk appetite, concerns about the economic outlook, their cost of funds and their balance sheet situation.

- **Banks' overall terms and conditions** for new loans to enterprises tightened further in the second quarter of 2023, at a similar pace as in the previous quarter (net percentage of 23%, after 24% in the previous quarter). In all four largest euro area countries, overall terms and conditions tightened on loans or credit lines to enterprises.

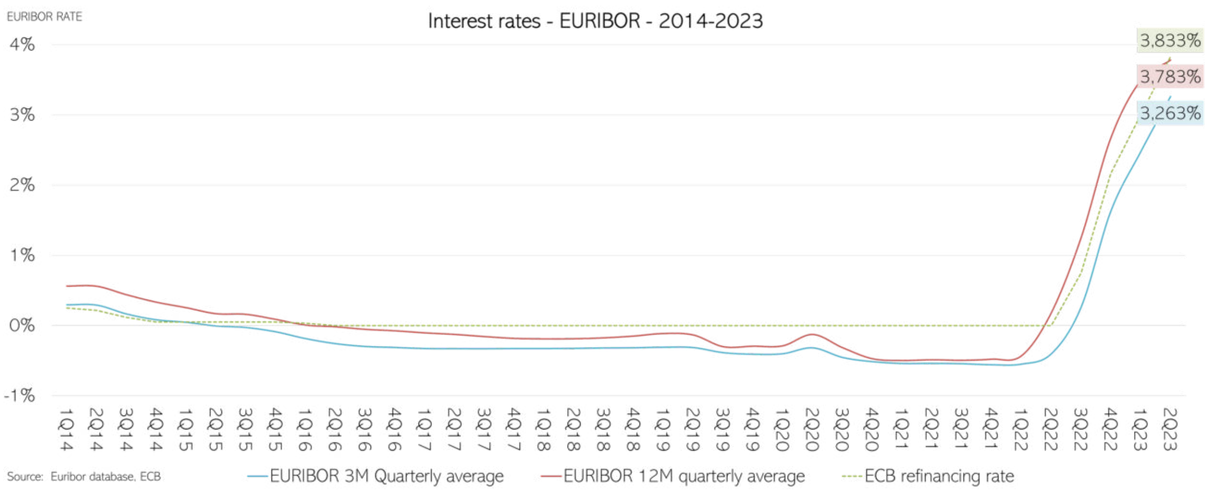
- **Rejected loan applications:** In line with the tightening of credit standards and overall terms and conditions, banks also reported a further increase in the share of rejected applications for loans to firms (net percentage of 16%, after 15% in the previous quarter).

- **Net demand for loans** decreased strongly in the second quarter of 2023 (net percentage of -42%, after -38% in the previous quarter), dropping to an all-time low since the start of the survey in 2003. Rising interest rates and falling fixed investment remained the main drivers of the net decline in loan demand, and this trend was observed in all four of the largest euro area countries.

- Looking ahead to the **next quarter**: In the third quarter of 2023, banks anticipate a continued decrease in demand for loans to firms, but the decline is expected to be less pronounced than in the previous quarter, with a net percentage of -6%.

3.4 EURIBOR (M)

Following the European Central Bank’s (ECB) efforts to combat inflation, the ECB's refinancing rate rose steadily from 3.50% in March to 4.25% in July. Throughout the second quarter, the average refinancing rate was around 3.833%. At the same time, the 3-month EURIBOR average rose to 3.263% and the 12-month average reached 3.783%.



According to the latest ECB Economic Bulletin, in September 2023, the ECB raised its key interest rates by 25 basis points in an effort to combat the persistently high level of inflation. The decision was based on the ECB's assessment of the inflation outlook, economic data, underlying inflation trends and the strength of monetary policy transmission. Despite the rate hikes, inflation remained a concern, with average inflation rates projected at 5.6% in 2023, 3.2% in 2024 and 2.1% in 2025.

The ECB emphasised its commitment to maintaining restrictive interest rates in support of the inflation target and would continue to monitor economic data and financial dynamics in its future policy decisions, including the management of asset purchase programmes and targeted lending operations.

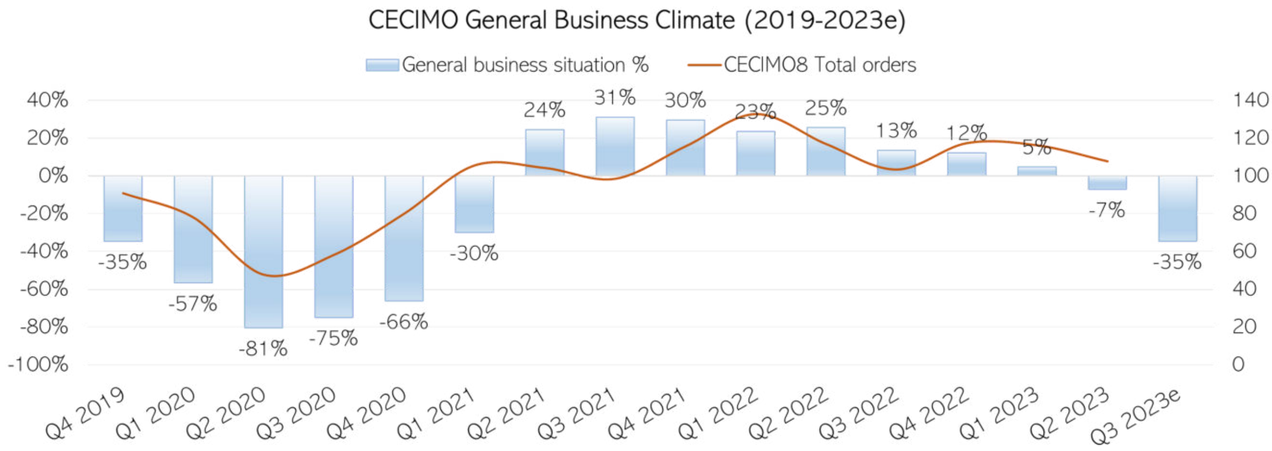
4. BUSINESS CLIMATE

4.1 CECIMO BUSINESS CLIMATE BAROMETER (M)

The Business Climate Barometer (BCB) 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 to demand, domestic production, export sales and employment. The responses of the CECIMO BCB are analysed 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.

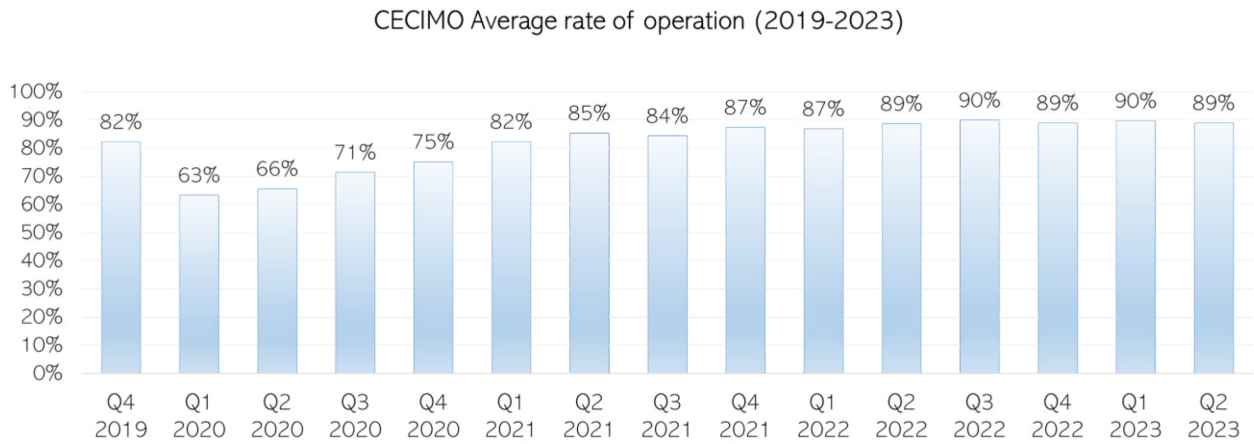
Note: Q2 2023 results are based on the responses of the following CECIMO countries: Austria, Switzerland, Germany, the United Kingdom and Italy.



Source: CECIMO & National associations I e - expectatoins   % = weighted average of the national balances (increase-decrease), in %

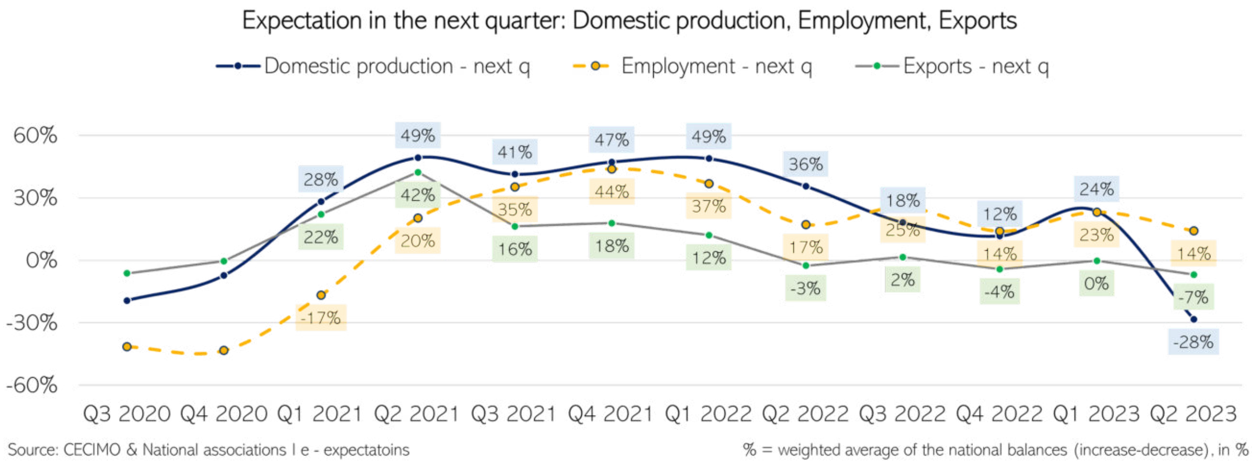
According to the latest results of the CECIMO Business Climate Barometer, for the first time since Q1 2021, our machine tool manufacturers expressed a negative general business climate in Q2 2023, with a net balance of -7%. As shown in the graph above, expectations for the general business climate in Q3 2023 are also clearly negative (-35%).

While the general business climate has deteriorated, it is important to note that the average capacity utilisation rate of CECIMO's MT builders remains at a very high level - 89% in Q2 2023.



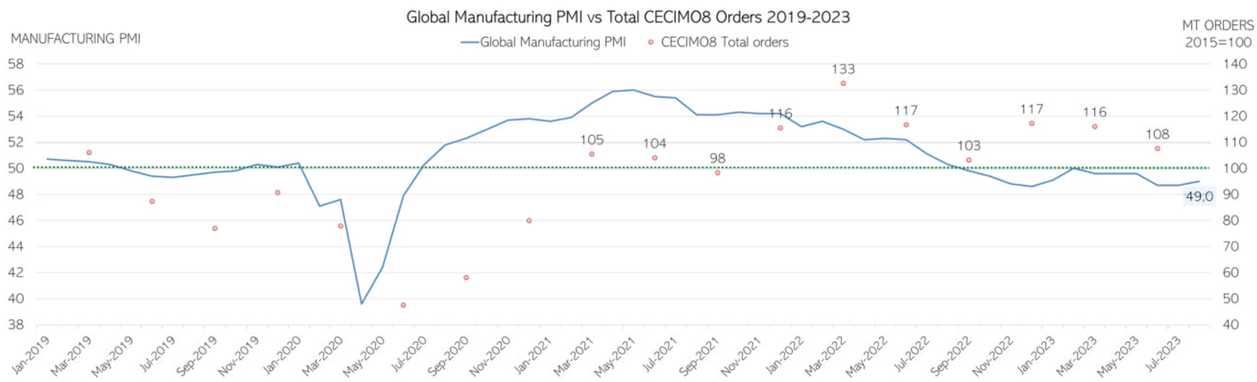
Source: CECIMO & National associations

With the worsening of the general business situation, our managers' expectations for domestic production dropped significantly from a positive balance of 24% in Q1 2023 to -28% in Q2 2023. While the expectations for new employment are still positive, the expectations for exports are now also negative for the next quarter. The main factors limiting their production in this survey round were insufficient or irregular orders, the general economic situation, labour shortages and shortages of materials or raw materials.



4.2 PURCHASING MANAGERS INDEX (M)

The IHS Markit PMI® is compiled by IHS Markit from responses to questionnaires sent to purchasing managers in a panel of around 300 manufacturers Global Manufacturing PMI. The most recent data (August) were collected in mid-August 2023.

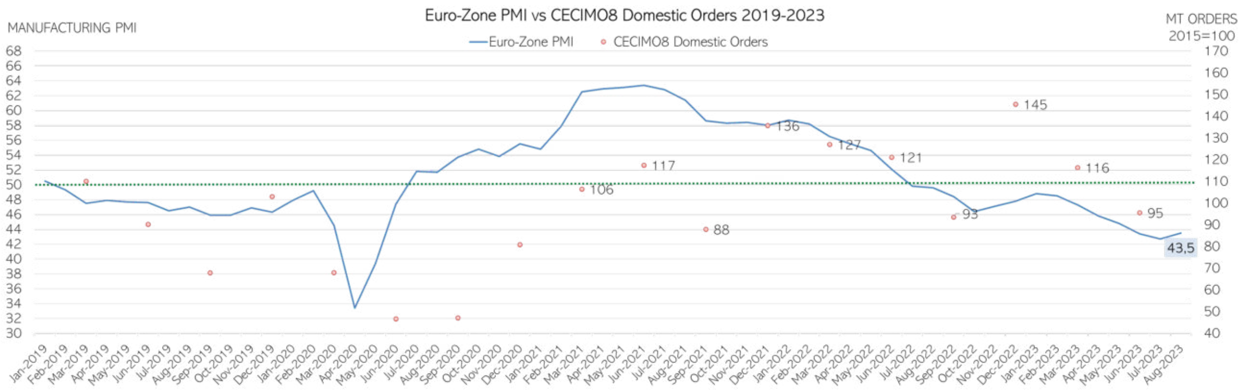


As shown on the chart above, the Global PMI reached a three-month high of 49.0, but remained below the neutral 50.0 level, indicating continued deterioration for the twelfth consecutive month. Production, total new orders and new export business all showed slower rates of decline in August, while employment improved slightly.

The decline in manufacturing output was driven by contractions in the intermediate and capital goods sub-industries, despite modest growth in consumer goods. New orders continued their decline for the fourteenth straight month, although the pace of decline moderated since May. While new orders decreased in the euro area, the United States, and Japan, mainland China saw a marginal uptick in new orders.

In addition to the decline in new orders, business confidence fell to its lowest level in nine months and the ratio of new orders to stocks of finished goods remained at a level indicating a slight contraction.

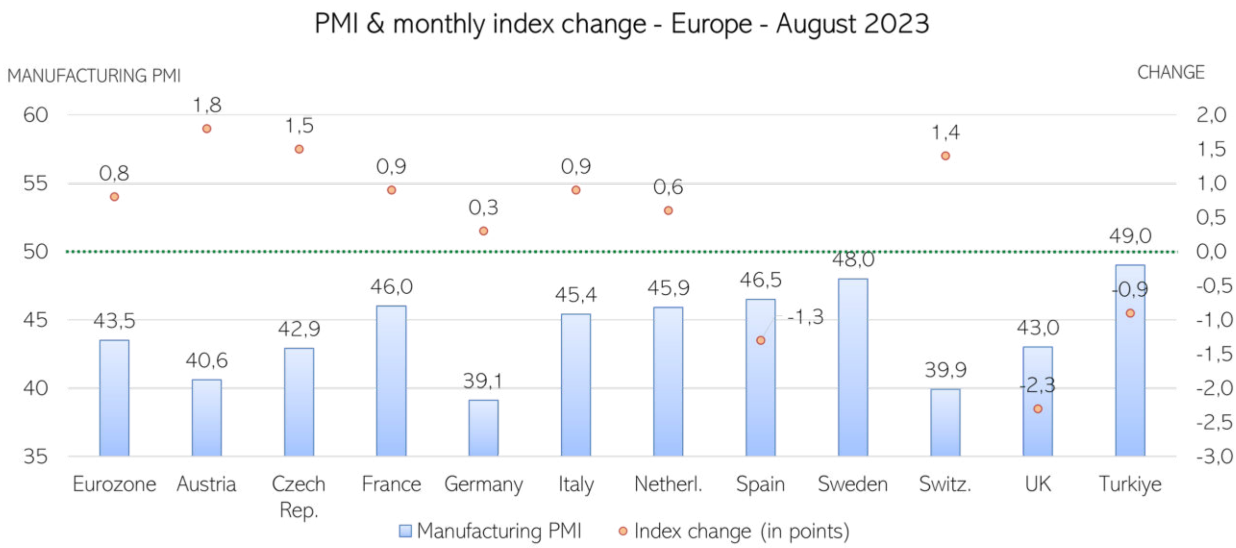
Eurozone Manufacturing PMI



According to IHS Markit, the eurozone manufacturing sector faced significant challenges in August, characterised by a sharp fall in new orders, dwindling backlogs of work and falling employment levels.

The euro area manufacturing PMI remained below the level of 50.0 for the fourteenth consecutive month, indicating a continued deterioration in operating conditions. Although the index improved slightly from July's 38-month low, it still signalled a sharp decline in the health of the eurozone manufacturing economy. August data showed a historic fall in new orders, both at home and in export markets, pointing to severe weakness in demand. Backlogs of work continued to shrink for the 15th consecutive month, leading to a decline in manufacturing output. Although the rate of decline in output was milder than in July, it remained significant, underlining the ongoing challenges facing euro area manufacturers.

Despite the worsening of sector conditions seen in August, optimism improved markedly. In general, growth expectations strengthened and reached a three-month high, although they remained well below their long-term average.



Austria

In August, the Austrian manufacturing PMI rose slightly from 38.8 to 40.6, the first increase in seven months. However, the reading remained well below the critical threshold of 50.0, which indicates a marked deterioration in business conditions in the manufacturing sector. The improvement in the index was mainly due to a slower fall in output in August. New orders continued to fall sharply in August, driven by customer uncertainty, falling stocks and weakness in the construction sector. In addition, export sales fell by the most since October last year. The continued fall in demand has led to a significant reduction in order backlogs and has weighed on manufacturers' expectations for output in the year ahead.

Czech Republic

The Czech manufacturing sector continued to contract markedly in August. Although the contraction was the slowest since April, it was mainly driven by significant declines in production and new orders. The seasonally adjusted Czech Republic Manufacturing PMI rose slightly from 41.4 in July to 42.9 in August, indicating a sharp deterioration in the health of the Czech manufacturing sector. Both domestic and foreign demand for Czech manufacturers remained subdued in August, with total new orders and foreign sales contracting further. As a result, Czech manufacturers reduced their production levels, with output falling for the fifteenth consecutive month.

Germany

The German manufacturing PMI registered 39.1 in August, up only slightly from 38.8 in July. This was the second lowest reading since May 2020, indicating continued contraction in the sector. Manufacturers reduced production for the fourth consecutive month, with the rate of contraction reaching levels not seen since the initial COVID-19 shutdowns in spring 2020. This fall in production affected all the main industrial groupings. New orders continued to fall sharply, reflecting factors such as customer uncertainty, destocking, weakness in construction and limited investment. Export orders also fell sharply, particularly for sales to China and Europe, although the rate of decline slowed compared with the previous month. In August, manufacturers were actively reducing their backlogs of work and remained pessimistic about the production outlook for the year ahead.

Spain

The Spanish manufacturing PMI stood at 46.5 in August, indicating a fifth consecutive month of contraction in the sector, down from 47.8 in July. The decline in the headline PMI was largely driven by a rapid contraction in order books, with total new orders falling for five consecutive months, one of the sharpest declines since the start of the COVID-19 pandemic. This weakness in demand also led to a decline in prices, with both input and output costs falling. However, business sentiment improved to a six-month high on hopes of future demand growth, leading to a slight increase in staff numbers for the first time in three months.

France

In August, the French manufacturing sector continued to face challenges, with an accelerated decline in new orders putting pressure on output and employment. Firms became even more pessimistic about the 12-month outlook, resulting in increased discounting in order to remain competitive. As a result, the seasonally adjusted HCOB France Manufacturing Purchasing Managers' Index (PMI) rose slightly to 46.0 from 45.1 in July. However, it still indicated a significant deterioration in the health of the sector and remained well below the index's long-term average.

Italy

The Italian manufacturing sector remained in recession in August, with output and new orders both falling sharply, reflecting subdued market demand. The Italian manufacturing PMI rose slightly to 45.4 from 44.5 in July, a three-month high. However, it remained below the critical 50.0 level, indicating a marked deterioration in the manufacturing sector for the fifth consecutive month. The decline in the PMI was influenced by simultaneous falls in output and new orders, albeit at slower but still historically significant rates. Factors such as adverse weather conditions, lower confidence, recessionary fears and customer destocking weighed on order books and output. Foreign sales were particularly weak, with new export orders falling for the fifth consecutive month. Job losses were reported for the first time in three years, although confidence about the future rose to a four-month high.

Netherlands

The Dutch manufacturing sector continued to struggle with weak demand in August, with output and new orders continuing to fall. The Netherlands Manufacturing PMI, an indicator of the performance of the manufacturing sector, registered 45.9, indicating a year of decline in the sector. Although this figure was an improvement on July's 45.3, it marked the slowest pace of contraction since March. Production continued to come under pressure, as companies cut back on manufacturing output in response to falling new orders. However, the rate of decline slowed for the third month in a row, indicating a modest improvement.

Sweden

Sweden's manufacturing PMI fell to 45.8 in August 20/23 from an upwardly revised 48 in the previous month. This was the thirteenth consecutive month of contraction, amid a deteriorating global economy and declining foreign trade. New orders fell to their lowest level since May, while output also declined. While production plans for the next six months fell, employment returned to growth.

Switzerland

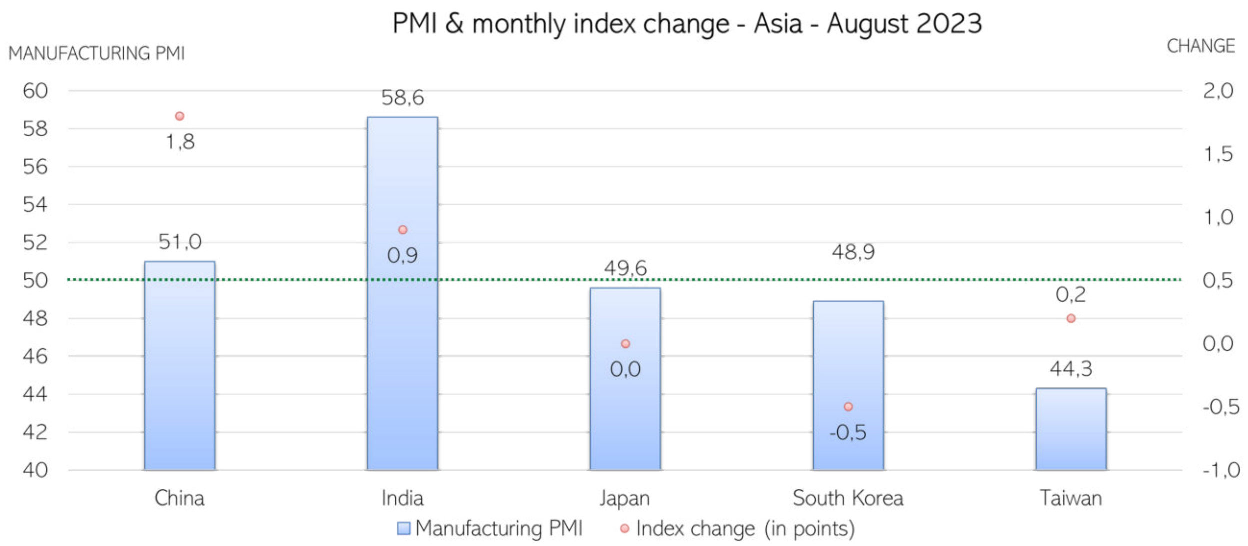
The Swiss manufacturing PMI showed a slight improvement in August, rising to 39.9 from the previous month's 14-year high of 38.5. Slower falls in output and new orders drove the slight upturn, although companies reducing their inventories weighed on the PMI reading in August. However, it's important to note that the index still points to a significant contraction in the manufacturing sector. On the price front, inflationary pressures eased markedly, while both purchase volumes and delivery times declined at a slower pace.

Türkiye

In August, the overall health of the Turkish manufacturing sector slowed down, mainly due to a lack of new orders. Inflationary pressures remained high, easing only slightly from the recent peaks recorded in July. The Turkish manufacturing PMI registered 49.0 in August, down from 49.9 in July. This was the second consecutive month below the 50.0 mark for no change, indicating a further, albeit modest, slowdown in Türkiye's manufacturing sector. Input costs rose sharply, reflecting the weakness of the Turkish lira against the US dollar and rising wages. In response to the slowdown in new orders, manufacturers cut production for the second month in a row. On a more positive note, employment increased for the fourth consecutive month, as some firms reported a need for additional workers.

United Kingdom

In line with other European countries, the UK manufacturing sector experienced a deeper downturn in August, with both output and new orders falling sharply. Manufacturing output fell for the sixth consecutive month in August, with the rate of contraction accelerating to the fastest in a year. As result, the UK Manufacturing Purchasing Managers' Index (PMI) fell to 43.0, its lowest level since May 2020, indicating a sharp deterioration in operating conditions. Factors behind the contraction included weaker market conditions, a fall in new orders and efforts to reduce stocks of finished goods. Despite the economic challenges, manufacturers remained positive about the year ahead, with optimism reaching a four-month high.



China

China's manufacturing sector saw its operating conditions strengthen at the fastest pace in six months in August, with output and total new work rising on the back of stronger market demand. The Purchasing Managers' Index (PMI) rose from 49.2 in July to 51.0 in August, signalling an improvement in the health of the sector for the third time in the past four months. The pick-up in new work was driven by stronger domestic demand, although new export orders fell slightly compared with July. Output increased modestly and employment rose at the fastest pace since March 2010, supported by planned business expansions. Despite positive expectations for the 12-month outlook, overall sentiment fell to an 11-month low.

India

India's manufacturing sector showed robust improvement in August, with new orders and output rising at the fastest pace in almost three years. As a result, the India Manufacturing Purchasing Managers' Index (PMI) rose from 57.7 in July to 58.6 in August, indicating the second best improvement in the health of the sector in almost three years. Strong demand was a key driver of this robust performance, leading to the fastest increase in new orders since January 2021. International sales also played an important role, with new export orders rising for the seventeenth consecutive month and reaching their highest level since November 2022. Indian manufacturers secured new work from clients in several countries, including Bangladesh, China, Malaysia, Singapore, Taiwan and the USA. Although historically high, the overall level of fell to a three-month low due to inflationary concerns.

Japan

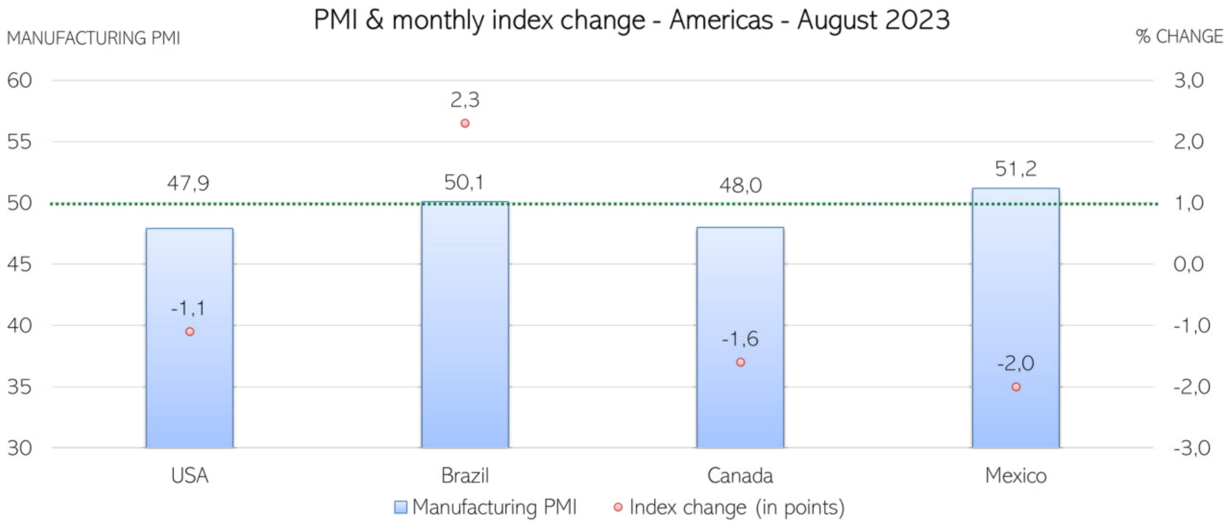
The Purchasing Managers' Index (PMI) for the Japanese manufacturing sector remained unchanged at 49.6 in August, indicating a third successive deterioration in the health of the sector, albeit only a marginal one. While new orders continued to decline, the rate of contraction was marginal, with weak customer confidence and subdued economic conditions weighing on new orders. Despite these challenges, production levels at Japanese manufacturers declined at a moderate pace, unchanged from July. Inflationary pressures remained historically high, with average cost burdens rising at a faster pace, driven by high raw material and labour costs and exchange rate weakness. The year-ahead production outlook remained positive in August.

South Korea

The South Korea Manufacturing PMI remained below the no-change mark of 50.0, indicating a further deterioration in overall business conditions for the 14th consecutive month. The headline figure eased to 48.9 from 49.4 in July, signalling a modest rate of decline that was weaker than the average for the current series. The deterioration was mainly associated with declines in output, new orders, exports and purchasing activity compared with July. Some positive signs were reported, as employment remained stable and the 12-month outlook for output was the most optimistic since mid-2022.

Taiwan

Taiwan's manufacturing PMI improved slightly from July but remained at a low of 44.3 in August, signalling a continued sharp decline in the health of the sector. While the slight improvement in the PMI reading was due to a slightly less severe contraction in output in August, it still remained below 50. A sharp fall in total new orders led to an equally sharp fall in output, driven by reduced demand from both domestic and overseas customers. The continued decline in production was driven by a further fall in total new business, the steepest since January, with weaker demand recorded in both domestic and export markets. In addition, Taiwanese manufacturers' assessment of the 12-month production outlook remained pessimistic in August.



United States

The US Manufacturing PMI, a composite indicator of manufacturing activity, fell to 47.9 in August from 49.0 in July, indicating a sharper deterioration in operating conditions for US goods producers. Business conditions for US manufacturers deteriorated further, with a sharper fall in new orders leading to a further contraction in production. The deterioration in business conditions was mainly due to a further fall in new orders, reflecting the weakening economy and customers' reluctance to place new orders. Expectations for future output in 2023 were also at their weakest, leading to the slowest increase in employment in the sector since January.

Canada

The Canadian Manufacturing Purchasing Managers' Index remained below the critical 50.0 mark for the fourth consecutive month in August. It fell to 48.0, its lowest level since June 2020, indicating a modest deterioration in operating conditions. August's subdued performance was characterised by similarly large falls in output and new work, with the fall in output the steepest this year and new orders the sharpest since March. The weakness in sales was mainly concentrated in the domestic market, as new export orders rose modestly for the second month in a row. Confidence in the outlook for the next 12 months remained positive.

Mexico

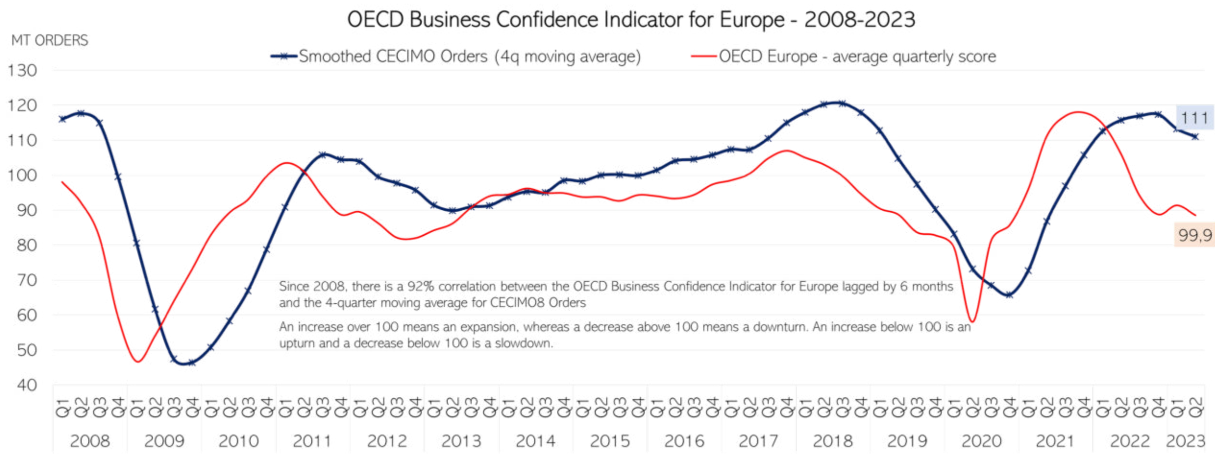
The August PMI data for Mexico showed mixed trends in the manufacturing sector. Total new orders and exports expanded at a softer pace, while production growth was halted due to slower sales and sufficient stock levels. As a result, the Global Mexico Manufacturing PMI registered 51.2 in August, the seventh consecutive month in expansion territory, but indicating only a slight improvement in the health of the sector. The reading above 50.0 was mainly due to a sustained increase in new orders to manufacturers. While new export orders rose for the second month running in August, the rate of growth slowed from July's 53-month high.

Brazil

Brazil's manufacturing sector showed tentative signs of recovery in August. New orders rose marginally for the first time in almost a year, leading to higher production volumes. Business sentiment improved, leading to an increase in hiring, while purchasing levels remained stable. The PMI reached 50.1, up from 47.8 in July and above the neutral level of 50.0 for the first time in ten months, indicating stable operating conditions in the sector. Signs of increased demand and production requirements also led to an increase in employment for the first time in ten months.

4.3 OECD BUSINESS CLIMATE INDICATOR (M)

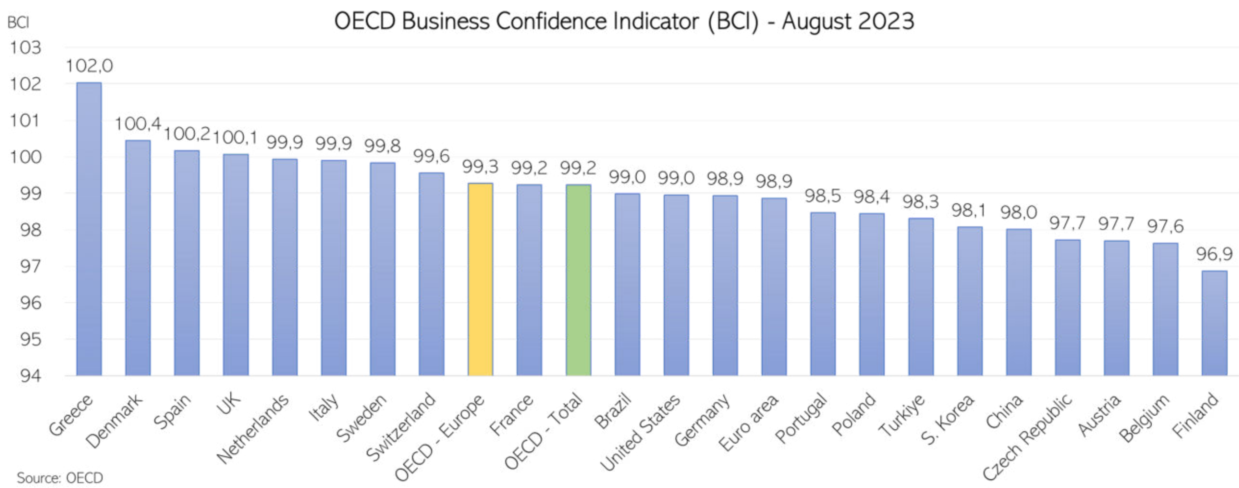
The Business Confidence Indicator (BCI) can be used to monitor output growth and predict turning points for economic activity. Numbers above 100 suggest an increased confidence in near future business performance, and numbers below 100 indicate pessimism towards future performance.



Following a slight improvement in Q1 2023, the European BCI showed a deterioration in Q2 2023, falling just below the no-change mark, indicating negative business confidence among European manufacturers.

The European BCI decreased from 100.1 in Q1 2023 to 99.9 points during the second quarter, with the business confidence indicator for the euro area (consisting of 19 countries) following a similar trend. The most recent data for July and August indicate a further deterioration in the index, with the European BCI dropping to 99.3 in August, and the eurozone BCI recording an even lower level of 98.9 points. It is worth noting that there is a significant correlation between the European BCI and CECIMO8 Total orders, with changes in orders typically becoming visible a few quarters later - As indicated earlier in the report, this trend in the BCI index leads to the conclusion of a negative trend in new orders in the second half of 2023.

Regarding the OECD Total BCI, it remained below the 100 no-change point, reaching 99.5 points in the second quarter of 2023. The latest data for August 2023 (please note that the previous graph refers to quarterly averages) show a further deterioration in the index, with the OECD total aggregate reaching 99.2 points.



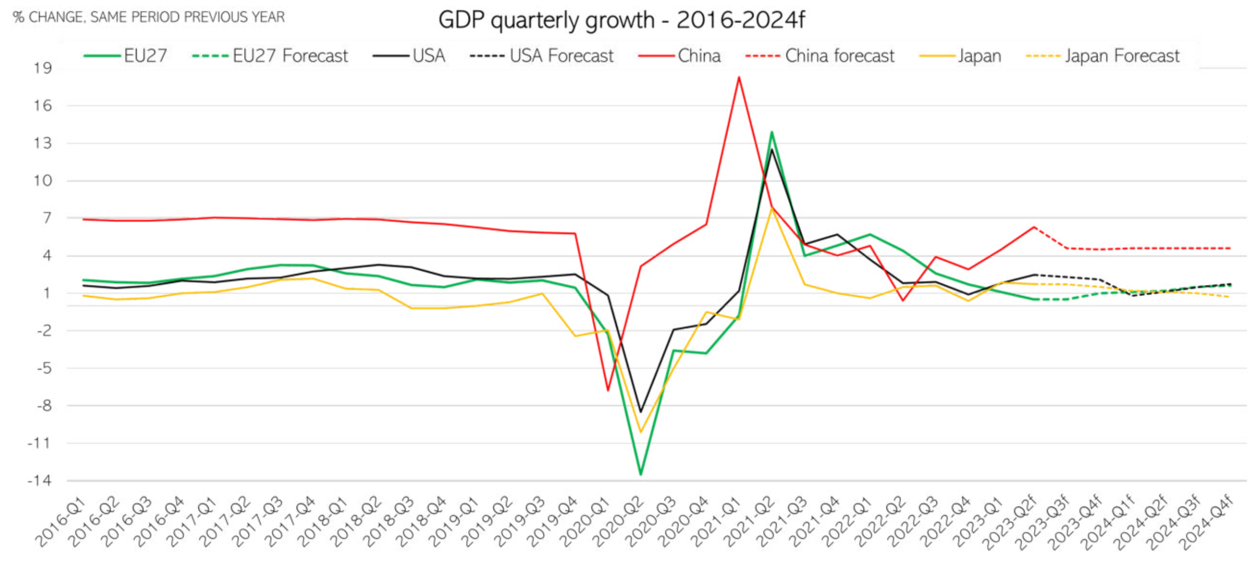
Source: OECD

Country-specific BCI readings for August 2023 (latest available data) show:

- Among the European markets, Greece (102.0), Denmark (100.4), Spain (100.2) and the United Kingdom (100.1) remained in favorable territory, with BCI values above the euro area and European averages.
- Among the other CECIMO countries, the Netherlands, Italy, Sweden, Switzerland and France recorded BCI values below the OECD average but above 100 points in August.
- Germany, Portugal, Poland, Turkey, the Czech Republic, Austria, Belgium and Finland were below the European and total average.
- Among the Asian markets (based on available data), the latest data show that South Korea and China remain in the unfavorable zone.
- The BCI for the United States also remained below 100.0 points.

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, the following points show the most recent quarterly developments and forecasts for 2022, 2023 and 2024.

- In the second quarter of 2023, seasonally adjusted GDP increased by 0.3% in the euro area and remained stable in the EU compared to the previous quarter. According to the European Commission's latest forecast (September), EU economic growth has been revised slightly downwards to 0.8% in 2023 and 1.4% in 2024.
- China's economy continued to recover in the second quarter of 2023. GDP in Q2 2023 was around 6.3% higher than in the same quarter of 2022. According to the OECD Economic Outlook (Sept 2023), growth in China is expected to be held back by subdued domestic demand and structural stress in the property markets, easing to 5.1% in 2023 and 4.6% in 2024.
- According to the OECD's latest forecasts annual GDP growth in the United States is expected to slow from 2.2% this year to 1.3% in 2024, as tighter financial conditions moderate demand pressures.
- In the second quarter of 2023, the Japanese economy recorded GDP growth of 1.7% on an annual basis, +1.2% compared with the previous quarter. The Japanese economy is expected to grow by 1.8% in 2023 and by 1.0% in 2024, according to the latest OECD GDP forecasts.

European Commission's Forecast – Summer 2023:

The European Commission's Summer Economic Forecasts (September 2023) show that the EU economy is still growing, but at a slower pace. EU economic growth is revised downwards to 0.8% in 2023 and 1.4% in 2024. Overall, the weaker growth momentum in the EU is expected to persist until 2024 and the impact of tight monetary policy will continue to dampen economic activity. However, a mild pick-up in growth is projected for next year, as inflation continues to ease, the labour market remains robust and real incomes gradually recover. Inflation is expected to decline, with EU inflation projected to reach 6.5% in 2023 and 3.2% in 2024.

Major risks to the outlook:

- China's economic risks: China faces downside risks from a slowdown in its property sector, high debt imbalances and low confidence. These factors could have a negative impact on Europe's trade performance.
- Monetary tightening: Internationally synchronised monetary tightening could weigh heavily on economic activity. If this tightening coincides with deteriorating household and corporate balance sheets, it could affect economic sentiment and the ability of banks to finance growth, potentially leading to a faster-than-expected decline in inflation.
- Inflation uncertainty: Inflation can surprise on both the downside and the upside. Weak domestic demand could result in less persistent inflation, leading to a faster recovery in purchasing power and consumer spending. Conversely, persistent inflation due to unexpected factors, such as rapid wage increases, could lead to a strong monetary policy response with negative consequences for growth.
- Climate risks: Increasing climate risks, such as extreme weather events, forest fires and floods, pose a tangible threat to the EU economy. These events can lead to losses of natural capital and economic activity, including in the tourism sector.

5.2 INFLATION (M)

Q2-2023 average inflation data:

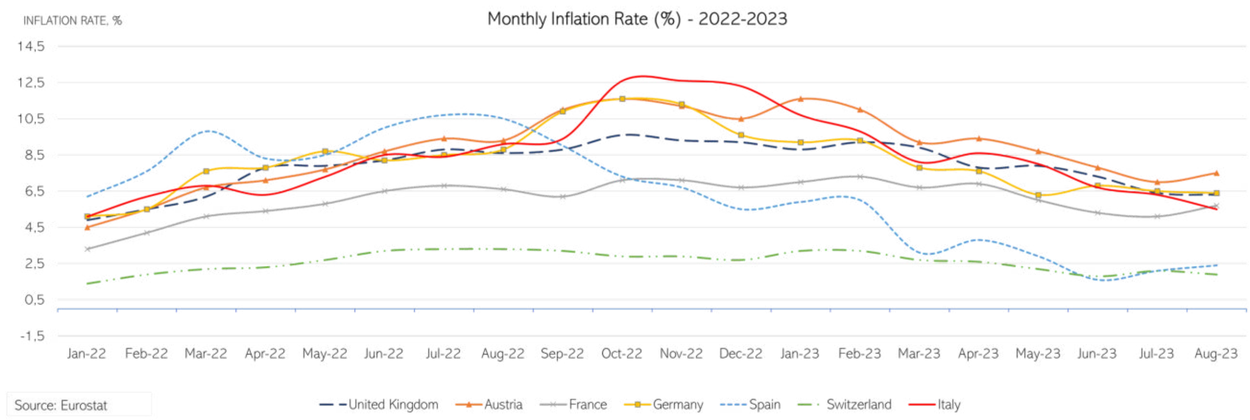
- EU27: 7.2%
- Eurozone: 6.2%
- United States: 4.0%
- United Kingdom: 7.7%
- Turkiye: 40.6%
- Switzerland: 2.2%
- China: 0.1%

In the second quarter of 2023, euro area inflation eased slightly, averaging 6.2% y/y, compared with 8% y/y in the previous quarter. Inflation in the EU27 also follows a similar trend, averaging 7.2% yoy in the second quarter of 2023.

The European Central Bank's latest projections for the euro area: Overall, assuming that medium-term inflation expectations remain anchored at the ECB's inflation target, headline HICP inflation is projected to decline from an average of 8.4% in 2022 to 5.6% in 2023, 3.2% in 2024 and 2.1% in 2025, reaching the target in the third quarter of 2025. Compared with the June projections, HICP inflation has been revised upwards in 2023 and 2024, reflecting higher forward energy prices, and downwards in 2025, as the effects of the appreciation of the euro, tighter financing conditions and weaker cyclical conditions are expected to dampen HICP inflation excluding energy and food.

Inflation in the United States continued to ease, averaging 4% in Q2 2023, down from 5.8% in Q1 2023 (year-on-year). Similarly, China's inflation rate continued to fall in Q2 2023, averaging 0.1%, down from 1.3% (year-on-year) in Q1 2023.

According to the latest OECD forecasts (September 2023), inflation is expected to moderate gradually in 2023 and 2024 but remain above central bank targets in most economies. Headline inflation in the G20 economies is projected to ease to 6% in 2023 and 4.8% in 2024, with core inflation in the advanced G20 economies declining from 4.3% this year to 2.8% in 2024.



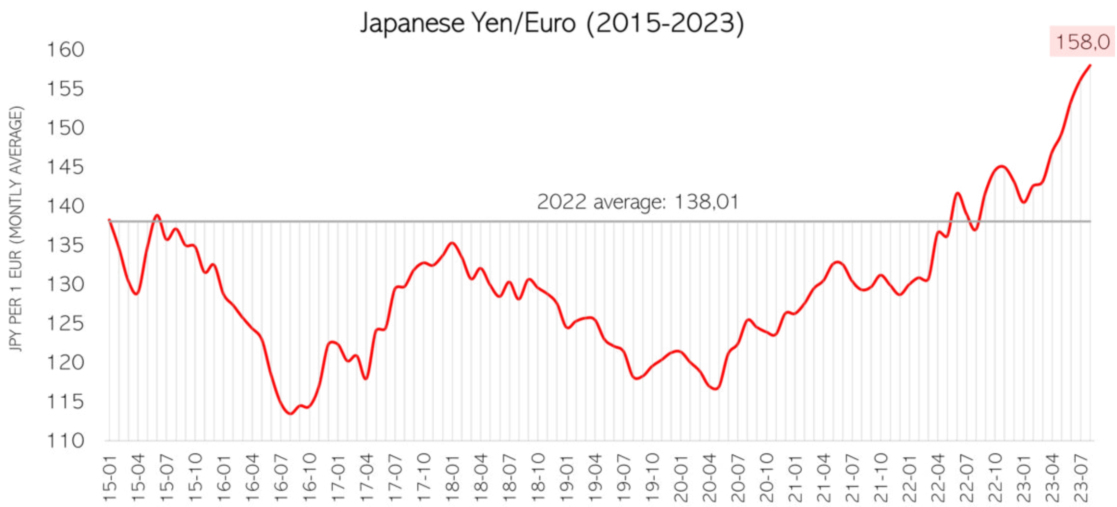
Looking at the main CECIMO MT-producing countries (table below), average inflation fell in all countries in the second quarter of 2023. The latest data (August 2023) show the following inflation rates: Germany 6.4%, Switzerland 1.9%, UK 6.3%, France 5.7%, Spain 2.4% and Italy 5.5% (year on year).

Inflation rates by Country (August 2022 - August 2023)

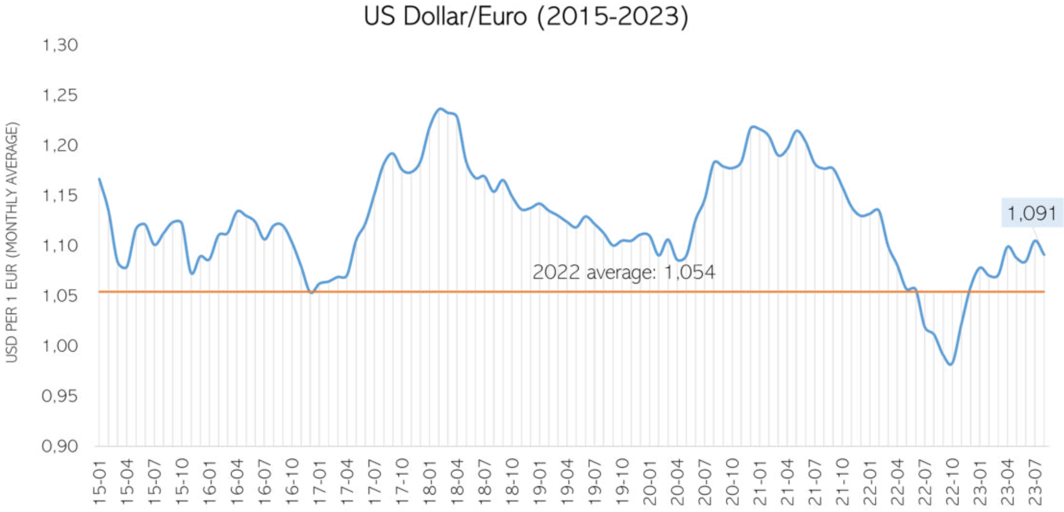
% change on a year earlier	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23
Austria	9,3	11,0	11,6	11,2	10,5	11,6	11,0	9,2	9,4	8,7	7,8	7,0	7,5
France	6,6	6,2	7,1	7,1	6,7	7,0	7,3	6,7	6,9	6,0	5,3	5,1	5,7
Germany	8,8	10,9	11,6	11,3	9,6	9,2	9,3	7,8	7,6	6,3	6,8	6,5	6,4
Italy	10,5	9,0	7,3	6,7	5,5	5,9	6,0	3,1	3,8	2,9	1,6	2,1	2,4
Spain	3,3	3,2	2,9	2,9	2,7	3,2	3,2	2,7	2,6	2,2	1,8	2,1	1,9
Switzerland	9,1	9,4	12,6	12,6	12,3	10,7	9,8	8,1	8,6	8,0	6,7	6,3	5,5
United Kingdom	8,6	8,8	9,6	9,3	9,2	8,8	9,2	8,9	7,8	7,9	7,3	6,4	6,3

Source: Eurostat & OECD

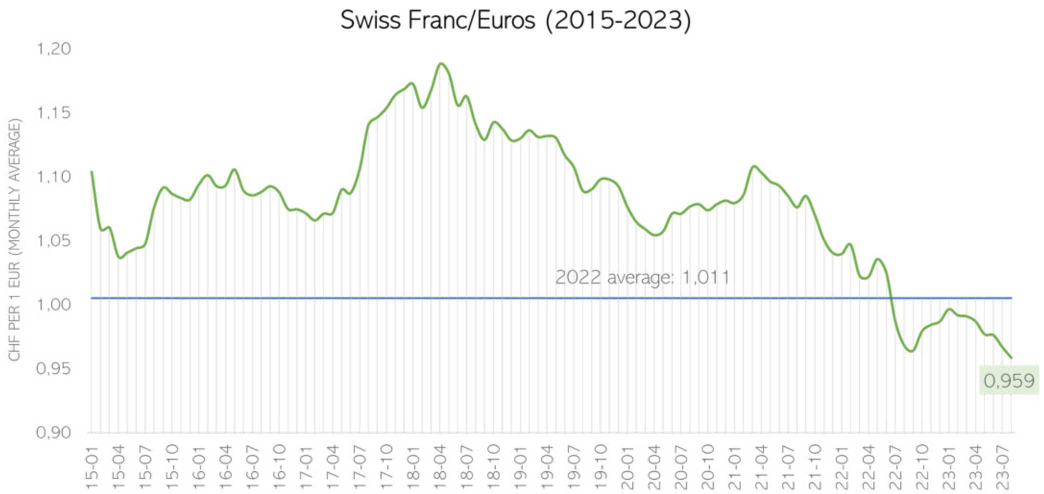
5.3 FOREIGN EXCHANGE RATES (M)



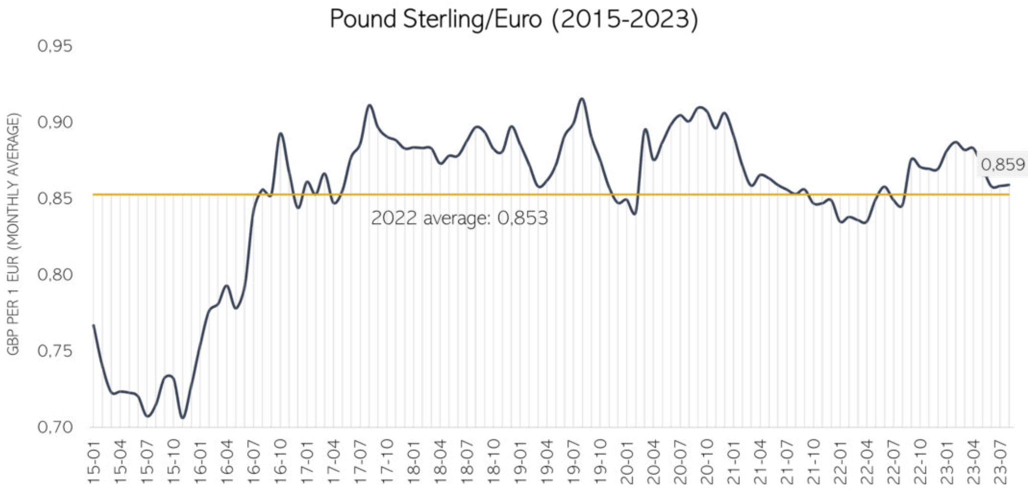
In the second quarter of 2007, the exchange rate between the Japanese yen (JPY) and the euro (EUR) averaged 149.8, significantly higher than in the previous quarter (142.0), suggesting a significant weakening of the JPY against the EUR (by 6%). In addition, the most recent data show further JPY weakening, with the exchange rate reaching 158.0 JPY per EUR in August.



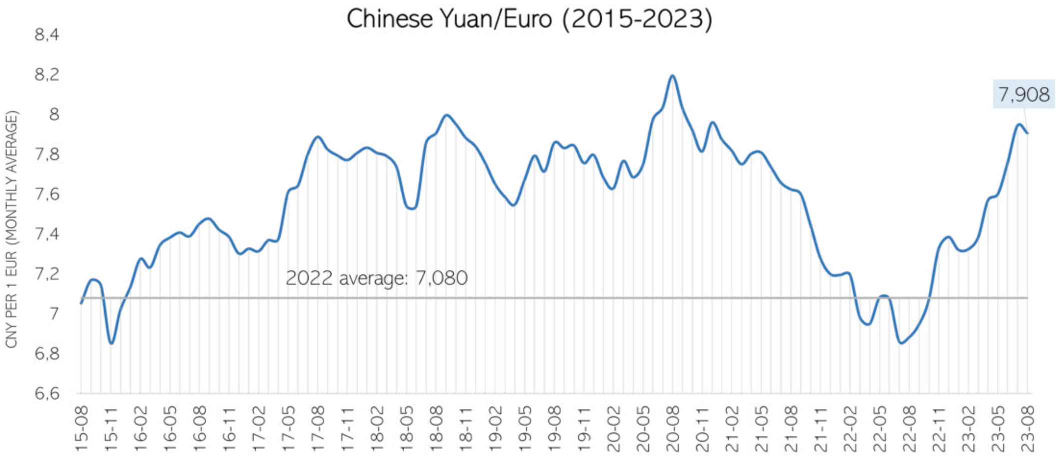
The average exchange rate of the USD against the EUR in Q2 2023 was 1.090, a depreciation of 2% against the EUR compared to the previous quarter.Looking at recent months, July saw a marked weakening of the USD, but August brings some strengthening, and the exchange rate stabilizing at USD 1.091 per euro, somewhat above the 2022 average.



The average exchange rate of the Swiss franc (CHF) per euro was 0.980 in the second quarter, slightly lower than in the first quarter. Moreover, looking at the past few months, the CHF gradually strengthened against the EUR between February and August. As a result, the CHF/EUR exchange rate reached 0.959 CHF per euro in August.



The average exchange rate of the British pound sterling (GBP) in the second quarter of 2023 was 0.871 per euro, indicating a slight strengthening of the GBP against the euro compared to the average of the previous quarter. The latest data show a more stable exchange rate, averaging 0.859 GBP per euro in August.



During the second quarter, the average exchange rate of the Chinese yuan (CNY) per EUR was 7.643, indicating a further weakening of the CNY compared to the average of the previous quarter (7.343). Moreover, data from recent months suggest that the CNY depreciated further against the EUR in July, with the exchange rate stabilising at CNY 7.908 per EUR.

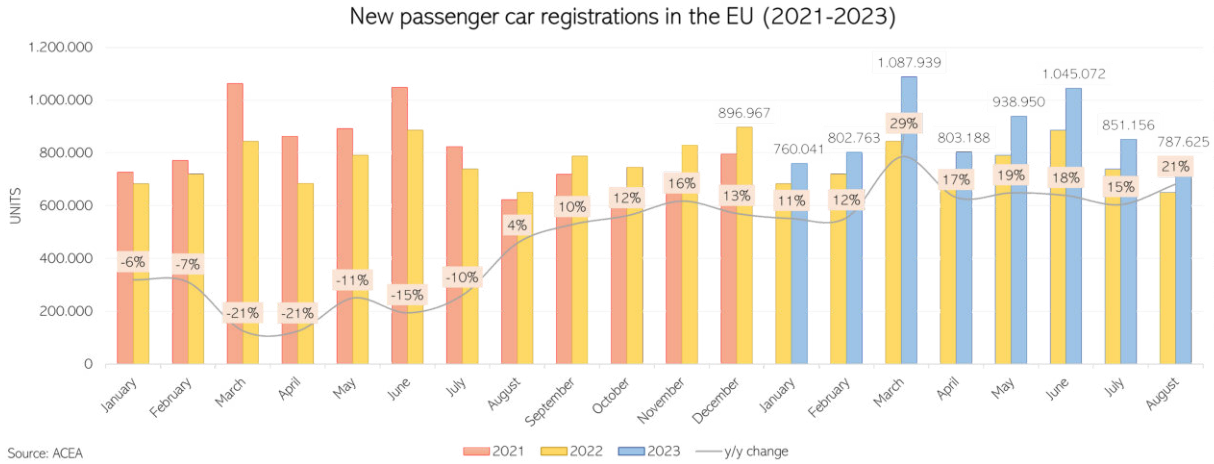
6. RELATED SECTORS

The Related Sectors section provides a brief overview of the automotive and aerospace sectors, major MT buying sectors. Moreover, the last section presents recent trends in commodity prices.

6.1 AUTOMOTIVE

According to the latest S&P Global Mobility Forecast, light vehicle production remains resilient in the near term, with rising output in several regions. The state of consumer demand remains a key consideration, with vehicle prices elevated and credit conditions still tight.

After 2023, the general production outlook continues to shift towards a more traditional demand-driven model as inventory levels in several markets come closer to balance. The September 2023 forecast (S&P) update reflects some notable upgrades in the near term, particularly for Europe and Japan/Korea as production continues to recover, and for Greater China as export activity remains strong. On the other hand, the light vehicle production forecast for North America has been downgraded due to the impact of the UAW strike.



According to ACEA (the European Automobile Manufacturers' Association), the EU passenger car market grew by 21% to 787,625 registered units, the thirteenth consecutive month of growth. Although August is typically a slower month for car sales, double-digit growth indicates that the EU market is recovering from last year's component shortages. Double-digit growth was recorded in most markets, including the three largest: Germany (+37.3%), France (+24.3%) and Italy (+11.9%).

In August, the market share of battery electric cars exceeded 20% for the first time (up from 11.6% in August last year), overtaking diesel for the second time this year to become the third most popular choice for new car buyers. Hybrid electric cars maintained their position as buyers' second choice with a market share of 24%. Petrol cars are still the most popular choice, but their market share has fallen from 38.7% in August last year to 32.7%.

Total and EV new Passenger Car registrations in the EU

	Q2 2021	Q3 2021	Q4 2021	Q1 2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023
Total new PC registrations	2.802.034	2.165.540	2.173.642	2.246.248	2.362.562	2.176.387	2.363.252	2.650.743	2.787.210
Total (Q/Q-4)	56%	-22%	-25%	-12%	-16%	1%	9%	18%	18%
EV new PC registrations	446.028	409.882	532.721	423.252	439.914	443.899	694.254	510.337	594.953
EV % of Total	16%	19%	25%	19%	19%	20%	29%	19%	21%
EV (Q/Q-4)	244%	50%	12%	19%	-1%	8%	30%	21%	35%

EV = Electric Vehicles including BEV and PHEVs *Source: ACEA*

In the second quarter of 2023, the total number of new passenger car registrations in the EU increased by 18% compared to the same period of the previous year (2022). The share of new electric passenger cars reached 21% of total registrations. Nevertheless, the electric car segment showed significant growth of 35% compared to the same period last year.

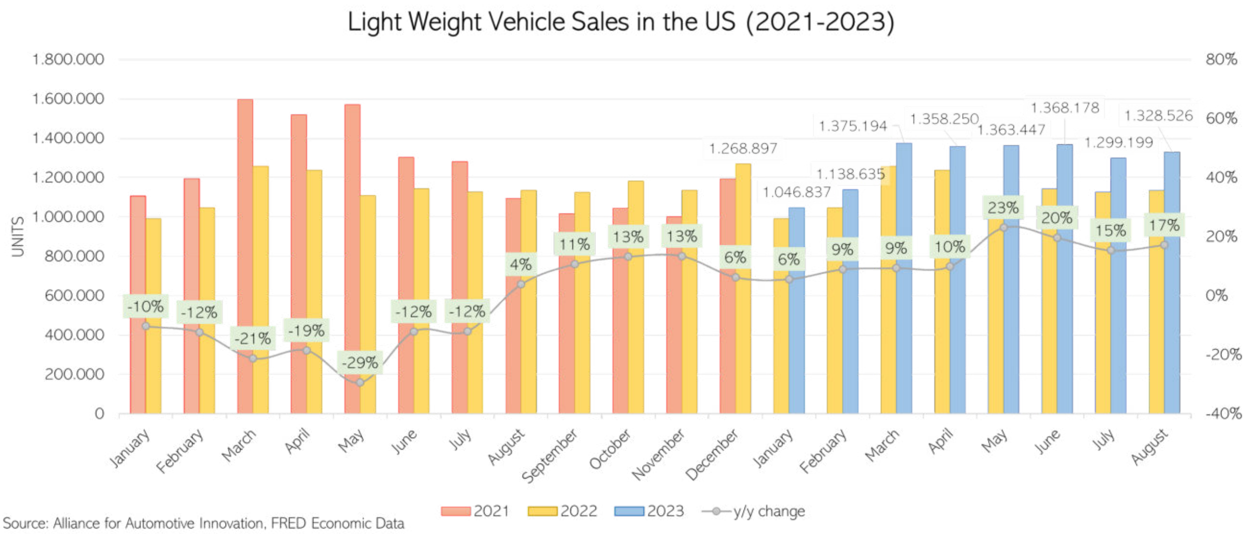
After the growth in new car sales in China in May and June 2023, when the level of new car sales reached the level of December 2022, July brings a slight slowdown (-7%). However, at 2.1 million units, new car sales were only 3% down on the same month last year.

Total and EV new Passenger Car registrations in China

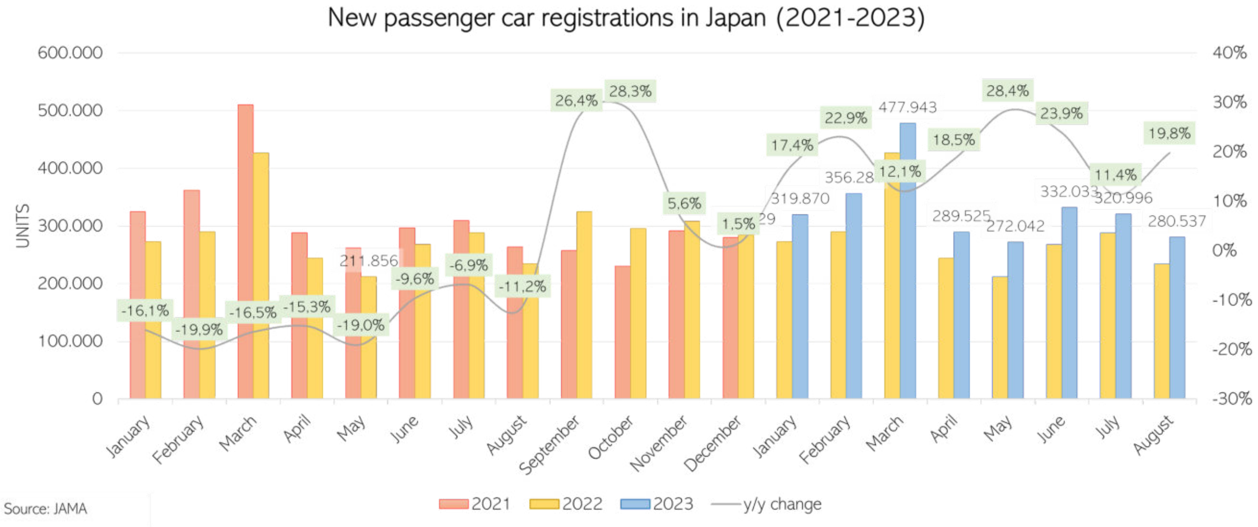
	Q2 2021	Q3 2021	Q4 2021	Q1 2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023
Total new PC registrations	4.919.000	4.854.000	6.621.000	5.537.000	4.810.000	6.631.000	6.571.000	5.139.000	5.481.000
Total (Q/Q-4)	-1%	-12%	-2%	9%	-2%	37%	-1%	-7%	14%
EV new PC registrations	638.000	904.000	1.291.000	1.224.000	1.342.000	1.967.000	2.314.000	1.586.000	1.814.000
EV % of Total	13%	19%	19%	22%	28%	30%	35%	31%	33%
EV (Q/Q-4)	179%	198%	131%	150%	110%	118%	79%	30%	35%

EV = Electric Vehicles including BEV and PHEVs *Source: China Association of Automobile Manufacturers*

On a quarterly basis, new passenger car sales in the second quarter of 2023 were 14% higher than in the same period of the previous year. The share of new electric passenger cars reached an average of 33% in the second quarter of 2023, above the 2022 average. As in previous quarters, this group showed significant growth (+35%) compared to the same period last year.



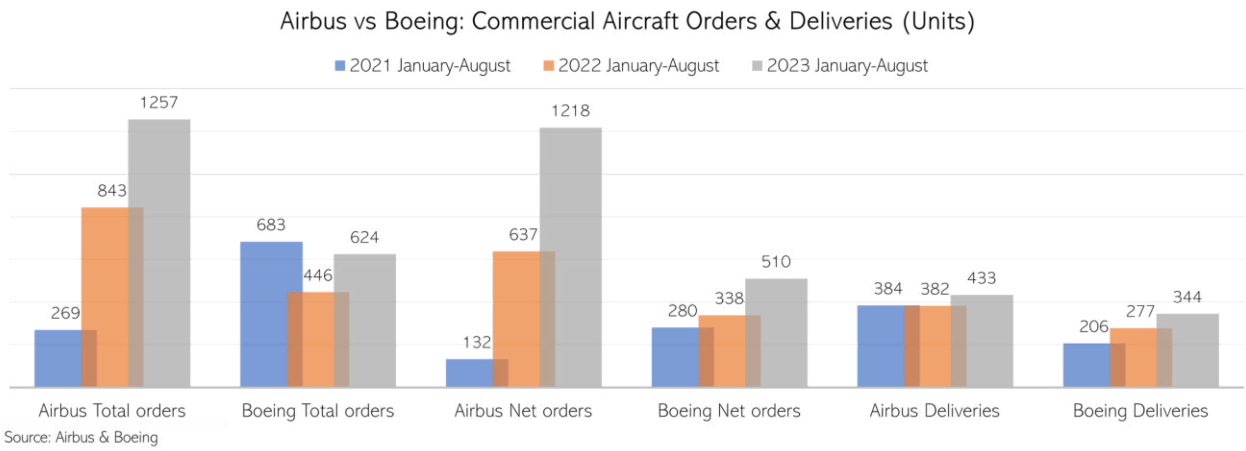
The latest data, shown in the graph above, show continued growth in light vehicle sales in the US. The average growth rate in the first eight months of 2023 was around 14% compared to the same period in 2022. As shown in the graph above, the level of light vehicle sales in August 2023 was 17% higher than the level of light vehicle sales in August 2022. Sales of electric vehicles (BEV, PHEV & fuel cell) accounted for 9.5% of total vehicle sales in August 2023.



According to the Japan Automobile Manufacturers Association (JAMA), new car registrations/sales in Japan continued the trend of reaching higher levels than the same period last year, although the level has declined on a monthly basis in recent months. The latest available data, for August 2023, show that the level of new passenger car registrations in Japan was up by almost 20% compared to the same month last year.

6.2 AEROSPACE

According to the Eurocontrol press release (September 2023), during the core summer months (June-August 2023), the number of flights in the Eurocontrol network increased by 7% compared to 2022, reaching 93% of the pre-pandemic level. According to its latest forecasts, the 2019 level (11.1 million flights) is expected to be reached in 2025.



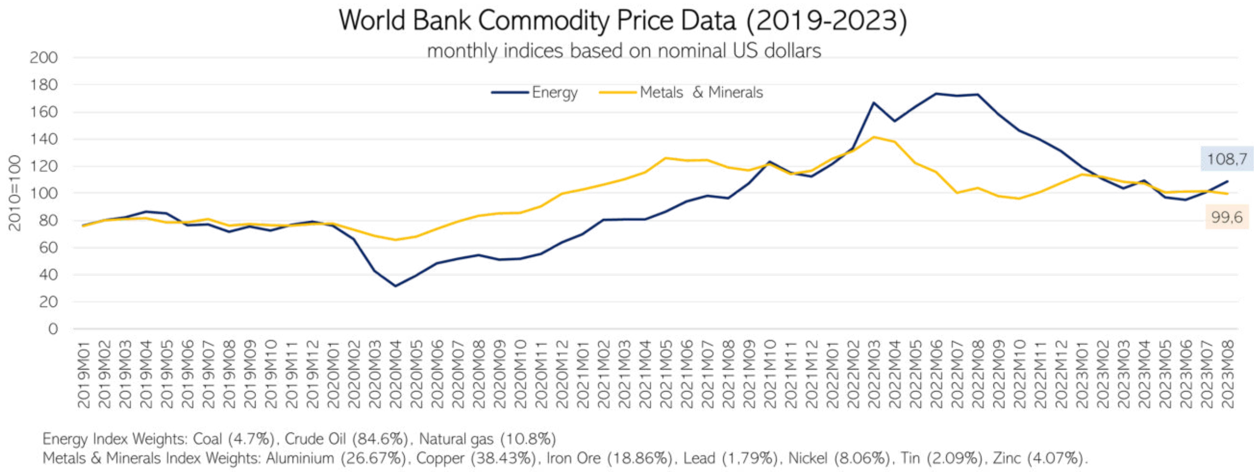
Following a highly challenging 2020 due to the COVID-19 pandemic, 2021 and 2022 were recovery years for the two largest commercial plane makers. Another year of recovery for the commercial aircraft manufacturing industry is expected in 2023 despite continued supply chain challenges, higher interest rates, labour shortages, and the war in Ukraine. However, Boeing and Airbus still have quite a way to go before deliveries are back to pre-pandemic levels.

Analysing the data for the first eight months of 2023, Boeing received a total of 624 orders but experienced 114 cancellations, resulting in 510 net orders – significantly above the net order level observed during the same period in 2022. On the other side, Airbus recorded 1218 net orders after accounting for 39 cancellations within the same timeframe.

In the first eight months, Boeing deliveries increased by about 24% compared to the same period last year, while for Airbus, this increase was about 13%.

6.3 ENERGY AND METALS

This chapter gives a brief overview of energy and metal prices from the World Bank and London Metal Exchange sources. While the World Bank's commodity price data presents monthly indices based on the nominal US dollars, the prices for certain metals are based on information available on the London Metal Exchange (LME) website at the time of writing this report.

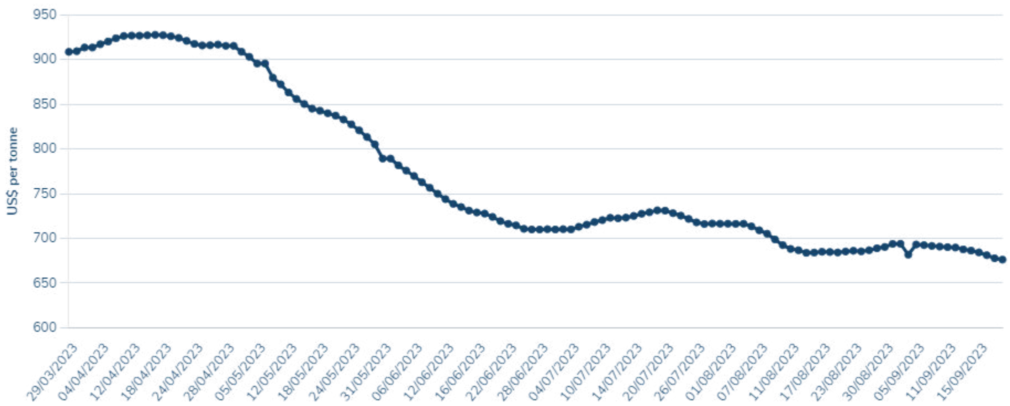


As shown in the chart above, there was a notable 7.8% increase in energy prices during the month of August. This increase was mainly driven by significant gains in the natural gas market in Europe, which recorded a robust 17.3% increase, and coal prices in Australia, which rose by 8.5%. In contrast, metal prices followed a different trend, with a fall of 1.9%, with tin leading the decline with a significant fall of 9.3%.

Notably, the World Bank's Commodity Markets Outlook for April 2023 projects a significant 21% decline in commodity prices for the current year, with stabilisation expected in 2024. This forecast is in line with previous reports that have emphasised a downward trend in commodity prices. Despite these forecasts, it's important to remain vigilant regarding energy prices, as the latest assessment by the European Commission continues to signal a potential risk factor in this regard.

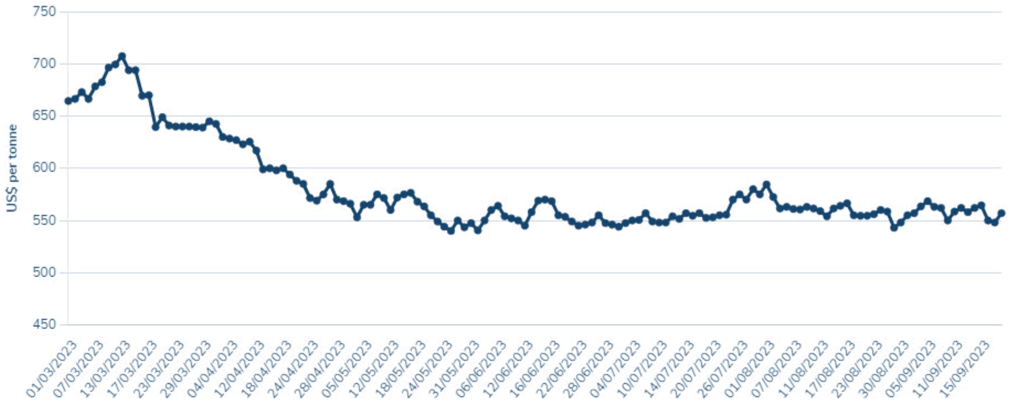
The text below provides an overview of the latest developments in metal prices on the LME.

LME Steel HRC EXW NW Europe (Argus) Closing prices graph (September 20 = 676.26 USD/t)



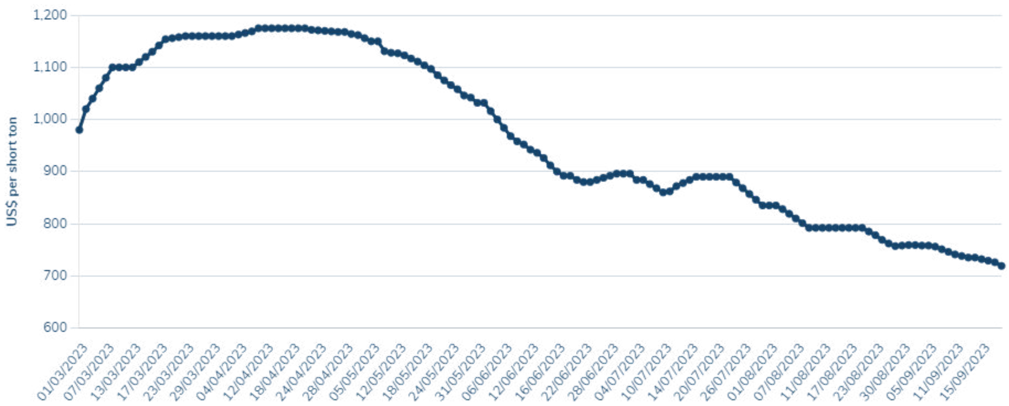
Following an increase in Northern European domestic HRC prices at the beginning of the year, prices fell significantly in later months due to lower demand. The LME closing price on 20 September was USD 676.26 per tonne, some 6.6% lower than the previous reporting date (20 June - USD 724.01 per tonne). While European steel producers are on the lookout for price increases in view of the seasonal return of customers, steel mills have been confronted with weak demand this year, particularly from the automotive and construction industries.

LME Steel HRC FOB China (Argus) Closing prices graph (September 20 = 557.0 USD/t)



The price of HRC FOB China closed at USD 557.0/tonne on 20 September, some 0.6% higher than in the previous reporting period, when the price closed at USD 553.5/tonne on 20 June. As far as Chinese steel producers are concerned, while steel production is expected to remain relatively high in the near term, end-user demand is likely to come under pressure from a slowdown in the property sector, which is the largest consumer of steel.

LME Steel HRC EXW N America (Platts) Closing Prices graph (September 20 = 719 USD/t)



On the US steel market, the closing price on 20 June was USD 892 per tonne, but by 20 September it had fallen to USD 719 per tonne, a fall of around 20% in three months. While US steel producers expect steel prices to fall in the short term, they are optimistic about a recovery in demand, driven primarily by key sectors of the green transition, particularly the energy industry and the Inflation Reduction Act (IRA).

LME Aluminium Closing Prices (September 20 = 2.256 USD/t)

The latest closing price for aluminium at the time of writing was USD 2,256 per tonne, slightly higher than the level recorded on 20 June (USD 2,230 per tonne). This is the highest price in almost two months, driven by growing supply pressures and signs of increased demand. In terms of recent developments, China, the world's leading aluminium producer, has halted the expansion of production capacity beyond the current limit of 45 million tonnes. This decision is part of Beijing's efforts to prevent oversupply and curb higher energy consumption due to old and inefficient infrastructure. At the same time, Indonesia's ban on exports of bauxite, the main commercial ore for aluminium production, has also raised concerns about potential supply constraints.

LME Copper Closing Prices (September 20 = 8.345 USD/t)

Looking at recent months, the LME copper closing prices in August and September were lower than in the second quarter. The price reached a level of USD 8.345/t on 20 September, below the closing price of the previous reporting period (20 June = USD 8.548/t). It is important to note that September saw the lowest price since late May, amid continued pressure from a strong dollar and weak global industrial sentiment.

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, Turkiye and the United Kingdom.

Euro area (EA) / Eurozone (EZ)

The euro area (EA20), 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, Finland and Croatia.

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

CREDITS

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MEMBER ASSOCIATIONS

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

Belgium: AGORIA, the Federation of the Technology Industry
www.agoria.be

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

Denmark: Danish Manufacturing Industry
www.danskindustri.dk

Finland: Technology Industries of Finland
www.teknologiateollisuus.fi

France: Evolis, Organisation professionnelle des biens d'équipement
www.evolis.org

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 - Cluster for Advanced and Digital Manufacturing
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

Turkiye: 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 Manufacturing Technologies. With a primary focus on machine tools and additive manufacturing technologies, we bring together **15 national associations**, which represent approximately **1500** industrial enterprises in Europe (EU + UK+ EFTA + Türkiye), over **80%** of which are SMEs. CECIMO covers **97%** of the total machine tool production in Europe and about **1/3 worldwide**. It accounts for approximately **150,000** employees and a turnover of around **25.3 billion** euros in 2022.