



cecimo

European Association of the Machine Tool Industries
and related Manufacturing Technologies

Q1 2023

ECONOMIC AND STATISTICAL TOOLBOX



- CECIMO8 total orders down 14% compared to the same period last year.
- Business climate indicators continue to show a very uncertain business situation.
- CECIMO announced the first MT production estimates for 2023: With growth of around 8%, CECIMO production is expected to reach 2019 levels.
- New Oxford Economics GMT forecast: CECIMO MT consumption is expected to grow by 7.4% in 2023 and 6.4% in 2024.

TABLE OF CONTENTS

1-2

Introduction

3

Mindmap

4-10

Historical Data for the Sector

11-13

Demand

14-17

Investment

18-26

Business Climate

27-31

General Indicators

32-37

Related Sectors

38-39

Glossary

40

Geographical Information

41

Other

INTRODUCTION

The CECIMO Economic and Statistical Toolbox for the first period of 2023 provides the latest data update for the European MT sector. The report covers the first quarter of 2023, but where possible the most recent data has been included. While the latest PMI data shows that global manufacturing production improved for the fourth consecutive month in May, thanks to improved supply chain conditions, the demand side of the equation remains a concern. Furthermore, monetary tightening in Europe and globally is expected to continue to have a negative impact on business financing and investment levels in 2023. Looking at European banks, the decline in net demand for loans was significant and the largest since the fourth quarter of 2008, during the global financial crisis.

While the demand side remains a concern for European manufacturers, managers' expectations for production growth over the next twelve months remain positive. Looking at the level of the **EU industrial production index (IPI)**, it remained stable in the first quarter of 2023, but slightly lower than in the previous quarter. The high level of the index still points to robust manufacturing activity in the European Union (EU).

It is important to note that the European Commission **has revised its GDP growth forecast slightly upwards**, and according to the latest expectations, the EU economy is now expected to grow by 1.0% in 2023 and 1.7% in 2024. However, persistent core price pressures have led to **upward revisions in inflation forecasts**, with inflation rates in the euro area expected to reach 5.8% in 2023 and 2.8% in 2024.

Regarding the performance of the European machine tool industry, total new orders in the first quarter of 2023 remained almost at the same level as the previous quarter but were significantly lower compared to the record-high achieved in Q1 2022, as anticipated. As detailed in the report, **CECIMO8 domestic orders** in Q4 2022 were 8% lower than the same period the previous year, while **CECIMO8 foreign orders** saw a decline of 13% on the same basis. Consequently, the **CECIMO8 total orders** index experienced a 2% quarterly decrease, landing 14% below the corresponding period from a year ago. Consistent with historical patterns, it is expected that the next two quarters will witness a further decline in new orders on a quarterly basis before experiencing a new upturn in the final period of 2023.

The latest estimates for CECIMO and global MT production have been included in this report, based on CECIMO's new Global MT Report for 2022 (available to CECIMO members). According to the report, **world MT production** has reached approximately 79.5 billion EUR, with 55.94 billion EUR in the metal cutting sector and 23.53 billion EUR in the metal forming sector. This represents a global increase of around 12% compared to 2021 and a significant growth of approximately 7.9% compared to 2019. **CECIMO's MT production** experienced a notable increase of 12% in 2022, reaching a level of 25.1 billion euros. As shown later in the report, our initial estimates for 2023 show production growth of 8% at CECIMO level.

The latest **MT consumption** forecasts from Oxford Economics (April 2023) indicate that the CECIMO countries are expected to witness an annual growth rate of approximately 19.5% in machine tool consumption in 2022. However, the growth is projected to be more moderate in the subsequent years, with forecasts of 7.4% in 2023 and 6.4% in 2024.

In terms of **trade**, according to our latest data, CECIMO's total MT exports increased by around 10% in 2022, while imports increased by around 27% compared to the previous year. In value terms, this resulted in a positive trade balance of around 6.7 billion euros.

As is usual for the first quarters, **Gross Fixed Capital Formation** in the EU decreased on a quarterly basis (-10.1%). However, at 682.6 billion euro, the absolute value was slightly higher than in the same period of a year before (+2.3%). Capacity utilisation in the EU remained well above its long-term average, while the level of spare capacity in the industrial goods sector increased to around +4%.

According to the **CECIMO Business Climate Barometer** for the first quarter of 2023, our machine tool manufacturers expressed a lower, but still positive view of the general business situation. Moreover, it is important to note that while managers' expectations for domestic production and employment are slightly higher than in the previous survey round, export expectations are more stable.

The **Global Manufacturing Purchasing Managers' Index (PMI)** fell from 50.0 in February to 49.6 in March, after improving in the first two months of the year. The index remained stable at this level for the following two months, with April and May still pointing to unfavourable business conditions in the months ahead. Looking at the **euro area manufacturing PMI**, a steady deterioration can be seen, with the index reaching a low of 36 points in May 2023, mainly due to a fall in new orders and production.

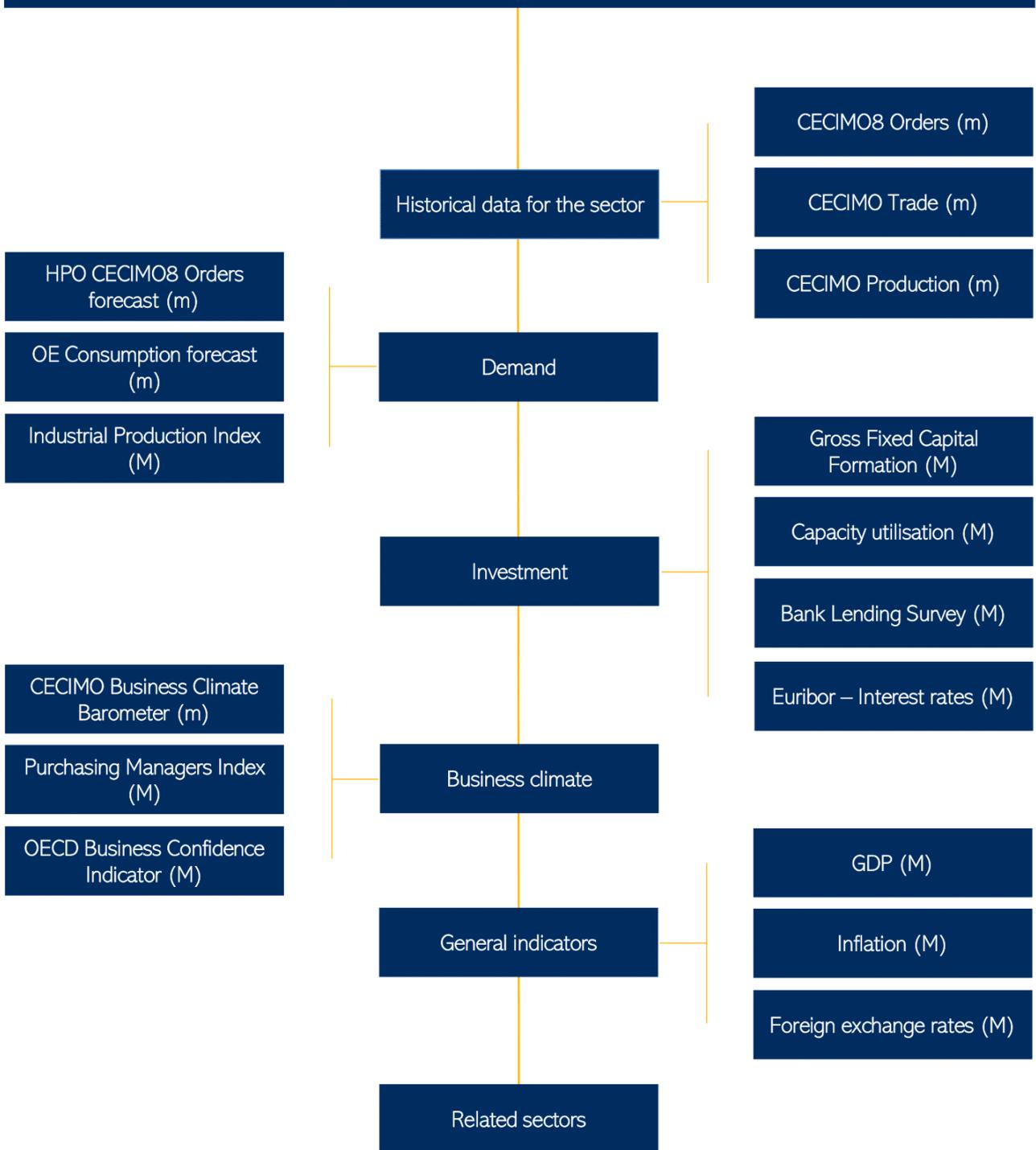
While the **European BCI** showed a slight improvement in the first quarter of 2023, the latest data for April and May point to a renewed deterioration in the index, which fell to 99.9 points, just below the no-change mark.

The latest data show that **EU GDP** grew by 1.3% in the first quarter of 2023 compared to the same period of the previous year. On an annual basis, EU GDP growth was around +3.5% in 2022 compared to 2021. It is also worth noting that the European Commission has recently revised upwards its forecast for 2023, and the latest data show that EU GDP is expected to grow by around 1.0% in 2023 and 1.7% in 2024 (y/y).

Related sectors: The first half of 2023 has brought positive developments, particularly in the **automotive sector**, where there has been a notable increase in new car registrations compared to the same period last year. However, the **aerospace sector** experienced slightly lower net orders during the period from January to April, although deliveries remained nearly consistent with the previous year. Notably, both Aerospace and Boeing saw an increase in their orders backlog, amounting to approximately 3%. According to the latest data from the World Bank, there has been a decline in **energy and metal prices** compared to the previous reporting period.



Toolbox Mind Map



1. HISTORICAL DATA FOR THE SECTOR

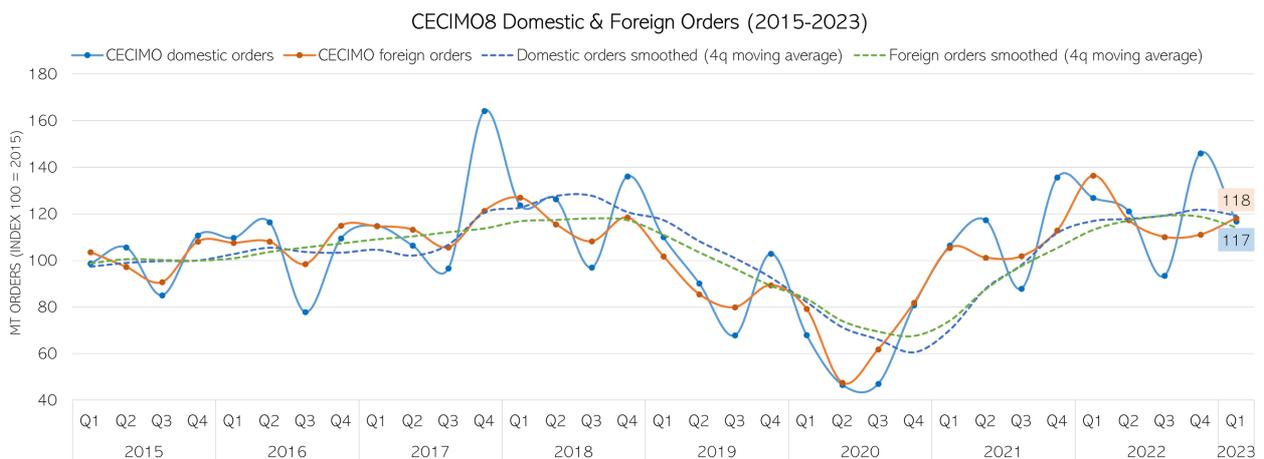
1.1 CECIMO 8 ORDERS (M)

Although at a lower level compared to the record high in the first quarter of 2022, the beginning of 2023 brings a rather stable level of total orders in the CECIMO8 region compared to the last period of 2022. While there is a visible shift and improvement in orders from the foreign market compared to the previous quarter, the domestic market recorded a decrease in orders on a quarterly basis.

The level of new domestic orders in the CECIMO8 was lower both on a quarter on quarter (-8%) and on an annual basis (-20%). However, despite the decline in domestic new orders, they are still above the 2021 average. Among the CECIMO8 countries, only Switzerland reported an increase in domestic orders compared to the previous quarter.

The CECIMO8 level of foreign orders improved by a further 6%, following the quarterly improvement in the fourth quarter. However, compared with the same period a year earlier, the level of the index is 13% lower. Strong quarter-on-quarter improvements were seen in Italy, Germany and the UK.

Reflecting the changes in the domestic and foreign market, the CECIMO8 total new orders index remained broadly unchanged compared to the previous quarter. While the index was 14% below the same period last year, it is important to note that total CECIMO8 orders reached a record level in the first quarter of 2022, so the level of orders was expected to be somewhat lower at the beginning of this year. In line with historical trends, it can be expected that the next two quarters will result in a quarterly decline and a lower level of new orders, before a new upturn in the final period of 2023.

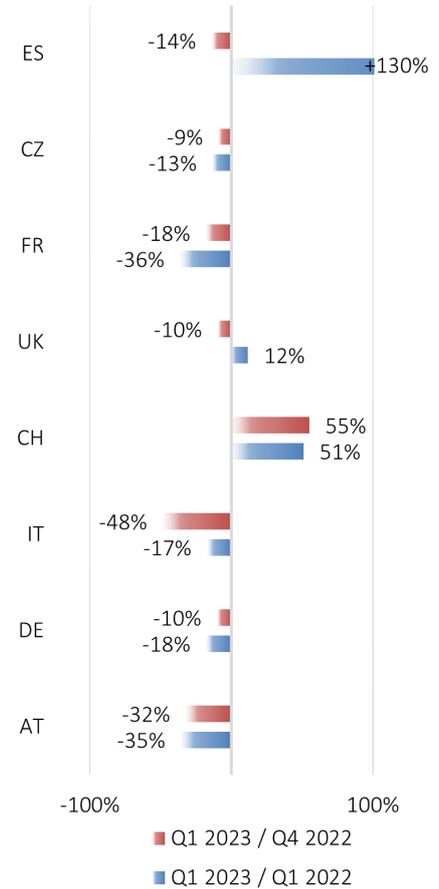


Source: CECIMO & National Associations

CECIMO8 includes: Austria, UK, Germany, France, Italy, Czech Republic, Switzerland and Spain

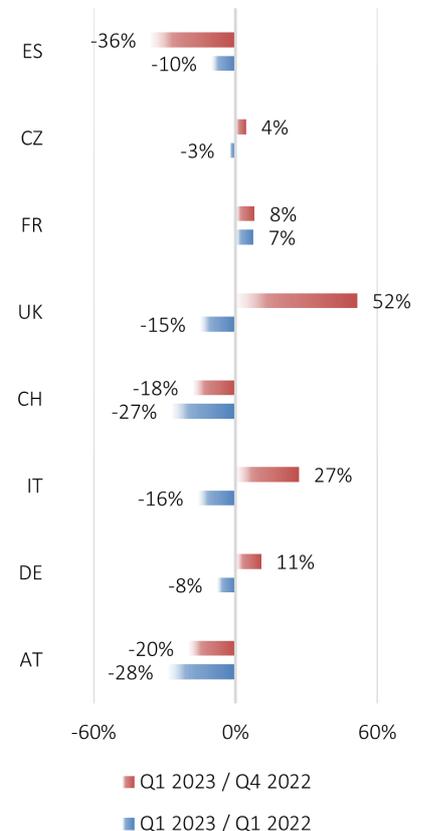
Domestic Orders

- Among the CECIMO countries, Spain and Switzerland recorded significantly higher levels of new orders compared to the same period last year. It is also important to note that domestic new orders in Switzerland were 55% higher on a quarterly basis.
- UK domestic orders fell 10% quarter-on-quarter, but remained around 12% up on the same period last year.
- The largest decreases compared to the previous year were recorded in France (-36%) and Austria (-35%).
- After significant quarterly growth in Q4 2022, Italian domestic orders fell by 48% in Q1 2023. This level of orders was also 17% lower than in the same period of the previous year.
- German domestic orders fell by 10% on a quarterly basis and the level of orders was 18% lower than in Q1 2022. A similar trend was observed in the Czech Republic, where new orders fell by 13% compared with the same period last year and by 9% on a quarterly basis.

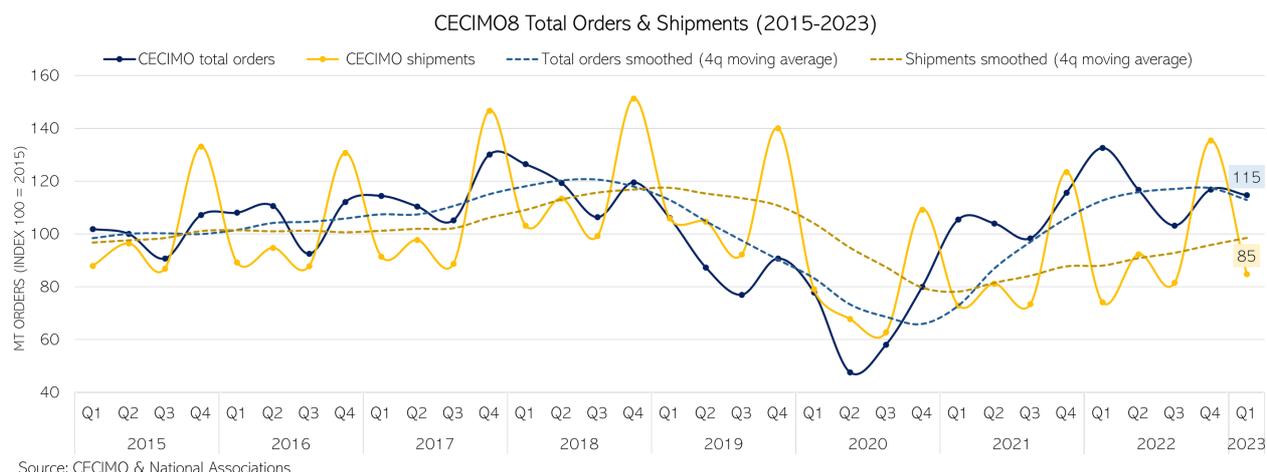


Foreign Orders

- While the level of foreign CECIMO8 orders remained above the level of the fourth quarter of 2022, we could assume that it will be below the record high level of the first quarter of 2022.
- The strongest improvement on quarterly basis regarding foreign orders can be noticed in UK (+52%) and Italy (+27%).
- Strong improvement on quarterly basis was also recorded in Germany (+11%), however, this improvement was not so strong to reach the levels that were seen in Q1 2022.
- French manufacturers recorded a 7% increase in new export orders compared with the same period a year earlier and 8% on a quarterly basis.
- Lower levels of foreign orders are observed in Austria, Switzerland and Spain on both a quarterly and annual basis.



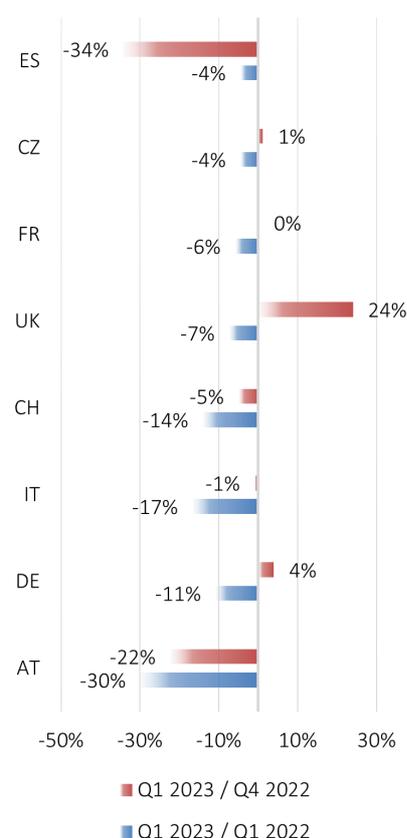
Total Orders



As it can be seen from the graph, the CECIMO8 total new orders index remained fairly stable, at almost the same level as in the fourth quarter of 2022, mainly thanks to the positive developments in new foreign orders.

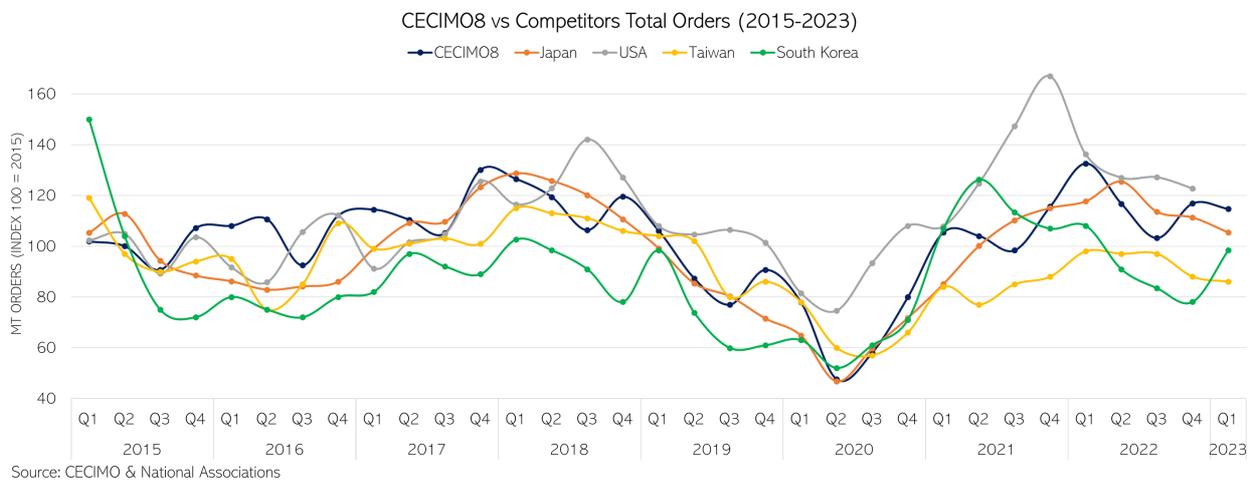
In line with historical trends, after peaking in the last quarter of 2022, CECIMO8 shipments recorded a decline in the first quarter of 2023. As shown in the graph, the smoothed shipments curve is getting closer to the smoothed total orders curve, indicating a smaller gap and decreasing order backlogs for CECIMO MT producers.

- The level of CECIMO8 total orders in the first quarter of 2023 was 2% down on the previous quarter and 14% down on the same period a year earlier.
- Germany (+4%), the United Kingdom (+24%) 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 (-30%), followed by Italy (-17%), Switzerland (-14%) and Germany (-11%).
- Smaller decreases compared to the same period of the previous year were recorded in the United Kingdom (-7%), the Czech Republic (-4%) and Spain (-4%).
- Thanks mainly to developments in the foreign market, French manufacturers reported almost the same level as in the previous quarter.
- As already mentioned, the following two quarters are expected to result in a lower level of total orders, if we look at the historical trend, before a new upturn in the last period of 2023.



CECIMO Competitors

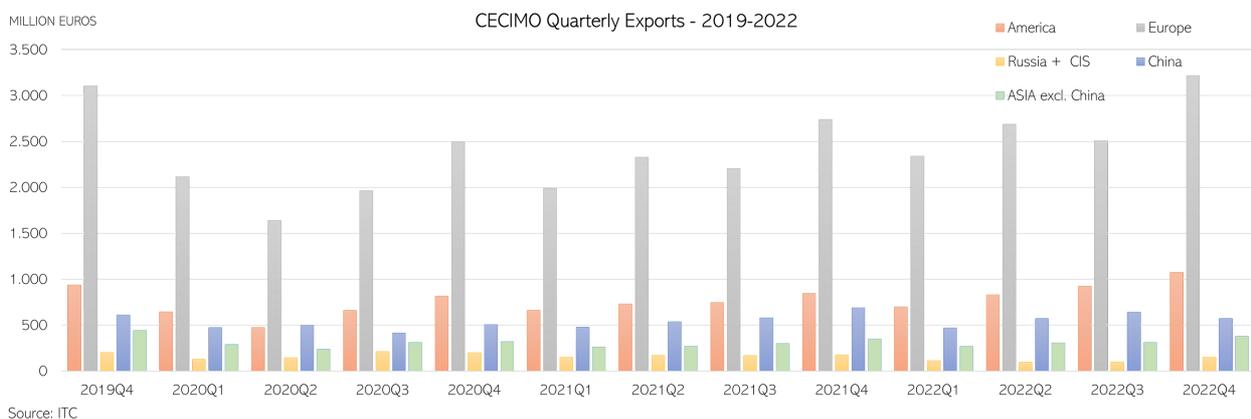
- Looking at Japan's total MT orders, Japanese MT producers recorded a decline in orders on both a quarterly (-5%) and annual basis (-10%). While the metal forming sector recorded a quarterly increase in new orders, the metal cutting sector recorded a significant decrease, which had a negative impact on the total orders trend.
- Total Taiwanese MT orders remained fairly stable on a quarterly basis but were down by 12% compared to Q1 2022. When examining the markets on an annual basis, domestic orders were down by 14%, and a similar trend can be observed for foreign orders (-12%).
- South Korean manufacturers recorded a total new orders growth of 26% on a quarterly basis in Q1 2023. While this quarterly growth is observed in both domestic and foreign orders, it did not reach the level of Q1 2022.
- US machine tool orders data for Q1 2023 were not available at the time of writing.



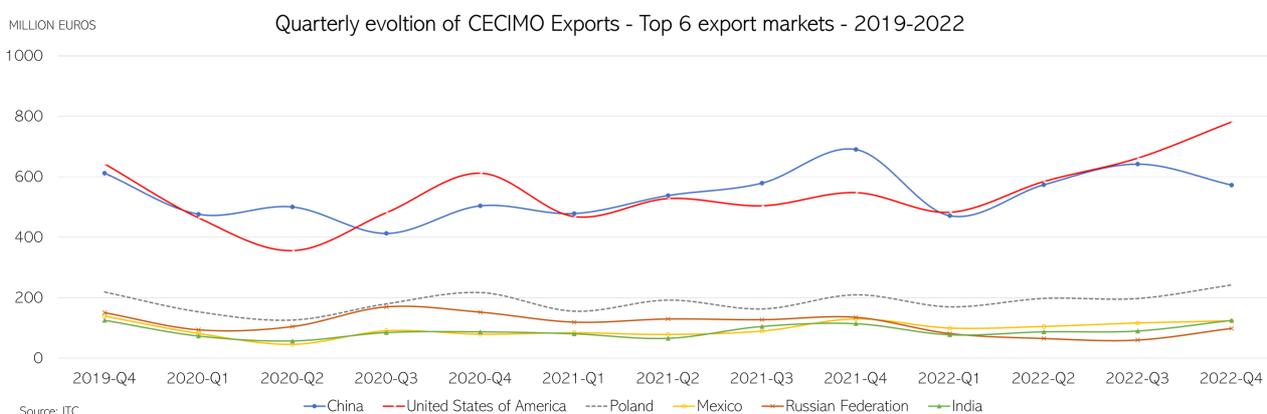
1.2 CECIMO TRADE (M)

Note: The following analysis refers to Q4 2022 trade figures. ITC Q1 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 2022.

Q4 2022 Exports

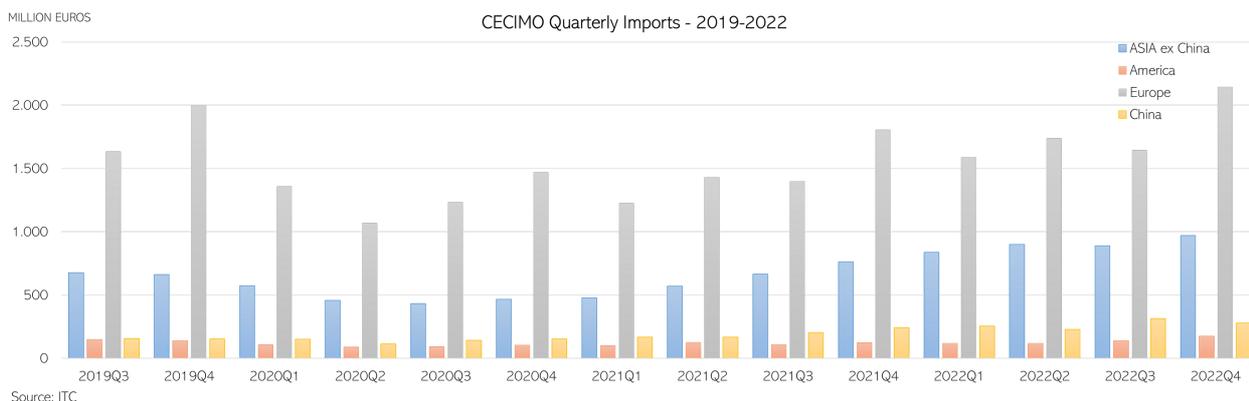


- Looking at the most recent quarter, total MT exports increased by 21% on a quarterly basis in Q4 2022, and the level of exports remained 13% higher than in the same period a year earlier.
- Following decrease in Q3 2022, MT exports on domestic market increased by 29% in last period of 2022.
- Compared with the previous quarter, exports to China fell by 11% on a quarterly basis, while exports to the rest of Asia rose by 22%, reaching their highest quarterly level since Q4 2019.
- The strong export growth was recorded for exports to the CIS region (+51%), Africa (+49%) and to the group of Other countries (+41%).
- Exports to the Americas reached a record high in Q4, rising 16% compared to the previous quarter.
- With strong growth in total exports in the fourth quarter of 2022, CECIMO exports in 2022 reached the level of around 19.1 billion euros.



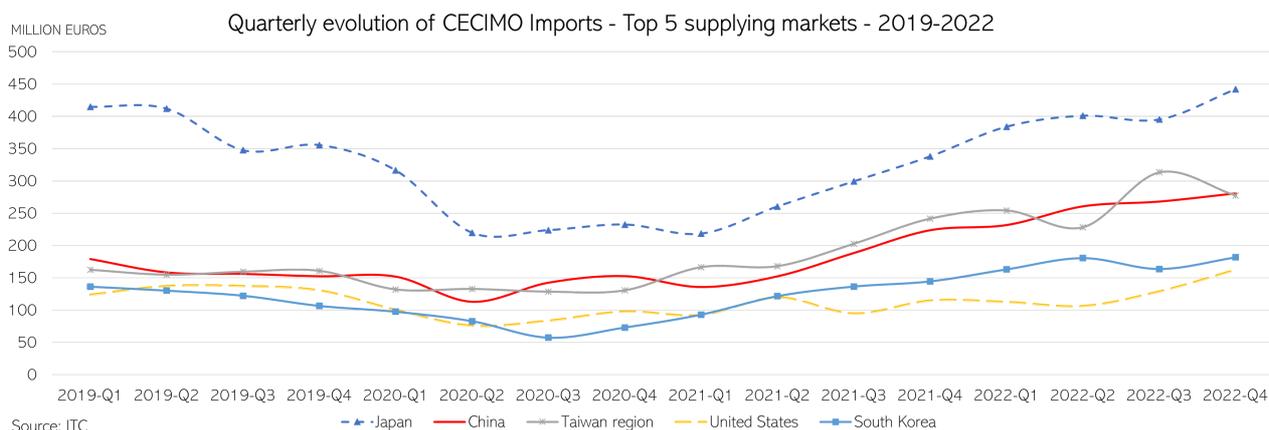
- As the graph above shows, the United States remained the main MT export destination for the CECIMO countries in the last quarter. Thanks to strong export growth, the USA was the main export destination for the CECIMO countries in 2022, with China not far behind in second place.

Q4 2022 Imports



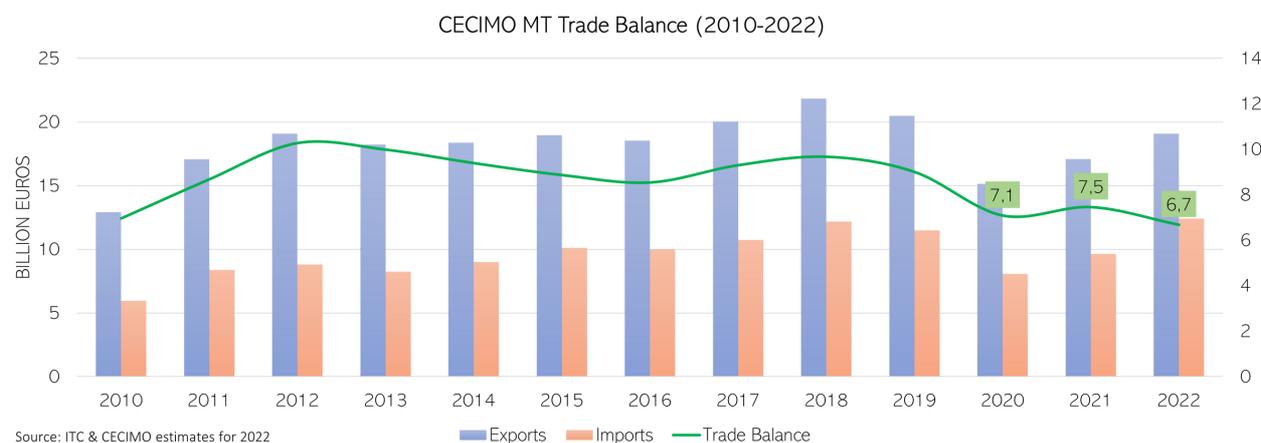
- The last quarter of 2022 brings significant growth in total CECIMO exports. With a growth of 19%, total imports reached a record quarterly import value, 22% higher than in the same period of the previous year.
- The graph above shows that the largest increase in imports was recorded within the domestic market - Europe (+30%), with imports from the Americas also growing strongly (+25%).

- Looking at Asia, a decrease in imports from China (-11%) can be seen, while imports from the rest of Asia improved by around 9%.
- Imports from the CIS region continued to fall, by 23% in the last period of 2022.
- After improvements in the previous three quarters, imports from Africa region decreased significantly in the last period of 2022 (-57%).
- Looking at the full year, total CECIMO imports improved by around 27% compared to 2021, reaching a level of around 12.4 billion EUR.



- As shown in the graph above, there is a visible improvement in MT imports from Japan, China, South Korea and the United States. The only decrease was recorded for MT imports from Taiwan. Japan remained the CECIMO countries' main supplier of MT in 2022.

CECIMO Trade Balance



- The graph above shows CECIMO's latest trade balance estimates for 2022 (last updated in May 2023).
- CECIMO's total exports increased by about 10% in 2022, while imports increased by about 27% compared to the previous year. In value terms, this resulted in a positive trade balance of around 6.7 billion euros.

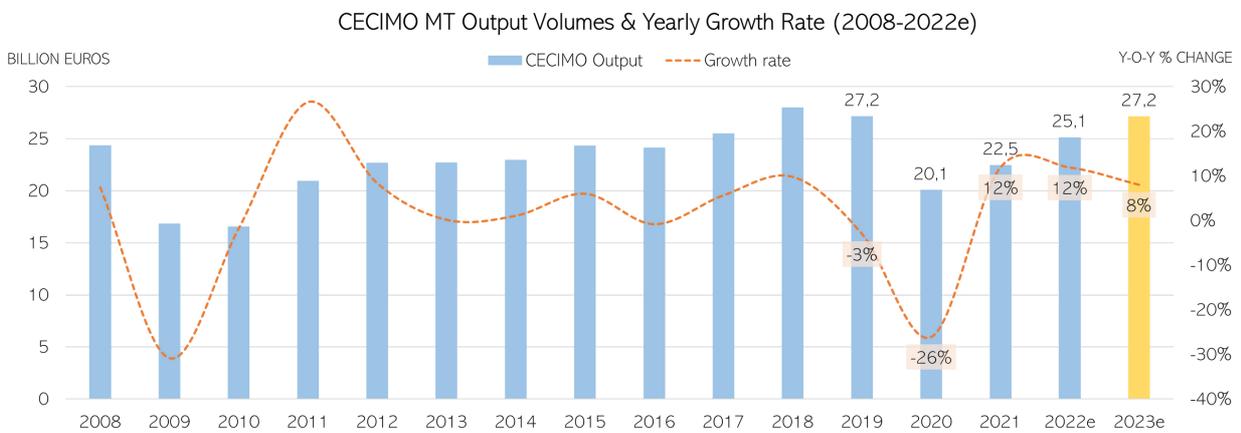
1.3 PRODUCTION (M)

According to the CECIMO Global MT report 2022, world MT production in 2022 reached the level of about 79,5 billion EUR (55,94 billion EUR in Metal cutting sector and 23,53 billion EUR in Metal forming sector). This reflects an increase in total MT production at the global level of around 12% compared to 2021, and around 7,9% higher compared to 2019.

- Looking at sectors, the top five producing countries in the Metal cutting sector in 2022 were China (29,2%), Japan (14,0%), Germany (12,8%), the United States (7,4%) and South Korea (6,1%).
- The top five producing countries in the Metal forming sector in 2022 were China (39,9%), Italy (13,3%), Germany (9,9%), the United States (6,2%) and Japan (5,6%).

Production in the CECIMO countries reached the level of more than 25 billion euros in 2022.

- In terms of world share, this level is about 31,6% and it is important to note that the CECIMO countries cover about 97% of the total European MT production.
- The top five CECIMO MT producers in 2022 were Germany, Italy, Switzerland, Austria and Spain.



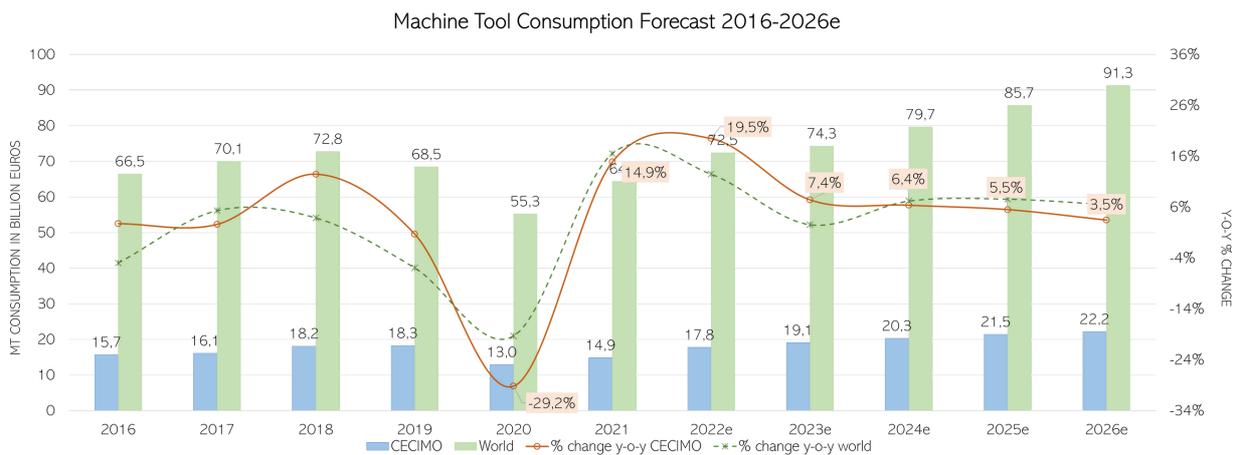
Thanks to high order backlogs and very high capacity utilisation, MT production growth is expected to remain very stable in 2023. In line with this, it is important to highlight that during the CECIMO General Assembly in Turkiye in May 2023, the Chairman of the Economic Committee, Mr Marcus Burton, announced the first estimates of CECIMO machine tool production growth of about 8% in 2023. As shown in the previous chart, in terms of volume, this would mean that pre-pandemic 2019 production would be reached in 2023.

2. DEMAND

2.1 CECIMO CONSUMPTION (M)

Note: Consumption = Production + Imports - Exports

The latest report from Oxford Economics, the Global Machine Tool Outlook (April 2023), provides a new update on expectations for growth in global machine tool consumption. Although the overall growth rate has been revised downwards, CECIMO's forecast for machine tool consumption in 2022 has been revised upwards. As a result, the CECIMO countries are now expected to experience a significant annual growth rate of around 19.5% in machine tool consumption in 2022. The following graph shows that growth is expected to be more moderate in the following years: +7.4% in 2023 and +6.4% in 2024.



Source: CECIMO & Oxford Economics

2021-2025 estimates are based on OE consumption estimates for Germany, Italy, Switzerland, Austria, Spain, Czech Republic, France, UK and Turkey (October 2022)

The baseline scenario indicates that global GDP is expected to increase by 1.7% in 2023 and 2.5% in 2024. In Europe (including Russia), GDP growth in 2023 is expected to increase by 0.2% in 2023 and 1.4% in 2024.

According to a new report, order backlogs, though showing signs of weakening, are at high levels and will support MT consumption in 2023. However, Oxford Economics has slightly downgraded the outlook for global MT consumption in 2023 and 2024.

- Global MT consumption is expected to grow by 2.6% in 2023 before rising to 7.2% in 2024, compared with 3.4% and 7.7% respectively in the previous report.
- European MT consumption (including Russia) is projected to increase by 17.0% in 2022, 6.9% in 2023 and 8.6% in 2024.
- Chinese MT demand is expected to increase by 3.7% in 2023 and 5.6% in 2024, after a stronger-than-expected increase of 2.4% in 2022.
- US MT consumption is expected to fall by 7.2% in 2023 and recover by 9.9% in 2024.

As in the previous report, the main downside risks are related to the war in Ukraine, inflation, supply chain issues and the fiscal and monetary outlook. For global industry and MT's main purchasing sectors, the highest investment/production growth in 2023 is still expected to be in aerospace and motor vehicles (automotive). Global aerospace production is expected to grow in both the short and long term, but in the short term, ongoing supply chain disruptions are holding back growth. Regarding aerospace investment trends, global growth between 2020 and 2022 has been revised upwards, reflecting production trends. Chinese and Japanese investment has been stronger than expected in 2022, while data revisions for countries with large aerospace industries, such as the US, France and the UK, suggest that past investment trends have been stronger than Oxford Economics originally expected.

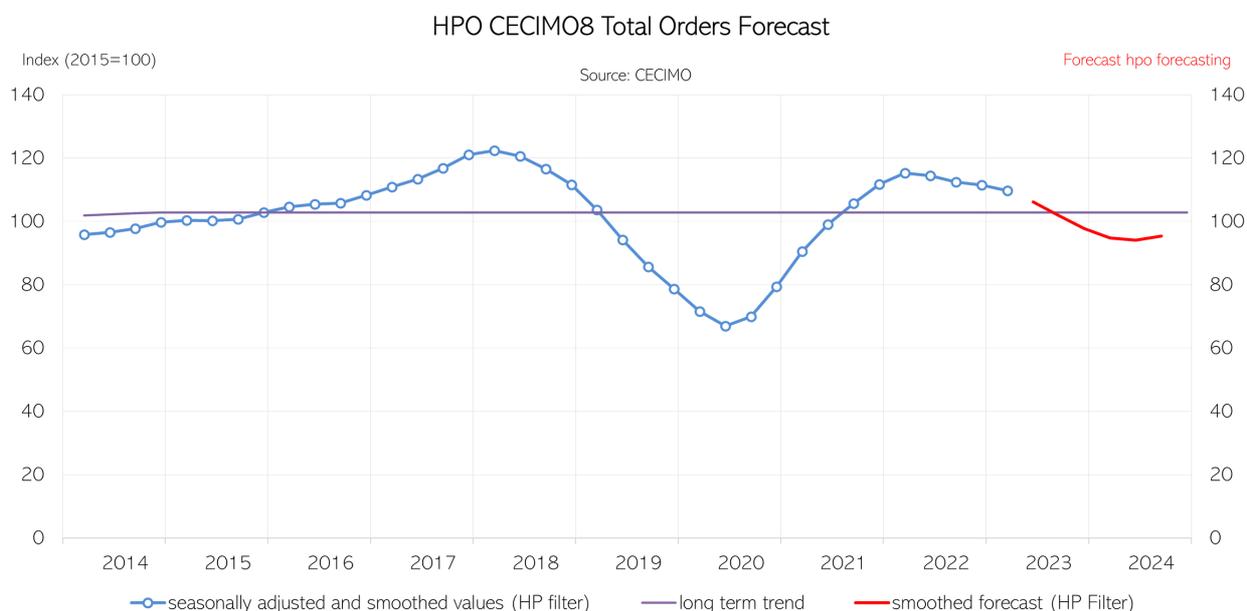
Looking ahead to 2023 and 2024, Oxford Economics expects significant investment growth in this sector in all three major regions: Asia, Europe and the Americas. Global investment spending by the automotive sector is expected to return to growth in 2023, however, machine tool manufacturers must exercise caution, because much of the investment is destined to support the transition to electric vehicles, for which machining requirements are much less than for conventional petrol-based power trains.

2.2 HPO CECIMO8 ORDERS FORECAST (M)

According to the latest economic commentary from HPO, inflation rates have had a significant impact on the disparity between nominal and real terms. When examining industrial orders over the past few quarters, it becomes apparent that there has been a stable level observed in nominal terms. However, in contrast, a decline is noticeable when considering the orders in real terms.

Overall, HPO's model calculations point to falling industrial new orders and a general slowdown in economic momentum in the coming quarters. This is in line with recent developments in the level of the BCI in three major economic regions (the US, China and Europe).

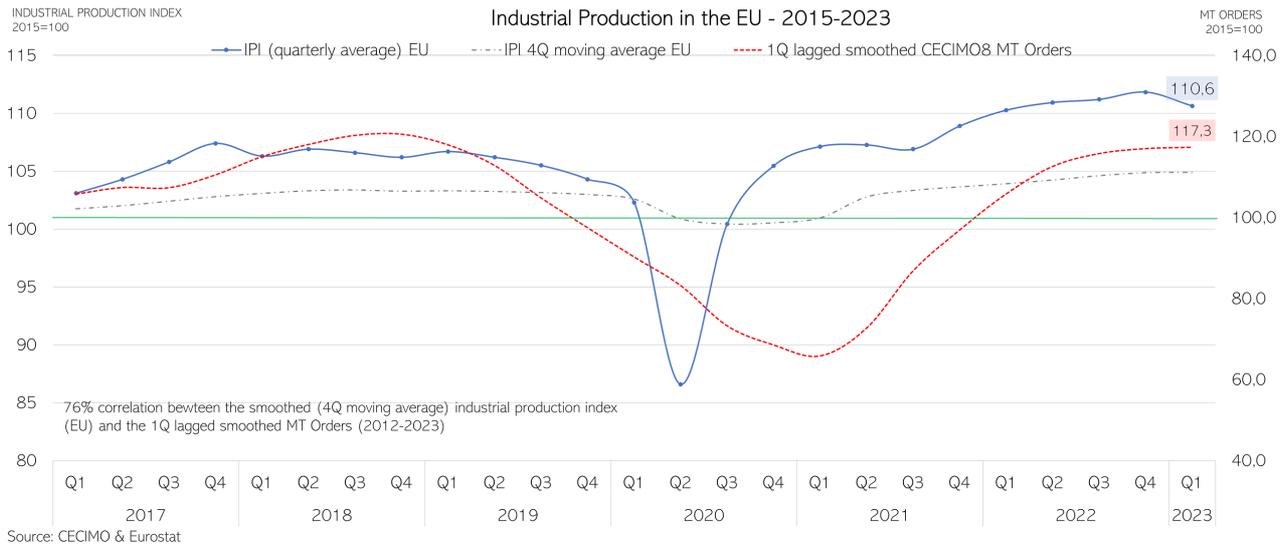
CECIMO8 Orders Forecast



Based on the most recent data, it is evident that smoothed new orders have outperformed the previous forecast. Despite this positive development, the outlook for the future remains largely pessimistic. Projections indicate a downward trajectory in the upcoming quarters, with the lowest point now anticipated to occur in the second quarter of 2024.

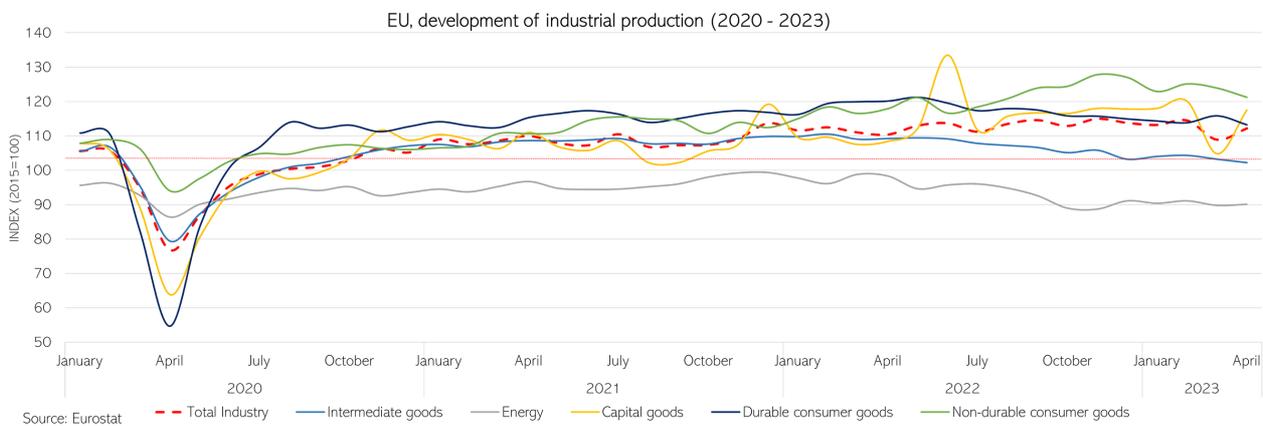
The latest forecast shows that the annual decline in total CECIMO8 orders is expected to be about 14% in 2023. This revised forecast represents a slight improvement compared to the previous estimate of -15%.

2.3 INDUSTRIAL PRODUCTION INDEX (M)



EU industrial production index (IPI) remains stable, but records slight quarterly decline in the first quarter of 2023. However, the high level of the index (above its historical average) still indicates a robust manufacturing dynamic within the European Union (EU). As a reminder, it is important to analyse this indicator because of its significant correlation of 76% with the level of CECIMO8 MT orders (4q moving average), as shown in the chart above. While positive developments in the index lead to positive expectations for CECIMO8 new orders, 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 remained slightly higher than in the first quarter of 2022.

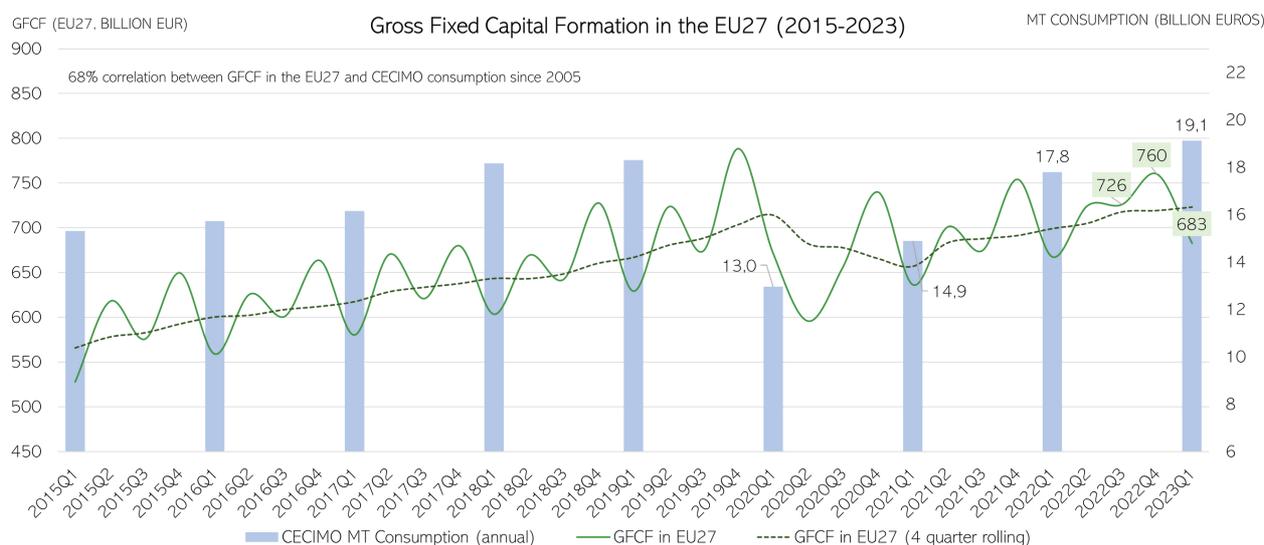


From a sectoral point of view, as in the previous quarter, the strongest quarterly decline in Q1 2023 was recorded in the capital goods sector (-2.7%). After a decline in the previous quarter, only the energy sector recorded an improvement in the first quarter of 2023 (+0.9%).

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).



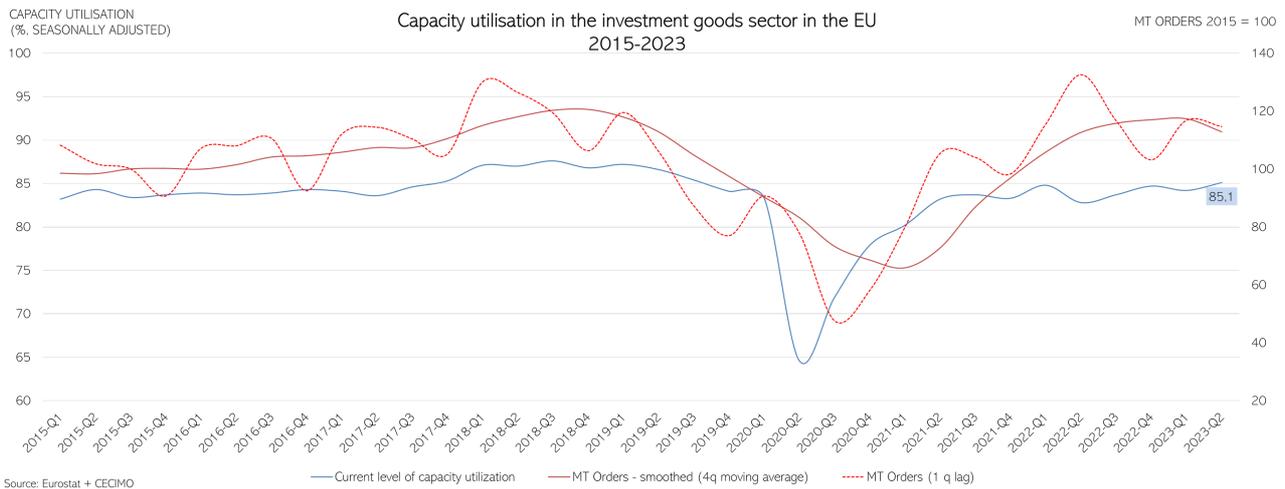
Gross fixed capital formation fell by 10.1% in the EU27 in the first quarter of 2023 compared with the previous quarter, according to the latest figures available from Eurostat. In absolute terms, investments amounted to 682.6 billion euro in the first quarter of 2023, a slightly higher value (+2.3%) compared to 667.2 billion euro in the same period of the previous year. While a significant decline can be observed on a quarterly basis, it is important to note that this is usually the case for the first quarter when we look at the historical data in the chart above. The average investment path is expected to remain positive throughout 2023.

Expected growth in the EU is likely to be fueled by new investments associated with the green and digital transition. In addition, as highlighted in the previous report, EU policies aimed at improving the resilience of supply chains, such as the Chips Act and the Raw Materials Act, are expected to stimulate investment in the region in the coming years. Despite considerations about the negative impact of rising interest rates, the overall outlook for investment in the EU remains positive, driven by emerging opportunities and supportive policies.

3.2 CAPACITY UTILISATION AND PRODUCTION CAPACITY (M)

Methodological note: The dates in this section refers to when the results were published; so, the Q2-2023 figures were published in Q2-2023 but reflect the position at the end of the previous quarter when the data collection took place (Q1 2023).

The latest capacity utilisation data for the EU capital goods sector show a slight improvement in Q2 2023, with an increase of 1.1% on a quarterly basis. As a result, the indicator now stands at 85.1 points, above its historical average and the highest level reported since the third quarter of 2019.



At the national level, the Czech Republic exhibited the highest capacity utilization rate, showcasing the most significant improvement, as indicated in the table below. Apart from the Czech Republic, Austria and Germany also observed higher capacity utilization rates compared to the previous quarter. However, Italy and Spain experienced lower levels and a decline on a quarterly basis.

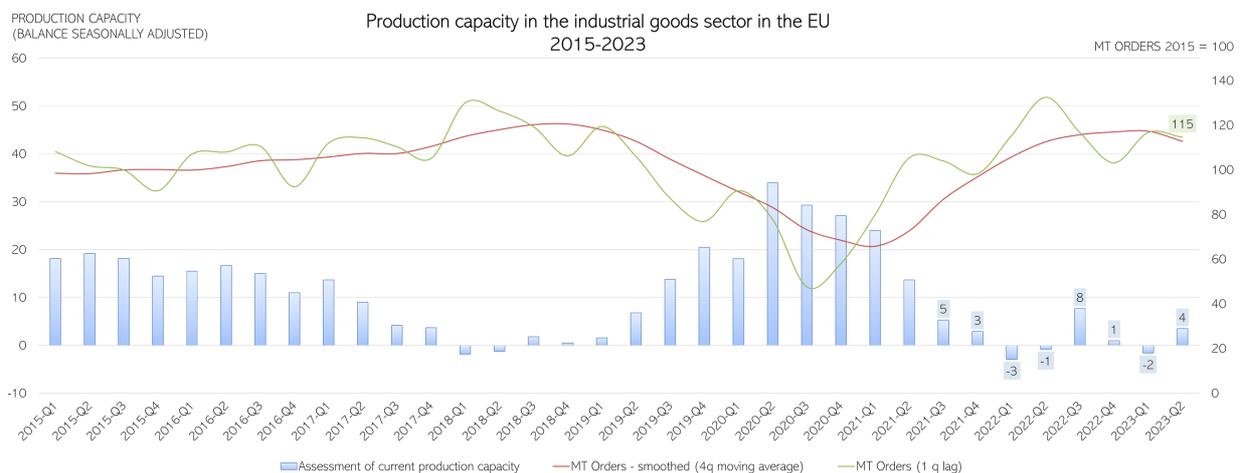
Capacity Utilisation (% of total capacity)

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

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.

In the second quarter of 2023, the spare capacity in the EU's industrial goods sector witnessed a slight increase, reaching 4%. This level represents the highest since Q3 2022. Although the spare capacity remains slightly above zero, it signifies that companies have limited room for further production expansion. While high levels of capacity utilization are positive indicators of production growth, the existence of very low spare capacity prompts companies to invest more in expanding their production capacities.



Analysing the selected CECIMO countries, a decline in spare capacity was observed in Austria, the Czech Republic, and Italy. While the level of spare capacity remained negative in France and Spain, spare capacity in Germany moved out of negative territory (+6.1%).

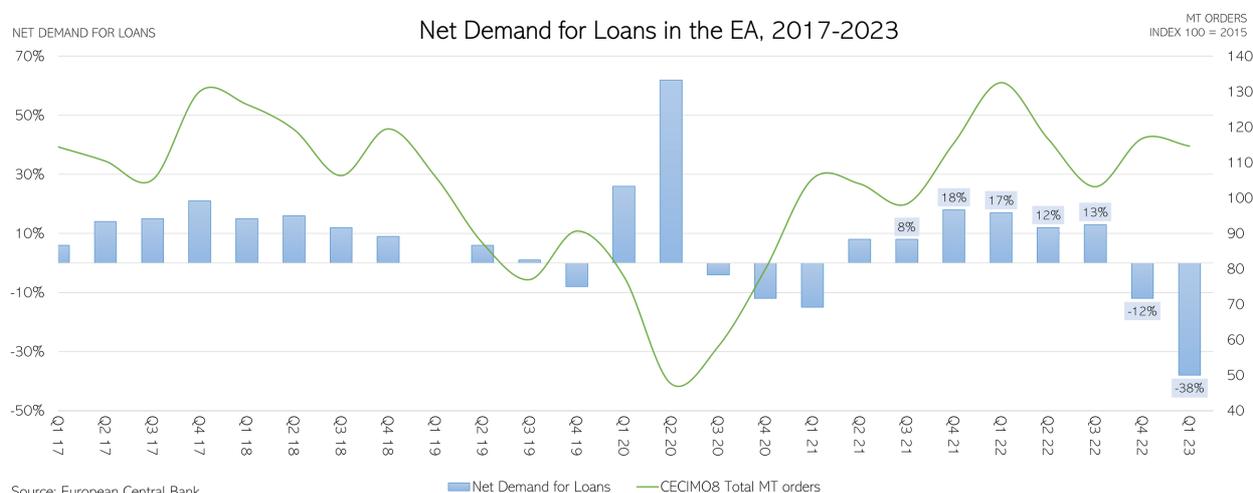
Production Capacity (balance in %)

	Q2 2021	Q3 2021	Q4 2021	Q1 2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023
Austria	13,2	-3,6	-3,3	-5,6	-2,2	-8,5	6,3	9,4	-4,4
Czech Republic	9,1	9,3	12	9,1	49,2	9,1	10,3	44,1	11,3
France	32,7	22,2	17,5	-4,1	-0,7	9,5	-14,9	-23,3	-9,3
Germany	7,8	3,1	-8	-6,5	-5,3	14,3	4,6	-5,0	6,1
Italy	24,9	20,5	15,9	16,4	14,2	12,8	12,9	16,1	11,2
Spain	13,1	-14,3	16,8	-19,1	-6,6	2,2	-10,2	-13,2	-4,5

Source: Eurostat

3.3 BANK LENDING SURVEY (M)

Note: The results reported in the April 2023 Bank Lending Survey (BLS) relate to changes observed during the first quarter of 2023 and expectations for the second quarter of 2023.



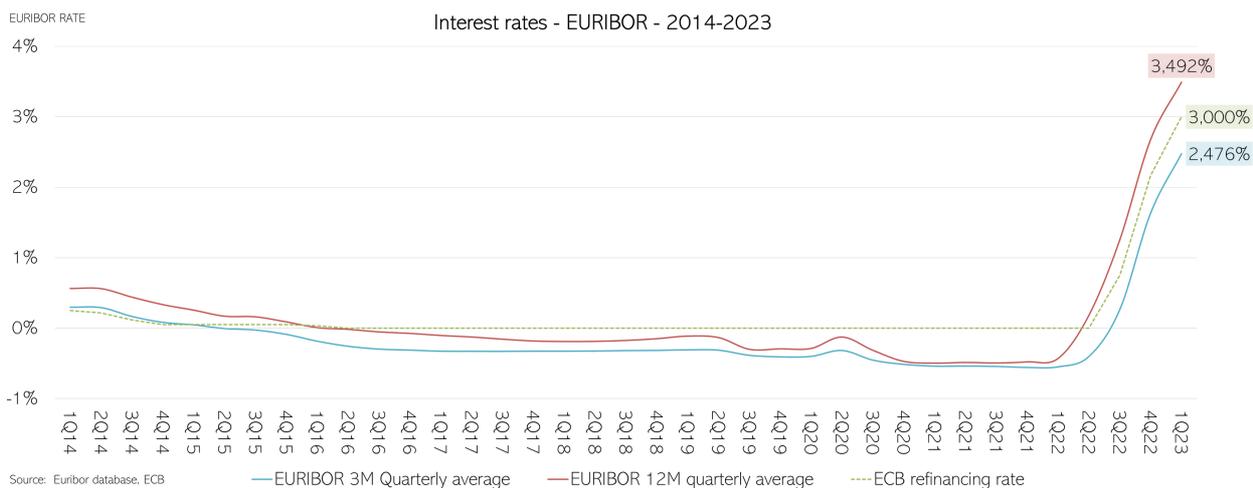
Source: European Central Bank

- Credit standards** - euro area banks have further tightened their credit standards for loans or credit lines to enterprises in the first quarter of 2023 (27%, after 27% in the fourth quarter of 2022). The tightening was stronger than banks had expected in the previous quarter and points to a persistent weakening of loan dynamics. As reported by banks, risks related to the economic outlook and firm-specific situation remained the main driver of the tightening of credit standards.
- Banks' overall terms and conditions** on new loans to enterprises tightened further in the first quarter of 2023, although to a lesser extent (net percentage of 24%, down from 38%). The tightening of terms was primarily driven by increased margins on riskier loans and, to a lesser extent, on average loans, according to the ECB.
- Rejected loan applications** - following the additional tightening of credit standards, euro area banks reported the largest net increase in the share of rejected applications for loans to enterprises in the first quarter of 2023 since this question was introduced in 2015.
- Net demand for loans** - there was a significant decrease in net demand for loans in the first quarter of 2023 (net percentage of banks at -38%, compared to 12% in the fourth quarter of 2022). This represents the most substantial net decline since the fourth quarter of 2008, during the global financial crisis. Banks reported that the decline in demand was particularly notable for long-term loans. It is also important to note that demand for loans to enterprises fell in all four of the largest euro area countries.

- Looking ahead to the **next quarter** - in the second quarter of 2023, banks expect a further, smaller net decline in the demand for loans to enterprises (net percentage of -18%). However, the impact on long-term loans is expected to be more pronounced than on short-term loans. Similar rates of decline are expected in net demand for loans to both SMEs and large enterprises.

3.4 EURIBOR (M)

In line with the measures taken by the ECB to address inflationary pressures, the ECB's refinancing rate rose to 3.00% in February and 3.50% in March. On average, this means that in the first quarter of 2023, the refinancing rate was around 3.00%. The EURIBOR 3-month average rate increased to 2.476%, while the 12-month average reached the level of 3.492%.



Considering more recent developments, it is evident that the ECB's refinancing rates have continued to rise, reaching 3.75% in April and 4.00% in June. As a result, it is expected that there will be a rise in the average level of interest rates in the second quarter.

It is important to highlight that the previous increases in rates have already begun to strongly affect financing conditions, progressively influencing the overall economy. As a result, the costs associated with borrowing have seen a significant increase, leading to a deceleration in loan growth. Nevertheless, according to the ECB, it is important to note that the tightening of financing conditions plays a vital role in the projected decline of inflation towards its target (2%), as it is expected to progressively curb demand.

In view of the upward trend in interest rates, it is important to be aware of both the positive effects of these measures on inflation and the potential negative effects on financing sources for companies and investments in general.

According to the latest decisions (15 June), the ECB has announced that it will stop Asset Purchase Programme (APP) reinvestments from July 2023. With regards to the pandemic emergency purchase program (PEPP), the Governing Council plans to reinvest the principal payments from maturing securities acquired through the program until at least the end of 2024.

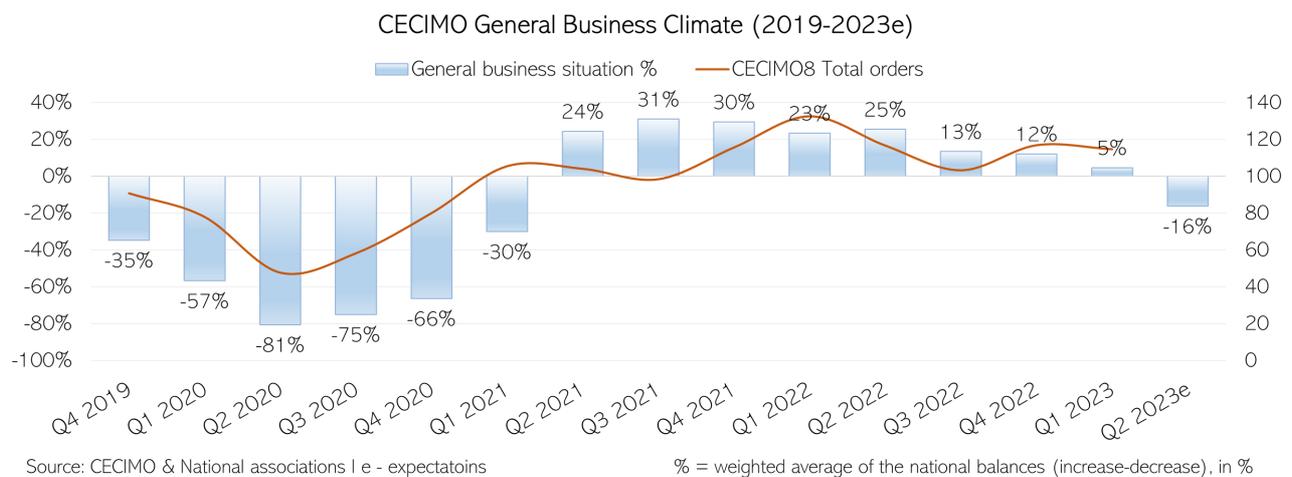
4. BUSINESS CLIMATE

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.

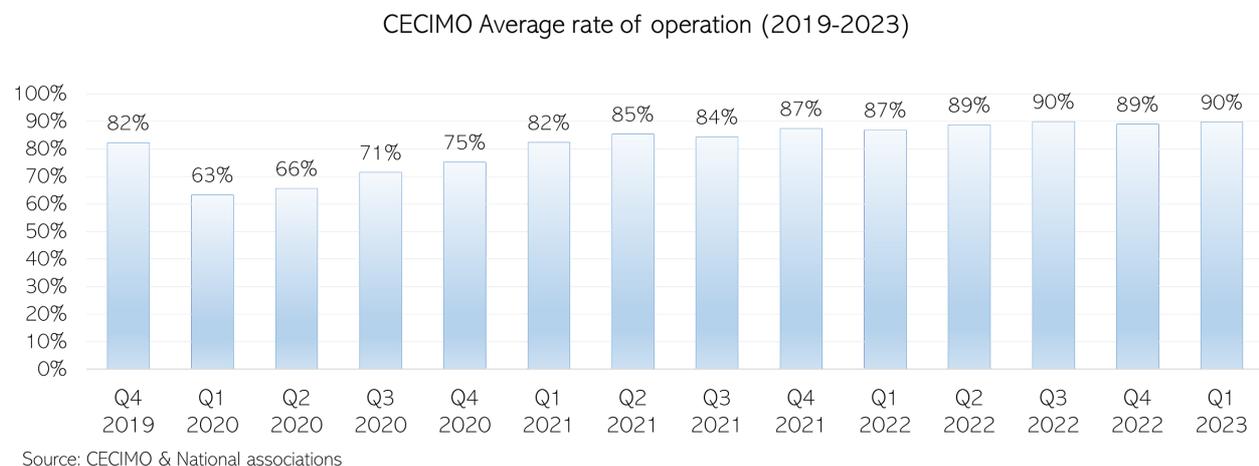
Methodology: CECIMO & National association surveyed individual companies and assessed their current business climate and their expectations (next q) in relation to demand, domestic production, export sales and employment. The responses of the CECIMO BCB are analysed as the difference (net percentage) 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: Q1 2023 results are based on the responses of the following CECIMO countries: Austria, Switzerland, Germany, the United Kingdom and Italy.



According to the latest results of the CECIMO Business Climate Barometer, our machine tool manufacturers have expressed a lower, but still positive business climate in the first quarter of 2023, with a net positive balance of 5%. This level is 7 percentage points lower than in the last period of 2022. However, the expectations for the general business climate in Q2 2023 are moderately negative (-16%).

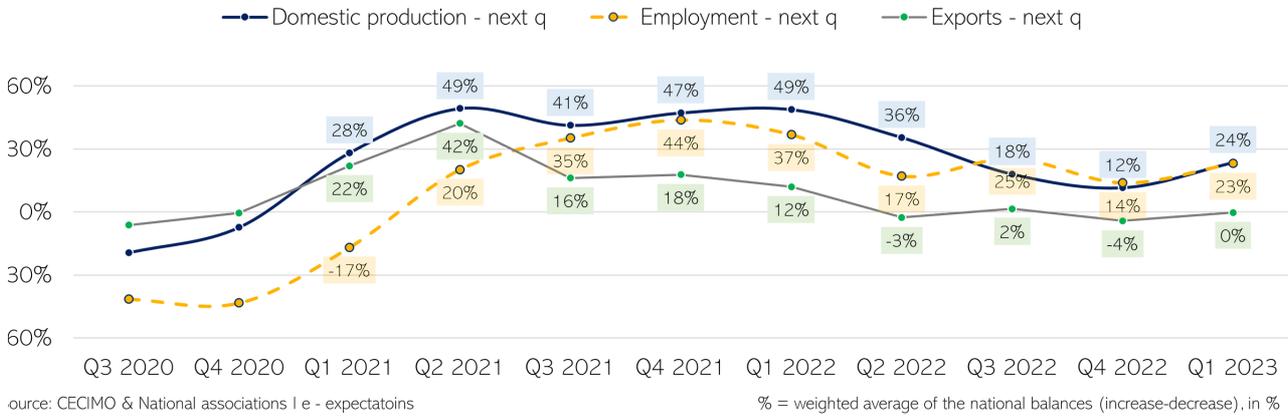
The average capacity utilisation rate of CECIMO's MT builders remained high at 90% in the first quarter of 2023, roughly the same as in the previous reference period. The high level of capacity utilisation in previous quarters is in line with the EU average mentioned before and confirms the high orders backlogs of our MT builders.



Managers' expectations for domestic production are slightly higher than in previous surveys (growth-down balance +24% compared with +12% in Q4/2022). While export expectations are more stable, employment expectations are also positive (growth-down balance +23%) and higher than in the previous survey period.

Similar to the previous survey, the main factors limiting their production in this survey round were shortages of materials or raw materials, labour shortages and lack of production capacity.

Expectation in the next quarter: Domestic production, Employment, Exports



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 (May) were collected in mid-May 2023.

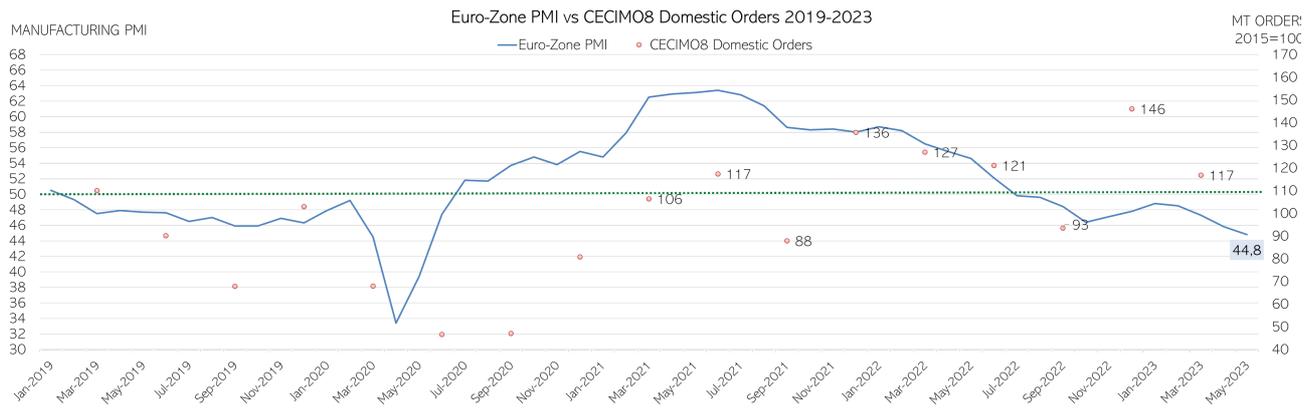
Note: The presentation of data and explanations has been slightly modified. In previous editions, we analysed changes between two periods as a percentage change. However, Starting from this issue, we have implemented a new approach where we will focus on the absolute change of the index between two periods.



The J.P. Morgan Global Manufacturing Purchasing Managers' Index (PMI) fell from 50.0 points in February to 49.6 points in March, after improving in the first two months of the year. As shown in the chart above, the index remained stable at this level for the following two months, April and May.

While manufacturing production showed improvement for the fourth consecutive month in May, thanks to enhanced supply chain conditions, the demand side of the equation remains a concern. Both domestic and export orders experienced a faster decline in May compared to the results of the April survey. Notably, the output growth was primarily driven by Asia and North America, whereas Europe reported a downturn. Although there have been positive developments in input costs and the supply chain situation, business optimism continued to decline in May. Global manufacturers, on average, expect an increase in production over the next 12 months, but confidence levels reached their lowest point since December 2022.

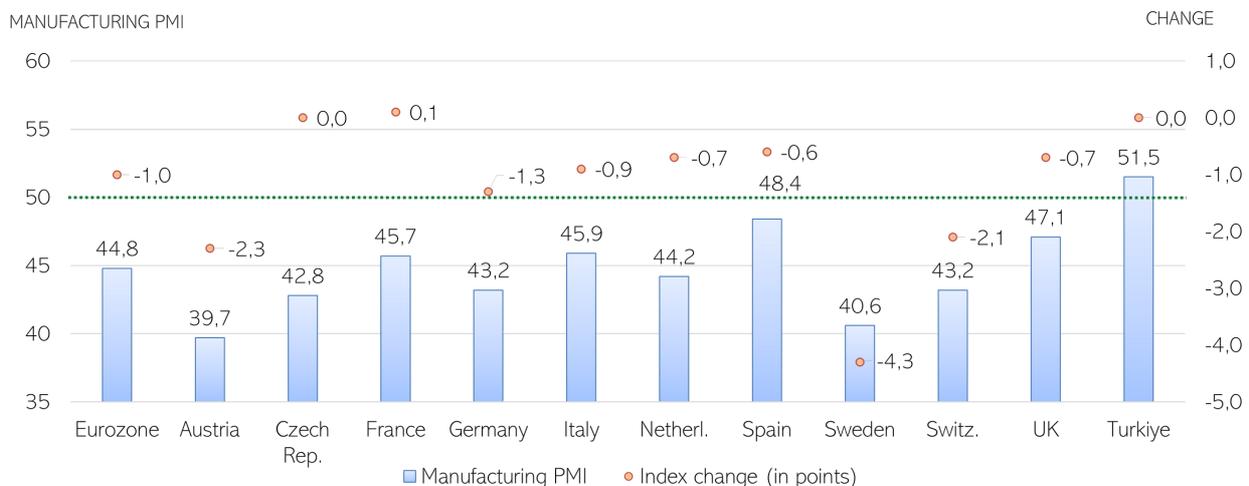
Eurozone Manufacturing PMI



The eurozone manufacturing PMI has continued to deteriorate since December 2022, reaching a 36-month low in May 2023 at a level of 44.8, reflecting a decrease of 1 index point compared to April. According to the latest HCOB PMI survey, production volumes experienced the fastest decline since last November, primarily due to a growing drag from weakened demand. Additionally, new orders also fell to the greatest extent in six months.

As highlighted in our previous report, specific concerns revolve around export orders, which experienced a sharp deterioration in May, marking one of the steepest declines on record. However, there have been positive developments in the form of reduced input costs, driven by lower supplier charges and declining energy prices.

PMI & monthly index change - Europe - May 2023



Austria

The Austrian PMI has been on a deteriorating trend since December 2022. After experiencing decreases in the previous five months, the headline PMI reached a level of 39.7 points in May, marking its lowest level since April 2020. The worsening situation can be attributed primarily to sharp and accelerated output and new (domestic and export) orders. As pointed out in the survey, companies mentioned demand suffering of rising interest rates and clients delaying orders due to uncertain economic outlook. Business confidence deteriorated further and remained in negative territory.

Czech Republic

The Czech PMI has experienced further deterioration over the past few months, reaching a level of 42.8 points in April. Although the index level remained the same in May, it is worth noting that it still indicates an unfavourable situation, primarily due to a significant decline in output and a contraction in new orders. Like in Austria, managers in the Czech Republic reported improvements in terms of input costs. Despite being among the strongest in a year, expectations remained historically weak, as companies did not observe any signs of the challenging conditions easing.

Germany

In May, Germany showed a contraction in manufacturing output, marking the first decline in four months according to the latest PMI developments. This trend is consistent with other eurozone countries, where weak demand persisted throughout the month. Notably, export orders experienced their sharpest decline since October. The PMI index dropped to 43.2, a decrease from April's 44.5 and the lowest recorded in three years. Although there were positive reports concerning employment from managers, the outlook for manufacturers took a pessimistic turn in May, marking the first instance of such sentiment in 2023. This shift in expectations can be attributed to concerns over the global economy, geopolitical tensions, rising interest rates, and a general hesitancy among clients.

Spain

Similar to Germany, Spain experienced a decline in new orders and a contraction in output, leading to a decrease in the PMI from 49.0 in April to 48.4 in May. Notably, positive developments were observed in terms of improved supply conditions. Furthermore, the moderation in energy and raw material prices played a significant role in reducing costs for businesses. Looking ahead, companies in Spain displayed optimism in their projections for future output, indicating a positive outlook for the upcoming year.

France

After experiencing a four-month decline in 2023, the PMI index in May remained at nearly the same level. With a value of 45.7, there was only a slight change from April's 35-month low of 45.6. This indicates a significant deterioration in business conditions compared to the previous month. Notably, factory output levels continued to decrease for the twelfth consecutive month in May, and French manufacturers witnessed a sharp reduction in new orders. Although managers remained optimistic regarding the next 12 months, the degree of confidence weakened further in May.

Italy

The HBOC Italy Manufacturing Purchasing Managers' Index (PMI) registered a decline to 45.9 in May 2023, marking the steepest contraction in three years. This figure fell from April's reading of 46.8, slightly below the market's anticipated level of 45.6. Production experienced a significant decline, reaching its lowest point since October of the previous year, while new work contracted at a rate not seen since November 2022. In terms of prices, input costs witnessed the most substantial decrease in 14 years, while output prices declined for the third consecutive month, reaching the sharpest pace in three years. Business optimism also declined, hitting a three-month low, although it remained above the long-term trend.

Netherlands

The Dutch manufacturing sector continued to experience a downturn in the second quarter of the year, with no signs of improvement. The latest headline PMI reading for the sector was 44.2, down from 44.9, indicating a ninth consecutive month of declining operating conditions. This represents the sharpest decline observed in three years. Both new orders and output showed further deterioration compared to the previous month, resulting in reduced purchasing activities by companies. Despite the ongoing challenges in the market, companies expressed optimism regarding their future output, projecting positive growth over the next 12 months.

Sweden

The Swedish PMI experienced a significant decline in May 2023, dropping to 40.6 from a downwardly revised 44.9 in the previous month. This marks the tenth consecutive month of contraction and the most severe drop since May 2020. The deterioration was primarily driven by a further weakening in order intakes and a decline in employment levels. Among other indicators, production levels also decreased. On a more positive note, input costs showed a decline as supply-side pressures eased considerably.

Switzerland

In May 2023, the Swiss Manufacturing PMI continued its downward trend for the fifth consecutive month, reaching a reading of 43.2. This represents the lowest level since June 2020, compared to April's reading of 45.3. As a result, the index remained below the crucial threshold of 50.0, indicating an ongoing decline in the operating conditions of the manufacturing sector compared to the previous month. The headline figure reflects significant declines in both output and purchasing activity, along with weaker employment growth.

Türkiye

Since January 2023, the Turkish manufacturing PMI index has consistently remained above the crucial threshold of 50 (no-change), indicating positive conditions in the sector. According to the latest data, the headline PMI remained unchanged at 51.5 in May, marking the fifth consecutive month above the 50.0 mark. This indicates continued improvement in business conditions within the Turkish manufacturing sector. In contrast to other European countries, Turkish manufacturers reported positive developments on the demand side, leading to an increase in production volumes for the third consecutive month. Additionally, there were encouraging signs regarding inflationary pressures. However, it's worth noting that input costs continued to rise, often influenced by currency weakness.

United Kingdom

The CIPS UK PMI declined to a four-month low of 47.1 in May, compared to 47.8 in April. All of the PMI components, including output, new orders, employment, stocks of purchases, and supplier lead times, indicated a decline in operating performance. Nevertheless, manufacturers maintained a positive outlook in May, with 57% expecting higher production levels in the next 12 months, while only 7% anticipated a contraction. This optimism was attributed to factors such as new product launches, expectations of a more favourable cost environment, and the possibility of a market recovery.



China

The Chinese PMI index has shown signs of recovery, marking an improvement in the health of the manufacturing sector since February after experiencing declines in March and April. In May, the PMI rose from 49.5 to 50.9, surpassing the critical 50.0 level. This positive shift can be attributed to stronger order intakes and increased production levels. Additionally, improved supply chains have contributed to a reduction in cost pressures during May. While there have been notable improvements in output and demand, it is worth mentioning that business confidence regarding the 12-month outlook for production declined to a seven-month low.

India

The Global India Manufacturing PMI experienced a significant increase from 57.2 in April to 58.7 in May, signalling the sector's most robust improvement since October 2020. This positive trend can be attributed to a favourable economic climate, as evidenced by higher output levels driven by strong demand. Particularly noteworthy is the remarkable expansion in new export orders, with companies registering the fastest growth in international sales in six months, leading to increased output levels. Despite concerns about inflation rates, it is important to highlight that business confidence regarding growth prospects reached a five-month high in May. This positive sentiment indicates a renewed optimism among businesses regarding future growth and development.

Japan

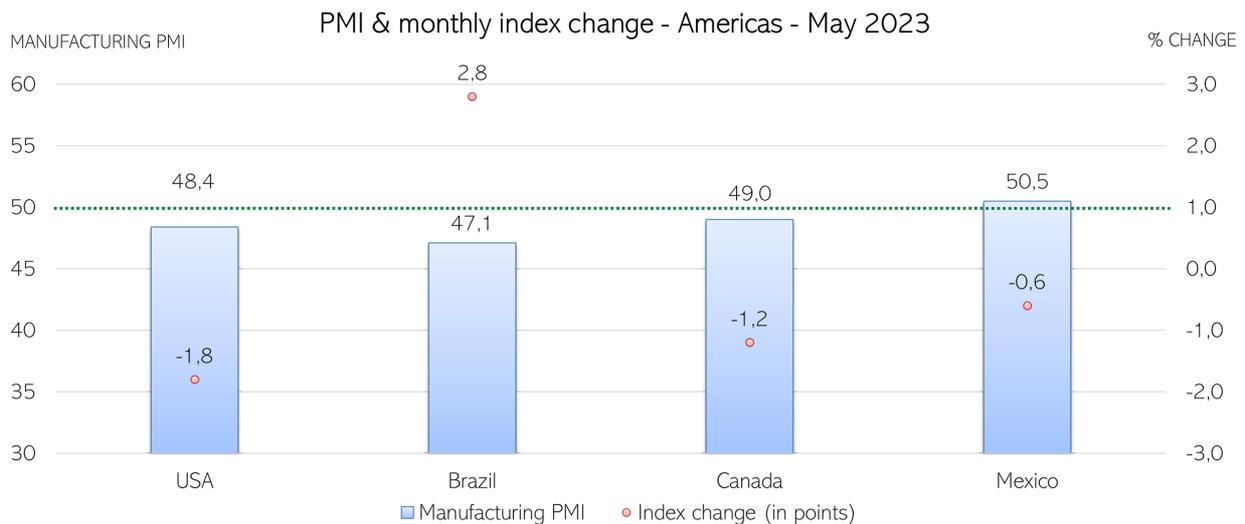
Following six months of unfavourable business conditions, the Japanese PMI index displayed signs of improvement in May 2023, reaching a level of 50.6 points. This modest overall improvement in operating conditions can be attributed to increased output levels, indicating a positive shift in the sector. Furthermore, total new orders experienced their fastest pace of growth since April 2022, signifying an encouraging uptick in demand. Additionally, employment numbers witnessed a slight increase in May and companies reported more optimistic expectations for the upcoming period, reflecting a growing confidence in future prospects.

South Korea

South Korea's manufacturing PMI continued to depict unfavourable conditions throughout the first quarter of 2023, extending into April and May. The latest data reveals a marginal improvement, with the index ticking up from 48.1 in April to 48.4 in May. However, it still remained below the 50.0 no-change mark. This marks the eleventh consecutive month of deterioration as production, new orders, and exports continue to experience contraction. On a positive note, there was a renewed increase in employment levels during May, suggesting a potential stabilization in the job market within the manufacturing sector. Additionally, the 12-month outlook for output strengthened, reaching a ten-month high during May.

Taiwan

After experiencing a modest improvement in the PMI index in February 2023, the following three months have seen a further decline in business sentiment among Taiwan manufacturers. The PMI index dropped from 47.1 in April to 44.3 in May, indicating a significant deterioration in business conditions during the second quarter. Companies reported the most substantial reductions in output and total new business since the beginning of the year, primarily due to weaker customer demand. Managers have also expressed a negative impact on employment levels as a result of the declining demand. Despite challenges, managers have maintained an optimistic outlook for the next 12 months.



United States

After experiencing two consecutive improvements in the PMI level in March and April, reaching a favorable zone of 50.2, the US PMI dropped to 48.4 in May. This latest figure indicated the most rapid deterioration in operating conditions since February. Although output continued to rise, manufacturing firms reported a significant and steady decline in new orders during May. Similar to other countries, input prices have decreased in recent months, and managers have also observed solid employment growth, among the fastest in two years. Despite the challenging circumstances, US manufacturers expressed continued confidence in the outlook for output over the next 12 months.

Canada

The Canadian PMI declined to 49 index points, moving into contractionary territory following 50.2 points in the previous month. Manufacturers continued to experience a decline in new orders, mainly due to lower demand impacted by elevated borrowing costs. With demand levels remaining consistently low, firms relied on backlogs of work to maintain production levels. However, the recent clearance of these backlogs resulted in a renewed contraction in Canadian manufacturing output in May. In addition, firms reported that their purchasing levels had fallen for the tenth consecutive month and that they had cut employment for the first time since October last year.

Mexico

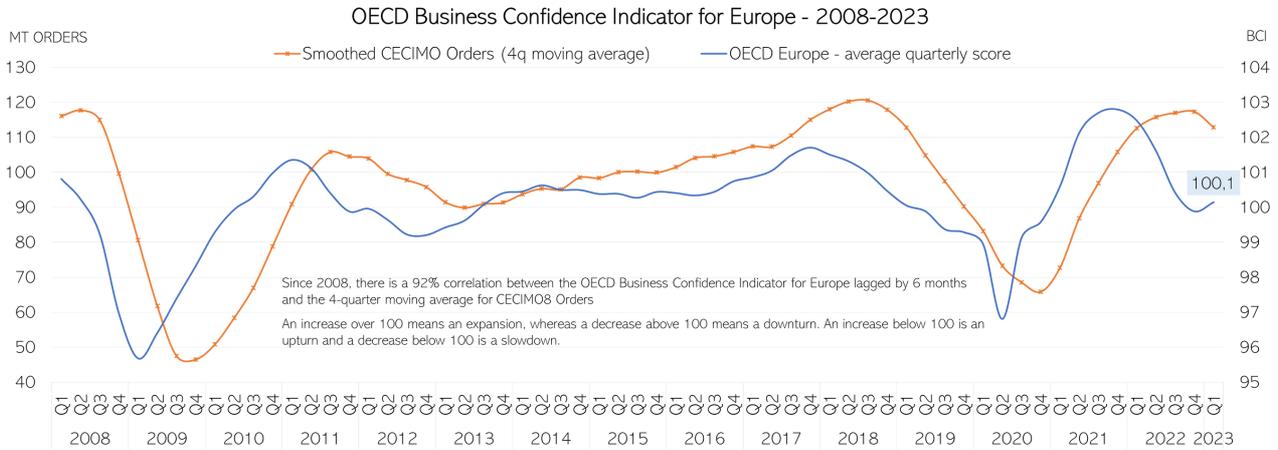
The Global Mexico PMI registered 50.5 in May, remaining above the neutral level of 50.0 and signalling a further improvement in operating conditions. However, the headline figure fell to a four-month low from 51.1 in April, with the PMI results showing that sales and output levels fell in May after expanding in April. Cost inflation eased to a 20-month low, but continued increases in input prices posed solvency risks for some goods producers and their customers. In line with recent developments, business sentiment regarding the year-ahead production outlook weakened from April.

Brazil

The Brazilian manufacturing PMI stood at 47.1 in May, up from 44.3 in April. However, it still reflects the 7th consecutive month of contraction in Brazilian manufacturing activity. Both new orders and output continued to contract at a solid pace, although the rate of decline slowed. While employment fell only slightly and at the slowest pace in three months, there was also a marked improvement in suppliers' delivery times and lower input costs. Looking ahead, the overall level of positive sentiment improved to an eight-month high in May.

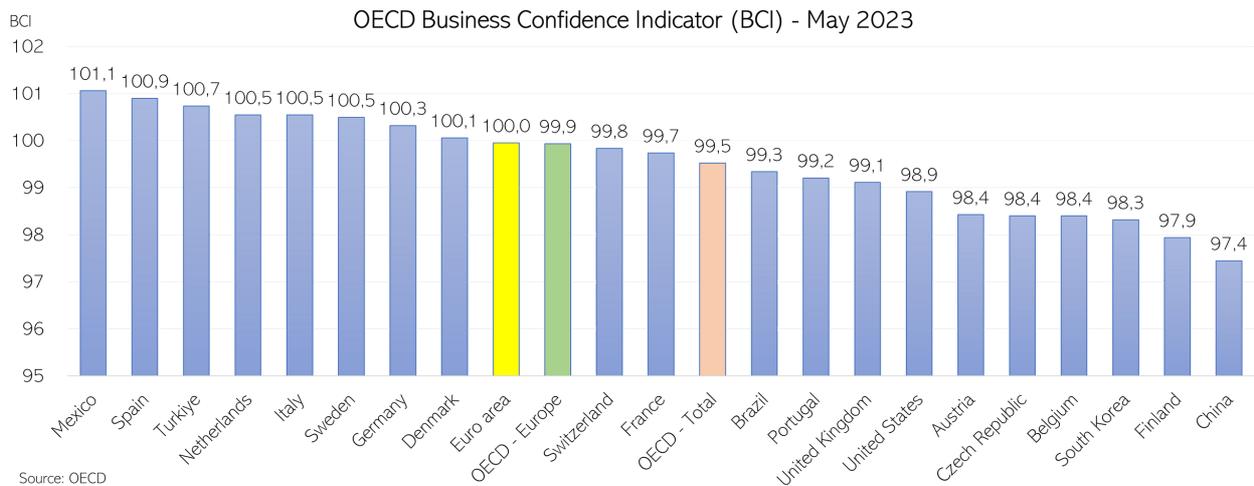
4.3 OECD BUSINESS CLIMATE INDICATOR (M)

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 downward trend that led to a level below 100 in Q4 2022, the European BCI showed a slight improvement in Q1 2023, reaching the level slightly above the no-change mark. While the European BCI increased by 0.3% from 99.9 to 100.1 points during the first quarter, the business confidence indicator for the euro area (consisting of 19 countries) remained slightly higher, averaging 100.8 points. However, the most recent data for April and May indicate a renewed deterioration in the index. The European BCI dropped to 99.9 in May, and the eurozone BCI reached the no-change mark of 100. 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 three to four quarters later.

Regarding the OECD Total BCI, it remained unchanged from the previous reporting period, reaching 99.6 in the first quarter of 2023. However, the latest data for May 2023 (please note that the previous graph refers to the quarterly average) show a slight deterioration in the index, with the OECD total aggregate reaching 99.5 points.



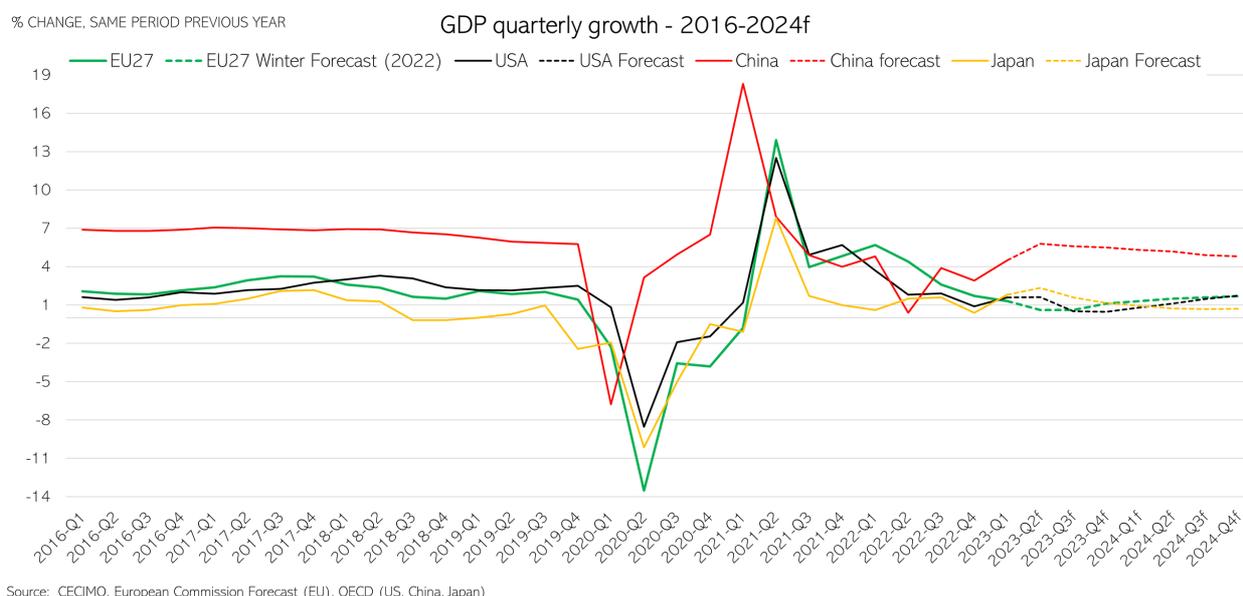
Country-specific BCI readings for May 2023 (latest available data) show:

- Among the European markets, Spain (100.9), Turkiye (100.7), the Netherlands (100.5), Italy (100.5), Sweden (100.5), Germany (100.3), and Denmark (100.1) recorded BCI levels above the eurozone and European average.
- Among the other CECIMO countries, Switzerland, France, Portugal, the United Kingdom, Austria, the Czech Republic, and Finland recorded BCI levels below the OECD Europe average and below 100 points in May, indicating an unfavorable business climate for the upcoming period.
- Among the Asian markets (based on available data), the latest data show that South Korea and China remain in the unfavorable zone.
- In the Americas region, Mexico's BCI remained in the favorable zone (101.1) and above the OECD Total average, while Brazil and the United States' BCIs remained below 100.0 points.
- Among all countries, Mexico and Spain recorded the highest levels in May, closely followed by Turkiye.



5. GENERAL INDICATORS

5.1 GDP (M)



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:

- EU GDP grew by 1.3% in the first quarter of 2023 compared with the same period of the previous year. Compared with the previous quarter (Q4 2022), GDP growth was positive both in Europe (+0.3%) and in the euro area (+0.1%). On an annual basis, EU GDP growth was around +3.5% in 2022 compared to 2021. It is also worth noting that the European Commission has recently revised upwards its forecast for 2023, and the latest data show that EU GDP is expected to grow by around 1.0% in 2023 and 1.7% in 2024 (y/y).
- China's economy continued to recover in the first quarter of 2023. GDP growth in Q1 2023 was around 4.5% higher than in the same quarter of 2022. For the full year, Chinese GDP growth was around 3% in 2022. The latest OECD annual forecast (June 2023) shows slightly revised upward estimates, mainly driven by China's reopening decisions in December, and the Chinese economy is now expected to grow by around 5.4% in 2023 and 5.1% in 2024.
- US GDP in the first quarter of 2023 was around 1.6% higher than in the first quarter of 2022 and 0.3% higher than in the previous quarter. According to the OECD's latest quarterly GDP forecast, the US economy is expected to grow by 1.0% in 2023 and 1.3% in 2024.
- In the fourth quarter of 2022, the Japanese economy recorded GDP growth of 1.8% on an annual basis, +0.7% compared to the previous quarter. The Japanese economy is expected to grow by 1.7% in 2023 and by 0.8% in 2024, based on the average of the latest OECD quarterly GDP forecasts.

European Commission's Forecast – Spring 2023:

According to the latest European Commission forecast (February 2023), the EU economy has demonstrated resilience amidst global challenges, with lower energy prices, improved supply conditions, and a strong labour market contributing to moderate growth in Q1 2023. These positive developments have dispelled concerns of a recession and led to an upward revision in growth forecasts.

The EU economy is now projected to grow by 1.0% in 2023 and 1.7% in 2024, while the euro area is expected to experience similar growth rates. However, persistent core price pressures have resulted in upward revisions of inflation forecasts, with the euro area expected to see inflation rates of 5.8% in 2023 and 2.8% in 2024. Despite the positive outlook, financing conditions are anticipated to tighten due to high inflation, potentially impacting investment growth.

While the baseline scenario remains relatively stable, there are increased downside risks to the outlook, mainly related to the persistence of core inflation, risks associated with the external environment of the EU, including turbulence in the banking sector, and geopolitical tensions. It is, of course, important to highlight in particular the continued uncertainty stemming from the ongoing Russian invasion of Ukraine.

5.2 INFLATION (M)

Q1-2023 average inflation data:

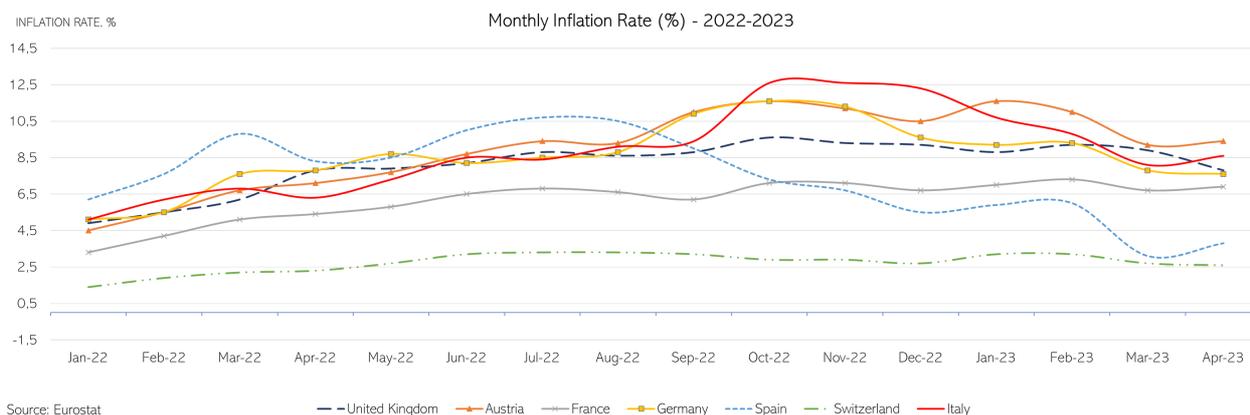
- EU27: 9.4%
- Eurozone: 8.0%
- United States: 5.8%
- United Kingdom: 9.0%
- Turkiye: 54.5%
- Switzerland: 3.0%
- China: 1.3%

In the first quarter of 2023, inflation in the euro area showed a slight decrease, averaging 8.0% year-on-year (y/y) compared to 10.0% y/y in the previous quarter. Similarly, EU27 inflation followed a similar trend, averaging 9.4% y/y, down from 11.0% y/y in the last quarter of 2022. Although inflation remains high, there has been a visible improvement and a downward trend since October 2022. The latest European Commission Forecast indicates that retail prices of gas and electricity are being influenced by significantly lower natural gas prices, although the impact varies across EU Member States. However, other major components of inflation, such as processed and unprocessed food, non-energy industrial goods, and services, have seen an increase in their annual inflation rates between December and March. As a result, core inflation, which excludes energy and unprocessed food, continued to rise in early 2023, reaching a historical high of 7.6% in March. Core goods and services have replaced energy as the primary driver of headline inflation in the EU.

In other countries, inflation in the United States experienced a further easing, averaging 5.8% in Q1 2023, down from 7.1% in Q4 2022 (year-on-year). Similarly, China's inflation rate continued to ease in the first quarter of 2023, averaging 1.3%, compared to 1.8% in Q4 2022 (year-on-year).

Looking ahead, the latest European Commission (EC) forecasts for the Harmonized Index of Consumer Prices (HICP) show slightly revised upward estimates for 2023 and 2024 for both the EU and the eurozone. In the EU, inflation is projected to decline from 9.2% in 2022 to 6.7% in 2023 and 3.1% in 2024. In the euro area, inflation is expected to decelerate from 8.4% in 2022 to 5.8% in 2023 and 2.8% in 2024.

According to the International Monetary Fund's (IMF) latest forecasts in April 2023, global inflation estimates have been revised upward. Global inflation is now anticipated to decrease to 7.0% in 2023 and 4.9% in 2024.



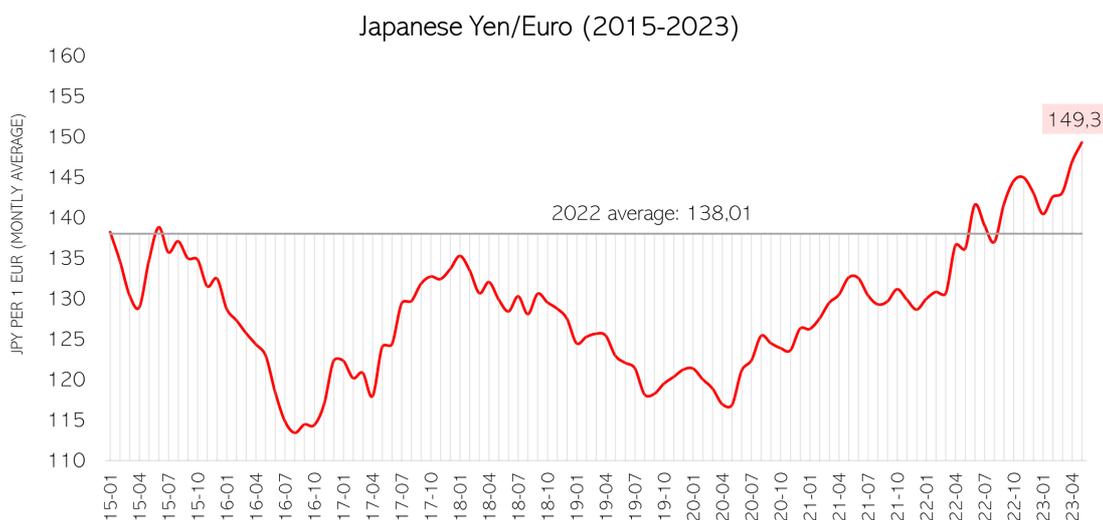
Looking at the main CECIMO producing countries (table below), while average inflation declined in the first quarter of 2023, several countries experienced increased inflationary pressures in April. The latest data show the following inflation rates: Germany at 7.6%, Switzerland at 2.6%, the United Kingdom at 7.8%, France at 6.9%, Spain at 3.8%, Austria at 9.4% and Italy at 8.6% (year on year).

Inflation rates by Country (April 2022 - April 2023)

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

Source: Eurostat & OECD

5.3 FOREIGN EXCHANGE RATES (M)



In the first quarter of 2023, the exchange rate between the Japanese yen (JPY) and the euro (EUR) averaged 142.0, indicating a lower exchange rate compared to the previous quarter (144.2). This also suggests a slight strengthening of the JPY against the EUR (by 2%). However, recent data shows a contrasting trend, with the exchange rate in May reaching 149.3 JPY per EUR.

US Dollar/Euro (2015-2023)



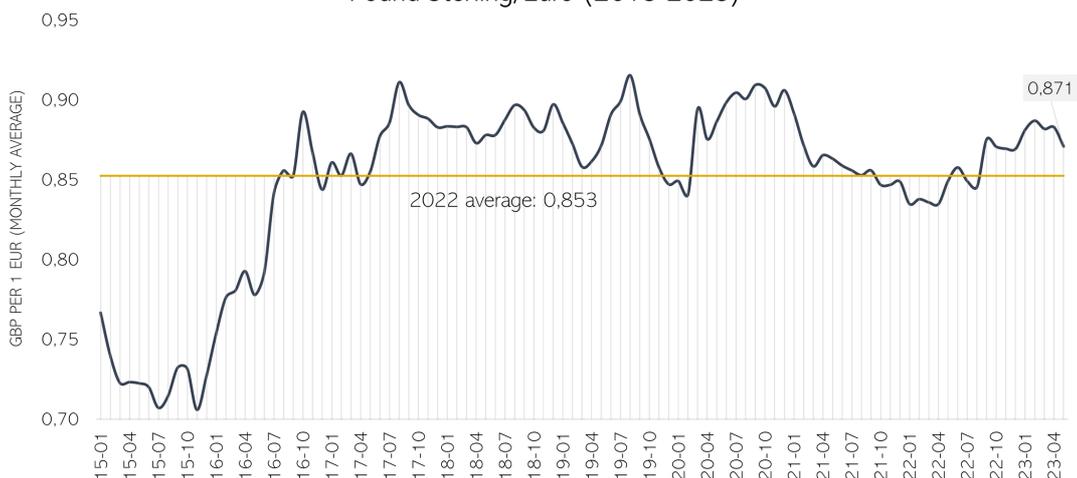
The average exchange rate of the USD against the EUR in Q1 2023 was 1.073, reflecting a 5% depreciation against the EUR compared to the previous quarter. After a significant weakening of the USD in April, May data show the opposite trend, with the exchange rate stabilising at USD 1.088 per euro, slightly above the average for 2022 and Q1 2023.

Swiss Franc/Euros (2015-2023)



In Q1 2023, the average exchange rate of the Swiss franc (CHF) per EUR was 0.993, slightly lower than in Q4 2022. This decrease was mainly influenced by depreciation in January. However, examining the past few months, the CHF gradually strengthened against the EUR from February to May. This resulted in the CHF/EUR exchange rate reaching 0.977 CHF per euro in May.

Pound Sterling/Euro (2015-2023)



The average exchange rate of the British pound sterling (GBP) in the last quarter of 2022 was 0.883 per EUR, indicating a slight weakening of the GBP against the EUR compared to the previous quarter's average. However, the most recent data show a strengthening of the GBP in March and May, with the exchange rate stabilising at 0.871 GBP per euro in May.

Chinese Yuan/Euro (2015-2023)



During Q1 2023, the average exchange rate of the Chinese yuan (CNY) per EUR was 7.343, indicating a weakening of the CNY compared to the average of the previous quarter (7.261). Moreover, data from the last two months suggests a continuous depreciation of the CNY against the EUR in April and May, with the exchange rate reaching 7.601 CNY per EUR.

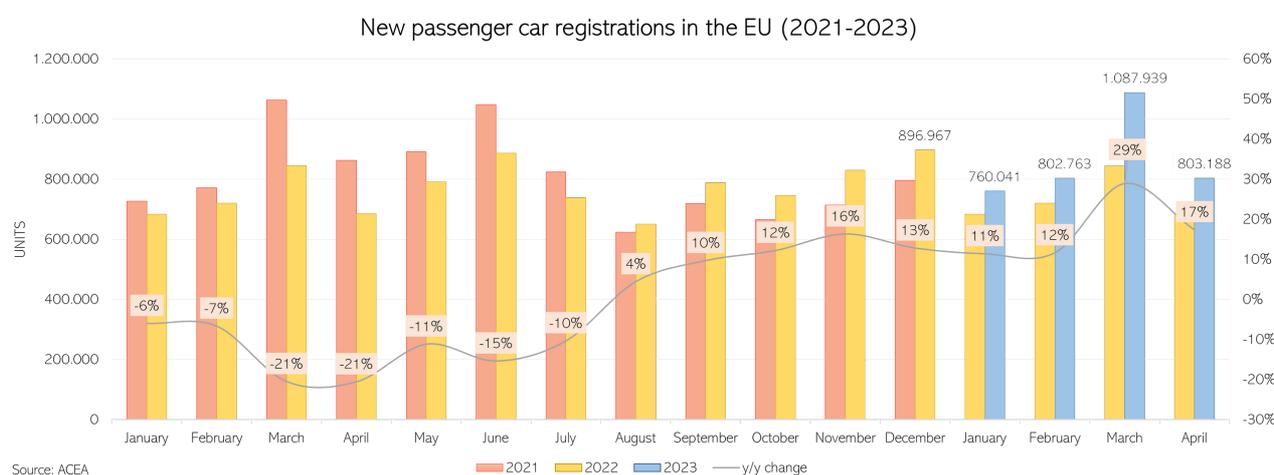
6. RELATED SECTORS

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 Light Vehicle Production Forecast (May 2023), global light vehicle production reached a level of 82.3 million units in 2022. Production by region is as follows: Europe 15.82 million units, Greater China 26.40 million units, Japan/Korea 11.11 million units, Middle East/Africa 2.24 million units, North America 14.3 million units, South America 2.82 million units and South Asia 9.61 million units.

Looking ahead, the outlook for light vehicles is positive. It is expected to grow by 4.1% in 2023, reaching an estimated 85.68 million units. The momentum is forecast to continue into 2024, with a further increase of 2.8%, to around 88.12 million units. While production in Greater China is expected to remain stable in 2023, the strongest annual production growth is expected in Japan/Korea (+9.7%), Europe (+7.7%) and North America (+5.2%) region.



According to ACEA (the European Automobile Manufacturers' Association), the EU car market experienced a remarkable growth of 17.8% in the period from January to April 2023, with a total of 3.5 million cars registered. However, despite this positive year-on-year improvement, sales were still 22.8% lower compared to the same period in 2019.

In April 2023, the EU car market saw a significant increase in passenger car registrations, with a total of 803,188 units sold, representing a robust growth of 17.2% compared to the previous year. In April, all major EU markets showed solid growth, with Italy leading the way with a remarkable increase of 29.2%, closely followed by France with a growth rate of 21.9%.

Total and EV new Passenger Car registrations in the EU

	Q1 2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023
Total new PC registrations	2.560.286	2.802.034	2.165.540	2.173.642	2.246.248	2.362.562	2.176.387	2.363.252	2.650.743
Total (Q/Q-4)	3%	56%	-22%	-25%	-12%	-16%	1%	9%	18%
EV new PC registrations	354.574	446.028	409.882	532.721	423.252	439.914	443.899	694.254	510.337
EV % of Total	14%	16%	19%	25%	19%	19%	20%	29%	19%
EV (Q/Q-4)	112%	244%	50%	12%	19%	-1%	8%	30%	21%

EV = Electric Vehicles including BEV and PHEVs

Source: ACEA

Please note that a slight revision has been made to the quarterly data for total new passenger car registrations due to a formula error (for Q3 and Q4 2022). In Q1 2023, the total number of new passenger car registrations in the EU increased by 18% compared to the same period of the previous year. The share of new electric passenger car registrations was slightly below the 2022 average, at 19% of total registrations. Nevertheless, the electric vehicle segment showed significant growth of 21% compared to the same period last year.

New passenger car registrations in China (2021-2023)



New car sales in China improved in February and March, but the level remained below the December 2022 level. As shown in the chart above, the number of new car registrations was around 1.8 million units. Although the level declined on a quarterly basis, it was 88% higher than the very low level of April 2022.

Total and EV new Passenger Car registrations in China

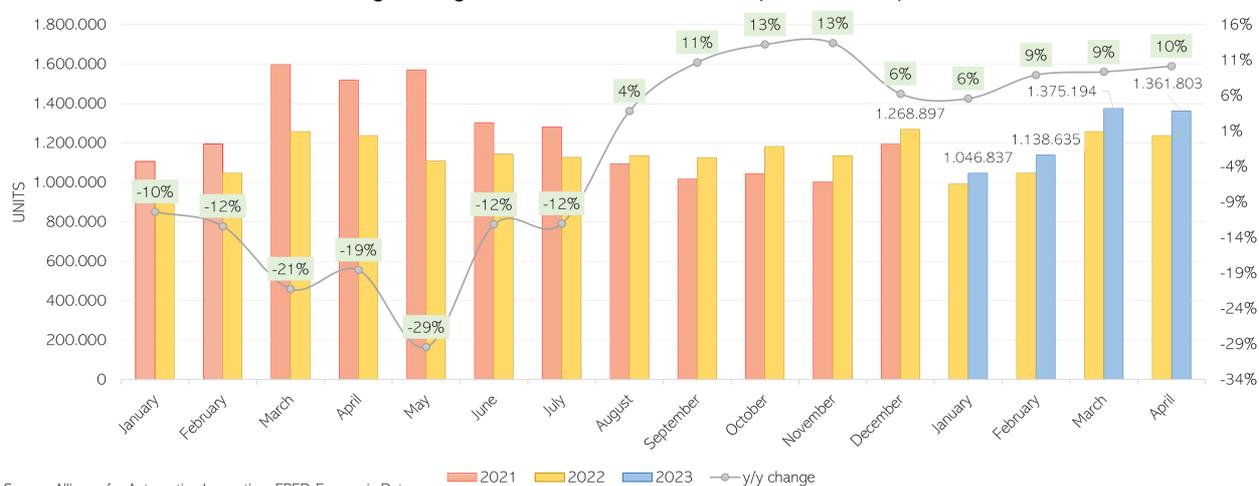
	Q1 2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023
Total new PC registrations	5,075,000	4,919,000	4,854,000	6,621,000	5,537,000	4,810,000	6,631,000	6,571,000	5,139,000
Total (Q/Q-4)	77%	-1%	-12%	-2%	9%	-2%	37%	-1%	-7%
EV new PC registrations	490,000	638,000	904,000	1,291,000	1,224,000	1,342,000	1,967,000	2,314,000	1,586,000
EV % of Total	10%	13%	19%	19%	22%	28%	30%	35%	31%
EV (Q/Q-4)	389%	179%	198%	131%	150%	110%	118%	79%	30%

EV = Electric Vehicles including BEV and PHEVs

Source: China Association of Automobile Manufacturers

On a quarterly basis, new passenger car sales in the first quarter of 2023 were 7% lower than in the same period of the previous year. The share of new electric passenger cars reached the average of 31% in the first quarter of 2023, slightly above the 2022 average. As in previous quarters, this group showed significant growth (+30%) compared to the same period last year.

Light Weight Vehicle Sales in the US (2021-2023)



Source: Alliance for Automotive Innovation, FRED Economic Data

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 four months of 2023 was about 8% (on an annual basis). As shown in the chart above, the level of light vehicle sales was 10% higher than the level of light vehicle sales in April 2022. According to the Alliance for Automotive Innovation, sales of electric vehicles (BEV, PHEV & fuel cell) accounted for 7.8% of total vehicle sales in April.

New passenger car registrations in Japan (2021-2023)



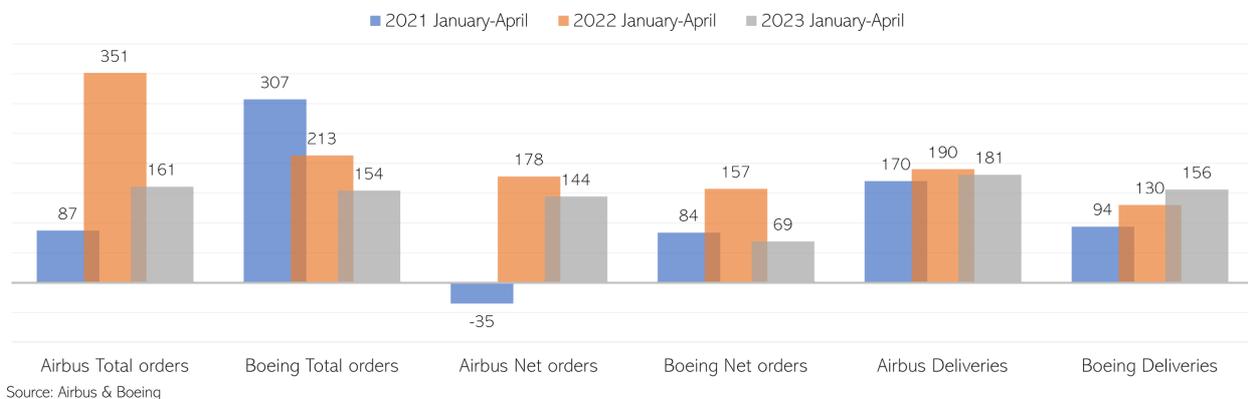
Source: JAMA

According to the Japan Automobile Manufacturers Association (JAMA), new car registrations/sales in Japan continued to reach higher levels than in the same period last year. Although the level in April-2023 declined on a monthly basis, it reached the 18.5% higher level than in the same period last year, thanks to the recovery of global demand and the continued easing of supply-side problems.

6.2 AEROSPACE

Based on the latest Eurocontrol data for the second week of June 2023, the average number of flights per day was 31,648, an increase of 6% compared to the same period in 2022. However, in the first half of June 2023, flight activity reached 91% of the level observed in June 2019, slightly below the baseline scenario forecast of 94%. As reminder, Eurocontrol's most recent forecast (December 2022), expected network traffic at around 95% of 2019 levels by July 2023.

Airbus vs Boeing: Commercial Aircraft Orders & Deliveries (Units)



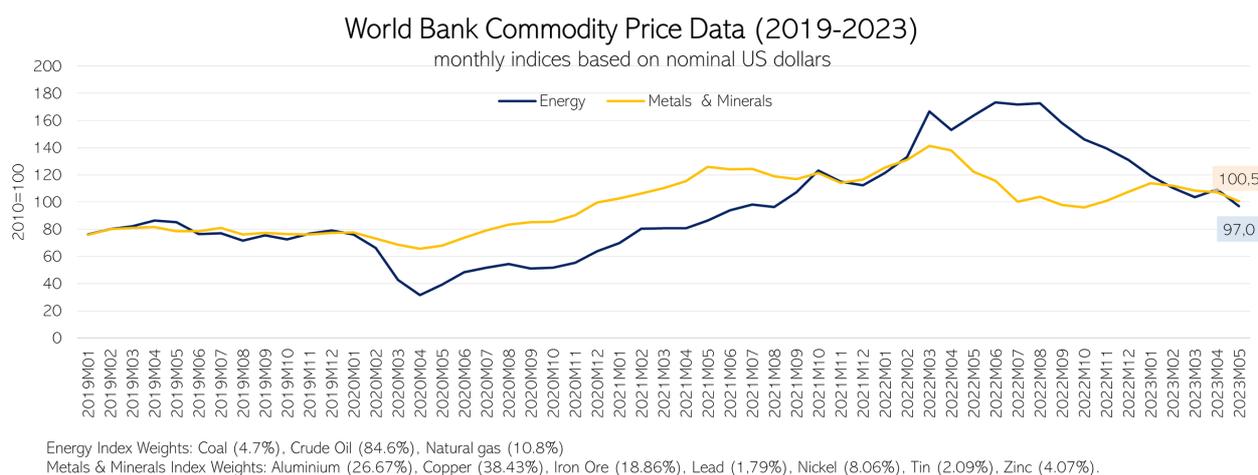
Source: Airbus & Boeing

The commercial aircraft manufacturing industry is expected to undergo another year of recovery in 2023, although both Boeing and Airbus still face a significant journey before reaching pre-pandemic delivery levels. Analysing the data for the first four months of 2023, Boeing received a total of 154 orders, but experienced 85 cancellations, resulting in 69 net orders - below the net order level observed during the same period in 2022. On the other side, Airbus recorded 144 net orders after accounting for 17 cancellations within the same timeframe. While Airbus reported a slight decline of approximately 5% in deliveries, Boeing's deliveries improved by around 20% compared to the corresponding period last year. It is worth noting that both manufacturers reported about 3% increase in their order backlogs compared to the same period last year.

It is important to note that according to Oxford Economics' April 2023 Global MT Outlook report, aerospace is expected to have the highest investment growth in 2023 among other major MT purchasing industries.

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.

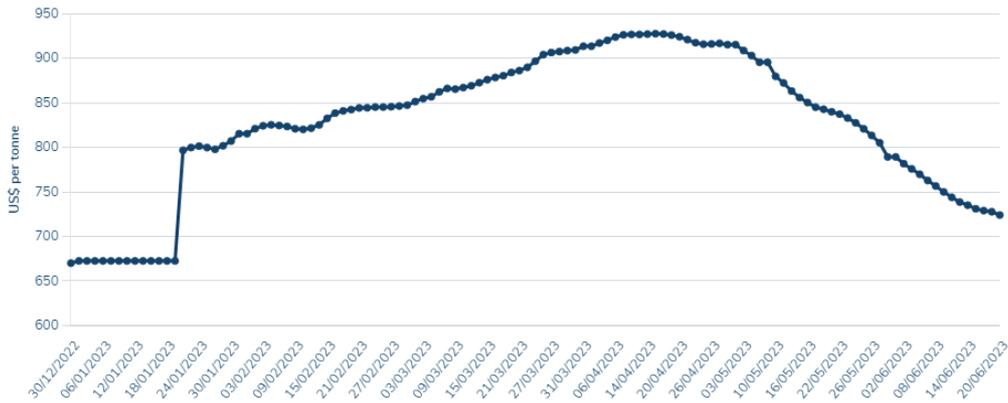


As shown in the chart above, energy prices fell 11.3% in May, led by natural gas in Europe (-25.2%) and coal (-17.4%). Metal prices dropped 6.4%, led by zinc (-10.5%) and iron ore (-10.4%). According to World Bank Commodity Markets Outlook (April 2023), commodity prices are expected to decrease by 21% this year and then stabilise in 2024. This expected fall in 2023 is the sharpest since the start of the pandemic.

The fall in energy prices in the first quarter of 2023 is expected to dissipate, leading to stable prices for the rest of the year and a slight increase in 2024. This is driven by tightening markets and supply pressures. On the other hand, non-energy commodity prices are projected to fall by around 10% in 2023 and almost 3% in 2024. Metals and minerals prices, which experienced a temporary rebound in January 2023, are projected to decline by 8% year-on-year in 2023, followed by a further 3% decline in 2024 as global manufacturing demand is expected to remain subdued, and China's recovery is expected to be concentrated in the services sector.

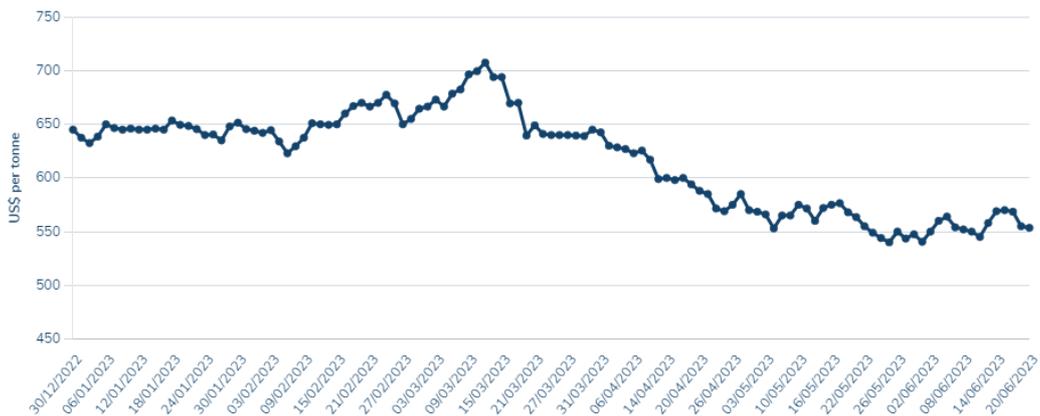
The text below provides an overview of the latest developments in metal prices on the LME.

LME Steel HRC EXW NW Europe (Argus) Closing prices graph (June 20 = 724.01 USD/t)



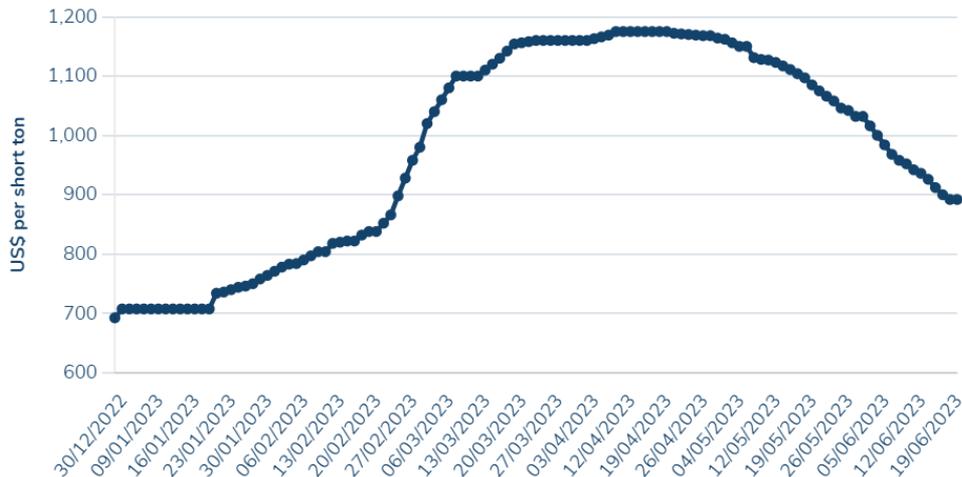
Following an increase in Northern European domestic HRC prices from January to the end of April, as shown in the graph above, prices declined in May and June. The LME closing price on 20 June was USD 724.01 per tonne, approximately 18% lower than the previous reporting date (20 March - USD 883.98 per tonne). As can be seen from the following charts, prices are falling globally due to lower demand and in line with steel buyer sentiment, which remains at some of its lowest levels since December 2022 (according to Steel Market Update).

LME Steel HRC FOB China (Argus) Closing prices graph (June 20 = 553.5 USD/t)



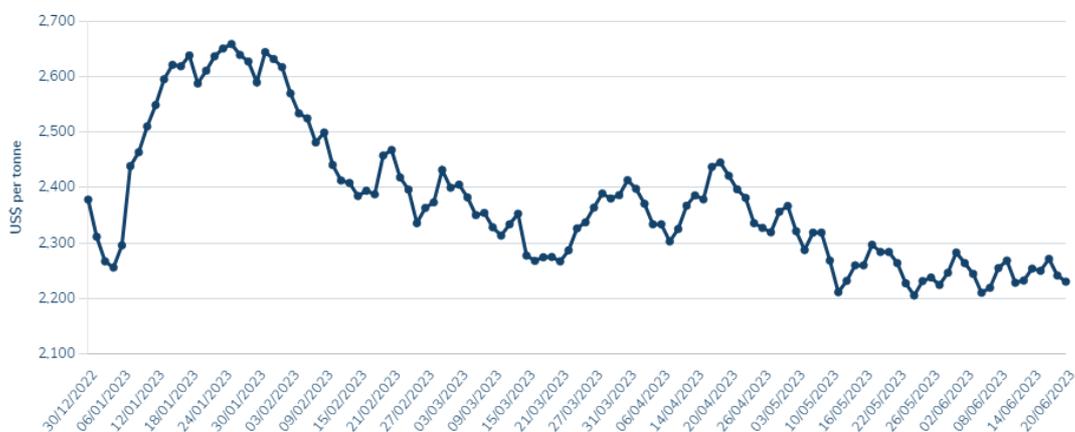
Hot rolled coil prices in China continued their downward trend of recent months, as shown in the chart below. Compared to the previous reporting period, when HRC FOB China closed at USD 644.0/tonne on 20 March, the price on 20 June was approximately 14% lower, closing at USD 553.5/tonne.

LME Steel HRC EXW N America (Platts) Closing Prices graph (June 20 = 892 USD/t)



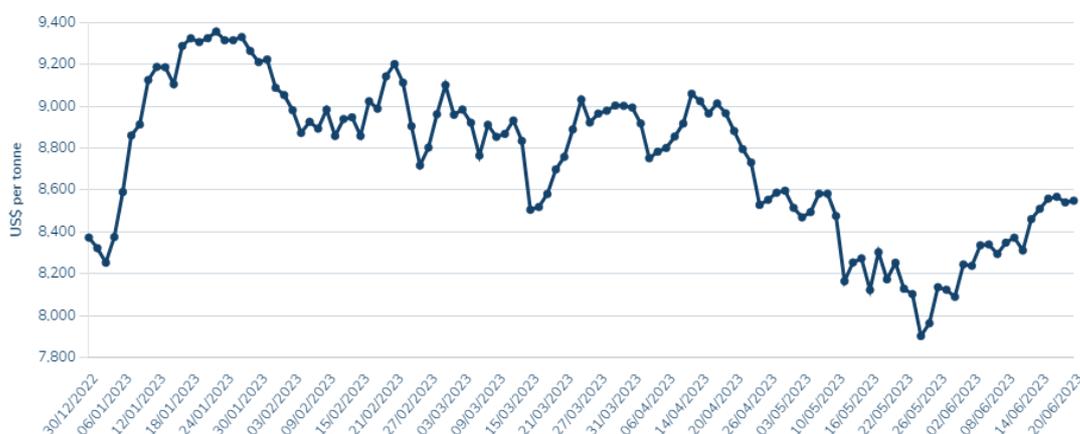
With regard to the US steel market, similar to Europe, the available data suggest that steel prices have fallen significantly in recent months as a result of weakening demand. While the closing price on 20 March was USD 1.154/t, the closing price on 20 June was USD 892/t, a fall of around 22.7% in three months.

LME Aluminium Closing Prices (June 20 = 2.230 USD/t)



Although not as significant as steel prices, aluminium prices on the LME are also showing a slight downward trend. The latest closing price for aluminium at the time of writing was USD 2,230/t, slightly lower than on 20 March (USD 2,274/t).

LME Copper Closing Prices (June 20 = 8.548 USD/t)



Looking at the last few months, LME copper closing prices have been falling on average since April 2023. They bottomed out at the end of May, before rising again in June. As a result, the price reached a level of USD 8.548/t on 20 June. However, it is important to note that this is slightly below the closing price in the previous reference period (20 March = USD 8697.5/t).

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' acquisitions, less disposals, of fixed tangible or intangible assets. This covers in particular machinery and equipment, vehicles, dwellings and other buildings. The GFCF is a key determinant of both aggregate demand and supply.

Source: Eurostat and ECB.

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

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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 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, Associação 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

Turkiye: MIB, Makina Imalatçılar Birliği
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 **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 **25.1 billion** euros in 2022. More than **three quarters** of CECIMO production is shipped abroad, whereas **half** of it is exported outside Europe.