

ECONOMIC AND STATISTICAL TOOLBOX



- CECIMO8's Total MT Orders reached an all-time high in the first quarter of 2022
- First estimates of CECIMO's Production, Exports and Imports for 2022
- New Oxford Economics MT Consumption forecast
- Rising input costs and stretched supply chains continue to impact global manufacturing
- The Russia-Ukraine war brings new risks and challenges for global economies

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INTRODUCTION

CECIMO Economic and Statistical Toolbox for the first period of 2022 shows further positive trends in the recovery of Europe's Machine Tool (MT) Industry with orders reaching record levels. In line with that, the **Industrial Production Index (IPI) shows a further improvement in Q1 2022** in the European Union (EU) as well as in the eurozone. Looking ahead, challenges such as supply chain disruptions caused by potential new lockdowns in China and the Russian war in Ukraine could slow the production growth in the following quarters. However, strong demand in the first quarter and the backlog of orders from last year, which can be observed in many sectors, should hold the production index steady over the next period.

Looking at the performance of the European Machine Tool Industry, new orders in Q1 2022 showed an impressive improvement over the same period last year. As reported later in the report, CECIMO's **foreign orders** increased by 29%, while **domestic orders** increased by 19% over the same period last year. As a result, CECIMO's **total orders** index was 26% above the same period last year and has reached record levels.

Based on the latest sources, we have updated **CECIMO and world MT production data** for 2021. The latest estimates show that global MT production grew by 19.7% in 2021, while production growth in CECIMO countries was slightly slower, around 11.6%. In this issue, you will also find CECIMO's first estimates of production for 2022 - CECIMO's MT production is expected to **grow by about 12% in 2022**. The latest Oxford Economic forecast (April 2022) shows that **CECIMO MT consumption** is expected to grow by approximately 19% in 2022 and 11% in 2023. In total, MT consumption is expected to increase from around 15.1 billion euros in 2021 to around 17.9 billion euros in 2022 and reach pre-pandemic levels in 2023. According to initial estimates, CECIMO total **MT exports** are expected to increase by about 9% in 2022, while total **MT imports** are expected to increase a bit faster (12%).

By measuring investment levels, **Gross Fixed Capital Formation** decreased (as usual in Q1) by 11.1% in Q1 2022 compared to Q4 2021. However, it is important to point out that this level (Q1 2022) is 4.2% higher than the same period last year. **Capacity utilization** and the level of EU **spare capacity** in the industrial goods sector remained almost unchanged from the previous period.

In line with the uncertainty of European and global growth, inflationary pressures, geopolitical challenges, eurozone banks reported a **net tightening of credit standards** for loans or credit lines to enterprises in the first period of 2021. Banks' overall terms and conditions for new loans have also tightened as demand for loans has risen.

While the business climate, according to the **CECIMO Business Climate Barometer** in the first quarter of 2022, remained positive, expectations for the second quarter were less optimistic, but still positive (+4%). Machine tool producers expressed slightly higher expectations for domestic production, while exports and employment in the next quarter (Q2 2022) are expected to grow slower.

Global Manufacturing **Purchasing Managers Index** (PMI), following strong declines in March and April, posted a slight increase of 1.1 percentage points in May. However, the index remained above 50.0 for the whole period, indicating improved operating conditions in global manufacturing. All major regions except China were over 50 no-change mark in May 2022.

The **OECD Business Confidence Index** for Europe fell slightly in the first period of 2022 to a level of 102.6 points. Moreover, the latest figures for April 2022, keeping in mind the impact of the war and inflation in Europe, showed further deterioration of the BCI index for Europe which has declined to 101.9 points.

While **EU GDP** increased by 5.2% in the first quarter of 2022 compared to the same period a year ago, the European Commission's new projections are less optimistic and real GDP growth in both the EU and the euro area is now expected to grow by 2.7% in 2022 and 2.3% in 2023.

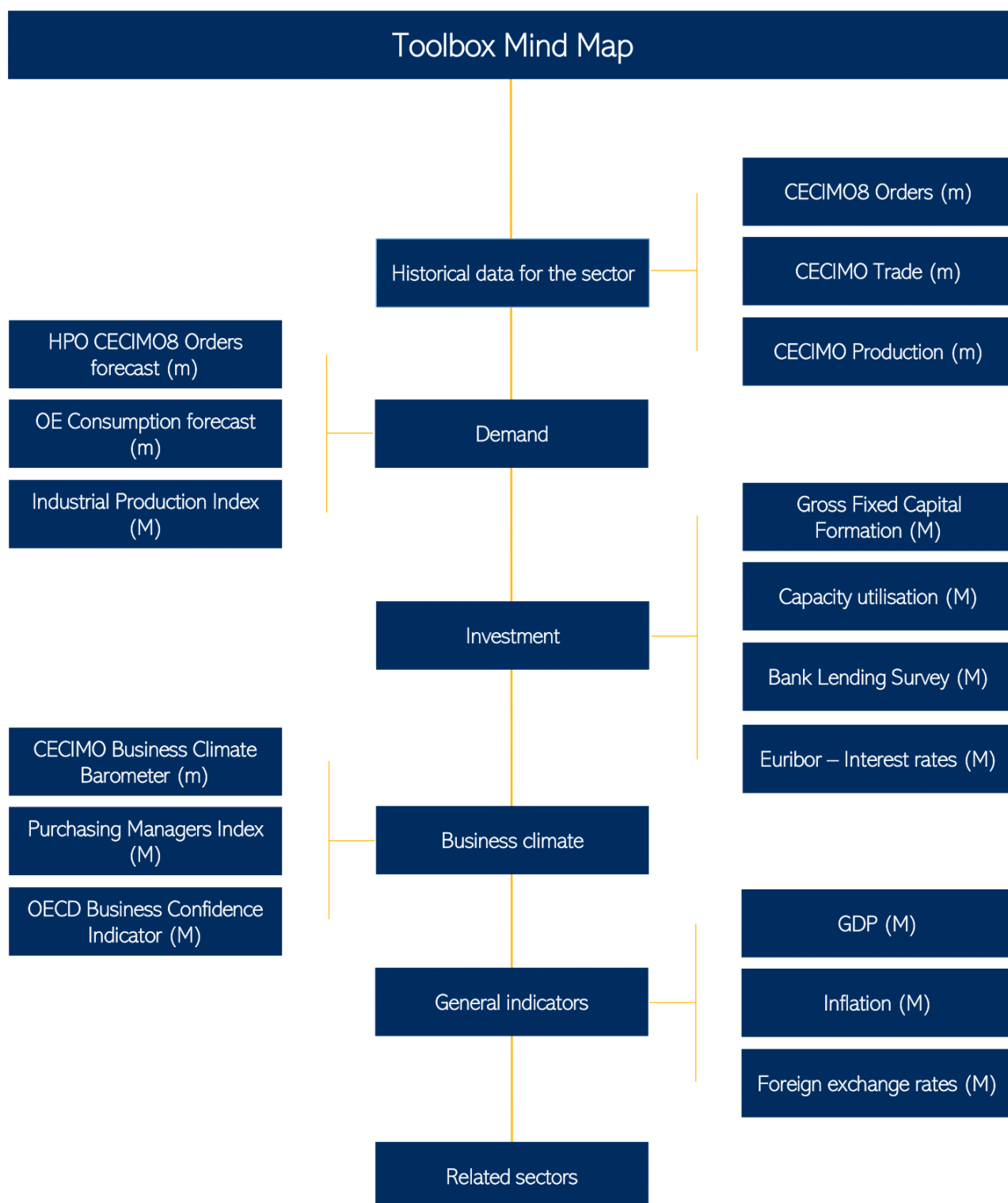
In the first quarter of 2022, **Eurozone inflation** continues to rise, averaging 6.13% year-on-year (y/y), up from 4.67% y/y in the fourth quarter of 2022 and according to latest forecasts, in same region, inflation is expected to reach 6.1% in 2022, before declining to 2.7% in 2023.

In the automotive sector, all the main regions (China, EU, US, Japan) saw a further decline in new vehicle sales (registrations) in the first five months of 2022 (y/y-1) due to recent lockdowns in China, supply-side issues, which continued to have a negative impact on the automotive sector during period of high inflationary pressures.

During the first five months of 2022, the **aerospace industry**, monitored by Airbus and Boeing statistics, registered improved orders and deliveries compared to the same period last year.

Recent figures (May-June 2022) on **energy and metals** prices show that while energy prices are still on the growth path and should remain high, metal prices are declining as demand from the world's major consuming sectors declines.





1. HISTORICAL DATA FOR THE SECTOR

1.1 CECIMO 8 ORDERS (M)

The last quarterly update of CECIMO8 countries shows a record level of foreign orders in the first period of 2022. The domestic orders index declined slightly in the first quarter of 2022 but remains well above the 2019-21 average.

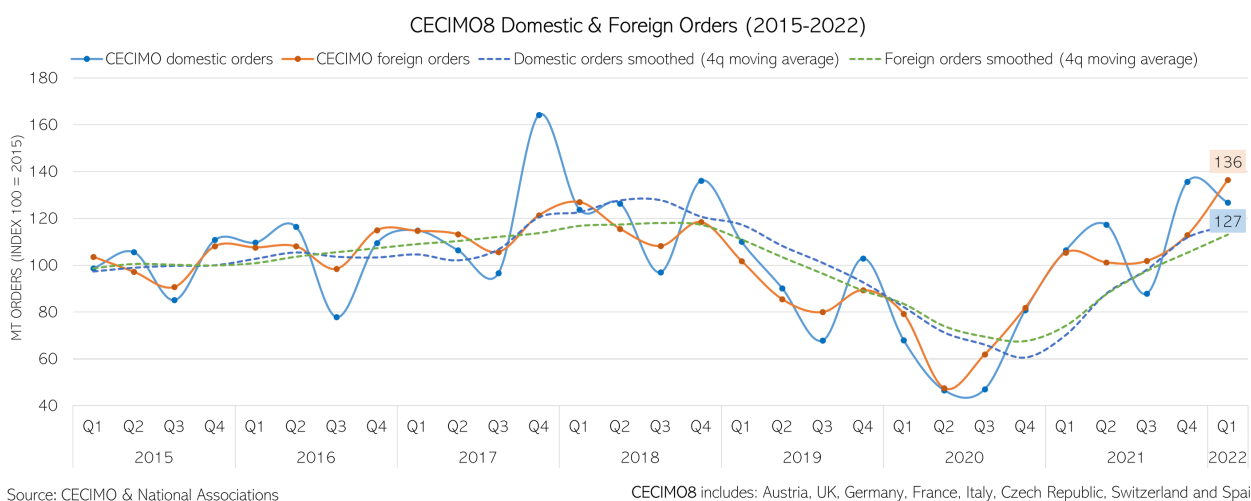
While domestic orders in Austria, Germany and Switzerland registered strong growth compared with the previous quarter, at the CECIMO8 level, orders were down as a result of lower orders in Italy, the United Kingdom and Spain. As a result, the CECIMO8 domestic order index decreased by 7% from the prior quarter. However, that level is still 19% higher if we look at the same period last year.

In terms of foreign orders, Italy, Germany, Switzerland and the UK recorded quarterly growth, while almost all countries recorded a higher level compared to the same period last year. As a result, the Foreign Orders Index rose to a record high in the first quarter of 2022. This level of foreign orders is 21% above the previous quarter and 29% above the same period last year.

As a result, CECIMO8's total orders increased by 15% in Q1 2022 compared to the previous quarter and reached record levels. This level of the index is a 26% higher than in the same period last year. It is important to keep in mind that high orders were forecast for the first period of 2022 according to HPO's forecasts given that many global sectors are still recovering, and MT consumption has yet to reach pre-pandemic levels.

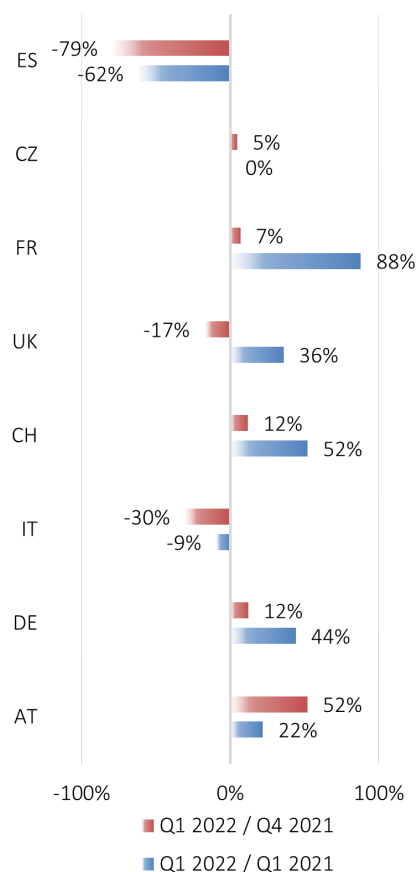
As previously mentioned, the CECIMO8 countries recorded in the first period of 2022 the highest total orders level ever. However, it is important to point out that many companies are reporting production difficulties due to the lack of different materials and components needed to transform these orders into products. While the war between Russia and Ukraine has worsened the supply side issues somewhat, the more significant issues have been experienced because of China's zero-COVID policy which caused transportation and related logistics issues. These issues resulted in very long delivery times from suppliers and created a risk of possible delays in the delivery of final MT products. Of course, the uncertainty of the Russo-Ukrainian war and the possibility of further lockdowns in China could affect future trends and world MT demand.

Beyond all the risks, according to Oxford Economics Forecasts, companies can expect strong MT demand in Europe this year. This is strongly related to the upturn in MT demand in some European countries (particularly Germany) and investment incentives related to Industry 4.0 across Europe.



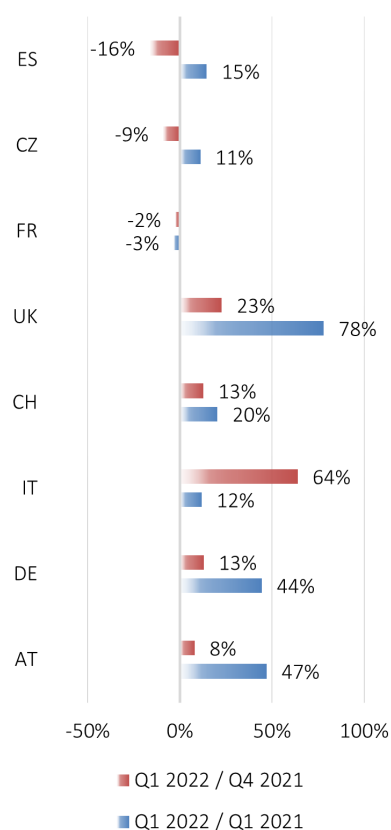
Domestic Orders

- Compared to the same period a year earlier, domestic orders grew most strongly in France (+88%), Switzerland (+52%) and Germany (+44%).
- After Italy posted a record level of domestic orders in the fourth quarter of 2021, orders fell slightly in the first quarter of 2022. Spain's domestic orders followed the same pattern, but with a more marked decrease (-79% on a quarterly basis and -62% more than at the same time last year).
- After a significant quarterly increase in the domestic orders index in Q4 2021 in the United Kingdom, the first quarter of 2022 registered a slight decrease (-17%). However, compared to the same period a year ago, the level is still 36% higher.
- Compared with the same period last year, the Czech Republic registered the same level of domestic orders and a slightly higher level than in Q4 2021.
- Austria recorded the largest quarterly growth among the CECIMO countries (+52%).

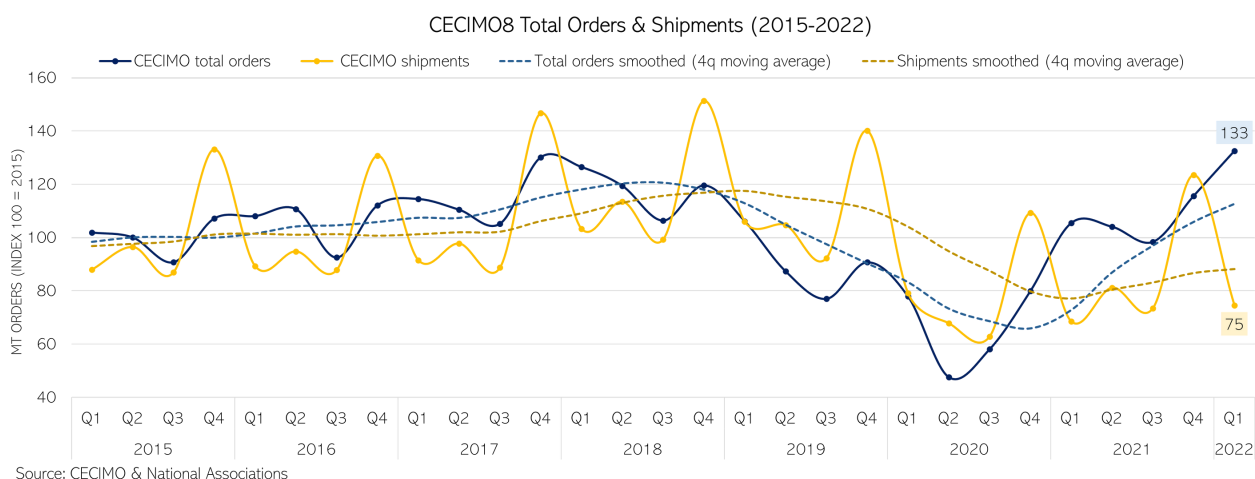


Foreign Orders

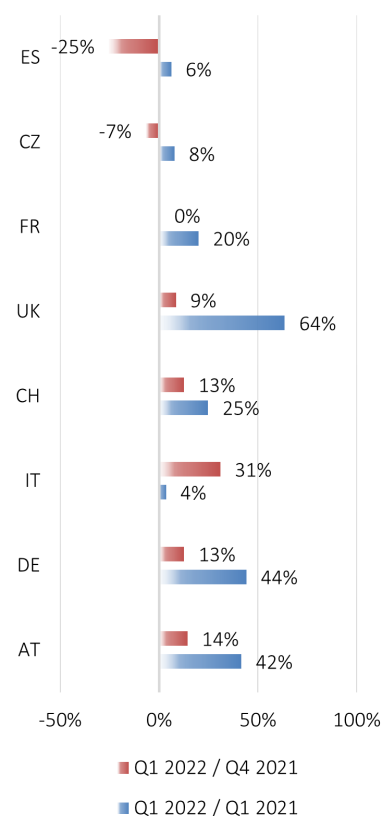
- Among the CECIMO8 countries, growth in foreign orders was highest in the UK (78%), Austria (47%) and Germany (44%) compared to the same period last year. The strongest quarter on quarter growth was registered in Italy (64%).
- After reaching a very high level of orders in the previous quarter, Spain registered a slight quarterly fall in foreign orders (-16%). However, this level remains 15% above the same period last year.
- A similar pattern is recorded in the Czech Republic, where companies recorded a negative growth in orders compared to the previous quarter, but also 11% higher compared to the same period last year.
- France recorded nearly the same level of foreign orders as in the previous quarter and the same quarter of last year.
- Strong foreign orders contributed to the CECIMO8 Foreign Orders Index in Q1 2022, reaching a record high.



Total Orders



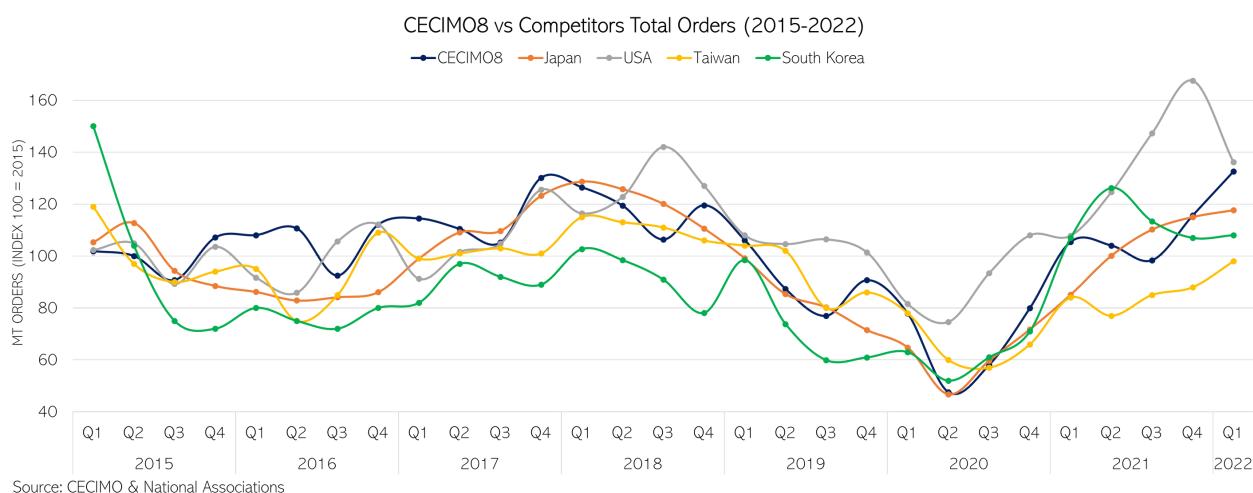
- All CECIMO8 countries recorded higher total orders in Q1 2022 compared to the same period last year. Notably, the United Kingdom (64%), Germany (44%) and Austria (42%) recorded the highest annual change.
- Driven by strong foreign orders, Italy recorded the strongest quarterly growth in total orders (31%), followed by Switzerland (13%) and Germany (13%).
- While remaining at the same level as in the previous quarter, the total orders index in France is up 20% compared to the same period last year.
- Due to lower domestic and foreign orders compared to the previous quarter, the Spanish Total Orders Index registered a 25% decline from the fourth quarter of 2021. However, it is still higher than the same period last year.
- Likewise, total Czech orders fell 7% in Q1 2022 from Q4 2021, but the index remained above Q1 2021 levels.



CECIMO Competitors

- While the Japanese metal cutting companies recorded a slight increase in orders compared to the previous quarter, the metal forming companies recorded a slight decline. This applies to both domestic and foreign orders. As a result, the Total Japanese MT Orders Index showed quarterly growth of 2% in Q1 2022 and over the same period last year. Comparing annual changes, this is a 38% increase over the first quarter of 2021 and the highest level since Q3 of 2018.
- Thanks to improved domestic and foreign markets, the Taiwan Total MT Index continues to grow through the first period of 2022. Compared to the previous quarter, the total orders index increased by 11% and, compared with the same period last year, it is 17% higher.

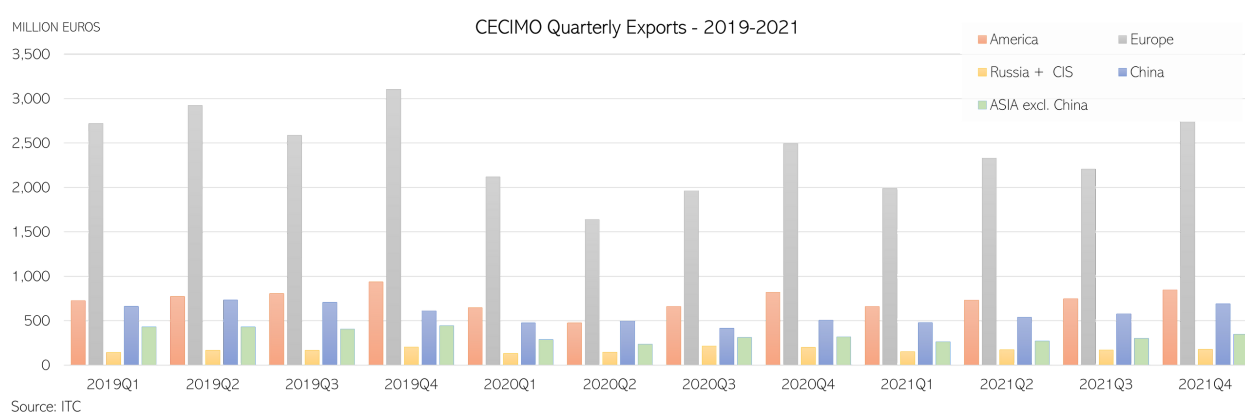
- Although the situation of South Korea's foreign orders reflects a 13% increase from the same period last year, the situation on the domestic market shows the opposite (-14% decrease). However, the Total Orders index was up 1% on a quarterly and yearly basis in the first quarter of 2022 and this level is in line with the 2021 average and far above the 2018-19 average.
- While domestic orders in the US have declined 18% from Q4 2021, they are still 26% above the same period last year and notably above the historic average.



1.2 CECIMO TRADE (M)

Note: The following analysis refers to Q4 2021 machine tool trade figures. ITC Q1 2022 data is not available by the time this report was written. The last part of the trade balance refers to the overall trade data for 2021 and initial estimates for 2022.

Q4 2021 Exports



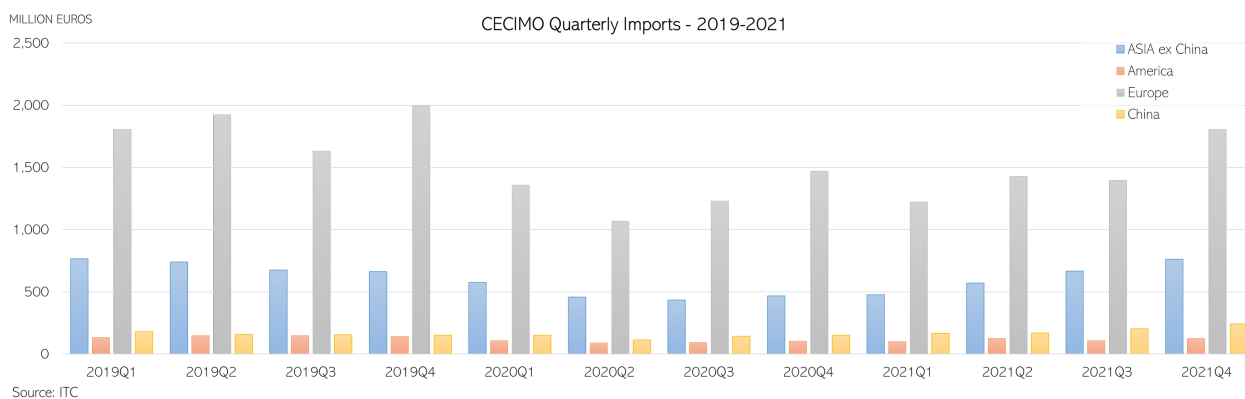
- After a slight quarter-on-quarter decline in the previous reporting period, total CECIMO exports increased significantly (19%) in the fourth quarter of 2021. Moreover, this level of CECIMO's machine tool exports in the fourth quarter of 2021 is 11% higher than the same period last year.
- If we consider quarterly growth, the increase in exports in the fourth quarter was observed in nearly all regions. The largest export growth occurred in Europe (24%), closely followed by Asia (18%) and the Americas (13%) region. After significant quarterly growth in the third quarter of 2021, exports in the Africa region fell slightly by 5% in the fourth quarter of 2021.

- While exports to China increased by 16% compared to the previous quarter, exports to other Asian countries increased by 19%.
- Export growth within the CECIMO countries follows the European average and in Q4 2021 exports increased by 24% compared to the previous quarter. This level of exports is 15% higher than the same period last year.

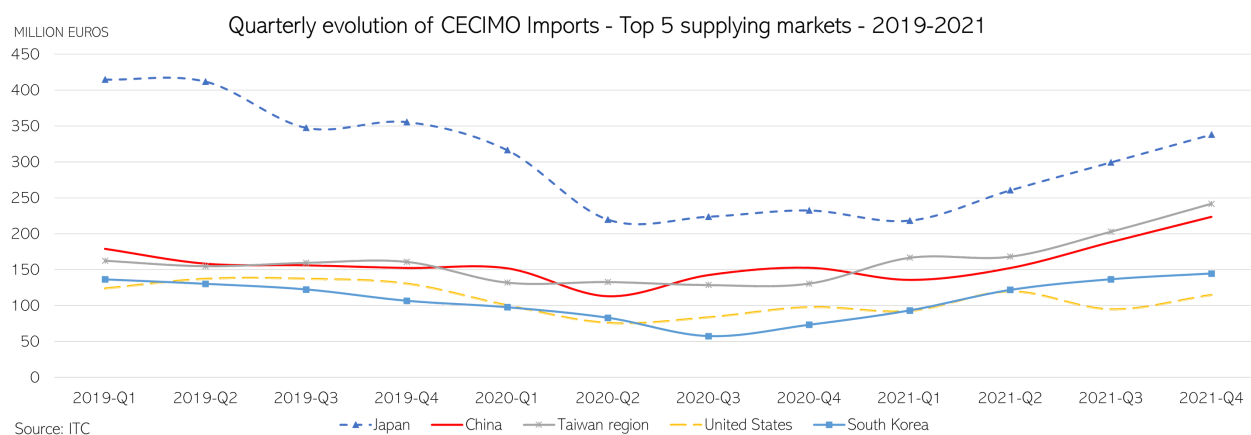


- China remains the CECIMO countries' top MT export destination, closely followed by the United States in the fourth quarter of 2021.

Q4 2021 Imports

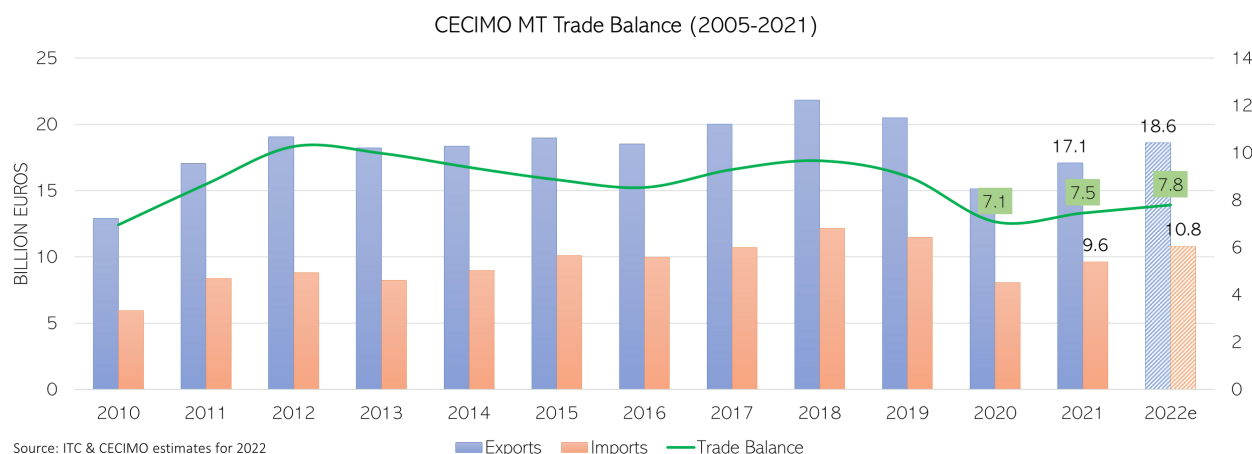


- The increase in MT consumption in the last quarter of 2021 among CECIMO countries led to substantial growth in total MT imports. Total MT imports were 33% higher than the year before and 23% higher than in the previous quarter.
- Compared with the previous quarter, as the graph above shows, the CECIMO countries have greatly increased their imports from the European region. Imports within Europe increased by 29% on the previous quarter and this level is 23% higher than the value in the previous quarter.
- CECIMO's total MT imports from the Asian region increased by 15% in the fourth quarter, up 62% from the same period last year. In this quarter, MT imports from China increased at a faster pace (+19%) than in the rest of Asia (+14%).
- While MT imports from the American region increased by 16%, imports from the Africa region and the CIS region decreased compared to the previous quarter.



- In the fourth quarter of 2021, Japan remains the largest MT supplier for CECIMO, followed by Taiwan and China.

CECIMO Trade Balance



- If we compare the data for the whole year 2021, as shown in the chart below, CECIMO's total exports reached the level of 17.1 billion euros. This level is about 13% higher compared to 2020.
- CECIMO's total imports amounted to 9.6 billion euros in 2021, an increase of 19.4% over 2020.
- The graph above also shows CECIMO's initial 2022 estimates, which indicate that CECIMO total exports are expected to grow by about 9%. However, with strong MT consumption forecast in Europe in 2022, CECIMO total imports are expected to grow at a somewhat stronger pace (+12%). This is in line with the strong MT consumption growth forecast for 2022 at the CECIMO level (see Demand section).
- The Russian-Ukrainian war and associated sanctions are unlikely to have a significant impact on CECIMO's trade balance; CECIMO's MT exports to Russia dropped dramatically in 2014 following Russia's annexation of Crimea and the first round of sanctions.

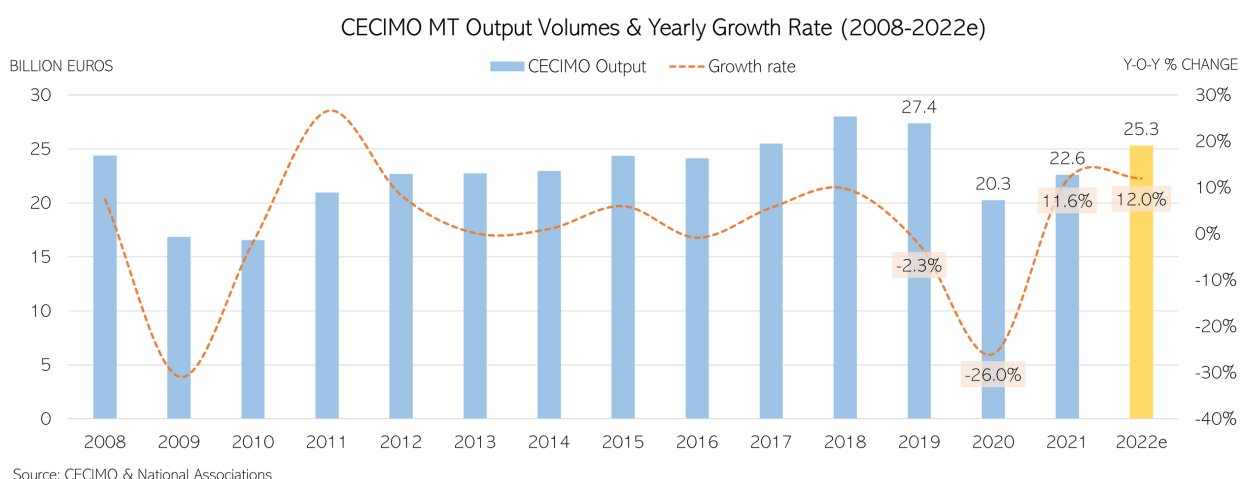
1.3 PRODUCTION (M)

Based on the latest sources, we have updated CECIMO and world MT production data for 2021. The latest estimates show that world MT production has increased by 19.7% reaching the level of 72.1 billion euros in 2021. CECIMO production growth was slightly slower, around 11.6% and CECIMO MT production reached the level of around 22.6 billion euros. As a result, CECIMO's share of world MT production has decreased slightly to about 31% in 2021.

According to Gardner, the strongest MT production growth in 2021 (in EUR) was registered in Thailand (+102.4%), India (+45.1%), the US (+39.1%) and China (+28.7%).

Among CECIMO's top three producers, strong growth was recorded in Italy (+21.7%) and Switzerland (+15.0%) in 2021. Germany is still the main producer of CECIMO, but with a small increase in production 2021 (+1.8%), Germany's share in total CECIMO production this year was slightly reduced. While other countries also posted a significant increase in MT production in 2021, the Czech Republic was the only country to report a decline compared to 2020 level.

Based on feedback from our national associations, we have calculated the first estimates of CECIMO MT production level for 2022, as shown in the graph below.



Based on contributions from national associations, our first forecast for this year is about 12% growth in MT output at the CECIMO level.

As previously mentioned, last year's world level of MT output recovered better than in the CECIMO countries. As a result, we expect to see a stronger recovery in production in CECIMO countries this year. It is important to highlight that these assumptions are strongly related to strong expectations in MT consumption in 2022, especially in the domestic market.

However, the very challenging times ahead pose some risks that could worsen the situation. Geopolitical uncertainty, inflationary pressures driven by high energy prices, the possibility that supply-side issues may last longer, are risks that need to be considered and that could impact MT producers and production levels in 2022.

2. DEMAND

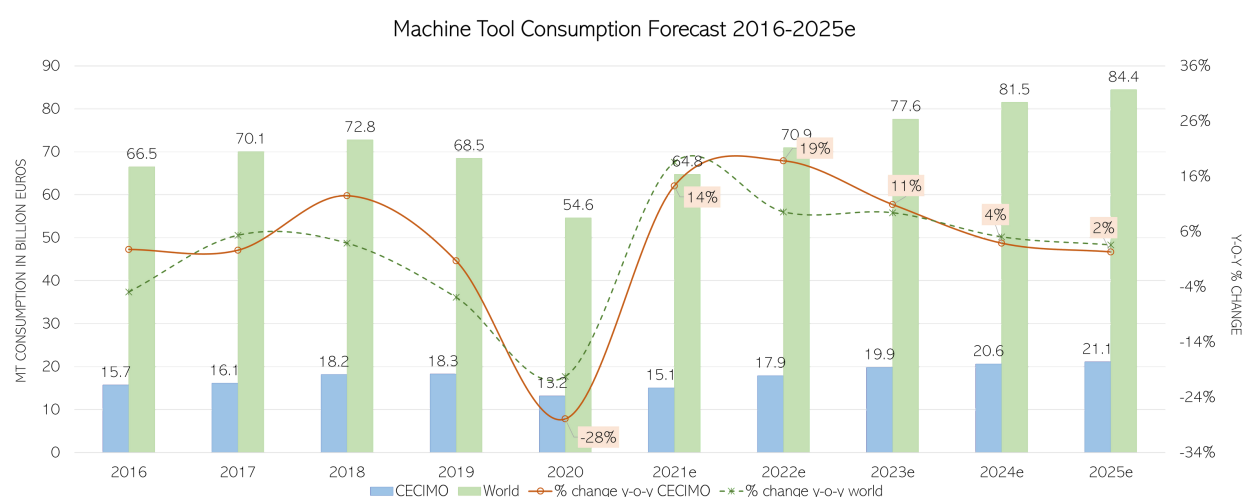
2.1 CECIMO CONSUMPTION (M)

Note: Consumption = Production + Imports - Exports

According to the latest estimates, as with production levels, the recovery in MT consumption also differs considerably among CECIMO countries in 2021. Italy (+40%) and Turkey (+37%) experienced the strongest growth in MT consumption in 2021 and while most other countries experienced an increase in MT consumption, Germany (-2.4%) and Switzerland (-1.6%) experienced a negative trend. However, MT consumption at the CECIMO level in 2021 picked up by about 14.3% in 2021.

Oxford Economics' latest forecast (April 2022) shows more optimistic MT consumption forecasts in 2022 than in October 2021 forecast. CECIMO MT consumption is expected to grow by approximately 19% in 2022 and 11% in 2023. In total, MT consumption is expected to increase from around 15.1 billion euros in 2021 to around 17.9 billion euros in 2022 and reach pre-pandemic levels in 2023.

One reason for the strong forecast for 2022 is fact that some CECIMO countries experienced a very slow or negative rebound in MT consumption in the previous year (2021). Hence, significant growth in MT consumption could be expected in Germany, which is expected to have a positive impact on MT demand and production in all CECIMO countries.



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 (April 2022)

The latest Oxford Economics report, Machine Tool Outlook, shows the emerging risks of the war between Russia and Ukraine and their impact on global industry. Ongoing supply chain problems, followed by inflation and linked to the evolution of war and coronavirus in Asia, are also weighing on world economies.

In the baseline scenario, Oxford Economics reduced global demand expectations for MT this year and delayed growth in the coming years. As a result, MT-weighted output is expected to grow by 3.1% in 2022 and 5.2% in 2023, while MT-weighted investment will grow by 2.1% in 2022 and 5.5% in 2023. World MT consumption is expected to increase by 10.3% in 2022 and 10.6% in 2023. Key downside risks are linked to the possibility of more severe supply chain disruptions, war in Ukraine developments and new waves of COVID-19 pandemic.

As the baseline scenario takes into account the latest developments and the Russian War in Ukraine, MT consumption forecasts at European level have been revised. Therefore, mainly due to expectations of a decrease in MT consumption in Russia, European MT consumption will grow at a slower pace than in the CECIMO countries. As a result, European MT consumption is expected to grow by 14% in 2022 and 9% in 2023.

With a strong government support, MT consumption in the United States saw a very strong recovery in 2021. With an increase of 24% compared to the 2020 level, MT consumption in the United States reached the level of 9.1 billion euros. According to the latest forecasts, MT consumption in the United States is expected to increase by around 9% in 2022 and 3% in 2023 before stagnating in 2024 and 2025.

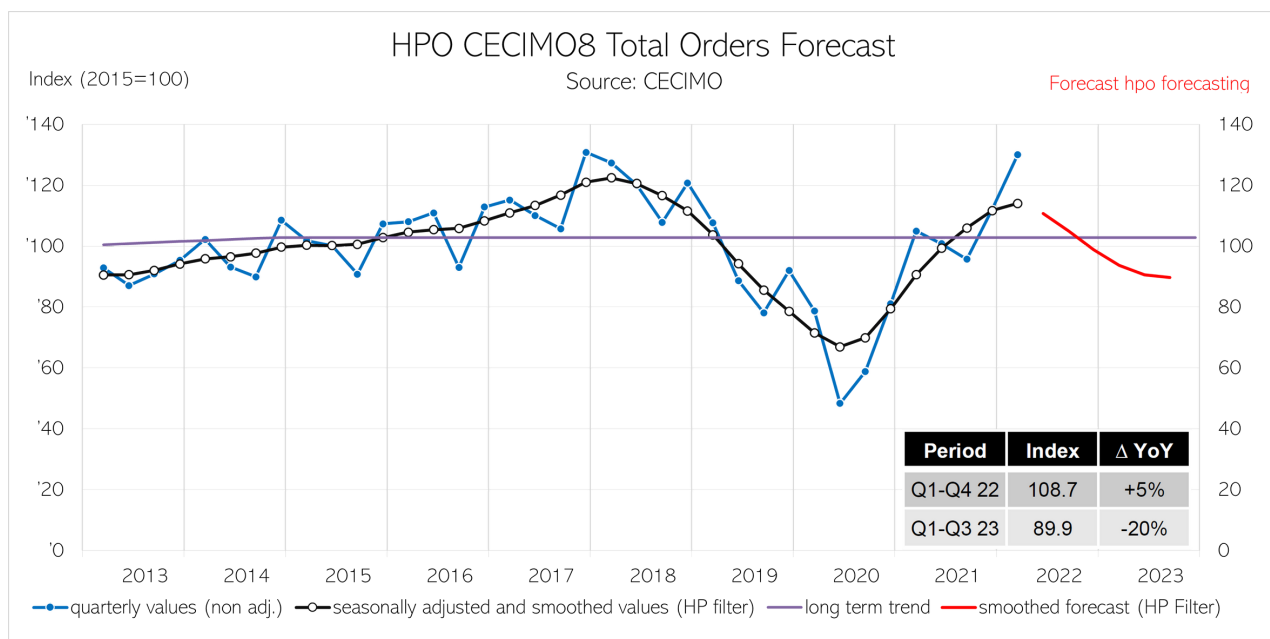
In terms of the latest figures for China, the recovery in MT consumption in 2021 was better than expected in the latest OE forecast (October 2021). However, weaker investment trends suggest more moderate Chinese MT consumption growth rates for the medium term. The MT demand is expected to increase by 4.5% in 2022 and 7.1% in 2023. The risks associated with MT's demand outlook are related to COVID-19 cases and the renewal of lockdown measures.

Regarding Global industry and main MT purchasing sectors, the highest growth rate in 2022 is expected to be Aerospace and Electrical/Electronic engineering sectors (5.4% growth rate). Due to war, new supply side disruptions can be expected mainly in countries that are geographically closer to Russia and Ukraine. The Motor vehicle and parts sector is projected to grow, but recovery and growth rates are expected to be stronger in 2023 and beyond. Prolonged chip shortages and the potential impact of new COVID-19 cases are downside risks. Considering developments regarding transition towards electric vehicles, latest Oxford Economic forecasts are showing that they expect global hybrid and electric vehicle sales to represent 54% of global light vehicle sales by 2030.

2.2 HPO CECIMO8 ORDERS FORECAST (M)

The latest HPO Economic Commentary rises significant concerns regarding the current economic and geopolitical challenges. Among others, inflation at very high levels, not seen for around 40 years is one of the great challenges for world economies. While high inflation has always caused a recession in the US in the past (with potential global impacts), due to current geopolitical challenges, economic developments are likely to remain unpredictable over some period. Supply chain disruptions remain the biggest challenge for the industry in 2022 and the zero-covid strategy in China, with strict lockdowns, is unlikely to ease in coming months.

Due to strong demand, the European machinery sector faces large order backlogs that are still very high. The real economy is still benefiting from dynamic consumption and strong industrial production in Europe and the US. However, according to HPO, a slowdown in economic growth and industrial demand is expected in the coming months.



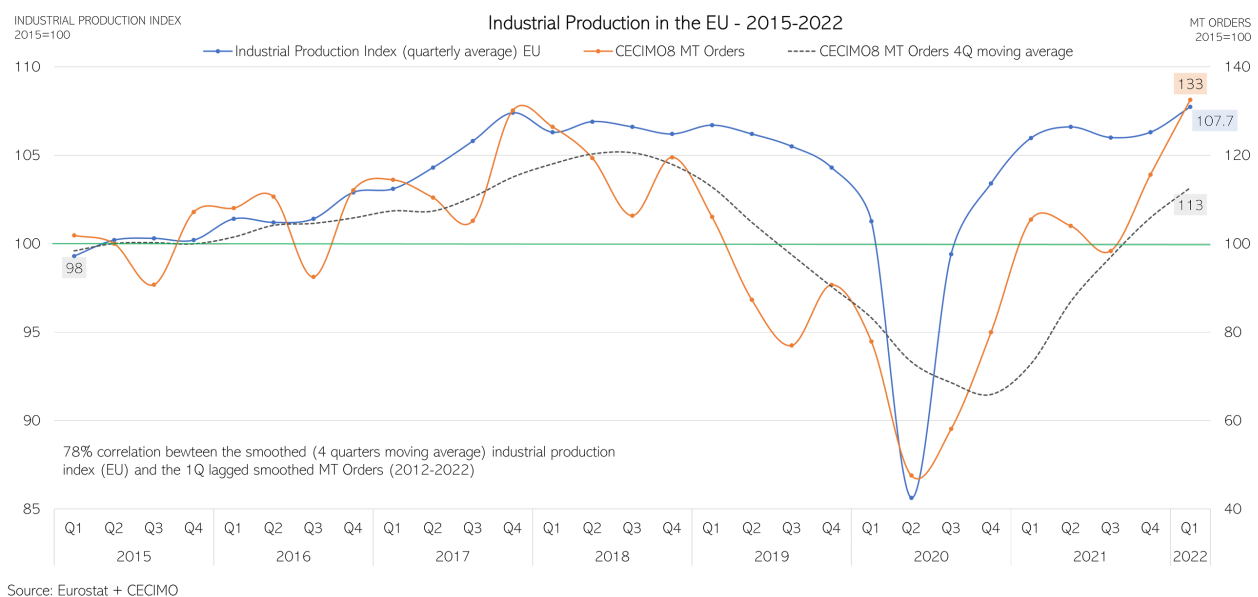
Based on the latest CECIMO8 forecasts, it is evident that CECIMO8's order intake outperformed in the first quarter of 2022. However, it is important to keep in mind that inflation itself has played a significant role in these figures.

For the following quarters, the latest HPO forecasts based on new economic indicators show a downward trend and an expected orders decrease for the following period. By the middle of 2023, quarterly values will reach the lowest point.

While HPO expects orders to decline over the next period, as shown in the small table in the graph (the annual change in unadjusted CECIMO8 orders), there is still an annual increase this year with orders approximately 5% higher than in 2021. The decrease in the following period can be attributed to the expected downturn in the economic cycle over the next 12 months and highly uncertain economic situation in the coming months.

The first three quarters of 2023 might face a worse scenario (-20%) than the first three quarters of this year. However, it is important to bear in mind that this is a forecast for the first three quarters, unadjusted values, and the level of orders in the first quarter of this year reached a record high.

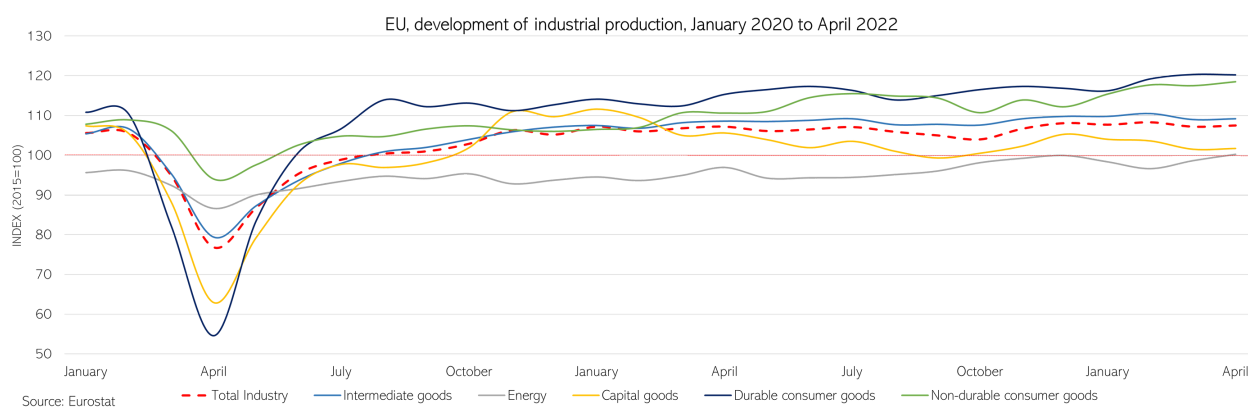
2.3 INDUSTRIAL PRODUCTION INDEX (M)



The Industrial Production Index (IPI) shows a further improvement in Q1 2022 in the European Union (EU) as well as in the eurozone. The trend above the historical average shows a continuous recovery in European industries.

Up on the previous quarter, the Eurozone's 4Q moving average rose slightly and reached its highest level since the second quarter of 2019. The current rating (Q1 2022) of the EU industrial production index (107.7) is at its highest level since 2008 – prior to the last financial crisis. This level is 1.7% higher than in Q1 2021 and reflects the continued growth of industrial production in the EU.

There are a number of risks that could affect EU industrial output in coming months. Of course, disruptions in the supply chain caused by new lockdowns in China and the Russian war in Ukraine could slow down growth in the following quarters. However, strong demand in the first quarter and the backlog of orders from last year, which can be observed in many sectors, should hold the production index steady over the next period.

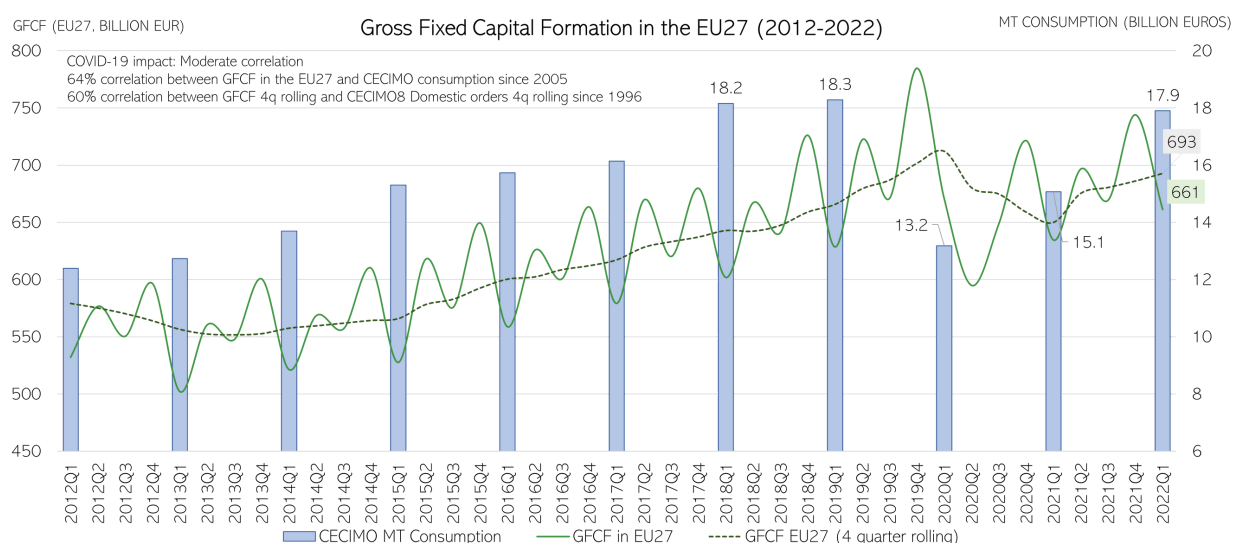


In sectoral terms, the strongest recovery in the first quarter of 2022 was recorded in the Durable consumer goods sector (+4.1%) compared to the previous quarter. Apart from the Energy sector (-1%), Intermediate goods (1%) and consumer non-durables (1%) improved as well compared with the level of production in the fourth quarter of 2021.



3. INVESTMENT

3.1 GROSS FIXED CAPITAL FORMATION (M)



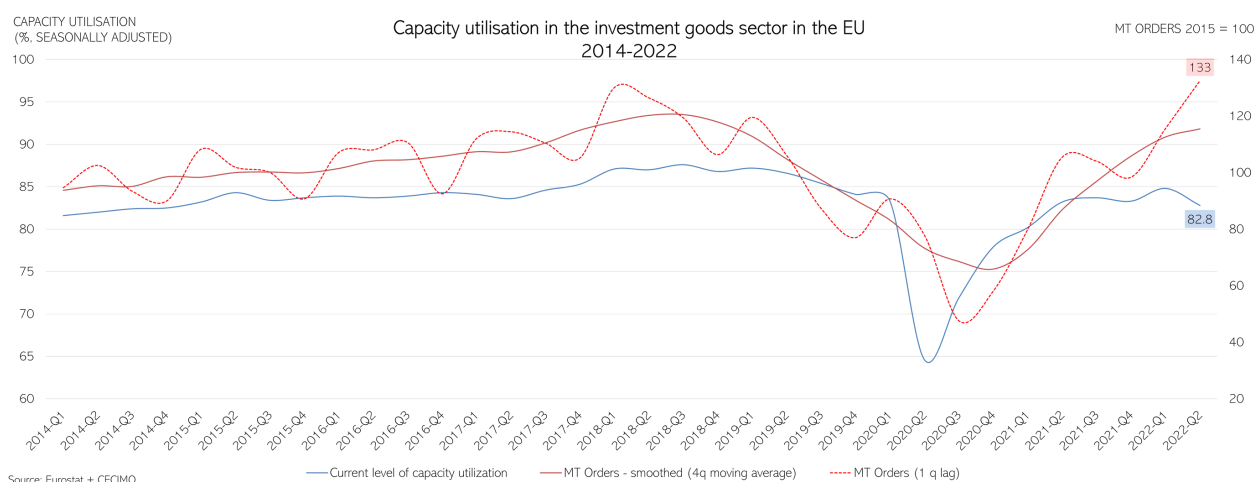
Considering the latest EU27 figures, Gross Fixed Capital Formation decreased by 11.1% in Q1 2022 against Q4 2021 value. However, this is normal as we know that the level of GFCF is usually the lowest in the year in the first quarter if we follow the historical trend. In addition, it is important to point out that this level (Q1 2022) is 4.2% higher than the same period last year. In absolute terms, investment in the first quarter of 2022 amounted to 661.2 billion euros, a bit higher figure if we consider the 634.6 billion euros registered in the same period previous year.

If we look at GFCF levels – 4q moving average, we can see the growth trend which also follow the rise in CECIMO MT consumption levels. For the coming quarters, with expected growth in industrial production and strong demand, we can expect a positive investment path in the EU. Though the first quarter shows the lower level of investment than the previous quarter, by the end of the year, the 2022 average is expected to be above the previous year's average.

3.2 CAPACITY UTILISATION AND PRODUCTION CAPACITY (M)

Methodological Note: The dates in this section refers to when the results were published; so, the Q2-2022 figures were published in Q2-2022 but reflect the position at the end of the previous quarter when the data collection took place (Q1 2022). We will refer to the date of publication in this section but please bear in mind this adjustment.

The most recent data for capacity utilisation in the European Union's investment goods sector following a slight q/q increase (+2%), records in Q1 2022, records small decline in the Q2 2022 by 2%. Currently, this indicator is at 82.8 points, which is close to the EU's long-term average levels between 2011 and 2019 (83.5).



At the national level, as shown in the table below, the level of capacity utilization slightly decreased in the second quarter of 2022 compared to the previous quarter in most CECIMO8 countries. Only Spain, Italy and Switzerland recorded an increase in capacity utilisation levels, whilst Austria recorded the same level as in the previous reference period.

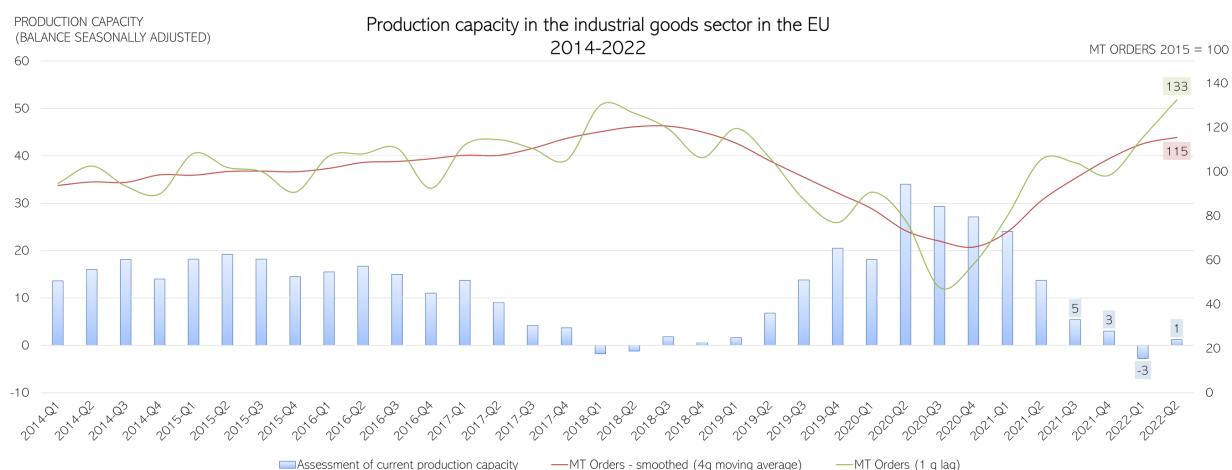
Capacity Utilisation (% of total capacity)

	Q2 2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022	Q2 2022
Austria	74.2	76.0	79.2	83.2	86.2	90.7	87.7	87.3	87.3
Czech Republic	45	74.8	80.5	87.4	87.2	92	63.2	81.1	78.3
France	62.0	70.9	75.1	77.5	78.1	80.7	80.3	81.7	80.4
Germany	65.9	72.7	81.1	81.9	87.5	85.2	85.4	89.4	83.7
Italy	NA	65.7	73.0	77.5	78.9	80.8	80.2	80.4	81.3
Spain	81.8	78.5	80.0	82.4	81.4	82.3	81.8	80.8	86.1
Switzerland	83.6	80.9	77.0	78.3	81.7	85.6	87.2	89.8	91.9
United Kingdom	55.0	64.0	74.0	75.0	79.0	82.0	81.0	83.0	82.0

Source: Eurostat, MTA, SWISSMEM

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 Q2 2022, results show an almost ideal level of spare capacity in the industrial goods sector in the EU compared to the negative balance in the previous period. The current level of spare production capacity is still quite close to zero - at 1% and it is important to point out that the very low level of spare capacity is usually closely related to increased demand for MT. Strong MT order intake was observed in Q1 2022 and is expected to remain steady as long as spare capacity levels are close to zero or negative.



As the chart below shows, there is a visible decline in spare capacity in Q2 2022 only in Italy. The Czech companies recorded the strongest growth of spare capacity after 9.1% in the first quarter, now this level is much higher and stands at 49.2%. All other countries registered an increase in spare capacity, but it is important to point out that some of them, such as Germany and Spain, are still in negative territory.

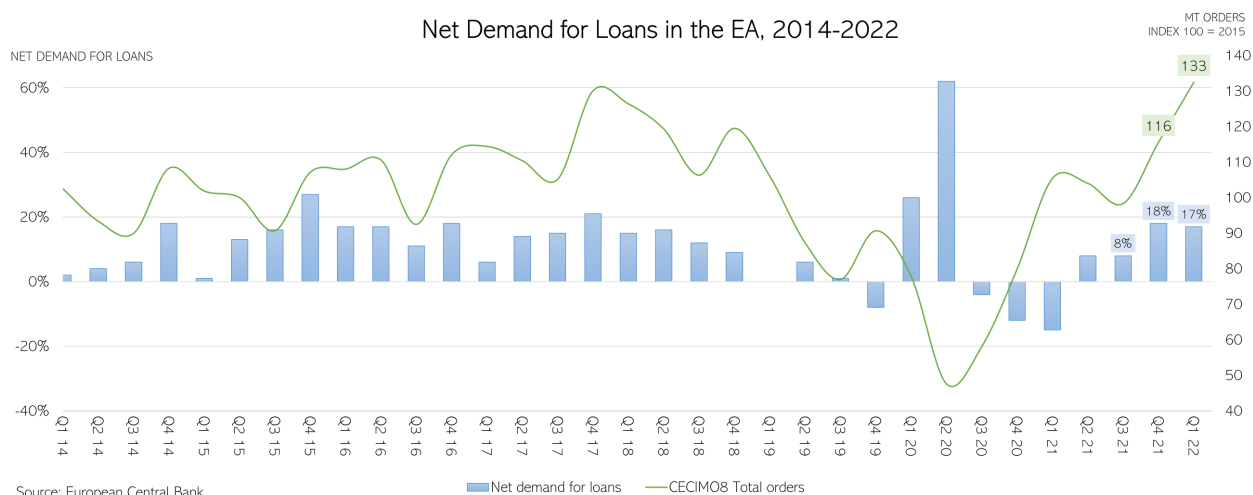
Production Capacity (balance in %)

	Q2 2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022	Q2 2022
Austria	35.8	42.7	41.9	21.7	16.8	-5.3	-2	-7.3	0.7
Czech Republic	19.2	25.4	21.3	13.1	9.1	9.3	12	9.1	49.2
France	29.2	-1.1	18.5	33	32.7	22.2	17.5	-4.1	12.1
Germany	46.5	44.4	35.6	32.4	7.8	3.1	-8	-6.5	-5.3
Italy	NA	28.7	26.6	27	24.9	20.5	15.9	16.4	14.2
Spain	13.7	26.5	9.3	-0.8	13.1	-14.3	16.8	-19.1	-6.6

Source: Eurostat

3.3 BANK LENDING SURVEY (M)

Note: The results reported in the April 2022 bank lending survey (BLS) relate to changes observed during the first quarter of 2022 and expectations for the second quarter of 2022.



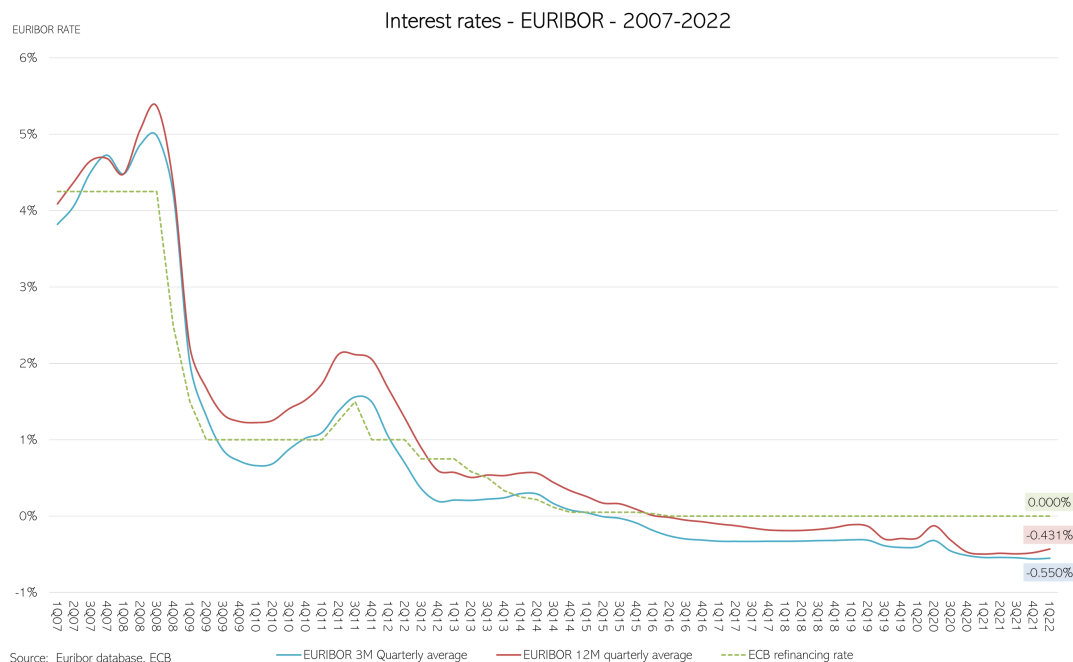
- Credit standards** – euro area banks reported a net tightening of credit standards (i.e. banks' internal guidelines or loan approval criteria) for loans or credit lines to enterprises in the first quarter of 2022 (with the net percentage of banks reporting a 6%, after 2% in the fourth quarter of 2021). According to ECB, credit standards tightened equally for loans to small and medium-sized enterprises and for both short-term loans and for long-term loans. A net tightening is mainly linked to higher risks related to the general and business-specific economic outlook, as well as the war in Ukraine and related uncertainty. In the largest euro area countries, credit standards for loans to enterprises tightened in Germany, Spain and Italy, while they remained unchanged in France in the first quarter of 2022.
- Banks' overall terms and conditions** (i.e. the actual terms and conditions agreed in the loan contract) for new loans to enterprises also tightened somewhat in the first quarter of 2022 (net percentage of 3%, after 0%. The major drivers were the banks' higher capital costs and the perception of higher risk. In the main euro area countries, overall terms and conditions for companies tightened in Italy and remained unchanged in Germany and Spain, and eased in France.
- Net demand for loans to enterprises** continued to increase. Banks again reported a net increase in firms' demand for loans or credit lines in the first quarter of 2022 (net percentage of banks of 17%, after 18% in the fourth quarter of 2021)

Banks reported higher increases in long-term maturities and, to a lesser extent, in short-term maturities and loan demand picked up for both SMEs and large firms. However, according to the survey results, banks reported that large firms in particular increased their loan demand for inventories and working capital in the first quarter of 2022, which may suggest that they are more exposed to supply chain disruptions than SMEs. When it comes to the largest euro area countries, banks reported a net increase in demand for loans to firms in Germany and France, while loan demand remained unchanged according to banks in Spain and decreased in Italy.

- **Over the next quarter (Q2 2022)**, Eurozone banks expect that demand for business loans, for both SMEs and large companies, will continue to increase. Demand for short-term loans is expected to increase significantly, signaling expectations of higher financing needs due to increased input costs and possibly lasting supply chain disruptions.

3.4 EURIBOR (M)

The **ECB refinancing rate** remained unchanged at 0.0% during the first quarter of 2022. The EURIBOR 3-month average rate stands at -0.550%, while the 12-month average rate stands at -0.431%.



According to recent ECB statements and decisions (9 June 2022), the Governing Council announced that ECB **will ensure that inflation returns to its 2 % target over the medium term**. Inflation is a major issue for the following period and the new inflation projected for 2022 is 6.8% in the eurozone, before it is expected to decline to 3.5% in 2023 and 2.1% in 2024.

Concerning the **Asset purchase program**, the Governing Council decided to end net asset purchases under its asset purchase programme (APP) as of 1 July 2022 putting an end to its economic stimulus scheme in the face of inflationary pressures. As concerns the pandemic emergency purchase programme (PEPP), the Governing Council intends to reinvest the principal payments from maturing securities purchased under the programme until at least the end of 2024.

The European Central Bank plans to carry out its **first interest rate increase** in 11 years. According to the statement, the ECB should raise key interest rates by 0.25% at its July monetary policy meeting, switching its policy **from supporting the economy during the pandemic to tamping soaring inflation**. Moreover, a further increase in the ECB's key interest rates is also planned for September.

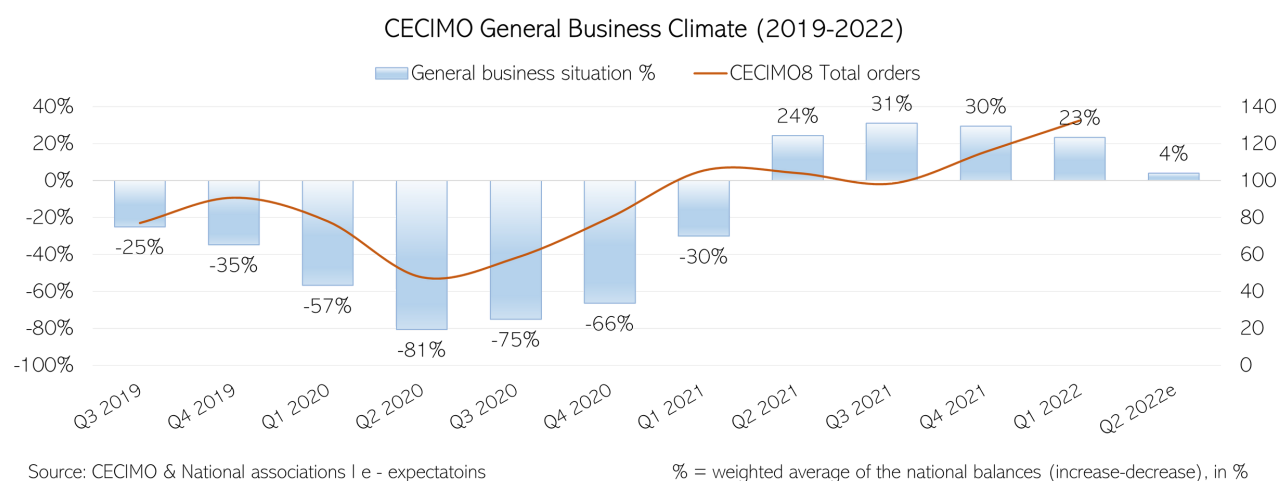
4. BUSINESS CLIMATE

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.

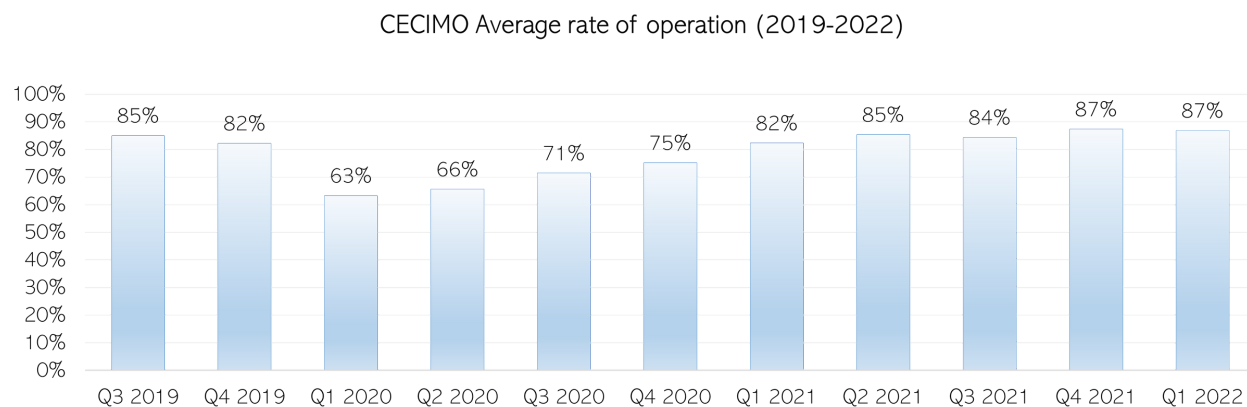
Methodology: CECIMO & National association surveyed individual companies and assessed their current business climate and their expectations (next q) in relation to demand, domestic production, export sales and employment. The responses of the CECIMO BCB are analysed as the difference (net percentage) 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 2022 results are based on the responses of the following CECIMO countries: Austria, Switzerland, France, Germany, the Czech Republic, the United Kingdom and Italy.



The overall business climate among CECIMO member firms remained above expectations and highly positive in Q1 2022 with percentage balance of 23%. It is important to note that the survey was launched in March (following the start of the Russian war in Ukraine). Despite the impact of the war, supply chain issues caused by lockdowns in China, European machine tool manufacturers are optimistic about the prospects for Q2. As shown in the chart above, the business climate is expected to be lower, but still stable in the first quarter of 2022 (4%).

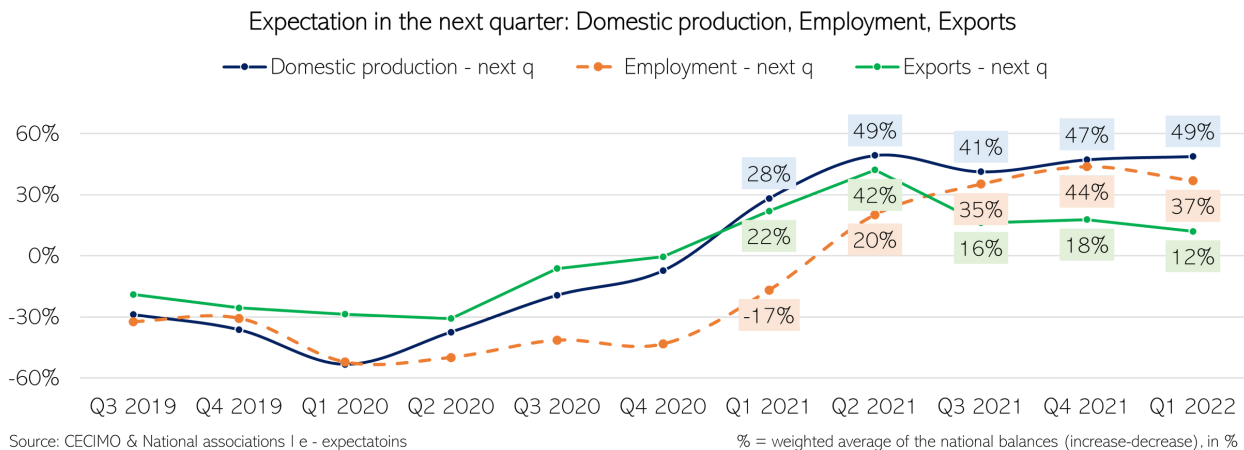
Similar to EU capacity utilization levels, in the first quarter of 2022, the average operating ratio of CECIMO companies remained stable, unchanged compared to the previous reporting period.



Source: CECIMO & National associations

Survey results indicate that managers expect moderately positive demand for products (percentage balance +25%) for the next quarter. While orders reached very high level in the first quarter of 2022 as outlined in the orders section, this is a good sign of strong demand expectations also for the second quarter of 2022.

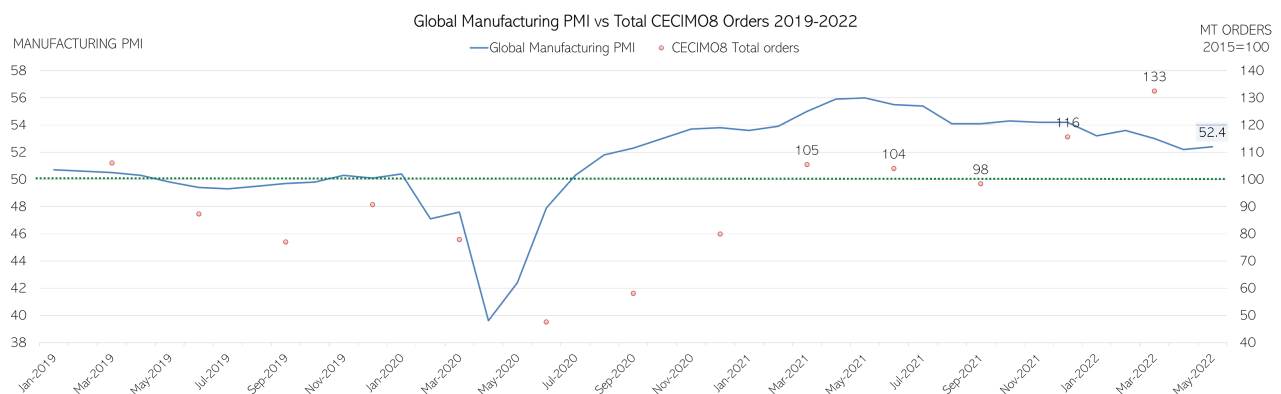
For the other indicators, as shown in the graph below, machine tool producers expressed slightly higher expectations for domestic production, while exports and employment in the next quarter (Q2 2022) are expected to grow slower.



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.

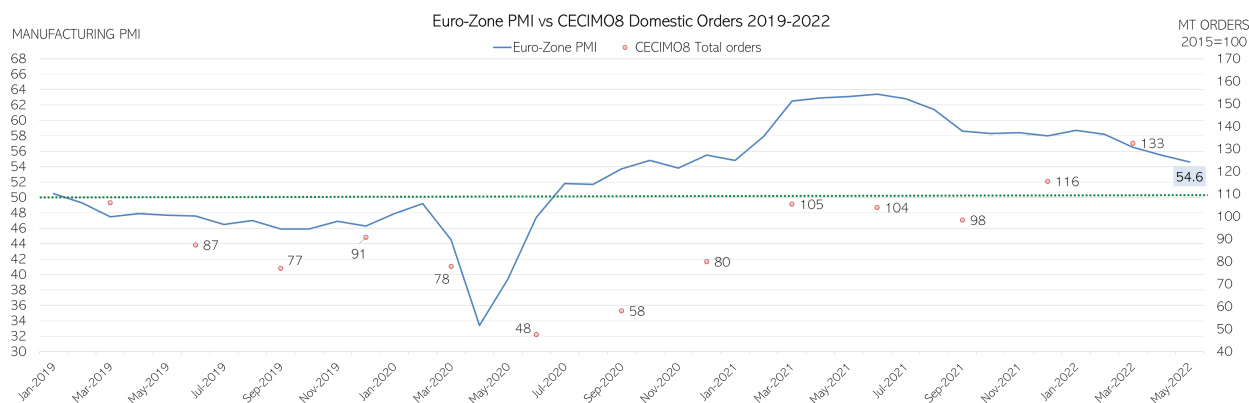
Note: The most recent data (May) were collected in mid-May 2022.



The J.P. Morgan Global Manufacturing Purchasing Managers Index (PMI), following strong declines in March and April, posted a slight increase of 1.1 percentage points in May. At 52.4 points in May, the index remained in expansion territory, above the 50.0 mark, indicating an improvement in operating conditions in world manufacturing.

Lot of manufacturers were faced with lower production levels due to stretched supply chains, inflation pressures, the war in Ukraine and the downturn in Chinese manufacturing. According to IHS Markit, inflationary pressures remained high in May as rates of increase in input costs and selling prices were among the highest in survey history (but lower than in April). Global growth is still largely driven by the North American and European regions.

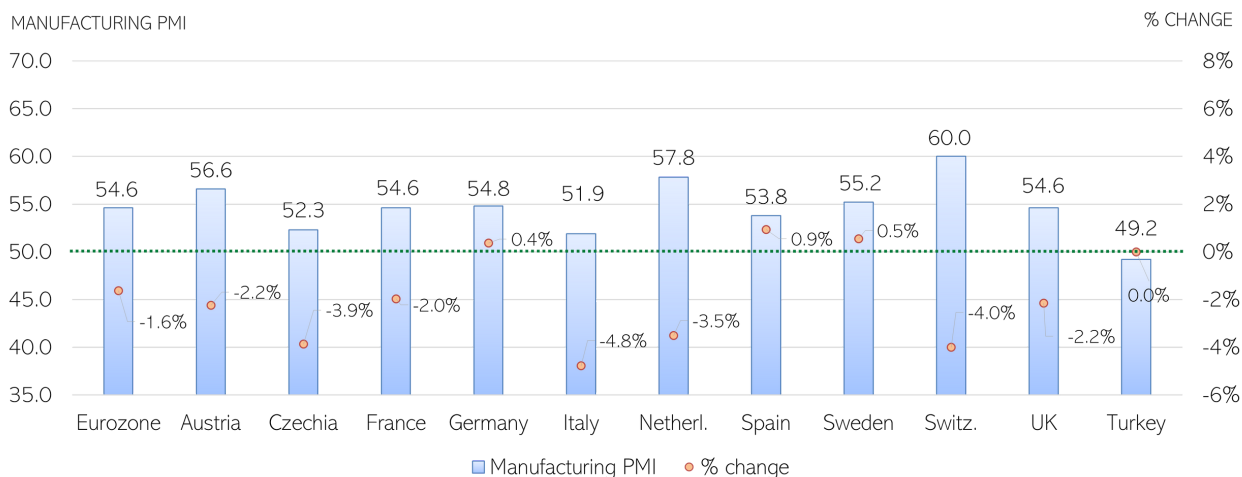
Eurozone Manufacturing PMI



Considering all the factors having a negative impact on the manufacturing industry of the eurozone, the level of the PMI index, although at 18-month low level, posted 54.6 points - well above the no-change mark (50.0). Eurozone (EZ) manufacturers were faced with supply shortages, inflationary pressures and as last survey shows, weakening demand amid rising uncertainty about the economic outlook. In May, manufacturers reported a decrease in new orders for the first time since June 20. One of the main reasons is the rising selling charges, the decline in business confidence due to the war in Ukraine, supply problems and increased uncertainty.

However, the index is above the 2011-2019 average and reflects a favourable business environment among EZ manufacturers. It is also worth noting that the EZ PMI index, which was 54.6 points in May, is 2.2 points higher than the global PMI.

PMI & monthly % change - Europe - May 2022



Austria

The Austrian PMI slipped to a 16-month low in May, dropping from 57.9 points in April to 56.6 points in May. According to IHS Markit, the main driver of this trend has been the contraction of new orders – the first in almost two years. Manufacturers' expectations for future production have deteriorated due to strong inflationary pressures, uncertainty over the war in Ukraine, and ongoing disruption of the supply chain.

Czech Republic

As in other European countries, the Czech Republic PMI decreased to 52.3 in May, down from 54.4 in April. While this still reflects the moderate improvement in the health of the Czech manufacturing sector, it was the slowest for 19 months. The fall in the PMI is mainly due to slower output growth and lower new orders. Companies said new orders have plummeted due to challenges in the automotive industry and uncertainty among customers because of the Russia-Ukraine war.

Germany

The latest PMI data for Germany show a slight increase in the PMI index in May 2022. Following the PMI decrease in February, March and April, the last PMI reflects an improvement to 54.8 (twenty-third consecutive monthly improvement). Growth in May was primarily due to growth in production, while supply challenges continued to constrain production in many cases. Although, some firms reported an improvement in the availability of materials, which helped them to increase production. According to IHS Markit, businesses reported a decrease in new orders, primarily due to economic uncertainty and strong price pressures, as well as COVID-related lockdowns in China.

Spain

Spain's PMI rose to 53.8 in May from 53.3 in April, marking a 16-month expansion in the manufacturing sector. Growth was driven primarily by output growth, and business confidence for the future remained positive. However, Spanish manufacturers reported that input price inflation remained noticeable in May, while supply challenges remained an issue as well. Lockdowns in China and the war in Ukraine and excess demand were seen as determining factors in the deterioration of supplier performance.

France

Although French manufacturers have experienced growth in production, according to the latest IHS Markit publications, the growth of the PMI has deteriorated as a result of the slowdown in new orders. As a result, the PMI declined to 54.6 in May from 55.7 in April. However, this level remains well below the 50.0 mark and French manufacturers remain optimistic for the coming 12 months, despite concerns about the impact of inflation, persistent supply issues and slowing global economic growth.

Italy

Although still above the neutral level of 50.0, Italian PMI index fell from 54.5 in April to 51.9 in May, the weakest improvement in manufacturing conditions for 18 months and only marginal growth overall. According to IHS Markit survey, the weaker upturn was driven primarily by falls in output and new orders during May. Also, both total order book volumes and new orders from abroad declined for the first time since November 2020. Positive trends are easing inflationary pressures across the manufacturing sector, sustained job creation, easing supply disruptions and improved business confidence in May.

Netherlands

While the Netherlands PMI is the strongest compared to other countries in the world, growth was slower in May. Reflecting weaker production, new orders and export growth, the PMI declined from 59.9 in April to 57.8 in May. While the supply chain disruption seemed to have eased somewhat, lockdowns in China, the war in Ukraine and staff shortages have led to another significant increase in supplier delivery times. Input price inflation remained strong, and input and output prices continued to rise sharply in May.

Sweden

Sweden's PMI for manufacturing increased from 54.9 in April to 55.2 in May, the lowest level in 21 months. Growth was mainly driven by increase in production level, followed by employment and new orders. While indicators related to delivery times have dropped to their lowest level in 18 months, in view of the coming period, Swedish manufacturers see a more optimistic business situation compared to the situation in April.

Switzerland

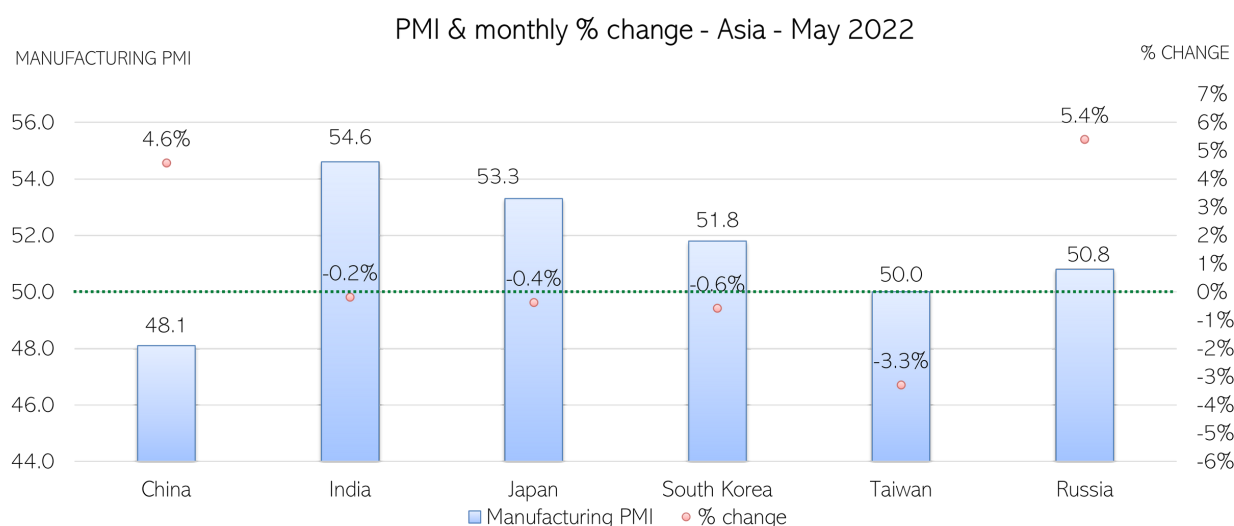
Based on the latest available data (May 2022), the Swiss PMI manufacturing index fell to 60 in May of 2022 from 62.5 in the previous month. However, the index remains one of the highest among CECIMO countries and shows a 23-month consecutive improvement in the health of the Swiss manufacturing sector. The decline in the index was due to slower growth in output, new orders and buying activity, while growth in input prices slowed somewhat.

Turkey

The Turkish manufacturing PMI remained under 50.0 and registered 49.2 points in May. As one of the major factors, manufacturers expressed low demand conditions and slowed production growth. Manufacturers continued to increase employment and there are visible positive signals of easing supply chain disruption and inflationary pressures.

United Kingdom

Although at a slower pace, the UK sector continues its 16-month expansion. The PMI posted 54.6 in May, compared with 55.8 in April and it is still well above 50.0 and above pre-pandemic levels. According to IHS Markit, main concerns UK manufacturers were faced with in May were linked to slowdown in domestic demand, lower exports, shortages of inputs and staff, inflationary pressures and concerns about the outlook given geopolitical uncertainties. However, the sector's outlook remained positive, with 55% of manufacturers expecting production to increase in the year ahead.



China

By posting 48.1 in May, the Chinese Purchasing Managers' Index rose from a 26-month low of 46.0 in April. Although the index level is now closer to 50.0-mark, Chinese manufacturers were still facing lower production and new orders, while COVID-19 restrictions had weighed heavily on logistics and transport. Weaker external demand was a key factor weighing on new business as export orders continued to decline markedly, which some firms also linked to difficulties in shipping items to their customers. Business confidence over the next 12 months dropped to a five-month low in May, primarily due to uncertainty around the COVID-19 virus and the war in Ukraine.

India

India's manufacturing sector continues to have the strongest growth among selected Asian countries. With new orders and production growing at rates similar to those recorded in recent months, the PMI index decreased from 54.7 in April to 54.6 in May. The sector's expansion in May was driven mainly by a sharp increase in international sales (and orders). As in other countries, input costs continue to rise in May, increasing output charges inflation as companies continue to pass on additional costs to their clients.

Japan

In May, IHS Markit reported that manufacturing conditions in Japan continued to improve, but at softest pace for three months. Compared to the previous month, the PMI declined marginally from 53.5 in April to 53.3 in May. Due to supply chain disruption and higher raw material prices, production and new orders rose at lower rates. Companies have expressed concern about higher input prices, attributed to higher materials and fuel costs, particularly for oil and semiconductors. Confidence in the next 12 months has strengthened with hopes of ending the pandemic and the Russian-Ukrainian conflict.

South Korea

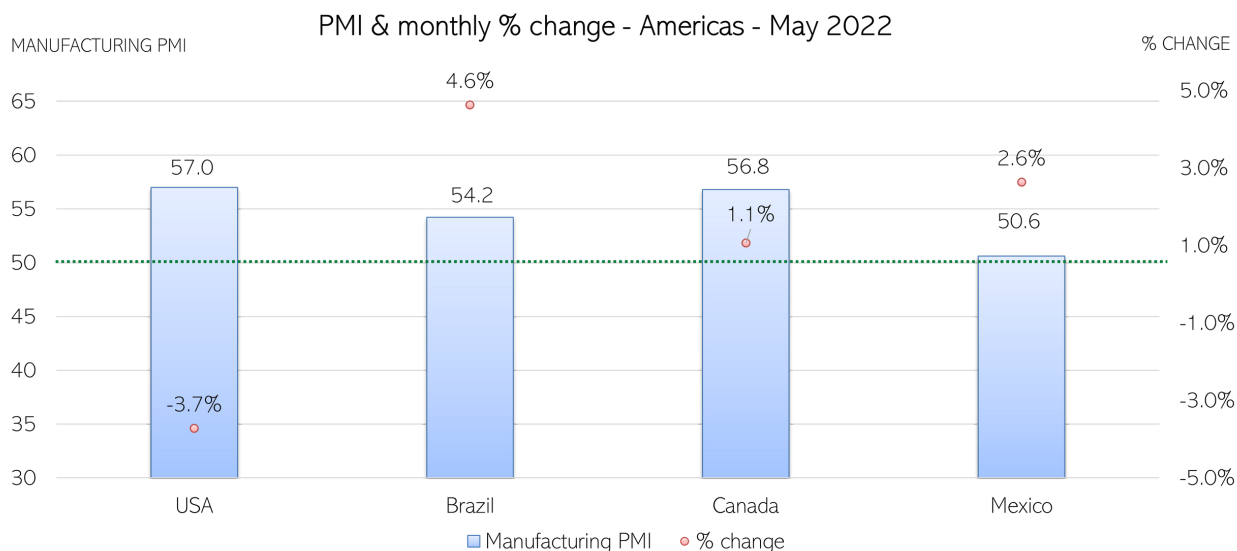
Like Japan, South Korean manufacturers have recently expressed concerns and have been confronted with supply chain disruption and rising input costs. As a result, South Korea's manufacturing PMI reached 51.8 points in May, down from 52.1 in April. May data points to a second contraction in production levels over the past three months. However, manufacturers have also reported increased new orders and producers remained strongly optimistic that production will grow over the next 12 months.

Taiwan

Due to the largest reduction in production in nearly two years, Taiwan's manufacturing PMI declined from 51.7 in April to 50.0 in May. The decrease was mainly due to deteriorating production and new orders, mainly due to recent COVID-19 lockdowns in China and general easing of global demand. Companies also expressed a more pessimistic scenario over the next 12 months due to rising costs, strained supply, the pandemic and the Ukraine war.

Russia

Regarding the situation in Russian manufacturing, according to latest IHS Markit press releases, the fall in new orders reflected weak domestic and foreign client demand, as new export orders decreased at one of the fastest paces on record. As a result of lower demand, largely related to the effect of sanctions, manufacturing output also declined in May, but at a slower pace than in April and business confidence among manufacturers increased to three months high in May. This was reflected in a rise in the Russian PMI from 48.2 in April to 50.8 in May.



United States

After a sustained increase in the PMI since January and a very high level in April 2022, the PMI was down 3.7% in May. However, from 59.2 in April to 57 in May, the US PMI remains well above 50.0 and reflects continued expansion in the US manufacturing sector. As mentioned by manufacturers, material shortages, delays in delivery and a more moderate increase in order books have begun to slow the pace of expansion. Companies reported the largest cost increase since November, mainly due to increases in energy, wages and transportation costs.

Canada

Following a slight slowdown in expansion in April, May data shows improved manufacturing growth in Canada. PMI went up from 56.2 in April to 56.8 in May. Although this level is still lower than in March, it reflects a more rapid expansion of production, new orders and employment in May. Firms reported high capacity pressures, with high new orders which led to increased backlog accumulation. The increase in output has been reduced as supplier performance has deteriorated once again due to port congestions, material shortages and recent lockdowns in China.

Mexico

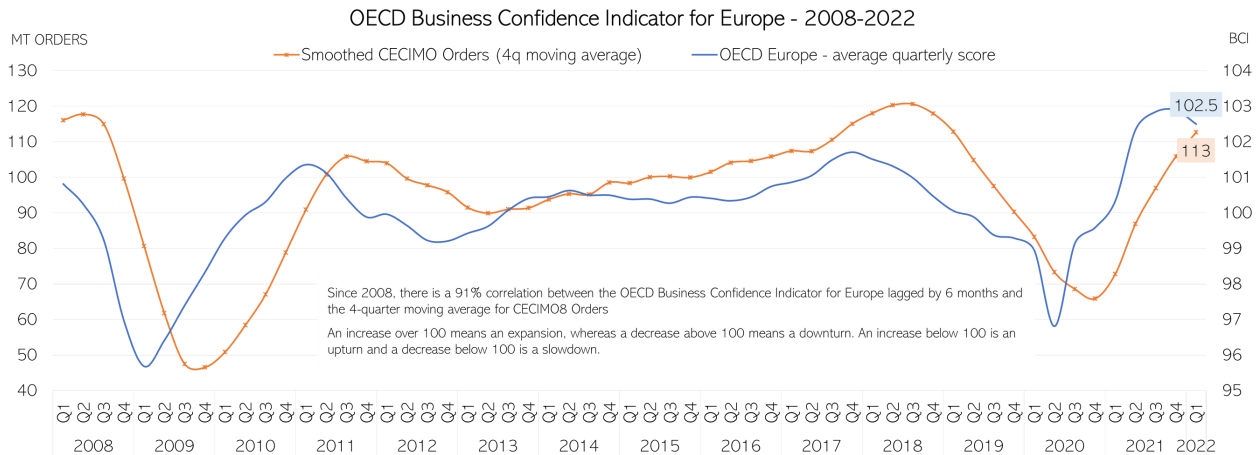
With 50.6 in May, up from 49.3 in April, Mexico's manufacturing PMI exceeded the 50.0 critical level for the first time in 31 months. According to IHS Markit, the major drivers for manufacturing expansion have been stronger increases in export orders and employment. On other side, Mexican manufacturers signalled another decline in production volumes and lower domestic demand. Manufacturers' optimism for the next 12 months in May was tempered by concerns about input shortages, issues in the automotive sector, weak demand and price pressures.

Brazil

After a slight fall in April, the Brazilian manufacturing industry developed strongly in May thanks to more dynamic growth in production, new orders and employment. Rising from 51.8 in April to 54.2 in May, the PMI level pointed to the strongest improvement in operating conditions since September 2021. However, companies reported difficulties receiving input deliveries in May due to lockdown in China, the war in Ukraine and global shortages of raw materials. As in other countries, companies faced cost pressures, but in the future, manufacturers were highly confident of the rise in the output over the next 12 months.

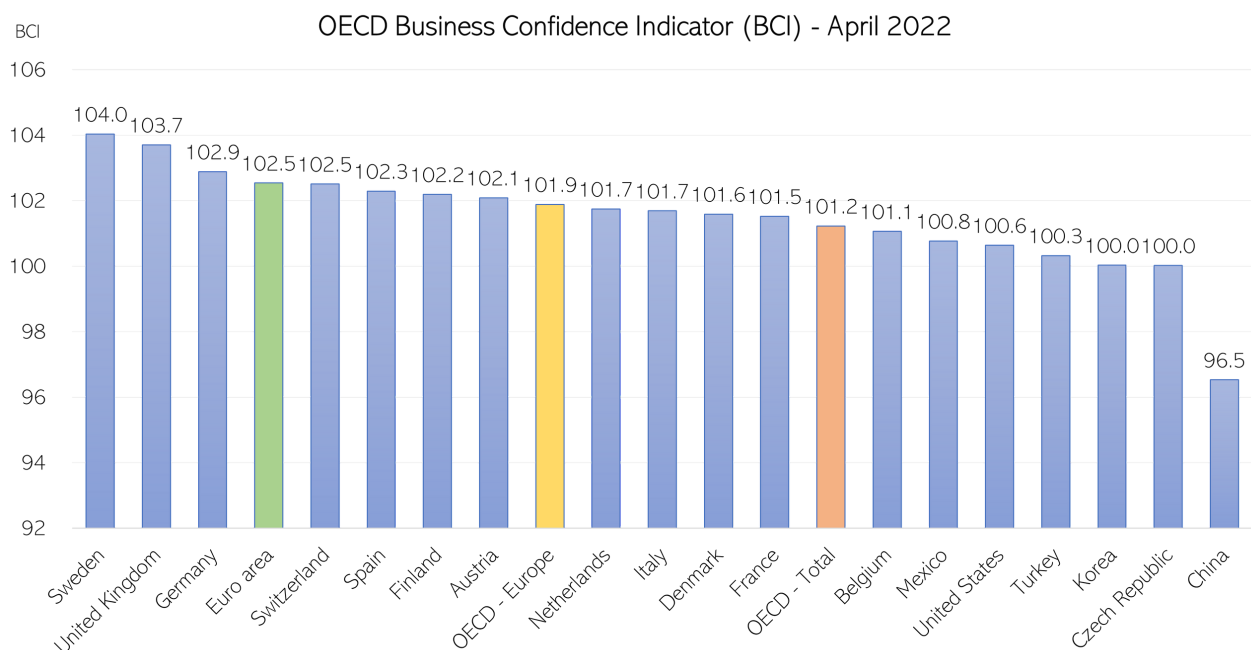
4.3 OECD BUSINESS CLIMATE INDICATOR (M)

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.



After reaching very high levels over the past few months, the BCI for Europe remains in expansion territory in the first quarter of 2022. The latest data for Europe shows that BCI fell slightly in the first period of 2022 to a level of 102.6 points. The eurozone business confidence indicator is slightly higher, reaching 103.3 points in the first quarter, but still below the level of Q4 2021. The latest figures for April 2022, keeping in mind the impact of the war and inflation in Europe, showed further deterioration of the BCI index for Europe which has declined to 101.9 points. However, with the level above 100, this still signals a positive outlook for the European business climate in the second quarter of 2022.

The OECD Business Climate Index (Total) also declined to 101.6 in Q1 2022, compared to 102.0 in Q4 2021. Data from April 2022 (note that the previous chart refers to quarterly averages) also show a slight drop in the index where the OECD-Total aggregate fell to 101.2 points reflecting weaker but still positive business sentiment in the near future.



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

- Although at a lower level than recent months, European markets such as Sweden (104.0), the United Kingdom (103.7) and Germany (102.9) reached BCI levels above the European and Euro-zone average. Switzerland (102.5), Spain (102.3), Finland (102.2), Austria (102.1), Netherlands (101.7), Italy (101.7) were above the OECD total BCI.
- Other European countries, such as Belgium, Turkey and the Czech Republic, reported levels of BCIs in April lower than the OECD average, but still above or at the 100-point level.
- Among Asian markets, the latest data for China shows that China remained in the unfavorable area (due to zero-COVID policy), while South Korea had a BCI at the level of 100 points.
- The US (100.6) and Mexico (100.8) were below the OECD average, but still higher than the 100-point level.
- Sweden, the United Kingdom, and Germany recorded the highest BCI levels in April 2022. It is important to highlight that European countries have on average the higher level of BCIs compared to the rest of the world.



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 and 2023:

- EU GDP increased by 5.2% in the first quarter of 2022 compared to the same period a year ago. Compared with the Q4 2021, both European GDP rates (EU and euro area) showed a continued recovery in the Q1 2022. As for annual data, the revised European Commission forecasts (April 2022) show a lower than previously expected level of GDP growth in 2022. As a result of recent geopolitical developments, EU GDP is expected to grow by 2.7% in 2022 and 2.3% in 2023.
- China's economy registered a 4.6% increase in the first quarter of 2022 compared to the same period in 2021, and an increase of about 1.2% compared to the previous quarter. According to the latest OECD forecast, it is expected to grow by 4.4% in 2022 and 4.9% in 2023.
- United States GDP in the first quarter of 2022 was 3.6% higher than in the first quarter of 2021, down 0.4% compared to the fourth quarter of 2021. Following an annual growth of 5.8%, the US economy is expected to grow by 2.5% in 2022 and 1.2% in 2023 (OECD).
- In the first quarter of 2022, the Japanese economy saw GDP growth of 0.4% compared to the same quarter in 2021, with negative quarter-over-quarter growth of 0.2%. The Japanese economy is projected to expand by 1.7% in 2022 and 1.8% in 2023 (OECD).

Please note that most of the forecasts have been revised in light of Russia's war in Ukraine. Recent developments will probably have the greatest impact on European growth, but the consequences will be visible globally as well.

European Commission's Autumn Forecast (May 2022):

The European Commission's new forecasts come after the start of Russia's war in Ukraine and bring new forecasts and related risks for EU growth in the following period. Real GDP growth in both the EU and the euro area is now expected at 2.7% in 2022 and 2.3% in 2023, down from 4.0% and 2.8% (2.7% in the euro area), respectively, in the Winter 2022 interim forecast (WiF).

As highlighted in forecast, although it is expected that COVID-19 will not cause significant disruptions to economic activity in the EU, the EU economy remains indirectly exposed to the evolution of the pandemic in other regions. After beginning of the Russian war in Ukraine, the biggest hit to the world and European economies comes from rising energy prices. Given the importance of Russia as a major exporter of fossil fuels, supply uncertainty has again put upward pressure on energy commodity prices as a result of increased volatility. In addition, while stronger inflationary pressures have accelerated the pace of monetary policy normalization, financial conditions are tightening, further increasing the cost of business financing. As a result, investment growth in the EU is expected to slow in 2022 and regain momentum in 2023, supported by the RFF.

In addition to lower growth expectations in Europe, global growth prospects are also expected to deteriorate. Global GDP is now expected to expand by 3.2% in 2022 and 3.5% in 2023. Advanced economies are set to grow by 2.8% in 2022 and 2.4% in 2023. EMEs are projected to grow by 3.6% in 2022 and 4.5% in 2023. For both advanced and emerging economies, this is a downgrade of more than 1 percentage point for 2022 compared to the Autumn Forecast. As highlighted in forecast, demand from the rest of the world is negatively affected by war-induced surges in commodity prices, disruptions in global trade and tightening global financing conditions.

The key risks for the baseline scenario relate to a possible higher than expected increase in input prices. Also, strong inflationary pressures could lead to tighter financial conditions which could negatively impact domestic demand and investments. In addition, a stronger-than-expected deterioration in economic activity in the United States and China would negatively impact growth in the EU. As seen through supply chain issues related to recent lockdowns in China, COVID-19 continues to pose a risk factor for the European and global economy.

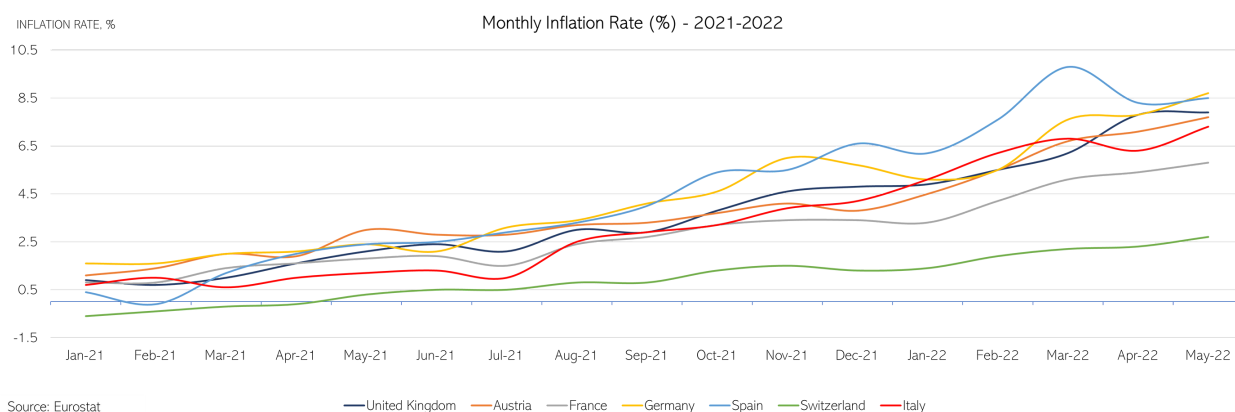
5.2 INFLATION (M)

Q1-2022 average inflation data:

- EU27: 6.53%
- Eurozone: 6.13%
- United States: 7.96%
- United Kingdom: 5.53%
- Turkey: 54.73%
- Switzerland: 1.83%
- China: 1.10%

In the first quarter of 2022, Eurozone inflation continues to rise, averaging 6.13% year-on-year (y/y), up from 4.67% y/y in the fourth quarter of 2021. EU27 inflation follows a similar path, averaging 6.53% y/y, compared to the 4.97% y/y in the fourth quarter 2021. Continued inflation growth in the EU in 2022 can be attributed primarily to rising energy and food prices due to the Russian war in Ukraine, rising material prices and other supply-side issues.

Inflation in the US also rose further, averaging 7.96% y/y in the first quarter of 2022, up from 6.69% y/y in the last quarter of 2021. The rate of inflation in China, after the quarterly value averaged 1.77% in Q4 2021, it decreased in Q1 2022, averaging 1.10% (y/y).



With strong order growth in the first quarter of 2022, European MT industry faces new inflationary pressures due to recent geopolitical challenges, with ongoing supply issues. Recent developments will probably lead to higher levels of inflation in the coming quarters among the largest CECIMO markets.

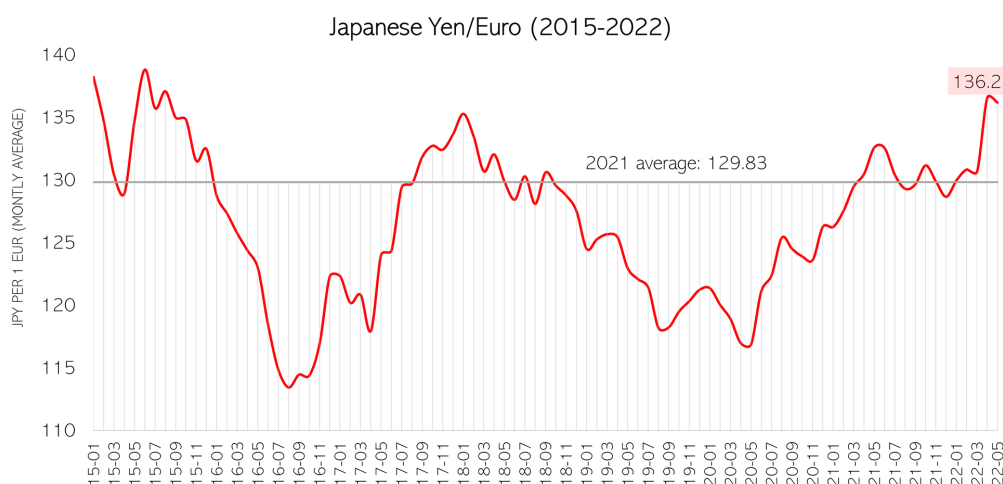
According to latest European Commission forecasts (May 2022), In the EU, HICP inflation is now expected to average an all-time high of 6.8% in 2022, before declining to 3.2% in 2023. In the euro area, inflation is projected at 6.1% in 2022 and 2.7% in 2023. That compares to 3.5% and 1.7% respectively in the Commission's winter forecast (February 2022). The latest Oxford Economics forecasts indicate that a sharp drop in inflation can be expected from the second half of 2023 and that it is expected to record negative values.

Inflation rates by Country (May 2021 - May 2022)

% change on a year earlier	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22
Austria	3.0	2.8	2.8	3.2	3.3	3.7	4.1	3.8	4.5	5.5	6.7	7.1	7.7
France	1.8	1.9	1.5	2.4	2.7	3.2	3.4	3.4	3.3	4.2	5.1	5.4	5.8
Germany	2.4	2.1	3.1	3.4	4.1	4.6	6.0	5.7	5.1	5.5	7.6	7.8	8.7
Italy	1.2	1.3	1.0	2.5	2.9	3.2	3.9	4.2	5.1	6.2	6.8	6.3	7.3
Spain	2.4	2.5	2.9	3.3	4.0	5.4	5.5	6.6	6.2	7.6	9.8	8.3	8.5
Switzerland	0.3	0.5	0.5	0.8	0.8	1.3	1.5	1.3	1.4	1.9	2.2	2.3	2.7
United Kingdom	2.1	2.4	2.1	3.0	2.9	3.8	4.6	4.8	4.9	5.5	6.2	7.8	7.9

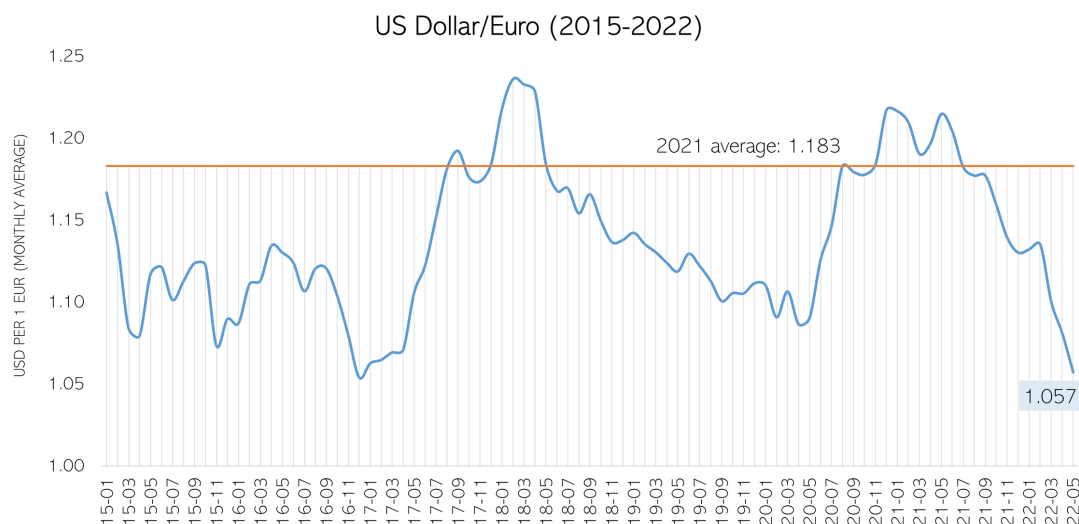
In Germany, in the first quarter of 2022, annual inflation stood at an average of 6.1%. Switzerland (1.8%), the United Kingdom (5.5%), France (4.2%), Spain (7.9%) and Italy (6.0%) also registered growth in quarterly inflation average (y/y) in the first quarter of 2022.

5.3 FOREIGN EXCHANGE RATES (M)

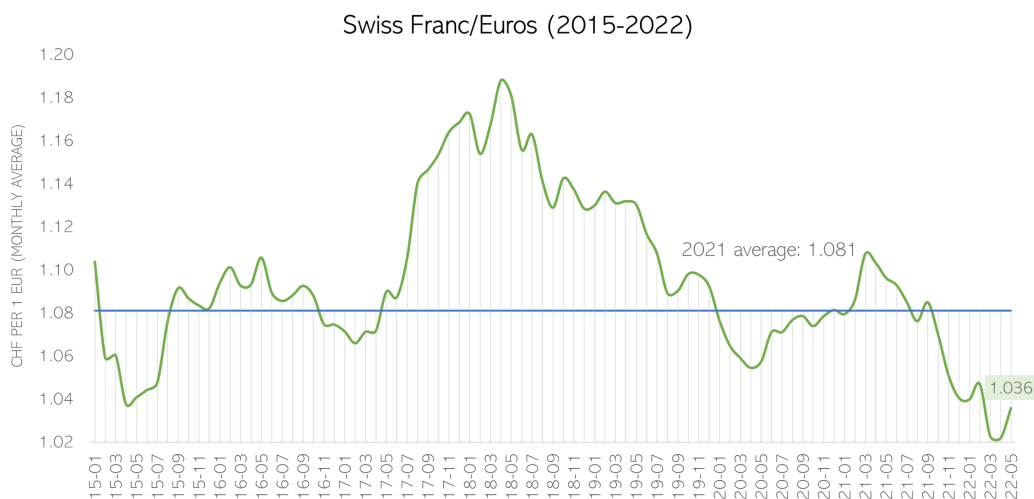




In Q1 2022, Japan's exchange rate relative to the Euro averaged 130.5, indicating a higher exchange rate than the 2021 average. After a slight weakening of the JPY against the euro in January and February, and especially in April 2022, the May exchange rate was 136.2.

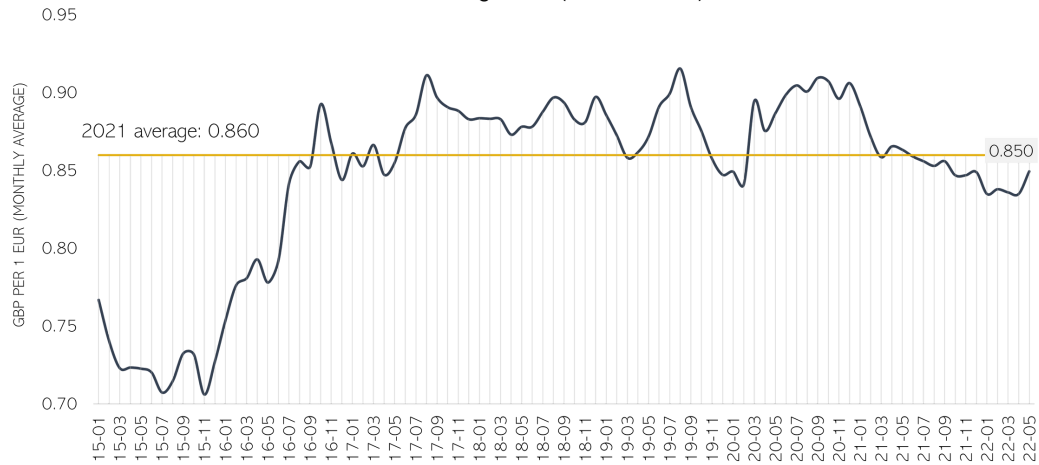


While the average USD exchange rate in 2021 was \$1.183 per euro, the average level for Q1 2022 shows a strengthening of the USD relative to the EUR and an average of USD 1.101 per EUR. After a slight depreciation of the US dollar during the first two months of 2022, the last three months show an inverse trend. As a result, the May exchange rate stood at 1.057 USD per 1 EUR.



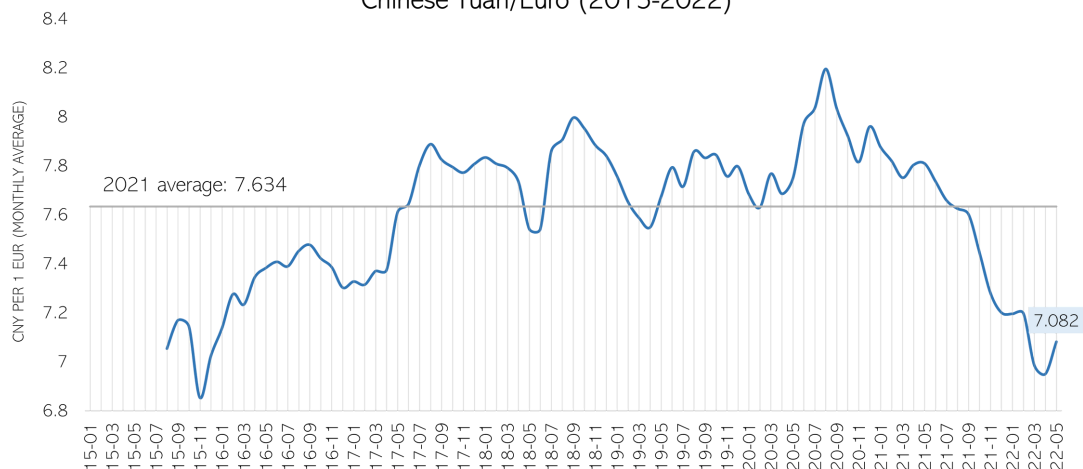
The average exchange rate of CHF in Q1 2022 was 1.033, whereas the average price in 2021 was 1.081. The appreciation of the CHF has been recorded over the last few months, except for February and May. However, the Swiss Franc exchange rate in May reached a level of 1.036 CHF per 1 EUR.

Pound Sterling/Euro (2015-2022)



The average trading price for the Pound Sterling during the first quarter of 2022 was 0.839 per Euro, lower than 2021 average. Monthly indicators in recent months show that the euro weakened against the GBP in March and April and strengthened significantly in May. The May exchange rate was 0.850 GBP per 1 euro.

Chinese Yuan/Euro (2015-2022)



The average trading price of the Chinese Yuan during first quarter of 2022 was 7.082 per Euro, signaling further weakening of the Euro compared to the previous year's average (7.634). The euro weakened relative to the CNY in Q3 and Q4 2021 and a similar trend continued in March and April of this year. The recent exchange rate - May is 7.082 CNY per euro.

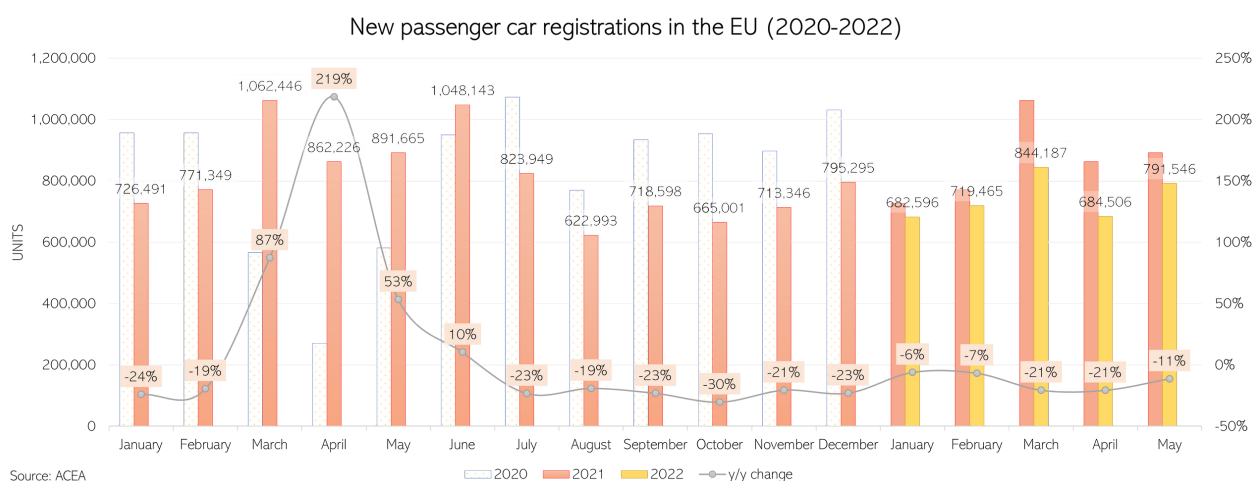
6. RELATED SECTORS

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

Recent IHS Markit reports (May 2022) show that global auto production forecasts have been downgraded for 2022. While the Russian war in Ukraine has raised new challenges, the greatest risk to the outlook lies in prolonged lockdowns in mainland China, which have impacted already disrupted global supply chains. Global production expectations have been reduced primarily due to reductions for Greater China and Japan/Korea due to the above mentioned COVID-related lockdowns in China. As result, global light vehicle production is expected to increase by about 4% in 2022 and about 9% in 2023.

The slow recovery in the supply of semiconductors continues to impact European and global vehicle producers and vehicle affordability. While producers are faced with lack of chips, components, it is important to highlight that rising input prices, strong inflationary pressures and rising interest rates could also lead to a decline in consumer spending.



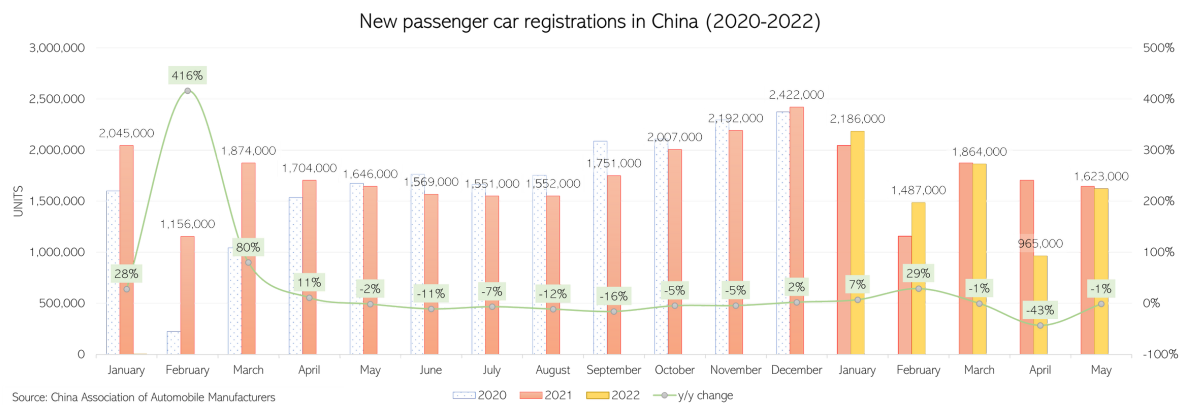
According to the ACEA (European Automobile Manufacturers' Association), in May 2022, although the level of passenger vehicle registrations was higher than in the previous month, EU passenger car registrations fell by 11.2% to 791,546 units year-on-year, marking the tenth consecutive month of decline. All four key EU markets recorded double-digit losses. Italy saw the steepest decline (-15.1%), followed by Spain (-10.9%), Germany (-10.2%) and France (-10.1%).

Total and EV new Passenger Car registrations in the EU

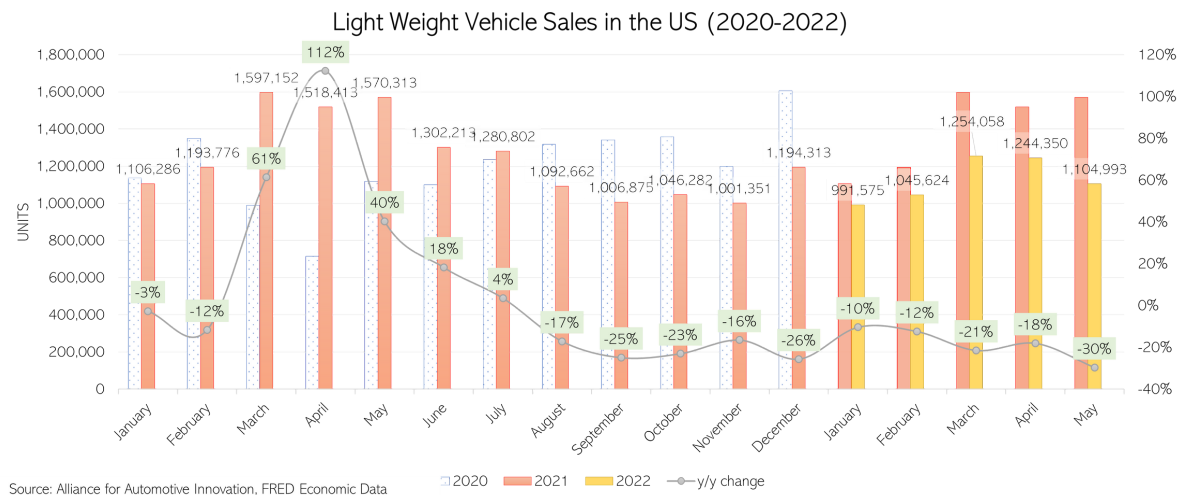
	Q1 2020	Q2 2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022
Total new PC registrations	2,480,130	1,801,613	2,776,425	2,882,377	2,560,286	2,802,034	2,165,540	2,173,642	2,246,248
Total (Q/Q-4)					3%	56%	-22%	-25%	-12%
EV new PC registrations	167,646	129,674	274,043	475,282	354,574	446,028	409,882	532,721	423,252
EV % of Total	7%	7%	10%	16%	14%	16%	19%	25%	19%
EV (Q/Q-4)					112%	244%	50%	12%	19%

EV = Electric Vehicles including BEV and PHEVs

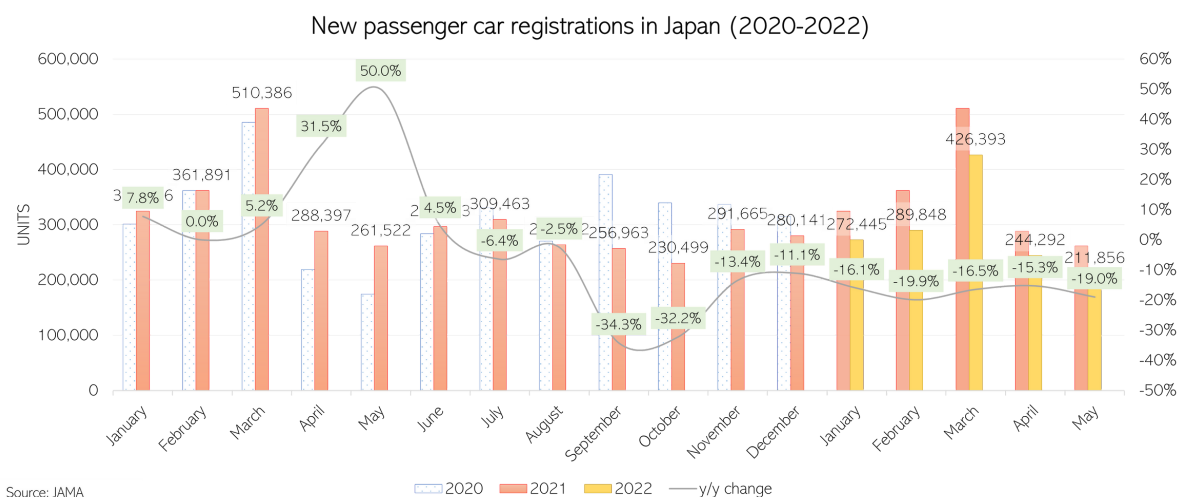
Following the quarterly figures, the total number of new passenger car registrations in the EU decreased by further by 12% in the Q1 2022 compared to the same period last year. The share of new passenger electric vehicle registrations in the first quarter of 2022 was 19%. As in recent quarters, it is important to note that this group (EV) is again showing an increase in new passenger car registration. In Q1 2022, it was 19% over the same period last year.



According to the China Association of Automobile Manufacturers, after a sharp decline in April 2022, sales of new passenger cars in China rose in May. However, the level was still 1% lower than the same period a year earlier, reaching 1.62 million units. The sharp decline in April can be attributed to the recent lockdowns in large Chinese cities because of the coronavirus pandemic. However, the recovery in May shows positive signs of recovery in production and sales.



The US light weight vehicle sales in May totalled 1.1 million units, around -30% compared to the same month in 2021 as the continuous supply-chain issues continue to curtail inventory growth resulting in sales well below demand. According to the Alliance for Automotive Innovation, sales were also likely affected by rising fuel costs, rising interest rates and a decline in consumer confidence.



According to the Japan Automobile Manufacturers Association (JAMA), new car registrations/sales in Japan in May 2022 decreased by 19% over the same period last year. Following a monthly increase in new car sales in January, February and March, a drop was recorded in April and May. This represents a decrease of 426,393 units in March to 211,856 units in May. Companies have seen their production decline primarily due to chip shortages and supply disruptions due to lockdowns in Shanghai.

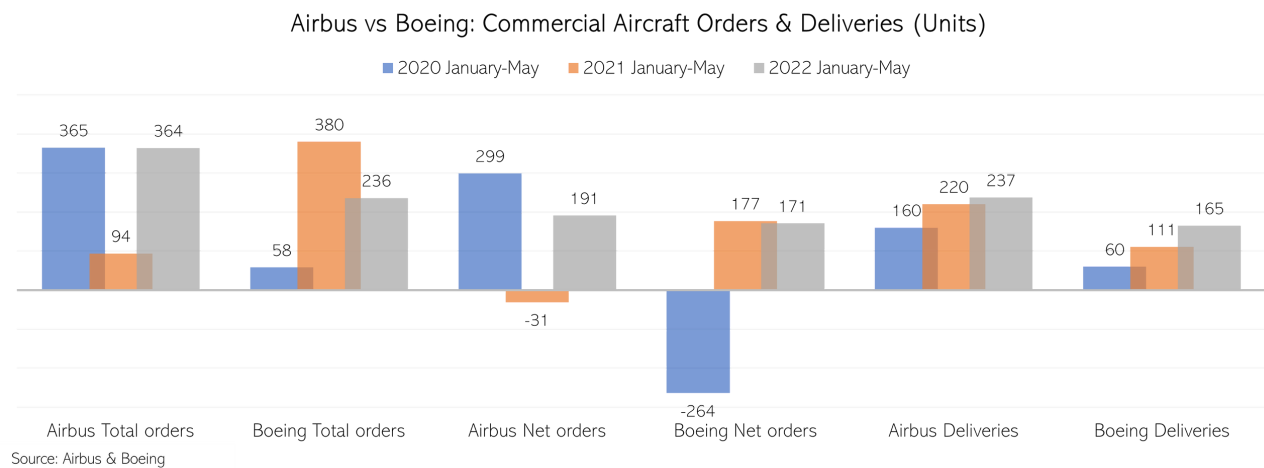
6.2 AEROSPACE

According to Eurocontrol, as of mid-May 2022, flights were back at approximately 84% of 2019 levels across Europe and a similar situation remained in mid-June. It is important to highlight increasing pressure on European airports which are dealing with staffing issues as passenger numbers increase, resulting in cancellations and delays. However, if we compare a year to date (June 22) basis, network traffic in 2022 stands at 79% of 2019.

There is a significant change in flows from Europe to the Other Europe (incl. Russia) decreased by 75% compared to 2019. Additionally, a significant lockdown in China (and actions), due to an increase in COVID-19 cases, has impacted Chinese domestic flows in recent months. Intra-European flights are at -10% compared to 2019 while intercontinental flows are at -28%.

According to Forecast International, following a more than challenging 2020 due to the COVID-19 pandemic, 2021 was a year of recovery for the two largest commercial plane makers. 2022 is well underway and is expected to be another year of recovery for the commercial aircraft manufacturing industry, despite events currently unfolding in Ukraine. However, both producers still have a long way to go before deliveries are back to pre-pandemic levels.

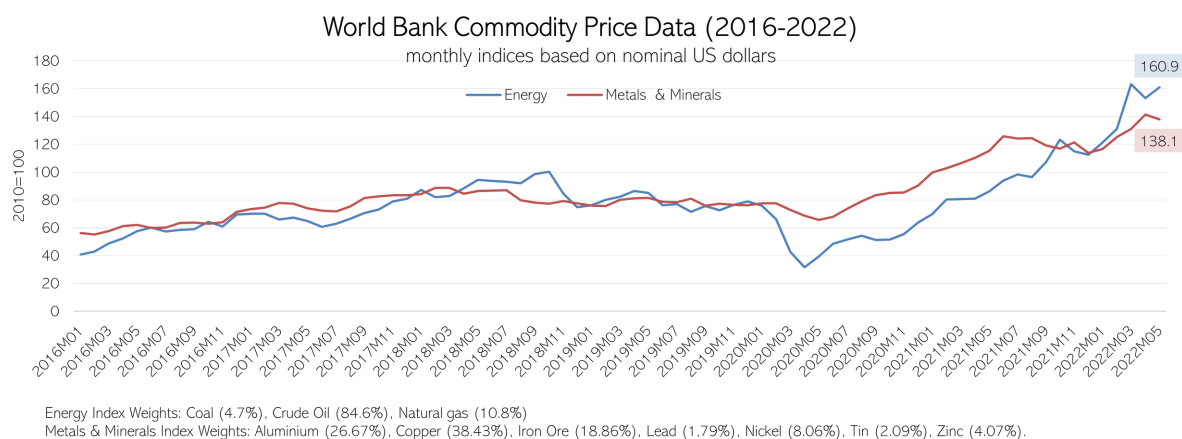
Forecast International's analysts currently expect Boeing and Airbus to deliver 450 and 702 commercial jets, respectively. This reflects a 15% increase in Airbus deliveries and a 32% increase in Boeing deliveries.



As shown in the chart above, between January and May 2022, Boeing recorded 236 total orders and 65 cancellations, resulting in 171 net orders. At the same time, Airbus recorded 191 net orders due to 173 cancellations. Compared with the same period last year, both producers saw an increase in deliveries where Airbus delivered 237 aircraft while Boeing delivered 165 aircraft between January and May 2022.

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 gained 5% in May, led by crude oil (6.5%) and US natural gas (24.6%). Metal prices dropped 11.3% in May, with all key metals registering declines (e.g., nickel fell 15.3%, aluminium 12.8%, iron ore 13.2% and copper 7.7%).

According to the World Bank's latest estimates, energy prices are now expected to increase by 50% on average in 2022 and will impact global growth in 2022 and 2023. Coal prices, natural gas prices and crude oil prices are expected to increase in 2022 by 81%, 74%, and 42 percent, respectively. Moreover, energy prices are expected to remain higher for longer. Although commodity prices (energy and non-energy) are expected to fall over the next period, energy commodity prices are still expected to average 46% higher in 2023 than in 2021.

While energy prices are expected to remain high, metal prices are falling due to lower demand due to the potential COVID lockdown risk in China, related supply side issues and global growth uncertainty caused by the Russian war in Ukraine. 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 24 = 842 USD/t)



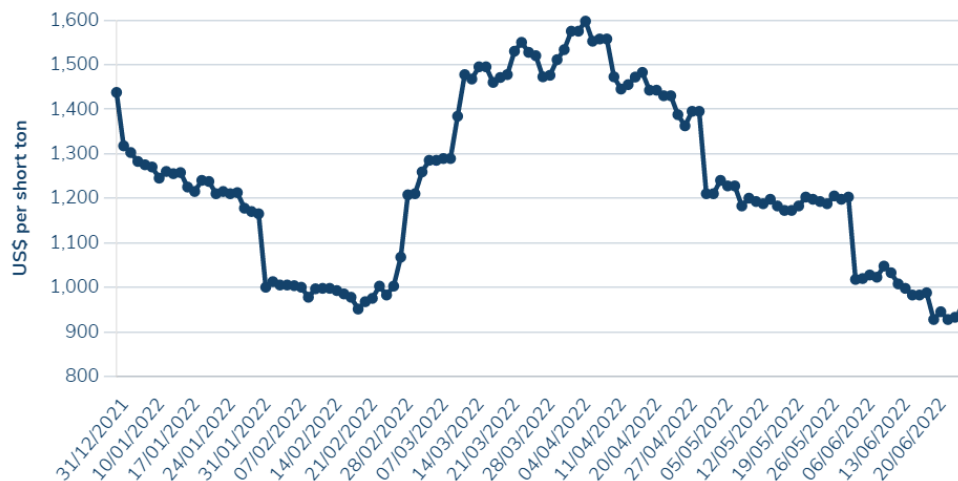
Domestic prices for hot-rolled coil in Northern Europe decreased significantly compared to our last reporting period when the closing price on March 24 was 1.618 USD/t, reaching an 842 USD/t on June 24. According to Eurometal, excess supply lowers EU hot-rolled prices in June. Demand has remained at low levels due to low end-user consumption and buyer aversion to restocking risk due to downward price trends.

LME Steel HRC FOB China (Argus) Closing prices graph (June 24 = 637 USD/t)

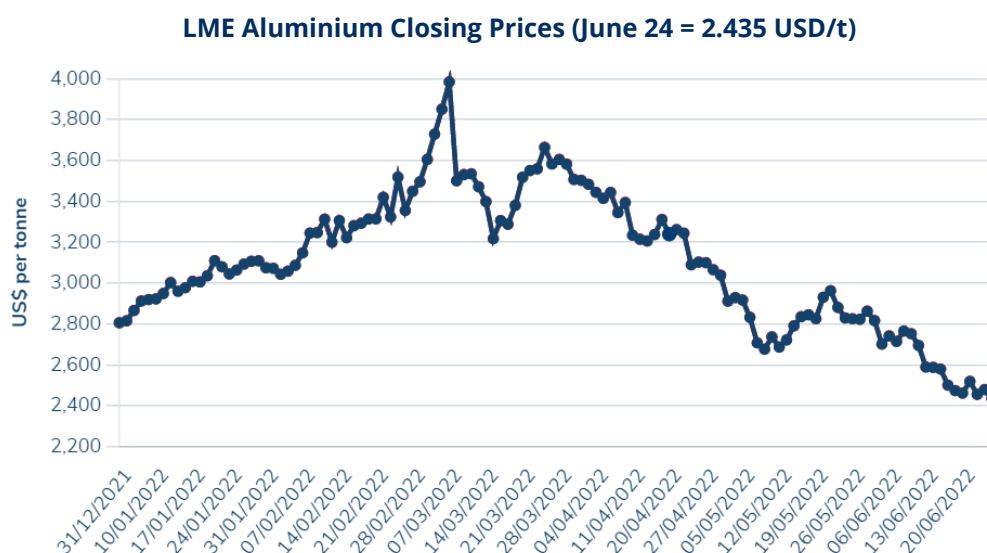


As in Northern Europe, hot-rolled coils in China decreased compared to the previous reporting period. On 24 June, the closing price for HRC FOB China was 637 USD/t, compared with 882.5 USD/t on 24 March (previous reporting period).

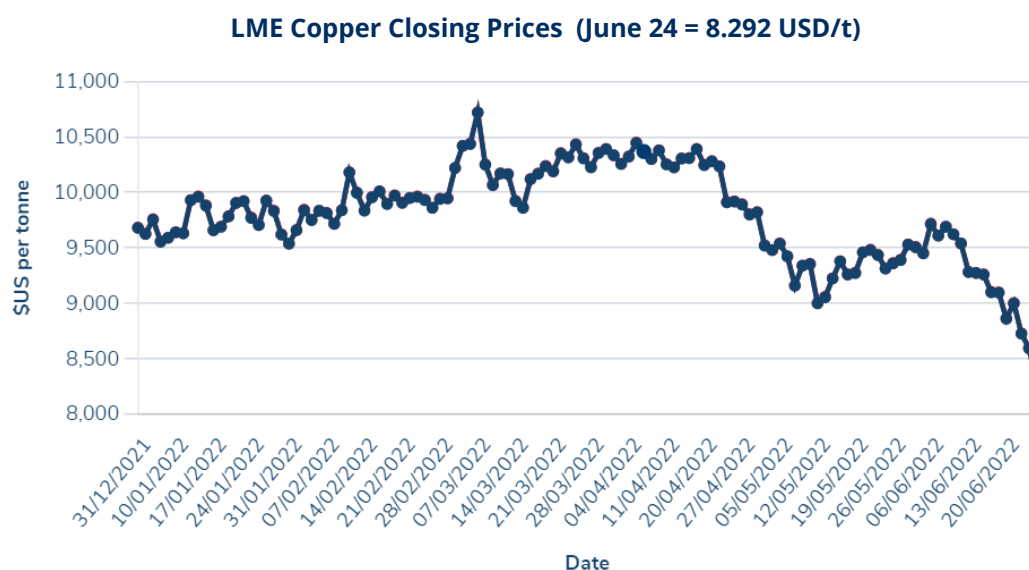
LME Steel HRC EXW N America (Platts) Closing Prices graph (June 24 = 942.5 USD/t)



The US steel market is on the same path and the latest figures at 942.5 USD/t show a much lower final price than on 24 March (1.527 USD /t).



After aluminium prices increased in February and March, the following months brought a downward trend. The latest figures for the closing prices of LME Aluminium show that the price is USD 2,435/t and that the final price is notably lower than on 24 March (USD 3,623/t). The decrease in aluminium prices is mainly a result of the easing of demand from consuming industries.



London copper prices dropped to a 16-month low, although price levels are still well above 2020 levels. With China's strict COVID-19 policy impacting manufacturing demand and geopolitical uncertainty, the risks of the global economy entering recession have slowed metal demand. The last figure of USD 8.292/t indicates a lower closing price compared to the previous reference period (24 March = USD 10.349/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, Turkey and the United Kingdom.

Euro area (EA) / Eurozone (EZ)

The euro area (EA19), also called the Eurozone, consists of Member States of the European Union that have adopted the euro as their currency. It includes Belgium, Germany, Estonia, Ireland, Greece, Spain, France, Italy, Cyprus, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Austria, Portugal, Slovenia, Slovakia and Finland.

European Union (EU)

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

9. OTHER

M / m (Toolbox headings)

M = Macro-economic. non-caps (m) = microeconomic.

GDP

Gross Domestic Product

Billion

Billion means one thousand million

US

United States

Q1, Q2, Q3, Q4

1st quarter, 2nd quarter, 3rd quarter, 4th quarter

EUR / €

Euros

USD / \$

United States Dollar(s)

HF

Swiss Franc(s)

ECB

European Central Bank

Fed

Federal Reserve (System), the US Central Bank

GBP

Great Britain Pound(s), the Pound Sterling

IMF

International Monetary Fund

WB

World Bank

MT

Machine tools

CECIMO countries

Countries whose machine tool sector is represented by CECIMO

CREDITS

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MEMBER ASSOCIATIONS

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

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

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

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

Finland: Technology Industries of Finland
www.teknologiateollisuus.fi

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

Germany: VDW, Verein Deutscher Werkzeugmaschinenfabriken
e.v.
www.vdw.de

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

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

Portugal: AIMMAP, 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

Turkey: MIB, Makina Imalatçileri 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 **98%** 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 **22.6 billion** euros in 2021. More than **three quarters** of CECIMO production is shipped abroad, whereas **half** of it is exported outside Europe.