

ECONOMIC AND STATISTICAL TOOLBOX

First Quarter 2021

In this issue

- ► European and global manufacturing continued its recovery in the 1st quarter of 2021. The EU Industrial Production Index reached its 4th quarter 2019 level.
- ► CECIMO8's domestic and foreign orders increased strongly at the beginning of 2021, resulting in total orders at the highest level since the 1st quarter of 2019.
- ► The improvement in capacity utilisation as well as in the business climate also reflects the better performance of European manufacturing.
- ► The new GDP forecast still shows divergences between key industrial markets, but also more optimistic global growth in 2021 and 2022.

TABLE OF CONTENTS

Introduction

Mindmap

- 1. Historical Data for the Sector
- 1.1 CECIMO8 Orders (m)
- 1.2 CECIMO Trade (m)
- 1.3 CECIMO Production (m)
- 2. Demand
- 2.1 CECIMO Consumption. Oxford Economics Consumption Forecast (m)
- 2.2 HPO CECIMO8 Orders Forecast (m) 2.3 Industrial Production Index (M)
- 3. Investment
- 3.1 Gross Fixed Capital Formation (M)
- 3.2 Capacity Utilisation in the Investment Goods Sector (M)
- 3.3 Bank Lending Survey (M)
- 3.4 Euribor Interest rates (M)
- **4** Business Climate
- 4.1 CECIMO Business Climate Barometer (m)
- 4.2 Purchasing Managers Index (M)
- 4.3 OECD Business Climate Indicator (M)
- 5. General Indicators 5.1 GDP (M)
- 5.2 Inflation (M)
- 5.3 Foreign exchange rates (M)

Glossary

Geographical Information

Other symbols and acronyms

INTRODUCTION

This issue of the CECIMO Toolbox looks at data for the first quarter of 2021. Following the start of the recovery in the second half 2020, it reflects the continued improvement of the global and European manufacturing industry, even the impact of the coronavirus outbreak continues to exist in world markets. Renewed measures and its diverse application across European countries. due to new waves coronavirus, followed different by vaccination scenarios have created new risks for the recovery forecasts.

In terms of the performance of the European Machine Tool Industry, new orders in the 1st quarter of 2021 improved significantly compared to the previous quarter, as well as on an annual basis. Compared to Q1 2020, CECIMO8 domestic orders have increased by +47%, while foreign orders have registered a +31% growth.

There was a further improvement in the Machine Tool total orders in the 1st quarter 2021 with the CECIM08 registering growth of +32% compared to the previous quarter and +35% higher than at the beginning of 2020. Highest quarteron-quarter growth is recorded in Italy (+54% domestic orders and +96% foreign orders) and France (+743% domestic Due to this improvement. CECIMO8's total orders were at their highest level since Q1 2019.

Production of machine tools in the CECIMO area fell by -26.7% in 2020 to €19.9 billion. That level of output is higher than what was estimated in the last reporting period (Q4 2020). Nevertheless, CECIMO retains the leading position on the global MT market, with around 33% share at the end of 2020.

The Industrial Production Index for the European Union (27 countries) continued its recovery in the first quarter of 2021 and is back to its pre-crisis level. This recovery has been both quicker and more complete than the recovery from the impact of the financial crisis in 2008–2010. In the first quarter of 2021, IPI goes to 104.4 points. This is 3,1% higher level than it was in the Q1 2020, and 0,1% higher level compared to the last period of 2019.

Followed by the higher level of MT consumption in 2020 (because of better recovery in second half in 2020 than it was predicted in last – October Report), the Oxford Economics April 2021 report predicts more optimistic forecasts of MT Consumption growth in Europe. In 2021, European MT demand is expected to grow by 13,8% in 2021, 8% in 2022, 5% in 2023 and 4% in 2024. Europe is expected to return to precrisis consumption levels by 2024.

The Gross Fixed Capital Formation quarterly change in trend (as the -11,6% Q1 2021) shows similar cyclical movements as in previous first quarters, and of course, it highlights the impact of the new measures concerning the COVID-19 public health crisis.

The latest data for capacity utilisation in the European Union reflects a continuation of the recovery from the low point at the start of the Coronavirus crisis to stand at 85.7. This is a higher level compared to the capacity utilisation rate average between 2011 and 2019 (83.6), and highest level of this indicator since Q2 2019.

According to the European Central Bank (ECB)'s Bank Lending Survey, across 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 2021.

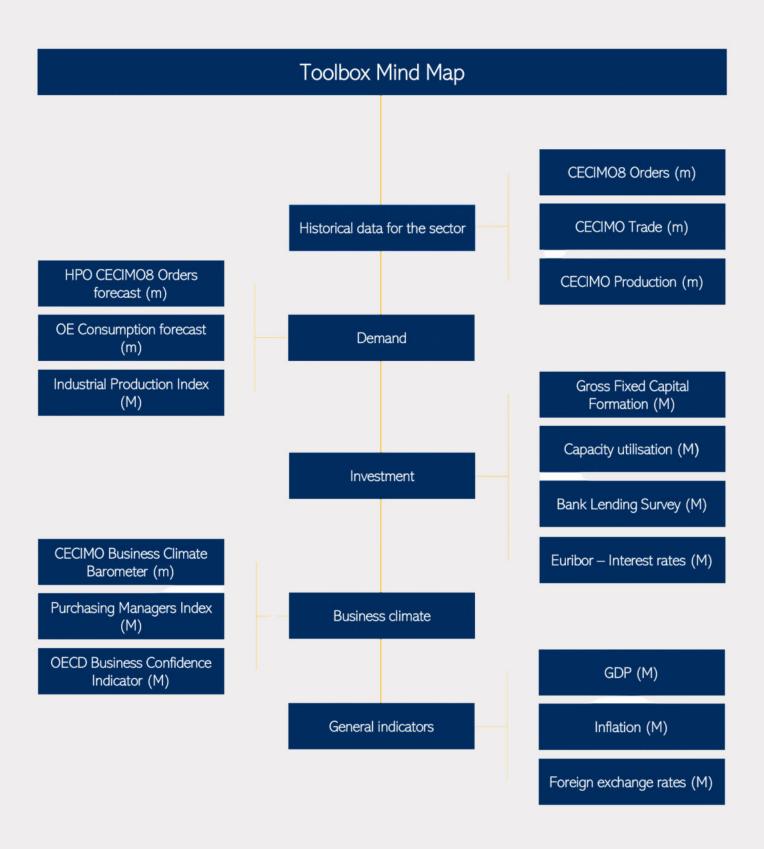
Banks reported, on balance, a further decline in firms' demand for loans or drawing of credit lines in the first quarter of 2021. The ECB's monetary policy remains unchanged, still focused on supporting lending to firms and household.

The CECIMO Business Climate Barometer section is released in this issue and shows interesting developments in relation with demand, domestic production, export and employment. CECIMO's average operating rate is back to Q4 2019 levels and expectations for the next quarter are generally positive.

The Global manufacturing PMI in May was generally positive. Global production in May rose at one of the fastest rates in a decade, as new order growth accelerated to an 11-year high. The outlook remained positive, with manufacturers forecasting further increases in output over the next 12 months. Most European counties saw an increase in the index compared to April. The exceptions are Germany and Sweden, but both countries still performed very positive reading. Turkey manufacturing PMI recorded 49.3 in May, down from 50.4 in April and under 50.0 for the first time in a year.

The OECD's Business Climate Indicator (BCI) reached level of 100.6 at the end of Q1 2021 – this matches the level that was recorded in the last quarter of 2018 and goes above the quarterly levels in 2019 and 2020.

The final section of the Toolbox reflects the GDP growth in first quarter of 2021. China recorded strong growth in the first quarter of 2021, while according to the European Commission's Spring 2021 forecast, the EU, the U.S. and Japan are about to record a more significant improvement in the second quarter of 2021. The exchange rate movements for the Euro against most of the currencies that we track are different. The latest figures show a weakening of the euro against the USD, YPY and CNY during April and May. Concerning inflation, as demand and consumption levels improve in the EU, and given the overly positive business outlook, prices rose in the first quarter of 2021 among the largest CECIMO markets.



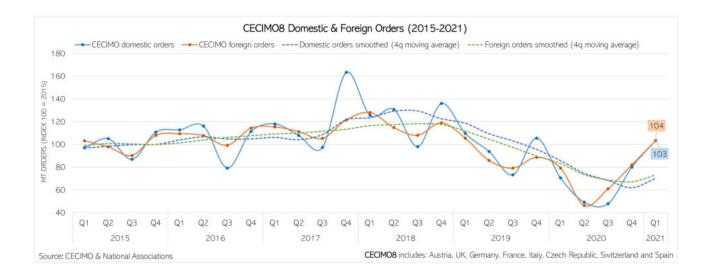
HISTORICAL DATA FOR THE SECTOR

1.1 CECIMO 8 Orders

Note: Switzerland's order figures at the time of writing of this report were provisional.

After the recovery of domestic orders in the last period of 2020, CECIMO8 domestic orders continued their recovery in the first quarter of 2021, showing a 47% increase over the same period in 2020. Compared to the last period of 2020, CECIMO8 domestic orders increased by 29%. Furthermore, foreign orders from CECIMO8 manufacturers registered a new 31% growth in the first quarter of 2021, compared with the same period last year, and 26% more than the last period of 2020.

As a result, total orders for the CECIMO8 increased by +35% in Q1 2021 compared to the same period in last year, and +32% higher level compared to the last period of 2020. After the initial recovery in the 2nd half of 2020 and good growth in the 1st quarter of 2021, CECIMO8's total orders reached their highest level since the 1st quarter of 2019.



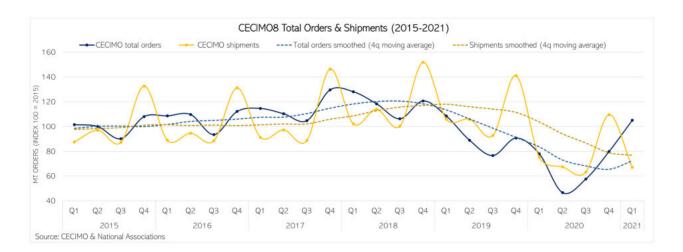
Domestic Orders

- Italy continued its strong recovery in the first quarter of 2021, with quarter-on-quarter growth of 54% and 158% higher than the previous year. Domestic orders reached the highest level since Q1 2019.
- After very low levels in 2020, French domestic orders recovered strongly in the first quarter of 2021. With an increase of 743% over the previous quarter and 401% over the previous year, French domestic orders reached their highest level since the second quarter of 2018.
- Austrian and German domestic orders continued its growth in the Q1 2021. With quarter-on-quarter increase of 23%, Austrian domestic orders reached their highest level since the fourth quarter of 2017 and with an increase of 27%, Germany's domestic orders reached their highest level since the fourth quarter of 2019.

- Switzerland and the United Kingdom recorded small declines (-9%) in domestic orders in the first quarter of 2021 compared with previous quarter. However, their domestic order levels are still above average in 2020.
- The Czech Republic recorded a -20% quarter-on-quarter decrease in the first quarter of 2021, but still shows a 48% higher level than the same period of the previous year.

Foreign orders

- All CECIMO8 countries recorded higher foreign order levels in Q1 2021 compared to the 2020 average.
- After lower growth over the last period of 2020, Italian foreign orders recorded the largest increase in foreign orders in the first quarter of 2021 among CECIMO8 countries. With a quarter-on-quarter growth rate of 96% and 30% higher than the same period last year, Italian foreign orders reached the highest level since we have been tracking these figures.
- Significant increase is also recorded in the France with quarter-on-quarter growth of 25% and 187% higher level than in the same period last year. As a result, foreign orders in France reached their highest level since Q4 2019.
- Germany's foreign orders were also 36% higher than in the same period last year and 16% higher than in the previous quarter. Foreign orders also improved slightly over the fourth period of 2020 in Switzerland (5%) and the United Kingdom (3%).
- In Austria (-10%), the Czech Republic (-21%) and Spain (-11%), foreign orders decreased compared with the last quarter of 2020. However, the Czech Republic and Spain recorded higher levels than in Q1 2020.



Total Orders

 Thanks to strong growth in domestic and foreign orders, total Italian orders recorded strong growth in the first quarter of 2021 with an increase of 93% compared to the previous quarter and 49% more compared to the same period last year, reaching the highest level so far.

- France registered the second strongest trend with quarter-on-quarter growth of 71% and 231% higher than in the same period last year.
- The quarterly increase was more modest in Germany (+18%) and Switzerland (+19%).
- In the UK, total orders were about the same level as in the previous quarter. A quarter-on-quarter decline was registered in Austria (-5%), the Czech Republic (-20%) and Spain (-10%), although these countries registered growth compared to Q1 2020.

CECIMO Competitors

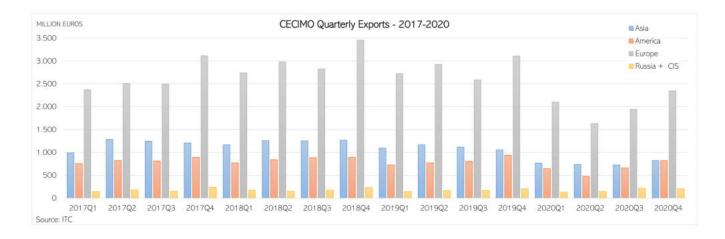
- The metal forming companies in Japan are recording higher quarter-on-quarter growth rate of 21% in Q1 2021 in domestic orders, even the growth rate of 10% is still recorded in the metal cutting sector. Metal cutting sector records higher quarter-on-quarter foreign orders growth rate of 25%, compared to 6% growth in the metal forming sector.
- Overall, Japanese orders in the first quarter of 2021 registered a quarterly growth rate
 of 19% and a 31% higher than in the same period of the previous year. Stronger growth
 took place in the metal cutting sector. As a result, total orders in Japan reached their
 highest level since Q2 2019.
- Thanks to good improvement in domestic and foreign orders, Taiwan machine tool manufacturers recorded significant quarter-on-quarter growth rate of 27% and 8% higher level than in the same period of the previous year.
- While US domestic orders remained unchanged compared to the previous quarter, they are still 32% higher than in the first quarter of 2020. Note: The US figures in the chart below represent only domestic orders.

Note: The latest figures from the South Korea were not available at the time of writing this report.



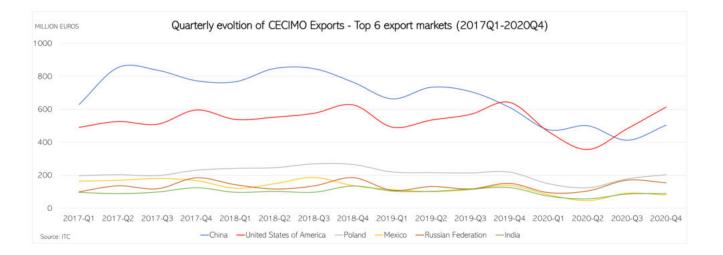
1.2 CECIMO Trade

Note: The following analysis refers to Q4 2020 machine tool trade figures. ITC Q1 2021 data is not available by the time this report was written.

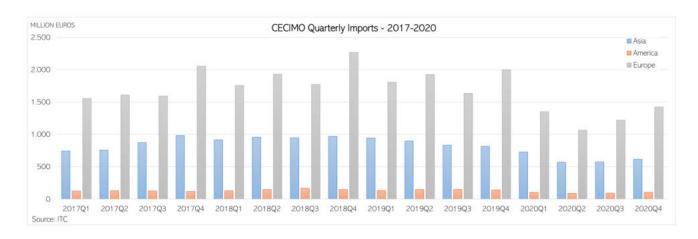


Q4-2020 exports trends

- As the global economy continues its recovery from the coronavirus pandemic, CECIMO's machine tool exports continue to grow. Similar to the previous growth, exports increased by 19% compared to the 3rd quarter of 2020, but the level was still -21% lower compared to the 4th quarter of 2019.
- The recovery in Q4 was repeated in most of the regions of the world with the notable exception of Russia + CIS (Commonwealth of Independent States) where CECIMO exports of machine tools were -5% lower than in the Q4 but if we compare that with Q4 of 2019, it is on the same level.
- However, in all cases, the level remained below that of a year earlier with Q/Q-4 declines of -22% for Asia, -12% for the Americas and -25% for Europe.
- Among the top export destinations, the strongest quarterly recovery continues in the Americas, where exports grew by 24% compared to the 3rd quarter of 2020, followed by Europe with an increase of 22% and good signs of the export recovery in Asia by 13%.
- Comparing the annual figures, exports of machine tools from the CECIMO region in 2020 fell by -27% compared with 2019 levels. The decline was strongest in Asia (-31.2%) and Africa (-30.6%).



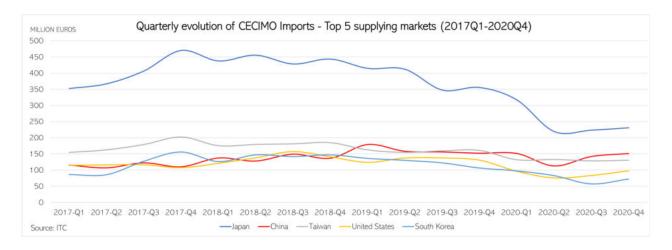
• In 2020, the United States was the largest export destination for CECIMO countries with a share of 21.8%, followed by China with a share of 21.5%.



Q4-2020 imports trends

- In the 4th quarter of 2020, CECIMO total machine tool imports were -27% lower than a year before but were +14% higher than in the 3rd quarter of the year. This is the seventh consecutive quarter when imports were lower than 4 quarters earlier, highlighting the fact that imports were falling before the effects of the pandemic were being reflected in the data.
- Total imports of machine tools to the CECIMO area were worth €2.16 billion euros in Q4 2020; with exports valued at €4.36 billion, the CECIMO positive trade balance was around €2.2 billion euros in this quarter.
- Imports from Asia only increased by +7% compared to the previous quarter and, at €0.62 billion, accounted for 29% of total machine tools imports in Q4 2020. CECIMO has a trade surplus with Asia for machine tools of €205 million in Q4 2020.
- The Americas still accounts for 5% of machine tool imports in the CECIMO area, even the imports grew by +14% compared to Q3 2020. The positive trade balance with the Americas for the latest period was €716 million.

Comparing figures for 2020 as a whole, machine tool imports in the CECIMO region fell
 -30.5% from 2019 levels.



• In 2020, Japan is still the main supplying market of the CECIMO countries with a share of 31.3%, followed by China with a share of 17.6%.

CECIMO Trade Balance (Billio	on EUR)							
	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020	Q3 2020	Q4 2020
CECIMO Total Exports	4,9	5,2	4,9	5,5	3,8	3,1	3,7	4,4
CECIMO Total Imports	2.9	3.0	2,6	3.0	2.2	1,7	1,9	2.2
CECIMO Trade Balance	2,0	2,2	2,2	2,5	1,6	1,4	1,8	2,2

• The CECIMO region registered a positive trade balance for all quarters, with a positive result of about €7 billion in 2020.

1.3 Production (m)



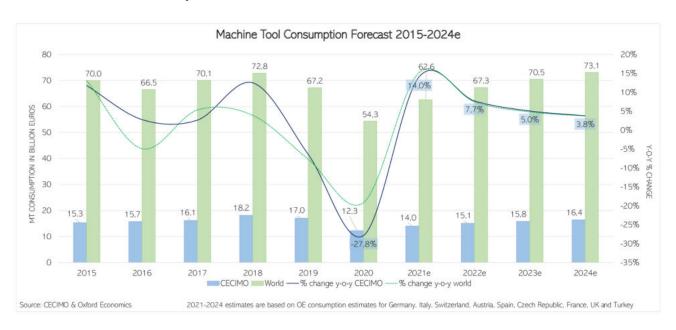
As part of the CECIMO General Assembly, thanks to the National Associations' new figures, we have updated the data for CECIMO production in 2020 for most of the CECIMO countries (in some cases, the latest data available was from the Gardener Report 2021). According to the data, the production of machine tools in the CECIMO area fell by -26.7% in 2020 to €19.9 billion. That level of output is higher than what was estimated in the last reporting period (Q4 2020).

On the other hand, due to the revised data for the CECIMO production in 2019, the decrease compared to 2019 is higher than estimated during the last reporting period. This is the lowest total output since 2010 which was the low point of the financial crisis, but it should also be noted that this represents a smaller fall than was recorded between 2008 and 2009.

With an output of €19.9 billion, CECIMO retains the leading position on the global MT market, with around 33% share at the end of 2020.

2 DEMAND

2.1 CECIMO Consumption (m)



According to the Spring edition of the Global Machine Tool Forecast by Oxford Economics (April 2021), CECIMO Machine Tool consumption for 2020 is recorded at 12,3 billion euros, slightly below the previous reported score (a -27,8% decrease compared with 2019 levels).

Oxford Economics (OE) new estimates, published in April 2021, outlines different trends in global machine tool consumption recovery between 2020 and 2024. In the baseline scenario (most likely), Global MT Demand is expected to rise by 15% in 2021 and 7.5% in 2022. The second scenario is related to the "Limited vaccine effectiveness". Of course, this relates to renewed restrictions, in case vaccines fail to halt the spread of more transmissible forms of coronavirus. In this case, the rebound in world demand for MT is projected to be lower than the baseline scenario, with a growth of 11.5%.

Third scenario gives more optimistic upside for the global economy. Predict global vaccine successes to facilitate a faster easing of public health restrictions and an early return to full capacity. In this scenario, global demand for MT is expected to rise by 17.1%, which is faster than the baseline scenario.

Beyond the global MT outlook, the recovery is also expected to be uneven in key markets. Thanks to a stronger recovery in the second half of 2020 and new scenarios, OE now forecasts more optimistic forecasts of MT consumption growth in Europe. In 2021, European MT demand is expected to grow by 13,8% in 2021, 8% in 2022, 5% in 2023 and 4% in 2024. As a result, Europe is expected to return to pre-crisis consumption levels by 2024.

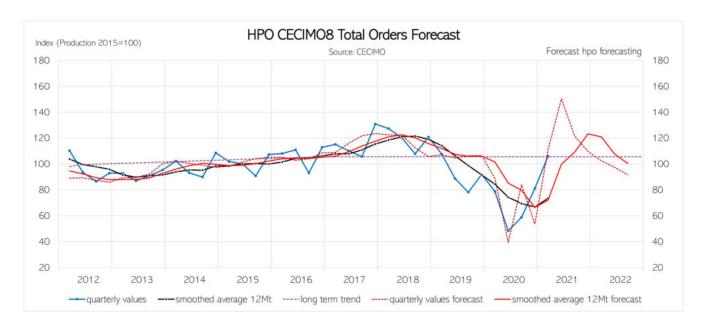
As for CECIMO's MT consumption levels, OE predicts a similar trend to that of the European region as a whole. Taking into account the volumes of nine countries (see note on the corresponding chart), the consumption of CECIMO decreased by approximately -27.8% in 2020 (to 12.3 billion euros). CECIMO MT Consumption is expected to continue to grow over the coming period, albeit declining over the years. By 2024, consumption is expected to be 16.4 billion euros, close to the 2019 score (17 billion euros).

In 2020, the United States also outperformed earlier projections. With a better recovery in the second half of 2020, a higher level of MT consumption is expected in 2021. According to the most recent report, the level of MT consumption in the US decreased by 18% in 2020. The forecast growth in MT consumption by 14% in 2021, thanks to a major recovery plan, will continue more slowly in 2022 (6%), 2023 (3%) and 2024 (3%).

Finally, after two consecutive years of annual declines (2019–2020), Chinese MT consumption is expected to recover steadily from 2021, reaching 2019 MT consumption levels and even better (\$24.3 billion) in the same year. The recovery in China was barely better in 2020 than expected in the latest OE forecast. In addition, there is also a more optimistic forecast of growth in Chinese MT consumption, linked to healthy economic conditions, a large share in global MT consumption and projected higher GDP levels over the coming years. Growth is expected to be 14.1% in 2021, and in the years ahead, growth is also expected to be slower, 6.5% in 2022, 4.1% in 2023 and 2.5% in 2024.

The recovery in China was barely better in 2020 than expected in the latest OE forecast. In addition, there is also a more optimistic forecast of growth in Chinese MT consumption, linked to healthy economic conditions, a large share in global MT consumption and projected higher GDP levels over the coming years. Growth is expected to be 14.1% in 2021, and in the years ahead, growth is also expected to be slower, 6.5% in 2022, 4.1% in 2023 and 2.5% in 2024.

2.2 HPO CECIMO8 Orders Forecast (m)



As HPO forecasting announced extraordinary volatility in demand for capital goods in 2021 in previous reports, the strong order intake in recent months in many industries confirms this picture. According to their latest report, we are currently experiencing a strong boom in industry and the supply chains, which continue to struggle, are unable to cope with it. Due to a combination of COVID-19 distortions the downturn and upturn phases in the industrial sector have progressed rapidly for more than a year now and have become even more pronounced. Progress in vaccination programs, stimulus packages and the positive bull-whip effects on supplier companies and manufacturers of capital goods are contributing to the current industry boom.

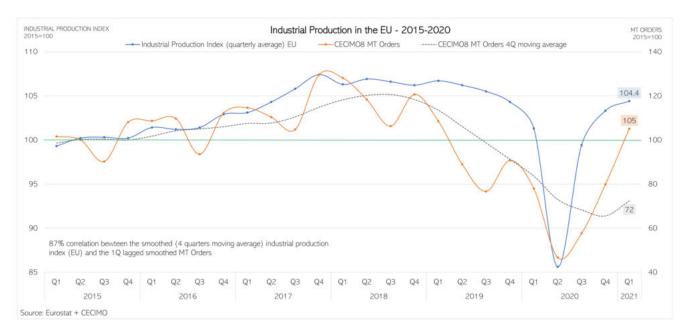
According to HPO real economic cycle observations, although all sentiment indicators are currently pointing upwards, their model calculations still indicate a prolonged phase of rather slow consumption in North America, Europe, and Asia, following a short phase of catch-up effects. Their cyclical view of the economy points to a modest outlook from around the second half of the year.

CECIMO8 Orders Forecast:

According HPO CECIMO8 Orders Forecast, new orders developed as expected and reached 106.1 index points in Q1 2021. They forecast that the strong recovery is expected to continue for a few more months. Furthermore, given the strong bull-whip effect, it is possible that order intake may even grow a bit longer and higher than indicated in the forecast graph.

The new economic indicators (Q1 2021) have only slightly changed the forecast: the peak should now reach a higher level than that of 2018. However, according to HPO model this peak is due to the catch-up and the bull-whip effect after the pandemic. Towards the end of this year and through 2022, a decrease in demand is again indicated.

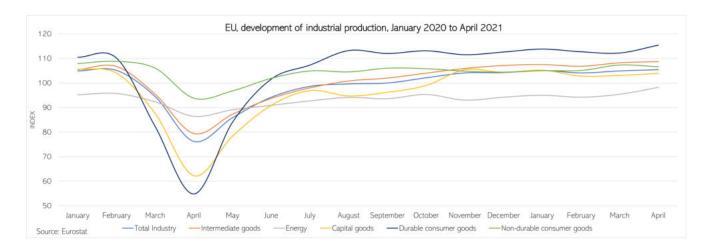
2.3 Industrial Production Index (M)



The total Industrial Production Index (IPI) showed a further recovery in the 1st quarter of 2021 in both the European Union (EU) and the Euro-zone (EZ) countries.

The European Union IPI (EU 27) continued to recover in the final quarter of 2020 and in the first quarter of 2021. The IPI recovered by 16% in Q3 2020, following by 4% growth in Q4 and 1% in Q1 2021, IPI reached level from final quarter 2019.

The current rating (Q1 2021) is an improvement over the Q4 2020 reading to 104.4, indicating a continuous recovery of European industry, in line with the forecast assumptions outlined in the previous edition of this report. This is 3,1% higher level than it was in the Q1 2020, and 0,1% higher level compared to the last period of 2019.



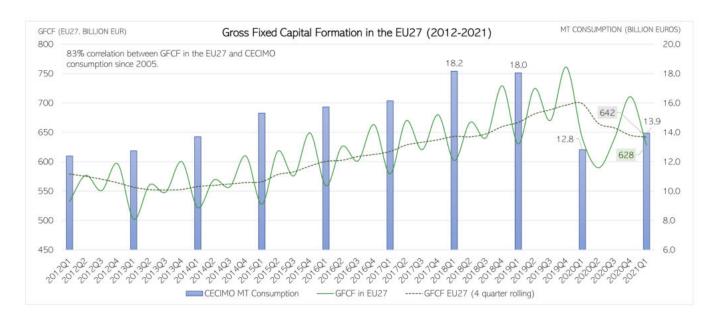
In sectoral terms, the strongest recovery is in the durable goods sector, which has the highest drop through the second quarter of 2020. Other key industrial sectors' outputs also increased during this three-month period.

Eurostat latest highlights:

- Industrial production in the EU increased by 0.5% in April 2021 compared with one month before; the total production level is now slightly above (100.3%) the level of February 2020, the month immediately before the crisis.
- Between April 2021 and April 2020, production of motor vehicles increased by more than 400%, production of leather products increased by more than 310%; this unusually high growth is due to the low levels of production in March and April 2020.

3 INVESTMENT

3.1 Gross Fixed Capital Formation (M)



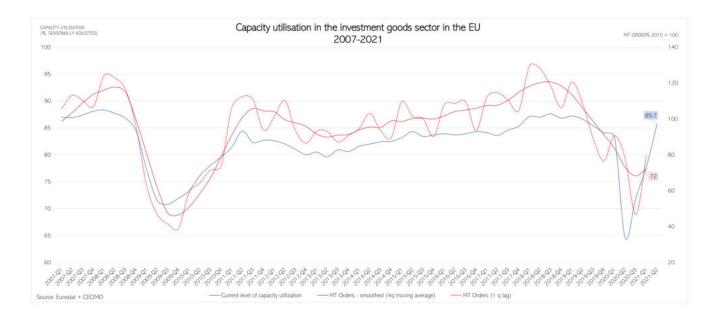
Considering the latest EU 27 figures, gross fixed capital formation decreased by almost -11.6% in Q1 2021 against Q4 2020 and -1.8% compared to the same period last year. In absolute terms, Q1 2021 investment amounted to 627.9 billion euros, a considerably smaller figure if we considered the 639.7 billion euros registered a year earlier.

The quarterly change in trend (as the -11,6% Q1 2021) shows similar cyclical movements as in previous first quarters, and of course impact of the new measures concerning the COVID-19 public health crisis. If we are watching 4 quarter rolling values, we can see a slight decline compared to the last 4 quarter rolling values.

3.2 Capacity Utilisation and Production Capacity (M)

Methodological Note: The dates in this section refers to when the results were published; so, the Q2-2021 figures were published in Q2-2021 but reflect the position at the end of the previous quarter when the data collection took place. We will refer to the date of publication in this section but please bear in mind this adjustment.

The latest data for capacity utilisation in the European Union also reflect a continuation of the recovery from the low point at the start of the Coronavirus crisis to stand at 85.7. This is higher level compared to the capacity utilisation rate average between 2011 and 2019 (83.6), and highest level of this indicator since Q2 2019.

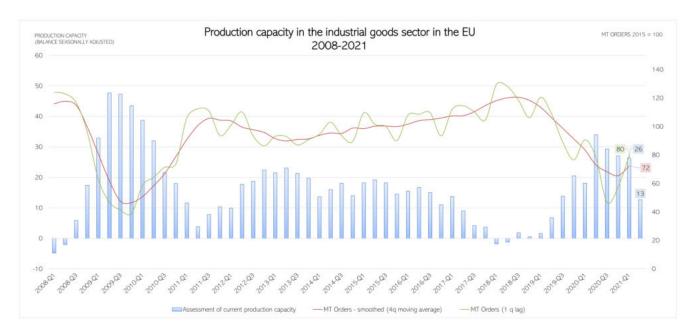


At the national level, we see similar trends and improvement compared to the previous reporting period. Furthermore, in the table below, we can see that the utilisation rate in several countries is back to the levels final quarter of 2019. Germany records the significant improvement compared to the previous reporting period standing at 90.3, the highest level since Q3 2018.

Capacity Utilisation (% of total capacity)

	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021
Austria	87,8	87,3	86,2	85,4	74,2	76,0	79,2	82,0	86,9
Czech Republic	85,5	85,4	86,9	86,9	47,7	74,8	80,5	82,2	91,5
France	88,3	87,3	85,7	84,0	62,0	70,9	75,1	74,4	82
Germany	89,5	87,9	85,5	85,5	65,9	72,7	81,1	79,2	90,3
Italy	78,7	77,8	77,9	76,9	NA	65,7	73,0	75,5	79,3
Spain	87,5	87,5	87,9	85,4	81,8	78,5	80,0	81,0	80,9
United Kingdom	81,2	80,0	82,9	82,9	57,5	65,7	68,1	NA	NA

To track production capacity, business managers are asked to assess their current levels of production as sufficient or not, considering the changes in the order book and demand of capital goods.

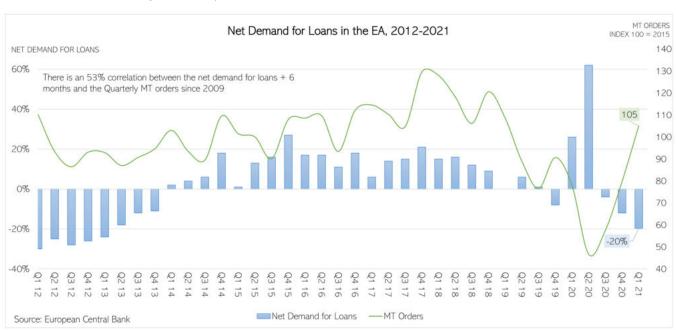


As shown in the chart below, there is a visible decrease in spare capacity in the second quarter of 2021 at almost all national levels, compared to the previous quarter. The largest change was in Germany, where the percentage balance decreased from 36.4 % to 7.8 % over the quarter-on-quarter period. Austria also registered a significant decrease in spare capacity, with the lower percentage balance in the second quarter of 2021 at the level of 15.4 %, compared to the prior reporting period, when the rate was 27.6%. Only Spain recorded an increase in spare capacity with a balance of 13.4% in Q2 2021.

Production	Capacity I	(balance i	n %)

	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021
Austria	6,1	11,7	22,5	18,7	35,8	42,7	41,9	27,6	15,4
Czech Republic	27,4	27,0	28,9	33,5	19,2	25,4	21,3	13,3	8,5
France	-11,4	-4,7	-4,0	-1,1	28,2	1,4	21,5	31,3	29,4
Germany	9,6	22,1	33,0	25,7	46,5	44,4	35,6	36,4	7,8
Italy	20,7	24,6	25,5	27,6	NA	28,7	26,6	27,5	25,2
Spain	0,4	-2,1	13,2	7,8	13,7	26,5	9,3	4,5	13,4
United Kingdom	14,0	25,7	41,2	0,3	47,1	37,8	20,3	NA	NA

3.3 Bank Lending Survey



Credit standards

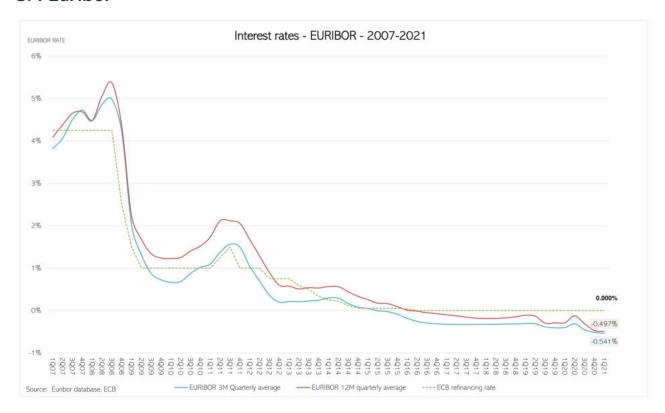
• After a two quarter of tight banks' internal guidelines or loan approval criteria, euro area banks reported a moderate net tightening of credit standards (i.e. banks' internal guidelines or loan approval criteria) for loans or credit lines to enterprises in the first quarter of 2021 (net percentage of banks standing at 7%, after 25% in the previous quarter). The tightening reflects banks' continued concerns regarding borrowers' creditworthiness given the length of the pandemic and the impact of containment measures on firms' business in some sectors of the economy. The net tightening of credit standards moderated significantly for loans to both SMEs (7%, after 25%) and large firms (5%, after 16%) as well as for short-term loans (6%, after 19%) and long-term loans (10%, after 26%).

Banks' overall terms and conditions

(i.e. banks' actual terms and conditions agreed in the loan contract)

- For loans to enterprises remained unchanged in the first quarter of 2021 (net percentage of 0%, after 14%). Margins on average loans (defined as the spread over relevant market reference rates) narrowed in net terms, mainly owing to competitive pressures, while margins on riskier loans widened somewhat, on balance. In addition, the tightening impact of collateral requirements became considerably smaller compared with previous pandemic quarters.
- Across 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 2021.
- Banks reported, on balance, a further decline in firms' demand for loans or drawing of credit lines in the first quarter of 2021 (net percentage of banks standing at -20%, after -12% in the fourth quarter of 2020). The decline continued to be mainly driven by a dampening impact of firms' demand for financing fixed investment as firms, especially in sectors more affected by the pandemic, tended to postpone investment. In addition, banks indicated the use of alternative sources of financing by firms, like internal financing or market-based financing, as a factor restraining loan demand. In net terms, firms did not demand additional financing for working capital, reflecting available liquidity buffers and direct government liquidity support, especially to SMEs.
- Across the largest euro area countries, banks reported, on balance, an increase in demand for loans to enterprises in Germany and Italy, but a continued decline in France and Spain in the first quarter of 2021.
- In the second quarter of 2021, banks expect a rebound of firms' net demand for loans (net percentage of 21%), especially by SMEs. This may be partly related to a resurgence of loan demand in the light of stronger containment measures, according to reporting banks.

3.4 Euribor



The ECB refinancing rate remained unchanged at 0.0% during the 1st quarter of 2021. The EURIBOR 3-month average rate fell to -0.541%, while the 12-month average stands at -0.497%.

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

The ECB will continue to conduct net asset purchases under the Pandemic Emergency Purchase Programme (PEPP) with a total envelope of €1,850 billion until at least the end of March 2022. Also, ECB states that net purchases under the Asset Purchase Programme (APP) will continue at a monthly pace of €20 billion. They intend to continue reinvesting, in full, the principal payments from maturing securities purchased under the APP for an extended period of time, past the date when they start raising the key ECB interest rates. In all cases, this should continue as long as necessary to maintain favorable liquidity conditions and an appropriate degree of monetary accommodation.

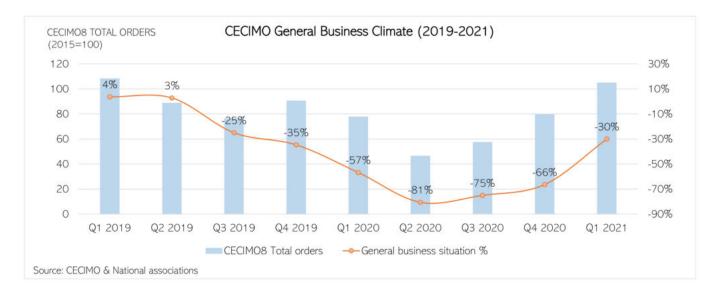
BUSINESS CLIMATE

4.1 CECIMO Business Climate Barometer (m)

The Business Climate Barometer is a quarterly survey that assesses CECIMO-based companies' current business sentiment and expectations for the next quarter.

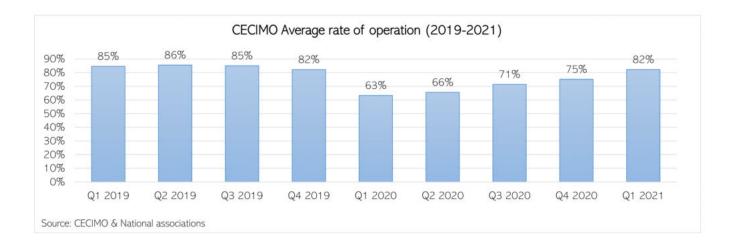
Methodology: CECIMO & National association surveyed individual companies and assessed their current business climate and their expectations (next q) in relation with demand, domestic production, export sales and employment. The responses of the CECIMO Business Climate Barometer are analyzed as the difference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

Note: The survey is still under improvement and the results below are based on responses from several CECIMO countries: Germany, Austria, United Kingdom, Italy and Czech Republic (about 74% of CECIMO's production in 2015).



Similar to the OECD Business Confidence Indicator levels, we can see a decrease in the CECIMO General Business Climate even before the coronavirus pandemic. This is also consistent with lower levels of the EU Industrial Production Index and CECIMO8 total orders. According to the results of the CECIMO Q1 2021 survey, the general assessment of the business climate continues to improve after reaching its lowest level in the Q2 2020. Although the improvement was substantial in the Q1 2021, with a balance of -31%, it was still below the positive levels recorded in the Q2 2019. However, reflects a much stronger position than in the Q1 2020. Furthermore, based on the latest survey results, managers' expectations regarding the general business climate for the upcoming quarter (Q2 2021) were very positive (+34%).

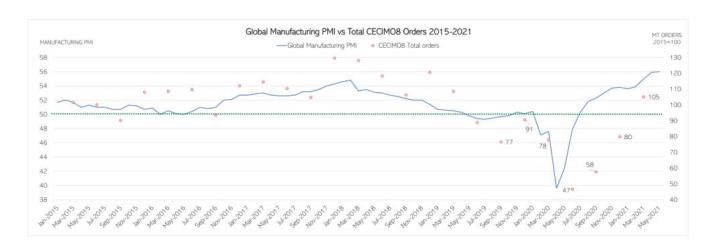
In line with EU capacity utilisation levels, in the Q1 2021, the average operating ratio of CECIMO companies continued to recover, reaching 82% (Q4 2019 level).



Based on previous surveys results, demand for products has been in a positive (increase) range since Q3 2020, reaching +27% balance in Q1 2021. This is in line with the improvement in CECIMO8 total orders since the Q3 2020. Furthermore, managers have strong positive (increase) expectations about domestic production (+28%) and export (+22%). Employment expectations have remained below the positive balance since the Q1 2019 survey, with a moderately negative balance in Q1 2021 (-17%).

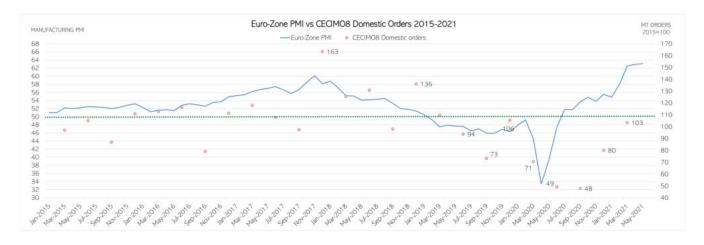
4.2 Purchasing Managers Index (M)

Global Manufacturing PMI



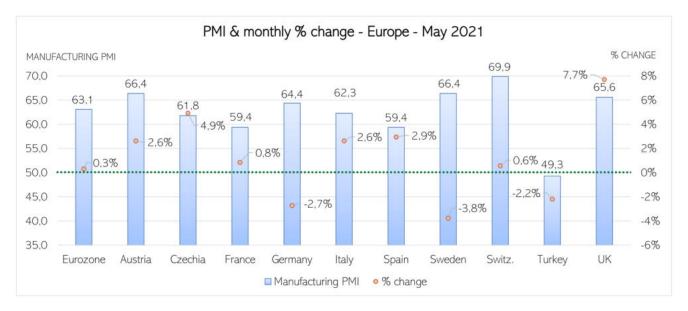
There was a continuous acceleration in the global manufacturing PMI during first five months of this year; this continues the peak levels we saw in 2018 and, before that, in 2011. This series has signalled expansion (the PMI above 50) since July 2020, with the latest reading of 56 (May 2021). Production in May rose at one of the fastest rates in a decade, as new order growth accelerated to an 11-year high. The outlook remained positive, with manufacturers forecasting further increases in output over the next 12 months. Delays in the receipt of goods ordered from suppliers combined with higher production needs encouraged manufacturers to raise purchasing levels in May.

Eurozone Manufacturing PMI



After continuous growth during the first four months, the manufacturing PMI for the Eurozone recorded a new improvement in operating conditions during May. The Eurozone PMI recorded 63.1, compared to 62.9 in April and its highest reading in the HIS Markit survey history (data for the Eurozone have been available since June 1997). Like the global index, above the threshold for the 11-month running.

All three market groups once again recorded strong improvements in operating conditions during May. Even the growth of manufacturing output was the slowest recorded by the survey for three months (+0,3% compared to the April), it nonetheless remained close to March's survey record with production again underpinned by rapid gains in new orders.



Austria

Austrian Manufacturing PMI increased from 64.7 in April to 66.4 in May. Improvement in the sector's performance continued to be led by rising inflows of new orders, with sales from abroad rising particularly sharply in May. As a result, Austrian manufacturers ramped up production in line with higher demand, with May data pointing to the sharpest expansion in output in the series' history. Firms were generally positive about the year-ahead outlook, though some did raise concerns about ongoing supply issues.

Czech Republic

The manufacturing PMI for the Czech Republic increased to 61.8 in May, up from 58.9 in the previous month to signal the steepest upturn in the health of the Czech Republic manufacturing sector since data collection began in June 2001. The pace of overall growth

also accelerated for the third month running. This growth was driven by a strong rebound in output and new orders. Even the increase in output was very rapid, some companies noted a high-capacity pressure due to shortages of raw materials.

Germany =



After significant improvement in the manufacturing PMI in February and March, the growth of Germany's manufacturing sector showed a further loss of momentum in May, standing at 64.4 (from 66.2 in April). Even the index was still well above the 50.0 level, German manufacturing growth slowed down since April, due to the increased number of disruptions resulting from shortages of materials and components. The decline in May was led by the investment goods category. Looking ahead, German manufacturers continued to report high expectations for output in 12 months' time, citing hopes for a continued recovery in demand as COVID-19 restrictions are lifted, and the easing of supply issues.

Spain ...



The manufacturing PMI index in Spain has continued its strong improvement since February 2021, reaching 59.4 in May from 57.7 in April, the highest level since May 1998. Driving the PMI higher were faster gains in both output and new orders (both from at home and abroad). Growth has now been recorded in each of the past four months, although there were some reports that the production had been constrained to some degree by supply-side constraints.

France





In France, output and new orders both increased at accelerated rates in May, resulting in a PMI increase up to 59.4 in May from 58.9 in April, signalling a further substantial improvement in business conditions in the French manufacturing sector, and one that has been the most marked since September 2000. The easing of COVID-19 restrictions and the preparation for the end of lockdown were reportedly key factors behind the latest improvement in business conditions in May. Supply issues were highlighted by a further severe lengthening of vendor delivery times, and one that was unprecedented prior to the COVID-19 pandemic. Aside from material shortages, the lack of shipping containers has been one of the recent problems for French manufacturers.

Italy





The growth of the manufacturing PMI index in Italy continued in the first months of this year. PMI increased again from 60.7 in April, reaching a new peak in the 62.3 points in May. At the same time, it represents the greatest improvement in production conditions since the start of the IHS Markit survey in June 1997.

A strong boost came from the seasonally adjusted New Orders Index, which reached a series record peak and pointed to a rapid increase in order book volumes overall. May data also highlighted further strain on supply chains. Stock shortages, high demand for materials and logistical issues were the primary cause of delays

Netherlands ____

The Netherlands PMI index gained more than two points in the month, rising from 67.2 in April to a fresh series record of 69.4 in May, and signalled a steep improvement in the health of the sector. Output, new orders and exports all expanded at the steepest rates on record amid reports of surging sales in both domestic and foreign markets. Like other European countries, the disruption in the supply chain continued to affect manufacturers.

Sweden ===

After the Manufacturing PMI for Sweden increased to 69.0 in April 2021 from 64.7 points in March, the Manufacturing PMI dropped to 66.4 in May 2021. Nevertheless, this was the eleventh consecutive month of expansion of factory activity and the fourth highest level of PMI observed in 26 years of data collection (Swedbank). The lower level of the PMI is mainly due to the decrease in the new orders index.

Switzerland 🚺

Switzerland PMI rose to an all-time high of 69.9 in May of 2021, from 69.5 in the previous month (all time high). The speed of the recovery is followed by an impact on the purchasing prices, sales stocks and longer delivery times. Looking ahead, broader recovery in Swiss manufacturing will likely remain in place for the foreseeable future thanks to the positive order situation.

Turkey C

After the small improvement in the March, the latest PMI survey data showed that the manufacturing sector was negatively impacted by the COVID-19 lockdown that was in place in April and May. The PMI registered 49.3 in May, down from 50.4 in April and below the 50.0 no-change mark for the first time in a year. Output and new orders in May slowed and the supply chain disruption was further highlighted as a problem for manufacturers.

United Kingdom

In the United Kingdom manufacturing production rose as one of the quickest rates in the series' history, bettered only by those registered in August 2013 and July 1994. The PMI rose to 65.6 in May, up from 60.9 in April, above July 1994's previous record high of 61.0. With May results, the PMI has signalled an improvement in each of the past 12 months. New orders and employment, unlocking economies from COVID restrictions and ongoing vaccination programs, supported one of the steepest increases in production volumes. Manufacturers' efforts to minimise the impact of supply-chain disruption led to a series-record increase in purchasing activity during May. Over 70% of companies forecast that production would be higher in one year's time, compared to only 3% expecting a decline.



China **

After the slight decrease in the PMI in February and March, the latest data for the Chinese manufacturing PMI show an improvement from 51.9 in April to 52.0 in May. The latest data indicate a new increase in demand for Chinese manufactured products, with total sales growing at the fastest pace in five months. Growth was supported by greater demand, both domestically and internationally. Growth in new export orders increased to its highest level of six months in May.

India 🚢

India's manufacturing PMI recording 50.8 in May, down from 55.5 in April moved closer to the no-change mark of 50.0. With the escalation of the COVID-19 crisis and its negative impact on demand, companies have seen the slowest increases in new orders and output for ten months. Furthermore, Indian manufacturers became more concerned about the negative impacts of the pandemic on the operations and growth projections for the future were revised to lower levels.

Japan •

The manufacturing PMI in Japan edged down from 53.6 in April to 53.0 in May, signalling a softer but still moderate improvement in the health of the manufacturing sector. The most recent data show a continued recovery in manufacturing production for the fourth consecutive month. Japanese firms recorded further increases in both output and new orders (notably in external markets) in May.

South Korea

At 53.7 in May, South Korean manufacturing PMI dipped slightly from 54.6 in April, signalling a moderate improvement in the sector. May data pointed to a solid increase in manufacturing output, but one that was softer than that seen in April, the lowest level since January 2021.

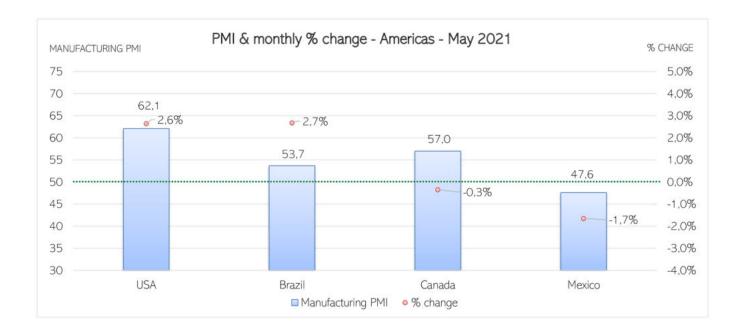
The improvement in South Korea's foreign demand for manufactured goods weakened in May, with new export orders growing only partially and at a slower pace since October 2020. As demand conditions remained generally positive, firms remained optimistic that output would increase over the next year.

Taiwan **

The Taiwan PMI edged down slightly from April's more than the 11-year high of 62.4 to 62.0 in May but continues to be one of the strongest we tracked. The expansion of output was supported by a substantial increase in total new orders in line with reports of greater customer demand both at home and across key export markets. Capacity pressures and supply chain disruption are ongoing challenges for Taiwan manufacturers as well as an increase of COVID-19 cases across the region.

Russia 🚃

Russia's manufacturing sector improved slightly in May. The Russian PMI registered 51.9 in May, compared to 50.4 in April. A further rise in new orders, as stronger domestic and foreign demand contributed to the upturn. As in other countries, Russian manufacturers faced disruptions in the supply chain, delays and growth in input prices.



United States

The manufacturing PMI in the U.S. posted 62.1 in May, up from 60.5 in an April reflecting increase in business activity among U.S. manufacturers (among the strongest in the 14-year series' history). The growth was based on a strong expansion of production, due to strong clients demand and a further sharp increase in new orders (domestic and foreign). Easing of COVID-19 restrictions and the successful vaccine rollouts supported stronger demand conditions.

Canada 📲

Canada's Manufacturing PMI fell slightly from 57.2 in April to 57.0 in May, after peaking in March at 58.5. It still reflects strong growth in operating conditions thanks to solid growth in production volumes even supply chains continued to be impacted by COVID-19 restrictions midway through the quarter. The slowdown in production and the growth of new orders influenced the softening in production forecasts among Canadian manufacturers.

Mexico

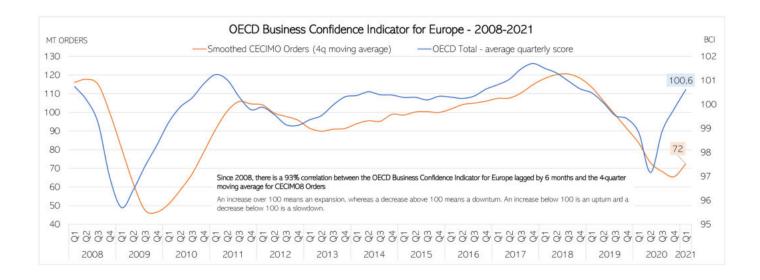
The Mexican manufacturing sector remains firmly stuck in contraction despite some improvements in the PMI in February, March and April. At 47.6 in May, down from 48.4 in April, the Mexico Manufacturing PMI reflects a further deterioration in operating conditions. The May figure continues to be below the critical threshold of 50.0, fifteenth month in a row. The drop is primarily due to weak sales, raw material shortages and the impact of the COVID-19 crisis.

Brazil 🔷

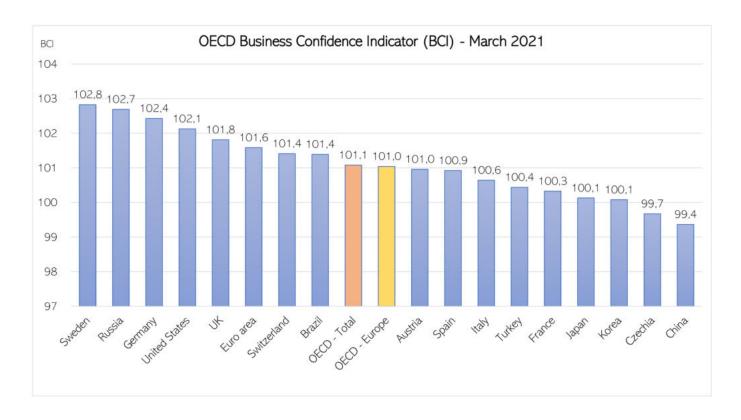
The manufacturing PMI in Brazil improved to 53.7 in May, up from 52.3 in April, although is lower than the high level of 58.4 in February 2021. This reflects a new growth in output and new orders, as well as a sustained increase in employment among Brazilian manufacturers. Vaccine availability is expected to improve over the coming months, reducing the spread of the disease and contributing to production growth.

4.3 OECD Business Climate Indicator (M)

The Business Climate Index (BCI) for the OECD countries reached level of 100.6 at the end of Q1 2021 – this matches the level that was recorded in the last quarter of 2018 and goes above the quarterly levels in 2019 and 2020. While the Coronavirus outbreak had a significant negative impact on the BCI, it is worth noting that this indicator was already falling from its peak at the end of 2017, and it is still below these levels. However, figures above 100 suggest increased confidence in short-term business performance and this is a good sign of improving the overall business climate.



The March 2021 (note that the previous chart refers to the quarterly averages) BCI readings show further improvement of OECD-Total aggregate standing on the level of 101.1 points, while the OECD-Europe was slightly behind, recording 101.0 points.

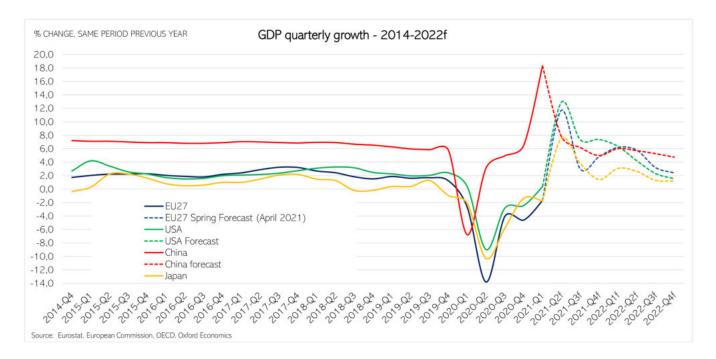


Country-specific BCI readings for March show:

- European markets such as Sweden (102.8), Germany (102.4), UK (101.8) and Switzerland (101.4) were above the OECD average, the other important European economies such as Austria (101.0), Spain (100.9), Italy (100.6) and France (100.3) were below this level, but still above the level of 100 points.
- All key Asian markets (China, Japan, and South Korea) had BCI below the OECD average, although Japan (100.1) and South Korea (100.1) both exceeded the 100-point level.
- The Russia (102.7), United States (102.1) and Brazil (101.4) stand at above the OECD average. Turkey (100.4) had BCI below the OECD average, but still above the 100-point mark.
- Sweden, Russia, Germany and the United States had the best results in March 2021, while the United Kingdom, Switzerland and Brazil were not far behind.

5 GENERAL INDICATORS

5.1 GDP



Tracking the trend of the percentage change in GDP, comparing the latest period (Q1-2021) with the same period a year earlier:

- Euro area GDP fell by -1.8% in the Q1 2021 compared to the same period of the previous year, while overall EU27 economic output fell by -1.7% on the same annual basis. Both European GDP rates show a partial, short-term recovery after a Q4 2020 -4,9% yearly drop in the Eurozone and a -4,6% drop in the European Union.
- The Chinese economy recorded a strong increase in 18,3% in Q1 2021 on a year-on-year basis, improving on Q4 2020's 6,5% yearly increase. China's GDP has picked up speed after a -6,8% yearly drop in Q1 2020, as the pandemic started to disrupt business activity in the Asian country.
- US GDP at the Q1 2021 was 0,4% higher than in the first period on of 2020 with quarter-on-quarter growth in the first period of 2021 by 1,6%.
- Looking at the comparison against a year earlier, Japan's economy was lower in the Q1 2021, compared to the same quarter of 2020 by the 1,8%, with negative quarter on quarter growth by -1%.

European Commission's Spring Forecast (May 2021):

The recently published Spring 2021 Forecast by the European Commission shows new trends regarding GDP growth in the European Union and other advanced economies. The renewed hit to economic output in the fourth quarter of 2020 reflected the worsening of the COVID-19 pandemic situation and renewed measures to curb the spread of infections. The forecast shows that in Q1-2021 is likely to record continuous slowdown in economic activity with the various forms of lockdown that have been imposed across most European economies.

Overall, GDP is now forecast to grow by +4.2% in 2021 and +4.4% in 2022 in the EU (+4.3 in 2021 and +4.4% in 2022 in the Euro-zone). European Union GDP should bounce back as of the second quarter of 2021, registering a 11,7% increase against Q2 2020 volumes. The European Union pace of growth should continue in 2021, but it will still be significant between the quarters. Q4 2022 is expected to end with a GDP yearly increase of 2,4%. A stronger-than-previously expected rebound is expected compared to the Winter Forecast. However, differences across countries in the pace of the recovery from the crisis remain substantial.

The global outlook has improved significantly since the Winter interim Forecast for both advanced and emerging market economies. World GDP (excluding EU) is expected to record growth of +5.9% in 2021 and +4.2% in 2022.

- The rapid growth is expected in the US, due to its rapid vaccination programme and additional strong policy support, with a return to pre-pandemic output levels in mid-2021, much earlier than in many other advanced economies. According to Spring 2021 forecast, the US economy is about to record GDP growth of +6.3% in 2021, slowing to +3.8% in 2022.
- Japanese GDP should expand at a notable speed in Q2 2021 (7,3% increase against Q2 2020) as momentum quickly fades away in the coming quarters. Furthermore, estimates show that the Q2 2021 surge will not be as strong as that of the EU or the US. GDP growth forecast is +3.1% in 2021 and +2.5% in 2022.

China continues to grow quickly due to its early control of the COVID-19 pandemic, and a
dynamic export sector. As mentioned above, significant improvement is expected in Q1
2021, compared to the same quarter of 2020. According to Spring 2021 forecast, GDP
growth forecast for China is +7.9% in 2021 and +5.4% in 2022.

5.2 Inflation

Q1-2021 average inflation data:

• EU27: 1.40%

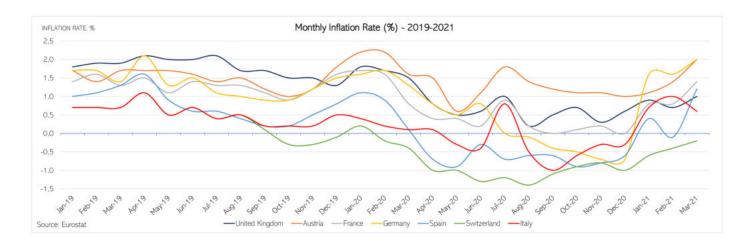
• Eurozone: 1.03%

• United States: 1.87%

• China: -0.03%

In the first quarter of 2021, Eurozone inflation has risen sharply, averaging 1% year-on-year (y/y), up from -0.3% y/y in the last period of 2020. EU27 inflation follows a similar path, averaging 1.4% y/y, compared to the 0.2% y/y in the last quarter 2020. The rebound in inflation in early 2021 can be attributed to higher prices for goods, and to a lesser extent, for services. We continue to see a small but significant difference between the Euro-zone countries and the EU27.

Inflation in the U.S. has also risen sharply, averaging 1.87% y/y, up from 0.9% y/y in the last period of 2020, with an especially high level in March 2021. The rate of inflation in China (where the data comes from the OECD) after lower levels in January, finished with positive value in March 2021, but quarterly y/y value reached negative value zone averaging -0.03%, down from 0.06% y/y compared with last quarter of 2020.



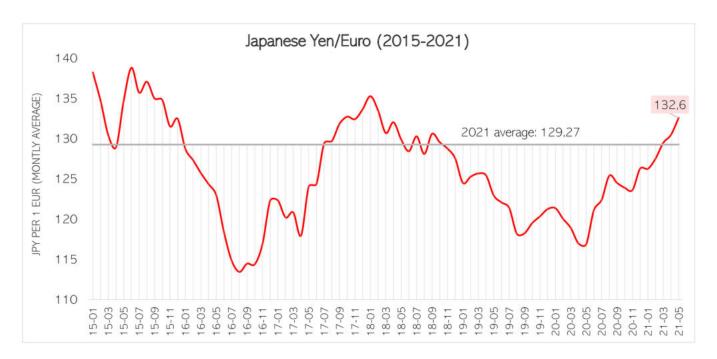
As demand and consumption levels improve in the EU, and given the overly positive business outlook, prices rose in the first quarter of 2021 among the largest CECIMO markets. In Germany, in the first quarter of 2021, annual inflation stood at an average of 1.7%. A significant increase is due to the end of the VAT reduction, new carbon emission certificates that have increased transport and heating costs, and an increase in the minimum wage.

Switzerland still registered a negative level of -0.4% y/y in the first quarter of 2021, compared to -0.9% y/y change in the last quarter of 2020. The United Kingdom (0.9%), France (1.0%), Spain (0.5%) and Italy (0.8%) also recorded positive y/y averages in the first quarter of 2021.

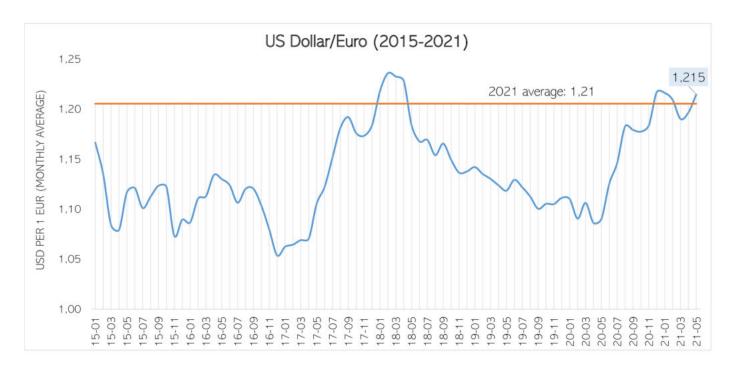
Inflation rates	by Country	(March 2020 -	March 2021)
-----------------	------------	---------------	-------------

% change on a year earlier	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21
Austria	1,6	1,5	0,6	1,1	1,8	1,4	1,2	1,1	1,1	1,0	1,1	1,4	2,0
France	0,8	0,4	0.4	0,2	0,9	0,2	0,0	0,1	0,2	0,0	0,8	0,8	1,4
Germany	1,3	0,8	0,5	0,8	0,0	-0,1	-0,4	-0,5	-0,7	-0,7	1,6	1,6	2,0
Italy	0,1	0,1	-0,3	-0,4	8,0	-0,5	-1,0	-0,6	-0,3	-0,3	0,7	1,0	0,6
Spain	0,1	-0.7	-0,9	-0,3	-0,7	-0,6	-0,6	-0,9	-0,8	-0,6	0,4	-0,1	1,2
Switzerland	-0,4	-1,0	-1,0	-1,3	-1,2	-1,4	-1.1	-0,9	-0,8	-1,0	-0,6	-0.4	-0,2
United Kingdom	1,5	0,8	0,5	0,6	1,0	0,2	0,5	0.7	0,3	0,6	0,9	0.7	1,0

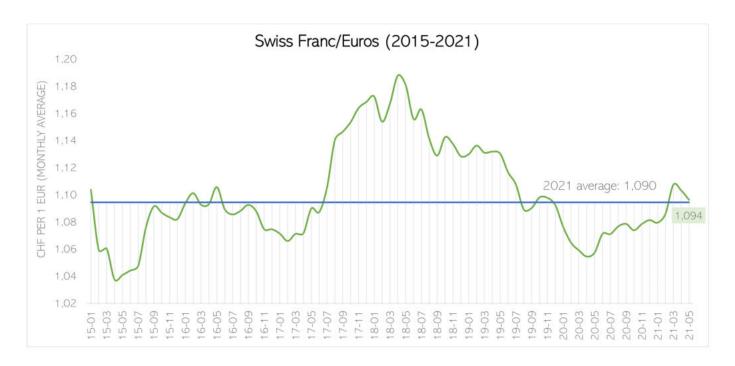
5.3 Foreign exchange rates



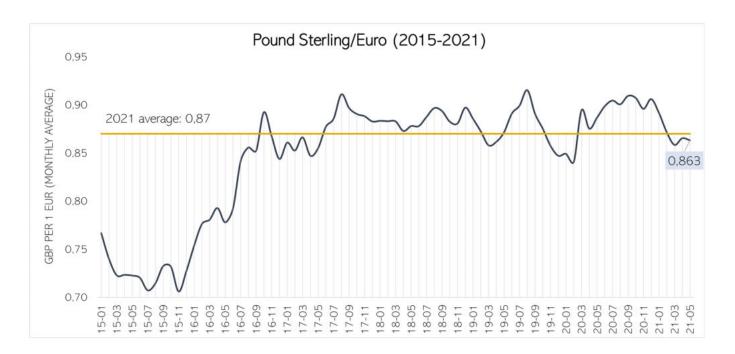
The average Q1 2021 Japanese trading prices against the euro was 127.8, indicating a market appreciation of the Japanese currency, which was trading at 124.6 units per euro in the previous quarter. The average trading price for the Japanese Yen during first five months in 2021 was 129.3 what reflected a continuous appreciation of the Japanese currency in April (130.5) and May (132.6) this year, to stand at its highest rate since April 2018.



The average trading price of the US Dollar during first five months in 2021 was 1.205 per Euro, reaching a higher average level that was in 2020. After significant depreciation of the US dollar in Q1 2021, the latest data for April and May shows a reversal situation and Euro weakened against the US dollar in the April and May.



The average trading price for the Swiss Franc during 2020 was 1.070 per Euro. Following the slight depreciation of CHF in January, a significant appreciation is visible in February and especially in March, recording 1.107 level, the highest since June 2019. Depreciation returns in April and May. As a result, first five-month period of 2021 the average is slightly above the average for 2020, standing at 1.090 per Euro.



The average trading price for the Pound Sterling during first five months of 2021 was 0.870 per Euro, the lowest level since February 2020. Even the exchange rate was volatile on the daily basis, the monthly indicators for early this year show that the pound weakened against the Euro, particularly in February. After an improvement in April, May still reflects a small weakening of the UK Pound against the Euro.



The average trading price of the Chinese Yuan during first five months of 2021 was 7.812 per Euro, signaling the slight weakening of the Chinese Yuan compared to the previous year's average (7,871). As with the US dollar, there was a different exchange rate movement between the Euro and the Chinese Yuan over this period. After significant appreciation in the first three months, the Euro weakened against the Chinese Yuan in April and May.

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 2010 = 100.

Source: Eurostat.

Gross Fixed Capital Formation

The Gross Fixed Capital Formation (GFCF) consists of resident producers' aquisitions, less disposals, of fixed tangible or intangible assets. This covers in particular machinery and equipment, vehicles, dwellings and other buildings. The GFCF is a key determinant of both aggregate demand and supply.

Source: Eurostat and ECB.

Capacity Utilisation in the Investment Goods Sector

Population: Investment goods producers.

Data covered: Assessment of current production capacity, measured as a balance (seasonally adjusted); Current level of capacity utilization, measured in % (seasonally adjusted). More than 38.000 industrial firms are surveyed every month, while the biannual investment survey includes over 44.000 units.

Answers obtained from the surveys are aggregated in the form of "balances". Balances are constructed as the difference between the percentages of respondents giving positive and negative replies. The Commission calculates EU and euro-area aggregates on the basis of the national results and seasonally adjusts the balance series.

http://ec.europa.eu/economy_finance/db_indicators/surveys/documents/userguide_ en.pdf

Bank Lending Survey

The bank lending survey is addressed to senior loan officers of a representative sample of euro area banks. Its main purpose is to enhance the understanding of bank lending behaviour in the euro area. The questions distinguish between three categories of loan: loans or credit lines to enterprises; loans to households for house purchase; and consumer credit and other lending to households.

For all three categories, questions are posed on credit standards for approving loans; credit terms and conditions; and credit demand and the factors affecting it. The responses to questions related to credit standards are analysed in this report by focusing on the difference ("net percentage") between the share of banks reporting that credit standards have been tightened and the share of banks reporting that they have been eased. A positive net percentage indicates that a larger proportion of banks have tightened credit standards ("net tightening"), whereas a negative net percentage indicates that a larger proportion of banks have eased credit standards ("net easing"). Likewise, the term "net demand" refers to the difference between the share of banks reporting an increase in loan demand and the share of banks reporting a decline. Net demand will therefore be positive if a larger proportion of banks have reported an increase in loan demand, whereas negative net demand indicates that a larger proportion of banks have reported a decline in loan demand.

http://www.ecb.eu/stats/money/surveys/lend/html/index.en.html

Interest Rates - Euribor

Euribor® (EURo InterBank Offered Rate) is the rate at which euro interbank term deposits are being offered by one prime bank to another within the EMU zone. Monthly data are calculated as averages of daily values from the banks with the highest volume of business in the euro area money markets. http://www.euribor-ebf.eu/

The deposit facility rate is the one the banks receive for depositing money with the central bank overnight. The so-called main refinancing rate, minimum bid rate or rate for the main refinancing operations (MROs) is the interest rate which banks do have to pay when they borrow money from the ECB for a period of one week.

Purchasing Managers' Index (PMI)

The Global Report on Manufacturing is compiled by IHS Markit and J.P. Morgan in association with ISM and IFPSM based on the results of surveys covering 9.000 purchasing executives in 30 countries. Together these countries account for an estimated 86% of global manufacturing output. Questions are asked about real events and are not opinion based.

Data are presented in the form of diffusion indices, where an index reading above 50,0 indicates an increase in the variable since the previous month, below 50,0 a decrease and equal to 50.0 means no change on prior month. All the indices are seasonally adjusted at the national sector level. http://www.markiteconomics.com/Survey/Page.mvc/AboutPMIData

OECD Business Confidence Indicator (BCI) for Europe

The Composite leading indicators (CLI), which BCI is part of, comprises a set of component series selected from a wide range of key short-term economic indicators to ensure that the indicators will still be suitable when changes in economic structures occur in future. CLIs are calculated for 33 OECD countries (Iceland is not included) and several regional aggregates, based on enterprises' assessment of production, orders and stocks, together with its current position and expectations for the near future.

These indexes are designed to anticipate turning points in economic activity relative to trend, on average 6 to 9 months before they happen. While theory says that a turning point in the CLI signals a turning point in the reference series, such turning points, in reality, are determined by a complicated process. Turning points in the detrended reference series are usually found about 4 to 8 months in advance.

Therefore, one often needs to wait for several periods to draw a more definite conclusion. A useful way to exploit the information in CLIs is to take their year-on-year growth rate.

Typical indictors in the CLI include orders and inventories changes, financial market indicators, business confidence surveys and data on key sectors and trend in the main trade partners. The standardised BCIs represent only the manufacturing sector. It is based on companies' assessment of production, orders, stocks and its current position and expectations. BCI shows a long-term trend in industrial production (with a 6-month time-lag). An increase over 100 means expansion; a decrease above 100 means a downturn; an increase below 100 is an upturn and a decrease below 100 is a slowdown.

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.

OTHER SYMBOLS AND ACRONYMS

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)

CHF

Swiss Franc(s)

ECB

European Central Bank

Fed

Federal Reserve (System), the US Central Bank

GRP

Great Britain Pound(s), the Pound Sterling

IME

International Monetary Fund

WB

World Bank

MT

Machine tools

CECIMO countries

Countries whose machine tool sector is represented by CECIMO



CREDITS

Publisher: Filip Geerts Author: Anto Jerkovic

Copyediting & Production: Diana Anichitoaei



MEMBER ASSOCIATIONS

Austria: 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: AlMMAP , Associacão dos Industriais Metalúrgicos, Metalomecãnicos e Afins de Portugal www.aimmap.pt

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

Sweden: SVMF Machine and Tool Association of Sweden www.svmf.se

Switzerland: SWISSMEM
Die Schweizer Maschinen-, Elektro- und Metall-Industrie
www.swissmem.ch

Turkey: MIB Makina Imalatcilari Birligi www.mib.org.tr

United Kingdom: MTA
The Manufacturing Technologies
Association
www.mta.org.uk

CECIMO is the European Association of the Machine Tool Industries and related Manufacturing Technologies. We bring together 15 national associations of machine tool builders, which represent approximately 1500 industrial enterprises in Europe (EU + UK+ EFTA + Turkey), over 80% of which are SMEs. CECIMO covers 98% of the total machine tool production in Europe and about 33% worldwide. It accounts for approximately 150,000 employees and a turnover of around 20 billion euros in 2020. More than three quarters of CECIMO production is shipped abroad, whereas half of it is exported outside Europe.



