

ECONOMIC REPORT

Economic and steel market outlook 2022-2023

Second quarter report
Data up to, and including, fourth quarter 2021

May 2022

EUROFER
THE EUROPEAN STEEL ASSOCIATION

Introduction

The positive trend in apparent steel consumption as well as in steel demand seen over the first three quarters of 2021 continued also in the fourth quarter, albeit at a considerably slower pace, while 2022 is expected to be subject to significant disruptions and uncertainties. Ongoing global issues have cast uncertainty on the economic and industrial outlook since last summer, and this situation is likely to last at least until the end of this year. Russia's invasion of Ukraine in February 2022 and its wide repercussions on oil and gas prices, global trade and supply chains in general have considerably worsened the picture.

Economic recovery in the EU appears to be increasingly uneven and exposed to downside risks: shortage of components and raw materials, skyrocketing energy prices, rising shipping costs, have already resulted in slashed GDP growth prospects for 2022. Recovery in steel-using industries and in steel demand is expected to continue – after the strong rebound seen in 2021 following the COVID-led slump in 2020 – but at a very moderate rate. High uncertainty is set to last at least until the end of 2022, conditional upon developments in the Russia-Ukraine war – which remain unpredictable at the time of writing – and its consequences on global supply chains.

EU steel market overview

In the fourth quarter of 2021 EU apparent steel consumption increased for the fifth consecutive time in a row (+9.5%), albeit at a lower rate than in the third quarter (+14.3%) due to the impact of severe supply chain issues and rising energy prices. Apparent steel consumption amounted to 36.3 million tonnes (35.9 million tonnes in the third quarter).

The whole year 2020 was considerably impacted by the COVID-19 pandemic and saw apparent steel consumption in the EU plummet (-10.7%, almost unchanged compared to the previous Outlook) for the second consecutive year after the slump (-5.2%) already seen in 2019. In 2021 apparent steel consumption rebounded (+15.2%, revised upwards from +13.8% in the previous Outlook) after the deep recession (-10.7%) experienced in 2020 caused by the pandemic. However, ongoing supply chain issues and the war in Ukraine are set to take their toll on apparent steel consumption: in 2022 it is expected to see its third annual recession over the last four years, albeit moderate (-1.9%), as a result of quarterly drops forecast in the second and the third quarters of 2022. Apparent consumption is set to recover in 2023 (+5.1%), but the overall evolution of steel demand remains subject to a high level of uncertainty, which is likely to continue to undermine demand from steel-using sectors.

Domestic deliveries also recorded growth in volumes over the fourth quarter of 2021, albeit very modest (+0.6%, after +6.5% in the third quarter), reflecting the slowdown in demand within the EU over the second half of 2021. Over the entire 2021, deliveries sharply rebounded (+10.7%), following the pronounced drop of 2020 (-9.6%) which marked the second consecutive decline in yearly terms after 2019 (-4.2%).

Imports – including semi-finished products – into the EU continued their dramatic surge also over the fourth quarter of 2021 (+4.3%, after +4.8% and +4.5% in the third and second quarter respectively). With the exception of the second quarter figure reflecting the comparison with the heavy impact of the pandemic the year before, import penetration has therefore remained considerably high.

As a result, in 2021 imports from third countries significantly rose (+32%) after two consecutive drops (-17.1% in 2020 and -10.9% in 2019), mirroring the improvement in steel demand.

EU steel-using sectors

After the record lows of 2020 due to lockdown measures, in 2021 steel-using industries in the EU experienced a strong rebound in output, which peaked in the second quarter (+26.3%). A faster-than-expected recovery in some sectors (domestic appliances and automotive in particular) facilitated recovery from the losses experienced due



to the pandemic over the first half of 2021. However, major issues along the global supply chain experienced since July 2021, especially affecting the automotive sector (rising transportation, energy and shipping costs, shortage of components, etc.), have impacted output over the third and the fourth quarter. As a result, total steel-using sectors' output recorded a meagre increase (+0.7%), after a rise (+2.2%) in the third quarter. In particular, the automotive sector saw output plunge for the second consecutive quarter (-14.6% after -15.2%), reflecting increasingly severe disruptions along the supply chain as well as subdued demand from consumers.

Total steel-using sectors' output is expected to continue to increase in 2022, but its growth rate will be halved compared to EUROFER's previous outlook (+2% versus +4% previously forecast). This results from the rapid deterioration of the global industrial and economic outlook due to the war in Ukraine, coupled with ongoing and worsening supply chain issues. This situation has cast wide uncertainty on the steel-using industries' outlook, at least until the end of 2022. As a result, growth in output is expected to gain only modest ground in 2023 (+2.3%).

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The EU steel market: supply

Real steel consumption in the fourth quarter of 2021

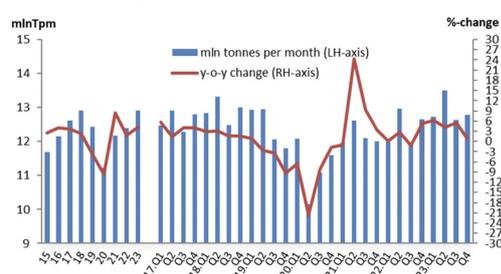
In the fourth quarter of 2021 real steel consumption continued to grow (+3.5%), albeit a lower rate than in the third quarter (+9.3%).

Real steel consumption recovered in 2021 (+8.5%, revised upwards from +7.8% in the previous Outlook), while growth is expected to continue at a more moderate pace in 2022 (+1.8%, revised downwards from +3.2%), before gaining speed in 2023 (+4.2%). In 2020 real steel consumption had declined for the second consecutive year (-9.7%, after -3.7% in 2019).

The two consecutive recessions of 2019 and 2020 were caused by the considerable slowdown in the activity of steel-using sectors (due to manufacturing and trade downturns) and to the COVID crisis and related effects, respectively. A counter-cyclical destocking trend from late 2019 persisted throughout 2020, starting to reverse only in the first quarter of 2021. However, the new stock building process occurred over the first semester of 2021 already came to an end in third quarter, when data showed again a sharply negative change in stocks, reflecting the deterioration of expectations for steel demand over the next quarters. This resulted from growing supply chain problems over the second half of 2021, which caused severe repercussions on demand from steel-using industries. This trend is likely to continue and further deteriorate over the course of 2022 due to the impact of the war in Ukraine.

In line with SWIP developments (see page 10), real steel consumption is expected to increase (+1.8%) in 2021 and grow more robustly (+4.2%) in 2023.

EU REAL STEEL CONSUMPTION
Forecast from Q1-2022



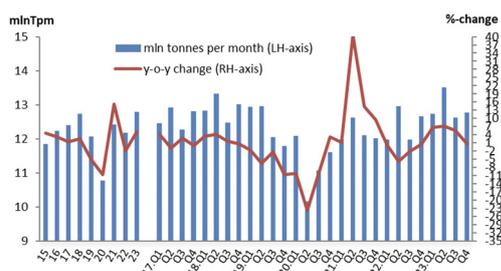
FORECAST FOR REAL CONSUMPTION - % CHANGE YEAR-ON-YEAR

Period	Year 2021	Q1'22	Q2'22	Q3'22	Q4'22	Year 2022	Q1'23	Q2'23	Q3'23	Q4'23	Year 2023
% change	8.5	0.1	2.7	-1.1	5.4	1.8	6.3	4.2	5.5	0.9	4.2

Apparent steel consumption in the fourth quarter of 2021

The positive trend seen in apparent steel consumption in the first three quarters of 2021 persisted in the fourth quarter albeit at a slower pace because of the ongoing supply chain issues, rising energy prices and production costs. These factors are expected to weigh even more in the first semester of 2022, together with the consequences of the war in Ukraine. In the fourth quarter of 2021, apparent consumption growth persisted (+9.5% after +14.3% in

EU APPARENT STEEL CONSUMPTION
Forecast from Q1-2022



The EU steel market: supply

the third quarter), recording a total volume (36.3 million tonnes) still below the pre-pandemic peak reached in the first quarter of 2019.

The whole year 2020 was considerably impacted by the COVID-19 pandemic and saw apparent steel consumption in the EU plummet (-10.7%, almost unchanged compared to the previous Outlook) for the second consecutive year after the slump (-5.2%) in 2019.

In 2021 apparent steel consumption rebounded (+15.2%, revised upwards from +13.8% in the previous Outlook) after the deep recession experienced in 2020 (-10.7%) caused by the pandemic. However, ongoing supply chain issues and the war in Ukraine are set to take their toll on apparent steel consumption: in 2022 it is expected to see its third annual recession over the past four years, albeit moderate (-1.9%), as a result of quarterly drops forecast in the second and the third quarters of 2022. Apparent consumption is set to recover in 2023 (+5.1%), but the overall evolution of steel demand remains conditional on very high uncertainty which is likely to continue to undermine demand from steel-using sectors.

EU domestic and foreign supply

Domestic deliveries also recorded growth in volumes over the fourth quarter of 2021, albeit very modest (+0.6%, after +6.5% in the third quarter), reflecting the slowdown in demand within the EU over the second half of 2021. Over the entire 2021, deliveries sharply rebounded (+10.7%), following the pronounced drop of 2020 (-9.6%) which marked the second consecutive decline in yearly terms after 2019 (-4.2%).

Imports – including semi-finished products – into the EU continued their dramatic surge also over the fourth quarter of 2021 (+43%, after +48% and +45% in the third and second quarter respectively). With the exception of the second quarter figure reflecting the comparison with the heavy impact of the pandemic in Q2 2020, import penetration has therefore remained considerably high.

As a result, in 2021 imports from third countries significantly rose (+31.9%) after two consecutive drops (-17.1% in 2020 and -10.9% in 2019), mirroring the improvement in steel demand.

EU APPARENT STEEL CONSUMPTION - IN MILLION TONNES PER YEAR										
Year	2014	2015	2016	2017	2018	2019	2020	2021	2022 (f)	2023 (f)
Million tonnes	136	142	147	149	153	145	129	149	146	154

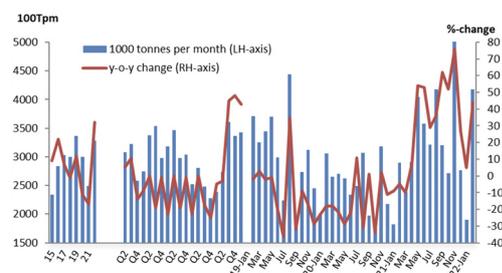
FORECAST FOR EU APPARENT STEEL CONSUMPTION - % CHANGE YEAR-ON-YEAR											
Period	Year 2021	Q1'22	Q2'22	Q3'22	Q4'22	Year 2022	Q1'23	Q2'23	Q3'23	Q4'23	Year 2023
% change	15.2	0.3	-5.8	-2.0	0.5	-1.9	6.7	7.1	5.5	0.8	5.1

Imports

Total steel imports (including semis) into the EU rose considerably over the fourth quarter of 2021 (+43% year-on-year, after +48% in the third quarter), mirroring improved demand across the EU as well as high import penetration. Imports of finished products recorded a surge (+50%, after +45% in the third quarter), as well as import of flat (+63%, after +52% in the third quarter) and import of long (+15%, after +25% in the third quarter).

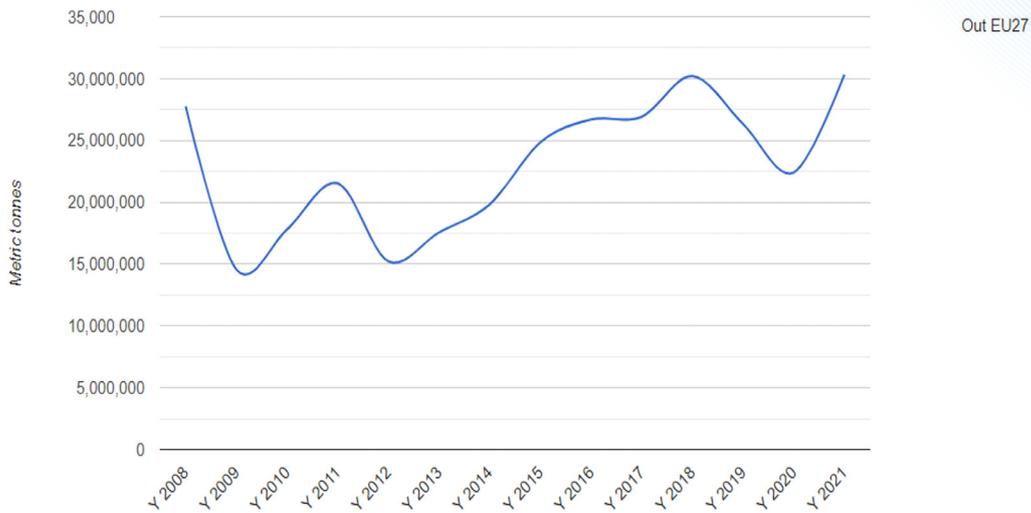
Over the entire year 2021, imports of finished products rose (+35%), after the drop (-15%) recorded in 2020, and so did imports of flat products (+40%; -15% in 2020) and imports of long products (+21%; -16% in 2020).

EU TOTAL STEEL IMPORTS 2015-2022



The EU steel market: supply

EU TOTAL STEEL IMPORTS - FINISHED PRODUCTS 2008-2021



In January 2022, imports of finished products increased (+53% year-on-year), as well as imports of both flat (+62%) and long products (+27%).

Imports were volatile across 2020 and 2021, continuing a trend seen since 2019. After a short period of exceptionally weak demand due to the outbreak of COVID-19, imports surged for some products and showed volatility again over the second half of 2020. The increase became significantly more pronounced during 2021, particularly over the second and third quarter, when very high import levels mirrored the continued improvement in steel demand. Volatility went on over the fourth quarter.

Imports by country of origin

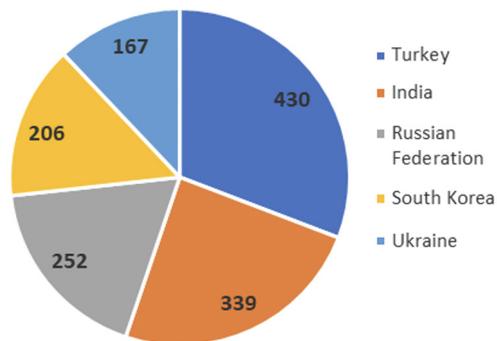
In the fourth quarter of 2021, the main countries of origin for finished steel imports into the EU market were Turkey, India, the Russian Federation, South Korea and Ukraine. These five countries represented 51% of total EU finished steel imports. Turkey and India were the largest exporters of finished steel products to the EU (with a share of 15.4% and 12.2% respectively), followed by the Russian Federation (9%), Ukraine (7.4%) and South Korea (6%).

Over the fourth quarter of 2021, imports of finished products rose significantly (+50%). Exceptional increases were registered in imports of finished products from India (+132%). Imports from Turkey significantly increased (+40%), whereas imports from Russia and Ukraine increased more moderately (+18% and +14% respectively). Imports from South Korea recorded a meagre increase (+2%).

Imports by product category

Customs data show that both flat and long product imports increased (+63% and +15% respectively) in the fourth quarter of 2021. The share of long products out of total finished steel product imports was 20%. Over the third quarter of 2021 imports of both flat

EU FINISHED STEEL IMPORTS BY COUNTRY Q4-2021, monthly '000 metric tonnes



The EU steel market: supply

and long products had increased as well (+52% and +25% respectively).

Within the flat product market segment, over the fourth quarter of 2021 imports of all flat products rose considerably. Imports of hot dipped increased particularly (+100%), as well as imports of cold-rolled sheet (+84%), coated sheet (+79%) and hot-rolled wide strip (+68%). Imports of quarto plate increased more moderately (+10%).

Correspondingly, all long product imports rose in the fourth quarter of 2021, with the exception of heavy sections (-19%). Imports increased particularly for rebars (+39%). More moderate increases were recorded for merchant bars (+15%) and wire rod (+10%).

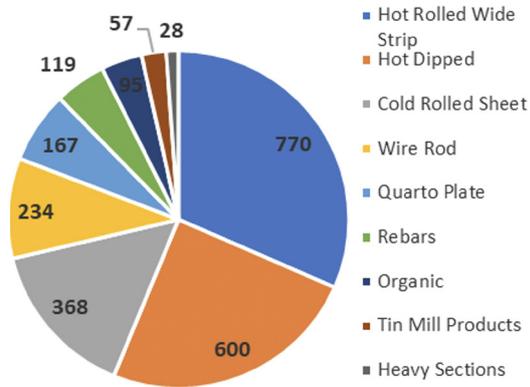
Exports

In the fourth quarter of 2021 total EU exports of finished steel products to third countries marginally decreased (-1%, after -11% in the third quarter). Over the entire year 2021, exports of finished products dropped (-2%) compared to 2020, resulting from a decrease of exports of flat products (-3%) and no change in exports of long products. In 2020, exports of finished steel products had decreased (-17%).

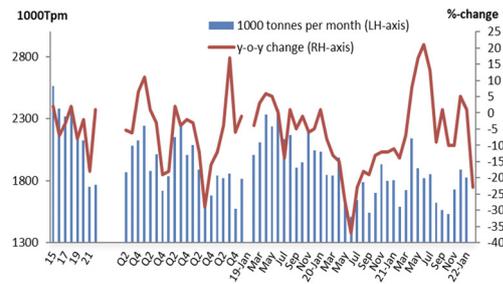
In particular, over the fourth quarter of 2021 exports of flat rose marginally (+1%), whereas those of long products dropped (-6%). In the third quarter, exports of both flat and long products had recorded a fall (-13% and -5% respectively).

In January 2022, exports of finished products rose marginally (+1%). Exports of flat products recorded flat developments exports of long products rose (+4%).

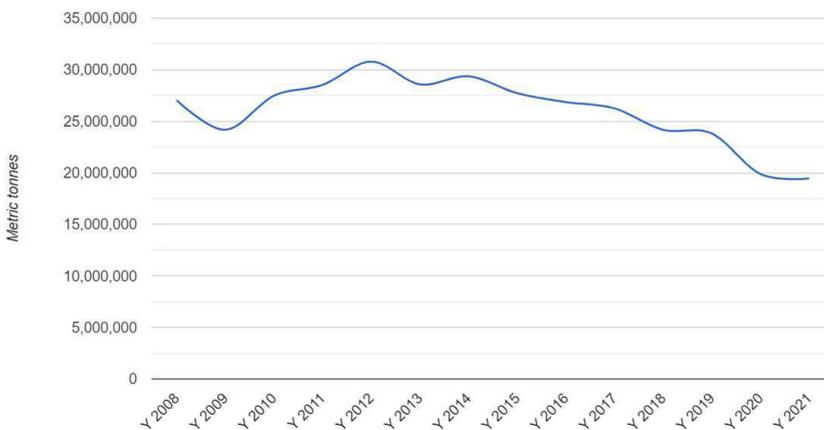
EU FINISHED STEEL IMPORTS BY PRODUCT
Q4-2021, monthly '000 metric tonnes



EU TOTAL STEEL EXPORTS



EU TOTAL STEEL EXPORTS - FINISHED PRODUCTS
2008-2021



Exports by country

The main destinations for EU steel exports over the fourth quarter of 2021 were Turkey, the United Kingdom, the United States, Switzerland and China, followed by Egypt, India and the Russian Federation. The first five destinations together accounted for 57% of total EU finished product exports.

The most significant increases in EU exports were recorded with the United States (+42%), Egypt (+15%) and Turkey (+12%), while the largest decreases were observed with India (-28%), China (-19%) and the United Kingdom (-14%).

Exports by product category

Over the fourth quarter of 2021, flat product exports marginally increased (+1%), whereas long product exports decreased (-6%). Over the entire year 2021, exports of flat products dropped (-3%) compared to 2020, while exports of long products remained unchanged.

In the fourth quarter of 2021, flat products accounted for 68% of finished product exports overall.

Exports of most individual flat products decreased compared to the same period of the previous year. In particular, exports of hot dipped recorded a drop (-27%), and so did exports of both coated sheet (-24%), and cold rolled sheet (-10%).

Among long products, exports decreased for rebars (-32%) and merchant bars (-6%). Exports of heavy sections remained unchanged compared to one year earlier, while exports of wire rod increased (+3%).

Trade balance

In the last quarter of 2021, the EU's total steel product trade deficit (finished plus semis) amounted to 1.6 million tonnes per month (lower than the deficit of 1.8 million tonnes recorded in the third quarter), with a peak of 3.9 million tonnes deficit recorded in October. For finished products, the trade deficit in the fourth quarter of 2021 amounted to 963 kilotonnes.

Throughout 2021, the EU's total trade deficit amounted to 1.5 million tonnes. For finished products it amounted to 907 kilotonnes. Flat products recorded a deficit of 923 kilotonnes, whereas long products recorded a surplus of 17 kilotonnes.

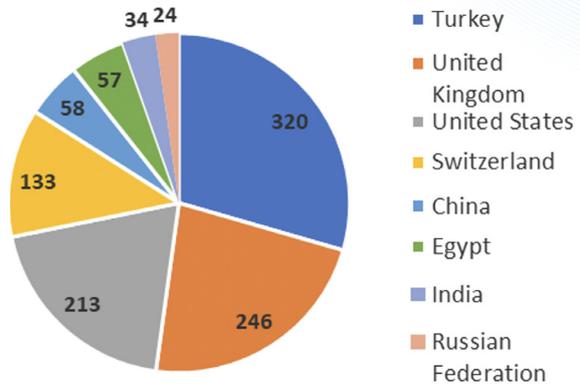
In the fourth quarter of 2021 the flat segment registered a deficit of 988 kilotonnes, whereas the long product segment registered a surplus of 25 kilotonnes. In the third quarter, both flat and long products had experienced a deficit (of 1.1 million tonnes and 62 kilotonnes respectively).

The biggest trade deficits - including semis - with individual trade partners were with Russia (593 kilotonnes), India (353 kilotonnes), Ukraine (338 kilotonnes), South Korea (197 kilotonnes), Turkey (110 kilotonnes) and China (109 kilotonnes).

The major destination countries for EU finished steel exports with a trade surplus over the fourth quarter of 2021 were the US (249 kilotonnes), the UK (87 kilotonnes) and Switzerland (78 kilotonnes).

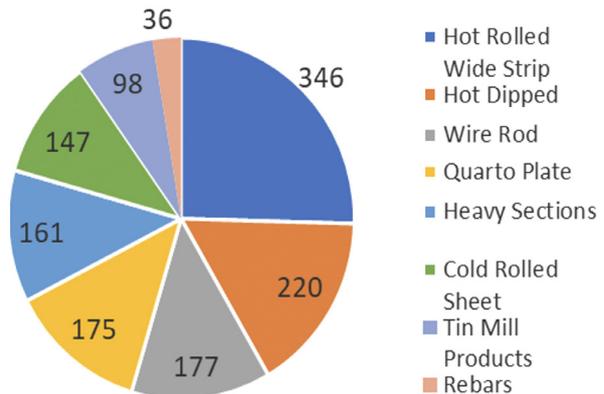
EU FINISHED STEEL EXPORTS BY DESTINATION

Q4-2021, monthly '000 metric tonnes



EU FINISHED STEEL EXPORTS BY PRODUCT

Q4-2021, monthly '000 metric tonnes



The EU steel market: final use

Outlook for steel-using sectors

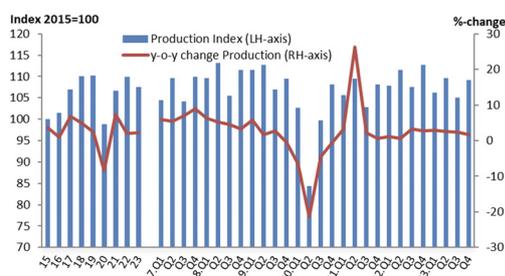
Total steel-using sector activity in the fourth quarter of 2021

Despite the persisting pandemic and supply chain issues, steel-using sectors marked the fourth consecutive year-on-year growth (+0.7%), albeit losing speed compared to the third quarter (+2.2%). This trend had peaked in the second quarter when steel-using sectors achieved a spectacular, one-off growth rate (+29.3%). This was due to the industrial recovery gaining momentum, but it was also a result of the comparison with the record lows of the second quarter of 2020.

By contrast, over the second half of 2021 total production activity in steel-using sectors has been increasingly impacted by the ongoing supply chain issues and high energy prices that took their toll in terms of production costs, component shortages and lower output. However, total output in steel-using sectors in 2021 rebounded (+7.3%, revised downwards from +7.9%) after the sharp drop recorded in 2020 due to the impact of COVID-19 (-8.4%, revised upwards from -10.3%), mainly thanks to the very positive developments of the first two quarters.

EU STEEL USING SECTORS

Production Activity - forecast from Q1-2022



Total steel-using sectors forecast 2022-2023

Total steel-using sectors' output is expected to continue to increase in 2022, but its growth rate will be halved compared to EUROFER's previous outlook (+2% versus +4% previously foreseen).

YEAR-ON-YEAR %-CHANGE IN EU STEEL WEIGHTED INDUSTRIAL PRODUCTION (SWIP) INDEX												
	% Share in total Consumption	Year 2021	Q1'22	Q2'22	Q3'22	Q4'22	Year 2022	Q1'23	Q2'23	Q3'23	Q4'23	Year 2023
Construction	35	5.9	5.9	3.4	1.1	-0.7	2.3	0.1	0.8	3.2	1.8	1.5
Mechanical engineering	14	14.6	4.6	-0.3	0.3	0.7	1.3	1.5	2.8	4.5	1.5	2.6
Automotive	18	3.8	-5.6	4.6	15.6	7.9	4.9	3.7	1.3	-0.6	-1.3	0.8
Domestic appliances	3	6.7	-8.6	-3.5	1.1	-1.5	-3.3	0.5	2.3	3.4	1.9	-0.3
Other Transport	2	-1.4	3.6	-0.3	3.3	4.1	2.7	6.8	5.4	4.3	4.8	5.4
Tubes	13	10.9	4.4	1.3	1.3	0.8	2.0	-1.3	2.4	2.7	1.8	1.4
Metal goods	14	11.0	0.8	-2.7	0.5	2.2	0.1	2.0	2.0	1.8	0.9	1.7
Miscellaneous	2	8.1	0.8	-0.7	0.3	1.8	0.5	1.9	2.0	2.4	2.0	2.1
TOTAL	100	7.3	1.2	0.6	3.3	2.8	2.0	2.9	2.5	2.4	1.6	2.3

This results from the rapid deterioration of the global industrial and economic outlook due to the war in Ukraine, coupled with ongoing and worsening supply chain issues. Growth in output is expected to gain only modest ground in 2023 (+2.3%), due to very high uncertainty which is likely to continue over the next year.

Construction industry

Construction industry activity in the fourth quarter of 2021

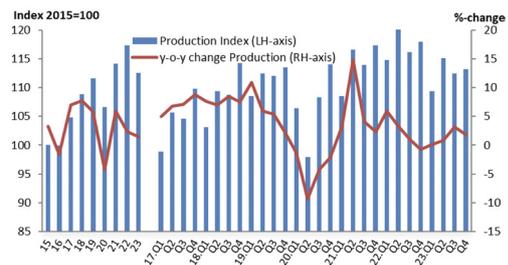
The positive trend in construction output seen over the first three quarters of 2021 continued, albeit at a slower pace, in the fourth quarter (+2.3%, after +4.1% over the third quarter). Over the entire 2021, construction output in the EU rebounded (+5.9%) after the drop (-4.2%) experienced in 2020.

The figures for the first three quarters of 2021 reflected the vigorous restart in economic activity across the EU. The boost by governmental support schemes at EU and national level especially benefitted the private residential and civil engineering sub-sectors. However, in the fourth quarter growth in construction output lost speed, further to ongoing problems along the global supply chain and increasing scarcity of construction materials in many EU countries.

In line with real production volumes, in the fourth quarter of 2021 gross fixed investment in construction increased (+2.1% on a yearly basis) for the fourth consecutive time (albeit lower than +3% recorded in the third quarter).

Growth was fuelled by residential investment (+2%, after +3.7%), boosted by low mortgage rates – despite expectations of rises in rates in connection with rises in government bond yields – and generous housing and renovation supporting schemes in place in many Member States. Positive developments were seen also in ‘other construction’ investment (+2.1%, after +2.4%), in particular in civil engineering. Its expansion should be stronger in the course of 2022, as governments are set to use it as a cyclical tool (thanks also to NextGenerationEU programmes) to bolster the economic recovery. However, the impact of these publicly-funded construction schemes is becoming increasingly uncertain due to multiple downside factors that are casting shadows on the overall economic outlook (supply chain issues, war in Ukraine, etc.). In particular, the shortage of construction materials is becoming a source of concern. Construction activity fell in 2020 (-4.2%), after increasing (+5.8%) in 2019.

EU CONSTRUCTION SECTOR
Production Activity - forecast from Q1-2022



CONSTRUCTION CONFIDENCE INDICATOR BALANCE OF POSITIVE AND NEGATIVE ANSWERS



Construction industry analysis forecast for 2022-2023

Construction output rebounded in 2021 (+5.9%, revised downwards from +6.7% in the previous Outlook), after the fall experienced in 2020 due to the COVID-19 outbreak (-4.2%). The outlook for 2022 shows moderate growth. (+2.3%, revised downwards from +3%), which will further ease in 2023 (+1.5%).

The EU construction confidence substantially improved after the record lows of the pandemic, almost reaching 2018 levels in the course of 2021. Yet, supply chain disruptions and the deterioration of the economic and industrial outlook in the second half of 2021 have changed the picture considerably. Overall construction activity should, however, continue to grow – albeit at rather low rates – mainly thanks to governmental housing supporting schemes, and public construction schemes. Civil engineering is expected to provide the strongest contribution to the construction sector’s performance. This segment will also be supported by EU-wide public policies (NextGenerationEU, etc.). Their effects have become increasingly uncertain and difficult to quantify, though, in light of the recent deterioration of the economic outlook due to the war in Ukraine and persisting supply chain issues.

Non-residential construction paid the highest toll to the pandemic in 2020 and also partly in 2021 with increasing vacancy rates, a trend that may continue as tele-working has remained rather common in the post-pandemic scenario. The subdued business investment outlook remains unfavourable to investment in non-residential projects in the near future.

Automotive industry

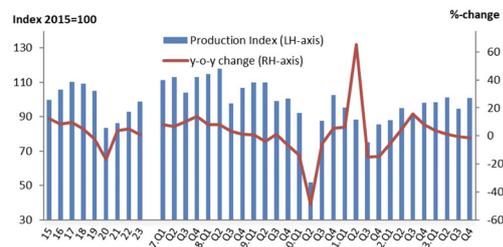
Automotive activity in the fourth quarter of 2021

In the fourth quarter of 2021, the automotive sector’s output dropped for the second consecutive quarter (-14.6%, after -15.32% in the third quarter). The sector experienced a rebound starting from the third quarter of 2020, due to the end of lockdown measures and culminating in an exceptional increase (+65%) in the second quarter.

In annual terms, in 2021 output in the automotive sector recovered modestly (+3.8%, revised upwards from +2.7%) after the severe drop experienced in 2020 due to the pandemic (-16.7%, revised upwards from -20.3%). The year 2020 was the second recession in a row after 2019 (-2.3%). The EU automotive sector had already experienced its worst slump during the euro area crisis of 2010-2012, when the recession was even bigger (-26.3%). In 2020, the automotive sector was the hardest hit among all steel-using sectors. Its output has been on a downward path since the third quarter of 2018: sluggish domestic and export demand, trade-related uncertainties, emissions rules, shifting patterns in ownership and model ranges had been felt all over 2019 before the onset of the pandemic. The continued supply chain issues experienced over the summer of 2021 increasingly resulted in shortage of components and semiconductors, rise in energy prices and production costs, slowdown in global trade. The invasion of Ukraine by Russia in late February 2022 has worsened the already subdued outlook even further.

EU AUTOMOTIVE SECTOR

Production Activity - forecast from Q1-2022



EU passenger car and commercial vehicle demand

This situation also contributed to continued depressed demand and consumer uncertainty. The latest passenger car registrations data show that car sales in the EU fell (-12.3%) in the first quarter of 2022 (-20.5% in March). Most individual countries recorded double-digit drops in sales, including the four key markets: Spain (-30.2%), Italy (-29.7%), France (-19.5%) and Germany (-17.5%). During the first quarter of 2022, new car registrations fell (-12.3% compared to the same period last year). The annual performance of 2021 (-2.4% for the entire year), down to 9.7 million units, has proved to be even worse than the already weak performance of 2020.

Automotive industry forecast 2022-2023

After a severe slump (-16.7%, revised upwards from -20.3%) in 2020 due to the pandemic, in 2021 automotive output is set to modestly rebound (+3.8%, revised downwards from +9%). The sector is expected to grow a bit more robustly in 2022 (+4.9%), despite the severe repercussions of the ongoing supply chain disruptions and the war in Ukraine. Growth is expected to be largely due to the rebound in output of some major economies (mainly Germany), after three consecutive slumps from 2019 to 2021.

The already mentioned supply chain disruptions have started to impact considerably the automotive industry around the third quarter of 2021 and are expected to persist at least throughout 2022. In addition, subdued consumer confidence, due to modest disposable income, has been impacting car demand since the second half of 2018.

The latter is expected to remain weak until the macroeconomic picture and consumer disposable income substantially improve –now even less likely given the worsening economic outlook. Uncertainties around the implementation of EV and delays in the launch of new models - many hybrid or fully electric – and lack of facilities (recharging points, etc.) have proven unsupportive factors of consumer demand and have also delayed investment decisions by carmakers. Full recovery in global trade and external demand from major markets such as the US, China and Turkey will remain a key factor for EU car exporters, but this is not likely to materialise as long as the uncertainty linked to the war in Ukraine and global supply chain disruptions persist. In the longer-term, however, political commitment (Fit for 55, etc.) at EU level towards the full adoption of EV by 2035 will prove somewhat supportive, despite the fact that general car demand appears to be dependent on fragile consumer confidence throughout 2022 and 2023.

As a result, 2023 is expected to be another difficult year for the sector, with a very feeble growth in output (+0.8%).

Mechanical engineering

Mechanical engineering activity in the fourth quarter of 2021

Output in the mechanical engineering sector increased (+10.9%) in the fourth quarter of 2021, for the fourth consecutive time (+13.5% in the third quarter). Driven by the overall recovery of the industrial sectors after the pandemic, the rebound recorded since the third quarter of 2020 brought back output to absolute high levels – albeit still below those recorded before 2019. Recovery in orders and output gained speed up to the third quarter of 2021, but it has been strongly exposed to downside risks since then. Among those, the ongoing global supply chain issues which are considerably disrupting industrial activity in the EU as well as in other world economies and, recently, the even more disruptive impact of the war in Ukraine.

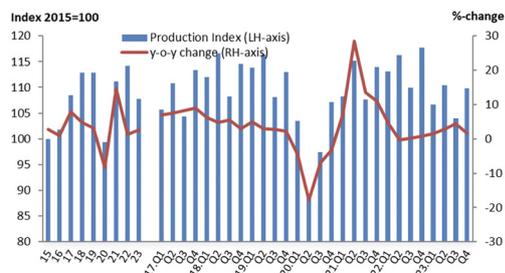
After Mechanical engineering output rebounded robustly (+14.6%, revised upwards from +11.4%) in 2021, thanks to the robust recovery of industrial sectors in the EU particularly over the first half of the year. In 2020 the sector experienced a sharp fall (-8.3%, previously estimated at -11.9%) due to the pandemic, after recording growth (+3.2%) in 2019.

Mechanical engineering forecast 2022-2023

Output in mechanical engineering is set to grow modestly in 2022 (+1.3%), and at a moderately higher rate in 2023 (+2.6%).

After the pandemic, manufacturing has bounced back quickly due to the relatively strong reliance of the EU mechanical engineering sector on export markets, the investment climate and global trade recovery. However,

EU MECHANICAL ENGINEERING
Production Activity - forecast from Q1-2022



slowdowns in industrial activity and other indicators have been showing a quick turn in the cycle since August 2021. From then on, the combined effect of the pandemic's persistence and issues affecting the global supply chain have been weakening demand in key EU domestic markets. The outlook for the sector's output throughout 2022 has now become clearly negative due to the persisting global supply chain issues, combined with the impact of the war in Ukraine.

Steel tube industry

Steel tube industry activity in the fourth quarter of 2021

Despite the continued supply chain issues, the fourth quarter of 2021 has confirmed the positive trend of the tube sector, recording the fourth consecutive increase in output (+6% year-on-year, after 6.9% in the third quarter). Over the entire 2021, the tube sector rebounded (+10.9%), after the severe drop experienced in 2020 (-12.8%) due to the COVID-19 pandemic.

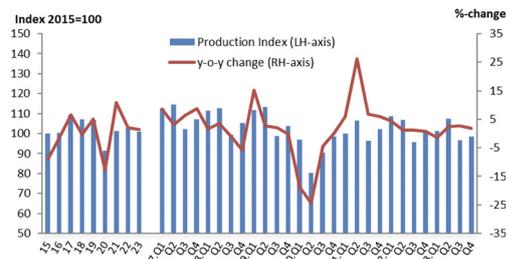
Steel tube industry forecast 2022-2023

After a rebound in 2021 (+10.9%), output in the tube sector is expected to grow very moderately in 2022 (+2%) and also in 2023 (+1.4%).

During 2020 output in the EU steel tube industry was heavily impacted by the industrial stoppages due to the COVID-19 outbreak. Likewise for other steel-using sectors, the rebound seen over the first three quarters of 2021 eased somewhat in the fourth quarter as a result of severe global supply chain issues. The expected disruptions linked to the war in Ukraine have further delayed ongoing projects and impacted the availability of materials. In the longer-term, demand for large welded tubes from the oil and gas sector should not improve substantially, due to the effects of war sanctions and consequent disruptions in oil and gas supply chain.

The recent recovery of global oil demand (including oil prices, although not yet at levels comparable to other commodities, e.g., natural gas) is not expected to boost the launch or the implementation of new pipelines in the short-term. On the other hand, demand from the construction sector is set to recover a bit more robustly, whereas tube demand from the automotive and engineering sectors is forecast to remain relatively weaker. In addition, import pressure on steel tube markets in the EU will remain high, particularly for the commodity segment.

EU STEEL TUBE SECTOR
Production Activity - forecast from Q1-2022

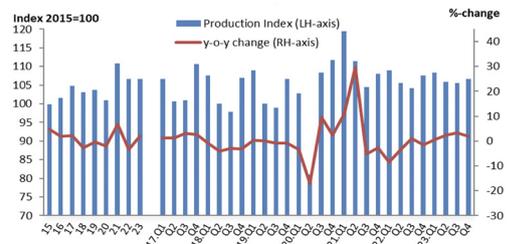


Electrical domestic appliances industry

Electrical domestic appliances industry activity in the fourth quarter of 2021

In the fourth quarter of 2021 output in the electrical domestic appliances sector dropped (-2.8%) for the second time in a row. The third quarter (-5.3%) saw the end of a very positive trend started in the third quarter of 2020, with a bigger-than-expected recovery in output after the removal of lockdown measures and widespread remote working across the EU, which boosted demand for home appliances and other related goods. However, despite the drop experienced over the last two quarters, the sector still records high output volumes in historical terms. On an annual basis, after 2020 moderate fall (-2.1%) compared to other EU steel-using sectors, output rebounded (+6.7%) in 2021, thanks to very positive performances recorded over the first half of the year.

EU ELECTRICAL DOMESTIC APPLIANCE SECTOR
Production Activity - forecast from Q1-2022



Electrical domestic appliances industry forecast 2022-2023

Output in domestic appliances is set to drop in 2022 (-3.3%) and to marginally recover (+2%) in 2023. Growth is expected to record negative growth over the first half of 2022 as a result of the already mentioned supply chain disruptions and effects of the war in Ukraine.

On the other hand, some supportive factors will provide positive contribution to growth: working from home will remain widespread in the EU over the next two years, albeit to a lower extent than during the COVID-19 pandemic. In the longer term, developments linked to the so-called "Internet of Things" (i.e., smart applications that enable to connect home appliances, devices, etc.) should also benefit the sector, but the impact of these applications is not likely to be visible before 2023.

EU economic outlook 2022-2023

GDP growth

Due to the impact of the conflict in Ukraine, ongoing supply chain issues and rising energy and commodity prices, EUROFER's GDP forecasts for the EU have been slashed compared to the previous Outlook. GDP growth estimates are now set at +2.9% for 2022 and at +2.4% for 2023 (revised downwards from +4.1% and +2.8% respectively). GDP recession in 2020 in the EU was estimated at -6%. This was the first recession since 2013 and the sharpest on record. In 2021, real GDP in the EU grew (+5.3%), as a result of the robust rebound of the economy and the industry further to the removal of most COVID-related restrictive measures and strong demand from steel-using sectors.

Over the fourth quarter of 2021, EU recorded real GDP growth (+0.4% quarter-on-quarter and +4.8% year-on-year), a clear slowdown from the third quarter (+2.2%). There are serious warning signs that Q1 2022 could result in negative quarter-on-quarter growth, paving the way for a possible recession (i.e., two consecutive quarter-on-quarter drops) due to the continuation of the war and its repercussions on energy and commodity prices, and supply chain issues. Among the biggest economies, Germany recorded a drop (-0.3% and +1.8% year-on-year), mostly due to problems affecting its industrial sector, in particular automotive. France, Italy and Spain all recorded positive GDP growth in Q4 2021 (+0.7%, +0.6% and +2.2% respectively), but growth lost momentum compared to the third quarter. On a year-on-year basis, however, these countries recorded higher growth in the fourth quarter than in the third (+5.4%, +6.2% and +5.5% respectively), as a result of the comparison with the relatively low GDP volumes seen in Q4 2020.

Leading indicators have been showing some easing already since August 2021, paving the way for a possible pronounced turnaround in the economic outlook after the strong rebound in EU economies seen since the third quarter of 2020. Skyrocketing energy prices (natural gas in particular), materials and components shortages, high shipping costs are resulting in major global supply chain disruptions. Growing uncertainty, primarily due to the conflict in Ukraine that started on 24 February, is casting a shadow on the whole year 2022. The duration of the war, the impact of related economic sanctions, its implications on global trade, industrial supply chain and commodity prices are set to weigh on EU countries' growth.

At the time of writing, the impact of the above factors cannot be quantified as uncertainty remains extremely high. However, it is clear that the EU's economic growth in 2022 will be considerably lower than previously forecast. Should current crisis factors persist, a new recession could also materialise in the course of the year or even emerge in a stagflation scenario (i.e., a combination of persistently high inflation rate and stagnating GDP growth rates). In any case, the consequences of the war will persist even after its end, whose timeframe remains unpredictable. Economic sanctions against Russia and other war-related disruptions, as well as high energy prices and record-high inflation, are also expected to stay.

Inflation - initially perceived as temporary and expected to ease by mid-2022 - has become a real concern and reached highs unseen for decades. In the EU it rose from 1.3% in February 2021 to 6.2% in February 2022 and 7.8% in March (5.9% and 7.4% respectively in the euro area). The March inflation rate has been the highest on record since 1993, with peaks of 11.9% in the Netherlands and 9.8% in Spain.

This resulted from the continued shortage of critical commodities, sharply worsened by the conflict in Ukraine, and supply chain issues coupled with skyrocketing energy prices. Continued inflationary pressures initially stemmed from the bottlenecks affecting the supply chain and scarcity of components.

As a consequence, central banks have started to change their hyper-accommodative monetary policy stance that so far has been extremely supportive of economic recovery. The FED in the US has already raised by 25 basis points its policy rate on 16 March and announced that other policy rate hikes will follow. A monetary policy change is not yet in sight in the euro area but could still be announced for the rest of 2022 – depending on war developments and their overall impact on the EU economy. However, the ECB already started a reduction in volume of the PEPP (the COVID-led exceptional Asset Purchase Programme) in March this year. Due to the impact of the war in Ukraine and the need to continue to provide public support to the economy, the Stability and Growth Pact has been suspended until the end of 2022.

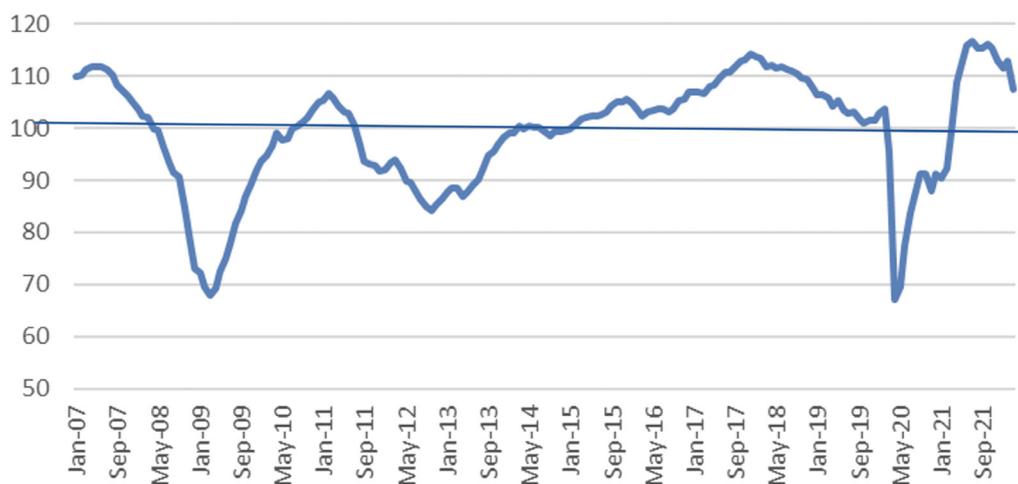
During the pre-COVID economic slowdown of 2019 and – to a lesser extent – since the onset of the pandemic, GDP growth has been mainly led by domestic demand and private consumption. This dynamic has gradually replaced exports as the main engine of growth. Government consumption, used as a tool to alleviate the slump in demand and to support the economy, was the only GDP component which provided positive contribution to growth also during the second half of 2020. By contrast, private fixed investment slowed down considerably over the first three quarters of 2021, after a substantial rebound over the second half of 2020 reflecting improved economic confidence. Private consumption, constrained by ongoing consumer uncertainty, has not proven to be sufficient to offset the negative developments of exports and other GDP components. Persistent uncertainty due to the pandemic, serious inflationary concerns, supply chain disruptions and lastly the conflict in Ukraine have induced major forecasters such as IMF and OECD to review their global GDP outlook for 2022. In particular, the IMF reported +4.4% in its January 2022 outlook and then revised it downwards (+3.6%) in its April 2022 update, with GDP projections of +3.7% for the United States and +2.8% for the euro area (+3.9% in the previous outlook).

Confidence indicators

Along with the post-pandemic economic recovery, a significant improvement in confidence persisted until mid-2021. This led to well above pre-pandemic levels peaking at 118 in July, a fourteen-year high, before easing in August following widespread concerns over supply chain issues and inflation. This downward trend has continued since then.

The latest IHS Markit Eurozone PMI Composite Output Index recorded a further slowdown in March, hitting a 14-month low. A rise in geopolitical tensions was the key factor weighing on demand, and had a remarkable impact on business confidence which fell to its lowest level since May 2020. This trend compounded with an intensification of supply chain issues over the entire month of March as COVID infections in China and Russia's invasion of Ukraine led to higher delays and even wider disruptions. Meanwhile, amidst surging commodity prices, consumer price inflation reached record highs unseen since 1993 in the EU: input prices inflation also accelerated, hitting a four-month high and putting great pressure on manufacturers' margins.

ECONOMIC SENTIMENT INDICATOR, EU
(long-term average=100)



After the pronounced drop in industrial production in the EU (-8.1%) in 2020 and the subsequent rebound in 2021 (+7.4%), EUROFER forecasts a more moderate growth in 2022 and 2023 (+3.1% and +4.3% respectively).

EU industrial production bounced back significantly since the trough due to the outbreak of the COVID-19 pandemic in the second quarter of 2020. Over the third quarter, thanks to the continued momentum of industry – before supply chain disruptions started to impact industrial activity – growth persisted but at a slower pace. In the fourth quarter, industrial production lost ground, rising by +0.9% in the EU and dropping by -1.6% in Germany and -0.4% in France. Among other major euro area economies, industrial output increased by +4.3% in Italy and +1.4% in Spain.

In absolute levels, the latest available monthly data before Russia’s invasion of Ukraine showed that EU industrial output - albeit with national disparities - had recovered from the exceptional losses due to the pandemic, but remained below the all-time highs recorded during the strong cycle of 2017. In particular, industrial output recovered up to pre-pandemic levels in Italy and Spain but not in France nor, to an even larger extent, in Germany. Yet, Industrial output was impacted by global supply chain disruptions already before the Russia-Ukraine conflict. Industrial output is likely to remain subdued throughout 2022 as a result of uncertainty linked to the war, ongoing supply chain disruptions and increasing energy costs.

Economic fundamentals

According to WTO data, despite rising transportation costs and high energy prices, in January 2022 (latest available data) merchandise export volumes rose in China (+24%), in the United States (+15%) and in the EU (+11%). Exports fell only in Japan (-1%). Growth in imports was more pronounced than in December 2021 for the EU (+42% versus +32%), while in the United States and China it was similar (+22% and +20% respectively).

Despite the long-lasting impact of the COVID-19 pandemic on the economy, labour market fundamentals have continued to prove resilient in most EU countries. However, job creation continued to be affected by lower levels of production activity in industry and persistent uncertainty about short-term business conditions.

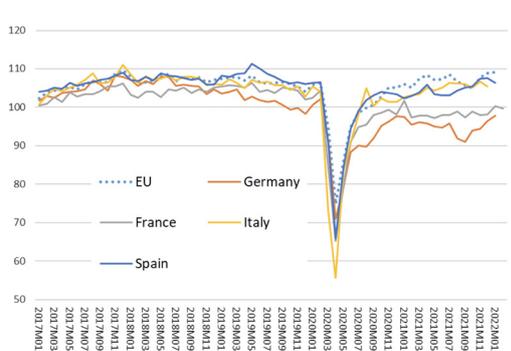
The EU unemployment rate, which had remained around late 2019 levels, peaked at 7.8% in September 2020 to gradually ease to 6.8% in August 2021 and 6.2% in February 2022. The unemployment indicator continues to conceal considerable variations across Member States and across economic sectors. Employment in services was particularly impacted, given that the sector was able to restart operations at large scale only in the second quarter of 2021. Consumers have been suffering from substantial decreases in their disposable income due to job losses, temporary lay-offs or reduction of working time. This dynamic has slashed consumption growth. Despite government support and increased social expenditure to mitigate the impact of the pandemic, uncertainty will continue to weigh down on consumer confidence throughout 2022, due to persisting and even worsening supply chain issues affecting the global economy and, to a larger extent, slashed growth outlook due to the war in Ukraine. In this scenario, the rise in commodity prices – coupled with accelerating inflation - is due to continue to impact household energy costs and limit considerably their purchasing power, while increasing their propensity to save.

IHS MARKIT EUROZONE COMPOSITE
PMI OUTPUT INDEX
Industrial Production, y/y% change



Source: S&P Global, Eurostat.

INDUSTRIAL PRODUCTION INDEX, S.A.,
MONTHLY DATA (2015=100)



Government investment and public expenditure are expected to continue to play a countercyclical role and could provide a strong contribution to the growth of domestic demand. However, room for manoeuvre is now shrinking due to limits to government debt expansion that are connected to the end of ECB asset purchase programme. The NextGeneration EU package will continue to be implemented, but its most noticeable effects will only be visible from 2023.

EUROFER MACROECONOMIC DATA, EU				
ANNUAL % CHANGE, UNLESS OTHERWISE INDICATED				
	2020	2021	2022	2023
GDP	-6.0	5.3	2.9	2.4
Private consumption	-7.5	3.6	4.1	3.1
Government consumption	0.8	3.6	1.3	0.7
Investment	-6.5	7.0	3.4	3.6
Investment in mach. equip.	-11.9	8.9	4.1	3.5
Investment in construction	-5.1	7.0	3.5	2.8
Exports	-10.0	10.8	5.5	4.2
Imports	-9.2	9.9	5.8	4.7
Unemployment rate (level)	8.0	7.7	7.3	7.1
Inflation	0.5	2.6	5.5	1.9
Industrial production	-8.1	7.4	3.1	4.3

Glossary of terms

Sector definitions according to NACE Rev.2

Building & Civil Engineering

- 41 _____ Construction of buildings
- 42 _____ Civil engineering
- 43 _____ Specialised construction activities
- 25.1 _____ Manufacture of metal structures and part of structures
- 25.2 _____ Manufacture of tanks, generators, radiators, boilers

Mechanical Engineering

- 28 _____ Manufacture of machinery and equipment
- 27.1 _____ Manufacture of electric motors, generators, transformers
- 25.3 _____ Manufacture of steam generators, except central heating hot water boilers

Automotive

- 29 _____ Manufacture of motor vehicles and trailers

Domestic Appliances

- 27.51 _____ Manufacture of electric domestic appliances

Other Transport Equipment

- 30 _____ Manufacture of other transport equipment
- 30.1 _____ Building and repair of ships
- 30.2 _____ Manufacture of railway locomotives and rolling stock
- 30.91 _____ Manufacture of motorcycles

Steel Tubes

- 24.2 _____ Manufacture of steel tubes

Metal Goods

- 25 _____ Manufacture of fabricated metal products excluding 25.1-25.2-25.3

Other sectors

- 26 _____ Manufacture of computer, electronic and optical products
- 27 _____ Manufacture of electric motors, generators, transformers and electricity distribution and control apparatus excluding 27.1 and 27.5

EU steel market definitions

SWIP: Abbreviation for Steel Weighted Industrial Production index. It is used as a proxy for real steel consumption. Activity in the steel-using sectors is weighted with the relative share of each sector in total steel consumed by all sectors.

Real steel consumption: Real consumption is the use of all steel products used by steel-using sectors in their production processes, also referred to as the 'final use' of steel products, adjusted for the stock cycle.

Apparent steel consumption: Apparent consumption is also referred to as 'steel demand'. It is total deliveries of all steel products and qualities by EU producers plus imports less 'receipts' into the EU, minus exports to third countries. In other words, apparent consumption is deliveries by EU producers plus imports minus receipts (that is, imports by EU producers themselves of material that is further processed), minus exports to third countries. EUROFER's definition of apparent consumption includes all qualities, including stainless, and all finished products and semi-finished products. If apparent consumption exceeds real steel consumption, the surplus is stocked in the distribution chain. If apparent consumption is less than real steel consumption, inventories are being withdrawn.

Steel industry receipts: In both the apparent consumption and market supply statistics, the imports component of the calculation is written, in the EUROFER definition, as 'imports less receipts'.

The 'receipts' in this instance mean imports by EU producers themselves of finished or semi-finished steel products that are further processed by the producer and transformed into other products. In the publicly available EUROFER figures, only finished products are shown and thus impacted by the receipts calculation.

This correction is important because it prevents double-counting that would artificially inflate the size of the market. If an EU producer imports a tonne of hot rolled strip that it further processes into a tonne of cold rolled which it then delivers to the EU market - in an uncorrected calculation the import of one tonne would then become one imported tonne plus one EU-processed and delivered tonne. The imported tonne is thus corrected out in the import side of the market supply and apparent consumption figures.

Narrow definition: EUROFER applies the so-called "narrow definition" which excludes steel tubes and first transformation products from the product scope used for calculating steel consumption. Hence, the steel tube sector is a steel-using sector under this definition.

Steel intensity: The ratio of real steel consumption to steel weighted production in the steel-using sectors. This reflects the usually slightly negative impact on consumption of innovation in steel products, inter-material substitution, improvements in process efficiency and design, etc.

About the European Steel Association (EUROFER)

EUROFER AISBL is located in Brussels and was founded in 1976. It represents the entirety of steel production in the European Union. EUROFER members are steel companies and national steel federations throughout the EU. The major steel companies and national steel federations in the United Kingdom and Turkey are associate members.

The European Steel Association is recorded in the EU transparency register: 93038071152-83.

About the European steel industry

The European steel industry is a world leader in innovation and environmental sustainability. It has a turnover of around €125 billion and directly employs around 310,000 highly-skilled people, producing on average 153 million tonnes of steel per year. More than 500 steel production sites across 22 EU Member States provide direct and indirect employment to millions more European citizens. Closely integrated with Europe's manufacturing and construction industries, steel is the backbone for development, growth and employment in Europe.

Steel is the most versatile industrial material in the world. The thousands of different grades and types of steel developed by the industry make the modern world possible. Steel is 100% recyclable and therefore is a fundamental part of the circular economy. As a basic engineering material, steel is also an essential factor in the development and deployment of innovative, CO₂-mitigating technologies, improving resource efficiency and fostering sustainable development in Europe.



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