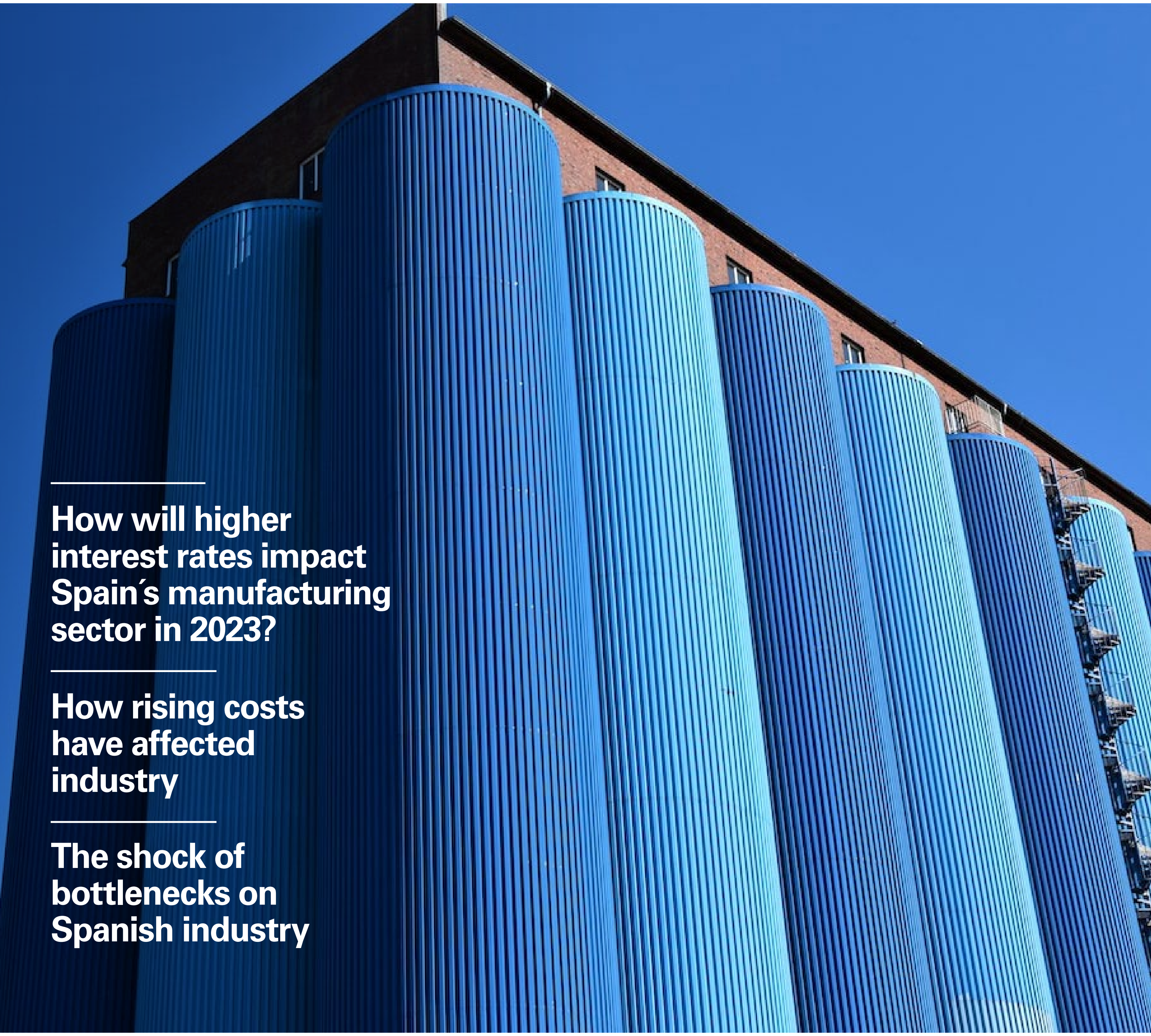
Manufacturing Industry
Sector Report

2023

Good prospects for Spain´s manufacturing industry



How will higher interest rates impact Spain´s manufacturing sector in 2023?

How rising costs have affected industry

The shock of bottlenecks on Spanish industry

CaixaBank Research

SECTOR REPORT
Manufacturing Industry 2023

The *Sector Report* is a publication produced by CaixaBank Research

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Closing date for this issue: 18 May 2023

Summary 2023

> **«Quality means doing it right when no-one is looking.»**
> HENRY FORD

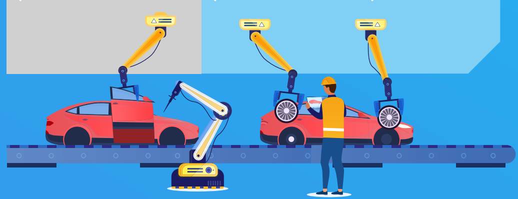
Manufacturing Industry

PROJECTIONS FOR SPAIN'S MANUFACTURING INDUSTRY

The sector has overcome a 2022 that was hard hit by the energy crisis and bottlenecks, preventing it from getting back to its pre-pandemic levels. Nevertheless, we expect a more favourable situation in 2023: one of the industry's major growth levers will be the gradual disappearance of bottlenecks, while the main challenge is the tightening of financial conditions.

Annual GVA growth (*projection)

2022	2023*	2024*
3.8%	3.5%	2.0%



	2021	2022	2023	2024
Financial conditions	↑	↘	↓	↘
Energy prices	↘	↓	↘	↘
Bottlenecks	↓	↓	↑	↑

EXPOSURE TO TIGHTER FINANCIAL CONDITIONS

On average, manufacturing is not particularly exposed to the tightening of financial conditions.

	Debt ratio in 2022	Interest burden in 2022
Manufacturing industry	304%	6.5%
Total economy	618%	12.2%

Debt ratio: ratio of borrowed funds with cost to gross operating profit (GOP) and financial revenue (including dividends).

Interest burden: ratio of borrowed funds with cost to gross operating profit (GOP) and financial revenue (including dividends).

However, in a sector as heterogeneous as manufacturing, some branches will be harder hit by the shock.

LESS EXPOSED INDUSTRIES

- Automotive industry
- Chemical industry
- Tobacco industry

MORE EXPOSED INDUSTRIES

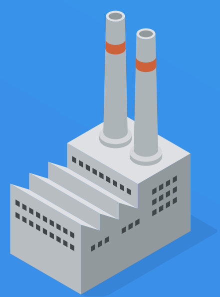
- Fashion industry (textiles, apparel and footwear)
- Electrical equipment manufacturers
- Auxiliary sector to construction

IMPACT OF RISING COSTS

Industry margins have narrowed due to the sharp rise in costs.

RETURN ON SALES
(ratio of gross profit to income)

2019	10%
2022	8% ↓

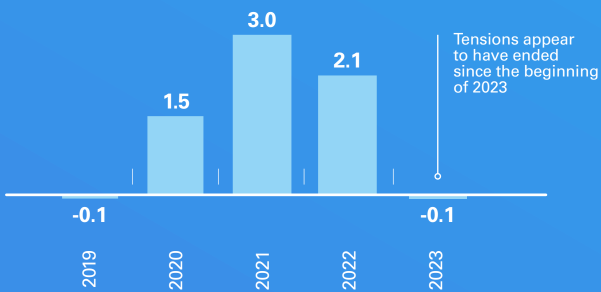


Intermediate costs rose by **25%** between 2019 and 2022 while income grew by **21%**.

OVERCOMING BOTTLENECKS

Disruptions in global production chains have subsided considerably.

INDEX OF PRESSURES ON GLOBAL SUPPLY CHAINS



Source: CaixaBank Research, based on data from the National Statistics Institute, Bank of Spain, Spanish Tax Authority and New York Fed.

CaixaBank Research

Executive summary

Spain's manufacturing industry overcomes the challenges of 2022 with flying colours

In recent years, manufacturing has been repeatedly weighed down by external factors that have characterised the economic scenario, starting with the effects of the COVID-19 crisis, followed by bottlenecks in 2021 and much of 2022, the energy crisis in the wake of the war in Ukraine and, finally, the impact of the ECB's interest rate hike. In fact, 2022 was once again a particularly adverse year for a sector that, nevertheless, **not only managed to avoid the worst-case scenario of a slump in activity but also saw dynamic growth continuing in most of its indicators** (the sector's GVA grew by 3.8% in the year). Our analysis of the performance of manufacturing's different branches shows that the sector as a whole would have returned to its pre-pandemic levels in 2022 had it not been for the effects of bottlenecks and, above all, higher energy prices. Based on this analysis, the rest of the report attempts to delve deeper into the impact of each of these external factors that are affecting the sector or will affect it in the medium term: namely rising interest rates, supply problems for certain inputs and higher production costs.

One of the most decisive factors for the economic scenario in 2023 will be the impact of the ECB's interest rate hike on agents' consumption and investment decisions. This report devotes a specific article to examining the financial position of the different branches of Spain's manufacturing industry in an attempt to determine their exposure to tighter financial conditions. The database of the Central Balance Sheet Data Office, produced by the Bank of Spain, reveals that **Spanish industry is still in a healthy financial position compared to the economy as a whole and to other sectors of production**. However, there are big differences between the different branches, in particular in the case of the apparel and the leather and footwear industries, both in a worse position because of their recent gearing and also because they are in a weaker financial situation than in previous cycles of interest rate hikes. In any case, the rest of the branches are in a strong position, so we expect the impact of interest rate hikes will be contained.

Regarding the disruptions in global supply chains, triggered towards the end of 2020 by the post-pandemic reactivation in demand and further aggravated by the war in Ukraine and the persistence of COVID-19 in Asia, the third article of this report analyses import data by industrial grouping to assess the extent of the impact on Spanish industry. Our analysis highlights manufacturers of computer equipment (with imports falling by as much as 50% in 2022 compared to 2019) and the automotive industry (21% drop in imports) as the worst hit sectors. However, **the factors behind these supply disruptions have eased in recent months, especially after China opened up again to trade.** As a result, in 2023 we expect manufacturing to leave behind one of the main obstacles of recent years and therefore receive an important boost for growth.

The last article examines how **the higher price of certain key raw materials for the sector have pushed up operating costs for Spain's manufacturing industry** (+25.4% in 2022 compared to 2019), again due to external factors. This has forced the sector to increase its production prices (19.8% in 2022) in order to offset part of this increase in costs and not compromise economic viability. However, despite offsetting costs through higher prices, it should be noted that **the gross margin for industry narrowed in 2022 compared with the margins recorded in 2019.**

Growth forecasts

A year of good prospects for manufacturing

Spain's manufacturing sector has overcome a 2022 that was hit hard by the energy crisis and supply problems regarding some raw materials, preventing manufacturers from getting back to their pre-pandemic levels. In 2023, although the economic situation is still significantly uncertain, the outlook is somewhat more favourable than a few months ago: having weathered the more adverse scenarios observed during the winter, the economy continues to show positive signs thanks to the stabilisation of energy markets and the resilience of Spain's labour market and household consumption.

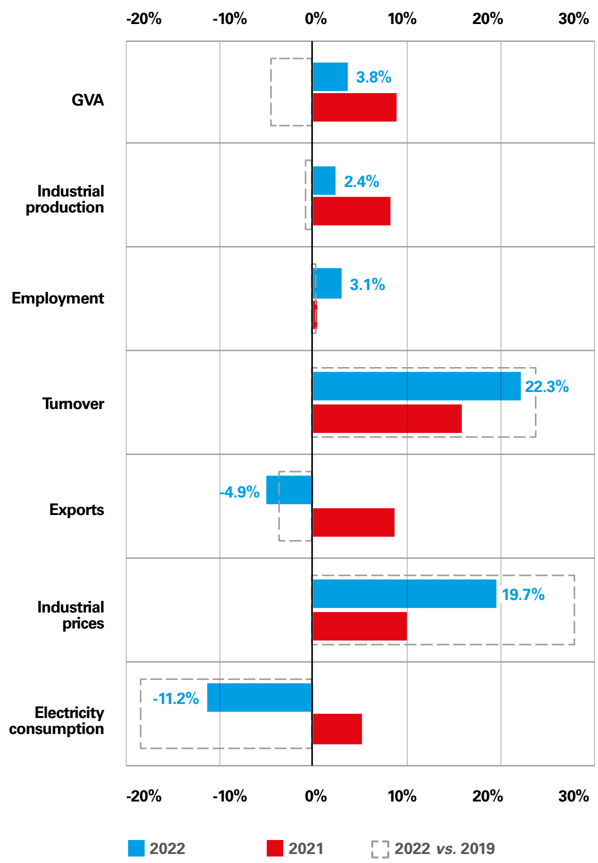
Manufacturing has suffered directly from all the exogenous factors that have impacted both the Spanish and European economic scenario in recent years: starting with the impact of the COVID crisis in 2020, then bottleneck problems in 2021 and much of 2022, the energy crisis experienced last year and, finally, the tightening of financial conditions caused by the interest rate hikes carried out by the European Central Bank (ECB).

Given such an adverse context, **in 2022 the manufacturing sector performed similarly to 2021, avoiding the worst-case scenario of a slump in activity but unable to get back to the levels of activity posted pre-pandemic.** Real gross value added (GVA) performed relatively well, up by 3.8% year-on-year although it was still 4.3% below the 2019 level and, when compared to GDP growth for the economy as a whole (+5.5% year-on-year), it's notably contained. On the other hand, the labour market was appreciably dynamic, with annual growth of 3.1% (the highest in the sector's historical series) and turnover rebounded strongly (+22.3% year-on-year), driven by a big rise in industrial prices (19.8% annually) and the somewhat more contained growth in production (2.4% annually). Exports performed particularly poorly with a drop of 4.9% year-on-year, affected by bottlenecks (the automotive industry, which has been particularly hard hit, accounts for a considerable share of the sector's exports).

However, figures from the start of 2023 continue to suggest that manufacturing is managing to navigate the current complex environment with resilience. Real GVA accelerated its growth in the first quarter of the year, reaching 1.2% quarter-on-quarter, higher than the figure for the second half of 2022. The industrial production index for the first quarter of the year also increased its rate of growth with a 1.9% year-on-year advance, a slight improvement on the increase recorded in the last quarter of 2022. In the same vein, the sector's job creation rate also remained relatively positive with year-on-year growth of 1.5% in April, although these figures were more moderate than the average for 2022. Nevertheless, there are huge differences between the different branches of manufacturing, as explained in more detail in the next section of this article. The weakest performance is being posted by the most energy-intensive industries, although the declines in wholesale energy prices observed since December 2022 suggest that industrial activity will become stronger in the coming quarters.

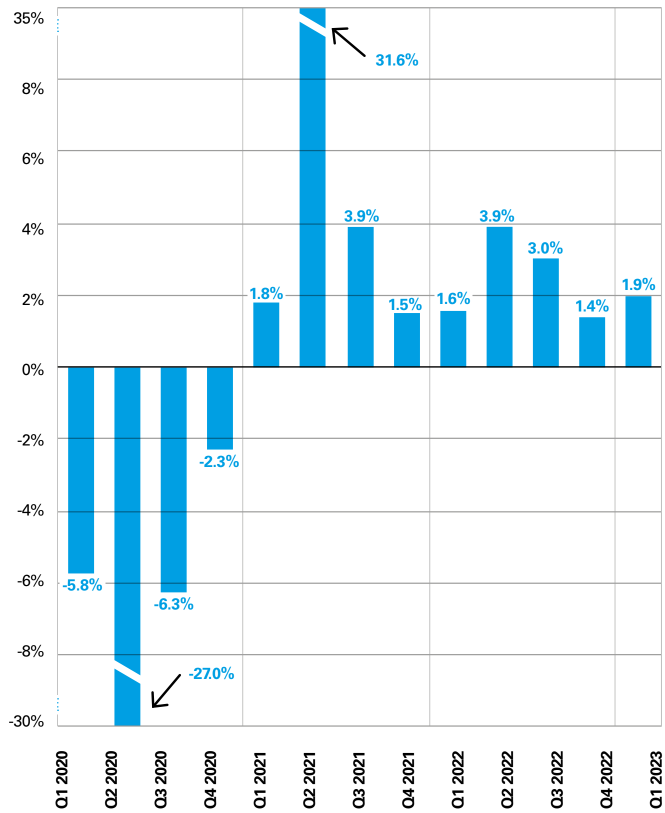
Economic activity indicators and prices

Annual change



Quarterly industrial production index

Year-on-year change



Source: CaixaBank Research, based on data from the National Statistics Institute, REE and the Ministry of Inclusion, Social Security and Migration.

Manufacturing Industry

Which factors are weighing heavily on manufacturing?

Manufacturing is a highly diverse economic sector. Consequently, the factors that have recently affected its performance the most (bottlenecks and energy prices) have had a very uneven impact on the different branches that make up the industry. We will now examine the trends in key economic indicators for those industrial sectors most affected by energy costs and supply shortages in order to assess how these factors are currently affecting the industry's performance and predict the trends that lie ahead in the coming quarters.

First, to identify the main branches of manufacturing that are most exposed to these two factors, we've used the European Commission's quarterly survey on business sentiment for industry, which includes a section on the elements limiting business activity, and the National Statistics Institute's input-output tables, which provide the relative weight of energy within the cost structure of each branch.[1]

Among the branches most affected by bottlenecks are the automotive industry, the paper industry and the manufacture of computers, electrical equipment and metals. In the case of the automotive branch, more than two out of three Spanish companies reported problems of shortages, particularly the microchip crisis that hit the sector in 2022. As for the paper industry, over 43% of the companies in the sector also reported material shortages in the survey. **Among the most energy-intensive industries** (which are therefore hardest hit by rising energy costs) **are the auxiliary industry to construction** (whose energy costs represent nearly 14% of its income) **and the manufacture of metals, paper, chemicals, wood and plastic products.**[2] Finally, there is a group of industries that have not been particularly exposed to either of these two factors, such as pharmaceuticals, textiles and the food industry.

1 **For more details on the use of input-output tables and the classification of manufacturing branches according to their greater or lesser dependence on energy prices, see the article «Rising energy prices: Which sectors are being hit the hardest?» in the 2022 *Manufacturing Industry Sector Report*.**

2 **The s of Spain's petroleum refining industry has been excluded from the analysis.**

Exposure of industrial branches to energy costs and bottlenecks

	Shortage of materials[1] (% of companies within each branch)	Energy intensity[2] (% of income of each branch)
Motor vehicle industry	76.1	1.2
Manufacture of metals	36.7	2.2
Manufacture of beverages	26.6	-
Manufacture of electrical equipment	39.3	2.3
Food industry	11.9	2.2
Graphic arts	25.1	2.6
Textile industry	8.6	1.8
Manufacture of pharmaceuticals	10.6	2.2
Transport equipment (not automotive)	33.2	0.8
Manufacture of computers	40.4	1.0
Manufacture of plastics	18.2	4.2
Manufacture of machinery	19.3	0.8
Chemical industry	15.8	7.4
Repair and installation of machinery	33.6	1.4
Paper industry	43.1	7.3
Metals	12.0	8.4
Manufacture of furniture	4.5	2.4
Activities auxiliary to construction	17.6	13.8
Wood industry	23.4	5.3
Total manufacturing industry	26.4	3.5

Industrial branches particularly exposed to bottlenecks
Energy-intensive industries

Notes: (1) European Commission survey on factors limiting production for the manufacturing sector in Spain.
(2) Expenditure on electricity, gas, steam and air conditioning, according to the input-output tables for 2016.
Source: CaixaBank Research, based on data from the European Commission and National Statistics Institute.

As shown in the charts below, **by aggregating the main activity and price indicators for the branches most exposed to bottlenecks, we can see that their level of activity has improved substantially since mid-2022.** Industrial production rose by 7.8% year-on-year in the first quarter, already at a higher level of production than at the beginning of 2021 before the toughest stage of the supply chain disruptions. In the same vein, the income of these industries is growing at a considerable rate (up 19.0% year-on-year), thanks also to them raising their prices. One possible negative aspect is job creation, which has remained stagnant since the beginning of 2021.

By aggregating the branches most exposed to higher energy prices we can see that, despite energy prices falling again since the end of last year, the activity of energy-intensive industries continues to show signs of cooling down. As a result, their industrial production fell by 5.8% year-on-year in the first quarter of 2023. It should also be noted that these branches are currently producing at a level significantly below that of 2021, highlighting the impact caused by higher energy costs. With regard to prices, these have moderated in recent months (down 3.9% between June 2022 and February 2023) although the cumulative increase since the beginning of 2021 is still substantial (+32%). This price hike has helped to boost income although, given recent declines in production, it's still down by 4.5%.

Manufacturing Industry

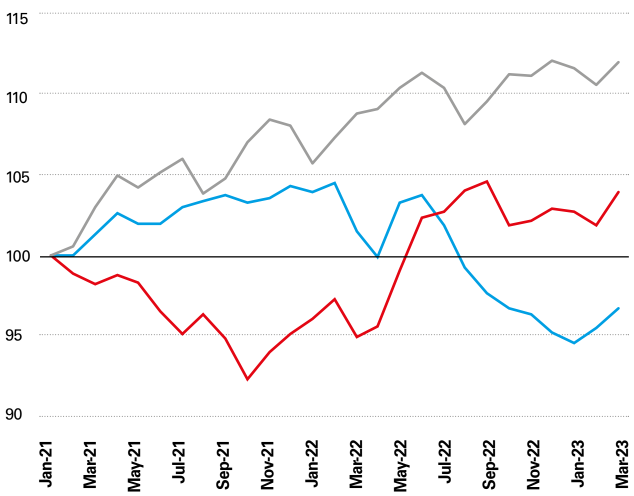
In conclusion, we can see that bottlenecks have stopped weighing so heavily on industry's performance for a few months now, confirming that manufacturing has room to grow in 2023. On the other hand, the impact of rising energy costs is still being felt. Despite the drop in wholesale energy prices since December, the lag with which these changes are passed on to consumers because, for example, they have annual contracts, means that the more energy-intensive industries are still facing substantially higher costs. However, once the lower prices definitively reduce industry's energy costs, the performance observed of branches less exposed to the energy shock leads us to believe that the activity of the more energy-intensive branches will rebound strongly.[3]

3 The aggregate of industries less exposed to shocks recorded an increase in industrial production of 3.7% year-on-year in the first quarter of 2023 and has accumulated growth of 13.6% since January 2021.

Indicators for activity and prices in the manufacturing sector

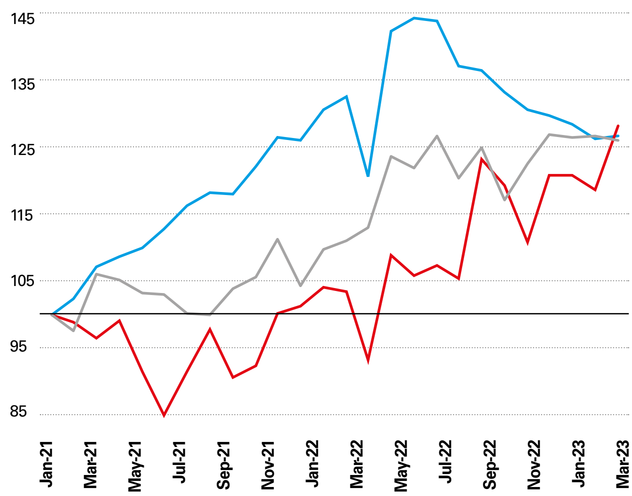
Manufacturing production*

Benchmark (100 = January 2021)



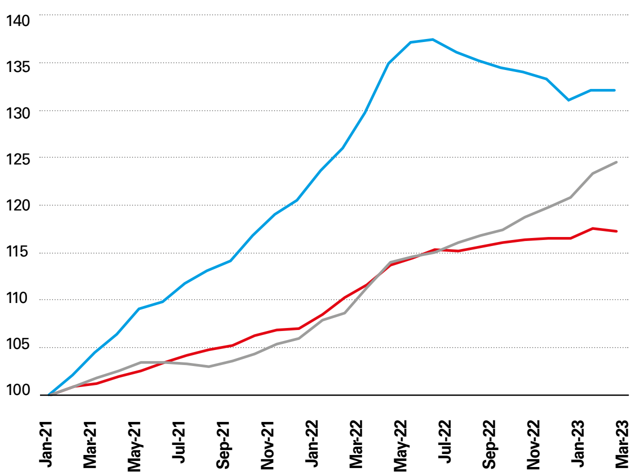
Turnover of the manufacturing sector

Benchmark (100 = January 2021)



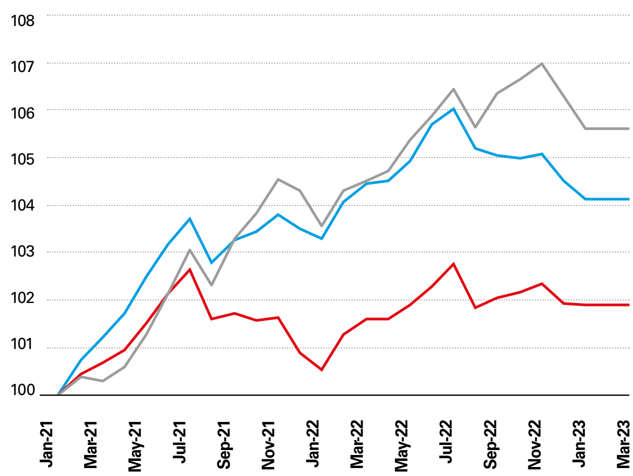
Industrial production prices

Benchmark (100 = January 2021)



Number of workers registered with Social Security

Benchmark (100 = January 2021)



Industry most exposed to energy — Industry most exposed to bottlenecks — Industry least exposed to shocks

Notes: NACE 19 Manufacture of coke and refined petroleum products has been excluded from the analysis so as not to alter the conclusions. *A two-month moving average is applied to remove volatility from the industrial production index.
Source: CaixaBank Research, based on data from the National Statistics Institute and the Ministry of Inclusion, Social Security and Migration.

Industrial activity will become more dynamic in 2023 although the situation is still complex

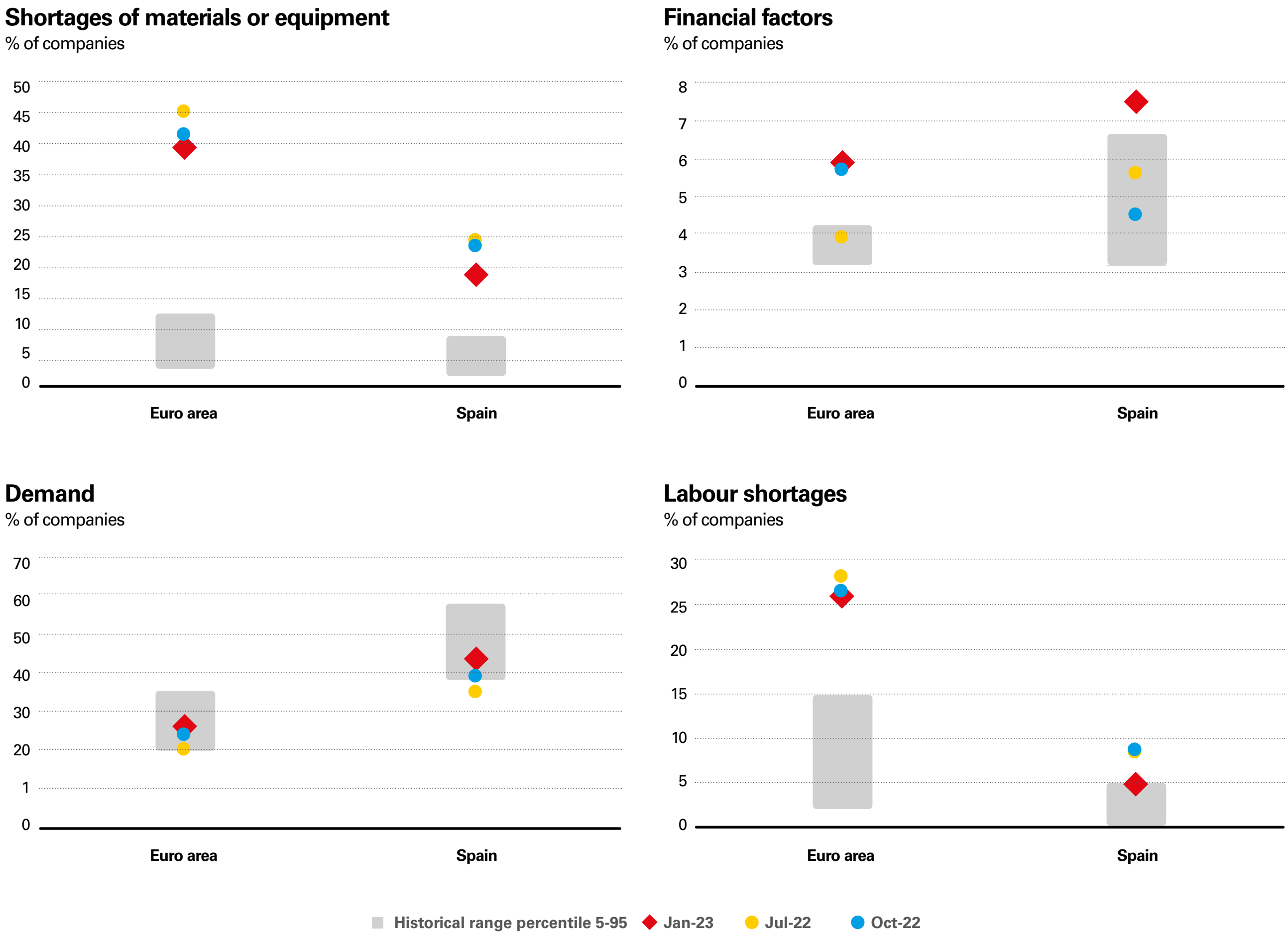
For 2023, the scenario remains subject to enormous uncertainty but the outlook is now somewhat more favourable as the factors that have been hampering industrial activity in recent months are beginning to show signs of abating. According to our analysis, the easing of the impact produced by bottlenecks will provide a growth lever for the sector over the course of the year, while we expect energy cost pressures to moderate and help activity to become more dynamic. However, there are still some factors that could limit growth in 2023. In particular, the tightening of financial conditions could act as a brake on such a capital-intensive sector as manufacturing.

In this regard, according to the European Commission's business sentiment survey, **financial factors are beginning to weigh heavily on an ever-larger percentage of companies**. Looking at the results for the first quarter of 2023, 7.5% of all companies in the sector reported that the financial environment was a limiting factor for their activity, a somewhat higher proportion than the historical average and the average for the euro area as a whole. Although the interest rate hikes planned and carried out by the ECB will have a negative impact on industry's performance throughout 2023, it should be noted that the sector's level of debt and interest burden are relatively low, especially compared to other branches of production in the Spanish economy.[4] Furthermore, no major imbalances can be observed regarding the rest of the factors highlighted in the survey: labour shortages don't appear to be a limiting factor in the short term (only 5% of companies in the sector report problems in this area, well below the European average), demand is within its historical range and, as previously mentioned, the shortages of materials continue to lessen.

4 **For a more detailed analysis of the impact of interest rate hikes by industrial branch, see the article «How will rising interest rates affect Spain's manufacturing sector in 2023? in this *Sector Report*.**

Manufacturing Industry

Limiting factors for manufacturers' production



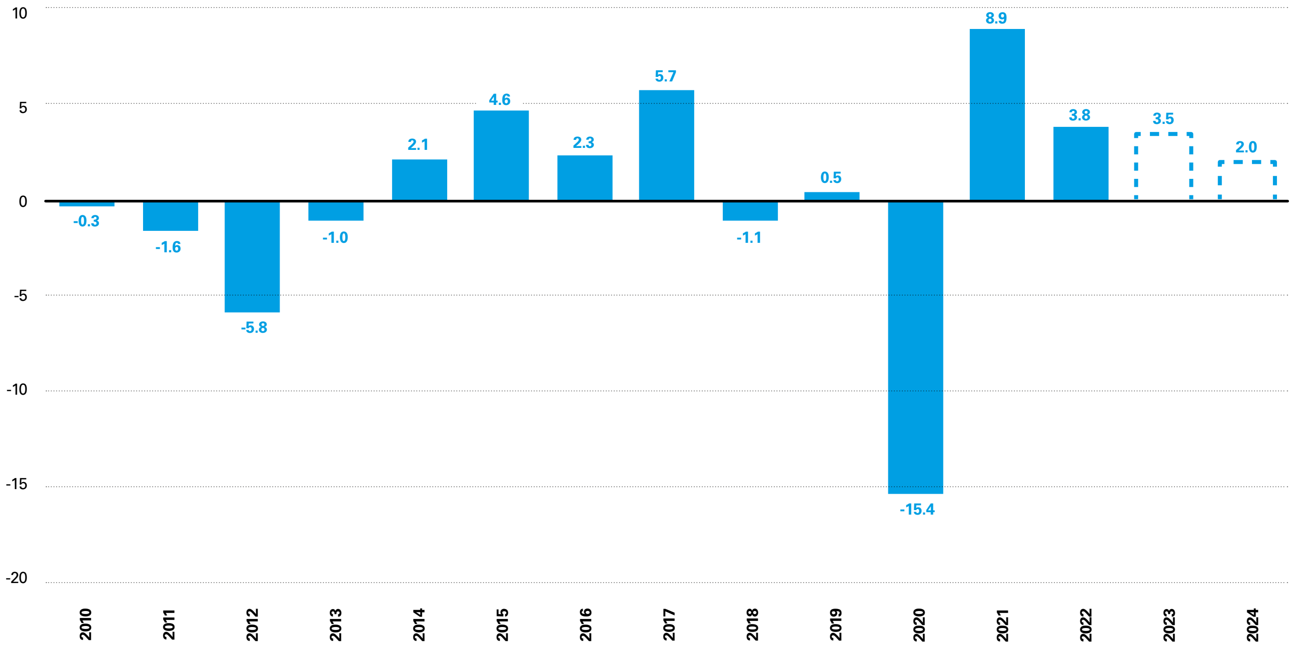
Note: Data adjusted for seasonal effects.
Source: CaixaBank Research, based on the survey by the European Commission.

On balance, we believe that the drivers of manufacturing activity (the easing of bottlenecks and falling energy prices) will outweigh the negative factors (tightening of financial conditions). **We therefore expect the sector's GVA to return to its historically dynamic growth**, with rates of around 3.5% in 2023 (this year we expect it to return to the sector's pre-pandemic levels of activity) and 2.0% in 2024.

> **We believe that the drivers of manufacturing activity (the easing of bottlenecks and falling energy prices) will outweigh the negative factors (tightening of financial conditions)**

GVA manufacturing industry

Annual change (%)



Source: CaixaBank Research, based on data from the National Statistics Institute.

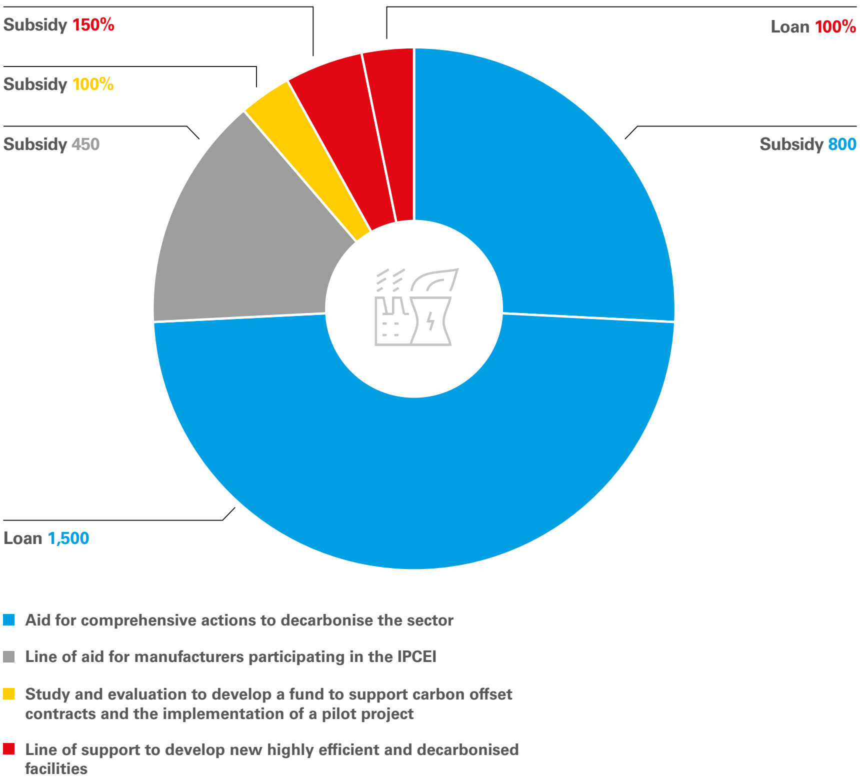
Regarding medium and long-term expectations, it should be noted that **the sector will continue to be supported by new industrial policy measures.** Firstly, the end of 2022 saw the approval of Spain's **Strategic Project for Economic Recovery and Transformation (PERTE in Spanish) for industrial decarbonisation**, which aims to decarbonise production processes, improve energy efficiency and promote the use of renewable energy, as well as increase the sector's competitiveness and the country's energy security, among other goals, these being achieved via four transformative measures. The first of these measures, namely aid for comprehensive actions to decarbonise the sector, would attract most of the funds (see the chart below). This measure focuses on decarbonising energy sources (electrification of processes and incorporation of hydrogen), on improving energy efficiency in industrial processes, on the capture, storage and use of carbon, on reducing the consumption of natural resources and on an increase in R&D&I to drive this decarbonisation. The rest of these transformative measures include (i) a line of aid for companies participating in the IPCEI (Important Projects of Common European Interest, in this case collaboration between Member states regarding the use of hydrogen from renewable sources); (ii) the development of a fund to support carbon offset contracts (to eliminate the uncertainty associated with the future price of greenhouse gas emission quotas), and (iii) a line of support to develop new highly efficient and decarbonised facilities. This is the fourth PERTE in terms of it volume of funds, up to 3.1 billion EUR, after the semiconductor PERTE (12.25 billion EUR), the renewable energy PERTE (10.475 billion EUR) and the electric vehicle PERTE (4.295 billion EUR).[5]

5 These figures are included in the Draft Addendum to Spain's Recovery, Transformation and Resilience Plan approved at the end of 2022.

Manufacturing Industry

Transformative measures in the decarbonisation PERTE

Million EUR



Source: CaixaBank Research, based on data from the Ministry of Industry.

Secondly, the European Commission has launched the Green Deal Industrial Plan in response to the new US Inflation Reduction Act (IRA), under which the US government has proposed a series of economic incentives for industry to relocate to US soil. The European plan redirects the common funds mobilised in recent years towards these new goals: two regulatory proposals (one regarding net zero emission industry and the other on key raw materials) and the reform, for the time being temporary, of the State aid framework, which allows Member states to match subsidies offered outside the EU in order to stop European industry from relocating outside the EU.[6]

6 For a more in-depth analysis of the EU's new industrial plan, see the article «The EU's answer to the Inflation Reduction Act "You cannot have dessert until you first eat your vegetables"» in the April 2023 *Monthly Report*.

The financial position of the manufacturing industry

How will higher interest rates impact Spain's manufacturing sector in 2023?

One of the determining factors of the economic scenario is the impact of the ECB's interest rate hikes on the consumption and investment decisions taken by economic agents. In this article, we examine the financial position of the different branches of Spain's manufacturing industry in an attempt to determine to what extent they're exposed to this tightening of financial conditions.

After more than a decade of low interest rates, in mid-2022 the ECB and major central banks effected a sharp turnaround in monetary policy with the aim of curbing strong inflationary pressures, mainly through interest rate hikes. This turnaround has led to a significant tightening of financial conditions that has affected all sectors of activity in the Spanish economy, including manufacturing.

The financial position of Spain's manufacturing industry

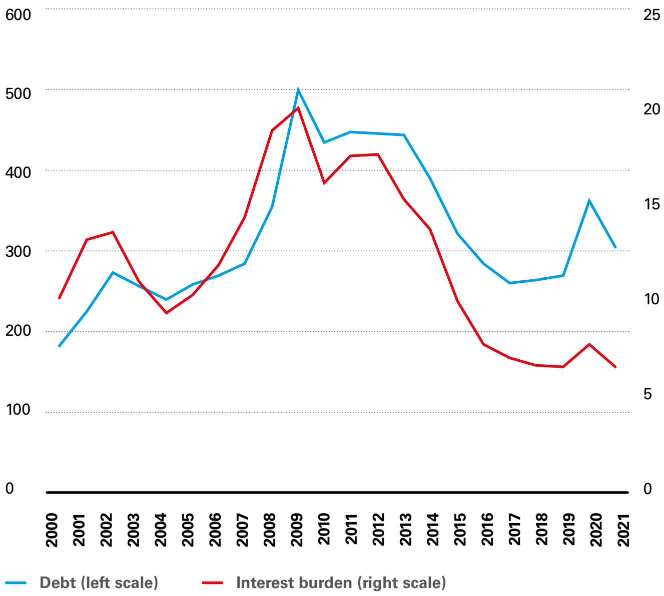
In order to determine how the rise in interest rates is affecting Spanish industry, we have analysed the financial position of manufacturing as a whole as well as its main industrial groupings, both from the point of view of debt and also interest burden.[7]

7 The debt ratio includes borrowed funds with costs as a percentage of gross operating profict (GOP) and financial revenue (including dividends). The financial revenue is calculated as the interest paid on borrowed funds, again out of GOP and financial revenue.

Manufacturing Industry

Financial position ratios for manufacturing

% of gross operating profit (GOP) + financial revenue



2021	Debt	Interest burden
Professional act.	1,441	29.0
Hospitality	880	19.9
Construction	963	19.2
Transport and logistics	896	15.8
Real estate activity	799	14.7
Leisure and entertainment	441	12.4
Total economy	618	12.2
Energy supply	605	9.2
Primary sector	473	8.0
Water supply and waste	398	8.0
Administrative act.	492	6.8
Education	256	6.8
Manufacturing industry	304	6.5
Information	304	5.5
Trade	262	5.2
Health act.	202	5.1
Mining industry	194	3.9
Financial sector	-	-
Public sector	-	-

Source: CaixaBank Research, based on data from the Bank of Spain's Central Balance Sheet Data Office.

The first conclusion from our analysis reveals that the financial position of the manufacturing sector is healthy when compared to the economy as a whole and, above all, to other sectors of production, as summarised in the table above. Both the sector's debt ratio and its interest burden were around half those borne by the economy as a whole in 2021 (latest available data). Secondly, both ratios have fallen considerably in recent years from the levels reached in previous decades (see the chart above), especially in the case of the interest burden, which in 2021 was close to a record low.[8] Thirdly, it should be noted that the sector is in a much healthier financial position than in previous cycles of rising interest rates. In the rate hike cycles of 2000 and 2005, its interest burden exceeded 10% while this even exceeded 17% in the short hike cycle of 2011. In summary, the Bank of Spain's data suggest that manufacturing is not excessively exposed to the current tightening of monetary policy and that, in any case, it's in a better position than in previous restrictive cycles.

8 The latest annual Central Balance Sheet data are for 2021. The Integrated Central Balance Sheet Data Office provides quarterly data for the sector aggregate of «Industry without refining» (which includes mining but excludes the branch of «Oil refining»), noting that the industry's interest burden and debt ratio continued to moderate in 2022.

> **Although manufacturing as a whole is in a healthy financial position and not too exposed to interest rate hikes, some of its branches have a high interest burden**

However, the different branches that make up the industry are very heterogeneous. The tables below show the financial position in 2021 of the branches that make up the industry. Of particular note is the manufacture of non-automotive transport («Other transport»), which includes the manufacture of ships, locomotives, air and spacecraft and military vehicles, among others. It should be noted that, historically, the uniqueness of this branch's business and production model has led to high levels of debt and interest burden. Moreover, its financial position ratios are not significantly correlated with economic and financial cycles.

Debt ratios

Debt over GOP + financial revenue

Sector	2021	Weight*
Manu. other transport	971	3.4
Apparel	540	1.2
Manu. electrical equipment	489	3.5
Leather and footwear ind.	452	1.2
Auxiliary sector to construction	415	4.6
Food ind.	370	14.9
Wood and cork ind.	369	1.6
Manufacture beverages	355	4.1
Graphic arts	347	2.0
Paper industry	332	3.1
Machinery repairs	331	3.4
Manufacturing industry	305	100
Textile industry	273	0.8
Manu. furniture	259	1.6
Manu. metal products	252	9.8
Metallurgy	248	4.3
Manu. computers	246	1.3
Pharmaceutical ind.	203	4.6
Other manufacturers	190	1.4
Manu. machinery	189	5.7
Manu. rubber and plastic	184	5.7
Motor vehicle ind.	182	10.2
Chemical industry	133	7.7
Tobacco industry	106	0.8

Interest burden

Interest over GOP + financial revenue

Sector	2021	Weight*
Manu. other transport	24.9	3.4
Apparel	12.5	1.2
Leather and footwear ind.	10.9	1.2
Wood and cork ind.	9.9	1.6
Paper industry	9.5	3.1
Metallurgy	8.4	4.3
Auxiliary sector to construction	8.3	4.6
Graphic arts	7.8	2.0
Manu. metal products	7.5	9.8
Manu. electrical equipment	7.3	3.5
Food ind.	6.8	14.9
Manufacturing industry	6.5	100
Textile industry	6.3	0.8
Manu. furniture	5.8	1.6
Machinery repairs	5.6	3.4
Manu. computers	5.4	1.3
Other manufacturers	4.9	1.4
Manufacture beverages	4.3	4.1
Manu. machinery	4.1	5.7
Manu. rubber and plastic	4	5.7
Pharmaceutical industry	3.9	4.6
Chemical industry	3.6	7.7
Motor vehicle ind.	3.1	10.2
Tobacco industry	0.1	0.8

Notes: The analysis excludes the petroleum refining sector. (*)This has been rebalanced to ensure the manufacturing sector totals 100%.
Source: CaixaBank Research, based on data from the Bank of Spain's Central Balance Sheet Data Office.

Also of note is the high level of debt observed in those industries related to fashion; i.e., the branches of apparel and leather and footwear, in which the interest burden exceeds 10% of the operating profit and financial income, these branches having the most delicate financial position in the manufacturing sector (without the atypical case of the manufacture of other transports). Among the rest of the branches, the high interest burden observed in 2021 for the wood, paper, metallurgy, auxiliary services to construction and graphic arts industries is particularly significant. This is a group of energy-intensive industries and they were therefore affected by the energy crisis in 2022.[9]

9 For a detailed analysis of the most energy-intensive manufacturing sectors, see the article «Rising energy prices: which sectors are being hit the hardest?» in the 2022 *Manufacturing Industry Sector Report*.

Manufacturing Industry

Finally, it's important to note that, without the food industry and the manufacture of metal products, two sectors with higher debt ratios and interest burdens, the share of the most exposed branches in total industry is relatively small: the five sectors with the highest interest burden account for barely 10% of the manufacturing production index.

The trends in debt levels and interest burden of Spanish industry

In addition to this static picture, in order to understand the financial health of manufacturing's different branches it's also useful to observe how their level of debt and interest burden have evolved over the past few years. The following tables show the increase in debt and interest burden since 2015, the branches being ordered in terms of the change between 2021 and the average for the five years prior to the pandemic.

> **After the manufacture of non-automotive transport, fashion-related industries (apparel and leather and footwear) are the least financially strong**

The trends in the debt ratio of Spanish manufacturers

Debt over GOP + financial revenue

	2015	2016	2017	2018	2019	2020	2021	2021 *vs.* 2015-2019
Leather and footwear ind.	223	201	191	216	243	637	451	236.3
Apparel	459	428	242	239	230	965	540	219.9
Manu. electrical equipment	347	297	301	364	339	600	489	159.4
Machinery repairs	216	207	219	217	251	336	331	108.5
Manufacture of beverages	304	282	266	213	245	423	354	91.9
Pharmaceutical ind.	131	130	181	158	144	133	202	53.5
Graphic arts	296	289	303	328	282	488	347	47.3
Manu. motor vehicles	178	150	123	131	159	184	182	33.4
Manufacturing industry	320.4	284.8	260.8	264.1	270.2	361.6	304.9	24.8
Manu. machinery and equipment	183	186	165	161	171	281	188	15.0
Food industry	384	354	361	387	362	413	381	11.1
Auxiliary services to construction	547	443	379	358	353	377	415	-1.5
Manu. rubber and plastic	186	177	191	193	193	195	183	-4.7
Wood and cork ind.	487	393	338	362	313	481	368	-10.1
Manu. computers	316	279	260	240	244	289	246	-21.9
Manu. metal products	302	282	271	267	279	371	251	-28.8
Textile industry	337	274	278	333	320	394	272	-36.3
Chemical industry	217	179	135	151	163	178	132	-36.6
Manu. other transport	999	1,486	1,168	950	573	1,157	971	-64.5
Other manufacturers	306	236	264	275	290	326	190	-84.5
Manu. furniture	624	415	298	280	264	354	258	-117.6
Metallurgy	546	357	309	309	543	430	247	-165.4
Tobacco industry	543	467	369	130	76	14	105	-211.8
Paper industry	265	284	292	365	332	12	7	-300.3

Note: The petroleum refining industry has been excluded from the analysis.
Source: CaixaBank Research, based on data from the Bank of Spain's Central Balance Sheet Data Office.

Once again, the branches that attract most attention are those of apparel and leather and footwear, which already stood out for their high debt and interest burden ratio in 2021 and, moreover, are the groupings whose financial position has deteriorated the most in recent years. There can be no doubt that this is one of the areas hardest hit by the effects of the pandemic, both in terms of restrictions on business and the collapse in demand, as well as the change in business model towards multi-channelling.

Albeit to a lesser extent, the branches of manufacturing of electrical equipment, machinery repair, beverage manufacture, pharmaceutical industry, graphic arts and automotive industry also stand out for their gearing in recent years, all of them posting a larger upturn than the mean for manufacturing as a whole. Apart from the cases of the automotive and pharmaceutical industries, these branches have posted a high debt ratio in recent years which has also continued to grow after the pandemic.

On the other hand, the paper, tobacco, metallurgy and furniture manufacturing industries, among others, have all reduced their debt in recent years. The first two branches have always had modest debt ratios but metallurgy and furniture manufacturing did have high debt and interest burden ratios in previous years, well above average, so the huge deleveraging effort undertaken by them in a year as complicated as 2021 is particularly positive.

The trends in the interest burden of Spain's manufacturers

Interests over GOP + financial revenue

	2015	2016	2017	2018	2019	2020	2021	2021 *vs.* 2015-2019
Leather and footwear ind.	10.0	7.8	6.5	6.9	6.9	12.8	10.9	3.3
Apparel	17.9	13.2	7.0	7.1	5.2	14.8	12.5	2.4
Pharmaceutical ind.	3.2	3.2	3.2	2.7	2.5	2.5	3.9	0.9
Paper industry	12.2	10.8	8.4	8.0	7.7	10.7	9.5	0.1
Manufacture beverages	6.7	4.6	4.4	3.6	3.6	5.5	4.3	-0.3
Motor vehicle ind.	5.1	4.3	2.4	2.6	2.7	3.7	3.1	-0.3
Manu. rubber and plastic	5.8	4.6	4.4	4.1	4.2	4.3	4.0	-0.6
Manu. machinery	6.4	5.2	4.4	4.1	4.0	7.5	4.1	-0.7
Chemical industry	5.7	4.6	3.9	4.1	3.6	5.4	3.6	-0.8
Manufacturing industry	9.9	7.7	7	6.6	6.5	7.7	6.5	-1.0
Machinery repairs	9.6	8.8	6.5	5.6	6.1	6.9	5.6	-1.7
Graphic arts	11.4	9.8	9.1	9.4	8.2	12.0	7.8	-1.8
Food ind.	13.2	8.5	7.5	7.7	6.6	7.3	6.8	-1.9
Wood and cork ind.	17.7	13.0	10.3	10.4	7.8	11.8	9.9	-1.9
Manu. metal products	12.5	10.0	9.0	8.0	8.4	9.8	7.5	-2.1
Manu. electrical equipment	12.1	9.6	7.8	10.0	8.4	11.7	7.3	-2.3
Auxiliary to construction	19.0	12.2	9.0	8.4	7.1	8.4	8.3	-2.8
Other manufacturers	12.5	6.9	7.5	7.2	7.6	7.2	4.9	-3.4
Textile industry	13.6	9.3	8.5	9.5	8.0	8.5	6.3	-3.5
Manu. computers	13.5	8.5	7.8	7.4	7.6	7.0	5.4	-3.6
Manu. other transport	24.1	34.7	37.5	27.9	21.4	14.7	24.9	-4.2
Manu. furniture	22.1	13.4	9.1	7.7	6.5	7.5	5.8	-6.0
Metallurgy	17.6	12.7	14.8	13.1	22.4	20.2	8.4	-7.7
Tobacco industry	25.8	22.1	19.4	4.5	0.2	0.2	0.1	-14.3

Note: The petroleum refining industry has been excluded from the analysis.
Source: CaixaBank Research, based on data from the Bank of Spain's Central Balance Sheet Data Office.

Manufacturing Industry

The metallurgy and furniture manufacturing industries not only stand out for having reduced their debt in recent years but also for the major deleveraging they've carried out

As for the interest burden, in addition to the aforementioned cases of fashion-related branches, th Interests over GOP + financial revenue e slight increase recorded in the pharmaceutical industry is also of note, although it should be remembered that its interest burden is not remarkable when seen within the context of manufacturing as a whole (it barely accounted for 3.9% of GOP plus financial revenue in 2021).

What is most striking about the trends in interest burden is that, without the case of the paper industry, most of the branches with an above-average interest burden in 2021 are also those that have reduced this burden the most with respect to previous years. Among these, the greatest reduction in interest repayments occurred in metallurgy and the manufacture of furniture, other transport and computers.

Conclusions

On balance it seems clear that, on this occasion, the manufacturing industry as a whole is tackling the challenge of rising interest rates from a position of relative strength. However, an analysis by branch of activity reveals some industries that are more sensitive to higher interest rates because their debt ratios were relatively high just before the ECB hikes, although these branches account for barely 10% of the sector's total. Among these branches, the manufacture of apparel and leather and footwear stand out, both related to the fashion industry which was hit particularly hard by the pandemic and its consequences. The rest of the branches are in a strong financial position, so they will be less affected by higher interest rates.

Inflation in commodities and intermediate goods

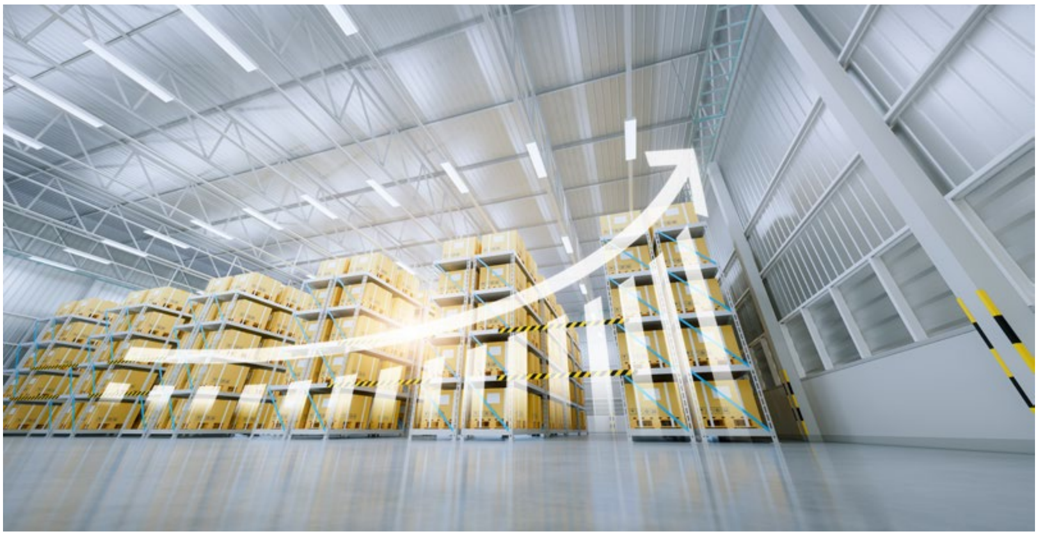
How rising costs have affected industry

The inflationary episode currently being experienced by the Spanish economy is due to a major shock in costs. While the focus has been on the rise in prices for energy and agricultural commodities, since mid-2021 a large number of key raw materials and intermediate goods used in a wide range of production processes have also become considerably more expensive. This article shows how the higher price of these products has affected manufacturers' operating costs, forcing them to pass on part of this increase to their customers so as not to jeopardise their economic viability.

Traditionally, manufacturing is the most exposed sector in the current context of rising intermediate costs. According to National Accounts data, the value of intermediate consumption in the manufacturing industry in 2019 was equivalent to 75% of its income.[10] In other words, out of every 100 euros of turnover, companies in this sector use 75 euros to buy the intermediate products they need in order to function.

In addition, the increase in prices faced by the industry since mid-2021 has been exceptional. According to data from the Industrial Import Price Index, import prices for energy products doubled compared to 2019. Looking beyond energy, the price of non-energy intermediate goods imports grew by a not inconsiderable 28% compared to 2019.

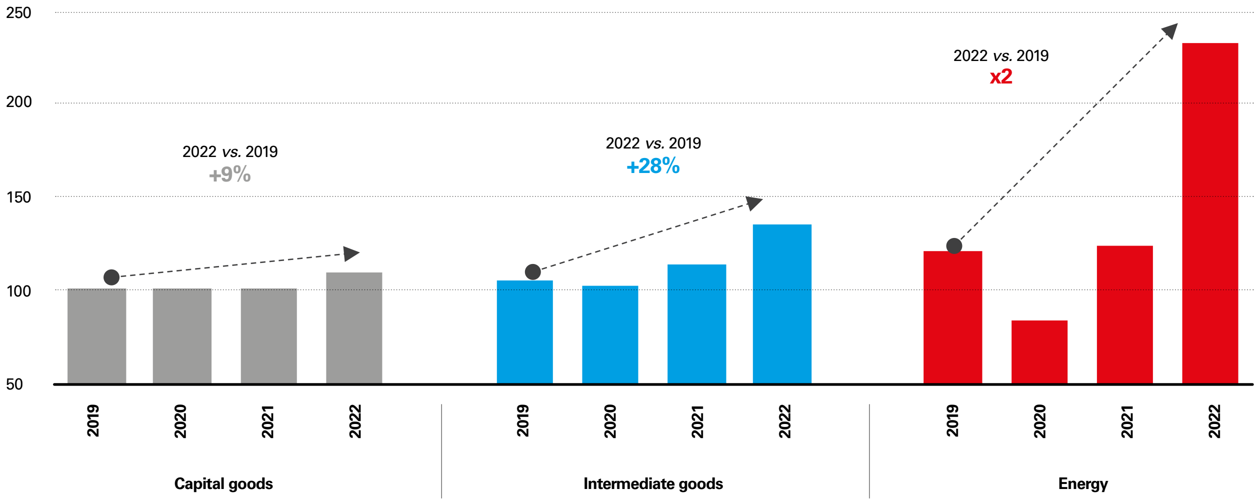
10 In the services sector, this value is 38% and in the primary sector, 45%, well below the figure for manufacturing.



Manufacturing Industry

Industrial import price index

Benchmark (100 = 2015)



Source: CaixaBank Research, based on data from the National Statistics Institute.

The trends in industry's income and costs

In short, the industry had to navigate a particularly adverse scenario in 2022. To assess the impact of more expensive intermediate goods on the sector, we used the sales database of large companies and SMEs of the Spanish Tax Authority (AEAT), which provides information on real and nominal income, intermediate consumption and employee remuneration.[11,12]

According to these AEAT data, expenditure on intermediate consumption in the manufacturing industry in 2022 was 25.4% higher than in 2019. This was caused by an increase in domestic purchases (+26.9% compared to 2019), outpacing the growth seen in imports (+22.2%). This was probably due to two factors: (i) a substitution effect as a result of the increase in price of imported products, which would have encouraged manufacturers to look for domestic alternatives at more moderate prices, thereby boosting the volume of domestic purchases, and (ii) the impact of higher import prices on the increase in price of domestic intermediate products.

> **Spanish manufacturers have had to increase sale prices to offset, on the income side, the pressure of costs**

(11) Apart from these data, the National Statistics Institute uses a range of sources to calculate the National Accounts statistics.

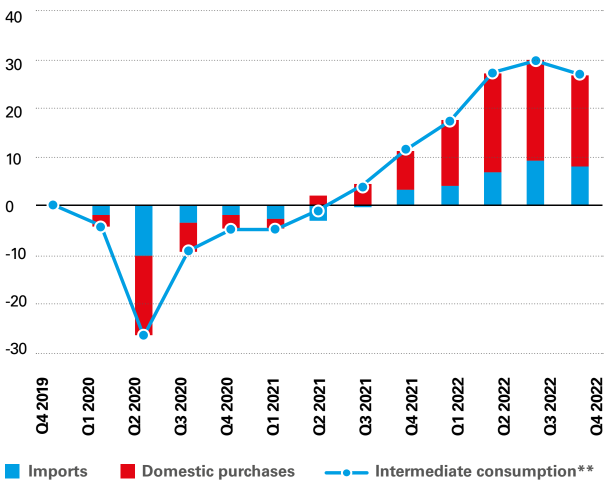
(12) For our analysis of the manufacturing industry, we have excluded the branch of Manufacture of coke and refined petroleum products because the income recorded is lower than expenses (purchases and employee remuneration) in 11 of the 13 years of the available historical series, suggesting that the variables in this branch are not entirely comparable. comparables.

Faced with such appreciable increases in intermediate consumption, the industry has had to adopt a strategy of increasing its sale prices to offset, on the income side and at least in part, the pressure caused by costs. This is precisely what the data reveal. Between 2019 and 2022, manufacturing income grew by 21.3% thanks to sale prices increasing by 19.8%, and this price increase took place without overly damaging sales volume, which was 1.2% above the level for 2019. Needless to say, in a hypothetical scenario in which prices had not increased so much, the growth in sales volume would have presumably been considerably higher.

Trends in intermediate consumption and in the operating income of manufacturing industry since 2019*

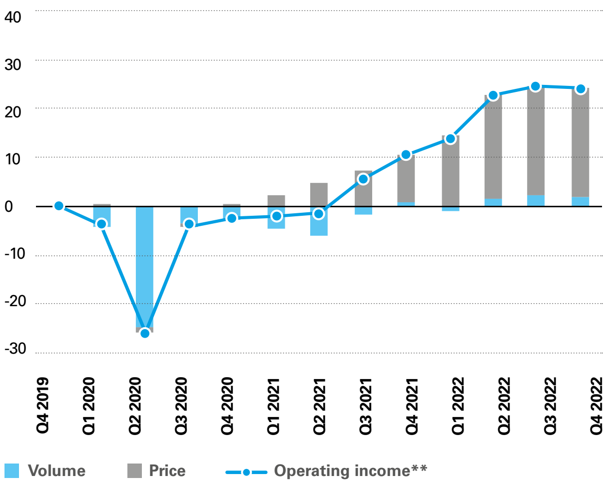
Intermediate consumption

Contribution to the change compared to 2019 (p. p.)



Operating income

Contribution to the change compared to 2019 (p. p.)



Notes: (*) Excluding the Manufacture of coke and refined petroleum products. (**) % change compared to the same period in 2019.
Source: CaixaBank Research, based on data from the Spanish Tax Authority (AEAT).

The trend in Spanish industry's earnings

To properly analyse the implications of the current cost environment on manufacturing, it's important to calculate the effect of the changes in costs and income in relation to the sector's gross profits.[13]

As can be seen in the next chart, the gross profit of the manufacturing industry as a whole was slightly above its 2019 level, specifically by 1.5% (0.6 EUR billion higher). Although this is a modest increase, given the context of rising costs it's a positive sign that the industry has managed to sustain its level of profit. The large increase observed in domestic purchases and imports pushed up costs by 89.7 billion EUR. In addition, employee remuneration in the sector rose by 3.4 billion EUR due to a 7.2% increase in the mean remuneration per employee between 2019 and 2022, while the number of jobs remained virtually unchanged (+0.2%).

13 We have estimated the sector's gross profit as total sales minus intermediate consumption and labour costs.

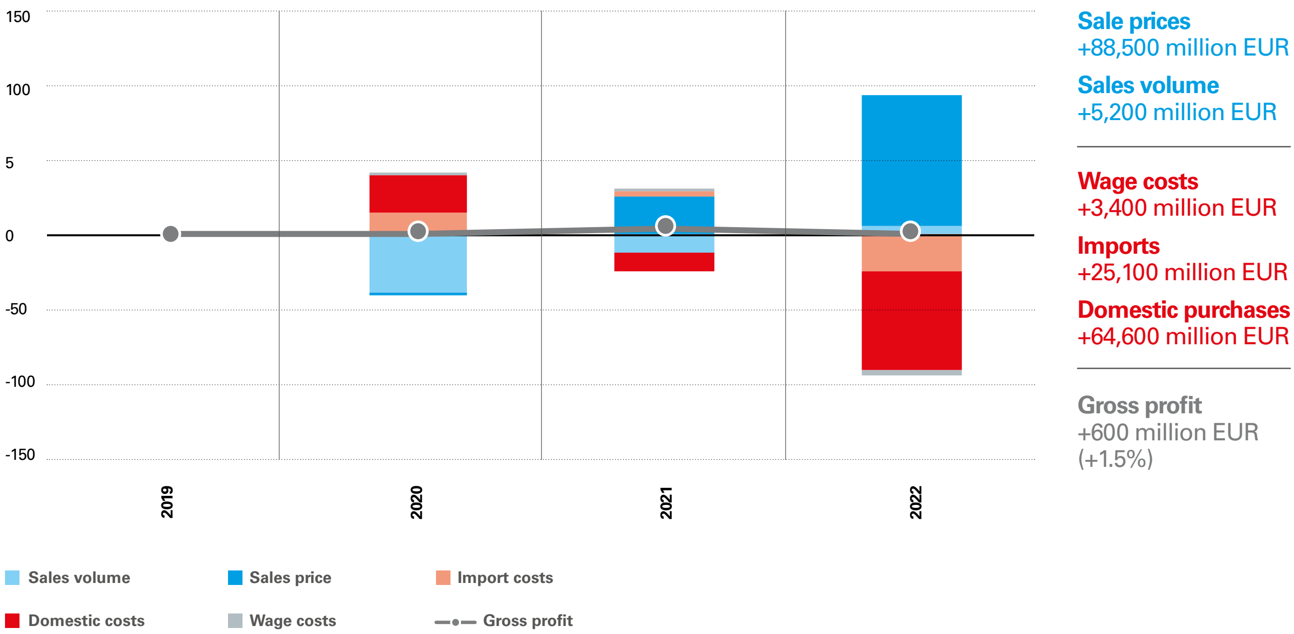
Manufacturing Industry

Spain's industrial sector was able to mitigate cost rises and sustain its level of profit, to the detriment of competitiveness

Thanks to the pricing strategy outlined previously, the sector managed to mitigate the higher costs (purchases and wages), which rose by 93.1 billion EUR compared to 2019. Specifically, income grew 0.6 billion EUR more than expenditure, mainly because the higher sale prices helped to boost income by 88.5 billion EUR while the higher sales volume generated 5.2 billion EUR.

All in all, in a situation in which cumulative inflation since 2019 has been 11.4%, the growth in profit achieved by the manufacturing industry as a whole over the same period (barely 1.5%) has deteriorated considerably in real terms.

Contribution to the growth in manufacturing's gross profit since 2019*
Billion EUR



Note: (*) Excluding the Manufacture of coke and refined petroleum products.
Source: CaixaBank Research, based on data from the Spanish Tax Authority (AEAT).

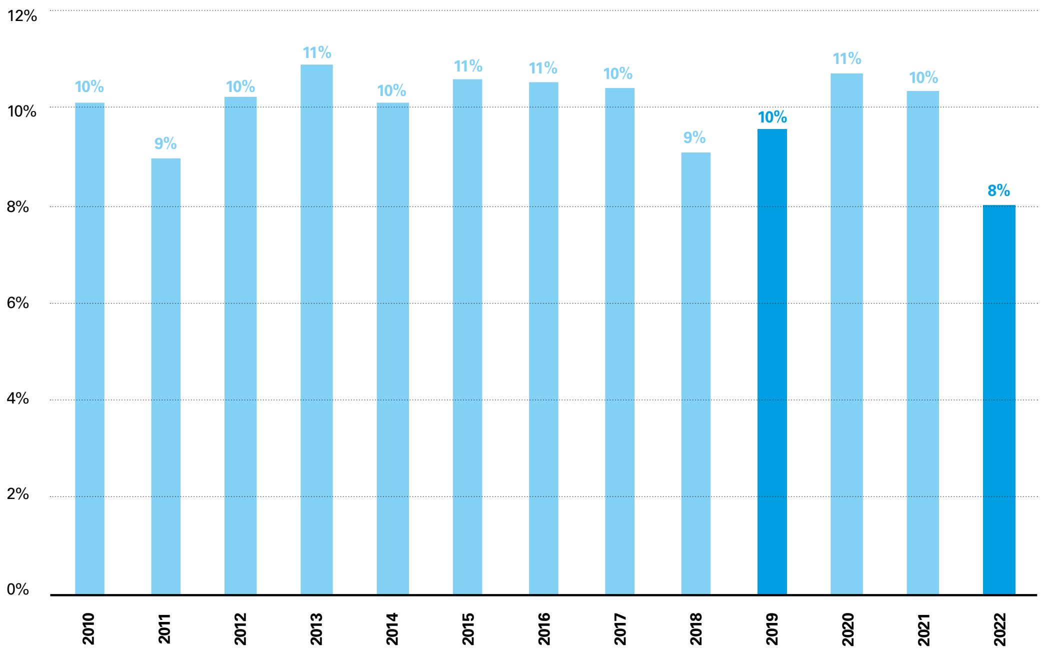
The state of health of Spanish industry

Finally, in order to assess the sector's economic health, we analysed the industry's business margins. Using AEAT data, we can calculate the ratio of gross profit over operating income (similar to the gross margin), which reflects the proportion of total industry income that is transformed into profit.

As shown in the chart below, the gross margin of the manufacturing industry shrank considerably in 2022, despite the sector raising its sale prices considerably (+19.8% since 2019). Specifically, this stood at 8.0%, 1.6 pp lower than in 2019, which in relative terms implies a drop of 16.3%, the lowest since data have been available (since 2010). This drop is due to the fact that the proportion of income allocated to purchasing intermediate goods increased considerably (rising to 82.9%, 2.7 p. p. more than in 2019).

The gross margin of manufacturing industry*

Ratio of gross profit to income (%)



Note: (*) Excluding the Manufacture of coke and refined petroleum products.
Source: CaixaBank Research, based on data from the Spanish Tax Authority (AEAT).

All in all, the gross margin of manufacturing industry fell considerably in 2022, with the higher costs being shared among buyers, employees and shareholders

Our analysis shows that the substantial price increase undertaken by the industry has managed to contain the sector's slump in margins, although it has fallen far short of fully offsetting the impact of rising costs. It's also evident that the impact of this sharp increase in costs has been spread among buyers, through a substantial rise in sale prices; employees, through the fall in real wages paid in the industry, and shareholders, through the decline in company profit measured in real terms.

Disruptions in global supply chains

The shock of bottlenecks on Spanish industry

Disruptions in global supply chains, present in markets since the end of 2020 due to the reactivation of demand after the worst phases of the pandemic, and later due to the effects of the war in Ukraine and the persistence of COVID-19 in Asia, affected activity in some manufacturing branches throughout the second half of 2021 and, above all, in 2022. In some sectors, the most intense episodes of difficulties for international trade forced production to be cut back on an ad hoc basis, or even to come to a halt. Logically, those industries most dependent on imports of raw materials and/or intermediate goods for their production processes, as well as those with greater complexity in their value chains, suffered the most.

According to data from the quarterly business sentiment survey produced by the European Commission,[14] the proportion of companies reporting shortages of materials or equipment stood at 22.0% in the second half of 2021 and 26.4% in 2022. In both cases, these rates are much higher than the historical average (5.3% between 1995 and 2019). So, without any doubt, manufacturing was clearly affected by the disruptions in the global supply chain, although early data for 2023 suggest that supply problems are easing.

The manufacturers of paper, metals, computers, electrical equipment and, above all, motor vehicles suffered particularly from supply shortages in 2022 (see the table below), due to delays in the shipment of metal parts and the shortage of microchips or semiconductors, of vital importance for the manufacture of new models and whose production is relatively inelastic. In terms of technology content, these products are both low/low-medium (paper, metals) and high/medium-high (computers, electrical equipment, motor vehicles).

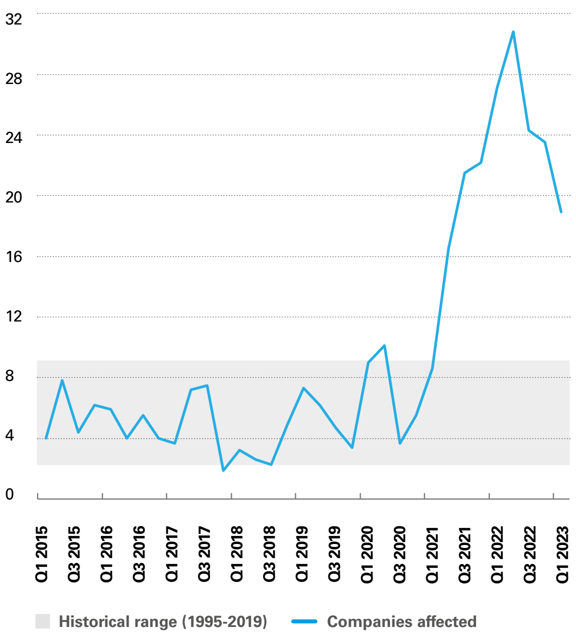
The manufacturers of paper, metals, computers, electrical equipment and motor vehicles suffered particularly from supply shortages in 2022

(14) **This examines the proportion of companies reporting shortages of materials or equipment as a limiting factor in production. The latest available data for Q1 2023 have been relatively favourable, with few sectors reporting more stress: food, beverages, textiles and pharmaceuticals.**

Companies reporting lower production due to shortages of materials

(% of all companies)

Trend in the manufacturing industry



	2019	2022	Latest figure: Q1 2023	Latest figure: Change vs. 2023
Motor vehicle industry	17.6	76.1	71.0	-5
Manufacture of metal products	6.4	36.7	32.7	-4
Manufacture of beverages	1.4	26.6	31.8	5
Manufacture of electrical equipment	2.8	39.3	17.6	-22
Food industry	2.4	11.9	16.8	5
Graphic arts	1.7	25.1	16.0	-9
Textile industry	4.3	8.6	15.2	7
Manufacture of pharmaceuticals	12.4	10.6	14.1	4
Transport material (not automotive)	0.1	33.2	13.6	-20
Manufacture of computers	11.7	40.4	11.5	-29
Manufacture of plastic products	1.3	18.2	11.3	-7
Manufacture of machinery	1.9	19.3	11.0	-8
Chemical industry	5.4	15.8	10.7	-5
Repair and installation of machinery	2.1	33.6	6.0	-28
Paper industry	3.6	43.1	5.9	-37
Metallurgy	5.8	12.0	1.0	-11
Manufacture of furniture	1.1	4.5	0.6	-4
Cement industry	2.6	17.6	0.6	-17
Wood industry	20.2	23.4	0.3	-23
Total manufacturing industry	5.4	26.4	18.9	-8

Source: CaixaBank Research, based on data from the European Commission.

Quantifying the drop in imports into Spain due to bottlenecks

To analyse the extent of the impact of bottlenecks on Spanish industry, we have used the import volume data registered with Customs, broken down by manufacturing branch. We can use these data to analyse the extent to which the five sectors we've identified as particularly hard hit reduced their volume of foreign purchases, presumably as a result of the disruptions in the global supply chain.

The chart below summarises how imports in these branches have performed since 2019. Particularly of note are the imports by the IT branch, which grew considerably in 2020 (+20% annually) thanks to demand created by the great advances made in digitalisation forced by the pandemic in many sectors of production (adaptation to e-commerce and teleworking systems). However, 2022 saw the most visible effects of the disruptions in the semiconductor market during the so-called «microchip crisis», with **the IT industry becoming one of the sectors hardest hit by the bottlenecks**, its imports falling by around 50% compared to 2019.

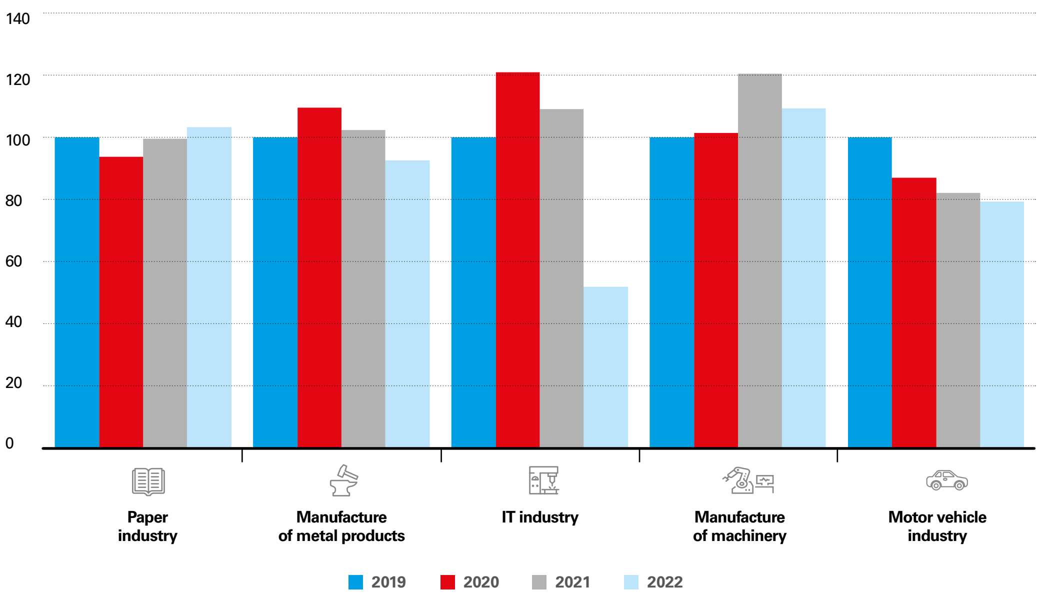
Manufacturing Industry

The performance of the automotive industry is also worth mentioning, this branch reporting the biggest problems due to lack of supply, largely because of the semiconductor shortage. Consequently, **the drop in automotive imports in 2022 was also considerable**, 21% lower than in 2019. Specifically, vehicle components and parts were the products that suffered most from the impact of bottlenecks in 2022, with imports, which are key to the proper functioning of factories in Spain, falling by 24% compared to 2019. However, imports of finished vehicles were also hit hard, posting a 20% drop compared to 2019 although they improved their position in relation to 2021 (when imports were down 32% compared to 2019).

Finally, **imports by the metal manufacturing industry also suffered from the effects of bottlenecks.** In this case, the 8.5% drop posted in 2022 was directly associated with the war in Ukraine and trade sanctions against Russia, one of the world's leading producers of metal ores. Despite the high proportion of companies reporting problems of shortages, there was no decline in the volume of imports among the other branches.

Imports by activity branch

Benchmark (100 = 2019)



Source: CaixaBank Research, based on data from DataComex.

Vehicle components and parts were the products that suffered the most from the impact of bottlenecks in 2022, with a decline in imports, which are key to the proper functioning of factories in Spain

Dependence remains high on Asia's manufacturing industry

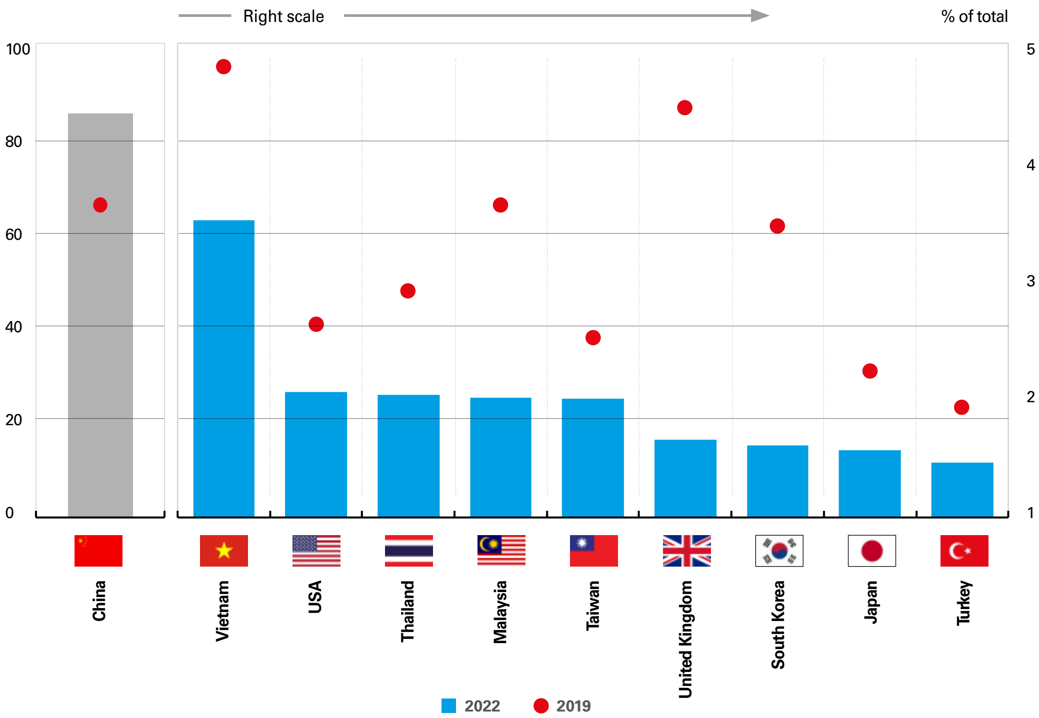
As noted at the beginning, much of the disruption in the global supply chain was caused by the pandemic but especially by the way China handled it. Its zero COVID policy, implemented until early 2023, resulted in long lockdowns and restrictions on people's movement in large cities, with the consequent difficulties in transport services and production centres. Due to international industry's huge exposure to the Chinese market and the trade problems and tensions it has caused in recent years,[15] people are once again starting to wonder whether production processes should be relocated and suppliers diversified in order to also diversify the industry's supply risks.

[15] **See the Focus «EU and China: mapping out a strategic interdependence» published in the May 2022 *Monthly Report*.**

Although this is a logical strategy in theoretical terms, an analysis of the most recent trends in the sector suggests that this change in the supplier mix is not taking place; in fact, rather the opposite. If we focus our analysis on imports of electronic components into the EU as a whole, where bottlenecks have been very intense, we can see a huge concentration of imports from China which continued to intensify in 2022. As seen in the chart below, 85% of all EU imports of electronic components came from China, a considerable increase when compared to the Asian country's share in 2019, namely 66%. China's greater share has been achieved to the detriment of the rest of the EU's main suppliers, both in the case of Western countries (mainly the US) and the emerging countries of South-East Asia (especially Vietnam, Malaysia and Thailand).

Manufacturing Industry

EU imports of electronic components
% of total



Source: CaixaBank Research, based on data from Eurostat.

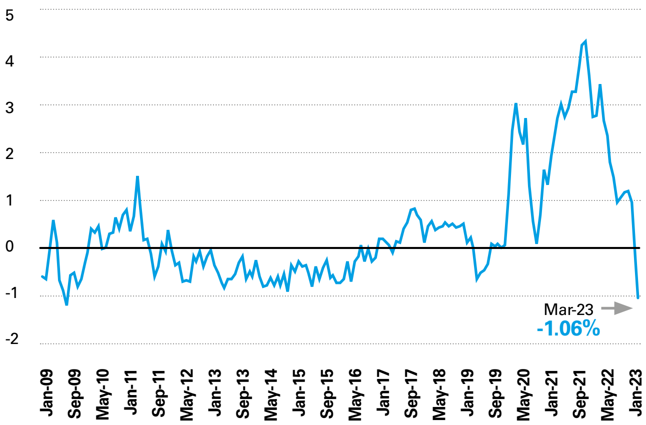
Positive outlook for 2023

While this greater concentration of Chinese imports could be a risk factor should disruptions in global supply chain remain high, most of the indicators used to gauge the intensity of bottlenecks suggest that these have been clearly diminishing since the end of 2022. For example, container cost indices, which reflect the rates and management of tariffs for freight forwarders and carriers for international cargo and indicate the ease of transporting goods internationally, have been at levels similar to 2019 since the beginning of 2023. The New York Federal Reserve's monthly index of global supply chain pressures[16] is also below 0 (i.e., below its long-term average) and in March 2023 was at its lowest level since August 2009.

Most of the indicators used to gauge the intensity of bottlenecks suggest these have been clearly diminishing since the end of 2022

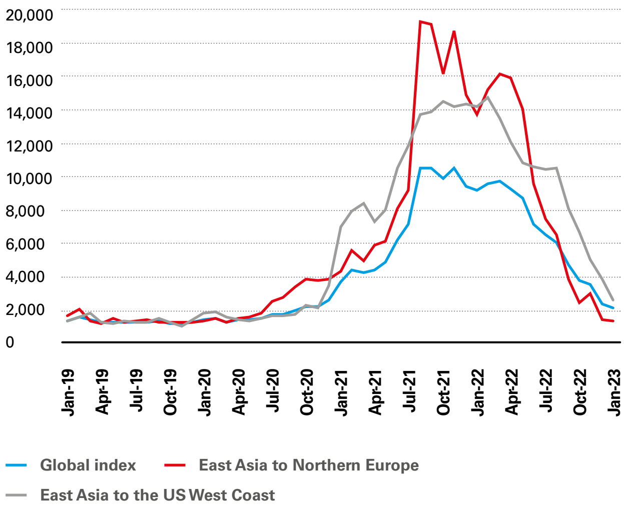
16 The Global Supply Chain Pressure Index (GSCPI) integrates a number of commonly used metrics with the aim of providing a comprehensive summary of potential supply chain disruptions. Global transportation costs are measured by employing data from the Baltic Dry Index (BDI) and the Harpex index, as well as air freight cost indices from the U.S. Bureau of Labor Statistics. The GSCPI also uses several supply chain-related components from Purchasing Managers' Index (PMI) surveys.

Pressures on global supply chains
Benchmark



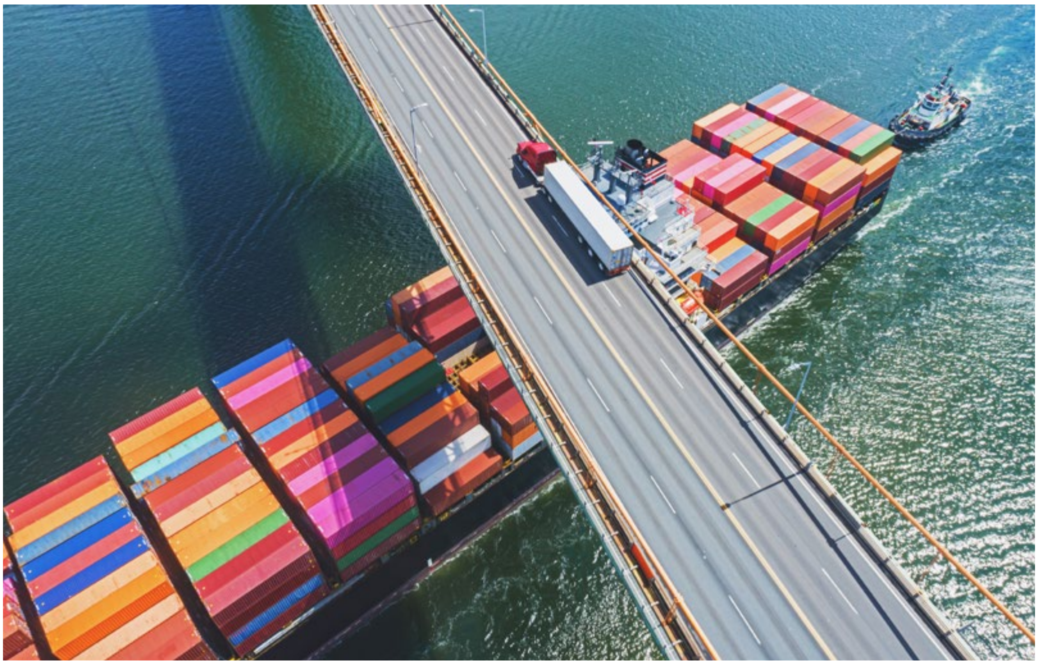
Note: The index mean is 0.
Source: CaixaBank Research, based on GSCPI data from the New York Fed.

Container cost
Dollars per 40' container



Source: CaixaBank Research, based on data from Freightos, via Refinitiv.

On balance, bottlenecks have posed a significant problem for some branches of Spain's manufacturing industry, with a particularly localised impact on the automotive industry and computer manufacturers. However, despite the huge difficulties faced by these industries, China's relative weight as a supplier of electronic products is still growing, so our exposure continues to be significant. Nevertheless, the factors behind the disruptions in the supply chain are easing, especially now that China has reopened to trade. Looking ahead to 2023, we expect this improvement in conditions to consolidate, so that manufacturing will leave behind one of the major problems of the past two years, thereby achieving an important growth lever.



Manufacturing Industry

Main indicators for the manufacturing sector

Annual change, unless otherwise specified

	Average 2000-2007	Average 2008-2014	Average 2015-2019	2020	2021	2022	2023	Date of latest figure	Trend
Economic activity indicators									
Total GDP of the economy	3.7	-0.9	2.8	-11.3	5.5	5.5	3.8	Q1 2023	
GVA manufacturing industry	1.9	-3.0	2.4	-15.4	8.9	3.8	5.0	Q1 2023	
Industrial production index: manufacturing industry	1.4	-4.6	2.4	-10.3	8.3	2.4	1.9 (*)	Mar-23	
Industrial production index: agrifood	1.8	-0.4	1.0	-5.7	6.0	1.6	-0.4 (*)	Mar-23	
Industrial production index: automotive	1.6	-4.5	3.1	-18.8	-1.1	8.2	14.0 (*)	Mar-23	
Turnover index: manufacturing industry	5.5	-2.7	3.0	-12.0	16.0	21.5	9.8 (*)	Feb-23	
Turnover index: agrifood	4.1	0.8	2.7	-4.1	8.9	19.5	19.2 (*)	Feb-23	
Turnover index: automotive	4.7	-1.3	5.1	-10.5	-2.8	12.6	26.8 (*)	Feb-23	
Demand indicators									
Passenger car registrations	1.0	-7.5	8.3	-32.3	1.0	-5.4	33.7 (*)	Apr-23	
Registrations of load-bearing vehicles	3.5	-8.5	13.5	-25.9	-2.7	-17.3	24.4 (*)	Apr-23	
Labour market									
Total registered workers in the economy	3.5	-2.1	3.1	-2.1	2.5	3.9	3.0	Apr-23	
Registered workers, manufacturing industry	-	-3.6	1.8	-2.1	1.3	2.3	1.5	Apr-23	
Total employees	4.2	-2.4	2.7	-2.9	3.0	3.1	1.8	Q1 2023	
Employees, manufacturing industry	-	-5.3	3.1	-2.6	-0.3	3.4	4.6	Q1 2023	
Temporary employment rate (% of employees)	32.6	25.0	26.2	24.0	25.1	21.2	17.3	Q1 2023	
Temporary employment rate, manufacturing ind. (% of employees)	-	17.3	20.7	17.1	17.6	13.2	8.9	Q1 2023	
Foreign sector									
Manufacturing industry exports	-	8.6	4.0	-10.2	19.2	23.0	13.8 (*)	Feb-23	
Agrifood exports	-	9.2	5.7	4.2	12.5	17.0	12.0 (*)	Feb-23	
Automotive exports	-	7.0	4.8	-14.0	3.4	13.5	23.1 (*)	Feb-23	
Manufacturing industry imports	-	4.2	5.5	-11.2	20.5	23.2	5.2 (*)	Feb-23	
Agrifood imports	-	4.2	4.5	-6.0	14.8	26.6	16.7 (*)	Feb-23	
Automotive imports	-	7.4	6.9	-23.1	8.7	23.9	22.7 (*)	Feb-23	
Manufacturing industry balance of trade (% of GDP)	-	0.0	0.1	0.1	-0.2	-0.2	-0.2 (*)	Q4 2022	
Agrifood balance of trade (% of GDP)	-	0.2	0.5	1.0	1.0	0.9	0.9 (*)	Q4 2022	
Automotive balance of trade (% of GDP)	-	1.2	0.9	1.2	1.0	0.7	0.7 (*)	Q4 2022	
Financing									
Outstanding balance of credit to production activities	17.8	-4.4	-4.5	7.6	-0.7	-1.1		Q4 2022	
NPL rate, production activities (%)	1.0	11.9	10.0	5.0	4.8	4.2		Q4 2022	
Outstanding balance of credit to the manufacturing industry	9.4	-2.9	-1.5	7.1	-0.8	3.1		Q4 2022	
NPL rate, manufacturing industry (%)	1.5	7.3	7.9	4.8	4.4	3.7		Q4 2022	

Notes: 2021 data are compared to those from the same period in 2019. For the indicators marked (*), the 2023 figure corresponds to the cumulative change up to the latest figure available. For the rest of the indicators, the change for the latest figure available is shown. A sun indicates growth above the 2015-2019 average less 1/4 standard deviation; a sun with a cloud indicates growth above the 2015-2019 average less 1 standard deviation; a cloud indicates negative growth or growth above the 2015-2019 average less 2 standard deviations; rain indicates growth below the 2015-2019 average less 2 standard deviations

Source: CaixaBank Research, based on data from the National Statistics Institute, DataComex, ANFAC, the Ministry of Social Security and the Bank of Spain.

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