COFACE ECONOMIC PUBLICATIONS

NOVEMBER 2023

FOCUS

Christiane von Berg,
Economist for Austria, BeNeLux,
Germany & Switzerland
based in Mainz, Germany

The German Metals Industry: Negative outlook, but surprisingly positive payment behaviour

EXECUTIVE SUMMARY

The situation of the German metals sector has never been easy, but it got more challenging since the 2000s and the emergence of the competition of Chinese state-supported metal products. This competition has been able to outperform European companies by offering cheaper products. Another significant factor altering the industrial landscape was Germany's industrial transformation towards green technology, notably in the automotive industry. The change towards e-mobility contributed to a recession in the German industry, including the metals sector. Since mid-2018, manufacturing production has declined, with few exceptions. Adding to these challenges, the surge in energy prices amid the post-pandemic recovery and following Russia's invasion of Ukraine has heightened production costs. As metals companies were not able to fully pass through the cost increase to their customers, profits seem to have declined in recent quarters.

Despite challenges, the payment behaviour has - counter-intuitively - improved over the years in the metals sector according to the results of our annual Germany payment surveys. While giving out payment terms is standard practice in the metals industry, they shortened noticeably from 44 days in 2019 to 31 in 2023. In our 2023 survey, 77% of respondents in the metals industry indicated that they experienced payment delays. While this marks an increase compared with the pandemic years, many companies view them as commonplace. Around one third of participants indicated that paying bills late is normal practice. Furthermore, the average payment delay in the metals sector – around 25 days – is relatively short compared with other sectors in Germany.

Our payment surveys also highlight that, while the economic outlook of the German metals sector remains more pessimistic than the German average, it has improved over time. One potential explanation is that the metals sector seems to have adapted earlier than other industries to the shifting economic environment: 13.6% of participants already have de-risking strategies in place in 2023, aiming to be less dependent on single suppliers, customers, or financial sources. Export destinations, including Russia – even before the war in Ukraine – and China, have become less attractive. Additionally, the adjustment of the sector, in the form of insolvencies, took place earlier. The main increase in insolvencies was experienced in 2020. Since then, they have remained relatively low and are stagnating in 2023 compared with the previous year.

ALL OTHER GROUP ECONOMIC PUBLICATIONS ARE AVAILABLE ON:
http://www.coface.com/Economic-Studies

Economic development in the metals sector

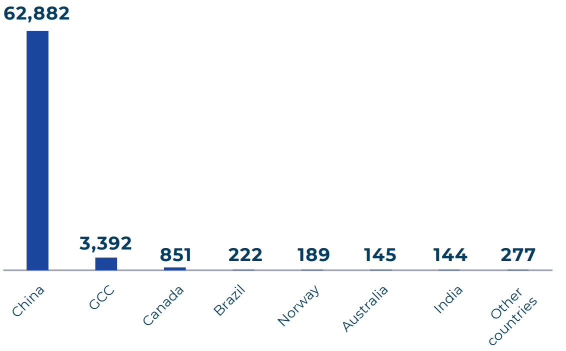
Production environment – Between the fronts of international industrial politics

The economic outlook of the metals sector is continuously evolving. It is very dependent on the state of the automotive sector, the demand for machinery and on the construction market. Aside from these cyclical factors, industrial politics domestically and abroad also have a heavy impact on the outlook of the sector.

In December 2001, China joined the World Trade Organization, and after only four years, the country became a net exporter of steel. The supply from China shifted the global market permanently. The main drivers behind this development are several long-term political strategies with the aim to make China self-sufficient or the global leader in key industrial fields, like metals and machinery. To reach these objectives, the Chinese authorities have been heavily supporting its domestic industry[1] and its ores supply[2]. Energy prices are state controlled and kept artificially low, especially for strategic and national champions. The market is dominated by a limited number of large state-owned enterprises that receive substantial subsidies. A study from the OECD[3] illustrates the extent of these subsidies in international comparison, using the example of the aluminium sector **(Chart 1)**. In the steel sector, energy subsidies increased by 15.7 billion USD or 3,800% between 2000 and 2007[4]. Over the years, these subsidies have led to significant over-capacities and an oversupply on the global market, weighing on prices of industrial metals, particularly steel and aluminium.

Another significant blow to the German metals industry came from former US President Donald Trump's section 232 tariffs on steel and aluminium. They resulted from a US government investigation which concluded that metal imports were a threat to domestic metals companies, thereby jeopardizing national security interests. In response, Donald Trump announced tariffs of 25% on steel imports and 10% on aluminium imports from the EU in March 2018, which went into effect in June of the same year. In October 2021, they were suspended by President Biden and replaced by tariff-rate quotas, which eliminated tariffs on a limited volume of US steel and aluminium imports from the EU. Still, between 2018 and 2021, the volume of US steel imports from the EU fell by 40%. Germany was impacted moderately by this development. 75 to 80% of the German steel production stays in the EU, but the US are the most important export destination outside of the EU. While in 2017, 5.6% of all German steel exports went across the Atlantic, this share halved to 2.6% in 2021. The impact of tariffs on aluminium is harder to measure as, at the time, US demand for aluminium was particularly strong, leading to a 7% increase of US aluminium imports from the EU between 2018 and 2021.

Chart 1 - State subsidies for the aluminium sector in international comparison
(in million USD for the 2013 – 2017 period)



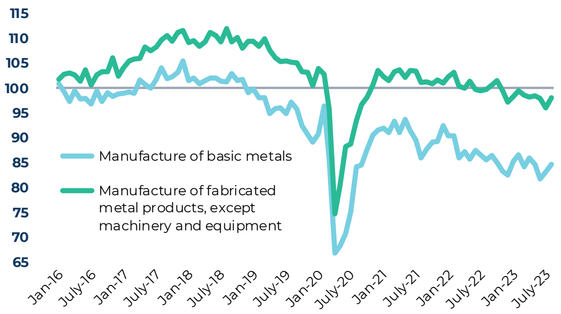
GCC: Gulf Cooperation Council; other countries = New Zealand, Russia, Spain, US
Sources: OECD, Coface

In addition, the German metals sector also felt the impact of tighter EU regulations regarding CO_2-emissions. In 2017, the EU introduced the new WLTP[5] test to analyse CO_2-emmissions and fuel consumption in the automotive industry, which came into effect from September 2018 in Germany. As the test was much stricter than the former procedure, and that the German motor vehicle tax is dependent on the CO_2-emissions per kilometre, the costs to buy German cars increased sharply. Between 2017 and 2019, car production fell by 982,000 cars to 4.6 million produced cars per year. As the metals sector is a main input-industry for the automotive sector (i. e. with steel and aluminium), the downturn in the industry impacted metals output as well. The WLTP is not the only measure to accompany European industries' transition towards green technology. In 2021, trade with CO_2-emission certificates was introduced in the EU, impacting the energy-intensive metals sector too, as it makes metal products more expensive, and therefore less competitive.

Downward trend of production continues after the pandemic-related interruption

Industrial production in the metals sector mirrors the downturn of the automotive sector. Even excluding the 2020 lockdown-related slump and recovery, production of metal products has been on a clear linear downward trend since 2018 **(Chart 2)**. This downward trend has also impacted capacity utilization. For both the manufacturing of basic metals and fabricated metals, the capacity utilization rate went below the 15-year-average in Q3 2023 and remained there in Q4 2023. This is the first time that utilization has fallen below the long-term average since the COVID-19 lockdown in 2020. Unfortunately, new orders in the sector were still decreasing in summer 2023 compared with a year earlier, and only the pace of the downward trend has eased in the recent months.

Chart 2 - Industrial production in the German metals sector *(Index: 2015 = 100)*



Sources: Destatis, Coface

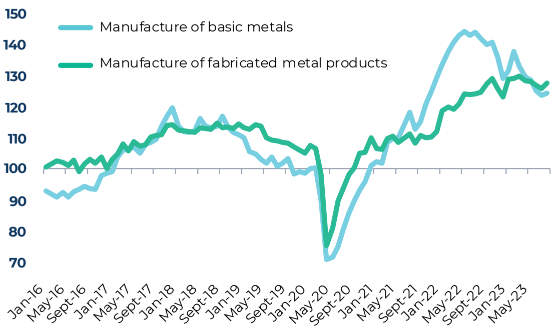
The nominal turnover of the metals sector does not always follow production

While a decline in production is always a bad signal for a sector, it does not necessarily mean that sales in the sector are falling. Changes can also result from an adjustment to the product range. For example, a switch to high-quality products with a lower number of units can keep nominal sales stable or increase them, even with lower production.

1 - Matthes, Jürgen 2021: Wettbewerbsverzerrungen durch China, IW-Report 10/2021, https://www.iwkoeln.de/fileadmin/user_upload/Studien/Report/PDF/2021/IW-Report-2021_Wettbewerbsverzerrungen-China.pdf
2 - Between 2005 and 2019, Chinese FDI in the mining/metals sector amounted to USD 182 billion (9% of Chinese FDI), via 199 equity investments and 74 operating contracts.
3 - OECD 2019: Measuring distortions in international markets, The aluminium value chain, Paris, https://one.oecd.org/document/TAD/TC(2018)5/FINAL/En/pdf
4 - Ambaw, Dessie Tarko/Thangavelu, Shandre 2021: Industrial subsidies and their impacts on exports of trading partners: The China case, Institute for International Trade of the University of Adelaide, https://iit.adelaide.edu.au/ua/media/1440/wp03-industrial-subsidies-and-their-impact-on-exports-of-trading-partners.pdf
5 - Worldwide harmonized Light vehicles Test Procedure

In fact, the nominal turnover of the industry increased significantly in 2021 and 2022 and remains at an elevated level this year **(Chart 3)**.

Chart 3 - Nominal turnover of the German metals sector
(average 2015 = 100, seasonally but not price adjusted data)



Sources: Destatis, Coface

Besides possible changes in the product range, the main contributor to the increase in nominal turnover has been higher production costs that were passed on to selling prices. Natural gas prices began rising in the spring of 2021, driven by the global economic recovery in demand after the 2020 COVID-19 lockdowns. Between March 2021 and September 2022, the yearly growth rate of the Dutch TTF natural gas price benchmark was above 100% and reached a peak of 626% year-over-year. The metals industry in Germany is the third-largest industrial natural gas consumer, accounting for 8% of total consumption, behind the chemicals (25% in 2020) and paper (9%) sectors.

The prices of iron ore have been volatile in recent years but have remained on an upward trend since 2018, rising by roughly 75% between mid-2018 and November 2023. The same is true for copper (+17%) and other coil metals. The price of aluminium increased by roughly 30% between 2019 and November 2023, to name a few examples. The critical question is if German metals companies were able to increase selling prices fast enough and sufficiently to maintain stable profit margins. According to the employers' association of the metals and electronics industry[6], the gross profit margin in the sector decreased from 4.4% in 2017 to 3.5% in 2021[7]. Between 2007 and 2016, the average gross profit margin was at 3.9%. For 2022 and 2023, some preliminary surveys from the ifo Institute give some insights[8]. In May 2023, 34% of companies in the metals and electronics sector indicated that they had, in 2022, either very low profit margins (between 0% and 2%; 20% of respondents) or even a negative profit margin (14%). In September 2023, this share had increased: 23% of surveyed companies expect low profit margins for this year and 15% are preparing themselves for profit losses.

Payment experiences in Germany - The metals edition

The problematic profit situation of metals companies, but also of their main customers, is expected to impact payment behaviour. Coface publishes a corporate payment survey for Germany, where the metals sector had the highest participation share[9], generating enough results to analyse the payment behaviour of the German metals sector over time. This allows not only for a comparison with other sectors[10], but also enables an examination of payment trends within the sector.

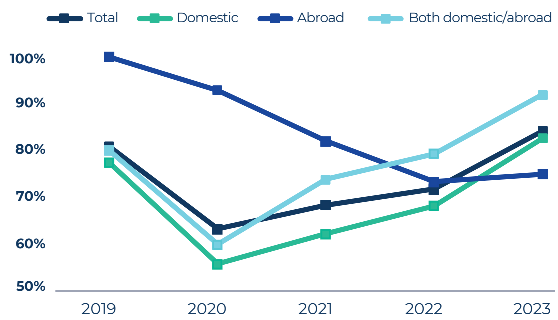
Payment terms get shorter each year

At the onset of every payment relationship is the question of whether a corporation provides customers with a payment term longer than the legal minimum of 14 days in Germany. Over the last five years, this proportion has changed noticeably in the German metals sector **(Chart 4)**. It started at a level of 80.9% in 2019, then decreased during the pandemic years, when companies wanted to cash in as soon as possible due to high economic uncertainties. From 2022 onwards, conditions were more relaxed and the share rose above the 2019 level. The main driver for this shift is companies that operate only within the German market, accounting for an average of 62% of German metals businesses in our surveys.

The reasons to offer payment terms have changed over the years. In each of the five years, a relative majority of companies in the metals sector answered that this practice is a market standard. However, while in 2019 and 2020 40% on average named this answer, it increased to 64% between 2021 and 2023. The tight liquidity of customers ranked among the top 3 concerns of our respondents in 2019 and 2020, with an average of 19% citing it. However, in subsequent years, despite the significant rise in interest rates and the subdued economic activity in recent quarters, this concern has diminished and become a minor issue (5% on average).

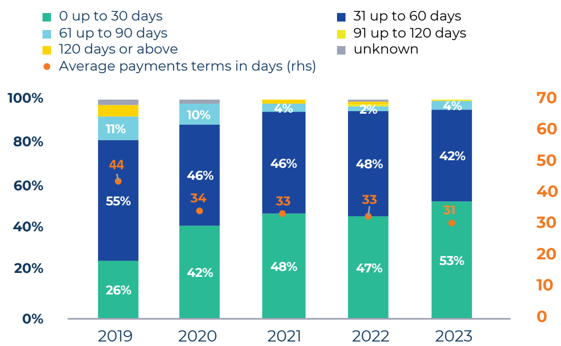
While it seems that companies in the metals sector have become more relaxed in offering payment terms, a contrasting trend is evident in the average duration of payment terms. While in 2019, a large majority (82%) asked for short-term payment terms of up to two months, and still 16% had the opportunity to pay after two months, this has changed noticeably since **(Chart 5)**.

Chart 4 - Share of companies in the German metals sector that provide payment terms by main market



Sources: Coface Corporate Payment Surveys

Chart 5 - Hypothetical payment terms in the German metals sector over time [11]



Sources: Coface Corporate Payment Surveys

6 - Single numbers for the metals sector are not available.
7 - Die Arbeitgeberverbände der Metall- und Elektro-Industrie: Zahlen 2022, https://www.gesamtmetall.de/zahlen-fakten/zahlenheft/
8 - Südwestmetall: Konjunktur Metall- und Elektroindustrie, https://www.suedwestmetall.de/munde-industrie/konjunktur (they publish the data from the ifo Institute in this case).
9 - On average, the participation share was 13% in the last five years. The number of the participants in 2019 was 52, in 2020 it was 94 companies, in 2021, 82 companies, in 2022, 138 companies and in 2023, 164 companies of the metal sector participated at the corporate payment survey Germany.
10 - Germany Corporate Payment Survey 2023: On the way back to the bad old times
11 - We ask our participants to give answers in time-ranges. As our lowest category is 0 to 30 days, the minimum average payment term is 15 days in our survey. We keep the category 0 to 30 days, although in Germany the "normal" payment term begins at 14 days, to make the data comparable to the results of our other international corporate payment surveys.

This year, it is nearly the opposite of 2019, with 53% of metals companies asking to be paid within the first 30 days after delivery. Only 5% of companies gave payment terms longer than two months. In total, the average payment term in the metals sector fell from 44 days in 2019 to 31 days in 2023, while in the same period, the payment term for all companies in Germany decreased only marginally from 34 days to 32 days.

Payment delays: a common practice, but they are short

In the pre-pandemic period, payment delays were standard practice in the metals industry. 87% of metals participants reported them in our 2019 survey. This was above the German economy-wide average of 82%. However, this share for the metals sector dropped sharply to 62% in 2020, and, surprisingly, remained exactly at this level for the next three years before increasing to 77% in 2023. When asked for the reasons for payment delays, participants to our surveys from the metals sector painted an interesting picture. The most named reason is financial difficulties. However, the share has dropped markedly. Starting with 39% in 2019, it increased to 44% in 2020, but since then has continuously dropped to only 31% in 2023, when the ECB key interest rates reached their highest level in two decades and banks reported a continuous tightening of their credit conditions towards corporates in Germany and Europe. The other big reason for payment delays seems to be that it is just the usual behaviour of clients. In 2023, we offered this reason for the first time as a possible answer (with 32%, it had the highest share in the metals sector of all answers). In previous years, when "usual behaviour of clients" as a reason for payment delays was not proposed in the survey yet, an average share of 32% cited "other" or "unknown" reasons instead[12]. This indicates that even when economic conditions are great, all problems within companies are solved and no technical issues happen, still a third of our participants in the metals sector would face payment delays.

The metals industry is among the German sectors where the vast majority of companies receive their payments within the first 30 days **(Chart 6)**. In 2023, only the pharma-chemicals sector got paid faster. While these short payment delays seem to be a structural characteristic of the metals sector, the extent has evolved over the years. In 2019, there was still 5% of respondents reporting longer-term payment delays exceeding 90 days, with even 2.4% reporting ultra-long payment delays of over 150 days. During the pandemic years (2020 and 2021), around 2% still experienced longer-term payment delays, which were exclusively ultra long-term. In contrast, in 2022 and 2023, there were no instances of ultra-long delays, and in 2023, there were even no delays longer than 90 days reported. Overall, except for 2020, the average payment delays of the metals sector have consistently remained below the economy-wide average payment delay.

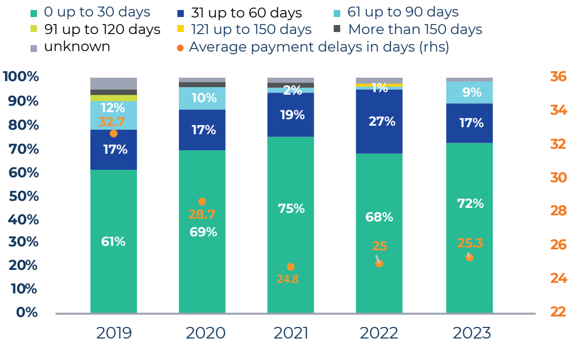
Adding payment terms to payment delays indicates the total waiting time between the purchase of a product and the payment of the invoice. This indicator – known as days sales outstanding (DSO) – has fallen sharply between 2019 and the 2020s **(Chart 7)**, mainly because of the noticeable 9.5-day drop in payment terms between 2019 and 2020. In total, the DSO in the metals sector slightly exceeds 50 days on average in 2023, below the economic wide average.

That being said, financial risks associated with late payments for German companies have increased in recent years. Overall, 8.7% of participants in the metals sector reported that the share of overdue payments between 6 months and 2 years represented 2% or more of their annual turnover. This is a continuous rise from 1.9% in 2020, to over 3.9% in 2021, 6.9% in 2022 and 8.7% in 2023. However, this is still noticeably below the pre-pandemic share of 15% in 2019. While in 2019, 5% of metals companies still reported that the share of overdue payments between 6 months and 2 years represented even more than 10% of their annual turnover, it has been rare in the 2020s, with only 0.7% in 2023.

Risks and outlook – go with the trend

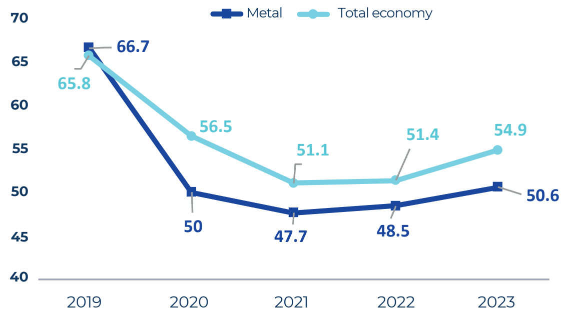
Over time, the outlook and the risks in the German metals sector have changed. Every year, we therefore ask firms how they assess their current business situation compared with a year earlier. The participants can choose between better, unchanged, and worse. By subtracting the share of negative answers from the positive ones, we get a net result in balance points (bp). With -43.7 bp, the outlook in 2019 was exceptionally gloomy and only exceeded by the pessimism over the business situation in 2020 with -62.0 bp, amid the pandemic. Since then, the mood has improved noticeably with +53.8 bp in 2021, and +7.5 bp in 2022. However, in 2023, the mood has turned sourer again, falling into negative territory at -35.6 bp. The outlook of -10 bp for 2024 points to a further deterioration in the sentiment of the metals sector. Despite the pessimism, what stands out in comparison with other sectors is that, while the metals sector remained more pessimistic than the overall average, it does not belong to the most pessimistic anymore but is positioned directly below the average of the total economy.

Chart 6 - Hypothetical payment delays in the German metals sector over time



Sources: Coface Corporate Payment Surveys

Chart 7 - Estimated Days Sales Outstanding in the metals industry

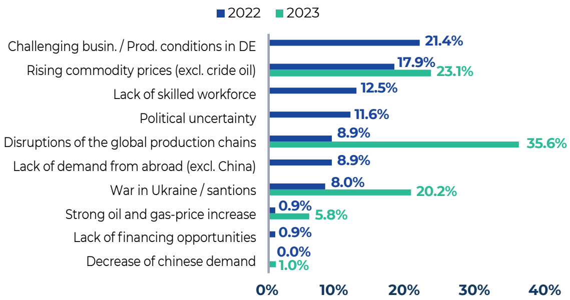


Sources: Coface Corporate Payment Surveys

12 - From the fact that in 2023 the group who answered "other reasons" or "unknown" went down to 3% and due to the individual comments of the participants in the last year, we assume that this group and the group saying that delays are a normal client behaviour are the same.

Together with the outlook, risks have also changed over the years. Some were fortunately only short-term ones (effects of COVID-19 on domestic and foreign demand, Brexit), others have had a longer lifespan[13]. The longest lasting risk has been disruptions of the global production chains. While in 2020 it was in the top 3 of all risks cited by our respondents, with 6.2% naming it, it became in 2021 and 2022 the most important risk with a share of 32.0% and 35.6%, respectively. In 2023, it was again one of the many risks that disrupted the sleep of managers in the metals sector **(Chart 8)**. Another longer-lasting risk consistently mentioned in recent years is rising commodity prices. While its importance has decreased since it was first mentioned in 2021 (by 28% of respondents), it was the second most cited risk in 2023 in the metals sector with 17.9%.

Chart 8 - What is the main risk for your export business in the future? – Results of the metals sector



Sources: Coface Corporate Payment Surveys

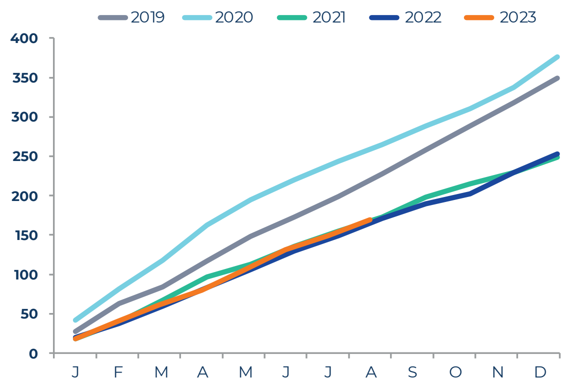
Together with the risks, the most important business destinations for the German metals sector have changed. The domestic market remains, by a wide margin, the most popular market for our survey respondents, but this large share has decreased. While it was around 85% in pandemic times, it decreased to 80% in 2023[14]. This could be associated with the response that the challenging conditions in Germany for production and businesses operations ("Standortschwierigkeiten") are the most significant obstacle for metals companies. They notably express concerns about high electricity prices[15], the low level of digitalization or red tape. Aside from the domestic market, some export destinations also fell out of grace. China, which began at 11% in 2019, after ups and downs, fell to 5.3% in 2023, as well as Russia, which started with 4.4% in 2019 and has since steadily lost its attractiveness (not only since the start of the war in Ukraine), falling to 0% in 2023. The main winners in this situation are the US and EFTA countries.

The distancing from China and Russia could be a result of de-risking strategies, which is a company's geopolitical strategy to reduce dependence on a single country, making it less vulnerable to sudden political or economic changes. In 2023[16], 13.6% of German metals companies surveyed confirmed that they already use de-risking strategies, surpassing the economy-wide average of 12%. Over the next three years, a total of 21.8% of metals companies expect to implement de-risking strategies[17]. Regarding their strategies, only a few participants provided answers. Nevertheless, the most frequently mentioned approach is companies learning from the supply-chain issues of the last five years and aiming to source their inputs from Europe. While less specific, some participants also expressed a desire to diversify both their suppliers and customers. Only one participant explicitly mentioned wanting to avoid their current Chinese suppliers and search for alternatives in Europe, and only one participant specified that the sales of key technology should be regulated.

What does this mean for insolvencies?

From the results of our surveys, it appears that the payment behaviour of companies delivering to the German metals sector is relatively good. The positive payment behaviour is clearly reflected in the insolvency data within the sector. While in the overall German economy, insolvencies are returning slowly to pre-pandemic levels – with total insolvencies in the first eight months of the year up by 24% year-over-year - this is not the case in the metals sector **(Chart 9)**. From January to August 2023[18], the number of insolvencies amounted to 169, which represents a decline of 1.2% compared with the same period of the previous year. The vast majority of these insolvencies come from the manufacturing of fabricated metal products, which account for 93% of insolvencies in the metals industry. They increased by 0.6% year-over-year, while insolvencies in metal production and processing declined by 20% over the same period. Crucially, insolvencies are noticeably below 2019 levels in all sub-sectors of the metals sector. A possible reason is that, during the pandemic, companies in the metals sector received less state-support than those in other sectors, as it was linked to the state of the business outlook at the end of 2019. If the outlook was already bleak before the pandemic hit, the government did not want to keep these companies artificially alive. Given that this was the case in the metals industry, insolvencies in this sector rose more than in the rest of the German economy in 2020. Conversely, for 2023, this implies that the non-viable companies in the metals industry have already exited the market, resulting in fewer insolvencies occurring in the current year, whereas overall insolvency levels are rising from the low rates observed during the pandemic.

Chart 9 - Number of corporate insolvencies in the german metals sector, aggregated by month



Sources: Destatis, Coface

13 - Depending on the current situation and discussions in the German economy, we adapt the answer possibilities for this question in our survey every year. This means that not every answer was provided in every survey over the years.
14 - In this question, every participant could name up to three answers. Therefore, the shares for one country can be relatively high.
15 - Actually, the electricity price for non-households in the second half of 2022 was exactly on the EU average. Romania, Italy or Lithuania have a noticeably higher electricity price, according to Eurostat (https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Electricity_price_statistics#Electricity_prices_for_non-household_consumers). But due to the high share of industrial production in the German economy, it is discussed prominently in the German news.
16 - We included this question into our survey in 2023 for the first time.
17 - This can be voluntarily or because of de-risking measures by the authorities.
18 - At the point of writing, this was the last data-point as German insolvency numbers are released with a time-lag of around three months.

COFACE SA
1, place Coste et Bellonte
92270 Bois-Colombes
France

www.coface.com

FOR TRADE

November 2023 - Layout: Cécile Bélonie - Photo © iStock