

Short economic and financial analyses

Is Germany Deindustrialising?

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Table of contents

Introduction	4
1 German manufacturing value added	6
2 Employment and productivity	7
3 Investment in machinery and equipment	9
4 Electricity and natural gas prices	10
5 Production indices across manufacturing industries	11
6 Survey indicators	13
7 References	17

Introduction¹

Germany is Slovenia's main foreign trade partner. However, its importance in this regard is declining. According to balance of payments figures, the share of merchandise exports to Germany in Slovenia's total merchandise exports dropped to 17.4% in 2024, down by 3.3 percentage points compared to the peak in 2012, although it continues to remain significantly above the shares of other major partners. The share of intermediate goods exports is even slightly higher: in 2024, these accounted for 18.1% of total exports of such products. These are mostly products made by Slovenian manufacturing companies and used by German partners in their production processes. As a result, the performance of the German economy significantly affects the activity of Slovenian industry.

Conditions in Germany's manufacturing sector have already been deteriorating for some time now. The sector's total value added peaked at the end of 2017 and has been gradually declining ever since. In the last quarter of 2024, it was 5.7% below that peak, which means that, in terms of value-added growth, seven years have been lost. An additional sign of the declining importance of German manufacturing is its value added expressed as a proportion of GDP, which stood at just 17.5% at the end of 2024, or 3.1 percentage points below the peak in early 2016. With the onset of the energy crisis, employment also began to fall in Germany, but long-standing problems with real labour productivity persist. In the last quarter of 2024, productivity stood at just over EUR 23,000 per employee, which is 3.1% below the post-pandemic peak and 2.5% below the previous peak in late 2017. One obvious reason for these prolonged problems is the modest volume of investment in machinery and equipment. In the last quarter of 2024, this was 13.5% below the peak from the second quarter of 2019, and its share of GDP was just 6.0% – the lowest between 2008 and 2024. Low investment and weak productivity are a problem across the euro area, including in Slovenia.

The energy crisis, ongoing since 2022, has severely affected European industry, especially in Germany. Electricity and natural gas prices are significantly higher than before the crisis: in Germany, energy prices for medium-sized non-household consumers in 2024 were 138.9% higher for electricity and 77.7% higher for gas compared to the average between 2013 and 2021. Across the EU, electricity prices rose by an average of 86.8% over the same period, and gas prices by 80.2%. After the onset of the energy crisis, Germany decided to shut down all its nuclear power plants in 2023. It was also because of this that in March 2025 Germany's annual energy production lagged 20.5% behind the post-pandemic peak, which is 12.1 percentage points more than the euro area average. However, the crisis in German industry has broader foundations and is not limited to the energy sector alone. In March 2025, twenty-two out of twenty-four manufacturing industries in Germany experienced a year-on-year decline in one-year activity compared to their post-pandemic peaks, with most of the declines greater than the euro area average. Under the same comparison, total manufacturing output in Germany fell by 6.6%, whereas the average decline across the euro area was 4.6%.

Unfavourable conditions in German manufacturing are also reflected in survey indicators. In May 2025, German manufacturing companies were more pessimistic than the euro area average and reported lower production expectations. They had more substantial problems with insufficient demand, and their capacity utilisation, at 76.9%, was

¹ The analysis is based on data available as of 29 May 2025. I would like to thank Robert Zorko and Ana Selan for their review and comments, and Rober Hlep for his assistance with conceptualisation and visual design.

6.2 percentage points below the 2008–2024 average and also below the already low euro area average. With the onset of the energy crisis, survey-based competitiveness also plummeted; in Germany, it declined particularly sharply in markets outside the EU. In the first half of 2025, this indicator reached its lowest level to date. Such an environment discourages private investment, and the decline in domestic production is further increasing reliance on imports.

Based on the analysis presented above, the answer to the question of whether deindustrialisation is underway in Germany is affirmative. One of the reasons is a prolonged period of weak investment, which has likely led to insufficient changes in the technological structure of production to support further growth in labour productivity and total value added in manufacturing. Some other reasons are linked to German – and more broadly, European – energy and foreign policy. Given the limited domestic sources of energy and raw materials, this is currently reflected in weaker cost competitiveness. Access to external markets has also declined. The planned increase in defence spending could partially address some of these issues but given the specific nature of the defence industry – also according to existing analyses² – it cannot be expected that such spending would fundamentally alter the long-standing structural challenges in German manufacturing.

² See also: [Nemški ekonomski modreci v posojilih za obrambo ne vidijo potenciala za rast](#) (Derčar 2025); [The economic impact of higher defence spending](#) (European Commission 2025); and [Revealed: Nato rearmament could increase emissions by 200m tonnes a year](#) (Gayle 2025).

German manufacturing value added had already been gradually declining before the pandemic crisis, and its fall as a percentage of GDP has been more pronounced than the euro area average.

The German manufacturing sector, which serves as the export engine of the euro area economy, has oscillated between stagnation and a decline in its value added for some time now. The upswing after the 2009 global economic crisis had already weakened prior to the 2020 pandemic crisis. The recovery that followed was then interrupted by a crisis in international relations and the resulting uncertainty in global trade, as well as by the energy crisis with a rapid increase in electricity and natural gas prices, which have remained at high levels to this day.

Between 2008 and 2024, German manufacturing value added reached its peak at the end of 2017, standing 21.6% higher than the 2008 average. That conditions in Germany were favourable for manufacturing during this period is shown by a comparison with the average growth in the euro area, which lagged behind by 9.5 percentage points, as was also the case, to a somewhat lesser extent, with regard to growth in Slovenia. One of the reasons for this was the debt crisis in the euro area, from which Germany remained unaffected. From that point until the pandemic crisis, German manufacturing value added gradually declined, stagnated in the euro area, and increased relatively rapidly in Slovenia (Figure 1, left).

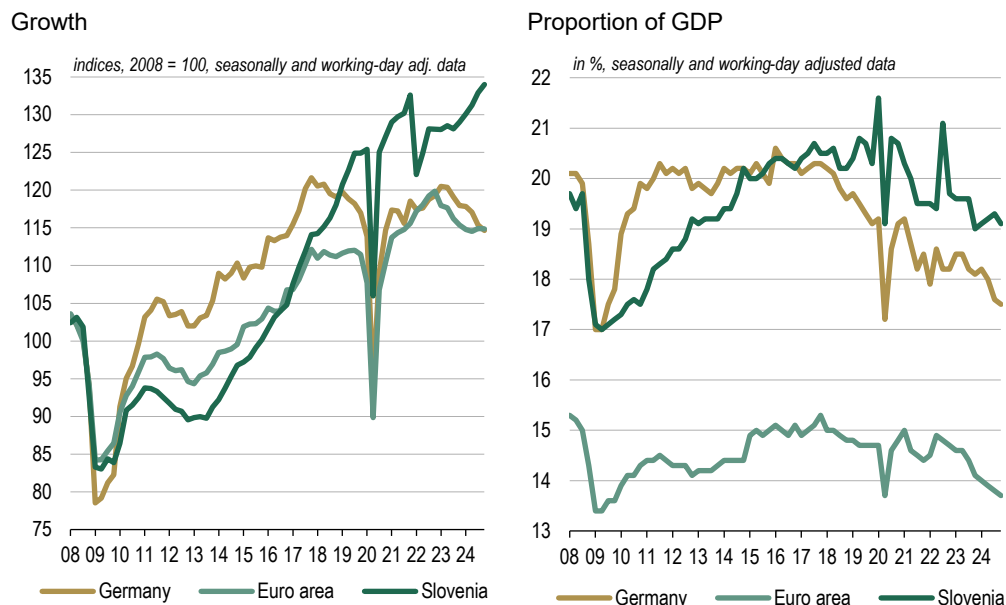
The post-pandemic recovery of the German manufacturing sector came to a halt at the beginning of 2023. In the last quarter of 2024, the value added was 4.8% lower than at its post-pandemic peak, which represented a 0.6 percentage point greater decline than the euro area average. In Slovenia, growth continued despite quarterly fluctuations. Compared to the peak in the last quarter of 2017, Germany's real manufacturing value added at the end of 2024 was 5.7% lower, meaning that, in terms of value-added growth, seven years had effectively been lost (Figure 1, left).³

The declining importance of manufacturing in the German economy is also clearly reflected in the sector's value added expressed as a portion of GDP. Between 2008 and 2024, this proportion was highest at the beginning of 2016, when it reached 20.6%. By the end of 2024, it had dropped by 3.1 percentage points, to 17.5% of GDP. This decline is notably greater than the average in the euro area, where the drop — from a considerably lower peak — was 1.6 percentage points. In Slovenia, quarterly fluctuations in the proportion can be significant due to the small size of the economy. Therefore, a comparison with the average during the period of stable economic conditions from 2015 to 2019 is more appropriate. The average during that time was 20.4%, whereas in the fourth quarter of 2024 the proportion stood at 19.1% (Figure 1, right).⁴

³ In the first quarter of 2025, the value added in German manufacturing was 1.2% lower year-on-year, based on seasonally and working-day adjusted data.

⁴ The share of German manufacturing in the total manufacturing value added of the euro area has also declined. Based on seasonally and working-day adjusted nominal data, it peaked at nearly 41% in 2014, and in the fourth quarter of 2024 it stood at 36.1%.

Figure 1: **Manufacturing value added**



Sources: Eurostat, SURS, author's own calculations

Note: The left chart shows real value-added growth indices, and the right chart shows added value as a nominal proportion of GDP.

2

Employment and productivity

Employment in German manufacturing has recently been adjusting more strongly to weak activity, but long-standing difficulties in improving productivity persist.

Between 2008 and 2024, employment trends in German manufacturing differed significantly from the average trends in both the euro area as a whole and Slovenia individually. During the 2009 global financial crisis, employment in Germany remained at a considerably higher level, began to grow more rapidly afterward due to the absence of debt-related problems, and even reached a new peak before the pandemic crisis, unlike in the euro area or Slovenia. Compared to the 2008 average, employment in Germany was 4.5% higher in the first half of 2019. The decline began in the second half of that year — that is, a year and a half after manufacturing value added had started to decrease. In the euro area average, employment continued to increase until the last quarter of 2019, even though value added had been mostly stagnating since early 2018. In Slovenia, employment during this period grew fairly closely in line with value added (Figure 2, left).

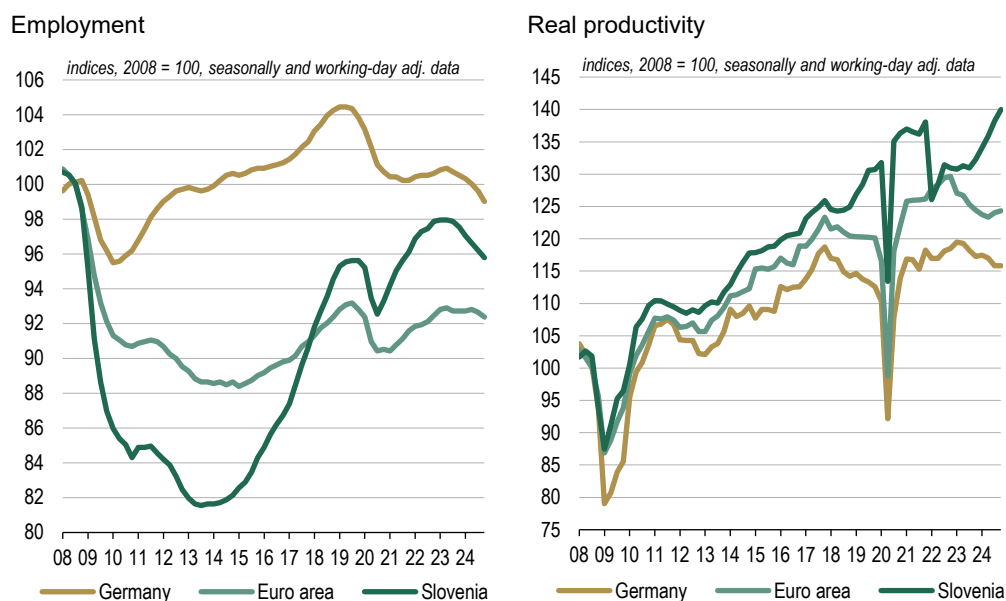
After the pandemic crisis, employment in German manufacturing did not recover significantly, in contrast to the euro area average and, even more noticeably, compared to Slovenia. It began to decline visibly again with the onset of the energy crisis. In the last quarter of 2024, it was 5.2% below its peak from the first half of 2019, roughly at the level recorded in early 2014.⁵ The adjustment in employment lagged behind the

⁵ In the first quarter of 2025, employment in the German manufacturing sector was 2.0% lower year-on-year, based on seasonally and working-day adjusted data.

drop in manufacturing value added by 0.5 percentage points, and the process may also indicate a reduction in the precautionary labour hoarding that took place before the pandemic.⁶ On average, employment in the euro area has not yet responded significantly to the decline in value added, whereas in Slovenia it is currently reacting with a delay to the tightening of conditions in early 2022, even though value added started to grow again later (Figure 2, left).

Labour productivity, measured as real value added per employee, is higher in the German manufacturing sector than in both the euro area overall and Slovenia, but it has been gradually declining for a while.⁷ In the last quarter of 2024, it was 3.1% below its post-pandemic peak and 2.5% below its previous peak at the end of 2017 (based on a fixed-base index with 2008 as the reference year), pointing to a seven-year loss in productivity progress. Similar difficulties are also evident from the euro area average. In Slovenia, following a decline at the start of the energy crisis and the crisis in international relations, productivity began to recover, reaching a new peak at the end of 2024. Compared to the 2008 average, productivity in German manufacturing was 15.8% higher by the end of 2024. In the euro area it was up 24.3% on average and in Slovenia it was 40.0% higher — the stronger growth in Slovenia being a sign of convergence toward more developed economies (Figure 2, right).

Figure 2: **Employment and labour productivity in the manufacturing sector**



Sources: Eurostat, SURS, author's own calculations

⁶ See also: [Labour productivity – slower growth in Germany and Europe](#) (Kuntze & Mai 2020).

⁷ According to the national account figures published by Eurostat, in the last quarter of 2024 real value added per employee in the manufacturing sector, based on seasonally and working-day adjusted data, amounted to approximately EUR 23,000 in Germany, EUR 21,500 on average in the euro area, and EUR 12,000 in Slovenia.

Germany is grappling with a prolonged crisis related to investment in machinery and equipment, with declines significantly greater than the euro area average.

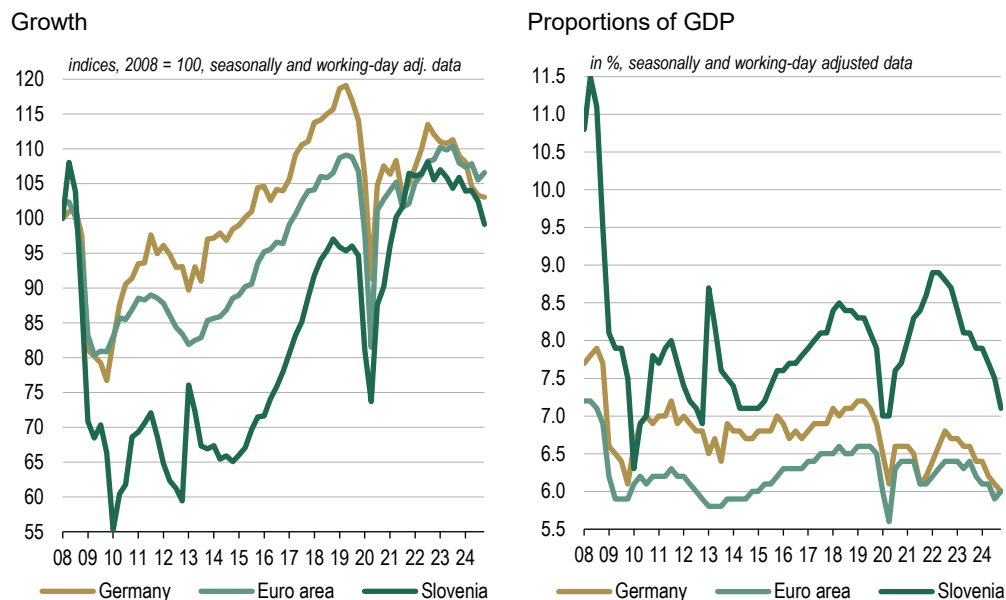
In contrast to the euro area average, investment in machinery and equipment in Germany peaked before the pandemic crisis or, specifically, in the second quarter of 2019. It reached a new, 4.7% lower peak during the post-COVID recovery. With the onset of a new crisis in 2022, another downturn followed, resulting in investment in machinery and equipment lagging 9.2% behind the post-pandemic peak by the fourth quarter of 2024.⁸ A similarly weak trend can be observed in Slovenia, where investment was 8.2% below its peak over the same period. In contrast, the challenges are currently less pronounced in the euro area average, where the decline stood at 3.5%. It can be concluded that Germany is also facing more prolonged challenges when it comes to investment in machinery and equipment. By the end of 2024, this investment had been declining on average for five and a half years and compared to its peak in the second quarter of 2019, it was down by as much as 13.5% (Figure 3, left).

Germany's weak investment in machinery and equipment is also clearly reflected in its proportion of GDP. By the end of 2024, this proportion had dropped to 6.0% of GDP, the lowest level between 2008 and 2024, and 0.8 percentage points below the average during this period.⁹ Throughout the period observed, Germany had consistently allocated a higher proportion of GDP to investment in machinery and equipment compared to the euro area average. However, by the last quarter of 2024, this gap had closed. In the euro area, the deviation from the 2008–2024 average was smaller, amounting to just 0.2 percentage points in the last quarter of 2024. In Slovenia, which allocates a larger share of its GDP to investment in machinery and equipment simply to catch up with economic development, the lag behind the average of the period observed amounted to 0.9 percentage points, with the investment share standing at 7.1% of GDP (Figure 3, right).

⁸ Based on seasonally and working-day adjusted data, investment in machinery and equipment in Germany was 3.5% lower year-on-year in the first quarter of 2025.

⁹ By comparison, based on seasonally and working-day adjusted data, investment in intellectual property, expressed as a proportion of GDP, has remained stable in Germany in recent years, standing at around 3.8%. The proportion is higher than in Slovenia, but lower than the euro area average, which is strongly influenced by the operations of American multinational companies in Ireland.

Figure 3: Investment in machinery and equipment



Sources: Eurostat, SURS, author's own calculations

Note: The left chart shows indices of real growth in investment in machinery and equipment, and the right chart shows its nominal proportions of GDP.

4

Electricity and natural gas prices

Prices of electricity and natural gas remain significantly higher than before the onset of the energy crisis.

Before the onset of the energy crisis in 2022, electricity prices were relatively stable and low compared to the 2024 levels.¹⁰ Between 2013 and 2021, Germany even had a small competitive advantage compared to the EU average, with prices lower on average by 0.8%. Slovenia had a considerably greater advantage, with prices 11.4% lower. In 2022, with the outbreak of the war in Ukraine and the tightening of EU economic sanctions against Russia, price stability ended. Electricity prices in Germany in 2023 were 130.2% higher than the 2013–2021 average. This was comparable to the average increase in the EU, whereas in Slovenia the surge was as high as 178.3%. In 2024, prices fell in the EU and Slovenia but not in Germany.¹¹ In all three cases, prices remained significantly above the 2013–2021 average: 138.9% higher in Germany, 86.8% higher on average in the EU, and 113.0% higher in Slovenia (see Figure 4, left).

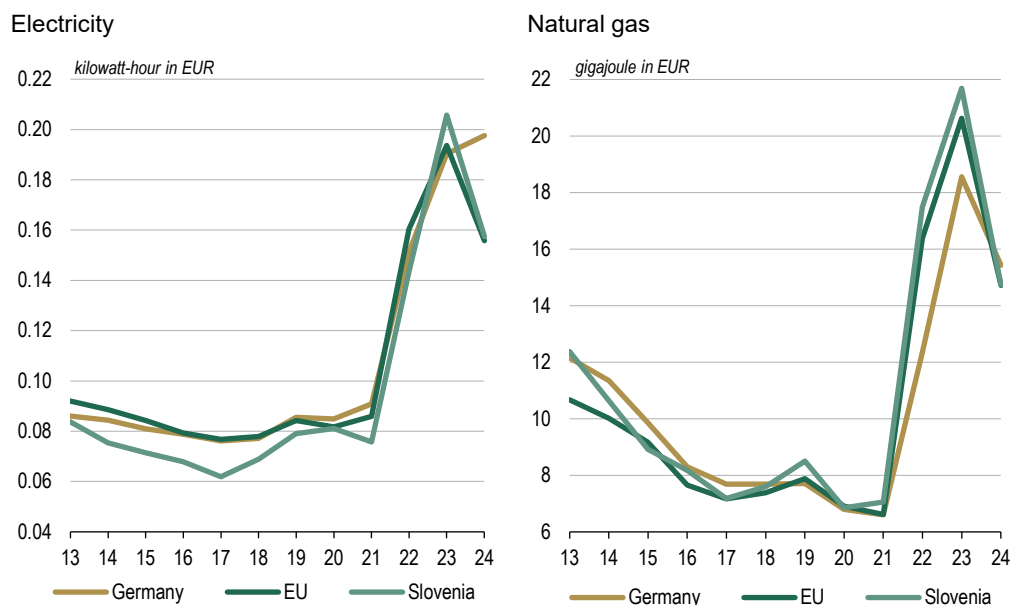
¹⁰The analysis was based on Eurostat's annual data for medium-sized non-household consumers (annual consumption between 500 and 2,000 MWh) available for the 2013–2024 period. The prices include taxes and other fees.

¹¹ In 2023, Germany shut down all its nuclear power plants and, for the first time since 2006, it became a net importer of electricity. Source: [Vse več Nemcev obžaluje zaustavitev jedrskih elektrarn](#) (Božin 2024).

Germany's seasonally and working-day adjusted output index in electricity, gas, and steam supply, measured by 12-month moving averages, lagged 20.5% behind its post-pandemic peak as of March 2025, whereas the euro area average showed a decline of 8.4% under the same comparison.

Before 2022, company costs related to natural gas decreased considerably. The prices in 2021, compared to 2013, were 45.7% lower in Germany, 38.0% lower on average in the EU, and 42.9% lower in Slovenia.¹² With the onset of the energy crisis, there was a sharp upward reversal. Despite later decreases, prices in 2024 remained significantly higher compared to the 2013–2021 average: 77.7% higher in Germany, 80.2% higher in the EU and 71.5% higher in Slovenia. In contrast to electricity prices, the average price of natural gas in Germany before the energy crisis was 6.4% higher than the EU average,¹³ and it remained higher in 2024. Before the energy crisis, gas prices were also higher than the EU average in Slovenia, but in 2024 Slovenia's prices aligned with this average (see Figure 4, right).¹⁴

Figure 4: **Electricity and natural gas prices for non-household consumers**



Source: Eurostat

5 Production indices across manufacturing industries

Weak output is characteristic for the vast majority of German manufacturing industries, with conditions worse than the euro area average.

In March 2025, the production volume index for German manufacturing, measured by 12-month moving averages, was 6.6% below its post-pandemic peak. This decline was

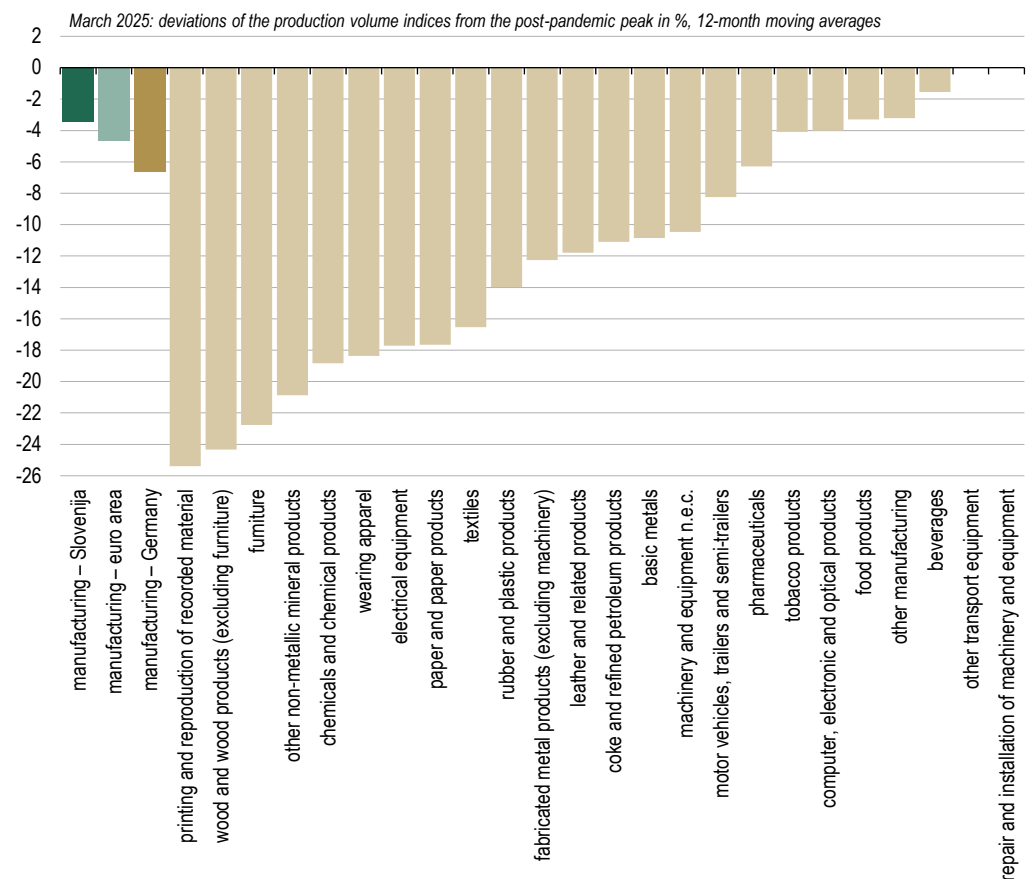
¹² The analysis was based on Eurostat's annual data for medium-sized non-household consumers (annual consumption between 10,000 and 100,000 GJ) available for the 2013–2024 period. The prices include taxes and other fees.

¹³ EU's reliance on liquefied natural gas is increasing, and its prices are significantly higher than those of pipeline gas. Sources: [Liquefied natural gas](#) (European Commission n.d.); [LNG vs Pipeline Natural Gas: Growing Price Divide in a Dynamic Market – Ceylon Today](#) (De Silva 2024).

¹⁴ Eurostat does not publish data on the average prices of electricity and natural gas for the euro area.

2.0 percentage points greater than that of the euro area average. In the same comparison, Slovenia recorded a drop of 3.5%. A detailed breakdown reveals that the downturn is broad-based: twenty-two out of twenty-four industries experienced a decline in activity, with only two continuing to increase their annual output. In fifteen industries, the decline in production exceeded 10%. These include wood processing, the manufacture of other non-metallic mineral products, chemicals and chemical products, paper and paper products, and basic metals – all energy-intensive industries. Activity continued to grow only in the production of other transport equipment and in the repair and installation of machinery and equipment (see Figure 8).

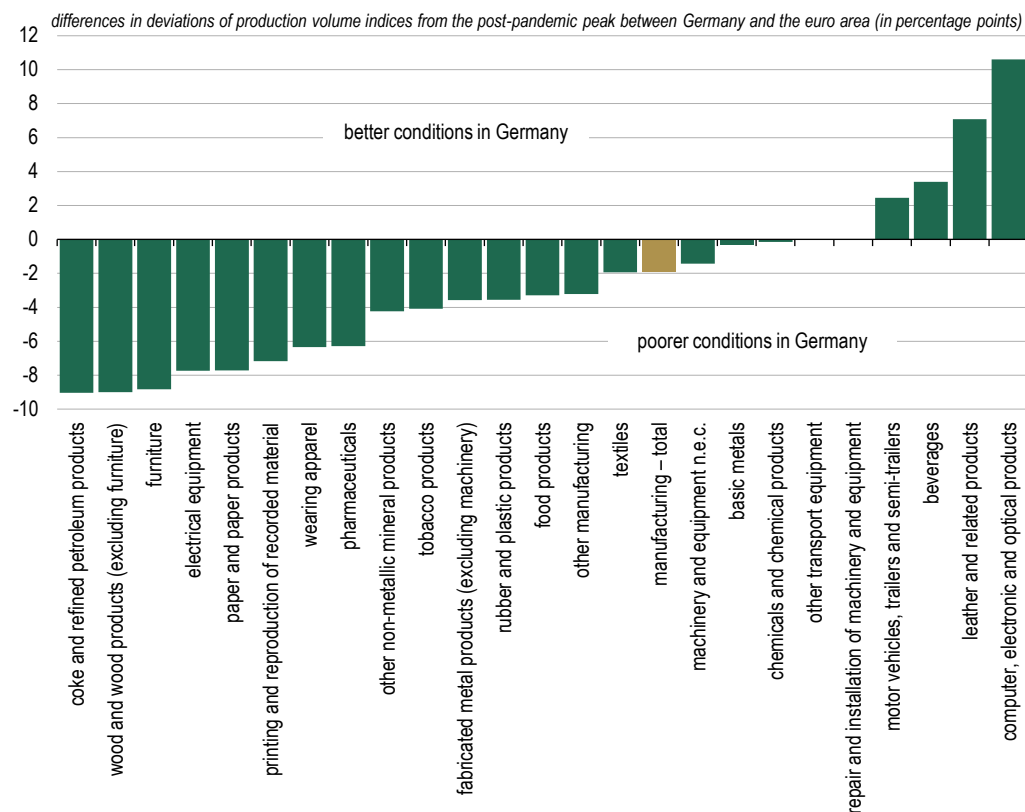
Figure 5: Conditions in German manufacturing industries



Sources: Eurostat, author's own calculations
Note: Based on seasonally and working-day adjusted data.

In most German manufacturing industries, the year-on-year decline in production from the post-pandemic peak was greater than the euro area average, providing further evidence of Germany's comparatively weaker industrial conditions. As of March 2025, a negative difference of more than one percentage point compared to the euro area was observed in seventeen industries, and in eight of them it exceeded 5.0 percentage points. Only four industries fared better than the euro area average. The manufacture of computer, electronic and optical products stood out with a positive difference of over 10 percentage points (see Figure 9). However, even in this industry, Germany's annual output in March 2025 remained 4.0% below its post-pandemic peak.

Figure 6: **Differences in activity by manufacturing industries between Germany and the euro area average**



Sources: Eurostat, author's own calculations
Note: Based on seasonally and working-day adjusted data.

6 Survey indicators

Confidence in German manufacturing is significantly lower than the euro area average, and companies also report more pessimistic production expectations.

According to data from the European Commission, pessimism among German manufacturing companies is evident and greater than in the euro area overall and Slovenia individually. Even though confidence improved after its most recent low in December 2024, the indicator in May 2025 was still 14.8 percentage points below the 2008–2024 average, standing at -17.7 percentage points. Under the same comparison, the average value of this indicator in the euro area was lower by 6.0 percentage points and in Slovenia the value was 6.4 percentage points lower (Figure 5, left). In all three cases, the averages over the period observed are negative, which can be linked to a succession of crises, beginning with the 2009 global financial crisis, followed by the euro area sovereign debt crisis, the COVID-19 pandemic in 2020, and the 2022 energy crisis, with high electricity and gas prices persisting to this day.

German manufacturing companies are also more pessimistic in their expectations for future production. Even though their assessments were considerably less negative in May 2025 than at the beginning of the year, unlike in the euro area overall and Slovenia

individually, a larger share of German companies still expected a decrease in production rather than an increase. In Germany, the expected production indicator in May of this year lagged behind the 2008–2024 average by 7.5 percentage points, in Slovenia by 10.6 percentage points, and in the euro area overall by 5.3 percentage points (Figure 5, right).

Figure 7: **Confidence and production expectations in manufacturing**



Source: Eurostat. Latest data: May 2025.
Note: Based on seasonally adjusted data.

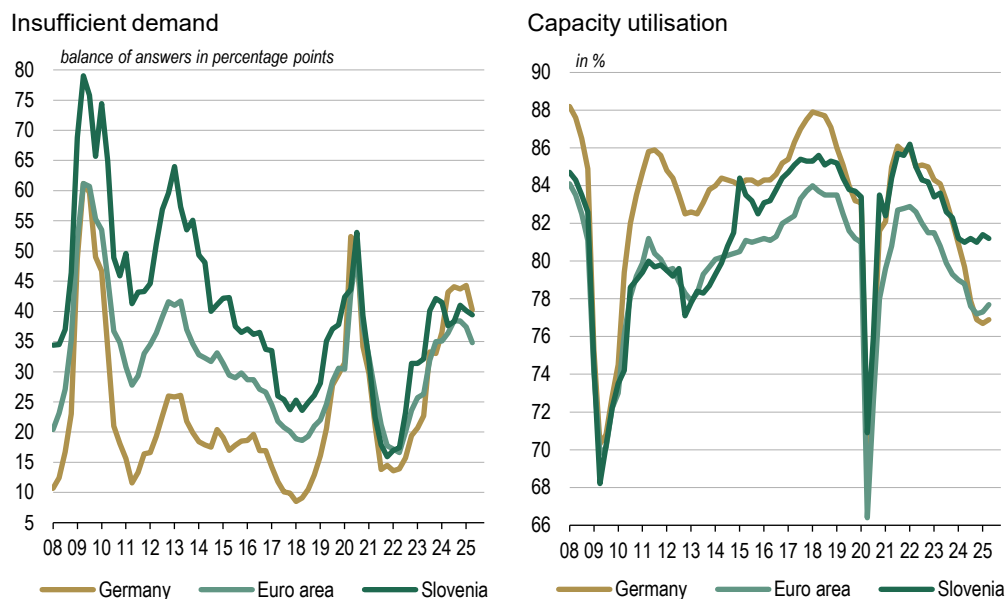
Due to insufficient demand, Germany's manufacturing sector is dealing with low capacity utilisation, which has fallen below the euro area average.

Since 2024, German manufacturing companies have been reporting greater difficulties with insufficient demand than the euro area average, which contrasts with the historical trends in this survey indicator. In the second quarter of 2025, 40.2% of German and 39.4% of Slovenian manufacturing companies reported facing insufficient demand, compared to 34.8% in the euro area overall. The differences are even more striking when compared to the 2008–2024 average: in Germany, the share of companies reporting insufficient demand in the second quarter of 2025 was 16.3 percentage points higher than the long-term average, in the euro area it was only 2.9 percentage points higher, and in Slovenia, the share was actually 1.5 percentage points below this average (Figure 6, left).

Germany's manufacturing has lost its advantage in production efficiency compared to the euro area average. Between 2008 and 2024, the average capacity utilisation rate in Germany, despite downturns during crisis periods, stood at 83.1%, which was 3.3 percentage points above the euro area average and 1.8 percentage points higher than in Slovenia. The current unfavourable position of German manufacturing is evident in the sharp decline in this indicator following the onset of the energy crisis, a drop that has been significantly greater than in the euro area on average. In the second quarter of 2025, capacity utilisation in Germany's manufacturing was only 76.9%, which is 0.8 percentage points below the euro area average and a full 4.3 percentage points lower

than in Slovenia. The low value of this indicator signals poor prospects for investment growth because companies are grappling with excess production capacity.

Figure 8: **Demand and capacity utilisation in manufacturing**



Source: Eurostat. Latest data: the second quarter of 2025.

Note: Based on seasonally adjusted data.

The competitiveness of the manufacturing sector has deteriorated significantly since the start of the energy crisis, more markedly in Germany than in the euro area on average.

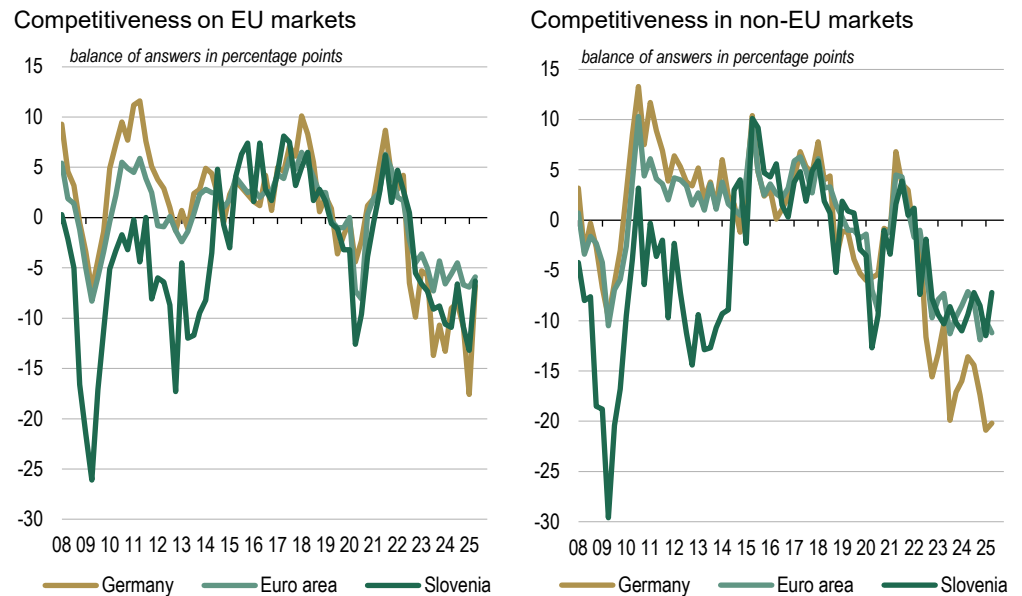
Based on the European Commission's survey indicators, German manufacturing held a competitive advantage before the onset of the energy crisis.¹⁵ Between 2008 and 2021, the average value of its competitiveness indicator in EU markets stood at 3.0 percentage points, which was 1.6 percentage points higher than the euro area average and 5.9 percentage points more than in Slovenia. Over the same period, German manufacturing's competitiveness indicator in non-EU markets stood at 2.1 percentage points, which was 0.7 percentage points higher than the euro area average and 6.0 percentage points higher than in Slovenia.

With the onset of the energy crisis following the outbreak of the war in Ukraine and the tightening of EU economic sanctions against Russia, manufacturing competitiveness began to deteriorate rapidly – more markedly in Germany than in the euro area on average (Figure 7). Compared to the 2008–2021 average, in the second quarter of 2025 the competitiveness indicator in EU markets was 9.8 percentage points lower in Germany, 7.3 percentage points lower in the euro area on average, and 3.4 percentage points lower in Slovenia. The decline in German competitiveness was even more pronounced in non-EU markets, with the indicator reaching its lowest value to date in the first half of 2025. Compared to the 2008–2021 average, in the second quarter of 2025 the competitiveness indicator in non-EU markets was as much as 22.3 percentage

¹⁵ The competitiveness survey indicator is calculated as the difference between the share of companies reporting a better competitive position and the share reporting a worse one.

points lower in Germany, 12.6 percentage points lower in the euro area on average, and 3.3 percentage points lower in Slovenia.¹⁶

Figure 9: **Surveyed competitiveness**



Source: Eurostat. Latest data: the second quarter of 2025.
 Note: Based on seasonally adjusted data.

¹⁶ The volume of German merchandise exports has been largely stagnating for an extended period. In the last quarter of 2024, it even declined significantly, falling to the level recorded in early 2017. Based on seasonally and working-day adjusted data, its share expressed as a proportion of GDP amounted to 30.9%, which is 2.4 percentage points below the 2008–2024 average. Under the same comparison, the proportion in the euro area was on average higher by 0.6 percentage points, standing at 32.6%, and in Slovenia by 0.2 percentage points, standing at 61.6%. Germany's significance as the export engine of the euro area has been declining since 2015. In the last quarter of 2024, its share in the total goods exports of the euro area stood at 26.8%, which is 3.9 percentage points less than the 2008–2014 average.

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