Roland Berger Construction Trend Radar Germany

Situation has worsened, further decline expected
Situation in the German-speaking region has worsened
Further decline in the construction industry expected

In our last Construction Trend Radar, published in October 2022, we reported that the construction industry in the DACH region (Germany, Austria, Switzerland) was cooling down after an extended period of growth. We examined the disruptions driving that uncertainty – the Covid-19 pandemic, Russia’s invasion of Ukraine and the resulting energy crisis, particularly in Central Europe – and looked at their impact on the local construction industry.

Since the last study, things have taken a noticeable turn for the worse. The geopolitical crisis, combined with soaring inflation and interest rates, have thrown the industry into a tailspin, eradicating any signs of imminent recovery. Last year, we suggested three possible scenarios: an optimistic case, a realistic case and a pessimistic case. This year, we only suggest a realistic case, which is already pretty bad in itself, and a pessimistic case, which is considerably worse than previously forecast.

In this study we narrow our focus to Germany, the largest construction market in the DACH region, and include data up to the third quarter of 2023. We investigate the ongoing downturn in the construction industry, industry fundamentals, key economic factors and their impact on industry segments and the construction value chain. Our message for construction companies remains the same as last year, but is now even more urgent: Act now to protect profitability and secure a favorable position for when the market finally gets back to normal.
Construction industry grew till 2021
But the geopolitical crisis then threw it into a tailspin

In our 2022 Construction Trend Radar we reported that the German construction industry was cooling down after nearly 17 years of growth since 2005. The global financial crisis, and more recently the Covid-19 pandemic, had a negative impact on construction. But the industry managed to recover quickly from both these setbacks. The current geopolitical crisis creates challenges of a different order. It has triggered soaring inflation and rising interest rates, both of which have a direct effect on the construction industry. Our new Realistic case scenario is far from inspiring, predicting that real construction production output in Germany will decrease to USD 291 billion by 2025. Our Pessimistic case is even more depressing, with the figure dropping to USD 232 billion by 2025.

Real GDP\(^1\) and real construction output in Germany, 1980–2025
[Real GDP in USD bn]

<table>
<thead>
<tr>
<th>Year</th>
<th>Real GDP</th>
<th>Real Constr. Output</th>
<th>Forecast Real GDP</th>
<th>Forecast Constr. Output - Realistic Case</th>
<th>Forecast Constr. Output - Pessimistic Case</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>2,046</td>
<td>297</td>
<td></td>
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<tr>
<td>1985</td>
<td>2,760</td>
<td>248</td>
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<tr>
<td>1990</td>
<td>3,457</td>
<td>355</td>
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<tr>
<td>1995</td>
<td>3,260</td>
<td>251</td>
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<tr>
<td>2000</td>
<td>3,944</td>
<td>316</td>
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<td></td>
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<tr>
<td>2005</td>
<td>4,056</td>
<td>301</td>
<td></td>
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<tr>
<td>2010</td>
<td>3,799</td>
<td>291</td>
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<td></td>
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<tr>
<td>2015</td>
<td>238</td>
<td>232</td>
<td></td>
<td></td>
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<tr>
<td>2020</td>
<td>2025</td>
<td>291</td>
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</tbody>
</table>

1 Real data based on 2018 prices and real developments for the years 2018-2022, derived from Euroconstruct 06/23 data for a) total German construction output and b) German GDP projections 2025 (based on RB realistic and pessimistic cases)

Source: IHS Markt, Euroconstruct, ifo Business Climate Index, IMF, Roland Berger
One of the key fundamentals for the construction industry is the order backlog. While the overall volume of orders across all three construction sectors – residential, non-residential and civil engineering – declined throughout 2023, rising prices are still more than compensating for this downturn in value terms. A cyclical rebound in the civil engineering segment became apparent in the first half of 2023. However, the residential and non-residential segments are not likely to follow suit until the period as of 2024.

Fundamentals of the German construction industry – Order backlog, 2017- H1 2023

Order backlog by volume falling, unlikely to rebound until 2024
Price increases have so far more than offset volume decline

So far, a ‘real’ decrease of order backlog is over-compensated by price increases

Source: DESTATIS, Roland Berger
The drastic fall in the number of permits issued at the end of 2022 and the start of 2023 is an early indicator of a downturn in the construction industry. More evidence for this downturn can be found in the slowdown in the number of orders across the two periods. Responding after a time lag, sales have been declining in real terms throughout 2023.

Fundamentals of the German construction industry – Permits, order intake and sales, 2018-H1 2023

- Slower growth in permits and order intake driving a downturn in 2023
- Sales now declining in real terms

Source: DESTATIS, Roland Berger
The number of permits issued fell at a CAGR of -0.2 percent between January 2018 and December 2022. Over the same period, the value of permits – a function of construction prices, building and the segment mix – grew by 6.2 percent a year. In the course of 2023 to date, the quantity of permits issued has continued to drop. While the value of permits has also declined, the gap between quantity and value is in Q2 2023 wider than at any time in recent years during the same time period.

**Building Permit Index (volume & value) in Germany, 2018 – H1 2023**

- **Gap between quantity and value of permits continues to grow**
- **Fall in number of permits almost doubled in first half of 2023**

![Graph showing Building Permit Index (volume & value) in Germany, 2018 – H1 2023](chart.png)

- **Nominal Permit Value Growth CAGR**
  - Pre-Covid: +6.5%
  - Covid: +5.8%
  - Geopolitical: +3.5%

- **H1'23 vs H1'22**
  - Value: -17.3%
  - Quantity: -24.5%

**Notes:**
1. Index 2018 of actual building permits for new construction and renovation of residential & non-residential buildings in quantity/permits and permit value
2. CAGR between Jan 2018 and Dec 2022
3. CAGR 22/21 in ×

Source: DESTATIS, Roland Berger
Order backlogs are a key indicator of the health of the construction sector. While the civil engineering and infrastructure segment still boasts well-filled order books and anticipates further growth going forward, the picture for the other two key segments is rather bleaker. Non-residential construction is seeing a marked slowdown in order intakes, whose current rate will not be able to sustain the existing backlog. Worst hit is residential construction, which is already eating into its order backlog. Compared to H1 2022, new orders here are down by nearly one fifth year on year, despite a slight rebound at the start of 2023.

Fundamentals of the German construction industry – By segment, 2018–H1 2023 (monthly development)

Residential [EUR bn]
- Sharpest downturn in order intake compared to other segments, thus already feeding on backlog to sustain sales
- Current status (H1’23) Development/outlook H2’23

Non-residential [EUR bn]
- Less impacted than residential but still experiencing a noticeable slowdown in order intake
- Current status (H1’23) Development/outlook H2’23

Civil & infrastructure [EUR bn]
- Most stable growth outlook of the three segments, with continuous growth expected in the future
- Current status (H1’23) Development/outlook H2’23

1 Data only covers construction companies with >20 employees

Source: DESTATIS, Roland Berger
The Covid-19 pandemic and the geopolitical crisis caused by Russia’s war in Ukraine have led to a high level of uncertainty. Of the few bright spots in the picture, one is the decrease in disruptions to the supply chain: The composite freight rate index has fallen consistently since the beginning of 2022. Another positive is that natural gas prices are now back down almost to their level before the outbreak of war in Ukraine. However, soaring inflation continues to make new building projects unaffordable, limiting investment appetite. At the same time, repeated jumps in interest rates and increased construction costs result in more project reviews, delays and even project cancellations. On both counts, a return to more normal levels is not expected before 2025 at the earliest.

Fundamentals of the German construction industry

**Key fundamentals of construction industry paint a worrying picture – Supply chain and gas effects have eased, but inflation and high interest rates are here to stay**

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**Fundamentals of the German construction industry**

**Inflation**
- Covid led to significant material price increases
- Followed by massive increases in energy costs & consumables due to geopolitical crises
- Triggering strong inflation of +3.1% in 2021, up to +7.9% in 2022 and c. +4.7% in 2023
- Normalization can only be expected until 2025/26

**Interest rates**
- Prices and massive governmental spending have led central banks to raise interest rates
- Germany’s long-term rate has increased by +3.1 pp from -0.6% in ’19 to +2.6% – level of c. 3-4% to be reached by ’24/’25
- ECB reacted with a next prime rate increase to 4.5% in Sept ’23 (10th since July 2022)
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**Supply chain**
- Covid lockdowns disrupted global supply chains, creating containers/goods shortages, leading to spikes in raw material price & logistic costs
- Air freight rates EU-US up +40%, ocean freight spot rates Asia–EU up +16% compared to pre-Covid levels
- The geopolitical conflict has led to short supply of energy and natural gas — Costs are soaring for households a. industry affecting production costs
- In July ’23, electricity price fell below 80 EUR/mWh for the first time in 2 y.
- Electricity down by -75% YOY, natural gas down by -87% YOY

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- Electricity down by -75% YOY, natural gas down by -87% YOY

Source: Statista, DESTATIS, OECD, Xeneta, ifo, Roland Berger
Construction market declining further in 2023
No rebound until 2025, recovery from 2026

The construction market in Germany is likely to contract by 6.2 percent in real terms in 2023 and is expected to see again a drop of 6.2 percent between this year and next. According to Roland Berger forecasts, the market will not begin to rebound until 2025, and a more robust recovery is not likely until 2026.

Market development by overarching markets and segments [EUR bn, 2022 prices], 2017–2026

Source: Euroconstruct, Construction Trend Radar, Roland Berger
Hopes of swift recovery in 2023 now revised
Two to three-year recession expected from this year

In light of recent developments, experts have revised their mid-2022 predictions of a swift recovery and are now expecting to see a two to three-year recession starting in 2023. This recession will be driven by inflation and interest rates—factors that can only change in the medium term, thus eliminating hopes for a recovery this year. While all segments of the construction industry are affected by this recession, residential new construction is suffering the most. A decline in residential new build will generate minor benefits for renovation work, but will not fully compensate for lost volume in the sector as a whole.

**Construction Scorecard – Germany**

| Source: BMI, BKI, Destatis, IFO, Euroconstruct, European Commission, Roland Berger |
Both our new Realistic and Pessimistic scenarios predict very slow growth in real construction production output in Germany in the period to 2025. The residential sector will be the most strongly affected, with demand falling due to the prevailing uncertainty. The rising building and financing costs will dampen demand and make developers more cost-conscious than ever. Furthermore, the initiation of new and implementation of existing project in the non-residential sector will be negatively affected, resulting in delayed projects or even cancelation thereof. The outlook for civil engineering is less bleak, and government measures could even boost demand. Overall, however, new construction projects are increasingly likely to be put on hold or delayed. By contrast, repair and renovation projects will continue, potentially benefiting from the fact that they are a more cost-efficient alternative to building new assets.

Impact on German construction industry segments

<table>
<thead>
<tr>
<th>Assessment of segment impact</th>
<th>Scenario I: Realistic case</th>
<th>Scenario II: Pessimistic case</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction segment</td>
<td>△ Market volume ppts. YoY</td>
<td>△ Market volume ppts. YoY</td>
</tr>
<tr>
<td>Residential</td>
<td>2022 2023 2024 2025</td>
<td>2022 2023 2024 2025</td>
</tr>
<tr>
<td>Non-residential</td>
<td>➔ ➔ ➔ ➔ ➔ ➔ ➔ ➔ ➔</td>
<td>➔ ➔ ➔ ➔ ➔ ➔ ➔ ➔ ➔</td>
</tr>
<tr>
<td>Civil engineering</td>
<td>➔ ➔ ➔ ➔ ➔ ➔ ➔ ➔ ➔</td>
<td>➔ ➔ ➔ ➔ ➔ ➔ ➔ ➔ ➔</td>
</tr>
<tr>
<td>Job type</td>
<td>2022 2023 2024 2025</td>
<td>2022 2023 2024 2025</td>
</tr>
<tr>
<td>New build</td>
<td>➔ ➔ ➔ ➔ ➔ ➔ ➔ ➔ ➔</td>
<td>➔ ➔ ➔ ➔ ➔ ➔ ➔ ➔ ➔</td>
</tr>
<tr>
<td>Repair and renovation</td>
<td>➔ ➔ ➔ ➔ ➔ ➔ ➔ ➔ ➔</td>
<td>➔ ➔ ➔ ➔ ➔ ➔ ➔ ➔ ➔</td>
</tr>
</tbody>
</table>

1 Based on the RB Construction Radar, we have derived these 2 scenarios for Germany. Their impact on the industry’s order intake has been modeled accordingly for all construction segments.

Source: Roland Berger
Swift and resolute action needed to weather the current crisis  
But companies and investors must also prepare themselves for coming rebound

Realizing what awaits them, many players in the construction industry have already taken steps to prepare for the coming recession. Yet even while cutting costs, shoring up liquidity and moving to contain immediate geopolitical risks, it is important not to lose sight of the longer term. Companies that resize and become more flexible now can also take advantage of new opportunities even during the crisis. For investors too, this is the time to realign portfolios and back companies’ attempts to improve performance. Then, when the storm abates, they can be among the first to seize fresh strategic and operational opportunities.

<table>
<thead>
<tr>
<th>Companies along the construction value chain</th>
<th>Investors</th>
<th>For investors (PE, company)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Must-do to remain capable of acting during/after crisis</strong></td>
<td>Analyze quality of risk to order backlog</td>
<td>Initiate an (outside-in) performance improvement program</td>
</tr>
<tr>
<td></td>
<td>Analyze effects of the German government’s 14-point plan</td>
<td>Evaluate portfolio performance and construction exposure for financial planning adjustments</td>
</tr>
<tr>
<td></td>
<td>Establish cash office</td>
<td>Shift portfolio exposure to crisis-resilient segments/companies</td>
</tr>
<tr>
<td></td>
<td>Identify business &amp; operational risks</td>
<td>Use an anticyclical investment strategy to buy high value targets below fair value</td>
</tr>
<tr>
<td></td>
<td>Plan scenarios for most critical economic factors</td>
<td>Strategic Operational Goal and status <em>Already done? ✔</em></td>
</tr>
<tr>
<td><strong>2. Meet challenges &amp; exploit chances during the crisis</strong></td>
<td>Renegotiate prices and accelerate variabilization</td>
<td>Re-evaluate the investment strategy</td>
</tr>
<tr>
<td></td>
<td>Prioritize/inform customers/orders for operations</td>
<td>Use the crisis as an opportunity for lucrative investments</td>
</tr>
<tr>
<td></td>
<td>Reorganize and rightsize workforce</td>
<td></td>
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<tr>
<td></td>
<td>Reallocate production capacity</td>
<td></td>
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<tr>
<td></td>
<td>Take advantage of temp. commercial competitors’ weaknesses</td>
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</tr>
<tr>
<td></td>
<td>Analyze and improve supply chain efficiency</td>
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</tr>
<tr>
<td></td>
<td>Flexibilize logistics &amp; accelerate global sourcing</td>
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<tr>
<td></td>
<td>Review risks/restructure real estate portfolio</td>
<td></td>
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<tr>
<td></td>
<td>Launch operational excellence program</td>
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<tr>
<td></td>
<td>Launch sales efficiency program (tactical)</td>
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<tr>
<td></td>
<td>Prepare short/medium-term commercial scenarios</td>
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<tr>
<td></td>
<td>Review organization, retain talent + prepare for selective hiring</td>
<td></td>
</tr>
<tr>
<td><strong>3. Be ready to accelerate after the storm</strong></td>
<td>Further diversify supplier base</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Improve asset management</td>
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<tr>
<td></td>
<td>Increase competitive advantage, push for green/sustainable transformation</td>
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<tr>
<td></td>
<td>Identify fields and prepare to invest in R&amp;D</td>
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<td></td>
<td>Adopt modern building practices (time and money saving) i.e. pre-fabs</td>
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<tr>
<td></td>
<td>Integrate BIM more broadly</td>
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<tr>
<td></td>
<td>Strategically (re)allocate operational capacity globally</td>
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<tr>
<td></td>
<td>Evaluate portfolio performance and construction exposure for financial planning adjustments</td>
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<td>Shift portfolio exposure to crisis-resilient segments/companies</td>
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<tr>
<td></td>
<td>Use an anticyclical investment strategy to buy high value targets below fair value</td>
<td></td>
</tr>
</tbody>
</table>

- Ensure sufficient liquidity
- Identify risks, prepare to react quickly to changing situations driven by geopolitical events
- Reduce costs and forward prices
- Resize & implement more flexible organization – retain competencies & capacity
- Proactively turn crisis into opportunity where possible, launching operational performance, de-costing and sales excellence programs
- Become the first player to benefit from the rebound, seizing operational and strategic market opportunities
- Move into the field of energy efficiency for renovation and new construction
- Re-evaluate the investment strategy
- Use the crisis as an opportunity for lucrative investments

Source: Roland Berger
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