

What if Germany becomes the sick man of Europe again?

Roland Berger Institute

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Roland
Berger

No other European economy is growing more slowly than Germany between 2020 and 2024 – Is the country about to become the sick man of Europe again?

1. Symptoms

Germany was dubbed the "sick man of Europe" by *The Economist* some 25 years ago due to a mix of reunification challenges, a stagnant job market, and slowing export demand, which led to high unemployment.

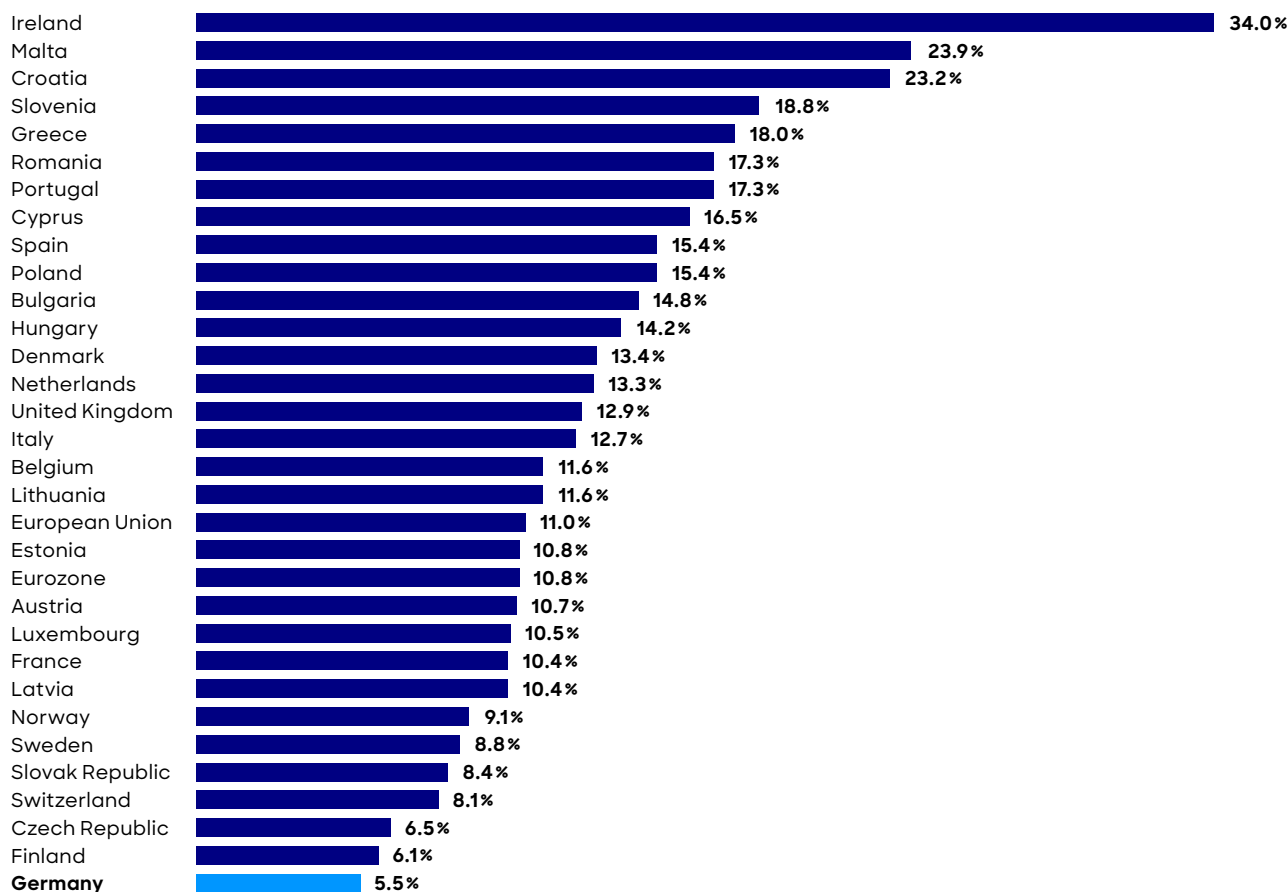
Early 2000s reforms brought about a remarkable transformation, turning Germany into a global export leader, fueled by a quick recovery after the global financial crisis and euro depreciation.

Yet, as the world continues to evolve, Germany now faces renewed challenges, risking falling behind once more. Among European countries, the German economy exhibits the weakest recovery from the pandemic and, along with Sweden, is the only major economy not experiencing growth in 2023. Even in 2024, no significant catch-up can be expected.

The signs are unfavorable: Germany's period of weakness does not appear to be a one-time occurrence stemming from last year's energy crisis.

In this analysis, we'll first discuss the symptoms that Germany is suffering and then delve into the cyclical and structural problems it faces. We'll also explore Germany's enduring strengths as a business location and, in a scenario analysis, assess the potential impact on the EU-27 if Germany were to remain stuck in a prolonged phase without growth.

Cumulative growth in real GDP between 2020 and 2024e [%]



Source: Oxford Economics

The industrial sector, the vital core of Germany's economy, has been under considerable strain for several years now

1. Symptoms

Germany, traditionally known for its strong manufacturing sector, has been experiencing a decline in industrial production for several years now, indicating that the current weakness is more structural than cyclical.

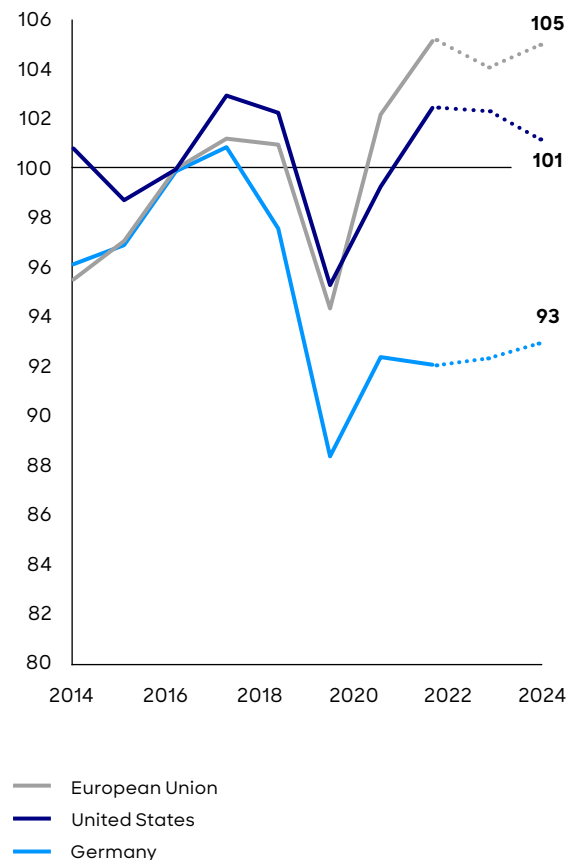
While industrial production in other EU countries as well as the US has shown at least some growth since 2017, it has significantly declined in Germany.

Since 2017, the share of industry in German value added has been decreasing, from 22.6 percent to just 20.8 percent in 2021.

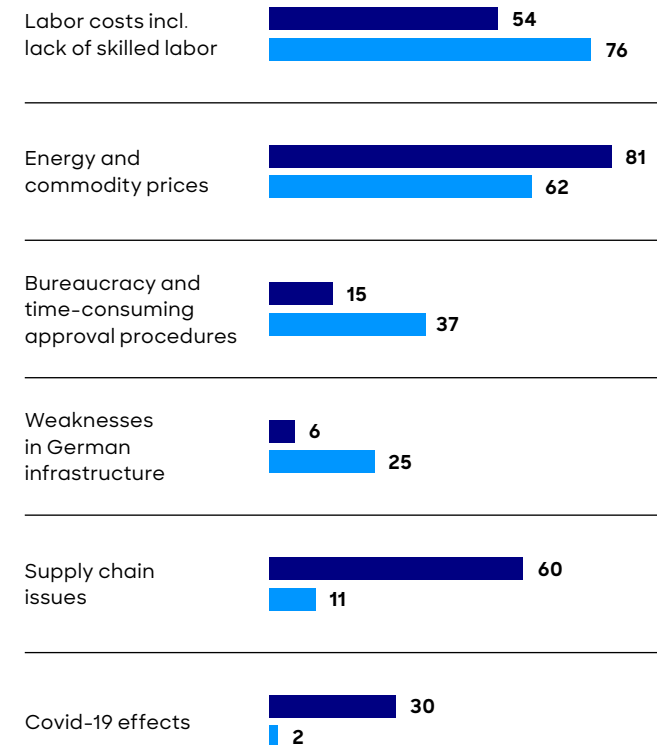
Especially the automotive industry, one of the key industries in Germany, has been producing less and less for the past few years.

Today, industrial companies complain mostly about the lack of skilled labor, high energy prices and excessive bureaucracy.

Development of industrial production by country [index, 2017 = 100]



Challenges faced by German industrial companies [survey data, %]



Ever fewer foreign companies consider Germany to be a good business location, leading to fading investment inflows

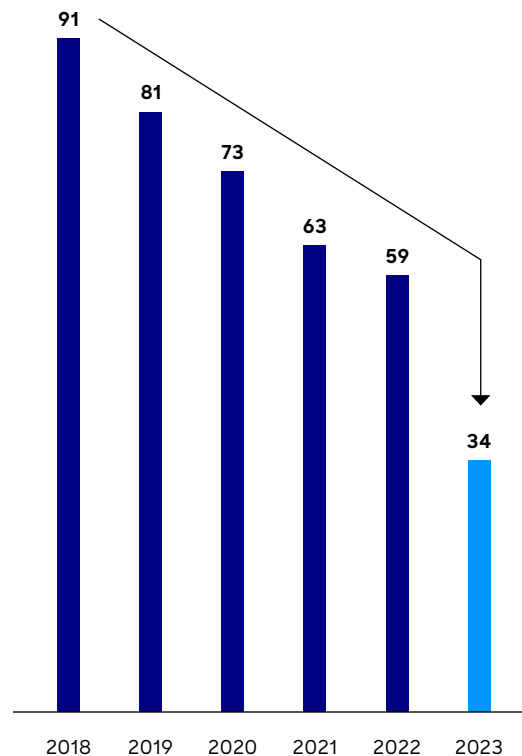
1. Symptoms

According to recent survey data, Germany is becoming an increasingly unattractive destination for foreign investments. Although the survey results for 2022 may be distorted due to the energy crisis, the trend is clear: fewer and fewer US companies operating in Germany are giving the country a positive rating as a business location.

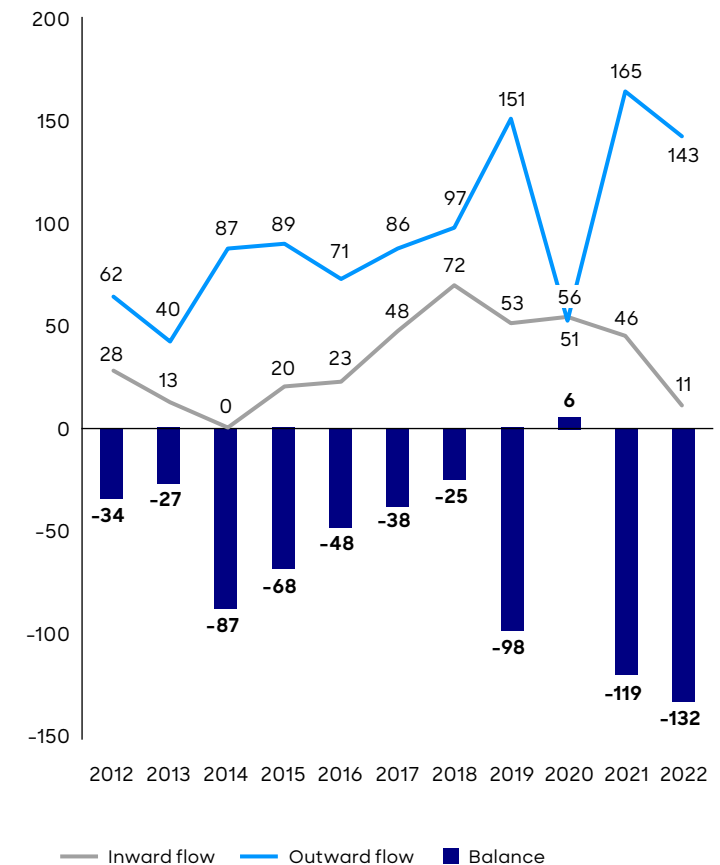
The survey trend is also reflected in actual investment data. For several years now, the investment gap has been steadily widening, with German companies increasingly investing abroad, while foreign capital flows into Germany have been decreasing.

The significant increase in net outflows of investment capital from Germany is a warning sign that the country is losing its attractiveness as a business location.

Share of US companies in Germany that rate Germany as a very good or good business location [%]



Inflows and outflows of direct investment to and from Germany and balance [USD bn]



Cyclical factors dampen the outlook: Though inflation has passed its peak, it still remains high – So do interest rates after an unprecedented rate hike cycle

2. Cyclical factors

To answer the question of whether Germany is once again the sick man of Europe, a distinction must be made between cyclical and structural developments.

Material shortages triggered by the pandemic and massive energy price increases due to the Russian invasion of Ukraine have led to massive inflation among producers and consumers alike.

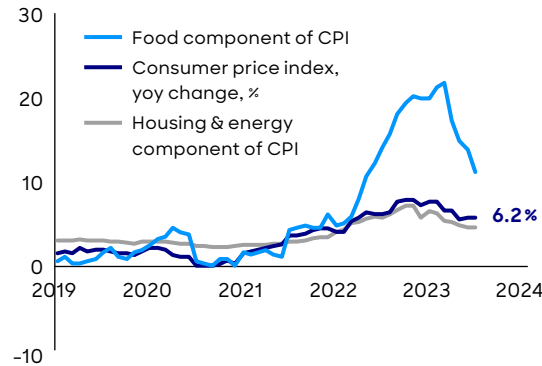
High inflation has led to a decline in the propensity to consume, which is having a negative impact on the economy.

In response, central banks in many parts of the world have raised interest rates – with far-reaching consequences for the economy.

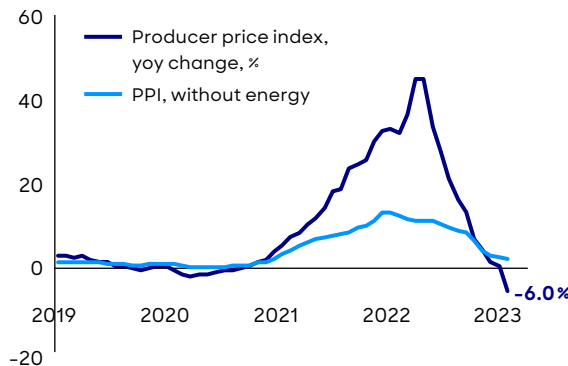
Banks have become more restrictive in their lending, which has put a strain on investment and consumption.

Consumer and producer prices in Germany [yoy change, %, 2015=100]

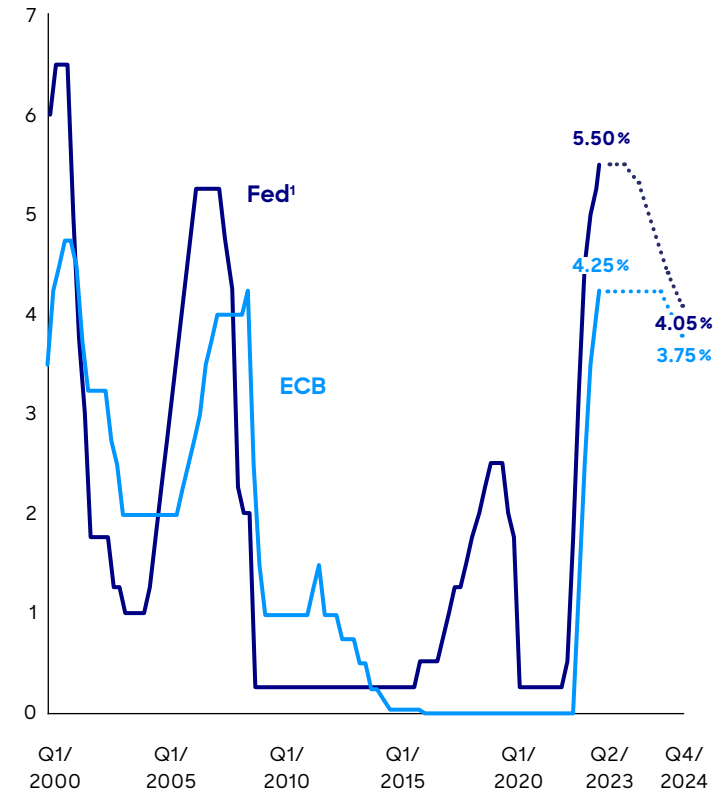
Consumer prices



Producer prices



Policy rates in the US and the euro area [%]



1 Upper bound of the interest band

Source: Destatis, National Central Banks, Consensus Economics

As major trade partners experience a slowdown, Germany's export sector is losing momentum, leaving a strong mark on the German economy

2. Cyclical factors

With an export share of about half of the country's GDP, the German economy is more dependent on global economic developments than others.

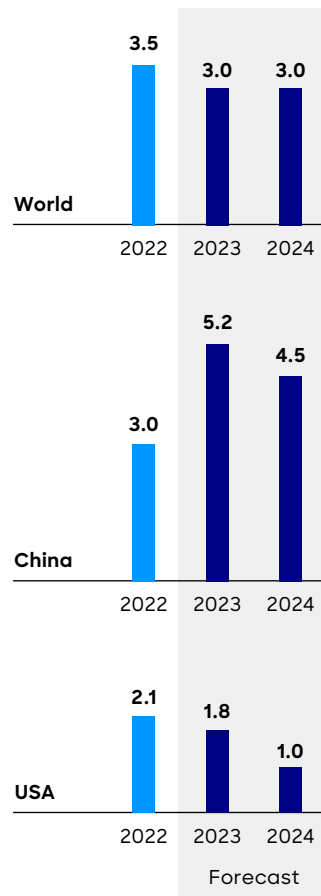
In the past, German GDP has developed roughly in line with global trade. For 2023, it is expected that global trade will grow by only a modest 1.5%.

This is because Germany is not the only economy that is struggling.

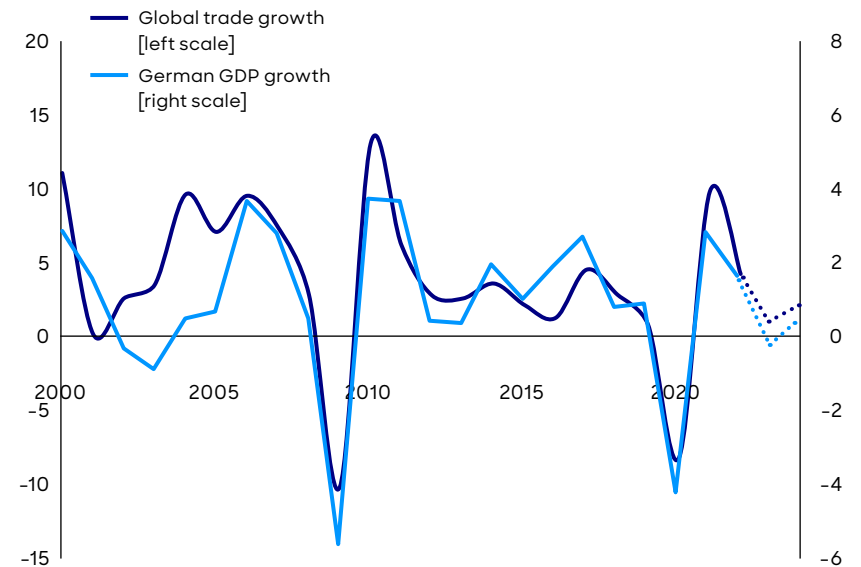
In particular, Germany's important trading partner China is experiencing an economic downturn triggered by low private consumption and sluggish investment.

The United States, as the most crucial export destination, also faces the risk of weak economic growth in the upcoming year.

2023 GDP forecasts over time [%]



Development of global trade and German GDP [%]



Export relevance [% of GDP, 2022]

Germany's export share as a % of GDP



In addition to the sluggish economic momentum, there are also structural problems – Productivity growth has been declining steadily since the 1970s

3. Structural factors

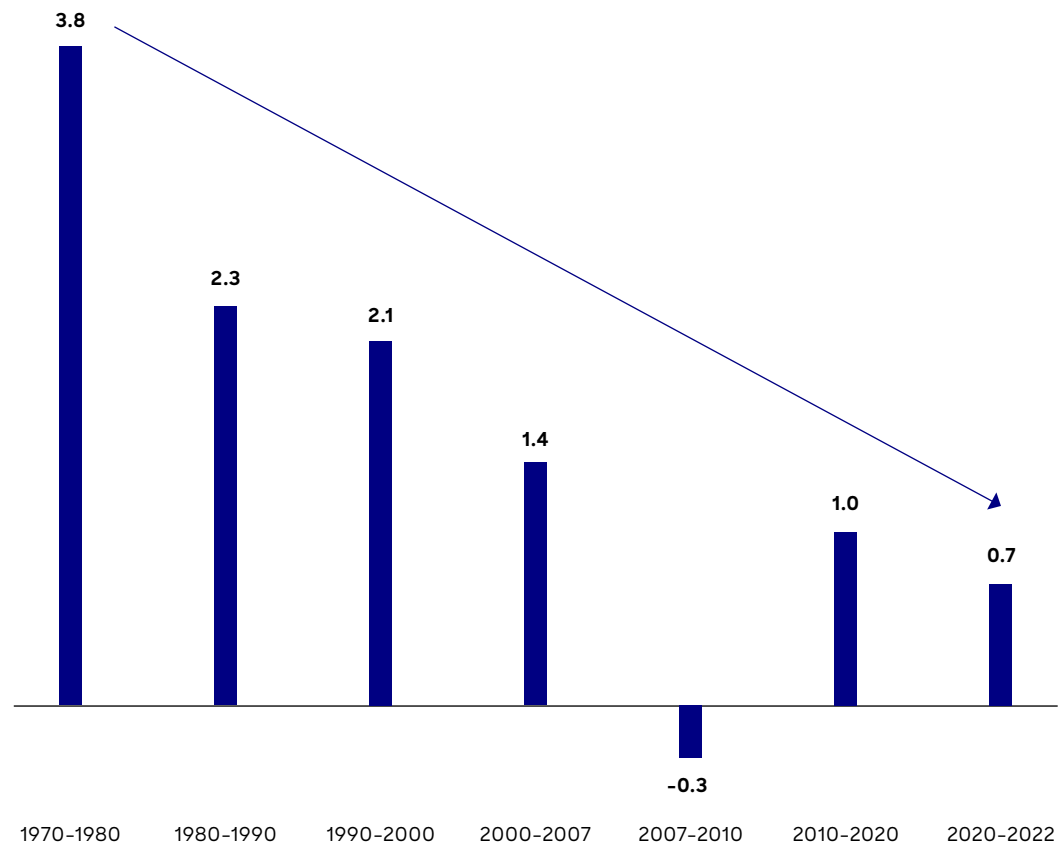
In addition to cyclical factors, Germany faces a multitude of structural challenges.

Productivity growth in Germany – as in other mature economies – has been shrinking for decades. While the country's productivity grew at 3.8% p.a. between 1970 and 1980, the figure fell to just 1.0% p.a. in the decade between 2010 and 2020.

Productivity growth plays a pivotal role in boosting wages and enhancing living standards, ultimately elevating consumers' purchasing power and stimulating demand for goods and services.

Consequently, the deceleration of labor productivity growth raises concerns, especially in an aging economy that relies on productivity improvements to propel economic growth.

Growth in GDP per hour worked
[CAGR, %]



Comparatively short working hours and demographic change exacerbate the skilled labor shortage - Need for 400,000 labor migrants p.a. to close gap

3. Structural factors

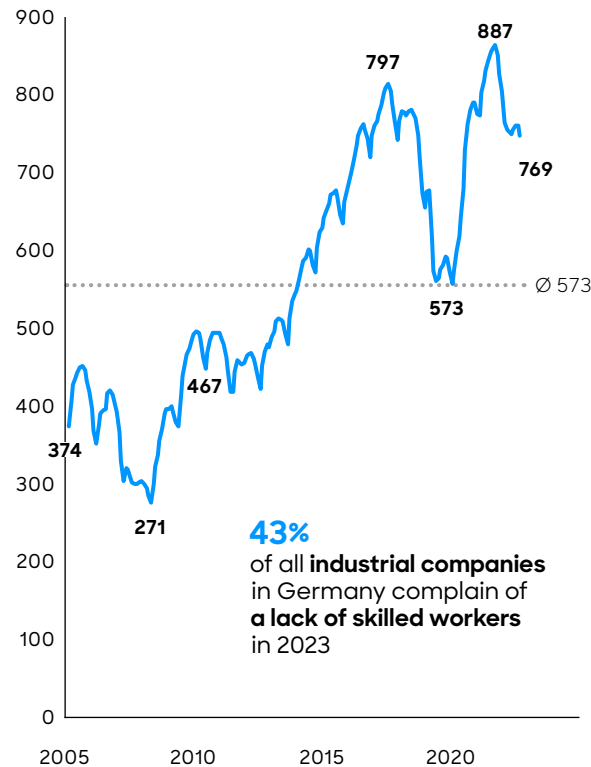
According to recent surveys, the shortage of skilled workers is the biggest problem for German companies.

Approximately 43% of all industrial companies in Germany are suffering from the shortage of skilled personnel, affecting their day-to-day operations.

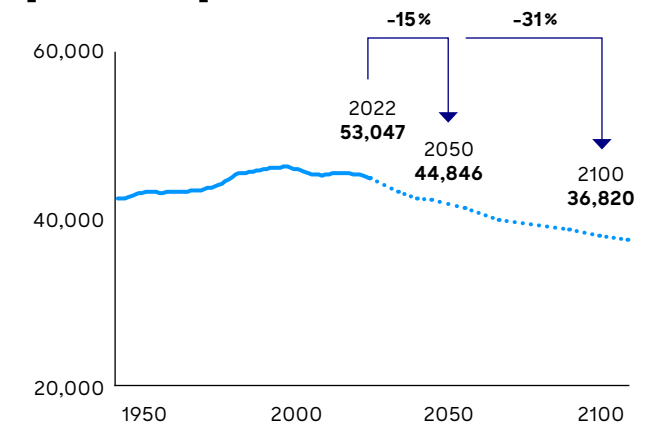
Even today, there are more than 760,000 vacancies. Unfavorable demographics are expected to further worsen that problem, as the total workforce is expected to shrink in the near future.

Additionally, Germany boasts the shortest working hours among all industrialized nations. The average employee in Germany works 1,341 hours per year, compared to 1,571 for the average EU employee and 1,752 hours for the average OECD employee.

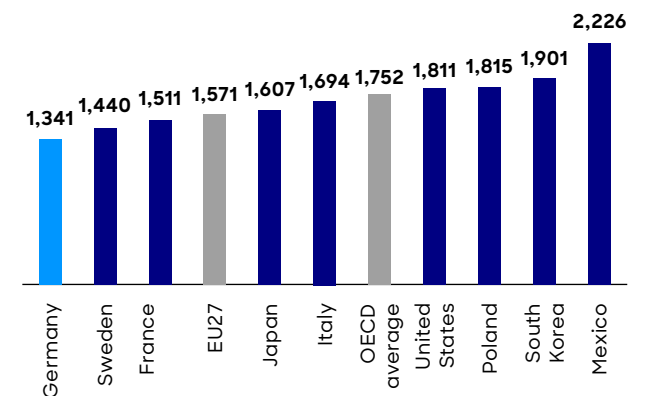
Total number of registered job vacancies in Germany ['000]



Number of people of working age [15-64, '000]



Annual working hours per employee [hours]



The skills of students after primary school have been deteriorating continuously, which is also likely to have a negative impact on the labor market in the future

3. Structural factors

The future workforce is not only smaller due to demographic change, but analyses of the skills of fourth graders give rise to the fear of a widening gap in basic skills.

The proportion of students who, after primary school, lack fundamental competencies in critical areas like reading or mathematics has been on the increase in recent years.

Alarming, nearly one in three fourth graders fail to meet the minimum standard in German spelling, with more than one in five not reaching the minimum standard in mathematics and reading.

This trend could aggravate the existing shortage of skilled labor.

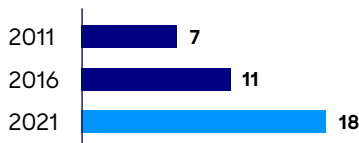
Proportions of students in fourth grade who do not meet minimum standards [%]

School subject German

Reading



Listening

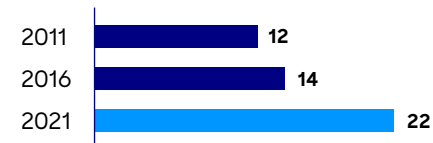


Spelling

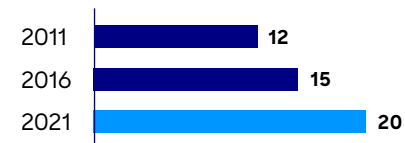


School subject Math

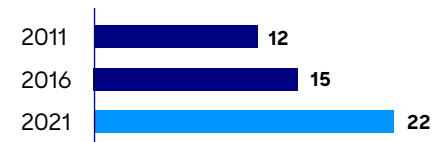
Mathematical competence



Numbers & operations



Data, frequency and probability



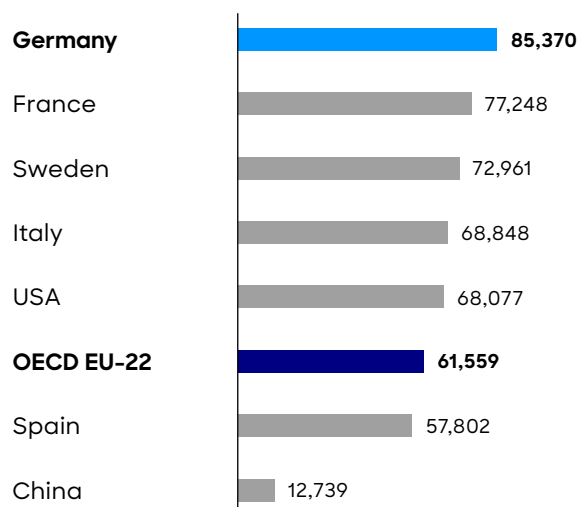
Germany is a high-cost location in many areas - Energy costs were expensive even before the Russian invasion and are likely to remain at elevated levels

3. Structural factors

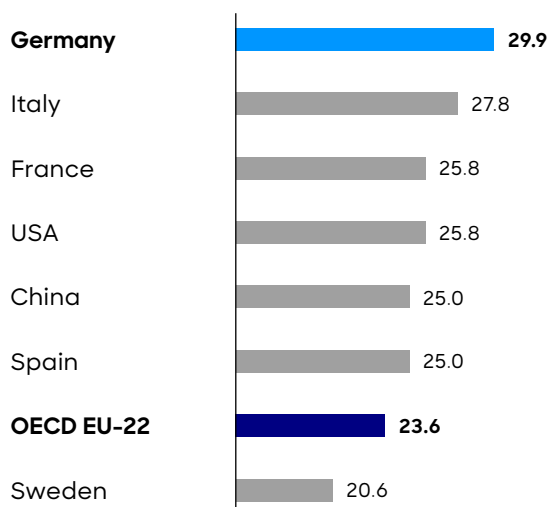
In conjunction with the challenge of skilled labor shortages, German companies are grappling with high costs for businesses in international competition. Factors such as elevated labor costs, substantial energy expenditures, and high corporate tax rates all contribute to this issue, ranking Germany among the most expensive locations for businesses. Energy prices were already comparatively high in Germany before the peak in 2022, and this gap is likely to remain in the coming years.

High-cost location

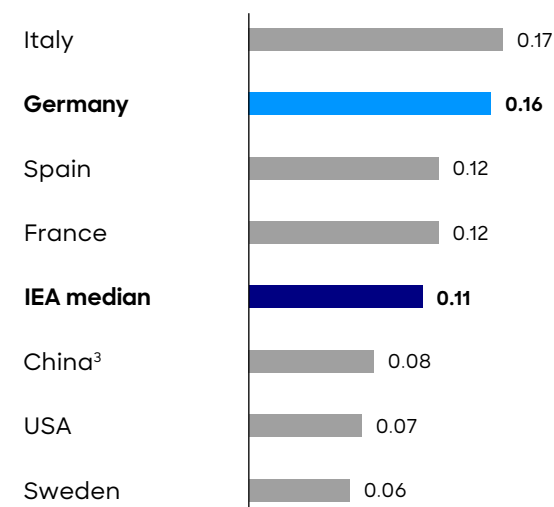
Annual labor costs¹ [USD PPP]



Combined corporate income tax rates [%]



Electricity prices² [EUR per kWh, 2021]



¹ Labor costs for a single employee with no children who earns 100% of the national average wage

² Industrial electricity prices incl. taxes; 2021 or latest available

³ China data based on December 2022

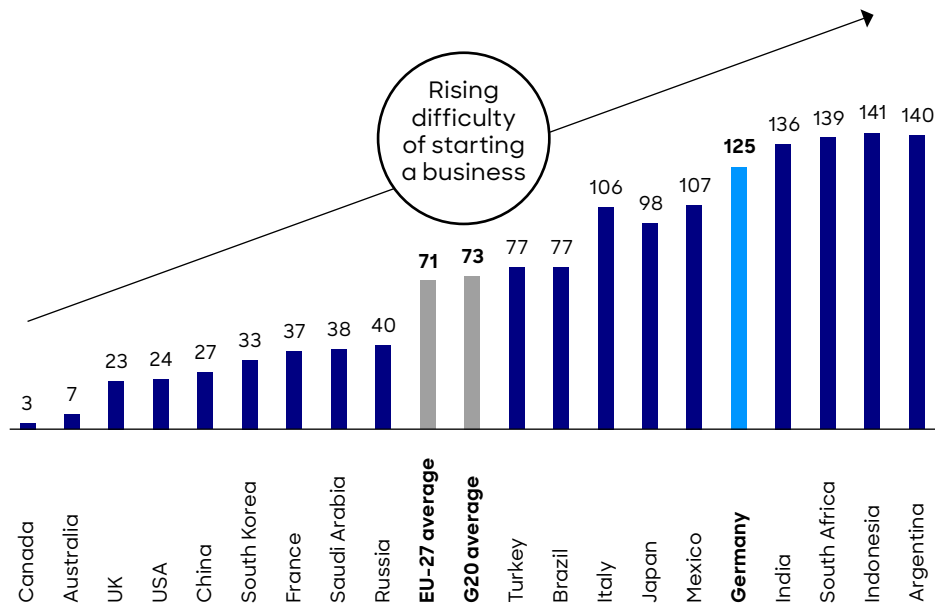
Starting and running a business in Germany is bureaucratically more challenging than in other economies, especially when it comes to the length of permitting procedures

3. Structural factors

Germany's bureaucratic burden is among the highest of any industrialized economy. Both a vast number of laws and regulations and personnel shortages as well as insufficient digitalization in the public sector are the main reasons. The extraordinary length and complexity of approval procedures not only aggravate the cost pressure of companies, they also slow down investments and crucial economic transformation. Due to this tough regulatory environment, starting a business in Germany is far more challenging than in other major economies. Consequently, the number of new firms registered in Germany has been slowing since 2013.

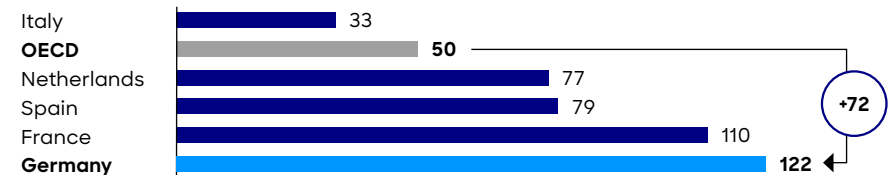
Bureaucratic burden

Ease of Doing Business sub-index: Starting a business¹⁾ [rank]

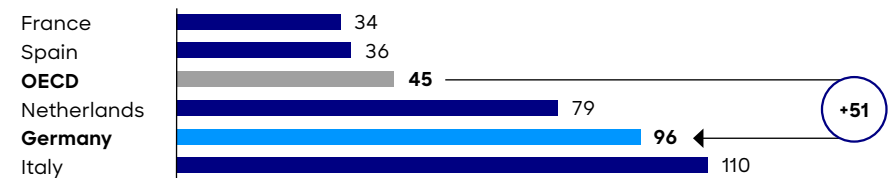


Time needed to get a permit [number of days]

Operating license



Construction permit



¹ Ranking among 191 countries. The indicator "Starting a business" measures the number of procedures, time, cost and paid-in minimum capital requirement for a small to mid-sized company to formally operate in each economy's largest business city

Germany's transport infrastructure displays major deficits, already impairing business processes

3. Structural factors

In 2022, roughly four out of five companies in Germany reported disruptions to business processes due to infrastructure deficiencies, notably inadequate road networks.

While government infrastructure investment has risen, it is challenged by escalating construction costs and substantial project delays, primarily due to lengthy planning and approval processes that strain government resources.

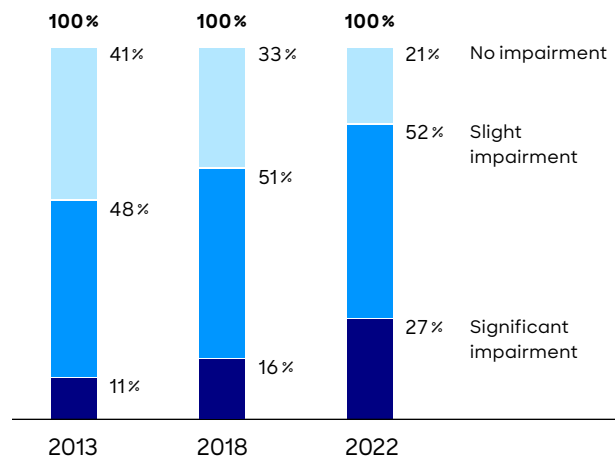
Moreover, there is a shortage of skilled professionals across the entire investment chain, from planning and permitting to construction and infrastructure operation.

Given these shortcomings, it is expected that impairments to business due to infrastructure deficiencies are likely to continue in the future.

Infrastructure decay

Impairment of business processes due to infrastructure deficiencies

[survey data, % of respondents]



38%

Only 38% of municipalities indicated in the most recent survey that they have been **able to maintain** all or most of their **transportation infrastructure** over the past 5 years

85%

85% of the watergates in the network of federal waterways are in only an adequate, inadequate or even insufficient state of preservation¹

41%

41% expected the investment **backlog** to **continue to grow** over the next five years

49%

49% of the bridges in the network of federal waterways are in an adequate, inadequate or even insufficient state of preservation¹

1/6

1/6 of the road surfaces of federal **highways**^{1,2} now have only **limited service ability**

1/4

1/4 of German rail bridges show **extensive damage**¹

1/3

1/3 of the road surfaces of **federal roads**^{1,3} now have only **limited service ability**

5%

A further **5%** will **have to be demolished** in the coming years, as their repair is too expensive compared to new construction¹

¹ As of November 2022 ² Bundesautobahnen ³ Bundesstraßen

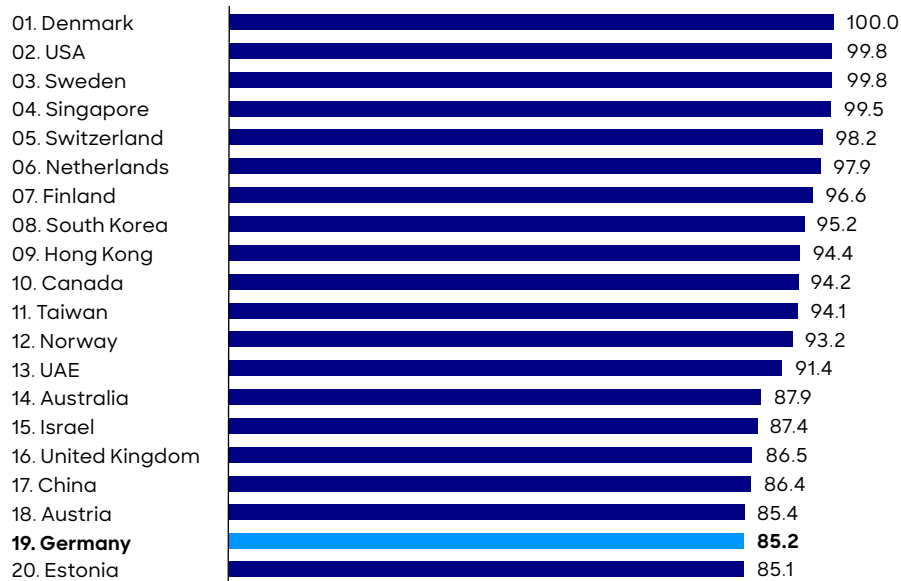
Germany's digital competitiveness trails the global front-runners – The share of German SMEs using high-end cloud services is less than half that of Sweden

3. Structural factors

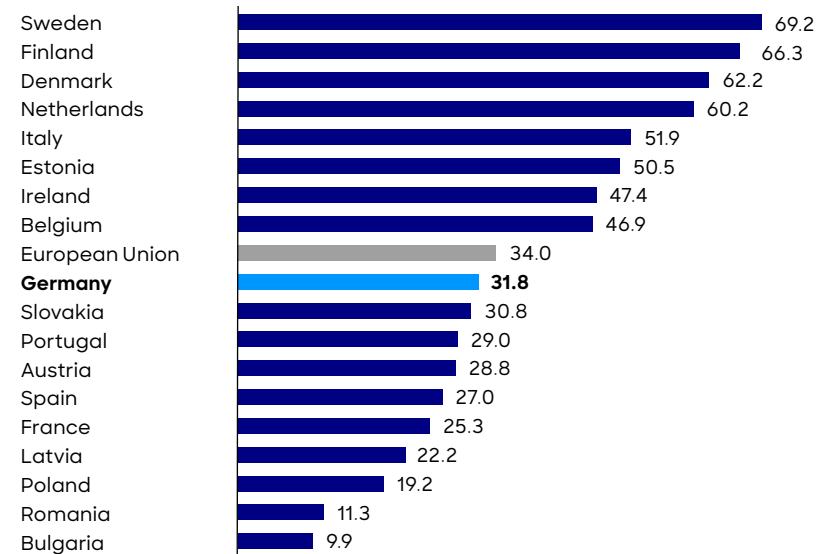
Despite its crucial role in boosting productivity and securing competitiveness, digitalization in Germany lags far behind the front-runners in global comparison. While the public sector is regularly criticized for its slow adoption of digital tools, private companies are also lagging behind other EU countries. Less than a third of German companies make use of cloud computing to purchase business-related services over the internet – a productivity-enhancing technology that has been available for years now.

Digital backwardness

Top 20 countries in the IMD World Digital Competitiveness Index 2022¹ [score]



Percentage of enterprises that have purchased cloud computing services² [2022, %]



¹ Incorporating the sub-criteria 1) Knowledge; 2) Technology; 3) Future Readiness, the World Digital Competitiveness Index ranks the capacity of 63 economies to adopt new digital technologies for government practices and business models. ² Enterprises excl. financial sector with more than 10 employees that have purchased at least one of the following cloud computing services: hosting of the enterprise's database, accounting software applications, CRM software, computing power

However, there are still many upsides to Germany as a business location: The government has sufficient fiscal firepower to support economic reforms

4. German strengths

Despite the additional public debt accrued since the pandemic, strict fiscal discipline in the previous years kept the German government's debt-to-GDP ratio at an internationally low level of 61% in 2022.

The financial stability of Germany is further underpinned by its strong tax revenue and favorable debt profile.

The average maturity of German Bunds is 7.7 years and as of 2022, public interest payments amounted to just 1.2% of total revenue.

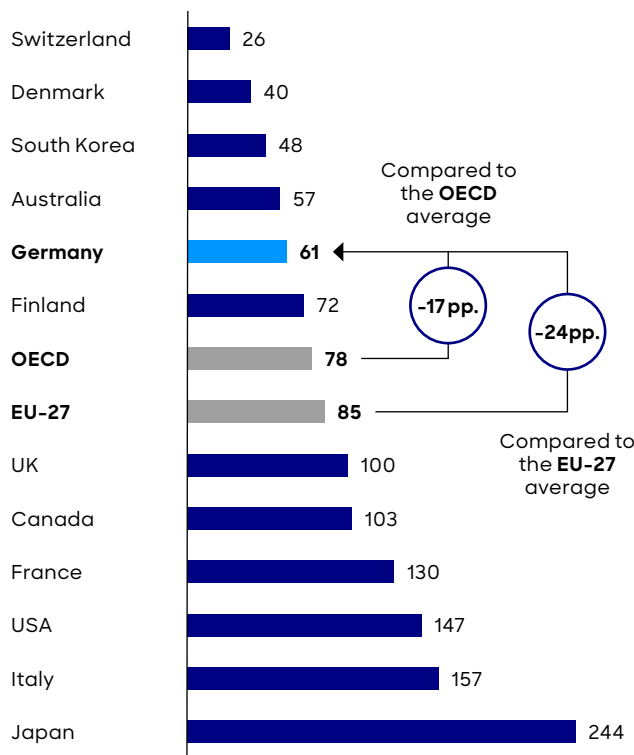
Macroeconomic risks also remain minor, with no FX exposure and a marginal share of inflation-linked securities (3.6%).

Given these data, the IMF even advised Germany to consider the revision of the federal debt-brake rule, creating more fiscal room to address structural reforms.

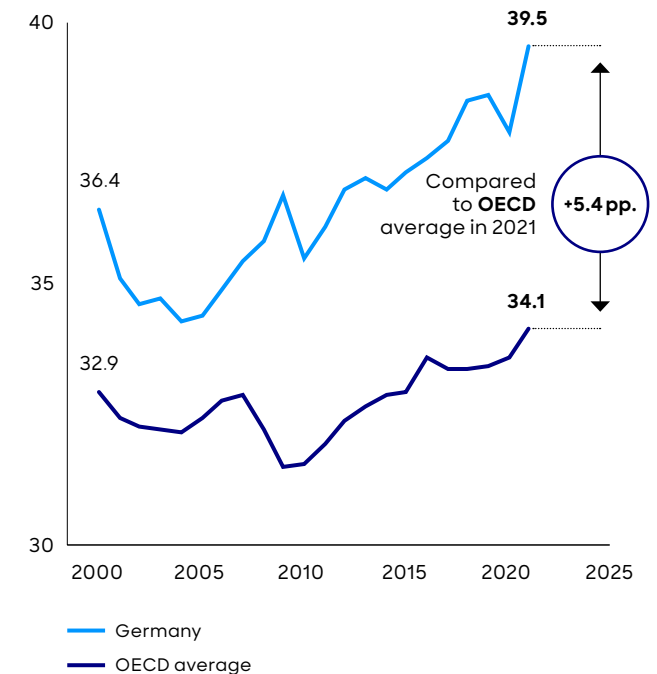
Among others, these would include the funding of digitalization, R&D, public infrastructure, green energy, and education.

Fiscal firepower

Gross government debt
[% of GDP, 2022]



Tax revenue over time
[% of GDP]



Thanks to its high-quality workforce with a strong STEM focus, Germany has the right brains to succeed in the transformation ahead

4. German strengths

In 2022, more than one third of tertiary graduates had a STEM degree in Germany, ranking fourth globally and first among European countries.

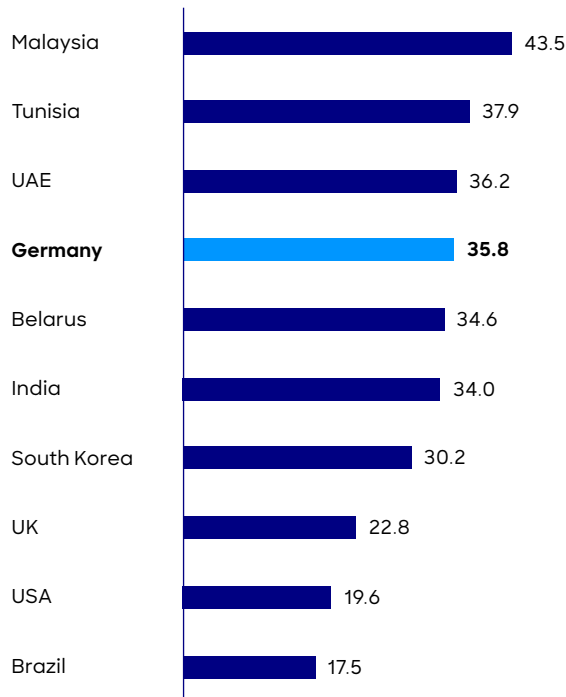
What is more, the overall quality of the workforce is regularly stressed in a survey among US companies doing business in Germany.

Considering the need for transformation towards automation and green technologies, skilled STEM workers can notably add to the sustainable growth of traditionally important sectors for the German economy such as automotive, mechanical engineering and chemistry.

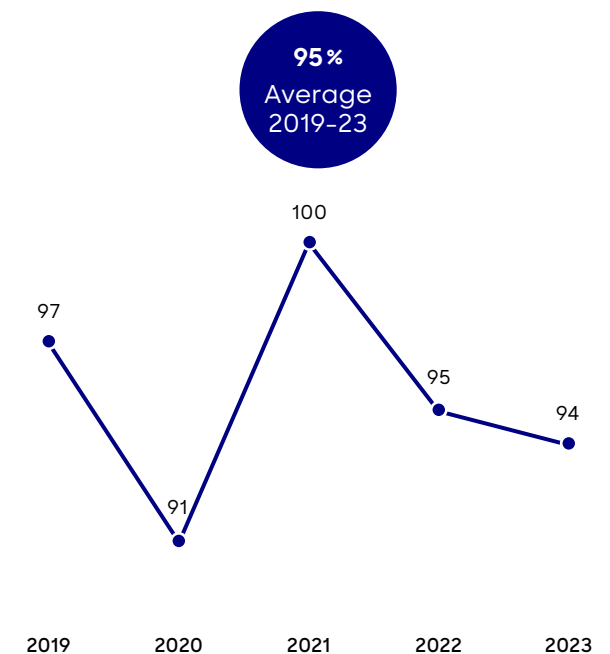
Together with the growing employment share of women and migrants in the STEM area, a large cohort of young talents offers potential to mitigate skilled labor shortages.

High-quality workforce

Countries with highest share of STEM graduates
[% of all tertiary degree recipients, 2022]



Share of US companies in Germany rating the quality of German employees as "very good" or "good" [%]



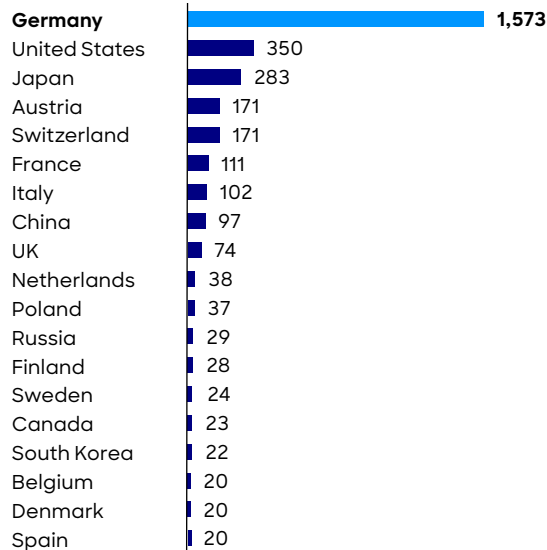
The German economy profits from a resilient economic structure led by innovative SMEs that have world-leading expertise in various frontier technologies

4. German strengths

Thanks to its predominantly small and mid-sized enterprise structure and the presence of numerous hidden champions across various sectors, the German economy has proved remarkably resilient in recent years. SMEs are known for their agility and innovation. They can quickly adapt to changing market conditions and are often at the forefront of technological advancements, making them more responsive to emerging trends. When considering key technologies, Germany is well positioned. The innovation index published by BDI and Roland Berger places Germany among the global top nations when it comes to innovation in key fields.

Strong economic structure

Number of "hidden champions"¹ by country [2020, #]



Top 5 nations in selected key technologies [2023, red circle depicts the global rank of Germany]



Advanced manufacturing



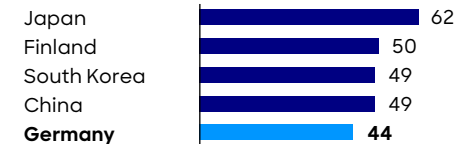
Circular economy



Energy technologies



Advanced materials



¹ Companies that are among the top three in the world in their market or are ranked number one on their continent, have annual sales of less than 5 billion euros and a low level of public awareness.

What if Germany becomes the sick man of Europe?

A weakening German economy could drag down overall economic growth in the EU

5. Impact analysis

Stagnant growth in Europe's largest economy would drag down overall EU growth, causing higher unemployment and welfare losses for EU citizens.

By 2025, the downside scenario would result in a cumulative loss of GDP for Germany of around EUR 66 bn, or 2% of GDP compared to the baseline scenario. For Europe, the damage would be greater in absolute terms – GDP would be around EUR 96 bn lower than in the base case.

By the end of 2025, there would be around 250,000 more unemployed people in Germany than in the baseline scenario. In Europe, there would be around 305,000 more people out of work.

Germany also plays a crucial role in the stability of the eurozone's financial system. A prolonged period of economic stagnation could lead to concerns about the health of German banks and financial institutions, potentially affecting investor confidence across Europe.

Scenario analysis

Scenario descriptions

Upside scenario

In our upside scenario, we assume that German export growth will be 2% above the baseline, reflecting recent upward revisions of GDP forecasts for many of Germany's major trading partners

Base case

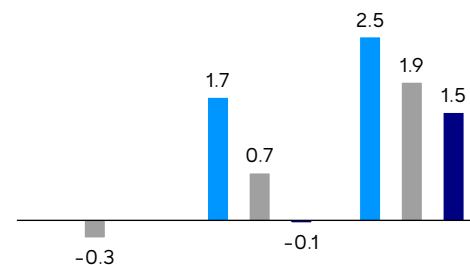
In the base case scenario, we assume that Germany returns to weak but continuous growth rates for the decade to come¹

Downside scenario

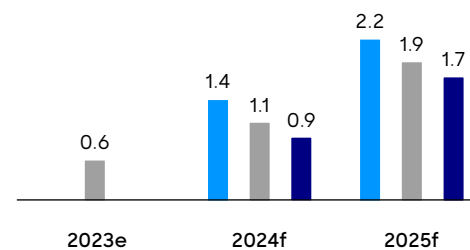
The downside scenario assumes that consumption in Germany does not recover as quickly as assumed in the baseline scenario and instead grows 1.5pp. below baseline

Real GDP development by scenario [growth, yoy, %]

Germany



European Union



■ Upside ■ Baseline ■ Downside

Expected unemployment rate [%]

2024

5.1%

5.6%

5.7%

2025

4.6%

5.2%

5.6%

2024

5.9%

6.0%

6.1%

2025

5.7%

5.9%

6.0%

¹ Oxford Economics GDP forecast as of August 2023

Germany is once again at risk of becoming the sick man of Europe, but it has the means to avoid it – Reforms are needed to get Germany back on its feet again

6. Conclusions

Summary

1. Due to cyclical slumps as well as structural deficits, Germany is once again at risk of becoming the sick man of Europe

2. Parts of the current downturn can be attributed to global, cyclical developments. Due to its export-oriented economic structure, Germany is particularly affected by these developments

3. While other countries have diligently reformed in recent years, many structural factors were neglected in Germany for a long time and are now becoming visible. Germany has lost ground to other economies

4. The German economy can nevertheless draw on numerous strengths. It has the necessary fiscal firepower to enact, implement and finance necessary reforms

5. Bold reforms are long overdue and are necessary for getting the economy back on track. The next page gives an overview of potential levers.

The German economy is facing huge challenges – But it also has the means to overcome them

Both structural reforms and huge investments are needed to enable Germany's economy to get back on a sustainable growth track

6. Conclusions

Action plan for the German economy



Reduce policy uncertainty

Currently, both citizens and businesses are grappling with significant uncertainty regarding the policy framework for the green transformation. Experts have made a wide range of suggestions on how to leverage market forces to drive the green transformation of the economy. Policymakers need to sketch a regulatory path forward so that companies can plan their investment accordingly.



Ramp up renewables

The energy crisis has pushed the long-standing issue of high energy prices to breaking point. Especially energy-intensive industries have yet to fully resume production and are exploring alternative locations. A credible plan must be outlined how to rapidly ramp up renewable energy production and how to keep energy prices at competitive levels.



Boost investment in infrastructure

Infrastructure investments have been neglected for many years, resulting in roads and railways being in a poor state, among others. Furthermore, digital infrastructure is below the international benchmark. To secure Germany's future as an attractive business location, government investment in infrastructure must not only be increased, but also sped up.



Reduce bureaucracy

Germany's public administration combines high reliability with a strong rule of law. However, currently a comparatively high regulatory burden is being exacerbated by a shortage of skilled labor in both private companies and the public sector. This leads to long permitting processes and stifles innovation. Stringent digitalization, reduction of regulatory burdens and transformation of the public sector must be prioritized by policymakers and managers within public administration.



Accelerate skilled worker immigration

The current skills shortage is the foremost concern for companies. Demographic change will only intensify this challenge. Closing the gap will require the promotion and acceleration of immigration procedures for skilled workers.

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