

Skills shortage is growing despite lockdown – further shortages are imminent

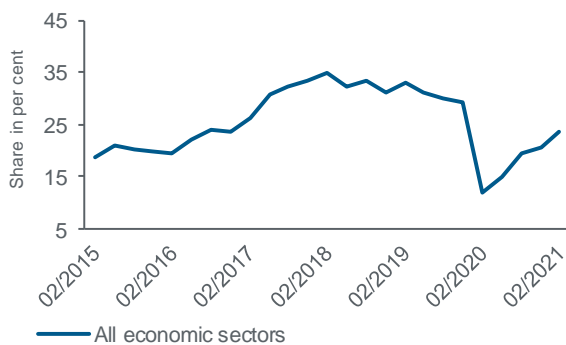
1 June 2021

Author: Martin Müller, +49 69 7431-3944, martin.mueller@kfw.de

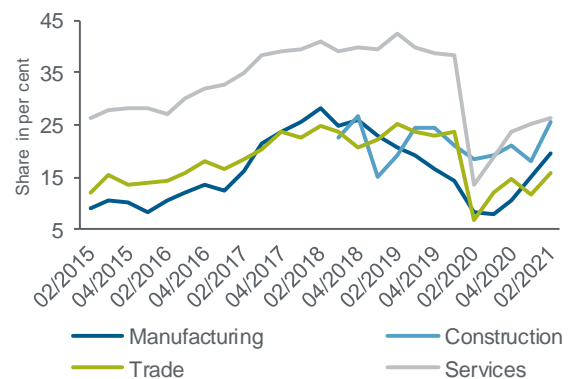
Press contact: Christine Volk, phone +49 69 7431-3867, christine.volk@kfw.de

- The skills shortage continues to grow strongly in the second quarter. Manufacturing, construction, services and retail are all affected by the rise.
- One quarter of all businesses see their operations hampered by skills shortages, more than twice as many as a year ago.
- SMEs, especially manufacturing SMEs, are more likely to be affected than large enterprises.

KfW-ifo Skilled Labour Barometer



KfW-ifo Skilled Labour Barometer – Economic Sectors



Shares of businesses whose operations are being negatively affected by a shortage of skills. 02/2021 means 2nd quarter 2021, with the survey conducted in the first month of each quarter, meaning April for the current quarter.

Sources: KfW Research, ifo Institute

Skills shortage continues to grow in the spring – low net migration is hampering employment growth

In April 2021, 23.7% of all businesses were impacted by skills shortages. Because of the coronavirus crisis, that share was a mere 11.9% in April 2020. The skills shortage has thus not yet returned to pre-pandemic levels but the trend is pointing sharply upwards.

The shortage is growing for several reasons, one of which is the resurgence in demand for skilled workers. On a seasonally and calendar-adjusted basis, Germany's gross domestic product grew by 7.4% from the second quarter of 2020 to the first quarter of 2021. The number of employees subject to social security contributions increased by 330,000 workers from June 2020 to February 2021 as a result of rising demand and continued to grow at the start of this year on a seasonally adjusted basis despite the lockdown.

Moreover, labour is now in much shorter supply because net migration from abroad has largely dried up. According to the Federal Employment Agency's migration monitor, the number of non-German workers in Germany rose by only 23,000 from February 2020 to February 2021. By comparison, that

number grew by 255,000 from February 2019 to February 2020, with non-German workers accounting for 84% of the increase in the total workforce. In other words: without net migration Germany would hardly have experienced any employment growth from 2019 to 2020. After all, the domestic labour supply is dwindling as a result of the demographic development and this decline will accelerate in the coming years as baby boomers retire from the workforce. This is an unfavourable outlook for tackling the major challenges which Germany has to meet in the future.

Skills shortage has grown in almost all sectors since January

At the beginning of spring, the rise in the shortage of skilled workers was most pronounced in the construction and civil engineering sector. In April, 25.5% of construction and civil engineering companies saw their business activity impacted by a lack of workers. In January it was 18.2% – a much lower rate.

But the shortage of skills increased in the other major economic sectors as well. From January to April, the share of enterprises impacted by a skills shortage increased from

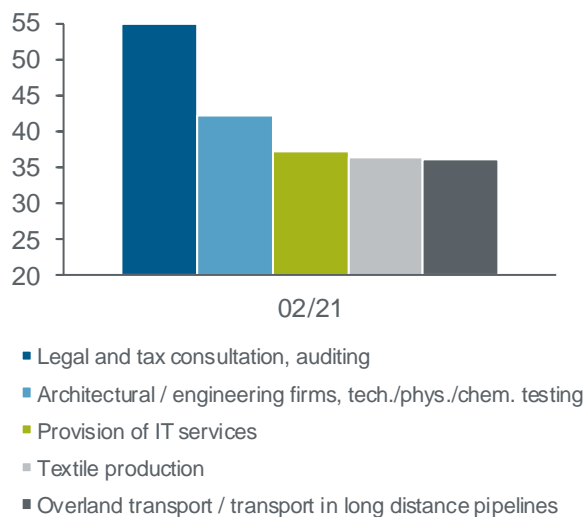
KfW Research KfW-ifo Skilled Labour Barometer: June 2021

14.9 to 19.4% in manufacturing, from 11.8 to 15.9% in retail and from 25.2 to 26.4% in the services sector.

In the subsegments of the sectors, the skills shortage in April was most pronounced in law firms, tax consultancies and auditing firms. Of the businesses surveyed, 54.8% reported that their operations had been impacted by a shortage of specialists. They were followed by architecture and engineering firms (42.1%) as well as information technology services (37.2%). This highlights the fact that STEM occupations – including those related to digitalisation and the construction industry – are among the ones most severely affected by the skills shortage.

Top 5 sectors affected by skills shortages

In per cent



Source: KfW Research, ifo Institute

SMEs, especially manufacturers, are more likely to be affected than large enterprises

In April 2021, 24.1% of SMEs reported that their operations were hampered by a shortage of skilled workers, compared with 22.9% of large enterprises. Particularly in the manufacturing sector, skills shortages affect more SMEs (24.5%) than large enterprises (11.9%). In the services sector, by contrast, they affect a much higher number of large enterprises – currently 30.5%.

Surveys among SMEs have revealed that attracting appropriately qualified skilled workers is now one of the most formidable challenges small and medium-sized companies are facing. This applies especially to successful, growing businesses.ⁱ The shortage of skilled workers is also one of the major barriers to digitalisation. Around 40% of all enterprises see the shortage of specialists with the necessary expertise as a significant obstacle to digitalisation.ⁱⁱ

Unless further steps are taken, skills shortages will pose a growing problem for German industry

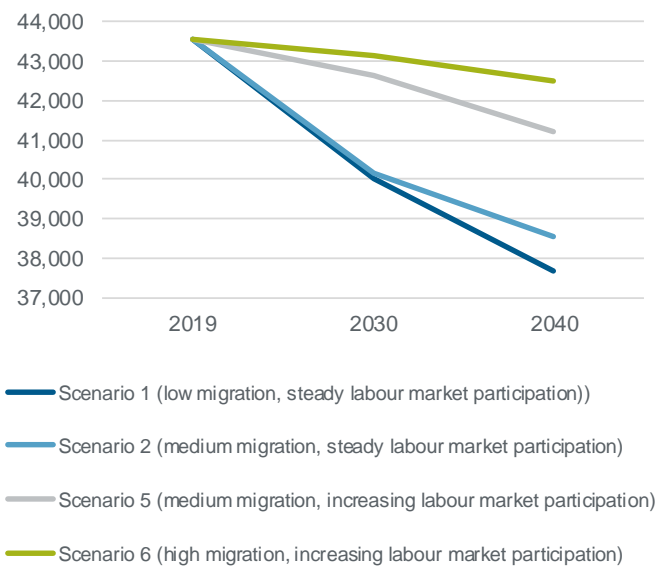
Skills shortages can turn into a serious obstacle to growth in the coming years. The Federal Statistical Office's forecast shows how the workforce is expected to develop in this dec-

ade and in the following decade as a result of two key influencing factors: net migration and labour market participation. The working-age population is composed of persons who are in employment or unemployed and other persons seeking employment.

Each scenario leads to a decline in the workforce by 2030, even assuming high annual net migration of 311,000 persons per year – a number much higher than Germany's current intake. By the year 2040, the decline is predicted to be between 1 and 6 million persons of working age. Unless the weak labour productivity growth rate improves noticeably, that will mean significantly lower economic growth in the coming years unless further countermeasures are introduced.

Even with high net migration, the workforce will shrink unless further countermeasures are adopted

Working age population, in millions



Source: Destatis, own rendition.

Conclusion: Germany needs a strategy to secure the supply of skills for the post-coronavirus era

A sharp rise in the shortage of skilled labour would make it much more difficult for the German economy to successfully meet the major challenges it is facing. A lot of hard work lies ahead: recovering from the coronavirus crisis, implementing the digital structural transformation, speeding up the transition to a climate-neutral economy, reducing the high government debt, managing the considerable growth of financial burdens for the pension, health and long-term care systems, as well as investing in better crisis resilience.

Three key mechanisms can be applied to secure the supply of skilled labour:

1. Skilled migration: Lack of recognised, demand-oriented occupational qualifications and German language skills are barriers to the recruitment of skilled labour from abroad. Besides simplifying the recognition of qualifications and degrees, it might be helpful if the private and public sector

KfW Research KfW-ifo Skilled Labour Barometer: June 2021

worked together in directing targeted foreign investment to training programmes for occupations in demand and more German language training. Appropriate German language courses and training programmes could also be offered to non-Germans in Germany where there is a shortage of German applicants.

2. Higher labour market participation: Increasing the standard retirement age for the state pension after 2030 could make a substantial contribution to securing the supply of skilled specialists. For example, the Council of Economic Experts has issued the recommendation of flexibly adapting the standard retirement age to the development of life expectancy. At the same time, this should not have to be about barring workers from retiring earlier. Early retirement with reduced entitlements could be maintained. A higher standard retirement age would benefit all. Those who work longer would receive higher pension payouts. Younger employees and enterprises would be burdened less with premiums and tax subsidies to the pension scheme. And those who leave the workforce earlier could also receive higher pension payouts because the reduction would be based on a higher level. Exemptions for occupations with a higher physical workload would be possible.

3. Appropriate training and lifelong continuing education. Skills that help workers navigate a working world shaped by digital transformation, drive the energy and mobility transition and meet the demographically induced increase in the need for skilled workers in the healthcare and long-term care sector are particularly important. Digital skills must increasingly be taught already in school classrooms. Just as important is that soft skills for self-management, independent effective learning and working and communication are taught at schools, colleges and universities as they are important for a successful career and help workers adapt independently to changing structures and to continue evolving. In a working world where remote and agile working are gaining ground, self-management and effective communication abilities are becoming increasingly important.

In order to strengthen the growth potential to meet the imminent challenges, the weak labour productivity growth rate must also be improved. Besides developing qualified human capital, this requires improved frameworks for investment, innovation and innovative start-ups. A focus should be placed here on productivity-enhancing digital technologies with high economic diffusion potential such as artificial intelligence, robotics and the Internet of things. To this end, the digital infrastructure must also be expanded swiftly. If labour productivity growth can be successfully increased, this will also reduce the skills shortage.

KfW-ifo Skilled Labour Barometer in figures

Shares of businesses whose operations are being negatively affected by a shortage of skills.

| | | Quarter/Year | | |
|---------------|--|--------------|---------|---------|
| | | 02/2020 | 01/2021 | 02/2021 |
| Total | | 11.9 | 20.6 | 23.7 |
| Manufacturing | Total | 8.2 | 14.9 | 19.4 |
| | Manufacturing of vehicles & parts | 3.9 | 11.6 | 15.2 |
| | Mechanical engineering | 8.1 | 11.6 | 17.0 |
| | Manufacturing of food & animal feed | 13.6 | 23.4 | 25.2 |
| | Manufacturing of chemical products | 5.7 | 6.9 | 9.6 |
| | Manufacturing of metal products | 12.0 | 21.9 | 27.8 |
| | Metal production & processing | 7.4 | 12.4 | 17.9 |
| Construction | Total | 18.3 | 18.2 | 25.5 |
| Trade | Total | 6.6 | 11.8 | 15.9 |
| | Wholesale | 7.3 | 11.9 | 16.1 |
| | Retail | 5.6 | 11.6 | 15.7 |
| Services | Total | 13.4 | 25.2 | 26.4 |
| | Transport: overland / pipelines | 20.1 | 30.4 | 36.1 |
| | Telecommunications | 12.8 | 20.0 | 14.2 |
| | Provision of information services | 15.5 | 29.9 | 37.2 |
| | Legal and tax consultation | 27.0 | 36.6 | 54.8 |
| | Business consultation | 9.9 | 18.3 | 21.6 |
| | Architect./eng. firms, tech./phys./chem. testing | 23.0 | 43.6 | 42.1 |
| | Research & development | 12.9 | 12.6 | 20.2 |
| | Catering | 0.0 | 14.5 | 5.9 |
| | Accommodation | 2.1 | 8.2 | 6.9 |
| SME | | 11.1 | 20.9 | 24.1 |
| LSE | | 13.6 | 19.9 | 22.9 |

Source: KfW Research, ifo Institute

Abbreviations:

S(mall and) M(edium-sized) E(nterprises).

L(arge-)Scale E(nterprises).

Construction and interpretation of the KfW-ifo Skilled Labour Barometer

The KfW-ifo Skilled Labour Barometer is based on evaluations of the ifo economic surveys which are used to calculate, among other things, the well-known ifo Business Climate Index. The Skilled Labour Barometer reports on the share of enterprises in Germany that report adverse impacts on business operations from a shortage of skilled workers. Each quarter about 9,000 enterprises from trade and industry, construction, wholesale, retail and services (without the banking and insurance sectors or the state) are polled on their business situation, among them some 7,500 SMEs. In addition to providing an overall indicator for the skills shortage in the German economy and indicators for various sectors and regions, the barometer also enables a company size-specific data evaluation separated into SME and large enterprises. Enterprises are generally classed as small to medium-sized if they employ a workforce of not more than 500 and record an annual turnover not exceeding EUR 50 million. For a more accurate analysis, however, these quantitative distinctions have to be drawn more narrowly for retail trade (maximum annual turnover of EUR 12.5 million), the building and the construction industry (up to 200 employees) and services (maximum annual turnover of EUR 25 million). All enterprises that exceed at least one of these thresholds are classed as large-scale enterprises. The construction and civil engineering sector was first surveyed on the impacts of skills shortages on business activity in the third quarter of 2018. That was the reason the sector was not integrated into the overall indicator before that quarter. The value of the overall indicator varies only marginally as a result.

ⁱ ETL, IW Köln (2021): ETL Mittelstandskompas, Edition 2021, p. 16, [Pressemappe_Mittelstandskompas\(etl.de\)](#) (only available in German).

ⁱⁱ KfW Research, Zimmermann, V. (2019): Business Survey 2019: More and more businesses have firm plans for digitalisation, hurdles also more widely acknowledged, p. 10, [Business Survey 2019 – Digitalisation \(kfw.de\)](#)