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SECURING SKILLED LABOUR: OPTIONS FOR ACTION IN CONTINUING EDUCATION AND LABOUR MIGRATION

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References

This is a translated version of the original German-language chapter "Fachkräftesicherung: Handlungsoptionen bei Weiterbildung und Erwerbsmigration", which is the sole authoritative text. Please cite the original German-language chapter if any reference is made to this text.

KEY MESSAGES

- The labour force potential will decline sharply in the coming years as a result of demographic ageing. Together with structural change, this will exacerbate shortages of skilled workers.
- Targeted and active guidance, standards, modularised courses and an understanding of future competences are needed to strengthen continuing education.
- The necessary labour migration will require a more transparent immigration law, a relaxation of the equivalence assessment relating to the recognition of professional qualifications, and an extension of the Western Balkans Regulation to selected third countries.

SUMMARY

The **transformation** towards a climate-neutral and more digitized economy is changing **demand for workers and skills**. While jobs are destroyed in some areas, new jobs are being created elsewhere. At the same time, the domestic labour force potential will decrease significantly in the coming years due to **demographic trends**. In order to meet the demand for labour and to prevent unemployment from arising during structural change, engaging in **continuing education and training (CET)** and managing **labour migration** are indispensable.

Participation in CET generally benefits both the participating individuals and the companies. Nevertheless, **participation in CET is low among some groups of people**, such as the low-skilled, the unemployed, older people and employees in small companies. There are already a large number of state support measures for CET. However, there is a lack of clarity and standardisation of the offers, and a need for stronger support for individual CET, especially for those affected by structural change. Therefore, firstly, **CET guidance** should be improved, for example through nationwide guidance services and active targeting. The relevant actors should agree in advance on which skills will be increasingly needed in the future. Secondly, the **supply of CET measures** should be improved, for example through networking, quality standards and nationally standardised partial qualification modules. Thirdly, individual CET for people affected by structural change should be **financially supported**, for example by expanding educational leave and covering direct CET costs via individual learning accounts.

In recent years, labour migration, especially from the EU, has contributed significantly to meeting the demand for labour in Germany. However, immigration from the EU is likely to decline in the future. The German labour market must therefore be further opened to **regulated labour migration from third countries**, and the **emigration** of domestic and foreign skilled workers must be **reduced**. To this end, barriers should be lowered, for example in the recognition of foreign qualifications and for the subsequent immigration of family members of skilled employees already working in Germany. In professions that are not regulated, partial recognition or the **abolition of the need to prove equivalence of qualifications** would be expedient. In order to increase the immigration of workers without formal training, the **Western Balkans regulation** could be extended indefinitely and the quotas related to it expanded. Furthermore, it would be expedient to extend the regulation to selected other countries. This would allow the administrative resources necessary for implementation to be concentrated on certain states. **Centralised** and better digitalised **foreigner authorities at Länder level** are needed to speed up administrative processes. These should be organised as service-oriented immigration agencies.

I. INTRODUCTION

355. **Demographic development** and structural change, especially due to **digitalisation** and **decarbonisation**, pose challenges for companies and employees. **It is becoming increasingly difficult for companies to recruit qualified staff.** As the population ages and the members of the baby boomer generation retire, [↪ CHART 94 TOP LEFT](#) the domestic labour supply will decrease significantly in the coming years. Technological progress is leading to the automation of routine activities and shifting labour demand away from low and even medium skills towards higher skills (Acemoglu and Autor, 2011; Hershbein and Kahn, 2018; Nedelkoska and Quintini, 2018; GCEE Annual Report 2017 items 747 ff.). Structural change is eliminating jobs in some sectors and creating new jobs and activities in others. These new activities require skills that are not (yet) sufficiently available on the labour market. At the same time, unemployment related to structural change should be avoided. Two key levers for securing skilled labour are **continuing education and training (CET) and labour migration.**

356. According to a simulation study by the Institute for Employment Research (IAB), by 2035 the labour force potential [↪ GLOSSARY](#) (i.e. the upper limit of the **labour supply**) will, **for demographic reasons, fall** by 7.2 million persons (i.e. by 15 %) from 47.4 million persons in 2020, if labour force participation rates [↪ GLOSSARY](#) (i.e. the share of the labour force in the respective age group) remain constant and if there is no immigration (Fuchs et al., 2021). [↪ CHART 95](#) In a scenario (considered more realistic by the authors) with rising **labour force participation rates** by women and older people, the labour force potential would still fall by 4.5 million (9 %) by 2035. The increase in labour force participation rates will thus not be able by far to compensate for the demographic decline. It can be assumed that a declining labour force potential and ageing will lead to shortages of labour and skilled workers, with negative effects on productivity growth (e.g. since older workforces are less innovative; Feyrer, 2007, 2008) and potential growth. [↪ ITEM 84](#) This would in turn make it more difficult to finance social insurance funds.

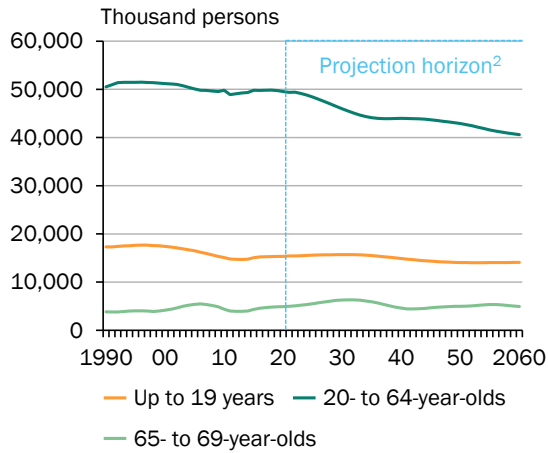
If there is **net immigration** of 100,000 persons per year, which roughly corresponds to the net immigration of the years 2000 to 2009, the labour force potential will decrease by 3 million by 2035 (taking into account rising labour force participation rates). [↪ CHART 95](#) This scenario is regarded as the reference scenario by Fuchs et al. (2021). If net immigration totals 400,000 persons per year – as occurred roughly in the years 2009 to 2020 – the labour force potential will remain constant until 2035. To achieve net immigration of this magnitude, gross immigration of 1.5 million persons per year would be necessary, since in the past five years an average of about 1.1 million people living in Germany have left the country each year. [↪ ITEMS 412 F.](#)

357. A smaller population [↪ CHART 94 TOP LEFT](#) does not necessarily lead to significantly lower per capita prosperity in the long run. However, during the transition, in which the employed population initially shrinks, while the older population continues to grow, [↪ CHART 94 TOP LEFT](#) considerable challenges arise for per capita economic output and its distribution between the generations (GCEE Annual Report

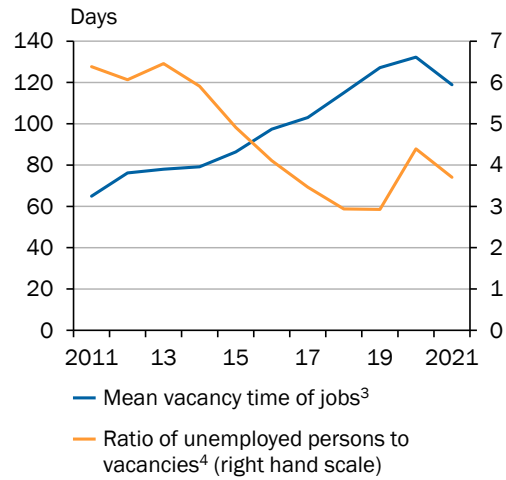
CHART 94

Age-specific population development and development of selected labour shortage indicators in Germany

Working-age population will decrease significantly in the future¹



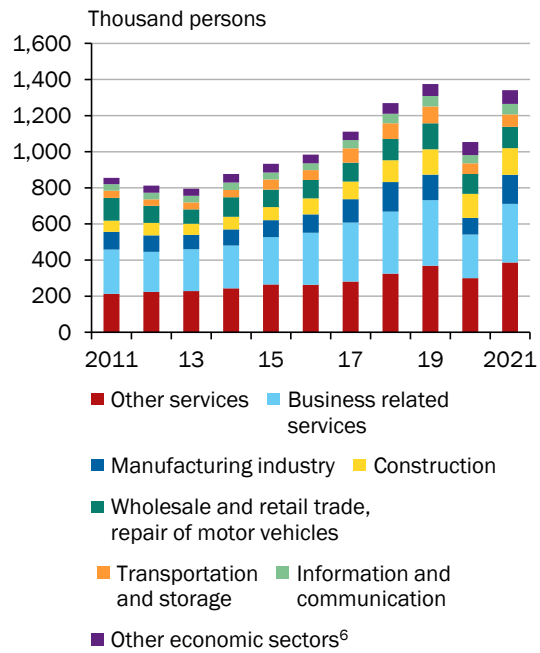
Vacancy time and ratio of unemployed to vacancies



Number of unemployed and vacancies



Vacancies by economic sector⁵

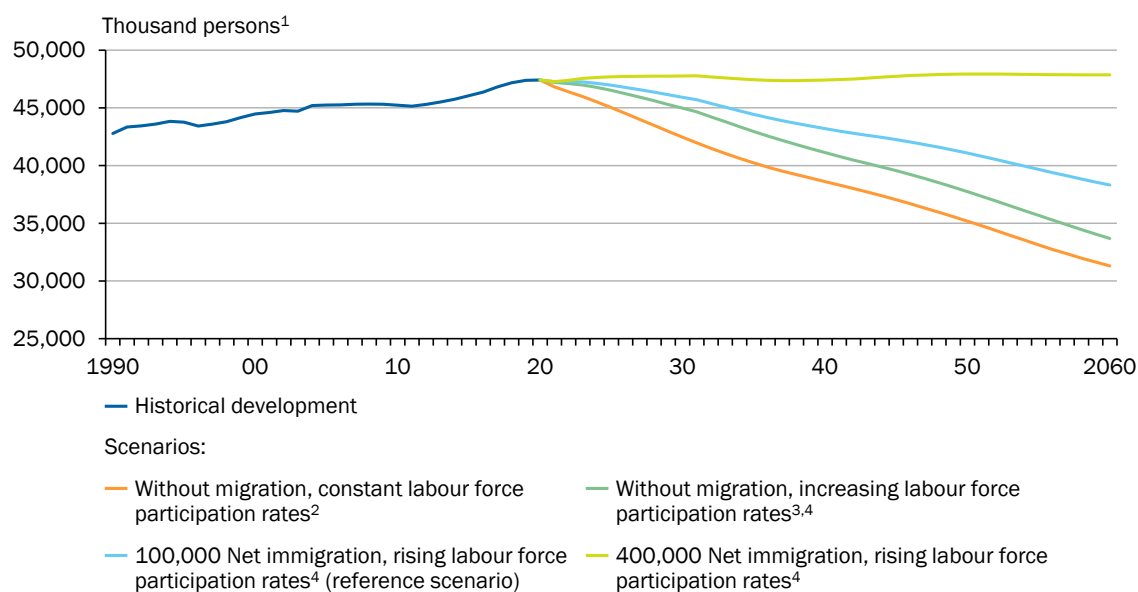


1 – Based on the 14th coordinated population projection of the Federal Statistical Office. Variant G2-L1-W2. Birth rate 1.6 children per woman from 2030, life expectancy at birth in 2060 82.5 years for boys and 86.4 years for girls. Decline in net migration to 206,000 in 2026 and constant thereafter. 2 – Projection horizon from the year 2022. 3 – Average of vacancies completed in the respective year. 4 – Registered unemployed in relation to registered vacancies. 5 – Based on the IAB job survey. For jobs in the primary labour market according to the Classification of Economic Activities, 2008 edition (WZ 2008). For the year 2021 extrapolation based on preliminary figures. 6 – Public administration and social security funds; financial and insurances services; agriculture and forestry; mining, energy, water and waste.

Sources: BA, Federal Statistical Office, IAB, own calculations
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↪ CHART 95

Scenarios for the development of the labour force potential for the years 1990 to 2060



1 – National concept. 2 – Demographic effect: Result of population decline and ageing. 3 – Behavioural effect: Effect of rising domestic labour force participation rates of women and older people. Scenario takes into account the demographic effect, but not migration. 4 – Rising labour force participation rates: The projection of labour force participation rates (strictly speaking, the simulation uses the potential labour force participation rates, i.e. the labour force participation rates plus the hidden reserve rates, but for linguistic simplification referred to as labour force participation rates) is based on the modelling of Fuchs and Weber (2021) and certain behavioural assumptions (Fuchs et al., 2021, p. 4).

Source: Fuchs et al. (2021)

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2020 items 602 ff.). Currently, according to the Federal Employment Agency (BA), there is no general shortage of labour, but employers are having increasing **difficulty finding suitable personnel** – especially skilled workers – in some occupations. ↪ [ITEMS 360 FF.](#) In the current situation, where **shortages of skilled workers in certain occupations** can be observed, improved wages and working conditions are key levers for attracting and making optimal use of labour.

↪ [ITEM 362](#)

- 358.** Continuing automation also contributes to the **challenges posed** by the **declining domestic labour potential**. However, at the same time this leads to a **change in demand for occupations and skills**. In addition to making adjustments in initial education, including school and early childhood education (GCEE Annual Report 2021 items 297 ff., 325 ff. and 342 ff.) – which lays the foundation for motivation and success in lifelong learning ↪ [ITEM 411](#) – this makes it necessary to strengthen **continuing education and training**. CET can help increase labour productivity and better manage structural and demographic change. Targeted measures should be taken to increase the participation in CET of low-skilled workers and employees in small companies. ↪ [ITEMS 369 FF.](#)
- 359.** Another key lever for offsetting the declining labour potential is **labour migration**. Many countries in the European Union (EU) are facing similar demographic problems, although for the most part these are less pronounced than in Germany.

Immigration from the EU will therefore decline in the future (Kubis and Schneider, 2020). It will therefore be necessary to increase labour migration from (“third”) countries outside the EU. Targeted measures should be taken to achieve this. [↪ ITEMS 450 FF](#). For these measures to be successful and for the integration of migrants in Germany to succeed, the foreigner authorities should be centralised and developed into service-oriented immigration agencies. [↪ ITEM 456](#) In addition, a social discourse on the challenges and opportunities of labour migration is necessary to strengthen acceptance among the population. [↪ ITEM 461](#)

II. SKILLED LABOUR: DEMAND AND BOTTLENECKS

360. Several indicators suggest that companies are finding it **increasingly difficult to fill their vacancies with suitable skilled workers** (Marjenko et al., 2021). In a survey published in April 2022 by the KfW-ifo Fachkräftemonitor, 44 % of companies stated that the lack of skilled workers was hampering their business activities (Müller, 2022). [↪ CHART 96 LEFT](#) In some sectors, a lack of skilled workers – along with rising energy prices and supply chain problems – is seen as the greatest challenge for business development in spring 2022 and is thus already a burden on economic growth (DIHK, 2022). The median **time required to fill vacancies** peaked in 2020. [↪ CHART 94 TOP RIGHT](#) It fell somewhat in 2021, but remains at a high level. The **number of unemployed persons** decreased steadily from 2013 to 2019, before visibly rising again in 2020 due to the coronavirus crisis. [↪ CHART 94 BOTTOM LEFT](#) At the same time, the **number of job vacancies** rose in the same period and then fell again somewhat in 2020. According to the IAB job survey, it fell from around 1.3 million in 2019 to around 1.1 million in 2020; in 2021, however, it rose again to 1.4 million. The **ratio of unemployed persons to job vacancies** has **more than halved** from over six in 2013 to under three in 2019. [↪ CHART 94 TOP RIGHT](#) The IAB Labour Shortage Index also suggests that **labour shortages** have **worsened again** in the past two years. [↪ CHART 96 RIGHT](#) When interpreting the unemployed-to-job-openings ratio, it should be noted that **not all unemployed people can be placed directly in employment**. This applies in particular to unemployed persons receiving income support for jobseekers, who are often long-term unemployed. [↪ BACKGROUND INFO 20](#)



[↪ BACKGROUND INFO 20](#)

Unemployment – inflow and outflow under the German social security code

Approximately two-thirds of all unemployed persons are supported by basic security benefits for job seekers (social security code SGB II). Almost half of these have at least two characteristics that make placement difficult (Federal Employment Agency, BA, 2022a). These include children under three years of age and a lack of childcare spaces, lack of language skills and health impairments. This explains significant **differences** in the dynamics, i.e. the **number of people entering and leaving unemployment**. Among people covered by unemployment insurance (social security code SGB III), around twice as many left unemployment over the course of

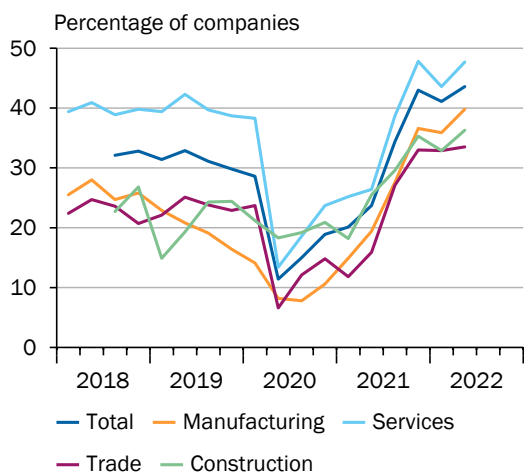
a year (July 2021 to June 2022) compared to the average number of unemployed. By contrast, among people receiving basic security benefits for jobseekers, less than half were able to take up employment in the course of a year (Federal Employment Agency, BA, 2022a).

- 361. The growth in job vacancies between 2019 and 2021 varied greatly between sectors of industry. ↘ CHART 94 BOTTOM RIGHT While the increase was strongest in “other sectors” (+15.3 %) and manufacturing (+13.5 %), a decline was observed in sectors such as transport and storage (–25.7 %), commerce and motor-vehicle repair (–18.3 %). According to the KOFA Skilled Workers Report (Hickmann and Malin, 2022), the **job surplus rate** – i.e. the proportion of vacancies for which there were no suitably qualified unemployed people nationwide – was 29.2 % in September 2021, and thus at a very high level.
- 362. Securing skilled labour is first and foremost the task of companies. **Structural change** can lead to temporary shortages in certain areas or for certain skills. If companies experience difficulties in recruiting staff, this may indicate that **relative wages and working conditions** need to be adjusted. This also applies to occupations that are subject to government regulation, or public sector employment such as jobs in health and education. Many companies seem to be getting used only slowly to a situation where they have to compete for workers, after several decades in which this was the other way around.

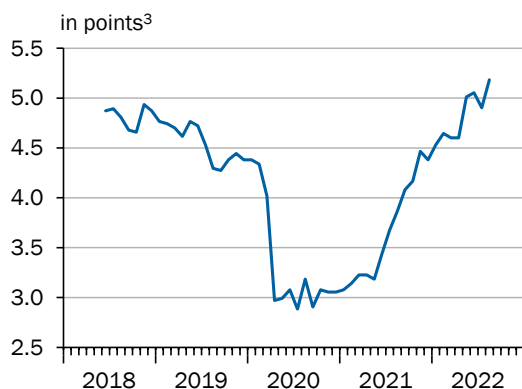
↘ CHART 96

Shortage of skilled workers in certain occupations-indicators from surveys among companies and employment agencies in Germany

Companies whose business activities are hampered by shortages of skilled workers in certain occupations¹



IAB Labour Shortage Index²



1 – KfW-ifo skilled labour barometer. 2 – Indicator based on the following question addressed to employment agencies: To what extent is filling vacancies in your agency district hampered by limited available labour? 3 – Points on a scale from 0 to 10, with higher values signalling greater labour shortages in the job filling process.

Sources: IAB, ifo, KfW
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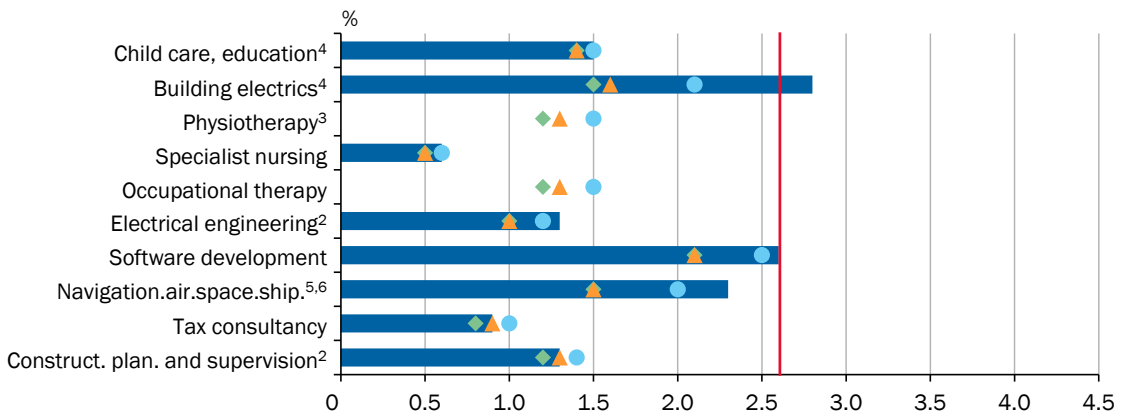
CHART 97

Occupation-specific unemployment rates for the bottleneck occupations with the highest employment¹

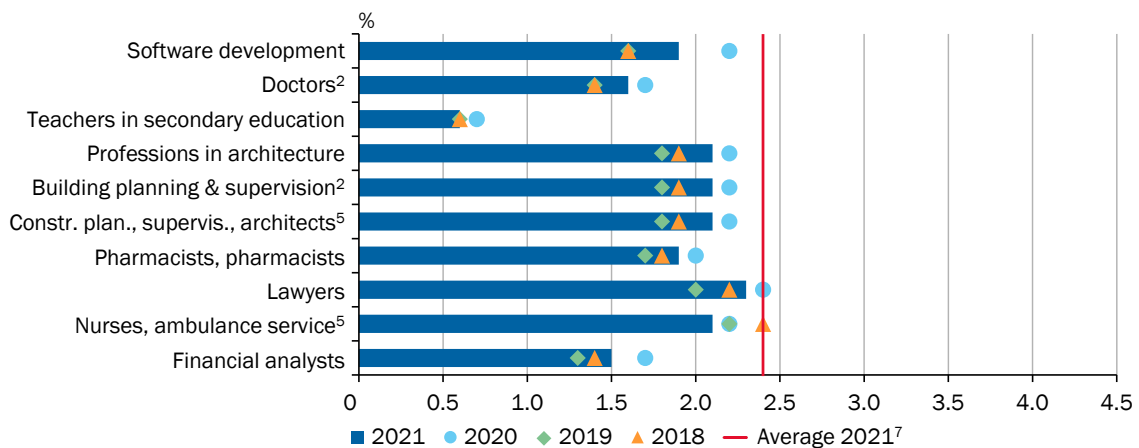
Requirement level: Skilled worker



Requirement level: Specialist



Requirement level: Expert



1 – According to the Classification of Occupations, issue 2010 (KIdB 2010). The requirement level of helper is not considered in the skilled labour shortage analysis. 2 – Without specialisation. 3 – No values are available for the year 2021. 4 – Including specialists. 5 – Supervisors and managers. 6 – Automotive, aerospace and shipbuilding. 7 – Occupation-specific unemployment rates in relation to all civilian employees according to the job level.

Source: BA

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➤ BACKGROUND INFO 21

Skilled labour shortage analysis by the Federal Employment Agency

In order to make labour shortages measurable in the various occupations, the Federal Employment Agency (BA) conducts an annual **analysis of shortages of skilled workers** (BA, 2022a). This is done on the basis of various **bottleneck indicators** such as average duration of vacancies, job seeker/vacancy ratio, occupation-specific unemployment rates, change in the percentage of foreign employees, exit rate of people ending unemployment and wage development. The BA distinguishes between four requirement levels: 1) helper – for jobs performed by unskilled or semi-skilled workers, 2) skilled worker – for jobs performed by skilled workers who have completed vocational training, 3) specialist – for jobs that require, for example, training as a master craftsman or technician, and 4) expert – for jobs that require, for example, a university degree. Requirement level 1) is not considered in the analysis. The term “skilled worker” for requirement level 2) is not synonymous with the use in the term “shortage of skilled workers”, which in general refers to skilled workers, specialists and experts.

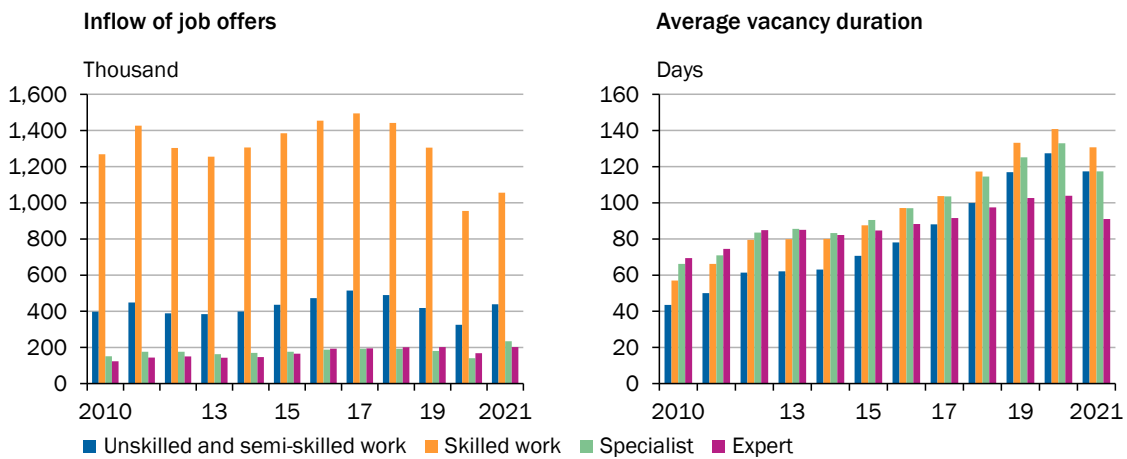
The BA assigns **points** from zero to three depending on the observations for the bottleneck indicators. Then, an overall result is calculated for each occupational category (five-digit code of the Classification of Occupations 2010, KldB 2010), which corresponds to the arithmetic mean of the points for the individual bottleneck indicators. If the total value is two or higher, the BA calls it a bottleneck occupation. If it is 1.5 to below two, it is called an occupation in the observation range.

In addition to the bottleneck indicators, the BA provides **risk indicators** that are intended to visualise foreseeable difficulties for filling vacancies in the near future. These risk indicators include, among other things, the percentage of unfilled training positions, the graduate-employee ratio and the change in the percentage of older employees.

With this **analysis**, the BA shows in how many and in which occupations shortages exist or are impending in the future. However, the results do not allow for any quantitative statements about the size of the worker shortage. Moreover, the BA does not discuss to what extent the demand for workers with certain qualifications is endogenous, i.e. influenced by supply. For example, the fewer skilled workers there are in the field of information and communication technology (ICT), the fewer ICT firms settle in Germany. Consequently, the demand and thus possibly also the bottleneck situation in this occupational group decreases.

363. In its latest skilled labour shortage analysis ➤ [BACKGROUND INFO 21](#) the BA concludes that there is currently no general shortage of skilled workers in Germany (BA, 2022a). However, there are definitely noticeable shortages in individual regions and occupations. The **number of occupational categories with shortages increased slightly** in 2021 compared to the previous year, but is still below the pre-crisis level. For 2021, bottlenecks were identified for a total of 148 out of 510 occupational categories; another 122 categories are close to being bottlenecks. Most of the bottleneck occupations are found at the **skilled-worker requirement level**. The bottleneck occupations with the highest employment in the three requirement levels are found in the **areas of health and long-term care, professional drivers, teaching and education, construction and electrics, and ICT**. The bottleneck is reflected in occupation specific unemployment

↘ CHART 98

Inflow of job offers and mean vacancy duration¹ by requirement level²


1 – Completed average vacancy duration in days. 2 – As of January 2020, some occupational positions according to the Classification of Occupations 2010 belong to the requirement level "Unskilled work", which were previously assigned to the requirement level "skilled work". Due to a revision of the classification of occupations 2010 as well as further occupational reclassifications as of the reporting month January 2021, the data for 2021 are only comparable with previous years to a limited extent.

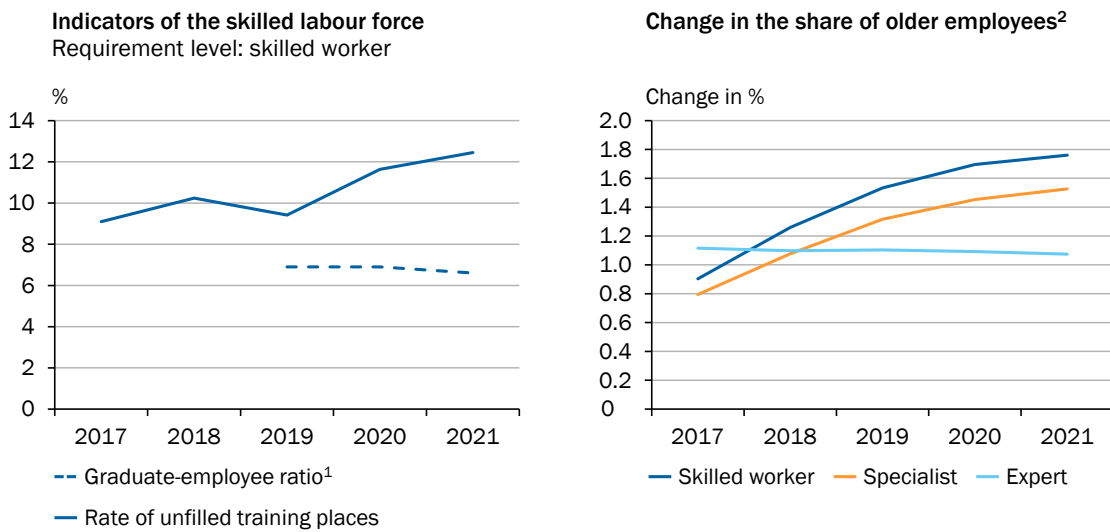
Source: Federal Employment Agency
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rates that are mostly well below average. ↘ CHART 97 TOP, MIDDLE AND BOTTOM Particularly low occupation specific unemployment rates are currently found in the nursing occupations (skilled worker and specialist) and among secondary school teachers.

364. The labour shortages are not limited to workers with medium and high qualifications. Differentiated by skill levels, job creation in the past decade indicates a **high demand for labour for unskilled and semi-skilled jobs (“helpers”)**, in addition to the demand for skilled labour. ↘ CHART 98 LEFT Although there are currently around six unemployed people per vacancy at the level of helpers, the ratio for skilled workers is only just over one (BA, 2022b). During the coronavirus crisis in 2020, however, the unemployment-to-job-openings ratio in helper occupations rose more sharply in absolute and relative terms than for occupations that require a degree (Gürtzgen and Kubis, 2021; Kubis and Popp, 2021). In 2021, it took the same amount of time to fill vacancies in helper and semi-skilled occupations as in specialist occupations – 117 days. ↘ CHART 98 RIGHT
365. While the duration of vacancies and the unemployed-to-job-openings ratio suggest that shortages of skilled workers in certain occupations decreased in 2021 compared to the pre-crisis year 2019, ↘ CHART 94 TOP RIGHT some **risk indicators** ↘ BACKGROUND INFO 21 **do not indicate any signs of relief**. The proportion of unfilled apprenticeships increased in 2021 compared to the pre-crisis year, while the graduate-to-employee ratio decreased slightly over the same period. ↘ CHART 99 LEFT In addition, older workers make up an increasingly large share of employees in occupations at the skilled worker and specialist levels. ↘ CHART 99 RIGHT The different developments according to job level are likely to be related to the increasing participation in education in the tertiary sector (EFI, 2022, p. 113).

↘ CHART 99

Risk indicators for future shortages of skilled workers



1 – No values available for 2017 and 2018. 2 – 60 years and older. Change compared to the time three years earlier. A positive value therefore indicates that the proportion of older employees is growing. A positive value that increases over time indicates that growth is accelerating. Rates of change are considered instead of absolute rates since different occupations with systematically different age structures are included.

Source: Federal Employment Agency
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366. According to the **medium-term forecast** on the development of skilled labour (IAB et al., 2022), the **number of occupational groups** for which **new demand will grow more strongly than new supply** by 2026 is increasing significantly. In the current forecast, this applies to 87 out of 140 occupational groups (three-digit KldB code 2010), compared to only 71 in the 2021 medium-term forecast. The search duration also indicates that recruiting skilled workers is becoming increasingly difficult for companies. According to the analysis, bottlenecks from the employer's point of view are to be expected above all in jobs that require at least a vocational qualification. The medium-term **bottleneck occupations** include, on the one hand, occupations that are experiencing strong job growth, e.g. as a result of technological development (e.g. ICT occupations and technical research), demographic development (education and health occupations) or the COVID-19-related catch-up effect (e.g. hotel industry). On the other hand, the medium-term bottleneck occupations include those that are likely to have a high demand for replacement due to the age structure of the workforce, such as many technical occupations (for example, plumbing, sanitation, heating, air conditioning technology, electrical engineering, energy technology, metal construction and welding technology) and occupations in the construction industry (with growing new and replacement demand). At the same time, the medium-term forecast (IAB et al., 2022) identifies **surplus occupations**, i.e. occupations for which applicants will face greater competition in their job search in the future. The largest of these occupational groups includes commerce, where job losses are likely to occur because of the increasing amount of online commerce.

367. According to analyses conducted by the BA, **shortages of skilled workers varied greatly from region to region** in 2021. While there were nationwide

shortages of skilled workers in mechatronics and automation technology, ICT experts and nursing occupations, for example, the shortage in electrical engineering was concentrated primarily in the states of Rhineland-Palatinate, Saarland and Bavaria (BA, 2022a). The Federal Institute for Research on Building, Urban Affairs and Spatial Development forecasts an increasing **concentration of the labour force in structurally strong conurbations** (Maretzke et al., 2021). While the overall labour force will decrease in the forecast period up to 2040, it will increase in urban regions such as Augsburg, Stuttgart, Rhine-Main, Munich, Hamburg and Berlin. Hüther et al. (2019) attribute this development in particular to the rising proportion of academics who prefer to live in urban areas. **The demand for labour at expert level is unlikely to be met in some rural regions in the future** (Hüther et al., 2019, pp. 156 ff.). Due to the regional concentration of industry and the regionally different age and qualification structure of the population, the **regions are affected to different degrees by structural change**.

368. A high level of demand for labour combined with shortages leads to **problems in recruiting skilled workers**. [↘ ITEMS 360 FF.](#) According to the IAB Job Survey, one in three advertised vacancies could not be filled in 2021 (Gleiser et al., 2022). 44 % of the companies surveyed stated that difficulties in filling vacancies had worsened compared to 2019. The reason cited by 91 % (71 %) was the decline in (suitable) applications. Companies have various options to counter staff shortages. On the one hand, they can react with internal measures, such as making better use of the potential of existing staff. In 2021, around 76 % of the companies surveyed used further qualification and 74 % continued to employ older workers, or could imagine doing so (Gleiser et al., 2022). On the other hand, measures can be taken to make the company more attractive for potential applicants. In 2021, for example, around 72 % of the companies offered an increased range of additional benefits, while 66 % mentioned improving the compatibility of family and work, for example through working from home. In addition, companies can intensify recruitment. About 51 % of the companies surveyed stated that they would use new recruitment channels or would be prepared to do so, and 35 % are stepping up their own training (Gleiser et al., 2022). On the other hand, recruiting abroad, at around 15 %, plays only a minor role in their recruitment strategy. This is a cause for concern in view of the demographic development. [↘ ITEM 356](#)

The **recruitment channels** through which companies advertise vacancies provide an indication of their willingness to invest in order to attract skilled workers. According to the Randstad-ifo HR Manager Survey (ifo, 2022), in the first quarter of 2022 around 39 % of the companies surveyed said they did not use the services of a recruitment agency, while around 10 % attached great importance to such services. The latter applies above all to large companies with 250 or more employees (ifo, 2022). According to the Randstad-ifo HR Manager Survey (ifo, 2022), companies actively recruiting potential employees (active sourcing) is not yet widespread. Only 14 % of the companies surveyed attach great importance to this channel. According to a survey by Weitzel et al. (2020), the proportion of new hires generated in the ICT sector in 2019 via the active sourcing recruitment channel was higher than in the thousand largest German companies that generated more than €150 million in turnover.

III. CONTINUING EDUCATION AND TRAINING

369. The analysis of the current skilled labour situation and the medium-term forecast for the development of skilled labour until 2026 indicate that the demand for skilled labour will shift and the supply will decline. [↪ ITEMS 360 FF](#). **Technological change** and **decarbonisation** are creating new fields of activity and occupations, while others are disappearing or are less in demand. In addition, the **qualification requirements** within many professions are **changing**. For example, the demand for analytical and interactive skills is growing (Nedelkoska and Quintini, 2018; Schneemann et al., 2021). **Continuing education** and retraining are becoming increasingly important in this context. They help to **meet** the changing **demand for skilled workers** and **prevent unemployment in jobs that are being eliminated** (Kirchmann et al., 2021; Klös, 2021; OECD, 2021a, 2021b). The risk that certain activities will no longer be needed due to automation increases as the qualification requirements for these activities decrease (Nedelkoska and Quintini, 2018). In a company survey conducted by the Chamber of Industry and Commerce (2017), almost nine out of ten companies named CET as a key response to the digitalisation of the world of work. CET ranges from independent informal learning to non-formal educational activities and formal education. [↪ BACKGROUND INFO 22](#)

370. The following section begins by explaining the **benefits of CET** for the various actors. [↪ ITEMS 371 FF](#). These benefits are likely to be considerable both for the participating individuals themselves and for companies. Subsequently, **participation in CET** is analysed according to different groups of persons and enterprises. [↪ ITEMS 376 FF](#). It turns out that low-skilled workers and workers in small companies, for example, have strikingly lower participation rates than higher-skilled workers and workers in large companies, although there is no evidence that they would benefit less from continuing education. The underlying **obstacles** are manifold and include a lack of information and role models.

To overcome the obstacles, there is a **need for action** in the areas of supply (e.g. quality standards for the training activities on offer and standardisation of partial

[↪ CHART 100](#)

Categories of learning activities

Formal education	Non-formal education	Informal learning
Recognised training programme, at least 6 months	No recognised training programme or shorter than 6 months	No pre-structured learning opportunity, but learning intentional
Example: Recognised vocational training	Organised teaching and learning arrangement Example: Course to acquire a licence (e.g. welder, forklift truck driver)	Example: Reading a reference book

Source: own presentation based on Federal Ministry of Education and Research (2021) and Eurostat (2016)
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qualifications), finance (e.g. training time and learning accounts) as well as information (e.g. outreach counselling for the low-skilled, communication among different actors about skills of the future and experience with successful CET measures) and motivation (e.g. role models with successful CET or retraining experience, establishment of lifelong learning as a standard, reduction of uncertainties). [↪ ITEMS 391 FF](#). This need for action does not primarily concern the state, but also companies and their associations in coordinating activities and experience. Last but not least, a person's educational experience in childhood and adolescence plays a decisive role in a later willingness and ability to make use of CET opportunities. [↪ ITEM 411](#)



[↪ BACKGROUND INFO 22](#)

Continuing education and training – definition and conceptual delimitation

CET encompasses a wide variety of types and intensities of educational activity, from independent **informal learning** to **non-formal educational activities** such as in-company training, and **formal education** such as comprehensive retraining courses within the framework of a recognised vocational training programme (GCEE Annual Report 2021 item 300). [↪ CHART 100](#) The majority of training activities take the form of non-formal education activities. [↪ CHART 103 LEFT](#) Non-formal training and courses are typically counted as CET and not as initial training (BMBF, 2021). Quantitative statements on the scope of CET are made difficult by the fact that a uniform definition of CET (as distinct from initial training) has been lacking to date (Kruppe and Trepesch, 2017, p. 9). This applies in particular to formal education. Kruppe and Trepesch (2017, p. 13), for example, count a formal educational activity as continuing education for persons with a professional degree if at least twelve months have passed since completion of the degree, otherwise as a continuation of the initial training. For persons who have not completed a professional education, they count a formal educational activity as CET only if at least 36 months have elapsed after leaving school. Alternatively, a person's age can be used to distinguish between initial education and CET, as in the evaluation of the Adult Education Survey (AES) data.

1. Distribution of the returns from CET

371. Classical human capital theory (Becker, 1964) distinguishes between **general human capital**, i.e. skills that are useful across companies, and **firm-specific human capital**, the returns to which accrue to the employers themselves. The incentive for companies to invest in firm-specific human capital is higher than to invest in general human capital.

Employees have an incentive to invest in general human capital if they can expect higher productivity and higher wages as a result of this investment. If this is not the case, for example because of labour-market frictions, employees will underinvest in general human capital. This could be compensated for by **the employer partially bearing the costs of investment in general human capital**. However, since the returns from this investment accrue not only to them but also to potential future employers, the level of investment in the general human capital

of employees is likely to be too low even then (Acemoglu, 1997; Acemoglu and Pischke, 1999; Balmaceda, 2005).

372. Although to date there is little evidence on **individual returns on investment in CET** (OECD, 2021b, p. 115), the empirical literature as a whole concludes that participation in training has a **positive** impact on individuals in a number of ways. CET leads to **higher wages** (Konings and Vanormelingen, 2015; Ruhose et al., 2019; Dauth, 2020; Bönke et al., 2022), increases the **likelihood of re-employment** after redundancy (Schmidpeter and Winter-Ebmer, 2021) and helps in moving into jobs that are **less threatened by structural change** (Nedelkoska and Quintini, 2018; Tamm, 2018). Among the low-skilled, the biggest effect of participation in CET is likely to be on wages and unemployment risk.

A true cost-benefit analysis is made more difficult by the fact that, in addition to **direct costs** and **opportunity costs due to lost working time and remuneration**, participation in CET also entails **psychological costs** (Müller and Wenzelmann, 2018). These are likely to be particularly high for low-skilled people, who are no longer used to learning. Uncertainty about the expected benefits can also deter employees from participating in CET (Osiander and Stephan, 2018).

373. **Returns on investment in CET for companies** have been the subject of even less empirical study, which may be due to the difficulty of identifying causal relationships in view of selection effects. The evidence to date shows that employee CET has a positive effect on **turnover, productivity, employment and innovation** in companies (Dostie, 2020; Martins, 2021). The positive effect on productivity is significantly greater than the positive effect on wages (Konings and Vanormelingen, 2015). The returns from CET thus accrue to a greater extent to the companies investing in it (Konings and Vanormelingen, 2015). Ebner and Ehlert (2018) conclude that job mobility does not increase after participation in in-company CET, but actually decreases. The reasons for this could be that in-company CET often (also) imparts firm-specific human capital (Ebner and Ehlert, 2018), or that training serves as a way of tying employees to the company (König, 2020, p. 42).

374. **The forms and contents of continuing education** are highly **heterogeneous**. ↘ [BACKGROUND INFO 22](#) ↘ [CHART 100](#) It is difficult to distinguish between general and firm-specific knowledge transfer. This makes it difficult to make general statements about the expected distribution of the benefits of CET and about an appropriate distribution of costs. Furthermore, depending partly on their qualifications, workers can be expected to underestimate the benefits of CET because of lacking or asymmetric information (Dietz and Osiander, 2014).

375. Since the **revenues from professional (further) training** greatly benefit the participating companies and employees, ↘ [ITEMS 371 FF.](#) they should certainly both also bear the majority of the costs for the training measures (Anger et al., 2013; Klös, 2021). In addition, however, there may be fiscal externalities for the state, e.g. through additional taxes or saved social spending. **Positive external effects** on other companies, **credit constraints and asymmetric information** about the quality and potential returns of training measures can lead to market

failures that justify state intervention. Currently, the state intervenes in the market in different ways, for example through state subsidies for CET activities.

↪ BOX 20

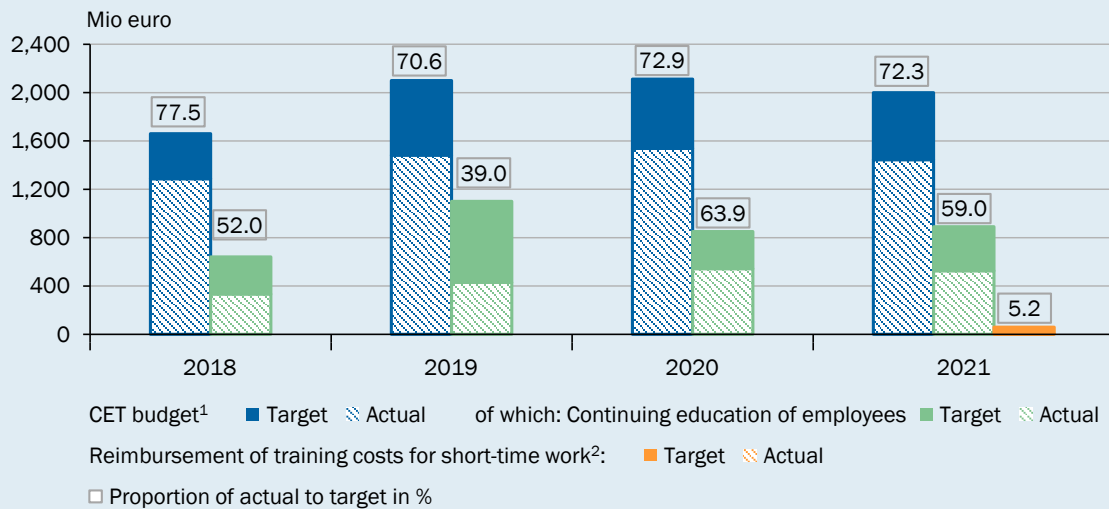
↪ BOX 20

Existing regulations on the promotion of continuing education and training

Since 2019, continuing education and training for **employees affected by structural change** and for **employees in bottleneck occupations** has been financially supported by the BA within the framework of the Qualification Opportunities Act. In order to be subsidised, CET must go beyond firm-specific requirements and comprise at least 120 hours. Since 2020, the Work of Tomorrow Act (Arbeit-von-Morgen-Gesetz) has made it possible to submit collective applications for a company's employees and has increased the subsidies for companies with special CET requirements and companies that conclude qualification agreements with social partners. Depending on the company's size, the BA pays between 15 and 100 % of the training costs and 25 to 75 % of the wages. Training costs are fully reimbursed for **employees in micro-enterprises** (up to 10 employees) and for employees aged 45 and over in companies with up to 250 employees. Wages are fully reimbursed in the case of trainings leading to a professional degree undertaken by employees **with no professional degree** (e.g. for them to attend training courses for partial qualifications, ↪ ITEM 382 or to prepare for an external examination ↪ GLOSSARY). In addition, employees receive a bonus of €1,000 or €1,500 respectively for passing an intermediate or final examination. ↪ CHART 102 The existing funding options can also be used by companies for recruitment purposes: by offering the necessary training to be carried out during the subsequent employment relationship.

↪ CHART 101

Public funds for continuing education are not being fully utilised



1 – CET budget for the unemployed and employed. Legal basis: §§ 81–87, 111a, 131a SGB III. 2 – Legal basis: § 106a para. 2 SGB III, new regulations since 1 January 2021.

Sources: BA, own calculations

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↳ CHART 102

Nationwide regulations on further education funding

Employees	Employees on short-time work	Unemployed
Promotion of CET during working hours ¹	Promotion of CET during short-time work (until July 2023) ²	Promotion of CET ¹
<ul style="list-style-type: none"> ▪ Collective applications of the employer to the BA according to § 82 SGB III ▪ Measure of an AZAV-certified provider with at least 120 hours ▪ Job affected by (digital) structural change or further training in a bottleneck occupation. No funding for qualifications with company-specific content ▪ The participants must have completed their vocational training and their last BA continuing education measure at least four years ago. ▪ Subsidy of 15 to 100 % of the training costs depending on the size of the company ▪ Full payment of training costs for persons aged 45 and over in companies with < 250 employees ▪ Subsidy of 25 to 75 % of the salary depending on the size of the enterprise ▪ Subsidies are increased by 5 percentage points if there are social partnership agreements on continuing vocational training and by 10 percentage points if at least one in five employees (or one in ten in companies with fewer than 250 employees) in the company requires continuing training. 	<ul style="list-style-type: none"> ▪ Application by the employer to the BA according to § 106a SGB III (application according to § 82 SGB III not possible) ▪ Start of further training during short-time work ▪ Measure of an AZAV-certified provider with at least 120 hours or further training according to the Upgrading Training Promotion Act (Aufstiegsfortbildungsförderungsgesetz) ▪ Subsidy of 15 to 100 % of the training costs depending on the size of the company ▪ Reimbursement of 50% of the social security contributions paid by the employer ▪ In addition, further training for employees threatened by unemployment is eligible for funding under Section 81 (1) SGB III during short-time work ⇒ see Unemployed 	<ul style="list-style-type: none"> ▪ Counselling by the BA or Job Centre and issuance of individual education certificates according to § 81 SGB III ▪ Redeem the voucher for courses run by AZAV-certified providers. The voucher specifies the aim and duration of the measure. ▪ Further training must help to end unemployment or improve employment opportunities. ▪ Continued payment of unemployment benefit or basic social security benefits during the CET.

Zukunftsstarter initiative for catching up on a vocational qualification¹

- Application to the BA according to § 81 SGB III
- For people who are at least 25 years old
- For employees who do not have a vocational qualification or who have been employed for at least four years in a semi-skilled or unskilled job outside their profession. In addition, for unemployed persons without a vocational qualification and those returning to work
- Assumption of 100% of the costs of further training (course costs and remuneration) for obtaining a recognised vocational qualification (retraining, courses to prepare for external examinations, partial qualifications that can be linked to the occupation) as well as measures to acquire basic competences.

Training bonuses¹

- Premiums for passing the intermediate and final examinations in the amount of 1,000 and 1,500 euros respectively according to § 131a SGB III.
- Measure funded by the BA to catch up on a vocational qualification
- Training duration of at least two years

Upgrading BAföG³

- Financial support to prepare for a further vocational training qualification (advancement) on a part- or full-time basis
- Persons with a maximum of a Bachelor's degree
- Subsidised qualifications at the following levels: certified vocational specialist, Bachelor Professional and Master Professional (for example, master craftsman and industrial foreman, business administrator, educator, technician, business economist).
- Full subsidy for living costs of up to 892 euros depending on assets and income (surcharges for married couples, children and single parents)
- 50 % subsidy for course and examination costs (independent of income and assets) of up to 15,000 euros. Low-interest loan from KfW for remaining costs. 50 % loan waiver for successful completion of training, 100 % waiver for transition to self-employment.
- Subsidy for material costs for the master craftsman examination project

1 – Qualification Opportunities Act, supplemented by Work of Tomorrow Act, §§ 81 and 82 SGB III. 2 – Employment Security Act, supplemented by Work of Tomorrow Act, § 106a SGB III. 3 – Upgrading Training Promotion Act.

CET support for **short-time workers** is defined in the Employment Security Act (Beschäftigungssicherungsgesetz) and is supplemented by the Work of Tomorrow Act. In addition to subsidies for the training-course costs, which range from 15 % to 100 % depending on the size of the company, the employer is reimbursed for 50 % of the social security contributions paid.

↳ CHART 102

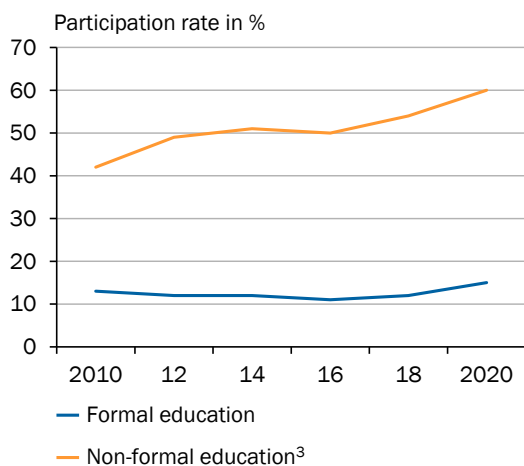
CET of **unemployed people** is promoted by the Qualification Opportunities Act in combination with the Work of Tomorrow Act. ↳ CHART 102 In practice, the BA or the job centre can issue an individual education voucher after a counselling interview, which is intended to improve the jobseeker's chances on the labour market, or issue activation and placement vouchers, which are aimed at direct integration into the labour market. The vouchers can be redeemed for individual coaching, job application training, language courses, software courses or coaching on how to become self-employed. All in all, considerable public funds are available for employees, staff on short-time working and the unemployed. ↳ CHART 101 However, these funds have never been exhausted in recent years. The most likely reasons for this, among other things, are the low level of awareness among companies of CET funding as well as the lack of suitable options on offer (Kruppe et al., 2021).

In addition to the above-mentioned CET subsidies for employees, short-time workers and the unemployed, there are **subsidy options for formal CET** regardless of employment status. ↳ CHART 102 These focus on the low-skilled (Zukunftstarter Initiative, CET premiums) or career advancement (Aufstiegs-BAföG). However, non-formal (for example modular) CET measures are not promoted in this framework.

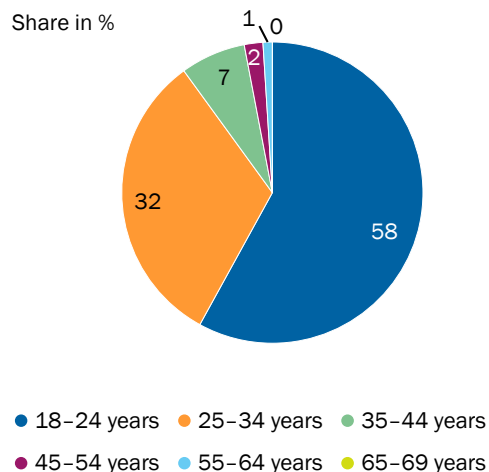
↳ CHART 103

Participation in non-formal and formal (further) education¹

Participation in non-formal continuing education increased²



Distribution of formal education activities⁴ among age groups, survey year 2020



1 – Education activities in the past twelve months. For formal education, no differentiation is made here between initial and continuing education. 2 – Persons aged 18 to 64 years. Sample size 2010: n = 7,035; 2012: n = 7,099; 2014: n = 3,100; 2016: n = 7,102; 2018: n = 5,359; 2020: n = 5,455. 3 – Includes a) courses of training in work or leisure time, b) short-term education or training events, i. e. lectures, training courses, seminars or workshops, c) training in the workplace (e. g. planned instruction or training by superiors, colleagues, trainers or team tutors), d) private lessons in leisure time (e. g. driving lessons for the driving licence, training lessons in sports, music lessons, private tutoring). 4 – Persons aged 18 to 69 years. Sample size: n = 5,818.

Source: Federal Ministry of Education and Research (2021) based on the Adult Education Survey (AES 2020)

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2. Use of CET measures

Forms and content of CET

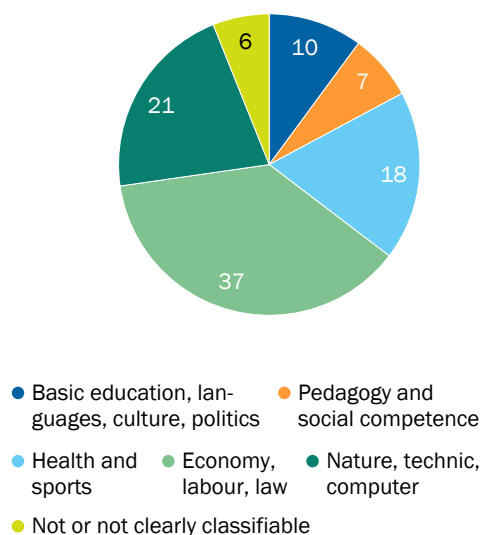
- 376. Participation in CET has increased** significantly in recent years. [↪ CHART 103 LEFT](#) In 2020, 60 % of 18- to 64-year-olds participated in at least one **non-formal CET activity** in the previous 12 months, compared to only 42 % in 2010. There is a long-term trend behind this; it is not a special effect of lockdown measures after the outbreak of the Covid-19 pandemic. In an international comparison, participation in CET in Germany is above or below the EU average, depending on whether one looks at participation in the last twelve months (AES) or the last four weeks (Labour Force Survey) (Eurostat, 2022). **Formal educational activities** account for a **significantly lower share** than non-formal educational activities. [↪ CHART 103 LEFT AND RIGHT](#)
- 377. A large proportion** (75 %) of non-formal CET activities takes place as **in-company CET**. This means they take place wholly or predominantly during paid working hours (66 %) or paid time off for educational purposes (5 %), or the employer pays the CET costs (53 %) directly (BMBF, 2021).
- 378. The curriculum** of non-formal CET activities often covers business, work and law (37 %), nature, technology and computers (21 %), or health and sport (18 %).

[↪ CHART 104](#)

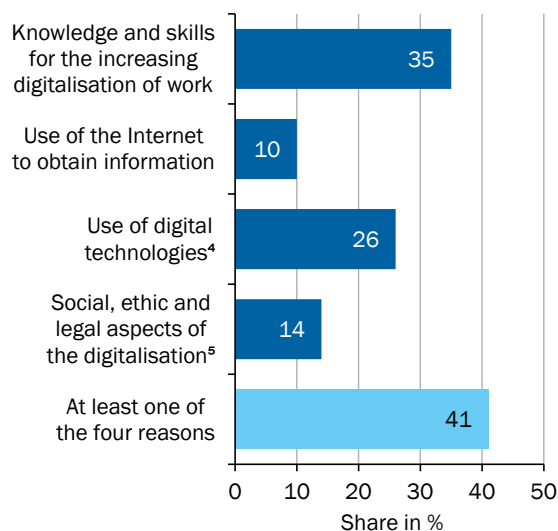
Learning content of non-formal continuing education activities and reasons for participation in 2020¹

Learning content²

Share in %



Reasons for participation related to digitalisation³

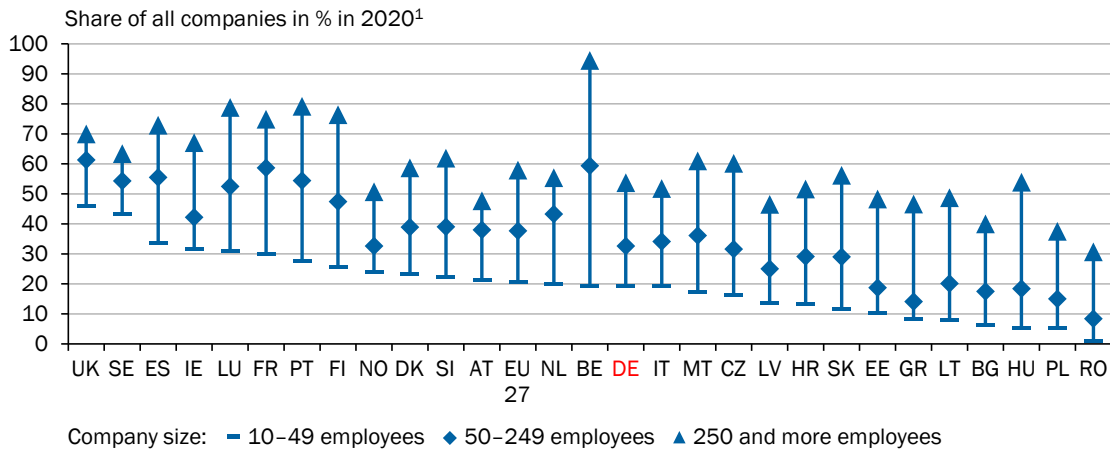


1 – Continuing education activities in the past twelve months of persons aged 18 to 64 years. 2 – Sample size: n = 9,616 3 – Question for up to two randomly selected continuing education activities. For each of the following statements, please indicate whether it applies completely, rather, rather not or not at all. Shown are the percentages of „strongly agree“ or „somewhat agree“. Sample size: n = 5,862. 4 – E. g. with a software, with an application or with a digital device. 5 – E. g. data protection.

Source: Federal Ministry of Education and Research (2021) based on the Adult Education Survey (AES 2020)
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↪ CHART 105

Share of companies that regularly assess their future skill needs



1 – Survey of companies with ten or more employees referring to the 2020 financial year. For United Kingdom only data for the 2015 financial year are available. Specification in the question: „Regularly means in the last and next few years“. Training refers to continuing professional development and other training; companies for which an assessment of skill and competence needs is part of the overall planning process in the company. UK-United Kingdom, SE-Sweden, ES-Spain, IE-Ireland, LU-Luxembourg, FR-France, PT-Portugal, FI-Finland, NO-Norway, DK-Denmark, SI-Slovenia, AT-Austria, EU27-European Union, NL-Netherlands, BE-Belgium, DE-Germany, IT-Italy, MT-Malta, CZ-Czechia, LV-Latvia, HR-Croatia, SK-Slovakia, EE-Estonia, GR-Greece, LT-Lithuania, BG-Bulgaria, HU-Hungary, PL-Poland, RO-Romania.

Sources: CVTS 6, Eurostat

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↪ CHART 104 LEFT Irrespective of this, the reasons for participation in CET are often linked to **digitalisation** (41 % of cases). ↪ CHART 104 RIGHT The extent to which CET actually helps to meet the skills requirements of companies is difficult to assess.

379. To ensure a targeted use of CET, it is **helpful to assess skill requirements** in advance. However, not all companies regularly assess these requirements, and small and medium-sized enterprises (SMEs) do so much less frequently than large companies (OECD, 2021a, pp. 86 f.). In Germany, the proportion of companies that regularly assess their requirements is lower than the EU average. ↪ CHART 105 SMEs in particular often lack strategic human resources planning as a basis for skills planning (BMAS, 2021, p. 30). There is often a lack of properly skilled personnel and the necessary financial resources (Dauser et al., 2022).

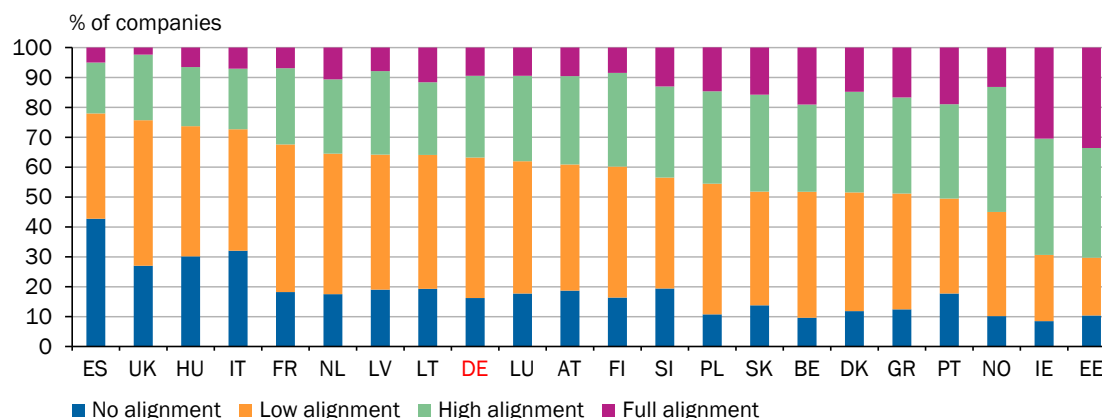
The question of how well the training measures cover the identified skill requirements can be approached by **comparing requirements and CET content**. In Germany, the three skills most important for the development of the respective company only coincide completely with the three skills most targeted by CET measures in about 9 % of the companies. Of the European OECD countries, Estonia and Ireland have the highest rate with a complete match in over 30 % of the companies. ↪ CHART 106

380. Measuring the **quality of CET measures** is difficult because the **objective criteria** that are common in other education sectors cannot be applied, and, for the most part, **no data** on this are available (Autorengruppe Bildungsberichterstattung, 2020, p. 220). Subjective satisfaction surveys are therefore used. In the poll conducted by the Adult Education Survey in 2018, however, participants in CET

↘ CHART 106

Overlap between skill needs and training content¹

Matching the three skills most important for the development of the company with the three skills most targeted in training courses



1 – Survey of companies with ten or more employees. Question 1: What are the three most important skills/competences for the development of your company in the next five years? Tick options for skills in the following areas: ICT General; ICT Professional; Management; Teamwork; Customer Handling; Problem Solving; Office Administration; Foreign Languages; Technical, Practical of Job Specific; Oral or Written Communication; Analytics and Language; Other; I don't know. Question 2: In your company, which three skills/competences have been targeted by most training (measured in training hours)? OECD score: A company has either no alignment between the three skills most important for development goals, low alignment (i. e. one development priority is also a training priority), high alignment (i. e. two development priorities are training priorities) or full alignment (i. e. all three development priorities match the three training priorities). ES-Spain, UK-United Kingdom, HU-Hungary, IT-Italy, FR-France, NL-Netherlands, LV-Latvia, LT-Lithuania, DE-Germany, LU-Luxembourg, AT-Austria, FI-Finland, SI-Slovenia, PL-Poland, SK-Slovakia, BE-Belgium, DK-Denmark, GR-Greece, PT-Portugal, NO-Norway, IE-Ireland, EE-Estonia.

Sources: CVTS 5, OECD (2019a)

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proved to be quite satisfied overall with what they had learned in their courses, and could use the knowledge and skills acquired (Autorengruppe Bildungsberichterstattung, 2020, pp. 220 f.).

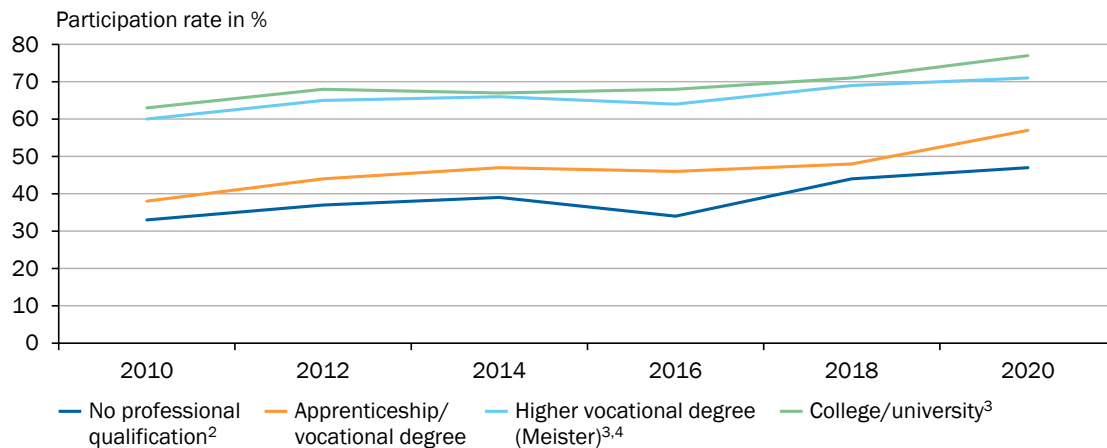
Participation in CET by personal characteristics

381. Participation in CET varies significantly with the qualification level (Schwerdt et al., 2012; Dostie, 2020). While 77 % of people with a (technical) tertiary education degree in 2020 stated that they had undergone non-formal CET in the previous twelve months, only 47 % of persons without a vocational qualification had done so. ↘ CHART 107 In Germany, the gap in participation rates by qualification level is one of the highest in the OECD (OECD, 2021b, p. 169). The gap in CET participation by qualification level has not narrowed significantly in recent years. ↘ CHART 107 This gap is particularly worrying because structural change makes CET and retraining for the low-skilled particularly urgent (OECD, 2021b, p. 149). ↘ ITEM 384

382. In Germany, CET provision specifically targeting the **low-skilled** consists primarily of **formal educational activities** leading to recognised school or vocational qualifications (OECD, 2021b, pp. 165 ff.). As it is often difficult for the low-skilled in particular to engage in a formal training course lasting several years, the

↘ CHART 107

Participation in non-formal continuing education by qualification level¹



1 – Continuing education activities in the past twelve months of persons aged 18 to 64 years. 2 – Since the AES 2016, the newly introduced category „Semi-skilled apprenticeship/vocational internship as at least 6-month training in the company“ is assigned to the category „No professional qualification“. 3 – Up to the AES 2014, studies at a vocational academy were assigned to the category „Higher vocational degree“. With the differentiated data since the AES 2016, the category „Studies at a vocational academy“ is assigned to the category „College/university“. 4 – The categories „Fachschule der DDR“ and „Ausbildungsstätte/Schule für Erzieher/-innen“ introduced in the AES 2016 have since been assigned to the category „Higher vocational degree“

Source: Federal Ministry of Education and Research (2021) based on the Adult Education Survey (AES 2020)

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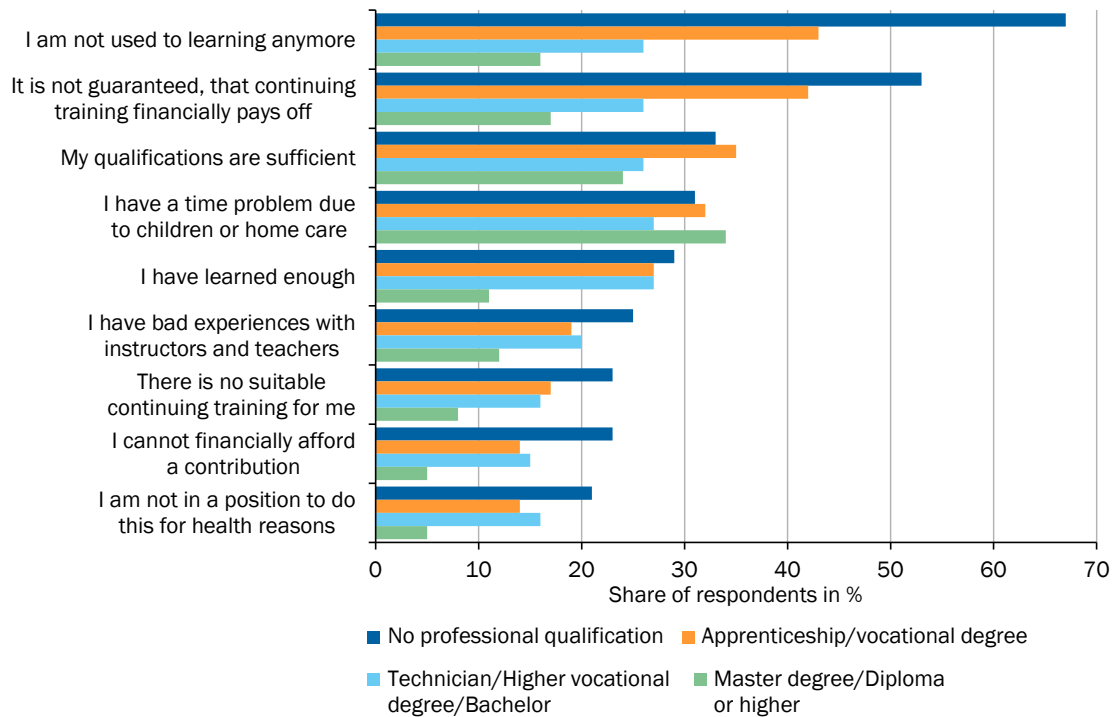
concept of **partial qualifications**, through which formal qualifications can be acquired in partial steps, was launched (Grebe et al., 2017; Fischer et al., 2020; OECD, 2021b, p. 98). This makes it possible to react more quickly and flexibly to changing qualification requirements in times of digital transformation. Both an evaluation of transitions into employment covered by social insurance (Bönke et al., 2022) and a company survey (Fischer et al., 2020) show positive effects of partial qualifications on labour-market success. However, partial qualifications are sometimes only offered regionally and only for certain occupations. Modularised CET provision in Germany thus lags behind other countries (OECD, 2021b, p. 106).

383. Literacy and basic education already play an important role as a prerequisite for vocational training for the low-skilled. The National Decade for Literacy and Basic Education (AlphaDecade), jointly proclaimed by the Federal Government and the Länder for the years 2016 to 2026 (BMBF, 2020), has sent an important signal to raise awareness of the need for basic education and to strengthen coordination between the actors involved.

384. In 2017, the IAB **asked employees about the reasons** that prevent them from participating in further vocational training (Osiander and Stephan, 2018). Among the highly qualified (people with a Master's degree, diploma or higher), lack of time was most frequently cited (34 %); in second place was the assessment that one's own qualifications are sufficient (24 %). ↘ CHART 108 Lack of time is generally cited as an obstacle in Germany more often than average in an OECD comparison (OECD, 2021b, p. 128). In the IAB survey, the most frequently cited obstacle by the **low-skilled** (persons without a vocational qualification) was that they were

↪ CHART 108

Reasons that prevent participation in continuing education and training
Employee survey in 2017¹



1 – Online Survey of the Institute for Employment Research (IAB) on continuing education and training; sample size N = 701 to 782.

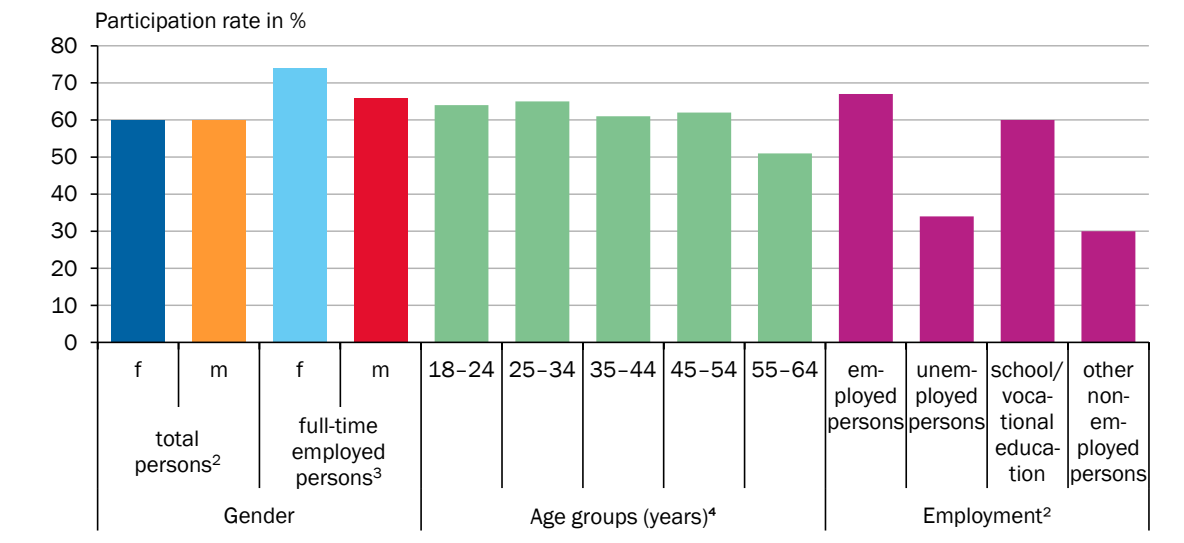
Source: Osiander und Stephan (2018)
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no **longer used to learning** (67 %); the second most frequent obstacle was **uncertainty about the financial return on continuing education** (53 %). In addition, low-skilled workers are particularly likely to be employed in occupations and sectors that offer few in-company CET opportunities (OECD, 2021b, pp. 160 ff.). ↪ ITEMS 389 AND 397

385. Participation in non-formal CET also varies by gender, age and employment status. **Women** participated in CET more frequently than men in 2020, all other personal characteristics being equal (BMBF, 2021, p. 46). ↪ CHART 109 Participation in CET also decreases with **age**, albeit less so than for formal CET. **Unemployed** and other non-employed persons participate less often in non-formal CET than employed persons. ↪ CHART 109 Employees whose **jobs can be replaced by digital technologies** – i.e. particularly routine jobs – also participate less often in continuing education and training (Hess et al., 2019).

386. Overall, it can be seen that, despite state support for CET measures, ↪ BOX 20 **certain groups of people participate in CET at a rate significantly below average**, even though they could be expected to have similar or higher returns than other groups of people. ↪ ITEM 372 Options for action to increase participation in CET in a targeted manner are discussed in section III.3. ↪ ITEM 391

↘ CHART 109

Participation in non-formal continuing education according to groups of persons in 2020¹


1 – Continuing education activities in the past twelve months of persons aged 18 to 64 years. 2 – Sample size: n = 5,455. 3 – Sample size: n = 2,778. 4 – Sample size: n = 5,818.

Source: Federal Ministry of Education and Research (2021) based on the Adult Education Survey (AES 2020)

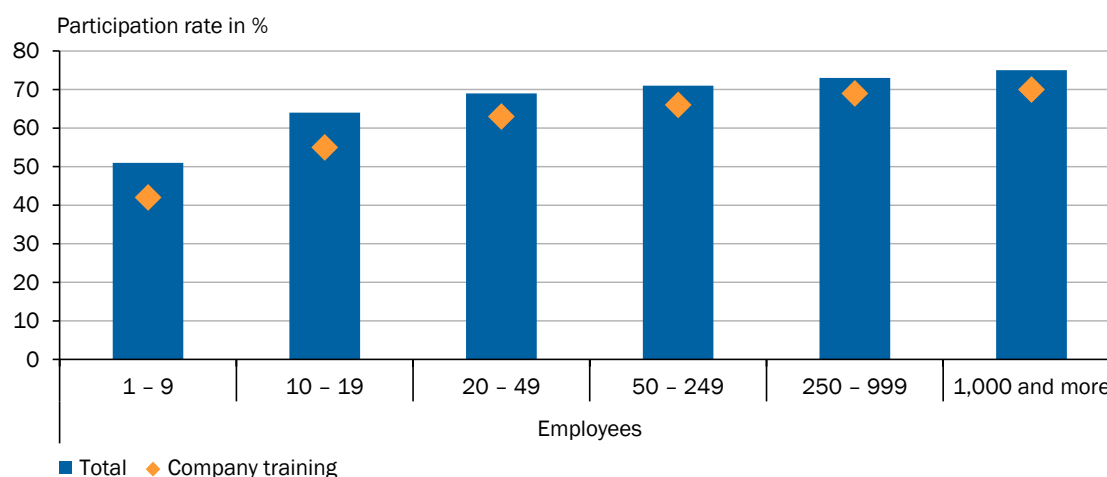
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Participation in CET by company characteristics

- 387.** The financial and organisational ability – and possibly also the willingness – of companies to offer CET can vary depending **on the size of the company** (König, 2020, p. 44). According to the Federal Statistical Office, 77.3 % of companies in Germany offered CET opportunities in 2020. This applied to 94.3 % of companies with more than 250 employees, but only 87 % of SMEs with 50 to 249 employees, and only 73.7 % of companies with 10 to 49 employees. Accordingly, it can be seen that employees in small and medium-sized companies participate in CET less frequently than employees in larger companies ↘ CHART 110 These differences in CET participation are particularly large in Germany by OECD comparison (OECD, 2021b, p. 130).
- 388.** In a **poll of companies** (IW Continuing Education and Training Survey 2020), the most common factors cited as obstacles for more of their employees participating in CET were a **lack of internal capacity to plan and organise** (58 %) and a **lack of available time in which to release their employees** (57 %) (Seyda and Placke, 2020). ↘ CHART 111 These reasons probably apply in particular to small companies (OECD, 2021a), which are less able to adjust to employees being absent from work. Management capacity, which varies greatly between companies, also plays a role. Lack of financial resources was cited as a barrier to CET by only 34 % of companies (Seyda and Placke, 2020). ↘ CHART 111
- 389.** Companies' **participation** in CET also **varies** greatly **by sector**. For example, only 20 % of hotel and catering enterprises offered CET activities in 2018. By contrast, the figure was over 80 % in health and social work (81 %), public admin-

↘ CHART 110

Participation of dependent employees in non-formal continuing education by company size¹



1 – Continuing education activities in the past twelve months of persons aged 18 to 64 years. Sample size: n = 3,398.

Source: Federal Ministry of Education and Research (2021) based on the Adult Education Survey (AES 2020)

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istration (85 %) and education (87 %) (Autorengruppe Bildungsberichterstattung, 2020, pp. 212 f.; König, 2020, pp. 44 f.). In sectors with strong CET participation, there are a large number of statutory or collectively agreed regulations or company agreements on which CET is based (Heidemann, 2015). For example, there is an obligation to further train staff in health-sector professions (Deutscher Bundestag, 2018). Several collective agreements in the metal and electrical industry include sections on CET and skills planning. ↘ [ITEMS 399 AND 401](#)

390. The CET landscape in Germany is characterised by a **high degree of regional heterogeneity**; its organisation is decentralised (GCEE Annual Report 2021 items 301 ff.). On the one hand, this allows CET provision to adapt to local conditions, but on the other hand, the system makes supraregional coordination difficult (OECD, 2021b, p. 54). Most CET providers are concentrated in **large cities** (Frick and Wittenbrink, 2018; Schrader and Martin, 2021). By contrast, the courses offered by adult education centres (Volkshochschulen) cover much of the country quite evenly (Frick and Wittenbrink, 2018). The level of CET participation was very **similar** in **Western and Eastern Germany** in 2020 (BMBF, 2021). There was a lot more **variation** in participation rates **between districts** (Frick and Wittenbrink, 2018). The greater the distance to the provider, the less likely it is that people who are educationally disadvantaged will participate in continuing education (Stöhr and Baur, 2018; Schrader and Martin, 2021).

3. Options for action to strengthen CET

391. Demand for qualified personnel is likely to increase faster than supply as a result of demographic and structural change. ↘ [ITEMS 355 AND 366](#) Continuing education and training, especially for the low-skilled and for people whose jobs are threatened by structural change, could help close this gap. This section discusses various

↪ CHART 111

Reasons cited by companies that hinder CET activities



1 – IW Continuing Education Survey 2020; sample size: N= 1,114 to 1,120. Excluding companies that did not provide any information.

Source: Seyda and Placke (2020)

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measures that can specifically address the barriers to CET faced both by companies ↪ ITEM 401 and by certain groups of people, especially the **low-skilled**, ↪ ITEMS 392 FF. **employees threatened by structural change**, ↪ ITEMS 397 FF. **people on short-time working** ↪ ITEMS 403 F. and the **unemployed**. ↪ ITEM 405 ↪ TABLE 20 Finally, some general recommendations for action are offered. ↪ ITEMS 406 FF.

Low-skilled workers

392. The high level of uncertainty about the benefits of continuing education and training, especially among the low-skilled, ↪ ITEM 384 could be reduced by providing counselling. However, little use has been made of available advisory services up to now; of those who do use them, only half find them helpful (Osiander and Stephan, 2018). One reason for the low uptake could be the unclear and incomplete counselling structure. A **clearer, more comprehensive and qualitatively more convincing counselling structure** is therefore needed. In addition, **outreach guidance in the workplace**, for example by company CET commissioners, would be helpful (BIBB, 2019; Pothmer et al., 2019; OECD, 2021b, p. 169; GCEE Annual Report 2021 items 304 f.). Interesting examples of best practice include initiatives by trade unions in the metal and chemical industries (OECD, 2021b, p. 173), where members approach low-skilled colleagues in the workplace to mobilise them for further training. In the United Kingdom, the “unionlearn” programme trains union learning representatives to help workers identify learning needs and arrange training opportunities. The programme has been very effective in increasing participation in training, especially among the low-skilled (OECD, 2021b, p. 174).

TABLE 20

Central options for action in continuing education

Advice/information	Further training offers	Funding/incentives
<ul style="list-style-type: none"> Comprehensive counselling structure and low-threshold, outreach counselling at the workplace (especially relevant for the low-skilled) Role models for workers Strengthening guidance for enterprises, especially SMEs Agreement between the federal government, Länder, bargaining parties, external experts on which competences will be needed in the future Cooperation between companies on successful continuing education structures, qualification networks 	<ul style="list-style-type: none"> Clearer design and better networking of the range of services structure Minimum standards for the quality of services, uniform national certification of quality Coordinated, quality-assured and nationally recognised continuing education modules, nationally available and standardised partial qualifications Workplace-based and practice-oriented learning processes (for low-skilled workers) Improve the general education day-care and school system as a basis for lifelong learning 	<ul style="list-style-type: none"> Training (part-)time: coverage of indirect training costs (especially relevant for people who want to undergo individual training to maintain their employability) Individual learning account to cover direct training costs (particularly relevant for people who individually train to maintain employability) Further training premium for low-skilled workers

Source: own representation

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393. A less complex design and tighter **network of courses offered** should also contribute to overcoming the barriers to CET experienced by the low-skilled (GCEE Annual Report 2021 items 301 ff.). As part of the National CET Strategy, plans have already been made to set up a central entry portal (“National Online CET Platform” [“Nationale Online Weiterbildungsplattform”]) to inform those interested in CET about programmes on offer and funding opportunities (BMAS and BMBF, 2019; Bundesregierung, 2022a). However, this platform is not yet in use. Ideally, such a platform would make needs-based suggestions.

394. Greater participation in CET by people who shy away from organised learning could also be achieved through **workplace-based and practice-oriented learning processes** (Pothmer et al., 2019; OECD, 2021b, p. 169). Companies should exchange information more often – for example in their associations and with social partners – about which types of CET (e.g. time, place, content and media) employees find acceptable, and which incentives and motivational tools work. **Role models** from different social backgrounds could have a motivating effect here. If companies have a clearer idea of what they have to gain from improving their employees qualifications, [ITEM 401](#) they can also communicate this information more clearly to their employees and thus help them overcome uncertainties.

395. Financial incentives for low-skilled workers via additional (nationwide) CET **bonuses**, for example for passing exams for partial qualifications, could increase CET participation further. However, the effects of the bonuses introduced in 2016 for the successful completion of intermediate and final examinations of CET courses [BOX 20](#) have not yet been clearly shown, and evaluation is difficult due to the lack of comparison groups (Kleifgen et al., 2022). If the bonus scheme is not effective, this could be due to a lack of awareness (Dohmen et al., 2022) or a lack of supplementary motivational incentives. [ITEM 392](#)

396. **Partial qualifications** ↘ ITEM 382 have hitherto only been offered regionally, for certain occupations and in different structures. What is required here is a **standardised structure of CET courses for partial qualifications** and **nation-wide availability** (OECD, 2021b, p. 106). As a general rule, if acquired qualifications are transparent for potential employers (e.g. thanks to standardisation), CET pays off for learners, and, in turn, this is likely to have a positive effect on people's willingness to continue learning (Pothmer et al., 2019). Initiatives to expand partial qualifications are currently being promoted within the framework of the National CET Strategy (NWS); they should be accelerated and expanded.

Employees threatened by structural change

397. Up to now, funding opportunities for further training and retraining employees have been directed primarily at companies. ↘ BOX 20 However, there is a need for improvement in the **individual support provided to employees** who want to retrain because their **qualifications will no longer be needed in the foreseeable future** (OECD, 2021b, p. 135), or because they can no longer continue working in their current job for reasons of age. These groups of people are hardly covered at all by existing support measures. The **Upgrading Training Assistance Act (Aufstiegs-BaföG)** ↘ CHART 102 offers support for people who wish to acquire higher qualifications (upgrading) – but not for retraining at the same level of the German Qualifications Framework. There are plans to extend support to further training at the same level and for full training in a second occupation. This is part of the **coalition agreement** of the Federal Government (SPD, Bündnis 90/Die Grünen and FDP, 2021, p. 67; Seifert, 2022), but details and concrete implementation steps have not yet been published.
398. All the Länder except Bavaria and Saxony offer workers in principle the opportunity to take employer-paid educational leave of five days per year to cover **indirect CET costs**. However, larger-scale retraining courses, as needed in the course of structural change, are not possible within this limited time frame. It would make sense to introduce a nationally uniform regulation for a **more extensive paid period of education** for eligible full-time or part-time CET courses ↘ ITEM 406 (OECD, 2021b, p. 138). All experience up to now suggests that too little rather than too much participation is to be expected for such a scheme. The wage-replacement benefit could be based on the level of unemployment benefits, as in the case of educational leave in Austria. Higher wage-replacement benefits could be considered for people with low incomes so that low-skilled staff are not deterred by the lower income. The option of educational leave should also be open to marginally employed persons.

An expansion of paid training time would simultaneously address other frequently mentioned obstacles to further training: lack of time and lack of finance. State **wage subsidies**, at least for some companies, should therefore be considered, especially because the education and training time is primarily intended to support structural change, i.e. also the transfer of employees to other companies. However, **companies** should be **involved** in the financing of longer education and training periods, e.g. via trade associations, since they are likely to benefit particularly from the availability of better qualified personnel.

399. At present, public funding in the form of wage subsidies during educational leave exists only in Mecklenburg-Western Pomerania, Hesse and Rhineland-Palatinate – in the latter two only for small companies. Some collective agreements in the metal and electrical industry already include part-time educational leave and thus, under certain conditions, a right to time off and – in some cases – continued wage payments (IG Metall, 2017). The **(part-time) educational leave** announced in the **coalition agreement** and the Federal Government's skilled labour strategy, based on the Austrian model (SPD, Bündnis 90/Die Grünen and FDP, 2021, p. 67; Bundesregierung, 2022a), should be fleshed out as soon as possible, covering details such as the duration of release periods, wage-replacement benefits, financing, and interaction with the expanded Upward Training Assistance Act (Aufstiegs-BAföG) (Seifert, 2022). Many OECD countries already have national regulations on educational leave, in some cases including compensation for lost wages. Some countries, such as Finland, Estonia and Lithuania, allow educational leave periods of up to 30 days per year. In Austria, employees can take one year of educational leave every three years (OECD, 2021b, p. 138). However, this requires the employer's consent; there is no right to educational leave. It has been shown that educational leave in Austria is rarely taken by the low-skilled or by older people (Lassnigg et al., 2011; Bock-Schappelwein et al., 2017; AMS, 2019).
400. In addition to (more) time for education and training, **direct CET costs** could be covered by **individual learning accounts** in which a person can save up financial resources during their working life and use them for further education and training (OECD, 2021b, p. 137; GCEE Annual Report 2021 item 301). Such learning accounts could potentially also cover wage costs, as an alternative to government wage subsidies. To ensure that low-skilled workers in particular benefit from learning accounts and to learn from the experience in France, for example – where low-skilled workers still hardly participate in CET despite learning accounts (GCEE Annual Report 2021 box 21) – the measure should be accompanied by information, targeted counselling and a quality control system [↘ ITEMS 375 AND 406](#) (OECD, 2021b, p. 137). Behavioural economic insights should be taken into account when providing information. The European Commission recommends that its member states establish an individual learning account and ensure adequate annual funding according to individual CET needs (European Commission, 2022a). In certain sectors particularly affected by structural change, this can be supported by public funds. According to the coalition agreement (SPD, Bündnis 90/Die Grünen and FDP, 2021, p. 67), the current Federal Government plans to set up a “free space account” for “education saving” as part of a “Life-Opportunity Training Assistance Scheme” (“Lebenschancen-BAföG”), for which people with low incomes will receive annual subsidies.

Support for companies

401. In order to overcome the obstacles experienced by companies, it would be helpful to provide more **information and advice** on the expected **changes in occupations**, the emergence of new fields of activity and the **skills that will be needed in the future**. Similarly, matching existing and required skills in the form of **career plans** for employees and **personnel-development strategies**

for companies should also help increase interest in CET at the individual and company level (Seyda and Placke, 2020). ↘ [ITEM 379](#) Identifying the skills needed in the future would help companies in their personnel planning, and qualification modules could be developed on this basis. This could be supported by external experts or **qualification networks**. In qualification networks, companies join forces with associations and institutions to form regional networks in order to plan and implement joint CET programmes for employees in the respective industries or across industries (BA, 2021; Dauser et al., 2022). Best-practice examples already exist in the chemical industry. The two social partners in the chemical industry, the Federal Employers' Association for the Chemical Industry (BAVC) and the Mining, Chemicals and Energy Industrial Union (IGBCE) have analysed over 200,000 job advertisements and produced a Future Skills Report for the chemicals industry. In addition, a skills analysis tool is to be made available to member companies and a CET guidance programme tested in cooperation with the BA (BAVC, 2021).

In the field of ICT, the **demand for further ICT training** seems to have exceeded supply up to now. In the United States, there are private providers that specialise in meeting this need. Best-practice examples show how these providers, in close **exchange with ICT start-ups** and established companies, offer application-oriented ICT training courses (e.g. on web development and data science) lasting a few weeks, and establish them as quasi-standards (EFI, 2018, p. 36).

402. Finally, **collaborations at the company level**, especially between SMEs, could serve as a regional **labour market hub**. One example is the Schwäbisch Gmünd Qualification Network (BiWe, 2020), a joint project of the BA, the Baden-Württemberg Ministry of Labour, the metal and electrical industry, and the textile and clothing industry. Early contacts between companies could enable workers whose jobs are threatened by structural change to be taken on by other companies and given further training – both before and after changing jobs. On the one hand, this could prevent unemployment; on the other, companies could secure the services of skilled workers (Kruppe et al., 2021).

Short-time workers and the unemployed

403. Periods of **short-time work** offer a **particularly suitable time** to engage in CET activities for which there would be little time under other circumstances (Weber, 2021). However, despite funding **opportunities** ↘ [BOX 20](#) and the historically high number of people on short-time work, there was little investment in CET during the coronavirus pandemic. Analyses by the IAB show that the percentage of companies that used the lost working time during short-time working to train employees was just 10 % (Friedrich et al., 2022). In addition, only 5 % of the publicly provided funds for CET were drawn down during short-time work in 2021.

↘ [CHART 101](#)

404. The fact that **little use is made of periods of short-time work for CET** is mainly due to a lack of digital formats, a shortage of teachers, and uncertainties about the business future (Bellmann et al., 2020). Due to the often **irregular** and difficult-to-plan **course of short-time work**, participation in CET also involves

considerable implementation problems in practice. During short-time work, CET courses should therefore be very flexible to allow a swift return to production when necessary; this can be made possible, for example, by cumulatively available **partial qualifications** (Eichhorst and Marx, 2022). [↪ ITEM 382](#)

Targeted incentives could also be provided by **tightening the conditions** that apply to relief for employers during short-time work. For example, extending short-time work beyond twelve months – as happened during the coronavirus pandemic (BA, 2022c) – could be linked to participation in further education and training (Weber, 2020). Stricter conditionality could also be linked to the qualification allowance proposed in the coalition agreement. It is intended to keep employees in the company after radical changes, for example as a result of digital and ecological change, and to qualify them for new demands and activities (SPD, Bündnis 90/Die Grünen and FDP, 2021). In this way, it closes the gap between the cyclical and the transfer short-time-working benefit, which only takes effect when a return to the company is ruled out (Seifert, 2022).

405. In addition to obstacles to CET, which also apply to the low-skilled in general, another obstacle for the **unemployed** is that **placement in work** by the BA has up to now taken priority over further education and education and training (SGB III section 4 (2)). [↪ BOX 20](#) For the long-term unemployed in particular, however, it would be more effective for lasting labour-market integration to focus on qualification and coaching, including **socio-educational support** during CET measures. It is therefore a positive development that, according to the amendment contained in the government draft bill (BMAS, 2022) on the reform of the programme for basic security benefits (“Bürgergeld”), **placement in work will no longer take priority over CET** aimed at improving employment opportunities. In addition, the draft law provides for a monthly **CET allowance of €150** for people entitled to benefits under SGB II and SGB III, as well as a **removal of the time limit on the bonus scheme for qualification-related CET** [↪ BOX 20](#) [↪ ITEM 395](#) for at least two years. Its aim is to reward participants' perseverance and willingness to learn and, in particular, to offer low-skilled workers an incentive to participate. Finally, there will be an entitlement to at least three months' unemployment benefit after CET (BMAS, 2022).

Other options for action

406. Participating in further education and training at regular intervals should be the standard, not the exception. In order to better anchor CET in working life, Pothmer et al. (2019) suggest a **federal CET act enshrining a right to CET** accompanied by regulated paid leave from work and guaranteed means of subsistence during programmes. The law could also lay down **minimum standards for the quality of the programmes** (GCEE Annual Report 2021 item 302) that can be followed within the framework of this right. Furthermore, a **nationwide standardised certification of programme quality** (GCEE Annual Report 2021 item 302) would be expedient. Where CET is publicly funded, it is essential to differentiate between programmes that are worthy of funding and those that are not, so that public funds are used in a targeted and efficient way (Board of Academic Advisors to the BMWK, 2022; GCEE Annual Report 2021 item 310). This

requires an understanding of which qualifications correspond to (future) needs. [▶ ITEM 401](#) In the case of new measures to promote CET, particular attention should be paid to **avoiding free-rider effects**. In-company CET schemes which companies are already running and which are in their direct interest should continue to be initiated and financed by the companies themselves.

- 407. Measuring the success of policy measures** requires concrete goals to be formulated as **quantitative indicators** (GCEE Annual Report 2021 item 311). For example, general indicators – such as participant numbers (especially of individual groups of people to measure the unevenness of CET participation), qualifications achieved, private and public expenditure on CET – would be useful, as would indicators on specific measures such as platform usage figures or indicators on the standardisation of (partial) qualifications. In order to assess the impact of individual policy measures, **evaluation systems must already be laid down when a measure is introduced**. In addition to data availability, it would be desirable to introduce innovations gradually over time – or across different sectors or regions – in order to determine causal effects, e.g. on employment patterns and wages.
- 408.** Furthermore, Pothmer et al. (2019) emphasise the importance of creating a **nationwide CET infrastructure** (GCEE Annual Report 2021 item 301). A report by the OECD (2021b, p. 102) also recommends closing gaps in provision in structurally weak areas. For example, more digital formats could be made available, especially for rural areas. In addition, the range of private CET programmes could be supplemented by offers from vocational schools and **universities**. A supply landscape of private providers geared solely towards the principle of profitability has led to the large regional differences currently observed, and thus to an underprovision in some regions. [▶ ITEM 390](#) Although CET is already embedded as a core task in higher education laws, it still plays only a marginal role. Only 2 % of 18-64 year-olds who have participated in formal education at a higher education institution assigned this to “continued” or “further” training in 2020. About 3 % have taken part in a non-formal CET activity at a higher education institution or other academic institution (BMBF, 2021, p. 65).
- 409.** In order for **higher education institutions to expand their CET programmes**, appropriate incentives should be provided, for example through target agreements, by counting courses as teaching load, and taking them into consideration when funds are allocated. CET programmes at universities should be developed as part of a strategy of education policy involving a larger number of universities (Pothmer et al., 2019, pp. 25 f.). If tertiary education institutions take on additional tasks as providers of CET, they must be equipped with the necessary resources, primarily by business and the respective participants, supplemented where necessary by the state (EFI, 2021, p. 66). [▶ ITEMS 375 AND 377](#) Since CET provided by higher education institutions – unlike other higher education teaching – can to some extent be regarded as a commercial activity, it falls under EU state aid rules. There should therefore be clearer rules on when CET offered by a higher education institution is to be classified as an commercial activity and when an exemption from the ban on state aid should nevertheless be made (OECD, 2022a).

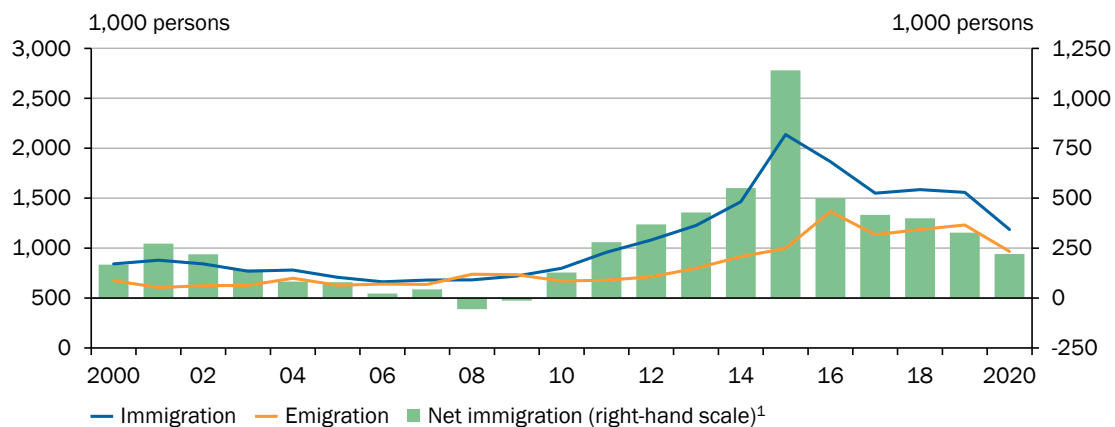
410. Skills and attitudes developed in childhood play a decisive role in the success of initial vocational training and later CET. The experience made in **early childhood education and at primary and secondary schools**, for example, influences attitudes towards learning in general, and thus towards a person's willingness to participate in CET in adulthood. Moreover, learning is a dynamic process. The better existing skills are developed, the easier it is to acquire new abilities and skills (Cunha and Heckman, 2007, 2008; Cunha et al., 2010; Berger, 2020; GCEE Annual Report 2021 items 327 f.). A child's experience and support at home also have an impact on the success of **lifelong learning** because important skills develop early in life (Cunha et al., 2006; Currie and Almond, 2011; Francesconi and Heckman, 2016; Almond et al., 2018; GCEE Annual Report 2021 items 327 f.).
411. The institutional education system has the task of compensating for deficits and social disadvantages. In Germany, this is done less successfully than in other countries (GCEE Annual Report 2021 items 329 ff.). There is therefore a particular need for action to provide more support for underachievers and the disadvantaged. In addition, digitalisation should be promoted – for example by rapidly developing the National Education Platform, which aims to provide learners with access to guidance, information and learning opportunities for their individual learning paths (BMAS and BMBF, 2022) – and nationwide comparability and evaluation should be strengthened (GCEE Annual Report 2021 items 342 ff.). Certainly, **key measures for ensuring the long-term supply of skilled personnel** include **strengthening education both in early childhood and at school** and **improving equal opportunities**.

IV. LABOUR MIGRATION

412. **Higher net immigration** would make an important contribution to stabilising the labour force potential in Germany. At around 432,500 persons per year, average net immigration in the past decade was significantly higher than the historical average. This was mainly due to the refugee migration in 2015/16. [↪ CHART 112](#) In the long term until 2060, Fuchs et al. (2021) consider net immigration of 100,000 persons per year to be realistic. According to their simulation study, immigration at this level would reduce the foreseeable decline in the labour force potential by around 1.5 million by 2035, which would, however, not be sufficient **to offset the demographic effect** (Fuchs et al., 2021). That would require, in addition to an increase in the domestic labour force potential through rising participation rates, an annual net immigration of 400,000 persons, with about 4.5 million additional gainfully employed persons by 2035 and about 14.2 million by 2060. An annual net immigration of 400,000 persons is quite high compared to the 14th coordinated population forecast of 2019. An upper limit of 311,000 persons per year (3rd variant) up until 2060 is quoted there. According to the medium-term **population projection** from 2021, net immigration in the high scenario is 450,000 persons in 2023 and drops to 320,000 persons by 2035.
413. In the following section, **increasing labour migration** is discussed as a **major possible way of increasing the labour force potential**. Complementary to this, greater use can be made of the domestic labour force potential. Another possibility would be to reduce emigration, for example by easing the subsequent immigration of labour migrants' family members. Educational migration can also contribute to an increase in the labour force potential.

↪ CHART 112

Immigration to and emigration from Germany



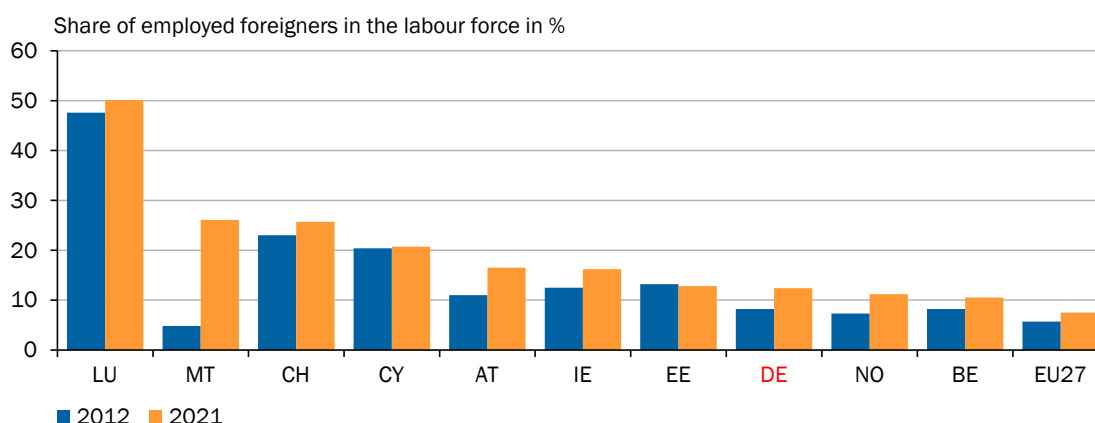
1 – Difference between immigration to and emigration from Germany (net immigration).

Sources: Federal Statistical Office, own calculations

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↘ CHART 113

Employment of foreigners in European comparison¹ for the years 2012 and 2021



1 – States with the ten highest shares. LU-Luxembourg, MT-Malta, CH-Switzerland, CY-Cyprus, AT-Austria, IE-Ireland, EE-Estonia, DE-Germany, NO-Norway, BE-Belgium, EU27-European Union.

Sources: Eurostat, own calculations
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1. Immigration of skilled labour to Germany

- 414.** Over the past two decades, **immigration** has been instrumental in meeting labour demand in Germany (Fuchs et al., 2019; GCEE Annual Report 2018 items 285 ff.), for example in the healthcare system (SVR Migration, 2022a). Between 2012 and 2021, the share of foreign individuals in the total labour force in Germany rose from around 8.2 % to around 12.4 %, well above the EU27 average in each case (from 5.7 % and 7.5 %). ↘ CHART 113 However, smaller member states often have even higher figures.



↘ BACKGROUND INFO 23

Indicators of framework conditions for highly qualified migrants

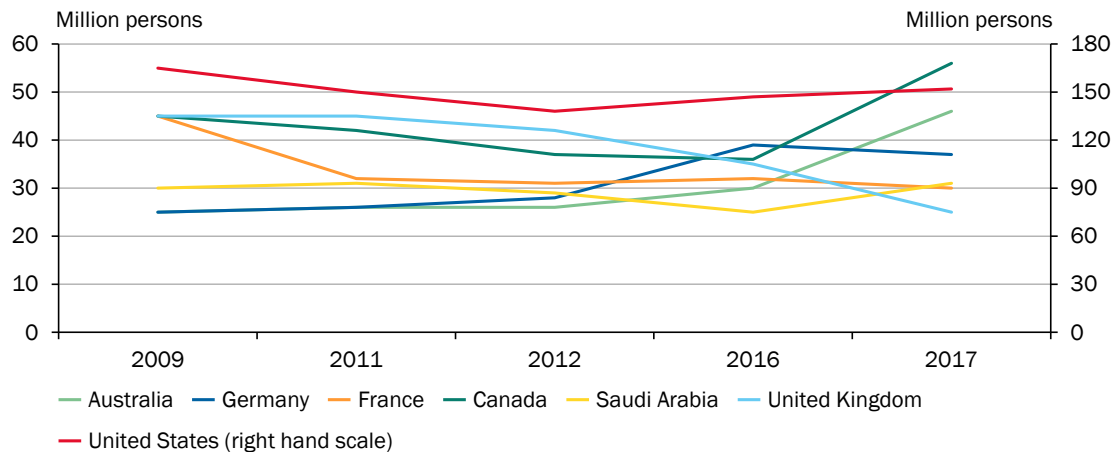
The **OECD Indicators of Talent Attractiveness** use seven dimensions to describe the framework conditions for the immigration of foreign students, entrepreneurs and highly qualified professionals in OECD countries (OECD and Bertelsmann Stiftung, 2019). The indicators include the quality of employment opportunities, income and taxes, future prospects, opportunities for family members, the skills environment, diversity and quality of life. Entry and residence conditions for the highly qualified are also taken into account.

- 415.** The barriers to entry for highly qualified people have been eased in many OECD countries over the past decades. However, some countries are still more attractive than others due to economic and labour market factors, living conditions or entry and residence conditions (OECD and Bertelsmann Stiftung, 2019). In terms of the **attractiveness of destination countries, Germany is ranked in the middle** both in an international comparison in a global **2017** survey by Gallup and

↘ CHART 114

Germany attractive for potential immigrants in international comparison

Worldwide number of people who indicate that they would like to move to the respective country



Source: Burn-Murdoch (2022) using the Gallup Potential Net Migration Index (PNMI)
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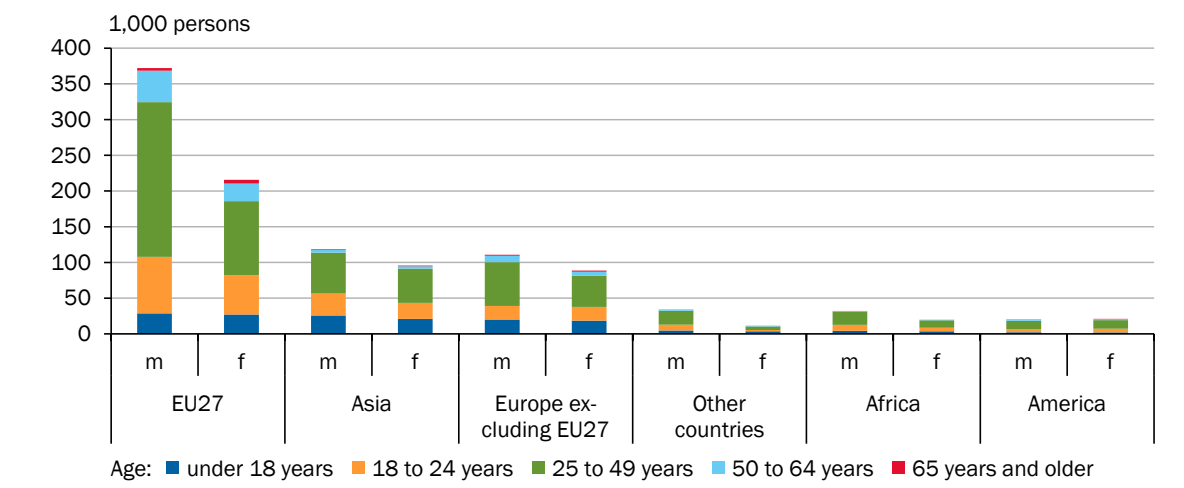
according to the OECD Indicator of Talent Attractiveness in **2019** (OECD and Bertelsmann Stiftung, 2019). ↘ CHART 114 Germany has recently shown itself to be a comparatively attractive destination country for foreign students and entrepreneurs. ↘ BACKGROUND INFO 23 However, Germany's processes for **verifying the equivalence of foreign qualifications** with German qualifications represent a **high barrier** to obtaining a residence permit. ↘ ITEMS 446 FF. In addition, **other factors** such as the **language** (Chiswick and Miller, 2014), economic and institutional factors, and **social networks** (Geis et al., 2013) influence the **decision to migrate** and the choice of a destination country.

Decline in EU internal migration as a challenge

416. Since 2010, the **majority of labour migrants** in Germany have come **from other EU countries** (Brücker et al., 2022); ↘ BACKGROUND INFO 24 ↘ CHARTS 116 LEFT AND 115 by contrast, only a small proportion have come from third countries. In 2021, it was mainly people aged between 25 and 49 who came to Germany from the EU, the rest of Europe (excluding the EU27) and Asia, and significantly more male than female immigrants. ↘ CHART 115 There are no gender differences among under-25-year-old nationals from Europe (excluding EU27) and the Americas. Immigration from the African continent has been low up to now. In the past, this was mainly refugee migration (Deutscher Bundestag, 2022a), often using irregular migration routes. The EU and the Federal Ministry of Economics and Climate Protection (BMWK) have been funding the THAMM ↘ GLOSSARY project since 2019 to boost the regular immigration of trainees and skilled workers from North Africa. In this project, the BA's Central Placement Services for Foreigners and Skilled Workers (ZAV) and the German Agency for International Cooperation (GIZ) cooperate on all aspects from migration management to post-entry integration support (BA and GIZ, 2022).

➤ CHART 115

Immigration of foreign nationals to Germany in 2021



Source: Federal Statistical Office
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➤ BACKGROUND INFO 24

Immigration routes to Germany

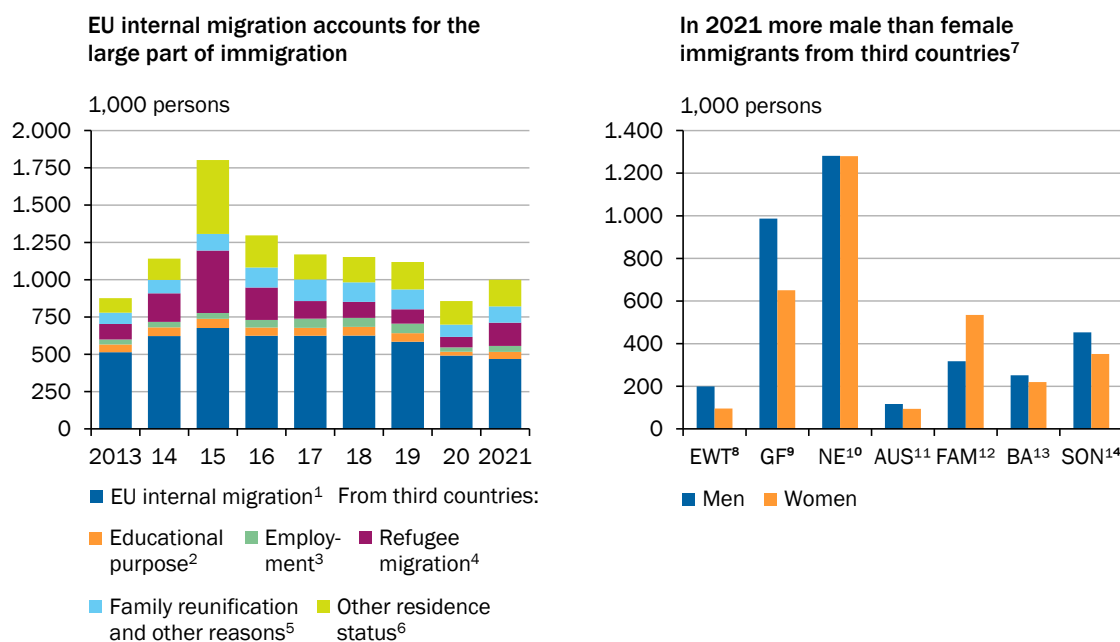
Immigration routes for the purpose of employment differ depending on the country of origin. For EU and EEA (European Economic Area) nationals, the principle of **free movement of workers** applies, which, along with the freedom to take up residence, is a form of the free movement of people. They have the right to seek and take up employment anywhere in the EU (SVR Migration, 2022b). Third-country nationals require a residence permit, which is regulated by sections 18 to 21 of the Residence Act (AufenthG). ➤ CHART 117 Unlike people who emigrate in the context of **refugee migration**, economic motives are in the foreground in the case of **labour migration** (Chiswick, 2000). Spouses and children of relatives living in Germany can enter with a residence permit **for family reasons** (sections 27 to 36a of the Residence Act). Another immigration route is **migration for educational purposes** (sections 16 to 17 of the Residence Act). This includes residence permits for studying at a German university or for school-based or company-based vocational training or further training.

- 417. Immigration to Germany reached a peak in 2015 in the course of refugee migration (GCEE Annual Report 2016 items 682 ff.; GCEE Annual Report 2017 items 156 f.). **Immigration from EU states is declining** compared to 2018 and is expected to decline further in the future, as these countries are experiencing similar demographic changes as Germany (Fuchs et al., 2019; Kubis and Schneider, 2020). ➤ CHART 116 LEFT

Immigration fell in 2020 as a result of the coronavirus pandemic and the associated restrictions, for example on visa applications and travel. ➤ CHART 112 Immigration for educational and employment purposes plummeted especially sharply. In 2021, the numbers increased again, with more male than female third-country nationals migrating to Germany. ➤ CHART 116 RIGHT

↗ CHART 116

Immigration to Germany from the EU and third countries according to selected purposes of residence titles and gender



1 – In each case without Germans and without the United Kingdom. 2 – Study, language course, school attendance, other training. 3 – In addition to persons who have been granted a residence title for the purpose of employment, this category also includes those who have received an EU Blue Card or have moved to Germany as researchers or self-employed persons. 4 – Includes the purposes permissions to remain pending on the asylum decision, temporal suspension of deportation and humanitarian reasons. 5 – Family reasons, other reasons as well as settlement permit and EU right of residence. 6 – Persons who are exempt from the requirement of a residence title and persons who have applied for a residence title but have not yet had it processed. 7 – Including the United Kingdom. 8 – EWT-Employment status: Persons with a residence title for the purpose of employment. 9 – GF-Refugee status: Persons with residence title due to reasons of international law, humanitarian and political reasons, with temporal suspension of deportation and with permission to remain pending on the asylum decision. 10 – NE-Settlement permit: Persons with an unlimited residence title. 11 – AUS-Persons for the purpose of education. 12 – FAM-Persons with a residence title for family reasons. 13 – BA-Applicants for a residence title. 14 – SON-Persons with other residence status (among others without residence title).

Sources: Federal Office for Migration and Refugees, own calculations
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Regulated immigration from third countries

418. There are various ways to immigrate to Germany as a skilled worker from third countries. ↗ CHART 117 The opportunities for access to the German labour market are regulated in the Residence Act (AufenthG) and depend heavily on the qualification level. Immigration from abroad without qualified vocational training is limited and temporary on principle (section 19c (1) of the Residence Act in conjunction with the Employment Ordinance (BeschV) or inter-governmental agreements). The Western Balkans Regulation (section 19c (1) of the Residence Act in conjunction with section 26 (2) of the BeschV) allows nationals from the Western Balkans to enter Germany without examination of the qualification level for the purpose of employment until the end of 2023 with a specific job offer and with the approval of the BA. The Western Balkans include Albania, Bosnia and Herzegovina, Kosovo, Montenegro, Northern Macedonia and Serbia. In addition to the priority check, ↗ GLOSSARY the BA's approval requires an

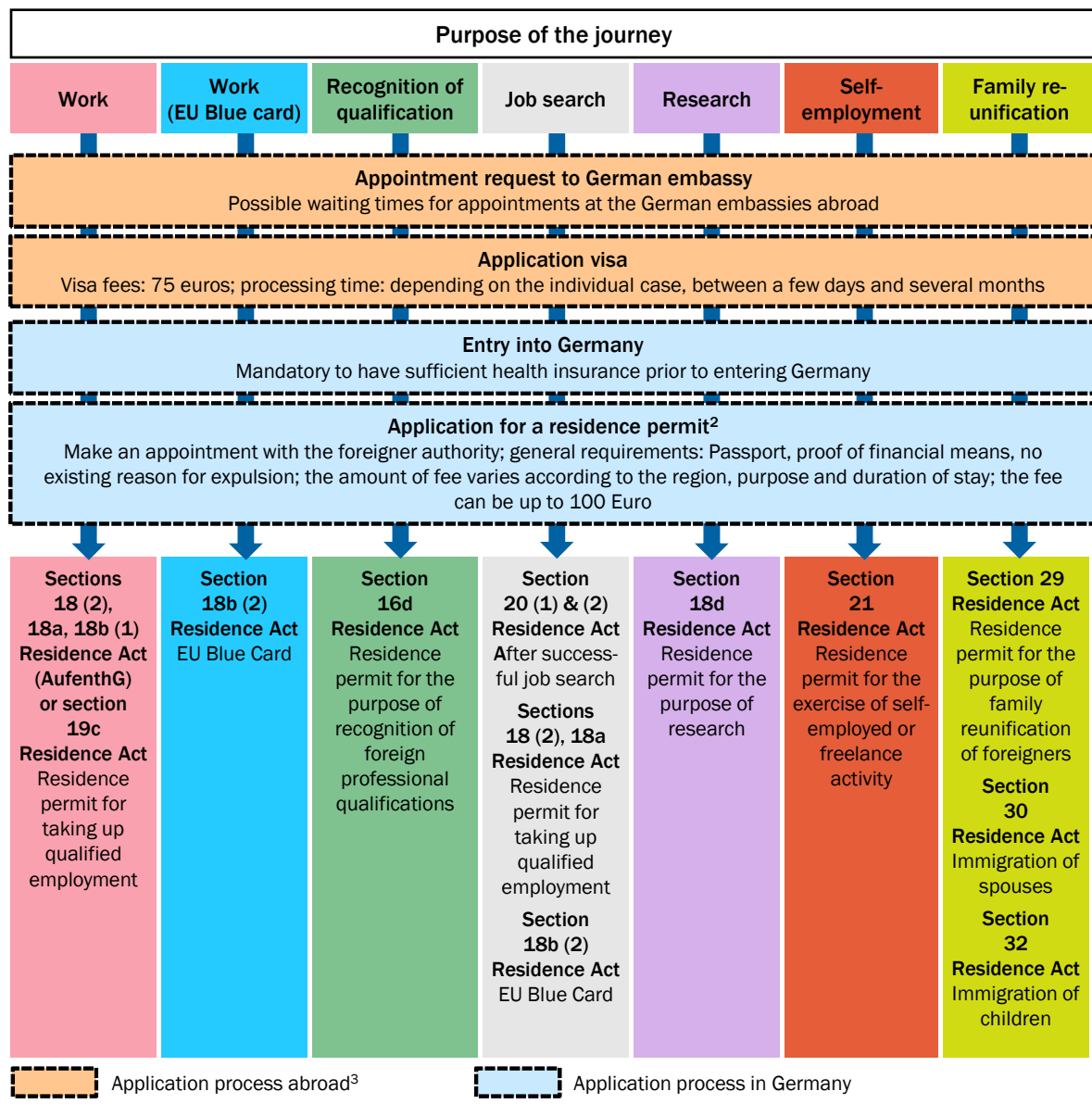
examination of the working conditions. These must not be less favourable than those that apply to comparable domestic employees, which is intended to prevent poverty migration. Under the Skilled Immigration Act (FEG), ↘ [GLOSSARY](#) by contrast, third-country nationals with vocational training completed abroad may enter Germany not only with a job offer, but also to look for a job (section 20 (1) of the Residence Act). ↘ [CHART 117](#)

419. As a general rule, the FEG, which came into force on 1 March 2020, allows **access to the German labour market for qualified skilled workers and professionals from third countries** whose foreign professional qualifications are recognised as equivalent to the German qualification (section 18a of the Residence

↘ [CHART 117](#)

Labour migration as a pathway into the German labour market

Visa and entry procedure for immigrants from third countries subject to visa obligation¹



1 – As of January 2022. 2 – Residence title corresponds to the purpose of employment entered in the visa. 3 – Clarification of intergovernmental agreements and special agreements.

Sources: BMWK, own representation
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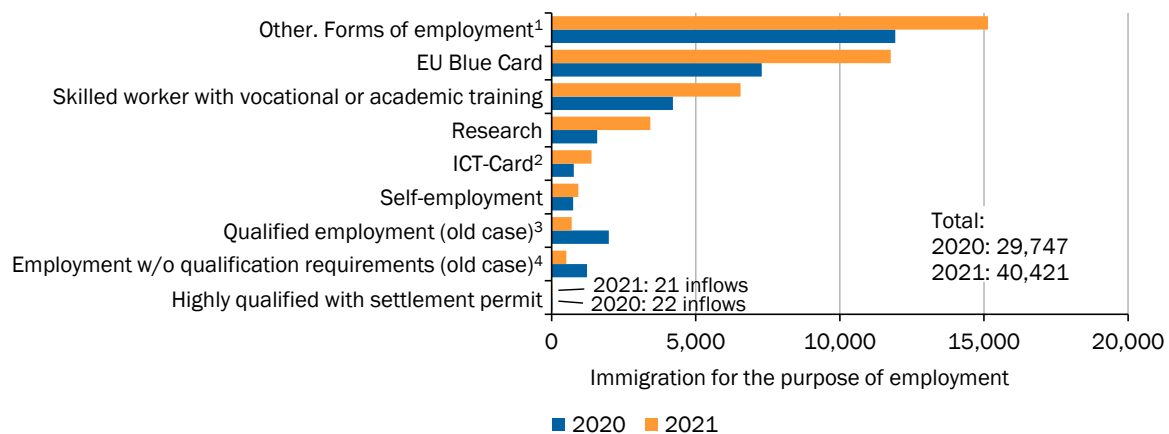
Act). In addition to people with a university degree, this also includes people with vocational training. As early as 2012, labour market access for people with a higher education qualification was largely liberalised by the Highly Qualified Persons Directive and the EU Blue Card [↪ GLOSSARY](#) (SVR Migration, 2022b). [↪ ITEM 445](#) A special regulation with similarly liberalised labour market access currently exists for ICT specialists with practical knowledge from third countries, so that recognition of their qualifications is not necessary (BMW, 2020).

Effects of regulated labour migration to Germany

- 420. In order to assess the prospects for sustainable labour migration, the GCEE commissioned an expert opinion from the IAB to analyse the **effects of previous instruments of regulated labour migration** to Germany (Brücker et al., 2022). In addition to the development of labour migration, the expert report examines the interrelations between the different immigration routes and success on the labour market.
- 421. In 2005, the Immigration Act created a legal basis in Germany for regulated **labour migration** from third countries for the first time (Brücker et al., 2022, p. 12). The number of immigrants from third countries who entered Germany with a visa or residence title for gainful employment rose from just under 33,600 in 2013 to around 64,200 in 2019, but fell again to around 30,000 in 2020 due to the pandemic. [↪ CHART 116 LEFT](#) In 2021, labour migration rose again to just under 40,400 immigrants. Almost all types of residence titles were affected by the increase. [↪ CHART 118](#) “Other forms of employment” currently account for the biggest share of labour migration from third countries with just under 15,100 people. This

[↪ CHART 118](#)

Labour migration from third countries for the entry years 2020 to 2021



1 – Residence permit for employment (Section 19c Residence Act), irrespective of a qualification as skilled worker, if the Employment Ordinance (BeschV) or an intergovernmental agreement permits this (1). Residence permit for employment with practical vocational knowledge, irrespective of a formal qualification, if the Employment Ordinance permits this (2). Residence permit for employment in the public interest (3) or a civil servant relationship with a German employer (4). Until the end of February 2020, residence permits were also issued under section 18 (3) (o.v.) of the Residence Act for the purpose of employment that does not require qualified vocational training. 2 – Intra-corporate transfers – transfer within a company. 3 – Section 18 (4) (o.v.) Residence Act. 4 – Section 18 (3) (o.v.) Residence Act.

Sources: BAMF using the Central Register of Foreigners (AZR), own calculations
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category includes, among others, section 19c of the Residence Act, which was introduced as part of the Skilled Immigration Act (FEG) and allows foreign nationals to work for special employment purposes or under intergovernmental agreements, regardless of their qualifications. In 2021, just under 20 % of the residence permits granted under section 19c of the Residence Act (excluding section 19c of the Residence Act in conjunction with sections 3 and 5 of the Employment Ordinance, BeschV) were accounted for by the Western Balkans regulation (BAMF, 2022a). In second and third place come the EU Blue Card with around 12,000 and the FEG with just under 6,500 people (skilled workers with vocational or academic training). However, the inflows under the FEG may be distorted by the effects of the pandemic and probably represent a lower limit. Overall, regulated labour migration accounted for only a small proportion of total inflows, averaging 4.1 % in the years 2013 to 2021. [↪ CHART 116 LEFT](#)

422. In view of the development of labour migration [↪ ITEMS 421 F.](#) and of immigration as a whole in recent years, [↪ ITEMS 416 F.](#) the question arises as to how the different immigration routes are related to the chances of integration on the German labour market. In the expert report commissioned by the GCEE, Brücker et al. (2022) analyse the differences in the **immigrants' chances of employment** in Germany according to the respective year of immigration and different immigration routes. [↪ BACKGROUND INFO 25](#) [↪ CHARTS 119 AND 120](#)



[↪ BACKGROUND INFO 25](#)

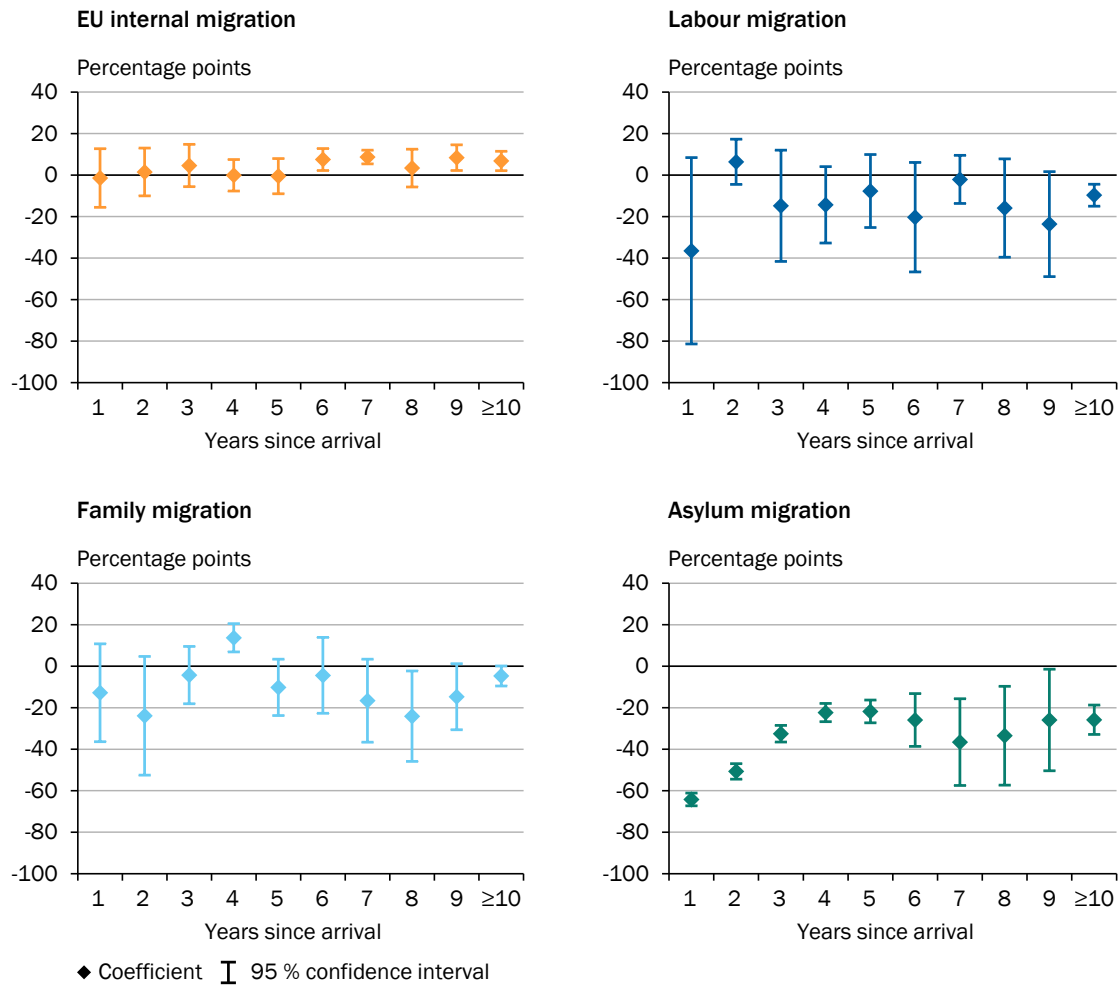
Data basis and methodology of the expert report by Brücker et al. (2022)

In its analysis of employment opportunities/prospects according to immigration routes, the expert report uses a multivariate regression approach based on the **IAB SOEP migration sample**, the **IAB-BAMF SOEP survey** of refugees and the Socio-Economic Panel (**SOEP**) for the years 2013 to 2020. In a second focus, the **Integrated Employment Biographies (IEB)** serve as the data basis for analysing the integration trajectories of immigrants within the framework of the expert report. The IEB are a 2 % sample of all employees covered by social insurance, in which various statistics of the Federal Employment Agency (BA) are combined; they provide information on employment status, earnings and receipt of benefits. Information on the legal basis of immigration is not included. In order to identify people from the Western Balkan states, the IEB data were linked to the permission to take up employment granted by the BA, which is recorded at the respective BA offices. In order to reduce the number of second generation immigrants included in the sample, Brücker et al. (2022) limited the analysis to people whose first entry in the IEB was in 2016 or 2017, and who were at least 21 years old (21+). For the comparison with the average of the German and foreign labour force, or with the labour force as a whole, the restrictions on people's age and year are waived with regard to the first entry in the IEB. Only people of working age are recorded; trainees as well as marginally or irregularly employed people are excluded from the distribution according to activity levels, accuracy of fit and wages. The employment and unemployment rates as well as the percentage of people receiving benefits are calculated as of 30 June of the respective year (Dauth and Eppelsheimer, 2020).

↘ CHART 119

Employment rates¹ of men² by immigration route and years since arrival for the years 2013 to 2020

Differences in employment rates to men without migration background in percentage points



1 – Results of a multivariate regression, with the dependent variable (binary) capturing the employment status. Control variables include indicator variables on the year of interview and five age categories. Heteroskedasticity-robust standard errors were used. Data weighted with SOEP person weights. Reading aid: The coefficients can be interpreted as the difference in the employment rate compared to persons without a migration background in percentage points. 2 – Male persons of working age.

Source: Brücker et al. (2022)

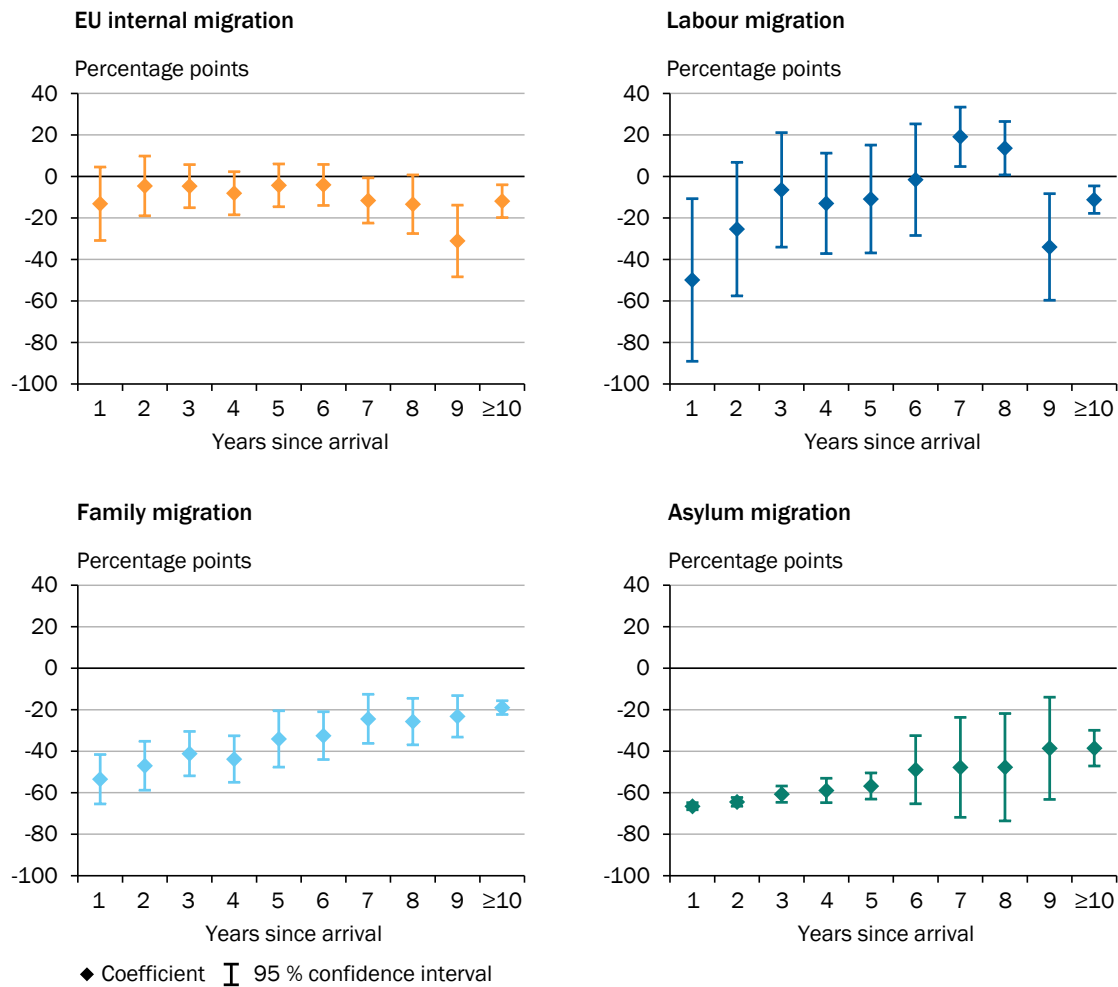
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423. The results of the analysis conducted by Brücker et al. (2022) show that for men, the **employment rates of immigrants from the EU and of labour migrants from third countries in the first years after immigration** do not differ significantly from those of men without a migration background and are actually slightly higher in the long term. ↘ CHART 119 TOP LEFT AND TOP RIGHT In the case of family migration, the differences vary. ↘ CHART 119 BOTTOM LEFT In the case of asylum migration, on the other hand, the employment rate is significantly lower than for men without a migration background. ↘ CHART 119 BOTTOM RIGHT Among women, the employment rates of female immigrants from the EU hardly differ, ↘ CHART 120 TOP LEFT but the employment rate of female labour migrants from third countries in the first year of immigration is significantly lower than that of women without a migration background. ↘ CHART 120 TOP RIGHT

↘ CHART 120

Employment rates¹ of women² by immigration route and years since arrival for the years 2013 to 2020

Differences in employment rates to women without migration background in percentage points



1 – Results of a multivariate regression, with the dependent variable (binary) capturing the employment status. Control variables include indicator variables on the year of interview and five age categories. Heteroskedasticity-robust standard errors were used. Data weighted with SOEP person weights. Reading aid: The coefficients can be interpreted as the difference in the employment rate compared to persons without a migration background in percentage points. 2 – Female persons of working age.

Source: Brücker et al. (2022)

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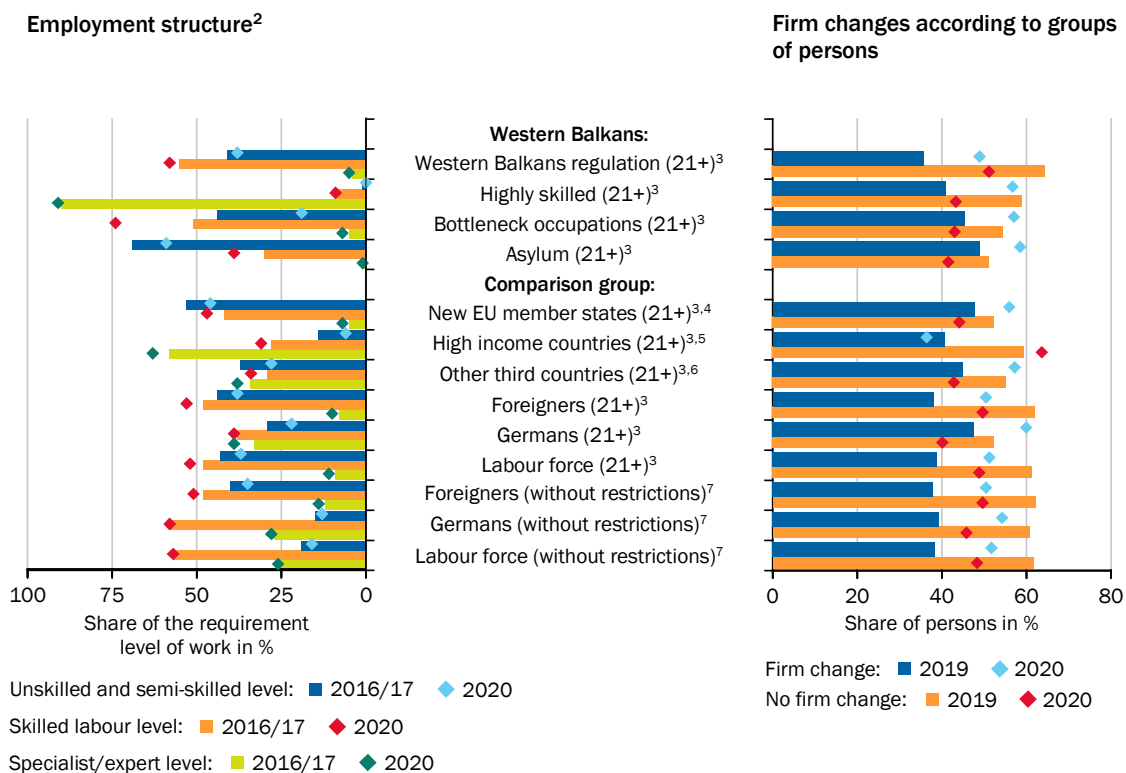
In the subsequent years, however, there are no longer any significant differences here either. The large confidence bands, however, indicate low case numbers. For women who come to Germany via family migration, on the other hand, employment is significantly lower, even if it develops positively. ↘ CHART 120 BOTTOM LEFT The differences decrease over the years as a result of the integration of migrant women, but they do not disappear completely even ten years after immigration. Distinct differences in employment rates are particularly evident in the case of the asylum migration of women. ↘ CHART 120 BOTTOM RIGHT In summary, the results point to the **important role of immigration channels for integration into the labour market**. Overall, the results for regulated labour migration are very good.

424. In a second focus, the expert opinion by Brücker et al. (2022) commissioned by the GCEE examines the immigration route of labour migration on the basis of microdata from the employment and social security statistics of the IAB and the BA. [↪ BACKGROUND INFO 25](#) The **Western Balkans regulation** has enabled immigration without qualification requirements since 2016. The focus here is on **labour market integration** via this immigration route compared to other immigration routes for third-country nationals (with further differentiations, such as immigrants from high income countries), people with German citizenship and EU citizens. In this context, the evaluation of the Western Balkans regulation (Brücker et al., 2020a) is updated beyond 2017 until 2020.

425. The **share of employed people** among immigrants who used the **Western Balkans scheme** between 2016 and 2020 at the age of 21 and older is **very high** compared to German and European first-time employees (Brücker et al., 2022, p. 30). In the first four years after immigration, almost no one became unemployed. This is probably due to the immigration regulation, which is linked to employment conditions such as a binding job commitment. [↪ BACKGROUND INFO 25](#) In the first years

↪ CHART 121

Employment structure and firm changes of employees who immigrated under the Western Balkans regulation and comparison groups¹



1 – Source for the Western Balkan countries: IEB and ZuWG 2016-2020, for all other groups: Two-percent sample of IEB 2016-2020. 2 – Excluding apprentices, marginally or irregularly employed persons. 3 – Only persons who were first recorded at the age of 21 or older (21+) and who were first recorded at the time of observation no more than two years ago. 4 – Bulgaria, Croatia, Czechia, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, Slovenia. 5 – Australia, Canada, Israel, Japan, New Zealand, Republic of Korea, United States. 6 – Other third-countries nationals without the main countries of origin for asylum Afghanistan, Eritrea, Iran, Iraq, Nigeria, Pakistan, Somalia, Syria. 7 – Persons of working age, with no age limit from 21 years onwards and without year limit with regard to the first observation.

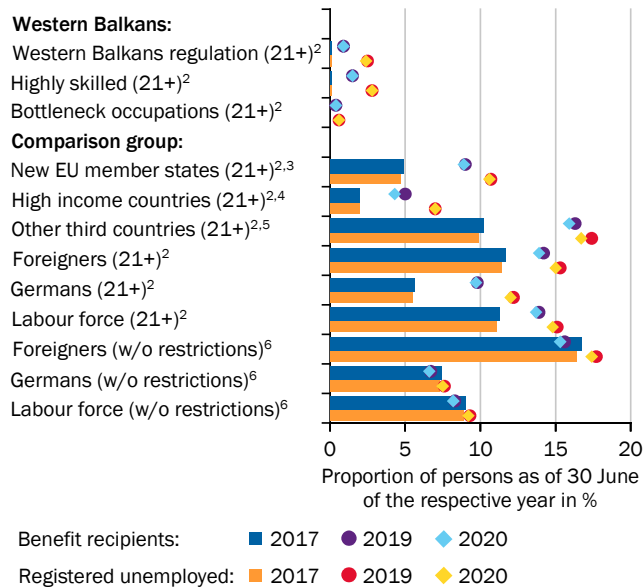
of immigration in 2016 and 2017, around 59 % of those who immigrated via the Western Balkans scheme were employed in jobs with higher skill requirements (**skilled worker, specialist and expert**). This proportion was lower for all comparison groups in the same age category. ↘ CHART 121 LEFT In 2020, the figure for labour migrants from the Western Balkans rose to 63 %. This was below the level for other immigrant third-country nationals (72 %), but above the level for migrants from the new EU states (54 %) and asylum-seekers from the Western Balkans (40 %). In the medium term, therefore, an immigration route without qualification requirements does not necessarily lead to a high proportion of employees in manual jobs.

Immigrants who have come to Germany via the Western Balkans scheme since 2016 and 2017 have also recorded **stable employment in the short (Brücker et al., 2020b, p. 8) and medium term**. ↘ CHART 121 RIGHT The proportion of these people who changed their place of work between 2016/17 to 2020 was around 49 %, lower than that of nationals from Germany (60 %) and the new EU states (56 %).

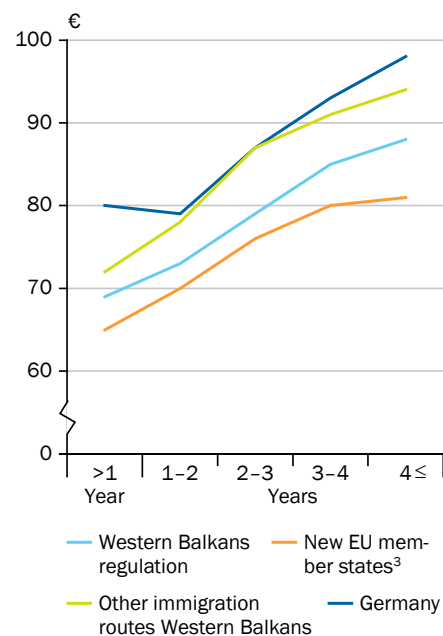
↘ CHART 122

Benefit recipients and unemployed persons as well as daily pay of employees who immigrated under the Western Balkans regulation and comparison groups¹

Benefit recipients (SGB II or SGB III) and unemployed persons



Daily pay⁷ by year since the first observation⁸



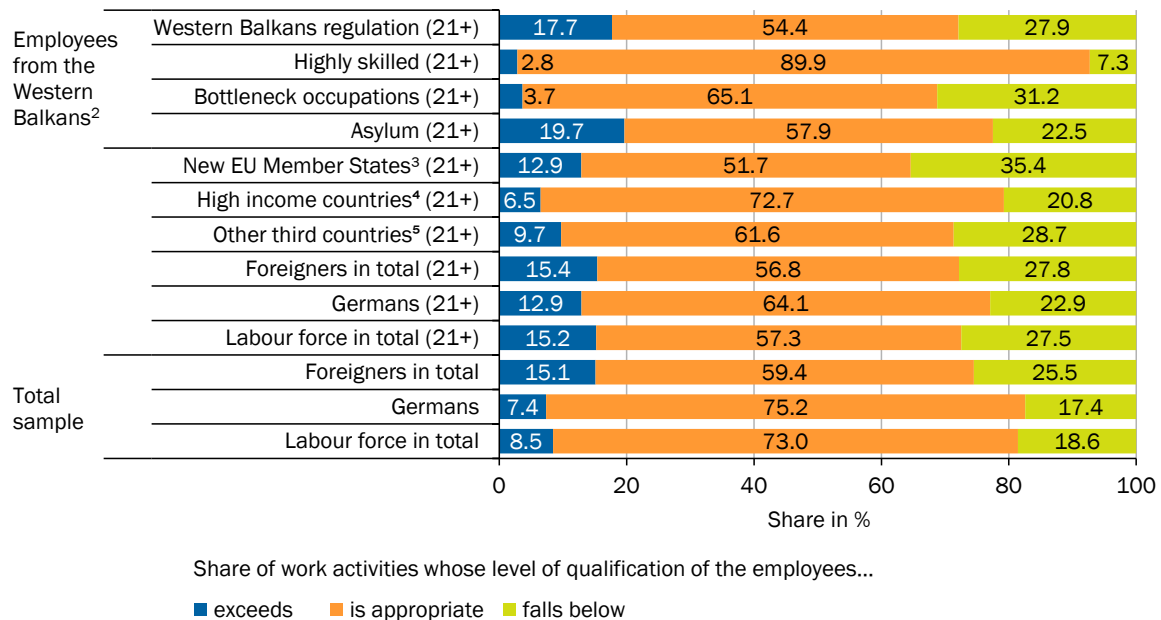
1 – Source for Western Balkan countries: IEB and ZuwG 2016-2020, for all other groups: Two-percent sample of the IEB 2016-2020. 2 – Only persons who were first recorded at the age of 21 or older (21+) and who were first recorded at the time of observation no more than two years ago. 3 – Bulgaria, Croatia, Czechia, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, Slovenia. 4 – Australia, Canada, Israel, Japan, New Zealand, Republic of Korea, United States. 5 – Other third-country nationals without the main countries of origin for asylum Afghanistan, Eritrea, Iran, Iraq, Nigeria, Pakistan, Somalia, Syria. 6 – Persons of working age, without age limit from 21 onwards and without year limit with regard to the first observation. 7 – Only persons in full-time employment. 8 – In 2016 and 2017, excluding apprentices, marginally or irregularly employed persons.

Source: Brücker et al. (2022)
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426. Immigration by third-country nationals for the purpose of employment without qualification requirements is often associated with the risk of benefit exploitation and unemployment risks. However, the **rates of unemployment and benefit receipt** (SGB II or SGB III) **indicate only low risks in the short and medium term** among people immigrating via the Western Balkans scheme. [↪ CHART 122 LEFT](#) The unemployment rate among this group of people, at 0.1 % in 2017, was significantly lower than for immigrants from the new EU states (4.7 %) and other third countries (9.9 %). In 2019, i.e. two to three years after immigration, the unemployment rate rose to 0.9 %, but was still well below the level of almost all comparison groups.
427. **Judging by the development of the mean earnings** from the time of arrival of people aged 21 and older in full-time employment who immigrated via the Western Balkans scheme, **labour market integration** has been **successful in the short and medium term** compared to migrants from the new EU member states and German job entrants. [↪ CHART 122 RIGHT](#) The mean daily wage rose continuously over the years from the time of arrival. However, the age distributions, which are an approximate measure of work experience, differ between the groups of people; German employees are younger than the immigrant groups (Brücker et al., 2022, p. 77).

↪ CHART 123

Matching of work requirements and occupational qualification level of employees in comparison¹
In 2019



1 – 21+: Persons who were observed as employed for the first time in 2016/17 and aged 21 years or older. 2 – Nationals of Albania, Bosnia and Herzegovina, Kosovo, Montenegro, Northern Macedonia and Serbia. 3 – Member States from 2004 onwards. 4 – Australia, Israel, Japan, Canada, New Zealand, South Korea and United States. 5 – Other third-country nationals excluding the main countries of origin of asylum Syria, Afghanistan, Iraq, Iran, Eritrea, Somalia, Nigeria and Pakistan, excluding Western Balkan countries, and excluding high income countries.

Source: Brücker et al. (2022) based on IEB and ZuwG (2016-2020)

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428. **Although the majority of immigrants under the Western Balkans scheme are skilled workers**, [↘ ITEM 425](#) not all immigrants are employed according to their qualification level. **In 2019, 56 % of those who migrated under the Western Balkans scheme were employed at the appropriate level** – i.e. the job requirement level matched their qualification level. [↘ CHART 123](#) For 26 % of those employed, their professional qualifications exceeded the job requirement, and the opposite was true for 18 %. Compared to other immigrants, such as those from the new EU member states, the proportion of jobs with the right fit is higher among immigrants from the Western Balkans and only 2 percentage points lower than among foreigners as a whole. Employment of formally overqualified immigrants may affect their prospects of remaining (Borjas and Bratsberg, 1996).
429. Overall, the results of the expert report show that the labour market integration of immigrants differs greatly, depending on the immigration route. [↘ ITEMS 422 FF.](#) **The results of the Western Balkans regulation in terms of migration management and labour market integration are positive.** For example, people who have migrated to Germany without qualification requirements under the Western Balkans scheme have had high employment rates and low unemployment and benefit receipt rates in the short and medium term. However, labour migrants who have come to Germany via other immigration channels also achieve high employment rates and low unemployment and benefit receipt risks.
430. The FEG has recently established new immigration channels that enable third-country nationals with vocational training acquired abroad to access the labour market. [↘ ITEM 418](#) Since the FEG's introduction in 2021, there has been a **change in the composition of immigration flows**. For example, the share of skilled workers with vocational training among all labour migrants rose from 12.7 % to 13.2 % in 2021 compared to the period from March to December 2020. In the same period, the share of immigrants with academic training increased from 14.0 % to 15.9 % (Graf, 2021, 2022; own calculations). However, it is unclear whether the FEG is responsible for these changes and what share other factors – such as the lifting of the entry restrictions in place during the coronavirus crisis – had in this development.

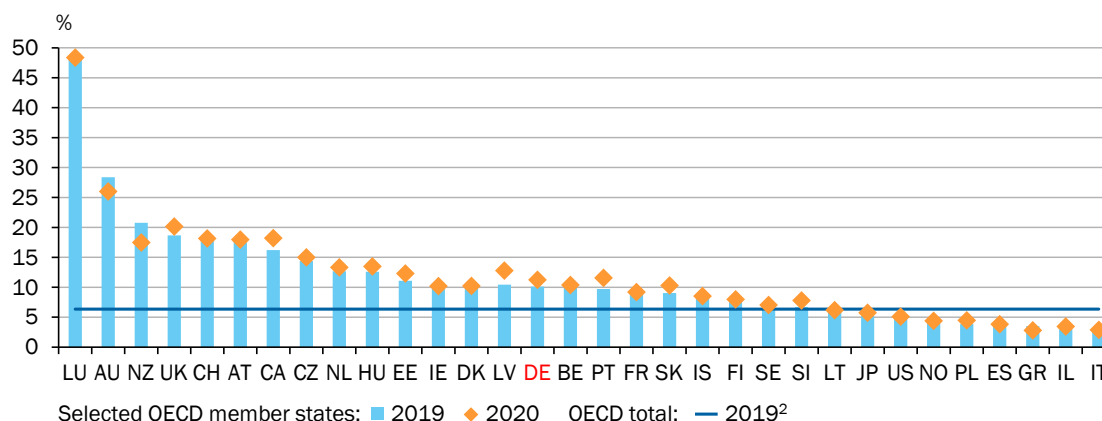
Educational migration as an indirect immigration channel

431. **Educational migration** is another important way of **securing skilled labour**. It aims to increase the number of foreign students and trainees who remain in the German labour market after completing their education (OECD, 2018). According to the OECD (2021c), the United States remained the most attractive destination in 2019 with around 1 million international students. Also in high demand were Australia (509,000) and the UK (489,000). In 2019, **Germany was in the middle of the international rankings** with around 333,000 international students constituting approximately 10 % of all students; this was above the OECD average of around 6 %. [↘ CHART 124](#)

↘ CHART 124

Educational migration in international comparison¹

Share of international students in tertiary education among all students



1 – LU-Luxembourg, AU-Australia, NZ-New Zealand, UK-United Kingdom, CH-Switzerland, AT-Austria, CA-Canada, CZ-Czechia, NL-Netherlands, HU-Hungary, EE-Estonia, IE-Ireland, DK-Denmark, LV-Latvia, DE-Germany, BE-Belgium, PT-Portugal, FR-France, SK-Slovakia, IS-Iceland, FI-Finland, SE-Sweden, SI-Slovenia, LT-Lithuania, JP-Japan, US-United States, NO-Norway, PL-Poland, ES-Spain, GR-Greece, IL-Israel, IT-Italy. 2 – Similar development in 2020.

Source: OECD

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- 432. Regulations on access to the German higher education system** for international students are **quite liberal** under section 16 (1) of the Residence Act (residence permit for the purpose of study). In addition to admission to a German higher education institution, candidates require proof that sufficient financial resources are available (section 5 (1) no. 1 of the Residence Act). However, because study programmes are often offered in German, Germany has a locational disadvantage compared to English-speaking countries. Offering more English-language study programmes would help to make studying more attractive for foreign students. In addition to a better marketing of higher education locations and simpler access to courses of study, measures such as conditional pre-admissions and more focused advisory and support services can bind students to a location (SVR-Forschungsbereich, 2019, pp. 18-21). More intensive cooperation with language schools, in-house language and preparatory courses, and cooperation with partner universities could also strengthen the international students' ties to a university and stabilise shrinking numbers of students in the future (SVR-Forschungsbereich, 2019). This could be supported by increasing administrative, recruitment and teaching capacities.
- 433.** Although the legal prospects of staying are generous, in the past many **international students** have failed to **gain entry to a profession** on the German labour market (SVR-Forschungsbereich, 2019). A nationwide survey to determine the reasons for this – conducted by the SVR Research Unit (SVR-Forschungsbereich, 2019) among the career services of higher education institutions and the international offices at universities in the winter semester 2014/15 – identified inadequate German language skills, a lack of knowledge of the German work environment, a lack of personal and professional networks in Germany, as well as reluctant companies and legal barriers. The success of initiatives and collaborations with employment services and regional organisations at the state and university

level has been limited up to now, as the funding for such projects is not designed to be long-term. This is demonstrated not least by budget cuts for funding programmes of internationally active science organisations, such as the German Academic Exchange Service (DAAD; Bundesregierung, 2022b).

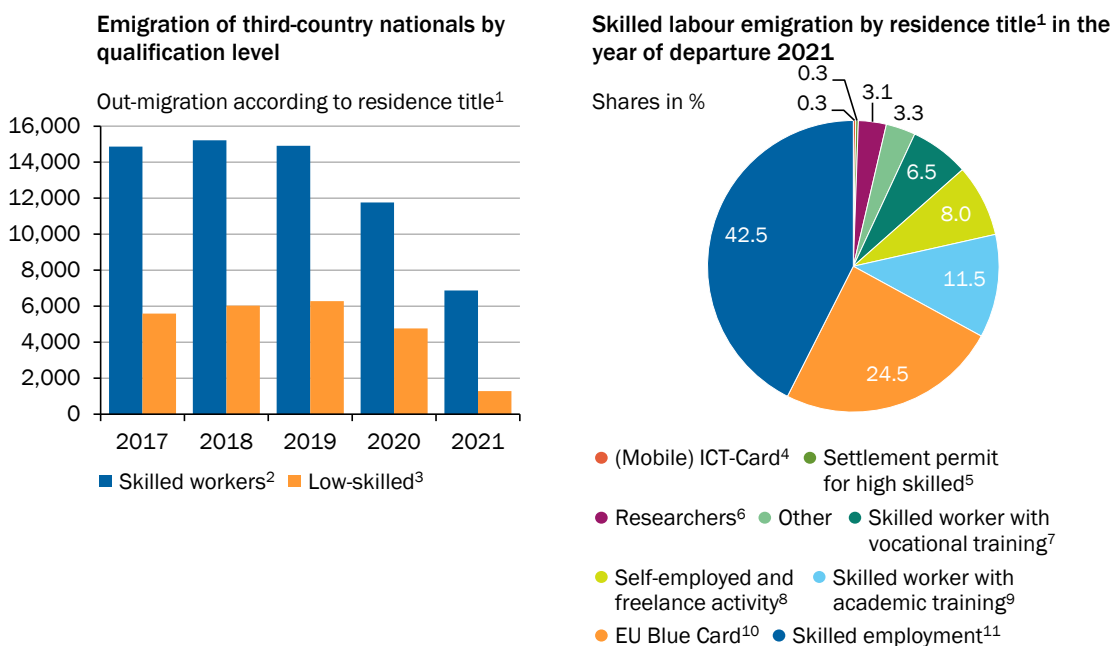
Immigration of family dependants and emigration

434. Another approach to strengthening the labour force potential is to motivate labour migrants to stay longer in Germany. The migration literature identifies five different **drivers of emigration** in OECD countries (see OECD, 2008, for a literature review): first, failure to integrate in the labour market of the destination country (Constant and Massey, 2003; Bijwaard and Wahba, 2014; Koser and Kuschminder, 2017); second, a change in the economic situation of the country of origin or the destination country (Bellemare, 2007; Adda et al., 2021; Décieux and Mergener, 2021); third, location preferences and personal resources in the country of origin (Sander, 2007; Bijwaard and Wahba, 2014; Ette et al., 2014; Adda et al., 2021); fourth, successfully reaching a savings target for remittances to the country of origin (Bijwaard and Wahba, 2014; de Haas et al., 2015; Kuhlenkasper and Steinhardt, 2017); fifth, improved labour market opportunities in the country of origin based on work experience acquired in the destination country (Dustmann and Kirchkamp, 2002; Dustmann and Weiss, 2007; Bijwaard and Wahba, 2014). Immigration of the family members of labour migrants has an effect on possible location preferences as well as the achievement of a savings target for remittances to the country of origin (mostly to the family).
435. Until 2019, **immigration for the purpose of family reunification** represented a major channel of immigration to OECD countries (OECD, 2021c). In Germany, this channel has accounted for around 11 % of immigration over the last five years. [↘ CHART 116 LEFT](#) In addition to the family members of labour migrants, this category also applies to the families of asylum-seeking immigrants. For highly skilled professionals, **whether they want to stay** depends largely on whether their spouses and families can join them. Moreover, immigration for family reunification is associated with incentives to make human capital investments in the host country, e.g. additional formal qualifications or specific work experience (Cobb-Clark and Crossley, 2004). For example, the OECD (2019b, p. 183) shows that delaying the arrival of the spouse has a causal negative impact on the wages of a person who has already immigrated. It also shows that the requirement of German language skills prior to entry introduced in 2007, i.e. stricter conditions for family reunification, led to delays in family-related immigration. The way in which family members who have joined immigrants are integrated into the labour market also influences the likelihood that previously immigrated skilled workers will remain and settle permanently (OECD, 2016, p. 206, 2019b, pp. 188 f.).
436. Inflows for gainful employment are offset by considerable **outflows**. Between 2012 and 2020, an average of 20,200 third-country nationals with a residence permit for employment left Germany each year (Brücker et al., 2022, p. 14). However, since it is possible to change the type of residence permit, the figures for immigration are not directly comparable. If we look at emigration on the basis of the last residence permit for gainful employment separately for skilled workers

and low-skilled workers, we see that it is particularly skilled workers who have previously immigrated that move away again. ↘ CHART 125 LEFT However, the number of emigrants among skilled workers and the low-skilled has declined recently. Around 25 % of the emigration of foreign skilled workers is accounted for by third country nationals who previously held an EU Blue Card. ↘ CHART 125 RIGHT This is surprising, as the EU Blue Card is associated with more rights than most other residence permits.

↘ CHART 125

Emigration of skilled workers and low-skilled workers from third countries in Germany



1 – As of 31 December in the respective year of departure. 2 – Skilled employment (section 18 (4) Residence Act, AufenthG), settlement permit for highly skilled persons (section 19 Residence Act), EU Blue Card (section 19a (6) sentence 1 Residence Act, section 19a Residence Act in conjunction with section 2 (1) No. 2 Employment Ordinance, BeschV), (mobile) ICT-Card (sections 19 and 19b (1) Residence Act). Other residence title: Intern. staff exchange (section 19c (1) Residence Act in conjunction with section 10 (1) No. 1 Employment Ordinance), non-formal skilled employment (section 19c (2) Residence Act in conjunction with section 6 Employment Ordinance), employment in the public interest (section 19c (3) Residence Act) and civil servant relationships with a German employer (section 19c (4) Residence Act). Researchers (section 20 Residence Act), self-employed and freelance activities (section 21 (1), (2) and (2a) and section 21 (5) Residence Act). Since 1 March 2022, skilled worker with vocational training (section 18a Residence Act) and with academic training (section 18b (1) Residence Act). 3 – Employment w/o qualification requirements (old case, section 18 (3) Residence Act) and employment (old case, section 18 Residence Act). 4 – Section 19 and section 19b (1) Residence Act. ICT – intra corporate transfer. 5 – Section 19 Residence Act. 6 – Section 20 Residence Act. 7 – Section 18a Residence Act. 8 – Section 21 (1), (2) and (2a) and section 21 (5) Residence Act. 9 – Section 18b (1) Residence Act. 10 – Section 19a (6) sentence 1 Residence Act, section 19a Residence Act in conjunction with section 2 (1) No. 2 Employment Ordinance. 11 – Section 18 (4) Residence Act.

Sources: AZR as of 31 July 2022, own calculations
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Network effects of migration

437. Migration of skilled workers from third countries and their staying in Germany can have **repercussions** on the prosperity and development of their country of origin. The overall effect depends on various factors, such as the scale and composition of migration, the level of development of the country, the population size and the geographical location (Docquier, 2014). A country's amount of human capital depends on both the prospect of migration and the implementation of migration plans (Docquier and Rapoport, 2012). In this context, the additional skills acquired can offset or even overcompensate for the loss of migrating skills in the country of origin (**brain drain**), so that positive externalities of skills acquisition can arise (**brain gain**) (Vidal, 1998; Beine et al., 2001). Migrants can support their countries of origin after migration through remittances, return migration or indirectly through the use of migration networks; this can permanently increase flows of goods, capital and ideas (Beine et al., 2001; Edwards and Ureta, 2003; Yang, 2008; Docquier and Rapoport, 2012). Saving up financial resources may also have been the original incentive for the migration decision, as this opens up the possibility of starting one's own company on return to the home country (Dustmann, 1996).
438. **Migration networks** influence a person's choice of their place of residence and can **promote integration**, for example by making it easier to find a job or providing childcare support (Dustmann et al., 2016; Dagnelie et al., 2019; Gossner and Kosyakova, 2021). Although German migration policy has probably learned from the past, deficits persist with regard to integration prospects in the German labour market, especially in childcare provision. Both progress and persistent deficits are currently evident in the reception of people who have fled Ukraine in the wake of the Russian war of aggression. [↪ BOX 21](#) They include a high proportion of women and children, and networks may have played an important role in their flight to Germany (BMI, 2022a; Panchenko, 2022). Successful integration of these people into the labour market could noticeably increase the labour force due to their high level of qualification. [↪ ITEMS 74 AND 84](#)

[↪ BOX 21](#)

Integration prospects for refugees from Ukraine

Since the Russian war of aggression on Ukraine began on 24 February 2022, a total of 7,751,169 refugees from Ukraine have been registered in the rest of Europe (data as of 28 October 2022; UNHCR, 2022). Apart from the migration of refugees in the wake of the conflicts in the former Yugoslavia (Yugoslav Wars) in the 1990s and the refugee migration of 2015/16, this represents the highest number of **refugees in Europe since the Second World War** (Alscher et al., 2015, p. 32; Brücker, 2022a, p. 8). In Germany, 1,002,668 people have been registered up to now (data as of 28.10.2022; UNHCR, 2022); approximately 36 % of them are underage refugees. The proportion of women among adult refugees is 74 % (data as of 21 August 2022; BMI, 2022b).

On 4 March 2022, EU member states agreed for the first time to activate the **Temporary Protection Directive** [↪ GLOSSARY](#) (European Council, 2022), which was adopted in 2001 in the wake of the flight and displacement caused by the Yugoslav wars (Trauner and Valodskaitė,

2022). Unlike in previous refugee movements, both Ukrainian nationals and third-country nationals from Ukraine can enter the EU without having to go through an asylum procedure. Under the Directive, refugees are granted a temporary right of residence in the EU for at least one year, as well as other rights, such as the right to suitable accommodation or social benefits (European Commission, 2022b). Without the activation of the Directive, large sections of the Ukrainian population would not have been entitled to protection in the EU under the Common European Asylum System (CEAS), which does not include war refugees (Brücker, 2022b).

Entry process and access to the social system and the labour market

In contrast to the regular entry process, which involves applying for a visa or some other residence title, a special regulation applies until the end of November 2022 whereby Ukrainian refugees do not need a residence title for the first 90 days after entering Germany. If a residence permit is subsequently applied for, the refugees receive a “fictional” (probationary) certificate covering the period until they receive the title. According to section 24 of the Residence Act, the German implementation of the EU Temporary Protection Directive, a residence title is then granted for two years, i.e. longer than prescribed at EU level. With the change of legal status on 23 May 2022, the Federal Government has also provided that refugees from Ukraine can receive “social welfare benefit” or “basic security benefit for job seekers” (SGB II/XII) from 1 June 2022 (Bundesregierung, 2022c, 2022d; Deutscher Bundestag, 2022b). This will enable the **direct integration of Ukrainian refugees** into the infrastructure of **job placement and labour market programmes** of the German Job Centres, and they will also receive higher benefits than under the Asylum Seekers' Benefits Act (Brücker, 2022b).

Integration opportunities on the labour market

The qualification level of the Ukrainian population as well as experience with the recognition of Ukrainian qualifications in Germany indicate the potential for integration in the labour market. No official data is available on the **educational level of registered Ukrainian refugees**, but initial survey results indicate that a large proportion of refugees have a university degree (78 % of respondents in the ifo survey by Panchenko, 2022). Because of the small number of cases, however, the study is not representative. Overall, the level of formal education in Ukraine is high. 47 % of men and 63 % of women have a tertiary level degree (Schreyer et al., 2022). However, in Ukraine, educational qualifications equivalent to vocational training in Germany are often counted as part of the tertiary education sector (Geis-Thöne, 2022; Schreyer et al., 2022). Although Ukrainian women achieve higher levels of education on average, they are less likely to be employed than men in Ukraine, where their labour force participation rate is 48 % (compared to men with 63 %; Schreyer et al., 2022). Labour migration from Ukraine to Germany played a minor role before the Russian attack began. 57,000 Ukrainian nationals who worked in Germany before the start of the war and were subject to social security contributions (BA, 2022d) tended to be more highly qualified than immigrants of other nationalities (Werner et al., 2022). However, it should be noted that immigration was only possible for Ukrainian nationals as skilled workers or for family reunification (Schork et al., 2022). Unqualified employment of Ukrainian nationals took place in legally grey areas before the war began and was therefore not statistically recorded (Schork et al., 2022). Almost all applications for recognition of equivalence of Ukrainian degrees were at least partially accepted (Werner et al., 2022). Before the war began, almost half of the recognised qualifications were in bottleneck professions, especially health professions (Werner et al., 2022).

Comparison with the labour market integration of refugees in the wake of the Yugoslav wars

A comparison with the inner-European refugee movements as a result of the Yugoslav wars in the 1990s highlights **options for action in the integration** of Ukrainians. Between 1990 and 2000, a total of 501,094 refugees from the former Yugoslavia applied for asylum in Germany

(Bundesregierung, 2001). However, few prospects for staying and limited access to the labour market prevented successful integration into the German labour market.

Unlike Ukrainian refugees, refugees from the Balkan countries had to apply for asylum, and most applications were rejected (Thym, 2019). As deportation to the home country was legally prohibited (Bundesregierung, 2001), they were granted tolerated status, which was extended for the duration of the war (Bahar et al., 2022). Many refugees returned home or were repatriated after the peace agreement that ended the Bosnian war (Dayton Agreement of 1995) (Barslund et al., 2016; Bahar et al., 2022). Empirical analyses show that **shorter asylum procedures** facilitate **entry into the labour market**. Based on data from the Swiss Federal Statistical Office for the years 1994 to 2004, Hainmüller et al. (2016) find that delaying a positive asylum decision by one year reduces the probability of entering the labour market by 4 to 5 percentage points. Kosyakova and Brenzel (2020) show that labour market participation was higher among refugees who arrived in Germany between 2013 and 2016 with completed asylum procedures than among those who did not, for the same length of stay. The Temporary Protection Directive applicable to Ukrainian refugees bypasses an asylum procedure and guarantees immediate legal certainty.

In addition to the uncertain **prospects for staying**, high entry barriers, e.g. a priority check, made labour market integration in Germany more difficult in the 1990s (Barslund et al., 2016). By contrast, refugees successfully integrated into the labour markets of neighbouring European countries that introduced **integration measures**. With a share of 1.1 % of the total population, Austria accepted a particularly large number of refugees from Bosnia-Herzegovina. From 1995 onwards, Bosnian refugees were granted work permits and access to language and vocational preparation courses. In 1998, the employment rate among Bosnian refugees in Austria was already 64 %, and in 2008 it was on par with the Austrian population at 77 % (Barslund et al., 2016). However, reports from various European host countries show that Bosnian refugees, despite being integrated into the labour market, often performed jobs for which they were over-qualified (Barslund et al., 2016).

Current challenges and options for action

For refugees in the past, language difficulties were associated with higher unemployment and lower wages (Dustmann and Van Soest, 2002; Aldashev et al., 2009; Isphording, 2014). Participation in a language course, as well as in vocational **language and integration courses**, can have a positive influence on employment (Brücker et al., 2020c, p. 15). According to a survey commissioned by the Federal Ministry of the Interior and Community (BMI), only just under 10 % of Ukrainian refugees had German language skills at the end of March 2022 (BMI, 2022a). However, refugees from Ukraine can quickly participate in professional language courses (BAMF, 2022b). In addition to part-time courses, childcare services should be expanded for single-parent Ukrainian women.

Rapid recognition of the qualifications of Ukrainian refugees also improves employment opportunities and prevents dequalification caused by longer breaks in employment in the profession a person has trained in. In regulated professions, recognition of the qualification takes place before employment begins. In non-regulated occupations, recognition should be aimed at improving employment opportunities, but should not be mandatory before employment begins. Experience in the **recognition of Ukrainian qualifications** exists, particularly in the medical field (Werner et al., 2022). In order to enable people to promptly acquire any post-qualifications requested during the recognition process, appropriate offers should be made (Bushanska et al., 2022). Companies can use the information portal for foreign professional qualifications (BQ-Portal) and the “anabin” database of foreign higher education qualifications to assess the qualifications of Ukrainian applicants in non-regulated professions before an official equivalence test is made.

The large proportion of women among adult Ukrainian refugees requires targeted integration

measures. For refugees who arrived between 2013 and 2016, the labour market integration of women, especially those with pre-school children, was slower than that of men (Kosyakova and Brenzel, 2020). In order to enable women to take up employment, or to participate in further education, it is therefore necessary to create a **comprehensive range of childcare services** (Gossner and Kosyakova, 2021). However, in 2020 there was already a shortage of 342,000 childcare places for under-3-year-olds in public facilities (Geis-Thöne, 2020). Geis-Thöne (2022) calculates an additional demand of between 49,100 and 70,200 childcare places for under-5-year-olds, which translates into a need for 11,400 to 16,300 additional childcare staff.

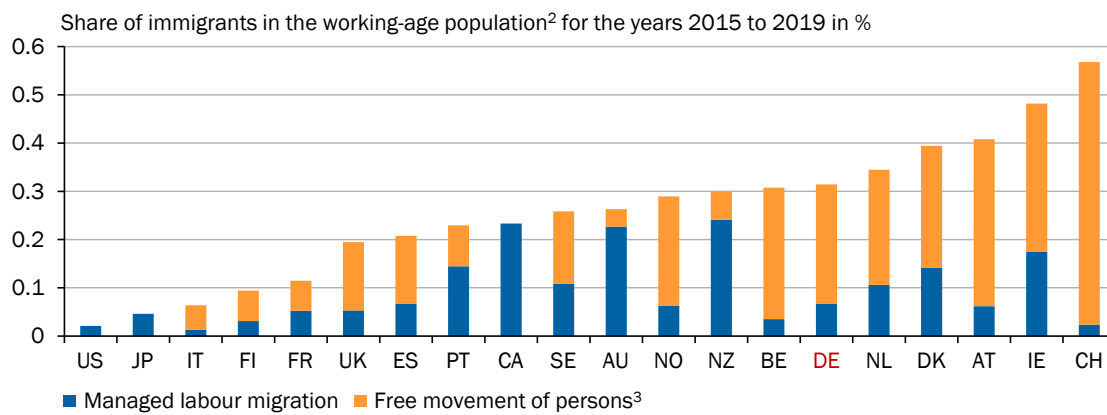
In the 2018 PISA study, pupils in Ukraine performed worse than their peers in Germany, but better than schoolchildren in Bulgaria or Romania, for example. There is a need to catch up especially in mathematics (Michlbauer and Mergele, 2022). Ukrainian children and adolescents who lack language skills usually start by attending welcome classes. Geis-Thöne (2022) estimates the need for teachers for welcome classes at between 20,000 and 28,900, depending on whether 3.5 % or 5 % of Ukrainian minors come to Germany. By the end of October 2022, 192,736 children and adolescents from Ukraine had already been admitted to general and vocational schools; that is already 3.6 % of Ukrainian minors (data as of 23 October 2022; KMK, 2022). Once the children and adolescents attend regular classes, the **need for additional teachers** is only 13,500 to 19,400, as the pupil/teacher ratio is higher. A further 2,100 to 3,100 additional support personnel are needed for afternoon care in lower secondary schools. To meet the need for staff in the education system, retired teachers and care workers could be rehired, the number of paid hours of current employees could be increased and new employees could be recruited (Geis-Thöne, 2022). Ensuring school support presents the education sector with challenges of a similar magnitude to those faced when receiving refugees from Syria.

2. International comparison of immigration systems

- 439. By international comparison, labour migration in the German-speaking countries is less controlled.** ↘ [CHART 126](#) Much of the increase in the number of foreign people in Germany is made up of EU nationals. ↘ [CHART 127](#) Since 2014, however, the share of immigrants from the EU has declined and Asia's share has increased. ↘ [CHART 127](#) By contrast, the share of controlled labour migration is much higher in traditional immigration countries. For example, employment-based titles as a percentage of total residence titles issued in 2019 is 30 % in Canada, 26 % in Australia and 23 % in New Zealand – but only 12 % in Germany (OECD, 2021c). Compared to the working-age population of the respective country, the share of controlled labour migration (on a long-term or permanent basis) in the period from 2015 to 2019 was 0.2 % on average for Canada and Australia and only 0.1 % for Germany. ↘ [CHART 126](#) Although English as a lingua franca is probably an important factor in these differences, ↘ [ITEM 415](#) this suggests **problems with past immigration management in Germany**. ↘ [CHARTS 116 AND 126](#)

↘ CHART 126

Permanent labour migration in international comparison¹ for the years 2015 to 2019



1 – US-United States, JP-Japan, IT-Italy, FI-Finland FR-France, UK-United Kingdom, ES-Spain, PT-Portugal, CA-Canada, SE-Sweden, AU-Australia, NO- Norway, NZ-New Zealand, BE-Belgium, DE-Germany, NL-Netherlands, DK-Denmark, AT-Austria, IE-Ireland, CH-Switzerland. 2 – Aged 15 to 64 years. 3 – Assuming that half of the migration inflow is employed under the free movement of persons. Australia and New Zealand have a Trans-Tasman Travel Arrangement (TTTA) that allows nationals of both countries the free movement of persons (employment and travel mobility) with few restrictions. Likewise, this arrangement applies to persons with a permanent residence visa and a visa to return to Australia. Free access to employment within the EU also applies to Switzerland and to states that belong to the European Economic Area alongside the EU states, such as Norway.

Sources: OECD, own calculations
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Instruments for managing labour migration

440. In general, two **policy approaches to managing immigration** can be distinguished: supply-oriented and demand-oriented management systems (Chaloff and Lemaître, 2009). **Supply-oriented management of labour migration** focuses on the long-term development of foreign human capital. It is geared towards the labour market success and social integration of immigrants on the basis of human capital criteria. For example, points are awarded for occupation, age, existing language skills, work experience and qualifications; a temporary or permanent residence and work permit is issued when a certain points threshold is reached (Brücker and Burkert, 2010). These systems originated in Australia, Canada and New Zealand.

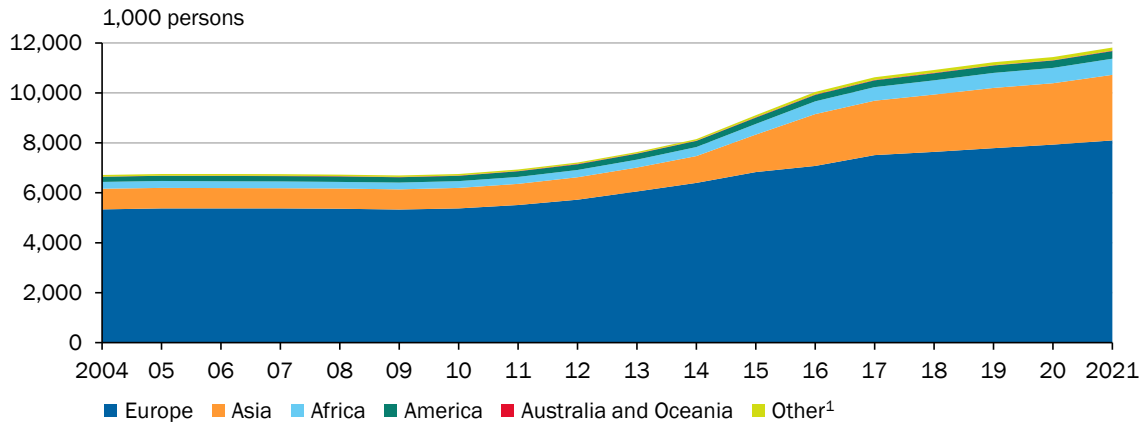
Demand-oriented systems, on the other hand, primarily pursue the strategy of using immigration to overcome short-term shortages of skilled workers in certain occupations and are therefore geared towards the current labour needs of companies (Chaloff and Lemaître, 2009; Brücker and Burkert, 2010). For example, a bachelor's degree and a specific job offer are minimum requirements for the more demand-oriented H-1B visa in the United States.

441. In order to **attract skilled workers** from third countries, **classic immigration countries** such as Canada and Australia, but also Austria (since mid-2011) and the United Kingdom (since the beginning of 2021), rely on supply-oriented approaches such as a **points-based system**, ↘ GLOSSARY although most points-based systems are now hybrid in structure. ↘ TABLE 21 APPENDIX This makes controlled

▸ CHART 127

Foreign population in Germany by continent of nationality

Marked foreign population growth in the last decade



1 – Stateless as well as unaccounted for and undisclosed, including British Overseas Territories as of 2014.

Sources: Federal Statistical Office, own calculations

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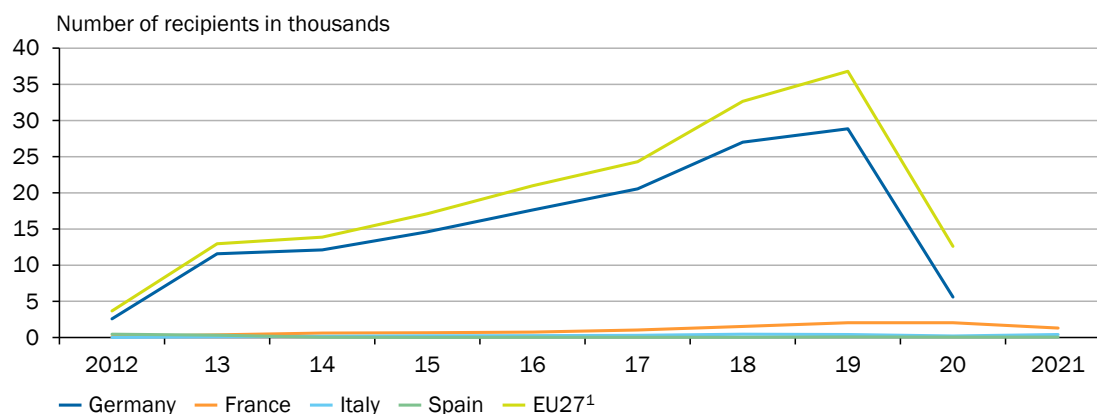
labour migration possible, creates transparency, and can simplify the migration process (König et al., 2018).

442. In Germany, **skilled labour immigration** takes place in a system controlled by **minimum requirements** (Brücker et al., 2019). The **FEG** has facilitated access to the German labour market for third-country nationals with foreign vocational training. It is to be welcomed that the priority check – which examines whether domestic applicants or equivalent people from the EU or the EEA are available for a job – and the orientation towards bottleneck occupations or occupations where there is a shortage of labour has been largely abolished (GCEE Annual Report 2018 item 98).
443. The **influx** of migrants with academic or vocational qualifications is usually **tied to several criteria that must be fulfilled cumulatively** (Brücker et al., 2022). With the amendment of the right of residence by the **FEG**, four main aspects were newly regulated: the extension of the concept of skilled workers to include all workers with vocational qualifications, not only those who were on a positive list (Brücker et al., 2022), the **abolition of the priority check**, the expansion of immigration for the purpose of seeking work to include workers with vocational qualifications, and measures to simplify procedures, such as the establishment of a central foreigner authority at the Länder level to **speed up** procedural processes between the competent authorities (Brücker et al., 2022). In addition, companies can apply for a fee-based **fast-track procedure for skilled workers** at the central foreigner authority. All of this has expanded the possibilities for skilled labour immigration, although the main restrictions on immigration remain in place (Brücker et al., 2022).
444. Currently, purely demand- or supply-oriented systems are predominantly giving way to hybrid systems. When it comes to the **fine-tuning**, i.e. aligning controlled labour migration with the current demand for skilled labour, **demand-oriented immigration can bypass future demand** (Brücker and Burkert, 2010). At

▸ CHART 128

Development of EU Blue Card recipients from 2012 to 2021

Immigration via EU Blue Card used almost exclusively in Germany



1 – No values available for Cyprus.

Sources: Eurostat, own calculations

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the same time, such management involves the risk of postponing investment in education – e.g. in CET for the domestic labour force – and in new technologies (Papademetriou and Hooper, 2019).

445. One example of a **hybrid immigration system** that combines supply- and demand-oriented elements is the **EU Blue Card**. It is intended to promote the permanent immigration of highly qualified people from third countries, and offers a residence title for university graduates from third countries that is generally limited to four years (section 18b (2) of the Residence Act). In addition to a recognised foreign or German university degree, the prerequisite for issuance is a specific job offer and a minimum gross salary of €56,400 in 2022 or €43,992 in occupations where a labour shortage exists, e.g. in scientific occupations or in the ICT sector (SVR Migration, 2022b). Until 2019, the access route via the EU Blue Card was used almost exclusively in Germany. ▸ CHART 128 According to data from the Central Register of Foreigners (AZR), in 2021 around 55 % of third-country nationals with a residence permit issued for the first time via the EU Blue Card already had another German residence title (Graf, 2022, p. 14), for example in the context of a course of study (BAMF, 2022c).

3. Barriers to entering the labour market

446. Various **barriers to labour migration** are discussed in the German literature on migration (Brücker, 2015; SVR Migration, 2018; Fuchs et al., 2019). In particular, **proof of equivalent vocational training** has proved to be a key **barrier to immigration** (SVR Migration, 2018, p. 53; Brücker et al., 2021, p. 501, 2022, p. 51). It already reduces the incentives to enter the country to seek work. The lack of transparency of immigration legislation and the time limit on residence permits, as well as the required language skills, are also problematic (Mayer and Clemens, 2021).

Despite the dynamism of its **start-up sector**, Germany is currently not yet succeeding in attracting start-up founders from third countries, although Germany is perceived as an attractive destination country for entrepreneurs by international comparison. ↘ [ITEM 415](#) According to a recent survey, **structural barriers** in the start-up field include raising capital, lack of networks, language barriers and bureaucratic hurdles after formation (Startup Verband and Friedrich Naumann Stiftung, 2022). It is also becoming increasingly difficult for start-ups to recruit qualified skilled workers (Startup Verband, 2022), especially in ICT professions. ↘ [ITEM 363](#) For example, after a pandemic-related decline from January 2021 to October 2021, the skilled labour gap in the ICT sector has risen continuously to 28,700 skilled workers (Jansen, 2022). Start-ups often use employee participation programmes as they do not have the financial resources to pay competitive salaries (EFI, 2019, p. 58). Yet employee share ownership is not very widespread in Germany compared to other European countries (Lowitzsch, 2020). This is due to the legislation to date, which often involves legal uncertainties (EFI, 2019, p. 60).

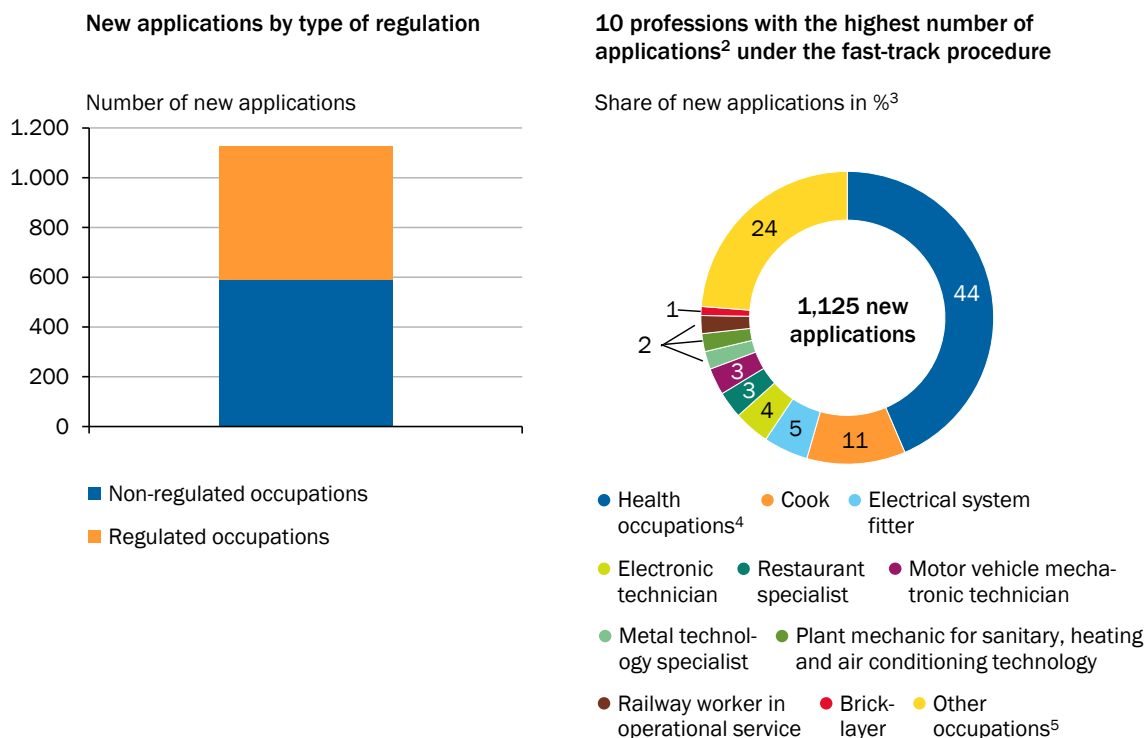
447. Although Germany was one of the quickest countries in an international comparison when it came to **issuing visas** or **residence permits** specifically for highly qualified people in 2019 (OECD, 2019c), waiting times for work visas can be long in general. For example, they take 9 months at diplomatic missions in India and over a year in Lagos (Deutsche Vertretungen in Indien, 2020; Federal Foreign Office, 2022). In general, the **high administrative and time burden** needed to obtain a residence title for employment purposes (e.g. filing applications at visa offices and foreigner authorities, or for recognition of professional qualifications), can be **prohibitive**. This applies not only to the recognition procedures, but also to obtaining the necessary documents and making appointments, for example at the foreign missions or recognition offices. Thus, the actual time required is significantly longer than the waiting times stated by the authorities (Brücker et al., 2022, p. 51). The longer the waiting time, the more likely it is that companies will no longer maintain a job offer for foreign applicants. This in turn reduces the incentives to submit an application. Second attempts to obtain recognition of professional qualifications in Germany are unlikely to increase incentives, since they involve the risk of the withdrawal of residence and work permits and the loss of investments made by immigrants and companies (Brücker et al., 2022, p. 51).
448. Despite easier access to the German labour market for foreign skilled workers with vocational training, the extensive abolition of the priority review and easier labour market access for job and training searches, **barriers to skilled worker immigration remain under the FEG**. The key barrier remains the recognition of foreign vocational qualifications with the equivalence assessment (Brücker et al., 2022). ↘ [ITEM 446](#) Since it came into force in 2012, the Federal Recognition Act (Anerkennungsgesetz) has pursued the aim of implementing European directives by accelerating and simplifying recognition procedures. Up until 2020, there was a significant increase in the number of recognition procedures and recognised vocational qualifications (BMBF, 2022). A total of 422,700 applications were decided between 2012 and 2020 (BIBB, 2021). Ultimately, however, this only affects just under 6 % of immigrants with vocational qualifications and foreign citizenship (Federal Statistical Office, 2021; Brücker et al., 2022, p. 47).

According to an evaluation of the scope and duration of **recognition procedures under federal law** (Böse and Schmitz, 2022a, p. 19), the number of recognition procedures in regulated professions increased from 16,500 to 23,500 **between 2017 and 2020**. The share of applications submitted from abroad rose from 17 % (2,800) to 36 % (4,000). However, as regards the aim of accelerating procedures, no trend can be observed in the regulated professions (Brücker et al., 2022, p. 49). The number of recognition procedures decided for non-regulated professions rose from just under 4,700 to just under 6,800 in the same period, with the proportion from abroad increasing significantly from 4 % (188) to 23 % (1,560) (Böse and Schmitz, 2022a, p. 14). The strong increase in non-regulated professions in 2020 is likely to be related to the entry into force of the FEG (Brücker et al., 2022, p. 49). However, due to the simultaneous onset of the coronavirus pandemic, the FEG has probably not yet had its full effect.

449. One indicator of bureaucratic hurdles in the recognition process is the duration of recognition procedures. In regulated professions, no trend towards acceleration can be observed up until 2020. [↪ ITEM 448](#) However, the accelerated procedure for skilled workers within the framework of the FEG (pursuant to section 81a of the Residence Act) could increase the **efficiency of the recognition process for foreign vocational qualifications**. The take-up rate was high in 2021 at

↪ CHART 129

New applications under the fast-track procedure for skilled workers¹ in the context of recognition in 2021



1 – According to section 81a Residence Act (AufenthG). 2 – According to the classification of occupations (KldB), 2010 edition. 3 – Deviation in total due to rounding. 4 – Health and nursing professionals. 5 – Other reference occupations (with less than 15 applications each).

Sources: Federal Institute for Vocational Training and Education (BiBB, 2022), own presentation
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around 48 % in regulated occupations and just under 52 % in non-regulated occupations. [↘ CHART 129 LEFT](#) 88 % of the accelerated procedures were completed within the scheduled time limit of two months (Böse and Schmitz, 2022b, pp. 16, 18). [↘ CHART 129 RIGHT](#)

4. Options for action: measures for labour migration

450. Simplified labour market access combined with easier procedures for issuing visas and recognising qualifications is key to making Germany **more attractive as a destination country**. The more restrictive immigration policies of other countries in recent years, for example in the United States, Switzerland and Hong Kong, offer opportunities for labour migration to Germany. This applies not only to skilled workers, but also to workers with lower skills.
451. The draft law on the introduction of the “Chancen-Aufenthaltsrecht” (“residence permit for opportunities”) of early July 2022 (Bundesregierung, 2022e) aims to further modernise immigration law. For example, **time limits on certain regulations in the FEG** were **abolished** – relating, among other things, to the BA's placement agreements (section 16d (4) no. 2 of the Residence Act) and to residence titles for job seekers with professional qualifications (section 20 (1) of the Residence Act). In addition to **lowering the barriers to entering the German labour market**, the draft law also **focuses on the prospects of residence and integration**. The **barriers to immigration for the family dependants of skilled workers from third countries** are also to be lowered by abolishing the requirement to provide proof of a spouse's German language skills. Furthermore, the stricter requirements for the subsequent immigration of older minor children are to be waived. The introduction of the “Chancen-Aufenthaltsrecht” enables refugees who have been “tolerated” for many years to obtain a one-year residence permit in order to fulfil the necessary requirements for a right to stay. This interrupts the previous practice of “chain toleration” and opens up prospects.

Lower barriers to labour market access

452. The proposed **abolition of time limits on the Western Balkans regulation** in the coalition agreement seems a sensible measure to promote labour immigration for people below the level of skilled labour. An **increase in quotas** should be considered in this context. [↘ ITEMS 425 FF](#). Furthermore, an extension to other selected third countries would be expedient. This would allow the administrative resources necessary for implementation to be concentrated on certain states.
453. The Blue Card Directive revised in 2021 (European Parliament and Council of the European Union, 2021) is to be implemented by mid-November 2023. However, the current salary threshold seems restrictive, especially for those entering the labour market for the first time. The **extension of the Blue Card to non-academic professions** in national law, which is set out in the coalition agreement

and requires a specific job offer, is also to be welcomed. However, significant immigration effects can only be expected **in combination with a lowering of the income threshold in line with qualifications** (hitherto €56,400 in 2022).

454. Partial recognition or even a complete **abolition of the proof of equivalence assessment for non-regulated professions** seems to be a key lever for facilitating labour migration. The equivalence test for non-regulated professions could conceivably be replaced by **general criteria** such as a minimum period of training or study at a recognised educational institution. The special regulation for ICT specialists from third countries with practical professional knowledge (section 19c (2) of the Residence Act in conjunction with section 6 of the Employment Ordinance BeschV) is currently designed in a similar way. Another special case is the employment of professional drivers from third countries who have no formal training. They can be employed as drivers for lorries and buses, provided the BA carries out a priority check and approves the granting of the residence title (pursuant to section 19c (1) of the Residence Act) for this employment (section 24a (1) of the BeschV). Such special regulations could conceivably be extended to other non-regulated occupations.

Alternatively, qualification criteria could be dispensed with completely, so that only a **job offer** would be made **a condition for admission**, in combination with strict residence requirements. One lesson that has been learned from the Western Balkans scheme, [↘ ITEM 429](#), is that a job offer can be a **functioning steering criterion** for ensuring high employment stability and high earnings.

455. An easing of administrative procedures and the introduction of uniform federal requirements, e.g. for employee share ownership, could help **make it more attractive for start-ups to recruit skilled workers from third countries**. [↘ ITEM 446](#) A four year pilot project has been running in the Netherlands since the beginning of 2021 which enables innovative start-ups to recruit highly qualified professionals from third countries (OECD, 2022b, p. 206). A lower salary threshold than for other highly skilled immigrants and a small company share of at least 1 % are envisaged. One limitation is that start-ups may only recruit a maximum of five employees through this new regulation. The Federal Government is planning a start-up strategy with a more attractive design of employee share ownership for start-ups (Bundesregierung, 2022f). It would make sense to apply this strategy to the recruitment of skilled workers from third countries.
456. **Administrative processes** in immigration, especially in the field of visa and residence title issuance, could be **speeded up** by a reform of diplomatic missions abroad, accompanied by better facilities (Brücker et al., 2022). In the case of municipal foreigner authorities in Germany, there is an urgent need to speed up the allocation of appointments, improve the language skills of staff, and reduce independent additional requirements. A simplification and acceleration of administrative processes by centralised foreigner authorities at Länder level, e.g. in Bavaria, or by improving the digitalisation of processes is necessary. These foreigner authorities should develop a self-image as agencies for immigration with a comprehensive service orientation.

Improve integration and reduce emigration

457. The successful integration of immigrants, regardless of the immigration route, requires accompanying **measures of integration policy**. This includes above all an **expansion of part-time language training in Germany**, for example by expanding the range of German courses on offer. In addition, an expansion of **language teaching abroad**, for example via Goethe Institutes, can boost labour migration and facilitate labour market integration (Brücker et al., 2022, p. 53). It is to be welcomed that the Federal Government's skilled labour strategy is pursuing the further expansion of opportunities for language learning, vocational language skills and language examinations abroad.
458. One attractive option for attracting **highly qualified skilled workers** from abroad is to **bring them to Germany as students**. To this end, the Federal Government is currently planning information programmes and study-preparation events in the countries of origin (Bundesregierung, 2022a, p. 28). The DAAD's "Digital Campus" pilot project pursues, among other things, the aims of study orientation and counselling in order to improve the integration of international students into the German higher education system (DAAD, 2022). Against this background, the current budget cuts for funding projects of this kind do not seem expedient.
459. In order to **improve the prospects of immigrant skilled workers staying**, prospects for their family members – including easier immigration and family reunification – are relevant. [↘ ITEM 435](#) The draft bill on "Chancen-Aufenthaltsrecht" envisages a **lowering of immigration hurdles**, [↘ ITEM 451](#) in particular the waiving of language certificates for spouses. In addition, the Federal Government's skilled labour strategy envisages improving administrative processes on entry and residence, and linking them with private and public support services to promote language skills (Bundesregierung, 2022a, pp. 29-30). This is to be welcomed because, although a lack of knowledge of German is an obstacle as an immigration criterion, part-time language learning and educational opportunities promote occupational and social mobility (Brücker et al., 2022). At the same time, the quantity of childcare should be expanded and its quality improved (GCEE Annual Report 2021 item 323). The Federal Government's skilled labour strategy is to be welcomed because it allows for multiple citizenships and reduces the waiting period for naturalisation to five or three years respectively (Bundesregierung, 2022a). The economic literature on immigrant assimilation has shown that **faster access to citizenship** has a positive impact on labour-market integration and encourages immigrants to invest more in host-country-specific language and vocational training (Gathmann and Keller, 2018). At the same time, the acquisition of citizenship can be promoted – for example through multiple citizenships or initiatives – in order to enable political participation and counteract discrimination (SVR Migration, 2021). A municipal right for third-country nationals to vote should also be considered so that immigrants can participate in the process of democratic decision making (SVR Migration, 2021).

Increase transparency

460. The coalition agreement provides for the introduction of an **opportunity card based on a points-based system for job searching** (SPD, Bündnis 90/Die Grünen and FDP, 2021). However, it is unclear how large the potential pool of jobseekers is who are not already able to look for a job via a tourist visa, and would enter the country to look for work on the basis of an opportunity card despite the previously mentioned obstacles. The criteria discussed so far for obtaining an opportunity card are work experience (at least three years), completed vocational training abroad or an academic degree, German language skills or a previous stay in Germany, and being under 35 years of age. Three of these four criteria must be met. Another prerequisite is that the person must be able to financially support him/herself while looking for a job or training place. The fact that the opportunity card bundles human capital criteria in a transparent and clear way is to be welcomed. Nevertheless, its success is likely to remain limited if it is not linked to general eligibility for employment above certain points thresholds, as is the case in the Canadian system, for example (Brücker et al., 2022; SVR Migration, 2022c).
461. Immigration legislation should be **continuously developed and evaluated**, as is customary in traditional immigration countries – such as Canada or Australia – in order to be able to react swiftly to changes in labour market dynamics. As in the case of the Transparency in Wage Structures Act, evaluation should be embedded directly in the adopted law.

In the past two decades, Germany's **immigration policy** has only gradually become geared towards the immigration of skilled workers, whereas in the past the intention was to limit migration. This explains why Germany still does not consistently see itself as a country of immigration, and is often not perceived as such abroad either. In order to be successful in regulated labour migration, a profound **cultural change** is needed, both in the responsible authorities and in the population. This requires a fundamental societal **discourse** on the impact of demographic developments on the labour market and the challenges and opportunities of labour migration. The coronavirus pandemic has already made it very clear that immigration is an integral part of society, with many immigrants working in system-relevant professions, such as healthcare (SVR Migration, 2022a). This is also increasingly shaping society's perception. According to a survey conducted in 2021, especially among the under-30-year-olds immigration today and in the future is perceived as an opportunity (Kösemen and Wieland, 2022). The promotion of diversity in the labour market, successful integration and a just and participation-oriented coexistence are key fields of action in order to counteract discrimination (SVR Migration, 2021; Kösemen and Wieland, 2022).

APPENDIX

▾ TABLE 21

Points-based systems for immigration in selected economies

	Canada (CA)	Australia (AU)	New Zealand (NZ)	Austria (AT)	United Kingdom (UK)
Programme	Express Entry Programs	Skill Select	Skilled Migrant Category	Red-White-Red Card (RWR)/Jobseeker visa	Skilled Worker Route
Criteria in the points-based system	Express Entry (EE): Language skills, level of education, work experience (Canadian/foreign), age, job offer, ability to integrate, qualification certificate for commercial professions Comprehensive Ranking System (CRS): Nominated by province, qualification of spouses/partners	Age, language skills, work experience, level of education, work experience in AU, Australian educational qualifications and additional criteria (e. g. work experience in shortage occupations or knowledge of a local language)	Age, skilled employment/job offer, work experience, recognized qualifications (additional subcategories for bonus points) language skills of the partner ¹	RWR: Criteria for job-seeker visa and job offer (corresponding qualification, adequately remunerated); RWR plus: At least 21 months employment Jobseeker visa: qualifications, work experience, language skills in German or English, age, studies in Austria	Mandatory criteria ² : language skills, job offer from a licensed employer (sponsor) with appropriate skill level Further: Minimum salary ³ , job offer in a shortage occupation, educational degrees (PhD in a subject relevant to the occupation/STEM subject)
Procedure	1. Creation of an online application profile and admission of applicants with a minimum score and fulfilled minimum criteria in the EE pool 2. Creation of a ranking of the applicants in the pool based on the CRS and invitation of the candidates with the most points to apply for permanent residence	1. Expression of Interest (EOI) and inclusion of applicants with a minimum score in the pool of candidates 2. Candidates can be nominated by employers or state and territory government, or invited by the government to submit an application	1. Expression of Interest (EOI): Inclusion of applicants with minimum score in the pool of candidates and invitation of candidates with the most points to apply for permanent residence 2. Submission of the application (including proof of minimum requirements) for a permanent visa and a final decision	Application for a RWR Card after successful job search or immediate application if job offer already exists Extension of status by applying for a RWR Plus Card Application for a job-seeker visa, if a job offer has not been made yet	After job offer, direct application for a visa on an online platform; submission of required documents and proof of identity (depending on country of origin and passport); collection of biometric data at foreigner/visa authority E-Mail with direct decision on the application for a work visa

1 – Good English language skills are a compulsory requirement for an application in NZ and are therefore not taken into account further in the points-based system. However, bonus points are awarded for the partner's language skills.

2 – Although the compulsory criteria are scored, they correspond more to minimum criteria according to the New Zealand model. 3 – Low salary can be compensated by other criteria, but certain minimum requirements still apply (at least between 70 % and 90 % of the occupation-specific salary threshold).

Sources: König et al. (2018), NZIER (2022), Austrian Federal Ministry of European and International Affairs and Federal Ministry of Interior, Australian government, New Zealand government and the government of United Kingdom

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STILL TABLE 21

Points-based systems for immigration in selected economies

	Canada (CA)	Australia (AU)	New Zealand (NZ)	Austria (AT)	United Kingdom (UK)
Quota/target	55,900 (Plan 2022) new residence permits for three programmes (see above)	109,900 skilled immigrants (quota 2022/23)	Planned for the 18 month period ⁴ 25,500 up to 30,600 seats for skilled/business flows	Not available	No limitation for sponsorships, no information on planned number/target
Residence title	Permanent Residence via Federal Skilled Worker Program, Federal Skilled Trades Class Program or Canadian Experience Class Program	Skilled Independent Visa, Business Innovation and Investment (Provisional) Visa, Skilled Nominated Visa, Skilled Work Regional (Provisional) Visa	Skilled Migrant Category Residence Visa	Jobseeker visa: Residence for six months, RWR (Red-White-Red) Card: Residence for 24 months with unlimited labour market access	Skilled Worker Visa, for up to five years with possible extension
Transparency	Access criteria and their evaluation by points are online accessible	Access criteria and their evaluation are online accessible	Access criteria and their evaluation by points are online accessible, preliminary examination possible	Beforehand an examination of the points to be achieved personally, is possible, criteria online accessible	Access criteria and their evaluation by points are online accessible
Digitalisation	Advanced digitalisation when creating the Express Entry Profile	Skill Select Online Portal provides advanced digitalisation at application stage	Online portal offers advanced digitalisation in the application and creation of the EOI ⁵	No portal, but application form which can be submitted in person or by the employer	Online application possible, depending on country of origin, if necessary further steps in the course of the application on site
Fees ⁶	Processing fee USD 850 (EUR 834) ⁷ , fee for permanent residence status USD 515 (EUR 505)	EOI ⁵ : free of charge, e. g. Skilled Independent Visa: AUD 4,240 (EUR 2,923)	Online EOI ⁵ Submission: NZD 590 (EUR 369) Skilled Migrant Category: NZD 4,890 (EUR 3,056)	Jobseeker visa EUR 150 RWR Card: EUR 160	Application fee (standard) between GBP 625 (EUR 741) and GBP 1,423 (EUR 1,687) (lower application fee for shortage occupations)
Processing time	Complete applications via Express Entry (EE): Six months or less	Quarterly rounds of invitations for permanent residence	Permanent Residence Invitation Rounds: Every two weeks (normally)	Eight weeks depending on completeness of documentation and time and human resources of the authorities	Application at the earliest three months before the start of work, average processing time is four weeks (as of 16 August 2022)
	Invitation rounds for permanent residence: several times a year	Examination of the visa eligibility: Median processing time is 25 months (as of 4 March 2022)	Invitation to apply: Three weeks, examination of entitlement to permanent residence: up to six months		

4 – As of 13 May 2019. 18-month planning period ended in December 2019. Currently, the selection of the „Skilled Migrant Category“ is suspended and there is no current „New Zealand Residence Program“ (NZRP) available. 5 – Expression of Interest. 6 – The fees listed here are payable directly at the time of application or when the work visa is issued. The exchange rate of 13 November 2017 was used for conversion into euros. 7 – Status of the reference rates for the euro as at 15 August 2022.

Sources: König et al. (2018), NZIER (2022), Austrian Federal Ministry of European and International Affairs and Federal Ministry of Interior, Australian government, New Zealand government and the government of United Kingdom

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