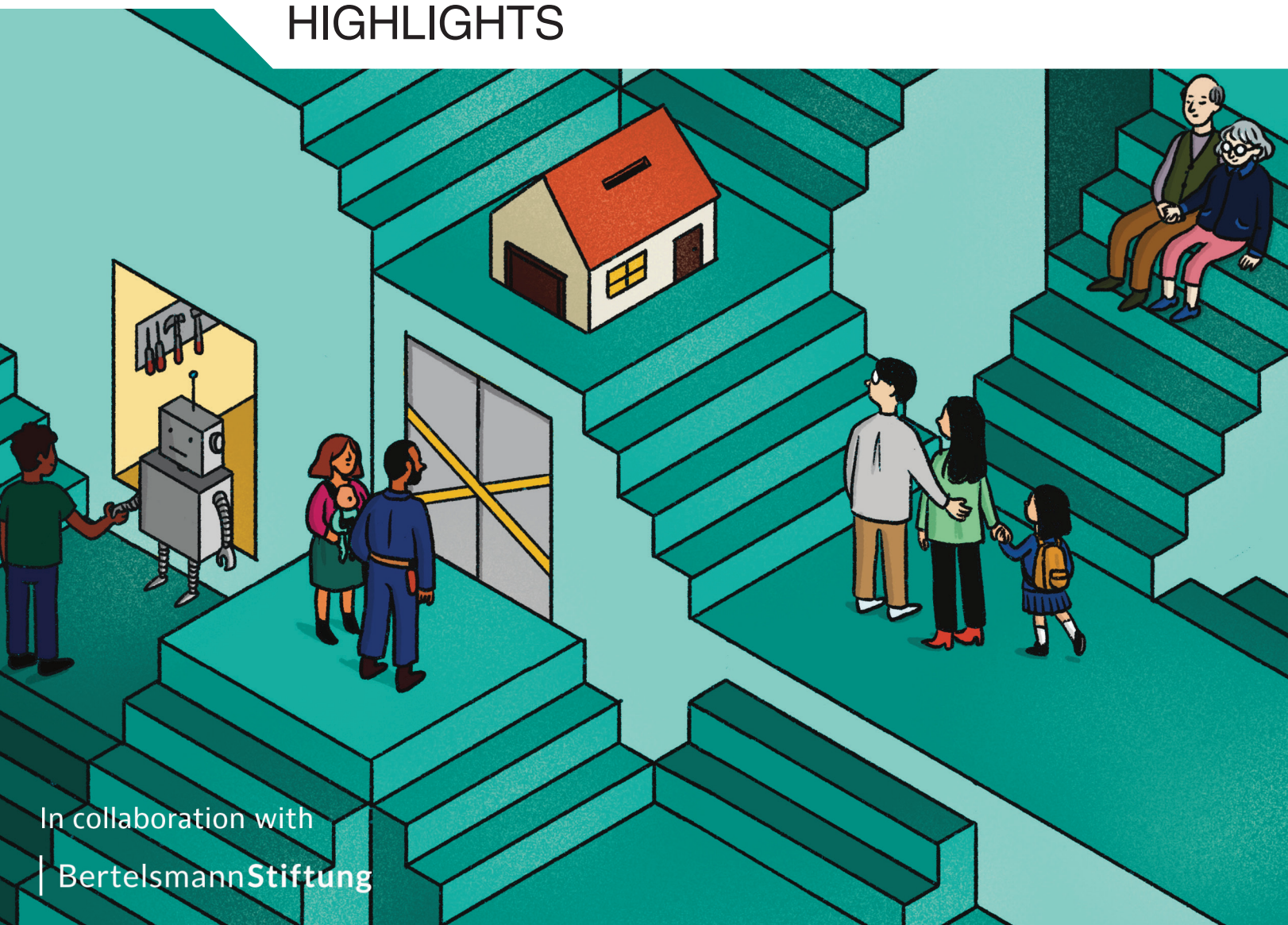




Is the German Middle Class Crumbling? Risks and Opportunities

HIGHLIGHTS



In collaboration with
| BertelsmannStiftung

Highlights from: “Is the German Middle Class crumbling? Risk and Opportunities”

Assessment and policy options

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Strong and thriving middle classes support healthy economies and prosperous societies. Middle-class citizens strongly contribute to the foundations of inclusive societies, to social and political stability, and to economic growth. They consume the bulk of economies' goods and services, simply by virtue of making up such a large share of countries' population and overall income, and play an essential role in accumulating savings, investing in human capital, safeguarding democratic institutions, and supporting good-quality public services. Societies with a strong middle class experience higher levels of social trust, but also better educational outcomes, less crime, better health outcomes, and higher life satisfaction (Kelly, 2000^[1]; Lynch and Kaplan, 1997^[2]; Thorson, 2014^[3]).

Yet, the middle class is a complex social construct without a unique definition. Indicators used to define, and study, the middle class vary significantly within and across disciplines. Some measures and indicators are based on occupation and employment status, relating, for example, to certain aspects of job quality (Goldthorpe, 2016^[4]). Others are based on social, cultural, or economic criteria, such as income level, educational attainment, as well as values and attitudes (Savage et al., 2013^[5]; Pressman, 2007^[6]).¹ Yet other definitions are consumption-based, with households being defined as middle class if they are able to buy a home, afford certain type of cars, or holidays (Reeves, Guyot and Krause, 2018^[7]). An alternative approach is to define the middle class based on subjective self-identification: about 73% of people in Germany self-identify as middle class. Yet, it is well-documented that there exists a "middle-class bias" (Evans and Kelley, 2004^[8]; Bellani et al., 2021^[9]), i.e. that many people self-identify as middle class even though their socio-economic circumstances may suggest otherwise. It can therefore be problematic to rely (alone) on self-identified middle-class status when studying the economic well-being of middle-class households.

This review uses an income-based definition of the middle class and focuses on the middle-income group as a proxy for the middle class, following the approach used in the OECD recent flagship publication *Under Pressure: The Squeezed Middle Class* (OECD, 2019^[10]). It defines the middle-income group as people living in households with disposable incomes between 75 and 200% of the national median after adjustment for household size. This corresponded to a monthly disposable income between about EUR 1 500 and EUR 4 000 for a single person and between EUR 3 000 and EUR 8 000 for a couple with two children in 2018. Within the middle-income group, the review further distinguishes the lower middle (75 to 100% of the median), the mid middle (100-150%) and the upper middle (150-200%). By analogy, people in households outside of the middle-income group are defined as "low-income" if they live on incomes below 75% of the median, while people with incomes above 200% of the median considered as "high-income".²

There is a strong rationale for looking at incomes when defining people's middle-class status for the purpose of comparative statistical analysis. Income is a key determinant of people's living standards and of many aspects of their well-being. It permits households to consume goods and services, including housing, education and health care, and to build up savings as an insurance against shocks. Income also strongly correlates with other determinants of social class, such as occupation, education, and self-perceived class. From an analytical point of view, the benefit of employing an income-based definition

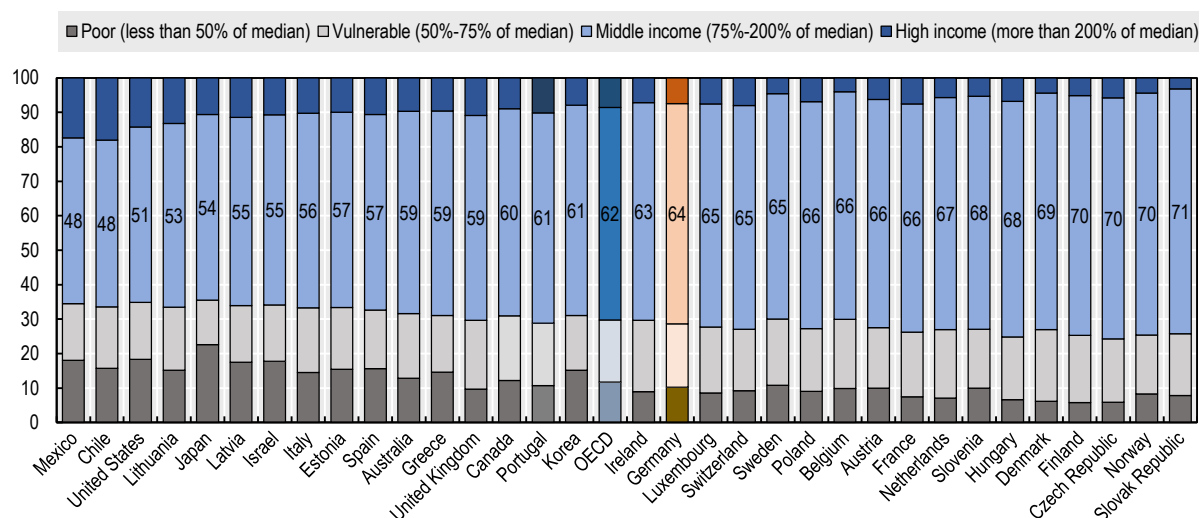
of the middle class is that income data are readily available across countries for long periods. The same does not necessarily hold for information on self-perceived class, or other socio-economic outcomes.

Trends in the size and composition of Germany's middle class

Using the above income-based definition, about two-thirds (64%) of people in Germany belonged to the middle class in 2018, slightly more than across OECD countries on average (62%, Figure 1). Across countries, the size of a country's middle-income group closely relates to the country's level of income inequality, because income groups are defined using thresholds expressed relative to the median income. It is larger in many Central and Eastern European and the Nordic countries, where income inequality is comparatively low, while being smallest in Mexico, Chile and the United States, where income inequality is greatest. Around one-in-three people (29%) in Germany belong to the low-income group of which 10% are poor, while 7% are in the high-income group.

Figure 1. The middle-income group is slightly larger in Germany than across OECD countries on average

Percentage share of the population by income group, 2018 or latest available year



Note: Results refer to the year 2018, except for the United States (2019), Belgium, Canada, Chile, Israel, Switzerland (all 2017), Austria, the Czech Republic, Denmark, Estonia, Finland, Greece, Italy, Norway, Poland, Spain (all 2016), Hungary, Slovenia (2015), Australia (2014), Japan, Luxembourg (2013), and Korea (2012). The OECD average gives the unweighted average over the 33 countries included in the figure.

Source: OECD calculations based on data from the LIS Cross-National Data Centre, except for France, Latvia, Portugal and Sweden, which is based on data from the European Union Statistics on Income and Living Conditions (EU-SILC).

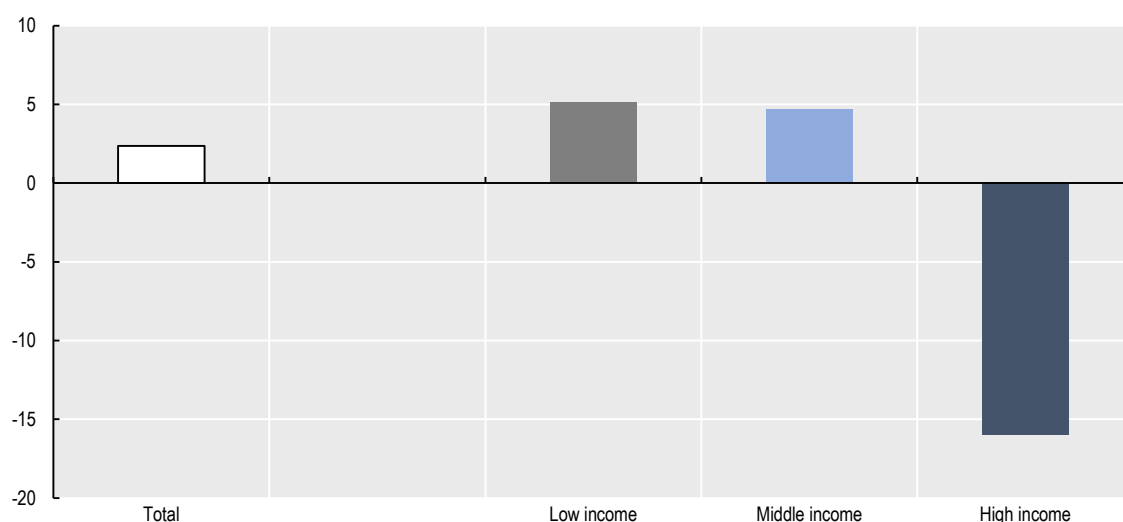
After one-and-a-half decades of real income stagnation, middle-income households in Germany experienced healthy income growth from 2015

Middle-income households in Germany experienced only modest real incomes growth for over two decades from the mid-1990s, before income growth picked up from 2015. Between 2000 and 2014, the median disposable household income stagnated in real terms, implying that many middle-income households in Germany experienced no rise in living standards over that period. Meanwhile, income disparities widened: while in the late 1990s, top, median and bottom incomes had still grown in lockstep, top incomes decoupled from stagnating median and declining bottom incomes in Germany between 2000

and 2014. This mirrors a trend towards higher income inequality compared to the mid-1990s in many other OECD countries. Since 2015, Germany experienced a healthy rise in disposable household incomes for households across the income distribution. In 2018, the median disposable household income was 17% higher in real terms than it had been in 1995; incomes of the top 10% of households had grown by 28%, those for the bottom 10% of households by only 7%. The available evidence on income developments during the COVID-19 crisis up to January 2021 suggests that disposable incomes slightly *grew* on average for workers in low- and middle-income households (Figure 2; Braband et al. (forthcoming^[11])), thanks to the comprehensive government support, while they substantially dropped for high-income households.

Figure 2. Workers in low- and middle-income households experienced on average net income gains during the initial phase of the COVID-19 crisis, unlike workers in high-income households

Percentage nominal change in monthly net household income between 2019 and January 2021 for workers employed before the crisis, by household income, Germany



Note: Results for 18-64 year-olds who were employed full-time, part-time or in Minijobs in 2019. Income groups are defined based on disposable equivalised household income for the year 2018. Monthly net household incomes are measured in January 2021 (SOEP CoV 2) and compared to pre-crisis values for 2019 taken from the SOEP.

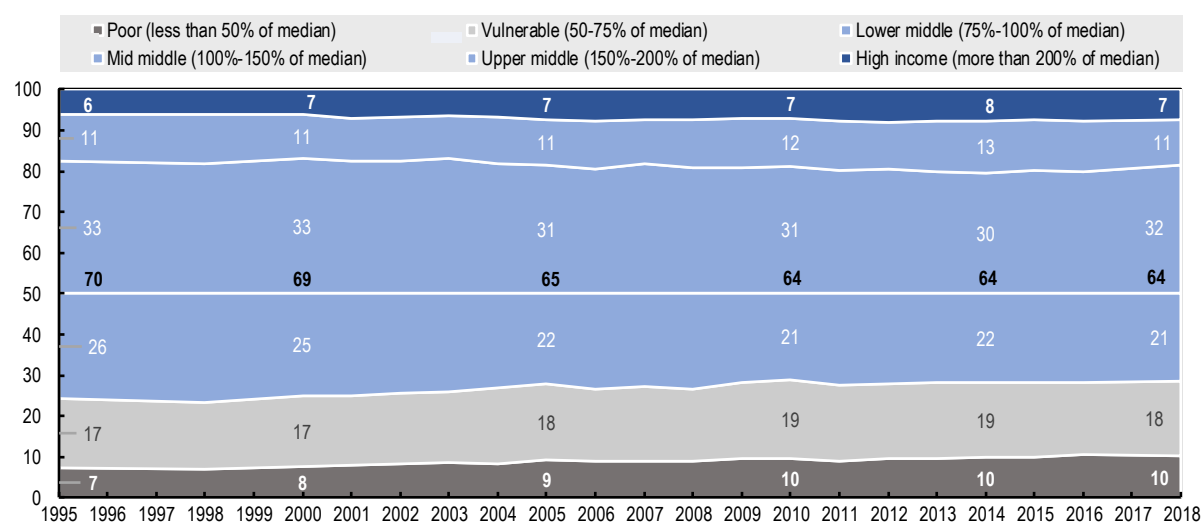
Source: DIW calculations based on the SOEP v36 and SOEP-CoV 2.

The German middle-income group has shrunk in the late-1990s and early-2000s, mostly at the lower end, and has not recovered since

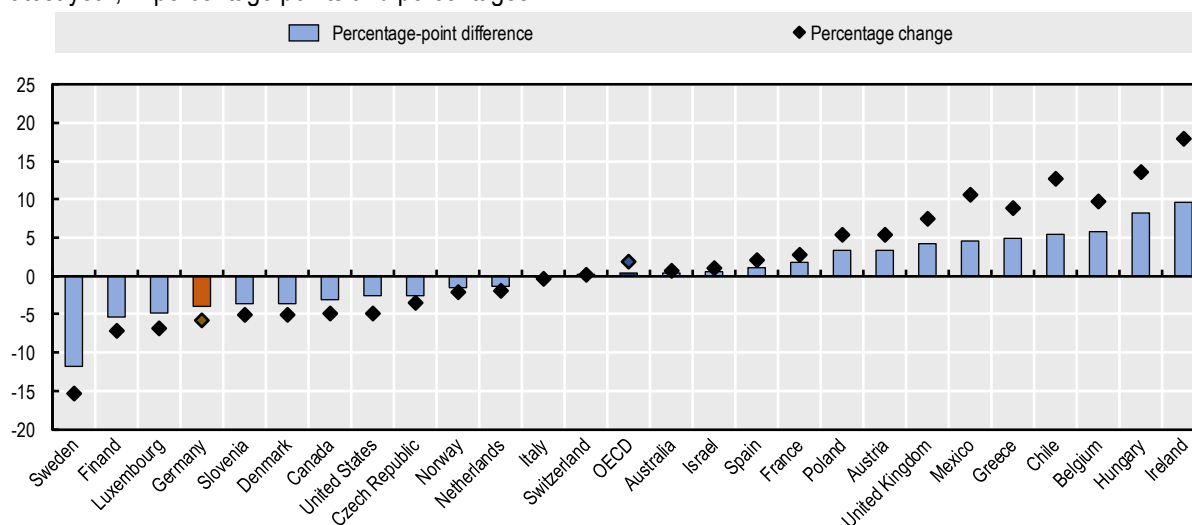
The German middle-income group is smaller than it was in the mid-1990s. Between 1995 and 2018, it shrunk by 6 percentage points, from 70 to 64% of the population (Figure 3, Panel A). Most of this decline occurred in the early 2000s, when income disparities in Germany widened. The German middle-income group did not recover in spite of the positive employment growth after 2005 as disposable incomes for lower and middle-income households stagnated in real terms. The decline in the middle-income group in the early 2000s mostly reflects a shrinking of the *lower* middle-income group, i.e. in the share of households with incomes of 75 to 100% of the median; the *mid* middle-income group (100-150% of the median) and the *upper* middle-income group (150-200% of the median) have remained broadly stable. In the meantime, the share of both low- and high-income households increased.³

Figure 3. The German middle-income group is smaller than in the mid-1990s, but has remained largely stable since 2005

Panel A. Percentage share of the population by income group, Germany, 1995-2018



Panel B. Changes in the population shares of the middle-income groups in OECD countries, mid-1990s to 2018 or latest year, in percentage points and percentages



Note: OECD refers to the unweighted average across 26 countries with available data. Results are for 2018, except for the United States (2019), Belgium, Canada, Chile, Israel, Switzerland (all 2017), Austria, the Czech Republic, Denmark, Estonia, Finland, Greece, Italy, Norway, Poland, Spain (all 2016), Hungary, Slovenia (2015), Australia (2014), Japan, Luxembourg (2013) and Korea (2012). The percentage point change (bars) refers to the difference between the mid 1990s and the latest year, while the percentage change (diamond) shows the relative change compared to the mid 1990s.

Source: OECD calculations based on data from LIS Cross-National Data Center, except for France and Sweden, which are based on data from the European Union Statistics on Income and Living Conditions (EU-SILC).

The shrinking of the middle-income group since the mid-1990s has been faster in Germany than in most OECD countries. Only in Sweden, Finland and Luxembourg, the middle-income groups declined faster. Across all 26 OECD countries with available data, the size of the middle-income group even slightly expanded on average, by 0.3 percentage points (Figure 3, Panel B). This reflects growing middle-income groups in some Latin American, Southern European and European English-speaking countries, where income inequality usually declined.

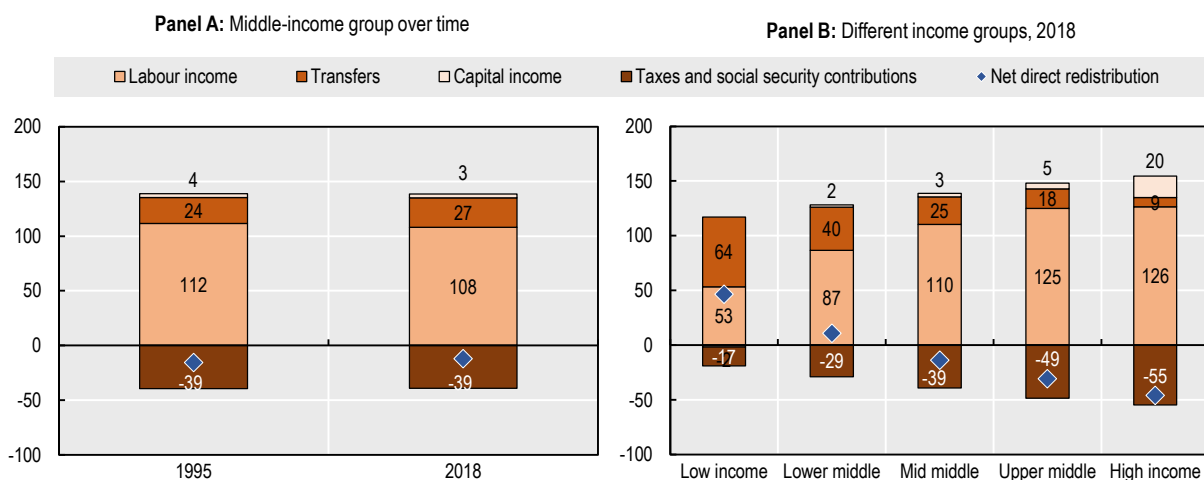
Also the income share of the middle-income group relative to total population income has fallen in Germany, from 74 to 67% between 1995 and 2018, indicating declining aggregate economic influence. Again, however, this decline occurred over the first decade of the observation period, between 1995 and 2005. It reflects almost entirely the shrinking size of the middle-income group (i.e. in its population share), and only to a very small extent the fall in relative income levels of middle-income people compared to people in other income groups.

The middle-income group pays more in income taxes than it receives in social benefits, but most redistribution takes place within the middle-income group

The German middle-income group is, on average, a net contributor to the tax and benefit system: the sum of taxes and social-security contributions paid on income exceeds the total value of social cash benefits received, at 39 vs 27% (Figure 4) in 2018. However, those figures neither account for indirect taxes paid (incl. VAT) nor for in-kind transfers received in form of public services, such as health care or education. Within the middle-income group, only the mid and upper middle are indeed net contributors. Lower middle-income households receive about 40% of their disposable income in transfers, while only paying 29% in taxes and contributions, i.e. they are net beneficiaries of the tax-benefit system. The middle-income group's net contribution in 2018 was slightly lower than in 1995.

Figure 4. The middle-income group pays on average more in income taxes and contributions than it receives in cash benefits, but the lower middle is a net beneficiary of the tax-benefit system

Income components as a share of disposable income, as percentages



Source: OECD calculations based on data from LIS Cross-National Data Centre.

However, most redistribution takes place over the life course *within* the middle-income group, between working-age people and the elderly. Indeed, 18-64 year-olds in the middle-income group are heavy net contributors, with taxes and social-security contributions exceeding benefits received by 33% of disposable income on average. Meanwhile, senior middle-income people (65+) are clear net beneficiaries: they derive nearly all of their disposable income from social transfers, namely public pensions, and pay only little taxes and social contributions.

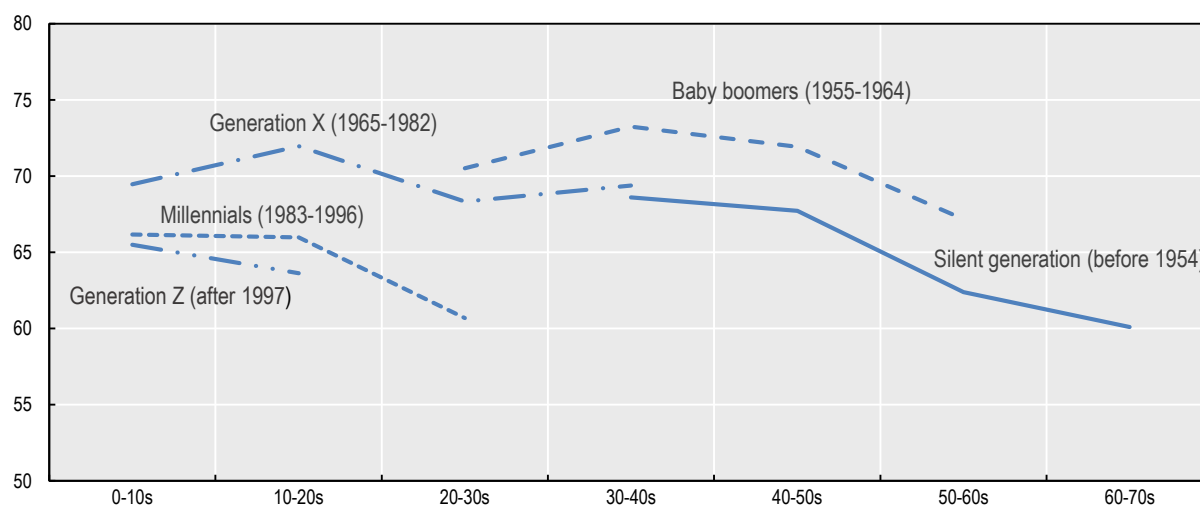
The German middle-income group has been changing its socio-demographic composition

The middle-income group has considerably changed its socio-economic composition over the last decades as a result of its declining size, and trends in living arrangements, labour force participation of women and young people, as well as the economic well-being of different age groups. In particular,

- The German middle-income group has aged more quickly than the general population, and particularly young people find it increasingly difficult to secure their place in the middle-income group. Older people instead managed better to hold on to their middle-income status. In 2018, older working-age adults (45-64 years) and seniors (65 years and older) made up more than half (55%) of middle-income people, up from around 40% in 1995. Young people have been disproportionately affected by the shrinking of the middle-income group. They are on average 10 percentage points less likely to be in the middle-income group than in the mid-1990s, a decline nearly twice the population average. However, this drop again occurred in the years up to 2005. The size of the middle-income group has continuously declined from one generation to the next since the baby boomers (see Figure 5). When aged in their 20s and 30s, 71% of the baby boomers belonged to the middle-income group, while for the Generation X (i.e. people born in the mid-1960s to early 1980s) and the Millennials (born in the early 1980s to mid-1990s), the shares had declined to 68% and 61% at the same age. The gradual decline in the size of the middle-income group from one generation to the next also holds when looking at people's income status in their childhood, youth, and early adulthood (0-10s, 10-20s, and 20-30s).

Figure 5. Since the baby boomers, the size of the middle-income group has declined generation by generation

Percentage share of the population belonging to the middle-income group, by cohort and age, Germany



Reading note: In their 20s and 30s, 71% of the baby boomers belonged to the middle-income group. For the Generation X (i.e. people born in the mid-1960s to early 1980s), the share had declined to 68% at the same age.

Source: OECD calculations based on data from LIS Cross-National Data Centre.

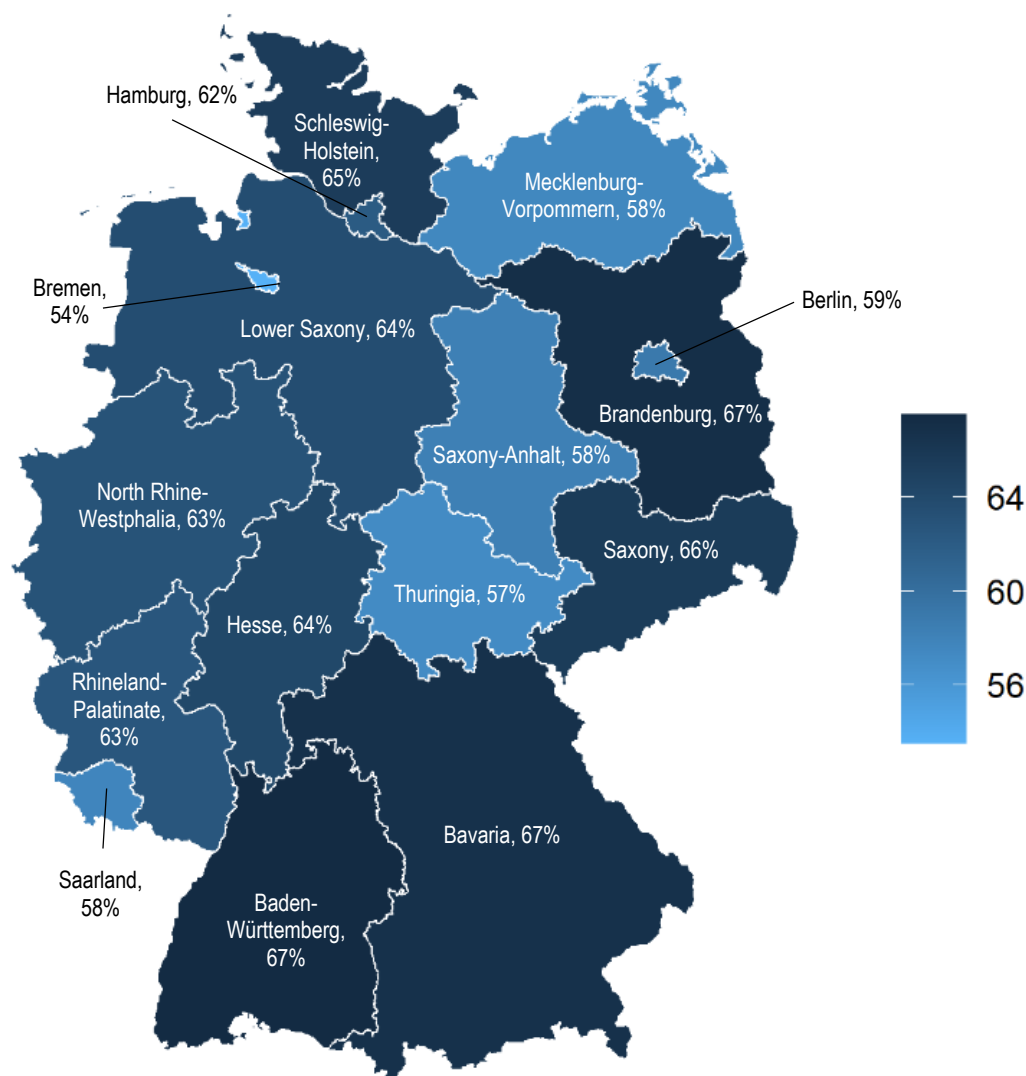
- *Working couples make up nearly half (44%) of middle-income households, and have increased their relative chances of living on middle incomes.* The middle-income group has even expanded for one-and-a-half earner couples, though “traditional” one-earner couples still make up the majority of working couples in the middle-income group. The growing share of one-and-a-half earner

couples reflects the risen female labour force participation, often in part-time work, and points to the growing importance of having a second earner for securing middle-income status. Couples with two full earners increasingly make it into the *high*-income group, as does a growing share of single-earner couples with high earnings. Meanwhile, working singles increasingly find themselves in the *low*-income group.

- *Educational attainment has been rising, but adults with an upper- and post-secondary qualification still make up the bulk of the middle-income group.* They accounted for 58% of all middle-income adults in 2018, while those with tertiary education make up 33% of middle-income adults; 9% have less than upper-secondary education. Educational attainment in the middle-income group has risen faster than in the overall population. Particularly for the younger generation (25-35 year-olds) having tertiary education has become crucial for making it into the middle-income group: since the mid-1990s the chances of making it into the middle-income group have declined by -27 percentage points (from 67 to 40%) for young adults with less than upper-secondary, by -12 percentage points (from 73 to 61%) for those with upper- and post-secondary, and by -5 percentage points (from 76 to 71%) for those with tertiary education.
- *Immigrants are less likely than in the mid-1990s to be part of the middle-income group, but this may reflect the changing composition of Germany's migrant population.* The share of people born abroad in the middle-income group rose by 2 percentage points, only half as much as the rise in the immigrant share in the overall population. At the start of the observation period, in 1995, most immigrants originated from Central and Eastern European countries, Turkey or Italy. The inflow of humanitarian migrants from 2015 led to an increase in the share of immigrants from Syria, Iraq and Afghanistan, who may take longer to integrate into the labour market and rise into the middle-income group.
- *The size of the middle-income group varies substantially between regions, and it has declined much more strongly in cities than in rural areas.* Among the German states, Bremen has the smallest middle-income group, at only 54%, and also four of the six eastern German states have middle-income groups of below 60% of the population (Figure 6). Meanwhile, over 65% of people in southern German Baden-Württemberg and Bavaria and eastern German Brandenburg and Saxony belong to the middle-income group. The middle-income group has declined slightly faster in urban than in rural areas since the mid-1990s, such that cities now tend to have somewhat smaller middle-income groups than rural areas. However, one needs to be somewhat careful in interpreting these regional and rural-urban middle-income shares simply as measures of regional living standards, because they do not account for geographic disparities in the cost of living.⁴

Figure 6. Regional differences in the size of the middle-income group are substantial, and notably between East and West

Percentage share of the population belonging to the middle-income group, German states, 2018



Note: The size of regional middle-income groups has been calculated with reference to the national median household income without accounting for regional differences in the cost of living.

Source: OECD calculations based on data from LIS Cross-National Data Centre.

The labour market trends of middle-income workers in Germany

Most middle-income workers are employed in middle- and high-skilled occupations, and the occupational distribution has become more polarised

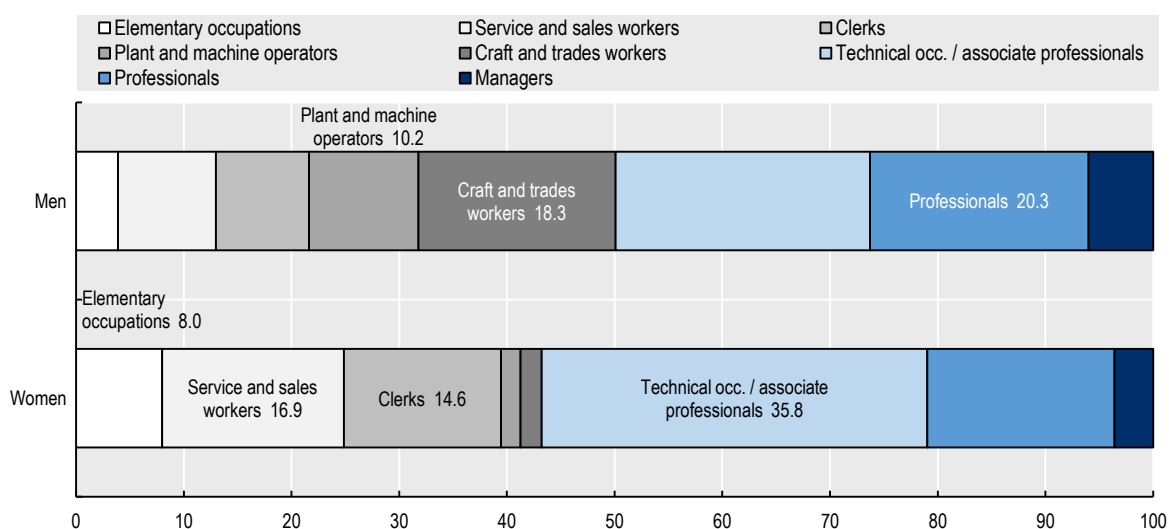
Most middle-income workers in Germany, i.e. working-age people employed full-time or part-time and living in middle-income households, work in high-skilled and middle-skilled occupations. In 2018, the largest occupational groups among middle-income workers were high-skilled technical occupations / associate professionals, who accounted for nearly 30%, and high-skilled professionals, at 19%.

Middle-skilled crafts and trades workers, as well as clerks, each accounted for 10%. However, a significant share of middle-income workers (about 19%) also worked in low-skilled occupations in 2018, notably in services and sales.

The occupational distribution also differs by gender. Male middle-income workers are strongly represented among high-skilled managers and professionals and middle-skilled crafts and trade workers (Figure 7). Female middle-income workers have moved up in the occupational distribution over the last decades. While they remain strongly overrepresented among the low- and lower middle-skilled occupations (elementary workers, service and sales workers, as well as clerks), many work also as high-skilled associate professionals and professionals.

Figure 7. Female middle-income workers remain overrepresented in lower-skilled occupations

Distribution of occupations across middle-income workers by gender, Germany, 2018



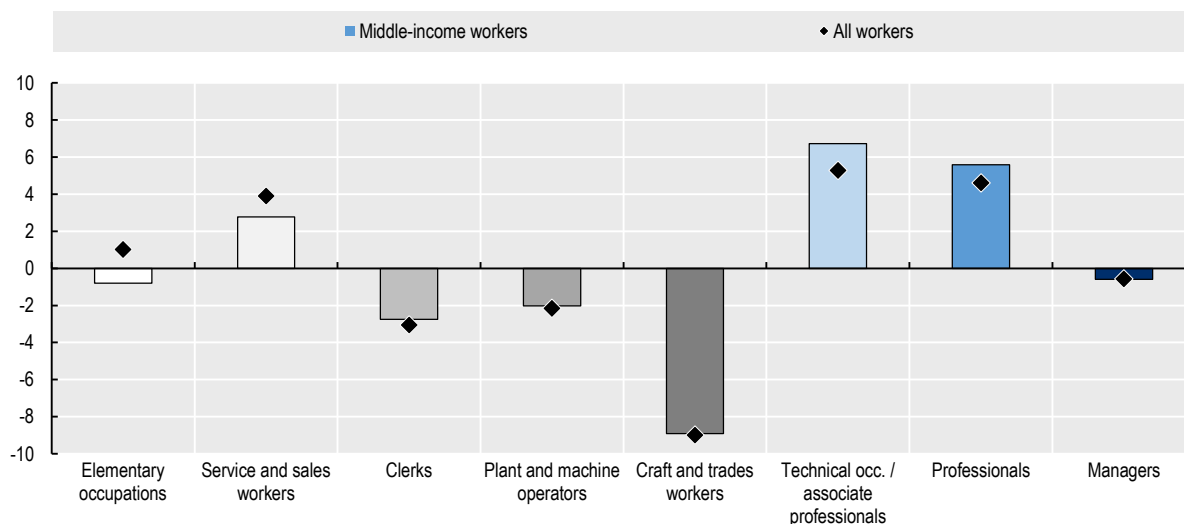
Note: Occupations are classified by ISCO-08 and sorted by average earnings per occupation. Low-skilled, middle-skilled, and high-skilled occupations are shaded in white, grey, and blue.

Source: OECD calculations based on data from LIS Cross-National Data Centre.

The occupational distribution in Germany has become substantially more polarised since the mid-1990s, across all workers as for middle-income workers more narrowly (Figure 8), though this trend has been less pronounced than in other OECD countries. The shares of middle-skilled craft and trades workers, machine operators, and clerks declined, while those of high-skilled professionals and technical occupations / associate professionals, but also of low-skilled service and sales workers, has grown. However, middle-income workers have not been affected more than other workers by this polarisation trend: the decline in employment shares in middle-skilled occupation and the rise in high- and low-skilled occupations in Germany is very similar in magnitude for middle-income workers as for workers overall.

Figure 8. The occupational distribution has gotten more polarised, but not more so for middle-income workers than for workers overall

Percentage-point changes in the distribution of occupations by income group, Germany, 1995-2018



Note: Occupations are classified by ISCO-08 and sorted by average earnings per occupation. Low-skilled, middle-skilled, and high-skilled occupations are shaded in white, grey, and blue.

Source: OECD calculations based on data from LIS Cross-National Data Centre.

Middle-income workers have shifted out of manufacturing towards public services, which together account for more than half of all middle-income jobs

Workers in public services – i.e. in the public administration, the education sector, and the health and social sector – and in manufacturing are the backbone of middle-class employment, accounting for more than half (54%) of middle-income workers.⁵ Particularly in public services, middle-income workers are overrepresented relative to workers from other income groups. The shift in employment shares across economic sectors in Germany over the last decades particularly affected middle-income workers. The manufacturing sector substantially lost in relative importance, with an employment share among middle-income workers that was 7 percentage points lower in 2018 than in the mid-1990s, while the share of workers employed in public services increased by 8 percentage points.

Non-standard work has become more frequent among middle-income workers, but it remains much less widespread than for workers in other income groups

Non-standard forms of work, i.e. temporary and part-time work and self-employment, are much less widespread among middle-income workers than among other groups of workers in Germany:

- *Few middle-income workers are employed on temporary contracts*, about 12% in 2018. This is less than on average across OECD countries with available data, and only about one-third the rate for low-income workers in Germany.
- *Part-time work is widespread only among female middle-income workers*. About 46% of female middle-income workers worked part-time in 2018, compared to 7% of male middle-income workers. However, rates of part-time work for middle-income workers are only about half as high as for low-income workers.

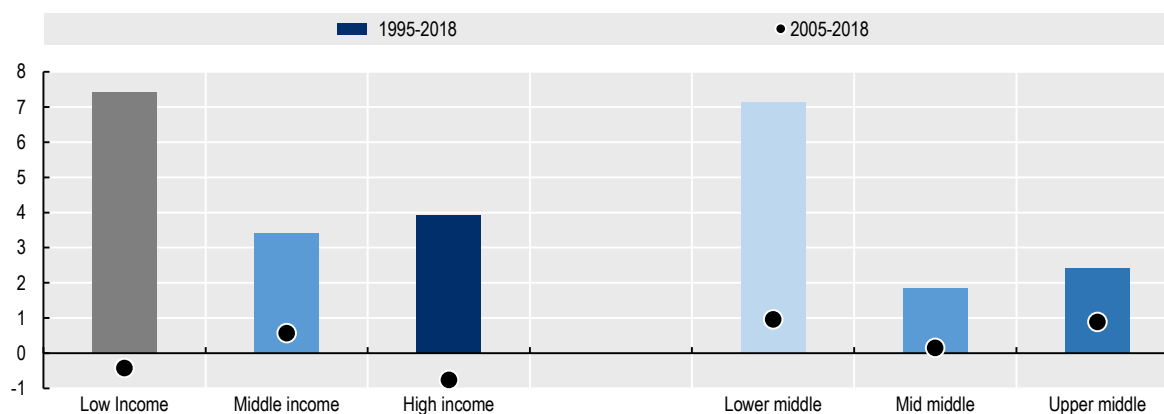
- *Few middle-income workers in Germany are self-employed.* The share of middle-income workers who report self-employment as their main activity status is low (6%), only about one-fourth the rate for high-income workers.

Rates of temporary and part-time employment are higher in Germany than they were in the mid-1990s, including for workers in middle-income households. However, most of this expansion occurred in the late 1990s and early 2000s, i.e. before the 2005 “Hartz reforms”. Low-income workers were much more strongly affected than middle-income workers, while there are few systematic differences *within* the middle-income group:

- *The share of middle-income workers on fixed-term contracts has risen by 3 percentage points since the mid-1990s.* However, this is less than the increase for either low- or high-income workers (Figure 9). Workers in the *lower* middle-income group experienced a much stronger expansion though, at + 7 percentage points. For workers across all income groups, this expansion happened before 2005.
- *Also part-time employment has become more widespread among middle-income workers,* with the share of those on part-time contracts having risen by 8 percentage points since the mid-1990s. This primarily reflects rising labour force participation of women, who are much more likely to work part-time, but also a growing incidence of part-time work among men. Again, however, the rise in part-time work was only about half as strong as for low-income workers, while there are no large differences in the rise in part-time work across income levels *within* the middle-income group.
- *Rates of self-employment have slightly declined since the mid-1990s* for middle-income workers in Germany, as for low-income workers, but risen among high-income workers.

Figure 9. The share of workers on temporary contracts in Germany has remained largely stable since 2005

Percentage-point change in the share of workers on temporary contracts, by income group, Germany, 1995-2018



Source: OECD calculations based on data from LIS Cross-National Data Centre.

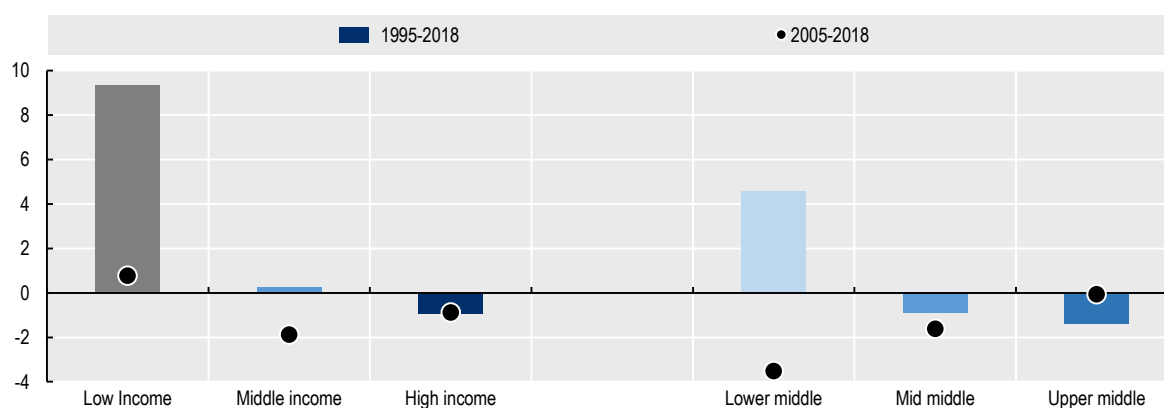
A sizeable minority of middle-income full-time workers are in low-paid jobs, but low-paid employment has risen only for low-income workers

About one-in-six (18%) middle-income people working full-time earn less than two-thirds of median earnings. One explanation for why they nonetheless make it into the middle-income group can be that they live in a household with a higher-earning partner. Some of them may also have other sources of income besides earnings from work, such as capital income. However, the low-pay rate is four times higher for low-income workers (75%). The share of low-paid workers in Germany has strongly increased relative to

the mid-1990s among those living in low- and lower middle-income households (again before 2005), but it has remained stable among those living in mid middle-, upper middle- and high-income households (Figure 10).

Figure 10. The incidence of low pay is higher than in the mid-1990s for workers in low- and lower middle-income households, but it has declined after 2005

Percentage-point change in the share of full-time workers who are low-paid, by income group, Germany, 1995-2018



Note: The incidence of low pay gives the share of full-time workers earning less than two-thirds of median annual earnings of full-time workers. Source: OECD calculations based on data from LIS Cross-National Data Centre.

One-in-six middle-income workers in Germany work in jobs facing high risk of automation

Recent OECD work has quantified the share of jobs at risk of automation across OECD countries based on expert assessments of the ease, or difficulty, of automating specific tasks and information on the relevance of these tasks for different occupations (Arntz, Gregory and Zierahn, 2016^[12]; Nedelkoska and Quintini, 2018^[13]; OECD, 2019^[14]).⁶ Based on data from OECD Survey of Adult Skills (PIAAC), this work estimated that 14% of jobs OECD-wide, and 18% of jobs in Germany, are highly automatable, i.e. they face a probability of automation of at least 70%. Another 32% of jobs OECD-wide, and 36% in Germany, have an automation risk of between 50 and 70%, i.e. there is a possibility of significant change in the way these jobs are carried out as a result of automation. This leaves Germany with one of the highest shares of jobs likely affected by automation across the OECD countries included in the analysis.

Matching these results with data on the occupational distribution of workers across income groups shows that middle-income workers in Germany face a slightly lower – but still substantial – automation risk, with about one-in-six (17%) working in jobs that are highly automatable. As in other OECD countries, middle-income jobs are much less likely to be automated than low-income jobs (22% of jobs at high risk of automation in Germany), but substantially easier to automate than high-income jobs (10%). Among German middle-income workers, drivers and mobile plant operators, labourers in mining, construction, manufacturing and transport, and clerical support workers face the highest automation risk. Some other occupational groups – such as different types of associate professionals (in business and administration, health, and science and engineering) and sales workers – include a lower share of at-risk jobs, but nonetheless significantly contribute to the overall automation risk because they account for a relatively large share of middle-income employment. Male middle-income workers in Germany are somewhat more likely than female workers to be employed in occupations with high automatability.

Forecasts show positive employment growth for middle-income occupations, but also further occupational polarisation

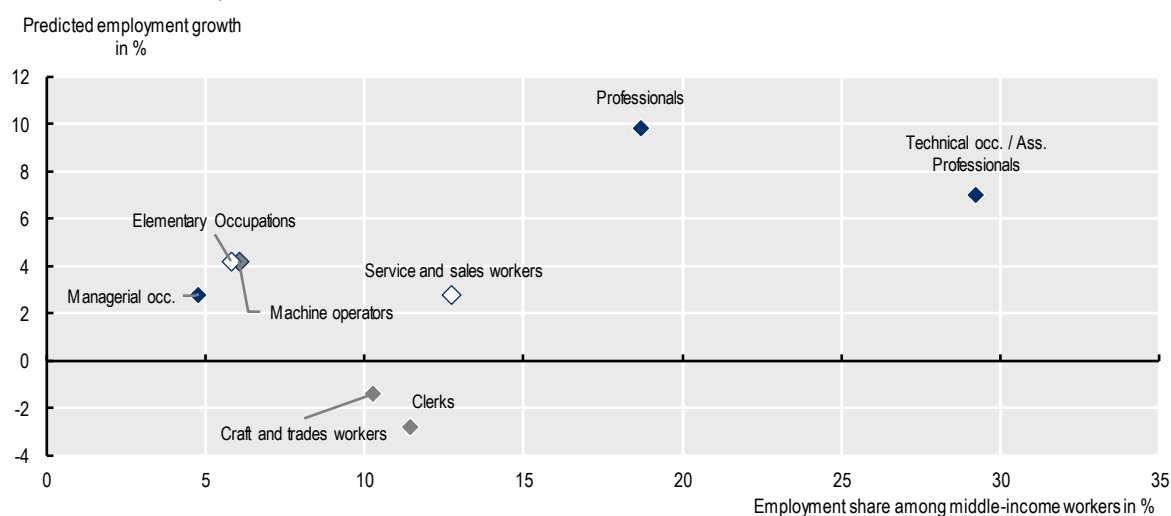
Employment growth forecasts by occupational group – which however pre-date the COVID-19 pandemic – indicate that the occupations of current middle-income workers can expect positive employment growth up to 2030, by approximately 4.5% overall (or an annual 0.3%; Figure 11, Panel A). This is higher than across the occupations of low-income workers (+3.8%), but lower than for high-income occupations (+5.8%). Those forecasts also point towards potential further polarisation of the occupational distribution in Germany (Figure 11, Panel B). Predicted employment growth is expected to be strong in high-skilled occupations, such as professionals, technical occupations and associate professionals, and managerial occupations, and also positive in low-skilled elementary occupations and service and sales workers. By contrast, growth forecasts for middle-skilled occupations are more pessimistic, with negative employment growth predicted for craft and trades workers and clerks.

Figure 11. Predicted employment growth for middle-income workers is positive but points towards further occupational polarisation

Panel A. Total predicted employment growth by income group, selected EU-OECD countries, 2018-30



Panel B. Predicted employment growth (2018-30) and employment share in the middle-income group, by occupation, Germany



Note: In Panel A, employment growth by income group was calculated by matching Cedefop's (2021_[15]) occupation-specific employment growth forecasts with LIS data on the occupational distribution of workers within income groups. OECD-17 gives the unweighted average of the 17 countries represented in the figure. In Panel B, high-skilled, middle-skilled and low-skilled occupations are colour-coded in blue, grey and white.

Source: OECD calculations based on data from LIS Cross-National Data Centre and Cedefop Employment Forecasts (<http://www.cedefop.europa.eu/en/publications-and-resources/data-visualisations/skills-forecast>).

Short-time work prevented larger employment losses for middle-income workers in the initial phase of the COVID-19 crisis

The rapid extension of Germany's short-time work (*Kurzarbeit*) scheme was a key factor in preventing larger employment losses for workers across all income groups up to January 2021.⁷ SOEP-CoV data show that in the initial phase of the COVID-19 crisis, in April-June 2020, around 16% of all workers

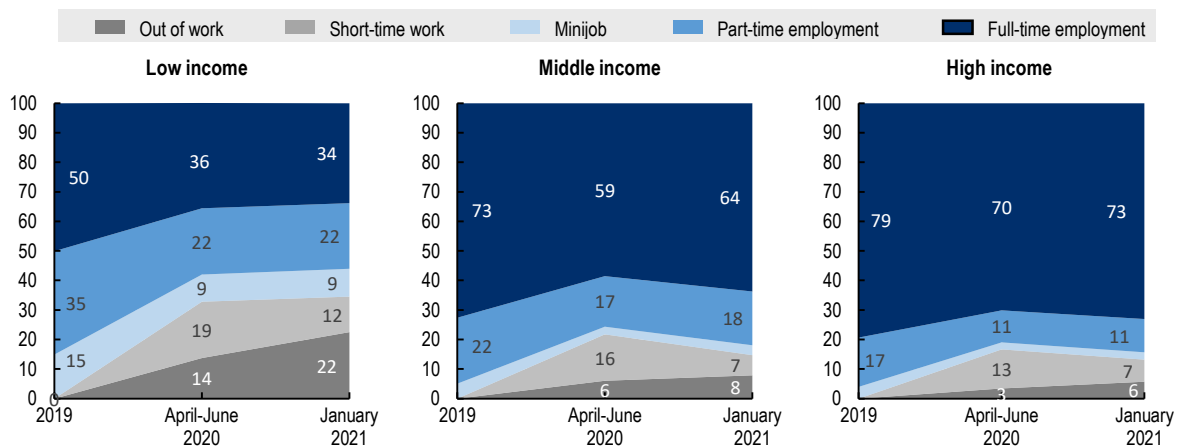
employed in 2019 participated in this scheme. Workers across all income groups were put on *Kurzarbeit*, with the shares varying from 13 to 19% for high- and low-income workers. By January 2021, the share of workers on *Kurzarbeit* had halved for workers in middle- and high-income households, to 7%, while it remained high for low-income workers, at 12%. Those differences in the decline of the participation in *Kurzarbeit* likely reflect differences in sectoral composition across workers in different income groups.

In spite of employers' massive use of *Kurzarbeit*, employment declined significantly, particularly among low-income workers. By January 2021, 8% of middle-income workers and 6% of high-income workers who had been employed in 2019 were out of work; among low-income workers, the share was three times as high, at 22%. Many of these workers were likely working in jobs that did not qualify for *Kurzarbeit* including workers in marginal employment (*Minijobs*) and the self-employed. These numbers include workers who left the labour market for retirement.

Those numbers are mirrored by a decline in employment (outside of short-time work) across the different employment types. Out of all middle-income people in work before the crisis in 2019, the share of those in full-time, part-time, and Minijobs and not on short-time work had dropped by 9, 4 and 2 percentage points by January 2021 (Figure 12). This drop had happened entirely in the initial months of the crisis, i.e. by April-June 2020. However, those declines were much more modest than those for low-income workers. Out of all low-income people in work before the crisis, the shares of those working full-time, part-time, and in Minijobs declined by 16, 13 and 6 percentage points. Overall, the employment rate in Germany was about 1.5 percentage points lower than its pre-crisis level in the third quarter of 2021 (OECD, 2021^[16]).

Figure 12. Workers in middle-income households experienced a much lower drop in employment than those in low-income households

Labour force status of workers employed before the crisis, by income group, Germany, 2019-21, as percentages



Note: Results for 18-64 year-olds who were employed full-time, part-time or in Minijobs in 2019. Income groups are defined based on disposable equivalised household income for the year 2018.

Source: DIW calculations based on the SOEP v36 and SOEP-CoV 1 and 2.

Income mobility in the German Middle Class

The level of social mobility is an important characteristic of a social market economy.⁸ The promise of moving up the income ladder, and the welfare state's capacity to protect people from substantial income losses and to guarantee a minimum standard of living, are cornerstones of an inclusive growth regime that encourages risk taking by limiting possible downsides for each individual. At the same time, access to

economic opportunities for all groups in society is important to promote social cohesion and secure broad support for democratic institutions. This in turn promotes economic stability.

The general claim towards the social market economy in Germany is that educational achievement and hard work are rewarded with palpable opportunities for upward mobility independently of one's socio-economic background and thus pay off over the course of a career. A certain degree of downward mobility from higher-income groups is acceptable, but should be cushioned by the welfare state, offering social security to everyone.

Analysing the chances and risks of up- and downward mobility requires a *longitudinal* perspective, tracing income mobility patterns between the six different income groups over time (see Table 1 for an example).⁹

Table 1. Mobility amongst six different income groups, 2014-17

Transition probabilities after four years

		2017						Population Size (in million)
		Poor <50%	Vulnerable 50-75%	Lower Middle 75-100%	Mid Middle 100-150%	Upper Middle 150-200%	High >200%	
2014	Poor <50%	45%	31%	13%	8%	2%	1%	4.5
	Vulnerable 50-75%	17%	43%	26%	11%	2%	0%	7.2
	Lower Middle 75-100%	6%	16%	45%	30%	2%	1%	9.1
	Mid Middle 100-150%	2%	4%	16%	63%	13%	2%	14.8
	Upper Middle 150-200%	2%	1%	5%	29%	49%	13%	7.1
	High >200%	1%	1%	3%	11%	19%	65%	4.3

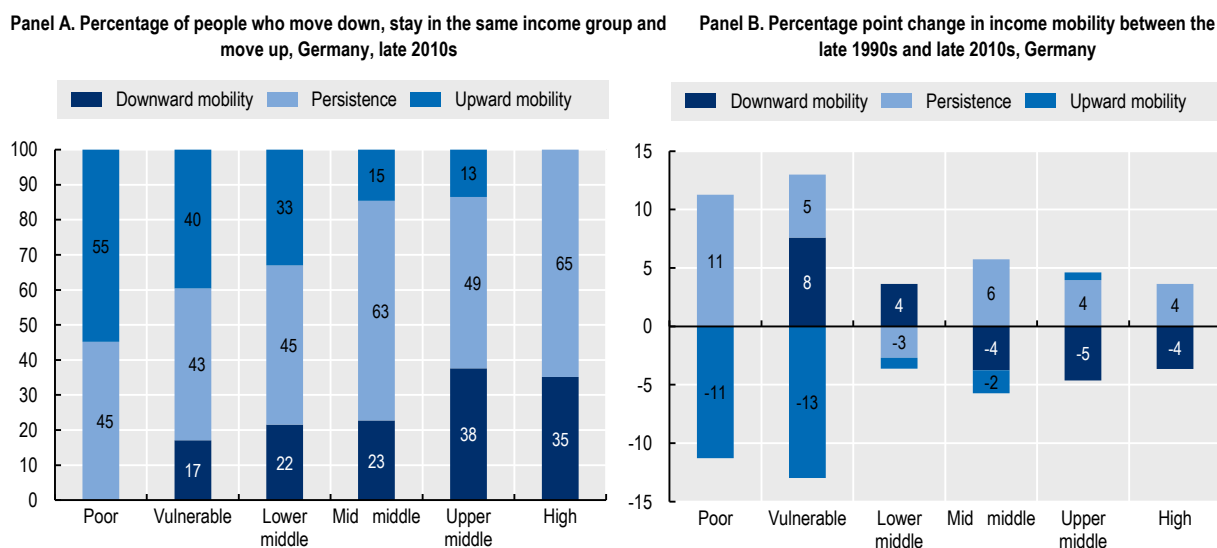
Note: Table displays the transition shares after four years averaged over the starting years 2013-15 for different income groups defined in relation to the median of household equivalised incomes for the working age population (18-64), and the population size.

Source: OECD calculations based on the SOEP v36.

Incomes in Germany are highly persistent, more so than they were in the late 1990s

Incomes in Germany are rather persistent over a short time horizon (4-year period), particularly in the middle and at the top of the income distribution (Figure 13, Panel A), and income persistence has risen in nearly all income groups since the late 1990s (Figure 13, Panel B). The rise in income persistence was particularly pronounced for people in the lower parts of the distribution, i.e. for the poor (less than 50% of the median), by 11 percentage points from 34 to 45%, and for the vulnerable (50-75% of the median), by 5 percentage points from 38 to 43%. Only for people in the lower middle-income group (75-100% of the median), income persistence declined as downward mobility increased. For people on low incomes, greater income persistence largely came at the cost of reduced *upward* mobility; for people on mid- and upper-middle incomes (100-150% and 150-200% of the median) and high incomes (more than 200% of the median), it is mirrored also in a reduced risk of *downward* mobility.

Figure 13. Incomes have become more persistent over time – especially so for the poor



Note: Persistence, upward and downward mobility shares are calculated for the working age population (18-64) for a four-year period as described in footnote 9. Results included for the period 1995-98 (“Late 1990s”) and 2014-17 (“Late 2010s”). Income groups are defined relative to the median of equivalised household income (poor: less than 50%; vulnerable 50%-75%; lower middle: 75-100%; mid middle: 100-150%; upper middle: 150-200%, high: more than 200%).

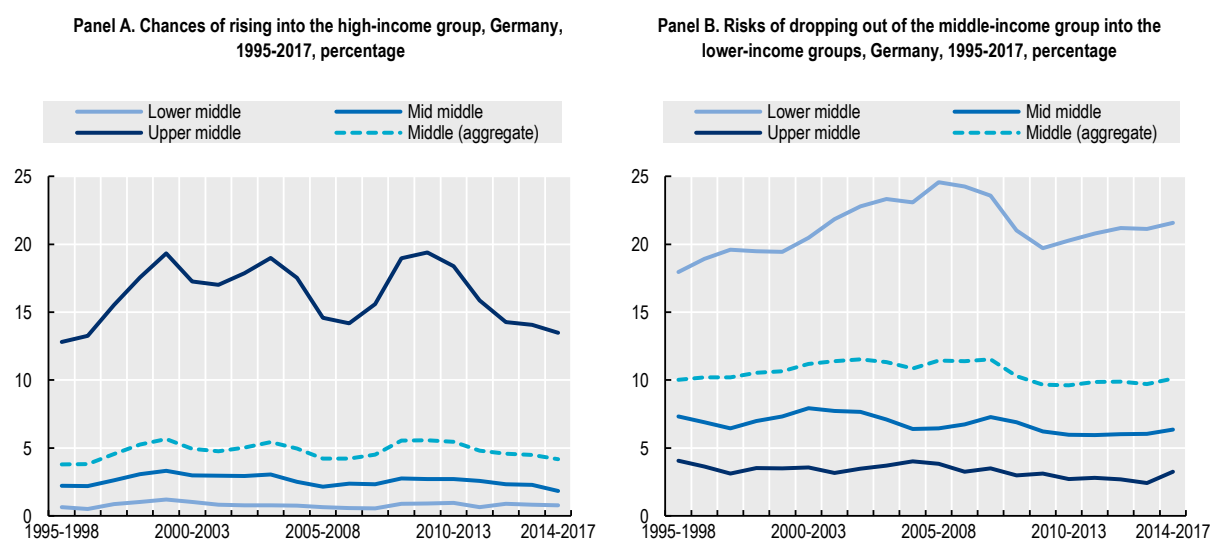
Source: OECD calculations based on the SOEP v36.

People in the lower (and mid) middle have low chances of rising to the top, and a high and rising risk of slipping out towards the bottom

While people living on lower and mid-middle incomes only have a very small chance of moving into the high-income group (between 0.5 and 3%) after four years, the chances are rather good for upper middle-income people (13 to 19%; Figure 14, Panel A). Meanwhile, more than one-in-five people on lower middle incomes slide down into the low-income group, i.e. into economic vulnerability or poverty; this is a three to six times greater share than for people in the mid and upper middle (Figure 14, Panel B).

Income mobility in Germany has become less favourable over the observation period, especially with the general economic slump in the mid-2000s. Around that time, for people in the upper middle, the chances of rising into the high-income group fell, while for people in the lower middle the risk of dropping out of the middle instead peaked. As a consequence, for people living on lower middle incomes, the risk of sliding into vulnerability or poverty is around 4 percentage points higher today than it was in the late 1990s.¹⁰ This may be a sign of weaker income protection for workers and households in the lower middle of the income distribution following the reforms to the German social protection system in the early 2000s. Another explanation could be the increased share of migrants in the population, many of whom are in the lower income groups.

Figure 14. The lower middle has very low chances of rising into the high-income group over a four-year period, while facing a high and increasing risk of dropping out of the middle



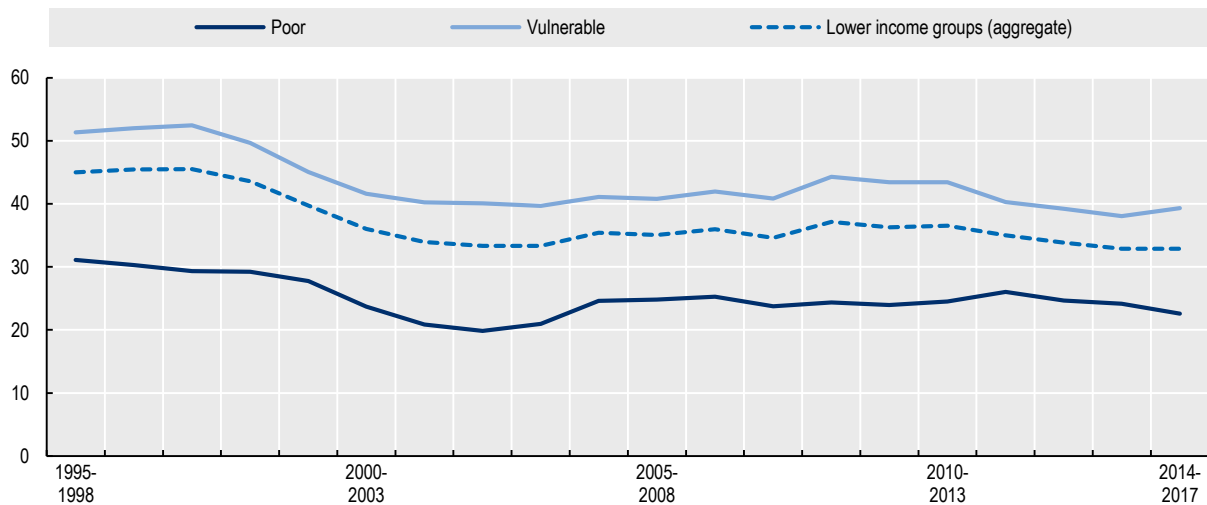
Note: Risks are calculated for the working age population (18-64) for a four-year transition period as described in footnote 9. Income groups are defined relative to the median of equivalised household income (poor: less than 50%; vulnerable 50%-75%; lower middle: 75-100%; mid middle: 100-150%, upper middle: 150-200%, high: more than 200%).

Source: OECD calculations based on the SOEP v36.

Meanwhile, upward mobility into the middle-income group has declined

People on lower middle incomes are not only more likely to drop out of the middle, but they also find it harder to rise (back) into the middle-income group. The chances of rising into the middle-income group have declined substantially, by more than 10 percentage points, since the late 1990s. Still, people living on low incomes in Germany have substantial chances of moving into the middle-income group. Among those living on incomes that classify them as “poor” or “vulnerable”, one-in-three make their way up into the middle over a four-year-period (Figure 15).

Figure 15. Low-income people in the late 2010s have substantially lower chances of rising into the middle than in the late 1990s



Note: Chances are calculated for the working age population (18-64) for a four-year transition period as described in footnote 9. Income groups are defined relative to the median of equivalised household income (poor: less than 50%; vulnerable 50%-75%; lower middle: 75-100%; mid middle: 100-150%, upper middle: 150-200%, high: more than 200%).

Source: OECD calculations based on the SOEP v36.

Income mobility patterns have become less favourable in particular for more disadvantaged labour market groups

Labour market groups in Germany that are generally considered more vulnerable often also have less favourable income mobility patterns. In particular:

- *Young people experience much stronger income dynamics than other age groups.* 18-29 year-olds face twice the risk of dropping out of the middle compared to the older working-age adults (19%, relative to less than 10% for 45-64 year-olds). They also have higher chances of moving up into the middle from the bottom (39%, compared to 30% for older working-age adults). High downward mobility may reflect at least partly that many young people experience a drop in (household) income when they move out of their parents' home (i.e. when picking up academic studies or starting an apprenticeship). High upward mobility will in many cases be the result of strong earnings growth at the beginning of their careers.
- *People living in eastern Germany still experience less favourable income dynamics.* Despite considerable efforts to realign living conditions and economic opportunities between the "old" and "new" federal states since the early 1990s, structural differences remain salient. The risk of dropping out of the middle-income group is higher for people living in the east compared to the west (12% vs. 9%). Also, their chances of rising into a middle-income position from the bottom are lower (26% vs. 38%) and have decreased stronger in the past decades than in western Germany.
- *Migrants face a greater risk of downward income mobility than people born in Germany.* The risk of dropping out of the middle-income group is higher for people born abroad than for native-borns (14% vs. 9%). Amongst the native-borns, downward mobility is greater for those born to immigrant parents, but it has substantially decreased since the late 1990s/early 2000s. Migrants' chances of rising into the middle-income group are similar as for people born in Germany.
- *For workers in "typical" middle-class occupations, the chances of making it into the middle-income group have decreased.* People with low educational attainment and those in lower occupational classes¹¹ have a greater risk of dropping out of the middle. The risk of losing a middle-income

position is around four times larger for non-skilled workers (16%) and those with less than upper-secondary education (22%) than it is for managerial and professional workers (4%) and for those with tertiary education (6%). They also have poorer chances of rising into the middle. However, workers in “middle-class occupations” were particularly affected by a decline in upward mobility: skilled manual and routine non-manual workers saw their opportunities to rise up into the middle-income group deteriorate from around 50% in the late 1990s/early 2000s to 32% and 37% in the 2010s. This confirms the tendency towards greater occupational polarisation in Germany.

Policy options for a stronger German middle class

The overall picture emerging from the statistical analysis carried out for this review is that of a rather robust middle class in Germany. The middle-income group in Germany is broadly comparable in size to those of Germany’s peer countries, such as Austria, France, Sweden, Switzerland, and the United Kingdom, but it is markedly smaller than it was in the mid-1990s. After one-and-a-half decades of real income stagnation, disposable incomes for the median household – and for households in the bottom of the income distribution – have finally grown again in real terms between 2015 and 2018. Analysis of the labour market outcomes of workers in middle-income households in Germany shows that, so far, they have weathered rather well the big structural challenges posed by globalisation, demographic change, digitisation, and automation. The labour market in Germany has been polarising, and middle-skilled occupations have lost importance, but less so than in other OECD countries. Employment growth has been much stronger for high-skilled than for low-skilled occupations, also because a growing share of working women have been pushing into high-skilled jobs. Fixed-term, part-time and low-paid employment have become more widespread in Germany, but this trend largely occurred in the late 1990s and early 2000s, and it primarily affected workers in low-income households. First data on employment and income trends by income group during the COVID-19 crisis, currently lasting up to January 2021, suggest that the widespread use of short-time work (*Kurzarbeit*) prevented larger employment losses among middle-income workers. The net incomes of middle-income workers may even have slightly *risen* in nominal terms between 2019 and January 2021. In the third quarter of 2021, the employment rate in Germany stood about 1.5 percentage points below its pre-crisis level.

However, the analysis also describes a number of trends that give reason to concern. In particular,

- *The generational divide in the size of the middle-income group has been growing:* since the baby boomers, each successive generation has found it harder to make it into the middle-income group; the middle-income group has declined most strongly for young people, and particularly for those without tertiary education the middle-income group is getting out of reach.
- *Regional differences in the size of the middle-income group are large in Germany,* and even just within eastern Germany, mirroring the still large disparities in economic and labour market outcomes more broadly. Social mobility patterns into and out of the middle-income group remain substantially less favourable in eastern than in western Germany.
- *Income mobility has become substantially less favourable,* which points towards greater vulnerability and raises doubts about access to opportunities. People in lower middle-income households face a growing risk of slipping out of the middle-income group, and – if they do – a greater risk of falling into poverty. Meanwhile, upward mobility *into the middle-income group* has declined, and particularly for workers in “typical” middle-class occupations. Also, the high incidence of part-time and low-paid jobs among low-income workers rises doubts about workers’ chances to rise up into the middle-income group.
- *Middle-income workers in Germany face further substantial structural change:* one-in-six (17%) middle-income workers in Germany are employed in jobs that are highly automatable, with the risk

being largest for drivers and mobile plant operators, labourers in mining, construction, manufacturing, and transport, and clerical support workers. Employment forecasts point to further occupational polarisation, with job growth predicted to be positive for high-skilled professionals, associate professionals and technical occupations, and managerial occupations, positive also for low-skilled elementary occupations and service and sales workers, but negative for the largest middle-skilled occupations.

The review discusses different policy options for a stronger middle class in Germany by raising the employability of middle-class workers, creating good-quality, future-oriented jobs, and boosting middle-class disposable incomes.

Building pathways into the middle class for the young generation

Most young people in Germany have a smooth school-to-work transition, and Germany fares well on youth labour market outcomes in international comparison. Against the background of falling unemployment rates in Germany, also labour market outcomes for young people have continuously improved since 2005 up until the COVID-19 crisis. In 2020, 9.4% of 15-24 year-olds were not in employment, education or training (NEET) in Germany, much below the OECD average of 16.1%. Still, about one-in-seven (13%) young people between 25 and 34 in Germany do not have an upper-secondary qualification (OECD, 2021^[17]). Ensuring that every young person has the opportunity to obtain at least an upper-secondary qualification is both a matter of fairness and an economic imperative, given demographic change and the growing shortage of skilled labour in Germany.

Young people interested in taking up an apprenticeship have been heavily affected by the COVID-19 crisis. By the start of the training year in September 2020, the number of apprenticeship positions offered by companies had declined by 7.3% relative to the previous year, and the number of applicants was down by 7.6%. Monthly evidence up to May 2021 suggests that both the number of applications and places available had not recovered to pre-crisis levels (OECD, 2021^[18]). Business survey data show that particularly small companies and those in sectors most heavily affected by the crisis indicated to reduce apprenticeship places in response to uncertain business prospects and financial difficulties (IAB, 2021^[19]). The drop in apprenticeship applications is a reason for concern because many of these young people may still apply later, which would lead to a larger number of unmatched applicants.

One option of ensuring that every young person gets the chance to obtain a qualification is through a vocational training guarantee, as it exists in Austria since 2008 (Wieland and Härle, 2020^[20]). Under the Austrian *Ausbildungsgarantie* scheme, every young person below the age of 25 is entitled to an apprenticeship place. Young people who cannot find a company for an apprenticeship receive their practical training through an accredited provider at so-called “supra-company” workshops. Supra-company training accounts for nearly 7.7% of overall apprenticeship participation in Austria (Schlögl et al., 2020^[21]), and participants’ employment outcomes and incomes have been encouraging. Simulations suggest that a similar policy could substantially increase the supply of skilled labour in Germany, and that the financial benefits would exceed costs within relatively short time (Forstner, Molnárová and Steiner, 2021^[22]).

Enabling and encouraging middle-class workers to upskill and reskill throughout their careers

In light of the rapid transformation facing OECD economies and labour markets, a good-quality education or vocational training obtained in young adulthood will often no longer be sufficient to guarantee a secure job and income for the entire working life. New job opportunities arise in occupations and industries that are different from those in which jobs are lost. Existing jobs will change as well as the sets of skills they require. The extent to which middle-class workers can reap the benefits of these transformations, or risk losing out from them, will heavily depend on whether they manage to develop, and maintain, skills over

their careers that are needed in those rapidly changing labour markets. This also means ensuring that workers have the foundational numeracy and literacy skills that are often essential for further training and that will only become more important with the digital transformation (OECD, 2020^[23]).

However, participation in adult education or training in Germany is just above the OECD average, and lags considerably behind comparable countries such as Austria, the Netherlands, and Switzerland. Low participation in Germany is not primarily a question of financial costs, but rather reflects workers' shortage of time because of work and family responsibilities (OECD, 2021^[24]). One way to overcome this issue can be to provide adults with a right to substantial paid training leave, independent from the employer. In Austria, workers with entitlements to unemployment benefits can pursue any job-related training or formal qualifications for 2-12 months, with a maximum of 12 months over the course of four years. During the training, they receive a compensation at the level of unemployment benefits. Around 0.4% of the working-age adult population in Austria received paid training leave in 2016 (OECD, 2020^[25]).

For workers with medium to high levels of education in Germany, i.e. most workers in middle-income households, the lack of perceived need of, and reward for, training are important obstacles to training participation (Osiander and Stephan, 2018^[26]). More generally, a higher share of workers with lower qualification levels report barriers to training participation, including that they perceive their qualifications to be sufficient. This illustrates the importance of reaching out to workers to help them identify their learning gaps, educate them about the necessity to up- and reskill and the potential benefits of training, and guide them to suitable training programmes. Germany's current career guidance landscape can be confusing to navigate and impedes equal opportunities across regions. Good international practice includes the UK's Unionlearn Programme, where trained representatives in each company promote the value of learning, support adults in identifying their training needs, and arrange learning opportunities (OECD, 2019^[27]). Evaluations have demonstrated its high return on investment and tangible benefits for all stakeholders. Also, workers' opportunities to reskill remain limited in Germany, which creates an obstacle to sectoral mobility. And while the structural transformation of the labour market will change skill demand and likely amplify regional imbalances, Germany largely lacks forward-looking skills management.

Improving the working conditions and pay of care professionals

Care professions will likely experience substantial employment growth over the coming years and decades. In health care and long-term care, qualified staff were already in short supply in Germany's booming labour market prior to the COVID-19 crisis, and the demand is projected to grow further as a result of population ageing (OECD, 2020^[28]). In the child care sector, many facilities are already understaffed, and the demand for qualified staff will increase because of rising child care participation rates, the shift towards full-day care and more flexible opening hours, and larger birth cohort sizes in recent years (OECD, 2020^[29]). This could be an opportunity for the creation of a large number of middle-class jobs. Occupations in nursing are one of the largest groups of associate professionals, who account for a growing share of middle-income jobs particularly among women. Health and personal care assistants are important groups among the lower-skilled service workers, many of whom live in middle-income households.

However, for the care sector to become a job engine for good middle-class employment, Germany will need to substantially boost job quality in these professions, and particularly so in long-term care. Pay is low, particularly for long-term care and child care workers. Working conditions are unattractive, with a high incidence of fixed-term contracts (e.g. for child care workers), part-time work because of high work strain (for long-term care and health care workers), and low potential for career development (Warning, 2020^[30]; Bundesagentur für Arbeit, 2020^[31]). The COVID-19 pandemic has exacerbated some of these challenges.

Better coverage of care professionals through collective agreements can be one way of improving their working conditions and pay, but Germany will likely also need to further increase public spending. Public spending on long-term care in Germany has risen over the last decade, but it remains much below the levels achieved in Belgium, Denmark, the Netherlands, Norway, and Sweden, all of which have much

smaller population shares of elderly people than Germany (OECD, 2021^[32]; 2021^[33]). There remains substantial scope also for raising public expenditures for early childhood education and care (see below). Since the public sector is the largest employer of care professionals in Germany, spending increases could directly translate into better working conditions and higher wages for care workers.

Creating middle-class jobs by renewing Germany's infrastructure

Germany will require large investments in its public infrastructure in the coming decades to address successfully the profound structural challenges arising from an ageing population, the digital transformation, and climate change. Infrastructure investment over the last two decades has been low in Germany, with stretches of negative net public investment in the mid-2000s and mid-2010s (OECD, 2020^[23]). And while Germany has stepped up public investment since 2014, including in its educational infrastructure and energy grid, general government investment remains at one of the lowest rates across OECD countries, at 2.5% of GDP in 2019 (3.7% in the OECD on average). This has created a considerable backlog, with substantial investment needed in digital infrastructure, social housing, and child care and education infrastructure. Large investments will be required also to decarbonise Germany's economy, notably into its electricity grid and into low-emissions transport infrastructure.

The public infrastructure investment needed for Germany to master the structural transformation of its economy has the potential to become an engine of employment growth, and to create quality middle-class jobs. Investment in digital infrastructure – including in broadband internet and better mobile connectivity outside urban areas – could help boost the productivity and innovative capacity of companies in Germany, hence contributing to job creation including in rural areas. The renewal of key public infrastructure in Germany, also as part of the greening of Germany's economy, would directly create many jobs, including in structurally weaker regions. Indeed, several OECD countries have announced investments in public infrastructure to boost job creation as part of their post-COVID-19 recovery plans. Most notably, the US American Jobs Plan foresees public infrastructure spending of about USD 2 trillion, or about 9.5% of 2020 GDP, by 2030 to address some of the same key challenges facing also the German economy (The White House, 2021^[34]). In particular, the US plan focuses on funding climate and clean-infrastructure projects in regions that are lagging or affected by the transition to clean energy, the creation and improvement of caregiving jobs, and investments in transport infrastructure, the electric grid, and broadband internet in all parts of the country. Already before the crisis, France announced a *Grand plan d'investissement*, to invest EUR 57 billion over 2018-22 to respond to the country's four major challenges: carbon neutrality, skills and employment, better competitiveness through innovation, and digitalisation (French Government, 2017^[35]).

Reducing the labour tax burden for middle-class workers

The disappointing growth in earnings and incomes since the early 2000s is likely one reason for why many people in Germany feel that middle-income households pay too much of their gross income in taxes. This partly reflects the fact that middle-income households – in Germany as elsewhere – play an important role for the financing of public expenditures through their taxes and social security contributions. However, substantial income redistribution also takes place *within* the middle-income group: from working-age to elderly households, and from upper and mid middle-income households to lower middle-income households.

Still, middle-income households in Germany face a comparatively high effective tax burden on their labour income (OECD, 2021^[36]). For a single person without children earning the average wage in Germany in 2021, deductions for income taxes and social-security contributions net of benefits equalled 38% of gross household income, more than in countries such as Austria, Denmark, France, the Netherlands, and Sweden.¹² This reflects a very steep rise in marginal tax rates at low to middle earnings, the so-called

Mittelstandsbauch (i.e. middle-class bulge) (Peichl, Buhlmann and Löffler, 2017^[37]). Meanwhile, tax progressivity is much lower at higher earnings levels.

Germany could reduce the labour tax burden for middle-class workers by changing the income tax schedule and moving its tax mix away from labour taxation. Options for changing the income tax schedule could be to lift the lower thresholds of the income tax brackets applying to middle-income earners or reducing marginal tax rates to reduce the *Mittelstandsbauch*. This could be complemented – and partly financed – by an increase in marginal tax rates at the top. Other options could include lifting social-insurance contribution ceilings, which are lower in Germany than in most other OECD countries, and shifting the tax burden away from labour income towards other types of taxes, e.g. by strengthening capital income taxation and removing exemptions to inheritance taxation (OECD, 2020^[23]).

Enabling and incentivising women to expand labour force participation

Employment rates in Germany are only little lower for women than for men (73 vs. 79%), but women are four times more likely than men to work part-time (37 vs. 9%) and more likely to be overqualified for their job. Those are part of the reason why women in Germany earn only about half as much as men over their lifetime (Bönke, Harnack and Wetter, 2019^[38]), and for why the gender gap in labour income in Germany is among the largest among European OECD countries (OECD, 2018^[39]). By enabling, and incentivising, women to work more hours in better-paid jobs, Germany could help households increase their income from work, strengthen the income position of middle-income households, and help low-income households rise up into the middle-income group.

The German tax system comes with low work incentives for second earners, in most cases women, to take up work and to increase earnings by working more hours or moving to better-paid jobs. A household in which a person takes up work, and in which there is already a person earning 100% of the average wage, pays nearly half of their additional earnings in net taxes: the so-called “participation tax rate” for a second earner that also starts working at the average wage equals 46%, the sixth-highest rate across the OECD. Second earners in Germany also have low incentives to increase their earnings, because the German tax system, with its income splitting option (*Ehegattensplitting*), favours married couples with unequal earnings levels. *Minijobs*, marginal jobs with earnings up to EUR 450 per month that are exempt from income taxation and nearly all employee social security contributions, are a second salient feature of the German tax-benefit system that generates incentives for second earners to work low hours (Blömer, Brandt and Peichl, 2021^[40]; Consiglio and Göbler, 2021^[41]).

Also, access to flexible, good-quality institutional child care, including for school-age children, remains an obstacle to paid work and career progression for women in Germany. Recent large investment in early childhood education and care have led to an impressive rise in child care participation rates, which reached 95% for 3-5 year-olds and 38% for 0-2 year-olds in 2018 (OECD, 2018^[42]). Still, participation rates for the youngest continue to lag those in neighbouring countries such as Belgium, Denmark, France, and Luxembourg, where they reach 55-65%, and the insufficient flexibility of opening hours remains an issue. The shortage of qualified child care workers is a constraint for the further rapid expansion of child care services. In spite of Germany’s large recent investments in all-day primary schools, the lack of afternoon education and care remains a major obstacle to full-time employment for parents of school-aged children (Blömer et al., 2021^[43]; Barisic and Consiglio, 2021^[44]).

A great number of reform scenarios of the income splitting for married couples have been discussed in recent years. Even some of the more modest options promise stronger work incentives for second earners, a modest rise in female employment rates, and notable increases in women’s hours worked (Bach et al., 2020^[45]). A restriction of *Minijobs*, for instance by targeting them only to pupils, students and pensioners, or by restricting them to private households, could improve work incentives, particularly when combined with a broader reform of social-security contributions for low-income earners (Rat der Arbeitswelt, 2021^[46]; Krebs and Scheffel, 2021^[47]). A more comprehensive joint reform of the income splitting and the *Minijobs*

could move more than an additional 100 000 women into employment without burdening public budgets, according to recent microsimulations (Blömer, Brandt and Peichl, 2021^[40]). A further expansion of institutionalised child care will likely require raising public expenditures for early childhood education and care, which at around 0.7% of GDP remain a little below the OECD average and two to three times lower than in some Nordic countries and France (OECD, 2020^[48]).

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Notes

¹ For example, on a comprehensive analysis of social class in Germany, Reckwitz (2019^[51]) argues that besides the old middle class – a group of middle-skilled workers that is shrinking in size and losing prestige – a new middle class has emerged made up of academics working in knowledge-based jobs in urban areas.

² Disposable household incomes are adjusted for household size using the square-root method (dividing the household income by the square root of the household size) to account for within-household sharing of resources. In some parts of the analysis, the low-income group is further split up into two subgroups: people living on incomes less than 50% of the median are classified as “poor”, those with incomes between 50% and 75% of the median as “vulnerable”.

³ In 2018, the total number of people in the different income groups was: 23 million in the low-income group, 18, 26 and 9 million in the lower, mid and upper middle-income group, and early 6 million in the high-income group. Among working age people (18-64 years), the corresponding shares were 13 million in the low-income group, 10, 17 and 7 million in the low, mid and upper middle-income group, and 4 million in the high-income group.

⁴ Middle-income groups tend to be smaller in lower-income regions, because they are measured against the *national* median household income, which can lie substantially above the regional median. However, also the cost of living – and notably housing – is often lower in those regions, and in some cases substantially so. Similarly, the costs of living are usually much higher in urban than in rural areas, and disparities will have risen over time. A lower middle-income household in a high-income region or city may hence have a lower living standard than a household classified as “vulnerable” (based on the lower nominal income) living in a low-income region or rural area.

⁵ Not all of these jobs in public services are necessarily also public-sector jobs. This group also includes people working in private hospitals and non-governmental childcare institutions.

⁶ This work builds on the landmark study by Frey and Osborne (2013^[50]; 2017^[49]), who predicted the automation risk across different occupations in the United States using expert assessments of the ease, or difficulty, of automating specific tasks that these occupations involved.

⁷ The results presented draw from a policy brief produced in collaboration with the Bertelsmann Stiftung and the German Institute for Economic Research, DIW (Braband et al., forthcoming^[11]).

⁸ Social mobility can be assessed across generations or over people’s lives, both in absolute and relative terms. In industrialised societies, changes in the relative position and deprivation are particularly relevant to assess whether prosperity is shared across the board. This analysis therefore focuses on people’s relative chances and risks of moving up or down the income ladder over time.

⁹ The analysis compares the income position of working-age people (18-64 years) in the starting year with that in the target year of four-year periods for all years between 1995 and 2017. **Error! Reference source not found.** displays the transition between 2014 and 2017 as an example. While it can be very interesting to also study transitions over longer periods, this increases panel attrition hence reducing the number of

observations and the representativeness of the sample. To smooth mobility patterns, the analysis presents moving averages of income transitions over three consecutive starting years of a four-year period.

¹⁰ The drop in downward mobility for the lower middle-income group between 2008 and 2011, and the following increase in the last four periods, is a bit difficult to explain. However, the trend seems to align broadly with that in the median disposable income, which declined in the aftermath of the global financial crisis and rose again thereafter (see Figure 2.4, Panel A).

¹¹ Occupational classes are defined according to the Erikson-Goldthorpe-Portocarero (EGP) scheme, a widely used classification with 11 categories which can be further aggregated. For this analysis, the aggregation was chosen according to Erikson & Goldthorpe (1992_[52]). The EGP-scheme is based on the German job classification (KIdB) and further reflects the following four components: (1) Type of occupation, (2) type of employment, (3) scope of authority, and (4) required qualification for the occupation.

¹² Results for Germany for 2021 are preliminary; for the other countries, results refer to 2020.

Is the German Middle Class Crumbling? Risks and Opportunities

HIGHLIGHTS

Thriving middle classes are the backbone of democratic societies and strong economies, but in many countries, they face mounting pressure as their economic strength is eroding relative to higher-income households. Real wages and incomes for most middle-class households have grown only very slowly, and rising expenditures have been putting further pressure on living standards. Meanwhile, globalisation, digitalisation, and demographic change are eroding job opportunities for middle-skilled workers, who risk sliding into lower-paid employment. The COVID-19 crisis has accentuated socio-economic divides and may end up accelerating some of the above trends. This publication builds upon the OECD's publications on the middle class (*Under Pressure: The Squeezed Middle Class*) and social mobility (*A Broken Social Elevator? How to Promote Social Mobility*). It demonstrates that the German middle class is similar in size as in peer countries, but substantially smaller than it was in the mid-1990s. Lower middle-class households face an increased risk of slipping out of the middle; meanwhile, upward mobility into the middle has declined, particularly for workers in "typical" middle-class occupations. Employment growth forecasts point to further occupational polarisation. The review proposes policy options for strengthening the employability of middle-class workers, creating good-quality, future-oriented jobs, and boosting middle-class disposable incomes.