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Working Paper

Disparities in Labour Market and Income Trends during the First Year of the COVID-19 Crisis – Evidence from Germany

IZA Discussion Papers, No. 15475

Provided in Cooperation with:

IZA – Institute of Labor Economics

Suggested Citation: Braband, Carsten; Consiglio, Valentina Sara; Grabka, Markus M.; Hainbach, Natascha; Königs, Sebastian (2022) : Disparities in Labour Market and Income Trends during the First Year of the COVID-19 Crisis – Evidence from Germany, IZA Discussion Papers, No. 15475, Institute of Labor Economics (IZA), Bonn

This Version is available at:

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ISSN: 2365-9793

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ABSTRACT

Disparities in Labour Market and Income Trends during the First Year of the COVID-19 Crisis – Evidence from Germany¹

This paper studies inequalities in labour market outcomes, incomes and economic concerns across workers in Germany during the first year of the COVID-19 crisis using SOEP-CoV data. It shows that, overall, the self-employed and disadvantaged groups of workers were more severely affected by the crisis, including part-time workers and workers in marginal employment (Minijobs), low-educated and low-income workers, and to some extent women. Short-time work (Kurzarbeit), one of the central pillars of Germany's policy response to the crisis, prevented a further widening of labour market inequalities. In spite of the widespread use of Kurzarbeit, about one-in-five low-income workers who had been employed in 2019 were out of work in January/February 2021. This reflects that a higher share of low-income workers had been on part-time contracts and in Minijobs, and had lower capacity to work from home.

JEL Classification: D19, D39, I39, J21

Keywords: SOEP-CoV, COVID-19, Corona, labour market, concerns

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¹ This paper has previously been released as a policy brief in English and German language, see Braband et al. (2022[33]; 2022[25]). For a more detailed analysis of long-term trends in workers' incomes and labour market outcomes in Germany, with a focus on workers in the middle-income group, see Consiglio et al (2021[5]) and OECD (2021[6]). The opinions expressed and arguments employed in this paper are those of the authors and do not necessarily represent the official views of the OECD or its member countries.

1. Introduction

The COVID-19 pandemic caused one of the most severe peacetime economic crises, with a massive impact on the lives and livelihoods of many people. The strict measures that were needed to contain the pandemic in spring 2020 brought the economy in many sectors to a standstill, forced companies to scale back or entirely shut down operations, and forced millions of workers to temporarily cut their hours worked. This was also reflected in an unprecedented decline in GDP: German GDP shrank by 4.9% year-on-year in 2020 – OECD-wide, GDP declined by 4.7%. However, the sudden and profound initial shock was followed by a rapid economic recovery: in Germany GDP rose by 2.9% in 2021, OECD-wide even by 5.3% (OECD, 2021^[1]).

Overall, the German labour market has weathered this deep crisis remarkably well. The unemployment rate increased only modestly, from 3.2% to 4.1% between the last pre-crisis quarter (Q4) of 2019 and its peak Q3 2020; the employment rate fell from 75.7% to 71.1%. Both indicators have since returned to their pre-crisis levels (OECD, forthcoming^[2]). This robust labour market response reflects not least the swift and decisive action taken by the German government to support businesses, workers and households, in particular through the extension of the short-time work (*Kurzarbeit*) scheme and tax relief, in particular for companies and (solo-)self-employed workers (BMF, 2022^[3]). However, not all population groups had equal access to this support, and the distributional consequences of the crisis are still unclear.

This short paper provides new insights into the uneven impact of the crisis on the labour market situation of different groups of workers in Germany, on their income developments and the economic concerns they faced.

2. Data and methodology

The analysis presented in this short paper draws on the SOEP-CoV, a special survey of respondents from the Socio-Economic Panel (SOEP) at the German Institute for Economic Research (DIW) set up with the aim of investigating the short-, medium- and long-term socio-economic factors and consequences of the spread of the corona virus in Germany (Kühne et al., 2020^[4]).² The special SOEP-CoV survey was conducted at two points in time during the COVID-19 pandemic: from early April to June 2020, and then again in January and February 2021. During the first wave, a total of 6 694 people took part in the survey. Of these, 6 038 agreed to participate in the second wave.

The sampling design consisted of inviting SOEP households that had successfully participated in the 2019 SOEP wave to take part in the special SOEP-CoV module. Unlike in the SOEP, where all adult household members are surveyed, only one person per household was asked to respond to questions in the in SOEP-CoV on behalf of all other household members. Because of the sampling design, comprehensive information on the participating respondents is already available from the previous SOEP waves, such that the SOEP-CoV can help shed light on societal changes during the COVID-19 pandemic.

The analysis in this paper looks at respondents who reported being in work at the time of their SOEP interview in 2019. Data from the special SOEP-CoV module are then used to study for this group the changes in employment outcomes and incomes, the frequency of telework, as well as respondents' economic concerns in the second quarter of 2020 and in early 2021. All data, including on hours worked, are self-reported and therefore subject to measurement error.

The classification of workers into income groups follows the approach taken in earlier studies and is based on the disposable household income in 2018 relative to the median. The lower income bracket includes

² The SOEP-CoV is a joint project between the University of Bielefeld and the SOEP at DIW Berlin. It is funded by the Federal Ministry of Education and Research (BMBF) as part of the funding call for research into COVID-19 in the wake of the Sars-CoV-2 outbreak. For further information see <https://soep-cov.de/>

workers in households on incomes below 75% of the median (up to EUR 1 500 for a single-person household), the middle income bracket includes workers in households with 75 to 200% of the median income (EUR 1 500 to 4 000 for a single person), and the upper income bracket households with more than 200% of the median income (above EUR 4 000 for a single person). For details see (Consiglio et al., 2021^[5]) and (OECD, 2021^[6]).

3. Main findings

Short-time work and the employment impact across workers in different income groups

Short-time work (*Kurzarbeit*) was one of the most important pillars of Germany's package to protect workers and companies from the impact of the COVID-19 crisis. The scheme gave companies that were heavily affected by the crisis, and had to reduce their employees' hours worked, access to public compensation payments for unworked hours. In response to the crisis, the German federal government significantly expanded the *Kurzarbeit* by, among other things, simplifying access for companies and reducing costs, increasing the amount and maximum duration of the short-time work allowance paid to employees, and opening up *Kurzarbeit* to temporary-agency workers. At the peak of the first COVID-19 wave, in April 2020, 15.5% of workers in Germany were on *Kurzarbeit*, about 6 million people. Similar job retention schemes were also an essential part of the crisis policy response in other countries: 37 out of 38 OECD countries introduced or expanded such instruments during the COVID-19 crisis.³ Across these countries, about one-in-five (20%) dependent workers benefited of such schemes at the height of the first pandemic wave (OECD, forthcoming^[2]).

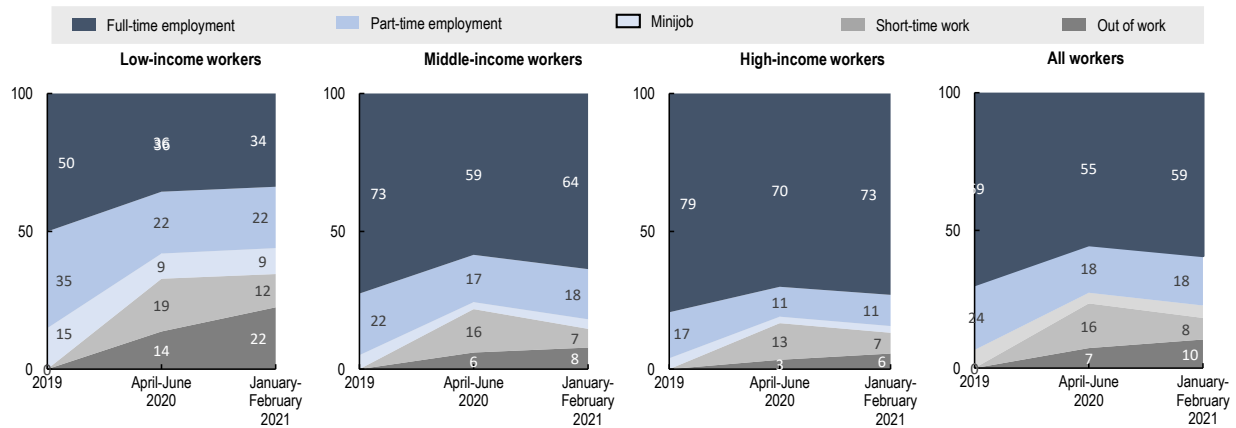
Kurzarbeit protected jobs and stabilised incomes in Germany, and played an important role in mitigating the widening labour market inequalities during the crisis. During the first pandemic wave in April to June 2020, about one-in-six (16%) workers who had been employed before the crisis were on *Kurzarbeit* according to SOEP-CoV data (see Figure 1). The probability of being on *Kurzarbeit* related negatively to income: it was higher for workers in low-income households (19%) than for workers in middle- and high-income households (16% and 13%).

The use of *Kurzarbeit* declined significantly in the second phase of the pandemic for workers across income groups, but for low-income workers this trend did not coincide with a rise in full-time employment. In January-February 2021, the share of pre-crisis workers on *Kurzarbeit* had halved to 8% compared to April-June 2020. Workers who had lived in middle-income households before the crisis experienced the largest decline (from 16% to 7%), followed by workers from high-income households (from 13% to 7%). For these workers, the decline in *Kurzarbeit* coincided with an increase in full-time employment, which indicates that many workers returned to their regular working hours when the economy picked up again. Among low-income workers, the use of *Kurzarbeit* declined slightly less in relative terms (from 19% to 12%), and full-time employment continued to decline.

³ Mexico did not operate a job retention scheme during the COVID-19 crisis.

Figure 1. Employment trends by income group

Labour market status of those employed in 2019 in percentages, 2019 to January/February 2021



Note: Results for 18-64 year-olds who worked full-time, part-time or in *Minijobs* in 2019. The income groups are defined on the basis of the equivalent disposable household income for 2018. The income groups are defined as described in Section 2.

Source: SOEP v36 and SOEP-CoV.

As a result, despite the widespread use of *Kurzarbeit*, the COVID-19 crisis led to significant job losses among low-income workers. In this group, the share of those who were in work in 2019 and jobless in the beginning of 2021 was three to four times higher than among middle- and high-income workers (22% versus 8% and 6%). Across all income groups, one-in-ten workers employed before the crisis (10%) had lost their job by January/February 2021 (Figure 1).⁴ The large job losses among low-income workers in Germany reflect that many low-paid workers were employed in the hospitality, household and other services, and retail sectors (Sachs et al., 2020^[7]), where economic activity was severely affected during the first pandemic wave and recovered only slowly afterwards. In addition, larger shares of low-income than middle- or high-income workers were employed part-time or in marginal employment (*Minijobs*)⁵ before the crisis. Particularly *Minijobbers* have little job security and – since *Minijobs* are not generally subject to social-security contributions – have neither access to *Kurzarbeit* nor to unemployment benefits (*Arbeitslosengeld 1*).

Women were more often affected by a job loss than men in the first year of the crisis. In the beginning of 2021, more than 12% of women who had been employed in 2019 were out of work; for men the figure was

⁴ The share of workers who lost their jobs during the COVID-19 crisis does not reflect the total increase in *joblessness* during that period, as simultaneously other workers took up employment. Due to the sample design chosen (see Section 2.), the figures presented only reflect *exits from employment into joblessness*, without taking into account *entries from joblessness into employment*. Some of the exits from employment, and part of the disparities in exits from employment across workers in different income groups, may also be due to retirement or the uptake of academic studies.

⁵ *Minijobs* are a type of marginal employment with earnings up to EUR 450 per month. They are exempt from income taxation and nearly all employee social security contributions. Given the statutory minimum wage of EUR 9.50 per hour (between January and July 2021), *Minijobbers* were able to work for a maximum of about 11 hours per week. *Minijobs* are very widespread: between over 6 and 7 million people in Germany were employed in *Minijobs* each quarter between 2005 and early 2020. Women are overrepresented among *Minijobbers*, and *Minijobs* have been criticised for trapping particularly second earners in low-paid employment. Most *Minijobbers* receive little training, and *Minijobs* have little to no potential for earnings progression (Consiglio and Göbler, 2021^[30]). *Minijobbers* suffered heavy employment losses during the COVID-19 crisis. Between December 2019 and December 2020, 900 000 jobs were lost in the commercial sector, a decline by over 13% (OECD, 2021^[6]).

only just under 9%. This primarily reflects the significantly higher proportion of women who worked part-time or in *Minijobs*. However, even among those who had worked full-time before the crisis, job losses were proportionately slightly higher for women than for men. By contrast, women were slightly less likely than men to take up *Kurzarbeit* during the first year of the crisis: 15% vs. 17% in spring 2020, and still 7% vs. 8% in early 2021. One reason for the larger employment losses among women will be that mothers shouldered the bulk of the additional education and care burden arising from the closure of schools and childcare facilities during the crisis.

Teleworking behaviour across workers in different income groups

Since the start of the COVID-19 pandemic, telework has been a tool to reduce physical contact and contain the spread of the virus. Many companies in Germany switched to telework during the first pandemic wave in spring 2020, and teleworking further expanded with the introduction of a statutory telework obligation between January 2021 and March 2022 (Corona Datenplattform, 2021^[8]; Bundesregierung, 2022^[9]). The opportunity to work from home may well be considered a privilege during a pandemic. Workers in jobs that could be performed from home faced a lower risk of job loss during the crisis, and of contracting the virus at the workplace or during their commute to work (Kunze, Hampel and Zimmermann, 2020^[10]).

Analysis using the SOEP-CoV data shows that about one-in-three workers in Germany worked from home entirely or some of the time. However, the use of telework varied across different groups of workers (Figure 2):

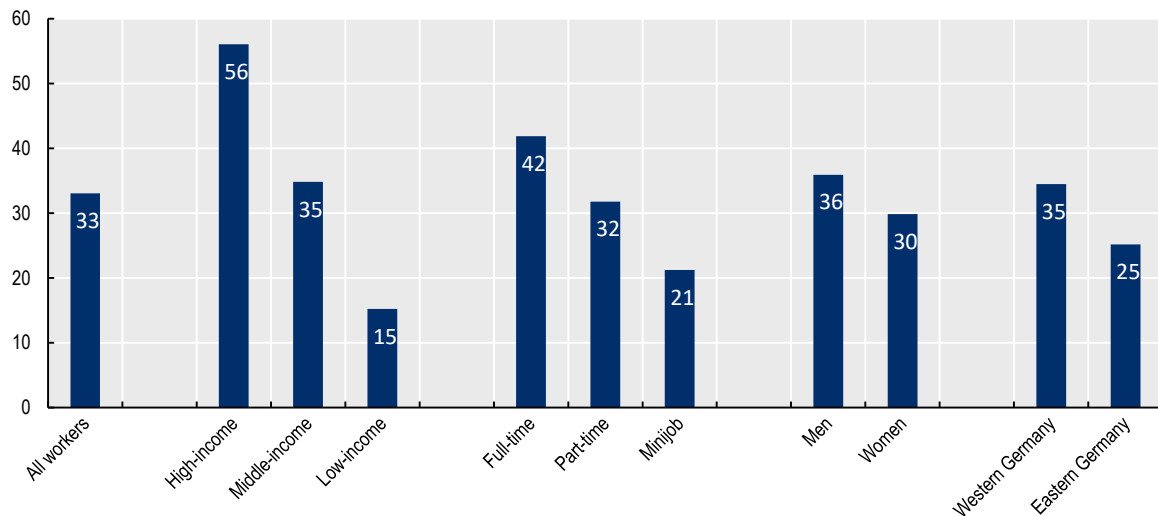
- *Workers in middle- and high-income households and those with a high level of education more often worked from home than low-income and low-educated workers.* More than half (56%) of high-income workers and about one-in-three (35%) of middle-income workers worked entirely or partly from home in early 2021. Among low-income workers, the share was significantly lower at 15%. This partly reflects that simpler tasks can be performed less often digitally, which also explains differences in the frequency of telework across workers with different levels of educational attainment. For example, more than 60% of those with a tertiary-level qualification could work entirely or partly from home. Among workers with a lower-level vocational qualification, the telework rate was just 6%.
- *There are also large differences in the frequency of telework by workers' employment type – particularly full-time workers often worked from home.* In early 2021, the share of full-time workers who teleworked was on average twice as high as for *Minijobbers* (42% vs. 21%) and significantly higher also than for part-time workers (32%). Full-time workers in middle- and high-income households worked from home much more frequently (42% and 63%) than those in the low-income households (21%).
- *Men more often worked from home than women, irrespective of household income.* On average, 36% of male and 30% of female workers reported having worked entirely or partly from home in early 2021. This gender difference likely partly reflects that women account for more than two-in-three workers in important frontline professions such as childcare, health care, and retail, where workers needed to be physically present at the workplace during the pandemic (Bundesagentur für Arbeit, 2022^[11]). The SOEP-CoV data also show that among part-time workers, women are less likely to be able to work from home than men. The rate of part-time work in Germany is considerably higher for women than it is for men.
- *Workers' age, by contrast, does not seem to have played an essential role in determining telework opportunities.* For example, among low-income workers, the teleworking rate is comparatively high among younger workers (under 30 years), at 32%. Among middle-income workers, it is highest for prime-age workers (30 to 49 years), at 45%. In the high-income group, the majority of workers were able to work from home irrespective of their age. Higher-paid jobs often come with managerial

tasks, and already before the pandemic workers in these positions more often had the opportunity to work from home irrespective of their age (Arnold, Steffes and Wolter, 2015^[12]).

- *There have also been regional differences in teleworking, with workers in western Germany having been able to work from home significantly more often than in eastern Germany (35% vs 25%).* These regional differences can be attributed, among other things, to differences in tasks and occupation-specific teleworking potentials (Alipour, Falck and Schüller, 2020^[13]). Also the lower availability of broadband Internet in eastern Germany may have played a role.

Figure 2. Share of workers who teleworked by income level, employment type, gender, and region

In percentages, January/February 2021



Note: Telework includes both partial and full work from home. The income groups are defined as described in Section 2.

Source: SOEP v36 and SOEP-CoV.

Trends in nominal incomes across workers

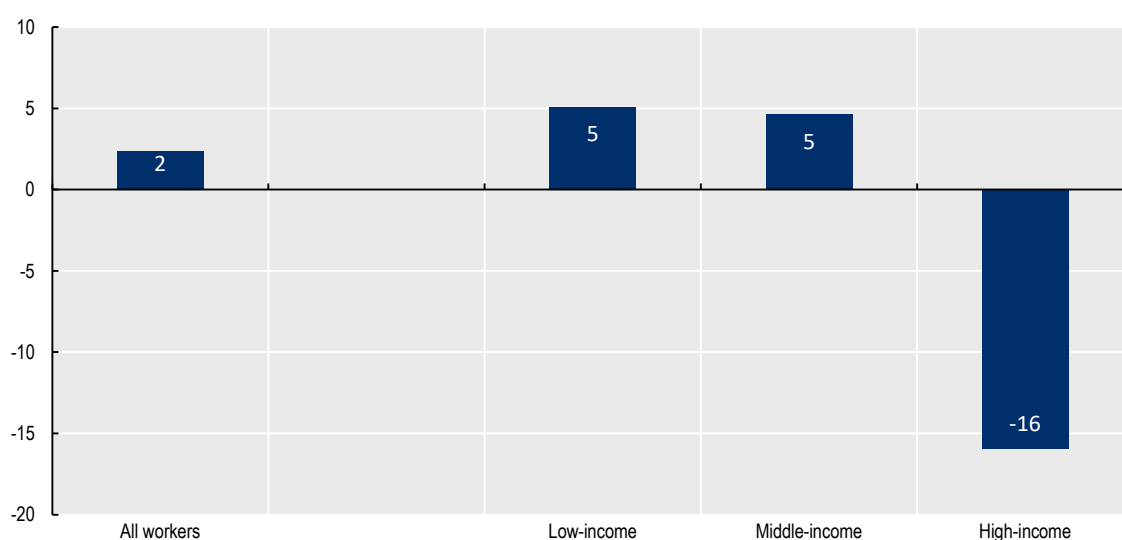
The impact of these labour market developments on workers' incomes is, *ex ante*, not entirely obvious. On the one hand, the job losses documented in Figure 1 brought about income losses for many workers, which were only partially offset by unemployment benefits and other forms of income support. This is true in particular for self-employed workers and those working part-time and in *Minijobs*, many of whom did not qualify for unemployment benefits and *Kurzarbeit*. Also the allowance paid for workers on *Kurzarbeit* during the crisis replaced only 60-80% of previous earnings (67-87% for workers with children), implying sometimes painful income losses particularly for the low-wage workers who qualified (see the evidence on workers' economic concerns further below). On the other hand, even at the height of the crisis, only a minority of workers lost their jobs or were put on *Kurzarbeit*, while the wages of many workers who continued working rose in the initial phase of the crisis. Of those who lost part-time work or *Minijobs*, many were likely second earners or had worked in these jobs alongside a main job, school or higher education. Indeed, the decline in the number of *Minijobs* was particularly pronounced among young people (almost 20% between December 2019 and December 2020 among under-25 year-olds, compared to 13% overall; (Minijob-Zentrale, 2021^[14]). Meanwhile, many employees who continued working experienced positive wage growth in the initial phase of the crisis.

Data from the SOEP-CoV document that the nominal incomes of workers in Germany slightly rose on average during the initial phase of the COVID-19 crisis. For people who had been employed in 2019, the

monthly net equivalised household income⁶ increased by 2.4% on average between 2019 and January/February 2021 (see Figure 3). This is consistent with earlier results calculated across all German *households* – i.e. not just across workers – a few months after the start of the crisis (Grabka, 2021^[15]).⁷ Given an inflation rate of around 2% during this period, this means that on average, workers in Germany did not suffer any real income losses between 2019 and early 2021.⁸ This result probably reflects a combination of positive wage growth in the beginning of 2020 and the support paid during the pandemic, notably in the form of *Kurzarbeit* and the child bonus.

Figure 3. Change in workers' nominal net household incomes

Percentage change, 2019 to January/February 2021



Note: Figures for 18-64 year-olds who were working before the crisis (in 2019). The income groups are defined as described in Section 2.
Source: SOEP v36 and SOEP-CoV.

Meanwhile, income disparities between workers have narrowed. This is a result of nominal income gains for low-income workers (on average about +5% between 2019 and January/February 2021) and substantial income losses for high-income workers (on average about -16%).⁹ Also these results are consistent with earlier evidence of declining income inequality across households in the initial months of the crisis in Germany (Grabka, 2021^[15]) and a few other European countries for which corresponding data are available (Clark, D'Ambrosio and Lepinteur, 2021^[16]). However, these income-group-specific averages

⁶ The net monthly household income is the income after deduction of taxes and social-security contributions including regular transfers, e.g. in the form of pensions, housing benefit, child benefit, scholarships for tertiary education and alimony payments. Income figures are adjusted for household size by dividing the household income by the square root of the number of household members.

⁷ National accounts data show a decline in disposable per-capita income for Germany in 2020 Q2, followed by an increase in 2020 Q3 and Q4. OECD-wide, the average per-capita income even rose in all three quarters since the start of the crisis, which reflects large increases in Canada and the United States (OECD, 2021^[26]).

⁸ According to the German Federal Statistical Office, real gross monthly earnings in Germany declined by -1.1% and -0.1% in 2020 and 2021. Those figures refer to workers in full-time and part-time employment and Minijobs across manufacturing and services, excluding the *Kurzarbeit* allowance (Statistisches Bundesamt, 2022^[32]).

⁹ Here, as in the other parts of this policy brief, workers' income groups are defined based on pre-crisis incomes.

may well conceal variations in individual income developments: even as the incomes of low-income workers have increased *on average*, some workers in low-income households may have suffered significant income losses. This may be true particularly for workers who were the sole breadwinners in their household and became unemployed or had to reduce their working hours during the crisis.

Breakdowns by employment type and occupation group show that workers who had been self-employed before the crisis suffered the greatest income losses (-23% on average), particularly self-employed workers in the high-income group (-34%).¹⁰ These workers did not have access to *Kurzarbeit*; the crisis support payments available to them in Germany were less generous than for many dependent workers and initially mainly covered fixed operating costs (BMF, 2022^[3]). Income growth was strongest for workers in technical occupations (+11%) – a symptom of the increasing skill shortages in these occupations in Germany.

In eastern Germany, workers' nominal household incomes rose more strongly, on average, but income disparities between high- and low-income workers declined by less. Specifically, high-income workers in eastern Germany experienced smaller income losses than those in the west (-11% compared to -16%), while low-income workers experienced weaker income gains (+1% compared to +6%). This could reflect the fact that the share of self-employed workers, and also the share of *Minijobbers*, is lower in eastern Germany. Income growth for middle-income workers was somewhat stronger in eastern than in western Germany (7% vs. 4%).

Workers' economic concerns

Economic crises affect workers' well-being through their direct effects on labour market outcomes and incomes, but they usually also cause more widespread economic and social concerns: about the broader economy and the household's financial situation, about social cohesion and inequalities, and – in times of a pandemic – about the health of the loved ones. During the COVID-19 crisis, the incidence of poor mental health rose significantly in many countries (OECD, forthcoming^[2]).¹¹ Research for the United States shows that economic concerns were a major driver of these poor mental health outcomes (Kämpfen et al., 2020^[17]). This underlines the importance of broadening the view beyond worker's employment outcomes and income developments to look at their economic concerns.

The SOEP-CoV data up to early 2021 show that:

- *Workers across income groups held more pessimistic views of the general economic situation than of their own economic situation during the initial year of the COVID-19 crisis.* The share of workers who reported being very concerned about the general economic situation increased from 12% to 38% between 2019 and early 2021. Meanwhile, the share of those who were very concerned about their own economic situation remained largely constant at much lower rates, between 9% and 11%. A similar trend had already been observed in earlier crises (Dittmann, 2009^[18]). Disparities in the level of concern about the general economic situation across workers from different income groups are comparatively small (see Figure 4, Panels A and B).
- *More working women than men reported large concerns during the first crisis year.* Of both working women and men, about 12% reported large concerns about the general economic situation before the COVID-19 crisis in 2019. Among working women, this share rose to 46% by early 2021, i.e. to nearly

¹⁰ For a more detailed overview of results by gender, occupation type and region of residence, see OECD (2021^[6]).

¹¹ During the COVID-19 crisis, different levels of concerns, and changes in these levels, were evident between different groups of workers, reflecting the unequal consequences of the crisis (Schröder et al., 2020^[31]). Studies by Hövermann (2020^[27]) and the WSI (2022^[28]), for example, showed using labour force surveys that parents, and especially mothers, reported greater levels of concerns during the COVID-19 crisis, as well as low-income workers and those with low levels of educational attainment.

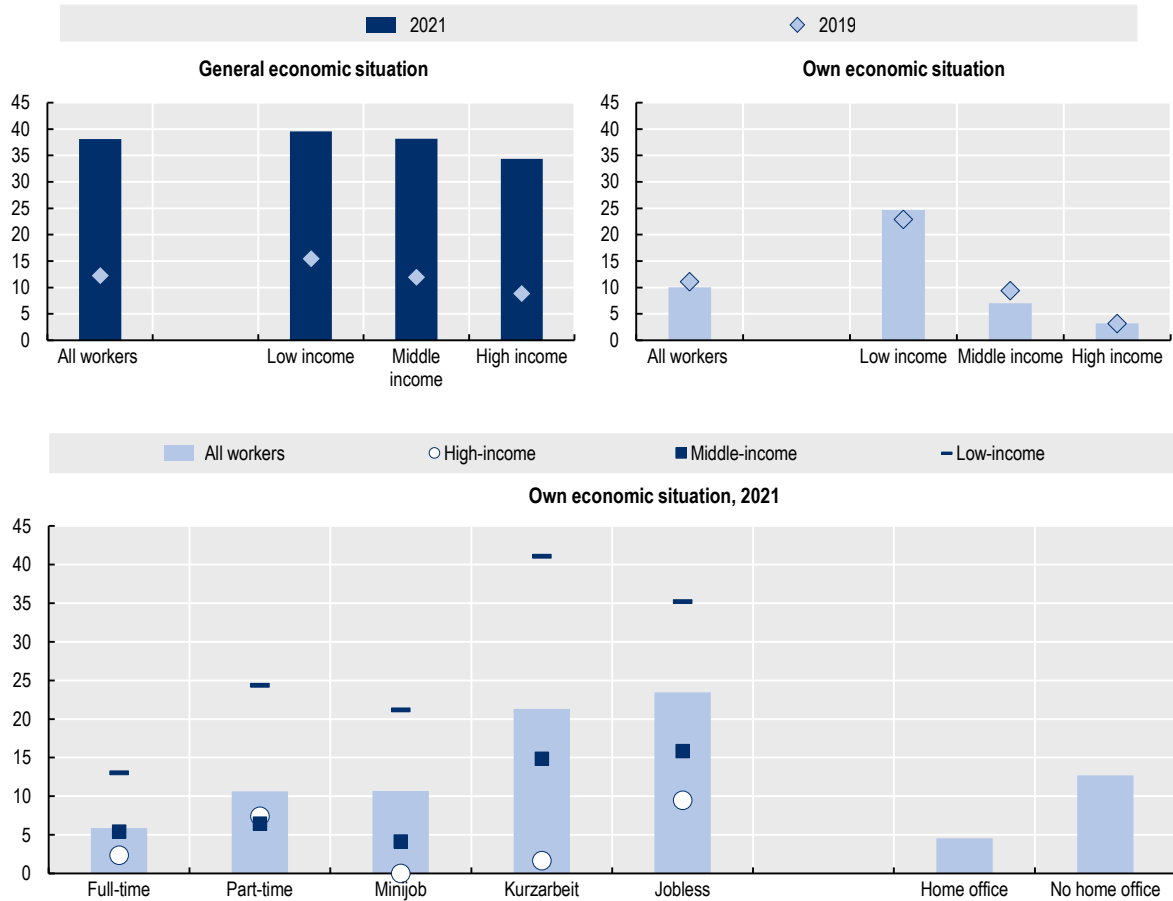
every second working woman. Among men, the increase was more moderate, to 31%.¹² About equal shares of female and male workers report being very concerned about *their own* economic situation.

- *Low-income workers were significantly more likely to report being very concerned about their own economic situation than workers with middle or high incomes.* In early 2021, one-in-four low-income workers were very concerned about their own economic situation, more than three times the rate for middle-income workers (7%) and even eight times the rate for high-income workers (3%, see Figure 4, Panel B). Concerns about the own economic situation moreover rose among low-income workers (+2 percentage points between 2019 and early 2021), but not among middle- and high-income workers. This may reflect the greater rise in joblessness and more frequent use of *Kurzarbeit* among low-income workers. Low-income households also usually have fewer financial reserves that they could fall back on in times of crisis. The slight rise in average nominal monthly net incomes among workers in low-income households hence could not prevent a growth in economic concerns.
- *Indeed, many workers who were on Kurzarbeit or lost their job during the first year of the COVID-19 crisis were very concerned about their own economic situation* – more than one-in-five among them in early 2021 (21% of workers on *Kurzarbeit*, 23% among those out of work). This rate is twice as high as among workers in part-time or *Minijobs* (11% each) and almost four times as high as among full-time workers (6%, see Figure 4, Panel C). Again, low-income workers are most likely to report being very concerned, with 41% of workers in *Kurzarbeit* and 35% of people out of work. This suggests that *Kurzarbeit* – while protecting many jobs – was not in all cases sufficient to alleviate the economic concerns of workers affected by the crisis, in particular among low-income workers. This may reflect, among other things, that *Kurzarbeit* does not entirely replace previous earnings, but also workers' increased concerns about the economic situation of their employer, and thus the future of their job.
- *Also self-employed workers increasingly reported being very concerned about their own economic situation.* Among those who had been self-employed before the crisis, the share reporting being very concerned almost doubled between 2019 and early 2021, from 9% to 17%. This reflects the greater income losses, and the weaker social protection, among self-employed workers.
- *Workers who could work from home were less concerned about their own economic situation than those who could not.* Across all income groups, only few workers (5%) who reported being able to fully or partly work from home in early 2021 were very concerned about their own economic situation (Figure 4, Panel C), while the share was more than twice as high among those who could not work from home (13%). This reflects that people in occupations that could be done from home were less likely to be affected by job losses, and that these occupations often required higher qualifications and were associated with higher incomes (Alipour, Falck and Schüller, 2020^[13]; Mergener, 2020^[19]).
- *A growing share of young workers were very concerned about their own economic situation in the wake of the COVID-19 crisis, unlike for prime-aged and older workers.* Among 18-29 year-olds, the share of those who were very concerned rose slightly from 13% to 17% between 2019 and early 2021. By contrast, among workers aged 30+ the share even declined (by 1 percentage point to 10% among 30-49 year-olds and by two percentage points to 8% among 50-64 year-olds). This may reflect that young people at the beginning of their working lives are more likely to work on temporary contracts, which come with lower job security. Younger people also tend to have lower savings that they could fall back on to cushion earnings losses.

¹² Earlier studies have documented greater levels of concern among women, and mothers, than among men also along other dimensions, including fear of contracting the virus (Gerhold, 2020^[29]) and concerns about social cohesion (WSI, 2022^[28]).

Figure 4. Percentage of workers who report being very concerned about the general or their own economic situation, by income group, employment type and possibility of teleworking

In percentages, January/February 2021 and 2019 (as indicated)



Note: Being "very concerned" refers to levels 9-10 on a scale from 0 to 10, with higher numbers representing greater worries. The income groups are defined as described in Section 2. Telework includes both full and partial work from home.

Source: SOEP v36 and SOEP-CoV.

4. Conclusions

Germany's labour market has weathered the COVID-19 crisis very well. Both the increase in the unemployment rate and the decline in the employment rate were relatively moderate, and both indicators have since returned to their pre-crisis levels. The widespread use of Germany's *Kurzarbeit* short-time work scheme has been one of the key factors for this success, as it had been already during the global financial crisis.

Analysis of SOEP-CoV data shows that labour market and income developments during the first year of the crisis have been uneven across workers, and that disadvantaged groups have been particularly affected: part-time workers and *Minijobbers*, low-educated and low-income workers, and to some extent also women. However, the analysis also shows that through its rapid policy reaction, notably the extension of the *Kurzarbeit*, Germany managed to cushion the crisis impact for many workers and prevented a widening of labour market inequalities during the initial year of the crisis. Indeed, workers in low- and middle-income households – unlike those with high incomes – did, on average, not suffer any real income losses during the first crisis year.

In particular, the analysis shows that:

- *Workers from low-income households were put onto Kurzarbeit more often, and for longer periods, but they were also less often able to work from home, and more often affected by job losses.* This reflects not least the significantly higher share of part-time and *Minijobs* among workers in this group, who often did not have access to *Kurzarbeit*. Consequently, a higher share of low-income workers were also very concerned about the own economic situation than among workers in middle- and high-income households.
- *Workers on standard contracts were better protected than non-standard workers*, especially the self-employed and *Minijobbers*, because of their access to *Kurzarbeit* and greater possibilities to work from home. As a consequence, fewer workers on standard contracts reported being very concerned about their economic situation.
- *Despite the massive impact of the COVID-19 crisis on the German labour market, household incomes remained largely stable over the first year of the crisis.* Workers in low- and middle-income households recorded, on average, even small nominal income increases. High-income workers suffered income losses, and particularly so the self-employed.
- *Women have been somewhat more affected by job losses and were less likely to work from home than men.* They were also more likely to report being very concerned about the overall economic situation.

While the German labour market proved quite robust during the COVID-19 crisis, also in comparison with other OECD countries, the crisis also highlighted some of its well-known weaknesses and demonstrated where it lacks resilience. To improve the inclusiveness and strength of the German labour market, particularly with a view to current and future transformations, policy measures are needed particularly in the following areas:

- *Restriction of Minijobs and reform of social-security contributions for low-income earners:* The low-wage sector in Germany is among the largest across European countries, and many low-wage workers are employed in *Minijobs*. Compared to standard employment, those jobs provide little job security and usually low hourly wages. *Minijobbers* do not have access to *Kurzarbeit* and are often the first to lose their jobs in crisis times, as during the COVID-19 crisis (Grabka, Braband and Göbler, 2020^[20]). Research has shown also that the German low-wage sector is often not fulfilling its intended function of providing workers with stepping stones into better, more secure employment (Grabka and Göbler, 2020^[21]). Women, who are overrepresented among *Minijobbers*, are particularly affected. The planned rise of the *Minijob* threshold to EUR 520 from October 2022, foreseen in the recent coalition agreement, could exacerbate this problem. To promote jobs that are crisis-proof and come with good social protection, *Minijobs* should be restricted, for example by targeting them only to pupils, students and pensioners. The transition to standard employment should be made more attractive, particularly for women, through a smoothing of social-security contributions for low-income earners (for detailed policy recommendations see Blömer, Brandt and Peichl (2021^[22])).
- *Improving social protection for the (solo) self-employed:* self-employed workers, especially those with very small businesses and the solo self-employed, have little income security in times of crisis. Around one-in-three self-employed workers in Germany suffered income losses during the COVID-19 crisis, and some even slipped into the low-income group (Schulze Buschoff and Baumann, 2021^[23]). For some time now, there have therefore been debates about ways of better integrating self-employed workers into the statutory social-insurance system and of bringing their coverage in line with that of dependent workers, especially in case of joblessness. In the area of unemployment insurance, one option would be to introduce compulsory insurance against income losses due to *systemic* risks, such as those resulting from a larger economic crisis. Moreover, for solo self-employed workers, compulsory old-age pension insurance should be a priority, as these

workers usually have no large working capital that could be liquidated upon retirement, and face a high risk of old-age poverty.

- *Investment in digital infrastructure:* Germany's digital infrastructure and its use of digital technologies lags those of many other OECD countries (OECD, 2020^[24]). This has negative effects for the productivity of companies and workers in Germany and for the resilience of the German labour market. Inadequate digital infrastructure, particularly in rural areas, and the only moderate digitalisation of many companies, are some of the reasons why Germany did not fully exploit the teleworking potential of many jobs during the COVID-19 crisis. To better harness the enormous potential of the digital transformation, Germany requires greater investment in digital infrastructure, clearer incentives and more support for small and medium-sized enterprises to digitalise their operations, a rapid digitalisation of public services, and effective measures to develop digital skills among low-skilled workers.

While the German labour market has overall mastered the COVID-19 crisis well – especially due to the rapid expansion of *Kurzarbeit* –, employees who were less well covered by the social protection system have been heavily affected. A lesson from the crisis for Germany should therefore be to carry out reforms that strengthen the social protection for currently undercovered workers, modernise the labour market and make it even more resilient in view to possible future crises. This makes sense also in the current context of the growing geopolitical instability in Europe, renewed economic uncertainty and a large number of humanitarian migrants, which may bring new challenges for the German labour market.

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