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# The impact of the COVID-19 crisis across different socio-economic groups and the role of job retention schemes - The case of Switzerland

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# The impact of the COVID-19 crisis across different socio-economic groups and the role of job retention schemes - The case of Switzerland

# Abstract

This paper analyses the impact of the COVID-19 crisis across socio-economic groups in Switzerland and the role played by its short-time work scheme during the first year of the crisis until the end of 2020. To this end, it compares changes in hours worked for different socio-groups in Switzerland and other OECD countries, and then documents differences across groups in the use of short time work and in the risk of job loss. Finally, the paper investigates differences between groups of short-time work participants in terms of the reduction in working time, job search behaviour and the risk of subsequent job loss. The evidence so far suggests that the Swiss short time work scheme as it operated during the first year of the COVID-19 crisis was fit for purpose.

# Résumé (in French)

Cet article analyse l'impact de la crise COVID-19 sur les groupes socio-économiques en Suisse et le rôle joué par son régime de chômage partiel pendant la première année de la crise et ce jusqu'à la fin de 2020. Dans ce but, il compare les changements dans les heures travaillées pour différents groupes socio-économiques en Suisse et dans d'autres pays de l'OCDE, puis documente les différences entre les groupes dans l'utilisation du chômage partiel et dans le risque de perte d'emploi. Enfin, l'article étudie les différences entre les groupes de participants au chômage partiel en termes de réduction du temps de travail, de comportement de recherche d'emploi et de risque de perte d'emploi ultérieure. Les résultats obtenus jusqu'à présent suggèrent que le programme suisse de chômage partiel, tel qu'il a fonctionné pendant la première année de la crise COVID-19, était adapté aux besoins.

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# 1. Introduction

1. The Swiss labour market has proved highly resilient in the face of the Covid-19 crisis in large part thanks to the unprecedented use of its short-time work (STW) scheme. In April 2020, 1.3 million employees spent at least some time on STW, i.e. 14 times more than at the peak of the global financial crisis. This is equivalent to just under 35% of the total number of employees, well above the OECD average of 20%, and similar to neighbouring countries such as France, Germany and Italy (Figure A A.1., Panel A). If the entire reduction in hours achieved through the use of STW had instead been pursued through a reduction in employment, the year-on-year drop in full-time employment in Q2 2020 would have been ten times larger, 11.9% instead of the observed 1.2% (OECD, 2021[1]). By the end of 2020, as the economy recovered, the employment rate had fully caught up, despite a resurgence in the number of infections.

2. This paper investigates the extent to which different demographic groups have benefitted from the remarkable resilience of the Swiss labour market and the role of its short-time work scheme in protecting them against the impact of the COVID-19 crisis. The highly sectoral nature of the Covid-19 crisis led to an unequal exposure to the shock for different groups depending on their distribution across sectors. The crisis affected most severely businesses whose activities could not be conducted remotely and require close contact between consumers and producers, large crowds, or cross-border travel. In Switzerland, the hospitality industry, a sector with a relatively young and low skilled workforce, was hit especially hard, displaying the highest losses in full-time equivalent employment (Figure A A.1., Panel B). Moreover, the labour demand and supply of different groups may respond differently to the same shock. For example, faced with a temporary drop in activity, firms might be less likely to place workers on short-time work who can be laid off and rehired more easily – which would typically be younger, less educated workers. Or women's labour supply might be more sensitive to the increase in household work linked to school closures.

3. The first contribution of the paper is to provide an overall picture of the impact of the COVID-19 crisis across groups in Switzerland compared with other OECD countries. To this end, it decomposes changes in total hours worked over the course of 2020 by gender, age, and education in (i) changes in employment (i.e. the extensive margin) and (ii) changes in hours worked for those who are employed (i.e. the extensive margin). Compared to a reduction in employment, adjustments in hours are generally associated with smaller losses in income and do not carry the risk of long-term scars linked to unemployment spells.[1] Importantly, the evidence highlights which groups experienced an increase in joblessness and might require complementary support. While in normal times brief spells of non-employment might be instrumental in reallocating employment efficiently, at the height of Covid-19 crisis this was less likely to be the case because of the pandemic-induced reduction in both job search and job creation (OECD, 2021[2]).

4. The second and main contribution of the paper is to offer novel evidence on the variation across different demographic groups in the use of the short-time scheme and the risk of job loss. A key policy

[1] From the perspective of the firm, they can be reversed more quickly enabling activity to resume promptly when restrictions are lifted or conditions improve.

question is whether short-time work is effective in sheltering different workers from the risk of job loss equally. Economic theory suggests that firms might be more inclined to use short time work for workers which are more costly to replace – which are typically older and more educated workers (OECD, 2021[2]). The standard practice of comparing take-up as a fraction of earlier employment is not informative on this point since it provides no indication as to whether workers who are not on STW remain employed. At the same time, obtaining plausible estimates of the causal effect of STW on the risk of non-employment is not feasible due to the lack of a credible counterfactual for what would have happened to different workers during the COVID-19 crisis in the absence of the scheme. Instead, to provide insights on this point, the analysis exploits longitudinal data from the Swiss Labour Force Survey to compare changes in the probability of non-employment and in the probability of STW across different groups of employees. Intuitively, evidence that a group became relatively more likely to lose their employment, but not to be on STW is suggestive that the group benefited less from the scheme.

5. The third contribution of the paper is to highlight the risk of subsequent job loss and financial hardship among STW participants and the importance of providing effective job search support. To this end, the paper presents evidence on differences across groups of STW participants in terms of (i) the reduction in working time; (ii) job search behaviour and (iii) the risk of subsequent job loss. These three variables have potentially important implications for workers wellbeing and therefore policy. Workers whose hours are reduced to zero see a larger fall in earnings and therefore in living standards and may also be at greater risk of ultimately losing their job. Job search while on short-time work can help workers improve their working conditions and reduce the risk of becoming unemployed. Unemployment may involve a more prolonged reduction in living standards and also carries the risk of possible scarring effects in the longer term.

6. The remainder of the paper proceeds as follows. Section 2. presents the results of the decomposition of changes in hours worked by different demographic groups in Switzerland and selected countries. Section 3. then zooms in on the role of STW in Switzerland investigating differences across groups of employees in the probability of accessing STW and the risk of job loss. Section 4. examines differences in the reduction in working time, the probability of job search and the risk of subsequent job loss across groups of STW participants. Finally, Section 5. offers some policy considerations based on the main findings of the paper.

### Box 1.1. Executive summary

**The impact of the COVID-19 crisis across socio-economics and the role of short-time work**

The Swiss labour market was remarkably resilient during the COVID-19 crisis. It experienced a smaller reduction in total hours worked than the OECD average and neighbouring countries. Moreover, the reduction in hours worked was less unequally distributed across different groups of workers. While it was initially concentrated among younger and low educated workers and to a greater extent took the form of increased joblessness (as opposed to reductions in working time), differences across groups were smaller in Switzerland than in most other OECD countries and became less important as the crisis evolved.

The overall resilience of the Swiss labour market is in large part due to the use of its short time work scheme that helped to keep the risk of job loss for employees at bay. As the crisis hit and economic activity fell dramatically, the probability for an employee to be placed on STW jumped from about 1% before the crisis to the unprecedented level of 13% in the second quarter of 2021, according to the Swiss Labour Force Survey. As a result, the risk of job loss for an employee remained subdued at 4% - only 1pp higher than in the five years before the crisis.

There is some evidence that the scheme might have been somewhat less effective in preserving the jobs of the low educated and workers on temporary contracts at the onset of the crisis. In Q2 2020, these groups saw a larger increase in the risk of losing their employment compared to other groups, but not a higher probability of being placed on STW. However, there is no indication this continued to be the case in subsequent quarters. The temporary removal of the waiting period and the extension of eligibility to workers on temporary contracts may have been particularly important for encouraging the use of short-time workers for young and low educated workers.

A considerable fraction of workers on STW saw its working hours reduced to zero, especially at the beginning of the crisis and among foreign-born and low-educated workers. To attenuate the impact of the crisis on the living standards of low earners, the Swiss Parliament temporarily increased the replacement rate of hours not worked for low-wage workers to 100%.

As the crisis lingered, the use of STW became more concentrated in firms experiencing more serious and lasting difficulties. The fraction of jobs on support that was terminated in the following quarter climbed to over 10% in Q4 2020, and the fraction of workers on STW who actively searched for another job also increased. The risk of subsequent job loss and the intensity of job search were higher for workers whose hours had been reduced to zero.

**Policy implications going forward**

Going forward, there is a growing risk that jobs that remain on STW support are no longer viable, as already witnessed by the growing fraction of jobs supported by STW that are eventually terminated. Once most health-related restrictions are lifted, the temporary extensions to the short-time working compensation scheme need to be wound back and firms' financial participation to the cost of the scheme reintroduced.

As STW is scaled back, it is important to adopt measures to support job-search and training among workers in subsidised jobs. The support of public employment services can be extended by encouraging regional placement offices to reach out to workers in jobs that remain at risk and are more likely to be have become permanently unviable (the paragraph below discusses how this could be achieved in practice) while informing them of the services that they can access. Furthermore, financial incentives could be introduced to promote the acquisition of generic skills among workers on short-time work through the use of training.

Since the objective of STW is to preserve jobs and only a modest fraction of jobs supported by STW are eventually terminated, efforts to actively reach out to potential job losers on short-time work should be effectively targeted to jobs that remain at risk and are less likely to viable in the medium term. Target groups could include workers on zero hours, workers who have been on STW for a relatively long time, as well as workers in firms and industries that experienced financial difficulties already before the crisis.

Beyond supporting workers on short-time work, support for job losers who were initially less protected by STW as well as those who lost their job despite having been on STW could be strengthened further. While active labour market policy programs are well provisioned and flexible Switzerland, their effectiveness can be increased by establishing a clear placement strategy for jobseekers in the cantons where this does not happen yet and privileging targeted measures at specific groups.

# 2. The impact of the COVID-19 crisis across demographic groups

7. This section uses labour force surveys to decompose changes in total hours worked by gender, age, and education into changes in hours among employed workers (intensive margin), which may include reductions in working time to zero hours as long as the employment contract is preserved, and changes in the number of jobless workers (extensive margin). The section focuses on the results for the second quarter of 2020, when the crisis first hit, and for the last quarter of 2020, the latest data available. The results highlight the groups that saw a larger increase in joblessness and that might require additional support. These differences are likely in part driven by differences in the extent to which short time work was used across different demographic groups. To provide more insights on the specific role played by short-time work in explaining differences in labour market outcomes across groups, Section 3. turns to data from the Swiss Labour Force Survey, which unlike labour force surveys for most other countries, provides information on the use of short-time work.

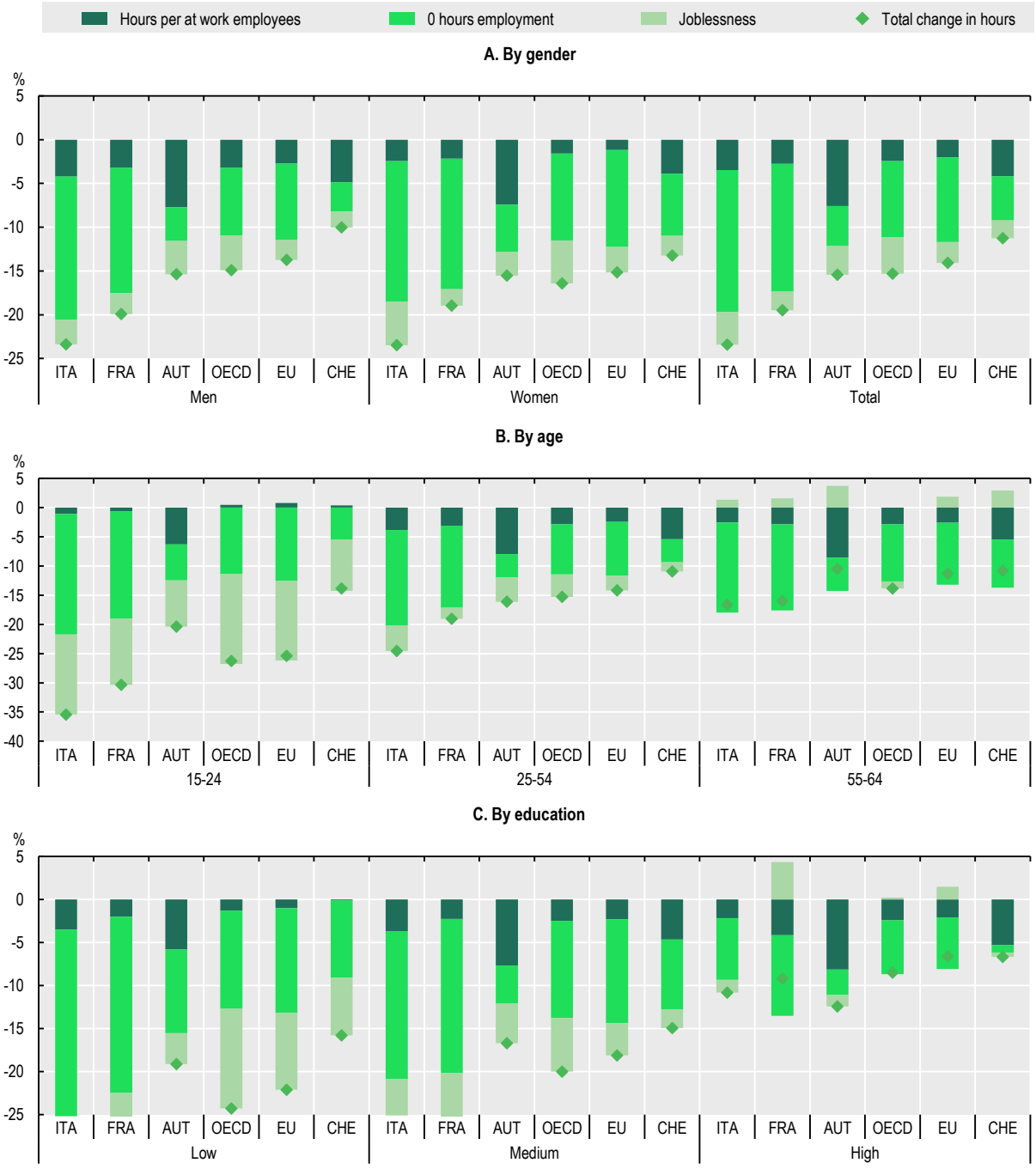
***In Switzerland, the decline in total hours was smaller and reflected to a greater extent a reduction in working time than in the OECD as a whole***

8. Overall, total hours worked fell less in Switzerland than across the OECD and in neighbouring countries. In Q2 2020, the year-on-year decline in hours worked was 11% in Switzerland, against 15% across the OECD, the EU and Austria and 20% or more in France and Italy (Panel A in Figure 2.1**)**. By Q4 2020, the year-on-year decline in hours worked was only 2% in Switzerland, again considerably smaller than that of the OECD average (5%), Italy (7%) and Austria (11%), but similar to the level in France (Panel A in Figure 2.2**)**.

9. In all countries, employment losses (i.e. the extensive margin) accounted for a relatively small part of the total fall in hours. In Switzerland, the increase in joblessness accounted for 18% of the overall decline in hours worked in Q2 2020, a lower proportion than on average across the OECD, but similar to that seen in neighbouring countries and the EU that also made considerable use of short time work. Indeed, the bulk of the reduction in working time was accounted for by reductions in working time among employees who kept their jobs. This mainly reflected complete work stoppages in Switzerland, although partial reductions in working time also played an important role, and relatively more so in Switzerland than in other countries. By Q4 2020, Switzerland stood out in the international comparison because its (modest) year-on-year decline in hours worked was entirely accounted for by changes along the intensive margin – mainly through partial reductions in working time - with the extensive margin actually making a small positive contribution to hours worked.

## Figure 2.1. The initial impact of the COVID-19 crisis across socio-economic groups

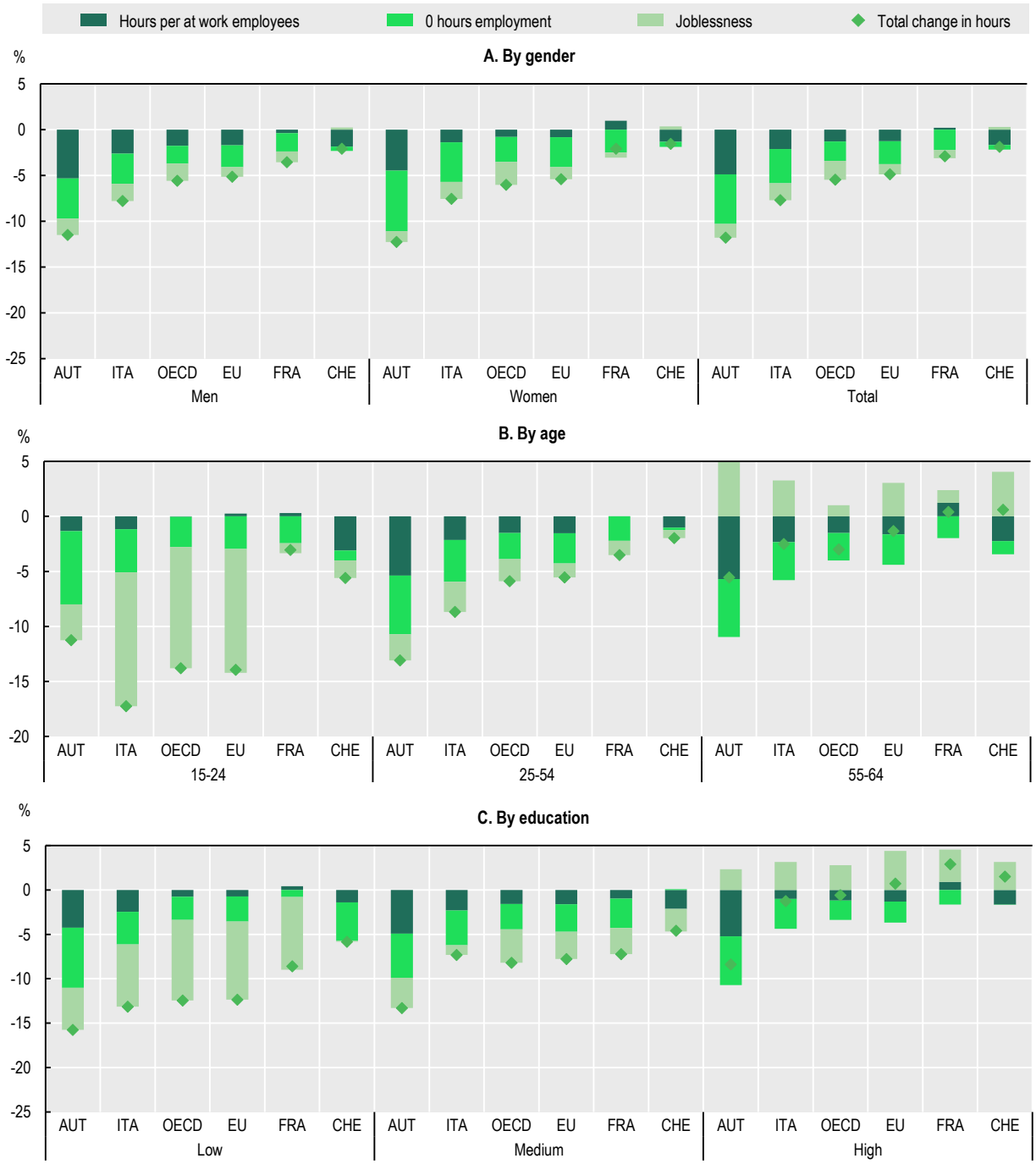
Decomposition of changes in total hours worked, year-on-year percentage change, 2020 Q2




*Source:* OECD (2021), OECD Employment Outlook 2021: Navigating the COVID-19 Crisis and Recovery, OECD Publishing, Paris, https://doi.org/10.1787/5a700c4b-en.

## Figure 2.2. The medium-term impact of the COVID-19 crisis across socio-economic groups

Decomposition of changes in total hours worked, year-on-year percentage change, 2020 Q4




*Source:* OECD (2021), OECD Employment Outlook 2021: Navigating the COVID-19 Crisis and Recovery, OECD Publishing, Paris, https://doi.org/10.1787/5a700c4b-en.

***Hours worked fell more for the young and the low educated but differences between groups were smaller than in many other OECD countries***

10. Hours worked tended to decline more strongly for young workers. In Q2 2020, total hours worked declined by 14% for young workers and by 11% for both prime-age and older workers in Switzerland (Panel B in Figure 2.1). Across the OECD, age differences were markedly more pronounced, as young people's hours declined by 26% and those of prime-age and older workers by around 15%. The fall in hours for young people was particularly large in some of Switzerland's neighbouring countries, reaching 30% and 25% respectively in France and Italy. By the end of the year, the gap in hours lost between age groups had actually slightly increased in Switzerland, as hours were down by 6% for the young, but up by 1% for older workers (Panel B in Figure 2.2). The gap between age groups at the OECD level, however, remained considerably larger, as hours were down by 14% for young workers, but only by 4% for older workers. In France, differences between age groups had become much smaller than at the start at the crisis, as hours worked by the young were down only by 3% relative to a year earlier, while those for older workers were in line with pre-crisis levels.

11. Hours worked also tended to decline more strongly for low and medium educated workers. As the crisis hit Switzerland, total hours worked declined by 16% in Q2 2020 relative to a year before for workers with low and medium education, but only by 7% for workers with high education (Panel C in Figure 2.1). By contrast, hours worked by the low educated declined by over 25% in Italy and France, and by 24% on average across the OECD, while the high educated saw declines of about 10% in Italy and France and 9% at the OECD level. By the end of 2020, total hours worked by the high educated had fully recovered in Switzerland (+1%), but hours worked by the low educated remained 6% lower than a year before (Panel B in Figure 2.2). The gap between the two groups was still smaller than for the OECD average, where hours worked were still down by 1% for the high educated and by 13% for the low educated. Similarly, the gap between the education groups was larger in Switzerland's neighbouring countries, including in France where hours worked actually increased by 3% for the high educated, but decreased by 9% for the low educated.

12. Differences in the decline in total hours worked across socio-economic groups to some extent reflect differences in the ability to telework. Evidence for selected OECD countries – not including Switzerland – suggests that young and low educated workers were less likely to telework than older and more highly educated workers during the COVID-19 crisis (OECD, 2021[2]).

***For the young and low educated, most of the initial decline in hours worked occurred through a temporary increase in joblessness***

13. Besides experiencing larger declines in total hours, the young and low educated saw a larger proportion occur through increases in joblessness. In Switzerland, the increase in joblessness accounted for over 40% of the decline in hours worked by the low educated in Q2 2020, but only for 14% and 8% of the decline for the mid and high educated respectively. Similarly, the increase in joblessness accounted for over 60% of the decline in hours worked by young people, but only for 10% for older workers. This pattern was also clear on average across the OECD, but was somewhat less pronounced in some of Switzerland's neighbouring countries. In France, Italy and Austria, the proportion of the fall in hours accounted for by joblessness was under 25% for the low educated and under 40% for the young.

14. The proportion of the fall in hours explained by the increase in joblessness decreased over time for most groups in Switzerland. In fact, by Q4 2020, the role of joblessness had increased only for the mid-educated (reaching 50%) (Figure 2.2). By contrast, the contribution of joblessness to hours worked had actually turned positive for older and high educated workers, indicating an increase in employment for older and high-educated workers in Q4 2020 relative to Q4 2019. At the same time the fraction of the fall in hours accounted for by increasing joblessness was down to 25% for young workers, and had become negligible for the low educated. In stark contrast with this pattern, the role played by joblessness in explaining the

decline in hours for the low educated increased in most other countries, exceeding 70% at both the EU and OECD average.

15. Young and low educated workers who avoided joblessness were more likely to see their hours reduced to zero. Indeed, in 2020 Q2 almost the entire reduction in working time among young and low educated workers remained employed is accounted for by complete work stoppages. To the extent that reductions in working time result in lower earnings and these groups already had lower earnings to start off with this may have raised the risk of financial hardship in the absence of income-support measures.

## 2.1. Differences by gender were small

16. Differences between genders were small in Switzerland, and across the OECD more broadly. At the start of the crisis, women's hours worked declined by 13% while men's by 10%, and the difference became negligible by quarter 4 (Panel A in Figure 2.1 and Figure 2.2). There is some indication that the reduction in working time was more likely to take the form of complete work stoppages for women rather than partial reductions in working time or job losses.

# 3. The use of short time work across different groups of workers and the risk of job loss

17. Switzerland has a long tradition of using STW to help firms to deal with a temporary decline in economic activity. Empirical evidence from the global financial crisis shows that the scheme increased firm survival and was effective in preventing unemployment rather than in postponing it (Kopp and Siegenthaler, 2021[3]). At the one-set of the Covid-19 crisis, the Swiss government acted promptly to simplify access, extend eligibility and lower the cost of the scheme to firms (Box 3.1). While the massive use of the scheme certainly played a major role in the remarkable resilience of the Swiss labour market, little is known about the extent to which the scheme has been used for different groups of workers.

### Box 3.1. The Swiss Short Time Work Scheme before and during the Covid-19 crisis

Under its pre-crisis rules, a firm facing a temporary downturn could request STW support to the cantonal employment office, upon agreement with the employees. The claim must be made at least 10 days ahead of the expected reduction in working hours. The compensation, paid by the unemployment insurance to the enterprise, represented 80% of the employee's loss of gross earnings attributable to the reduction in working hours capped at CHF 196 per day. It also covered the employer's share of social security contributions associated with reduced hours, except those paid into occupational pension schemes. Only permanent employees were eligible to receive STW for a maximum duration of 12 months (with possible extension to 18 months) for every two-year period. Requests needed to be renewed every three months.

During the early stages of the pandemic, the federal authorities took a broad set of measures to facilitate the uptake of the scheme and broaden its eligibility. From March 2020, the claim process was simplified and digitalised while eligibility was extended among others to apprentices and workers on temporary contracts. Moreover, the 10 days of advance notice for claims was suspended. From March 2020, STW requests by firms are reviewed every 6 rather than 3 months. In July 2020, the maximum duration of the scheme was extended to 18 months and, in July 2021, to 24 months.

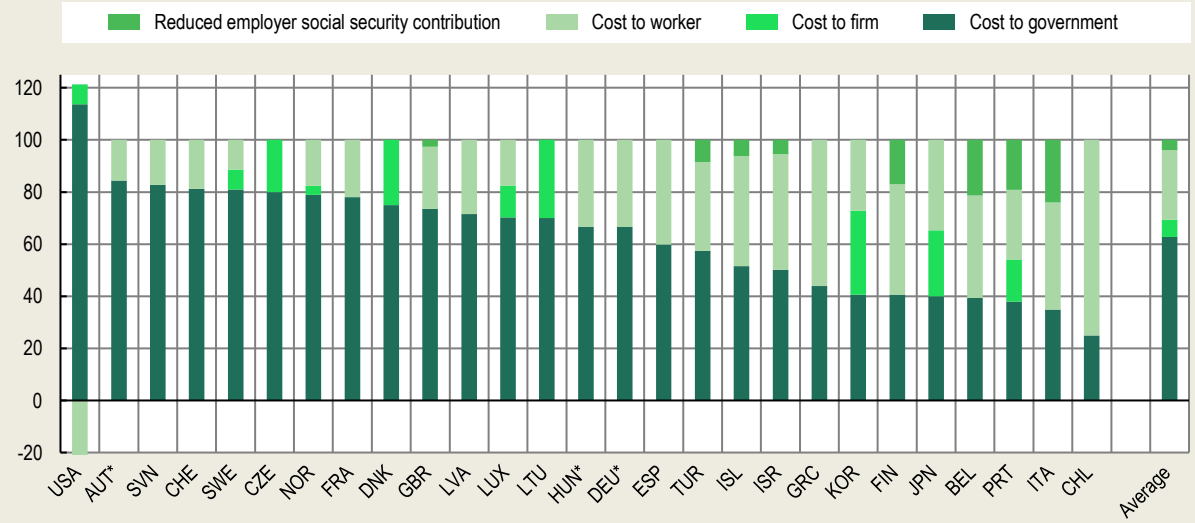
In line with many other OECD countries, Switzerland further reduced the cost to firms of hours not worked in the STW-scheme during the pandemic, alleviating liquidity constraints for firms and limiting the number of workers at risk of dismissal (Figure 3.1). Before the pandemic, firms had to pay full wages for two working days per month during the first six months of the scheme irrespective of the reduction in working time ("waiting period") and three working days thereafter. This "waiting period" was suppressed from March 2020 to June 2021, and re-introduced for one day only in July 2021. Between

January and March 2022, the waiting period was suppressed again in view of another wave of the pandemic.

The large replacement rate for hours not worked helped to ensure relatively high levels of income for the affected workers. Indeed, standing at 80% of gross wages, the replacement rate for workers on STW in Switzerland is one of the highest across the OECD and it is often higher than that of the unemployment benefits, which vary between 70 and 80%, depending on the wage level and family situation of the unemployed. In December 2020, the replacement rate for STW was temporarily increased up to 100% for low earners. In December 2021, the Parliament extended this measure until December 2022.

### Figure 3.1. Like most OECD countries, Switzerland significantly reduced the cost of STW for firms during the Covid-19 crisis

The cost of hours not worked as a percentage of labour cost – gross wage plus employer social security contributions – for maximum permissible reduction in working time, May/June 2020




*Note*: * Net terms (after taxes and other transfers). Mandatory employer contributions for private insurance are not taken into account (consistent with the OECD methodology of Taxing Wages). In Switzerland, employers remain liable for approximately 10% of mandatory non-wage labour costs to finance the second pillar of the old age pension scheme as well as family allowances. If job retention benefits are paid directly to workers it is assumed that firms pay no employer social security contributions over hours not worked. Norway: for the first 3 months (60 days). Chile, Hungary, Sweden and the United States: for a maximum reduction of working time. United States: includes weekly lump-sum of USD 600 that was paid irrespective of the reduction in working time to all short-time compensation recipients as part of CARES, resulting in an increase in earnings in both cases considered here. If there are several schemes in the country, the figure relates to the primary scheme in May 2020 (Denmark: Wage compensation scheme (Lønkompensation); Greece: Special purpose scheme; Portugal: Layoff Simplificado; the United States: short-time compensation).
*Source:* OECD Employment Outlook 2021, Chapter 2.

## 3.1. Using longitudinal data to document worker transitions

18. The analysis is based on the Swiss Labour Force Survey which allows identifying workers on STW (Box 3.2) and offers a rich characterisation of individuals in terms of both their personal (i.e. age, gender, education) and job characteristics (i.e. industry, occupation, contract type). It further exploits the longitudinal structure of the Swiss LFS to study changes in two key transition probabilities between

consecutive quarters for different groups of employees since the onset of the Covid-19 crisis: (i) the probability of moving to non-employment, and (ii) the probability of being placed on STW.

19. The present emphasis on worker transitions helps to address the key policy question as to whether the employees who are not placed on the scheme remain employed or not. Most previous studies simply focus on take-up – defined as the number of STW participants as a fraction of past employment. However, this take-up may appear relatively low in hardly hit groups because a high number of workers are laid-off, as observed by Adams-Prassl et al. (Adams-Prassl et al., 2020[4]) across British industries By explicitly differentiating between the two channels the analysis provides an indication of the extent to which STW sheltered different groups from the risk of job loss. Intuitively, evidence that a group saw a relatively large increase in the probability of non-employment, but not in the probability of being placed on STW is suggestive that the group was protected less by the scheme. These insights are very valuable given the absence of credible counterfactuals that would enable to quantify the causal impact of STW on the risk of job loss across different workers.

20. A number of confounding factors might drive differences in the risk of non-employment and STW across groups. The most important may be differences in the distribution of groups across industries and occupations that are affected to different degrees by social distancing and government restrictions. Accounting for these is essential to shed light on the important policy question as to whether differences in STW take-up between groups are simply driven by their differential exposure to the crisis, or by the decision of the firms to use the scheme more for certain groups. Indeed, as mentioned in the introduction, a common concern is that firms resort less to STW schemes for workers with lower replacement costs, who are typically younger and less educated. Consistently with this hypothesis, the results of Section 2. indicate that, at least at the onset of the crisis, these groups of workers experienced larger declines in hours and that such declines occurred relatively more through an increase in joblessness than through a reduction in hours for those employed.

21. To control for the role of confounding factors the analysis is extended to a multivariate setting using linear probability models that include controls for industry and occupation as well as for various personal characteristics (gender, age, education, foreign born status), contract type (temporary and part-time), and whether the employee is already on STW.[2]

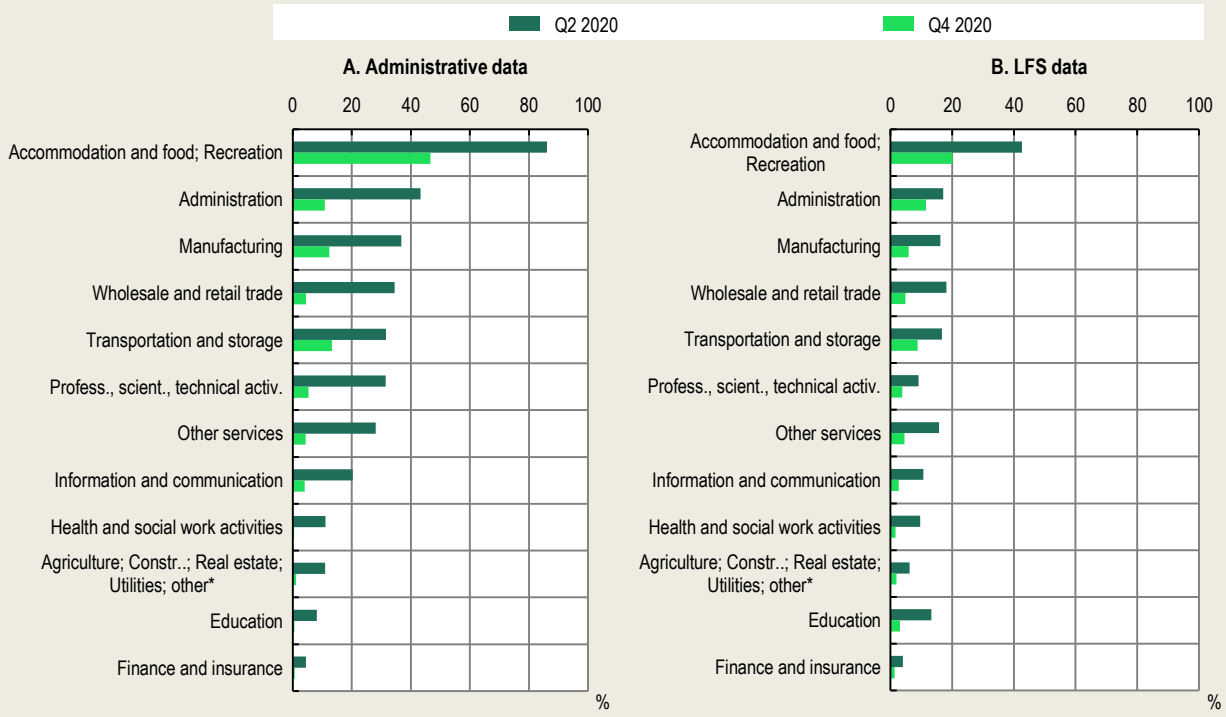
[2] The analysis exploits the fact that about of half of the sample of the Swiss Labour Force Survey in each quarter is interviewed in the successive quarter as well. Hence, the analysis uses samples that are representative of all employees (whether on STW or not) in each quarter and who have valid responses in the successive quarter. The weights employed throughout the analysis are the ones provided for the cross-sectional analysis of each relevant quarter. The dataset does not have weights to account for attrition between consecutive quarters.

## Box 3.2. Using the Swiss Labour Force Survey to study the role of STW across groups

The Swiss Labour Force Survey (SLFS) has two key advantages over administrative data on the use of STW that are particularly important in the present context**.** First, it allows providing a rich characterisation of employees on STW in terms of their personal (i.e. age, gender, education) and job characteristics (i.e. industry, occupation, contract type).[1] Second, its longitudinal structure allows an analysis of different types of transitions in the labour market (i.e from employment to non-employment or to STW as well as STW to non-subsidised employment and non-employment) that greatly enriches the understanding of the impact of the pandemic on the labour market and the role played by STW.

A limitation of the LFS data is the small size of the sample of workers on STW (e.g. only about 2000 individuals in Q2 2020, and just under 700 in Q3 and Q4). This limits the scope for using granular classifications (for example for industry and occupation) and, more generally, may reduce the statistical precision of estimates for specific subgroups.

### Figure 3.2. Proportion of employees on STW by industry and occupation




There are large differences in the measured aggregate use of STW based on SLFS data and administrative data**.** In the SLFS, 13% of all employees were on STW in Q2 2020 compared with 25% in the administrative data. This mainly reflects differences in the reference period. The SLFS refers to workers who were on STW in a specific reference week in the quarter, while the administrative data count anyone who has been on STW at any point in a month and average take-up across months in the quarter. Furthermore, the SLFS only covers the permanent resident population, while administrative data also include the significant number of cross-border workers and workers with a short-term residence permit who were placed on STW. Under-reporting by workers who are not aware that they are on STW is unlikely to play a significant role since workers must agree to participate in the scheme.

Reassuringly, the break down by industry– the only dimension available in both the SLFS and the administrative data – offers the same qualitative picture regardless of the data source. While there are small differences in the exact ranking of industries between the two sources, in both the use of STW was highest in accommodation and food, arts and entertainment, administration and support, transport, manufacturing, and commerce. Moreover, both show that, as the second wave of the pandemic hit the country in the fall, the use of STW became more concentrated in specific sectors, with accommodation and food, arts and entertainment seeing the most significant take up.

*Activities of Households as Employers; Activities of Extraterritorial Organisations and Bodies; Public administration and defence.
*Note:* Administrative data: average monthly number of workers who spent any amount of time on STW over total number of employees in Q4 2019. LFS data: number of workers who report being STW in the reference week over total number of employees in the same quarter.
*Source: TO COMPLETE*

1. In principle the SLFS allows identifying trainees and whether they were on STW. However, since the numbers are very small, trainees are excluded from the analysis.

## 3.2. Descriptive evidence without controls for personal and job characteristics

### *3.2.1. The widespread use of STW limited the increase in the risk of job loss*

22. The widespread use of STW – alongside with the broader policy response to the crisis – was highly effective in limiting the increase in the risk of job loss for employees as the crisis hit in Q2 2020, despite the unprecedented fall in economic activity. Between Q1 and Q2 in 2020, the risk of job loss for an employee was about 4% - only slightly higher than the pre-crisis 5-year average (Figure 3.3). By contrast, the probability of being placed on STW shot up to 13% - against an average of 1% over the previous five years.

23. As restrictions were lifted and economic activity picked up, the risk of job loss for an employee fell below pre-pandemic levels. The probability that an employee lost his or her job between Q2 and Q3 fell to 3.5%, against 4.5% before the crisis. The probability of being on STW fell to 4.2%, much lower than at the onset of the crisis. Despite the resurgence of the epidemic and the re-introduction of restrictions in the fall, the probability of job loss remained below pre-crisis levels at around 3.5% between Q3 and Q4. The probability of being placed on STW increased slightly to about 5%, remaining well below the peak of Q2. This likely reflects the fact that restrictions became looser and more targeted as the pandemic continued, while many businesses learned to operate safely without the need to reduce employment or working time.

24. The fall in the risk of job loss in Q3 and Q4 relative to the pre-crisis period likely results from the combination of a strong economic expansion following the initial unprecedented contraction in Q2 and the fact that generous support (in the form of STW and other policy measures) remained in place for firms experiencing difficulties. The reduced flows towards non-employment is unlikely to have significantly hindered employment reallocation given that the pandemic also tended to reduce job search and vacancies (OECD, 2021[2]).

*There is suggestive evidence that STW might have sheltered low educated and temporary workers less from the risk of job loss at the start of the crisis*

25. The evidence suggests that STW might have been less effective in sheltering the low educated and workers on temporary contracts from the risk of job loss as the crisis broke out in Q2 2020, but this was less the case in later quarters (Figure 3.4). At the onset of the crisis, these groups saw a larger increase in the risk of losing their employment compared to other groups, but not a higher probability of being placed on STW.

26. Between Q1 and Q2 2020, the low educated faced a 10% probability of losing their employment, 3pp higher than for the same calendar quarter in the five years before the crisis (Panel A of Figure 3.4). The increase was much smaller for mid educated workers. By contrast, the low educated were less likely to be placed on STW than mid-educated workers (13% vs 15%). The high educated saw essentially no change in the probability of losing their employment, while being protected by a large probability of being on STW (10%).[3] In later quarters, however, differences in both the probability of job loss and of STW became smaller, and the low-educated became more likely than all other groups to be placed on STW in Q4.[4]

27. Similarly, at the start of the crisis, the risk of employment loss increased more for workers on temporary contracts (from 12% in the five years before the crisis to 14%) than for permanent workers (from 2.8% to 3.3%), while the probability of being placed on STW remained lower for temporary workers than permanent one (9% vs 13%) (Panel C of Figure 3.4). Hence, while the opening of the STW scheme to workers on temporary contracts has likely helped preserve many jobs that would have been lost, the evidence suggests that the scheme was relatively less effective in sheltering temporary workers from the risk of job loss than permanent workers at the start of the crisis. However, as the crisis continued, the risk of job loss for temporary workers fell below pre-crisis levels considerably more than for permanent workers, even as temporary workers remained about 3pp less likely to be placed on STW.[5]

### *No indication of differences in the effectiveness of STW across genders, part-time status, and age groups*

28. Women saw a larger increase in the risk of job loss as the crisis struck than men and were also more likely to be on STW (15% vs 11%) (Panel B of Figure 3.4. This suggests that they were initially hit harder by the crisis (Figure 2.1). In later quarters, however, both women and men saw a reduction in the risk of job loss compared to the recent past. By the end of the year, the difference in the risk of job loss became smaller than in the pre-crisis period – with both women and men facing a risk of job loss of around 3.5% between Q3 and Q4. Similarly, the difference in the probability of STW between women and men became smaller over time, even though women remained slightly more likely to be on the scheme than men by the end of the year (5.2% vs 4.6%).

29. Similarly, part-time workers (who are disproportionately women in Switzerland) saw larger increases in both the probability of job loss and STW at the start of the crisis (Figure A A.1) suggesting that the impact of the crisis was somewhat more severe for them. The changes in the risk of job loss were small for both part-time and full-time workers - from 5.5% to 6.3% for part-time workers and 2.4% to 2.8% for full-time workers. The difference between the two groups was more pronounced for the probability of STW, with part-time workers facing a 15% probability of being placed on the scheme against 12% for full-time workers. While the difference between the groups did increase during the crisis, part-time workers were more likely to be placed on STW already before the crisis. In later quarters, the risk of job loss declined for both types of workers, but part-time workers remained more likely to be on STW.

---

[3] In general, differences across groups in the probability of being placed on STW were negligible in the pre-crisis period compared to those observed in 2020. Hence, while the figures report all the numbers for completeness, the discussion focuses on the differences in 2020 without an explicit comparison to pre-crisis differences.

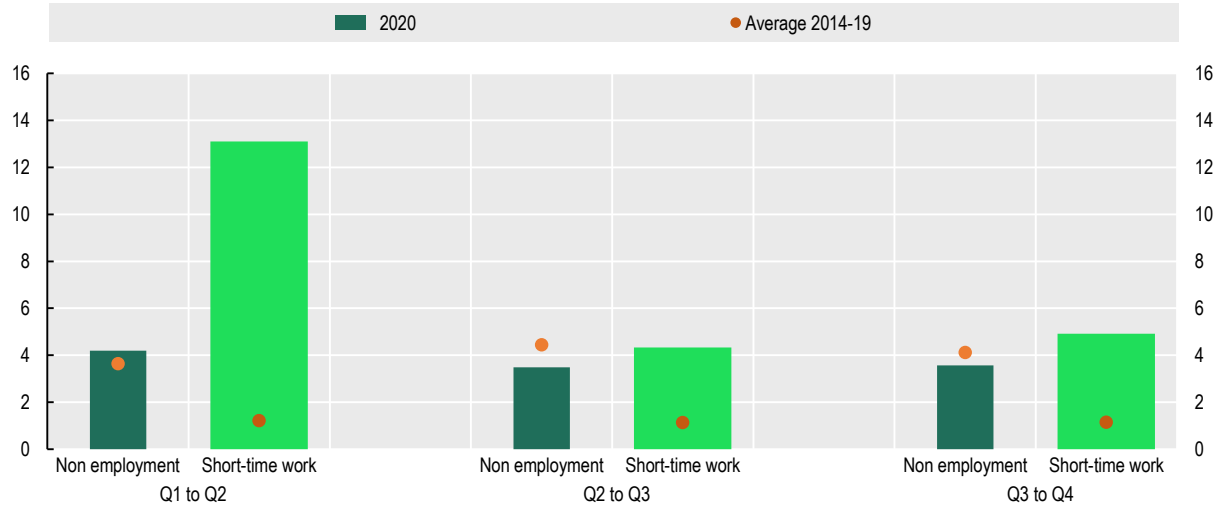
[4] To some extent, this is likely to reflect the narrowing of differences in the reduction in total hours worked as documented in Section 2. However, it is also likely to reflect the possibility that lowly educated workers were more likely to remain on STW support.

[5] There are several possible explanations for the stronger decline in the risk of non-employment for temporary workers in Q2 and Q3. In part, the result might be driven by selection, if at the onset of the crisis kept temporary workers that they were more likely to keep in the longer term. In addition, some firms actually saw an unexpected increase in demand during the crisis they might have dealt with by hiring and keeping more temporary workers.

The results do not point to clear differences across age groups in the extent to which STW has been used to shelter workers from job loss. None of the groups saw large increases in the risk of non-employment, while they experienced only relatively modest increases in STW (Figure A A.2). Even at the start of the crisis, the increase in the risk of job loss was similar across the age groups, keeping the differentials between them broadly in line with those from before the crisis. In particular, the probability of moving to non-employment from Q1 to Q2 was 2.4% for workers aged 29-54, 6.6% for older workers and 7.4% for workers under the age of 29. The probability of STW was similar between younger workers and those aged 29-54 (12.1% vs 12.9% respectively) and higher for older workers (14.5%). In later quarters, the differentials in the risk of job loss across age groups were generally smaller than before the crisis. The differences in the probability of STW remained small even in later quarters in 2020, with older employees continuing to be slightly more likely to be placed on the scheme (5.4% between Q3 and Q4) than young and prime-aged employees (4.8%).

## Figure 3.3. The massive use of STW kept the risk of losing employment at bay

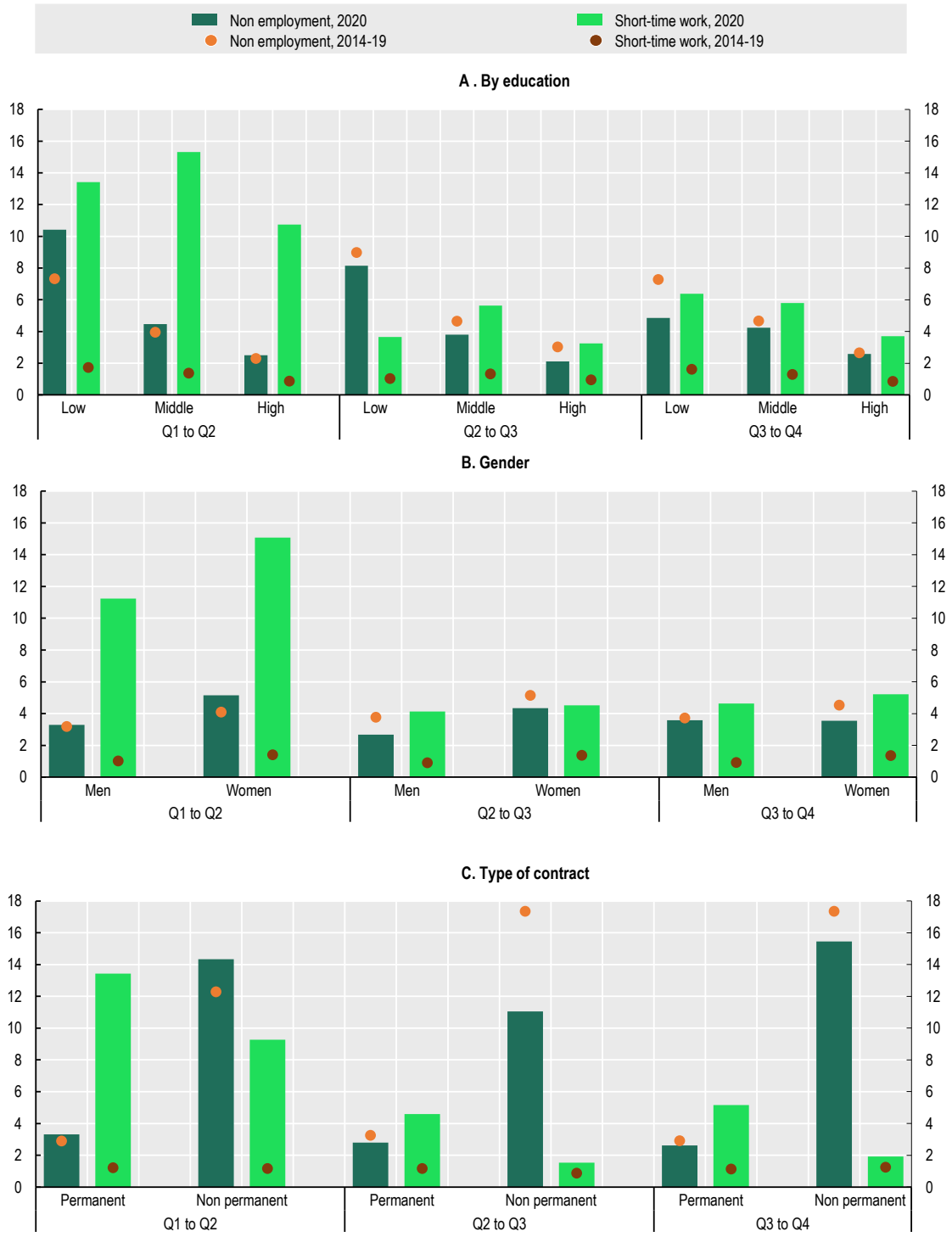
Probability that an employee moves to non-employment or short-time work between consecutive quarters




*Source*: OECD calculations based on the Swiss Labour Force Survey.

## Figure 3.4. At the start of the crisis, low educated workers were more likely to lose their job, and less likely to be on STW

Probability that an employee moves to non-employment or short-time work between consecutive quarters




*Source*: OECD calculations based on the Swiss Labour Force Survey.

### *3.2.2. Results conditional on personal and job characteristics*

*STW initially provided less protection to low educated workers and workers on temporary contracts*

30. In line with the results in Figure 3.4, the regression results suggest that, at the start of the crisis, the STW scheme provided less protection from employment loss for workers with lower education. Indeed, even conditional on job and personal characteristics, the low educated became more likely to move to non-employment than other workers compared to before the crisis (column 2 vs column 3 of Table 3.1), but were not more likely to be placed on STW[6] (column 5 of Table 3.1).

31. The characteristics of the jobs held by the low educated only account for a small part of their higher risk of job loss. Controlling for industry, occupation, and contract type only reduces the difference in the probability of losing employment between the low and the high educated from 7.5pp to 5.8pp[7] - a large difference that exceeds the average risk of job loss for the whole sample (4.2%). Low-educated workers were already more likely to lose their job than more educated workers between Q1 and Q2, but the difference in the five years before the crisis was smaller – at around 3pp.

32. The relative increase in the risk of losing the job for the low educated is unlikely to be driven by the fact that they were hit harder by the Covid-19 crisis in a way that is not fully captured by the specification adopted here.[8] Indeed, if that were the case and STW was used more to protect the most exposed workers, one would expect to see also an increase in the probability of low-educated workers being placed on STW relative to more educated workers. On the contrary, taken at face value, the statistically insignificant estimates point to a lower probability of STW for the low-educated conditional on personal and job characteristics (column 5 in Table 3.1). Overall, therefore, these results suggest that firms used STW less for the low educated – a result that might be expected due to the lower replacement cost of these workers as discussed in Section 1. .

33. Similarly, the regression estimates confirm that STW was used relatively less to protect employees on temporary contracts. These workers were much less likely to be placed on STW than permanent workers even after accounting for job and personal characteristics (-3.5pp) and saw a slight increase in the risk of non-employment relative to permanent workers (from -9pp before the crisis to -10pp). The similarity between this latter differential and the unconditional one reported in Figure 3.4 indicates that the higher risk of non-employment for workers on temporary contracts is not explained for by their personal characteristics nor by the industries and occupations in which they tend to work.

---

[6] As seen in Figure 3.4 differences in the probability of STW across groups for the period before the crisis are effectively negligible compared to those observed during the Covid-19 crisis. Hence, the before-after comparison is less informative substantively than for the probability of non-employment and is omitted from the tables with the econometric results.

[7] The controls for industry and occupation are meant to proxy for the differential exposure of workers to the crisis, which is in part driven by variation in the feasibility of telework across industries and occupations. The results are also robust to the inclusion of an indicator for whether the employee “teleworked in the 4 weeks before the interview” and the variable itself does not attract a statistically significant coefficient.

[8] As reported in Table 3.1, the specification includes dummies for occupations at the 1-digit level and dummies for industries at 1-digit level, but with some aggregations due to small cell sizes. Furthermore, the education result is also robust to the inclusion of interaction terms between industries and occupations, but the more parsimonious specification with the two included only in levels is presented as the preferred one due to the small size of most cells.

34. The regression results also confirm no clear indication that the scheme was used less to shelter particular groups of workers by gender, part-time status, and age.[9]

35. Women's higher risk of job loss at the start of the crisis was driven by the types of jobs they hold. In fact, their 2pp penalty disappears when controlling for contract type (temporary and part-time), industry, and occupation. Since before the crisis women were less likely than men to lose their job between Q1 and Q2, the results still points to a small deterioration of women's fortunes relative to men. However, they were also 3pp more likely to be placed on STW– even conditional on job characteristics – providing no support for the hypothesis that firms might have used the scheme less to protect women from the risk of non-employment.[10]

Part-time workers did not see a deterioration of the their fortunes relative to full-time workers when the crisis hit, remaining about 3pp more likely to lose their employment once personal and job characteristics are accounted for. The sizeable differential seen in Figure A A.2 for the probability of STW becomes negligible and statistically insignificant when conditioning on other variables. Overall, therefore, there is no indication that part-time workers were at a particular disadvantage when the crisis first hit.

36. The regression results also do not point to clear differences in the extent to which STW sheltered different age groups from the risk of unemployment. In fact, while young workers were 3pp less likely than older workers to be placed on STW, there is no indication that they also saw the relative increase in the risk of non-employment that would be expected if firms opted to use the scheme less for the group despite their exposure to the crisis. The differentials in the risk of non-employment between age groups remained broadly in line with those from before the crisis between Q1 and Q2.[11]

### Table 3.1. Conditional transition probabilities for employees between Q1 and Q2

Linear probability model of probability of becoming non-employed or being placed on STW.

| | Probability of non-employment | | | Probability of STW | |
|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) |
| | 2020 | 2020 | 2014-2019 | 2020 | 2020 |
| | b/se | b/se | b/se | b/se | b/se |
| Female | 0.017** | -0.002 | -0.009** | 0.036*** | 0.029** |
| | (0.006) | (0.009) | (0.003) | (0.009) | (0.011) |
| LowEdu | 0.075*** | 0.058*** | 0.031*** | 0.025 | -0.010 |
| | (0.016) | (0.017) | (0.006) | (0.017) | (0.020) |
| MiddleEdu | 0.010* | 0.006 | 0.006** | 0.045*** | 0.026** |
| | (0.005) | (0.006) | (0.003) | (0.010) | (0.011) |
| 15_29 | 0.014 | 0.006 | 0.004 | -0.029* | -0.033** |
| | (0.012) | (0.012) | (0.005) | (0.015) | (0.015) |
| 29_54 | -0.037*** | -0.033*** | -0.034*** | -0.014 | -0.014 |
| | (0.007) | (0.007) | (0.003) | (0.011) | (0.011) |
| Foreign-born | -0.003 | -0.000 | -0.005** | -0.003 | -0.012 |

[9] There were also no significant differences in the risk of losing employment or being on STW between foreign-born and native employees.

[10] Adams- Prassl et al. (2020[4]) also find that women were more likely to be furloughed in the UK and that this likely due to their additional care responsibilities, as evidenced by the fact that the gender gap is limited to women with children. However, further checks not reported here show that this is not the case in the Swiss data.

[11] The exclusion of the older group of employees from the regression does not change the results on the differentials between the other two age groups and only has a minor and substantively negligible impact on the estimates of the other coefficients of interest.

| | | | | | |
|---|---|---|---|---|---|
| | (0.007) | (0.007) | (0.003) | (0.010) | (0.010) |
| 1L.Part time | | 0.031*** | 0.031*** | | 0.003 |
| | | (0.008) | (0.003) | | (0.011) |
| 1L.stw | | 0.084* | 0.031** | | 0.115** |
| | | (0.044) | (0.012) | | (0.048) |
| 1L.temp | | 0.100*** | 0.090*** | | -0.035* |
| | | (0.019) | (0.007) | | (0.019) |
| Constant | 0.042*** | 0.032** | 0.031*** | 0.105*** | 0.049** |
| | (0.007) | (0.011) | (0.005) | (0.011) | (0.018) |
| Industry FE | No | Yes | Yes | No | Yes |
| Occupation FE | No | Yes | Yes | No | Yes |
| Year FE | No | No | Yes | No | No |
| r2 | 0.026 | 0.061 | 0.047 | 0.008 | 0.058 |
| N | 7956.000 | 7934.000 | 47531.000 | 7956.000 | 7934.000 |
| Average_depvar | 0.042 | 0.042 | 0.036 | 0.131 | 0.131 |

*Source*: OECD calculations based on the Swiss Labour Force Survey.

### *As the crisis lingered on, industry and occupations became more important determinants of STW use*

37. Job characteristics accounted for more of the variation in the probability of STW across workers in Q3 and Q4, as evidenced by the increase in the R2 of the specification with job characteristics relative to that including only personal characteristics (Table 3.2 and Table 3.3). This reflects the increasing concentration of STW in industries most directly affected by social-distancing measures over time (see Box 3.2), as many firms in other sectors learned to operate safely after the initial shock of the pandemic.

38. In general, the regression results offer little indication that STW provided less of a protection from the risk of job loss for any particular group after Q2. The only exception appears to be the low educated who, compared to the pre-crisis period, saw an increase in the probability of losing employment between Q2 and Q3 relative to both high and medium educated workers, but were not more likely to be placed on STW. Between Q3 and Q4, however, low educated employees were not more likely to end up in non-employment, conditional on both personal and job characteristics.

39. As already seen in the unconditional results in Figure 3.4, being on a temporary contract continued to carry a significantly higher risk of transitioning into non-employment both in Q3 and Q4, but the differentials with the other employees are actually smaller than in the five years before the crisis. However, temporary workers were 2pp less likely to be on STW than their permanent counterparts – conditional on other personal and job characteristics.[12] Overall, therefore, the evidence suggests that STW continued to play a significant role in protecting workers on temporary contracts, but other factors likely also contributed to the apparent decline in the risk of employment loss relative to permanent workers. In particular, workers who were still employed on temporary contracts in Q3 and Q4 were likely to be positively selected, while others would have been employed in firms experiencing (possibly temporary) increases in demand due to shifting consumption patterns during the pandemic. Both of these groups plausibly face a lower probability of employment loss than the average worker on a temporary contract before the pandemic.

40. Women continued to be more likely to lose their job than men between Q2 and Q3 (just under +2pp – vs no difference before the crisis) as a result of the types of jobs they hold. However, neither in Q3 nor in Q4 were they more likely to be placed on STW.

[12] Indeed, before the COVID-19 crisis, workers on temporary contracts were not eligible for STW. The small but positive take-up of STW for workers on temporary contracts in Figure 3.4 is likely to reflect measurement error.

41. There is some indication that employees who spent on time on STW were more likely to lose employment than employees who were not placed on STW, but the difference is never statistical significant. Unsurprisingly, having spent time on STW was strongly associated with remaining on STW in the next quarter (+13pp between Q2 and Q3 and +34pp between Q3 and Q4).[13] The next section focuses precisely on those who do get on STW, investigating differences in hours worked, job search and employment loss across groups of employees.

### Table 3.2. Conditional transition probabilities for employees between Q2 and Q3

Linear probability model of probability of becoming non-employed or being placed on STW.

| | Probability of non-employment | | | Probability of STW | |
|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) |
| | 2020 | 2020 | 2014-2019 | 2020 | 2020 |
| | b/se | b/se | b/se | b/se | b/se |
| Female | 0.014** | 0.004 | -0.004 | 0.004 | -0.001 |
| | (0.005) | (0.007) | (0.003) | (0.006) | (0.007) |
| LowEdu | 0.055*** | 0.045** | 0.041*** | -0.000 | -0.014 |
| | (0.012) | (0.014) | (0.006) | (0.009) | (0.011) |
| MiddleEdu | 0.010** | 0.010 | 0.011*** | 0.020** | 0.010 |
| | (0.005) | (0.006) | (0.003) | (0.006) | (0.007) |
| 15_29 | -0.010 | -0.016 | 0.017*** | -0.006 | -0.001 |
| | (0.010) | (0.010) | (0.005) | (0.010) | (0.010) |
| 29_54 | -0.037*** | -0.034*** | -0.037*** | -0.009 | -0.010 |
| | (0.007) | (0.007) | (0.003) | (0.007) | (0.007) |
| Foreign-born | -0.000 | -0.000 | -0.002 | 0.007 | 0.006 |
| | (0.005) | (0.005) | (0.003) | (0.007) | (0.006) |
| 1L.Part time | | 0.028*** | 0.032*** | | 0.018** |
| | | (0.007) | (0.003) | | (0.007) |
| 1L.stw | | 0.003 | 0.035** | | 0.131*** |
| | | (0.008) | (0.015) | | (0.015) |
| 1L.temp | | 0.079*** | 0.127*** | | -0.021** |
| | | (0.016) | (0.008) | | (0.008) |
| Constant | 0.042*** | 0.023** | 0.048*** | 0.037*** | 0.012 |
| | (0.007) | (0.010) | (0.006) | (0.007) | (0.012) |
| Industry FE | No | Yes | Yes | No | Yes |
| Occupation FE | No | Yes | Yes | No | Yes |
| Year FE | No | No | Yes | No | No |
| r2 | 0.017 | 0.041 | 0.063 | 0.003 | 0.076 |
| N | 7817.000 | 7796.000 | 47064.000 | 7817.000 | 7796.000 |
| Average_depvar | 0.034 | 0.034 | 0.044 | 0.043 | 0.043 |

*Source*: OECD calculations based on the Swiss Labour Force Survey.

[13] Excluding workers on STW from these regressions does not lead to substantial differences in the estimates obtained here. In part this might reflect their relatively small weight in the sample, but it is also an indication of the fact that the determinants of the transitions across quarters do not differ significantly between employees who are placed on STW and those who are not.

## Table 3.3. Conditional transition probabilities for employees between Q3 and Q4

Linear probability model of probability of becoming non-employed or being placed on STW.

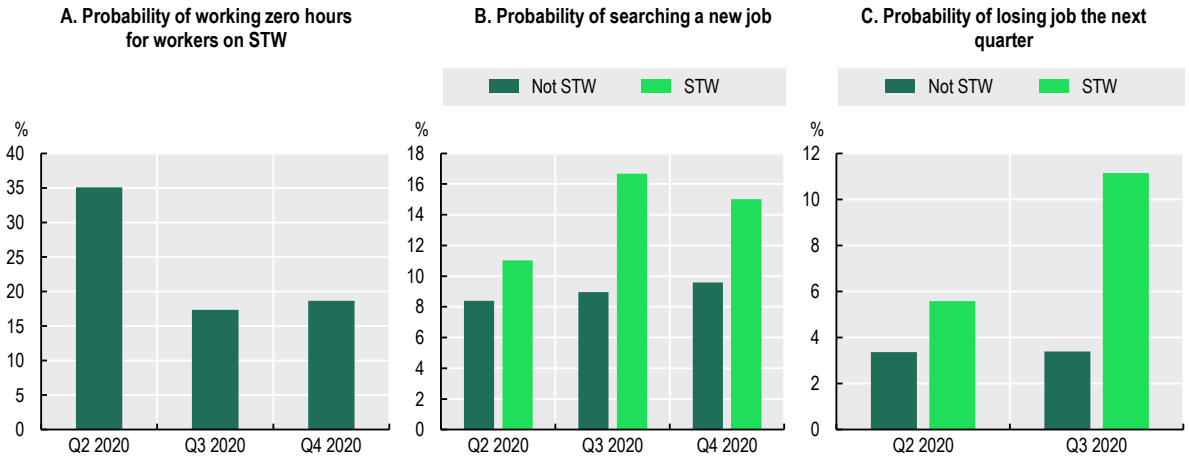
| | Probability of non-employment | | | Probability of STW | |
|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) |
| | 2020 | 2020 | 2014-2019 | 2020 | 2020 |
| | b/se | b/se | b/se | b/se | b/se |
| Female | -0.001 | -0.007 | -0.006** | 0.006 | 0.006 |
| | (0.005) | (0.007) | (0.003) | (0.006) | (0.007) |
| LowEdu | 0.017* | 0.003 | 0.021*** | 0.019 | -0.008 |
| | (0.010) | (0.012) | (0.006) | (0.013) | (0.014) |
| MiddleEdu | 0.010** | 0.006 | 0.006** | 0.022*** | 0.003 |
| | (0.005) | (0.006) | (0.003) | (0.006) | (0.007) |
| 15_29 | 0.011 | -0.003 | 0.003 | -0.005 | -0.002 |
| | (0.011) | (0.010) | (0.004) | (0.010) | (0.010) |
| 29_54 | -0.037*** | -0.033*** | -0.031*** | -0.006 | -0.004 |
| | (0.007) | (0.007) | (0.003) | (0.007) | (0.007) |
| Foreign-born | 0.005 | 0.001 | -0.006** | 0.019** | 0.012** |
| | (0.006) | (0.005) | (0.002) | (0.007) | (0.006) |
| 1L.Part time | | 0.014** | 0.023*** | | 0.003 |
| | | (0.007) | (0.003) | | (0.007) |
| 1L.stw | | 0.029 | 0.040** | | 0.340*** |
| | | (0.020) | (0.014) | | (0.032) |
| 1L.temp | | 0.123*** | 0.141*** | | -0.025** |
| | | (0.019) | (0.008) | | (0.009) |
| Constant | 0.048*** | 0.028** | 0.032*** | 0.031*** | 0.010 |
| | (0.007) | (0.010) | (0.005) | (0.008) | (0.012) |
| Industry FE | No | Yes | Yes | No | Yes |
| Occupation FE | No | Yes | Yes | No | Yes |
| Year FE | No | No | Yes | No | No |
| r2 | 0.015 | 0.055 | 0.064 | 0.005 | 0.170 |
| N | 7689.000 | 7675.000 | 46080.000 | 7689.000 | 7675.000 |
| Average_depvar | 0.036 | 0.035 | 0.041 | 0.049 | 0.049 |

*Source*: OECD calculations based on the Swiss Labour Force Survey.

# 4. Differences in the reduction in working time, the intensity of job search and the risk of subsequent job loss across groups of STW participants

42. This section documents differences between groups of STW participants in three areas: the probability that hours are reduced to zero, the probability of searching for a different job whilst on STW and the probability of job loss after a spell of STW. The average probabilities for all workers on STW are documented in Figure 4.1, while results on differences in these probabilities between worker groups are shown in Table 4.1.

### Figure 4.1. Probabilities of working zero hours, searching a new job and subsequent job loss




*Source*: OECD calculations based on the Swiss Labour Force Survey.

## 4.1. Workers with low levels of education and foreign-born workers saw larger reductions in working time and faced a higher risk of financial hardship and subsequent job loss

43. The majority of employees on STW only saw a partial reduction in hours worked (Figure 4.1, Panel A). The share of workers on STW at zero hours peaked at 35% in Q2 2020 and then declined to 17% in Q3, increasing only marginally to 19% in Q4 as the second wave of the pandemic unfolded. More detailed

analysis (not reported) further suggest that the average reduction in hours relative to usual hours for those on STW was -50% in Q2 and -37% in both Q3 and Q4.[14] Both the incidence of zero hours and the average reduction in working time suggest that STW was used more intensively at the start of the crisis.

44. Workers with low levels of education and foreign-born workers were more likely to be placed on zero hours than workers with higher levels of education and native workers (Table 4.1). As larger reduction in hours are associated with larger reductions in earnings, these workers are likely to have seen larger reductions in living standards over the crisis. Unlike many other countries with STW, the standard scheme in Switzerland does not impose a minimum benefit floor. To address this issue, in Q4 2020 Parliament decided to temporarily increase the replacement rate of hours not worked for low-wage workers to 100%.

45. The intensity with which STW is used not only reflects the extent to which firms can continue to operate in the context of the pandemic, but also their medium-term prospects. Workers on zero hours were more likely to lose their job in the subsequent quarter than workers whose hours were only reduced partially and were also more likely to look for another job while on STW (Table 4.1). This suggests that job-search support measures could be provided more effectively by targeting them to workers whose hours have been reduced to zero.

## 4.2. Employees on STW were more likely to search for a new job than those not on STW, with the difference growing as the crisis persisted

46. Currently, very little evidence is available on the job-search and switching behaviour of workers on STW schemes in general and in particular during the COVID-19 crisis. Survey evidence from the United Kingdom indicates that furloughed workers are pessimistic about the prospects of their jobs and that as many as 40% of them are either looking for a job or expect to do so in the coming months (Cominetti et al., 2021[5]; Adams-Prassl et al., 2020[6]).

47. The evidence in this paper for Switzerland suggests that employees on STW were more likely to search for a new job than those not on STW, with the difference becoming more pronounced as the crisis evolved (Figure 4.1, Panel B). The proportion of employees on STW who searched for jobs increased from 11% in Q2 to 17% in Q3 and 15% in Q4, while it increased from 8% to 10% among employees not on STW.[15] The higher level of job search among STW participants than other employees may reflect both worker concerns about the viability of their job in the medium-term and the greater time availability for job search among workers on reduced working time. The growing difference in job search activity between STW participants and other employees as the crisis evolved reflects at least to some extent concerns over the medium-term viability of jobs in firms that continued using STW. Indeed, the results show that workers who search for another job were more likely to find themselves without employment the following quarter, an indication that workers on STW might have a good sense of the level of precariousness they face.

48. The relative importance of job search among STW participants has a number of important implications for policy-makers. First of all, it points to the need to encourage or support job search among specific groups of STW participants. Encouraging job search may be particularly relevant for groups who display lowers of job search or whose job search efforts are less effective, resulting in a higher risk of

[14] However, these numbers have to be interpreted with caution since information on hours worked is missing for a large fraction of the already small sample raising doubts on the representativeness of the sample. The fraction of workers on STW with missing information on the number of actual hours worked was 40% in Q2 and 25% in Q3 and Q4.

[15] Employees on STW were more likely to search for a job even before the crisis – when overall on-the-job search was also higher. For example, pooling together data for all the Q2 of the five years before the crisis, 19% of employees on STW reported searching for a job against 10% among those not on STW.

subsequent job loss. Apart from older workers, who are likely to search less because of they use STW as a pathway into retirement, differences in job search intensity between worker groups are relatively small. Workers with intermediate and lower levels of education, natives and women may be somewhat less likely to search for another jobs while on STW.

49. (Table 4.1). Second, the relatively high level of job search among STW participants suggests that the potential negative impact of STW support on job reallocation might be less of an issue in practice than often assumed. This concern is based on the premise that STW discourages job search and hence makes it harder for firms to fill their vacancies. While by definition job search is lower among employed people than unemployed people (since active job search is one of the criteria for being qualified as unemployed), the present analysis suggests that job search among STW participants is far from negligible.

## 4.3. Employees on STW were more likely to lose their job in the next quarter than other employees, with the difference increasing over the course of 2020

50. Workers on STW were more likely to lose their job in the following quarter than other employees, with the difference increasing as the crisis evolved (Figure 4.1, Panel C). The proportion of employees on STW losing employment in the following quarter increased from 6% in Q2 to 11% in Q3, while it remained stable around 3% for the employees who were not placed on STW. This does *not* mean that STW was ineffective in protecting workers from the risk of job loss. Indeed, it is more likely to reflect the fact firms with greater financial difficulties were more likely to use STW. It is exactly this selection of firms into STW that makes it difficult to carefully evaluate the effectiveness of STW schemes using microdata. However, it does highlight that not all jobs supported by STW will survive. To limit the cost of job loss, it is important that policy-makers reach out to workers in jobs at risk of termination as early as possible and before they are terminated (OECD, 2021).

51. Since the number of workers on STW who lose their job in the following quarter remains relatively modest compared to the substantial number of workers on STW, it would make sense to target efforts to reach out to potential job losers based on their personal characteristics or the characteristics of their firms. The results reported in Table 4.1 do not suggest a major role for personal characteristics. Only older workers on STW appear more likely to become non-employed in the following quarter. While this could in principle reflect the possibility that older workers are more likely to be laid off, it is more likely to reflect the possibility that STW is used as a pathway towards early retirement.

52. Given the limited role played by personal characteristics, differences in the financial health of the firms may be key to identify jobs at risk of termination. Indeed, the large and positive coefficients attracted by the indicators for being on STW at zero hours and for job search are suggestive that workers in firms experiencing greater difficulties are more likely to lose their jobs. In addition, the positive coefficient associated with job search indicates that workers in these firms might require assistance in their effort to secure new employment.

### Table 4.1. Differences between groups of workers STW participants in the probabilities of subsequent job loss, job search and being placed on zero hours

Linear probability model

| | Probability of STW at zero hours | | | Probability of Job Search | | | Probability of non-employment at q+1 | |
|---|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| | 2020q2 | 2020q3 | 2020q4 | 2020q2 | 2020q3 | 2020q4 | 2020q2 | 2020q3 |
| | b/se | b/se | b/se | b/se | b/se | b/se | b/se | b/se |
| female | -0.007 | 0.036 | -0.036 | -0.009 | -0.087** | -0.050 | 0.031 | 0.022 |

| | Probability of STW at zero hours | | | Probability of Job Search | | | Probability of non-employment at q+1 | |
|---|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| | 2020q2 | 2020q3 | 2020q4 | 2020q2 | 2020q3 | 2020q4 | 2020q2 | 2020q3 |
| | b/se | b/se | b/se | b/se | b/se | b/se | b/se | b/se |
| | (0.026) | (0.039) | (0.039) | (0.022) | (0.040) | (0.036) | (0.022) | (0.055) |
| LowEdu | 0.115** | 0.143* | 0.079 | -0.049 | -0.098 | -0.005 | 0.040 | 0.056 |
| | (0.046) | (0.078) | (0.074) | (0.040) | (0.069) | (0.059) | (0.043) | (0.071) |
| MiddleEdu | 0.075** | 0.064* | -0.014 | -0.060** | -0.130** | 0.004 | -0.005 | -0.004 |
| | (0.026) | (0.038) | (0.042) | (0.021) | (0.043) | (0.041) | (0.020) | (0.056) |
| 15_29 | -0.017 | -0.023 | 0.038 | 0.106*** | 0.252*** | 0.153** | -0.076** | -0.006 |
| | (0.035) | (0.059) | (0.057) | (0.026) | (0.055) | (0.053) | (0.033) | (0.094) |
| 29_54 | -0.078** | -0.058 | -0.032 | 0.068*** | 0.074** | 0.074** | -0.092*** | -0.118** |
| | (0.027) | (0.042) | (0.042) | (0.017) | (0.029) | (0.033) | (0.026) | (0.050) |
| foreign | 0.104*** | 0.043 | 0.016 | 0.049** | 0.079** | 0.072* | -0.013 | -0.098** |
| | (0.024) | (0.034) | (0.038) | (0.019) | (0.036) | (0.037) | (0.017) | (0.048) |
| Part time | 0.179*** | 0.051 | 0.096** | 0.005 | 0.121** | 0.029 | -0.015 | 0.013 |
| | (0.026) | (0.040) | (0.039) | (0.021) | (0.040) | (0.036) | (0.021) | (0.056) |
| temp | 0.024 | 0.239** | -0.155** | 0.087** | 0.053 | 0.006 | 0.009 | -0.028 |
| | (0.050) | (0.101) | (0.054) | (0.042) | (0.110) | (0.086) | (0.035) | (0.137) |
| stw_zero | | | | 0.043** | 0.126** | 0.017 | 0.073** | 0.219** |
| | | | | (0.021) | (0.051) | (0.045) | (0.023) | (0.094) |
| jobsearch | | | | | | | 0.111** | 0.187** |
| | | | | | | | (0.043) | (0.086) |
| Constant | 0.044 | -0.042 | 0.152 | 0.058 | 0.162 | 0.124 | 0.090* | -0.125 |
| | (0.053) | (0.097) | (0.099) | (0.047) | (0.098) | (0.095) | (0.050) | (0.102) |
| Industry FE | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Occupation FE | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| r2 | 0.201 | 0.101 | 0.092 | 0.061 | 0.179 | 0.077 | 0.116 | 0.363 |
| N | 2095.000 | 677.000 | 678.000 | 2095.000 | 677.000 | 678.000 | 806.000 | 206.000 |
| Average_depvar | 0.351 | 0.173 | 0.187 | 0.110 | 0.168 | 0.149 | 0.054 | 0.112 |

*Source*: OECD calculations based on the Swiss Labour Force Survey.

# 5. Policy considerations

53. The Swiss labour market was remarkably resilient during the Covid-19 crisis, experiencing a smaller reduction in total hours worked than the OECD average and neighbouring countries. While the initial impact of the crisis was somewhat unequal - with younger and low educated workers experiencing a larger reduction in hours and a larger fraction of that through increased joblessness – the differences across groups were smaller in Switzerland than in most other OECD countries and became less important later as the crisis evolved.

54. The overall resilience of the Swiss labour market is in large part due to the use of its short time work scheme that helped to keep the risk of job loss for employees at bay. As the crisis hit and economic activity fell by an unprecedented amount, the risk of job loss for an employee remained subdued at 4% - only 1pp higher than in the five years before the crisis – while the probability of being placed on STW jumped to 13% from previously negligible levels. There is some indication that the scheme might have been less effective in preserving the jobs of the low educated and of workers on temporary contracts, but this evidence is generally limited to the first quarter of the crisis. Overall, the original design of the Swiss short time work scheme complemented with the additional measures to boost its use appears to have been fit for purpose.

55. As, over the course of 2020, the eye of the storm increasingly focused on the sectors more heavily affected by social distancing, the use of STW became more persistent and the fraction of jobs on support eventually terminated increased reaching over 10% in Q4 – while the overall risk of job loss remained stable. It is plausible that this trend will continue, as the use of the scheme continues to grow more concentrated in sectors and firms experiencing more likely to experience structural difficulties.

Going forward, the scheme needs to be adjusted to improve its targeting to jobs that remain viable in the medium term and complementary measures should be taken to support the workers who are likely to lose their job eventually.

## 5.1. The extensions to the STW scheme during the pandemic have helped to preserve many jobs, but need to be scaled back to prevent them from hindering job reallocation and restructuring during the recovery.

56. As the economy is recovering and firms are gradually resuming their activities, there is a growing risk that jobs that remain on STW support are no longer viable. This would not only impede restructuring, but also potentially hinder job creation in firms that would like to expand. Once most restrictions are lifted, the temporary extensions to the short-time working compensation scheme need to be wound back and firms' financial participation to the cost of the scheme increased. This would mean that firms cover two to three working days each month which tends to correspond to about 20% of the cost of hours of not worked for a typical reduction in working time. Similarly the maximum duration of STW support should be brought back from 24 to 12 months, as overly lengthy support risks merely postponing job losses rather than preventing them.

## 5.2. While many jobs were preserved by STW, some of them were terminated eventually or remain at risk of being terminated, highlighting the importance of measures to support job-search and training among workers in subsidised jobs.

57. The evidence in this paper shows that some of the jobs supported by the STW scheme are eventually terminated. Some workers anticipate this by looking for another job, especially when their hours are reduced to zero, but even those who search often end up in non-employment, while others, particularly older workers, are less likely to look for another job. Workers on STW can already benefit from the support of the public employment services for job–search assistance, career guidance and counselling and are systematically informed of this when agreeing to participate in STW. However, more could be done to encourage effective job search among workers on STW, or to increase their employability. The regional placement offices could actively reach out to workers who have been on protracted spells of STW. Virtual seminars could be organised to inform workers about the nature of support available. These could be tailored to workers in specific industries and regions where firms are more likely to have structural problems or to older workers who may have little knowledge of the support available to start a new career. The employability of workers could be promoted by incentivising training while on STW. While workers on STW are allowed to participate in training, Switzerland does not provide any financial incentives to do so, in contrast to some of its neighbouring countries such as France and Germany. In France, about one in five workers on *activite partielle* was participating in training in November 2020 (OECD, 2021[2]). Financial incentives could cover part of the costs of hours not worked or the provision of training itself.

## 5.3. The use of STW and the risk of job loss vary across groups of workers, as firms tend to have weaker incentives of placing low-skilled workers and workers on temporary contracts on reduced working time, highlighting the importance of complementary measures to support job losers.

58. Young, low educated workers and those on temporary contracts have fared worse than other groups in Switzerland. For the low educated and workers on temporary contracts, in particular, there is some indication that STW was used less to shelter them from the risk of job loss. As emphasised in OECD (2021), firms have weaker incentives to hoard workers with lower replacement costs – which would typically be younger, less educated workers. However, these differences were smaller in Switzerland than most other countries with short-time work schemes. The temporary removal of the waiting period and the extension of eligibility for STW to workers on temporary contracts in response to the COVID-19 crisis may have helped to contain such differences. The extension of eligibility to workers on temporary contracts may have been particularly important to ensure that young workers who are initially hired on fixed-term contracts for screening purposes did not bear a disproportionate cost of adverse temporary shocks.

59. Future increases in firms' participation to the cost of the scheme, including through the re-introduction of the waiting period, could however increase the differences in the probability of being placed on STW observed during the crisis. This highlights the importance of complementary measures to support job losers. While, active labour market policy programs are well provisioned and flexible, there are large differences in placement outcomes across cantons. Past evaluations highlight the importance of establishing a clear placement strategy for jobseekers in each canton as cantons where it was missing tended to underperform. The use of targeted measures for specific groups of jobseekers varies widely across cantons and could be made more widespread as they have been shown to yield positive outcomes in terms of placement (Federal Council, 2016).

60. While the present paper already presents a number of relevant policy insights on the impact of the COVID-19 crisis on different groups of workers and the role of short-time work in Switzerland, it is also

clear that the analysis can only be considered preliminary and its insights tentative given the data limitations, the short time period since the start of the crisis considered and the still evolving nature of the pandemic. Indeed, understanding the role of short-time work across different socio-economic groups remains an important avenue for research, not just in the Swiss context, but also in other countries. This requires detailed micro data, ideally based on administrative sources that allow following individuals over time, along the lines as was done by Kopp and Siegenthaler (2021[3]) to evaluate the role of short-time work during the global financial crisis. Such an evaluation could place particular emphasis on the effects of short-time across different groups of workers.

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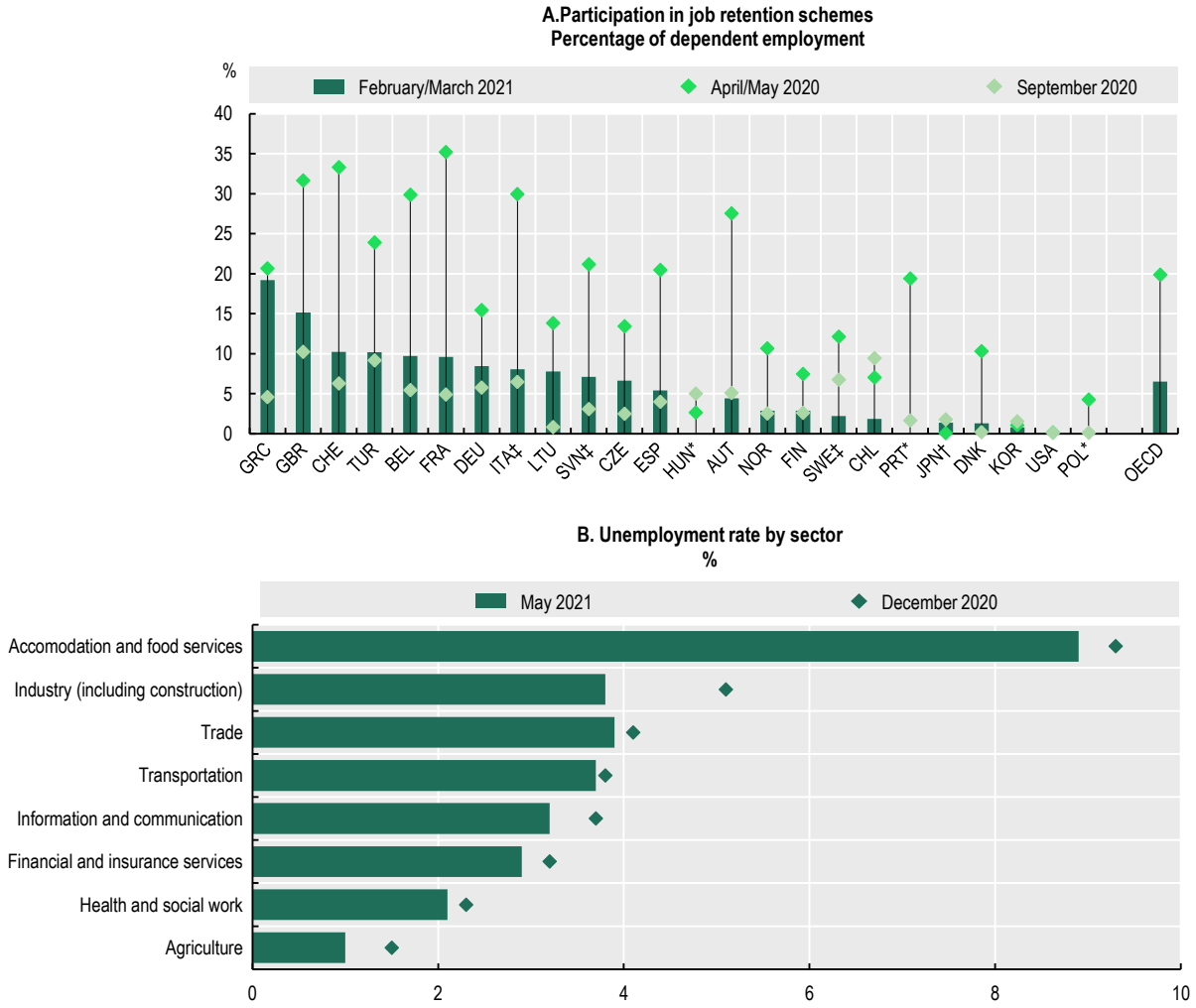
# Annex A. Additional information

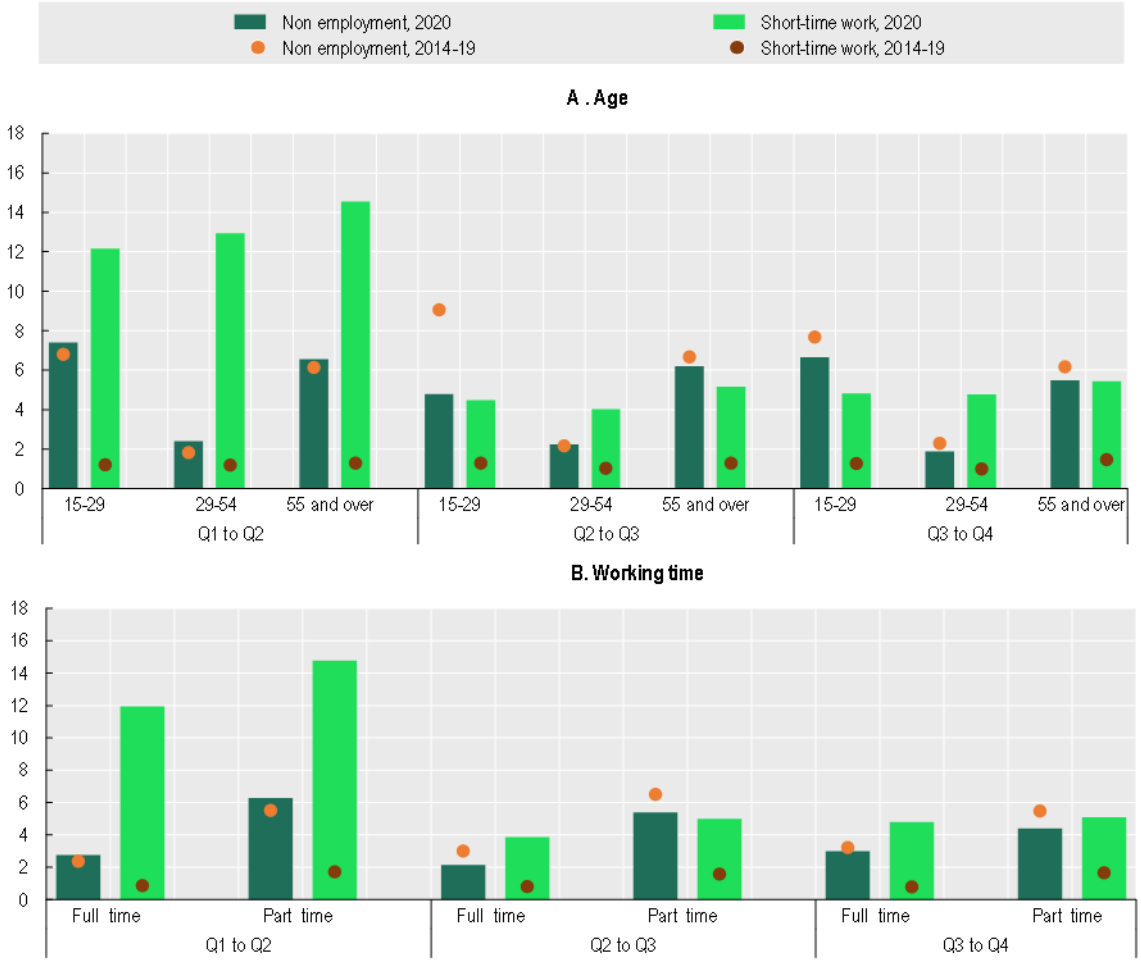
## Figure A A.1. Background statistics




*Note*: Panel A: Take-up rates are calculated as a percentage of all dependent employees in Q1 2020. ‡ Italy, Slovenia and Sweden: Latest data refer to December 2020.*Hungary, Poland and Portugal: Data for December unavailable. †Japan: estimate based on the total use during the reference period and the assumption that support is provided for no more than three months during this period, the United States: Refer to short-time compensation benefits. Sorted by latest available data.
*Source:* OECD Employment Outlook 2021: Navigating the COVID-19 Crisis and Recovery, https://doi.org/10.1787/5a700c4b-en

## Figure A A.2. Estimates of transition probabilities from STW

Probability that an employee moves to non-employment or short-time work between consecutive quarters




*Source*: OECD calculations based on the Swiss Labour Force Survey.