Gender Effects of the Covid-19 Pandemic in the Swiss Labor Market

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Abstract

We use the Swiss Labor Force Survey data to study how the Covid-19 pandemic affected the labor market activity of men and women. We employ a double and triple diff identification to test whether the gender gap in labor market outcomes, such as employment, unemployment and non-active status, reliance on short-time working scheme, hours worked and family leave, have changed during the Covid-19 pandemic. Our results suggest that women have been more likely to exit the labor market altogether or to use short-time working schemes than their male counterparts. Contrary to the evidence in other countries, family related factors play a positive role in improving female participation in the Swiss labor market during the pandemic. Occupation type and whether remote working is feasible play an important role for labor market outcomes and gender gap during the pandemic.

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1 Introduction

The Covid-19 pandemic and the undertaken containment measures have led to a major economic recession worldwide. The pandemic has also magnified inequalities in many countries. Previous studies (Alon et al. (2020), Collins et al. (2021), Bluedorn et al. (2021) among others) reveal that gender inequality in the labor market, in particular, has increased during the the Covid-19 crisis. For this reason, the term "she-cession" has been used by researchers and the media to refer to the coronavirus-induced recession started in 2020. Our paper is inspired by these novel findings on the gendered consequences of the Covid-19 pandemic in the labor market. We aim to understand whether Switzerland has also experienced a she-cession during the Covid-19 crisis and explore which factors can account for it.

We start by documenting the gender gap in labor market outcomes in terms of indicators such as labor market participation, unemployment, working hours, leaves of absence, and short-time work, and examining whether the gap has changed during the Covid-19 pandemic. To do this, we employ a diff-in-diff approach on the Swiss labor force survey data and control for usual labor market confounders, including age, education, location, sector, and occupation. Our results suggest a significant and persistent increase in the gender gap in labor market non-participation (extensive margin), but no change in the hours worked gap (intensive margin), which is in line with findings in other countries (Bluedorn et al. (2021)). However, we find no evidence of a gender gap in unemployment in Switzerland. This may be related to the widespread usage of short-time work, a temporary reduction of working activity while maintaining the employment relationship paid by the government. In fact, we provide evidence that women have been more likely to be put on short-time work than men during Covid-19. To fully understand the gender effects, we also look into labor market flows and find two factors contributing to the increased gender gap of being non-active. First, the transition from unemployment to inactivity increases more for women than men upon impact. Second, women tend to remain non-active during the recovery.

We then analyze how family characteristics influence the evolution of the gender gap during Covid-19. We find that being married or having children has been associated with a reduction of the non-active and short-time work gender gaps during the pandemic. The result pertaining to the presence of children contrasts with the effects documented in other countries. For example, Fabrizio et al. (2021) and Zamarro and Prados (2021) report a disproportionate negative effect of the crisis on mothers in the U.S. due to school closures, Andrew et al. (2020) find a similar effect in the U.K. Several factors can explain the remarkable result in Switzerland. First, the large recourse to short-time work let women keep their employment contract with a reduced workload, thus allowing caring for children. Second, women in Switzerland enjoy a higher flexibility on the labor market. Women in Switzerland, and especially mothers,

often work part-time, which makes it easier to combine work and childcare during the pandemic, especially if the partner is also working from home. Third, school closures in Switzerland were considerably shorter than in the U.K or the U.S., allowing mothers a swift return to work. Finally, the result could be driven by a family-insurance mechanism, where women keep or take new employment or increase their working hours to make up for the potential income loss of their partners. The last reason helps explain why marriage played a positive role in motivating women to work during the pandemic.

We then turn our attention to the role of occupation and telework availability in explaining the gender gap. After controlling for Covid-19 occupation- and sector-specific effects, we find that the non-active gender gap disappears, suggesting that the differential effect is mainly due to the fact that women work more than men in sectors and occupations hit hard by the pandemic. After categorizing occupations by telework availability, we find that the non-active gender gap disappears for respondents with highly-teleworkable jobs while the gap persists among respondents with low teleworkable jobs. This result is in line with the findings in Alon et al. (2021) and Shibata (2020), who argue that the increase of telework availability can reduce gender inequalities in the labor market. Our results moreover indicate that the narrowing of the gender gap in working hours is mainly driven by high-teleworkable occupations.

Finally, we provide some suggestive evidence on the increased gender income gap between 2019 and 2020. Women having jobs with low telework availability have been more severely affected by the pandemic and are more likely to experience an income loss than their male counterparts. This may contribute to an increase in the overall gender income gap.

The rest of the paper is organized as follows. Section 2 reviews the relevant literature. Section 3 and 4 describe the labor force survey data and our regression design. Section 5 presents changes in labor market status. Section 6 discusses the reliance on short-time working scheme. Section 7 focuses on the effects on working behavior of employed respondents. Section 8 shows changes in gender pay gap. Section 9 concludes.

2 Literature

Our work relates to the growing literature analyzing the labor market impact of the Covid-19 pandemic. Cajner et al. (2020a), Bick and Blandin (2020), Coibion et al. (2020), Forsythe et al. (2020), Juranek et al. (2020) and Gupta et al. (2020) provide empirical evidences that this pandemic has resulted in large employment losses and substantial declines in working hours. A subset of this literature focuses on the heterogeneous effects of the Covid-19 crisis across sectors, occupations and worker characteristics (e.g., Leibovici et al. (2020), Mongey and Weinberg (2020), Montenovo

et al. (2020), Cajner et al. (2020b) and Benzeval et al. (2020)). Our analysis confirms a large negative effect of the Covid-19 crisis on the Swiss labor market, but we rather focus on the differential impact for male and female workers. Given that Switzerland is characterized by both a high female participation rate and a high female part-time employment rate, it is interesting to investigate the gender effects of the Covid-19 pandemic and compare it with other countries. Evidence derived from the Swiss Labor Force Survey shows an increased gender gap in non-participation during Covid-19, which is broadly in line with recent work on the disproportionately negative impact of the pandemic on women (Zamarro et al. (2020); Alon et al. (2020); Couch et al. (2020) and Albanesi and Kim (2021)). Differently, we observe a decreased gender gap in work hours and no significant change in the gender gap of being unemployed during the crisis.

To better understand the results, we turn to discussions on why the pandemic may disproportionately affect women. An important channel that has been documented in the previous studies is that women bear the brunt of increased childcare needs due to school and daycare closures (Del Boca et al. (2020), Queisser et al. (2020)). Alon et al. (2020) find that there are more single mothers than single fathers, and among couples, women have a lower occupancy rate. Therefore more women than men will be strongly affected by the rise in child care needs. Collins et al. (2021) use the US Current Population Survey to examine the impact of the Covid-19 pandemic on working hours and find that mothers with young children have reduced their working hours four to five times more than fathers. Farré et al. (2020), and Sevilla and Smith (2020) find although the childcare allocation within households may have slightly improved during the crisis, most of the burden still falls on the mother, making it harder for them to participate in the labor market. Our results for Switzerland are different from most previous findings, as we find that motherhood contributes to decreasing the gender gap during the Covid-19 crisis. In the context of Switzerland, a high female part-time employment rate may give women more flexibility to hold on to their jobs or work more to compensate for their partner's income loss. So far, the pre-pandemic female employment conditions have received little attention.

Another important channel for the larger effects on women's labor market outcomes is that women may be over-represented in the most affected sectors and occupations. Mongey and Weinberg (2020) suggest that social distancing rules had the biggest effect on more female-dominated sectors, namely the service industry. Alon et al. (2021) provide a decomposition analysis and show that the differential occupation distribution accounts for 12 percent of the gender gap in the employment decline. Our results are consistent with these findings. We document that the gender gap in non-activity status is mainly explained by gender differences in the distribution across occupations and sectors. Also, we classify occupations by the possibility to work from home and find that women in low teleworkable occupations show a higher exiting rate

during the pandemic, explaining the increased gender gap in non-participation.

Finally, this paper relates to the literature on the effectiveness of labor market policies in cushioning the economic consequences of Covid-19. During this crisis, a prominent feature in policy has been the introduction or expansion of furloughing and short-time-working schemes. Kopp and Siegenthaler (2017), Hijzen and Venn (2011) and Abraham and Houseman (2014) find that short-time work schemes helped stabilizing employment during the Great Recession. Adams-Prassl et al. (2020) compare the impact of the Covid-19 crisis in the U.K., the U.S. (furloughing schemes), and Germany (short-time working schemes), and they show that German employees were much less affected by the crisis. We document that the short-time work policy has been used substantially in Switzerland during Covid-19 and, however, unequally across gender; women were significantly more likely to be put on it than men.

3 Data and Descriptive Statistics

The Swiss Labor Force Survey (SLFS) is a quarterly survey conducted in Switzerland since 1991 among residents aged 15 and older. It aims to provide information on the structure of the labor force and employment behavior patterns. The survey is carried out by telephone on a representative sample of the population (around 120'000 annual interviews). The SLFS sample is a 4-wave rotating panel: the persons who participate in the survey are interviewed four times throughout 15 months.[1] The SLFS includes questions on current and previous employment, unemployment, working conditions, occupation, salary, job seeking, as well as general questions on education, household composition and other demographic characteristics. Our dataset includes quarterly data for the period 2019Q1 to 2020Q4; it contains a total of 231'667 observations, i.e., approximately 30'000 observations per quarter.

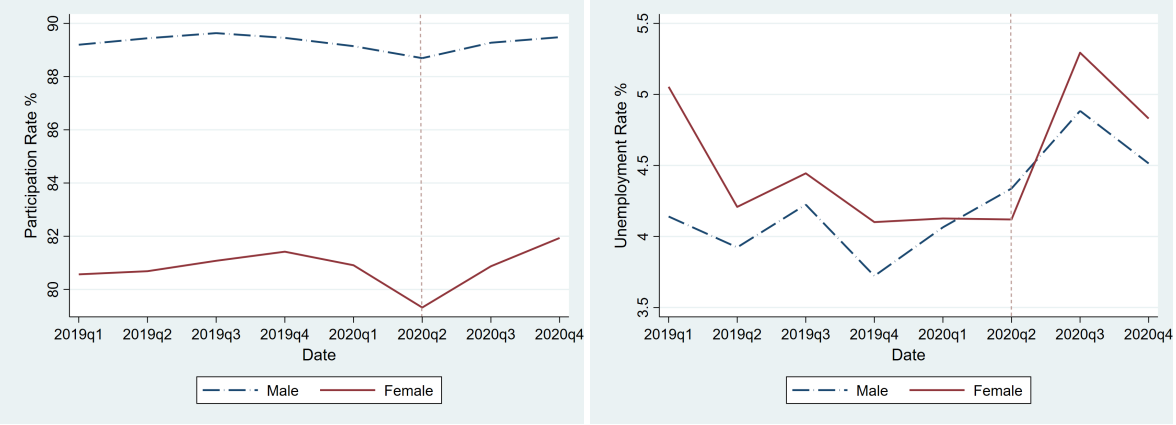
Figure 1 reports the dynamics of labor market status by gender between 2019Q1 and 2020Q4, and it displays asymmetric effects of the pandemic on men and women. Female labor market participation fell sharply in the second quarter of 2020 and returned to its pre-pandemic level by the end of the year. In contrast, the reduction in male labor market participation is less severe. Interestingly, the female unemployment rate did not increase in 2020Q2, but it jumped by 1.2 percentage points in 2020Q3; on the other hand, the male unemployment rate increased continuously over the two quarters. This evidence suggests that women were more likely than men to drop out of the labor market at the height of the pandemic; our paper sheds light on the reasons behind this gender-specific labor market response.

We use the KOF stringency index[2], which records the stringency of Covid-19 policy

[1] The interviews are conducted with a gap of 3 months between the first and the second interview, 9 months between the second and the third, and 3 months again between the third and the fourth.

[2] For details on the KOF Swiss Economic Institute Stringency Index, see https://kof.ethz.ch/

Figure 1: Labor Market Status by Gender



(a) Participation Rate

(b) Unemployment Rate

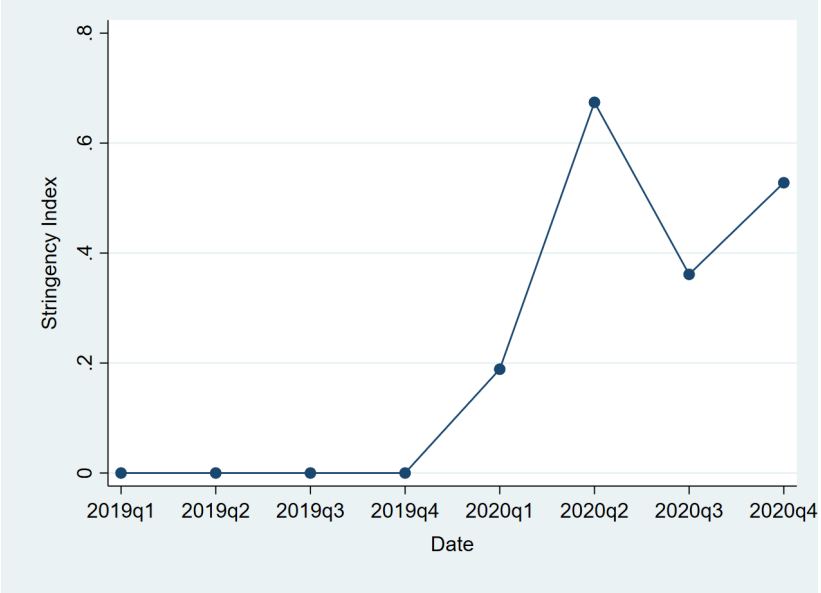
Notes: The participation rate is measured as the number of working-age respondents who are in the labor force as a percentage of the total number of working-age respondents. The unemployment rate is calculated as the number of working-age respondents who are currently unemployed as a percentage of the total number of working-age respondents in the labor force. These indicators are broken down by gender group and are measured as a percentage of each gender group.

measures in Switzerland, to capture the Covid-19 pandemic in our setting. The index is available at the cantonal level daily; we construct the national index as the (population) weighted average of the cantonal indices and convert daily to quarterly values by averaging. The value of the index ranges from 0 (= no measures) to 100 (= full lockdown); details on how to calculate the stringency index are provided in section 10. The national KOF stringency index is normalized into a scale of 1 and shown in Figure 2; stringency measures peaked in the second quarter of 2020, reaching the value of 0.75; they were reduced in the third quarter and raised again in the fourth quarter of 2020.

Figure 3 reports the female labor market participation rate in Switzerland and other OECD countries. It shows that the Swiss female participation rate is high in international comparison: it is the third highest of all OECD countries and is about 15 percentage points above the OECD average. A distinctive feature of the Swiss labor market is however the widespread use of part-time work, especially for women. The percentage of employees (both male and female) in part-time work in 2019 was on average 16.7% in OECD countries, while it was 26.9% in Switzerland. Figure 4 indicates that the percent of part-time workers among women employees in Switzerland is particularly high (44.9%) and is the second largest of all OECD countries. These facts suggest that women in Switzerland benefit from an increased flexibility in their employment. The possibility to work part-time allows work-life balance and encourages the participation of women. This is particularly true for

en/forecasts-and-indicators/indicators/kof-stringency-index.html

Figure 2: KOF Stringency Index



Notes: The index record the stringency of Covid-19 policy measures in Switzerland. It is constructed as the (population) weighted average of the cantonal indexes. The values range from 0 (=no measures) to 1 (=full lockdown). Source: KOF Swiss Economic Institute.

mothers. In our sample, we find that 35% of employed women without children work part-time, while this percentage increases to 65% for mothers of children between 0 and 6 and 63% for mothers of 7-14 year-old children.

4 Regression Design

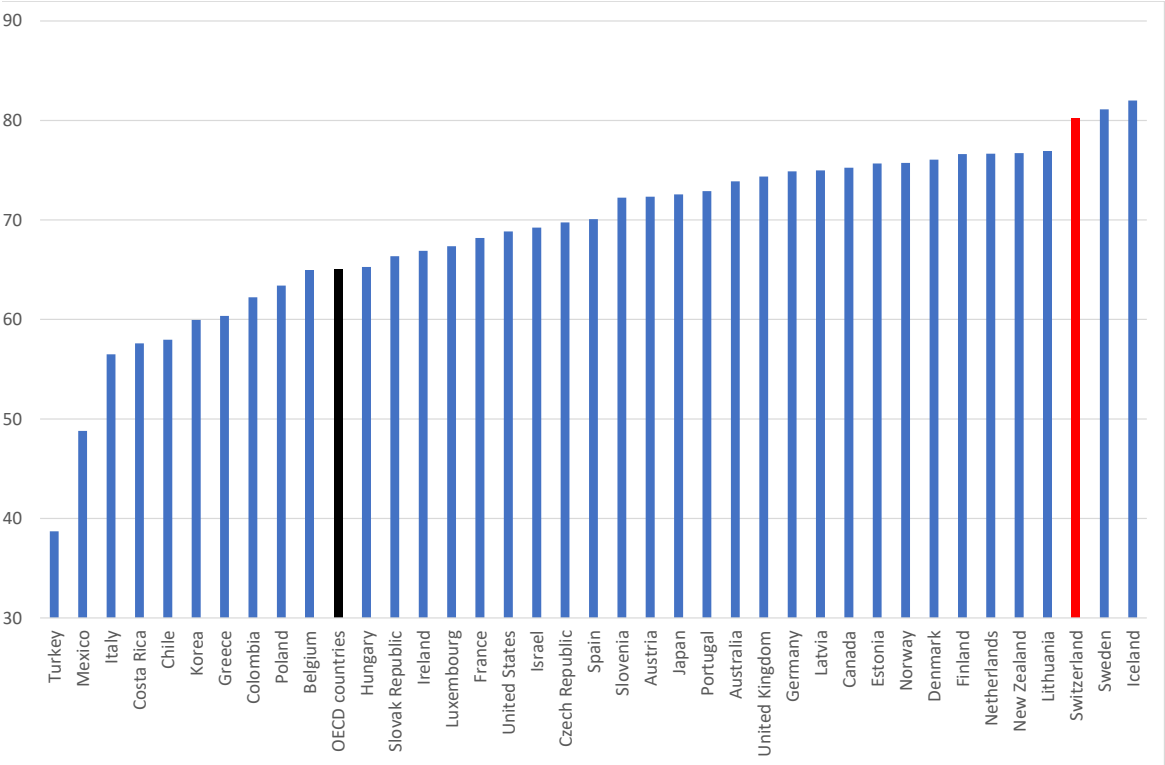
We use a diff-in-diff specification to study whether Covid-19 impacted differently men and women on the labor market. The typical regression specification looks as follows:

$$y_{i,t} = \alpha + \gamma_1 female_i + \gamma_2 CovInd_t + \gamma_{cov} female_i \times CovInd_t + \gamma_3 X_{i,t} + \epsilon_{i,t}, \qquad (1)$$

where $y_{i,t}$ is the dependent variable of interest, including labor market status, short-time work, searching for jobs, having worked last week, working hours, and taking family leave. $female_i$ is a binary variable equal to one if the respondent is female. $CovInd_t$ is the Covid-19 stringency index shown in Figure 2;[3] $X_{i,t}$ is a vector of covariates, including age cohort, indicators for occupation, location, sector of economic activity and the level of education. Suppose $y_{i,t}$ is the labor market status of the respondent, which is set as a dummy equal to one for employed and zero for unemployed and non-active; then γ_1 measures the differential likelihood of female respondents to

[3]We calculate the correlation matrix for the Cantonal stringency index, and all the coefficients are above 0.95, showing a high degree of similarity of Covid-19 policies across cantons. Therefore, we use a national stringency index instead of a cantonal one.

Figure 3: Female labor market participation (2019)



Notes: Data from the OECD labor force statistics. The labor force participation rates is calculated as the labour force divided by the total working-age population (15-64).

be employed relative to male respondents and γ_2 is the differential likelihood of both male and female respondents to be employed during the Covid-19 crisis relative to normal times; γ_{cov} is our parameter of interest, it captures the employment gender gap differential caused by Covid-19.[4]

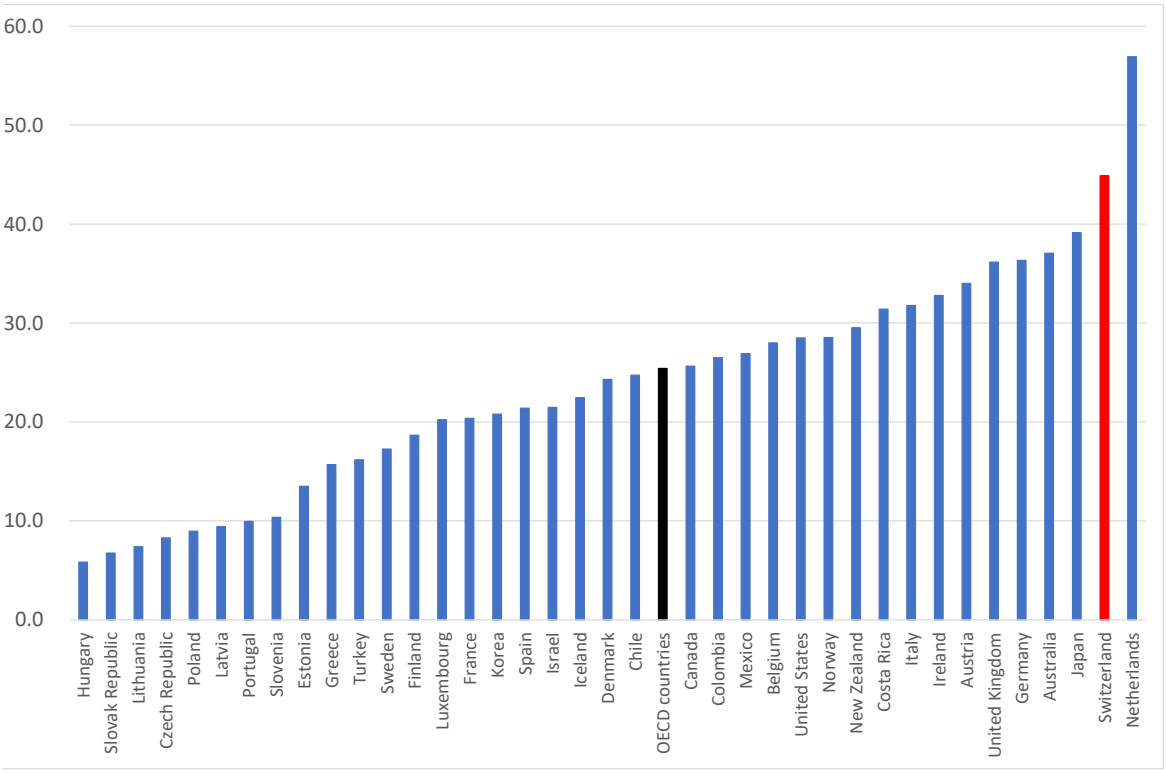
To capture the effect of a specific factor z_i on female's differential likelihood of being employed during Covid-19, we use a triple diff regression of the following type:

$$\begin{aligned} y_{i,t} =& \alpha + \gamma_1 female_i + \gamma_2 CovInd_t + \gamma_3 z_{i,t} + \gamma_4 female_i \times z_{i,t} + \gamma_5 CovInd_t \times z_{i,t} \\ &+ \gamma_{cov} female_i \times CovInd_t + \gamma_{cov,z} female_i \times CovInd_t \times z_{i,t} + \gamma_6 X_{i,t} + \epsilon_{i,t}, \end{aligned} \quad (2)$$

where $z_{i,t}$ is the specific independent variable of interest, including civil status, presence of children in the household or teleworking availability. $\gamma_{cov,z}$ captures the differential effect of $z_{i,t}$ on a female's differential likelihood of being employed during Covid-19.

[4]To check the robustness of our estimations, we replace the KOF stringency index by a Covid dummy that equals one for quarters two, three and four of 2020 and report the results in section 11.

Figure 4: Women employed in part-time work, as percent of total employed women (2019)



Notes: Data (for all countries except the United States) from the OECD labor force statistics, data for the United States comes from the Current Population Survey. The part-time rate is calculated as the number of employed women working less than 30 hours (35 for the United States) weekly over the total number of employed women.

5 Covid-19 and Labor Market Status

We start our empirical analysis by studying how the Covid-19 pandemic impacted the labor market status of male and female respondents and which characteristics help explain the differential effects.

5.1 Effect of Gender and Covid-19 on Labor Market Status

Table 1 presents the estimates based on regression (1) with labor market status as the dependent variables. Labor market status is set as a dummy with value 1 if the person is employed (column 1), unemployed (column 2), or non-active (column 3); we control for the respondent's age, level of education, canton of residence, type of occupation (ISCO code) and the type of economic activity as measured by NOGA 1st level code.[5]

[5]For some of the survey respondents, the information on occupation and sector is not available; In particular, among the non-active respondents, only about half of the respondents report these information. We ensure that we keep all participants in the regression by inputting a generic code

In this regression, we only consider working-age population, i.e. respondents between age 15 and 64.

Several findings in Table 1 are worth mentioning. First, the Covid-19 pandemic has decreased the likelihood of employment and increased that of being non-active for male as well as female respondents. Second, women are more likely to exit the labor market and be non-active during Covid-19 relative to men. Since we do not control for the respondent's previous labor market status,[6] this suggests that women either become more likely to quit the labor market or become less likely to reenter it during the pandemic. Third, lockdown measures raise the probability of being unemployed and do not affect that of women disproportionately. Fourth, in normal times, women are less likely to be employed and more likely to be non-active than men. Overall, these findings confirm the well-known lower female participation in the Swiss labor market and suggest significantly higher exit rates for women during Covid-19.

Table 1: Covid-19 and Labor Market Status

	Employed	Unemployed	Non-active
female	-0.0408***	-0.00166	0.0412***
	(0.00232)	(0.00139)	(0.00205)
CovInd	-0.0165***	0.00556***	0.0117***
	(0.00278)	(0.00211)	(0.00252)
female × CovInd	-0.00165	-0.00461	0.00583*
	(0.00385)	(0.00292)	(0.00350)
constant	0.727***	0.0291	0.243***
	(0.0396)	(0.0233)	(0.0350)
Age FE	YES	YES	YES
Canton FE	YES	YES	YES
Education FE	YES	YES	YES
NOGA FE	YES	YES	YES
ISCO FE	YES	YES	YES
Observations	186881	186881	186881
R^2	0.417	0.0423	0.459

Notes: * p<0.1, ** p<0.05, *** p<0.01.
Estimates from regression (1) of labor market status on a constant, female dummy (1 for women and 0 otherwise), Covid-19 stringency index and its intersection with the female dummy. Sample includes respondents aged 15 to 64. Regressions estimated with linear probability model, including random effects. Robust standard errors in parentheses.

To further analyze how the probability of being non-active evolves over time for

for all missing observations of these two variables. Results are robust to only including participants with information sector and occupation, as shows in Appendix section 11.

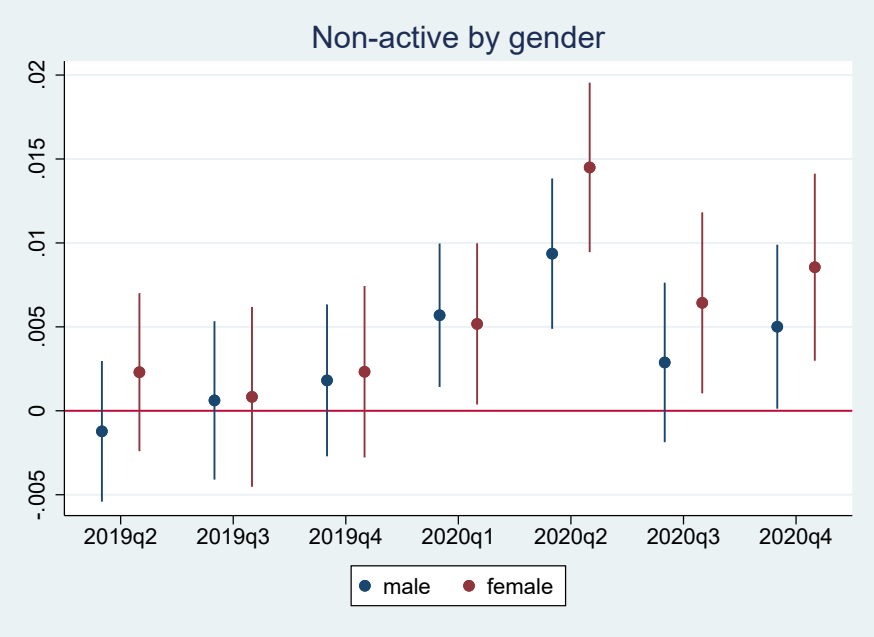
[6]We restrict our sample to respondents for whom we know previous labor market statuses and show how the pandemic affects their labor market transitions between different statuses in Table 2

men and women, we run the following regression:

$$y_{i,t} = \alpha + \sum_{s=2019Q2}^{2020Q4} \gamma_{cov,s} Q_{s,t} + \gamma_2 X_{i,t} + \epsilon_{i,t}, \tag{3}$$

where $y_{i,t}$ is the dummy for being non-active, $Q_{s,t}$ are quarterly dummies and $X_{i,t}$ is the same vector of covariates as in regression (1). The coefficients of interest, $\gamma_{cov,s}$ indicate the differential propensity to be non-active over the quarters compared to the baseline level in 2019Q1. The regression is run separately for male and female respondents, and the coefficient estimates of the quarterly dummies are plotted in Figure 5. First, we observe that the probability of being non-active increased during Covid-19 and peaked in the second quarter of 2020, when the strictest lockdown measures were adopted. Second, there is a gender gap of being non-active during the Covid-19 quarters. In the second quarter of 2020, men were 0.9% more likely to be non-active relative to 2019Q1, while women were about 1.5% more likely to be so. The non-active probability for both men and women falls in 2020Q3, when sanitary measures were relaxed, but increases again in quarter 4, following the resurgence of the pandemic in the fall.

Figure 5: Non-active Over Time for Men and Women



Notes: Estimates from regression (3) of non-active dummy on quarterly dummies, run separately for men (blue) and women (red), with 95% confidence intervals. Regressions estimated with linear probability model, including random effects.

5.2 Labor Market Transitions by Gender

To better understand the influence of Covid-19 on labor-market gender gaps, we consider the respondent's previous working status and measure changes in labor market

flows during the pandemic. We calculate the average transition probabilities between different labor market statuses for two consecutive quarters, and do so separately for male and female respondents over time. Table 2 panel (a) reports the average quarter-to-quarter transition probabilities in the pre-Covid period, i.e. 2019Q1 to 2020Q1. Panels (b) and (c) report the changes in 2020Q2 and 2020Q3-Q4, respectively, relative to the pre-Covid quarters. E, U and NA refer to respondents' current labor market status (employed, unemployed and non-active, respectively); $L.E$, $L.U$ and $L.NA$ indicate their status in the previous quarter.

Panel (a) confirms the lower participation of women in the labor market: regardless of their previous employment status, transition into non-active status are higher for women than for men. The gender gap is strongest for respondents who were unemployed in the previous quarter: men stay unemployed with a higher probability while unemployed women more often exit the labor market. Panel (b) reveals how transition probabilities changed in 2020Q2, when the strictest lockdown measures were in place. Interestingly, male and female respondents who were previously employed were little affected by the pandemic; this result is likely the consequence of the government policies to protect employment, such as the increased support of short-time work and liquidity provision to firms. We will discuss the gendered effects of the short-time work policy in subsection 6.2. Among respondents who were previously unemployed, we see a large decrease in the probability of finding employment accompanied by an increase in the probability of remaining unemployed or becoming non-active. Moreover, the female increase in the probability of transitioning from unemployment to inactivity is double that of male respondents. Finally, among the previously non-active respondents, we also observe an increase in the gender gap during the peak of the pandemic, with women becoming even more likely to remain non-active than men. These results confirm the disproportionate effect of the pandemic on women documented in Table 1.

Panel (c) reports how transition probabilities changed in 2020Q3 and Q4 relative to the pre-Covid period.[7] The second half of the year 2020 saw a relaxation of the lockdown measures during the summer and a new tightening towards the end of the year, but measures were at all times milder than during the peak of 2020Q2. Panel (c) shows that, again, previously employed respondents did not experience any significant change in their labor market status. There are signs of labor market recovery in the second half of 2020, with a decrease in the probabilities of transitioning from unemployment to inactivity and of remaining non-active. Panel (c) indicates that previously unemployed women are more likely than men to remain in the labor force and find employment, but previously non-active women are less likely than men to re-enter the labor market.

[7] We calculate the probabilities in panel (c) by taking the average of quarter to quarter transition probabilities in 2020Q3 and 2020Q4, and then taking the difference relative to the relevant estimate in panel (a)

Comparing labor market transitions between normal times and the pandemic suggests two driving forces behind the higher likelihood of women being non-active during Covid-19: First, women are more likely to exit the labor force during the peak of the crisis (2020Q2); second, they are less likely to return to the labor force during the recovery period.

Table 2: Labor Market Transition Probabilities

	Men				Women			
(a). PreCovid		E	U	NA		E	U	NA
	L.E	97.38	1	1.62	L.E	96.31	1.05	2.64
	L.U	33.11	51.16	15.73	L.U	33.79	44.68	21.53
	L.NA	11.92	5.62	82.46	L.NA	9.83	4.58	85.59
(b). Changes in 2020Q2		E	U	NA		E	U	NA
	L.E	0.01	0.17	-0.18	L.E	-0.26	0	0.26
	L.U	-8.38	6.53	1.85	L.U	-9.08	5.32	3.76
	L.NA	0.98	-1.38	0.4	L.NA	-2.59	-0.92	3.5
(c). Changes in 2020Q3-Q4		E	U	NA		E	U	NA
	L.E	0	0.18	-0.17	L.E	0.18	0	-0.17
	L.U	-4.98	7.23	-2.25	L.U	0.37	5.21	-5.57
	L.NA	2.85	2.58	-5.43	L.NA	0.17	0.57	-0.74

Notes: E=employed; U=unemployed; NA=non-active. L.E, L.U, L.NA show previous statuses. Sample includes respondents aged 15 to 64 for which we have information on employment status in two consecutive quarters. Panel (a) shows the average quarter-to-quarter transition probabilities in the pre-covid period, from 2019Q1 to 2020Q1. Panel (b) and (c) report the changes in 2020Q2 and 2020Q3-Q4 (average of the two quarters), respectively, relative to the pre-Covid quarters. Results are reported in percentage points.

5.3 Labor Market Status and Marital Status

A question arises as to what factors can account for the different labor market responses of men and women to the Covid-19 pandemic. To answer this, we first take a look at family related characteristics. Here we analyze whether marital status is related to the differentiated impact of the pandemic using regression (2). The dependent variables are still the labor market status dummies (*Employed*, *Unemployed* and *Non-active*); we add to the explanatory variables of Table 1 the marital status dummy (1 for married or in a registered relationship and 0 otherwise), its interaction with the female dummy and the Covid-19 index, as well as the triple interaction of female, Covid-19 index and marital status.

Table 3 reports the estimates. In normal times, unmarried women are less likely to be unemployed, but more likely to be non-active than unmarried men. Marriage in the pre-Covid period improves labor market outcomes for men (increase in employment, decrease in unemployment and inactivity) but worsens them for women (decrease in

employment, increase in inactivity). These findings confirm the well-known lower participation of Swiss women in the labor force relative to their male counterparts, and suggest that marriage is a contributing factor. Interestingly, marriage has played a positive role in motivating women to work during the pandemic. Our results show that while the pandemic magnified the gender gap in employment and non-participation between unmarried men and women, as shown by the significant estimates on $female \times CovInd$, it had no (or even slightly negative) effect on the married gender gap, as captured by the triple interaction estimates. Marriage therefore plays a different role in normal and crisis times: it amplifies the gender gap in employment and inactivity in normal times but rather tends to decrease it during the crisis. This result indicates a form of family insurance during the pandemic. Prior to Covid-19, married women were more likely to drop out of the labor force; it can be either that they have the flexibility in participating in the labor force or that they have to take family care responsibilities. During Covid-19, the probability of married women being employed has increased, possibly to offset the income loss of their partners.

5.4 Labor Market Status and Child Care

In this section, we test whether having children influences men's and/or women's labor market response to the Covid-19 pandemic using regression (2). We add to our starting set of explanatory variables a dummy *child0-6*, which equals 1 if the respondent has children 6 years old or younger, and a dummy *child7-14*, which is equal to 1 if the respondent has children between 7 and 14 years old;[8] we also include the interaction of our two children dummies with the female dummy, their interaction with the Covid-19 index, and the triple interaction of female, Covid-19 index and children dummies.

Table 4 displays the estimates. In normal times, women are overall less likely to be employed and more likely to be non-active than men; the presence of children increases these disparities, especially when children are under 7 years old. During Covid-19, the gender gap in employment and non-participation increases for women without children; the presence of school-aged children (7 to 14) does not significantly change this effect. However, the significance of the triple ineraction term between Covid-19 index, female and child 0-6 indicates that presence of young children actually increases the probability of employment and decreases that of non-participation for women during Covid-19. In other words, the labor market participation gap between fathers and mothers of young children significantly diminished during the pandemic. It is important to note that our findings differ from previous studies, which found that the gender gap in employment worsened with the presence of children during the Covid-19 crisis. There are several factors at play in reducing the gap. First, school/kindergarten closure policies are relatively lenient in Switzerland.[9] Second,

[8] The children dummies only consider the age of the youngest child in the household.

[9] See Figure 13 for the stringency of school closure policy; Switzerland reopened its schools in May

Table 3: Covid-19, Labor Market and Marital Status

	Employed	Unemployed	Non-active
female	-0.00362	-0.00551***	0.00864***
	(0.00325)	(0.00197)	(0.00288)
CovInd	-0.0157***	0.00737**	0.0103***
	(0.00413)	(0.00313)	(0.00375)
female × CovInd	-0.0115**	-0.00586	0.0162***
	(0.00576)	(0.00437)	(0.00523)
married	0.0311***	-0.0134***	-0.0166***
	(0.00323)	(0.00196)	(0.00286)
married × female	-0.0692***	0.00732***	0.0603***
	(0.00559)	(0.00424)	(0.00508)
married × CovInd	-0.00110	-0.00373	0.00225
	(0.00559)	(0.00424)	(0.00508)
married × female × CovInd	0.0176**	0.00256	-0.0185***
	(0.00776)	(0.00589)	(0.00704)
Constant	0.706***	0.0329	0.260***
	(0.0395)	(0.0234)	(0.0350)
Age FE	YES	YES	YES
Canton FE	YES	YES	YES
Education FE	YES	YES	YES
NOGA FE	YES	YES	YES
ISCO FE	YES	YES	YES
Observations	186881	186881	186881
R^2	0.419	0.0429	0.460

Notes: * p<0.1, ** p<0.05, *** p<0.01
Estimates from regression (1) of labor market status on a constant, female dummy (1 for women and 0 otherwise), Covid-19 stringency index, marital status dummy(1 for married/in a registered relation and 0 otherwise) and their interactions. Sample includes respondents aged 15 to 64. Regressions estimated with linear probability model, including random effects. Robust standard errors in parentheses.

mothers in Switzerland usually work part-time during normal times, which means that they can more easily hold on to their job during the crisis. Third, men can help share child care responsibilities during a lockdown, reducing the heavy burdens on the partner's shoulder.

The results have thus far shown that in Switzerland, women are more likely to leave the labor market than men during Covid-19. This may happen because women became discouraged from job searching. Therefore we examine the role of family factors in affecting worker's willingness to search for a new job. The last column of Table 4 focuses on people who have not been seeking new employment. The dependent variable is a dummy equal to 1 if the worker has stopped the job search for family

2020 while other countries kept strict measures throughout 2020.

Table 4: Covid-19, Labor Market Status and Child Care Responsibility

	Employed	Unemployed	Non-active	Nosearch_family
female	-0.0173***	-0.00726***	0.0230***	0.191***
	(0.00276)	(0.00167)	(0.00244)	(0.00651)
CovInd	-0.0167***	0.00449*	0.0129***	-0.00229
	(0.00335)	(0.00254)	(0.00304)	(0.0119)
female × CovInd	-0.00990**	-0.00409	0.0135***	-0.0328**
	(0.00466)	(0.00354)	(0.00423)	(0.0145)
child0-6	0.0309***	-0.0153***	-0.0165***	
	(0.00448)	(0.00279)	(0.00398)	
child7-14	0.0353***	-0.0162***	-0.0191***	
	(0.00457)	(0.00288)	(0.00407)	
child0-6 × female	-0.110***	0.0233***	0.0881***	
	(0.00604)	(0.00376)	(0.00537)	
child7-14 × female	-0.0429***	0.0142***	0.0294***	
	(0.00612)	(0.00384)	(0.00544)	
child0-6 × CovInd	-0.00218	0.00586	-0.00375	
	(0.00821)	(0.00622)	(0.00745)	
child7-14 × CovInd	0.00714	0.000584	-0.00723	
	(0.00841)	(0.00638)	(0.00763)	
child0-6 × female × CovInd	0.0453***	-0.00794	-0.0343***	
	(0.0112)	(0.00853)	(0.0102)	
child7-14 × female × CovInd	-0.000995	0.00734	-0.0101	
	(0.0115)	(0.00874)	(0.0104)	
Constant	0.714***	0.0384	0.247***	-0.0578
	(0.0410)	(0.0245)	(0.0363)	(0.107)
Age FE	YES	YES	YES	YES
Canton FE	YES	YES	YES	YES
Education FE	YES	YES	YES	YES
NOGA FE	YES	YES	YES	YES
ISCO FE	YES	YES	YES	YES
Observations	175360	175360	175360	27404
R^2	0.422	0.0426	0.462	0.315

Notes: * p<0.1, ** p<0.05, *** p<0.01

Estimates from regression (2) of labor market status and non job search for family reasons on a constant, female dummy (1 for women and 0 otherwise), Covid-19 stringency index, child dummies (child0-6 for having child(ren) under 7 years old, child7-14 for having school age child(ren)) and their interactions. Sample includes respondents aged 15 to 64. Regressions estimated with linear probability model, including random effects. Robust standard errors in parentheses.

reasons and 0 for other reasons. We find that women are more likely than men to stop the job search because of family duties, such as caring for children or elderly relatives; this disparity however diminished during Covid-19. This result lends some support to our finding that the presence of children did not hinder female participation in the labor market during the pandemic.

Table 5: Covid-19, Labor Market Status and Occupation/Sector-specific Effects

	Employed	Unemployed	Non-active
female	-0.0410***	-0.00251*	0.0423***
	(0.00236)	(0.00143)	(0.00209)
CovInd	0.0626	-0.0112	-0.0627
	(0.0958)	(0.0716)	(0.0869)
female × CovInd	-0.000766	-0.000875	0.000807
	(0.00431)	(0.00327)	(0.00391)
Constant	0.712***	0.0305	0.259***
	(0.0436)	(0.0269)	(0.0387)
Age FE	YES	YES	YES
Canton FE	YES	YES	YES
Education FE	YES	YES	YES
NOGA FE	YES	YES	YES
ISCO FE	YES	YES	YES
NOGA × CovInd	YES	YES	YES
ISCO × CovInd	YES	YES	YES
Observations	186881	186881	186881
R^2	0.417	0.0428	0.459

Notes: * p<0.1, ** p<0.05, *** p<0.01
We show estimates from regression (1) of labor market status after adding the interaction of the Covid-19 stringency index and dummies for occupations and sectors as controls. Regressions estimated with linear probability model, including random effects. Robust standard errors in parentheses.

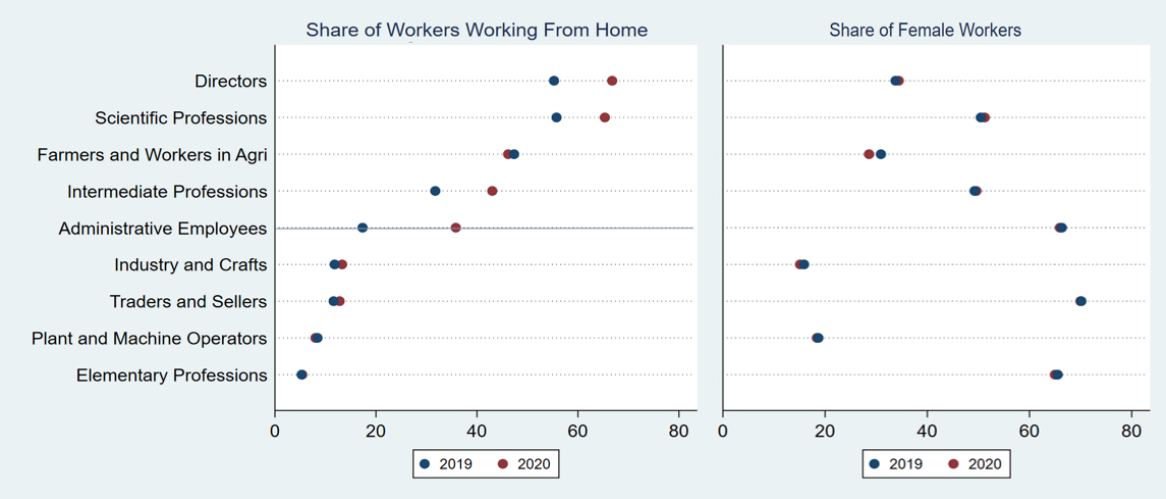
5.5 Labor Market Status and Telework Availability

Next, we use regression (2) to explore whether work-related characteristics can explain the differentiated labor market outcomes of men and women during the pandemic. The Covid-19 pandemic affected different sectors and occupations in different ways. Sectors such as food services and accomodation or entertainment were hit hard, while others such as information technology or financial services remained unscathed. Table 5 analyzes whether the different distribution of men and women across sectors and occupations explains the Covid-19 gender gap in labor market participation. We keep the labor market status dummies (*Employed*, *Unemployed* and *Non-active*) as dependent variables and add $occupation \times CovInd$ and $sector \times CovInd$ fixed effects to control for the different impact of Covid-19 across sectors and occupations. The coefficient estimate of the female and Covid-19 interaction becomes insignificant; this suggests that the observed gender gap in labor market status is mainly due to women being predominantly present in sectors and occupations that suffered more during the crisis.

We further test whether the availability of telework for a given occupation relates to the gender-specific effects of the Covid-19 pandemic. Telework availability is mea-

sured by the percentage of workers in a given occupation who worked from home occasionally or regularly during the last four weeks. We rank occupations by average telework availability in 2020, as displayed in Figure 6. Telework availability varies greatly across occupations: in 2019, it ranges between approximately 5% for elementary professions to almost 60% for directors and scientific professions. During the pandemic crisis of 2020, telework substantially increased for the occupations that had above median teleworkability already in 2019 but remained almost unchanged for the other occupations. We construct a dummy variable *LowTele* that equals 1 for occupations that have below-median telework availability (indsutry and crafts, traders and sellers, plant and machine operators and elementary professions) and 0 for occupations with above-median telewok availability (directors, scientific professions, farmers, intermediate professions and administrative employees). Note that low-teleworkable occupations are typically blue-collar jobs requiring physical labor. However, they are not necessarily female-dominated, with the share of female workers ranging from 17% to 68%.

Figure 6: Telework Availability and Female Share by Occupation



Notes: The share of workers working from home (telework availability) is measured as the number of respondents who worked from home in the last 4 weeks as a percentage of the total number of respondents in each occupation group. The share of female workers is calculated as the number of respondents who are female as a percentage of the total number of respondents in each occupation group. We rank occupations in a descending order of telework availability in 2020.

We add to the explanatory variables of Table 1 the telework dummy *LowTele*, its interactions with the female dummy and with the Covid-19 index and the triple interaction $LowTele \times female \times CovInd$. Table 6 reports the estimates. The gender gap in employment and non-active status during normal times is confirmed, with a stronger gap among respondents in low-telework occupations; interestingly, a gender gap in unemployment emerges in high-teleworkable occupations. During the pandemic, we observe no significant differential effect between men and women in high-teleworkable

Table 6: Covid-19, Labor Market Status and Telework Availability

	Employed	Unemployed	Non-active
female	-0.0413***	0.00300*	0.0370***
	(0.00289)	(0.00164)	(0.00248)
CovInd	-0.0101***	0.00346	0.00739**
	(0.00354)	(0.00252)	(0.00299)
female × CovInd	-0.00357	-0.000196	0.00336
	(0.00490)	(0.00350)	(0.00415)
LowTele	-0.0137***	0.00803***	0.00508*
	(0.00358)	(0.00210)	(0.00306)
LowTele × female	-0.0176***	-0.00170	0.0195***
	(0.00479)	(0.00281)	(0.00410)
LowTele × CovInd	-0.0159**	0.0117***	0.00433
	(0.00623)	(0.00442)	(0.00527)
LowTele × female × CovInd	-0.00325	-0.0122*	0.0163**
	(0.00890)	(0.00631)	(0.00753)
Constant	0.883***	0.0230***	0.0942***
	(0.00786)	(0.00445)	(0.00674)
Age FE	YES	YES	YES
Canton FE	YES	YES	YES
Education FE	YES	YES	YES
NOGA FE	YES	YES	YES
Observations	171218	171218	171218
R^2	0.0611	0.0787	0.0415

Notes: * p<0.1, ** p<0.05, *** p<0.01
We show estimates from regression (2) of labor market status on a constant, female dummy (1 for women and 0 otherwise), Covid-19 stringency index, LowTele dummy (1 for respondents in an occupation with low telework availability and 0 otherwise) and their interactions. Regressions estimated with linear probability model, including random effects. Robust standard errors in parentheses.

occupations. Covid-19 however magnified the non-participation gender gap among respondents in low-teleworkable occupations.

6 Covid-19 and Short-time Work

The analysis of section 5 showed that the Covid-19 crisis had a positive but mild effect on the unemployment rate in Switzerland. The main reason behind this was the massive use of short-time work (STW). This section reviews STW policy in Switzerland and analyzes whether there was a gender gap in the recourse to STW during Covid-19.

6.1 Short-time Work in Switzerland

STW is a public policy that allows firms facing a fall in demand to keep their employees while transferring the cost to the government. The shortfall in demand must be outside the company's control and it may come, for example, from a downturn in economic activity, unusual weather conditions, or a pandemic. The STW compensation is paid to the employer and covers 80% of the loss of earnings attributable to the reduction in working hours, up to a maximum insured gain of 148'200 CHF yearly. The aim is to reduce the work of employees without the need to lay them off. Note that employees have the right not to accept the STW compensation. In this case, the employer either continues paying the full salary or lays off the employee.

In March 2020, the federal government decided to simplify and expedite the administrative procedures for requesting STW. The government reduced justification and reporting requirements, abolished the 2-day waiting period and the 10-day notice for requesting STW and extended the maximal validity from 3 to 6 months. Moreover, the government decided to broaden the access to STW. In particular, apprentices and employees on fixed-term contracts, who could not use STW before Covid-19, were granted access in March 2020.

Figure 7 shows the monthly number of employees in STW in Switzerland in 2019 and 2020. In 2019, on average 2000 employees used STW every month. This figure jumped to about 1'000'000 in March 2020 due to the lockdown imposed by the government and it reached a peak of 1'300'000 in April 2020. Following the relaxation of lockdown measures in May and June 2020, the recourse to STW diminished but remained two orders of magnitude higher than in 2019.

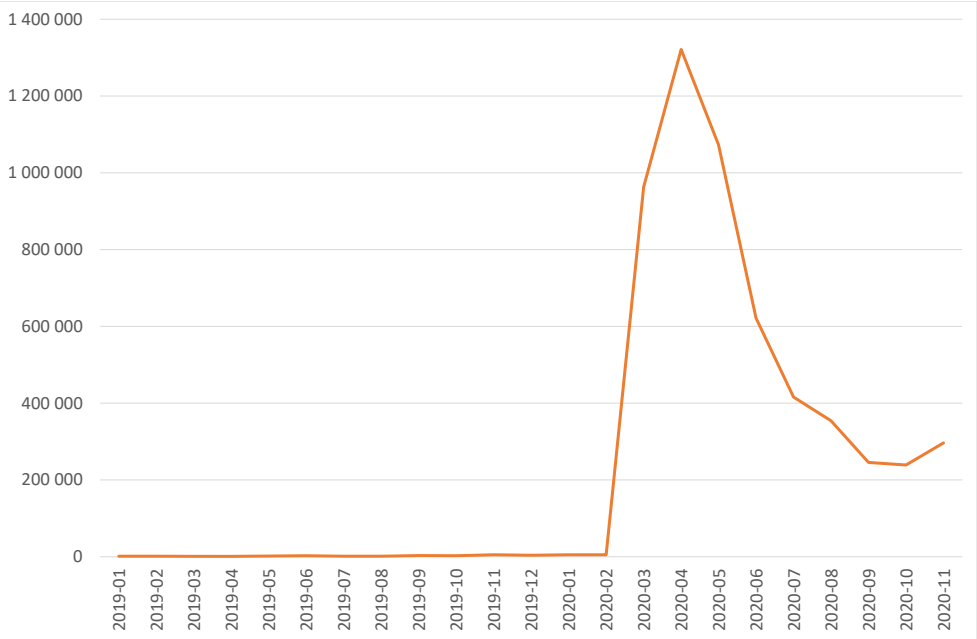
Figure 8 reports the number of employees in STW in April 2020 as a percentage of the number of employed persons in that canton. We observe significant variation in the share of employees in STW across cantons, ranging from 10% for Basel-city to 50% for Ticino. On average, the German-speaking cantons were less affected than the French and Italian-speaking cantons.

Finally, Figure 9 plots the share of employees in STW by economic sector in April 2020. The Covid-19 crisis and lockdown measures had differential effects across sectors. Lockdown measures included the complete shutdown of restaurants, non-essential shops, cinemas, theaters, etc. Therefore, accommodation, food services, arts, and entertainment sectors were the most affected. Sectors dealing with essential goods, such as agriculture and electricity, were barely impacted. Sectors where most of the work could be done remotely such as the financial service sector were also barely affected.

6.2 Effect of Gender and Covid-19 on Short-time Work

This section analyzes how gender affects the probability of engaging in STW during the Covid-19 crisis. Table 7 displays the estimates from regressions where the

Figure 7: Employees in short-time work



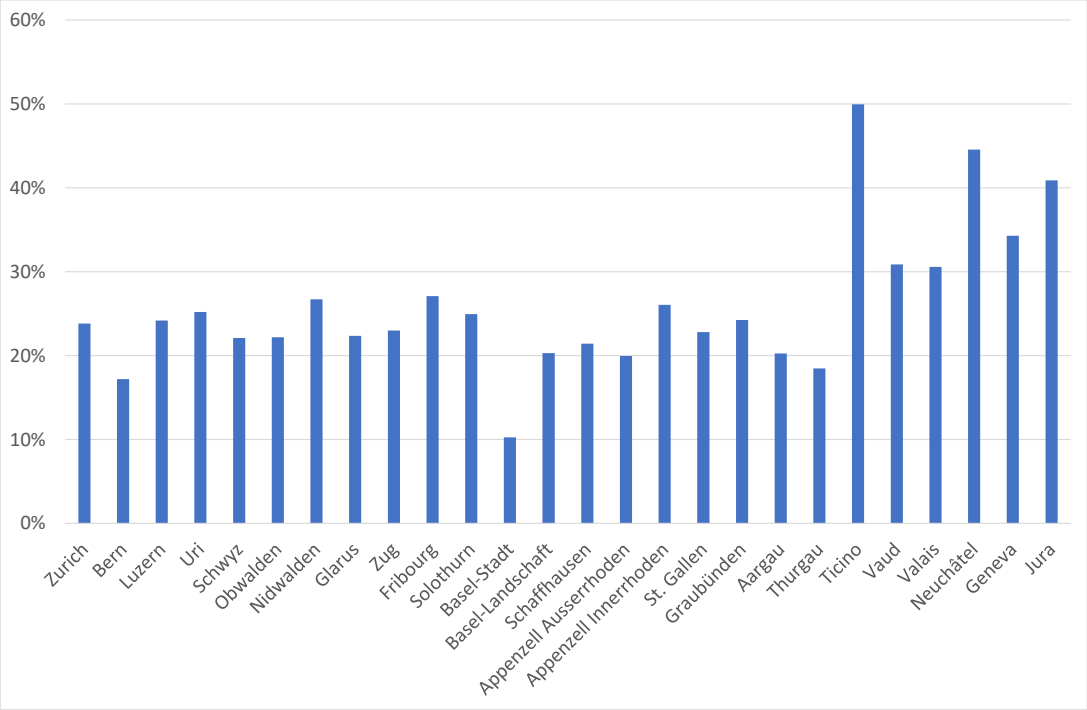
Source: State Secretariat for Economic Affairs (SECO)

dependent variable is a dummy that equals 1 if the person is on STW and 0 otherwise. Column (1) includes the Covid-19 index, the female dummy, the interaction between the two and controls for age, education, occupation type, sector of work and canton of residence. It confirms that the Covid-19 pandemic increased STW for both men and women. The positive and significant coefficient on the interaction term $female \times CovInd$ indicates that women were more likely to be put on STW during the pandemic. Appendix Table 20 shows the estimates from a similar regression, but adding occupation times CovInd and sector times CovInd fixed effects. The coefficient on the interaction between *female* and *CovInd* is remarkably similar to the one in our main specification in Table 7. This suggests that the STW gender gap that appeared during the pandemic cannot be explained by differences in sector and occupation distribution. In other words, even within sector and occupation, female workers were significantly more likely to be put on STW than their male counterparts during the pandemic.[10]

Column (2) explores the role of the presence of children in the household. We include children dummies and their interactions with the female dummy and the Covid-19 index. We find that for men, the presence of children in the household does not

[10]Note that we find no evidence that the STW gender gap is related to the lower pre-pandemic occupation rate of women. Women are more likely to be put on STW than men regardless of whether they work full-time or part-time. Results are available upon request.

Figure 8: % Employees in short-time work by canton



Notes: Number of employees in STW in April 2020, divided by the total number of employees in each canton in 2019.
Sources: SECO and Swiss federal statistical office.

significantly alter the probability of being on STW during Covid-19. For women with children, the effect on STW is negative. These results suggest that, while women have been overall more likely to use STW during the Covid-19 crisis, the presence of children does not contribute to it. A possible explanation for this result is that mothers are more likely to have a flexible job, or one that can be done remotely, possibly reducing the need for the employer to put them on STW.

Column (3) considers the role of telework availability of an occupation on recourse to STW. We add the dummy variable *LowTele*, as defined in subsection 5.5. The results show that having a job with low telework availability increases the probability of engaging in STW during the Covid-19 pandemic. This effect is, however, significantly larger for women than for men, as can be seen in the positive and significant coefficient on the triple interaction term $female \times LowTele \times CovInd$. The STW gender gap is also significant in the high-telework occupation but considerably smaller.

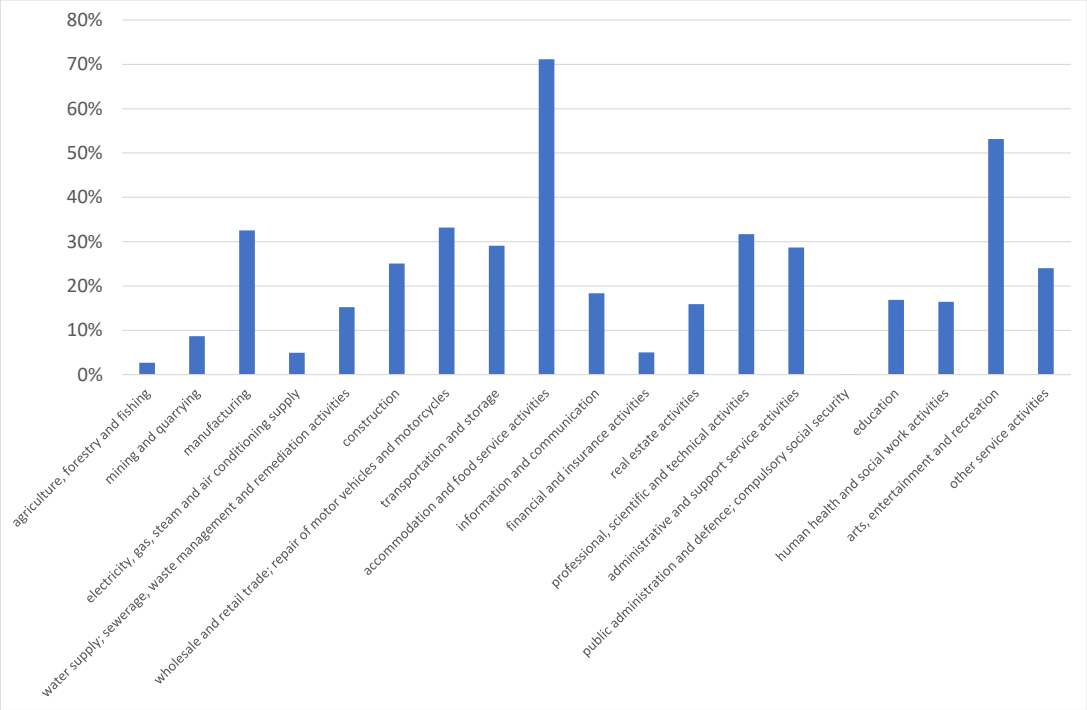
We further analyze how the probability of engaging in STW evolves through time by running regression (3) separately for men and women. The coefficient estimates of the quarterly dummies are plotted in Figure 10. The figure shows that the effect of Covid-19 on the probability of being on STW is highest in the second quarter of 2020,

Table 7: The Effect of Covid-19 and Gender on STW

	In Short-time Work		
	(1)	(2)	(3)
female	0.000416	-0.000910	0.00154
	(0.00139)	(0.00172)	(0.00160)
CovInd	0.112***	0.113***	0.105***
	(0.00251)	(0.00309)	(0.00304)
female × CovInd	0.0311***	0.0370***	0.0198***
	(0.00360)	(0.00443)	(0.00430)
child0-6 × CovInd		0.00167	
		(0.00731)	
child7-14 × CovInd		0.00130	
		(0.00752)	
child0-6 × female × CovInd		-0.0204*	
		(0.0105)	
child7-14 × female × CovInd		-0.0177*	
		(0.0106)	
LowTele			-0.000404
			(0.00207)
LowTele × female			-0.00146
			(0.00285)
LowTele × CovInd			0.0241***
			(0.00540)
LowTele × female ×CovInd			0.0438***
			(0.00787)
Constant	0.0146	0.0157	0.00246
	(0.0220)	(0.0238)	(0.00396)
Age FE	YES	YES	YES
Canton FE	YES	YES	YES
Education FE	YES	YES	YES
NOGA FE	YES	YES	YES
ISCO FE	YES	YES	
Observations	158250	148431	158162
R^2	0.0466	0.0480	0.0474

Notes: * p<0.1, ** p<0.05, *** p<0.01.
Estimates from regression (2) of STW dummy on a constant, female dummy, Covid-19 stringency index, child dummies (column 2) and low telework dummy (column 3) . The sample is restricted to respondents who are employed or apprentices. Regressions estimated with linear probability model, including random effects. Standard errors in parentheses.

Figure 9: % Employees in short-time work by sector



Notes: Number of employees in STW in April 2020, divided by the total number of employees in each sector in 2019.
Sources: SECO and Swiss federal statistical office.

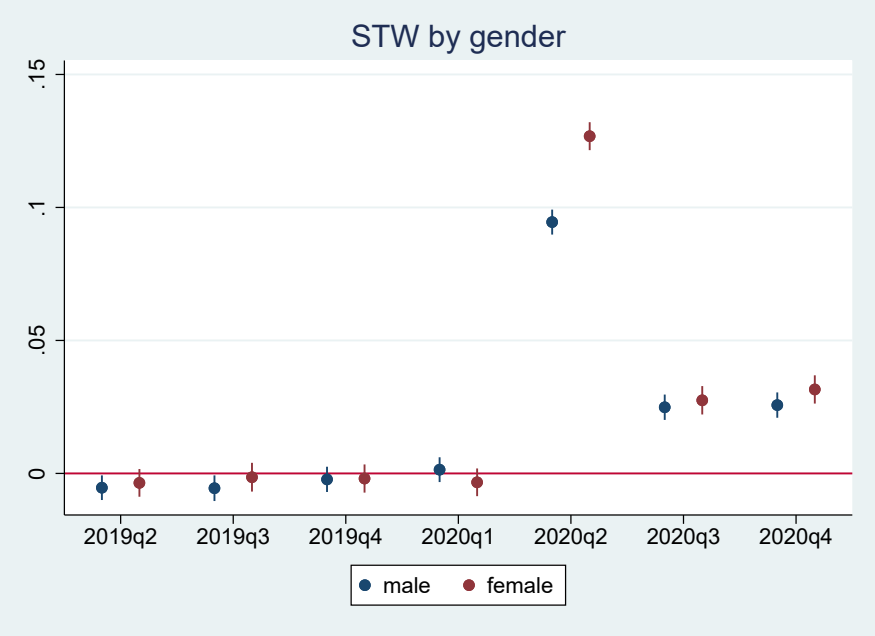
it falls substantially in the third and fourth quarter, still remaining well above the pre-covid levels. The figure also shows an economically large and statistically significant difference between men and women in the second quarter of 2020: women were 3% more likely to engage in STW in this quarter. The gender gap persists to some extent in the third and fourth quarter, but is not statistically significant.

7 Covid-19 and Hours Worked

In this section, we only consider respondents that are currently employed or apprentices and we examine the effect of the Covid-19 crisis on (i) the probability of having effectively worked in the previous week and (ii) the number of hours effectively worked in the previous week.

In the regression presented in Table 8, the dependent variable is a dummy equal to 1 if the respondent did at least one hour of paid work in the previous week and 0 otherwise. Some of the employed respondents worked zero hours in the previous week, possibly because they were on paid or unpaid leave, on STW, or because they work on an irregular schedule. The explanatory variables are the female dummy, the Covid-19

Figure 10: STW Over Time for Men and Women



Notes: Estimates from regression (3) of STW dummy on quarterly dummies, run separately for men (blue) and women (red). Regressions estimated with linear probability model, including random effects.

index and their interaction. We control for age, education, occupation type, sector of work and canton of residence. The results in column (1) show that, in normal times, women are less likely than men to have worked in the past week. During Covid-19, the probability of having worked in the past week went down for both men and women, but the effect is four times larger for women. This result is in line with the evidence that women are more likely to be in STW than men during Covid, documented in subsection 6.2.

Column (2) introduces a full-time dummy that equals 1 if the respondent works full time and zero otherwise. The estimation results in Column (2) reveal that the probability of having worked in the past week went down similarly for both part-time working men and women during Covid-19. However, among full-time working respondents, women were more likely to be absent from work than men during the pandemic. The intuition is that part-time working women had sufficient flexibility to reconcile the additional family care needs with their work schedule. Therefore there is no differential effect between men and women. In contrast, full-time working women did not have the same flexibility and thus may find it hard to continue to work during the pandemic.

Column (3) addresses how the presence of children in the household affected the gender gap in the work probability during the pandemic. We find that, in normal times, the presence of children reduces the likelihood of having worked in the past week. The

effect is strongest for women with children under 7 years old, suggesting that in normal times, the woman is more likely to take a leave of absence from work to take care of a child when it is needed. There is, however, no differential effect between men and women with children during Covid-19. The possible explanations are that men and women shared the additional childcare needs due to Covid-19 restrictions more equally, or women with children usually do part-time jobs and have the flexibility to hold on to work, as documented in section 3. Therefore, the presence of children does not explain why women are less likely to have worked in the previous week during Covid-19.

In the last column, we consider the role of telework availability. In normal times, the gender gap in work probability is smaller in low telework occupations relative to high telework ones. During the pandemic, low teleworkability had a strong negative impact on the probability of having worked in the previous week for all respondents. However, this effect is twice as large for women as for men in occupations with low telework availability, as documented by the coefficient on the triple interaction between LowTele, female and CovInd. The effect could either come from the demand side, i.e. women in low teleworkable occupations may have been disproportionately put on leave or short-time work by their employers, or from the supply side, i.e. women in those occupation may have chosen to take more leave during the pandemic.

In Table 9 we study whether respondents' hours worked were affected by the Covid-19 pandemic. The dependent variable is the respondent's effective hours worked in the past week. The explanatory variables are the female dummy, the Covid-19 index, and their interaction. We control for age, education, occupation type, sector of work, and canton of residence. Column (1) shows that women worked about 9 hours per week less than men in normal times; during the pandemic, all respondents reduced their working hours but women reduced their working time less than their male counterparts. This result is due to the fact that women work fewer hours than men in general, so the scope for reducing hours is necessarily lower, and there is more room for increasing hours if possible.

Column (2) estimates how the presence of children in the household affects working hours during normal and pandemic times. The results show that in normal times, the presence of children, whether pre-school or school-aged, greatly impacts the working hours of mothers, while it barely affects that of fathers. Women without children work about 6.6 hours less than their male counterparts on average, but the gender gap more than doubles for mothers of children under 15. This confirms the well-known fact that in Switzerland, it is mothers who adjust their working schedule to meet childcare needs. During the pandemic, the evidence suggests that the presence of school-aged children did not significantly impact hours worked by fathers and mothers. We find that mothers of younger children experienced a lower decrease in hours worked, but mostly due to the fact that they were working fewer hours before the pandemic.

Since the effect of the pandemic on the absolute number of hours worked heavily

Table 8: The Effect of Covid-19 and Gender on Having Worked Last Week

	Worked Last Week			
	(1)	(2)	(3)	(4)
female	-0.0286***	-0.0250***	-0.0180***	-0.0346***
	(0.00244)	(0.00442)	(0.00297)	(0.00280)
CovInd	-0.00903**	-0.0287***	-0.0187***	0.0117**
	(0.00440)	(0.0108)	(0.00539)	(0.00533)
female × CovInd	-0.0269***	-0.00609	-0.0223***	-0.00983
	(0.00626)	(0.0122)	(0.00766)	(0.00748)
FullTime		0.0213***		
		(0.00431)		
FullTime × female		0.0103*		
		(0.00550)		
FullTime × index		0.0238**		
		(0.0119)		
FullTime × female ×CovInd		-0.0279*		
		(0.0154)		
child0-6			-0.00870*	
			(0.00462)	
child7-14			-0.0171***	
			(0.00480)	
child0-6 × female			-0.0633***	
			(0.00652)	
child7-14 × female			-0.0104	
			(0.00661)	
child0-6 × CovInd			0.0181	
			(0.0124)	
child7-14 × CovInd			0.0460***	
			(0.0127)	
child0-6× female × CovInd			-0.00401	
			(0.0178)	
child7-14× female × CovInd			-0.0189	
			(0.0180)	
LowTele				-0.0127***
				(0.00364)
LowTele × female				0.0219***
				(0.00500)
LowTele × CovInd				-0.0646***
				(0.00943)
LowTele × female × CovInd				-0.0702***
				(0.0137)
Constant	0.832***	0.788***	0.841***	0.833***
	(0.0381)	(0.0386)	(0.0402)	(0.00725)
Age FE	YES	YES	YES	YES
Canton FE	YES	YES	YES	YES
Education FE	YES	YES	YES	YES
NOGA FE	YES	YES	YES	YES
ISCO FE	YES	YES	YES	
Observations	151565	144373	142149	151478
R^2	0.0119	0.0143	0.0153	0.0131

Notes: * p<0.1, ** p<0.05, *** p<0.01.
Estimates from regression (2) of work last week on a constant, female dummy, Covid-19 stringency index, child dummies (column 2) and low telework dummy (column 3). The sample is restricted to respondents who are employed or apprentices. Regressions estimated with linear probability model, including random effects. Standard errors in parentheses. Some insignificant estimates are eliminated for brevity.

Table 9: The Effect of Covid-19 and Gender on Hours Worked

	Hours worked last week	
	(1)	(2)
female	-8.999***	-6.626***
	(0.128)	(0.152)
CovInd	-2.979***	-3.067***
	(0.187)	(0.229)
female × CovInd	0.514*	0.120
	(0.270)	(0.330)
child0-6		-0.585**
		(0.232)
child7-14		0.426*
		(0.240)
child0-6 × female		-8.887***
		(0.332)
child7-14 × female		-7.430***
		(0.333)
child0-6 × CovInd		-0.0668
		(0.522)
child7-14 × CovInd		0.552
		(0.537)
child0-6 × female × CovInd		1.417*
		(0.771)
child7-14 × female × CovInd		1.015
		(0.770)
Constant	50.21***	51.05***
	(2.117)	(2.156)
Age FE	YES	YES
Canton FE	YES	YES
Education FE	YES	YES
NOGA FE	YES	YES
ISCO FE	YES	YES
Observations	133583	125218
R^2	0.223	0.250

Notes: * p<0.1, ** p<0.05, *** p<0.01.
Estimates from regression (2) of working hours last week on a constant, female dummy, Covid-19 stringency index and child dummies (column 2). The sample is restricted to respondents who are employed or apprentices. Regressions estimated with linear model, including random effects. Standard errors in parentheses.

depends on occupancy rate before the pandemic, we construct a relative working hours variable and use it as dependent variable in Table 10. The relative working hours variable is defined as the number of hours worked in the previous week divided by per contract hours worked.[11] Column (1) indicates that in relative terms, there is no differential impact between male and female hours worked during the pandemic.

Column (2) introduces a full time dummy that equal 1 if the respondent works full time and zero otherwise. The estimation results in Column (2) reveal that full-time working women cut their working hours more than men during the pandemic. There is however no similar gender gap for part-time workers. A possible explanation is that part-time working women had sufficient flexibility to reconcile the additional childcare needs with their work schedule, and therefore were comparatively less affected. Full-time working women did not have the same flexibility, making it more difficult for them to continue working the usual number of hours during the pandemic.

Column (3) assesses how the presence of children affected relative working hours during the pandemic. It indicates that children did not have any significant effect on relative hours worked during Covid, neither for men nor for women. Finally, Column (4) considers the role of teleworkability on hours worked during the pandemic; it shows that women in low teleworkable occupations experienced a larger decrease in hours worked than their male counterparts. The pandemic had no differential effect on men and women in high teleworkable occupations.

7.1 Covid-19 and Family Leave

The Swiss federal government imposed complete school closure between March 16 and May 11, 2020 (8 weeks). It is therefore possible that some workers, if not entitled to STW, would request a leave of absence to care for their children. Table 11 displays estimates from a regression whose dependent variable is a dummy with value 1 if the person was on family leave in the previous week and 0 otherwise. Employed respondents are said to be on family leave if they did not work at all in the previous week and they state that this absence is due to family responsibilities. Family leave can refer to a paid or unpaid leave.

Column (1) displays regression results, including the Covid-19 index, the female dummy, and their interaction, as well as the usual labor market controls. The estimates emphasize that, in normal times, women are more likely to be on family leave. The Covid-19 crisis has significantly increased the recourse to family leave for both men and women, but without any significant difference between the two.

Column (2) addresses the role of children in the household. We include children dummies and their interactions with the female dummy and the Covid-19 index. The coefficient on the female dummy is positive and significant, suggesting that women

[11] Per-contract hours worked are replaced by usual hours worked for independent employees.

Table 10: The Effect of Covid-19 and Gender on Relative Hours Worked

	Hours worked last week over hours worked per contract			
	(1)	(2)	(3)	(4)
female	0.00685	-0.00723	0.00611	-0.000381
	(0.00417)	(0.00718)	(0.00512)	(0.00477)
CovInd	-0.0726***	-0.0883***	-0.0778***	-0.0678***
	(0.00632)	(0.0154)	(0.00784)	(0.00755)
female× CovInd	-0.0128	0.00923	-0.0115	-0.00209
	(0.00938)	(0.0177)	(0.0115)	(0.0111)
FullTime		-0.0467***		
		(0.00677)		
female× FullTime		-0.00951		
		(0.00878)		
FullTime × CovInd		0.0184		
		(0.0169)		
female× FullTime × CovInd		-0.0377*		
		(0.0222)		
child0-6			-0.00992	
			(0.00763)	
child7-14			-0.00897	
			(0.00791)	
female× child0-6			-0.00678	
			(0.0112)	
female× child7-14			0.000276	
			(0.0113)	
child0-6 × CovInd			0.00784	
			(0.0177)	
child7-14 × CovInd			0.0109	
			(0.0183)	
female× child0-6 × CovInd			-0.0104	
			(0.0270)	
female× child7-14 × CovInd			0.0128	
			(0.0271)	
LowTele				-0.00790
				(0.00605)
female× LowTele				0.0248***
				(0.00849)
LowTele × CovInd				-0.0157
				(0.0139)
female× LowTele × CovInd				-0.0436**
				(0.0210)
Constant	1.148***	1.202***	1.144***	1.036***
	(0.0809)	(0.0813)	(0.0851)	(0.0134)
Age FE	YES	YES	YES	YES
Canton FE	YES	YES	YES	YES
Education FE	YES	YES	YES	YES
NOGA FE	YES	YES	YES	YES
ISCO FE	YES	YES	YES	
Observations	116951	116724	109629	116636
R^2	0.00573	0.00754	0.00608	0.00496

Notes: * p<0.1, ** p<0.05, *** p<0.01.

Estimates from regression (2) of hours worked last week over per contract hours worked on a constant, female dummy, Covid-19 stringency index, full-time dummy (column 2), child dummies (column 3) and low telework dummy (column 4). The sample is restricted to respondents who are employed or apprentices. Regressions estimated with linear model, including random effects. Standard errors in parentheses.

are more likely to ask for family leave in normal times, even if they do not have children under 15. The coefficients on children aged 0-6 and 7-14 also carry a positive and significant coefficient: Having children in the household increases the likelihood of taking family leaves in normal times, this effect being the strongest for mothers of young children. During the Covid-19 crisis, having children under 7 increased the probability of being on family leave without any significant difference between men and women. However, in households with children aged 7 to 14, women were more likely to be on family leave during the crisis, possibly reflecting the effect of school closures. Column (3) considers teleworkability and indicates that the latter does not affect family leave, either in normal or in Covid-19 times.

8 The Gender Wage Gap

In this final section, we study how the gender wage gap has changed during Covid-19. We measure wage by dividing a respondent's annual income by his/her occupancy rate.[12] Figure 11 shows the wage distribution of male and female respondents in 2019 and 2020. In both years, men's wage distribution is situated to the right of that of women's, indicating that men earn on average more than women after controlling for occupancy rate. Moreover, men's distribution is more heavily skewed to the right, suggesting that there are more men than women among the high-earnings respondents. Similarly, the wage distribution indicates a higher fraction of women among low-earners. During Covid-19, men's wage distribution shifted slightly rightwards while women's distribution remained unchanged, suggesting that the gender wage gap increased.

We further document how wages have changed during the Covid-19 pandemic across gender and occupations in Figure 12. We restrict the sample to respondents with wage information available in both 2019 and 2020 and plot the share of workers who experienced a decline/an increase in their wages between 2019 and 2020 by gender and occupation. In Figure 12, occupations are ranked in descending teleworkability order. The figure indicates that, in low-teleworkable occupations, women were more likely than men to experience a wage reduction during the Covid-19 period, indicating an increase in gender wage gap. However, in high-teleworkable occupations, women were more likely than men to experience a wage increase during Covid-19, implying a decrease in gender wage gap. The decline in wages may relate to the recourse to STW during the pandemic: Employees in STW maintain their employment contract, and therefore also their contractual occupation rate, but receive a compensation of only 80% for the reduced working hours. The wage gap result is thus consistent with our previous insights on STW, namely that women, and in particular women

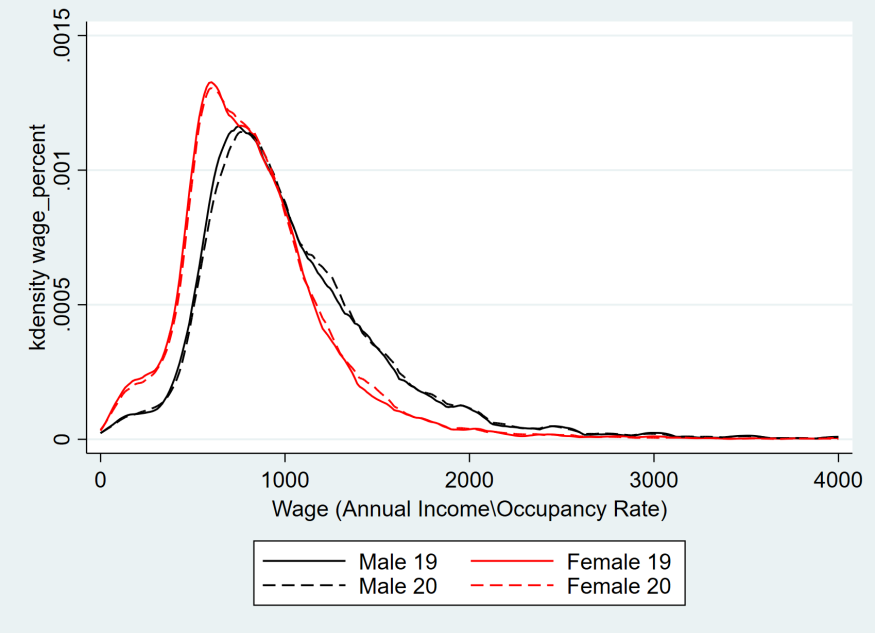
[12]Ideally, we would like to calculate wage per hour by dividing annual income by annual working hours. Data on annual working hours is not available, so we use the occupancy rate as a proxy.

Table 11: The Effect of Covid-19 and Gender on Family Leave

	Request a Family Leave		
	(1)	(2)	(3)
female	0.00236***	0.00138***	0.00268***
	(0.000422)	(0.000518)	(0.000488)
CovInd	0.00238***	-0.000105	0.00306***
	(0.000802)	(0.000973)	(0.000972)
female × CovInd	0.00157	0.000102	0.00172
	(0.00115)	(0.00139)	(0.00137)
child0-6		0.00275***	
		(0.000827)	
child7-14		0.00227***	
		(0.000858)	
child0-6 × female		0.00667***	
		(0.00117)	
child7-14 × female		0.00148	
		(0.00118)	
child0-6 × CovInd		0.0151***	
		(0.00230)	
child7-14 × CovInd		0.00247	
		(0.00237)	
child0-6 × female × CovInd		0.000233	
		(0.00331)	
child7-14 × female × CovInd		0.00800**	
		(0.00335)	
LowTele			0.000956
			(0.000631)
LowTele × female			-0.00143
			(0.000869)
LowTele × CovInd			-0.00213
			(0.00172)
LowTele × female × CovInd			-0.000850
			(0.00251)
Constant	0.000685	0.00260	0.00190
	(0.00652)	(0.00701)	(0.00118)
Age FE	YES	YES	YES
Canton FE	YES	YES	YES
Education FE	YES	YES	YES
NOGA FE	YES	YES	YES
ISCO FE	YES	YES	
Observations	158250	148431	158162
R^2	0.00191	0.00600	0.00193

Notes: * p<0.1, ** p<0.05, *** p<0.01.
Estimates from regression (2) of family leave dummy on a constant, female dummy, Covid-19 stringency index, children dummies (column 2), and low telework dummy (column 3). The sample is restricted to respondents who are employed or apprentices. Regressions estimated with linear probability model, including random effects. Standard errors in parentheses.

Figure 11: Wage Distribution by Gender and Year



Notes: This figure plots kernel density of the wage distribution of men and women in 2019 and 2020. Wage is measured by dividing income by the occupancy rate. The black line is for men and red line is for women. The solid and dashed lines correspond to the data in 2019 and 2020, respectively.

in low-teleworkable occupations, were more likely to be put on STW than their male counterparts and therefore more likely to suffer a wage drop.

Figure 12: Wage Changes by Gender and Occupation

Notes: We restrict the sample to respondents with wage information (annual income/occupancy rate) in both 2019 and 2020, calculate the percentage of respondents whose wage has decreased/increased from 2019 to 2020, and then break it down by occupation types and gender. Occupations are ranked in descending order of telework availability in 2020.

9 Conclusion

This paper provides empirical evidence that the Covid-19 pandemic has resulted in a "she-cession" in the Swiss labor market. First, we document a pandemic-fueled increase in the gender gap in labor market participation, the increase being particularly strong in occupations that cannot be done remotely. We however find that marriage and the presence of children played a positive role in attenuating the labor market gender gap driven by the pandemic. The result on motherhood differs from findings in other counties, and points to a greater labor flexibility for mothers in Switzerland, which helped reduce the negative impact of the pandemic on them. We provide evidence of a large and persistent gender gap in STW, with women being significantly more likely to be in STW than their male counterparts during the pandemic. The STW gender gap cannot be explained merely by the different sector and occupation distribution of employment between men and women; that is to say that even within sector and occupation, it is women who will be disproportionately put in STW. The STW gender gap is moreover particularly strong in occupations that cannot be done remotely. In terms of hours worked, our results indicate that there was no significant gender gap due to the pandemic overall, but that full-time working women, and those working in low-teleworable occupations had to reduce their hours more than their male counterparts. The result again points to the role of part-time work and flexibility in reducing the impact of the pandemic on women. Finally, we show a limited effect of the pandemic on the wage distribution for both male and female workers. There is however substantial heterogeneity among workers; we show that women in low-teleworkable occupations are more likely than men to experience a wage reduction during the pandemic, while women in high-teleworkable occupations are more likely to have an increase in their wage.

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10 Data

This section documents all survey variables we used in the regressions and figures reported in this paper.

10.1 Definition of Variables

KOF stringency index: The indices are composite measures including different lockdown policies, such as school and workplace closure. The values range from 0 (= no measures) to 100 (= full lockdown). The data is available at the national level and for all individual 26 cantons of Switzerland from January 2020 onwards. The construction largely follows the code book of the Oxford Covid-19 Government Response Tracker.

Gender (BB04A)

Labor market status (B0000): active, apprentice, unemployed according to the ILO, non active.

Age category (AGE64): 15-24, 25-39, 40-54, 55-64, 65+.

Education (TBQ2): Highest education level achieved: middle school, high school or equivalent, college.

Canton (B017): canton of residence.

Occupation (BFU7): Occupation according to the International Standard Classification of Occupations (ISCO-08 at 1 position). The variable refers to current occupation for employed respondents and to previous occupation for unemployed and inactive ones. Respondents who were never active or were inactive for more than 8 years do not answer this question.

Sector (BMU3): Sector according to the General Classification of Economic Activities classification (NOGA-08 level 1). The variable refers to current sector for employed respondents and to previous sector for unemployed and inactive ones. Respondents who were never active or were inactive for more than 8 years do not answer this question.

Civil status (IS03): single, married, divorced, widower, in a registered partnership, separated, other.

Children (FAMTYP2): The variable refers to the presence of children in the household, either own or partner's child. No child under 15, youngest child aged 7-14, youngest child aged 0-6.

Professional activity patterns in couples (BKU6): Occupancy rate brackets for male and female partner.

Work from home (EI04): Binary variable recording whether the respondent worked from home at least once over the last four weeks.

Reason for reduction in hours of work (EK101): Respondents who experienced a reduction in hours worked in the previous week provide a reason for the reduction (vacation, military service, maternity/paternity leave, sick leave, education, family responsibilities, short-time work, personal, weather, variable hours, compensation of overtime, other). The variable is used to construct the short-time work dummy and the family leave dummy.

Job search (BD08): Respondents that are not currently employed are asked whether they were searching for a job in the last 4 weeks.

Reasons for not searching job (BD131, BD132, BD133): Respondents that are not currently employed and not currently searching for a job are asked the reasons why they are not searching. Education, military service, retirement, sickness, invalidity, child care, other personal or family responsibilities, other.

Worked last week (BD01): The variable records whether respondent performed at least one hours of paid work in the previous week.

Hours worked last week (EK08): Number of hours effectively worked in the previous week.

Occupancy rate in percent (EK08)

Annual income (BWU1): Gross annual professional income.

10.2 Summary Statistics

The number of observations by labor market status, education, family type, occupation and work model within couple are given respectively in Table 12, Table 13, Table 14,

Table 15 and Table 16.

Table 12: Number of Observations by Labor Market Status (B0000), Gender and Quarter

	Men				Women			
	Employed	Appr.	Unempl	Non-active	Employed	Appr.	Unempl	Non-active
2019q1	9848	498	409	3548	9622	333	497	5364
2019q2	9675	505	376	3155	9339	349	399	4873
2019q3	9267	456	390	3159	8808	358	400	4611
2019q4	9383	479	349	3168	9186	364	379	4690
2020q1	9610	505	390	3237	9448	369	398	4863
2020q2	9869	492	428	3606	9510	338	397	5325
2020q3	9768	464	480	3461	9309	349	504	4924
2020q4	9844	492	443	3360	9532	360	469	4886

Table 13: Number of Observations by Education (TBQ2), Gender and Quarter

	Men			Women		
	Mandatory school	High school	University	Mandatory school	High school	University
2019q1	2284	5867	6152	3061	7630	5125
2019q2	2139	5587	5985	2818	7116	5026
2019q3	1835	5613	5824	2473	6961	4743
2019q4	1918	5603	5858	2572	7182	4865
2020q1	2082	5588	6072	2742	7264	5072
2020q2	2164	5900	6331	2857	7379	5334
2020q3	1984	5954	6235	2580	7209	5297
2020q4	2012	5813	6314	2666	7206	5375

10.3 Additional Data

The Oxford Covid-19 Government Response Tracker (OxCGRT) collects information on the school closure policies across countries, which are recorded on a scale to reflect the stringency of school closure policies. In the data, 0: no measures; 1: recommend closing or all school open with alterations resulting in significant differences compared to non-covid-19 operations; 2: require closing (only some levels or categories, eg just high school or public schools); 3: require closing all levels.

As displayed in Figure 13, Switzerland has a more lenient school closure policy. Swiss schools reopened in May 2020 while other countries kept strict measures throughout 2020.

Table 14: Number of Observations by Family Type (FAMTYP2), Gender and Quarter

	Men			Women		
	No Child	Child 0-6	Child 7-14	No Child	Child 0-6	Child 7-14
2019q1	8217	1247	1116	8890	1502	1426
2019q2	10522	1690	1499	11257	1904	1799
2019q3	10208	1595	1469	10757	1749	1671
2019q4	10342	1551	1486	11100	1800	1719
2020q1	8201	1222	1166	8797	1372	1364
2020q2	11145	1671	1579	11789	1931	1850
2020q3	10943	1632	1598	11529	1830	1727
2020q4	10867	1639	1633	11674	1832	1741

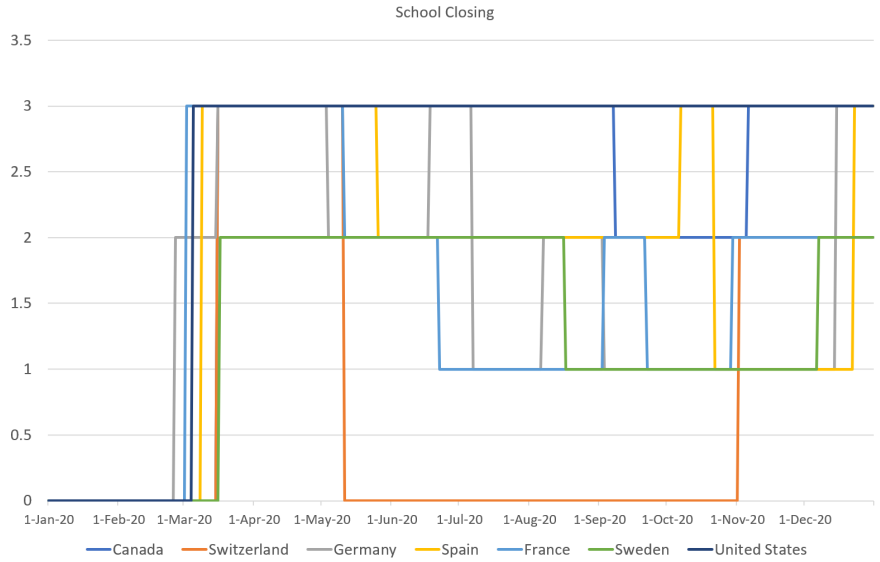
Table 15: Number of Observations by Occupation Type, Gender and Quarter

	Men		Women	
	HighTele	LowTele	HighTele	LowTele
2019q1	8126	4149	8508	3868
2019q2	8064	4018	8277	3660
2019q3	7761	3851	7801	3443
2019q4	7859	3855	8121	3645
2020q1	8068	3980	8452	3723
2020q2	8345	4146	8686	3746
2020q3	8228	4045	8435	3587
2020q4	8369	4040	8675	3599

Table 16: Number of Observations by Quarter and Professional Activity Model in Couple

	Equal	M-more	F-more
2019q1	2791	6747	759
2019q2	3616	8759	942
2019q3	3457	8275	914
2019q4	3480	8414	974
2020q1	2750	6517	717
2020q2	3824	8898	1015
2020q3	3655	8648	1057
2020q4	3603	8674	1059

Figure 13: School Closure Index



Notes: The index records the stringency of school closure policy in several developed economies. The values range from 0 (=no measures) to 3 (= closing all levels). Source: Oxford.

11 Robustness

Table 17 presents a robustness check where we only include respondents for which we have complete information on occupation type (ISCO) and economic sector (NOGA). For non-active respondents, this question is only answered by participants who had been employed over the previous 8 years. The sample in this robustness check therefore excludes non-active respondents who never worked or exited the labor market more than 8 years ago. The regression estimates are consistent with those presents in the Table 1.

We also tried to run the baseline regression using a simplified dummy for Covid-19 period, *Covid* is a time dummy, which is equal to one starting in 2020Q2, and zero before. Table 18 presents the estimates based on regression (1) that takes as dependent variable the labor market statuses. The results are again consistent with what we have seen in Table 1. Women are more likely to exit the labor market during Covid-19 both relative to men and relative to women during normal times.

Table 19 reports the regression results on STW, work last week and family leave using the Covid-19 dummy instead of the Covid-19 stringency index. In Table 20, we run our baseline regression again but include $NOGA \times CovInd$ and $ISCO \times CovInd$ fixed effects. The results are broadly consistent with those in the main text.

Table 17: Covid-19 and Labor Market Status

	Employed	Unemployed	Non-active
female	-0.0402***	0.00104	0.0375***
	(0.00254)	(0.00142)	(0.00218)
CovInd	-0.0148***	0.00650***	0.00928**
	(0.00288)	(0.00204)	(0.00244)
female × CovInd	-0.00502	-0.00310	0.00805**
	(0.00406)	(0.00287)	(0.00343)
constant	0.713***	0.0324	0.253***
	(0.0421)	(0.0230)	(0.0362)
Age FE	YES	YES	YES
Canton FE	YES	YES	YES
Education FE	YES	YES	YES
NOGA FE	YES	YES	YES
ISCO FE	YES	YES	YES
Observations	170619	170619	170619
R^2	0.0422	0.0108	0.0445

Notes: * p<0.1, ** p<0.05, *** p<0.01.
Estimates from regression (1) of labor market status on a constant, female dummy (1 for women and 0 otherwise), Covid-19 stringency index and its intersection with the female dummy. Sample includes respondents aged 15 to 64. Regressions estimated with linear probability model, including random effects. Robust standard errors in parentheses.

Table 18: Robustness: Replacing Covid Stringency Index by Covid Dummy

	Employed	Unemployed	Non-active
female	-0.0399***	-0.00247*	0.0412***
	(0.00230)	(0.00137)	(0.00203)
Covid	-0.00763***	0.00348***	0.00470***
	(0.00151)	(0.00114)	(0.00137)
female × Covid	-0.00328	-0.000605	0.00336*
	(0.00210)	(0.00158)	(0.00190)
Constant	0.726***	0.0291	0.244***
	(0.0396)	(0.0233)	(0.0350)
Age FE	YES	YES	YES
Canton FE	YES	YES	YES
Education FE	YES	YES	YES
NOGA FE	YES	YES	YES
ISCO FE	YES	YES	YES
Observations	186881	186881	186881
R^2	0.417	0.0423	0.459

Notes: * p<0.1, ** p<0.05, *** p<0.01.
Estimates from regression (1) of labor market status on a constant, female dummy (1 for women and 0 otherwise), Covid-19 dummy and its intersection with the female dummy. Regressions estimated with linear probability model, including random effects. Robust standard errors in parentheses.

Table 19: Robustness: Replacing Covid Stringency Index by Covid Dummy

	dumSTW	work_last_week	work_hours	dumfamleave
female	0.00218	-0.0292***	-8.991***	0.00239***
	(0.00135)	(0.00238)	(0.126)	(0.000407)
Covid	0.0517***	-0.0128***	-1.466***	0.00116***
	(0.00133)	(0.00230)	(0.101)	(0.000422)
female × Covid	0.0137***	-0.0176***	0.270*	0.000832
	(0.00191)	(0.00329)	(0.146)	(0.000603)
Constant	0.0188	0.788***	50.15***	0.000762
	(0.0220)	(0.0390)	(2.117)	(0.00652)
Age FE	YES	YES	YES	YES
Canton FE	YES	YES	YES	YES
Education FE	YES	YES	YES	YES
NOGA FE	YES	YES	YES	YES
ISCO FE	YES	YES	YES	YES
Observations	158250	158242	133583	158250
R^2	0.0392	0.0201	0.223	0.00189

Notes: * p<0.1, ** p<0.05, *** p<0.01.
Estimates from regression (1) of STW (column 1), work last week (column 2), working hours last week (column 3) and family leave (column 4) on a constant, female dummy and Covid-19 dummy. The sample is restricted to respondents who are employed or apprentices. Regressions estimated with linear probability model, including random effects. Standard errors in parentheses.

Table 20: Robustness: Adding NOGA× CovInd and ISCO× CovInd

	dumSTW	work_last_week	work_hours	dumfamleave
female	0.000907	-0.0321***	-8.934***	0.00210***
	(0.00144)	(0.00255)	(0.131)	(0.000442)
CovInd	0.125	0.0212	-2.248	0.000953
	(0.0864)	(0.150)	(6.298)	(0.0275)
female × CovInd	0.0286***	-0.0177**	0.223	0.00275**
	(0.00401)	(0.00695)	(0.303)	(0.00129)
Constant	0.0188	0.788***	50.12***	0.000762
	(0.0220)	(0.0390)	(2.449)	(0.00652)
Age FE	YES	YES	YES	YES
Canton FE	YES	YES	YES	YES
Education FE	YES	YES	YES	YES
NOGA FE	YES	YES	YES	YES
ISCO FE	YES	YES	YES	YES
NOGA×CovInd FE	YES	YES	YES	YES
ISCO×CovInd FE	YES	YES	YES	YES
Observations	158250	158242	133583	158250
R^2	0.0577	0.0227	0.224	0.00224

Notes: * p<0.1, ** p<0.05, *** p<0.01.

Estimates from regression (1) of STW (column 1), work last week (column 2), working hours last week (column 3) and family leave (column 4) on a constant, female dummy and Covid-19 stringency index. The sample is restricted to respondents who are employed or apprentices. Regressions estimated with linear probability model, including random effects. Standard errors in parentheses.