The consequences of the implemented COVID-measures on gender-specific labour market inequalities – a global perspective

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Abstract

The COVID-19 pandemic and accompanying lockdown measures expose populations across the globe to negative social and economic consequences. While the long-term consequences of the pandemic are still to be determined, gender inequalities are already evident: drops in maternal labour force participation were reported in a range of countries, while work pressure in female dominated vital occupations soared. The analysis of the COVID-19 impact on gender inequalities remains predominantly focused on the Anglo-Saxon and European context. Studies covering developing countries are few and rather descriptive. Our study covers Egypt, India, Indonesia, Turkey, and Vietnam, as well as European and North American countries. We investigate the gender-specific labour market effects of COVID-19 and its related lockdown measures by addressing three research questions. First, which gender-specific labour market inequalities have emerged during the first year of the pandemic, and which individual factors account for the observed inequalities? Second, are groups of women, such as mothers and women in vital occupations, especially affected by the pandemic? Third, do the observed gender gaps differ across countries and do contextual factors such as school closures account for the observed differences? Answers are based on the data from the multilingual, continuous *WageIndicator Survey of Living and Working in Coronavirus Times* (LWCV). The data collection started in March 2020 and we use data till June 7th, 2021. The dataset covers 24 countries representing five continents. Three dependent variables are examined (decrease and increase in workload as well as working from home. Regarding workload decrease, we observe that women in vital occupations do not experience any reduction in workload. This does not vary between women with and without children at home. Regarding workload increase, we find evidence that mothers and women in vital occupations experienced such an increase. Regarding working from home, we do not notice gender differences, but women in vital occupations are less likely to work from home.

Keywords: COVID-19, gender inequalities, vital occupations, mothers, school closures, cross-national comparison

Introduction

The COVID-19 pandemic and accompanying lockdown measures expose populations across the globe to highly negative social and economic consequences. While the long-term consequences of the pandemic are still to be determined, gender inequalities with respect to employment are already evident: drops in particularly maternal labour force participation were reported in a range of countries, while work pressure in female-dominated vital occupations soared (EIGE 2021, Eurofound, 2020b, 2020c). While the analysis of the COVID-19 impact on gender inequalities remains predominantly focused on the Anglo-Saxon and/or European context, studies covering developing countries are rather descriptive and do not provide a comprehensive understanding of determinants and possible consequences. This is highly problematic because it may jeopardize the progress achieved towards Sustainable Development Goal (SDG) 5 "Achieve gender equality and empower all women and girls" (UN 2020).

This paper aims to investigate the gender-specific labour market effects of COVID-19 and its related lockdown measures from a worldwide perspective by addressing the following research questions:

1. Which gender-specific labour market inequalities have emerged during the first year of the pandemic, and which individual factors account for the observed inequalities?
2. Are particular groups of women (mothers and those working in a vital occupation) especially affected by the pandemic?
3. Do the observed gender gaps differ across countries and in how far can the length of school and childcare closures account for the observed differences?

We explore answers to these questions using data from the continuous, online WageIndicator Survey of Living and Working in Coronavirus Times (LWCV). The multilingual data collections started in March 2020 and are still ongoing. The analysis uses data from 24 countries representing 5 continents (n= 10628-10793). The analysis is descriptive as well as analytical using country fixed-effects models. Three dependent variables are examined (increase and decrease in workload as well as working from home). In the light of recent literature, women can be expected to suffer more from the negative labour market consequences of pandemic-specific measures than men do. However, this will differ depending on which group of women we examine. Moreover, we expect that cross-national differences in the observed gender inequalities will be associated with the durations of implemented measures such as school and childcare closures.

What do we know? Literature review

From the start of the COVID-19 outbreak, there has been widespread speculation about the question whether women have been particularly affected, both in paid and unpaid work, by the pandemic and the lockdown measures such as school and childcare closures. Previous crises like the 2008 financial crisis have shown male employment is often more immediately vulnerable to economic downturns in industrialized countries due to their concentration in industries like construction and manufacturing, however, female employment was more affected in developing countries, where women are overrepresented in export-oriented sectors (Bariola & Collins, 2021; Elson, 2010; Seguino, 2010). Increases in demand in the female dominated care sector during the COVID-19 pandemic, could also imply that gender differences in unemployment effects in industrialized countries are not mirrored in developing countries.

Research has also demonstrated that the impact of economic shocks, such as unemployment, on the household division of paid and unpaid labor between women and men is rather limited (Van Der Lippe et al., 2018). However, the COVID-19 pandemic is rather special. In particular, the lockdown and related containment measures have changed the demand for paid work and its modalities, such as how and where it is done (Eurofound, 2020b). At the same time, the demand for unpaid work increased tremendously, particularly for parents with small and school-age children due to school and childcare closures (Bayham & Fenichel, 2020; Collins et al., 2020; Eurofound, 2020a; Koslowski et al., 2020). A major shift during the first lockdown was the unprecedented increase in work-from-home arrangements, which saved commuting time and, as a result, blended working time with other tasks, such as taking care of children who could not attend school. This additional time could be spent on either paid work, unpaid work or leisure. While the effects of the COVID-19 pandemic and containment measures were strongly gendered, there are strong indications that they also varied between women depending on care responsibilities and working in a vital occupation (Witteveen, 2020; Yavorsky et al., 2021; Yerkes et al., 2020).

Role of children

The presence of children in a household impacts the labour supply and labour market position of parents, and especially mothers in industrialized as well as developing countries (Besamusca et al., 2015; Goldin, 2006). Cued by cultural norms and institutional logics, employed mothers continue to take on the brunt of childcare responsibilities in most households (Becker, 1991; Del Boca et al., 2009; Gerson, 2010; Gutiérrez-Domènech, 2005; Jacobs & Gerson, 2004; Kremer, 2007; Pfau-Effinger, 2005; Tavora & Rubery, 2013). In consequence, they experience more work-family conflict than any other group, stemming from scheduling and role incompatibilities (Blair-Loy, 2003; Dotti et al., 2018; Hochschild & Machung, 2012). A major factor in reconciling work and family responsibilities is the

provision of midweek childcare, as provided in schools and early childhood education and care (ECEC) institutions (Ferragina, 2019; Lee, 2016; Press et al., 2006; Yerkes & Javornik, 2019).

Due to COVID-19 containment measures schools and ECEC centres were closed in many countries (Koslowski et al., 2020). As a consequence, care responsibilities multiplied for parents with young and school age children, who had to be cared for and home-schooled by parents. Studies in industrialized countries find that this increase in childcare responsibilities led substantial shares of mothers to drop out of the labour force or reduce working hours (Collins et al., 2020; Craig & Churchill, 2020; Landivar et al., 2020). Studying Canadian mothers, Qian and Fuller (2020) report that mother's employment bounced back up once schools and ECEC facilities reopened, suggesting that the provision of midweek childcare has a direct impact on working mothers' ability to stay in employment and make their usual hours. Collins and colleagues show similar findings comparing the effect of COVID-19 on mothers' employment across US school districts, who adopted wildly different approaches to school closures (Collins et al., 2021). Comparing the effects of policies towards school closures and re-openings in Denmark, Germany and the US, Bariola and Collins (2021) concluded that countries that prioritized the re-opening of schools and ECEC centres were better able to mitigate the gender unequal effects of the pandemic.

Moreover, the COVID-19 pandemic has forced employers to quickly adapt their working practices to more flexible arrangements. Specifically, they had to provide their employees with options to perform their work in a more adaptive way and from home, which substantially increased the time spent at home and may encourage more involvement in care tasks by men (Landivar et al., 2020; Witteveen, 2020; Yerkes et al., 2020). Findings are mixed, however, about any actual increase in men's share in domestic and care tasks during the COVID-19 pandemic (Hennekam & Shymko, 2020; Zamberlan et al., 2021).

Role of vital occupations

COVID-19 and associated containment measures have affected the labour market unequally. While large parts of the economy shut down under stay-at-home orders, other segments faced soaring demands. Of particular interest were occupations coined as "vital" during the pandemic, which include workers in health care, education, early childhood education and care, public transport, food stores and their value chains, etc. If the definition of vital occupations is limited to health care, education, early childhood education and care, women are largely overrepresented, but if the definition is extended to public transport, transport, IT and communication, and food manufacturing women and men are equally employed in these occupations. These so-called system relevant / essential occupations, often defined as working in health and education, where women are overrepresented, have largely been exempted from stay-at-home- orders, spared of unemployment, and have even seen

increased demand on paid working time (Herzberg-Druker et al., 2020; Hupkau and Petrongolo, 2020; Zhou et al., 2020). In addition, Koslowski et al (2020) report that school and ECEC facilities remained open for children of workers in essential occupations in 18 out of 40 high- and middle-income countries who closed ECEC centres and/or primary schools, provisions were made for vital workers. The increase in care responsibilities faced by parents during school closures, might therefore have been lower for essential workers.

Due to the overrepresentation of women in vital occupations in health care and education, their employment may have become more crucial to maintaining the financial stability of the household (Witteveen, 2020; Yerkes et al., 2020). It may also have increased women's relative resources within a household. Evidence for the economic crisis in 2007/08 indeed showed that such an experience can change the perception of the 'ideal' work division. At the time, the clear necessity of securing two incomes to prevent a family from economic risks pushed women into the labor market and eroded the male breadwinner model (Bettio et al., 2013; OECD 2017).

The size of differences between essential and non-essential workers are likely to vary with the strictness of stay-at-home orders. When non-essential businesses and stores shut down in some countries, they could remain open under social distancing rules in others.

In sum, we expect the consequences of the COVID-19 pandemic and containment measures to be gendered, but to intersect with parental status and working in a vital occupation. Moreover, we expect that:

- Women were more likely to have increased working hours in the pandemic if they worked in a vital occupation;
- Women were more likely to have decreased working hours in the pandemic if they were mothers;
- School closures increase in particular the negative effect of the pandemic on mothers' employment and on their likelihood to reduce working hours.

Data and Methods

Data

The data stem from the *WageIndicator Survey of Living and Working in Coronavirus Times* (LWCV). WageIndicator Foundation is a non-profit NGO that started in 2001 in the Netherlands. It develops, operates and owns national WageIndicator websites in 184 countries with labor-related content, generating web pages from its database. The mission of WageIndicator is to promote labor market transparency for the benefit of all employers, employees and workers worldwide by sharing and

comparing information on wages, minimum wages, living wages, labor law and career. It runs several continuous, global surveys to collect wage data, and price data on food and services. WageIndicator makes this information freely available on easy to reach and read national websites in the national language(s), using sophisticated search engine optimization. In 2019 its national websites attracted 47 million web visitors in total.

The multilingual LWCV was launched on March 23th 2020 and was made accessible through the frequently visited national WageIndicator websites in 143 countries. The survey has been promoted via social media, press releases, snowballing, messages in widely distributed newsletters, and websites of partners. The survey will continue as long as the pandemic lasts. The collected data is updated on a daily basis and shared with the research community through the data archive of the IZA - Institute of Labor Economics. Data used in this paper was collected between March 23th 2020 and June 7th 2021. We include 24 countries with at least 50 valid observations in the samples. Moreover, all missing's have been excluded. This leaves us with three different samples (per outcome variable): N=10649 (increase workload), N=10628 (decrease in workload) and N=10793 (working from home) The LWCV survey takes 5-10 minutes to complete and the questionnaire is designed to tackle the individual, family, and interpersonal coping with the COVID-19 situation.

As the LWCV collects data continuously, we can merge the sample for each country with other data sources on a daily basis. In the framework of this paper we add data about **schools closures** from UNESCO's global monitoring of schools closures (https://en.unesco.org/covid19/educationresponse#schoolclosures) based on latest UNESCO Institute for Statistics data. In the analysis, we can observe the whole period from March 2020 to June 2021 during which schools were closed and reopened again, in some countries several times. To account for the effect of school closure, we use a variable that captures the number of weeks the schools were closed during the period we study.

Operationalisation

In this paper we examine *three dependent variables* which reflect different aspects of how the pandemic has affected people across the globe. They are all dummy coded and cover whether a) the workload has decreased during the pandemic (1 if yes), b) whether the workload has increased during the pandemic (1 if yes), and c) whether the respondent works from home due to the pandemic (1 if yes).

The *main independent measures* are dummy variables related to a) whether the respondent is a man or a woman (=1), b) whether the respondent works in a vital occupation[1] (1 if yes), and c) whether a cohabiting child is present in the respondent's household (1 if yes).

Several *micro-level control variables* associated with gender inequalities in employment are included. We consider educational level, age, having a partner, health condition, level of urbanization, type of employment, working hours, size of the company, having a permanent contract and day of completing the survey. For a detailed overview of the included variables see Table A in the appendix.

Method and Analytical Strategy

The empirical strategy focuses on gender inequalities for three different labor market outcomes operationalized as the share of women relative to men. We estimate logit country fixed-effects models with interactions between gender and the main independent variables (having a child and working in a vital occupation) as well as cross-level interactions between gender and pandemic-specific indicators (school and childcare closures). The models are virtually identical to an ordinary least squares or logistic regression controlling for $n-1$ country fixed-effects (Allison 2009). Compared with conventional multilevel regression models, the fixed effects approach is preferred as it facilitates a more appropriate examination of cross-level interaction effects, even when the number of country-level units is small (N<30). Moreover, by including country-fixed effects, this model controls for country-level heterogeneity, most notably in composition and labour markets' structural conditions, which could bias the relationship between examined institutions and women labor market outcomes (Allison 2009).

We specify four models (M1-M4, see Tables 2-4 in the annex) for each outcome variable, starting with a bivariate model in which we examine the raw gender effect (M1) followed by a model including all relevant independent and control variables (M2). M3-M4 include the respective aforementioned interaction effects between gender and having a child as well as gender and working in a vital occupation in a stepwise procedure. Finally, we focus why countries differ with respect to the observed

[1] The LWCV has a question about respondent's occupation, using a database of 1,700 occupational titles translated for all countries. All occupations are coded according to the International Classification of Standard Occupations (ISCO08). We define vital occupations following the suggested definition by the UK government (https://www.gov.uk/government/publications/coronavirus-covid-19-maintaining-educational-provision/guidance-for-schools-colleges-and-local-authorities-on-maintaining-educational-provision#critical-workers). It includes occupations in health and social care, education and childcare, the justice system, journalists and broadcasters, local and national government, food and other necessary goods, public safety and national security, utilities, communication and financial services. We assume that similar lists were used in all other countries in the survey, but we could not check this assumption. The main reason is that not all governments specified vital occupations to the same degree of detail or did not publish a list of occupational titles. In some countries vital occupations were rather defined at regional instead of national level. Two characteristics of vital occupations stand out: 1) they were first exempted from the lockdown measures (so they could go to their workplace), and 2) in times of school closures they were allowed to send their children to emergency care.

motherhood and gendered vital occupation effect by including a three way cross-level interaction effect between gender*having a child*school closure in weeks and gender*working in a vital occupation*school closure in weeks (see Table B, Models 1a-1c and 2a-2c in the appendix).

Results

Tables 1-3 presents the results obtained from logistic country fixed-effects models for gender inequalities for the three outcomes of interest. In all models, we control for the individual-level variables and country-fixed effects. To increase the readability of the Tables, we present only the relevant effects for the independent variables and interaction effects. Regarding models estimating how the pandemic and related measures are associated with an increase or decrease in workload, Table 1 (Models 1-4) shows that, with respect to men, women experienced a significant increase in workload. This effect remains significant when controlling for relevant compositional and labor market related differences. Moreover, it is also evident that people in vital occupations are more likely to report an increase in workload than those not working in a vital occupation. Turning to the question whether this gender effect differs for different types of women (Models 3 and 4) we find evidence that particular mothers as well as women in vital occupations are more likely to experience an increase in the workload.

Table 1: Gender inequalities in workload increase due to COVID-19: country-fixed effects

	M1	M2	M3	M4
Women (ref. men)	**0.316*****	**0.385*****	**0.186*****	**0.294*****
	(0.045)	(0.048)	(0.057)	(0.063)
Vital occupation (ref. no)		0.726***	0.326***	0.724***
		(0.046)	(0.081)	(0.046)
Child in HH (ref. no)		0.084	0.082	-0.063
		(0.047)	(0.047)	(0.082)
Interactions				
Women*Vital			**0.603*****	
			(0.099)	
Women*Child				**0.207***
				(0.094)
_cons	-0.316	-2.681	-2.457	-2.680
	(1.415)	(1.410)	(1.413)	(1.408)
Control variables	No	Yes	Yes	Yes
Country fixed effects (N=24)	Yes	Yes	Yes	Yes
N	10649	10649	10649	10649

*Source: LWCV 2020-2021, standard errors in parentheses, * p < 0.05, ** p < 0.01, *** p < 0.001*

Continuing with the exploration whether people and women experienced a reduction in workload, Table 2 shows that such an effect cannot be observed. There are no significant differences between

women and men observable. However, people working vital occupations are less often reporting a decrease in workload, which is in accordance with previous findings. Moreover, this seems to be gendered. Women working in vital occupations experience significantly less often a workload reduction. This might be related to the fact that those women have been working in the educational and health sector which had (as already elaborated above) rather been in strong demand during the pandemic.

Table 2: Gender inequalities in workload decrease due to COVID-19: country-fixed effects

	M1	M2	M3	M4
Women (ref. men)	-0.021	-0.056	0.062	0.003
	(0.047)	(0.050)	(0.058)	(0.067)
Vital occupation (ref. no)		-0.637***	-0.329***	-0.635***
		(0.055)	(0.090)	(0.055)
Child in HH (ref. no)		-0.057	-0.054	0.032
		(0.050)	(0.050)	(0.085)
Interactions				
Women*Vital			**-0.486*** **	
			(0.113)	
Women*Child				-0.130
				(0.099)
_cons	-0.832***	0.832**	0.726**	0.800*
	(0.149)	(0.253)	(0.256)	(0.254)
Control variables	No	Yes	Yes	Yes
Country fixed effects (N=24)	Yes	Yes	Yes	Yes
N	10739	10739	10739	10739

*Source: LWCV 2020-2021, standard errors in parentheses, * p < 0.05, ** p < 0.01, *** p < 0.001*

Turning to the question whether working from home was gendered, the findings in Table 3 support this hypothesis. The significant effects indicate that in particular women were more often working from home than their male counterparts. This effect can be partly explained by the socio-demographic and workplace related differences (see Model 2). To address the question whether the differences between different types of women can be observed, depending on whether they work in vital occupations or have children, Model 3 and 4 provide some evidence that in particular for women in vital occupations the main positive effect of gender becomes smaller, indicating that they are a bit less often working from home. This findings is consistent with other studies emphasising that in particular essential occupations in the health sector which are strongly feminised did not fall under the home office obligations implemented in many countries.

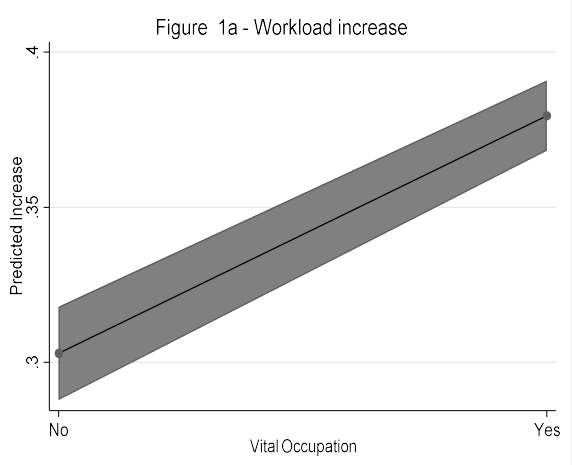
Table 3: Gender inequalities in working from home due to COVID-19: country-fixed effects

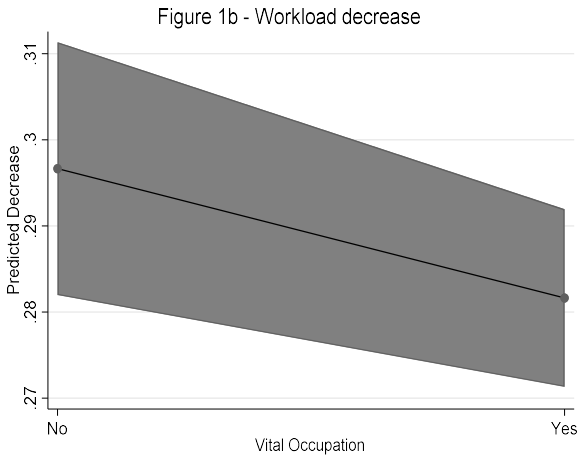
	M1	M2	M3	M4
Women (ref. men)	**0.177*****	**0.160****	**0.298*****	0.094
	(0.045)	(0.050)	(0.059)	(0.066)
Vital occupation (ref. no)		-0.142**	0.163	-0.144**
		(0.052)	(0.086)	(0.052)
Child in HH (ref. no)		0.001	0.000	-0.102
		(0.051)	(0.051)	(0.085)
Interactions				
Women*Vital			**-0.477*****	
			(0.107)	
Women*Child				0.149
				(0.098)
_cons	-0.177	-1.100	-1.269	-1.099
	(1.451)	(1.396)	(1.396)	(1.395)
Control variables	No	Yes	Yes	Yes
Country fixed effects (N=24)	Yes	Yes	Yes	Yes
N	10793	10793	10793	10793

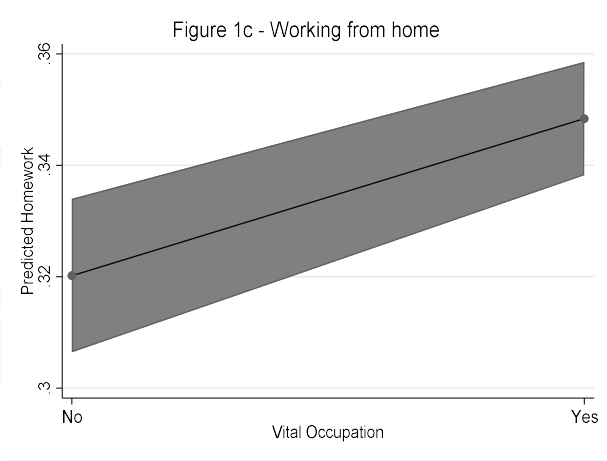
*Source: LWCV 2020-2021, standard errors in parentheses, * p < 0.05, ** p < 0.01, *** p < 0.001*

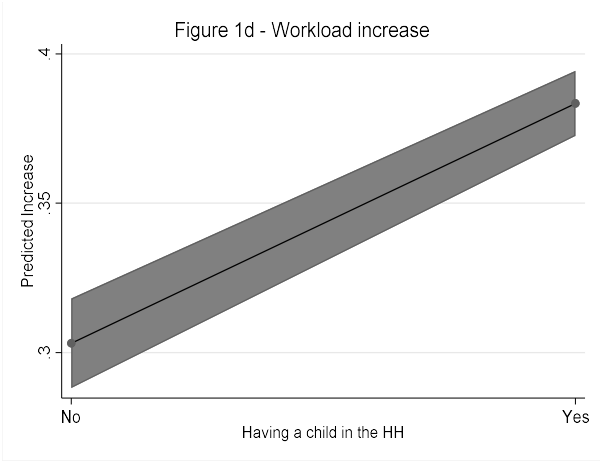
To illustrate the effects for women in vital occupations (Figures 1a-1c) and mothers (Figure 1d) the following figures show the predicted probabilities for them during the pandemic. Starting with women in vital occupations, we can see that in comparison to men in vital occupations, 8% more women report an increase in their workload (Figure 1a), 1,5% less women report a reduction in workload (Figure 1b), and finally around 2,8 % more women in vital occupations report working from home (Figure 1c) . Interestingly besides the increase in workload, we did not find any further evidence of a motherhood effect. However, as figure 1d shows, the increase in the workload is 8 percentage points higher for mothers working in any vital occupation than for men working in such an occupation.

Figures 1a-1d: Simple slope comparison of inequalities between women in vital and non-vital occupations as well as between mothers and non-mothers









Finally, we also aimed to shed light on whether and why the observed gender differences vary across countries considering in particular pandemic containment measures, such as school closures. For our three outcomes working from home and experiencing either a workload increase or decrease (see Table B in the appendix) we included relevant cross-level interactions with how long schools were closed in the respondent's country. Starting with the results for vital occupations and increase in workload it seems that in countries with a long partial or complete school closure the extent to which in particular women working in vital occupations experienced a workload increase was less pronounced. This might on the one hand indicate that women and particular mothers working in these occupations received more support through for instance emergency childcare facilities or through a partner not working in a vital occupation. On the other hand it might also be related to the type of vital occupation women in our sample are performing. While for instance, in particular health related vital occupations experienced a tremendous increase in work during the pandemic, other vital occupations related to education might have more stable work requests (Table B Model 2b in the appendix). Turning to the findings for mothers, we did not find any significant association between an in- or decrease in the workload nor working from home with the length of school closures (Table B Models 1a-1c in the appendix).

Summary and conclusion

In evaluations of the impact of the pandemic on labour market outcomes, the dominant narrative is that women have been affected harder than men. Our study aimed to underpin and to specify this narrative with empirical data from a multi-country, multilingual survey in 24 countries. Therefore, we specified the male-female divide with further breakdowns for mothers versus non-mothers and for women working in vital occupations versus women not working in such occupations. Our findings do

not straightforwardly support the worsening of women's position in the labour market but reveal a nuanced picture.

Starting with the question whether and which gender-specific labour market inequalities have emerged during the first year of the pandemic, our preliminary analyses shows that women have been affected, but not for all considered outcomes to the same extent. First, we clearly see that an increase in workload during the pandemic is gendered. Women in our sample are more likely to experience an increase in workload than their male counterparts. Such a clear gendered pattern could not be observed for workload decrease nor working from home. Part of this effect can be attributed to compositional differences of women with respect to socio-demographic and workplace-related characteristics. However, they do not completely account for the observed gender differences in workload increase.

Regarding the question whether particular groups of women, such as mothers and those working in a vital occupation have been affected by the pandemic, our result confirm this partially. In particular women in vital occupations have been affected by the implemented pandemic measures. For the three outcomes considered we were able to show that women in vital occupations do not experience any reduction in workload but a strong increase. This is in line with research discussing women's overrepresentation in vital occupations, notably the educational and the health sector. Women in vital occupations were also less often working from home which seems logical as those occupations often did not fall under the home office obligations implemented in many countries. For mothers we also found some evidence that their workload has increased. But no indication that they worked more often from home.

Finally, our results show that the observed gender gaps in increased workload and working from home differ across countries and can be accounted for by implemented lockdown measures - namely school closures. More concretely, in countries in which the partial or full school closure was long, the workload increase of women in vital occupations was less pronounced. This might on the one hand indicate that women and particular mothers working in these occupations received more support through for instance emergency childcare facilities or through a partner not working in a vital occupation. On the other hand it might also be related to the type of vital occupation women in our sample are performing. While for instance, in particular health related vital occupations experienced a tremendous increase in work during the pandemic, other vital occupations related to education might have more stable work requests. Turning to the findings for mothers, we did not find any significant association between an in- or decrease in the workload nor working from home with the length of school closures.

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NOTES

1. WageIndicator Foundation (2020) *Survey of Living and Working in Coronavirus Times. Codebook and Explanatory Note*. Amsterdam, WageIndicator Foundation, March 30, https://wageindicator.org/Wageindicatorfoundation/publications/2020/wageindicator-foundation-2020-survey-of-living-and-working-in-coronavirus-times-codebook-and-explanatory-note-amsterdam-wageindicator-foundation-march-30
2. The data of the survey "Living and Working in Coronavirus Times" is free available for non-commercial research at the IDSC Research Data Center of IZA - Institute of Labor Economics, see Data Set Repository - Dataset: WageIndicator Survey of Living and Working in Coronavirus Times 2020-2021 (iza.org)
3. The survey is registered at the World Pandemic Research Network (WPRN), see https://wprn.org/item/417152
4. The survey is featured in the COVID-19 Network of the BBMRI-NL Catalogue, see https://catalogue.bbmri.nl/menu/main/app-molgenis-app-biobank-explorer/network/bbmri-eric:networkID:EU_BBMRI-ERIC:networks:COVID19#/

APPENDIX

Table A. Description and operationalization of the independent and control variables

Variable	Description	Source
Individual-level	**Independent variables**	
Work increase	Dummy-coded variable based on the questions "How is your work affected? The workload has decreased (0=no, 1=yes)	LWCV March 2020-June 2021
Work decrease	Dummy-coded variable based on the questions "How is your work affected? The workload has increased (0=no, 1=yes)	
Working from home	Dummy-coded variable based on the questions "How is your work affected? I have to work from home (0=no, 1=yes)	
Female	Dummy-coded variable (0=male, 1=female)	
Child	Dummy-coded variable (0= no child in HH, 1= child in HH)	
Educational level	Dummy-coded variable based on ISCED 6 (no/low/medium (ref.) based on categories 0-400; high=3 based on categories 500-600)	
Vital occupation	Dummy-coded variable (0= no, 1= yes).	
	Controls	
Age	Continuous variable (15-78)	
Partner	Dummy-coded variable (0= no partner in HH, 1= partner in HH)	
Health	Categorical variable (1-5) treated as a continuous variable	
Urbanization	Categorical variable (1=city (ref.), 2= town, 3=village)	
Employment status	1 No job, 2 Employee permanent contract, 3 Employee fixed term contract, 4 Self-employed, 5 Other	
Permanent contract	Dummy-coded variable (0= no, 1= yes)	
Working hours	Continuous variable (0-99)	
Survey week	Continuous variable	
Country-level		
Partial and full school closure by weeks	Continuous variable	UNESCO's global monitoring of schools closures

Table B. Gender inequalities in working from home, workload increase and decrease due to COVID-19: country-fixed effects

	M1a	M2a	M3a	M1b	M2b	M3b
	homewo	workinc.	workdec	homewo	workinc.	workdec
Women (ref. men)	**0.104**	**0.298*** **	0.015	**0.292*** **	**0.176** **	0.062
	(0.067)	(0.064)	(0.068)	(0.060)	(0.058)	(0.058)
Vital occupation (ref. no)	-0.142**	0.725***	-0.633***	0.152	0.326***	-0.344***
	(0.052)	(0.046)	(0.055)	(0.086)	(0.082)	(0.090)
Child in HH (ref. no)	-0.096	-0.072	0.046	0.001	0.079	-0.053
	(0.085)	(0.084)	(0.086)	(0.051)	(0.047)	(0.050)
Interactions						
Women*schoolclose	-0.043	-0.018	-0.082	0.025	0.051	-0.002
	(0.063)	(0.064)	(0.063)	(0.055)	(0.054)	(0.053)
Women*Child	0.130	**0.209***	-0.147			
	(0.099)	(0.095)	(0.099)			
Child*schoolclose	-0.030	0.052	-0.128			
	(0.074)	(0.076)	(0.074)			
Women*Child*schoolclose	0.158	0.011	0.179			
	(0.094)	(0.093)	(0.094)			
Women*Vital				**-0.467*** **	**0.620*** **	**-0.473*** **
				(0.107)	(0.100)	(0.113)
Vital*schoolclose				0.060	-0.000	0.161
				(0.083)	(0.081)	(0.086)
Women*Vital*schoolclose				-0.031	**-0.213***	0.012
				(0.108)	(0.101)	(0.111)
_cons	-1.286	-2.781*	0.790**	-1.316	-2.566	0.788**
	(1.401)	(1.415)	(0.250)	(1.400)	(1.417)	(0.249)
Control variables	Yes	Yes	Yes	Yes	Yes	Yes
Country fixed effects (N=24)	Yes	Yes	Yes	Yes	Yes	Yes
N	10893	10755	10739	10893	10755	10739

*Source: LWCV 2020-2021, standard errors in parentheses, * p < 0.05, ** p < 0.01, *** p < 0.001*