INAPP
PUBLIC POLICY INNOVATION

WORKING PAPER

INAPP WP n. 57

Covid-19 and women's attitude to work: commitment, effectivity and participation

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MARZO 2021

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MARZO 2021

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ABSTRACT

Covid-19 and women's attitude to work: commitment, effectivity and participation

In this paper we try to assess the Covid-19's and the lockdown policy's impact on the attitude and capability of women toward work and labour force participation. We use data that we gathered from an online survey on women working conditions before and during the lockdown as well as their perspective on their post-lockdown situation. Our analysis relies on Item Response Theory to estimate a latent measure that captures the capability of women to commit fruitfully in their work activities. We then use this estimation to compare how the lockdown impacted on this factor. Our results suggest a predictable worsening of the women working conditions and perspectives, but they also show that this worsening was not symmetric across all the categories of women.
The lockdown was particularly detrimental to women: i) working in the private sector, ii) in the younger age class (below 35) and iii) with less than tertiary education level. Interestingly, these categories, that were badly hit by the pandemic, were faring quite well (or at least average) in the pre-pandemic situation. We also find that there are some categories that appear to perform poorly in terms of working capability and that they see the expected decrease in their perspective as a consequence of the pandemic. However, for these disadvantaged categories the descrease is the same as the other categories. This is particularly true for women that have very young kids. Our findings point to the facts that there is a severe risk of a withdrawal of women in terms of labour force participation and from a point of policy it highlights the categories that are particularly exposed to this risk and should be the focus of interventions.

KEYWORDS: health emergency, Covid-19, female labor participation, item response theory

JEL CODES: C81, J6, J22

1. Introduction

Over the last three decades, in most of G20 countries there was an increase in the labor force participation rate of women aged 15-64 (ILO and OECD 2019). In Italy, for example, female employment rate has reached 48.8%. Nevertheless, the growth appears to be too slow, the chances for men and women to get employed and promoted in the labor force remain uneven, and, as a consequence, the women participation to labor market is still lower than men's. Persistent occupational and sector segregation, barriers to participation and a disproportionate share of unpaid household and care work hinder, indeed, an equal access to opportunities that should be in line with their significant progress in educational achievement reached over the past decades. All that limits women's economic choices and weighs on their social status (ILO 2016).

The recent Covid-19 pandemic has exacerbated these differences creating a profound shock with different implications for men and women. Economic crisis often differently affects men's and women's employment, with a greater negative effect on men (Rubery and Rafferty 2013; Hoynes *et al.* 2012). Job losses resulting from the 2008 financial crisis were much greater in male-dominated sectors of the economy (notably construction and manufacturing), while women's working hours actually increased. Differently, as suggested by Hupkau and Petrongolo (2020) and ILO (2020), the current recession, being not only an economic crisis, but a health and social one too, should have a similar impact on male and female employment, since the social measures taken have affected sectors where both genders are employed. However, emerging evidences suggests that women's economic and productive lives are disproportionately affected by a pandemic firstly because they are overrepresented in health sector, secondly because they continue to do the majority of unpaid care work in households.

Sevilla and Smith (2020) show that there has been a shift towards a more equal distribution of household and childcare between men and women, but most of the extra work caused by the crisis has fallen on women. Moreover, in September 2020, there were 2.4 million fewer women in the labour force compared to September 2019[1]. Across the world, women spend more time on domestic chores and care work than men: women spend, on average, slightly over 35 minutes each day on childcare activities – more than double the amount of time spent on childcare activities by men, and round 2 hours per day more on unpaid work than men (OECD 2020, OECD Gender Data Portal). The closure of schools and childcare facilities deriving from the lockdown policy, for example, has not only increased the time that parents have devoted to childcare and supervising children, but has also forced many to supervise or conduct education at home. All this implies for women an higher risk of economic insecurity than their male counterpart (Alon *et al.* 2020).

Women's predominant responsibility to get housework and domestic chores negatively affects women's labour force participation. As women take on greater care demands at home, their jobs will be affected by cuts and lay-offs leading to a rolling back of female labor force participation, limiting women's ability to support themselves and their families, especially for female-headed households. These risks are particularly serious both in developing countries and emerging economies, where large

[1] https://www.bls.gov/news.release/empsit.t01.htm.

numbers of women continue to work in "informal employment" namely jobs, often unregistered and that generally lack basic social or legal protection and employment benefits (OECD and ILO 2019).

This paper contributes to this recent but growing economic literature investigating the impact of the Covid-19 pandemic, and of the lockdown policy, both on the attitude of women toward work and on their labour force participation. We focus on Italy and in particular on one region, Tuscany, because the Italian context is particularly interesting. Italy was, indeed, the first European country to adopt particularly strict lockdown measures to contain the crisis, but, at the same time, as discussed by Del Boca *et al.* (2020), it is characterized by a high gender gaps in the labour market and by a patriarchal view of roles.

Our analysis contributes to the literature about women's attitude to work in two different ways. First, it provides an estimation of a variable measuring women working attitude and capability using an Item Response Theory (IRT) model. Second, it investigates how this variable changed before, during and after the lockdown. In doing this, it highlights which categories of women were particularly hit by the effects of the pandemic and the consequential lockdown. The IRT methodology exploits qualitative information gathered in "items", usually drawn from surveys or tests, to estimate a latent variable that is related to the observed items. In our specific case we gathered data from ad hoc survey we built on woman working and family conditions. The survey allows us to identify these characteristics before and during the lockdown as well as the expectation on these characteristics after the lockdown will be other. The survey also contains socio-demographic information.

The idea we are pursuing is that there exists a latent variable, that we call working attitude and capability, that is related to the working condition and therefore, the IRT methodology can exploit information on the latter to provide an estimation of the (latent) working attitude in capability. In what follows, we will often refer to this latent variable as "working capability": with this term we imply the capability of women to effectively commit and participate to the working process and activity. The results suggest a predictable worsening of the women working conditions and perspectives but they also show that this worsening was not symmetric across all the categories of women. The lockdown was particularly detrimental to women: i) working in the private sector, ii) in the younger age class (below 35) and iii) with less than tertiary education level. Interestingly, these categories, that were badly hit by the pandemic, were faring quite well (or at least average) in the pre-pandemic situation. We also find that there are some categories that appear to perform poorly in terms of working capability and that they see the expected decrease in their perspective as a consequence of the pandemic. However, for these disadvantaged categories the decrease is of the same magnitude as the one of the other categories. Women with very young kids are most striking example of this. Our findings point to the facts that there is a severe risk of a withdrawal of women in terms of labour force participation and from a point of policy it highlights the categories that are particularly exposed to this risk. These findings provide relevant policy implications as it calls for intervention to avert the above-mentioned risks: moreover, we clearly pinpoint the categories and situations on which a strong and quick intervention is more needed.

The paper is organized as follows. section 2 reviews the literature on, section 3 addresses the methodology and the data issues. The interpretation of the empirical results is provided in section 4. section 5 concludes with a discussion of the policy implications of the main findings.

2. Literature Review

In many European countries the female participation rate has start to increase in the early 90s. In the same period women's employment rate has moved to the same direction leading to a decline in the gender employment gap, but this decline is still too slow.

Several benefits can derive from the reduction of the gender gap in labor force participation. Blau (1998) suggests three main reasons why increased women's labor force participation may be advantageous: i) earning an income increases women's bargaining position inside the household, thereby affecting the distribution of resources and give them a more equal footing in making other decisions; ii) an increase in the number of female-headed families creates a group of households whose well-being is strongly dependent on their participation in the labor markets. Finally, iii) the level of participation is related to the accumulation of work experience which is an important determinant of the wage. Moreover, international evidences show that a stronger female participation in the labor market, and in particular in the public administration, coincides with lower level of corruption and an allocation of resources more oriented towards social care services, healthcare and education. So increasing participation could be an important factor in closing down the gender wage gap and in reducing the risk of poverty of families with a rise of overall GDP. Although there is a variety of studies looking at this issue from different perspectives, the available evidence is not uniform (for a review see Del Boca and Locatelli 2006). Many studies have investigated the role of different factors, such as: i) the changes in cultural attitudes towards work (Fortin 2005; Giavazzi *et al.* 2009); ii) the changes in the characteristics of the female population such as fertility decisions and elderly care responsibilities educational choices and demographic changes (Leigh 2010; Euwals *et al.* 2011; Balleer *et al.* 2009); and iii) the reforms of the welfare state and changes of labor market institutions and policies specifically targeted at groups with lower attachment to the labor market (Attanasio *et al.* 2008).

The decision of a woman about her labor market participation is affected by a lot of factors, including culture and institutions. For a woman to be able to participate in the labor market means to have the time and opportunity to do so. In particular, time allocation is crucially affected by the fact that women tend to spend a substantial amount of time on activities, such as unpaid care work, and by their personal perception of the family model (Fernández *et al.* 2004). Therefore, since time allocation is gender bias, female participation in labor markets tends to increase when the time-cost of unpaid care work is reduced, shared equally with men, and/or made more compatible with market work. Albeit the time-use should be a choice, evidence shows that social norms play a large part in determining gender roles and consequently the time devoted to work. Thornton *et al.* (1983) and Vella (1994) show that female attitudes towards work are developed in youth and thus they are influenced by parental education. Pastore and Tenaglia (2013) suggest that also different religious denominations can have a role in favouring or preventing female employment – as a consequence of a different views regarding traditional gender roles and the male breadwinner family model. Some scholars stress how the variation of women's participation could be the result of differences in cultural beliefs about the appropriate role of women in society (Fernández and Fogli 2009; Bertrand *et al.* 2015). Regarding to this, Mason and Lu (1988) highlight that as the rate of women's labor force participation raises the attitude to accept women's non-familial roles become greater. As well, Attanasio *et al.* (2008) emphasizing the role of market prices, show that is the decline in child care costs that mainly explains

the increase in participation to the labor market of mothers of young children. Fortin (2005) points out that gender differences in attitudes towards work account for part of the existing gender wage gap in the US.

A more recent strand of economics literature analyses the determinants of women's attitudes to work and finds that they have very deep historical roots (Giuliano 2018). Albanesi and Olivetti (2016) studying the relationship between medical progress, women's fertility and their participation in the labor market showing that an improvement in maternal health, for given fertility, boosts women's attitude and participation. Campa and Serafinelli (2019) exploit the imposition of state-socialist regimes in Central and Eastern Europe and highlight that individuals exposed to different regimes develop different attitudes toward work and different gender-role attitudes. Their findings suggest that those policies favouring women's participation in the labor market might improve the cultural acceptance of female work.

Relating to the effects of the lockdown after the Covid-19 outbreak in spring 2020, for Italy, Barigozzi *et al.* (2020) show that mothers with young children do a total amount of work of 60 hours per week divided between paid work (25 hours) and housework and childcare (35 hours), while their male partners provide 47 hours per week. Del Boca *et al.* (2020) find that the additional housework associated with the lockdown falls on woman while childcare and home learning activities were more equally shared. The same results were found for Spain by Farré *et al.* (2020). For the UK, Andrew *et al.* (2020) suggest that, in households with dependent children, mothers are more likely than fathers to be out of work or furloughed during the crisis. Finally, Oreffice and Quintana-Domeque (2020) find that poorer female employment outcomes during the crisis are also accompanied by a higher incidence of mental health issues.

3. Methodology

3.1 Survey design and administration

Data have been collected through an anonymous web-based survey during the Italian national lockdown[2], in the period April 19 - May 1 in 2020.

The survey has three parts: a first part containing questions related to general demography and socioeconomic situations; a second part that contains questions linked to the experience associated to the role of women within their work activity; and a third part containing questions related to the perceived experience in the context of domestic activity. The sets of questions contained in the last two parts have been repeated, changing the time reference; a single question belonging to these sets was then answered three times:

- with regards to *before* the start of the Covid-19 pandemic;
- *during* the Italian lockdown; and
- concerning the *post-emergency* expectation.

[2] The Italian lockdown of the first Covid-19 has been in effect from March 9 to May 3 (DPCM 9 marzo 2020).

The panel nature of the responses belonging to the parts two and three of the survey allows us to make a comparison on any changes due to the Covid-19 emergency. The complete questionnaire is reported in Appendix. The questionnaire was administered to women of Tuscany via web. All data have been collected anonymously, and the answers have not been attributed to a specific individual. Only complete records were considered, and after data cleaning we get 304 responses.

3.2 Statistical methodology: Item Response Theory

Our aim is to assess the unobservable *attitude of women toward work* through an Item Response Theory (IRT) model that allows the simultaneous estimation of both the women's score on the attitude scale and the items' properties (van der Linden and Hambleton 2013).

All IRT methods rely on three principal assumptions: (i) item responses are affected only by the latent trait; (ii) a change in the probability of a response is fully described by the item characteristic curve (ICC) and the boundary characteristic curve (BCC) for binary and graded items, respectively; (iii) pairwise item responses are statistically independent given the underlying latent trait.

Our analysis uses the Samejima's Graded Response Model (GRM) (Samejima 1996) that is specified as follows:

[Women] Let consider a random vector, $\boldsymbol{Y}_i$, of p item responses for the i-th woman ($i = 1, \dots n$) and the resultant observed responses, $\boldsymbol{y}_i = (y_{i1}, \dots, y_{ip})$. Let denote with θ_i the latent trait of the i-th woman. Latent trait is assumed to follow a standard normal distribution.

[Items] Let consider a set of p ordinal items, Y_j, where each item has K_j ordered categories, indexed by k. Hence, each item is described by $K_j - 1$ thresholds or boundaries: $\kappa_{j,1}, \dots, \kappa_{j,K_j-1}$. The probability to reach category k or higher increases monotonically as the latent trait grows and the boundaries satisfy the order constraint: $\kappa_{j,1} < \cdots < \kappa_{j,K_j-1}$.

The GRM is specified with respect to the probability that the response will be observed in *category k or higher*. The probability π_{ijk} that the i-th respondent will achieve the k-th category on item j is hence computed as the probabilities of responding above the lower boundary for the category ($\pi^*_{ij,k}$) minus the probability of answering above the category's upper boundary ($\pi^*_{ij,k+1}$):

$$\pi_{ij,k} = P\left(Y_{ij} = k \middle| \theta_i\right) = \pi^*_{ij,k} - \pi^*_{ij,k+1} \qquad \theta_i \sim N(0,1)$$

where $\pi^*_{ij,1} = 1$, $\pi^*_{ij,K_j+1} = 0$ and $\pi^*_{ij,k} = P\left(Y_{ij} \geq k \middle| \theta_i\right) = \frac{\exp\left(\alpha_j \theta_i - \kappa_{j,k}\right)}{1 + \exp\left(\alpha_j \theta_i - \kappa_{j,k}\right)}$.

The discrimination parameter α_j represents the slope of the response functions and does not vary between the category responses of the same item: this guarantees the presence of non-negative probabilities. The boundary parameters $\kappa_{j,k}$ vary within an item, according to the order constraint $\kappa_{j,k-1} < \kappa_{j,k} < \kappa_{j,k+1}$, and at each level of $\theta = \kappa_{j,k}$ the household has a probability of 0.5 of endorsing the category.

In this work we fit multiple-group GRMs, where each group is defined according to the different time references: before the pandemic, during the lockdown and in the post-emergency. This approach permits to make comparisons across groups. In our context, this means that we can assess whether

women's attitudes towards work have changed in relation to the different time references and we normalize to 0 the mean of the working capability before the pandemic.

4. Empirical results

The first step in the use of the IRT estimation is to check whether the items we are going to use are coherent in terms of the estimation of a single latent variable. This can be achieved with tests that control that the three fundamental IRT assumption are satisfied. In particular, we perform this test and we select the items using the Mokken Scale Procedure (MSP). This procedure measures the appropriateness of the scale (using Loevinger's H coefficient using Hardouin *et al.* 2011) and the internal consistency of items computing the Cronbach's alpha.

The implementation of MSP shows that all items in the Women and work activity section (see appendix for details and coding) appear to be coherent and share a single latent factor. On the contrary, the items from Women and domestic life (section (see appendix for details and coding) do not share a similar property. Therefore, we can safely perform our estimation using all the items form the working activity but we do not use items from the other group. This is the list of all the 6 items we use in the estimation of the working capability latent variable: time spent working, pleasure in doing the job, satisfaction from working life, appropriateness of tools, valorization from work, adequateness of pay.

After the selection of the items we can use them to estimate the IRT model and to obtain the parameters of each item: we report in table 1 the results of this estimation of the parameters for each of the item. From an interpretation point of view, the discrimination parameters reflect how well an item discriminate between people with different levels of working capability, whereas the difficulty parameters can be viewed as "challenging levels" of the corresponding item. The latter signals how difficult is, even for individuals with high working capability, to score well in these items.

Table 1. Estimation of IRT model and parameters

	Discrimination parameters	**Difficulty parameters**					
		>=2	>=3	>=4	>=5	>=6	=7
Time spent working	.912777	-3.61394	-2.89536	-2.10156	-.987253	.38241	1.44021
	0.07501	0.27717	0.22499	0.17312	0.11594	0.1103	0.16384
Pleasure in doing the job	1.84791	-2.88367	-2.13747	-1.53349	-.714832	-.017757	.889956
	0.13632	0.19127	0.14466	0.11408	0.08441	0.07712	0.09915
Satisfaction from working life	2.64020	-2.28627	-1.74274	-1.1631	-.471860	.270456	1.00645
	0.20946	0.14813	0.11857	0.09316	0.07462	0.0746	0.0952
Appropriateness of tools	1.52750	-2.78903	-2.22780	-1.61306	-.686366	.053319	1.07599
	0.11333	0.190184	0.15510	0.12193	0.0876	0.08234	0.11318
Valorisation from work	1.83358	-2.09186	-1.60783	-1.05876	-.327949	.414031	1.32843
	0.13878	0.14465	0.11904	0.09577	0.07821	0.08294	0.11779
Adequateness of pay	1.16211	-2.34143	-1.70138	-.863541	.133033	1.0277	2.0064
	0.09037	0.17499	0.13750	0.1009	0.09235	0.12307	0.18135

Source: own elaboration on data collected by the Authors

In terms of the discrimination parameters, we find that pleasure of doing job, satisfaction from it and valorisation are the most important factors. Changes in the working capability produces large changes in these items. The difficulty parameters signal interesting role for the time spent working and for the adequateness of pay. For the latter we find that even in the presence of large working capability is difficult that payment is perceived as adequate. For the former, we find that even in the case of scarce attitude, working time does not necessarily assume low value.

We turn now to the estimation of our latent variable: we used as reference period its value before the pandemic so that we normalized it to 0 during such time. We report in table 2 the mean values of the working capability at different times and for specific categories of women.

Table 2. Mean working capability for the whole sample and for selected categories

	Before the lockdown		**During the lockdown**		**After the lock down**	
	Mean	Std. Err.	Mean	Std. Err.	Mean	Std. Err.
All Woman	0	0.05	-1.16	0.07	-0.18	0.06
By age class:						
25-34	-0.06	0.09	-1.32	0.13	-0.18	0.11
35-49	0.03	0.07	-1.12	0.1	-0.2	0.08
50 and older	0.07	0.13	-0.73	0.16	-0.02	0.19
Education						
Secondary or less	0.11	0.8	-1.21	0.12	-0.13	0.1
At least tertiary	-0.08	0.07	-1.11	0.09	-0.21	0.08
Working Sector						
Public	0.07	0.09	-0.87	0.1	-0.01	0.1
Private	0.07	0.07	-1.35	0.11	-0.25	0.09
Age of youngest child						
Two years or less	-0.09	0.09	-1.35	0.12	-0.22	0.11
Three years or more	0.06	0.06	-1.05	0.09	-0.15	0.08

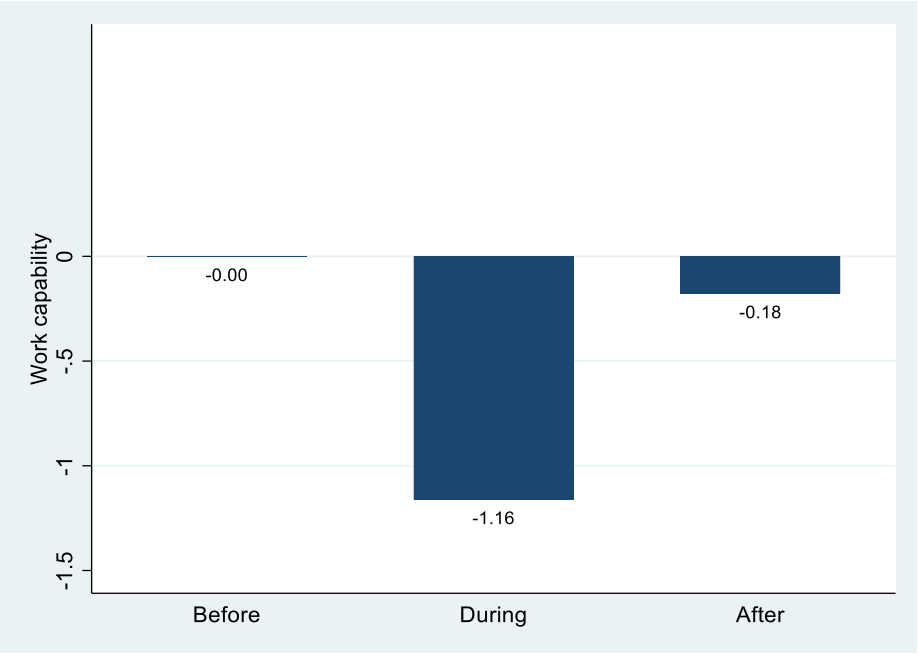
Source: own elaboration on data collected by the Authors

To offer a clearer representation of working capability at the different times, we depict in figure 1 depicts the mean values at the different timing for the whole sample. As expected, capability fell during the lockdown and it maintains a lower value (in terms of its perception) even after the end of it.

The results in the above figure were expected, even if the persistence of lower capability after the end of the lockdown could not be given for granted.

However, what we are more interested in, is whether this fall in the working capability was symmetric across different socio-demographic groups or if it was particular severe against some specific categories. Our analysis seems to suggest that 4 characteristics can be used to drive conclusions on these aspects: age, education, working sector, age of the youngest child and status in employment. The mean values of these categories were reported in table 2 and we now provide a deeper discussion of each of this aspects.

Figure 1. Work capability before, during and after the lockdown

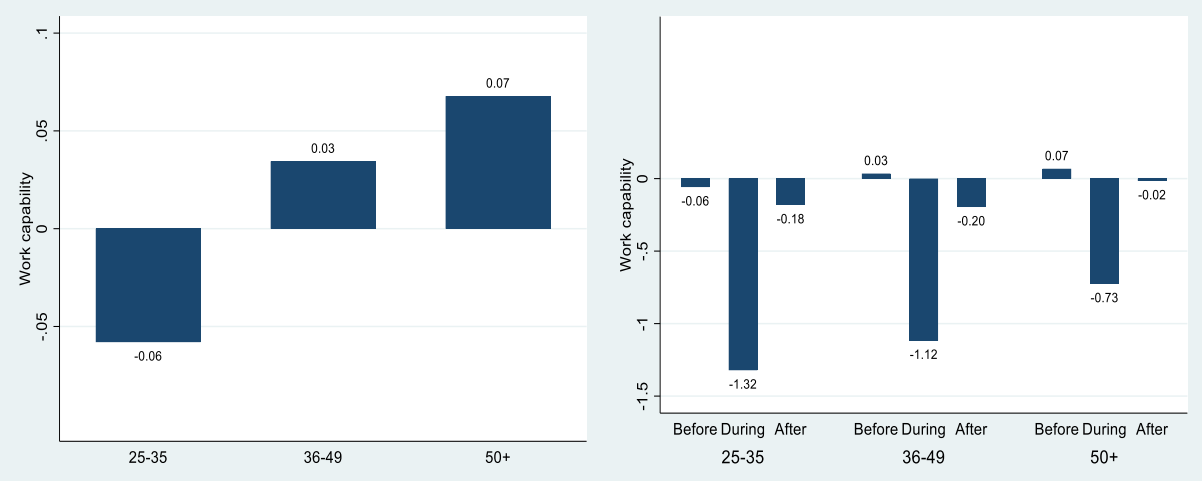


Source: own elaboration on data collected by the Authors

4.1 Age

We report in the left panel of figure 2 the mean capability for women of different age class before the lock down and in the right panel the same variable at different stages: we do not report values for women below 25 because the number of observations was too low.

Figure 2. Work capability for different age groups (left panel represents)



Source: own elaboration on data collected by the Authors

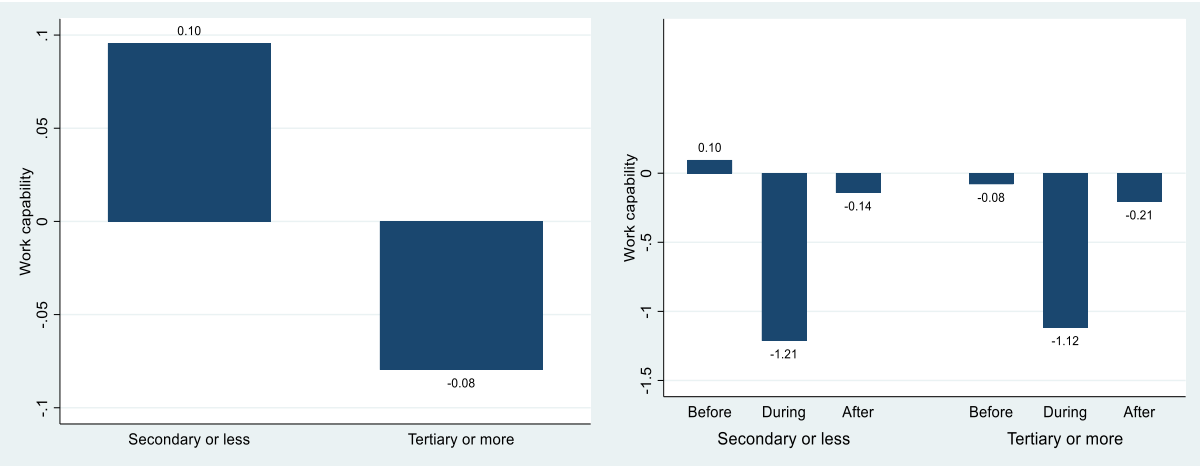
The figure shows that, before the lockdown, younger women were having more difficulties in terms of working capability. If we look at the evolution during and after the lockdown (right panel of figure 2) we

find that women in the 25-35 and 36-49 age classes were particularly hit by the lockdown and they believe will maintain this worsening even after the lockdown. However, this difference in the means is subject to relatively high standard errors (see table 2): while the differences during the lockdowns appear to be statistically very significant the gaps in the other periods are too blurred there a conclusive result.

4.2 Education

We report in the left panel of figure 3 the mean capability for women of different level of education and in the right panel the mean at the different stages of the lockdown.

Figure 3. Work capability for different education levels



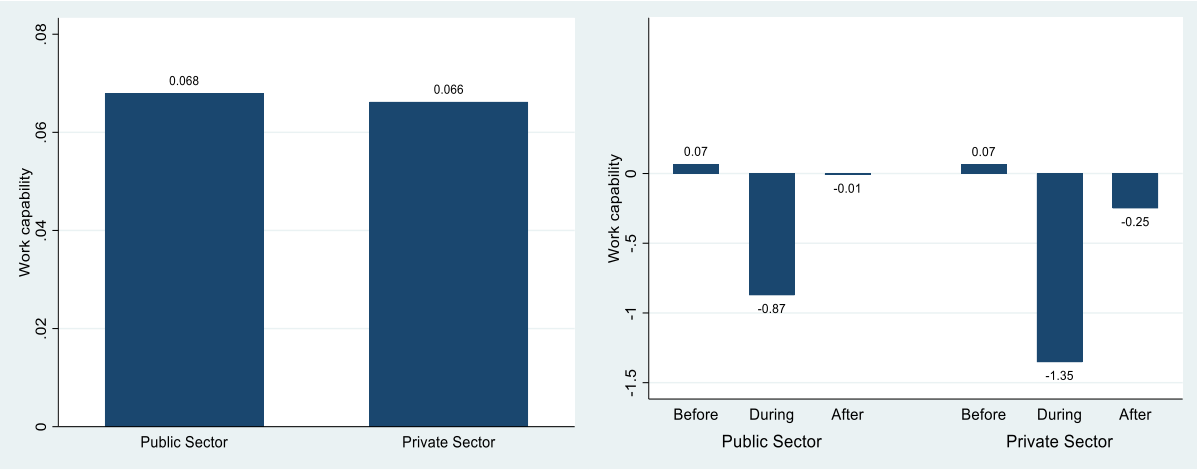
Source: own elaboration on data collected by the Authors

The figure shows two main findings. First, before the lockdown, it was the most educated women that were having more problems in effectively express themselves in the working world. However, this latter group experience a less severe worsening during the lockdown and this pattern partially remains after the end of it.

4.3 Working sector

We report in the left panel of figure 4 the mean capability for women working in the public and private sector and in the right panel the mean before, during and after the lockdown.
We do not report data for self-employed women because the number of observations is too low to draw precise conclusions.
Results on this aspect are quite clear: before the lockdown both sectors had a similar value in terms of working capabilities. However, the lockdown stroke particularly heavily for women in the private sector and this difference is believed to persist even after the end of the lockdown.

Figure 4. Work capability in the public and private sector

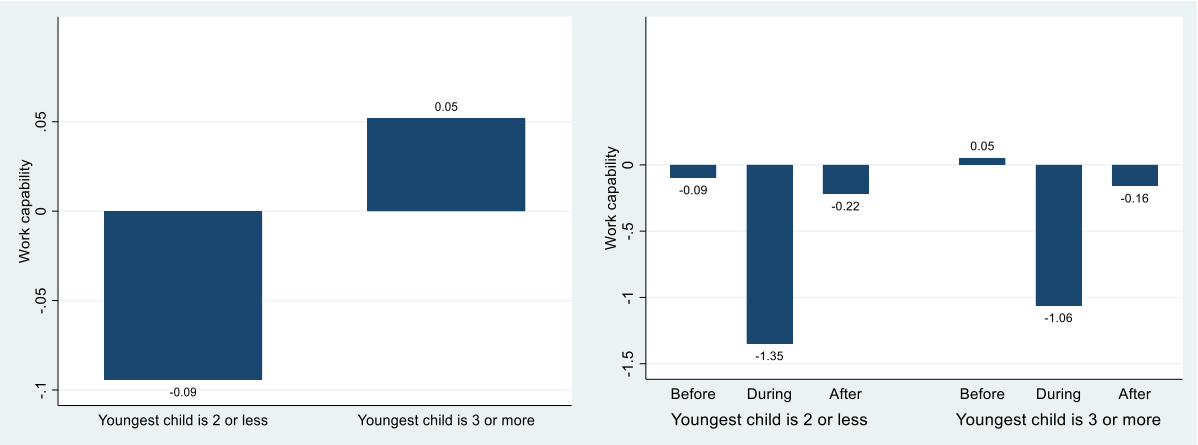


Source: own elaboration on data collected by the Authors

4.4 Age of youngest child

We report in the left panel of figure 5 the mean capability for women whose youngest child was below 3 years and for the rest women (that have at least one child).

Figure 5. Work capability and age of youngest child



Source: own elaboration on data collected by the Authors

The figure shows that having a very young child lower the working capability and are therefore in a condition of weakness. However, looking at the right panel of figure 3, we find the pandemic had a similar impact on all women with child, independently of the age of the youngest child: the gap between these categories remains similar (it slightly broaden during the lockdown and it slightly shrinks in the post-lockdown expectations).

5. Conclusions and policy implications

Our analysis has the aim to assess to what extent the pandemic and the lockdown reduced the capability of women to effectively commit and participate to the working process and activity. We achieved this estimating a latent variable measuring exactly this capability. Our results not only confirm a deep fall of this capability during the lockdown but shows that it is to be expected that part of this reduction will persist even after the end of the pandemic emergency.

In our analysis we tried to understand whether the detrimental effect of the lockdown was evenly distributed across all categories of women of it was possible to pinpoint some categories that were particularly hit. This is important in terms of policy suggestions because it is necessary to understand towards which categories public aid and support should be directed. In this sense we strictly find women in the younger age class and that were working in the private sector lost the most in terms of working capabilities and should receive special attention in terms of policy intervention.

Another implication, trickier this time, that emerge from our analysis is related to women with very young children. These women appear to be the weakest group and certainly deserve attention but, on the other side, we find the reduction in their working capability is of a comparable size as the rest of women with children. In some sense we call for an intervention to support this category though the ground for such intervention does not rest too much on the consequences of the pandemic.

Appendix

Questionnaire administered to women during the Italian lockdown.

Part 1. Demographic section

Item	Type	Values	
Age	Ordinal/Class	1- Less than 19 2- From 19 to 24 3- From 25 to 35	4- 50 or more 5- Prefer not to answer
Number of children	Ordinal/Class	1- 0 child 2- 1 child 3- 2 children	4- 3 children 5- 4 children or more
Age of the youngest child (1)	Numeric		
Number of household members	Numeric		
Educational qualification	Ordinal	1- Lower Secondary School 2- Upper Secondary School 3- University Degree 4- Post graduate qualification	5- Others 6- Prefer not to answer
Occupation	Nominal	1- Medical doctor 2- Nurse 3- Healthcare worker 4- Student 5- Housewife 6- Domestic worker 7- Manager 8- Employee 9- Teacher/Researcher	10- Factory worker 11- Entrepreneur 12- Freelance 13- Artisan 14- Trader 15- Looking for a job 16- Other 17- Prefer not to answer
Sector of Activity	Nominal	1- Public sector 2- Private sector	3- Other 4- Not applicable
During the lockdown, do you start to work at home?	Nominal	1- Yes 2- Yes, partially 3- No, I go to work outside my home 4- No, I had to stop my job	5- I do not work/study 6- I was already working from home 7- I am in maternity or parental leave 8- Other
During the lockdown, does your husband/partner start to work at home?	Nominal	1- Yes 2- Yes, only partially at home 3- No, only at workplace	4- Other 5- Not applicable

Note: (1) Conditional questions, asked only when appropriate.

Part 2. Women and work activity

Item	Time Ref.	Type	Values
How much time do I spend on my work during an average day? (2)	*Before* the pandemic *During* the lockdown Expectations *post-emergency*	Likert	Scale from 1 (min) to 7 (max).
How much do I enjoy doing my job? (2)	*Before* the pandemic *During* the lockdown Expectations *post-emergency*	Likert	Scale from 1 (min) to 7 (max).
How satisfied am I overall with my working life? (2)	*Before* the pandemic *During* the lockdown Expectations *post-emergency*	Likert	Scale from 1 (min) to 7 (max).
Am I satisfied with the equipment available to do my job? (2)	*Before* the pandemic *During* the lockdown Expectations *post-emergency*	Likert	Scale from 1 (min) to 7 (max).
Do I feel valued for the work I do? (2)	*Before* the pandemic *During* the lockdown Expectations *post-emergency*	Likert	Scale from 1 (min) to 7 (max).
Do I think I am paid adequately for the work I do? (2)	*Before* the pandemic *During* the lockdown Expectations *post-emergency*	Likert	Scale from 1 (min) to 7 (max).

Note: (2) Women studying, housewives or job seekers were asked to consider these activities as their job.

Part 3. Women and domestic activity

Item	Time Ref.	Type	Values
How much time do I spend on household activities during an average day?	*Before* the pandemic *During* the lockdown Expectations *post-emergency*	Likert	Scale from 1 (min) to 7 (max).
How much help do I get from other people in my household?	*Before* the pandemic *During* the lockdown Expectations *post-emergency*	Likert	Scale from 1 (min) to 7 (max).
How much energy do I use to look after my family members?	*Before* the pandemic *During* the lockdown Expectations *post-emergency*	Likert	Scale from 1 (min) to 7 (max).
How tiring do I consider home care (cleaning, cooking, etc.)?	*Before* the pandemic *During* the lockdown Expectations *post-emergency*	Likert	Scale from 1 (min) to 7 (max).
How much time can I dedicate to myself (hobbies, relaxation, etc.)?	*Before* the pandemic *During* the lockdown Expectations *post-emergency*	Likert	Scale from 1 (min) to 7 (max).
How happy do I feel about my personal and family life?	*Before* the pandemic *During* the lockdown Expectations *post-emergency*	Likert	Scale from 1 (min) to 7 (max).
How tired do I feel at the end of the day?	*Before* the pandemic *During* the lockdown Expectations *post-emergency*	Likert	Scale from 1 (min) to 7 (max).

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