

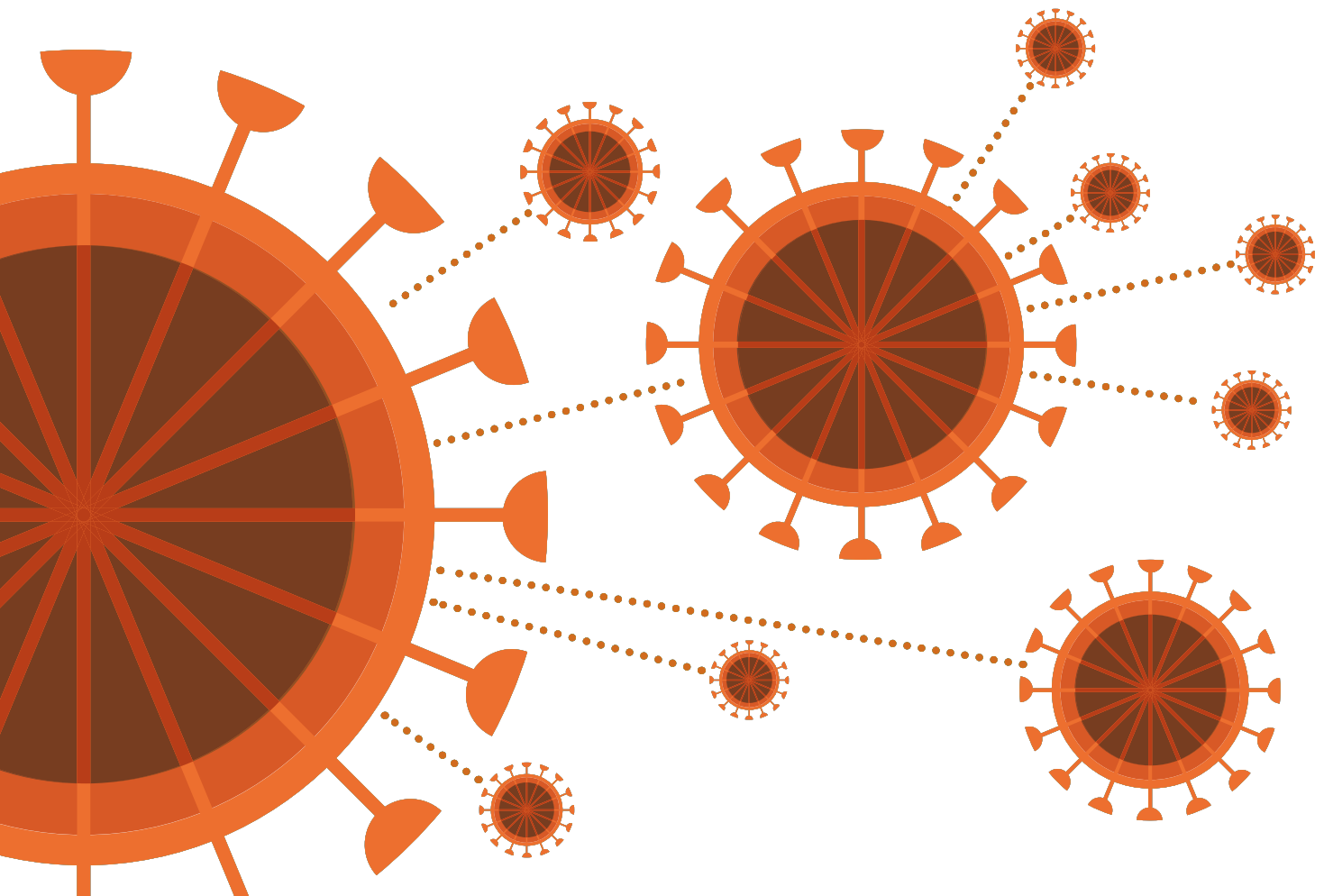
A series of background briefings on the policy issues arising from the Covid-19 pandemic

# Work, care and gender during the Covid-19 crisis

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**A CEP Covid-19 analysis**

**Paper No.002**



## **Work, care and gender during the Covid-19 crisis**

### **CEP COVID-19 ANALYSIS**

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#### Summary

- Given the exceptional nature of the Covid-19 crisis, the distribution of jobs and workers affected is potentially different from previous recessions.
- Women are over-represented in locked-down sectors but, if not subject to the lock-down, they are more likely to work in jobs that can be done from home. Preliminary survey evidence for the UK finds that, overall, women are more likely to lose their jobs than men.
- The closure of schools and nurseries has added education and childcare services to pre-existing home production needs, with a likely increase in pre-existing disparities between the childcare contributions of mothers and fathers.
- The massive increase in the incidence of working from home provides a valuable testing ground for the adoption of flexible working solutions beyond the current emergency.
- Parental childcare roles are likely to be reversed in households where the mother works in a critical sector and the father is forced to stay at home due to social distancing measures. This may accelerate the evolution of gender norms towards more equitable roles.

## **Introduction**

Covid-19 is hitting most economies as hard as the deepest recessions, but given the exceptional nature of this crisis, the distribution of jobs and workers affected is potentially different from previous recessions.<sup>1</sup> The Great Recession, as well as other previous downturns, tended to more severely affect male-dominated industries such as construction and manufacturing. In contrast, the social distancing and lock-down associated with the Covid-19 crisis has hit service sectors with frequent interactions between consumers and providers, sectors whose activities involve social contact, such as retail, restaurants and hospitality have been shut down, with temporary or permanent job losses concentrated among low-skill service workers. But even among workers whose activities are not directly subject to the lock-down, many are unable to work as normal, as their work would not comply with social distancing (e.g. in construction, repairs and home services), and can be hardly performed from home.

At the same time, other sectors, such as healthcare, food production and distribution, and protective services, have been defined as critical to the Covid-19 response, and their activity is maintained at or above full capacity. As the participation of men and women is different across sectors, the labour market impact of Covid-19 may differ across genders. At the same time, men and women also differ in their responsibilities for childcare. With schools closed this means that men and women are also differentially affected by the impact of Covid-19 on home production. Below we combine evidence on jobs performed by men and women in the UK and childcare time of mothers and father to discuss potential impacts on the crisis on gender inequalities. We also consider the possibility of long run consequences if these impacts persist beyond the crisis.

## **Market work**

Figure 1 gives a snapshot of the distribution of job attributes for men and women in the UK, through the lens of the Covid-19 incidence. The data used combine sector-level information on critical and locked-down jobs from the UK Labour Force Survey (April-June 2019), and occupation-level information on which activities can be performed from home, obtained by matching information on tasks in O-NET (from Dingel and Neiman, 2020) with the UK classification of occupations in the LFS. We classify jobs into four categories: Those in critical industries (health care, public services and

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<sup>1</sup> See Alon et al (2020), Adam-Prassl et al (2020) and Bell et al (2020) for recent work on COVID-19 impacts on gender inequalities and low-wage labor markets.

security), those that are in locked-down industries (hospitality, accommodation and food services). All remaining jobs are classified into whether or not they can be performed from home.

More women than men are employed in critical sectors (about 46% and 39% of working women and men, respectively). Offsetting this, more women than men are employed in locked-down sectors (about 19% and 13%, respectively).<sup>2</sup> For the remaining 48% of men and 35% of women, the chance to avoid earnings losses are closely linked to their ability to work from home. Working from home is possible in female-dominated sectors like education, where teachers support distance learning for the vast majority of children (and continue to provide schooling for children of critical workers) continue to provide schooling for a small minority of children of critical workers and support distance learning for the rest. In contrast, working from home is not possible for male-dominated sectors like construction, repairs, and large parts of manufacturing. Thus, it is unsurprising that about 29% of men but only 11% of women are in jobs that are not doable from home, even if not directly subject to the lock-down. According to the survey by Adam-Prassl et al (2020), workers who can perform all of their tasks from home appear to be insured against job loss during the current crisis, but still suffer some earnings losses, presumably via reduced workloads.

Overall, the share of workers who are either in locked-down industries or in jobs that cannot be done from home is 42% for men and 30% for women. Does this mean that, as in previous recessions, men will be more affected than women? Probably not. Survey evidence from Adam-Prassl et al (2020) shows that the possibility to perform some of one's usual work tasks from home provides only partial insurance against job and earning losses. In addition, jobs in locked-down sectors (where women are over-represented), such as accommodation and food services, are at a higher risk of being destroyed as it is still unclear when and at what capacity business in these sectors will be able to operate in the future. Activities that are not locked down and that cannot be performed from home, but that do not involve frequent social interactions with customers (for example in construction or manufacturing, where men are over-represented), have already slowly started to resume. Consistent with this, recent evidence from the Business Impact of Coronavirus (Covid-19) Survey (ONS, 2020) shows that furloughing affects about 27% of the UK workforce, but that the percentage is much higher in locked-down sectors (up to 80%).

There is only limited evidence available to date on actual patterns of job loss. Some of the evidence finds more detrimental effects for women, while some detects impacts that are roughly balanced across

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<sup>2</sup> The classification of sectors into critical and locked-down is based on UK Government's guidelines on "[critical workers](#)" and "[businesses that must remain closed](#)".

genders. Adam-Prassl et al (2020) find that women in the UK are nearly 5 percentage points more likely to have lost their jobs than men since the onset of the Covid-19 crisis. For the US, Adam-Prassl et al (2020) report a gender differential in the probability of job loss of nearly 7 points, while Bick and Blandin (2020) find similar employment losses for men and women. If these survey findings generalise, it seems that – unlike previous recessions – the current crisis will not harm men’s labour market prospects more than women’s.

## **Home production**

Unequal contribution to home production offers one possible explanation for these findings on the unequal labour market impacts. One unique feature of the Covid-19 crisis has been its impact on the volume of home production, reversing by decree a secular process of marketization of childcare and home keeping. With the start of the lock-down, virtually none of the typical components of home production can be outsourced to the market, and the closure of schools and nurseries has added education and childcare services to pre-existing home production needs.

The impacts of Covid-19 on the gender distribution of home production depends on various factors. First, the incidence of increased childcare needs is shaped by household composition. Women are more likely than men to raise children as single parents. In the UK, 20.3% of households with dependent children (aged 15 or below) are headed by single mothers, against 3.3% headed by single fathers. Hence, for single parent households, women are far more likely than men to be the sole providers of the sharp increase in childcare during the lock-down.

Second, the distribution of home production depends on the working status of partners (if any), which is itself affected by the crisis. Figure 2 shows the distribution of partner status for women with dependent children. Around one third of women with dependent children work in critical jobs (as opposed to 46% of women overall). Of these, 57% have either no partner or a partner who also works in a critical job, and hence mostly rely on basic childcare services guaranteed by the education system to parents in critical jobs. The remaining 43% has a partner who is staying at home – whether he is employed in a locked-down sector (6%), or cannot go to work due to social distancing (33%), or does not work at all (4%). In these households, we would expect a reversal of the home production gap, with men taking over the bulk of increased childcare and housekeeping needs. Among mothers who are not in critical jobs, and therefore stay at home during the lockdown, 21% have no partner and 26% have a partner in a critical job, and hence are likely fully in charge of home production. The other 53% has a stay-at-home partner, and home production is somehow shared between spouses.

There is plenty of pre-Covid-19 evidence on the contribution of men and women to home production from time use data. According to the 2015 time-use survey for the UK, women do 27 hours per week of home production on average, while men do 16 hours on average. Among households with dependent children, weekly home production hours are 40 for mothers and 20 for fathers, of which 16 and 8, respectively, represent childcare, and we obtain very similar figures if we restrict attention to two-parent households. If the additional home production falls on men and women according to baseline specialization patterns, women are at the receiving end of the best part of increased home production requirements.

There is no comprehensive evidence on the time use of spouses since the onset of the crisis, but Aguiar et al (2013) show that, during the Great Recession, women allocated a larger portion of reduced market hours to childcare and housekeeping, and recent evidence collected by Adams-Prassl et al (2020) shows that, during the current lock-down, working-from-home mothers are doing about 1h30mins extra childcare on a typical workday relative to working-from-home fathers. It is not straightforward to identify a corresponding sample in the time-use data, but if we restrict to employed individuals with dependent children, we obtain a smaller daily differential in childcare time of about one hour, suggesting that the higher childcare load during Covid-19 has on average widened existing inequalities in gender contributions to home production.

### **Potential long-lasting consequences**

Several of the impacts discussed are temporary in nature and can in principle be reversed with the end of the lock-down and the restart of usual economic activity. But given the recent radical changes to the organization of work and family life, it is natural to reflect on potentially permanent consequences of the crisis beyond the current lock-down, via learning, habit formation and the evolution of social norms. First, the massive increase in the incidence of working from home has suddenly accelerated a pre-existing but slowly-evolving tendency towards smart working and flexible work arrangements. The number of people working from home in the UK has risen from 2.9 million in 1998 to 4.2 million in 2014, representing 14% of employment, and an additional 1.8 million people report they would prefer to work from home if they were given the chance.<sup>3</sup> According to a recent survey, 86% of UK managers foresee organizational barriers to the adoption of flexible working in their workplaces (CIPD, 2019), but it is possible that some of the perceived barriers will be eventually cracked by actual remote work patterns implemented during Covid-19.

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<sup>3</sup> <https://www.thehrdirector.com/business-news/health-and-wellbeing/four-million-working-from-home/>

The supply and demand of remote work varies across genders. In the UK, 48% of women are in jobs that can be done from home, against 39% of men (across all sectors of the economy). Due to heavier household responsibilities, women also value flexible work schedules and shorter commutes more than men (Mas and Pallais, 2017; Le Barbanchon et al, 2019), and thus may be more beneficially affected by remote work opportunities. Increased home working post-crisis could, therefore, benefit women more than men. But while remote working may provide women with the flexibility to combine market work and family commitments, it may also lead them to specialize in low- or middle-tier jobs that are more permeable to informal work arrangements. Furthermore, remote working may dilute employee presence and attachment to the workplace, with possibly detrimental impacts on career progression (Bloom et al, 2015).

Second, the increased home production needs may substantially shift the allocation of childcare and housekeeping in households in which the husband is forced at home by the lockdown. There is evidence that the spousal allocation of home production is shaped in large part by social norms on gender roles, and that gender identity norms are only slowly evolving. But evidence has also shown that “forced” changes in gender roles may have permanent consequences beyond short-term circumstances, by accelerating the evolution of norms and eroding gender comparative advantages. For example, male mobilization during World War II in the US induced more women to enter the labour market during the war, and thereby shaped the norms and preferences of younger generations who were exposed to those early labour market entrants (Fernandez et al, 2004). In about 20% of couple households with dependent children in the UK, fathers are likely becoming the main providers of additional childcare because they are at home during the lockdown (either because they are working from home or they not-working) and live with women working in critical sectors. One would expect a substantial redistribution of home production loads in these households during the crisis, and one should wonder whether the emergency would ease the breakdown of traditional gender roles come the recovery.

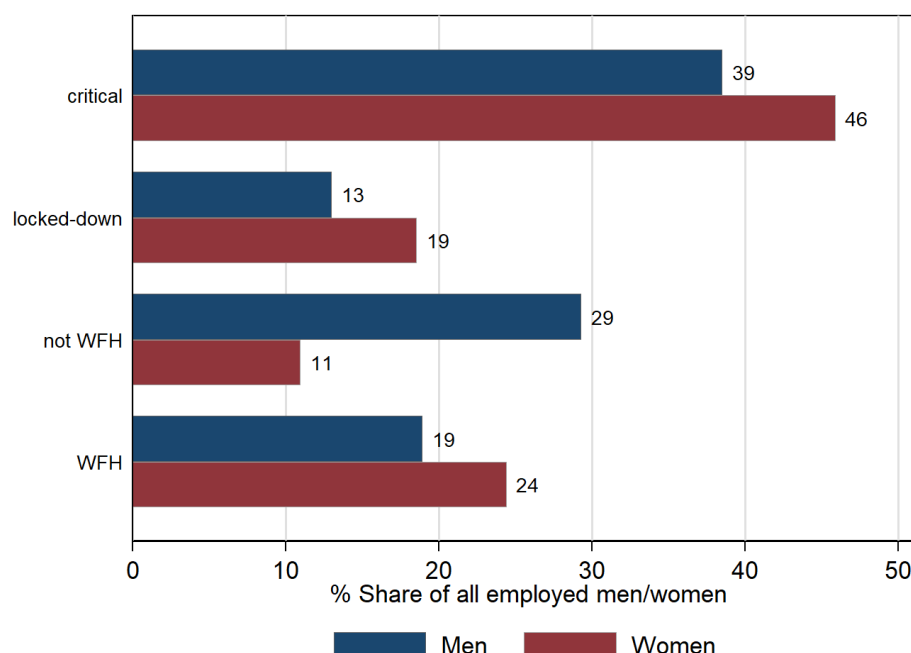
## **Conclusion**

The Covid-19 crisis has especially hit service sectors with frequent social interactions, in which women are over-represented. At the same time, if not directly subject to the lock-down, women are more likely to hold jobs that can be performed from home. Survey evidence for the UK shows that women are more likely to report job losses than men during Covid-19, suggesting that remote work opportunities only partially offset the differential exposure of men and women to the lockdown. Following the closure of nurseries and schools, women are also likely to take over a larger share of increased

childcare needs. However, in about 20% of households, in which women work in critical sectors and men stay at home, one would expect a reversal of usual childcare gaps, with potential consequences on the evolution of gender roles and comparative advantages. Furthermore, valuable lessons may be learned from current remote working patterns, possibly feeding into more flexible working solutions for the long-run.

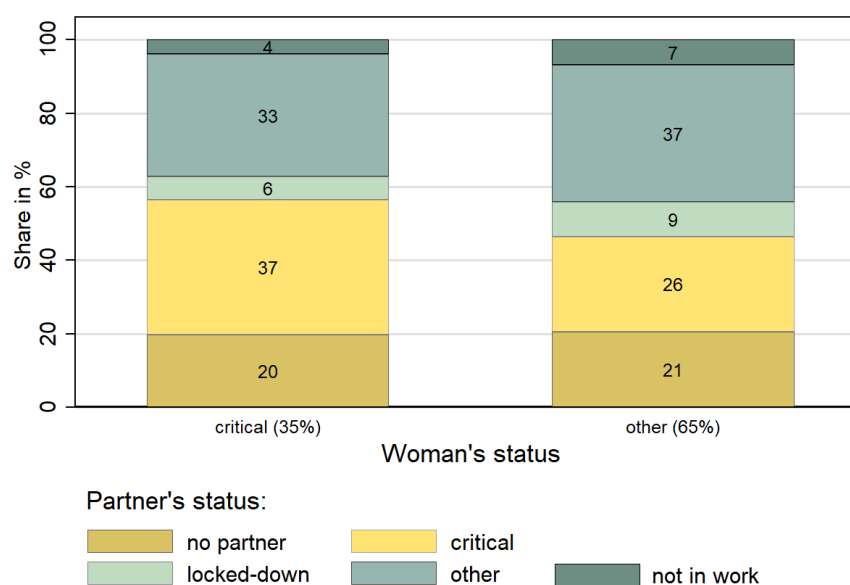


**Figure 1**  
**The composition of jobs according to COVID-19 incidence**



Notes. Sample: employed men and women. The bars show the incidence of critical jobs and locked-down jobs, as well as the incidence of working from home among those not in critical or locked-down jobs. For completeness, the percentage of critical jobs that can be done from home is 44 for men and 41 for women, and the percentage of locked-down jobs that can be done from home is 22 for men and 24 for women. Source: UK LFS, April-June 2019.

**Figure 2**  
**The distribution of partner's status, by women's status**



Notes. Sample: Women with dependent children. The “other” status indicates women staying at home during Covid-19 (including: in locked-down jobs, in non-critical jobs, not employed). The sample does not include households with two or more family units or same-sex couples with children

(representing, respectively, 2.33% and 0.23% of households with children). Source: UK LFS, April-June 2019.

## References

- Adams-Prassl, A., T. Boneva, M. Golin and C. Rauh (2020). “Inequality in the impact of the coronavirus shock: Evidence from real-time surveys.” CEPR Discussion Paper 14665.
- Aguiar, M., E. Hurst and L. Karabarbounis (2013). “Time use during the Great Recession.” *American Economic Review* 103: 1664-1696.
- Alon, T., M. Doepke, J. Olmstead-Rumsey and M. Tertilt (2020). “The impact of COVID-19 on gender equality.” NBER Working Paper 26947.
- Bell, B., N. Bloom, J. Blundell and L. Pistaferri (2020). “Prepare for large wage cuts if you are younger and work in a small firm”. VoxEU.
- Bick, A. and A. Blandin (2020). “Real time labor market estimates during the 2020 coronavirus outbreak.” Mimeo.
- Bloom, N, J. Liang, J. Roberts and Z. Ying (2015). “Does working from home work? Evidence from a Chinese experiment.” *Quarterly Journal of Economics* 130: 165-218.
- CIPD (2019). “Megatrends: Flexible working”. Report available at <https://www.cipd.co.uk/knowledge/work/trends/megatrends/flexible-working>.
- Dingel, J. and B. Neiman (2020). “How many jobs can be done at home?” NBER Working Paper 26948.
- Fernandez, R., A. Fogli and C. Olivetti (2004). “Mothers and sons: Preference formation and female labor force dynamics.” *Quarterly Journal of Economics* 119: 1249-1299.
- Le Barbanchon, T., R. Rathelot and A. Roulet (2019). “Gender differences in job search: Trading off commute against wage.” Mimeo.
- Mas, A. and A. Pallais (2017). “Valuing Alternative Work Arrangements.” *American Economic Review* 107: 3288-3319.
- Office for National Statistics (2020), “Furloughing of workers across UK businesses: 23 March 2020 to 5 April 2020.” Report available [here](#).

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