Inequality in the Impact of the Coronavirus Shock:

New Survey Evidence for the UK

Abi Adams-Prassl¹, Teodora Boneva², Marta Golin¹, and Christopher Rauh*³

¹Department of Economics, University of Oxford

²Department of Economics, University of Zurich

³Department of Economics, University of Cambridge

April 1, 2020

1 Main Findings

Using new UK survey data collected on March 25th 2020, we already find that:

- 1. 57% of workers engaged in less paid work over the past week than usually.
- 2. 8% of workers in employment a month ago have already lost their job due to COVID-19. For those still in work, the expected probability of job loss within the next four months is 33%.
- 3. On average, workers expected to earn 35% less in the next four months compared to usual and expect there is a 49% chance of them having problems paying their bills.
- 4. These harsh impacts are not evenly distributed across the population; the young, and low income earners have been hit hardest.
- 5. Workers without paid sick leave beyond the statutory minimum are more likely to go to work with a cold or a fever and also work in close proximity to others.

^{*}Ethics approval was obtained from the Central University Research Ethics Committee (CUREC) of the University of Oxford: ECONCIA20-21-09. We thank the University of Oxford and the University of Zurich for generous financial support.

2 Executive Summary

COVID-19 is not only a global health pandemic; it has brought whole economies grinding to a halt. In this briefing note, we provide new evidence on inequalities in the economic impact of COVID-19. To provide timely information on the emerging and expected impacts of the current crisis, we collected novel survey data from a large representative sample of UK workers on 25th March 2020, two days into the government-imposed lockdown. We find significant differences in the impact of the economic disruption across workers of different income levels, ages, and those employed under different work arrangements. Our findings suggest that even with the unprecedented policy response from the government, many UK workers are already feeling the effects of the economic slowdown and expect significant economic hardship as a result of containment measures. This suggests a need to speed-up the implementation of stimulus and social assistance packages to provide quick assistance to help those hit hardest.

Our evidence suggests that this downturn is highly likely to increase inequality across the income distribution, between young and old, and between those on insecure and secure contracts. Preventing this shock from having permanent effects on the employment progression of the younger generation and the less-economically advantaged is of first-order policy importance.

In summary, our key findings are as follows:

- 1. **Age**: Younger workers have already been hit hard by the economic downturn and expect to be much more severely affected than older workers.
 - Younger workers are more likely to have worked fewer hours and earned less than usual in the past week.

 69% of workers aged under 30 report working fewer hours last week compared to usual and 58% report
 earning less, compared to 49% and 36% of workers aged 40-55 respectively.
 - Younger workers are more likely to have lost their job in the last four weeks and attribute this to COVID-19.

 Of those in work last month, 10% of workers under 30 are now unemployed "definitely" or "probably"

 because of COVID-19, compared to 6% of workers aged 40-55.
 - Younger people who are still in work believe that they are more likely to lose their job by August. On average, currently employed workers aged under 30 believe they have a 39% chance of losing their job by August, compared to 27% for those aged 40-55.

- 2. **Income**: Workers on low incomes are less able to work from home, are more likely to have lost their job because of COVID-19 in the last 4 weeks, and expect to lose a greater proportion of their usual earnings between now and August.
 - Workers on low incomes can do fewer of the usual tasks in their main job from home and were less likely to work from home last week. Workers who earned less than £20,000 last year can do only 30% of the tasks in their main job from home compared to 55% for those earning more than £40,000. Of those in employment, only 33% of workers earning less than £20,000 last year worked more from home last week, compared to 72% of those earning more than £40,000.
 - Workers on low incomes are more likely to have lost their job in the last four weeks and attribute this to COVID-19. Of those in work last month, 12% of workers earnings less than £20,000 are now unemployed "definitely" or "probably" because of COVID-19 compared to 5% of workers earning more than £40,000.
 - Workers on low incomes expect to earn a smaller proportion of their usual income between now and August. Workers who earned less than £20,000 last year expect to earn just 58% of their usual income between now and August. Those who earned more than £40,000 last year, expect to make 69% of their usual income on average.
- 3. Work Arrangements: The self-employed, those not paid a salary, and workers with variable hours at employers' discretion (e.g. zero-hours contracts) are more likely to have been negatively affected by the downturn already and believe that they are more likely to face economic difficulties between now and August.
 - Self-employed workers, those not paid a salary, and those with variable hours were more likely to work and earn less. For example, 75% of the self-employed, 66% of temporary workers, and 66% of workers with variable schedules set by their employer earned less last week compared to 26% of permanent, salaried employees.
 - Workers employed on less secure work arrangements were more likely to have lost their job in the last four weeks and attribute this to COVID-19. Of those in work last month, 28% of temporary workers and 15% of those with variable hours set by their employer are now unemployed "definitely" or "probably" because of COVID-19 compared to 4% of permanent, salaried employees.
 - Workers on less secure work arrangements expect to earn a smaller proportion of their usual income

between now and August. For example, self-employed workers, temporary workers, and those with variable hours set by their employer expected to earn only 49%, 51% and 59% respectively of their usual income between now and August compared to 77% of permanent, salaried of employees.

3 Data Collection

This briefing note relies on primary survey data that we collected on a large representative sample of individuals in the United Kingdom (N = 3,974). The data were collected by a professional survey company on March 25 2020. This was before the UK Chancellor's announcement of additional government assistance for the self-employed and two days into the government-imposed lockdown.¹

To be eligible to participate in the study, participants had to be resident in the UK, be at least 18 years old, and report having engaged in any paid work during the previous 12 months, either as an employee or self-employed.² The sample was selected to be representative in terms of region. 53% of respondents are female and the average age is 38.6. 42% have a university degree and the average annual individual income is around £28,000. 58% are married or cohabiting, and the average number of children below the age of 18 is 0.69.

4 Realised Impacts

We first present results on the impact that the COVID-19 impact had on workers in the last two weeks. Specifically, respondents were asked:

"Think about the last two weeks. Due to the coronavirus outbreak, did you...

- Work fewer hours
- Work more from home
- Earn less money than usual...
- Have to change your work patterns to care for others"

¹All participants were part of the company's online panel and participated in the survey online. The survey was scripted in the online survey software Qualtrics. Participants received modest incentives for completing the survey.

²We asked participants to think about all the paid work they engaged in other than completing surveys.

Age. Figure 1 shows the proportion of workers³ who experienced changes in their work patterns and earnings last week. While we find significant movement for all groups, we find striking age patterns in these outcomes. While younger workers were more likely to have worked from home in the last week, they were also more likely to have worked fewer hours last week, to have earned less in the last week, and to have had to change their work patterns due to caring commitments.

Figure 1 (e) shows the experienced "corona" job loss probability by age group. Specifically, this is the proportion of individuals who report having become unemployed within the last four weeks "definitely" or "probably" because of COVID-19 as a fraction of all individuals employed at some point in the last four weeks. The age-effect is, again, striking. 10% of under 30s who have been in work in the last four week say they are unemployed because of the coronavirus. Workers aged over 50 are also more likely than those in their 40s to report COVID-19 related unemployment.

Income. Figure 2 shows the proportion of workers experiencing changes in their work conditions last week by the labour income they earned last year.⁴ The inequality in impact across the income distribution is evident. The income gradient in working more from home last week is striking; while 72% of workers earning more than £40,000 worked more from home, 33% of workers earning less than £20,000 did.

The proportion of low-income individuals who became unemployed in the last month because of the coronavirus is significant. 12% of those who earned less than £20,000 last year in our sample lost their jobs in their opinion because of the impact of COVID-19, while 5% of those earning more than £40,000 last year did.

Work Arrangements. Figure 3 shows the proportion of workers experiencing changes in their work conditions last week by their work arrangement.⁵ While all workers worked less on average, this was less likely to result in income losses for salaried employees, those on permanent contracts, and for employees with fixed schedules. Those made unemployed due to coronavirus were more likely to be in temporary, non-salaried jobs, where employers determined how much individuals worked week to week.

³All workers who have done paid work at some point in the last four weeks.

⁴All workers who have done paid work at some point in the last four weeks.

⁵All workers who were employees at some point in the last four weeks. We did not ask those who were unemployed on the survey data about self-employment activities in the last month.

Figure 1: Realised Impacts by Age

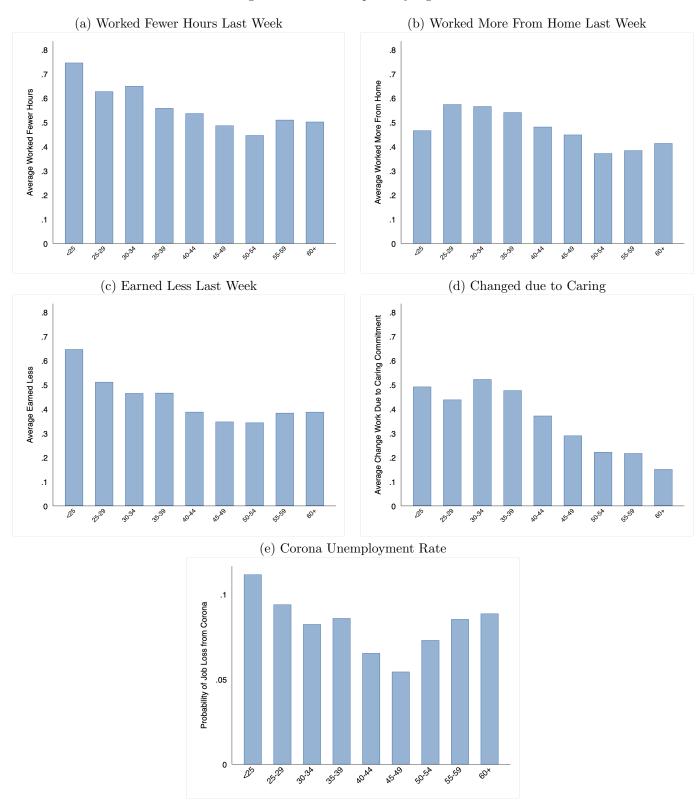


Figure 2: Realised Impacts by Income

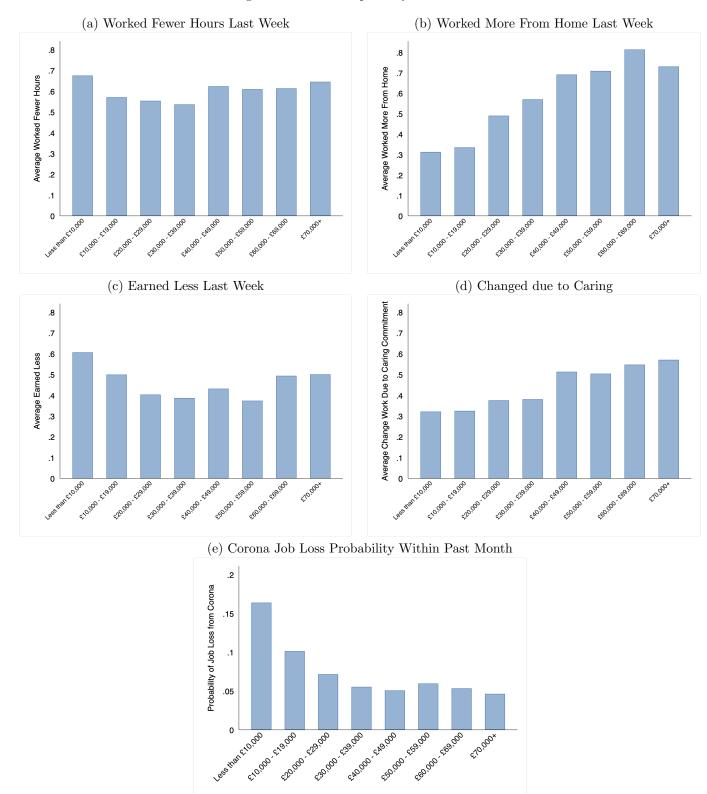
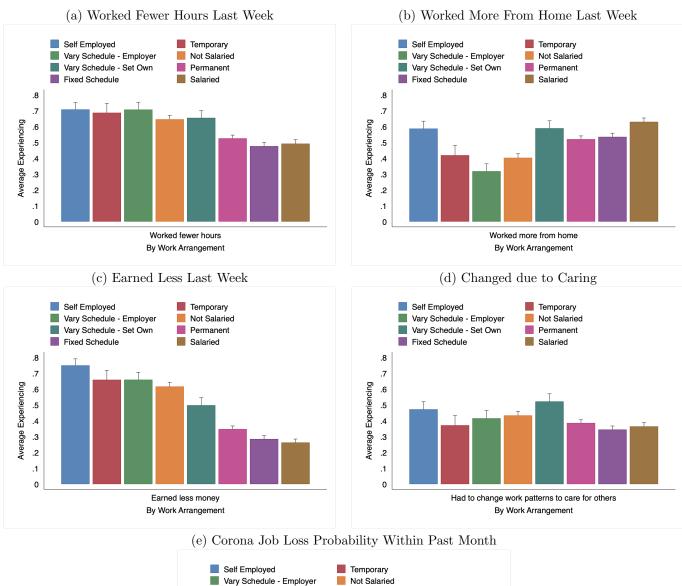
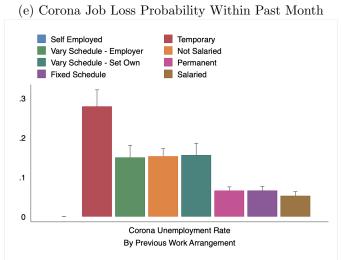


Figure 3: Realised Impacts by Work Arrangement





5 Expected Impacts

We also asked workers about the impacts they expect in the coming months. Specifically, respondents were asked:

"On a scale of 0-100%, how likely are the following scenarios to cocur before 1st August 2020?

- I will lose my job or shut my business if self-employed
- I will work fewer hours than usual
- I will have trouble paying my usual bills and expenses"

Respondents were also asked about the income losses they expected over this period.

"On a scale of 0-100%, what percentage of your usual income (including government benefits and any sick pay) do you expect to make in the period up to 1st August?"

We again see striking patterns by age, income, and work arrangement; younger workers, those who earned less last year, and those on less secure work arrangements expect to face more sever economic difficulties in the coming months.

Age. Across all outcome measures, younger workers expect a more severe economic shock in the coming months than older workers: younger workers believe they have a much larger chance of losing their job and have difficulties paying their bills, and they also expect to make a smaller percentage of their usual income. Of those currently employed, on average, those under 30 expect there is a 39% chance of them losing their job or shutting their business if self-employed compared to 27% chance for workers aged 40-55. On average, those under 30 expect there is a 53% chance of them having difficulties paying their bills compared to 45% chance for workers aged 40-55. Those under 30 expect to have 40% lower earnings on average than usual over the next five months compared to 31% for those aged 40-55.

Income. Those on the lowest incomes expect a much greater percentage change in their earnings over the coming months than higher-earners. Workers who earned less than £20,000 last year expect a 42% decline in their usual income between now and August compared to 31% for those earning over £40,000. However, amongst those currently employed, higher earners are more pessimistic on average about their chance of losing their job. Workers who earned less than £20,000 last year expect they face an 33% chance of losing their job before August compared

to 37% for those earning over £40,000. This may be because many of the most insecure low-earning workers have already lost their job as a result of the crisis (Figure 3).

Alternative Work Arrangements. The patterns across workers employed on different work arrangements are striking. Those on permanent contracts, workers paid a salary, and those with a stable work schedule expect the most mild economic impacts on average. The self-employed, workers on temporary contracts, and those with variable hours on the other hand expect they are more likely to lose their job, face difficulties paying bills and will face larger reduction in their usual income.

Figure 4: Expected Impacts

Will Lose Job or Shut Business

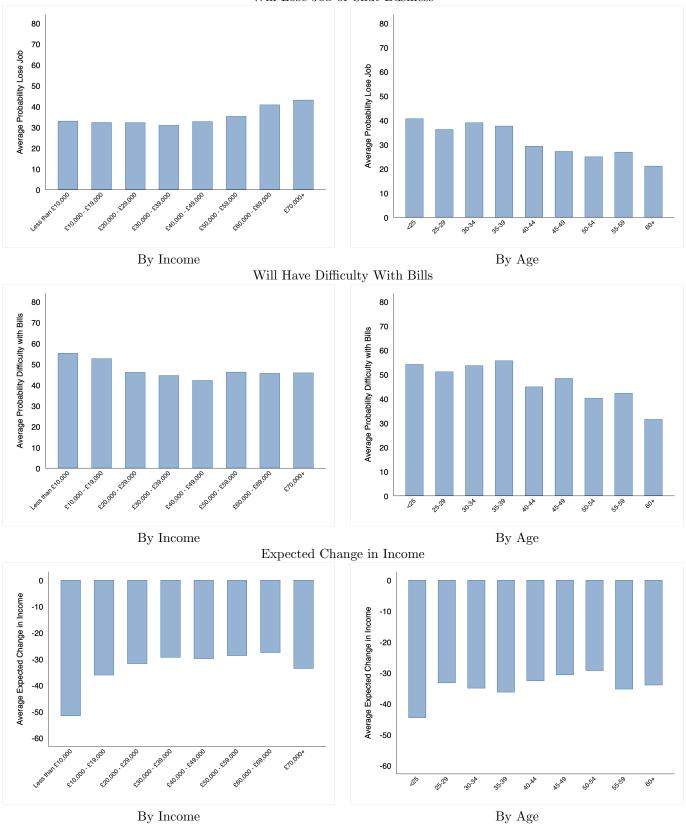
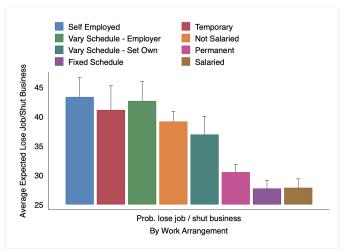
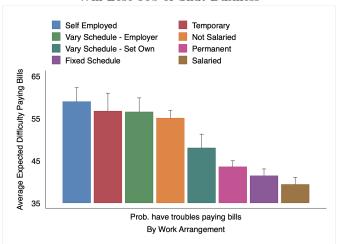


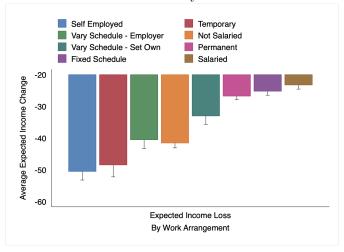
Figure 5: Expected Impact By Work Arrangement



Will Lose Job or Shut Business



Will Have Difficulty With Bills



Expected Change in Income

6 Availability of Paid Sick Leave

In the UK, some employees receive paid sick leave from their employers that is more generous than the statutory minimum. However, those that do not must rely on statutory sick pay (SSP) of £94.25 per week if they are employed. The value of SSP is low compared to average earnings; average weekly earnings in the UK in January 2020 were £512 implying a replacement rate of less than 20%. Further, the self-employed do not have access to SSP but must claim through Universal Credit.

We asked workers about their paid sick leave entitlement in addition to SSP. In Figure 6 we show the share of workers without paid sick leave beyond SSP by occupation.⁶ We further categorize occupations by the level of physical proximity required in the job using O*NET data. Red bars indicate a high level of physical proximity. We can see that the share of individuals without paid sick leave varies considerably by occupation, and that this share tends to be higher in occupations with a high level of physical proximity. For instance, in the UK more than half of workers in "Personal Care and Service" have no paid sick leave despite working in close proximity to others.

This is important given that those who do not have additional sick pay report that they are more likely to work with a cold or light fever than those with more generous entitlements. 43% of currently employed workers in the UK without additional paid sick leave report that they usually go to work with a cold or light fever, compared to 31% of workers with paid sick leave beyond the statutory entitlement.

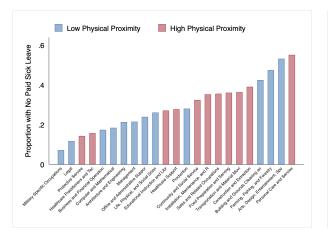
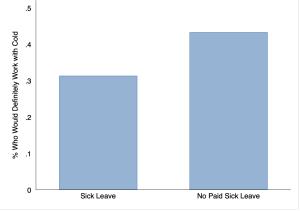


Figure 6: No Paid Sick Leave



By Occupation

Would Definitely Work With a Cold

⁶All workers in paid employment on the survey date.

7 Conclusions

Our evidence shows that the immediate impact of the COVID-19 downturn on workers has been large and unequal, with younger workers and those at the bottom of the income distribution being hit hardest. In terms of work arrangement, the self-employed and those on un-salaried, variable contracts are particularly vulnerable. The same patterns hold for expectations about the near future. Our evidence thus suggests that this downturn is highly likely to increase inequality across the income distribution, between young and old, and between those on insecure and secure contracts.

In the short run, there is a need to provide quick assistance to help those hit hardest to cover their essential bills in the coming weeks; 57% of workers have already reported lower earnings and 49% expect to have difficulty paying their usual bills. Providing stimulus in June, as has been promised for the self-employed, might be too late to prevent severe economic hardship. In the long run, preventing this shock from scarring the employment progression of the younger generation and the less-economically advantaged is of high importance to prevent permanent damage to the economy and individual welfare. Moreover, paid sick leave policies should be rethought not only in light of workers' welfare but public health as a whole.