Long COVID and the labour market
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Tom Waters
Thomas Wernham

Copy-edited by Judith Payne

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Executive summary

As the UK exits the most acute phase of the COVID-19 pandemic, attention has turned to ‘long COVID’, which is on the rise and becoming no less severe. We use data from the UK Household Longitudinal Study, collected during 2021, to learn more about the characteristics of long COVID sufferers, and to assess the impact long COVID has on labour market outcomes including hours, earnings and employment.

Key findings

1 According to the Office for National Statistics, almost 2 million people, or 3% of the population, had long COVID by the end of May 2022, of whom 72% were limited by the condition and 21% were limited ‘a lot’. These numbers have been rising steadily since the middle of 2021.

2 The impact of long COVID is felt unequally. Existing work finds that sufferers are more likely to have a pre-existing health condition, be female and be middle aged. We show that they are also more likely to live in social housing, to have been claiming benefits before the pandemic, and possibly to be in poverty.

3 By examining how outcomes have changed since before the pandemic for long COVID sufferers and similar individuals without the condition, we estimate that one in ten people who develop long COVID stop working, with sufferers generally going on sick leave (rather than losing their jobs altogether). As a result, hours worked on average reduce by about 2½ hours per week and earnings by £65 per month (6%), or £1,100 per person who drops out of work. Our estimates suggest that while the prevalence and severity of COVID remain at current levels, the aggregate impact is equivalent to 110,000 workers being off sick.

4 At the individual level, long COVID shows some persistent labour market effects, with impacts being felt at least three months after infection. Further research would be required to precisely determine the duration of the impact.
1. Introduction

The COVID-19 pandemic had a profound, immediate impact on people’s health and economic circumstances. But as the UK moves from the worst of the acute phase and towards ‘living with COVID’, attention is shifting to the virus’s long-run consequences.

One particularly high-profile consequence is the increasing prevalence of ‘long COVID’, the experience of ongoing symptoms several weeks after the initial COVID-19 infection. Figure 1.1 shows the ONS’s measure of long COVID – the number of people in the UK reporting that they still have symptoms more than four weeks after infection.

Figure 1.1. Prevalence of self-reported long COVID and activity limitation

Note: ‘Self-reported long COVID’ means respondents answer ‘Yes’ to the question ‘Would you describe yourself as having “long COVID”, that is, you are still experiencing symptoms more than 4 weeks after you first had COVID-19, that are not explained by something else?’.

The figure shows a large and increasing number of people experienced long COVID since early 2021. Around 1 million reported long COVID symptoms in the first half of last year, rising to 2 million by May 2022 (3% of the population, including around 3.7% of the working-age population). It is notable that long COVID levels were high throughout 2021 despite a very low number of cases in the spring. The same research also estimates that 72% those experiencing long COVID have their day-to-day activities ‘adversely affected’ by their condition, and just over a fifth (21%) or over 400,000 people, are ‘limited a lot’ (Office for National Statistics, 2022). Notably, the estimates of activity limitation as a proportion of long COVID prevalence have been slowly increasing since the middle of 2021, indicating that unlike the acute impact of COVID, the average impact of a case of long COVID has not become any less severe.1 With no end to the circulation of the virus in sight, this suggests that long COVID might be one avenue by which the pandemic has lasting economic consequences.

At the same time, a trend that has received some attention is the increasing number of people who report being economically inactive (that is, they are neither in work nor looking for work) because they are long-term sick. This group contained 2.5 million people at the beginning of 2022, up from 2.3 million immediately prior to the pandemic.2 It is possible that some of the more serious cases of long COVID have contributed to this rise – though this is difficult to distinguish from what appears to be a rising trend that started a couple of years before the pandemic.

This briefing note uses detailed survey data, collected both prior to and since the beginning of the pandemic, to investigate the characteristics of people with long COVID. This allows us to analyse its incidence along dimensions that the ONS research and others are unable to speak to, such as whether it is more common among those in income poverty. We also estimate the impact of long COVID on labour market outcomes. We begin by discussing the data; readers interested only in the results should skip to Section 2.

**Data**

We use data from the UK Household Longitudinal Study (UKHLS; University of Essex, Institute for Social and Economic Research, 2021). The UKHLS is a panel survey running since 2009. Many of those who are part of the main UKHLS sample were also surveyed across nine short online surveys since the start of the pandemic, from April 2020 to September 2021.

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1 Of course, new variants, and changing levels of immunity and vaccination, mean it is uncertain whether these trends will continue.

2 Authors’ calculations using the Labour Force Survey (Office for National Statistics et al., 2022). See Boileau and Cribb (2022) for more details on rising inactivity among older people.
(University of Essex, Institute for Social and Economic Research, 2022). This allows us to study the pre-pandemic characteristics of those who are surveyed in the COVID waves.

We use waves 7, 8 and 9 from January, March and September 2021, as these contain the best data for identifying those experiencing long COVID symptoms. To construct our sample of people with long COVID, we make use of two questions. The first, asked in each wave to respondents who had reported COVID symptoms in the previous wave, asks ‘You previously reported having coronavirus symptoms. Have you recovered from these and returned to your previous level of health?’ Given the timings of the surveys, all respondents answering negatively would have had symptoms for at least four weeks. The second question, asked to anyone experiencing symptoms at the time of survey, asks ‘For how many weeks have you experienced coronavirus symptoms?’ We classify anyone responding negatively to the first question, or with four weeks or more to the second question, as having long COVID.

To study how long COVID affected labour market outcomes, we use questions on work status, hours worked and individual earnings at the time of survey, and compare with recall questions asking what these usually were at the beginning of 2020. On work status, we consider both the proportion of workers dropping to zero hours, and the proportion leaving employment altogether (which may differ because of, for example, people going on long-term sick leave). We also make use of a range of questions from the COVID surveys and the main surveys to gain information on respondents’ characteristics, including gender, family structure, health status, household income and poverty status, benefit receipt and housing tenure.
2. Who has long COVID?

It is well known that the health impacts of COVID have had disparate impacts between different groups. The same is also true of long COVID. In this section, we will examine the characteristics of those with long COVID.

We in particular focus on pre-pandemic characteristics such as housing tenure, income, benefit receipt, poverty status and family structure. This allows us to study whether the disparate impacts of long COVID are likely to widen pre-existing levels of deprivation. It also adds to the existing evidence on the characteristics of those with long COVID – which suggests that it is more common among women, the middle-aged, people living in deprived areas, people with other limiting health conditions and disabilities, and those working in health and social care. These disparate impacts might be driven by differences in infection rates, or by variation in the likelihood of developing long COVID given an infection, or a combination.

Table 2.1 compares the average characteristics of people aged 16 and above with and without long COVID, pooling across the three waves we have available. Those who have long COVID at any points in the three waves are included in the long COVID column.

Consistent with ONS findings, we find that long COVID sufferers are more likely to have a pre-existing health condition, be female and be middle aged. We also find that those with long COVID are more likely to have dependent children, and are about as likely to live with a partner as those without.

We now turn to economic indicators of welfare. The ONS has found that those living in deprived areas are more likely to have long COVID, though this does not necessarily imply that those who are themselves more deprived are more likely to have long COVID (since the driving force could in principle be related to some other factor about the area). Our data allow us to directly investigate this issue. We find that those with long COVID were, pre-pandemic, more likely than others to have been living in social housing (25% compared with 17%), and more likely to have been claiming benefits (other than the state pension or child benefit; 41% versus 28%). We also find some limited evidence that they had lower pre-pandemic net household incomes, on average, though this result is not statistically significant. Those with long COVID were not more

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3 We estimate that those with long COVID are more likely to be female, but we do not have sufficient sample size to find a statistically significant difference. Previous ONS research has found that long COVID prevalence is higher among females.
likely to be in income poverty when measured in the usual way, but it turns out that this is explained by the high proportion of long COVID sufferers who receive disability benefits in light of long-term health conditions. Those benefits are supposed to help support people with the extra costs of disability, and if we exclude them from income when calculating poverty then

### Table 2.1. Characteristics of people with long COVID compared with those without

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Long COVID (1)</th>
<th>No long COVID (2)</th>
<th>Difference (1) – (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>% aged 16–34</td>
<td>22%</td>
<td>27%</td>
<td>−5ppts</td>
</tr>
<tr>
<td>% aged 35–49</td>
<td>30%</td>
<td>23%</td>
<td>7ppts**</td>
</tr>
<tr>
<td>% aged 50–64</td>
<td>35%</td>
<td>26%</td>
<td>9ppts***</td>
</tr>
<tr>
<td>% aged 65+</td>
<td>14%</td>
<td>23%</td>
<td>−10ppts***</td>
</tr>
<tr>
<td>% female</td>
<td>58%</td>
<td>53%</td>
<td>4ppts</td>
</tr>
<tr>
<td>% long-term health condition (pre-pandemic)</td>
<td>51%</td>
<td>36%</td>
<td>16ppts***</td>
</tr>
<tr>
<td>% living with partner</td>
<td>56%</td>
<td>57%</td>
<td>−1ppt</td>
</tr>
<tr>
<td>% living with dependent children</td>
<td>39%</td>
<td>30%</td>
<td>8ppts**</td>
</tr>
<tr>
<td>% in social housing</td>
<td>25%</td>
<td>17%</td>
<td>8ppts**</td>
</tr>
<tr>
<td>% in private rented housing</td>
<td>14%</td>
<td>12%</td>
<td>2ppts</td>
</tr>
<tr>
<td>% working any hours pre-pandemic</td>
<td>63%</td>
<td>61%</td>
<td>1ppt</td>
</tr>
<tr>
<td>Average pre-pandemic hours (among workers)</td>
<td>34</td>
<td>34</td>
<td>1</td>
</tr>
<tr>
<td>% full-time (pre-pandemic, among workers)</td>
<td>75%</td>
<td>74%</td>
<td>1ppt</td>
</tr>
<tr>
<td>Average pre-pandemic net annual earnings (among workers)</td>
<td>£19,859</td>
<td>£20,703</td>
<td>−£844</td>
</tr>
<tr>
<td>Poverty rate (pre-pandemic)</td>
<td>19%</td>
<td>20%</td>
<td>−1ppt</td>
</tr>
<tr>
<td>Poverty rate (excl. disability benefit income, pre-pandemic)</td>
<td>25%</td>
<td>19%</td>
<td>6ppts</td>
</tr>
<tr>
<td>Average equivalised annual household income (pre-pandemic)</td>
<td>£34,124</td>
<td>£35,364</td>
<td>−£1,240</td>
</tr>
<tr>
<td>% claiming benefits (pre-pandemic)</td>
<td>41%</td>
<td>28%</td>
<td>13ppts***</td>
</tr>
</tbody>
</table>

Note: *** p<0.01, ** p<0.05, * p<0.1. ‘Poverty’ here is defined as having an equivalised household income, after deducting housing costs (and, in the second case in the table, disability benefits), in the bottom 22% of the population (a weighted average of the official 2018–19 and 2019–20 relative AHC poverty rates). The ‘% claiming benefits’ measure gives the proportion living in a family claiming benefits excluding state pension and child benefit. ‘Pre-pandemic’ means January 2020 for the hours and earnings variables, and 2019 for the income, benefits receipt and long-term health condition variables.

Source: Authors’ calculations using UKHLS COVID survey, waves 7–9.
poverty among the long COVID group is actually 6 percentage points (ppts) higher than among those without long COVID (though this still is not statistically significant). In other words, this group look worse off in material terms than those not suffering from long COVID according to a variety of proxies.
3. Impact of long COVID on the labour market

Given the high proportion of long COVID sufferers who report that their ability to carry out day-to-day activities has been adversely affected by the condition, one might expect that long COVID has impacts on their ability to do paid work. This is the question we turn to now. We are not aware of any other evidence on the impact of long COVID on labour market outcomes in the UK, with the exception of a survey by the Resolution Foundation which found that in October 2021, 600,000 workers self-reported that they were working fewer hours because of either long COVID or fear of the virus (Brewer, McCurdy and Slaughter, 2021).

Our basic approach is to examine how labour market outcomes have changed for those with long COVID, between the beginning of 2020 and the time of survey when they reported having the condition (January, March or September 2021), and compare these changes with those for people who have not had long COVID.

However, as we showed in the previous section, long COVID sufferers are in important ways different from those not suffering from long COVID. It may be that labour market trends would have differed between these two groups of people, on average, even if long COVID sufferers had not been infected. To eliminate some of the factors that might confound attempts to estimate the causal impact of long COVID, we control for a variety of other characteristics as follows: 4,5

- pre-pandemic long-term health condition;
- age;
- sex;
- pre-pandemic work status;
- pre-pandemic industry worked in;
- pre-pandemic benefit receipt (binary).

4 We still cannot rule out the possibility that those who contracted long COVID are different from those we compare them with in ways that are unobserved. For example, although we control for the presence of a long-term health condition pre-pandemic, those who get long COVID may have a more severe condition; that might exert its own force on the change in their outcomes. Note that because we are looking at the change in outcomes, it is not a problem for our approach if those with long COVID have a different pre-pandemic level of some outcome from those we compare them with.

5 More detail on these control variables is given in the appendix.
We include long-term health conditions, age and sex because of the well-documented relationship between these things and long COVID. We use benefit receipt because of the evidence above showing that it is linked to the likelihood of experiencing long COVID. We include pre-pandemic work status and industry because people from different industries and work statuses faced differing risks of contracting COVID (and hence long COVID) during the pandemic.

The main approach we use to control for these characteristics and estimate the impact of long COVID on labour market outcomes is to simply regress each of our outcome variables on having long COVID and the above controls, essentially using a difference-in-difference approach. We have also used a ‘propensity score matching’ approach, which involves identifying a control group of people without long COVID who have similar characteristics to those with the condition, and comparing the outcomes across these two groups. Each person with long COVID is matched with at least one person without who, based on their observed characteristics alone, is predicted to have been similarly likely to develop long COVID. Both approaches give very similar estimates; below we focus on the regression estimates.

### Table 3.1. Pooled regression results estimating the impact of long COVID on labour market outcomes

<table>
<thead>
<tr>
<th></th>
<th>Hours worked (per week)</th>
<th>Earnings (£ per month)</th>
<th>Working non-zero hours (ppts)</th>
<th>Employed (ppts)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact of long COVID</td>
<td>–2.4***</td>
<td>–65**</td>
<td>–5.9***</td>
<td>–1.0</td>
</tr>
<tr>
<td></td>
<td>(0.5)</td>
<td>(30)</td>
<td>(1.3)</td>
<td>(1.1)</td>
</tr>
<tr>
<td>Pre-pandemic mean</td>
<td>21.7</td>
<td>1,025</td>
<td>63%</td>
<td>63%</td>
</tr>
<tr>
<td>Sample size</td>
<td>36,233</td>
<td>32,766</td>
<td>36,228</td>
<td>36,540</td>
</tr>
</tbody>
</table>

Note: *** p<0.01, ** p<0.05, * p<0.1. Standard errors in parentheses. ‘Pre-pandemic mean’ is among those who end up getting long COVID.

Source: Authors’ calculations using UKHLS COVID survey, waves 7–9.

The results are shown in Table 3.1. We estimate that contracting long COVID reduces the likelihood of working any hours at all by 6 percentage points (prior to the pandemic, 63% of long COVID sufferers were working at least some hours, so this effect is equivalent to about one in ten workers with long COVID stopping work). Long COVID sufferers are not, however, significantly more likely to actually lose their job (just 1 percentage point, not statistically

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6 Specifically, our outcomes are: change in hours since pre-pandemic; change in earnings since pre-pandemic; a dummy indicating whether the individual works a positive number of hours or not; and a dummy indicating whether the individual is employed or not. Note that our set of controls includes dummies for working a non-zero number of hours pre-pandemic and for being employed pre-pandemic.
significant). We investigate the difference between these results by running equivalent regressions with furlough and sick leave status – both reasons to work zero hours while still being employed – as the outcome variables. These regressions (not shown in the table) indicate that essentially the entirety of the difference between the ‘working non-zero hours’ and ‘having a job’ results is driven by those with long COVID being more likely to be on sick leave. Those with long COVID are no more likely to be on furlough than those without. This is important for the external validity of our results, given that after September 2021 the furlough scheme was shut down.

The impact on working feeds through to average hours worked, which are 2.4 hours lower for long COVID sufferers. Average monthly earnings also fall, by £65 (indicating that at least some of those with long COVID are getting less than full income replacement when on sick leave; for example, they may be on statutory sick pay). These changes are equivalent to 11% and 6% of the pre-pandemic average for those who ended up getting long COVID. We find no evidence that getting long COVID makes workers more likely to reduce their hours to some amount above zero (e.g. going from full time to part time) – these effects are essentially wholly driven by the 6 percentage point drop in the likelihood of working any hours at all. Assuming that the same is true for earnings (i.e. that falls in earnings caused by long COVID are entirely explained by people stopping work), the monthly earnings losses are £1,100 per person.

These results reflect the average impact of long COVID in our three sample months in 2021 (January, March and September). In the appendix, we show the impact in each of the sample months separately. The largest point estimates of the impact of long COVID on our outcomes are in the March wave, followed by the January wave, with the smallest estimates in our September wave. Note, however, that differences between waves are not statistically significant.

These results suggest that long COVID had a significant impact on the labour market in 2021. Since economic conditions, the virus and population immunity have been changing through the pandemic and continue to change, we must be cautious in extrapolating from these results. For example, increased vaccination might have reduced the impact of long COVID since the data were collected (UK Health Security Agency, 2022), or the effect of the Omicron variant may be different. But a back-of-the-envelope calculation allows us to get an idea of the potential magnitude of long COVID’s impact. Taking the ONS’s latest estimate from May 2022 that 1.85 million people aged 17 and above had long COVID (Office for National Statistics, 2022), our results imply about 4.4 million lost working hours per week, and 110,000 workers off sick; the

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7 We assessed the effect of long COVID in causing people to partially reduce their hours by running a regression where the outcome variable is reducing one’s hours (relative to pre-pandemic) but still working a non-zero number of hours.

8 That the proportion of long COVID sufferers reporting being ‘limited a lot’ by their condition remains high, as discussed in Section 1, somewhat mitigates this concern.
loss in earnings would aggregate up to almost £1.5 billion per year. If the prevalence and severity of long COVID remain similar, this would amount to a meaningful lasting economic impact.

Beyond the aggregate impact of long COVID, the persistence of these effects is clearly highly relevant to individuals with the condition. Evidence is still emerging on the duration of long COVID symptoms, but we do find some evidence of persistent economic impacts for at least a few months. Our approach is as follows: we compare labour market outcomes in March 2021 for those who reported having long COVID in January with those for similar individuals who did not, irrespective of their March long COVID report. We then do the same analysis in the next wave, comparing September labour market outcomes and comparing those who had long COVID in March with those who did not.9

Table 3.2 shows regression results estimating the impact of having long COVID in January 2021 on March 2021 labour market outcomes and Table 3.3 shows the results for the impact of March cases on September outcomes. The results are less precise because of the smaller samples, but we see that the impacts of having long COVID in January on March’s labour market outcomes are roughly similar in magnitude to the contemporaneous impacts estimated for the pooled sample in Table 3.1. But when we turn to the March–September analysis, the effects – while still directionally the same – fall in size, and none is statistically significant.

Table 3.2. Regression results estimating the impact of having long COVID in January 2021 on March 2021 labour market outcomes

<table>
<thead>
<tr>
<th>Impact of long COVID</th>
<th>Hours worked (per week)</th>
<th>Earnings (£ per month)</th>
<th>Working non-zero hours (ppts)</th>
<th>Employed (ppts)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>−1.6*</td>
<td>−109**</td>
<td>−4.9**</td>
<td>−1.1</td>
</tr>
<tr>
<td></td>
<td>(0.9)</td>
<td>(52)</td>
<td>(2.3)</td>
<td>(1.8)</td>
</tr>
<tr>
<td>Sample size</td>
<td>10,298</td>
<td>9,356</td>
<td>10,298</td>
<td>10,353</td>
</tr>
</tbody>
</table>

Note: *** p<0.01, ** p<0.05, * p<0.1. Standard errors in parentheses.
Source: Authors’ calculations using UKHLS COVID survey, waves 7 and 8.

9 In other words, we use the same regression approach as before, but replace contemporaneously reporting having long COVID with ‘having long COVID in the previous wave’.
Table 3.3. Regression results estimating the impact of having long COVID in March 2021 on September 2021 labour market outcomes

<table>
<thead>
<tr>
<th></th>
<th>Hours worked (per week)</th>
<th>Earnings (£ per month)</th>
<th>Working non-zero hours (ppts)</th>
<th>Employed (ppts)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact of long COVID</td>
<td>–0.9</td>
<td>–30</td>
<td>–1.6</td>
<td>0.3</td>
</tr>
<tr>
<td></td>
<td>(0.8)</td>
<td>(43)</td>
<td>(2.0)</td>
<td>(1.7)</td>
</tr>
<tr>
<td>Sample size</td>
<td>10,380</td>
<td>9,378</td>
<td>10,380</td>
<td>10,453</td>
</tr>
</tbody>
</table>

Note: *** p<0.01, ** p<0.05, * p<0.1. Standard errors in parentheses.

Source: Authors’ calculations using UKHLS COVID survey, waves 8 and 9.

Putting these results together, it seems that long COVID may have impacts that last a few months (as evidenced by the persistence of impacts in March following a January long COVID report\(^{10}\)), but that after more than six months (March–September comparison) much, though perhaps not all, of the effect has dissipated. A promising avenue for future research would be to use larger samples to more precisely assess how long these labour market impacts last, and whether they are due to the persistence of long COVID itself or to ‘scarring’ effects of being out of the labour force.

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\(^{10}\) Note that those with long COVID in January by definition report having had symptoms for at least four weeks, so by March it is at least three months since their infection.
4. Conclusion

As the UK returns to a greater degree of normality as we emerge from the worst of the COVID-19 pandemic, long COVID looks to be a significant part of the pandemic’s legacy, and this briefing note has shown that its impacts are unlikely to be felt equally by different groups. There is still much to be learned about its health and economic consequences. But the results presented here provide evidence that long COVID has a meaningful impact on the labour market.

Beyond the previously established basic demographic characteristics of long COVID sufferers, we have shown that those with long COVID in 2021 were more likely to be on benefits, and more likely to live in social housing, than those without, suggesting that long COVID is disproportionately concentrated on more deprived groups.

Those with long COVID have an increased risk of reducing their work hours to zero, with an associated fall in earnings – though this seems to be driven by them ending up on long-term sick leave or similar, rather than losing their job altogether. In aggregate, this could represent a moderate impact on the labour market – and potentially a very persistent one, depending on how the prevalence and severity of the condition evolve. At the individual level, the impact of long COVID on labour market activity can be reasonably long lasting – at least three months after infection and perhaps longer. This could imply significant consequences for some individuals, especially those without savings or a working partner.

Nevertheless, there is still much we do not know about long COVID. New research into its health consequences is ongoing, and changes both to the virus and immunity in the population mean that the impact is likely to be changing over time. It will therefore be important to continue to monitor the economic consequences of long COVID, as well as the longer-term health consequences of COVID infection more broadly, going forward.
References


Data


Appendix

List of control variables

- Pre-pandemic long-term health conditions
  - Respondents were asked pre-COVID whether they had ‘any long-standing physical or mental impairment, illness or disability’ troubling them or likely to trouble them for at least 12 months
- Age
  - 16–29
  - 30–39
  - 40–49
  - 50–59
  - 60–69
  - 70+
- Sex
- Pre-pandemic broad industry classification and work status
  - Not working
  - Health and care sector
  - Industries where working from home likely to be possible
  - Industries likely to have been shut down during lockdowns
  - Industries where work would largely have continued on location
- Benefit receipt
  - Pre-pandemic receipt of any benefits except child benefit and state pension
## Results by wave

### Table A.1. Regression results estimating the impact of long COVID on labour market outcomes, January 2021

<table>
<thead>
<tr>
<th>Impact of long COVID</th>
<th>Hours worked (per week)</th>
<th>Earnings (£ per month)</th>
<th>Working non-zero hours (ppts)</th>
<th>Employed (ppts)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>–2.1***</td>
<td>–61</td>
<td>–5.5***</td>
<td>–0.5</td>
</tr>
<tr>
<td></td>
<td>(0.8)</td>
<td>(42)</td>
<td>(2.1)</td>
<td>(1.6)</td>
</tr>
<tr>
<td>Sample size</td>
<td>11,623</td>
<td>10,573</td>
<td>11,625</td>
<td>11,751</td>
</tr>
</tbody>
</table>

Note: *** p<0.01, ** p<0.05, * p<0.1. Standard errors in parentheses.
Source: Authors’ calculations using UKHLS COVID survey, wave 7.

### Table A.2. Regression results estimating the impact of long COVID on labour market outcomes, March 2021

<table>
<thead>
<tr>
<th>Impact of long COVID</th>
<th>Hours worked (per week)</th>
<th>Earnings (£ per month)</th>
<th>Working non-zero hours (ppts)</th>
<th>Employed (ppts)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>–3.3***</td>
<td>–99**</td>
<td>–7.6***</td>
<td>–1.6</td>
</tr>
<tr>
<td></td>
<td>(0.8)</td>
<td>(50)</td>
<td>(2.1)</td>
<td>(1.6)</td>
</tr>
<tr>
<td>Sample size</td>
<td>12,202</td>
<td>11,037</td>
<td>12,200</td>
<td>12,278</td>
</tr>
</tbody>
</table>

Note: *** p<0.01, ** p<0.05, * p<0.1. Standard errors in parentheses.
Source: Authors’ calculations using UKHLS COVID survey, wave 8.

### Table A.3. Regression results estimating the impact of long COVID on labour market outcomes, September 2021

<table>
<thead>
<tr>
<th>Impact of long COVID</th>
<th>Hours worked (per week)</th>
<th>Earnings (£ per month)</th>
<th>Working non-zero hours (ppts)</th>
<th>Employed (ppts)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>–1.8***</td>
<td>–37</td>
<td>–4.5***</td>
<td>–0.9</td>
</tr>
<tr>
<td></td>
<td>(0.7)</td>
<td>(35)</td>
<td>(1.7)</td>
<td>(1.4)</td>
</tr>
<tr>
<td>Sample size</td>
<td>12,408</td>
<td>11,156</td>
<td>12,403</td>
<td>12,511</td>
</tr>
</tbody>
</table>

Note: *** p<0.01, ** p<0.05, * p<0.1
Source: Authors’ calculations using UKHLS COVID survey, wave 9.