COVID-19: What impacts are unemployment and the Coronavirus Job Retention scheme having on food insecurity in the UK?

Brief report

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Summary

This briefing report uses data from two YouGov surveys commissioned by the Food Foundation over 14-17 May 2020 and 6-8 July 2020 to examine how risk of food insecurity compares for adults who have been furloughed or newly without work since February 2020 compared to those who have remained in work. It finds that, after adjusting for sociodemographic characteristics, adults who were working in February 2020 but who reported being unemployed in May or July were about 2.5 times more likely to be experiencing food insecurity than those who remained in work (18.5% vs. 7.4%, respectively). An equivalent rise was not observed for adults who had been working in February but who were furloughed in May or June, suggesting this scheme has protected this group from the dramatic rise in food insecurity observed for those who became unemployed. However, compared to those who remained in employment, significantly higher rates of food insecurity were still observed among people who were furloughed (10.2% vs. 7.4%, respectively).

Based on worst-case projections from the Office for Budgetary Responsibility of a rise in unemployment to 13.2%, it is estimated that there will be 251,892 to 336,533 more working age adults made food insecure on account of transitions from furlough or employment to unemployment, respectively, in the coming six months. In light of this evidence, there is an urgent need to address the inadequacy of income protection for the newly unemployed.

Introduction

The COVID-19 pandemic in the UK has turned life upside down for millions of people in many different ways since March 2020, but even as lockdown measures have eased, the economic impacts continue to mount. People lost jobs and lost hours of work in early lockdown as businesses shut, nurseries, childminders and schools closed, and government guidance all but ordered home working for those working in non-essential services. From just March to April, the claimant count increased from 1,240,122 to 2,098,153, reflecting the immediate impacts of the lockdown on earnings and jobs.¹ By July, it reached 2,688,694. Recent data from the Office for National Statistics showed that there were 220,000 fewer people in employment over April to June than there were over January to March, with older and younger workers, people in part-time work, and the self-employed worst affected.²

However, the impacts of COVID-19 on employment and earnings could have potentially been much worse had the UK Government not introduced measures to allow employers to retain workers and to subsidise the loss of incomes for people who were self-employed. The Coronavirus Job Retention Scheme³ enabled employers to furlough their workers and continue to pay them, with 80% of wages being subsidised by the Government up to a maximum salary of £2,500 per month. For people who were self-employed before 2019-20, the Government's Self-Employment Income scheme⁴ paid a grant worth up to 80% of 3-months' earnings based on the previous earning levels, up to £7500, from the middle of May.

But weaknesses in these schemes have been identified. In the first months of the Coronavirus Job Retention Scheme scheme, the scheme could only be applied to employees who stopped work completely. This meant that people who had hours reduced but who were still able to work would have experienced losses in income without any replacement.⁵

The scheme also has not taken into account what difference a loss of 20% of income could make to some employees. Whilst employers could choose to top-up wages to their employees' full level of earnings, in a YouGov survey commissioned by the Resolution Foundation, only 21% of furloughed employees reported receiving their full wages from their employer.⁶ For low-income individuals on the scheme not receiving a topped-up wage, a 20% pay cut has likely significantly impacted their ability to cover living expenses, and the same survey from the Resolution Foundation found that lowest paid workers have been more likely to be furloughed than the highest paid.⁷

 $\frac{https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/bulletins/uklabourmarket/august2020\#claimant-count-experimental-statistics$

https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/bulletins/employmentintheuk/august2020

¹ The claimant count is a count of the number of people claiming benefits primarily because they are unemployed or eligible for unemployment-related benefit support on Universal Credit. It includes people who receive unemployment-related benefit support on Universal Credit and people who receive Jobseeker's Allowance. The data reported here are available from the Office of National Statistics.

³ https://www.gov.uk/government/collections/coronavirus-job-retention-scheme

⁴ https://www.gov.uk/guidance/claim-a-grant-through-the-coronavirus-covid-19-self-employment-incomesupport-scheme

 $^{^{5} \, \}underline{\text{https://www.ifs.org.uk/uploads/publications/bns/BN277-Income-protection-for-the-self-employed-and-employees-during-the-coronavirus-crisis.pdf}$

 $^{^{6}\,\}underline{\text{https://www.resolutionfoundation.org/publications/the-effects-of-the-coronavirus-crisis-on-workers/}$

⁷ Ibid.

The scheme for people who are self-employed was criticised for its slow implementation, with individuals only being able to assess their eligibility from early May and apply in mid-May, with grants being paid out 6 days later. Importantly, people who recently became self-employed were not eligible for the scheme, nor were people with less than half of their earnings from self-employment or people with earnings of more than £50,000. Whilst generous when received, especially for self-employed people who were able to continue some level of work through the lockdown, the delay in payment could have caused substantial financial hardship for self-employed people with little savings before the crisis.

In contrast to these schemes, only Universal Credit has been available for people made newly unemployed. Although a boost in the monthly standard allowance of £20 per week was announced as part of the response to the economic impacts of coronavirus, compared to the furlough scheme paying up to £2,500 a month, the monthly standard allowance for a single claimant without children over the age of 25 who is looking for work on Universal Credit is still only £409.89 (plus any housing elements claimants are entitled to). For anyone over 25 moving from a full-time job paid the national living wage of £8.72 per hour and takehome pay of about £1260 per month, a transition from even low-wage work to Universal Credit is likely to be crushing.

Over the course of the lockdown, there has been plenty of evidence suggesting that more and more people have been struggling to make ends meet. ^{13,14,15} In the first three weeks of lockdown, we estimated the prevalence of food insecurity to be four times higher than when it was last measured in 2018. ¹⁶ Adults who had reported income losses arising from COVID-19 were at much higher risk of experiencing food insecurity than adults whose incomes had been unaffected. Recent qualitative research from Bright Harbour and the Food Standards Agency¹⁷ explored reasons for households newly experiencing food insecurity since March, and found many were people who worked jobs that could not be done remotely, who held mixed work, who had zero-hours contracts or who normally worked overtime to supplement low wages. Having been just about managing before the COVID-19 crisis, the loss of work against a backdrop of little savings and/or debt meant they simply did not have enough income to afford sufficient food. Lastly, quantitative evidence from food banks¹⁸ and the Food Standards Agency¹⁹ has shown numbers of people using food banks continuing to rise and a sustained increase in food insecurity since the beginning of the crisis.

In this brief, we specifically explore food insecurity among people who have been affected by the loss of jobs, the loss of self-employment, or the furlough scheme over the COVID-19 crisis. This brief examines whether people on the furlough scheme have been just as

⁸ <u>https://www.gov.uk/guidance/claim-a-grant-through-the-coronavirus-covid-19-self-employment-income-support-scheme</u>

 $[\]frac{9}{\text{https://www.ifs.org.uk/uploads/publications/bns/BN277-Income-protection-for-the-self-employed-and-employees-during-the-coronavirus-crisis.pdf}$

¹⁰ Ibid.

 $^{^{11}\,\}underline{\text{https://www.gov.uk/guidance/coronavirus-covid-19-what-to-do-if-you-were-employed-and-have-lost-your-job}$

¹² https://www.gov.uk/guidance/coronavirus-covid-19-what-to-do-if-youre-already-getting-benefits

¹³ https://www.foodaidnetwork.org.uk/ifan-data-since-covid-19

¹⁴ https://www.trusselltrust.org/2020/06/03/food-banks-busiest-month/

¹⁵ https://cpag.org.uk/news-blogs/news-listings/covid-realities-monitoring-front-line

¹⁶ https://foodfoundation.org.uk/wp-content/uploads/2020/04/Report COVID19FoodInsecurity-final.pdf

¹⁷ https://www.food.gov.uk/sites/default/files/media/document/fsa-food-insecurity-2020 -report-v5.pdf

¹⁸ https://www.foodaidnetwork.org.uk/ifan-data-since-covid-19

¹⁹ https://www.food.gov.uk/sites/default/files/media/document/covid-19-wave-1-4-report-final-mc.pdf

protected from food insecurity through the crisis as those who have remained in work. It also examines how those who have lost work compare to those who have remained in work and those on furlough. As employers have been asked to contribute more to the wages of their furloughed employees since August and the scheme will cease at the end of October, these findings are important for understanding how shifts from furlough to unemployment may affect rates of food insecurity into the future.

Methods

Data

Data for these analyses come from a pooled sample of two YouGov omnibus surveys of adults living in the UK aged 18 and older carried out at two time points: 14-17 May and 6-7 July, 2020. Approximately 4,350 adults took part in each survey wave. Samples were weighted to match the adult UK population by age, gender and region, social grade and highest education level. For more details on how YouGov polling works, see https://yougov.co.uk/solutions/research/realtime/gb-and-uk.

Measures of food insecurity, food acquisition concerns, and food sources

Three questions from the United States Department of Agriculture's Adult Food Security Survey Module²⁰ were adapted to provide a measure of food insecurity in the UK during lockdown. This 10-item scale is already used to measure food insecurity amongst adults in the Food Standards Agency's Food and You survey (covering England, Wales, and Northern Ireland).²¹ To measure food insecurity, three questions which capture moderate and severe experiences of food insecurity were selected. These were:

- Did (you/you or other adults in your household) ever cut the size of your meals or skip meals because there wasn't enough money for food?
- Were you ever hungry but didn't eat because there wasn't enough money for food?
- Did (you/you or other adults in your household) ever not eat for a whole day because there wasn't enough money for food?

As reflected in these questions, normally when measuring food insecurity, only issues of economic access are specified as driving experiences of food insecurity, but the COVID-19 crisis raised other concerns about food access, namely those arising from people being unable to go out to purchase food, and especially in early lockdown, concerns about the reduced availability of food in shops. As such, the three questions were adapted to include being unable to "get access to food". Other adaptations included specifying not being able to afford food rather than not having enough money for food and including reference to anyone else in one's household rather than just adults for all questions for the question about experiences of hunger. The wording "cutting size of your meals" was modified to "have smaller meals than usual" to add clarity. These modifications do not change the core construct being measured but may have captured higher levels of food insecurity than if using the usual USDA measure.

- Did you/anyone else in your household have smaller meals than usual or skip meals because you couldn't afford or get access to food?
- Have you/anyone else in your household ever been hungry but not eaten because you couldn't afford or get access to food?
- Have you/ anyone else in your household not eaten for a whole day because you couldn't afford or get access to food?

Each of these questions was asked in reference to a different and non-overlapping time period over the survey waves, referring to the past 4 weeks at the time of answering the questionnaire. This is also an adaptation from the USDA scale used in the UK, which asks respondents to recall experiences over the past 12 months. For the first time point (conducted over 14-17 May), respondents were asked about experiences from Easter

²⁰ https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/survey-tools/#adult

²¹ https://www.food.gov.uk/research/food-and-you

weekend, and for the second time point, which took place over 6-7 July, respondents were asked about experiences since early June.

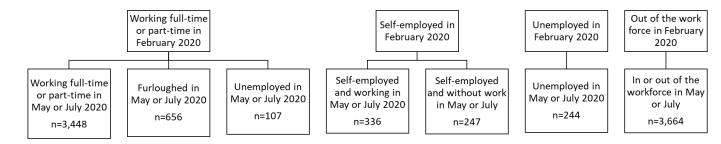
If a respondent gave an affirmative response to any of the above questions, they were classed as food insecure.

Changes in employment status

In the survey questionnaire, respondents were asked to report their current employment status at the time of the survey (either May or July, depending on the respondent's survey wave), which included options to indicate if they were currently furloughed or self-employed but without work. They were also asked to report what their employment status had been in the month of February, denoting a time before COVID-19 started to impact employment in the UK.

Based on responses to these questions, respondents were divided into seven groups to enable comparisons between respondents with different employment transitions or consistent employment over February to May or July. We examined how those who remained in part-time or full-time employment fared in contrast to those who had been working in February but had transitioned to one of three groups: furloughed, unemployed, self-employed without work at the time of the survey. In addition, people who were always unemployed were also examined, as well as a group including respondents who were out of the workforce in February (i.e. due to retirement, caregiving, education, or not working for other reasons (i.e. disability)).²²

Figure 1 Sub-samples of respondents based on work status in February and May or July 2020.



Socio-demographic characteristics

Routine variables included in YouGov surveys include information on gender, age, occupational class, and marital status. In addition, information on respondent ethnicity was collected. Due to low numbers of respondents in each specific ethnic group, these were roughly grouped into White ethnicity, Black and Asian ethnicity, respondents who identified as having a mixed ethnicity, and other ethnicities or where ethnicity was not indicated. Respondents were also asked about whether or not they have a health condition or disability that limits their daily activities a lot, a little or not at all, in line with how disability is classified in the UK.

Statistical analyses

²² While some of this group may have transitioned to employment or unemployment (i.e. looking for work) over February, examining these transitions in relation to food insecurity was not a focus of this analysis.

Descriptive statistics are presented as unweighted sample sizes and weighted sample proportions. Chi square tests were used to compare if proportions were significantly different across survey waves.

Logistic regression models were used to test for differences by changes in employment status. Predicted probabilities produced using Stata's margins command are used to show marginal effects by changes in employment status. Logistic regression models adjusted for sociodemographic characteristics are presented in the appendix.

Results

Descriptive statistics

Table A1 in the appendix shows respondent characteristics across the two waves of data. In general, socio-demographic characteristics were constant across survey waves, however, over the May to July wave, there were shifts in employment status. There was an increase in the proportion of people reporting current full-time employment, a decrease in people reporting being self-employed without work and a decrease in people reporting currently being furloughed. At the same time, there was a rise in unemployment.

Food insecurity did not differ between survey waves. Approximately 9.7% of adults consistently reported reducing the size of their meals or skipping meals, experiences of hunger, and at worse, going whole days without eating in the past four weeks because they could not afford food or access food.

Logistic regression results

Table A2 in the appendix presents the results of the logistic regression analysis examining risk factors for food insecurity over the pooled survey waves. Consistent with earlier research, 23 sociodemographic characteristics associated with higher odds of food insecurity in the sample included younger age, lower levels of education, mixed ethnicity or Black or Asian ethnicity, not being married or partnered, having a disability, and having children. People 71 years of age and older had significantly lower odds of food insecurity compared to people aged 55-70. Individuals working in low grade employment or who had a trade apprenticeship as their highest qualification had significantly higher odds of food insecurity. There were no significant differences in food insecurity across different regions of England or the devolved nations.

After controlling for these background socio-demographic characteristics, we observed different patterns in food insecurity status by transitions in employment status. Compared to people who reported being employed in February and currently at the time of the survey wave, people who had been working in February but had become unemployed had significantly higher odds of being food insecure. People who had been working but who reported currently being self-employed and without work also had significantly higher odds of food insecurity, as did people who were currently furloughed, compared to those who remained in employment. Only people who reported working in February and working in self-employment in either May or July did not have significantly higher odds of food insecurity compared to people who remained in employment.

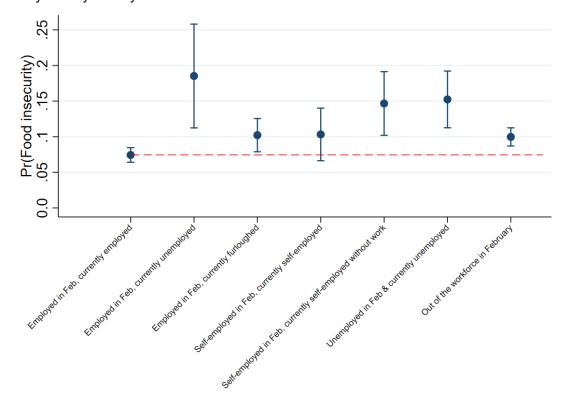
²³ Loopstra R, Reeves A, Tarasuk V. The rise of hunger among low-income households: an analysis of the risks of food insecurity between 2004 and 2016 in a population-based study of UK adults. J Epidemiol Community Health. 2019;73:668-673.

In line with previous research,²⁴ people who were out of the workforce or who were unemployed from February to either May or July also had higher odds of food insecurity compared to those in employment. Interaction terms between survey wave and employment transitions were tested to see if relationships changed between the survey time points, but none were significant. However, when split by survey wave, the sample size in some groups was low, so there may not have been the statistical power to detect different trends between these groups between survey waves.

Figure 1 shows how these figures translate to prevalence of food insecurity for these different groups, after adjustment for model covariates. As shown, among adults who had transitioned from working in February to unemployment at the time of the survey, 18.5% (95% CI: 11.2% to 25.8) were experiencing food insecurity in either May or July, compared to just 7.44% (95% CI: 6.41% to 8.47%) of people who remained in work over February to May or July. Among the self-employed who reported no work in either May or July, 14.7% (95% CI: 10.2% to 19.1%) were food insecure, also significantly higher than people who were employed since February.

For those on the furlough scheme, whilst rates of food insecurity were significantly lower than among the unemployed, they were still significantly higher than people who remained in employment (10.2% (95% CI: 7.89% to 12.6%). This could reflect that people who have been furloughed were more likely to be in low-paid employment to start with, but also the potential of the scheme to not sufficiently cover living costs for some households, given the 20% cut in wages.

Figure 1 Adjusted prevalence of food insecurity by employment transitions over February to May or July survey wave.



Notes: Figures adjusted for age band, gender, ethnicity, partnership status, number of children, educational qualifications, social grade, disability, and region/devolved nation.

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²⁴ Ibid.

Projections for future rises in food insecurity resulting from unemployment

In mid-July, the Office for Budgetary Responsibility projected three possible scenarios for the impact of COVID-19 on the UK's economy. In their "upside scenario", unemployment peaks at 9.7% in Q3 of 2020. In their moderate scenario, economic recovery is slower and unemployment peaks at 11.9% in Q4 of 2020. And in their downside scenario, unemployment peaks at 13.2% in Q1 of 2021.

In table 1 below, we outline the potential increases in the number of working age, economically active adults experiencing food insecurity in a 4-week period arising from new unemployment based on these projected rises in unemployment from rates in the first quarter of 2020. We use the adjusted rate of food insecurity among the newly unemployed over May/July 2020 for our calculations. Though the loss of jobs by sector may not follow the same pattern in the next months as early lockdown, projections are that industries already worst impacted by the lockdown and furloughing the most staff (i.e. the hospitality and retail sectors) will also be those making the most staff redundant in the coming months. Thus, we assume that the rate of food insecurity among adults becoming newly unemployed in the next months will be approximately the same as among adults who became newly unemployed in the first four months of lockdown. In the appendix, we assume rates of food insecurity for the longer-term unemployed from our analyses. We do not use rates of food insecurity among the self-employed without work, even though some of the newly unemployed may come from this group. This is because our point estimates for this group are from a time when self-employed people could access the Self-Employment Support scheme, which is not available after August 2020.

Lastly, in calculating how many people will move into food insecurity, we need to consider what some of these individuals would have already been experiencing food insecurity prior to moving to unemployment, either when employed or when on furlough. As evident in our analysis, these groups are not exempt from food insecurity. To calculate the projected number of newly food insecure arising from unemployment, we have subtracted the number estimated to have been food insecure prior to unemployment for two scenarios: (1) assuming all newly unemployed had been employed; and (2) assuming all newly unemployed had been on furlough. In reality, a mix of people who have remained in employment and who have been furloughed will be made unemployed in the coming months.

As shown in table 1, if unemployment peaks at 9.7% in the third quarter of 2020, we project there will be **156,155 to 208,627** more working-age adults experiencing food insecurity at that time than there would have been if unemployment had not risen to this level from 4% among working-age adults. In the worst-case scenario, we project there may be **251,892 to 336,533** more working-age adults experiencing food insecurity in a given month during the first quarter of 2021 than there would have been if unemployment had not risen to 13.2%.

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²⁵ https://obr.uk/coronavirus-analysis/

Table 1 Projected rises in food insecurity resulting from projected rises in unemployment from the Office of Budgetary Responsibility.²⁶

	January to March 2020	Upside scenario: Peak in Q3 of 2020	Moderate scenario: Peak in Q4 2020	Downside scenario: Peak in Q1 2021
Unemployment rate	3.9%	9.7%	11.9%	13.2%
Number of working age adults unemployed	1,318,764 ¹	3,205,0972	3,932,0262	4,361,575 ²
Rise in number unemployed ²		1,886,333	2,613,262	3,042,811
Estimated number newly unemployed working-age adults experiencing food insecurity ³		348,972	483,453	562,920
Rise in food insecurity attributed to new unemployment from baseline rate of food insecurity among employed ⁴		208,627	289,025	336,533
Alternate scenario: rise in food insecurity attributed to new unemployment from baseline rate of food insecurity among furloughed employees ⁵		156,155	216,332	251,892

¹ Unemployment rate and numbers of working-aged adults based on Labour Force Survey figures from nomis.co.uk.

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² Number of projected unemployed adults based on reported number of 33,042,236 economically active working-age adults in January-March 2020. Source: nomis.co.uk

² Rise in number of unemployed working-age adults calculated as difference in number of unemployed working age adults in January to March 2020 to projected number for each scenario.

³ Adjusted prevalence of food insecurity among newly unemployed applied of 18.5% (95% CI: 11.2% to 25.8). See appendix table A3 for alternate scenario.

⁴ To calculate this figure, the prevalence of food insecurity of 7.44% among adults who were furloughed was applied to number of newly unemployed adults. The number of newly food insecure is the difference in food insecurity from this baseline scenario assuming transition from furlough to unemployment for the newly unemployed.

⁵ To calculate this figure, the prevalence of food insecurity of 10.2% among adults who were furloughed was applied to number of newly unemployed adults. The number of newly food insecure is the difference in food insecurity from this baseline scenario assuming transition from furlough to unemployment for the newly unemployed.

²⁶ https://obr.uk/coronavirus-analysis/

Estimated numbers protected from food insecurity by the Coronavirus Job Retention Scheme

The Coronavirus Job Retention scheme has covered 9.4 million jobs over the course of the crisis.²⁷ with estimates of about 8 million individuals furloughed at the peak uptake of the scheme in early May.²⁸ We can use our estimates to give us some indication of what would have happened to food insecurity had the furlough scheme not been in place. To do this, we need to estimate how many of the people that were furloughed would have lost their job in the absence of this protection. While we do not have a clear picture of what this world would have looked like, it is not unreasonable to assume that around 50% of those on furlough at its peak would have been made redundant (4 million). First, we calculate the prevalence of food insecurity among this group using data from our models (i.e. observed prevalence of 10.2% among furloughed employees), which suggests there would have been around 408,000 food insecure people among this 4 million furloughed workers. But, what would have happened if they had been made redundant and had continued to be unemployed? We can apply the same adjusted rate of food insecurity for this group as seen amongst the newly unemployed in our analysis (18.5% (95% CI: 11.2% to 25.8) and according to this estimate there would have been 740,000 newly unemployed working-age adults experiencing food insecurity in early May. Thus, in this scenario, there would have been 332,000 more working-age adults experiencing food insecurity due to unemployment in early May had the furlough scheme not been put in place.

If all 8 million furloughed employees had been made redundant in early May, there would have been 664,000 more people experiencing food insecurity due to unemployment at that time (again, after accounting for food insecurity among furloughed employees).

Sensitivity analysis

We have also re-estimated our main findings from the logistic regression models above using a matching procedure that focuses our analysis on those parts of our sample that are most comparable with each other. In practical terms, this means we might remove unemployed individuals from our analysis that are incomparable with those who are still in work. We use a procedure called Coarsened Exact Matching to create these samples of individuals who, apart from their employment status are otherwise similar. We match on age (34 and under, 35 to 54, and 55+), gender, ethnicity (White British vs Non-White British), marital status (Married/Partnered, Separated/Divorced/Widowed, Never married), number of children in the household (0, 1, or 2+), highest educational qualification (university degree, A Levels, GCSEs or trade apprenticeships, and no qualifications or don't know), social grade (Higher Professional, Clerical or junior managerial, Skilled manual, routine manual), and disability. Using these variables we create matching models for 3 comparisons. First we compare people who have become unemployed (n = 84) and those who have remained employed (n = 833). We find that 18.5% of the newly unemployed are experiencing food insecurity while around 7.8% of those who remained employed are food insecure (a difference of 10.7% (95% CI: 2.1% to 19.4%, p = 0.015) (see figure A1). Second, we compare people who have been furloughed (n = 535) with those who remained employed (n = 2195). We find that 8.8% of the furloughed are food insecure while around 6.2% of those

²⁷ https://www.gov.uk/government/publications/coronavirus-job-retention-scheme-statistics-july-2020/coronavirus-job-retention-scheme-statistics-july-2020

 $^{{}^{28}\,\}underline{\text{https://www.resolutionfoundation.org/publications/the-government-is-not-paying-nine-million-peoples-wages/}$

who remained employed were food insecure (a difference of 2.6%, 95% CI: -0.1% to 5.2%, p = 0.057) (see figure A2).²⁹ Finally, we compare whether those who lost their jobs (n = 64) were more likely to become food insecure than those who were furloughed (n = 124). We find that the furloughed were less likely to be food insecure than the recently unemployed (a difference of -10.2%, 95% CI: -20.8% to 0.4%, p = 0.058). In each case, our results are consistent with the regression models reported above.

Summary and conclusions

Our analysis shows four key things. First, people who have newly become unemployed during the COVID-19 pandemic have rates of food insecurity, on average, that are 2.5 times higher than people who remained in employment over this period, even after accounting for occupational class and educational qualifications and other socio-economic characteristics that may differ between people who remained in employment and people who were made redundant. These high rates of food insecurity suggest that financial protection for the newly unemployed, namely, Universal Credit, has not been adequate to protect people from rising risk of food insecurity during the COVID-19 crisis. These findings align with a large body of evidence showing that people struggle to afford food and other basic necessities on Universal Credit.³⁰

Second, people who are self-employed but without work have also not been sufficiently protected from rises in food insecurity. This may be because of the delay in receiving assistance in the first months of lockdown amongst those eligible for the Self-Employment Income Support Scheme, but also may be because many people who are self-employed are not eligible. These include anyone who wasn't already self-employed in 2018-19, self-employed people with less than 50% of their earnings from self-employment, and people with earnings more than £50,000 per year. The Institute for Fiscal Studies estimated about 2 million people with self-employment income were not covered by the Self-Employment Income Support Scheme.³¹ In addition, company owner-managers were also not covered (estimated about 2 million people).

Third, people who have been furloughed, assuming they could have been made redundant, have been protected from the dramatic rise in food insecurity seen for the newly unemployed. Depending on how many of furloughed employees could have been made redundant, we estimate that the scheme protected from 332,000-664,000 from food insecurity at the height of its uptake in early May. However, the scheme has not fully protected employees from heightened risk of food insecurity. They still have significantly higher rates of food insecurity than those who remained in employment. This may be because many people who were furloughed had lower incomes to begin with 32 and worked in low-pay sectors, 33 and thus, were already at higher risk of food insecurity; however, our figures were adjusted for these types of socio-economic characteristics. Thus, these findings

²⁹ Note that because these analyses are conducted in matched samples, the point estimate for the employed group when compared to the unemployed group is different than when the employed group is compared to the furloughed group.

³⁰ For references to this body of research, see the House of Lords Economic Affairs Committee report "Universal Credit isn't working: proposals for reform." 2020.

 $[\]underline{https://publications.parliament.uk/pa/ld5801/ldselect/ldeconaf/105/105.pdf}$

³¹ https://www.ifs.org.uk/uploads/publications/bns/BN277-Income-protection-for-the-self-employed-and-employees-during-the-coronavirus-crisis.pdf

³² https://www.resolutionfoundation.org/publications/the-effects-of-the-coronavirus-crisis-on-workers/

³³ https://www.jrf.org.uk/blog/postponed-job-losses-mean-we-need-lifeline-next-stage-storm

suggest that the furlough scheme has not completely protected households from new experiences of food insecurity.

Lastly, based on the projected rises in unemployment in the coming months, we calculate there will be **156,155 to 208,627** more working-age adults who are food insecure due to unemployment in scenarios where people transition from furlough and employment, respectively, and if unemployment rises to 9.7%. These figures rise to **251,892 to 336,533** if unemployment reaches a peak of 13.2%. The scale of these figures should motivate urgent intervention to protect people whose jobs are at risk from the cliff edge of unemployment in the coming months.

Importantly, these figures do not account for other reasons why food insecurity may rise over these timelines. For example, local lockdowns resulting in people shielding or outbreaks of the virus leading people to self-isolate may also contribute to rises in food insecurity, as these actions have also been associated with increased risk of food insecurity. Similarly, these projections do not account for the potential for food insecurity to rise among people who remain in work but may experience a loss in hours of work and earnings, or among people who are out of work caregiving or on account of disability and struggling to cope with new financial and food access challenges under COVID-19. We have also not enumerated the number of children who are likely to also be affected by the losses of employment among their parents.

As the end of the Coronavirus Job Retention scheme looms, it is critical that a stronger social safety net be put in place for people made unemployed by the crisis. The inadequacy of the social safety net to protect people from economic hardship arising from unemployment was a major concern before the COVID-19 crisis, but the rising tide of unemployment, and in turn, rising numbers of people facing not having enough food to eat, will make this all the more apparent.

³⁴ https://foodfoundation.org.uk/wp-content/uploads/2020/04/Report COVID19FoodInsecurity-final.pdf

³⁵ Loopstra, R; Lambie-Mumford, H. How has food insecurity changed for people who are shielding and self-isolating over the COVID-19 crisis in Great Britain? *Forthcoming*.

Acknowledgements

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Appendix

Table A1 Socio-demographic characteristics of respondents (n=8,702).

	Survey Wave 2 14-17 May 2020		Survey Wave 3 6-7 July 2020		P-
_	n	Weighted %	n	Weighted %	value for χ ²
Respondent age		/0		/0	0.68
18-24	421	11.1	327	11.1	0.00
25-34	683	16.1	664	15.2	
35-44	740	17.3	782	17.9	
45-54	698	16.2	762	17.9	
55-70	1,247	27.9	1,246	27.1	
71+	563	11.5	570	11.5	
Gender	303	11.5	370	11.5	1.00
Male	2.015	48.5	2 022	48.5	1.00
Female	2,015		2,022		
Ethnicity	2,337	51.5	2,328	51.5	0.00
White	2.054	00.0	2 000	00.0	0.23
Mixed ethnicity	3,851	88.0	3,880	88.8	
BAME	66	1.6	51	1.2	
	155	3.9	127	3.4	
Missing/other	280	6.5	292	6.7	0.00
Partnership status	0.045	50.5	0.004	50.0	0.89
Married/Partnered	2,615	59.5	2,694	59.9	
Separated/ Divorced/Widowed	527	11.6	541	11.7	
Never Married	1,182	28.9	1,093	28.4	0.00
Number of children	0.4.40	70.0	0.400	70.0	0.83
0	3,142	72.9	3,168	73.2	
1	525	12.8	492	12.2	
2	430	10.3	455	10.7	
3	164	4.0	150	3.9	
Highest education qualification					0.91
Postgraduate degree ¹	433	9.4	452	9.6	
Undergraduate degree or equivalent ²	1,416	30.9	1,414	30.6	
Diploma or equivalent ³	350	7.8	351	7.9	
A Level or equivalent ⁴	688	16.3	647	16.1	
Trade apprenticeships	55	1.3	57	1.3	
GSCE (grades A-C) or	646	15.9	632	15.2	
equivalent ⁵	0 10	10.0	002	10.2	
GCSE (grades D-G) or equivalent ⁶	349	8.6	362	8.6	
No qualifications	231	5.5	266	6.3	
Don't know/prefer not to say	184	4.4	169	4.4	
Social grade					1.00
A/B^7	1,308	28.0	1,329	28.0	
C1 ⁸	1,262	29.0	1,288	29.0	
C2 ⁹	798	21.0	819	21.0	
02	100				

Life-limiting disability					0.64
A lot	409	9.3	397	9.3	
A little	701	16.0	736	16.8	
No	3,200	74.7	3,192	73.9	
Region/country					0.94
North	1,015	23.3	1,042	23.3	
Midlands	707	16.1	677	16.1	
East	345	7.9	379	8.7	
London	531	13.1	519	13.1	
South	1,047	23.8	1,031	22.9	
Wales	209	4.8	208	4.8	
Scotland	380	8.4	383	8.4	
Northern Ireland	118	2.7	111	2.7	
Current employment status					0.0002
Full-time work	1,304	30.6	1,447	33.2	
Part-time work	364	8.5	361	8.4	
Furloughed full-time	220	5.3	201	4.7	
Furloughed part-time	150	3.5	108	2.6	
Self-employed without work	165	3.8	116	2.6	
Self-employed, full-time	65	1.5	68	1.6	
Self-employed, part-time	122	2.8	104	2.3	
Casual/zero hours	52	1.2	33	0.8	
Unemployed	181	4.3	214	5.5	
Full-time student	205	5.5	139	4.6	
Retired	1,128	23.7	1,165	24.1	
Not in paid work due caregiving	108	2.5	119	2.8	
Not in paid work for other reason/sick leave	210	4.9	224	5.4	
Missing	78	1.9	51	1.3	
Employment transition over COVID-19					0.0011
Out-of-the workforce in Feb	1,841	41.2	1,823	41.3	
Unemployed in Feb & currently	118	2.79	126	3.28	
Working in Feb, unemployed currently	42	1.06	65	1.60	
Working in Feb, self-employed without work currently	148	3.41	99	2.24	
Working in Feb & employed currently	1,672	39.1	1,776	40.8	
Working in Feb & self-employed currently	176	4.06	160	3.66	
Working in Feb, furloughed currently	355	8.37	301	7.08	
Food insecurity					0.94
No food insecurity	3,785	90.3	3,832	90.3	0.0 1
Any food insecurity	395	9.68	392	9.73	
No. 20 Miles (2007)		1 11	33 <u>-</u>	5.7.0	

Note: Significant (p<0.05) p-values are shown in bold.

¹ Higher degree or postgraduate qualifications

² Degree (undergraduate) (including B. Ed.), Postgraduate diplomas or Certificates (inc. PGCE), Professional qualifications at degree level

- Diplomas in higher education or other HE qualifications, HNC / HND / BTEC Higher, Teaching qualifications, Nursing or other medical qualifications, RSA Higher Diploma
 A/AS levels / SCE Higher / Scottish Certificate 6th Year Studies, NVQ / SVQ / GSVQ level
 GNVQ Advanced, ONC / OND / BTEC National, City and Guilds Advanced Craft / Final level / Part III / RSA, Advanced Diploma
- ⁵O level / GCSE grades A-C / SCE Standard / Ordinary grades 1-3, CSE grade 1, NVQ / SVQ / GSVQ level 2 / GNVQ intermediate, BTEC /SCOTVEC
- ⁶ O level / GCSE grades D-G / SCE Standard / Ordinary below grade 3, CSE grades 2-5, NVQ / SVQ / GSVQ level 1 / GNVQ foundation, BTEC / SCOTVEC first / General Certificate, City and Guilds part 1 / RSA Stage I-III
- ⁷ Higher & intermediate managerial, administrative, professional occupations
- ⁸ Supervisory, clerical & junior managerial, administrative, professional occupations
- ⁹ Skilled manual occupations
- ¹⁰ Semi-skilled & unskilled manual occupations, lowest grade occupations or have never worked.
- ¹ In survey wave 2 and 3, respondents were asked to indicate their employment status in February 2020 and their current employment status. This variable identifies transitions from work to unemployment, self-employment without work, and furlough for people who were working in February. Anyone who was not working but also not unemployed in February are classed in the first category "Out of the workforce in Feb" regardless of their current employment status.

Table A2 Adjusted odds of food insecurity by employment transition before and during COVID-19 crisis (n=8,189).

	Food insecurity (Odds Ratio (95% CI))			
	Model 1	Model 2	Model 3	
Respondent age				
18-24	2.45 (1.63-3.68)	2.42 (1.59-3.68)	2.43 (1.60-3.71)	
25-34	3.16 (2.37-4.22)	3.38 (2.48-4.60)	3.39 (2.49-4.62)	
35-44	2.74 (2.08-3.61)	2.92 (2.16-3.94)	2.92 (2.16-3.95)	
45-54	2.10 (1.61-2.74)	2.18 (1.63-2.90)	2.17 (1.63-2.89)	
55-70	Ref	Ref	Ref	
71+	0.56 (0.39-0.81)	0.55 (0.38-0.79)	0.55 (0.38-0.79)	
Gender				
Male	Ref	Ref	Ref	
Female	1.03 (0.87-1.22)	1.03 (0.87-1.22)	1.04 (0.87-1.23)	
Ethnicity				
White	Ref	Ref	Ref	
Mixed ethnicity	1.92 (1.11-3.32)	1.85 (1.06-3.22)	1.90 (1.09-3.31)	
Black/Asian ethnicity	1.78 (1.14-2.77)	1.78 (1.13-2.81)	1.79 (1.14-2.82)	
Missing/other	1.15 (0.81-1.62)	1.13 (0.79-1.60)	1.12 (0.79-1.59)	
Partnership status				
Married/Partnered	Ref	Ref	Ref	
Separated/ Divorced/Widowed	2.23 (1.73-2.88)	2.19 (1.70-2.82)	2.19 (1.70-2.81)	
Never Married	1.51 (1.21-1.90)	1.44 (1.14-1.81)	1.44 (1.14-1.81)	
Number of children				
0	Ref	Ref	Ref	
1	1.47 (1.15-1.88)	1.52 (1.18-1.94)	1.53 (1.19-1.96)	
2	1.26 (0.95-1.68)	1.27 (0.95-1.68)	1.27 (0.96-1.69)	
3	2.14 (1.51-3.01)	2.05 (1.44-2.92)	2.05 (1.44-2.93)	
Highest education qualification				
Postgraduate degree ¹	1.08 (0.79-1.48)	1.11 (0.81-1.52)	1.11 (0.81-1.53)	
Undergraduate degree or equivalent ²	Ref	Ref	Ref	
Diploma or equivalent ³	1.46 (1.06-2.00)	1.43 (1.04-1.98)	1.43 (1.04-1.98)	
A Level or equivalent ⁴	1.07 (0.82-1.40)	1.06 (0.81-1.39)	1.06 (0.81-1.39)	
Trade apprenticeships	2.49 (1.37-4.51)	2.32 (1.28-4.21)	2.38 (1.31-4.32)	
GSCE (grades A-C) or equivalent ⁵	1.16 (0.89-1.51)	1.13 (0.87-1.48)	1.14 (0.87-1.49)	
GCSE (grades D-G) or equivalent ⁶	1.32 (0.96-1.82)	1.32 (0.96-1.81)	1.31 (0.95-1.80)	
No qualifications	1.59 (1.12-2.26)	1.52 (1.07-2.17)	1.54 (1.08-2.20)	
Don't know/prefer not to say	1.52 (1.01-2.29)	1.44 (0.95-2.20)	1.46 (0.96-2.21)	
Social grade	Det	D-4	D-4	
A/B ⁷ C1 ⁸	Ref	Ref	Ref	
C2 ⁹	1.10 (0.87-1.40)	1.10 (0.86-1.40)	1.10 (0.86-1.40)	
D/E ¹⁰	1.26 (0.96-1.65)	1.22 (0.93-1.59)	1.21 (0.93-1.59)	
	1.57 (1.23-2.01)	1.43 (1.11-1.83)	1.42 (1.11-1.83)	
Life-limiting disability	E 40 (4 40 0 E4)	4 70 /2 7E 0 44\	4 00 /2 70 0 40	
A lot	5.18 (4.12-6.51)	4.79 (3.75-6.11)	4.80 (3.76-6.12)	
A little	3.12 (2.54-3.84)	3.02 (2.44-3.73)	3.02 (2.44-3.73)	

No	Ref	Ref	Ref
Region/country	-	-	
North	0.87 (0.65-1.17)	0.90 (0.67-1.22)	0.90 (0.67-1.22)
Midlands	0.96 (0.70-1.33)	0.99 (0.72-1.38)	0.99 (0.72-1.38)
East	1.09 (0.76-1.57)	1.15 (0.79-1.66)	1.16 (0.80-1.67)
London	Ref	Ref	Ref
South	1.22 (0.91-1.63)	1.27 (0.95-1.70)	1.28 (0.96-1.72)
Wales	0.94 (0.60-1.46)	0.97 (0.62-1.51)	0.98 (0.63-1.53)
Scotland	0.97 (0.67-1.40)	1.01 (0.70-1.47)	1.01 (0.70-1.46)
Northern Ireland	1.46 (0.91-2.34)	1.51 (0.93-2.43)	1.50 (0.93-2.43)
Employment transition over COVID-19			
Out of the workforce in Feb		1.42 (1.11-1.82)	1.24 (0.92-1.69)
Unemployed in Feb & currently		2.43 (1.66-3.56)	1.98 (1.15-3.41)
Working in Feb, unemployed currently		3.17 (1.79-5.62)	4.33 (1.83-10.25)
Working in Feb, self-employed without work currently		2.31 (1.51-3.54)	1.71 (0.95-3.06)
Working in Feb & self-employed currently		1.48 (0.93-2.36)	1.51 (0.82-2.78)
Working in Feb, furloughed currently		1.46 (1.07-2.00)	1.41 (0.92-2.16)
Working in Feb & employed currently		Ref	Ref
Survey wave			
Wave 1			Ref
Wave 2			0.90 (0.68-1.20)
Employment transition over COVID- 19*Survey wave			
Out of the workforce in Feb*Wave2			1.29 (0.88-1.89)
Unemployed in Feb & currently*Wave2			1.46 (0.70-3.04)
Working in Feb, unemployed currently*Wave2			0.61 (0.19-1.91)
Working in Feb, self-employed without work currently*Wave2			2.01 (0.87-4.68)
Working in Feb & self-employed currently*Wave2			0.96 (0.38-2.40)
Working in Feb, furloughed currently*Wave2			1.07 (0.58-2.00)
Working in Feb & employed currently*Wave2			Ref

¹ Higher degree or postgraduate qualifications

² Degree (undergraduate) (including B. Ed.), Postgraduate diplomas or Certificates (inc. PGCE), Professional qualifications at degree level

³ Diplomas in higher education or other HE qualifications, HNC / HND / BTEC Higher, Teaching qualifications, Nursing or other medical qualifications, RSA Higher Diploma

⁴ A/AS levels / SCE Higher / Scottish Certificate 6th Year Studies, NVQ / SVQ / GSVQ level 3 / GNVQ Advanced, ONC / OND / BTEC National, City and Guilds Advanced Craft / Final level / Part III / RSA, Advanced Diploma ⁵ O level / GCSE grades A-C / SCE Standard / Ordinary grades 1-3, CSE grade 1, NVQ / SVQ / GSVQ level 2 / GNVQ intermediate, BTEC /SCOTVEC

⁶ O level / GCSE grades D-G / SCE Standard / Ordinary below grade 3, CSE grades 2-5, NVQ / SVQ / GSVQ level 1 / GNVQ foundation, BTEC / SCOTVEC first / General Certificate, City and Guilds part 1 / RSA Stage I-III

⁷ Higher & intermediate managerial, administrative, professional occupations

⁸ Supervisory, clerical & junior managerial, administrative, professional occupations

⁹ Skilled manual occupations

¹⁰ Semi-skilled & unskilled manual occupations, unemployed and lowest grade occupations

Table A3 Projected rises in food insecurity resulting from projected rises in unemployment from the Office of Budgetary Responsibility assuming adjusted rate of food insecurity observed for long-term unemployed.³⁶

	January to March 2020	Upside scenario: Peak in Q3 of 2020	Moderate scenario: Peak in Q4 2020	Downside scenario: Peak in Q1 2021
Unemployment rate	3.9%	9.7%	11.9%	13.2%
Number of working age adults unemployed	1,318,764 ¹	3,205,0972	3,932,026 ²	4,361,575 ²
Rise in number unemployed ²		1,886,333	2,613,262	3,042,811
Estimated number newly unemployed working-age adults experiencing food insecurity ³		287,356	398,094	463,530
Rise in food insecurity attributed to new unemployment from baseline rate of food insecurity among employed ⁴		147,012	203,666	269,101
Alternate scenario: rise in food insecurity attributed to new unemployment from baseline rate of food insecurity among furloughed employees ⁵		94,540	130,973	196,409

¹ Unemployment rate and numbers of working-aged adults based on Labour Force Survey figures from nomis.co.uk.

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² Number of projected unemployed adults based on reported number of 33,042,236 economically active working-age adults in January-March 2020. Source: nomis.co.uk

² Rise in number of unemployed working-age adults calculated as difference in number of unemployed working age adults in January to March 2020 to projected number for each scenario.

³ Adjusted prevalence of food insecurity among long-term unemployed applied of 15.2% (95% CI: 11.3% to 19.2%).

⁴ To calculate this figure, the prevalence of food insecurity of 7.44% among adults who were furloughed was applied to number of newly unemployed adults. The number of newly food insecure is the difference in food insecurity from this baseline scenario assuming transition from furlough to unemployment for the newly unemployed.

⁵ To calculate this figure, the prevalence of food insecurity of 10.2% among adults who were furloughed was applied to number of newly unemployed adults. The number of newly food insecure is the difference in food insecurity from this baseline scenario assuming transition from furlough to unemployment for the newly unemployed.

³⁶ https://obr.uk/coronavirus-analysis/

Figure A1: Matched comparison of those who have become unemployed and those who remained in work

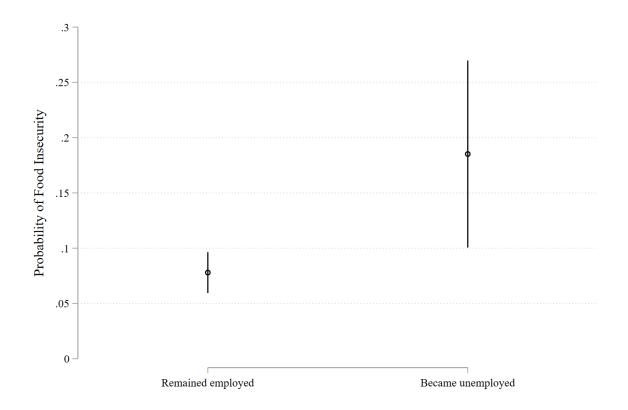


Figure A2: Matched comparison of those who have been furloughed and those who remained in work

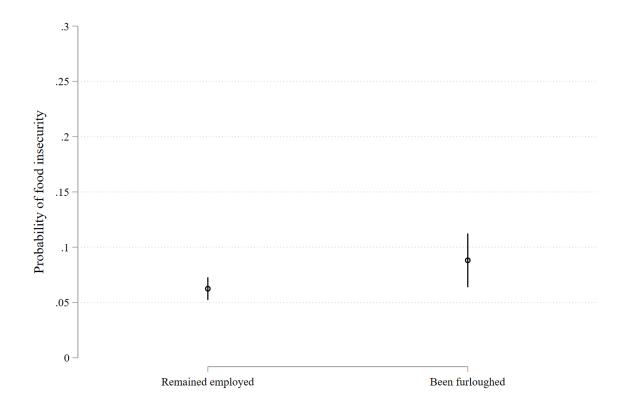


Figure A3: Matched comparison of those who have been furloughed and those who became unemployed

