

# **Covid-19 and self-employment in the UK**

**ERC Insight Paper**

**April 2020**

## **Covid-19 and self-employment in the UK**

**Andrew Henley**  
Cardiff Business School  
Cardiff University

**Darja Reuschke**  
School of Geography and Environmental Science  
University of Southampton

The Enterprise Research Centre is an independent research centre which focusses on SME growth and productivity. ERC is a partnership between Warwick Business School, Aston Business School, Queen's University School of Management, Leeds University Business School and University College Cork. The Centre is funded by the Economic and Social Research Council (ESRC); Department for Business, Energy & Industrial Strategy (BEIS); Innovate UK, the British Business Bank and the Intellectual Property Office. The support of the funders is acknowledged. The views expressed in this report are those of the authors and do not necessarily represent those of the funders.

## INTRODUCTION

The growth in self-employment since the global financial crisis and earlier has been a striking feature of employment patterns in the UK (ONS, 2018). This is a pattern of growth which has been almost unique amongst western advanced economies. The self-employment rate in the UK in 2019 stood at over 15% of those in employment, having grown from around 13% a decade previously (Annual Population Survey, those aged 16+, NOMIS). At the end of 2019, just above five million workers in the UK were self-employed (ONS, 2020). For males the self-employment rate in 2019 stood at over 19%. Within academic literature there has been considerable debate on how to interpret the high rate of self-employment. At the risk of over-simplification, we can identify one view which says that this reflects a growing desire of individuals to work for themselves and launch new businesses. An alternative view is that an increasing proportion of the self-employed are reluctant sole-traders or own-account workers, who have been discouraged by an inability to find well-paid, secure and satisfying employment opportunities in the labour market, or have found themselves pressured to work as self-employed due to the flexibilization strategies of employers or the growth of so-called 'gig economy' working. We might expect the 'entrepreneurial' self-employed to experience higher levels of earnings volatility than paid employees in the current public health crisis, particularly as economic uncertainty has dramatically increased. However, we might also anticipate that the other 'reluctant' or so-called 'dependent' self-employed group to be more at risk from employment retrenchment strategies by large organizations in the face of the sudden economic shock brought on by the Covid-19 pandemic, since they have no employment protection rights and may possess few or no firm-specific skills which an organization might wish to retain in the hope that the shock is temporary.

As the spread of Covid-19 infection reached the UK and developed into an unprecedented public health crisis in March 2020, it became quickly clear that the self-employed are a particularly vulnerable group. However, while the UK government was able quickly to announce a wage-subsidy scheme to allow paid employees to be furloughed, it took longer to frame a workable response to the likely earnings crisis for the self-employed, and it is likely to take even longer to operationalise the announced financial support scheme for the self-employed. The self-employed are a highly heterogeneous group and fluctuations in and out of self-employment are high in the UK. Perhaps a tenth of the self-employed at any point in time have transitioned into self-employment within the previous year and therefore lack any recent self-assessed tax

return information, and a further tenth is likely to transition back into paid employment within the next year (authors' own estimates from ESRC Understanding Society longitudinal survey). For these and other reasons, such as second job self-employment, a significant proportion of the self-employed may not be eligible for government support (Rouse et al., 2020).

While the majority of the self-employed are sole-trading or co-owning business proprietors, a growing minority are sub-contractors and freelancers, in part reflecting changing employment patterns. Self-employment rates also vary spatially (ONS, 2018) – rates have tended to be high traditionally in rural areas, reflecting not just agricultural activity but also rural leisure, tourism and craft-based activities. However, over the past decade or so, the region (NUTS1) which has witnessed the most rapid growth is London, with a self-employment rate now at 18.5% (Powell, 2020). The self-employed are also highly heterogenous in terms of industrial sector (ONS, 2020), predominant not just in traditional service sectors such as accommodation and food services (3.2% of all self-employed at the end of 2019), retailing & wholesale (7.9%) and human health and social work services (7.6%), but increasingly in growing knowledge-economy sectors. At the end of 2019, 12.1% of all self-employed worked in professional, scientific and technical activities. The greatest proportion of the self-employed worked in the construction sector (18.3%). This sectoral diversity is further reflected in the educational background of the self-employed – growing numbers of the self-employed are graduates. In 2016, one-third of all self-employed in the UK are graduates (ONS, 2018). In fact, the growth in self-employment between 2001-16 has been mainly driven by those with a degree (ONS, 2018). A further feature is the spread of working patterns. The majority of the self-employed either work from home (22% of all self-employed at the end of 2019) or declare no fixed place of work (meaning that they travel to work to a range of client or customer premises) (33.5%). To compare, just around 7% of employees reported working mainly from home or at no fixed location (own calculations with the Labour Force Survey). However, despite the growth of the 'weightless economy', significant numbers of self-employed business owners operate 'bricks and mortar' premises, incurring significant fixed operating costs regardless of any short term or seasonal fluctuations in business revenues.

In this short paper, we provide a preliminary assessment of the likely impact of the Covid-19 crisis on the self-employed, and in particular, using the most recently available UK Quarterly Labour Force Survey data, we provide an analysis of which groups and where

the self-employed are most at risk of significant income loss and therefore household distress.

Because of time-lags in the publication of official labour force and business statistical data, it is still too early for us to assess with any degree of precision the impact of the crisis on the self-employment. Nevertheless, the sudden closure of businesses and tight social distancing restrictions on the movement of people in the attempt to slow down the spread of Covid-19 is having unprecedented effects on employment and businesses activity. Employment and self-employment in non-food personal and domestic services is directly affected since customers are required to stay at home except for essential shopping for food and medical supplies, and where possible work from home, and so no longer permitted to use these services. The Institute for Fiscal Studies identifies sectors that are directly affected by the lockdown: non-food, non-pharmaceutical retail; passenger transport; accommodation and food; travel; childcare; arts and leisure; personal care and domestic services (Joyce and Hu, 2020). The sector-specific employment risk coincides with specific job and worker characteristics with young people and women being predicted to be hit hardest by the lockdown. Age and gender effects are further associated with low income jobs and part-time workers. Hence, the employment effect of Covid-19 is associated with a stark level of social inequality. However, predictions about which workers are hardest hit by the crisis (Joyce and Hu, 2020; Kitsos, 2020), included only those in paid employment. We provide here a corresponding analysis for the self-employed.

## **QUARTERLY LABOUR FORCE SURVEY ANALYSIS OF THE SELF-EMPLOYED AT RISK**

We estimate who is most affected by the lockdown including both employees and the self-employed, in order to compare and contrast the two groups. In addition to worker and job characteristics, we investigate whether the lockdown may hit employment in some regions harder than in others. We use the latest release of the UK Labour Force Survey from October to December 2019 (ONS and NISRA, 2020), as well as for comparison the earlier January to March 2019 release (ONS and NISRA, 2019) and define sectors where workers are most likely to be affected following Joyce and Hu (2020) and Kitsos (2020):

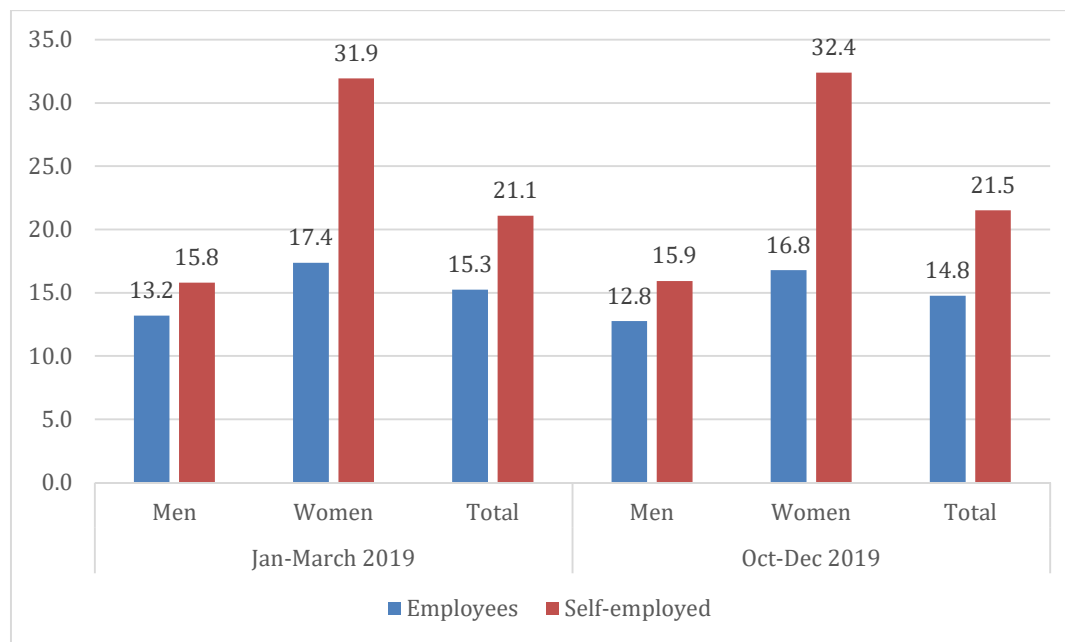
- Non-food, non-pharmaceutical retail (SIC 4 digit codes: 4719, 4730-4772, 4776-4799);
- Passenger transport (4910, 4931-4939, 5010, 5030, 5110)
- Accommodation and food (5510- 5630)
- Travel (7911-7990); childcare (8510, 8891)
- Arts and Leisure (9001-9329 except 'artistic creation' 9003)
- Personal care (9601-9609 except 'funeral and related activities' 9603)
- Domestic services (9700).

We may further assume that some economic activities in the construction sector are affected by the lockdown. In this sector, male self-employed workers might be particularly affected. However, the shutdowns in this sector have been left to the discretion of main contractors, and the impact may not have been as severe as in the personal and domestic services sectors listed above. Although working from home cannot be implemented in this sector, governmental advice is for strict implementation of safety procedures (BEIS, 2020).

In Figure 1 we chart the proportions of employees and self-employed working in these at-risk sectors, in quarters 1 and 4 of 2019. Because of seasonal changes in self-employment, we display both quarters. Two features stand out. The first, the proportion of the self-employed at risk, is significantly higher than the proportion of the employed. Over one-fifth of the self-employed (or approximately 1,068,000) are in at-risk sectors whereas for paid employees the proportion is just under one-sixth. These figures suggest that this gap has widened a little over the course of 2019 although this may to some extent reflect seasonality in sectoral employment patterns. The second feature is that

females are at much high risk than males, a reflection of the segregation of women into particular at-risk sectors, such as childcare, personal care and domestic services. Overall almost a third (or approximately 545,000) of the female self-employed are at risk, and this proportion is much higher than the proportion of female paid employees at risk.

**Figure 1. Proportion of workers ‘at risk’, employees and self-employed by gender and in total, in per cent**

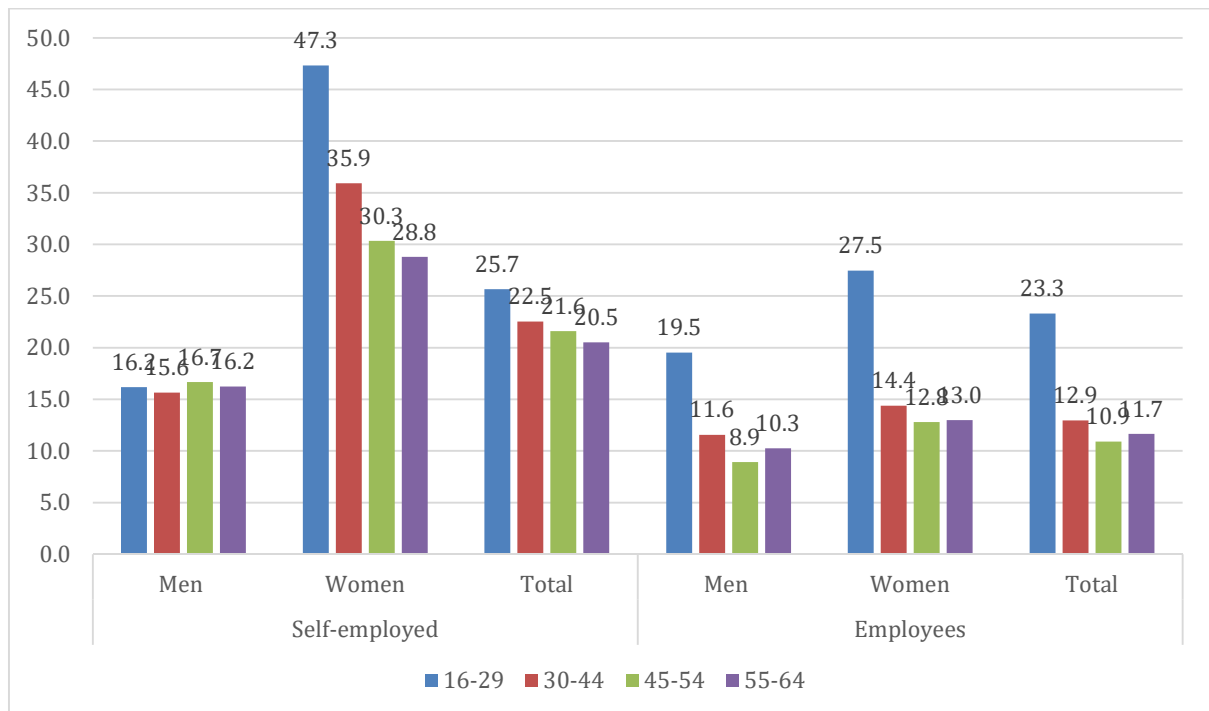


Note: Individual sample weights applied; including workers aged 16 and upwards but excluding those in full-time education.

Data source: Quarterly Labour Force Survey January-March 2019 (Q1) & October-December (Q4)

In Figure 2, we provide a further disaggregation of those at-risk into age bands. For paid employees it is in particular the under 30s who are at high risk, and both male and female young paid employees are at high risk. However, for the self-employed in this youngest age category, almost half of females are at risk. Over a third of females in the 30 to 44-year age band are also at risk. This is particularly concerning as these young female self-employed may well be juggling self-employment activity with childcare responsibilities and be affected by school and nursery closures. Some are likely to be single parents who have primary childcare responsibilities. On the other hand, there is little variation in at-risk rates across male age groups – in stark contrast to male employees and self-employed women.

**Figure 2. Proportion of workers ‘at risk’ by age groups, self-employed and employee by gender and in total, in per cent**

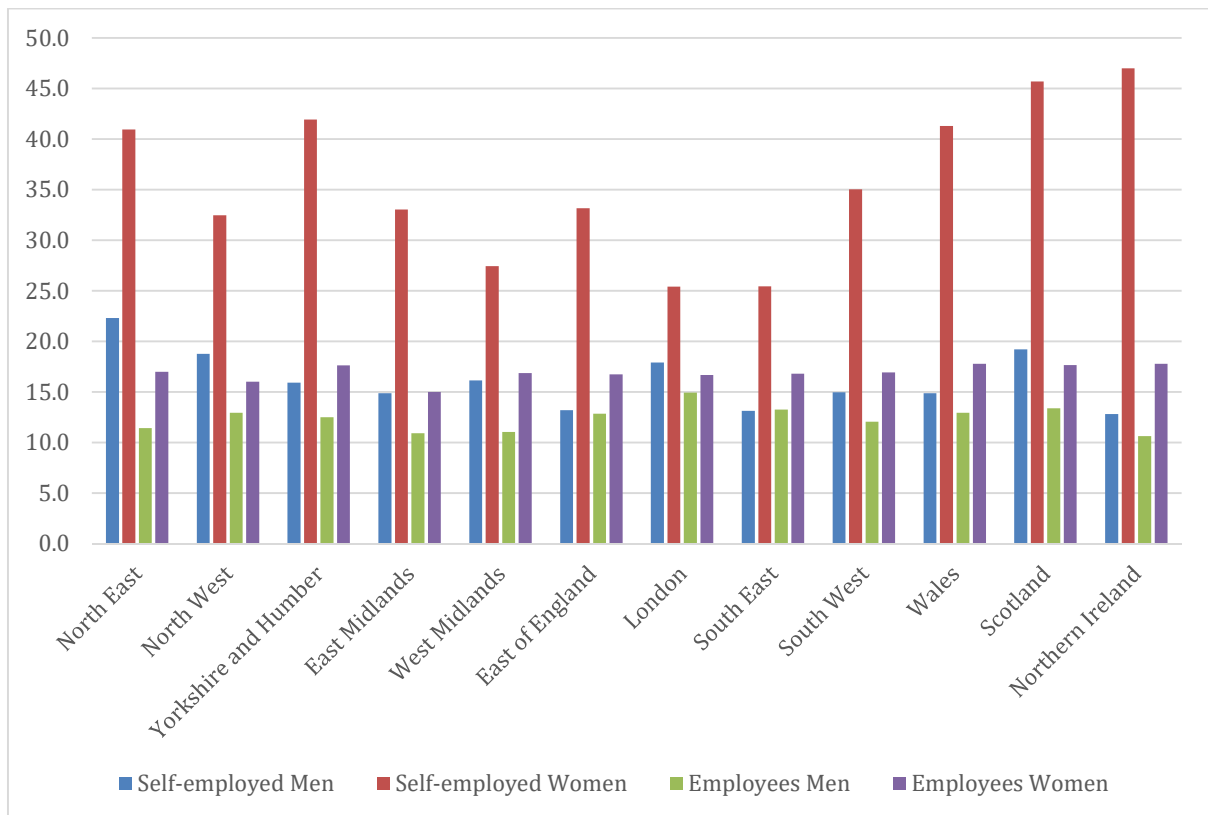


Note: Individual sample weights applied; excluding workers in full-time education.  
Data source: Quarterly Labour Force Survey October – December 2019

In Figure 3, we chart the regional picture. Regional variation in at-risk rates is higher for the self-employed than for the employed, and particular so in the case of women. Proportions of male at-risk self-employed are higher in some regions in the North of England (North East and the North West) and Scotland, but are also higher in London, reflecting the higher overall rates of self-employment in the Capital. For self-employed females, proportions at-risk are highest away from London and the South East, and in particular in some northern regions, and in some more rural regions such as the South West and Northern Ireland, as well as in Wales and Scotland.



**Figure 3. Proportion of workers 'at risk' by UK regions, self-employed and employee by gender, in per cent**



Note: Individual sample weights applied; including workers aged 16 and upwards but excluding workers in full-time education.

Data source: Quarterly Labour Force Survey October-December 2019

## MULTIVARIATE ANALYSIS COMPARING EMPLOYED AND SELF-EMPLOYED AT RISK

It is likely from these charts that a number of drivers are simultaneously at work in influencing the likelihood that the self-employed are at risk of livelihood loss in the current crisis. These include, in particular, gender, but also age and location. We investigate this further through the use of logistic regression analysis modelling 'at-risk' as the outcome. We also include in this analysis the education/skill level of workers and whether the work is performed mainly in the home. Table 1 presents some key findings. Model 1 is the basic model. Models 2-5 include interaction effects: between self-employment and women (Model 2), self-employment and age groups (Model 3), self-employment and regions (Model 4) and self-employment and working mainly from home (Model 5). Note that the main effects in these models are now the estimate of the reference category of the other independent variable including in the interaction term. For example, the self-employment main effect in these models are the estimates for men (in Model 2), for 16-29-year-olds (in Model 3), the North East (in Model 4) and not working mainly from home (in Model 5) respectively.

The findings confirm that the self-employed and in particular self-employed women are likely to be more severely affected by the current crisis. Overall, young people in the 16-29-years group are particularly at risk as suggested in recent predictions (Joyce and Xu, 2020). However, amongst the self-employed compared with employees the age groups 30-44, 45-54 and 55-64 are disproportionately harder hit. Notably, people are more likely to become self-employed in their 30s and 40s and are therefore on aggregate older than employees. We further tested (not shown) three-way-interactions between self-employment, woman and age groups as almost half of young self-employed women are at risk – but we could not find that younger self-employed women are significantly more affected than other groups once we account for their education level, location and likelihood of working part-time. This is likely to be explained by the strong education/skills level effects, since graduates appear least at risk and those with low qualifications and no qualifications the most. This finding coincides with the conclusion that low wage and part-time paid employees are most at risk, as shown by Joyce and Xu (2020).

The findings further confirm regional differences in the severity of the crisis on employment, with London and Scotland being significantly more at risk than other regions. Employees in London are specifically affected compared to other regions.

However, for the self-employed the regional pattern is different. The self-employed are likely to be hardest hit in the North East – and significantly less so in London and the South East. Thus, our estimates suggest a gap in the employment effect in London, with paid employees being significantly more and the self-employed being significantly less affected than elsewhere in the UK.

We further find that working from home reduces the risk of being affected by the crisis amongst employees. However, amongst the self-employed those working from home have an increased risk of being affected by the crisis, most likely because homeworking includes ‘bricks and mortar’ activities such as accommodation services (B&Bs) or child-minding. This suggests that even though homeworking employees are better prepared to weather the economic impact of the health crisis, through already being familiar with teleworking, it does not make many self-employment activities more resilient to restriction of movement and social distancing, as ‘at risk’ sectors are also often home-based.

**Table 1. Logistic regression of workers in ‘at risk’ sectors (Group = 1) vs workers in not ‘at risk’ sectors (Group = 0), odds ratios (OR)**

Independent variables	Model 1		Model 2		Model 3		Model 4		Model 5	
	OR	Stand. Error	OR	Stand. Error	OR	Stand. Error	OR	Stand. Error	OR	Stand. Error
Self-employed (Ref. employee)	2.036***	0.078	1.427***	0.074	1.249*	0.138	3.268***	0.590	1.916***	0.078
Woman (Ref. male)	1.544***	0.049	1.317***	0.045	1.545***	0.049	1.541***	0.049	1.534***	0.048
Self-employed × female	-	-	2.235***	0.164	-	-	-	-	-	-
Age groups (Ref. 16-29 yrs. old)										
30-44 yrs. old	0.517***	0.020	0.519***	0.020	0.491***	0.020	0.516***	0.020	0.521***	0.020
45-54 yrs. old	0.398***	0.017	0.399***	0.017	0.364***	0.017	0.397***	0.017	0.400***	0.017
55-64 yrs. old	0.382***	0.018	0.384***	0.018	0.353***	0.018	0.381***	0.018	0.384***	0.018
65+ yrs. old	0.364***	0.027	0.373***	0.028	0.407***	0.036	0.363***	0.027	0.364***	0.027
Self-employed × 30-44 yrs. old	-	-	-	-	1.694***	0.213	-	-	-	-
Self-employed × 45-54 yrs. old	-	-	-	-	1.948***	0.256	-	-	-	-
Self-employed × 55-64 yrs. old	-	-	-	-	1.857***	0.249	-	-	-	-
Self-employed × 65+ yrs. old	-	-	-	-	1.119	0.193	-	-	-	-
Region (Ref. North East)										
North West	0.970	0.082	0.979	0.083	0.970	0.082	1.043	0.100	0.970	0.082
Yorkshire and Humber	1.024	0.090	1.034	0.091	1.025	0.090	1.092	0.108	1.023	0.089
East Midlands	0.846	0.077	0.849	0.078	0.849	0.077	0.891	0.092	0.844	0.077
West Midlands	0.908	0.080	0.913	0.081	0.908	0.081	1.002	0.100	0.908	0.080
East of England	0.993	0.085	1.004	0.086	0.990	0.085	1.105	0.107	0.995	0.085
London	1.216*	0.104	1.227*	0.105	1.216*	0.104	1.452***	0.141	1.219*	0.104
South East	0.994	0.082	1.000	0.083	0.997	0.082	1.164	0.109	0.998	0.082
South West	0.976	0.085	0.983	0.086	0.976	0.085	1.036	0.102	0.982	0.085
Wales	1.064	0.104	1.072	0.105	1.064	0.104	1.123	0.124	1.059	0.104
Scotland	1.195*	0.105	1.197*	0.105	1.194*	0.105	1.227*	0.122	1.192*	0.105
Northern Ireland	0.997	0.088	1.023	0.091	0.996	0.088	1.100	0.110	0.993	0.088
Self-employed × North West	-	-	-	-	-	-	0.686	0.146	-	-
Self-employed × Yorkshire & Humber	-	-	-	-	-	-	0.711	0.155	-	-
Self-employed × East Midlands	-	-	-	-	-	-	0.746	0.168	-	-
Self-employed × West Midlands	-	-	-	-	-	-	0.596*	0.132	-	-
Self-employed × East of England	-	-	-	-	-	-	0.575*	0.123	-	-
Self-employed × London	-	-	-	-	-	-	0.431***	0.090	-	-
Self-employed × South East	-	-	-	-	-	-	0.459***	0.094	-	-
Self-employed × South West	-	-	-	-	-	-	0.710	0.150	-	-
Self-employed × Wales	-	-	-	-	-	-	0.757	0.186	-	-
Self-employed × Scotland	-	-	-	-	-	-	0.881	0.193	-	-
Self-employed × Northern Ireland	-	-	-	-	-	-	0.601*	0.131	-	-
Working mainly from home (yes)	0.846**	0.052	0.755***	0.048	0.841**	0.052	0.842***	0.052	0.525***	0.065
Self-employed × Working mainly from home	-	-	-	-	-	-	-	-	1.991***	0.288
Highest qualification (Ref. Degree or equivalent)										
Other higher education	1.667***	0.092	1.675***	0.093	1.672***	0.093	1.673***	0.093	1.666***	0.092
GCE A level or equivalent	2.171***	0.089	2.195***	0.090	2.175***	0.089	2.172***	0.089	2.174***	0.089
GCSE grades A*-C or equivalent	2.403***	0.102	2.442***	0.104	2.413***	0.102	2.412***	0.102	2.404***	0.102
Other qualification	3.002***	0.164	3.056***	0.167	3.009***	0.164	3.018***	0.165	3.005***	0.164
No qualification	3.120***	0.197	3.212***	0.203	3.110***	0.197	3.133***	0.198	3.123***	0.197
Part-time (Ref. Full-time)	1.618***	0.054	1.611***	0.054	1.618***	0.054	1.628***	0.054	1.618***	0.054
N (individuals)	39,363		39,363		39,363		39,363		39,363	
R <sup>2</sup>	0.060		0.064		0.064		0.062		0.061	
Log likelihood Chi <sup>2</sup> (df)	2028.53(24)***		2148.78(25)***		2066.68(28)***		2071.17(35)***		2053.20(25)	

Note: unweighted data; excluding workers in full-time education.

\*p<0.05, \*\*p<0.01, \*\*\*p<0.001

Source: Quarterly Labour Force Survey, October-December 2019

## CONCLUSION

Our headline conclusion is that 22% of the self-employed, or 1.1 million in total, are in sectors most at risk of loss of livelihood in the current crisis. If this materialises and the loss of livelihood is permanent then it would wipe out more or less exactly all of the growth in self-employment activity seen across the UK since the onset of the 2008 financial crash. The odds of being at risk of losing one's livelihood is twice as high if one is self-employed compared to being in paid employment.

However, underneath this headline, we have identified a number of groups within the self-employed who are particularly at risk. In the workforce, other things equal, female self-employed are over twice as likely to be at risk. The self-employed are more affected than employees across all age groups between 16-64, however, older age groups in their 30s and upwards are disproportionately affected. Surprisingly, home-based self-employment activity may not protect earnings from the impact of the crisis as it might for employees. As amongst employees, those with lower levels of qualifications, and particularly no qualifications, are likely to be at risk. The self-employed in London and the South East, other things equal, are less at risk while the North East of England shows a high risk. However, we should note that there may be specific locations, such as around major airports, even in more resilient economies that are exposed to an increased risk, as shown in Centre for Cities analysis (Magrini, 2020). Some groups amongst the self-employed appear better positioned to withstand the current crisis, and unsurprisingly these tend to be graduates, as amongst paid employees. We can only at this stage speculate whether those at risk will remain self-employed, retaining a strong sense of entrepreneurial orientation, or whether they largely represent 'dependent' or 'reluctant' self-employed who may be discouraged from future self-employment, preferring to seek return-to-work opportunities in the paid labour market once the lockdown ends.

There are a number of further factors to consider which we have not been able to address in this short briefing. Loss of self-employment earnings needs to be understood within the household context – clearly where the self-employed individual is the main breadwinner or where a (female) self-employed individual is also a lone-parent, then household financial distress is likely to be more severe and immediate. Importantly, the finding that it is particularly the self-employed in the age groups 30-54 who may be affected by the crisis (whereas it is younger people amongst employees) suggests that households with families or those with mortgages may be disproportionately hit amongst the self-

employed. Whilst the Government's recent announcement of temporary earnings support for the self-employed is to be welcomed, the extent to which it is able to protect the most vulnerable, amongst those we estimate to be particularly at risk, depends critically on speed of roll-out, leniency in eligibility criteria and the level of stringency in the evidence required to support claims. At the time of writing, there are still considerable gaps in our understanding of these. And of course, there also remains huge uncertainty about the length and severity of the crisis.

## **AUTHORS**

Andrew Henley is Professor of Entrepreneurship and Economics at Cardiff Business School, Cardiff University

Darja Reuschke is Associate Professor of Human Geography, School of Geography and Environmental Science, University of Southampton

## REFERENCES

- BEIS (2020) Letter from the Secretary of State to the UK's construction sector. 31<sup>st</sup> March 2020  
([https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/877074/secretary-of-state-letter-construction-industry.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/877074/secretary-of-state-letter-construction-industry.pdf))
- Joyce, R. and Xu, X. (2020) Sector shutdowns during the coronavirus crisis: which workers are most exposed? IFS Briefing Note BN278  
(<https://www.ifs.org.uk/publications/14791>)
- Kitsos, T. (2020) Identifying Exposure: What Do the IFS Estimates on the Coronavirus Sector Shutdown Mean for the West Midlands? City Redi Blog  
(<https://blog.bham.ac.uk/cityredi/identifying-exposure-what-do-the-ifs-estimates-on-the-coronavirus-sector-shutdown-mean-for-the-west-midlands/>)
- Magrini, E. (2020) How will coronavirus affect jobs in different parts of the country? Centre for Cities blog. (<https://www.centreforcities.org/blog/how-will-coronavirus-affect-jobs-in-different-parts-of-the-country/>)
- ONS (Office for National Statistics) (2018) Trends in self-employment in the UK. Analysing the characteristics, income and wealth of the self-employed. Office for National Statistics.
- ONS (Office for National Statistics) (2020) EMP14 All self-employed by industry sector. 18<sup>th</sup> February 2020
- ONS (Office for National Statistics, Social Survey Division) and NISRA (Northern Ireland Statistics and Research Agency). (2019). *Quarterly Labour Force Survey, January - March, 2019*. [data collection]. 2nd Edition. UK Data Service. SN: 8485, <http://doi.org/10.5255/UKDA-SN-8485-2>
- ONS (Office for National Statistics, Social Survey Division) and NISRA (Northern Ireland Statistics and Research Agency). (2020). *Quarterly Labour Force Survey, October - December, 2019*. [data collection]. UK Data Service. SN: 8614, <http://doi.org/10.5255/UKDA-SN-8614-1>
- Powell, A. (2020) Labour market statistics: UK regions and countries. House of Commons Briefing Paper 7950, 9<sup>th</sup> March 2020
- Rouse, J., Hart, M., Prashar, N. and Kumar, A. (2020) Covid19: Critique and Proposals to Develop More Comprehensive and Inclusive Support for the Self-Employed. ERC Research Report April 2020, [https://www.enterpriseresearch.ac.uk/wp-content/uploads/2020/04/ERC-ResReport-Covid-19-Developing-More-Comprehensive-and-Inclusive-Policy-for-the-Self-Employed\\_final.pdf](https://www.enterpriseresearch.ac.uk/wp-content/uploads/2020/04/ERC-ResReport-Covid-19-Developing-More-Comprehensive-and-Inclusive-Policy-for-the-Self-Employed_final.pdf)



Centre Manager  
Enterprise Research Centre  
Aston Business School  
Birmingham B4 7ET  
[CentreManager@enterpriseresearch.ac.uk](mailto:CentreManager@enterpriseresearch.ac.uk)

Centre Manager  
Enterprise Research Centre  
Warwick Business School  
Coventry, CV4 7AL  
[CentreManager@enterpriseresearch.ac.uk](mailto:CentreManager@enterpriseresearch.ac.uk)



[www.enterpriseresearch.ac.uk](http://www.enterpriseresearch.ac.uk)