

A SUMMARY OF KEY FINDINGS ON HOW OPPORTUNITIES FOR HOMEWORKING ARE EVOLVING IN THE UK, BASED ON OUR ANALYSIS OF 47 MILLION JOB ADVERTISEMENTS.

Julia Darby, Stuart McIntyre and Graeme Roy

In this short article we summarise some key findings from our ongoing analysis of homeworking opportunities. We focus on the extent to which the shift to homeworking seen during the Covid pandemic looks set to remain a feature of the UK labour market. This matters because the extent to which the shift persists will have implications for a range of economic and social issues including productivity, wellbeing, a range of inequalities, housing needs, the future of cities and town centres, and demand for public transport.

Readers are urged to read the full paper for further details and a deeper analysis of these data, see: [Darby, McIntyre and Roy \(2022\)](#). Note that this is an open access article in the Industrial Relations Journal, providing access to the public without a paywall.

There has long been interest in homeworking and other forms of flexible working in academic and policy circles. A concerted drive toward encouraging more home working started with the legal right to request flexible working introduced in section 47 of the Employment Act 2002. Since then, successive Governments extended this right to wider categories of employees and, on 30 June 2014, to all employees in the Children and Families Act 2014 (Pyper 2018). Nonetheless, these changes resulted in very little increase in the number of employees using formal flexible working arrangements.

In early 2018 the government set up the Flexible Working Task Force, co-chaired by the Department for Business, Energy and Industrial Strategy and the Chartered Institute for Personnel Development. A key aim of the taskforce was to clarify the business benefits of flexible working. They also investigated actual and perceived barriers that stop employers from offering and employees from taking up flexible working options.

Among the business benefits CIPD (2018) cite are:

- enabling businesses to access a wider and more diverse talent pool;
- improving staff motivation, engagement, job satisfaction and loyalty;
- reducing absenteeism and improved well-being;
- reducing staff turnover; enabling working parents and carers to progress;
- increasing employment opportunities available to workers with long term health conditions and disabilities.

Nonetheless, it took the onset of public health restrictions during the pandemic to give many people their first experience of significant periods of working from home. As 'stay at home' and 'work from home' restrictions were introduced, strengthened, relaxed, strengthened again and eventually removed, businesses have revisited and adapted working practices, and some have made significant investment in IT systems and other technology to enable homeworking.

Survey evidence suggests that many workers and some employers would like to retain hybrid patterns of working where these can have lasting positive impacts. It's therefore interesting to explore whether homeworking is set to remain important as the impacts of the pandemic recede.

What we did, and why we chose to look at job advertisements

Our initial focus in analysing the data was to track how the language used in job adverts to signal homeworking opportunities had evolved through the pandemic. We then identified all the job adverts that signal such opportunities. Next, we investigated how the characteristics of the jobs offering homeworking opportunities have evolved over time.

There are several advantages of using job advert data for this analysis.

First, by focusing on adverts we gain insights into the opportunities on offer from employers; these opportunities provide an indication of employers' expected future needs. Employers and workers entering new employment contracts adopt working conditions that will apply into the future. Such arrangements are likely to lead changes to previous contractual norms.

Second, the database of job adverts we use provides extensive coverage of all jobs advertised online in each successive month from January 2018 to January 2022. In contrast, surveys of employers and/or workers typically involve relatively small samples, and even if surveys are repeated, none offer the possibility of the detailed month on month analysis made possible by job advert data.

The dataset we use is provided by Adzuna, through the Urban Big Data Centre at the University of Glasgow¹. It provides information on all the online job adverts that were live in the last week of each month from January 2018 to January 2022, giving a total of 49 separate extractions which combine to provide a dataset of more than 47 million adverts.

Investigating the terminology used in job adverts to signal homeworking opportunities

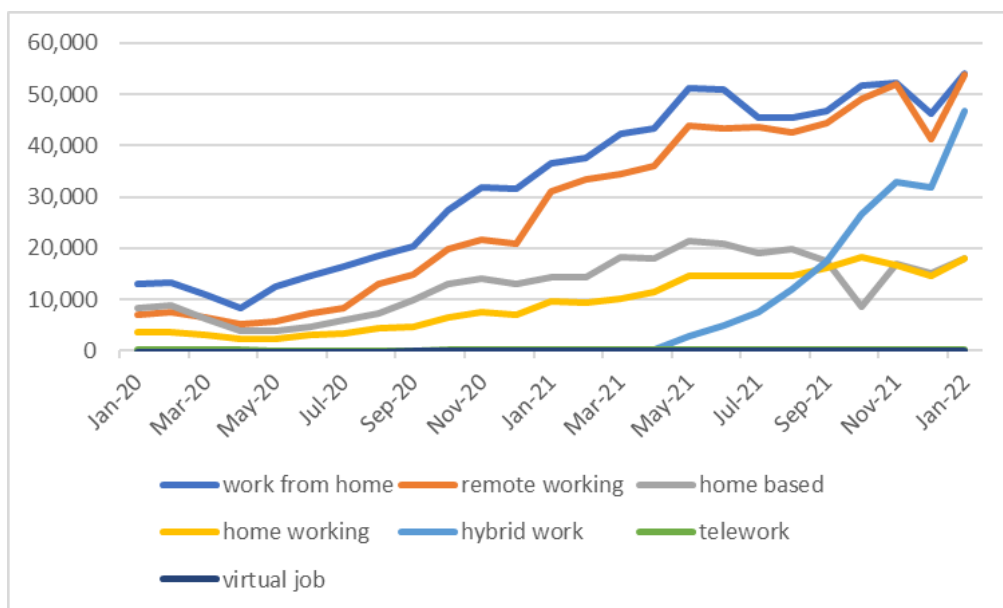
To identify those job adverts that make mention of homeworking opportunities we automated searches for key phrases in the text of each advert. We consolidated the searches into seven categories: 'work from home', 'remote working', 'home based', 'home working', 'hybrid work', 'telework' and 'virtual job'. We then applied various corrections to avoid misclassifying jobs, for example by dropping references to 'care home based', 'not suitable for home working', and adverts requiring applicants to 'watch a virtual job preview'.

What did we find?

1. The terminology used in adverts to identify opportunities for homeworking has been changing

The prevalence of phrases such as 'work from home' and 'remote working' have increasingly appeared in job adverts. Phrases related to 'teleworking' (which work done at the OECD suggests are prevalent in several European countries) are rarely used in UK job adverts.

Figure 1: Tracking the terminology used to refer to homeworking in job advertisements



Notes: The number of job adverts using the stated terminology is indicated on the horizontal axis. These numbers should not be combined, since the same advert may include mention of multiple phrases.

¹ Adzuna Data, 2022 (data collection). University of Glasgow—Urban Big Data Centre.

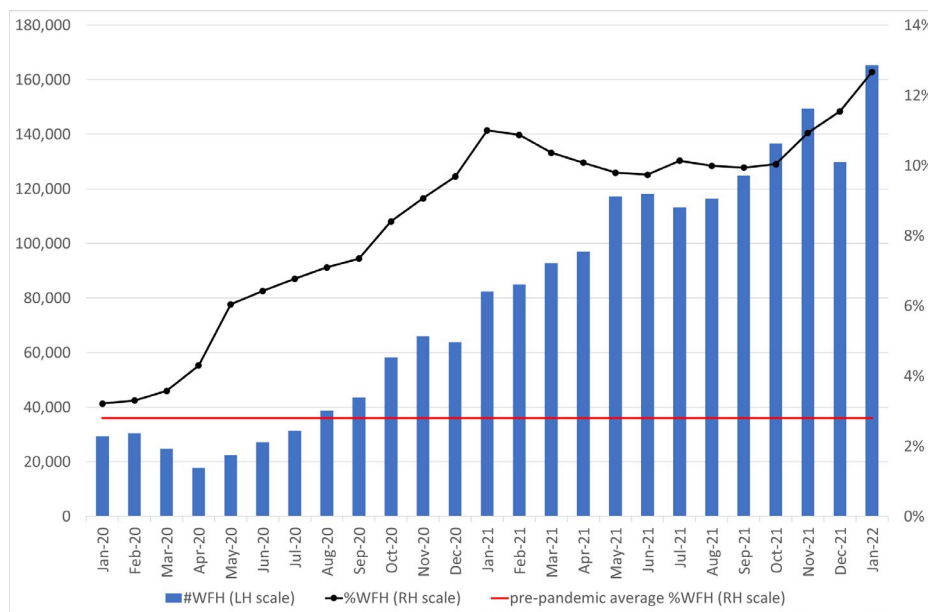
Mention of vacancies being ‘unsuitable for homeworking’ picked up from early 2021 onwards, while references to ‘hybrid working’ have been on the increase since April 2021.

2. Opportunities for homeworking have increased

In the pre-pandemic months of our sample fewer than 3% of all job adverts mention any opportunities for working from home. This percentage grew consistently from May 2020 to June 2021. By April 2021 the total number of online job adverts had surpassed their pre-pandemic level.

At the end of our sample in January 2022, there were in excess of 165,000 online job adverts offering working from home opportunities, which represents around 12.5% of all job vacancies advertised online at that time.

Figure 2: How many, and what percentage of online job adverts offer homeworking opportunities?



Notes: WFH is used to characterise a vacancy that mentions at least one of the opportunities for homeworking specified in figure 1. The pre-pandemic average is the average % of job adverts mentioning homeworking opportunities over the period January 2018 to February 2020.

3. Opportunities for homeworking tend to be concentrated in a limited number of job categories

Obviously, there are large numbers of jobs that cannot be done from home, A&E nurses, supermarket workers and delivery drivers to name a few. Nonetheless, ONS surveys have indicated that at height of the first lockdown in April 2020, over 40% of UK workers were working from home, this is a massive increase given that only around 5% of workers reported that they were ‘working mainly at home’ prior to the pandemic (Felstead and Reusch 2020).

Our analysis of the text of job adverts identified clear patterns across several job categories. We found that IT jobs accounted for at least 30% of all adverts offering homeworking in the pre-pandemic period, making this the category of jobs most likely to offer homeworking. By January 2022 our analysis showed that homeworking opportunities had risen by a factor of 5.8 relative to February 2020 (from 10,674 to 51,508).

Over this time period, the total number of job adverts in the IT category rose by 58%. Even as public health restrictions were relaxed and removed, the percentage of IT job adverts offering homeworking remained relatively stable over the last seven months of our sample at around 28%, relative to 9% immediately prior to the pandemic, as shown in the top left panel of Figure 3.

The job category that saw the greatest shift in the percentage of job adverts offering homeworking opportunities was Customer Services. Here the picture is more nuanced. From January 2018-February 2020 less than 2% of adverts for Customer Services jobs referred to homeworking, but this rose to 41% of Customer Services job adverts in May 2020.

As vacancy numbers increased and public health restrictions eased, there we found evidence of some reversion. This suggests that a substantial part of the earlier uplift was temporary and driven by necessity. Nonetheless, by January 2021 we found that almost 20% of adverts in this job category still mention opportunities to work from home.

Adverts for Human Resources & Recruitment jobs and Accountancy & Finance jobs have followed similar paths. In each of these areas, the proportion of adverts referencing homeworking (including hybrid working) continued to climb even as restrictions eased, most strongly when the total number of adverts surpassed their pre-pandemic levels. All of which suggested to us that offering e.g. hybrid working might be being used by businesses as a way of attracting applicants in a tightening labour market.

4. Opportunities for homeworking are not equally distributed across salary deciles

Our analysis revealed that opportunities for working from home fall into very different salary bands. Adzuna's predicted salary variable allowed us to allocate each advertised job into a specific salary decile, so having identified which jobs offer opportunities for homeworking, we could check how the opportunities were distributed across salary deciles.

We found that as the effects of the pandemic receded, opportunities for home working became more concentrated. We showed that by January 2022 the top three salary deciles account for 49% of all the adverts offering homeworking, while the bottom three deciles account for just 19%.

Conclusions

In this article summarised our recent research, published in Darby, McIntyre and Roy (2022), into how homeworking has evolved through the pandemic in the UK labour market. It is clear from our research that the pandemic increased the prevalence of homeworking for workers across a range of job categories. In addition, as restrictions associated with the pandemic have eased, a greater proportion of job opportunities are now explicit in offering homeworking or hybrid working opportunities relative to the pre-pandemic period.

However, there is evidence of some forms of polarisation. While many of higher paid workers look to be in a position to choose to reap this additional benefit, the same options are less likely to be afforded to lower-paid workers. Furthermore, as this concentration increases, the initial optimism that wider experiences of homeworking during the pandemic might result in unlocking the full benefits stressed by the Flexible Working Task Force seen to be waning.

References

CIPD (2018). Flexible working: the business case. https://beta.cipduat.co.uk/Images/flexible-working-business-case_tcm18-52768.pdf

Darby, J., McIntyre, S., & Roy, G. (2022). What can analysis of 47 million job advertisements tell us about how opportunities for homeworking are evolving in the United Kingdom? *Industrial Relations Journal*, 1– 22. <https://doi.org/10.1111/irj.12375>

Felstead, A., & Reuschke, D. (2020). Homeworking in the UK: Before and during the 2020 lockdown. WISERD Report, Cardiff: Wales Institute of Social and Economic Research. <https://wiserd.ac.uk/publications/homeworking-ukand-during-2020-lockdown>

Pyper, D. (2015). Flexible working. House of Commons Library Briefing Paper, 01086. <https://researchbriefings.files.parliament.uk/documents/SN01086/SN01086.pdf>

Acknowledgements

Graeme Roy acknowledges support from the ESRC: ProPEL Hub: Grant Award: ES/T001771/1.

This study makes use of Adzuna data, made available through the Economic and Social Research Council. Adzuna Data, 2022 (data collection). University of Glasgow—Urban Big Data Centre.