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Economic and Social Research Council

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Key findings

1 Layoffs and furloughing during the pandemic were heavily concentrated in close-contact service roles. But the number of new job openings fell sharply across the whole economy: in four-fifths of occupations, vacancies in Spring 2020 were less than 30% of their usual level.

2 People normally change jobs and occupations over their careers, so a very large fraction of workers – well beyond just those in locked-down sectors when the pandemic hit – would have found their typical career routes closed off. We develop a way of measuring this reduction in new job opportunities facing each worker, given the set of occupations that someone in their line of work would typically move into and vacancy trends in those occupations. We estimate that for nearly three-quarters of the workforce, opportunities were below 30% of their usual level in the Spring of 2020. That compares with 14% of workers who were actually furloughed or laid off.

3 Overall job vacancies now slightly exceed their pre-pandemic levels. However, because the mix of occupations being advertised is not the same as it was before the pandemic, we estimate that new job opportunities remain more than 10% below pre-pandemic levels for a quarter of the workforce (or 8.1 million people).

4 The recent recovery in vacancies has been strongest in traditionally lower-paid occupations. This largely, though not entirely, reflects the surge in road transport driving and storage vacancies. In fact, as of June 2021, vacancies in the lowest-paying third of occupations (when ranked according to pre-pandemic wage levels) are now 19% higher than pre-pandemic, while vacancies in other occupations have only just returned to pre-pandemic levels.

5 For people in search of new jobs, vacancies are only half of the story: the number of other people looking for such vacancies also matters for how easy it is to find a job. We estimate that competition for new jobs among unemployed former road transport drivers is well below pre-pandemic levels. Job competition in a handful of other fields, including waiters and bar staff, also looks low compared with pre-pandemic. This is consistent with high-profile media reports about worker shortages in these sectors.

6 However, for the majority (64%) of unemployed workers, competition for relevant new job openings is *at least 10% greater* than pre-pandemic. If some of the still-furloughed workers join the pool of unemployed jobseekers when the furlough scheme ends, competition would be stiffer still. The handful of high-profile labour-shortage occupations – while real, and causing real problems for the supply of certain goods – should not mislead us into thinking that worker power is back.

7 The broad picture of buoyant vacancies in aggregate, but shortfalls of new job openings for many people alongside significant increases in opportunities for a minority, is seen across education levels, age groups and ethnicities. This suggests that a granular approach to tracking the labour market recovery and supporting those who are struggling will be necessary: a focus simply on broad groups (such as 'the young') may have a place, but it will not be enough. Much currently depends on the specific skill sets people have and the line of work they are in.

1. Introduction

Reports of encouraging job vacancy numbers, and of serious labour shortages in certain sectors, dominate newspaper headlines as we emerge from the pandemic. These raise important questions. How does the highly variable situation across different sectors translate into different sets of opportunities and career prospects, and hence the likelihood of long-term economic 'scarring' from the pandemic, for different kinds of workers? To what extent do labour shortages reflect short-term bottlenecks as large numbers of workers seek new work, and large numbers of firms ramp up activity, simultaneously; and to what extent do they reflect more fundamental, durable challenges in our post-pandemic economy due to a mismatch between demand for certain skills and the supply of them?

In this note, we address these questions by bringing together fine-grained data on the demand and supply sides of the labour market up to the summer of 2021. We draw on vacancy data from Adzuna, which cover all online job adverts, along with data on the characteristics and job background of workers and jobseekers from the Labour Force Survey. Our main innovation is to employ a measure of job opportunities and job competition for each worker or jobseeker, based on job openings in the full range of occupations that someone in their line of work typically moves into. We show that the severe shortages experienced in some sectors are not representative of the economy as a whole and that the aggregate recovery of vacancies masks diminished opportunities for a large share of workers.

2. Labour market opportunities

New job openings at the start of the pandemic

We begin by describing how new job openings evolved at the start of the pandemic. Figure 2.1 shows the fall in vacancies by occupation in April 2020, just after the pandemic hit the UK and the first lockdown was implemented, as a share of the number of vacancies in April 2019. The April–April comparison controls for seasonality in vacancy postings, giving us a good proxy for how far vacancies deviated from their 'normal' or 'expected' levels just after COVID-19 hit the economy. A value less than 100% indicates that vacancies were below their expected level. The figure includes the 30 largest occupations in terms of the number of vacancies in 2019.[1] Together these occupations accounted for three-quarters of pre-pandemic vacancies.

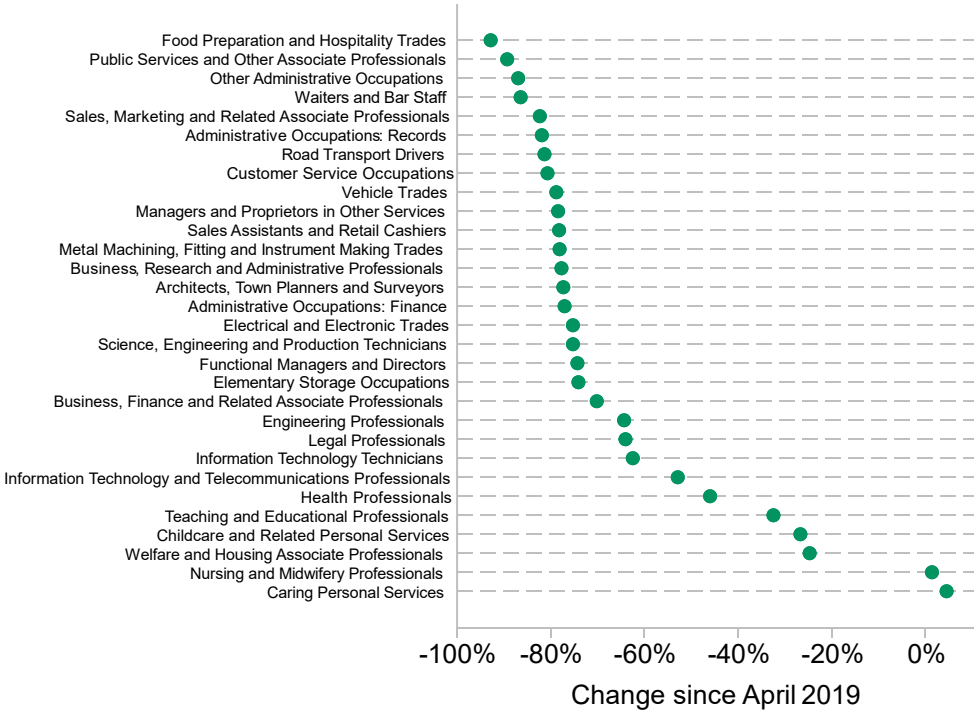
The massive impact of the pandemic on labour demand is clear. Total vacancies in April 2020 were down 54% on their pre-pandemic average level for April.[2] Almost every occupation shown on Figure 2.1 saw vacancies fall by at least 20%; looking across all occupations (including smaller occupations not shown in the figure), four in five occupations saw falls of over 70%. Only vacancies closely related to health and social care, education and social work held up well. As one would expect, vacancies in food preparation and hospitality fell the most (by 93%).

In other words, while layoffs and furloughing were heavily concentrated in jobs most directly relying on social contact or working in close physical proximity (see Blundell et al. (2020a) and Piyapromdee and Spittal (2020)), Figure 2.1 shows that the massive economic disruption and uncertainty was enough to deter new hires across the economy. This has very important implications. It is inevitable that the

[1] We use the three-digit Standard Occupational Code (2010 version) to classify occupations. This gives us 90 occupations in total.
[2] This includes vacancies in smaller occupations that are not shown in Figure 2.1.

pandemic will have interfered with the careers of a much wider set of people than 'just' those furloughed or laid off. Those just starting out in the labour market after finishing education, and groups such as parents (typically mothers) resuming paid work after a career interruption, are likely to be among the most affected by the drying-up of new job openings. But those in continuous employment are affected too, since changing jobs is a key part of career progression and skill development, particularly for younger workers. In fact, recent evidence from prior to the pandemic showed that young workers were becoming increasingly reliant on climbing the occupational ladder in order to increase their wages (Blundell et al., 2020b). Job-to-job moves fell across all age groups at the start of the pandemic, and nearly halved for 16- to 24-year-olds (Office for National Statistics, 2021a).

Figure 2.1. Vacancies in April 2020 relative to pre-pandemic April vacancies, by occupation



Note: Shows change in number of vacancies from April 2019 to April 2020, as a percentage of vacancies in April 2019, for the 30 largest occupations in terms of number of vacancies in 2019. The three-digit group 'Other Elementary Services Occupations' has been relabelled as 'Waiters and Bar Staff'; the group also includes kitchen and catering assistants and hospital porters.

Source: Adzuna vacancy data.

The economy as a whole is likely to suffer too because, along with the loss of skills that results from workers not progressing their careers, job transitions are the key mechanism for matching workers to jobs that are best suited for their skills – replacing suboptimal matches with better ones. A lack of new openings over an extended period, therefore, could have persistent negative effects on people's career paths and on overall productivity.

One of the limitations of looking at job vacancies by occupation is that they are only a crude proxy for the opportunities open to any specific individual. For example, vacancies in retail are not the only job opportunities that someone working in retail may consider and be a suitable candidate for: only 25% of retail workers move to another retail position when they change jobs. The remaining 75% move on to a broad set of other roles – such as in administration, caring personal services or storage – so the number of job openings in those roles will be relevant too. Conversely, a job opening for a position that requires very specialised training may not be very useful for a retail worker.

To address this issue, we construct a new measure of the job opportunities available to a worker. This measure can be computed for any individual, given knowledge of their current (if in work now) or previous (if not in work now) occupation, and then aggregated across any group of people we examine.

The logic of our approach can be illustrated with an example. Imagine that, upon moving jobs or finding re-employment after a spell out of work, 60% of those who were last working as a cashier take on another cashier role, while the remaining 40% become receptionists. A 'naive' analysis would just look at the number of cashier vacancies to measure job opportunities for cashiers. Another equally naive analysis would pool together all vacancies for all occupations, despite there being no precedent of cashiers moving into a subset of those. Instead, our measure of new job opportunities for a cashier would weight the available vacancies using the pre-pandemic probabilities that cashiers move into each occupation. So, in our simple example, these weights would be 60:40 for cashier and receptionist vacancies, and 0 for vacancies in all other occupations.[3] By doing this for every occupation, we

[3] This is a simplified description of our approach: in practice, we also control for the level of available vacancies and jobseekers at the time of the job transition. The exact measure, as well as the microeconomic theory underpinning the measure, is set out in section 2 of our companion working paper (Costa Dias et al., 2021).

derive a set of occupation-specific measures of job opportunities that can be applied to any person, given knowledge of their occupation.

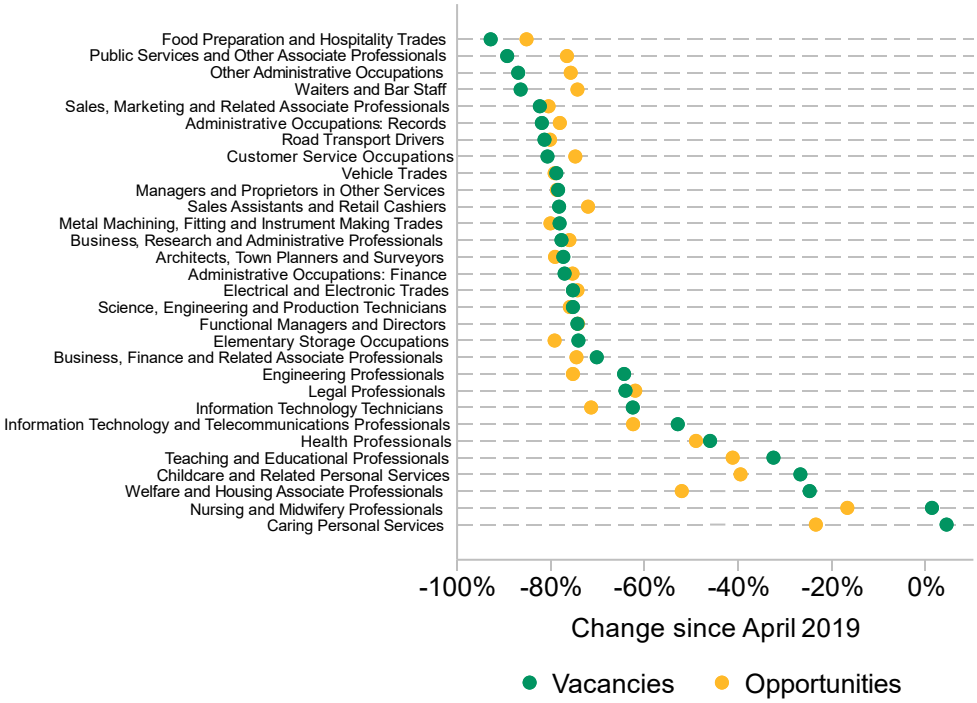
In summary, this approach gives us a much more holistic view of the opportunities facing different people by incorporating information from across the whole economy, in a way that is tailored to the specific employment background of each person. Section 2 of our companion working paper provides more detail on how this index is constructed (Costa Dias et al., 2021).

Figure 2.2 illustrates the effect of measuring new job openings using this more refined approach. It reproduces the data on vacancies in April 2020 by occupation from Figure 2.1, but also adds alongside it our more holistic measure of opportunities, which takes account of vacancies across the full range of 'destination' occupations for people from each 'origin' occupation. This highlights that not only was the fall in vacancies more evenly spread than the sectorally concentrated rise in layoffs and furloughing, but the fall in job opportunities was yet more evenly spread than the fall in vacancies. That is, the job opportunities index varies less across occupations than the simple plot of vacancies by occupation.

There are two sides to that coin. On the one hand, people in occupations that were hit most by social distancing may have found that their job opportunities were not as negatively affected as would have been suggested simply by what happened in their own occupation (although in general the collapse in suitable vacancies was still very large, by any normal standards, for those in the most affected occupations). For example, for waiters and bar staff,[4] own-occupation vacancies fell by 86% in April 2020 but new job opportunities fell by less than that – albeit still by a huge 74%. This is because many waiters and bar staff typically move into other occupations. For example, 5% move into elementary cleaning occupations, where vacancies held up relatively well at the start of the pandemic, falling by 'just' 23%.

[4] Throughout this note, we relabel the three-digit group 'Other Elementary Services Occupations' as 'Waiters and Bar Staff'. The group also includes kitchen and catering assistants and hospital porters.

Figure 2.2. Vacancies in each occupation, and new job opportunities for people from each occupation, April 2020 relative to pre-pandemic



Note: Shows change in number of vacancies and broader opportunities from April 2019 to April 2020, as a percentage of the number in April 2019, for the 30 largest occupations in terms of number of vacancies in 2019.

Source: Adzuna vacancy data; Labour Force Survey.

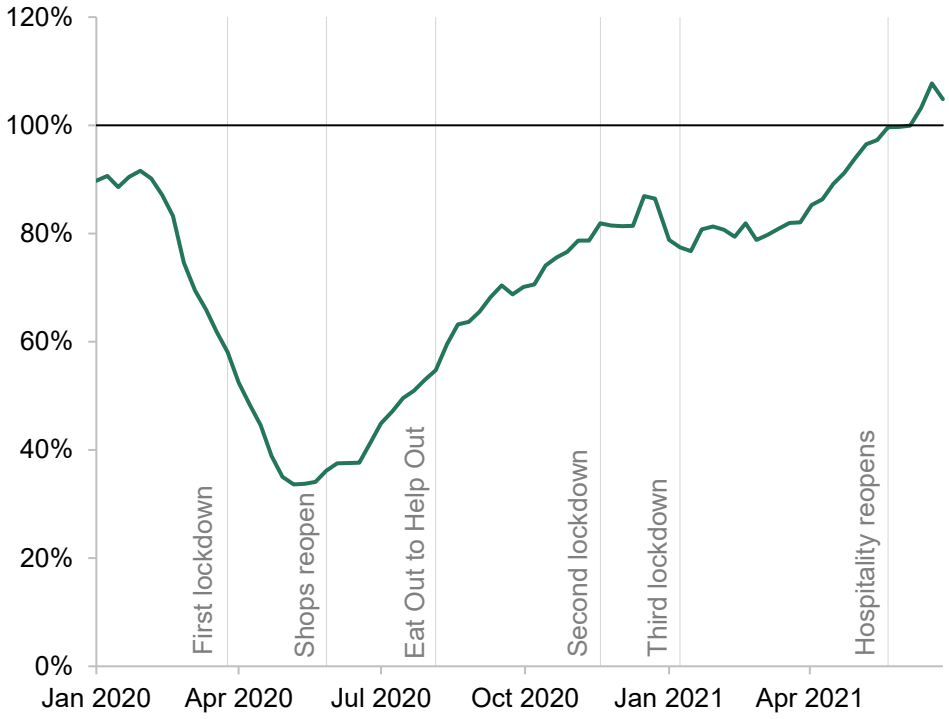
On the other hand, and more importantly, the likely negative impacts on people's careers were more widespread than one might imagine simply from looking at own-occupation vacancies. Vacancies for nurses and midwives were just as high in April 2020 as they were a year earlier. But new job opportunities more broadly were down 17% for nurses and midwives – which, by any normal standards, is a very substantial effect. This is because many of them, upon changing jobs, switch occupations, and vacancies in most of those other occupations had collapsed. For example, pre-pandemic, only 65% of nurses and midwives who changed jobs stayed in nursing and midwifery. The remaining 35% moved on to a range of other occupations, including those (such as public services, retail or housekeeping) where vacancies were far lower in April 2020, which almost inevitably will have hindered the natural career paths of nurses and midwives. We estimate that opportunities

were at least 30% below their pre-pandemic levels for 73% of the workforce in April 2020. In comparison, only 14% of workers were furloughed or laid off.

New job openings over the course of the pandemic

Figure 2.3 turns to the full time series of overall vacancies since the eve of the pandemic. It shows the number of vacancies since January 2020 as a share of vacancies in the same week in 2019 to control for seasonal fluctuations in job postings.[5]

Figure 2.3. Job vacancies as a share of 2019 levels, over time



Note: Shows vacancies as a percentage of the number in the same week in 2019.

Source: Adzuna vacancy data.

[5] It is worth noting that the numbers of vacancy postings in 2019, and in 2018, were lower than the numbers of vacancy postings in 2016 and 2017. Vacancies in 2020–21 would be lower than Figure 2.3 suggests if we used the average number of vacancies in 2016–19 as the baseline, rather than just 2019, though relative trends over time would look very similar. An alternative time series that shows vacancies since January 2020 as a share of average 2016–19 vacancies in the same week is given in appendix C of our companion working paper (Costa Dias et al., 2021).

Overall vacancies started to fall just before the first lockdown, and recovered significantly between the summer of 2020 and November 2020, as one would expect given trends in the prevalence of COVID-19 and associated social distancing measures. After stalling as we entered the second lockdown, the recovery in vacancies picked up again in March 2021 and they surpassed their pre-pandemic level by June 2021.

New job opportunities by occupational background

We now examine how the aggregate recovery in vacancies has affected different groups. We start by once again grouping people according to their occupation – their current one, if in work, or their previous one, if not in work. For the reasons described above, to understand job opportunities well for these groups we need to weight new job vacancies according to their relevance to each person given their occupational background, and so we use our 'new job opportunities' index.

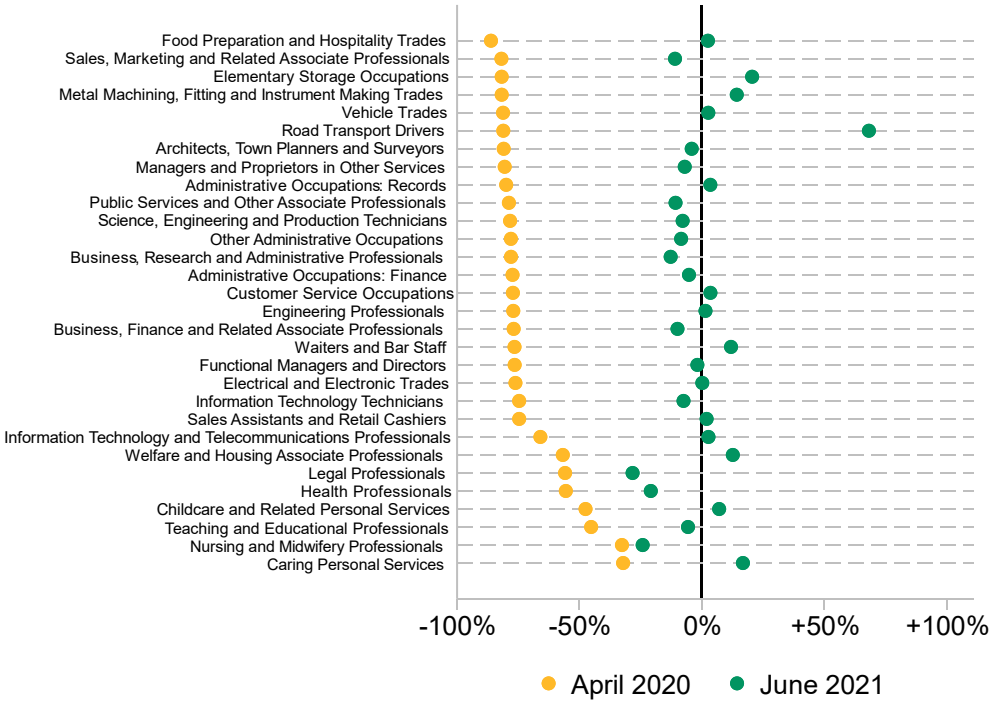
Figure 2.4 shows that, just as the initial collapse in new job openings was widespread and by no means confined to those jobs most directly affected by social distancing, the recent recovery has also been widespread. In June 2021, the number of new job opportunities was significantly above April 2020 levels for workers from all major occupations, and opportunities had returned to around pre-pandemic levels for people from most occupational backgrounds. There is significant variation, however. Opportunities for workers from certain occupations – including health professionals, nurses and midwives, and legal professionals – were still below their pre-pandemic levels despite having fallen much less dramatically than other occupations when the pandemic began.

On the other hand, in line with recent headlines on labour shortages, relevant job openings for road transport drivers were 68% higher than pre-pandemic. Opportunities for workers in elementary storage occupations were also 21% higher. This reflects an approximate doubling of vacancies in those occupations compared with pre-pandemic, muted by less spectacular trends in vacancies in the other occupations that drivers and storage professionals move into.[6] The surge in vacancies in these occupations is likely to reflect a number of factors, including a rapid increase in e-commerce (hence deliveries) and departure of EU migrants over

[6] A large share of drivers and (in particular) storage workers normally move on to other occupations, so the relevant new job opportunities they face are lower than their own-occupation vacancies.

the pandemic. Internet sales accounted for over a third of all retail sales in the second and third lockdowns, up from just 19% before the pandemic, and still accounted for 26% of total sales in June 2021 – when social restrictions were largely lifted (Office for National Statistics, 2021b). EU migrants made up a disproportionately large share of storage workers and drivers before the pandemic – at least 21% and 11% respectively compared with 8% across all occupations[7] – so the exodus of EU migrants over the last year (O'Connor and Portes, 2021; Sumption, 2021) will have created vacancies in these occupations.

Figure 2.4. New job opportunities for people coming from different 'origin' occupations, April 2020 and June 2021 relative to pre-pandemic



Note: Shows job opportunities in April 2020 and June 2021, relative to the same months in 2019, for the 30 largest occupations in terms of number of vacancies in 2019.

Source: Adzuna vacancy data; Labour Force Survey.

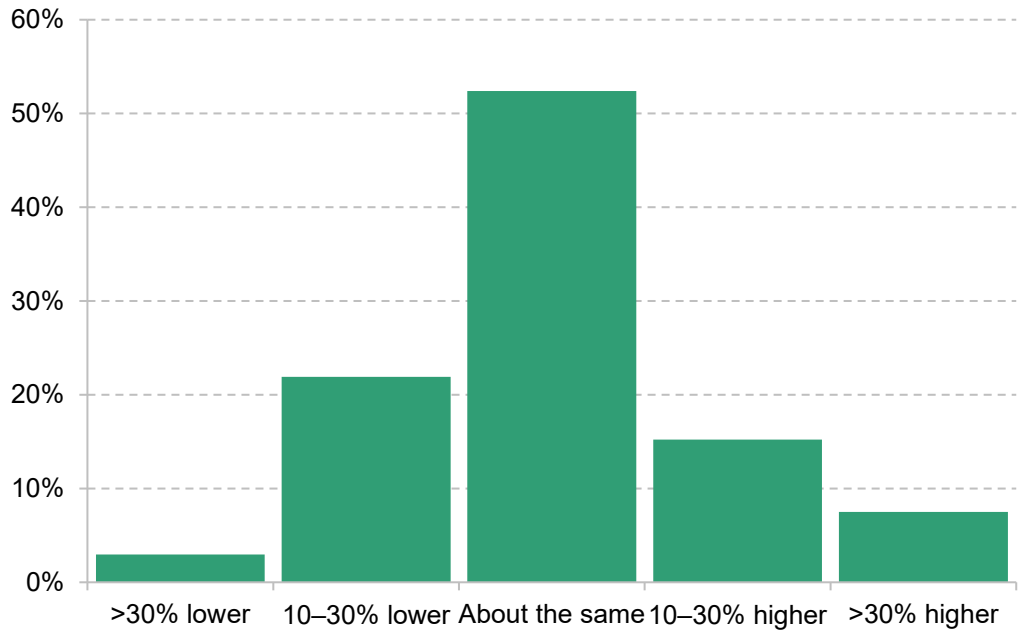
[7] These estimates are based on the Labour Force Survey (LFS), which excludes people who live in communal establishments. As a result, the LFS is likely to understate the share of EU migrants especially among road transport drivers.

Opportunities for different kinds of workers

As explained above, given knowledge of their (current or previous) occupation, we can assign any individual our occupation-level measure of 'new job opportunities'. This allows us to describe how opportunities vary across the population.

Many workers still face significantly lower new job opportunities than was the case before the pandemic. As Figure 2.5 shows, we estimate that the number of new job opportunities in June 2021 was within 10% of its pre-pandemic level for a little over half the workforce. But a quarter of the workforce (about 8.1 million) had at least 10% fewer new job opportunities than pre-pandemic, with a similar number having at least 10% more opportunities.

Figure 2.5. Share of workforce by level of opportunities relative to pre-pandemic, June 2021



Note: Shows the proportion of the June 2021 workforce (specifically those who are working, furloughed or unemployed) facing different changes in new job opportunities, relative to June 2019.

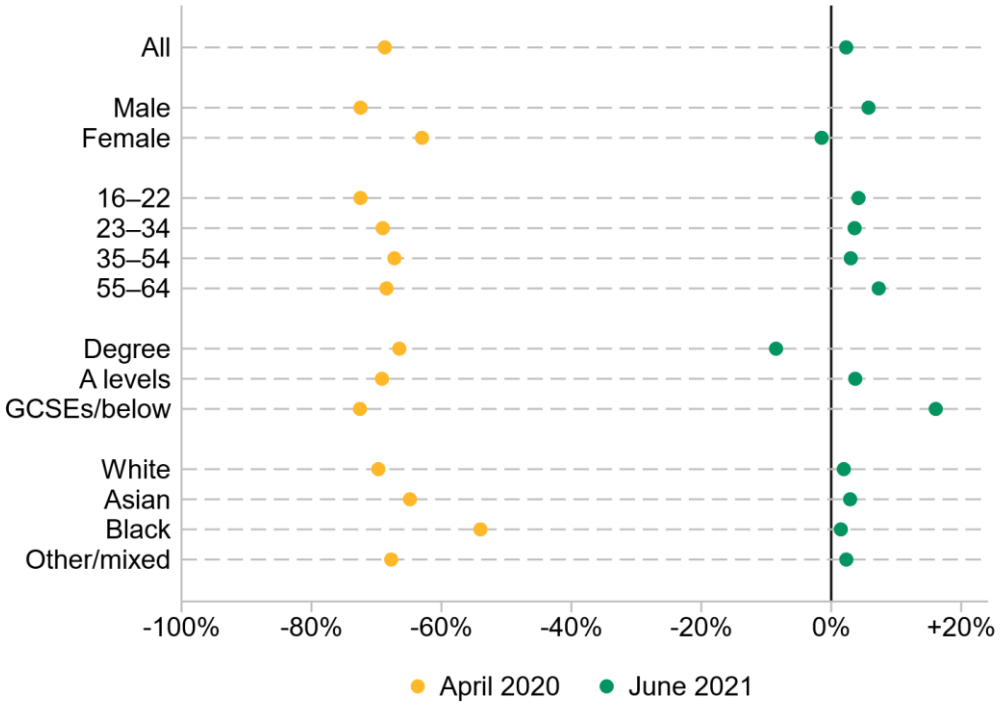
Source: Adzuna vacancy data; Labour Force Survey.

In summary, when looking at new job openings, the aggregate picture looks quite reassuring. But because the new economy does not yet look much like a restored version of the old, the kinds of jobs being advertised are different from the mix of jobs available pre-pandemic. This means that, while some will find that the number of new job openings that are relevant to them is holding up particularly well, many workers will not recognise the relatively buoyant overall picture. And it is important to note that none of this, so far, addresses whether people have a good chance of actually securing those jobs that are being advertised. This depends on how much competition they have for those jobs, which is an issue we analyse in Section 4.

Figure 2.6 splits the analysis according to various demographic characteristics, and shows the level of opportunities across demographic groups in April 2020 and June 2021, relative to their pre-pandemic levels. Note that we use group-specific job mobility patterns to define the typical career trajectories from any given 'origin' occupation. For example, if a female sales assistant is less likely than a male sales assistant to become a road transport driver (which is indeed the case), then we account for this when weighting sales assistant vacancies and splitting our results by gender; just as we account for the different propensities of men and women to be sales assistants in the first place.

Figure 2.6 shows that at the height of the pandemic, opportunities fell sharply for all demographic groups, but the fall was largest for young people and those with lower levels of education. This is not surprising given the disruption to service sectors, which tend to be low-skilled and often form the first rung of people's career ladders (Blundell et al., 2020b). Opportunities for men fell by more than opportunities for women, partly because women are more likely to be in healthcare, teaching or social work. By June 2021, however, the gender pattern had reversed, partly due to the rapid recovery of male-dominated occupations such as driving and storage (and, to a lesser extent, construction). As a result of rising vacancies in these occupations, as well as in cleaning and hospitality occupations, by June 2021 the number of new opportunities suitable for people with relatively low levels of education (GCSEs and below) was 16% higher than pre-pandemic. In contrast, opportunities for those with degrees were still 8% lower than pre-pandemic, driven by slower recovery in high-skilled service jobs in health, law and business. But perhaps the key takeaway from this figure is that, for every other broadly defined demographic group, new job opportunities had on average recovered to at least around (within 10% of) their pre-pandemic levels by June 2021.

Figure 2.6. Opportunities, by demographic group, April 2020 and June 2021 relative to pre-pandemic



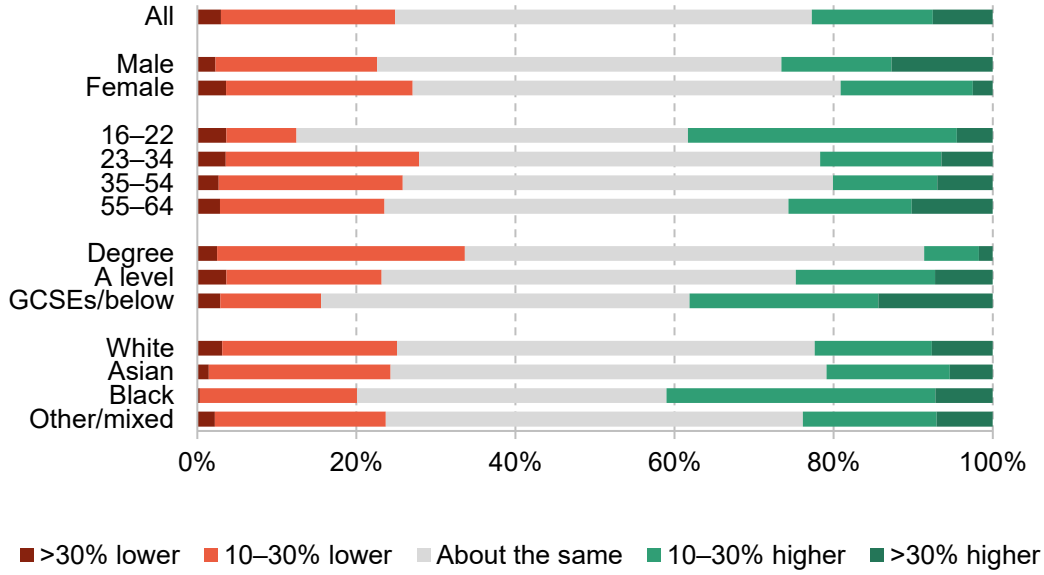
Note: Shows opportunities in April 2020 and June 2021, relative to the same month in 2019, for broad demographic groups.

Source: Adzuna vacancy data; Labour Force Survey.

However, Figure 2.7 shows that within each group there is a substantial share of workers who still face lower opportunities than before. Again, note that this ignores the level of competition for these jobs, which will alter the picture further – we come to this in Section 4.

It is useful to dwell on the fact that trends in job opportunities across these broad demographic groups vary less starkly than across occupations (shown in Figure 2.4). This of course makes perfect (common and statistical) sense: people within any of these groups work in a wide variety of occupations, meaning that any occupational differences 'average out' to a significant degree. It also has important implications. A granular approach to tracking the labour market recovery, and to policymaking to help those struggling, will be necessary: a focus simply on broad groups (such as 'the young') may have a place, but it will not be enough. Much currently depends on the specific skill sets people have and the line of work they are in.

Figure 2.7. New job opportunities relative to pre-pandemic levels, by demographic group, in June 2021



Note: Shows, for each demographic group, the share of workers facing different changes in total opportunities relative to June 2019.

Source: Adzuna vacancy data; Labour Force Survey.

The strong recovery in jobs typically taken by those with lower levels of education also hints at important limitations of simply looking at new job postings as a measure of job prospects. It is quite possible for vacancies in occupations in one's career path to have bounced back, but for this to have been driven by a bounceback in lower-quality options. We consider this in the next section.

3. Job quality

The previous section showed that by June 2021, the number of new job opportunities for people in most occupations had returned to pre-pandemic levels. We now examine whether the quality of those opportunities has changed.

We use a simple measure of job quality based on occupation-level wages. For each occupation, we calculate the average hourly wage before the pandemic (in 2019), controlling for the demographic characteristics of workers in that occupation.[8] This can be interpreted as the 'wage premium' to working in a given occupation. On this measure, agricultural services and trades are ranked lowest, and chief executives and financial institution managers are highest. Hospitality managers are at the boundary of the bottom and middle tertiles (thirds), while teachers are at the boundary of the middle and top tertiles, with average hourly wages of £12.33 and £19.08 respectively in 2019. It is worth noting that because the measure is constructed using pre-pandemic data, it does not account for potential changes in the ranking of jobs during the pandemic – for example, if the nature of certain jobs has changed, or if labour shortages have driven up wages in some occupations (discussed further in the next section).

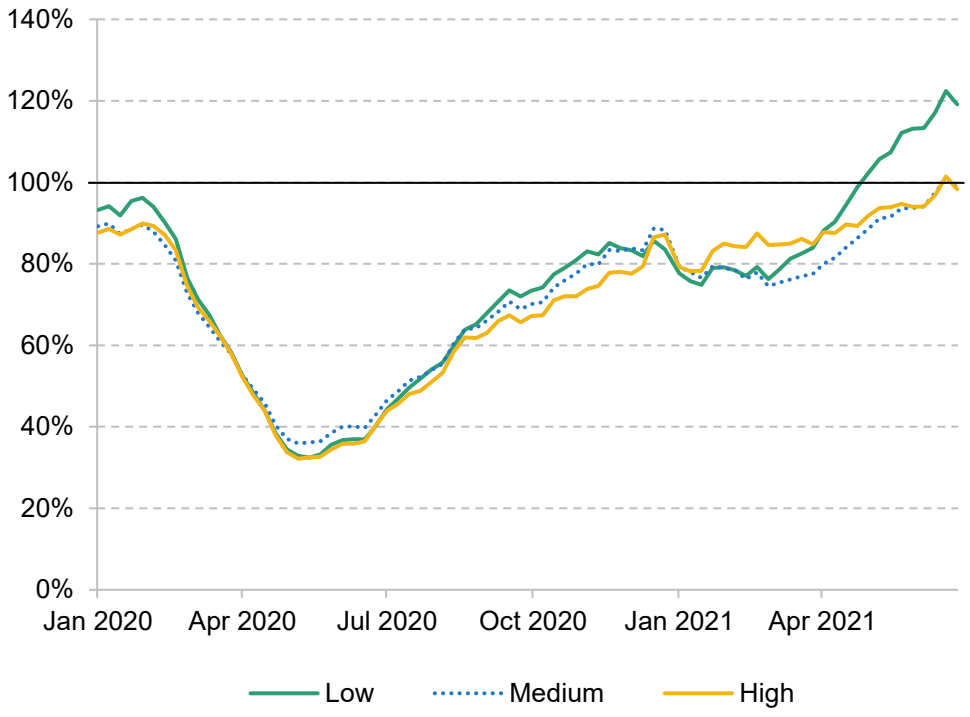
Figure 3.1 groups our measure of job quality into tertiles and shows the evolution of vacancies since the start of the pandemic in each tertile (third). It shows that there were relatively small differences in trends for most of the pandemic, though vacancies in higher-paying occupations were somewhat less affected by the third lockdown. Since the spring of 2021, however, we see a substantial divergence in trends, with a much steeper bounceback in vacancy numbers in low-paying occupations. By mid summer, the number of vacancies in mid- and high-paying occupations had just returned to their pre-pandemic levels, but the number of

[8] Specifically, we use individual-level data in 2019 and estimate ordinary least squares (OLS) regressions of hourly pay as a function of occupation indicators, along with controls for sex, age, ethnicity, education and region. We use the estimated coefficients on the occupation indicators as our measure of occupation quality.

vacancies in low-paying occupations had surged to around 20% above its pre-pandemic level.

The surge in vacancies in road transport driving and elementary storage occupations accounts for over half (61%) of the increase in low-paying occupations. Waiters and bar staff, elementary cleaning occupations and caring personal services (which includes care workers) account for a further 28% of the increase. This adds to the picture provided by ONS analysis which shows that vacancy growth has been strongest in smaller firms (Office for National Statistics, 2021c), which tend to be lower-paying employers. A pattern of faster recovery of lower-quality jobs after recessions is consistent with an established literature documenting a 'cyclical job ladder' (see, for example, Moscarini and Postel-Vinay (2012, 2016, 2018) and Haltiwanger, Hyatt and McEntarfer (2018)). In this instance, that common post-recession pattern appears to have been compounded by additional factors specific to this recession, such as a structural shift towards e-commerce.

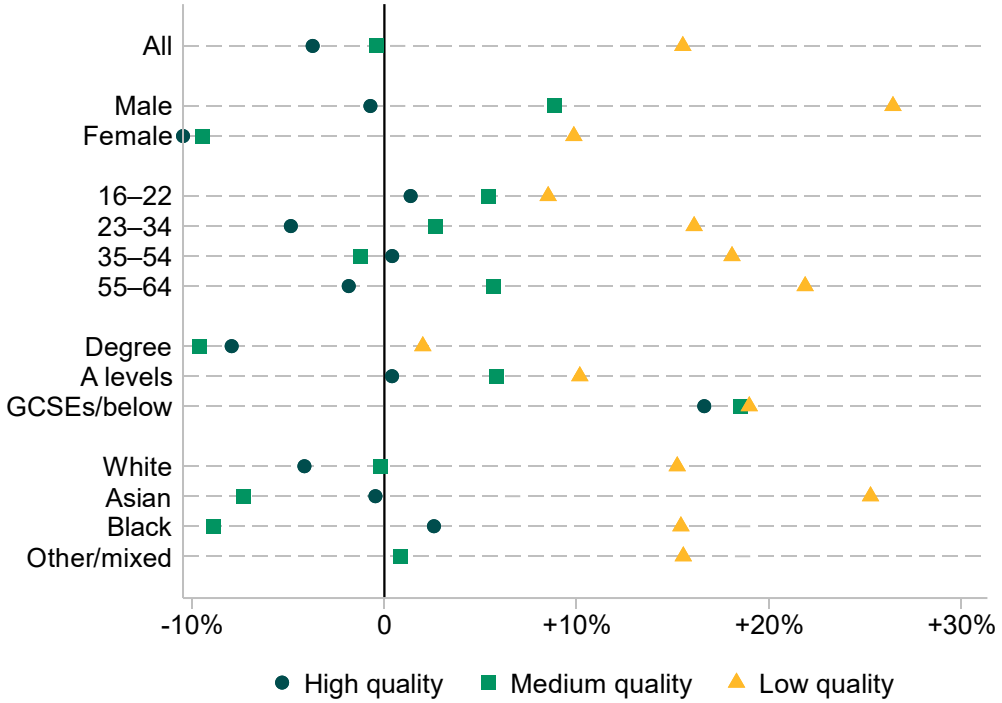
Figure 3.1. Vacancies as a share of pre-pandemic levels, by job-quality tertile



Note: Shows vacancies relative to average in the same week in 2019.

Source: Adzuna vacancy data; Labour Force Survey.

Figure 3.2. Change in opportunities relative to pre-pandemic, by job-quality tertile and demographic group, June 2021



Note: Shows, for each demographic group, the change in opportunities in each quality tertile, relative to June 2019.

Source: Adzuna vacancy data; Labour Force Survey.

Figure 3.2 revisits our previous analysis of the change in new job opportunities, split by demographic group, in order to decompose the total change in new opportunities into those of low, medium and high quality.[9] The calculations are set out in more detail in section 2 of Costa Dias et al. (2021).

New opportunities are strongest in the lowest-paying third of occupations for all demographic groups. Unsurprisingly that tends to affect the quality of opportunities most for the lower-educated, since they are the most likely to enter these rapidly expanding occupations. Higher-quality opportunities seem to be struggling to

[9] Strictly speaking, we calculate the change in opportunities for workers in low-, medium- and high-quality occupations, separately by demographic group. That is, a fall in high-quality opportunities for men indicates a fall in opportunities for men in high-quality occupations, taking into account which high-paying occupations men tend to be in, and the typical career paths for men in these occupations.

recover, particularly for jobs that are in the typical career paths of women and, perhaps surprisingly, graduates. This reflects the sluggish recovery in higher-paid service jobs, such as legal, business and health professionals, which are particularly relevant for this group.

4. Competition for jobs

The previous sections show that overall new job openings are now back to pre-pandemic levels, though the extent of the recovery varies a lot by occupation. For a quarter of the workforce, relevant job opportunities (based on their current or previous occupation) were still more than 10% lower than pre-pandemic. Furthermore, the quality of available opportunities in June 2021 was lower than pre-pandemic: the composition of available opportunities has shifted towards lower-paid occupations. But the raw numbers of new job openings do not tell us how easy it is to find a job, even when making efforts to consider those openings that are relevant to each worker, as we have tried to do. It also matters greatly how much competition there is for these jobs.

We examine the number of available jobseekers per opportunity. The exact measure is defined in section 2 of Costa Dias et al. (2021), but again a key feature of our approach is to match jobseekers with 'relevant' job vacancies based on the full range of job moves typically undertaken by someone with their occupational background. We do not, for example, treat former hospitality workers as the only people who could fill vacancies in hospitality, just as we do not assume that hospitality is the only possible new occupation for those formerly in hospitality.

We consider two alternative measures of available jobseekers: the number of unemployed workers, and the number of unemployed or fully furloughed workers. The latter is a more appropriate measure of available jobseekers if fully furloughed workers are likely to be let go at the end of furlough, whereas the former is more appropriate if furloughed workers are likely to be called back. Given that the vast majority of furloughed workers were called back in the summer of 2020, rather than made unemployed, the measure using unemployed workers is more informative of the level of competition for jobs in the initial stages of the pandemic. Now, as the furlough scheme is unwound, the 'true' level of competition will lie somewhere between these two measures, depending on how many workers who are still fully furloughed can expect to return to their jobs.

Workers may also face competition from those who are searching for a new job despite already being employed. As discussed, the pandemic is likely to have disrupted usual career progression routes – either by preventing moves people would have usually made or by leading people to take up jobs that are a less good fit for their skills as a temporary measure. If workers are less well matched to their jobs than before the pandemic, we can expect more existing workers to be searching for new jobs than usual, leading to further competitive pressure from those who are currently working.[10] Our measures will not capture this, so if anything they may understate the degree of job competition.

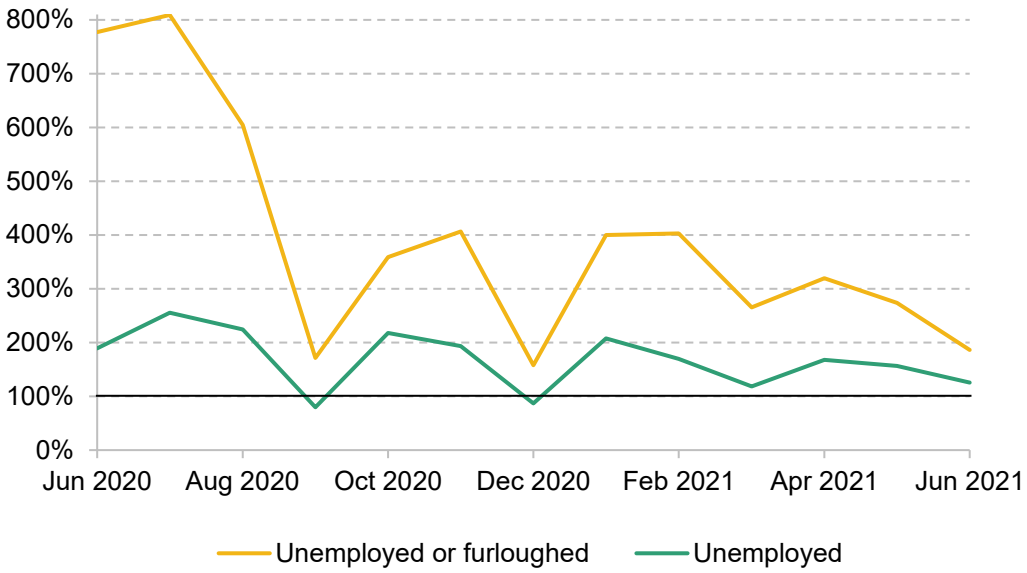
Another important caveat is that our analysis does not directly capture changes in EU migration as a result of the pandemic and Brexit, though these may well be the cause of some of the job vacancies that we see. Our estimates of the numbers of unemployed and furloughed workers in 2021 are based on the Labour Force Survey, which is weighted to estimates of the UK population that may not be accurate, since official data collection on international migration has been suspended over the pandemic. A number of studies estimate that over half a million EU migrants may have left the country in the last year (O'Connor and Portes, 2021; Sumption, 2021), so a smaller population may mean fewer jobseekers competing for jobs. On the other hand, by focusing on unemployed and furloughed workers, we also do not take into account competition for jobs from new immigrants, which is likely to have diminished due to travel restrictions and the end of free movement.

With those caveats in mind, Figure 4.1 shows trends in competition for new job opportunities over time, relative to the average in the same month in 2019 to control for seasonal fluctuations in vacancy postings and unemployment.[11] The green line shows the number of unemployed workers per opportunity as a share of pre-

[10] Indeed, recent data on worker mobility indicate an increase in the likelihood of an already-employed worker moving to a new job, alongside a reduction in the likelihood that an unemployed worker moves into work. This pattern is consistent with an increase in mismatch between labour demand and supply with respect to different skills. (https://twitter.com/fpvinay/status/1430089069053235203?s=20)

[11] It is worth noting that unemployment was low in 2019 compared with previous years. The choice of pre-pandemic baseline matters for our estimated effect on competition: if the downward trend in unemployment would have continued in 2020 in the absence of the pandemic, the actual effect on competition would have been higher than we estimate; conversely, if unemployment in 2019 was at a cyclical trough, the actual effect would have been lower. The corresponding figure using the average level of competition in 2016–19 as the pre-pandemic baseline is given in appendix C of Costa Dias et al. (2021). The choice of pre-pandemic baseline makes little difference to the relative effects across different occupations and demographic groups.

Figure 4.1. Workers per new job opportunity, as a share of pre-pandemic levels



Note: Shows number of workers per opportunity as a percentage of levels in the same month in 2019.

Source: Adzuna vacancy data; Labour Force Survey.

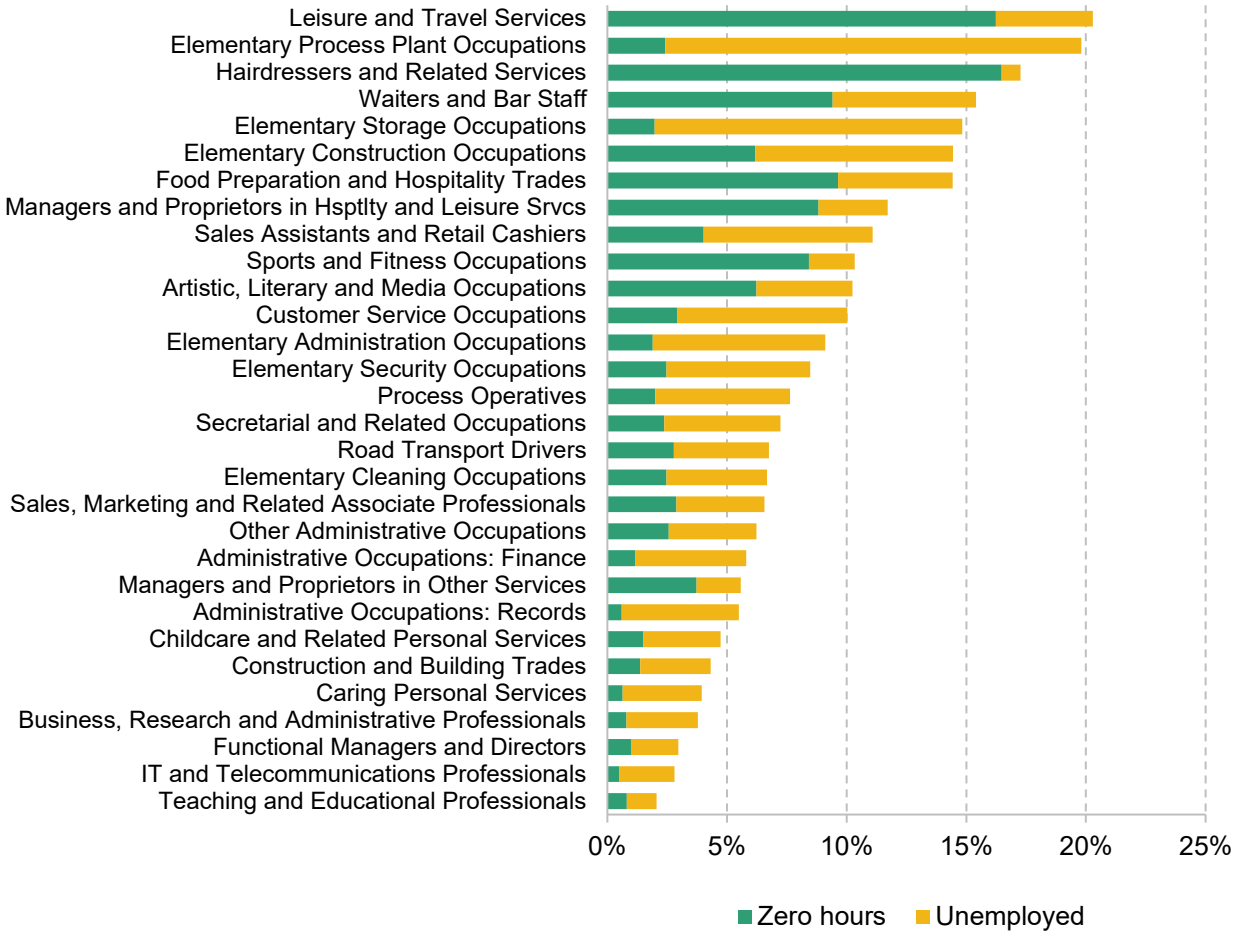
pandemic levels. After increasing nearly twentyfold in early 2020 due to the collapse in vacancies, and later partly due to a rise in unemployment (starting late summer 2020), by June 2021 overall competition for new opportunities had stabilised to around 25% higher than pre-pandemic levels.

If we include all fully furloughed workers in the measure of available jobseekers, the number of jobseekers per opportunity in June 2021 is nearly double the pre-pandemic level. That is probably a substantial overestimate, as many people still on furlough will return to their jobs. But it reinforces the conclusion that, despite the high-profile reports of important labour shortages in particular areas, they are a very poor guide to the overall situation facing workers: in general, competition for new job openings is clearly higher than before the pandemic.

Competition for jobs, by previous occupation

The overall trends in workers per new job opportunity set out above mask considerable variation by occupation. Just as the recovery in job opportunities has been uneven across occupations (as shown in Figure 2.4), rates of unemployment and furlough differ starkly across occupations. Figure 4.2 shows the number of unemployed and fully furloughed workers by their former (unemployed) or current

Figure 4.2. Unemployed and fully furloughed workers in April–June 2021, as a share of workers in 2019, by current or previous occupation



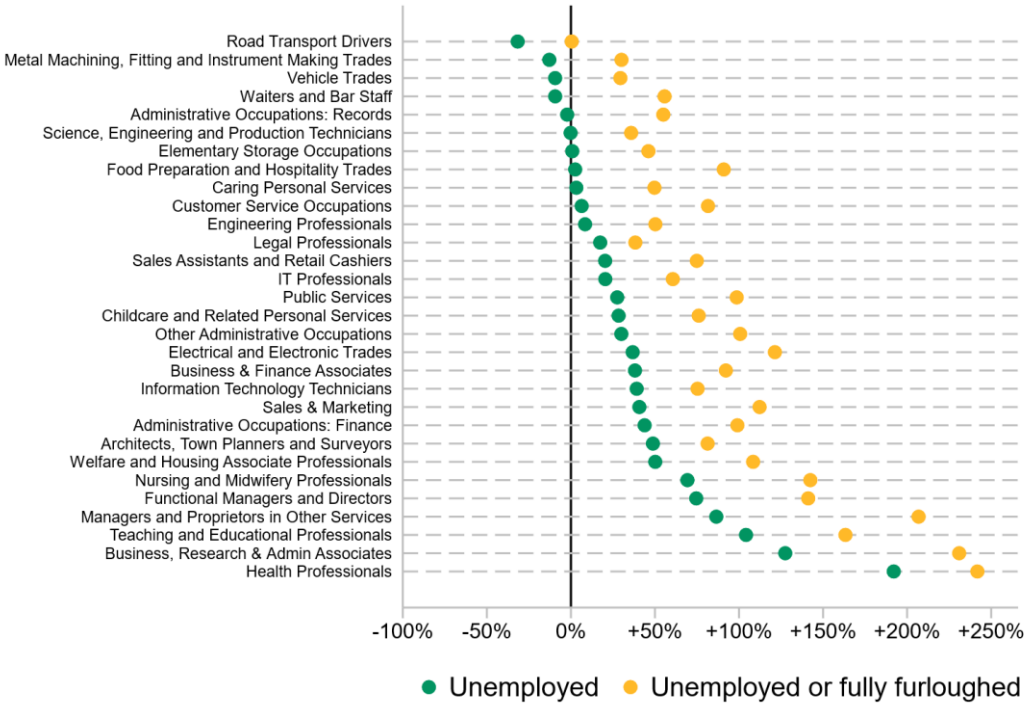
Note: Shows number of workers who were unemployed or fully furloughed in April–June 2021, as a share of the average number of workers in each occupation during 2019, for 30 occupations with the largest number of unemployed or fully furloughed workers in April–June 2021.

Source: Labour Force Survey.

(furloughed) occupation, as a share of workers in that occupation pre-pandemic. A fifth of workers in leisure and travel services, and 17% of hairdressers, were still doing no hours of paid work in April–June 2021.

As a result of differences in the number of vacancies and available jobseekers, the extent of competition for new jobs varies for workers from different occupations. This is shown in Figure 4.3. We estimate that competition for new jobs among unemployed road transport drivers is substantially below pre-pandemic levels, even if we ignore the fall in immigrants from the EU who would normally compete for

Figure 4.3. Unemployed or furloughed workers per opportunity in June 2021 relative to pre-pandemic, by occupation



Note: Shows the number of unemployed or furloughed workers who would usually compete for the same jobs as workers from each occupation, divided by the new job opportunities for workers in that occupation, relative to June 2019. Shows 30 largest occupations in terms of number of vacancies in 2019.

Source: Adzuna vacancy data; Labour Force Survey.

these jobs, and it would be similar to pre-pandemic even if all fully furloughed workers were laid off at the end of furlough. There are a handful of other occupations, including waiters and bar staff, where competition for jobs among unemployed workers (who were previously in these occupations) is lower today than before the pandemic. This is consistent with recent news reports of employers struggling to hire in these occupations.

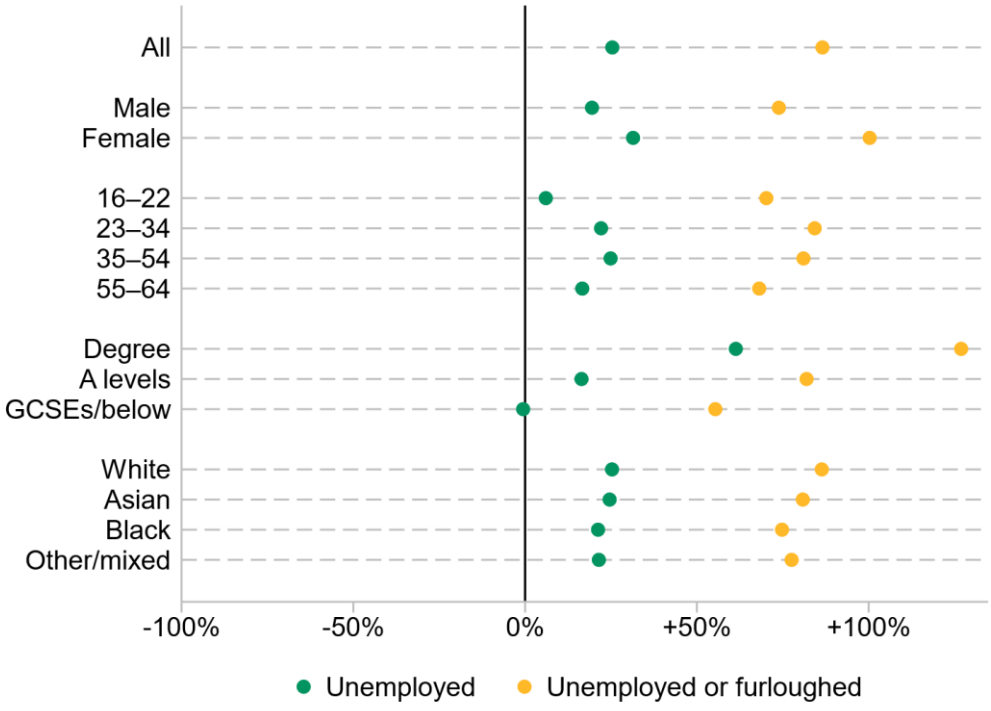
However, unemployed workers in the majority of occupations face higher competition than before the pandemic. We estimate that in June 2021, competition for new jobs is at least 10% higher than pre-pandemic for 64% of the workforce. Competition is particularly high in a number of relatively high-skilled occupations: for managers in some fields, teachers, business associates and health professionals, competition among unemployed workers is more than 50% higher than the pre-pandemic level. If furloughed workers are included in available jobseekers, competition for new jobs is higher still, up to 250% higher than the pre-pandemic

level. Figure 4.3 makes clear that the tight labour market in some parts of the economy – which dominate newspaper headlines – is not representative of the range of occupations across the economy as a whole.

Competition for jobs, by demographic group

Figure 4.4 disaggregates the results by demographic group. It shows that competition for new job opportunities in June 2021 is higher for women than for men, and higher for those with degrees than for those with lower levels of education. In general, these patterns reflect differences in the recovery of vacancies relevant to each demographic group, rather than differences in their rates of unemployment or furlough. As we noted in Section 2, the much greater variation in the outlook by occupation than by broad demographic group highlights the need for a granular approach to tracking the labour market recovery, and probably to some extent to policy.

Figure 4.4. Unemployed or furloughed workers per opportunity in June 2021 relative to pre-pandemic, by demographic group



Note: Shows the number of unemployed or furloughed workers who would usually compete for the same jobs as workers in each demographic group, divided by the new job opportunities for workers in that group, relative to June 2019.

Source: Adzuna vacancy data; Labour Force Survey.

5. Conclusion

The pandemic led to a collapse in vacancies right across the economy. Whilst layoffs and furloughing were concentrated in close-contact service sectors, vacancies fell sharply in the vast majority of occupations. Further, because people normally change occupations over their careers – so workers in relatively protected occupations can still see their career paths closed off – workers in all occupations saw their career progression interrupted. This is likely to have long-term scarring effects on earnings and productivity.

Job vacancies have now recovered in the aggregate, but the new economy does not yet look much like the old. As a result, a large share of workers still face lower job opportunities than before the pandemic. In particular, vacancies in higher-quality occupations have been slower to recover, and people with degrees still face reduced opportunities. Competition for new openings among the unemployed is still higher than before the pandemic, especially if some of the workers who are still furloughed are laid off as the furlough scheme winds down. The labour shortages in driving and storage which dominate newspaper headlines are by no means representative of the economy as a whole. Tracking the labour market recovery adequately, and designing policy in order to help that recovery along, is going to require a careful recognition at all times of the very different outlooks facing people in different lines of work.

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