

Migration Advisory Committee Research Paper: Indeed Data Exploration



Introduction

In 2019, the jobs website Indeed agreed to share data with the Migration Advisory Committee (MAC). Since then, the data have been included in several MAC reports, including the [2021 Annual Report](#), where a chapter was dedicated to early exploration.

This paper is an exploratory technical piece which examines the data further to build the MAC's evidence base and highlight areas where the analysis may provide valuable insights.

Some of the data and insights, including for vacancy rates, pay, and employer requirements (like the skills and experience needed), are also provided by other sources, including Analyst (formerly known as Burning Glass), HMRC, and the ONS. However Indeed has the advantage of providing insights into job seeker behaviour and allows us to compare trends internationally.

A limitation of the Indeed data is that it only covers part of the labour market, with any offline role interaction, or interaction through other job search sites, missing. This means that data may not be available for all occupations and sectors, particularly those that do not generally recruit online, and that some communities may not be represented where other job websites or search methods are preferred.

For these reasons, this paper is exploratory, considering Indeed data as a potentially useful source of insight to add to our evidence base. At this point, the data should not be used to draw conclusions or form recommendations, but the analysis is useful for context setting and may feed into other MAC reports.

Throughout this report, we will explore labour market changes seen in the Indeed data from 2019 to 2022, considering the impact of both the pandemic and the ending of Freedom of Movement (FoM) in the UK. Where possible, we will also compare trends across other European countries, and datasets.

The Value of Indeed Data for Building our Evidence Base

As mentioned in the introduction, there are several data sources that overlap with Indeed. This section will explore these in more detail and how they might compare to that provided by Indeed. The greatest advantage of the Indeed data is that it covers more than just the UK. Whilst it is possible to do this through other data sources there are often caveats and limitations which make this more complicated. This data may help evidence and isolate some impacts of UK policies or where problems like labour supply gaps are a more global issue, by comparing international trends.

To do this, Indeed provide data in 52 predefined sectoral categories. Table 1.1 shows that these sectors account for between 83% and 97% of job adverts on Indeed across the countries. Adverts that are missing either could not be categorised or come from an omitted sector, where samples are too small for data to be reliable. These sectors include Agriculture and Forestry, and Mining. The missing values could skew overall totals, particularly for Germany where this quantity is the largest.

Table 1.1: Share of job adverts classified into Indeed's occupational categories, 2016 - 2022

	Minimum	Maximum
UK	91%	93%
Germany	83%	87%
France	94%	97%
Italy	94%	96%
Spain	87%	92%

Source: Indeed, January 2016 – July 2022

Notes: Reports percentage of jobs advertised on Indeed that can be categorised. The maximum and minimum values are used across the period.

Indeed data can also be provided in Standard Occupation Classification (SOC) groups for the UK, as is commonly available in other data sources. Each SOC code groups jobs together based on the type and level of skill required to perform them. This is done at varying levels of granularity, with SOC 2010 comprising 9 1-digit codes and 369 4-digit codes. The Indeed data are provided at the 3-digit level. Codes are generally revised every 10 years, with the ONS recently releasing an updated SOC 2020 list. However, the Indeed data (like many other data sets) have not yet been updated to match this.

SOC codes are used to inform both the Skilled Worker route (SWR) and the Shortage Occupation List (SOL), although occasionally exceptions are made for specific jobs within a 4-digit SOC code.

Having the data in this form allows us to more accurately compare and work with other data sets to understand how workforce or occupational characteristics might impact labour market trends within the UK, particularly when thinking about the SWR which is based on SOC codes. However, there are other data sources available which are more commonly used to evidence emerging labour market trends, such as the ONS Vacancy Survey, Labour Force Survey (LFS) and Annual Survey of Hours and Earnings (ASHE).

Table 1.2 shows some key data sources regularly used to understand pay, recruitment, skills, and job searching within the UK labour market. Whilst the Indeed data can provide evidence for all of these, that may differ from other sources.

Data Source	Pay	Recruitment	Skills	Job Seeking
Indeed	✓	✓	✓	✓
Analyst	✓	✓	✓	
HMRC Real Time Information (RTI)	✓			
ASHE	✓			
ONS Vacancy Survey		✓		
ONS Labour Force Survey	✓	✓	✓	✓
Employer Skills Survey (ESS)			✓	
HO Management Information		✓		

Source: MAC

Note: This list is not exhaustive.

Salary/Pay and Conditions

Many job adverts contain pay data for prospective employees; however, the Real Time Information (RTI) data provided by HMRC gives actual pay of employees, though the income of those self-employed and any non-declared income will not be included. While data provided by Indeed or Analyst could evidence possible changes in recruiter behaviour to try and attract more workers, that may not translate to real wage growth. It would also only be for new starters and therefore would not necessarily apply to the existing workforce.

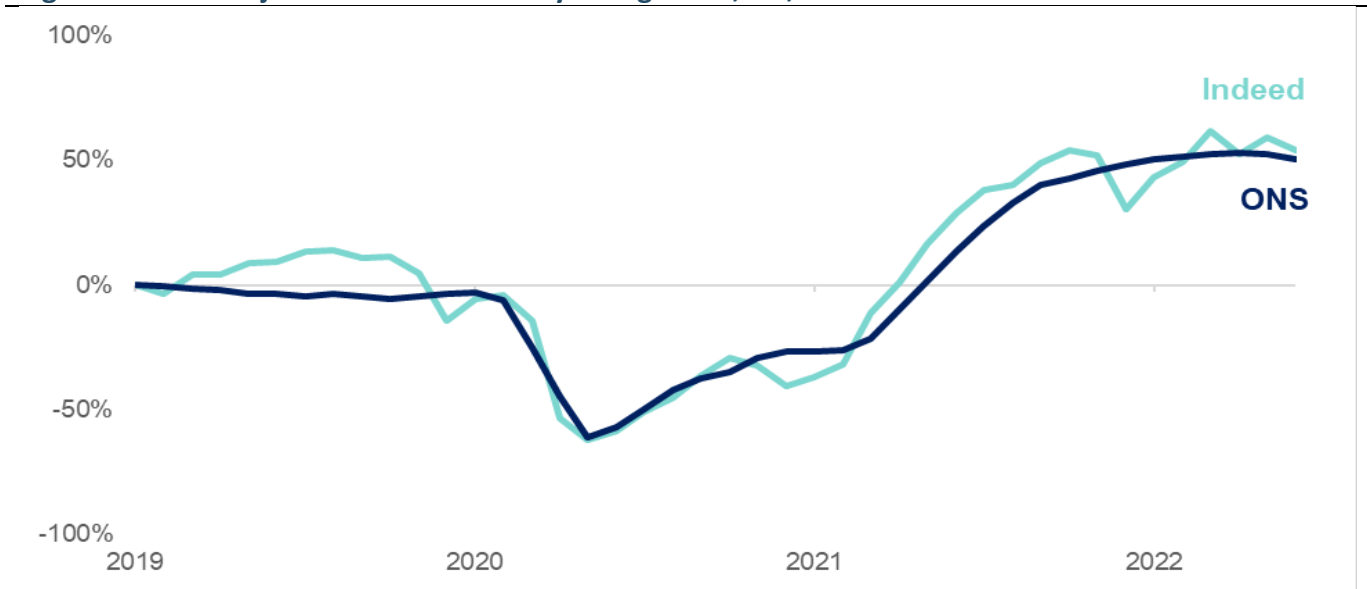
Employers may also improve their terms and conditions to attract new workers. Data from Indeed and Analyst could provide insights into emerging recruiting trends in the future. These could range from increased home or remote working options for employees to increasingly referencing visa sponsorship.

Recruitment

There is quite extensive coverage of the vacancy rate evidence base through Analyst and the ONS Vacancy Survey. While the vacancy rates provided by ONS form the main evidence base, advert volume data from Indeed or Analyst can provide real time information to supplement this. The ONS are also exploring this

using online postings data from Adzuna. In addition, the ONS survey does not provide information on vacancies at the occupational level. Figure 1.3 shows that in the UK, changes in online job adverts on Indeed follow similar trends to those seen in the ONS Vacancy Survey, suggesting it may be a suitable proxy for vacancy rates.

Figure 1.3: Online job advert and vacancy rate growth, UK, 2019 - 2022

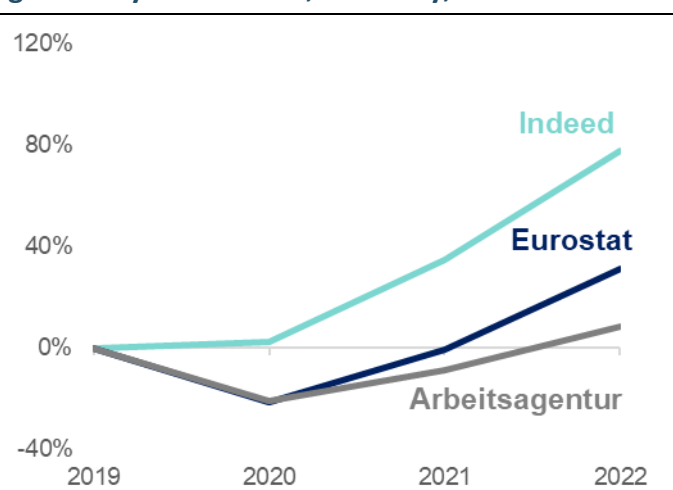


Source: Indeed, ONS Vacancy Survey, and ASHE, January 2019 to June 2022

Notes: Weighted averages are taken for all Indeed sectors based on the 2019 ASHE estimated population. Where data are not available for a 4- or 3-digit SOC code, the unaccounted amount within the 2- or 3-digit total is split equally between the missing values. ONS Vacancy data are reported for 3-month intervals for all of the labour market. The central month is selected as the reference point for the data, e.g. the average from January to March will be listed as February etc.

Similarly, Figures 1.4 and 1.5 show that overall, the trends in growth of postings on Indeed in Germany and Italy are similar to their vacancy statistics published by Eurostat. However, the data from Indeed often shows faster growth in postings compared to the vacancy rates. This may be due to changes in recruiting preferences and the desire to recruit through online channels.

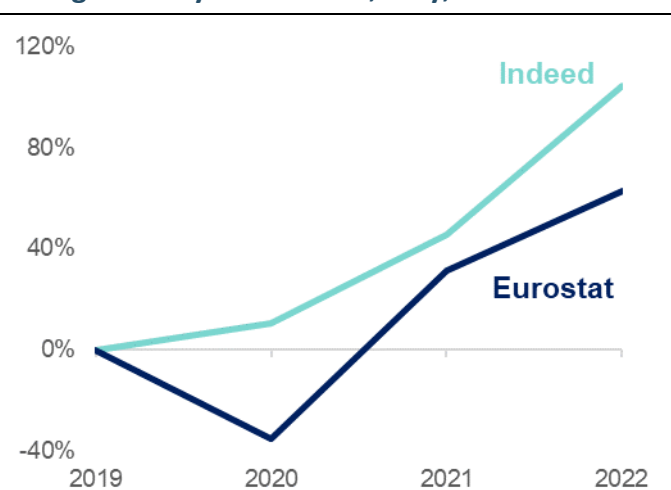
Figure 1.4: Online job advert and vacancy rate growth by data source, Germany, 2019 - 2022



Source: Indeed, Eurostat, and Arbeitsagentur, January 2019 to June 2022

Notes: Indeed Averages are taken across all sectors, regardless of market share, for each month. Reported roles represent around 50% of all German vacancies. Eurostat data are provided quarterly as the proportion of vacancies. Arbeitsagentur produce monthly statistics for the number of unfilled reported roles.

Figure 1.5: Online job advert growth and vacancy rate growth by data source, Italy, 2019 - 2022



Source: Indeed, Eurostat, January 2019 to June 2022

Notes: Indeed Averages are taken across all sectors, regardless of market share, over 3-month periods (e.g. January to March) for comparison against the Eurostat data, which are quarterly.

Similar analysis and results were found when looking at France and Spain, with growth on Indeed often being greater than if using the official published national vacancy rate. It may be that occupations with the most vacancies are also those that are most likely to recruit online, artificially inflating the growth. From Table 1.1, we know that the Indeed data used excludes adverts that were not assigned to an occupational category.

An increase in the number of job adverts may not necessarily be correlated with employers struggling to recruit. If roles are desirable, and the labour market has the skills, vacancies should be filled. However, if the volume of adverts remains high relative to the workforce size over a longer period it may indicate a more significant gap between labour market supply and demand. Changes in job posting trends on Indeed will be explored later in this report.

Skills

Another area where Indeed data could expand our evidence base is around skills and experience requirements for roles. The immigration system is based on the Regulated Qualifications Framework (RQF) which aims to standardise qualifications based on the time taken to acquire them. There are 9 RQF Levels, with RQF 1-2 being equated to GCSEs, RQF 3 to A-Levels, and RQF 6 to a bachelor's degree. These are then linked to SOC codes to estimate the experience required for different roles.

Under the new immigration system only occupations listed as RQF 3 (with the exception of care workers at RQF2 who are able, based on MAC recommendations, to use the SWR) and above can use the SWR. However, over time occupations may evolve, meaning qualification and training requirements for staff change; these changes should be picked up in the 10-year rebasing to a new Standard Occupation Classification when each occupation has an RQF level attached to it. Equally, specific job roles within an occupation may require additional expertise.

One area of interest would be the proportion of roles advertising with little or no experience and or qualification requirements, as this may support an RQF 1-2 classification, thus excluding an occupation from the SWR.

In the future, data from platforms like Indeed and Analyst may provide insights into changing role requirements from employers that could impact their RQF level. Similarly, data captured in the Employer Skills Survey (ESS) may also show this, albeit with a time lag.

Job Seeker Behaviour

There are several ways to gain insights into job seeker behaviour on Indeed, including looking at changes in search patterns, the number of job seekers clicking on adverts, and their locations while searching. However, this only covers a section of the labour market and interest does not necessarily mean job seekers have the skills or employers the ability to hire overseas workers.

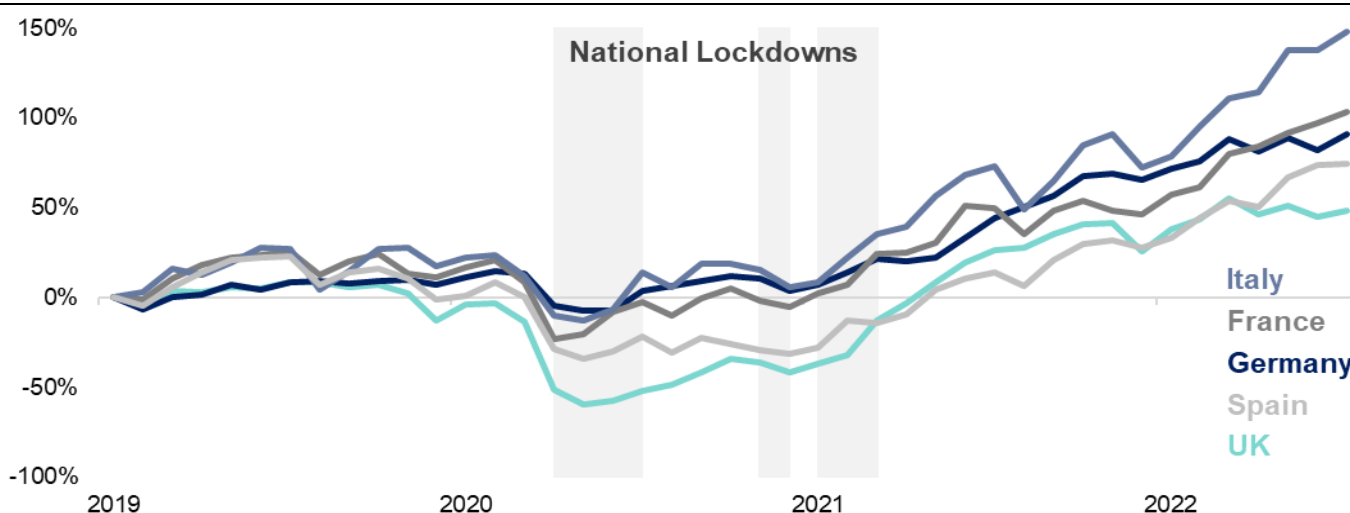
Labour Market Changes, 2019 - 2022

Over the last few years, the UK has experienced several changes which are likely to have impacted the labour market, including the pandemic and the ending of FoM. Through this section we will explore how that may have impacted employers and whether those impacts are unique to the UK, through comparison with data for Germany, France, Italy and Spain.

Figure 2.1 shows that the number of online job adverts on Indeed remained relatively similar across 2019 in the UK, Germany, France, Italy, and Spain. In April 2020, the number shrank across all countries, though the decrease was particularly large in the UK. This coincides with the introduction of restrictive measures for employers and employees across the globe in efforts to control the spread of COVID-19, though the exact nature of restrictions and their duration varied between countries.

In the UK, volumes began to recover slowly across the summer of 2020 before a second, smaller dip in late 2020, which again coincides with the introduction of a second lockdown in England. Since early 2021, the volume of online job adverts on Indeed has almost continually grown across all 5 countries, to above the level seen in January 2019.

Figure 2.1: Online job advert growth by country, 2019 – 2022



Source: Indeed, January 2019 to July 2022

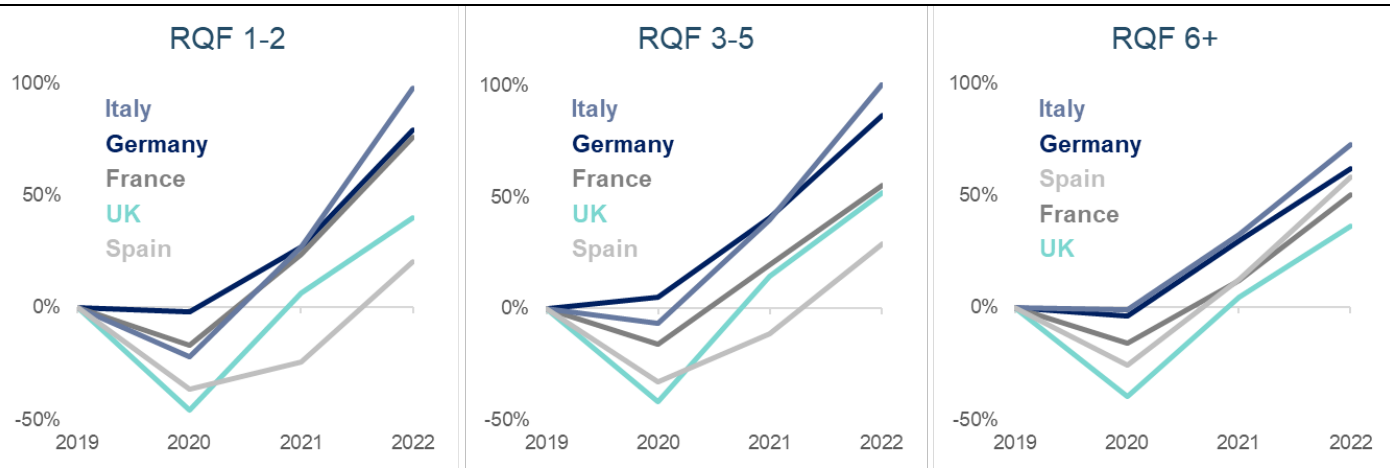
Notes: Averages are taken across all sectors, regardless of market share, for each month. National Lockdowns are for the UK only.

Although the Indeed data shows slower growth in adverts for the UK compared to Germany, France and Italy, this may not mean lower vacancy growth. The use of online recruitment may be more established in the UK, which would see slower growth due to lower adoption rates. The data used here for each country also covers a different proportion of the adverts on Indeed, as reported in Table 1.1. Therefore, changes in levels may reflect both changed recruitment behaviours (moving to or from online recruitment) and changed demand for workers.

Exploring the growth by RQF levels, Figure 2.2 shows that the posting growth on Indeed has been happening across all levels. In the UK, the growth has been slowest in the RQF 6+ roles (degree or equivalent).

Growth in the volume of UK job adverts on Indeed has been greatest in RQF 3-5 roles (A-Level and NVQ3), although at RQF 1-2 (GCSE equivalents) the growth in 2022 has on average been more than 50% higher than January 2019. Whilst most RQF 1-2 roles are not eligible for the SWR, they may be eligible for other visas, such as the Seasonal Agricultural Workers Scheme (SAWS).

Figure 2.2: Online job advert growth by country & RQF level, 2019 – 2022



Source: Indeed, January 2019 to July 2022

Notes: Average is taken across all sectors and all months, regardless of their comparative size. To determine the RQF Level, 4-digit SOC codes have been mapped to the Indeed categories and the modal value taken.

Table 2.3 shows the growth in adverts on Indeed from Q2 2019 to Q2 2022 for the 6 largest growing sectors in the UK over the time period, where advert numbers have nearly doubled. These sectors are also consistently near, or above, the average change for other European countries, except for Spain, where only 3 of the sectors exceed the domestic average, and 1 sector (Dental) experienced a decline.

Table 2.3: Online job advert growth by country, Q2 2019 – Q2 2022

	UK	Germany	France	Italy	Spain
Loading & Stocking	98%	79%	56%	155%	41%
Cleaning & Sanitation	88%	137%	153%	240%	48%
Dental	85%	197%	62%	95%	-17%
Retail	85%	62%	85%	95%	9%
Pharmacy	85%	94%	79%	85%	8%
Medical Technician	81%	69%	105%	120%	92%
Average Change	41%	77%	57%	92%	38%

Source: Indeed, Apr - Jun 2019 and Apr - Jun 2022

Note: Calculated as (Sectoral Q2 2022 Average / Sectoral Q2 2019 Average) - 1.

Table 2.4 illustrates the same information as Table 2.3, but accounting for the average sectoral growth experienced within each country over the same time period. The UK has seen higher proportional growth across the Retail and Pharmacy sectors, with only Italy matching growth in Loading & Stocking. However, proportional growth in Cleaning & Sanitation lags France and Italy. Table 2.3 and 2.4 highlight that although all countries have experienced online job advert growth between Q2 2019 and Q2 2022, the magnitude of, and sectors driving, that growth within each country differ.

Table 2.4: Online job advert growth, relative to domestic average, by country, Q2 2019 – Q2 2022

	UK	Germany	France	Italy	Spain
Loading & Stocking	40%	2%	0%	34%	2%
Cleaning & Sanitation	34%	35%	62%	79%	6%
Dental	31%	70%	4%	3%	-40%
Retail	31%	-7%	18%	3%	-22%
Pharmacy	31%	10%	15%	-3%	-22%
Medical Technician	28%	-4%	31%	16%	38%

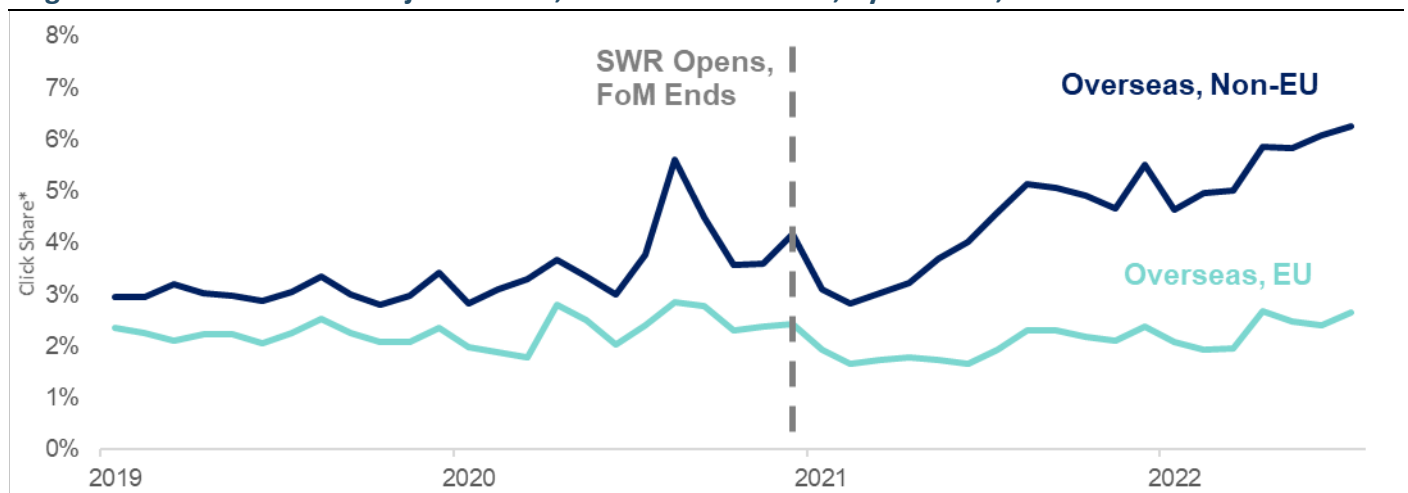
Source: Indeed, Apr - Jun 2019 and Apr - Jun 2022

Note: Calculated as ((Sectoral Q2 2022 Average * Overall Q2 2022 Average) / (Sectoral Q2 2019 Average * Overall Q2 2019 Average)) - 1.

Where there are gaps in the labour market, employers may look to recruit workers from overseas. This is not possible for RQF 1-2 occupations under the SWR, except in social care. However, migrants may still enter via another route – for example, as the spouse of an eligible worker – and be eligible to work in RQF 1-2 roles. Throughout the pandemic, this was made more difficult by increased travel restrictions around the world.

Despite the travel restrictions, Figure 2.5 shows that interest in UK roles from overseas jobseekers was not largely affected by the pandemic in March 2020. Since 2021, there has been an increasing share for those searching from outside the EU. This relative growth in interest from outside the EU in UK jobs on Indeed begins in early 2021, coinciding with the launch of the new immigration system. There has been no comparable change in the share of job searchers from the EU.

Figure 2.5: Click share on UK job adverts, relative to UK share, by location, 2019 – 2022



Source: Indeed, January 2019 – July 2022.

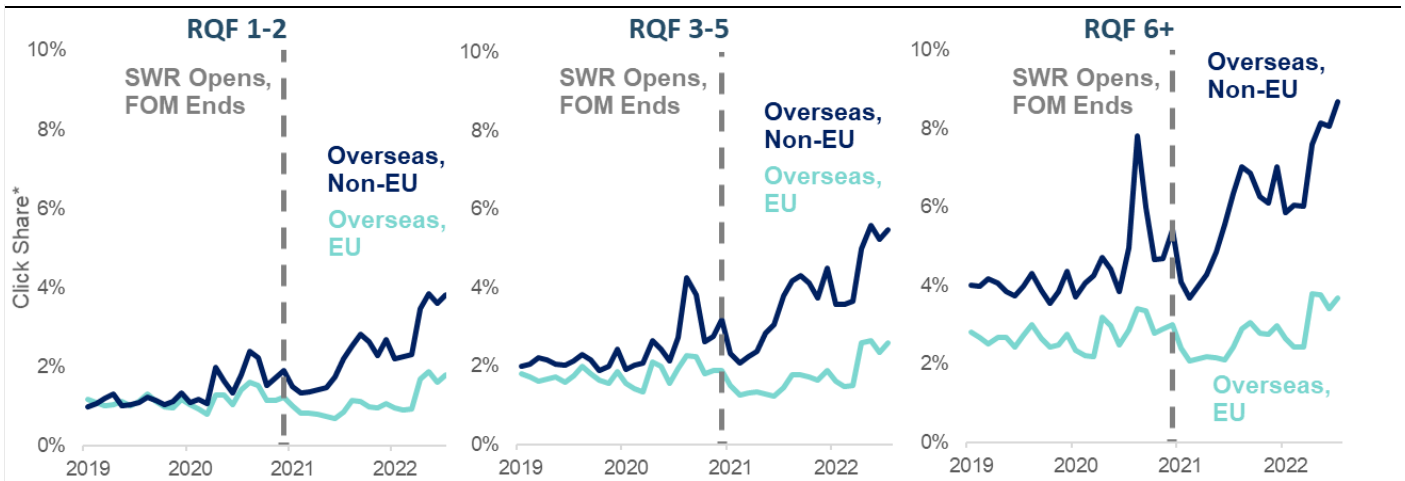
Notes: Average is taken across all sectors and all months, regardless of their comparative size. March 2021 data are taken as the average of the 2 months either side currently due to a data error.

* Click share is exclusive of other overseas clicks so that changes in one overseas cohort do not impact the other, i.e. non-EU = Non-EU/(Non-EU + UK) and EU = EU/(EU + UK).

Since 2021, the immigration system has become more liberal for those outside of the EU and more restrictive for EU workers. It is possible that this has affected the growth in overseas interest on Indeed from outside the EU. However, Figure 2.6 shows that this growth in interest (relative to the domestic level) can be seen across all RQF levels on Indeed, though the levels are much higher at the higher RQF grades. However, the data used combines occupations together, some of which have different RQF levels assigned to them.

Prior to 2021, it also shows that the relative interest from overseas jobseekers on Indeed was similar outside the EU to that within for UK roles at RQF 1-2 and RQF 3-5. For RQF6+ roles, a higher proportion came from outside the EU – and during the period prior to the introduction of SWR it was only jobs at RQF6 and above that were open to applications from non-EU workers.

Figure 2.6: Click share on UK job adverts, relative to UK share, by location & RQF level, 2019 - 2022



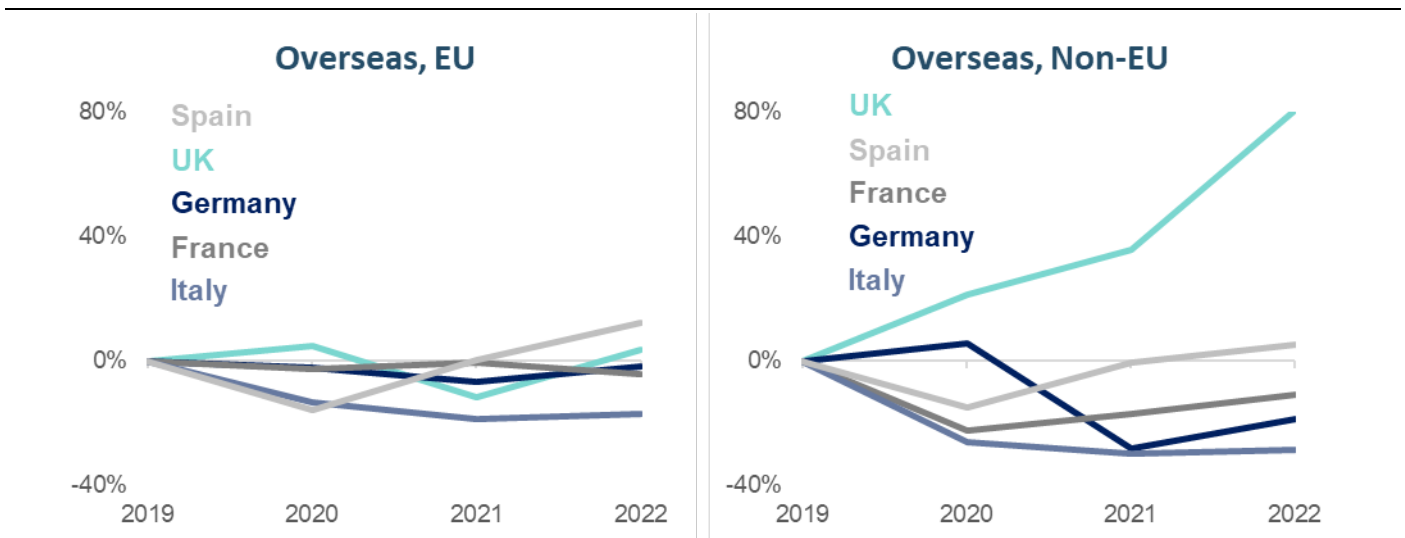
Source: Indeed, January 2019 to July 2022

Notes: Average is taken across all sectors and all months, regardless of their comparative size. March 2021 data are taken as the average of the 2 months either side currently due to a data error.

*Click share is exclusive of other overseas clicks so that changes in one overseas cohort do not impact the other, i.e. non-EU = Non-EU/(Non-EU + UK) and EU = EU/(EU + UK).

Figure 2.7 shows that, although the relative change in interest in the UK from EU countries is similar to that seen in Germany, France, Italy and Spain; only the UK has seen an increase from outside the EU. It is possible this is linked to the new immigration system, with more occupations now eligible for the SWR than for the previous main work route, given a similar change did not happen in EU countries. There are, however, other factors that may also drive interest in UK jobs, including changes in economic or political conditions in countries of origin where the UK has traditionally been an important destination for emigrants.

Figure 2.7: Click share growth, relative to domestic share growth, by country and location, 2019 - 2022



Source: Indeed, January 2019 to July 2022

Notes: Average is taken across all sectors and all months, regardless of their comparative size. March 2021 data are taken as the average of the 2 months either side currently due to a data error.

*Click share is exclusive of other overseas clicks so that changes in one overseas cohort do not impact the other, i.e. non-EU = Non-EU/(Non-EU + UK) and EU = EU/(EU + UK).

A 2022 Indeed [report](#) noted the countries with the most interest were India and the USA. Looking at the volumes of visa applications over Q1-Q2 2022, Table 2.8 shows the top search countries on Indeed were similar to those with the most Skilled Worker main applicant visa applications once Health and Care visas were excluded. These were isolated as Health and Care visas make up a significant proportion of sponsorship applications and do not seem to have proportional representation on Indeed.

Not all overseas job seekers apply for UK visas through the SWR or Health and Care Worker routes. Some may be eligible to apply as a dependent or for another type of visa. For example, Hong Kong ranked 6th on Indeed for overseas interest but 51st for Skilled Worker main applications. However, many Hong Kong citizens are eligible to apply through the separate BN(O) route.

Overseas interest from the EU reported on Indeed appears to be slightly overrepresented, with 6 of the top 10 search countries being from within the EU compared to 3 on the SWR (excluding Health and Care Worker visas). However, all of these countries (excluding Ireland) were within the top 25 for applications to the Skilled Worker route over the first half of 2022. Irish nationals do not need visas to come to the UK as they are part of the Common Travel Area (CTA).

Table 2.8 also shows that overseas interest from Indeed for care worker roles does have some commonalities with the top Health and Care visa application countries in 2022, with Zimbabwe also featuring highly on Indeed (6th). However, visa applications will also be for other Health and Care roles and not all job seekers may apply as a main applicant on the Health and Care Worker route.

Table 2.8: UK overseas interest, 2022

Ranking	Indeed		HO Migration Statistics	
	Top Search Locations	Care Worker Top Search Location	Top SW Visa Applications	Top H&C Worker Visa Applications
1	India	Bangladesh	India	India
2	United States	Nigeria	United States	Nigeria
3	Ireland	India	South Africa	Philippines
4	France	South Africa	France	Zimbabwe

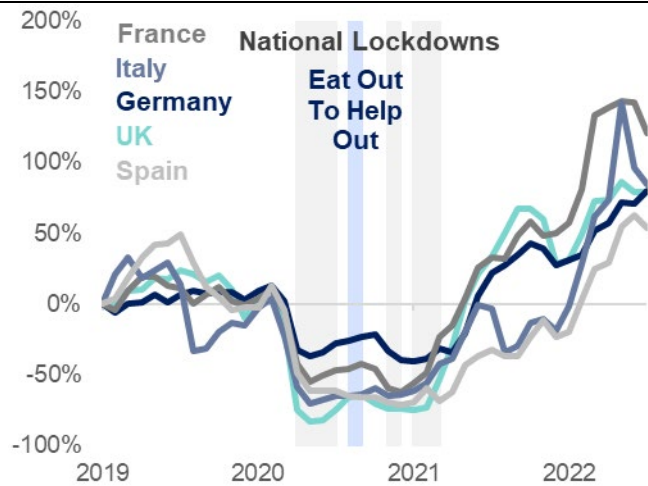
Source: Indeed, Jan – Apr 2022 and [Home Office Migration Stats](#), Jan – Jun 2022

Sectors with Reported Recruitment Difficulties

Since FoM ended, some sectors and occupations have reported increasing recruitment difficulties in the UK. These include Agriculture, Fishing, Food Processing, Hospitality, Logistics, Manufacturing and Aviation. Recruitment for Agriculture and Fishing roles is not generally done online; however, some data are available for the other sectors.

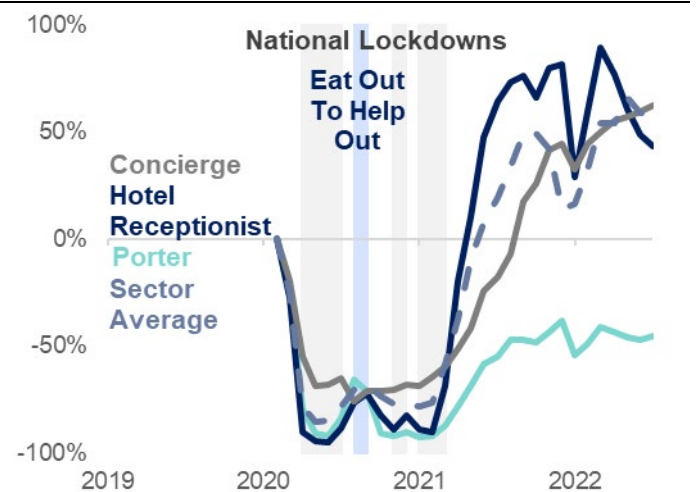
Figure 2.9 shows that in the Hospitality & Tourism sector, the volume of job adverts shrank to less than 20% of their January 2019 volume in early 2020 in the UK as lockdown restrictions were in place. Since 2021, the volume of adverts on Indeed for Hospitality & Tourism roles has been growing, with around 80% more adverts in the UK in July 2022. Similar growth rates are seen across all EU countries analysed.

Figure 2.9: Online job advert growth in hospitality & tourism, by country, 2019 - 2022



Source: Indeed, January 2019 to July 2022.
Notes: National Lockdowns and Eat Out to Help Out are for the UK only.

Figure 2.10: Online job advert growth in hospitality & tourism (top 3 roles), UK, 2020 - 2022

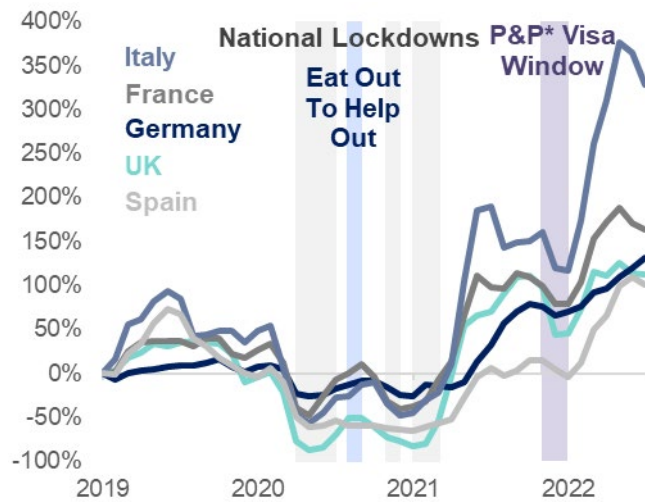


Source: Indeed, February 2020 to July 2022.
Notes: National Lockdowns and Eat Out to Help Out are for the UK only. Top 3 roles are Hotel Receptionist, Concierge and Porter.

In Figure 2.10, for the top 3 job titles in the Hospitality & Tourism sector, adverts for porters and hotel receptionists dropped by around 95% as the first lockdown was introduced. Adverts for hotel receptionists and concierge staff returned to pre-pandemic levels in 2021 on Indeed, but those for porters have remained lower. Through 2022, the volume of concierge adverts has continued to grow whilst those for hotel receptionists have been more volatile.

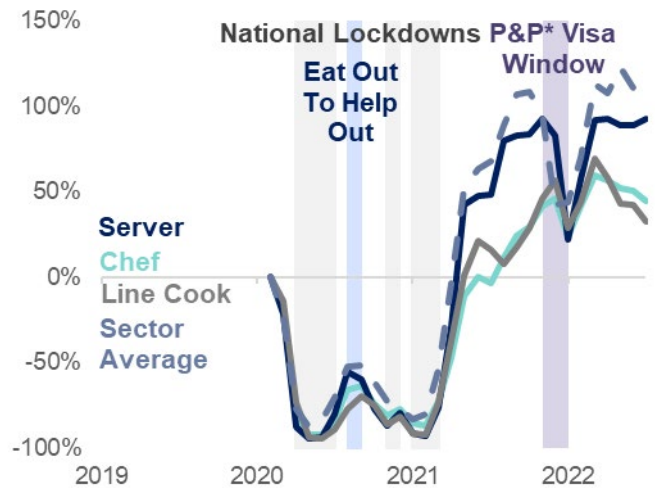
In the Food Preparation & Service sector, Figure 2.11 shows advert volumes fell to less than 15% of those seen on Indeed in January 2019 by May 2020. Since 2021, the volume of adverts has grown and was around double the volume seen in January 2019 by July 2022. Similar growth has again been recorded across Europe, with Italy seeing even greater growth (as would be expected from Figure 2.1). Whilst not a unique position for the UK, the rising advert numbers would suggest employers are facing more recruiting difficulties in this sector.

Figure 2.11: Online job advert growth in food preparation & service, by country, 2019 - 2022



Source: Indeed, January 2019 to July 2022.
 Notes: *P&P = **Pork & Poultry**. National Lockdowns, Eat Out to Help Out and Pork & Poultry Visa window are for the UK only.

Figure 2.12: Online job advert growth in food preparation & service (top 3 roles), UK, 2020 - 2022



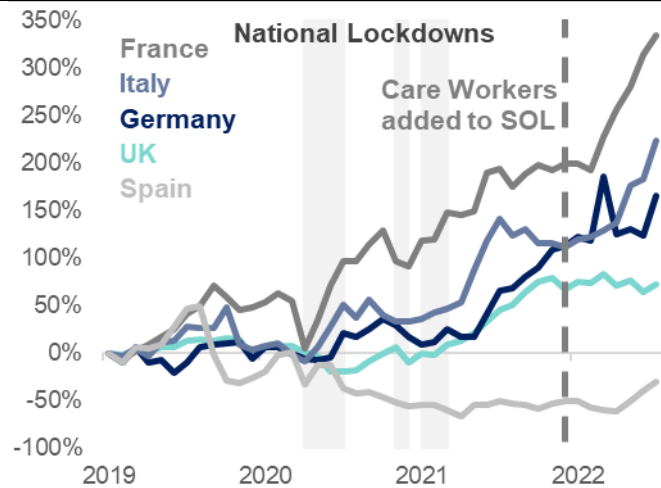
Source: Indeed, February 2020 to July 2022.
 Notes: *P&P = **Pork & Poultry**. National Lockdowns, Eat Out to Help Out and Pork & Poultry Visa window are for the UK only. Top 3 roles are Server, Line Cook and Chef.

Figure 2.12 shows that the fall in adverts in 2020 was seen in all of the 3 most common job titles in the sector on Indeed, dropping to around 5% of the proportion seen pre-pandemic. Volumes grew again in 2021 and exceeded those seen in pre-pandemic by June 2021. Whilst there was strong initial growth in the volume of adverts on Indeed for chefs and line cooks, the volume of adverts has been easing more recently, suggesting that recruitment may be getting easier. However, for servers, it has remained at around 90% higher than February 2020 volumes since March 2022, suggesting recruitment for this type of role is not getting easier. However, all 3 roles are below the UK sector average.

The care sector has seen recruitment challenges for a significant time, as reported in the MAC's [Review of Adult Social Care 2022](#). In December 2021, they were added to the SWR and the SOL following advice from the MAC, enabling them to recruit overseas workers if they met the salary threshold and language conditions. Figure 2.13 shows that since 2019, the volume of adverts for care staff on Indeed has continued to rise in the UK, although larger growth has been seen across Europe, in France, Italy and Germany.

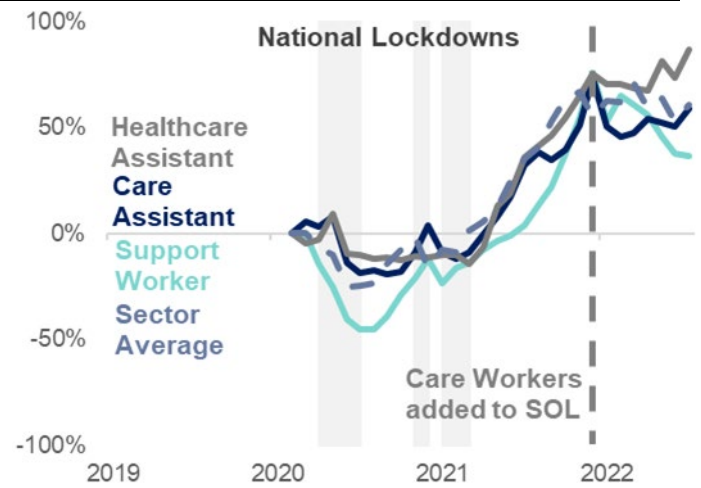
For the 3 most common job titles, Figure 2.14 shows that support worker roles were impacted most by the first lockdown. However, advert volumes across all 3 roles continually increased from late 2020 to early 2022. Support worker growth has since trended downwards, but care assistant and healthcare assistant adverts remain over 50% higher than February 2020, implying potential recruitment difficulties may still exist.

Figure 2.13: Online job advert growth in personal care & home health, by country, 2019 – 2022



Source: Indeed, January 2019 to July 2022.
 Notes: National Lockdowns and Care Workers added to the SOL are for the UK only.

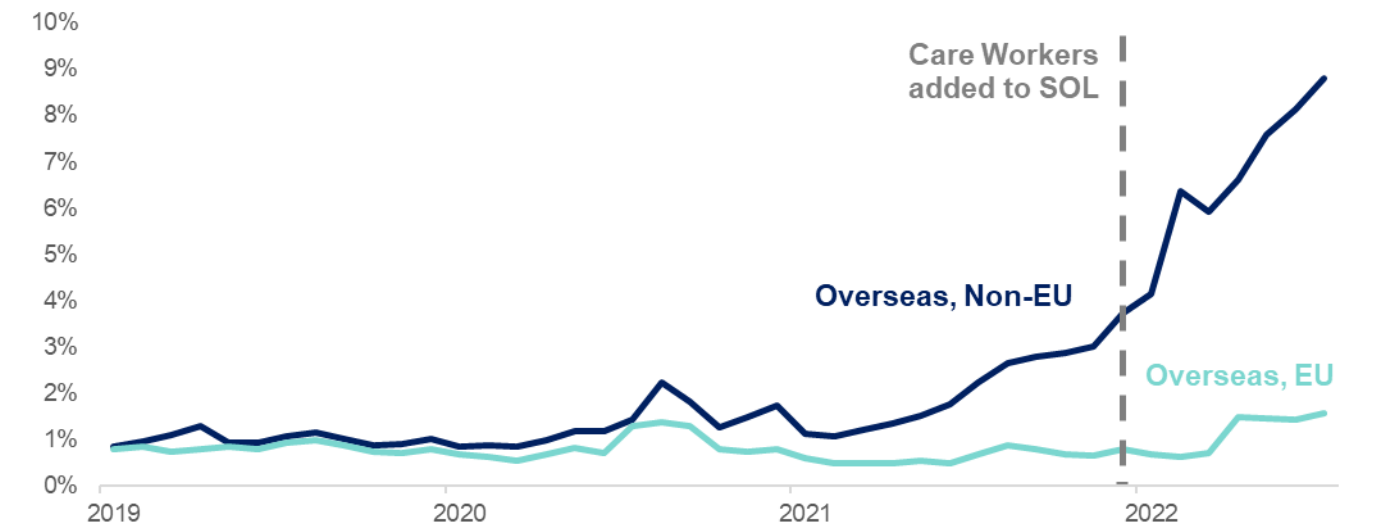
Figure 2.14: Online job advert growth in personal care & home health (top 3 roles), UK, 2020 - 2022



Source: Indeed, February 2020 to July 2022.
 Notes: National Lockdowns and Care Workers added to the SOL are for the UK only. Top 3 roles are Healthcare Assistant, Care Assistant and Support Worker

Indeed suggests that there is interest in filling these roles from workers overseas. Figure 2.15 shows that since care workers were added to the SWR and SOL, a growing share of clicks on job adverts have been from overseas, non-EU IP addresses, reaching almost 9% of all unique clicks on Care and Personal Service Roles in July 2022, an increase of over 900%.

Figure 2.15: Click share for care and personal services roles, by location, 2019 - 2022



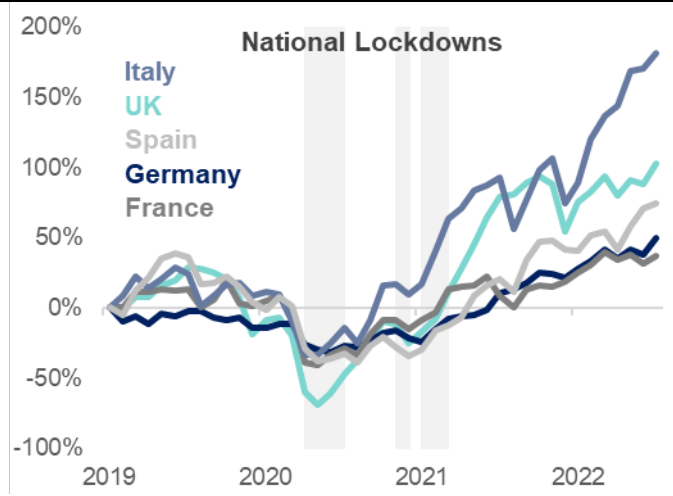
Source: Indeed, January 2019 – July 2022.
 Notes: Data is for SOC Code 614. Data for March 2021 is taken as the average of February and April 2021 due to a data error.

In Production & Manufacturing, Figure 2.16 shows that the volume of adverts had more than doubled by July 2022 on Indeed compared to January 2019, with only Italy showing a higher growth.

Isolating the top 3 roles, Figure 2.17 illustrates advert volumes for production coordinator and welder roles returned to pre-lockdown levels after a brief increase, suggesting any recruitment challenges may be similar to those seen before the pandemic.

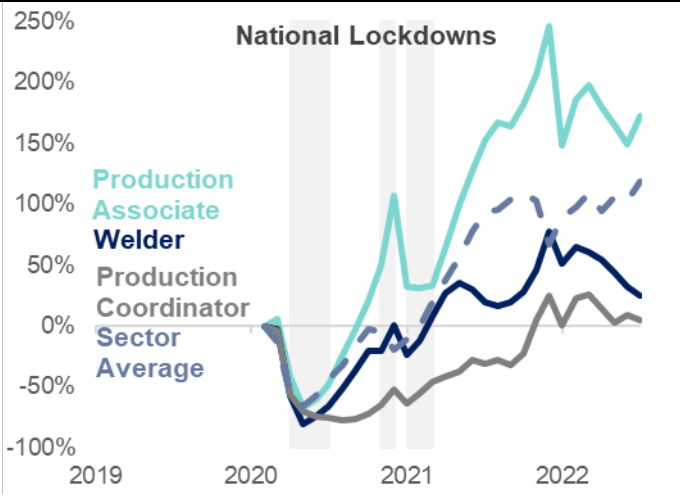
However, adverts for production associate roles exceeded February 2020 numbers soon after the first lockdown, and as of July 2022, are 170% higher. Employers may be finding recruiting these workers increasingly challenging.

Figure 2.16: Online job advert growth in production & manufacturing, by country, 2019 - 2022



Source: Indeed, January 2019 to July 2022.
Notes: National Lockdowns are for the UK only.

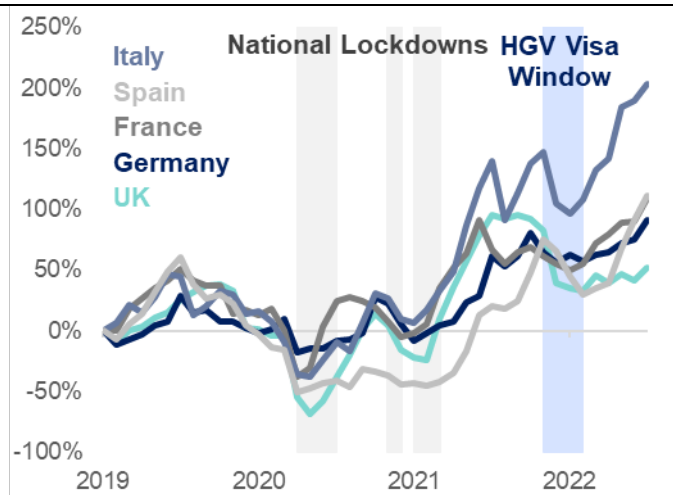
Figure 2.17: Online job advert growth in production & manufacturing (top 3 roles), UK, 2020 - 2022



Source: Indeed, February 2020 to July 2022.
Notes: National Lockdowns are for the UK only. Top 3 roles are Production Associate, Welder and Production Coordinator.

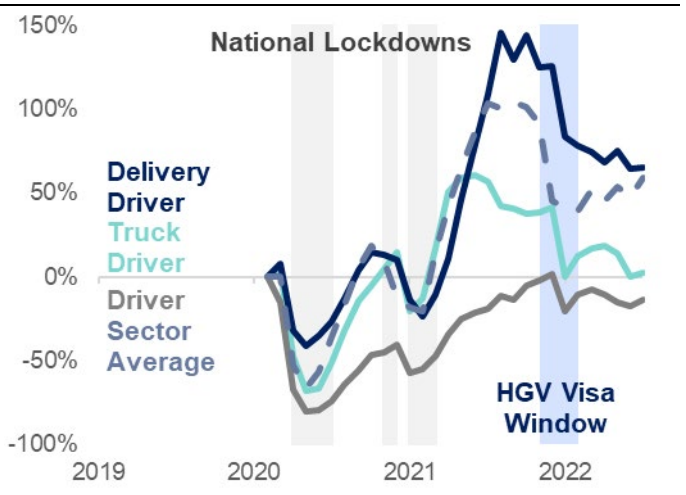
In 2021, there were concerns around the shortage of HGV drivers within the UK, with a temporary visa arrangement introduced in late 2021 to help with Christmas demand. Figure 2.18 shows that the volume of adverts for drivers in the UK initially shrank more than other European countries during the first lockdown. Adverts peaked at around 90% more volume in mid-2021, exceeding all but Italy, but quickly fell to around 40%, coinciding with the implementation of the HGV temporary visa. Advert levels have remained similar since, in contrast to the rest of Europe, where advert levels have been steadily climbing.

Figure 2.18: Online job advert growth in driving, by country, 2019 - 2022



Source: Indeed, January 2019 to July 2022.
Notes: National Lockdowns and the HGV Visa Window are for the UK only.

Figure 2.19: Online job advert growth in driving (top 3 roles), UK, 2020 - 2022



Source: Indeed, February 2020 to July 2022.
Notes: National Lockdowns and the HGV Visa window are for the UK only. Top 3 roles are Delivery Driver, Truck Driver and Driver.

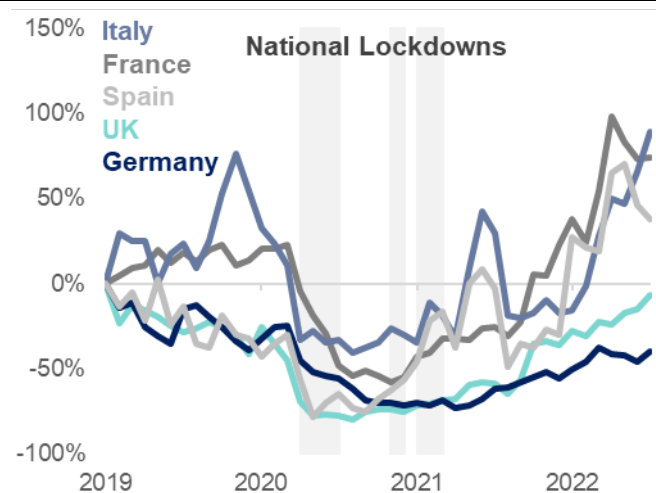
Looking at the 3 most common job roles for driving adverts, Figure 2.19 shows that the increase in adverts during mid-2021 may have come from employers looking for delivery drivers and, to a lesser extent, truck

drivers. Truck driver and driver adverts have returned to pre-lockdown levels, but delivery driver adverts are still 65% higher, suggesting that while some recruiting pressures have been reduced, it may be more difficult to find certain types of drivers than before the pandemic.

The Aviation industry has experienced difficulty recently, with long airport queues and flight cancellations being blamed on insufficient staffing levels. Figure 2.20 highlights a trend not seen across any other analysed sector – pre-pandemic, aviation role adverts were in decline in March 2020. This decline was exaggerated by the first lockdown but has steadily been increasing since. A similar trend can be seen across the other European countries, although UK adverts are still short of January 2019 levels.

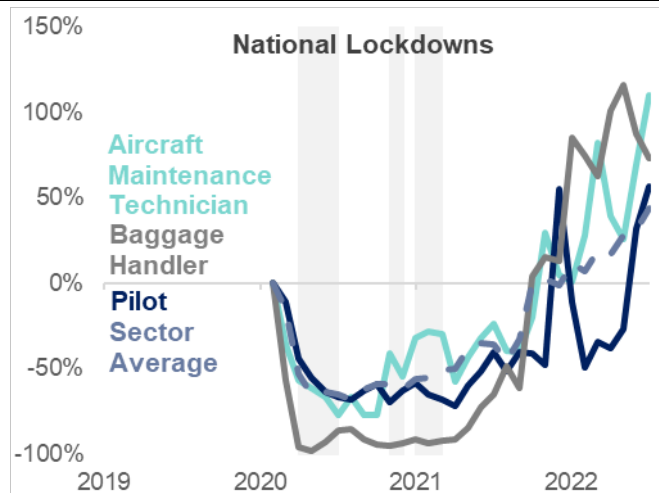
Considering the 3 most common job roles, Figure 2.21 shows that advert volumes substantially reduced over lockdown but have been increasing since October 2021. Advert numbers are particularly volatile in this sector, so it is difficult to confidently determine trends seen in 2022, but levels across all 3 roles have consistently exceeded pre-lockdown levels by 50%. This suggests growing demand may be providing employers with more recruitment difficulties compared to before the pandemic.

Figure 2.20: Online job advert growth in aviation, by country, 2019 - 2022



Source: Indeed, January 2019 to July 2022.
Notes: National Lockdowns are for the UK only.

Figure 2.21: Online job advert growth in aviation (top 3 roles), UK, 2020 - 2022



Source: Indeed, February 2020 to July 2022.
Notes: National Lockdowns are for the UK only. Top 3 roles are Aircraft Maintenance Technician, Baggage Handler and Pilot.

Salary

Employers struggling to recruit may also raise wages, or advertised wages, to attract workers. Figure 2.22 shows that at the 3-digit SOC level, Hospitality & Tourism and Food Preparation & Service roles have generally seen continual increases in the median advertised salary on Indeed since Spring 2021. Prior to this, wages saw little change. However, as outlined earlier in the report, increases in advertised wages may not affect pay for existing employees. This would be illustrated by the care sector, where the median advertised salary for Caring Personal Services on Indeed has increased consistently since 2019. However, budgeting restrictions driven by Government funding means that the care sector has struggled to raise wages for existing employees.

Figure 2.22: Median wage growth in hospitality & tourism and food preparation & service sectors by SOC, 6-month rolling average, 2019 - 2022

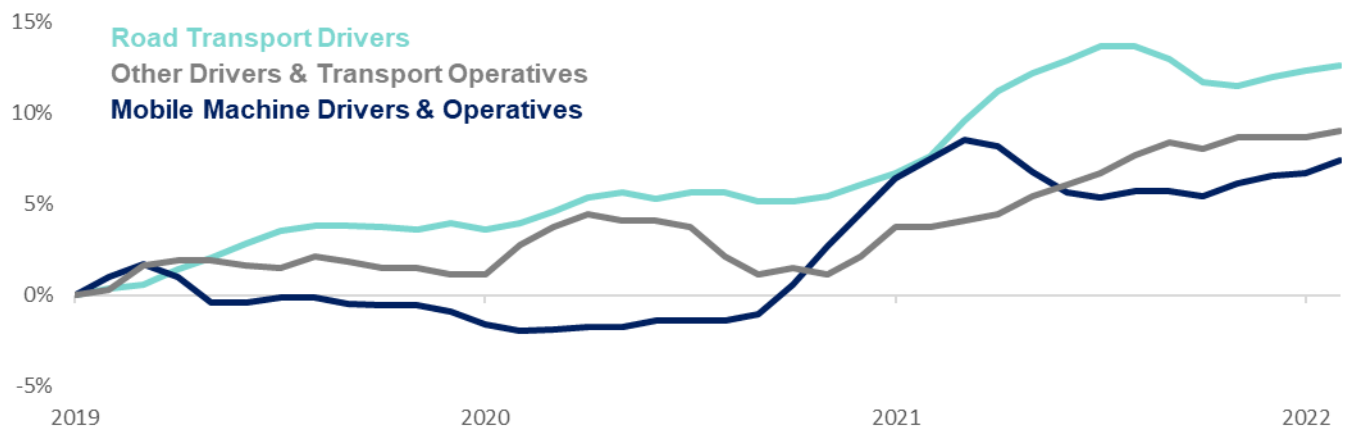


Source: Indeed, January 2019 to July 2022.

Notes: 3-digit Indeed codes are matched to 4-digit SOC codes. SOC codes are omitted from the output where there is more than 1 month with a low sample size, or less than 20% of the SOC code would fall into the Indeed category.

Figure 2.23 shows that while advertised wages on Indeed were slowly increasing for Drivers over 2019 and 2020, the rate of growth in advertised pay increased over 2021. There were some increases in over May, June and July 2022 but these have not exceeded the 2021 peak, suggesting recruitment difficulties may have somewhat improved.

Figure 2.23: Median wage growth in driving by SOC, 6-month rolling average, 2019 - 2022



Source: Indeed, January 2019 to July 2022.

Notes: 3-digit Indeed codes are matched to 4-digit SOC codes. SOC codes are omitted from the output where there is more than 1 month with a low sample size, or less than 20% of the SOC code would fall into the Indeed category.

Figure 2.24: Median wage growth in production & manufacturing by SOC, 6-month rolling average, 2019 - 2022



Source: Indeed, January 2019 to July 2022.

Notes: 3-digit Indeed codes are matched to 4-digit SOC codes. SOC codes are omitted from the output where there is more than 1 month with a low sample size, or less than 20% of the SOC code would fall into the Indeed category.

Figure 2.24 shows that Production & Manufacturing advertised wages have generally increased since 2019 on Indeed, with the exception of manager and director roles, suggesting employers may be trying to attract more workers. However, changes differ between types of processing and manufacturing; for example, median advertised pay for Assemblers and Routine Operatives reduced at the beginning of the pandemic while it went up in the other occupation codes on Indeed. This is a broad sector so recruitment experiences may be very different within it. Some occupations within this sector have also been excluded because of low sample sizes on Indeed.

While the timings for increased advertised wage growth often coincide with the ending of FoM, the pandemic and other factors will have also impacted employer and employee behaviours and therefore no conclusions can be drawn from this.

Conclusion

Whilst the MAC has access to various data sources, these are often not directly comparable to datasets from other countries. The Indeed data enables more direct comparisons and insights into unique trends within the UK labour market and further afield. The initial analysis undertaken in this report highlights several similarities in trends regarding online job advert growth across the EU, particularly in sectors reporting recruitment difficulties (Figure 2.9 – 2.21). The largest difference between the UK and other EU countries is the change in click share from overseas, non-EU IP addresses since 2019, shown in Figure 2.7. However, as with all data sources, there are limitations, so while it may add to the evidence base, conclusions cannot be drawn from it in isolation.

As an increasing amount of recruitment is done online, we will continue to explore the insights that could be gained from online job adverts, their relationship to job seekers, and the impacts of migration and migration policy on the labour market. This could range from additional insights for the SOL, to the MAC's Annual report and other MAC commissions.