

# Research Bulletin 22/12 | Measuring the Demand for Labour

Clare McCallum, Analytical Services Division, Department for the Economy

December 2022

---

## Summary

This Research Bulletin considers the various ways in which the demand for labour can be measured, looking at government and commercial sources which can help signal how high or low the demand for labour is relatively. The sources identified in this bulletin represent online job postings (Lightcast, Adzuna), job vacancies notified to Government (DfC Job Vacancy Service) and business surveys (ONS Business Insights, Chamber of Commerce). It is important to examine all sources when measuring the demand for labour, in order to signal the direction in which it is going.

After examining all sources, the findings signal that the demand for labour has certainly bounced back following the Covid-19 lockdowns, with the volume of online job postings reaching relative highs throughout 2021 and peaking towards the end of 2021, signalling a high demand for labour in Northern Ireland. The demand for labour has remained high in 2022, however it is levelling off in Northern Ireland, with the UK also beginning to signal a weakening of demand.

---

## Introduction

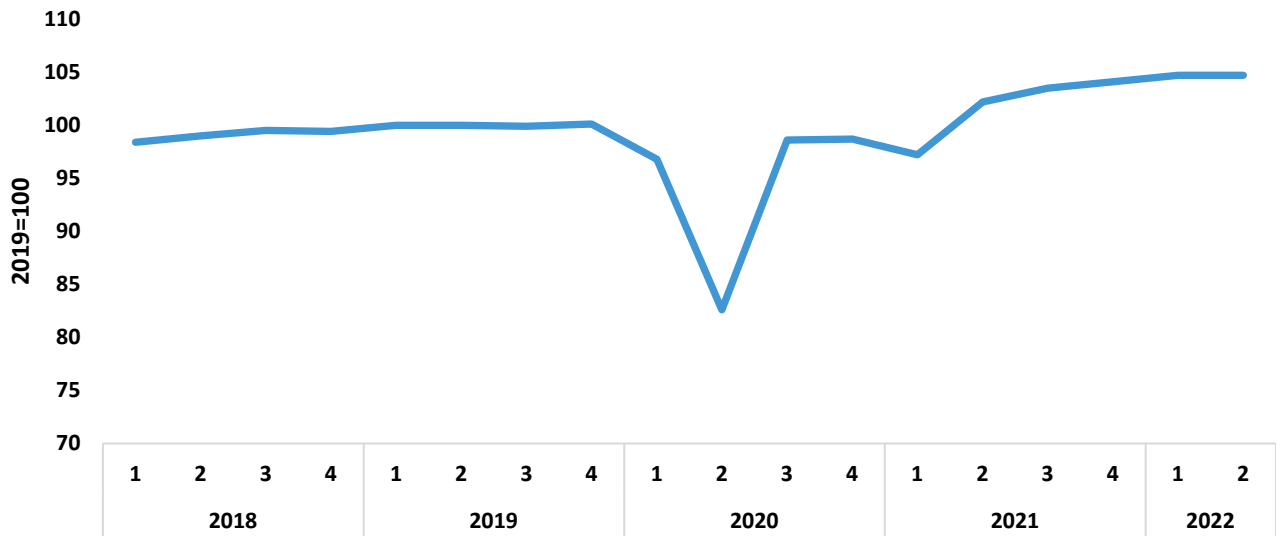
The onset of the Covid-19 pandemic and associated lockdowns caused unprecedented impacts to the Northern Ireland economy and labour market. In the aftermath of the lockdowns, the economy experienced a bounce back, driven by consumer demand. With reports of labour and skills shortages widespread, this put the focus on determining the overall level of demand for labour.

However, measuring the demand for labour can be difficult. There are various sources, both official and unofficial, and it is the overall interpretation of these that can signal how high the demand for labour is relatively. This research bulletin considers the various ways to measure the demand for labour and examines the trends in these. This includes online job postings, job vacancies notified to government and business survey data. Each of these sources has their unique strengths but will have limitations too.

## Context on Labour Market

As Northern Ireland came out of the Covid-19 lockdowns, overall economic activity rebounded quickly and experienced a V-shaped economic recovery. The NI Composite Economic Index (NICEI)<sup>1</sup> for Q2 2022 shows that economic activity increased by 27% from its lowest point during Covid-19 (Q2 2022), a rapid rebound with overall activity now actually higher than any time since 2007. This is illustrated in Figure 1.

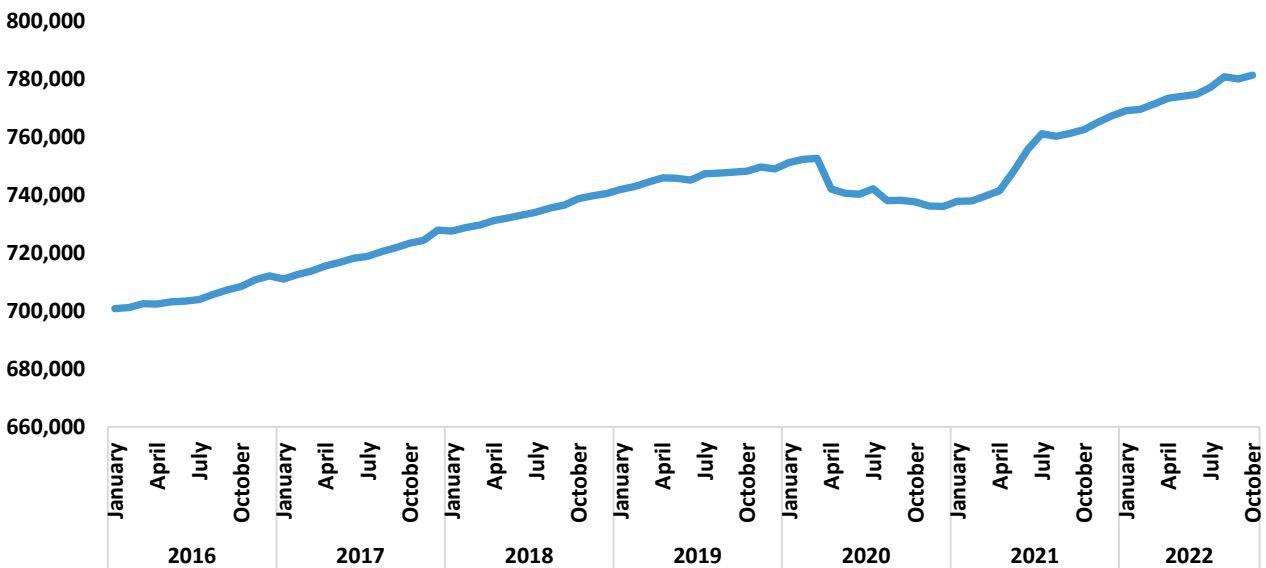
**Figure 1: NICEI – Economic Activity in Northern Ireland (Quarterly)**



Source: NICEI; NISRA

Alongside this rebound in economic activity, the labour market also displayed improvements. The number of payrolled employees according to HMRC is at its highest level on record<sup>ii</sup> after making a quick recovery post Covid-19 lockdowns (see Figure 2). The unemployment rate is also relatively low in historical terms after reaching its joint lowest on record, at 2.3%, during January to March 2022<sup>iii</sup>.

**Figure 2: Number of HMRC Payrolled Employees in Northern Ireland**



Source: HMRC RTI Payrolled Employees, NISRA

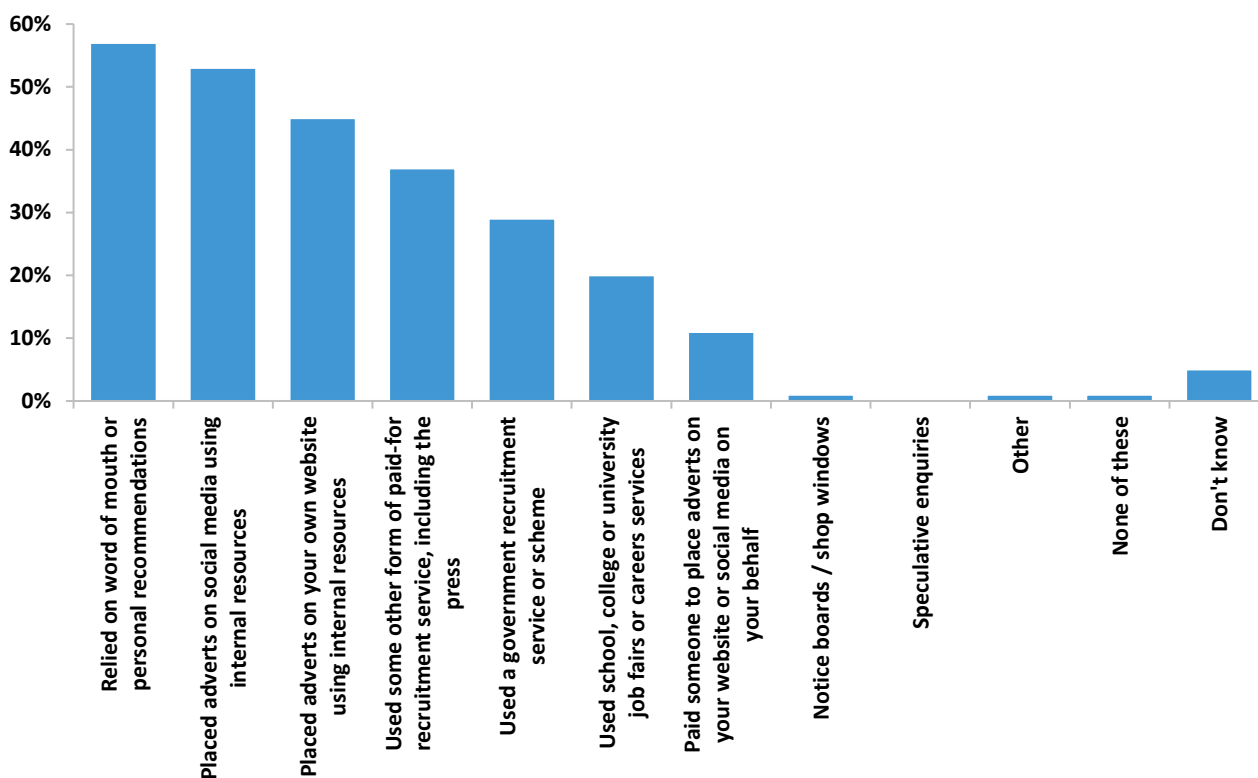
However, some signs of weakness remain. The number of people self-employed has not fully recovered since Covid-19 lockdowns with self-employment of an estimated 105,000 during July to September 2022, down from a recent

high of 139,000 three years earlier<sup>iv</sup>. Despite this, it appears that demand for labour has been higher than normal with multiple reports in the news of labour and skills shortages<sup>v</sup>.

### How Employers Recruit

Employers can use various methods for filling vacancies. According to the 2019 Employer Skills Survey<sup>vi</sup>, 57% of Northern Ireland employers with vacancies in the previous year relied on word of mouth or personal recommendations to fill vacancies. The second most popular response was using social media using internal resources (53%). Figure 3 below highlights the full list of responses.

**Figure 3: Activities to Fill Vacancies, 2019 - Northern Ireland Businesses with a Vacancy over Previous 12 Months**



Source: Employer Skills Survey (2019)

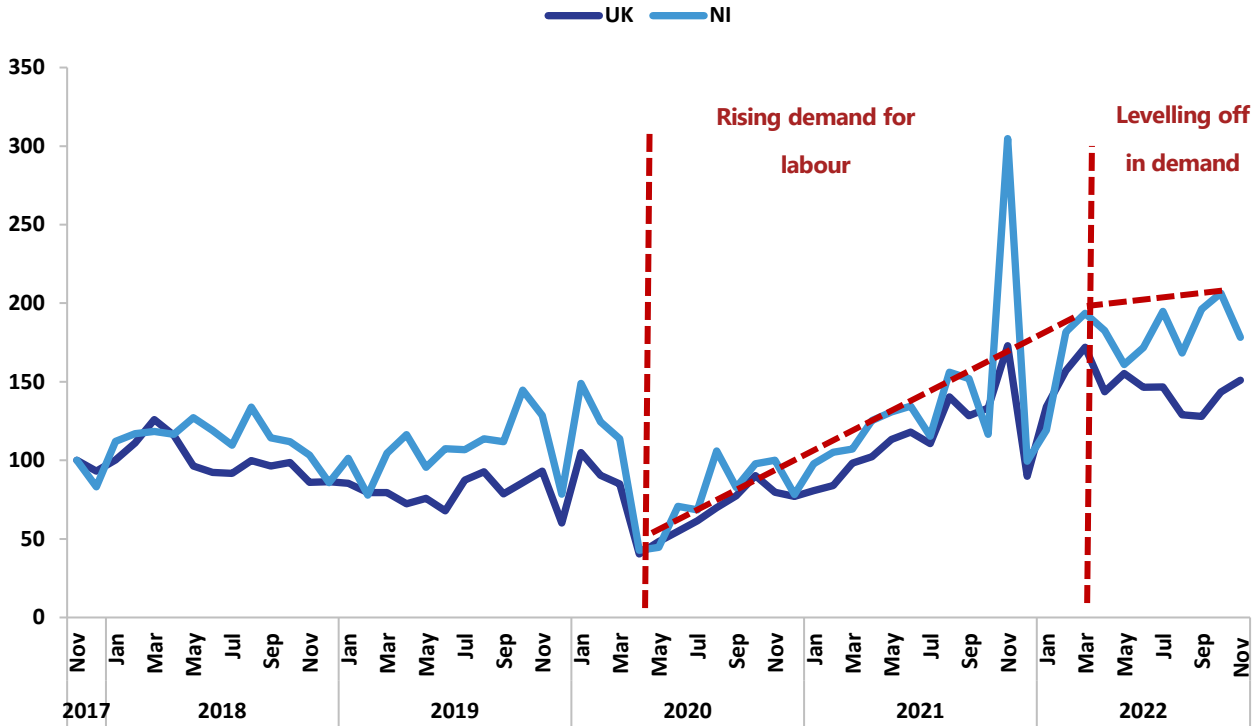
The following sections consider different ways to measure the demand for labour. It should be noted, as shown above, that not all businesses will recruit online or through government recruitment services. Considering the range of sources below provides a fuller picture of labour demand.

### Online Job Postings - Lightcast

According to analysis of Lightcast / Burning Glass<sup>vii</sup> data, a tool that analyses the number of job advertisements placed online by employers, the onset of the Covid-19 pandemic and associated lockdowns had a depressing effect on the levels of unique online job advertisements, with these around 40% of their three-year average in the second quarter

of 2020. The first lockdown had a major impact in the number of unique online job postings, with these falling from approximately 12,900 in January 2020 to a low of approximately 3,700 in April 2020.

**Figure 4: NI vs UK Job Postings, November 2017=100**



Source: Lightcast

Figure 4 shows the level of online job postings in Northern Ireland and the UK. The large dip in online job postings was seen for both Northern Ireland and the UK over the Covid-19 lockdown periods. Unique job postings were 65% and 63% lower in April 2020 for the UK and Northern Ireland respectively compared to two years previous.

Since the Covid-19 reopenings, the number of online job advertisements has trended upwards hitting new highs near the end of 2021<sup>viii</sup>.

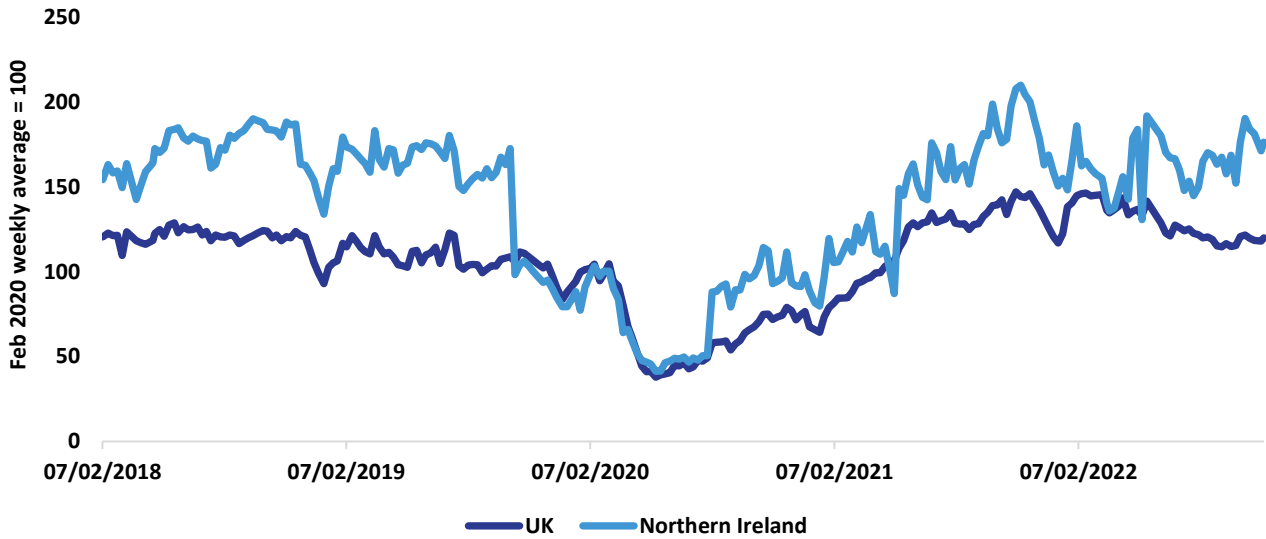
More recently from around April this year, it is clear to see there is a levelling off in the number of unique online job postings. While Northern Ireland appears to have maintained its current level of demand, the UK’s demand for labour appears to be in decline.

### Online Job Postings - Adzuna

ONS publishes job advertisement indices for UK regions using Adzuna<sup>ix</sup>. According to these estimates, the trend is similar to that of Lightcast. There was a large dip to around 40% of their normal level during Covid-19 lockdown periods with demand rising beyond what was previously normal during 2021 and peaking around November 2021. More recently, there is a clear levelling off in demand for Northern Ireland although demand remains relatively high

still, but for the UK demand appears to be easing. The trend over time for both Northern Ireland and the UK is illustrated in Figure 5.

**Figure 5: NI and UK Job Advertisement Indices, February 2020=100**

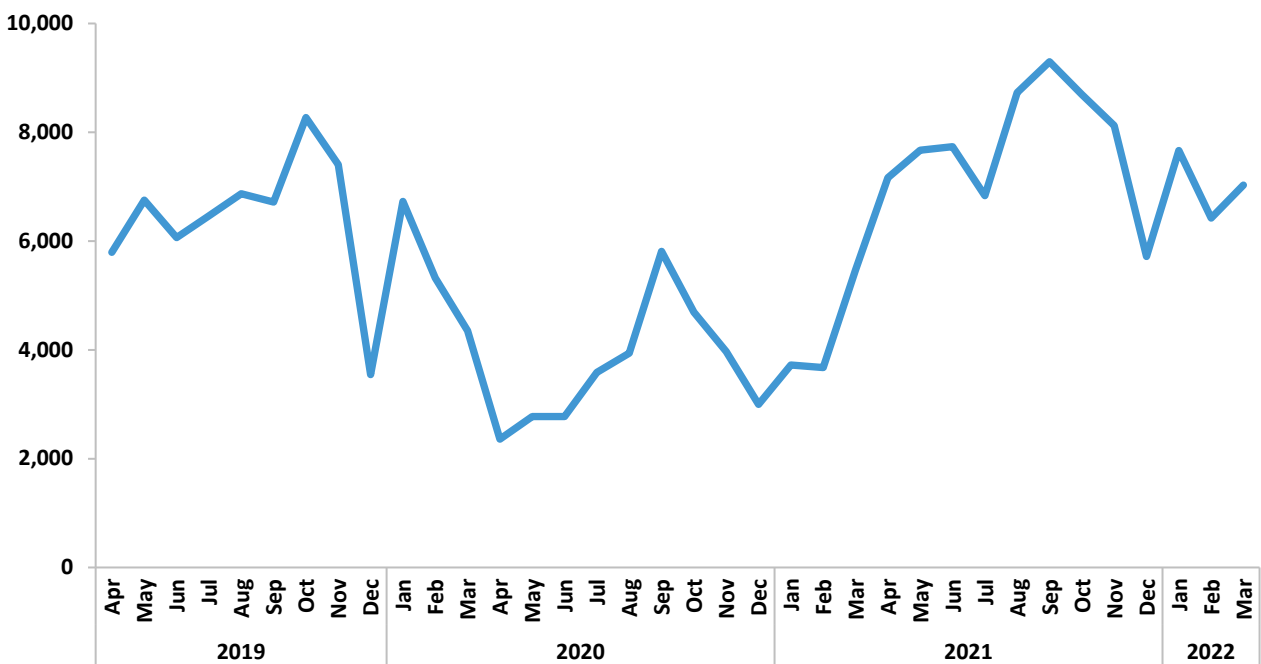


Source: Adzuna Job Advertisement Indices, ONS

### Job Vacancy data – Department for Communities

The Department for Communities (DfC) Job Vacancy advertising service publishes data annually on the number of job vacancies that it has been notified about with the latest available data for March 2022<sup>x</sup>.

**Figure 6: Employment Vacancies notified to DfC, 2019-20 to 2021-22**



Source: Department for Communities Employment Vacancies

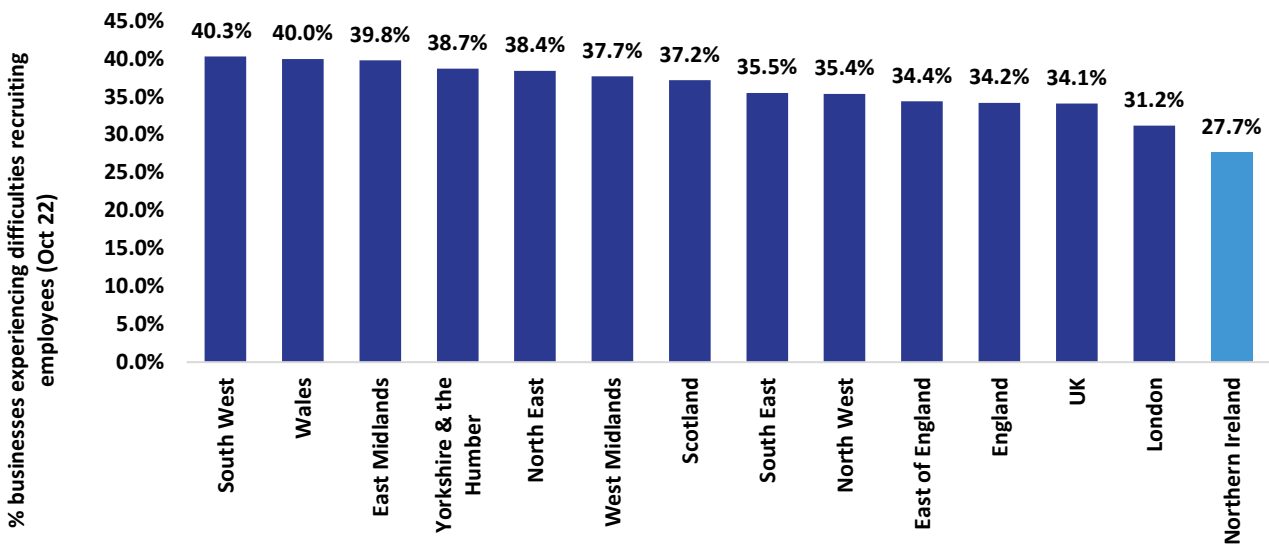
In parallel with Lightcast, a similar picture can be seen where the number of job vacancies declined over the Covid-19 lockdown periods before rising to its highest levels in September 2021.

The number of notified job vacancies reached as high as 9,300 in one month alone. In the 2021-22 year, there were 91,100 vacancies notified to DfC; this itself was an annual high since the time series began in 2014-15. Job vacancies reported to the Department are however beginning to slow down with a dip towards the end of 2021, with job vacancies beginning to level off at the beginning of 2022.

## Surveys of Businesses

This section considers official and unofficial business surveys that indicate whether there are ongoing recruitment difficulties being reported by businesses. According to the fortnightly ONS Business Insights and Impact on the UK Economy survey<sup>xi</sup>, more than one in every four (27.7%) Northern Ireland businesses reported that they were experiencing difficulties recruiting employees in October 2022. However, this was the lowest of any UK region and below the UK average of 34.1%. The results for UK regions are illustrated in Figure 7.

**Figure 7: Proportion of Businesses Experiencing Difficulties Recruiting**



Source: ONS Business Insights and Impact on the UK Economy, Wave 69

When comparing over time, the results also indicate that there were proportionally fewer businesses experiencing recruiting difficulties in October compared with just a few months previous. In July, 40.1% of Northern Ireland businesses reported experiencing difficulties recruiting, similar to the UK average of 38.9% - which has also fallen over the period.

Findings from the Northern Ireland Chamber of Commerce’s Quarterly Economic Survey (QES) for Q3 2022<sup>xii</sup> indicated that 75% of manufacturers and 68% of services are trying to recruit. During the Covid-19 pandemic this had

fallen to just 27% of manufacturers and 21% of services in Q2 2020 reflecting that there has been a strong bounce back after the most difficult times. Recruitment difficulties remain one of the most persistent and growing concerns among members. In Q3 2022, 93% of manufacturers and 84% of services are finding it difficult to get staff. This is the highest share of manufacturers experiencing recruitment difficulties on record.

## **Conclusion**

There are various methods that employers deploy when recruiting for vacancies and therefore measuring the demand for employees can be difficult. It is therefore important to examine a range of sources before making a judgement on the overall level of labour demand.

Across the sources examined, there were signs of rising demand for labour during 2021 before peaking towards the end of 2021, whilst during 2022, there have been mixed signals on the demand for labour. According to online job postings, the demand for labour has remained relatively high but levelled off in Northern Ireland whilst there are clearer signs of a weakening demand for labour across the UK. However, evidence from the ONS fortnightly business survey suggests there are many fewer Northern Ireland businesses experiencing difficulties recruiting during October compared with July.

## **Clare McCallum**

For further information or queries please contact [Clare.McCallum@economy-ni.gov.uk](mailto:Clare.McCallum@economy-ni.gov.uk)

---

<sup>i</sup> [NICEI is an experimental quarterly measure of the performance of the NI economy based on available official statistics](#)

<sup>ii</sup> [HMRC payrolled employees \(Nisra.gov.uk\)](#)

<sup>iii</sup> [NISRA Labour Force Survey January – March 2022 \(economy-ni.gov.uk\)](#)

<sup>iv</sup> [NISRA Labour Market Report – November 2022 \(Nisra.gov.uk\)](#)

<sup>v</sup> [Agenda NI article on Skills Shortages \(Agendani.com\)](#)

[Irish News article on high demand for staff \(Irishnews.com\)](#)

[Newsletter article on Skills Shortages \(Newsletter.co.uk\)](#)

<sup>vi</sup> [Employer Skills Survey \(2019\) \(Gov.uk\)](#)

Note: Employers could choose multiple options

<sup>vii</sup> Lightcast, a tool that provides current and historical job postings with filters by company, job title, skills, keywords, and more.

<sup>viii</sup> Lightcast, November 2021 spike - Feedback from Burning Glass showed that whilst the majority of the increase in postings in November 2021 was valid, there were observed incidences of recruiters flooding the market in occupations related to Administrative/Clerical roles, Customer Services Representatives and Software related roles, leading to the duplication of some postings.

<sup>ix</sup> [ONS Adzuna Job Advert Estimate indices \(Ons.gov.uk\)](#)

Adzuna is an online job search engine who collate information from thousands of different sources in the UK. These range from direct employers' websites to recruitment software providers to traditional job boards thus providing a comprehensive view of current online job adverts. Adzuna is working in partnership with ONS and have made data available for analysis including online advert job descriptions, job titles, job locations, job categories and salary information. The data provided are a point-in-time estimate of all job adverts indexed in Adzuna's job search engine during the point of data extraction.

<sup>x</sup> Department for Communities, Statistical publications on employment vacancies are temporarily on hold following the launch of JobApplyNI.com on 31 March 2022. JobApplyNI is the Department's new vacancy management website which aims to provide an efficient, modern vacancy management system for employers and job seekers, replacing both the former EmployersOnlineNI.com and JobCentreOnline.com websites.

<sup>xi</sup> [ONS Business Insights and Impacts on the UK Economy \(Ons.gov.uk\)](#)

<sup>xii</sup> [NI QES is the largest unofficial survey of business opinion conducted in NI. In total, it surveyed 184 members between 25 August 2022 and 12 September 2022 \(Northernirelandchamber.com\)](#)