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Labour Demand in Ireland – Insights from Online Job Postings

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In a recent *Economic Letter* ([Adrjan and Lydon, 2019](#)), we show how information from online job postings on [Indeed's](#) Irish website can shed light on labour market developments. This box updates the analysis in two ways. First, it provides a timely update on labour demand by showing trends in job postings through to mid-2019 and identifying the most 'in-demand' jobs. Second, given the increasing importance of inward migration for employment growth, it identifies the jobs that attract the most interest from jobseekers located abroad.

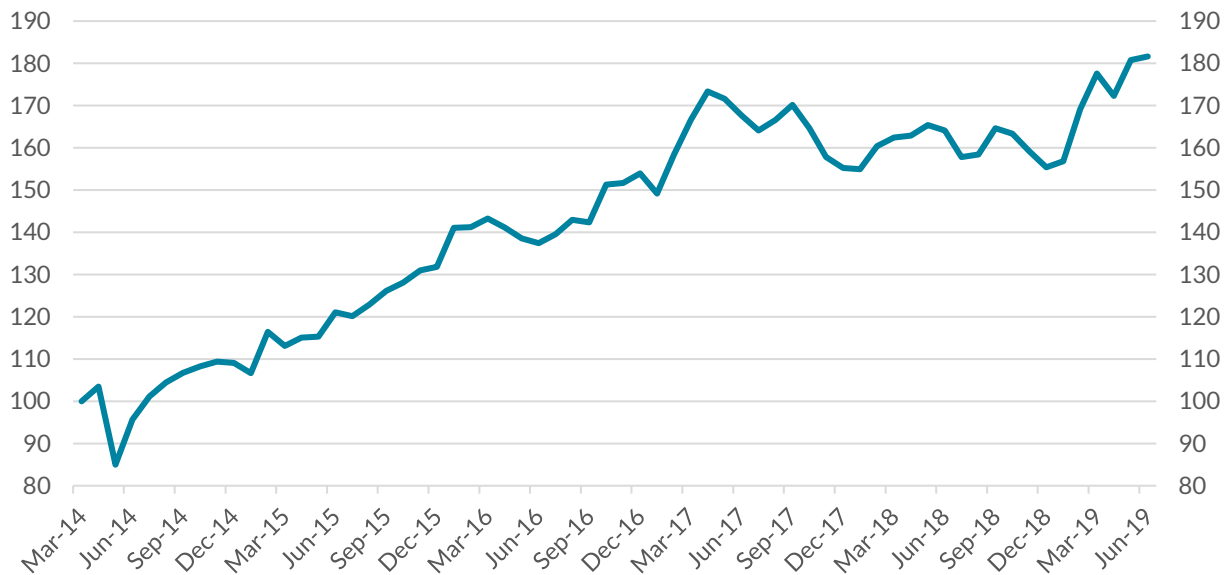
Strong demand for workers in the first half of 2019

One of the key findings from [Adrjan and Lydon \(2019\)](#) is that online job postings closely track official estimates of job vacancies from the CSO. Figure 1 plots the job posting trends to June 2019. There has been a pick-up in the first half of the year, with job postings almost 6.5 per cent higher, compared to the first half of 2018. June 2019 alone was over 10 per cent higher than May 2018.

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Figure 1: Job posting trends (January 2014 = 100)



Source: Indeed. See [Adrian and Lydon \(2019\)](#) for data definitions. Data seasonally adjusted.

Historically, changes in vacancies and changes in new hires are positively correlated. Using the CSO vacancy series from 2008 (allowing us to go back further than the Indeed series), the elasticity of new hires to vacancies is around 0.5. In other words, a 1 per cent increase in vacancies is associated with a 0.5 per cent increase in the number of *new hires*.² The response of employment, unemployment and wages to an increase in job postings/vacancies depends on the share of job churn in new hires. As pointed out in this article and [Staunton and Lydon \(2018\)](#), the share of job churn has grown steadily throughout the recovery and now accounts for over a third of all new jobs in a quarter –marginally above pre-recession levels. [Staunton and Lydon \(2018\)](#) also show that higher job churn tends to put upward pressure on wages.

With a wide range of skills demanded...

Around 30,000 new job postings appear on the Indeed website each month, attracting 3.9 million monthly visits.³ Table 1 lists the top-ten job titles advertised on Indeed in the first half of 2019. Just over one in every hundred jobs is for a 'Customer Service Representative'. Related roles of 'Sales Assistants' and 'Sales Representatives' also appear in the top-ten. After this, the range of job titles is quite diverse, covering healthcare, financial, administrative, construction and service-related roles. This is consistent with the broad-based nature of employment growth since the start of the recovery.

² A 'new hire' is defined as any employee starting a new job in the last three months. This includes workers who transition from inactivity (including inward migration) or unemployment *and* workers moving from one job to another, i.e. 'job churn' or 'job switchers', as in [Staunton and Lydon \(2018\)](#).

³ SimilarWeb, Total Visits, January 2019.



Table 1: Top-ten job titles advertised on Indeed Jan-Jun 2019

Rank	Occupation	Share of all job postings
1	Customer Service Representative	1.10%
2	Quantity Surveyor	0.90%
3	Cleaner	0.80%
4	Sales Assistant	0.80%
5	Chef	0.80%
6	Sales Representative	0.70%
7	Administrator	0.70%
8	Porter	0.60%
9	Healthcare Assistant	0.60%
10	Accountant	0.60%
	<i>Top-ten total</i>	7.70%

Source: Indeed job postings advertised on Indeed's Irish Website between January and June 2019.

Table 2: Fastest-growing occupations – Growth in the share of job postings on Indeed from Jan-Jun 2018 to Jan-Jun 2019

Rank	Occupation	Growth rate
1	Food Preparation Workers	69.00%
2	Surveyors	69.00%
3	Truck Drivers	60.00%
4	Civil Engineers	58.00%
5	Sales and Related Workers	50.00%
6	Electrical and Electronic Engineering Technicians	47.00%
7	Teacher Assistants	36.00%
8	Mechanical Engineers	35.00%
9	Electrical Engineers	34.00%
10	Architectural and Civil Drafters	34.00%

Source: Indeed occupations with at least 500 jobs posted in each period.

As well as the *absolute* share of job postings in 2019 H1, we can also look the jobs that have *grown* their share of postings over the last year (Table 2). We aggregate jobs to slightly wider occupational



categories than in Table 1 to show a broader picture of current trends in labour demand (these ten occupations represent 8.2 per cent of job postings in 2019). For example, whilst *Quantity Surveyors* are among the most common job titles, we see growth in a much broader range of skilled construction-related roles (surveyors, civil engineers and architectural/civil drafters). This increase in the demand for construction-related roles, combined with strong wage growth in the sector⁴, suggests that it may be a challenge to meet this increasing labour demand in the short-term.

Migrants are a potentially important source of workers in technology, healthcare and construction

Inward migration will play an increasingly important role in meeting labour demand in Ireland in the future.⁵ We use the Indeed data to analyse the search patterns of jobseekers located outside of Ireland actively searching for jobs in Ireland. This information on ‘migration intentions’ has been shown by Mamertino and Sinclair (2019) to be strongly positively correlated with actual migration patterns.

We measure ‘migration intentions’ by counting the share of clicks on job ads from jobseekers located outside of Ireland, at the time of the search.⁶ Table 3 lists the top-ten job titles ranked by share of clicks from within the EU, but outside of Ireland. For these top-ten jobs, almost four out of every ten clicks (37 per cent) is from a job search outside of Ireland (overall foreign share). To put this figure in context, for all job postings on Indeed, around one-in-nine clicks (11 per cent) comes from outside Ireland. For comparison, the same figures for the UK and London are 3 per cent and 9 per cent respectively.

Language-related roles attract considerable interest, with up to 40 per cent of clicks on these jobs coming from jobseekers outside of Ireland, and around 25 per cent from within the EU. After languages, technology-related job searches are popular, with more than one-in-three clicks from foreign jobseekers, of which around half are within the EU. Architects are the only job title that appears in both the ‘fastest growing’ list in Table 2 and in the top-ten list of EU job-seeker interest. This suggests that fulfilling these high-demand roles in the future may rely increasingly on inward migration, from both within and outside of the EU.

⁴ See [CSO EHECs, May 2019](#).

⁵ This is a recurring theme in recent Quarterly Bulletins. As well as this article, see Box C, [Quarterly Bulletin 2, 2019](#), “Inward Migration and the Irish Labour Market”, by David Staunton.

⁶ From the geolocation of the Internet Protocol address.



Table 3: Top 10 job titles by share of clicks from elsewhere in the EU, Jan-Jun 2019

Rank	Occupation	EU click share	Overall foreign click share
1	Translator	25%	41%
2	Bilingual Sales Representative	23%	36%
3	Game Tester	19%	32%
4	Obstetrics And Gynaecology Physician	16%	53%
5	Media Content Reviewer	16%	29%
6	Architect	14%	39%
7	iOS Developer	13%	36%
8	Android Developer	13%	35%
9	PHP Developer	13%	41%
10	C++ Developer	12%	31%

Source: Indeed job titles with at least 100 posted jobs. EU excludes Ireland.

Table 4 lists the top-ten job titles ranked by share of clicks from outside of the EU. Technology related job titles are once again prominent, with various roles receiving around 30 per cent of clicks from foreign jobseekers. The key difference versus Table 3 is the high interest in healthcare roles when we look outside the EU. Four of the top-ten roles, including the top-three, are in healthcare, with up to a half of all job search for some of them coming from workers currently located outside of Ireland. Finally, as with Architects in the previous table, we see that fulfilling labour demand in certain skilled construction-related jobs – like *Senior Civil Engineers* – relies heavily on inward migration, with 40 per cent (35 per cent) of clicks on these jobs coming from foreign (non-EU) searches. It is clear that Irish employers are competing in global labour market for many of these skilled roles.



Table 4: Top 10 job titles by share of clicks from outside the EU, Jan-Jun 2019

Rank	Occupation	Non-EU click share	Overall foreign click share
1	X-Ray Technician	45%	51%
2	Obstetrics And Gynaecology Physician	37%	53%
3	Emergency Medicine Physician	36%	43%
4	Senior Civil Engineer	35%	40%
5	Senior .Net Developer	34%	40%
6	Intensive Care Nurse	33%	37%
7	Senior Software Engineer	32%	40%
8	SAP Consultant	31%	41%
9	Senior Automation Engineer	30%	36%
10	Software Architect	29%	36%

Source: Indeed job titles with at least 100 posted jobs.