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Data Insight

Who gets a graduate job? The impact of language and migration on the early careers of Welsh students

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Summary

This Data Insight explores the influence of the Welsh language and migration on the probability that Welsh-domiciled graduates are in a graduate job around six months following the completion of their studies. Using linked administrative data combined with information from the Destinations of Leavers from Higher Education (DLHE) survey, we find that leaving Wales to work elsewhere in the UK is associated with an increased probability of finding a graduate role within six months of qualifying from university. For those who choose to find work in Wales, the probability of gaining a graduate role is higher for those who are fluent in Welsh and who studied for their degree – at least in part - through the medium of Welsh.

Background

Skills, their development and utilisation feature frequently in policy discussions. In terms of the demand for skills, evidence from the 2024 Skills and Employment Survey (SES) suggests that the requirement from employers for graduate level qualifications has continued to increase. In 1986, just one in five (20%) workers reported that a graduate level qualification would be required for them to get their current job. By 2024, almost half (46%) report that a graduate level qualification would be required for them to get their current job. Are workers, however, able to find jobs that make effective use of their skills? The 2024 SES reveals that the proportion of job holders who have qualifications above the level currently required if they were to apply for their job today has exhibited a small but steady decline since 2006. Nonetheless, over a third of workers (35%) regard themselves as overqualified (Davies et al, 2025).

In the context of the massification of Higher Education that has occurred in the UK, particularly since the early 1990s (Bolton, 2025), attention often turns to whether graduates are able to find jobs that make effective use of their skills. Studies of early careers of graduates from the 1990s revealed that many graduates initially gained work in jobs for which they could be regarded as being overeducated. However, the proportion employed in these non-graduate roles was observed to decline during the months following graduation (Elias et al 1999, Purcell et al. 2005). The later Futuretrack study of 2005/06 entrants to higher education however revealed a different pattern, with the proportion of graduates in non-graduate occupations persisting during the years following graduation (Purcell et al, 2013). Whilst employment in non-graduate jobs can provide useful development opportunities and much needed earnings, time spent in these jobs can slow down entry into graduate positions (Behle, 2016; Green and Henseke, 2016).

The likelihood of gaining a graduate job will, in part, be linked to geographical mobility.Within the UK, internal migration is most often observed as the movement of workers towards 'escalator regions' which provide greater opportunities for career advancement; most notably London and its neighbouring commuting regions (Gordon et al. 2015). Among graduates, those who move away to study are more likely to subsequently move for employment (Faggian et al., 2007; Hoare and Corver, 2010). Those students who remain close to home are less likely to operate in the national graduate labour market (Furlong and Cartmel, 2005). The Futuretrack

study confirms that those respondents who lived at home during the course of their studies were more likely to express a preference for developing their careers locally or regionally. However, these graduates were less likely to be working in a job that was mainly undertaken by graduates and were less likely to be optimistic about their long-term career prospects compared to those who had moved away from home (Artess et al, 2014).

Within Wales, the public sector represents an important source of good quality employment for graduates. ONS estimates reveal that half (49%) of employed graduates in Wales work in public administration, education and health, compared to under a third (32%) of graduates in London. Furthermore, these sectors account for 55% of graduates employed in graduate roles in Wales – the highest figure across Great Britain.). In 2016, Welsh Language Standards were introduced to ensure that public bodies treat the Welsh language no less favorably than English (Welsh Language Commissioner, 2016). The Welsh Language Standards have therefore increased demand for bilingual skills within a sector that is of particular importance in terms of graduates being able to access jobs that are commensurate with their skills and abilities. In this context, this Data Insight examines the importance of both geographical mobility and Welsh language skills on the employment outcomes of Welsh graduates.

What we did

Through the Secure Anonymised Information Linkage (SAIL) Databank (Lyons et al., 2009), we linked administrative records of two successive cohorts (2010/11 and 2011/12) of Key Stage 4 learners within the National Data Collection (NDC)[1] with data from the Post-16 Data Collection and the Lifelong Learner Wales Record (LLWR). We linked these records to data from the Higher Education Statistics Agency (HESA) for students who entered university between 2013/14 and 2014/15. This linked dataset was subsequently linked with two cohorts of data from the HESA Destinations of Leavers from Higher Education (DLHE) survey for the years 2016/17 and 2017/18. The DLHE survey aimed to contact graduates six months after qualifying from university to collect information about the employment in which they were engaged. Our data records the destinations of over 11,000 Welsh-domiciled learners. We also linked these records to data from the 2011 Census, which allowed us to account for family socio-economic background in our analysis.

Definition of a graduate job

In the DLHE dataset, the occupations held by graduates are coded to the Unit Groups of the 2010 Standard Occupational Classification (i.e., the 4-digit level). We distinguish between graduate and non-graduate jobs using the SOC(HE) 2010 classification derived by Elias and Purcell (2013) that was developed to "facilitate analysis of the transition between HE participation and labour market integration". Graduate jobs are defined as those occupations where graduates use their subject knowledge and skills they had developed as undergraduates in their jobs. Non-graduate jobs are those where degree-level education is not necessary in order to be able to do the job well.

Other variables pertinent to our analysis are as follows:

Measures of Welsh language ability

Data collected by schools provides information on pupils' Welsh ability, generally as assessed by their parents or guardians. Using records for pupils as held for Year 11 we can identify whether pupils were reported to be 'Fluent in Welsh', or that they could 'Speak Welsh but not fluently', or if they 'Cannot speak Welsh'.

Tuition through the medium of Welsh

For those students attending university in Wales, the HESA data records the number of credits studied through the medium of Welsh in any academic year. In the UK, 120 credits typically represent one year of

1. The National Data Collection (NDC) is the term given to annual pupil level collection of statutory teacher assessment data in Wales.

full-time undergraduate study. In this report we identify those students who are fluent in Welsh and who have studied at least 40 credits through the medium of Welsh during any academic year that we are able to observe them attending university.

Migration: 'Stayers', 'Leavers' and 'Returners'

To examine migration patterns in Welsh-domiciled students, we divide graduates into three groups which we term 'Stayers', 'Leavers' and 'Returners'. They are defined as follows:

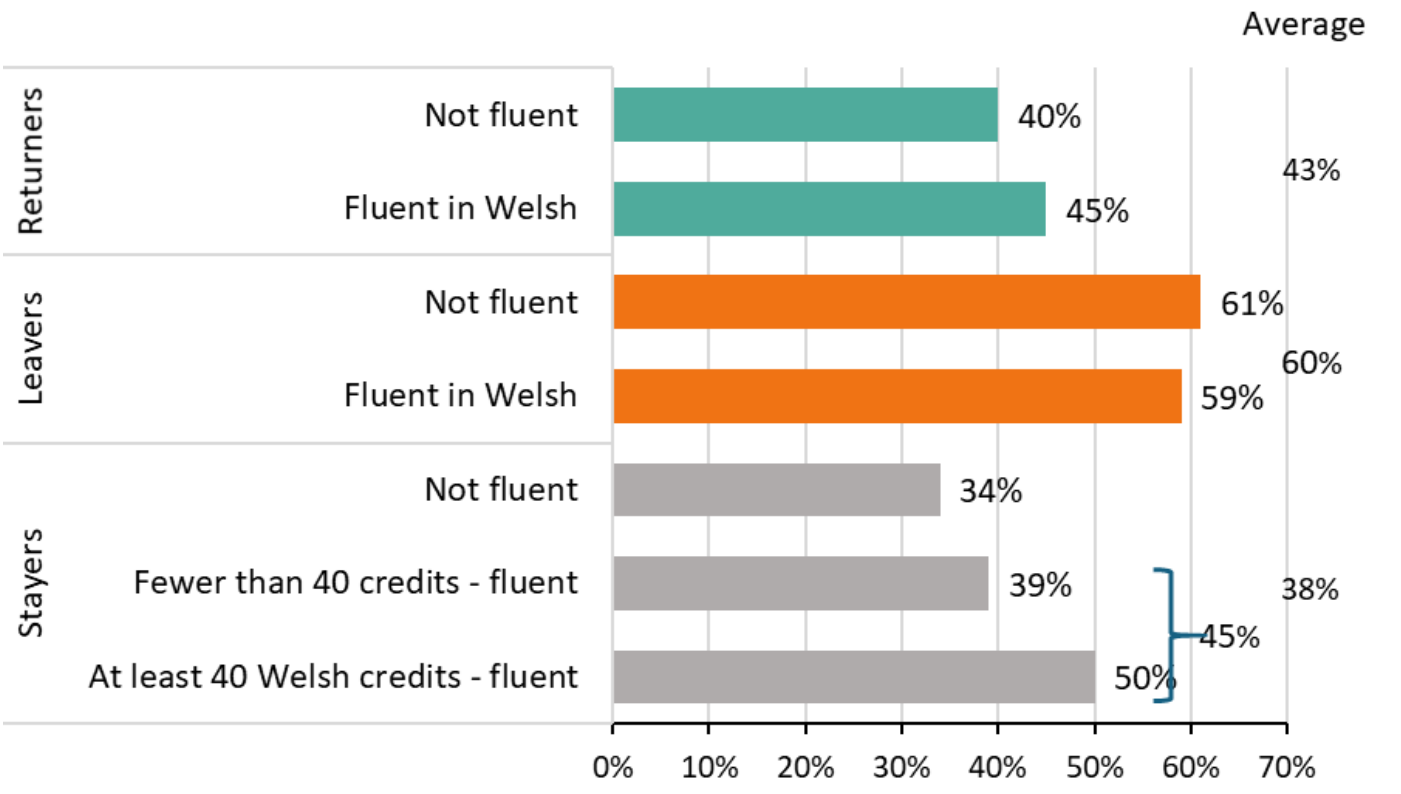
- Stayers: those who studied at a Welsh university and subsequently gained employment within Wales
- Leavers: those who found work elsewhere in the UK, outside of Wales[2]
- Returners: those who studied elsewhere in the UK but subsequently returned to Wales for work

We differentiate between Stayers, Leavers and Returners who are either fluent or not fluent in Welsh, as well as those who studied for their degree courses through, either whole or in part, the medium of Welsh. We also distinguish between Leavers who, at the time of the DLHE survey, are living within London or the South East of England as opposed to those who are living elsewhere in the UK.

What we found

Figure 1 provides a summary of graduate job attainment by migration patterns of learners and by Welsh fluency. Among all Welsh-domiciled university graduates in our data, 44% are defined as being in a graduate job at six months following graduation.

Figure 1: Employment in graduate occupations among Welsh-domiciled learners at six months following graduation



[2] Whilst some Leavers in our sample chose to study at a Welsh university before migrating elsewhere, a large majority had already chosen to study elsewhere in the UK.

Those who leave Wales to find work are the most likely to attain a graduate position at six months following graduation (60%), whilst those who return to Wales after studying elsewhere in the UK (43%) are around 5 percentage points more likely to have entered a graduate position compared to those who stay in Wales to both study and work (38%). This finding is not surprising as the decision of graduates to leave or remain away from Wales may well be associated with gaining a role that is worth moving elsewhere for.

There is also however evidence of positive returns to speaking Welsh among both those who both studied and remained in Wales following graduation and among those who returned to Wales having studied elsewhere[3]. Among those Welsh-domiciled graduates who remained in Wales, 45% of those who were recorded as being fluent in Welsh held a graduate role, compared to just 34% of those who could speak some Welsh but were not fluent. This differential is estimated to be even greater when focusing upon those graduates who were fluent in Welsh and who received tuition through the medium of Welsh. Among this group, half gained employment within a graduate role.

Among the returners, we also observe that those who were fluent in Welsh were more likely to gain a graduate job (45%) compared to those who were not (40%). Intuitively, whilst graduate job attainment is highest among those who leave Wales for work, fluency in Welsh does not appear to affect the employment outcomes of those who move away.

These differences in employment outcomes will in part reflect differences in the characteristics of graduates between these groups. For example, further analysis of the data reveals that entry into graduate jobs was higher for those in the top quintiles of GCSE and A-level results, while graduates from deprived backgrounds were less likely to attain a graduate position. There was also a clear gradient in graduate outcomes with respect to parental occupation, with graduates from managerial and professional family backgrounds being more likely to enter graduate occupations themselves. The higher rates of employment within graduate occupations among those who leave Wales could therefore simply reflect – at least in part - the characteristics of this group of graduates.

To overcome these issues, we use multivariate regression techniques. Regression analysis allows us to simultaneously control for the characteristics of graduates so that the separate and additional effect of migration or fluency in Welsh on graduate outcomes can be quantified. At the outset it must be acknowledged that regression analysis can only control for characteristics that are contained with our linked dataset. Otherwise, unobserved personality traits - such as motivation, ambition, or career-mindedness - can only be controlled for as far as that they are captured by other items in our database such as educational attainment. Such issues are likely to be important determinants of the decision to leave Wales to attend university or to gain employment following university.

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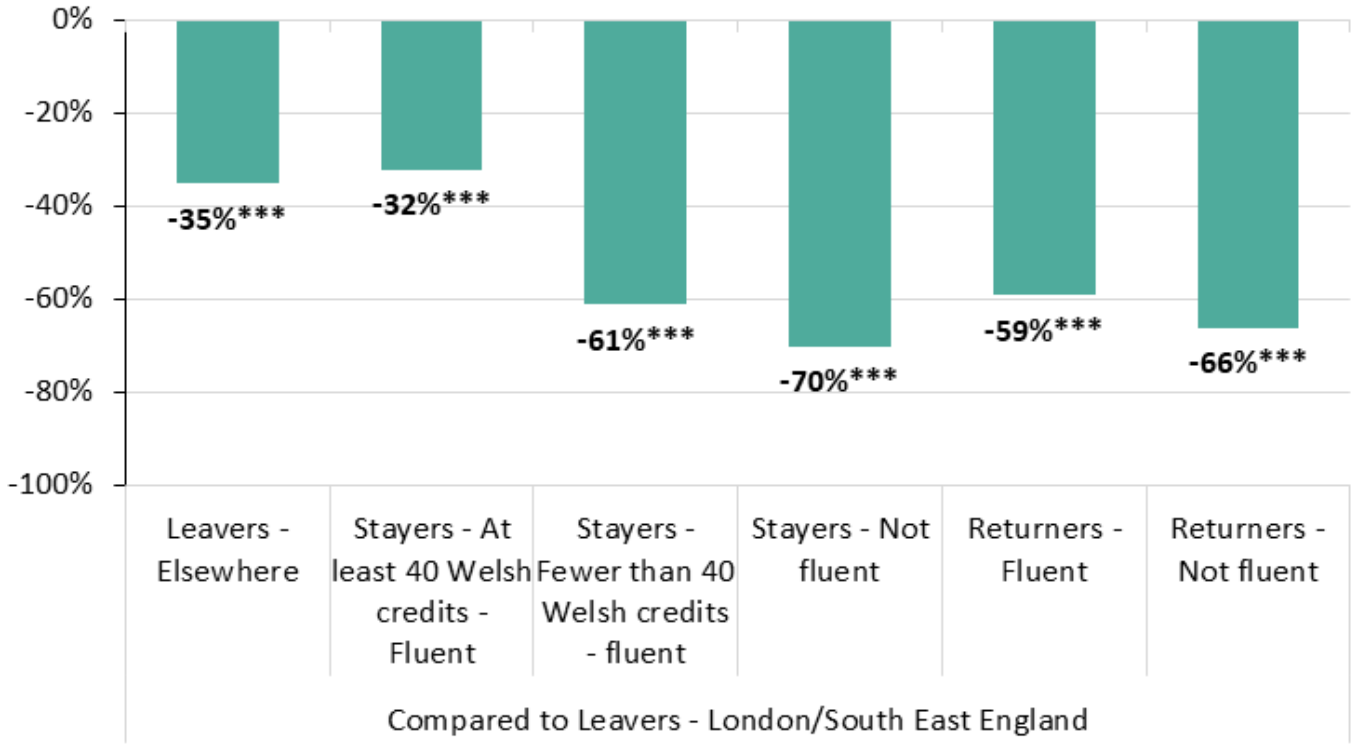
[3] Within this analysis we distinguish between those who speak Welsh fluently versus those who can either speak Welsh but not fluently and those who cannot speak it at all. Further analysis (not presented) revealed that being able to speak Welsh but not fluently did not influence the likelihood that a graduate was employed in a graduate job following university. In terms of attaining graduate positions, the benefits of speaking Welsh only accrued to those who could do so fluently.

Figure 2 summarises the results from a logistic regression that estimates the likelihood of gaining a graduate job at six months following graduation after controlling for a variety of personal and household characteristics.[4] We estimate that:

- **Those Welsh-domiciled graduates work elsewhere in the UK are 35% less likely to find a graduate role than those who find work in London or South East England.** Even among those who leave Wales, living in London and the South East is associated with improved employment outcomes.
- **Returners and Stayers who are not fluent in Welsh[5] are estimated to be 66% and 70% less likely to find a graduate position,** respectively, compared to those in London and the South East. However, this decreases to 59% and 61%, respectively, for Returners and Stayers who are fluent in Welsh.
- **Fluent Welsh speakers who study at least 40 credits of their course in any given year of university are only 32% less likely to find a graduate role within six months.** This is similar to that of the Leavers who find work in other parts of the UK outside of London and the South East.

Figure 2: Regression model estimating the effects of study and work locations and Welsh language fluency upon graduate job attainment



Confidence levels: ***1%, **5%, *10%

[4] The controls we include in our regression models are GCSE points quintiles, A-level points quintiles, HE degree classification, HE subject area, gender, ethnicity (white or other), eligibility for Free School Meals, whether registered as having Special Educational Needs, household deprivation, socio-economic background, local authority, and year.

[5] 'Not fluent in Welsh' includes both those who do not speak Welsh and those who do speak Welsh but not fluently.

Why it matters

The link between language, migration and economic growth features prominently in the Welsh Government strategy document Prosperity for All, which asserts that "Good quality jobs (in) attractive places…to live…will provide people with a reason to remain or return to work and live in communities where the Welsh language thrives" (Welsh Government, 2019). The ambitious targets to increase the number of Welsh speakers set out in Cymraeg 2050 also emphasises the need to create an employment market in Wales that is attractive to Welsh speakers (Welsh Government, 2018). Our analysis demonstrates that among those who remain in Wales, receiving tuition through the medium of Welsh appears to be beneficial in terms of securing a graduate role.

The increasing demand for Welsh skills among employers should continue to reinforce the benefits associated with bilingual skills. Being a Welsh speaker and having the opportunity to receive tuition through the medium of Welsh could therefore have real bearings on the decisions of prospective entrants to university. The challenge is to ensure that those graduates from non-Welsh-speaking backgrounds and those who can speak Welsh but not fluently are also able to benefit from these opportunities.

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