Patterns and destinations of cross-border higher education mobility in the UK

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This briefing paper is one of two which summarise the results of research on cross-border mobility for HE study among young full-time students entering higher education institutions in the UK in 2012. This briefing describes patterns and destinations of flows. A separate briefing paper summarises analyses of student characteristics and cross-border mobility.

Introduction

There are broad differences in the extent and forms of higher education (HE) participation amongst young people in the United Kingdom (UK) in relation to their socio-economic backgrounds and ethnicity. In the devolved policy context of the UK, institutional, policy and financial factors differ across the four countries of the UK, and have the potential to incentivise or disincentivise cross-border flows. These pressures may affect students differently in relation to their social characteristics and may contribute to wider inequalities in HE participation. This study explored whether this was the case through analysing the relationships between the socio-economic background and ethnicity of students; where students live and the institutional and policy characteristics in their home country; and whether students enter an HEI in their home country or in another UK country.

This analysis was carried out using Higher Education Statistics Agency (HESA) data, principally of young full-time undergraduate entrants in 2012 (N=290,510; N movers=22,155). The research found:

- The main differences in inflows and outflows for each country were in the specific institutions and types of institutions their students predominantly entered and the extent to which the mobility from the country was focused on particular regional and country destinations.
- There was greatest social diversity of movers amongst those living relatively close to a border, from where mobility was most common. The findings suggest that if the social as well as financial costs of mobility are lower, it is a more feasible option for those who are not socio-economically advantaged.
- Movers were more likely than stayers to enter higher status institutions, but mobility was to all tariff levels of institutions, reflecting differences in institution supply in the home country.
- Under-supply of provision in the home country in relation to institution types or fields of study can help explain mobility. In particular, mobility to less selective institutions was associated with field of study under-supply, which further helps to explain why movers from a range of social backgrounds cross borders.
- Overall, movers from all countries were using mobility in ways specific to that country, affected by physical location, institutional and field of study supply in the home country, and established pathways and traditions of mobility out of countries.
Extent and direction of cross-border flows

Figures 1 and 2 provide an overview of inward and outward flows of young full-time entrants to and from each country. Figure 1 shows that as a percentage of entrants, outward flows have been largely unchanged for England since a time preceding legislative devolution (in 1999). Due to the large relative size of the HE sector in England, inflows to the country’s HEIs were a very small percentage of entrants (}
Figure 2). Outward flow from Scotland has decreased over time (Figure 1), but despite a strong incentive to stay in Scotland in 2012, when the difference between no fee debt in Scotland and the fee debt for studying elsewhere increased substantially, a small percentage of entrants, representing just over 1000 students, nonetheless left Scotland to study. Scotland has experienced much higher levels of inflows than outflows. This increased in 2012 compared to the two previous years (}
This may be due to the change in student number control policy in Scotland in 2012, by which RUK entrants were taken out of the student number cap, allowing universities to recruit RUK entrants to the extent that they were able and willing to do so.

Figure 1: Percentage of young full-time entrants who were movers-out by country of domicile – five years of entry

In percentage terms, outflows from Wales and Northern Ireland have over this period been much higher than those from England and Scotland, but there has been fluctuation in both cases (Figure 1). Inflows into Wales were also high, although they dropped in 2012 compared to 2011.
Figure 2). Almost all movement into and out of Wales is with England. One suggestion for reduced inflow to Wales in 2012 is that it was a reaction of England-domiciled students to the increased fees in England, perhaps in the form of fewer deferrals in 2011, trying to cut costs by staying closer to home, or by focusing mobility more on accessing higher tariff universities, either within England, or in Scotland where the number of movers-in increased in 2012.
The changes over time for Northern Ireland would appear to relate to other factors. A key characteristic of HE in Northern Ireland is under-supply of places, necessitating movement for a substantial minority of students. The extent of the under-supply lessened in 2004 when capacity was increased in Northern Ireland, apparently reflected in the reduction in outflow that year compared to 1996 (Figure 1). In 2012, students staying in Northern Ireland were liable for the pre-2012 fee level, while those studying elsewhere in UK were subject to the full higher fee level of the institution entered. This would have created a strong disincentive for leaving Northern Ireland, but with continued supply issues in Northern Ireland, an unavoidable one for many determined to enter HE. There is on the other hand very little inflow into Northern Ireland (Figure 2).

Overall, the data show some differences between 2012 entrant patterns and those from the previous two years, suggesting that various policy changes, including changes in fee differentials, may have had some impact. However in comparison with earlier years, the patterns in 2012 fall within the percentage range of mobility from each country, suggesting that from a recent historical perspective, mobility in 2012 was not a notable outlier, and therefore that policy changes may not have been the most important factor in mobility patterns that year.

Table 1 provides more information on directions of flows. As calculated from the table, 69% of England-domiciled movers went to Welsh HEIs, and 29% to Scottish HEIs. Of Northern Ireland-domiciled movers, 73% went to English HEIs and 24% went to Scottish HEIs. Almost all Scotland and Wales-domiciled movers went to English HEIs.
Table 1: Percentage of UK domiciled full-time young entrants from country of domicile entering HEIs in each country, 2012 (row percentages)

<table>
<thead>
<tr>
<th>Country of domicile</th>
<th>Country of study</th>
<th>England</th>
<th>Scotland</th>
<th>Wales</th>
<th>Northern Ireland</th>
<th>Total (N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>England</td>
<td></td>
<td>95</td>
<td>1.4</td>
<td>3.3</td>
<td>0.1</td>
<td>242970</td>
</tr>
<tr>
<td>Scotland</td>
<td></td>
<td>4.6</td>
<td>95</td>
<td>-</td>
<td>-</td>
<td>22405</td>
</tr>
<tr>
<td>Wales</td>
<td></td>
<td>41</td>
<td>0.7</td>
<td>5</td>
<td>-</td>
<td>14585</td>
</tr>
<tr>
<td>Northern Ireland</td>
<td></td>
<td>22.7</td>
<td>7.4</td>
<td>1.1</td>
<td>68.8</td>
<td>10555</td>
</tr>
</tbody>
</table>

‘<’ fewer than 52 cases.

Home area and extent and directions of mobility

The percentage of young full-time entrants from each local authority (LA) domicile who were cross-border movers was analysed. Movement was fairly high from across Wales (ranging from 15% to 70% of entrants from the LA entering cross-border institutions), and movers were actually more common than stayers among young entrants from 6 LAs which were located on the border with England or in the counties close to the border in North Wales, where there is limited HEI provision. The counties with the lowest percentages of movers among entrants were all in the south of Wales. Ten per cent of Welsh entrants went to South-West England HEIs and 10% to North-West England HEIs. LA of origin is strongly associated with the region in which movers enter HEIs. Those from the north of Wales most commonly went to the North-West of England (or Yorkshire and Humber); those from the south of Wales to the South-West of England. 14 English institutions accounted for almost half of all movers, including UWE Bristol (8% of Wales-domiciled movers), Chester (5%), Liverpool John Moores (4%) and Exeter (4%).

Mobility out of Northern Ireland from each county ranged from 16% to 48% of entrants. Overall, 9% of entrants went to North-West England HEIs, 7% to Scotland, and 4% to North-East England HEIs. Movers from most counties were most likely to go the North-West of England, but from some counties Scotland was a more common destination. These were mainly located down the east coast of Northern Ireland, and so relatively close to airports and ferry ports that connect with Scotland. Ten institutions accounted for almost half of movers, including Liverpool John Moores (10% of Northern Ireland-domiciled movers), Northumbria (7%) and Dundee (5%).

Around 1% of Scottish entrants went to HEIs in each of North-East England, Greater London and South-East England. Scottish LAs with the highest percentage of young movers amongst their entrants were City of Edinburgh (13% of entrants were movers), and the three which are the closest LAs to England: Scottish Borders (9%), East Lothian (9%) and Dumfries and Galloway (8%). Nearly a quarter of all movers were from the City of Edinburgh. Twelve institutions accounted for almost half of movers, including Cambridge (7% of Scotland-domiciled movers), Newcastle (7%) and Oxford (5%).

Those who went to HEIs in North-West England from both Wales and Northern Ireland were more likely, compared to movers to other regions, to be from an intermediate or working class background, to be first generation students, to be lower attainers, and were less likely to have gone to an independent school. Those from Scotland moving to the north of England were a little less socio-economically advantaged and less likely to be high attainers than those moving to elsewhere in England. These findings support the notion that proximity and accessibility can make mobility a more feasible or desirable option for
less socio-economically advantaged students. Generally greater movement into specific regions over time, notably the North-West for students from Northern Ireland and Wales, may have created associated networks and social ties, which could further drive migration to the area. Movement out of Scotland is more spread, as well as less common, and may not be explained to the same extent by issues of proximity and any associated social connections or diaspora.

For England-domiciled students, moving country was much less common than moving region, and both were associated with socio-economic advantage. England-domiciled students living relatively close to borders, particularly the Welsh border, were the most likely to be movers. The most frequently entered institutions were Cardiff (22% of England-domiciled movers), Edinburgh (13%), Aberystwyth (11%) and Bangor (10%). Mobility to Wales for England-domiciled students was not explained by socio-economic advantage to the same extent as mobility to Scotland, but the differences in student characteristics between movers to the two countries was explained largely by the different types of institution entered.

**Institution types**

In addition to identifying the most frequently entered institutions entered by movers, analysis by institution type used an institution tariff measure. All UK HEIs were categorised into tariff groups, based on the average UCAS tariff of the HEI’s entrants in 2012. A form of supply measure was calculated, by dividing the percentage of UK entrants to each group in each country HE system by the percentage of all places for UK entrants in the whole of the UK (Figure 3). A score below 1 indicates a lower percentage of places in the country than would be expected if there was the same distribution of places within the country as within the whole of the UK (which can be termed a relative under-supply); above 1 indicates a higher percentage of places in the country than would be expected if there was the same distribution of all UK places and places within the country (which can be termed a relative over-supply). The measure has limitations but suggests that supply is relatively balanced overall for England, but higher tariff provision appears under-supplied in Wales; lower tariff provision under-supplied and higher tariff provision over-supplied in Scotland; and hugely uneven provision in Northern Ireland, due to only two universities and two teacher training colleges being classified as HEIs, with the effect of no supply at lowest and highest tariff levels.
Movers from all countries were more likely than stayers to enter the highest tariff institutions (Table 2). Of course for students from Wales and Northern Ireland this was inevitable, but there are further important differences to note between countries of domicile and destination. There was a notable difference in the selectivity of institutions entered by movers from England if they went to Scotland rather than Wales. Comparing Northern Irish movers to England and Scotland, movers to Scotland were more likely to enter medium to higher tariff universities; and movers to England low and lowest tariff universities. Mobility to less selective institutions from Scotland, Wales and Northern Ireland appears to map on to the potential supply issues identified for each country, offering at least a partial explanation for this form of mobility.
Table 2: Institution type entered by young full-time stayers and movers by country of domicile 2012 (row percentages)

<table>
<thead>
<tr>
<th>Domicile</th>
<th>Stayer/mover</th>
<th>Highest tariff</th>
<th>High tariff</th>
<th>Medium tariff</th>
<th>Low tariff</th>
<th>Lowest tariff</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>England</td>
<td>Stayed in England</td>
<td>11.5</td>
<td>22</td>
<td>18.3</td>
<td>26.7</td>
<td>21.4</td>
<td>231290</td>
</tr>
<tr>
<td></td>
<td>Stayed within region</td>
<td>5.8</td>
<td>15.8</td>
<td>16.9</td>
<td>33.7</td>
<td>27.7</td>
<td>103750</td>
</tr>
<tr>
<td></td>
<td>Moved between regions</td>
<td>16.1</td>
<td>27.1</td>
<td>19.4</td>
<td>19.4</td>
<td>16.3</td>
<td>127545</td>
</tr>
<tr>
<td></td>
<td>Moved out of England to Wales</td>
<td>19</td>
<td>29.3</td>
<td>21.4</td>
<td>18.2</td>
<td>12.2</td>
<td>11680</td>
</tr>
<tr>
<td></td>
<td>to Scotland</td>
<td>65.2</td>
<td>31.8</td>
<td>27.3</td>
<td>23.5</td>
<td>17.4</td>
<td>8100</td>
</tr>
<tr>
<td>Scotland</td>
<td>Stayed in Scotland</td>
<td>20.8</td>
<td>27.9</td>
<td>25.1</td>
<td>16.9</td>
<td>9.3</td>
<td>21325</td>
</tr>
<tr>
<td></td>
<td>Moved out of Scotland</td>
<td>30.2</td>
<td>24.7</td>
<td>17.9</td>
<td>14</td>
<td>12.4</td>
<td>1080</td>
</tr>
<tr>
<td>Wales</td>
<td>Stayed in Wales</td>
<td>0</td>
<td>16.9</td>
<td>20.7</td>
<td>27.6</td>
<td>34.8</td>
<td>8485</td>
</tr>
<tr>
<td></td>
<td>Moved out of Wales</td>
<td>17.5</td>
<td>24.4</td>
<td>14.8</td>
<td>33.1</td>
<td>10</td>
<td>6100</td>
</tr>
<tr>
<td>Northern Ireland</td>
<td>Stayed in Northern Ireland</td>
<td>0</td>
<td>47.8</td>
<td>3.1</td>
<td>49.1</td>
<td>0</td>
<td>7260</td>
</tr>
<tr>
<td></td>
<td>Moved out of Northern Ireland</td>
<td>15.9</td>
<td>26.8</td>
<td>18</td>
<td>28.6</td>
<td>10.5</td>
<td>3295</td>
</tr>
<tr>
<td></td>
<td>to England</td>
<td>13.6</td>
<td>22.4</td>
<td>17.2</td>
<td>33.8</td>
<td>13</td>
<td>2390</td>
</tr>
<tr>
<td></td>
<td>to Scotland</td>
<td>25.6</td>
<td>39.5</td>
<td>20.1</td>
<td>13.3</td>
<td>1.5</td>
<td>780</td>
</tr>
</tbody>
</table>

Fields of study

Analysis of the field of study entered showed that entrants to medical and veterinary studies were the most likely to be movers, and those entering humanities subjects and physical sciences were also movers to a relatively high extent. A common factor between these fields is that they tend to be available to a greater extent in higher tariff institutions. Movers from the three DAs were also more likely than stayers to enter creative arts and design degrees, which may be explained by a lack of accessible supply in the home country.

The relationship between field of study supply, institution type and cross-border mobility was also analysed, and indicated that for Wales and Northern Ireland-domiciled students
moving was more likely to under-supplied fields of study, but particularly so if moving to lower tariff institutions. The findings particularly for Welsh students suggested that field of study supply issues at lower tariff entry levels may be a factor in students leaving the country, whereas moving to enter higher tariff institutions may be less driven by field of study supply.

**Summary**

Students who had been living close to a border on the Great Britain mainland were more likely to be movers than those living further away. From all countries mobility has been relatively focused on a small group of institutions which was largely consistent in 2004, 2010 and 2012. The main differences between countries were in the specific institutions and types of institutions their students predominantly entered and the extent to which the mobility from the country was focused on particular regional and country destinations. Movers from all countries were using mobility in ways specific to that country, affected by physical location, institutional and field of study supply in the home country, and established pathways and traditions of mobility out of countries. These factors appear to affect countries with overall high outward mobility differently to those with overall low outward mobility.

From Northern Ireland this mobility was particularly strong to the North-West of England and Scotland, and mobility to these relatively closer and more established destination locations more likely to entail entering lower tariff institutions, compared to those who moved further afield and did not follow the more common pathways. From Wales, students entered a mix of institution types and this was more likely in the nearest region of England to where they lived. Geography, history, and physical accessibility combine to explain mobility patterns. Institution supply within Northern Ireland, and Wales to a lesser extent, further contribute to the explanation. From Scotland, there was less concentration of destinations in relation to place, with patterns of mobility explained better by institution type entered. From England mobility patterns were defined more strongly by place of domicile for movement to Wales and by institution type entered for movement to Scotland. Overall, proximity to a border increased the likelihood of being a mover, and more proximal mobility was associated with lower levels of socio-economic advantage, which may be further influenced by the accessibility of institutions and institution types in the home country.

Compared to Scotland and England, Wales and Northern Ireland had more field of study under-supply issues and higher overall outward mobility, and the fields of study which movers were more likely than stayers to enter were wider in range, even though within fields in absolute terms stayers usually outnumbered movers. There was evidence that the field of study supply was associated with staying and moving, particularly amongst students from Northern Ireland and Wales, and more so amongst entrants to lower tariff institutions. From all countries, movers were more likely than stayers to enter medical studies, a field of study in which there is high demand, a strict cap on places and no protection of places for home students as the cap includes RUK students. In other cases, such as mobility to enter humanities fields, the potential benefit of entering a field of study which may have prestige due to its association with high tariff institutions may offer an explanation for cross-border mobility.

The patterns and destinations of mobility summarised in this briefing paper are based mainly on descriptive analysis of population data. They provide a useful overview of the
movement of HE students in the UK. To further develop understanding of purposes and differences in cross-border mobility the role of student characteristics in cross-border mobility needs to be taken into account. This is the focus of the CREID briefing paper *Student characteristics and their association with cross-border higher education mobility in the UK.*
Related CREID publications

Whittaker, S (2017). *Student characteristics and their association with cross-border higher education mobility in the UK.*

**Working papers published as part of the ESRC grant HE in Scotland, the devolution settlement and the referendum on independence:**


**Related CES publication**

Further information

Further information about the project is available from Dr Susan Whittaker, CREID, Moray House School of Education, University of Edinburgh, Holyrood Road, Edinburgh EH8 8AQ, Susan.Whittaker@ed.ac.uk. All publications and information about this project are available at http://bit.ly/Indy_Scot_HE

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