



THE UNIVERSITY *of* EDINBURGH

Edinburgh Research Explorer

Working paper 4: Student flows across the UK's internal boundaries: Entrants to full-time degree courses in 2011

Citation for published version:

Croxford, L & Raffe, D 2014 'Working paper 4: Student flows across the UK's internal boundaries: Entrants to full-time degree courses in 2011' pp. 1-34.

Link:

[Link to publication record in Edinburgh Research Explorer](#)

Document Version:

Publisher final version (usually the publisher pdf)

Publisher Rights Statement:

© Croxford, L., & Raffe, D. (2014). Working paper 4: Student flows across the UK's internal boundaries: Entrants to full-time degree courses in 2011. (pp. 1-34).

General rights

Copyright for the publications made accessible via the Edinburgh Research Explorer is retained by the author(s) and / or other copyright owners and it is a condition of accessing these publications that users recognise and abide by the legal requirements associated with these rights.

Take down policy

The University of Edinburgh has made every reasonable effort to ensure that Edinburgh Research Explorer content complies with UK legislation. If you believe that the public display of this file breaches copyright please contact openaccess@ed.ac.uk providing details, and we will remove access to the work immediately and investigate your claim.





THE UNIVERSITY
of EDINBURGH

Working Paper 4: Student flows across the UK's internal boundaries

Entrants to full-time degree courses in 2011

Linda Croxford and David Raffe

March 2014



Centre for Research in
Education Inclusion
and Diversity



Table of Contents

List of tables	ii
Introduction	1
Patterns of cross-border study	2
Inflow analyses.....	4
The characteristics of movers and stayers	6
Predicting moving-out	8
Flows between home countries compared with flows between English regions	9
Conclusion.....	9
1. What are the main patterns of cross-border study, and where is its impact felt?	9
2. Is cross-border study associated with student characteristics?.....	11
3. If so, does it contribute to inequalities in access?	11
References	14

List of tables

Table 1: Country of study, by country of domicile: UK-domiciled full-time first-degree course entrants in 2011.....	16
Table 2: ‘Movers’ as percent of students domiciled in country/region and as percent of students studying in country/region (UK-domiciled full-time first-degree course entrants in 2011)	16
Table 3: ‘Movers’ as percent of UK-domiciled full-time first degree students (a) by home country of domicile (movers-out) and (b) by home country of study (movers-in), 1996-2011	17
Table 4: Institutional sector of stayers and movers-out, by domicile (full-time first-degree course entrants in 2011)	18
Table 5: Subject area of stayers and movers-out, by domicile (full-time first-degree course entrants in 2011)	19
Table 6: Domicile of full-time first-degree course entrants in 2011, by sector and country.....	20
Table 7: Domicile of full-time first-degree course entrants, by sector and year: Scotland	21
Table 8: Domicile of full-time first-degree course entrants in 2011, by subject area and country	22
Table 9: Domicile of full-time first-degree course entrants, by subject area and year: Scotland	23
Table 10: Characteristics (percentages) of movers and stayers, by country (UK-domiciled full-time first-degree course entrants to UK institutions in 2011)..	24
Table 11: Characteristics (percentages) of RUK and Scottish-domiciled full-time first-degree course entrants to Scottish institutions in 2011, by sector	26
Table 12: Binary logistic regression predicting study in another country of the UK: Under-21 year old full-time first-degree course entrants in 2011, by country of domicile....	27
Table 13: Characteristics (percentages) of stayers and movers between regions of England (full-time first-degree course entrants to UK institutions in 2011.....	30
Table 14: Binary logistic regression predicting study in another region of the UK: English- domiciled under-21 year old full-time first-degree course entrants in 2011	31

Introduction

Seven per cent of UK-domiciled students who study full-time for a first degree at a UK higher education institution move to another home country of the UK in order to do so. These students are the subject of this working paper. We use data from the Higher Education Statistics Authority (HESA) to describe the cross-border flows of students in relation to country, institutional sector and subject, and the demographic, social and educational characteristics of movers and stayers. In particular we explore the extent to which cross-border movement is associated with inequalities in participation, and we consider the implications for measures to 'widen participation'. We focus on students who entered full-time degree courses in UK higher education institutions in 2011-12, although we describe earlier trends. The 2011-12 session was the last to admit students under the tuition fee regime introduced in 2006-07. Tuition fees rose again in 2012, and not only did the increase vary across the four home countries but also, in the case of Scottish and Northern Irish domiciles, it changed the relative costs of study in the rest of the UK compared with the home country. The present working paper describes a baseline against which the possible impact of these fee changes will be measured. A companion paper ([Whittaker 2014](#)) reviews the research literature on cross-border flows.

The paper is a product of the ESRC Fellowship Project on *Higher Education in Scotland, the Devolution Settlement and the Referendum on Independence*, one of nine such projects in the ESRC Programme on *The Future of the UK and Scotland*. Each project explores an area of policy interest in the context of the changed constitutional status of Scotland – as well as Wales and Northern Ireland – following parliamentary devolution in 1998-99 and the possibility of independence after the referendum of 2014. In the case of higher education, parliamentary devolution followed an earlier process of administrative devolution. Higher education in Northern Ireland had been administered separately ever since the partition of Ireland in 1921/22, although policy had closely followed that of England ([Osborne 1996](#)). The public sector of Scottish higher education had always been administered by the Scottish Office of the UK government, and in 1992 new Scottish and Welsh Higher Education Funding Councils were established with a remit covering all higher education institutions in their respective countries.

There are several reasons why the cross-border flows of students are important in the context both of devolution and of possible Scottish independence. In the first place, devolution or independence may have direct or indirect effects on the scale of cross-border flows. The devolved administrations have placed increased emphasis on higher education's contribution to the economic, social and cultural goals of the home country, and they have sought closer integration with the other sectors of education ([Raffe 2013](#)). This is likely to have encouraged students to study within the home country, and the proportion doing so tended to rise following devolution ([Raffe and Croxford 2013](#)). Policies for tuition fees have diverged, creating a growing incentive for Scottish students to study within the home country, and a similar incentive for Welsh students between 2007-10 and for Northern Irish students since 2012 ([Wakeling and Jefferies 2012](#), [Gallacher and Raffe 2012](#)).

Second, cross-border flows have financial implications which may not be directly reflected in transfers of funding between the UK administrations. Fees from RUK (rest of UK) students were expected to help to close the funding gap between Scottish and English higher education created by the fee changes in 2012 ([Scottish Government 2010](#)), and a working group of the UK government is reported to be assessing the financial implications for England. Conversely, the

Welsh Government currently subsidises English universities via its contributions to the fees of Welsh students who study there, an arrangement which may prove to be unsustainable.

Third, the devolved administrations may have limited scope to shape their own policies on such issues as tuition fees if they have to avoid large fluctuations in the cross-border flows of students which might adversely affect their own domiciles or institutions. Many policies in the devolved administrations have been reactive, responding to the possible effects of changes in English arrangements on the flows of students into and out of their own territory ([Gallacher and Raffe 2012](#)). For example, the Welsh Government did not want to increase tuition fees either in 2007 or in 2012, but it was compelled to do so to prevent a flood of fee refugees from England ([Rees Review 2005](#)). Even Scotland, which has retained free tuition for Scottish domiciles, has found it a challenge to maintain a distinct policy without opening up a large funding gap with English universities. Paradoxically, an independent Scotland might have even less control over its higher education policy, since under EU rules it could no longer discriminate against nationals of the residual UK – a separate member state – by charging them for tuition while offering it free to Scottish students. (This interpretation of EU rules is contested: see [Anderson Strathern 2013](#), [Nic Shuibhne 2013](#), [Scottish Government 2013](#)).

Fourth, cross-border flows raise important questions about the sphere of responsibility of the devolved administrations and, related to this, the territorial basis of social citizenship. Commentators have noted the apparent contradictions in public attitudes which expect common entitlements and standards of public service provision across the UK, while simultaneously respecting the right of each home country to determine these entitlements and standards for itself ([Jeffery 2009](#)). The issues are further complicated when students from one jurisdiction seek to enjoy services provided by another. Concepts such as citizenship, entitlement and equality need to be defined in relation to a given population, but is this population that of the home country or of the UK (or, indeed, of the EU)? All governments within the UK are committed to equality of access to higher education, but among which group of students should equality be defined? Does the Scottish Government's responsibility for promoting equality relate only to Scottish students studying within Scotland, or does it also cover Scottish students studying elsewhere in the UK and/or students from the rest of the UK studying in Scottish institutions? In practice, Scottish policy is largely directed towards Scottish students studying within Scotland, but the principle underlying this priority is rarely debated. We return to this issue at the end of this paper.

With these issues in mind, this paper asks:

1. What are the main patterns of cross-border study, and where is its impact felt?
2. Is cross-border study associated with student characteristics?
3. If so, does it contribute to inequalities in access?

As noted above, we restrict our analysis to full-time first-degree students in higher education institutions. We examine flows across all the internal borders of the UK, but we pay most attention to flows into and out of Scotland, and we focus on 2011 entrants.

Patterns of cross-border study

Table 1 shows the number of UK-domiciled students who entered UK higher education institutions in 2011, classified by their country of domicile and the country in which they studied. The off-diagonal cells show the 'movers' who studied outside their country of domicile. These are a small

minority – only 7.0% – of all students in the table. The table covers only full-time first-degree students. The proportion of movers among full-time students on other undergraduate courses (about one in ten of all full-time undergraduates) was almost identical, at 6.7%. Among part-time students (about one in three of all undergraduates) the proportion was even higher, at 8.6%, a figure which may be explained by the inclusion of the Open University and other distance learning programmes in this category.

Our main interest in this paper is full-time first-degree students, 7% of whom moved between home countries. Had the same students been allocated at random to the same filled places, without reference to country, four times as many – 28% – would have moved. Conversely, had movements between countries been restricted to the minimum required to balance the number of students and the number of filled places within each country, 2% would have moved, or rather more if imbalances within particular subjects are taken into account. The fact that the observed level of movement (7%) lies closer to this minimum than to the proportion based on random movement suggests that the pressures on students to remain in their home country are stronger than the pressures on them to move.

The movements in Table 1 are asymmetrical, with different flows in each direction between each pair of countries. For example, 11,133 students moved from England to Wales to study; only 6,032 moved in the opposite direction. The contrast between flows out of and into Northern Ireland is even more extreme: 3,459 students moved from Northern Ireland to England, compared with 246 in the opposite direction. Table 2 summarises this asymmetry by contrasting the percentages of movers-out (the percent of domiciled students who studied elsewhere) and movers-in (the percent of students at the country's institutions who were domiciled elsewhere) for each country. Wales and Northern Ireland had much larger proportions of movers-out than the other two countries; Wales and (to a lesser extent) Scotland had larger proportions of movers-in. Wales and Scotland had more movers-in than movers-out; that is, they were net importers of students. England had the lowest percentage of movers in both directions; nevertheless, as the largest home country it dominated the overall patterns of movement. Among the 7% of all students who were movers, 41% moved from another UK country to England to study, 54% moved from England to another country, and only 5% moved between the other three countries. Conversely, among the 93% of students who were stayers, nearly seven in eight (87%) were domiciled and studied in England.

Student flows were influenced by distance and country size, but these were not the only factors. They do not, for example, explain the very different flows in and out of each country; and if size were the determining factor we would see more students coming to Scotland to study and many more students leaving it. Table 2 provides further context by showing the proportions of UK-domiciled students in UK institutions who had moved out of, or into, each region of England to study. The average region is larger than the devolved countries, so we might expect less movement between regions than between countries; on the other hand, the boundaries between regions are considerably more arbitrary, and in no region is higher education administered as a 'system', leading us to expect more movement between them. In practice, each English region had a larger proportion of movers-out than any of the home countries, but Wales attracted a higher proportion of movers-in than Greater London, the North West or the West Midlands. Scotland, by contrast, had fewer movers-in, and far fewer movers-out, than any English region. Northern Ireland, with a chronic excess of demand over supply of places ([Osborne, 2006](#)), had few movers-in but its proportion of movers-out was not far short of the lowest English region.

Between 1996 and 2011 there was a decline in the proportion of movers-out of each home country (Table 3). Much of this decline occurred before 2004, and subsequent trends were more erratic. The proportion of movers-out of Wales and Scotland continued to fall slowly between 2004 and 2010, although the Welsh proportion rose again in 2011. The proportion of movers-out of Northern Ireland fell sharply between 1996 and 2004 but then rose again. A similar pattern holds in the 'inflow' figures: the proportion of movers-in to each country fell between 1996 and 2004; it continued to fall slowly in England and Scotland, but rose again in 2010 and 2011 in Wales and Northern Ireland.

Movers-out of England, Wales and Scotland were more likely than stayers to enter Russell Group universities; movers-out of England were also more likely to enter universities in the 'other pre-1992' category (Table 4). The pattern of movers-out of Northern Ireland, whose universities were both founded before 1992, was different: more than half of all movers-out, and more than 60% of those who moved to England, entered post-1992 universities. English students who moved between regions were similarly more likely to enter Russell Group universities and less likely to enter a post-1992 university. Movers-out of each country were more likely than stayers to study medicine and veterinary medicine or arts subjects; they were less likely to study subjects allied to medicine or social sciences and law (Table 5). There was no consistent trend in relation to sciences or engineering and technology. A more detailed breakdown identifies particular subjects that were associated with moving, such as creative arts and design (especially among movers-out of Scotland), or with staying, such as education and computer science.

Inflow analyses

The analyses presented above showed that the probability of moving to another home country to study varied according to the country of domicile and the subject of study, and it was associated with institutional sector. Its quantitative impact on higher education in the receiving country also varied. As we have seen, Welsh higher education was most affected, with more students from the rest of the UK than from Wales itself; higher education in Northern Ireland and England was least affected. This impact also varied within each country. In this section we compare the proportion of movers in to different institutional sectors and subjects within each country, and we compare the proportions of movers from the rest of the UK with the proportions from other European Union (EU) countries and from non-EU countries (hereafter referred to as 'overseas'). We therefore switch our focus to all full-time degree students in UK institutions, not only those who are UK-domiciled. We focus especially on Scotland.

Table 6 shows the percentages of stayers and movers-in from the rest of the UK (RUK), from the rest of the EU and from overseas, in each sector of higher education in each home country. Movers from within the UK were relatively evenly spread across the sectors of English higher education; within each sector they were outnumbered both by students from other EU countries and by overseas students. The sectors described in Table 6 are less meaningful in Wales, where many long-established institutions had been constituent colleges of the University of Wales, or in Northern Ireland, which has only two universities. However, both in Wales and in Northern Ireland the proportion of RUK students tended to be higher among the older foundations, and highest in the single Russell Group university. In all sectors of Welsh higher education RUK students hugely outnumbered EU and overseas students combined. By contrast, in Northern Ireland the relatively small proportion of movers from within the UK was balanced by a similar proportion of movers from within the EU (including the Irish Republic), and outnumbered by students from overseas. RUK students were less evenly spread across Scottish institutional sectors

than across sectors in England or Wales. They tended to concentrate in the Russell Group universities and to a lesser extent in other pre-1992 universities. An alternative classification of Scottish universities, which distinguishes ancient (pre-1600), old (pre-1992) and new universities shows a similar pattern.

Movers-in from the rest of the UK were outnumbered by non-UK (EU and overseas) students within each sector of Scottish higher education except the non-university sector of specialist institutions. Table 7 suggests that this was a recent trend. In 1996 there were nearly twice as many RUK students as non-UK students in Scottish institutions; in 2011 there were nearly twice as many non-UK as RUK students. The ancient universities saw the largest increase in EU and overseas students: both of these groups more than trebled as a proportion of the total. Scotland had by far the highest proportion of EU students of all the home countries, probably encouraged by the continued access to free tuition in Scotland compared with rising fees elsewhere in the UK. However, overseas student numbers rose as fast as EU student numbers over the period.

The highest concentrations of RUK students were in medicine, followed by arts (except in England) and science (except in England and Northern Ireland) (Table 8). As with institutional sectors, RUK students were less evenly spread across subject areas in Scotland (and, within smaller overall numbers, Northern Ireland) than in England or Wales. RUK students formed a higher proportion of students in Scottish medical and arts faculties than other subject areas, a contrast which had become more pronounced since 1996 (Table 9). Although RUK students declined as a proportion of each subject area in Scottish HE, the sharpest declines were in sciences, engineering and technology and social sciences and law. In two of these areas – sciences and social sciences and law – the number of students from the EU had grown particularly rapidly; this was also the case in arts. Nevertheless medicine and arts, the two subject areas with the greatest concentrations of RUK students in Scotland, were also the two subjects where they continued to outnumber students from the rest of the EU and overseas.

A more detailed subject breakdown for Scotland in 2011 reveals the highest proportions of RUK students in medicine and dentistry (32%), languages (30%), historical and philosophical studies (30%) and veterinary science (25%); the lowest proportions were in law, mass communications and documentation, business and administrative studies, computer science, engineering and technology, education and subjects allied to medicine, each of which had fewer than 10% of students from the rest of the UK.

Movers-in to each country were much less likely than stayers to be living in the parental home during term time (3% compared with 25%, among all movers and stayers respectively across the UK). They were also less likely to live in their own home (6% compared with 13%), but more likely to live in university property (58% compared with 37%) or in private sector halls (13% compared with 8%).

The quantitative impact of RUK students, therefore, varied by country, with Wales followed by Scotland the most affected, by institutional sector, with pre-1992 and especially ancient or Russell Group universities most affected, and by subject area, with medicine and arts recruiting the highest proportions of RUK students, especially within Scotland. However, the detailed patterns were more complex, and our data provide two further insights into the scale of this impact. First, except in Wales RUK students were outnumbered in most sectors and in most subject areas by students from the rest of the EU or overseas. Second, because of its relative size England was in

the paradoxical position of having the greatest impact on the other countries (as the main source of students who moved there) while being the least affected itself.

The characteristics of movers and stayers

Table 10a to Table 10d summarise, for each home country, the demographic, social and educational characteristics of three groups of students: the movers-in from other countries of the UK; the stayers who were domiciled in, and studied in, the country; and the movers-out. The relative sizes of these three groups varied considerably across the four countries.

The first set of measures in each table refers to characteristics on which data are available for entrants of all ages.

- *Gender* – Of all the characteristics described in the table, the gender balance varied least across the three groups. The stayers tended to include more females than the movers, but the differences were small and inconsistent. Further analyses, not shown here, show a somewhat greater propensity for males to move among older students.
- *Age* – Students aged 21 or over formed a higher proportion of stayers in Wales and Scotland than in England or Northern Ireland, but in all countries they accounted for a relatively low proportion of movers, either in or out.
- *Ethnicity* – All students who reported their ethnicity as anything other than ‘white’ are recorded as belonging to an ethnic minority. The proportion of domiciled students from ethnic minorities varied widely across the four countries, being highest in England and lowest in Northern Ireland. English-domiciled ethnic-minority students tended to stay in England to study; 25% of stayers belonged to an ethnic minority, compared with only 10% of movers-out of England. The proportion of ethnic minority students among movers-in to England was even smaller, at 7%. This reflected the relatively small ethnic-minority populations of the other home countries, rather than a tendency for these students to study within the country. Indeed, among students domiciled in each home country other than England, minority students formed a larger proportion of movers-out than of stayers.
- *Low participation area* – The HESA data record the POLAR-3 classification of each student’s area of residence. This refers to the higher education participation rate of young people in the area, and the table shows the percentage of students who were from the lowest quintile of POLAR-3 areas. The POLAR classification is acknowledged by HESA to be less applicable to Scotland, where overall levels of participation are higher. So, although Table 10d shows that slightly more movers-in to Scotland than stayers within Scotland were from low participation areas, this may simply reflect the lack of comparability between the measures for Scottish and non-Scottish domiciles. Movers-in to England and movers-out of England were less likely than stayers within England to come from a low participation area. The same was true for Wales, but not for Northern Ireland, where there was very little association between coming from a low participation area and moving. This may reflect the limited relevance of POLAR-3 to Northern Ireland, as for Scotland, but it may also reflect the fact that many movers-out of Northern Ireland were relatively disadvantaged ‘reluctant leavers’ who could not secure a place on a course of their choosing closer to home ([Osborne, 2006](#)).

The other measures in Table 10 are either available only for young people, or have relatively high levels of missing information for older students. We therefore report them for under-21 year olds.

- *Parental education* – Even among under-21s the data on parental education include a substantial number of cases where the parent’s education is not known or where the information has been refused. These categories are excluded from the 100% base for the percentages in Table 10, which is likely to provide an upwardly biased estimate of the true percentage. This may particularly affect the estimates for Northern Ireland and Wales, where the proportions of unknowns and refusals was highest. However, it is unlikely to affect the main conclusion from the table, that in each country more movers-in and movers-out than stayers had parents with a higher education qualification. The smallest difference relates to the movers-out of Northern Ireland, possibly because they included the less advantaged ‘reluctant leavers’ described above.
- *Social class* – This refers to the occupational class of the higher-earning parent, as reported by students at the time of completing their UCAS application. The reported occupations are grouped into the seven-class version of the National Statistics Socio-Economic Classes ([Rose and O’Reilly 1998](#)); the table shows the percentages respectively in class 1 (higher managerial and professional) and in classes 5-7 (‘working class’). For each home country, more movers (both movers-in and movers-out) than stayers were from higher managerial and professional backgrounds and fewer were from the working class.
- *Independent school* – The proportion of students who had attended an independent school varied across the country of domicile – as can be seen by comparing the stayers columns. Many more English and Scottish stayers were from independent school than stayers in Wales and Northern Ireland. In England more movers-out than stayers had been to independent schools, but the proportion among the movers-in was no higher than among the stayers, reflecting the fact that these movers-in were from countries with smaller independent-school sectors than England. Conversely, many more movers-in to Wales, Northern Ireland and Scotland than stayers within these countries were former independent-school pupils, a consequence of the relatively large proportion of such students among English-domiciled students as well as their greater propensity to move. But movers-out of Wales, Northern Ireland and Scotland were also more likely than stayers to have an independent-school education. The contrast was sharpest in Scotland, where more than half of those studying elsewhere in the UK were from independent schools, compared with one in ten of the stayers.
- *Attainment* – Attainment is measured by the UCAS tariff, a points score based on the qualifications obtained and on the grades of pass. Although the UCAS tariff is used by many institutions in the selection process, we doubt whether it measures comparable levels of attainment among students from different home countries. We therefore normalised tariff scores within each country of domicile and used the normalised score to identify attainment quintiles. Our adjustment assumes, in effect, that the average ‘true’ level of attainment as well as the variance in that level were the same for each home country. In Table 10 the attainment scores for stayers and movers-out of each country are directly comparable, because they are based on the same normalised distribution, but the scores for movers-in are not. In each country, and especially in the three devolved countries, more movers-out than stayers were in the top attainment quintile. In England and Wales the converse was also true: fewer movers-out than stayers were in the lowest quintile. This was not the case in Northern Ireland or Scotland, where the proportions were much the same. In Northern Ireland this may reflect the presence of ‘reluctant leavers’, who tended to have lower qualifications, among the movers out. A similar explanation may apply to Scotland, although it is worth noting that the HESA data exclude a significant group of less-qualified Scottish stayers who entered sub-degree courses in colleges.

Table 10d shows that movers-in to Scottish HE institutions tended to come from more advantaged social backgrounds and to have higher attainments than Scottish-domiciled stayers. However, we have also observed that RUK students were unevenly distributed across institutional sectors and subjects in Scottish higher education, more so than in England or Wales. Table 11 explores the extent to which the differences between movers-in and stayers can be explained by the different sectors which they enter. It replicates the movers-in and stayers columns of Table 10d for students studying in ancient, old and new universities and other HE institutions. Within each sector, movers-in were less likely than stayers to be aged 21-plus, to come from a working-class background or to be in the lowest quintile of attainment; they were more likely to be from an ethnic minority, from a low-participation area, from an independent school and from the top attainment quintile. However, the differences were stronger and more consistent within the ancient universities and in the non-university sector. The differences tended to be smaller among the 'old' (but not ancient) universities and the new (post-1992) universities, particularly with respect to parental education and higher managerial and professional-class backgrounds.

Predicting moving-out

Table 12 presents, for students domiciled in each home country, a logistic regression analysis of the probability of moving-out (that is, of studying in a different home country). The analyses are restricted to under-21 year olds, in order to take advantage of the wider range of characteristics for which data are available for these students, but we do not use the parental higher education variable because of the large number of unknown and refused responses. Each analysis is repeated with an additional set of predictor variables to represent the subject area of study. The analyses thus enable us, first to determine the extent to which each of the characteristics discussed above was independently associated with moving-out, and whether some factors were more important than others; second, to determine whether any of these associations can be 'explained' by the subject of study; and third, whether the same factors were associated with moving-out among the domiciles of each country.

Each of the characteristics was separately associated with RUK study among all countries' domiciles except for living in a low participation area and gender. Living in a low participation area was not associated with moving-out from Northern Ireland or Scotland, although as noted above this may reflect the unsuitability of the POLAR-3 classification for countries with higher average participation. The effect of gender was small but significant in England and Northern Ireland when no account is taken of subjects, but not significant in any country when subjects are included in the model. Subjects also 'explain' some of the association between attainment and moving-out, which tends to become slightly weaker when subjects are included in the model.

Table 12 confirms the conclusion of Table 10 that English-domiciled ethnic minority students were less likely than white students to study elsewhere in the UK, whereas ethnic minority students from Wales, Northern Ireland and Scotland were more likely than white students to study outside the home country. The effect was largest among Northern Irish domiciles, although very few of these were from ethnic minorities. Moving-out was associated with social class, and this association was similar across the UK. Former independent-school pupils from all four countries were more likely to study in another home country. The independent-school effect was largest in Scotland and smallest in England; it was large in Wales and Northern Ireland, but in neither country had a substantial proportion of domiciles attended independent schools. The association of moving-out with attainment varied across country. It was weakest in England, where there was

a slight tendency for domiciles in the three middle quintiles to study in another country; RUK study was lowest in the lowest attainment band followed by the highest attainment band, many of whose students may have chosen to enter an elite university in England. Among Welsh domiciles there was a strong and linear association of (high) attainment with moving-out. In Scotland and – to a lesser extent – Northern Ireland the association was U-shaped; students in the highest and lowest attainment bands were most likely to study elsewhere. The trend among high attainers may have been due to the ‘pull’ of elite universities in England. The Northern Irish trend among low attainers reflects the lack of opportunities at home for the ‘reluctant leavers’; the apparently high RUK study among low attainers in Scotland may reflect a tendency for the less-qualified stayers to enter college-based HE courses which are not included in the HESA data.

Finally, we note country differences in the subjects associated with RUK study. Among English domiciles these were medicine and arts; among Welsh domiciles they were medicine, subjects allied to medicine and engineering and technology; among Northern Irish domiciles they were medicine and arts; and among Scottish domiciles they were arts and engineering and technology (but not medicine).

Flows between home countries compared with flows between English regions

Table 13 compares the characteristics of English-domiciled students who studied, respectively, in their home region, in another region of England, and in another home country (this last column is identical to the ‘movers out’ column in Table 10a). The students who moved between regions were, in most respects, similar to the English students who moved between countries. The main exception relates to the proportion from ethnic minority backgrounds: although ethnic minority students were less likely to move between regions than to stay within the home region, they were even less likely to move to another home country. The students who moved to another country were also more likely to have HE-qualified parents, and were slightly more likely to come from a high social class, than movers within England.

Table 14 presents a logistic regression analysis of the chances of an English-domiciled student studying in another region, comparable to the analysis of Table 11 which predicted study in another country of the UK. In contrast to the analysis of RUK study, those who moved region were more likely to be male (even allowing for subjects) and well qualified (with a linear association across all attainment bands). The association with independent schooling was even stronger, and the association with subjects was slightly weaker, than in the case of RUK study.

Conclusion

We discuss our findings in relation to the three research questions posed earlier.

1. What are the main patterns of cross-border study, and where is its impact felt?

Students who study in another country of the UK do not do so at random. If they did, four times as many students would be involved and their patterns of movement – their demographic, social and educational characteristics, the countries between which they move and the institutions and programmes to which they move – would look quite different from the pattern observed in 2011.

England and Scotland are the least affected by these patterns: England because of its relative size, and Scotland because of the strong tendency for Scots to remain within their own country, a tendency which largely pre-dated the divergence in fee regimes since 2000. However, Scotland attracts a somewhat larger inflow of students from elsewhere in the UK, although it attracts nearly twice as many students from outside the UK, whose numbers have risen dramatically over the past decade and a half. Wales is the home country that is most affected by cross-border flows, with more students from the rest of the UK than from Wales entering its full-time first-degree courses, and a substantial outflow of students to England. Wales is the only country where RUK students outnumber students from outside the UK. More than a third of students from Northern Ireland enter institutions elsewhere in the UK, a trend attributed to limited availability of places at home. However, cross-border flows have much less impact on Northern Irish institutions, which recruit only a small fraction of students from elsewhere in the UK.

Geographical distance and the ease of travel between countries, together with their relative size, explain some of these patterns. We observe a similar tendency for English students to study within their home region. However, movements between home countries do not precisely mirror movements between the English regions. Our analyses are consistent with an earlier study which concluded:

The home-country effect is therefore both stronger than, and qualitatively different from, the home-region effect. On both criteria, the home country that behaves most like an English region is Wales and the English region that behaves most like a home country is the North East. (Raffe and Croxford 2013, p.129)

Geographical factors may help to explain the stronger tendency of Wales, compared with Scotland or Northern Ireland, to function as part of an 'England and Wales' higher education system. However, they do not explain why the flows in each direction between each pair of countries are often so different: if distance and travel times stop English students from going to Northern Ireland, why is there such a large flow in the other direction? Other factors must be involved. Similarly, flows between countries are not solely determined by their relative population sizes; the patterns for Scotland (population 5m) are much closer to those of England (population 53m) than of Wales (population 3m). However, size does matter in one very important respect. A fluctuation in flows into or out of England that was small in relation to the English university system might be very substantial in relation to a supplying or receiving country, so the mere possibility of such a fluctuation makes the devolved countries vulnerable to changes in English policy and practice. Only one per cent of English domiciled students went to Scotland to study; but in the previous year seven per cent had applied to at least one Scottish institution (Raffe and Croxford 2013), and more might have done so had the incentives been stronger – for example, had Scottish institutions offered free tuition to English as well as Scottish domiciles.

One consequence of this imbalance between the home countries is that cross-border flows have been a minor concern to England and almost invisible on English policy agendas, yet English policy and practice have major consequences for cross-border flows affecting the other three countries, for whom this is a much greater policy concern. The consequence has been a lack of inter-governmental consultation and coordination, and the need for the devolved administrations to adopt hasty and reactive measures to respond to circumstances created by English policy. This appears to be a failure of the current devolution settlement.

Finally, the impact of cross-border flows is felt most strongly in Russell Group and other older universities, although this trend is more pronounced in Scotland and (subject to having only two universities) Northern Ireland. Medicine and veterinary medicine is the subject area most affected. RUK students are distributed more unevenly across sectors and subjects within Scotland than elsewhere, with concentrations in the ancient universities and in medicine and arts subjects. This uneven distribution has become more pronounced as a result of recent trends. RUK students have declined as a proportion of all students in most sectors and subject areas in Scottish education, but this decline has been greatest in the newer sectors and in other subject areas, leaving the ancient universities, medicine and arts increasingly exposed as the main areas of RUK presence.

2. Is cross-border study associated with student characteristics?

Movers-in and movers-out of each home country were more likely than stayers to be under 21, to come from 'advantaged' social and geographical backgrounds and to have high levels of attainment, although movers out of Northern Ireland and Scotland were as likely as stayers to be in the lowest attainment band. Patterns by ethnicity were more complex, reflecting on the one hand the very different ethnic composition of the domiciled populations of the home countries, and on the other hands the tendency of ethnic minorities in England to remain within the home country and of ethnic minorities in the other three countries to leave. Gender differences were smaller and less consistent.

Subject choices explain the small gender differences, and account for some of the association between attainment and moving, but for the most part the characteristics listed above were separately and independently associated with RUK study. Similarly, most of the differences between Scottish-domiciled stayers and movers-in from the rest of the UK were found within each institutional sector of Scottish higher education, although the contrasts tended to be greatest within the ancient universities. The characteristics of English-domiciled students who moved to a different home country were similar to those of English-domiciled students who moved to a different region of England, except that the latter group included more ethnic-minority students and moving region was linearly associated with attainment.

3. If so, does it contribute to inequalities in access?

Cross-border study, therefore, is associated with many of the student characteristics against which inequalities in access to higher education are measured. But does it follow that cross-border study is in any sense a cause of inequality – that if students were somehow discouraged or prevented from studying in another country of the UK, inequalities would be reduced?

Any causal relationship between cross-border study and inequalities in access is, at best, indirect. However, it is probable that the fact that inequalities are associated with movements across boundaries may make the problem harder to address. There are several reasons why this might be the case.

First, it may help to mask the extent of the problem. Students crossing borders are often omitted from the data used to monitor HE participation and set policy targets in each home country, with the effect that the proportion of students from under-represented or disadvantaged groups is over-estimated. For example, 29% of young Welsh students entering Welsh institutions in 2011 were from working-class backgrounds (Table 10b); among all UK-domiciled young students at Welsh institutions (the stayers and movers-in in Table 10b) the proportion was only 22%, and among all Welsh-domiciled young students at UK institutions (the stayers and movers-out in Table

10b) the proportion was 24%. The equivalent figures for Scotland were 21%, 19% and 20%. Conversely, an exclusive focus on home-country domiciles in home-country institutions will underestimate the relative participation of more advantaged groups. For example, only 2% of young Welsh students entering Welsh institutions in 2011 were from independent schools, compared with 8% of all students at Welsh institutions and 5% of all Welsh-domiciled students at UK institutions. The equivalent figures for Scotland were 10%, 12% and 12%. Yet official data and targets are often based on home-country domiciles in home-country institutions. The Scottish Index of Multiple Deprivation (SIMD) is the main indicator of socio-economic background used by the Scottish Government and Scottish Funding Council, and it is used to set targets for widening participation, but it only covers Scottish residents.

Second, cross-border flows are more directly associated with social and educational advantage than with disadvantage; that is, they are more directly associated with inequalities at the top end of the continuum of advantage and disadvantage than with inequalities at the bottom end. As a result, they may seem less relevant to a policy discourse which associates inequalities in higher education with disadvantage – with increasing participation among a disadvantaged and ‘under-represented’ minority. (In practice, the inequalities at the top end of the continuum are as large, or even larger, than those at the bottom end, but they are not perceived as an equivalent policy problem.)

Third, many of the most effective measures to widen participation tend to assume a territorial frame of reference, and some element of collaboration or synergy between higher education institutions and schools or other stakeholders in the same territory. For example, in Scotland the Schools and Higher Education Programme, which involves regional partnerships of universities and schools with a weak tradition of progression to higher education, is recognised to be one of the more effective measures currently in force ([SFC 2013](#)). In England, the Aimhigher programme was similarly judged to have enjoyed some success ([Doyle and Griffin 2012](#)). In Scotland, there is a growing awareness of the possible implications of the national curriculum reform – Curriculum for Excellence – for widening participation and the need for universities to be aware of these implications when deciding on their admissions policies. Conversely, measures without an equivalent territorial frame, such as the provision of bursaries, have been less effective means of widening participation overall ([Harrison and Hatt 2010](#), [Milburn 2012](#)). Study in another jurisdiction of the UK is therefore outside the scope of many effective widening participation measures.

Fourth, addressing issues involved in cross-border flows would require greater collaboration between the respective UK governments. However, commentators have drawn attention to the absence of any arrangements for such coordination in the UK devolution settlement, and to the informality, irregularity and ineffectiveness of policy coordination ([Trench 2008](#), [Bruce 2012](#)). The main exceptions are the Funding Councils which have liaised much more effectively than their parent governments. The absence of effective consultation over England’s unilateral decision to increase fees in 2012, despite the substantial knock-on effects on the other home countries, is only the most recent example. It is unlikely that a political will for improved coordination could easily be established, particularly if this was focused on cross-border flows of students. On the one hand, such collaboration would depend critically on the full participation of England, which is either the origin or destination country for most students crossing borders within the UK, but is itself only marginally touched by the issue. On the other hand, the devolved administrations are reluctant to establish an arrangement which would almost certainly lead them to cede power to the dominant partner, England ([Keating 2009](#)).

Fifth, and most importantly, the inadequate arrangements for intergovernmental collaboration, and the lack of political will to use such measures as exist, reflect a more fundamental uncertainty about the basis of social citizenship in post-devolution UK: an uncertainty exposed by the current referendum debate. In a multi-level political structure is the basis for social citizenship, and for defining equal rights, the home country or the UK or the EU? What responsibility do governments have for promoting equality among citizens of other jurisdictions? In practice, as we have noted, Scottish government policy is largely focused on Scottish students in Scottish institutions. But is this a consequence of practical considerations (the scope and availability of SIMD and the policy focus on institutional targets, or does it express underlying principles? And if the latter, how are these principles reconciled with a third political level and source of social citizenship, the EU, which demands equality of treatment for Scots and other EU nationals but not for Scots and other citizens of the UK?

A few years ago Keating ([2009](#), p.113) noted that '[t]he failure to articulate a coherent Scottish or Welsh conception of social citizenship ... is in striking contrast to other stateless nations'. Whatever the outcome of the independence referendum, this judgement remains valid, and the position of cross-border flows of HE students provides an appropriate case study for exploring and debating the issue.

References

- Anderson Strathern. (2013). *Note for Universities Scotland re residence requirement for student fees*. www.universities-scotland.ac.uk.
- Bruce, T. (2012). *Universities and constitutional change in the UK: the impact of devolution on the higher education sector*. Oxford: Higher Education Policy Unit.
- Doyle, M., & Griffin, M. (2012). Raised aspirations and attainment? A review of the impact of Aimhigher (2004-2011) on widening participation in higher education in England. *London Review of Education*, 10(1), 75-88
- Findlay, A., King, R., Geddes, A., Smith, F., Stam, A., Dunne, M., Skeldon, R., & Ahrens, J. (2010). *Motivations and Experiences of UK Students Studying Abroad*. BIS Research Paper No 8. Dundee: University of Dundee.
- Gallacher, J., & Raffe, D. (2012). Higher education policy in post-devolution UK: more convergence than divergence? *Journal of Education Policy*, 27(4), 467-490.
- Harrison, N., & Hatt, S. (2012). Expensive and failing? The role of student bursaries in widening participation and fair access in England. *Studies in Higher Education*, 37(6), 695-712.
- Jeffery, C. (2009). Devolution, public attitudes and social citizenship. In S. Greer (Ed.), *Devolution and social citizenship in the UK*. Bristol: Policy Press, pp. 73-96.
- Keating, M. (2009). Social citizenship, devolution and policy divergence. In S. Greer (Ed.), *Devolution and social citizenship in the UK*. Bristol: Policy Press, pp. 97-115.
- Milburn, A. (2012). *University Challenge: How higher education can advance social mobility*. www.official-documents.gov.uk.
- Nic Shuibhne, N. (2013). University fees and rUK students: the EU legal framework. Retrieved from <http://www.scottishconstitutionalfutures.org/OpinionandAnalysis/ViewBlogPost/tabid/1767/articleType/ArticleView/articleId/2759/Niamh-Nic-Shuibhne-University-Fees-and-rUK-Students--the-EU-Legal-Framework.aspx>
- Osborne, R. (1996). *Higher Education in Ireland*. London: Jessica Kingsley.
- Osborne, R. (2006). [Access to and participation in Higher Education in Northern Ireland](#). *Higher Education Quarterly*, 60(4), 333-348. DOI: 10.1111/j.1468-2273.2006.00327.x
- Raffe, D. (2013). *Devolution and Higher Education: what next?* Stimulus paper. London: Leadership Foundation for Higher Education. Retrieved from <http://www.lfhe.ac.uk/en/research-resources/published-research/research-by-theme/the-uk-he-system/devolution-and-higher-education-what-next.cfm>
- Raffe, D., & Croxford, L. (2013). One system or four? Cross-border applications and entries to full-time undergraduate courses in the UK since devolution. *Higher Education Quarterly*, 67(2), 111-134.
- Rees Review. (2005). *Fair and flexible funding*. Cardiff: Welsh Assembly Government.
- Rees, G., & Taylor, C. (2006). Devolution and the Restructuring of Participation in Higher Education in Wales. *Higher Education Quarterly*, 60 (4), 370-391.

- Rees, G., & Istance, D. (1997). Higher Education in Wales: the (Re-)Emergence of a National System? *Higher Education Quarterly*, 51(1), 49-67.
- Rose, D., & O'Reilly, K. (1998). *The ESRC Review of Government Social Classifications*. London/Swindon: ONS and ESRC.
- Scottish Funding Council (SFC). (2013). Learning for All: Seventh update report on measures of success: 2013. Edinburgh: SFC.
- Scottish Government. (2010). *Report of the Scottish Government – Universities Scotland Technical Group on Higher Education*. Edinburgh.
- Scottish Government. (2013). Scotland's future: Your guide to an independent Scotland. Edinburgh.
- Trench, A. (2008). *Higher Education and Devolution*. London: Universities UK.
- Wakeling, P., & Jefferies, K. (2013). The effect of tuition fees on student mobility: the UK and Ireland as a natural experiment. *British Educational Research Journal*, 39(3), 491-513.
- Whittaker, S. (2014). Student cross-border mobility within the UK: a summary of research findings. Working Paper 2. Project on *Higher Education, the devolution settlement and the referendum on independence*. University of Edinburgh. Retrieved from http://www.docs.hss.ed.ac.uk/education/creid/Projects/34ii_c_ESRCF_WP2.pdf

Table 1: Country of study, by country of domicile: UK-domiciled full-time first-degree course entrants in 2011

Country of study: Country of domicile	England	Wales	N Ireland	Scotland	Total
England	314,588	11,133	246	3,287	329,254
Wales	6,032	10,853	9	86	16,980
N Ireland	3,459	189	8,756	1,053	13,457
Scotland	1,586	59	17	26,613	28,275
UK	325,665	22,234	9,028	31,039	387,966

Table 2: 'Movers' as percent of students domiciled in country/region and as percent of students studying in country/region (UK-domiciled full-time first-degree course entrants in 2011)

	Movers-out as % of students domiciled in country or region	Movers-in as % of students studying in country or region
Home country		
England	4	3
Wales	36	51
N Ireland	35	3
Scotland	6	14
Region of England		
North East	40	55
Yorkshire and Humberside	47	63
North West	40	43
East Midlands	61	69
West Midlands	53	50
Eastern	71	55
Greater London	48	42
South East	63	55
South West	57	58

Table 3: 'Movers' as percent of UK-domiciled full-time first degree students (a) by home country of domicile (movers-out) and (b) by home country of study (movers-in), 1996-2011

	1996	2004	2010	2011
<i>Movers-out, by country of domicile:</i>				
England	6	5	4	4
Wales	48	39	34	36
Northern Ireland	42	29	32	35
Scotland	8	7	6	6
<i>Movers-in, by country of study:</i>				
England	5	4	3	3
Wales	55	46	47	51
Northern Ireland	2	1	2	3
Scotland	21	17	14	14

Table 4: Institutional sector of stayers and movers-out, by domicile (full-time first-degree course entrants in 2011)

Domicile	Stayer/mover	Russell Group	Other pre-1992	Post 1992	Other HEI	n = 100%
England	Stayed in England	18	19	58	6	314,588
	<i>stayed within region</i>	10	17	67	6	152,373
	<i>moved between regions</i>	25	21	49	6	162,215
	Moved out of England	30	42	26	1	14,666
	<i>to Wales</i>	25	44	31	0	11,133
	<i>to Scotland</i>	45	36	13	6	3,287
Wales	Stayed in Wales	15	34	51	0	10,853
	Moved out of Wales	25	20	50	5	6,127
N Ireland	Stayed in Northern Ireland	42	53	0	5	8,756
	Moved out of N Ireland	25	19	53	3	4,701
	<i>to England</i>	23	12	61	4	3,459
	<i>to Scotland</i>	29	41	29	1	1,053
Scotland	Stayed in Scotland	18	31	48	4	26,613
	Moved out of Scotland	35	19	38	8	1,662

Table 5: Subject area of stayers and movers-out, by domicile (full-time first-degree course entrants in 2011)

Domicile	Stayer/mover	Medicine & veterinary medicine	Allied to medicine	Sciences	Engineering & technology	Social science and law	Arts	n = 100%
England	Stayed in England	3	9	23	7	34	23	314,588
	<i>stayed within region</i>	2	12	23	7	37	19	151844
	<i>moved between regions</i>	4	7	23	8	31	27	176837
	Moved out of England	5	5	30	7	23	31	14,666
	<i>to Wales</i>	4	5	32	7	25	27	11133
	<i>to Scotland</i>	11	6	22	6	16	38	3287
Wales	Stayed in Wales	2	13	24	6	35	20	10,853
	Moved out of Wales	7	11	22	9	26	25	6,127
N Ireland	Stayed in N Ireland	4	16	20	12	36	13	8,756
	Moved out of N Ireland	8	11	21	8	33	18	4,701
	<i>to England</i>	6	9	21	9	36	19	3459
	<i>to Scotland</i>	16	19	22	6	23	14	1053
Scotland	Stayed in Scotland	3	16	22	11	34	13	26,613
	Moved out of Scotland	8	7	16	11	26	32	1,662

Table 6: Domicile of full-time first-degree course entrants in 2011, by sector and country

Country of study		Sector				Total
		Russell Group	Other Pre-1992	Post-1992	Other HEI	
England	Home	75	76	83	86	80
	RUK	4	3	3	3	3
	Other EU	5	7	5	5	5
	Overseas	16	14	9	6	11
	<i>N (=100%)</i>	<i>74073</i>	<i>77080</i>	<i>218448</i>	<i>21760</i>	<i>391361</i>
Wales	Home	32	36	48		40
	RUK	54	49	31		42
	Other EU	2	4	5		4
	Overseas	11	11	16		13
	<i>N (=100%)</i>	<i>5190</i>	<i>10274</i>	<i>11569</i>		<i>27033</i>
Northern Ireland	Home	89	88		99.6	89
	RUK	6	.5			3
	Other EU	2	4		.4	3
	Overseas	4	8			6
	<i>N (=100%)</i>	<i>4122</i>	<i>5276</i>		<i>480</i>	<i>9878</i>
Scotland	Home	53	63	81	73	69
	RUK	21	12	5	16	11
	Other EU	11	12	9	5	10
	Overseas	14	12	5	7	10
	<i>N (=100%)</i>	<i>8716</i>	<i>13163</i>	<i>15650</i>	<i>1304</i>	<i>38833</i>
		Ancient	Other Pre-92	Post-92	Other HEI	Total
Scotland	Home	51	71	81	73	69
	RUK	20	11	5	16	11
	Other EU	14	9	9	5	10
	Overseas	16	9	5	7	10
	<i>N (=100%)</i>	<i>12858</i>	<i>9021</i>	<i>15649</i>	<i>1304</i>	<i>38832</i>

Table 7: Domicile of full-time first-degree course entrants, by sector and year: Scotland

Type of HEI: Scotland only		Academic year			
		1996	2004	2010	2011
Ancient	Home	60	60	54	51
	RUK	31	27	21	20
	Other EU	4	5	12	14
	Overseas	5	7	13	16
	<i>N (=100%)</i>	10081	12368	12678	12858
Other pre-92	Home	71	80	76	71
	RUK	18	10	9	11
	Other EU	5	5	7	9
	Overseas	7	5	7	9
	<i>N (=100%)</i>	7925	8862	9346	9021
Post-92	Home	81	78	78	81
	RUK	9	5	4	5
	Other EU	6	10	11	9
	Overseas	4	7	6	5
	<i>N (=100%)</i>	11642	11807	15452	15649
Other HEI	Home	80	74	66	73
	RUK	15	17	20	16
	Other EU	4	5	6	5
	Overseas	2	5	7	7
	<i>N (=100%)</i>	2115	1499	1646	1304
Total	Home	72	72	69	69
	RUK	19	15	12	11
	Other EU	5	7	10	10
	Overseas	5	6	9	10
	<i>N (=100%)</i>	31763	34536	39122	38832

Table 8: Domicile of full-time first-degree course entrants in 2011, by subject area and country

Country of study		Subject area					
		Medicine & Vet Med	Subjects allied to medicine	Sciences	Engineering & technology	Social science & law	Arts
England	Home	83	87	86	68	75	87
	RUK	6	3	3	3	2	3
	Other EU	2	3	4	8	7	5
	Overseas	8	6	7	21	16	5
	N (=100%)	11494	33252	83238	33839	143666	84338
Wales	Home	36	56	38	29	41	38
	RUK	57	24	54	35	31	55
	Other EU	3	2	3	10	5	4
	Overseas	4	18	5	25	22	3
	N (=100%)	746	2443	6661	2418	9037	5679
N Ireland	Home	78	92	93	86	86	91
	RUK	9	1	2	5	2	5
	Other EU	3	6	3	4	1	4
	Overseas	10	2	2	5	11	.3
	N (=100%)	412	1516	1911	1194	3611	1234
Scotland	Home	49	83	69	69	69	58
	RUK	29	8	11	7	6	24
	Other EU	3	5	13	11	12	10
	Overseas	19	4	6	13	12	8
	N (=100%)	1874	5126	8612	4119	13114	5986
Total	Home	76	85	81	67	73	82
	RUK	12	5	7	5	4	8
	Other EU	2	4	5	8	7	5
	Overseas	9	6	7	20	16	5
	N (=100%)	14526	42337	100422	41570	169428	97237

Table 9: Domicile of full-time first-degree course entrants, by subject area and year: Scotland

Subject area		Academic year			
		1996	2004	2010	2011
Medicine & Vet Med	Home	56	57	50	49
	RUK	34	30	28	29
	Other EU	3	3	4	3
	Overseas	8	10	18	19
	<i>N (=100%)</i>	<i>1475</i>	<i>1703</i>	<i>1751</i>	<i>1874</i>
Subjects allied to medicine	Home	79	80	85	83
	RUK	10	11	6	8
	Other EU	4	6	5	5
	Overseas	7	3	4	4
	<i>N (=100%)</i>	<i>2396</i>	<i>2621</i>	<i>4986</i>	<i>5126</i>
Sciences	Home	73	74	70	69
	RUK	20	16	13	11
	Other EU	4	6	12	13
	Overseas	2	4	5	6
	<i>N (=100%)</i>	<i>5554</i>	<i>8598</i>	<i>8988</i>	<i>8612</i>
Engineering & technology	Home	67	67	68	69
	RUK	13	9	6	7
	Other EU	10	16	13	11
	Overseas	9	8	13	13
	<i>N (=100%)</i>	<i>4647</i>	<i>4237</i>	<i>4259</i>	<i>4119</i>
Social science & law	Home	78	79	70	69
	RUK	14	8	6	6
	Other EU	4	5	12	12
	Overseas	4	8	11	12
	<i>N (=100%)</i>	<i>10100</i>	<i>11582</i>	<i>13240</i>	<i>13114</i>
Arts	Home	59	61	60	58
	RUK	34	30	25	24
	Other EU	3	4	8	10
	Overseas	3	5	7	8
	<i>N (=100%)</i>	<i>3380</i>	<i>5417</i>	<i>5862</i>	<i>5986</i>
Total	Home	72	72	69	69
	RUK	19	15	12	11
	Other EU	5	7	10	10
	Overseas	5	6	9	10
	<i>N (=100%)</i>	<i>31763</i>	<i>34536</i>	<i>39122</i>	<i>38832</i>

Table 10: Characteristics (percentages) of movers and stayers, by country (UK-domiciled full-time first-degree course entrants to UK institutions in 2011)

Table 10a: England

	Movers-in	Stayers	Movers-out
Female	55	55	51
Age 21-plus	14	20	10
Ethnic minority	7	25	10
Low participation area	7	12	8
<i>Under 21 only:</i>			
Parent has HE qualification	69	55	69
Higher managerial and professional	29	26	33
Working class	18	23	16
Independent school	12	12	17
Top attainment quintile	28	22	26
Lowest attainment quintile	16	19	14
n	11441	314588	14666

Table 10b: Wales

	Movers-in	Stayers	Movers-out
Female	49	59	55
Age 21-plus	10	28	13
Ethnic minority	10	6	9
Low participation area	9	15	8
<i>Under 21 only:</i>			
Parent has HE qualification	66	58	69
Higher managerial and professional	31	19	28
Working class	17	29	18
Independent school	13	2	9
Top attainment quintile	19	14	29
Lowest attainment quintile	16	22	12
n	11410	10853	6127

Table 10c: Northern Ireland

	Movers-in	Stayers	Movers-out
Female	52	56	55
Age 21-plus	11	19	13
Ethnic minority	13	1	3
Low participation area	7	7	6
<i>Under 21 only:</i>			
Parent has HE qualification	76	60	65
Higher managerial and professional	45	15	23
Working class	11	26	21
Independent school	24	0.3	1
Top attainment quintile	30	18	26
Lowest attainment quintile	2	22	21
n	277	8756	4701

Table 10d: Scotland

	Movers-in	Stayers	Movers-out
Female	58	58	56
Age 21-plus	10	26	21
Ethnic minority	9	7	12
Low participation area	6	5	2
<i>Under 21 only:</i>			
Parent has HE qualification	75	66	84
Higher managerial and professional	35	29	45
Working class	12	21	9
Independent school	24	10	53
Top attainment quintile	47	19	35
Lowest attainment quintile	9	19	18
n	4450	26613	1662

Table 11: Characteristics (percentages) of RUK and Scottish-domiciled full-time first-degree course entrants to Scottish institutions in 2011, by sector

	Ancient		Old (other pre-1992)		New (post-1992)		Other HEI	
	Movers-in (RUK domicile)	Stayers (Scotland domicile)	Movers-in (RUK domicile)	Stayers (Scotland domicile)	Movers-in (RUK domicile)	Stayers (Scotland domicile)	Movers-in (RUK domicile)	Stayers (Scotland domicile)
Female	61	55	51	57	58	60	60	55
Age 21-plus	7	15	11	20	21	33	16	41
Ethnic minority	9	6	9	7	10	7	6	3
Low participation area	4	3	8	3	11	6	6	3
<i>n</i>	<i>2490</i>	<i>6471</i>	<i>944</i>	<i>6299</i>	<i>754</i>	<i>12548</i>	<i>203</i>	<i>927</i>
<i>Under 21 only</i>								
Parent has HE qualification	81	75	71	70	56	56	71	66
Higher managerial & professional	41	37	29	28	21	23	39	24
Working class	8	15	15	19	21	26	10	19
Independent school	34	18	12	9	5	4	20	5
Top attainment quintile	66	40	23	21	7	4	28	10
Lowest attainment quintile	1	2	9	10	33	35	25	31
<i>n</i>	<i>1872</i>	<i>4204</i>	<i>645</i>	<i>3774</i>	<i>433</i>	<i>5992</i>	<i>144</i>	<i>337</i>

Table 12: Binary logistic regression predicting study in another country of the UK: Under-21 year old full-time first-degree course entrants in 2011, by country of domicile

Table 12 a:England

	B	S.E.	Exp(B)		B	S.E.	Exp(B)
Female	-0.09	.020	0.92		-0.04	.021	0.97
Ethnic minority	-1.03	.035	0.36		-1.00	.036	0.37
Low participation area	-0.23	.039	0.79		-0.24	.039	0.79
Lower managerial & professional	-0.09	.027	0.91		-0.08	.027	0.93
Intermediate	-0.22	.033	0.80		-0.21	.033	0.81
Working class	-0.47	.036	0.63		-0.46	.036	0.63
Unclassified	-0.10	.033	0.91		-0.09	.033	0.91
Independent school	0.31	.028	1.36		0.31	.028	1.37
High attainment	0.02	.030	1.02		0.09	.031	1.09
Medium attainment	-0.07	.029	0.93		0.02	.030	1.02
Low attainment	-0.12	.032	0.88		-0.02	.033	0.98
Lowest attainment	-0.22	.035	0.80		-0.12	.035	0.89
Medicine & Veterinary Medicine					0.80	.052	2.23
Subjects allied to medicine					0.10	.053	1.11
Sciences					0.65	.028	1.92
Engineering & technology					0.36	.043	1.44
Arts					0.39	.029	1.47
Other					-2.82	.708	0.06
Constant	-2.58	.029	0.08		-3.04	.036	0.05

Table 12b: Wales

	B	S.E.	Exp(B)		B	S.E.	Exp(B)
Female	-0.04	.042	0.96		-0.04	.045	0.96
Ethnic minority	0.55	.085	1.73		0.53	.086	1.71
Low participation area	-0.38	.074	0.69		-0.36	.075	0.70
Lower managerial & professional	-0.26	.062	0.77		-0.26	.062	0.77
Intermediate	-0.32	.069	0.72		-0.34	.070	0.71
Working class	-0.62	.069	0.54		-0.61	.069	0.54
Unclassified	-0.56	.070	0.57		-0.57	.071	0.56
Independent school	1.26	.106	3.52		1.24	.107	3.47
High attainment	-0.60	.063	0.55		-0.55	.064	0.58
Medium attainment	-0.74	.064	0.48		-0.67	.065	0.51
Low attainment	-0.94	.066	0.39		-0.84	.067	0.43
Lowest attainment	-1.23	.070	0.29		-1.14	.071	0.32
Medicine & Veterinary Medicine					0.97	.124	2.64
Subjects allied to medicine					0.61	.084	1.83
Sciences					0.06	.057	1.06
Engineering & technology					0.57	.086	1.76
Arts					0.45	.059	1.57
other					0.43	.445	1.54
Constant	0.67	.065	1.96		0.37	.077	1.45

Table 12c: N Ireland

	B	S.E.	Exp(B)		B	S.E.	Exp(B)
Female	0.11	.046	1.12		0.04	.049	1.04
Ethnic minority	0.96	.159	2.62		0.96	.161	2.61
Low participation area	-0.05	.099	0.95		-0.07	.100	0.93
Lower managerial & professional	-0.36	.071	0.70		-0.35	.071	0.70
Intermediate	-0.57	.074	0.56		-0.56	.074	0.57
Working class	-0.65	.078	0.52		-0.63	.078	0.53
Unclassified	-0.58	.085	0.56		-0.57	.085	0.57
Independent school	1.40	.322	4.05		1.35	.324	3.84
High attainment	-0.39	.070	0.68		-0.29	.073	0.75
Medium attainment	-0.49	.072	0.61		-0.38	.075	0.68
Low attainment	-0.31	.074	0.73		-0.19	.078	0.83
Lowest attainment	-0.30	.071	0.74		-0.16	.074	0.85
Medicine & Veterinary Medicine					0.58	.102	1.79
Subjects allied to medicine					0.09	.080	1.09
Sciences					0.06	.063	1.06
Engineering & technology					-0.34	.086	0.71
Arts					0.30	.071	1.35
Constant	0.15	.072	1.17		0.02	.085	1.02

Table 12d: Scotland

	B	S.E.	Exp(B)		B	S.E.	Exp(B)
Female	0.07	.074	1.07		0.03	.080	1.03
Ethnic minority	0.43	.134	1.53		0.64	.136	1.90
Low participation area	-0.31	.315	0.73		-0.34	.317	0.71
Lower managerial & professional	-0.19	.095	0.82		-0.24	.097	0.79
Intermediate	-0.32	.119	0.73		-0.35	.122	0.71
Working class	-0.54	.142	0.58		-0.54	.145	0.58
Unclassified	-0.09	.115	0.91		-0.16	.118	0.85
Independent school	2.37	.078	10.75		2.34	.080	10.34
High attainment	-0.59	.108	0.55		-0.72	.112	0.48
Medium attainment	-0.69	.118	0.50		-0.82	.122	0.44
Low attainment	-0.34	.111	0.71		-0.43	.115	0.65
Lowest attainment	-0.01	.113	0.99		0.01	.118	1.01
Medicine & Veterinary Medicine					-0.64	.180	0.53
Subjects allied to medicine					-0.53	.170	0.59
Sciences					-0.08	.113	0.92
Engineering & technology					0.16	.129	1.18
Arts					1.20	.101	3.31
Constant	-3.07	.104	0.05		-3.14	.129	0.04

Reference category for models: male; white; not in lowest quintile of young participation rate (POLAR); higher managerial & professional SEC; highest attainment quintile; studying social sciences and law.

Table 13: Characteristics (percentages) of stayers and movers between regions of England (full-time first-degree course entrants to UK institutions in 2011)

	Stayers within English region	Movers between English regions	Movers out of England
Female	57	52	51
Age 21-plus	29	10	10
Ethnic minority	30	21	10
Low participation area	16	9	8
Under 21 only:			
Parent has HE qualification	46	62	69
Higher managerial and professional	20	30	33
Working class	30	18	16
Independent school	6	16	17
Top attainment quintile	15	27	26
Lowest attainment quintile	24	15	14
n	152372	162206	14666

Table 14: Binary logistic regression predicting study in another region of the UK: English-domiciled under-21 year old full-time first-degree course entrants in 2011

	B	S.E.	Exp(B)		B	S.E.	Exp(B)
Female	-0.11	.009	0.89		-0.11	.010	0.89
Ethnic minority	-0.39	.011	0.68		-0.36	.011	0.70
Low participation area	-0.36	.015	0.70		-0.36	.015	0.70
Lower managerial & professional	-0.12	.014	0.89		-0.12	.014	0.89
Intermediate	-0.34	.015	0.71		-0.34	.015	0.71
Working class	-0.57	.015	0.57		-0.56	.015	0.57
Unclassified	-0.37	.016	0.69		-0.37	.016	0.69
Independent school	0.85	.017	2.35		0.84	.017	2.31
High attainment	-0.22	.016	0.80		-0.19	.016	0.83
Medium attainment	-0.58	.014	0.56		-0.54	.014	0.58
Low attainment	-0.58	.015	0.56		-0.54	.015	0.58
Lowest attainment	-0.76	.015	0.47		-0.72	.015	0.49
Medicine & Veterinary Medicine					0.33	.030	1.39
Subjects allied to medicine					-0.09	.020	0.92
Sciences					0.04	.012	1.04
Engineering & technology					0.21	.019	1.24
Arts					0.30	.013	1.34
Other					0.55	.075	1.73
Constant	1.22	.015	3.38		1.08	.017	2.94

Reference category: male; white; not in lowest quintile of young participation rate (POLAR); higher managerial & professional SEC; highest attainment quintile; studying social sciences and law.