



Centre for Research in Education Inclusion and Diversity

CREID BRIEFING 35

Student characteristics and their association with 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. This briefing describes student characteristics and their association with cross-border mobility. A separate briefing paper summarises patterns and destinations of cross-border flows.

Background and overview of study findings

The analysis was carried out using Higher Education Statistics Agency (HESA)¹ data, principally of young full-time undergraduate entrants in 2012 (N=290,510; N movers=22,155). The research found:

- A relationship between socio-economic advantage and mobility and movers were also more likely than stayers to enter higher status institutions. Moving country to enter HE may in these cases serve to further secure the advantages of socio-economically and educationally privileged young people.
- However many movers were not socio-economically advantaged. In particular there was social diversity of movers to institutions with relatively low entry requirements.
- Some Black and Minority Ethnic (BME) students may in addition be mobile to enter an HEI or location with greater ethnic mix than their home area. This may help to explain the higher levels of mobility of BME students into England than out of England.
- Only mobility from England and Scotland is associated with having a parent with an HE qualification. This form of resource does not have an association with mobility from Wales and Northern Ireland, from where mobility is a common phenomenon;
- Only for students from Wales is moving associated with being in higher prior attainment groups, from other countries those in the lower or mix of lower and higher attainment groups are more likely to be movers, once other factors are accounted for.

¹ HESA bears no responsibility for the analysis nor the inferences and conclusion drawn.

Overview of student characteristics associated with cross-border mobility

The summary descriptive data in Table 1 comparing stayers (those who entered an HEI in the same country as their country of domicile) and movers (those who entered an HEI in a country different to their country of domicile) indicate that, for all countries, movers were more likely than stayers to be socio-economically advantaged students. However for students from Northern Ireland there was the least difference in the percentage of movers and stayers who were from a working class background, and there was little difference in likelihood amongst movers and stayers of having a parent with an HE qualification or not. Students from Scotland on the other hand had a particularly high level of socio-economic advantage among movers, including that half of movers had been to independent school.

Table 1: Characteristics of movers from each country – percentage of young full-time entrants in 2012 who were movers (and percentage of stayers in each characteristic group in brackets)

	England	Scotland	Wales	Northern Ireland	UK Total
Higher managerial and professional class	32 (24)	44 (27)	27 (18)	24 (15)	30 (24)
Lower managerial and professional class	33 (30)	30 (31)	33 (30)	29 (30)	32 (30)
Intermediate class	18 (21)	15 (21)	20 (22)	25 (30)	20 (21)
Working Class	17 (26)	11 (21)	21 (30)	22 (26)	18 (26)
Has HE qualified parent	67 (53)	81 (65)	66 (57)	60 (59)	66 (54)
Went to independent school	20 (11)	51 (9)	9 (2)	-	15 (10)
From low participation HE area	8 (12)	-	9 (13)	6 (7)	8 (11)
BME	11 (26)	11 (6)	8 (6)	3 (2)	9 (23)
Total movers (N)	11680	1080	6100	3295	22150

‘ - ‘ fewer than 52 movers. Column percentages.

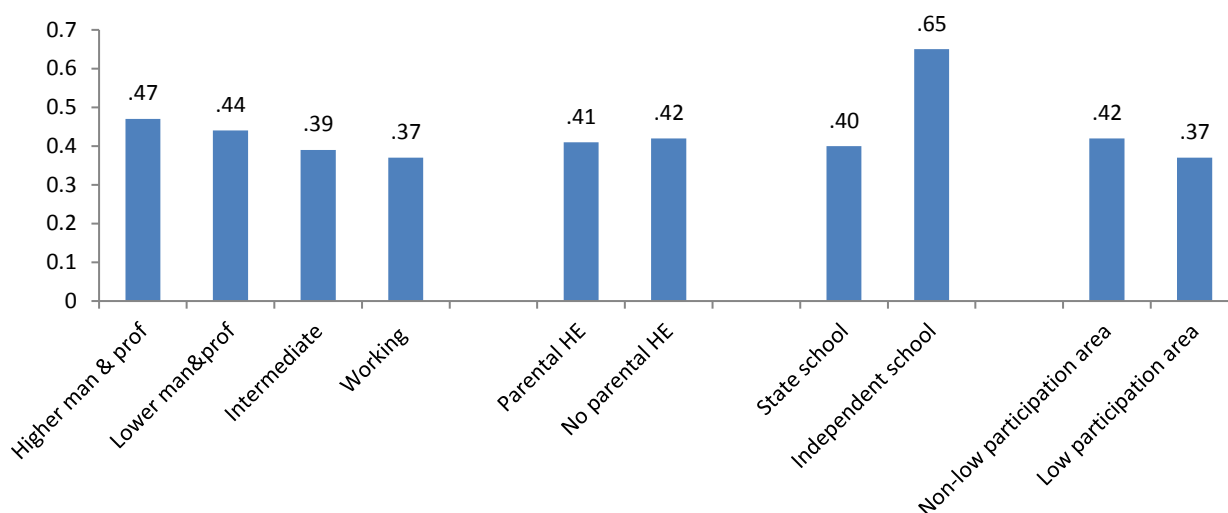
To explore the extent to which these factors may contribute to explaining student mobility patterns, binary logistic regression modelling was undertaken. The findings are summarised for each country of domicile in Figures 1-10, and show the probability of being a mover for these student characteristics having accounted for all the other variables in the model.

Wales-domiciled students

In 2012, 42% of young full-time Wales-domiciled students entered HEIs in another UK country, almost all in England. Figure 1 shows that as social class advantage increased so did the probability of being a mover. This effect was found after accounting for the other characteristics including those of prior attainment and parental education which are

strongly linked with social class of origin. There was also a strong positive effect of having been to independent school on probability of being a mover (although Wales only has a low rate of independent school attendance overall). There was however little difference in probability of moving between those who had a parent with or without a HE qualification.

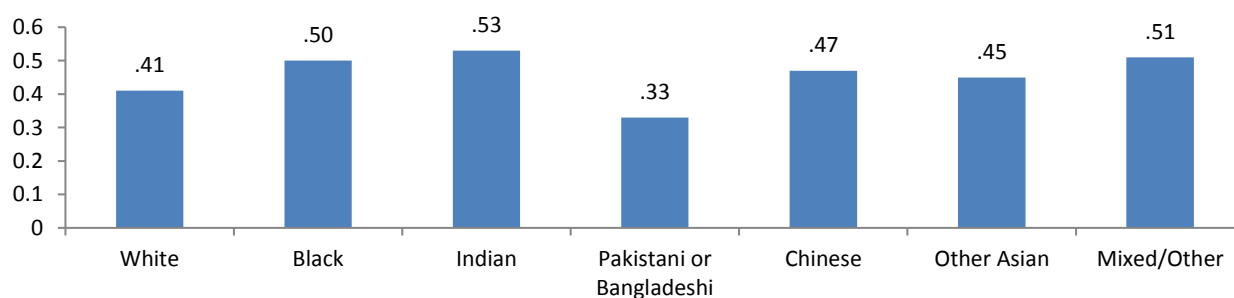
Figure 1: Probability (marginal effect) of being a mover by social characteristics, estimated from logistic regression model for Wales–domiciled 2012 young full-time entrants



Other variables controlled in the model: gender, ethnicity, attainment group, field of study entered, course level entered, average tariff points of institution entered. N=14385.

The probability of moving for BME groups was higher than that for White students, except for Pakistani or Bangladeshi entrants (Figure 2).

Figure 2: Probability (marginal effect) of being a mover by ethnic group, estimated from logistic regression model for Wales–domiciled 2012 young full-time entrants

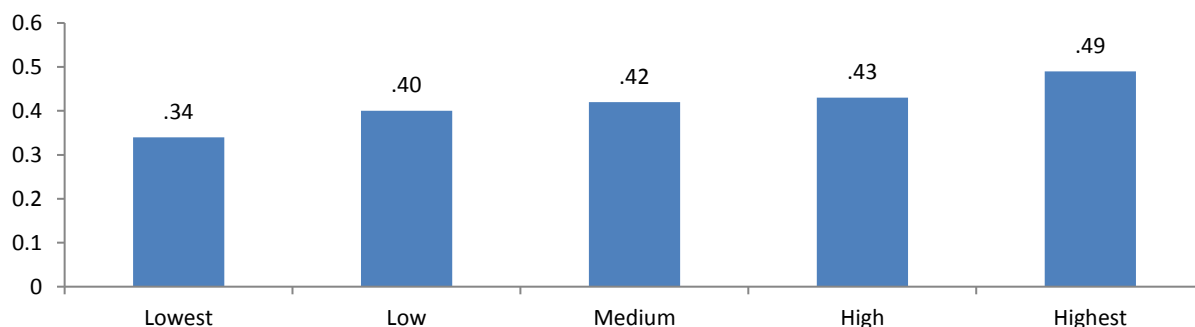


Other variables controlled in the model: gender, social class, parental education, attainment group, school type, home area participation rate, field of study entered, course level entered, average tariff points of institution entered. N=14385.

Mobility was more likely for high attainers than low attainers (attainment quintiles based on entrants' UCAS tariff scores) (Figure 3). After controlling for other variables, those in the highest attainment group had almost 50% probability of being a mover. Analysis of interaction effects showed this positive association with high attainment and mobility across social class groups, school types attended, and ethnicity. The findings therefore indicate a lack of higher tariff provision in Wales, as indicated by a relative distribution

measure of places in institution tariff groups in Wales compared to the whole UK (see briefing paper on patterns and destinations).

Figure 3: Probability (marginal effect) of being a mover by attainment group, estimated from logistic regression model for Wales-domiciled 2012 young full-time entrants

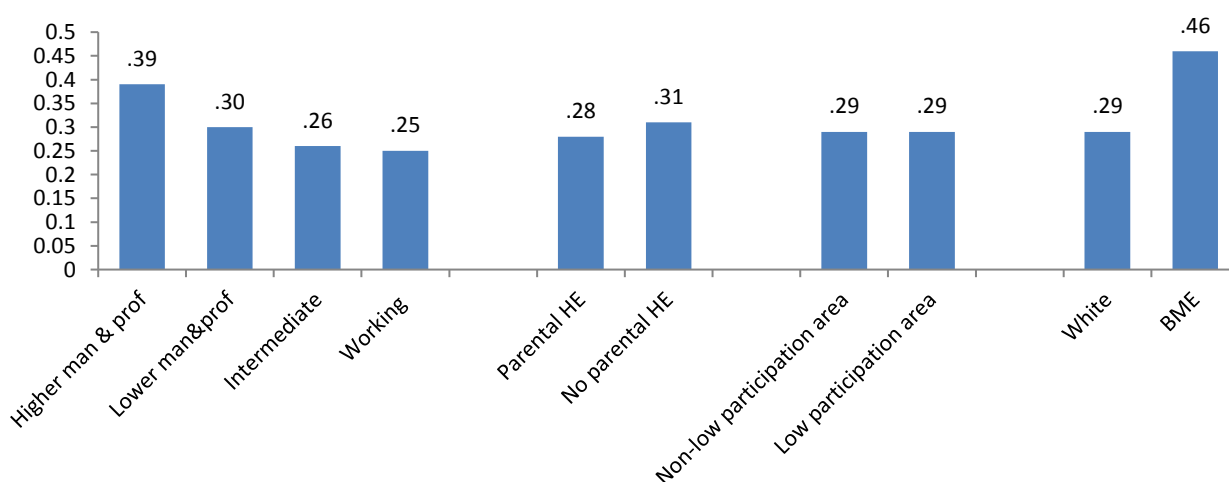


Other variables controlled in the model: gender, social class, ethnicity, parental education, school type, home area participation rate, field of study entered, course level entered, average tariff points of institution entered. N=14385.

Northern Ireland-domiciled students

31% of young full-time Northern Ireland-domiciled entrants were cross-border movers in 2012. Once other background factors were accounted for, the probability of mobility increased the higher the social class (Figure 4). Secondly, being a first generation entrant was positively associated with moving. This finding could reflect the effect of either real under-supply of places or the commonality of moving out of Northern Ireland overcoming the potential lack of HE knowledge of parents. BME students were much more likely than White students to leave Northern Ireland to study.

Figure 4: Probability (marginal effect) of being a mover by social characteristics, estimated from logistic regression model for NI-domiciled 2012 young full-time entrants

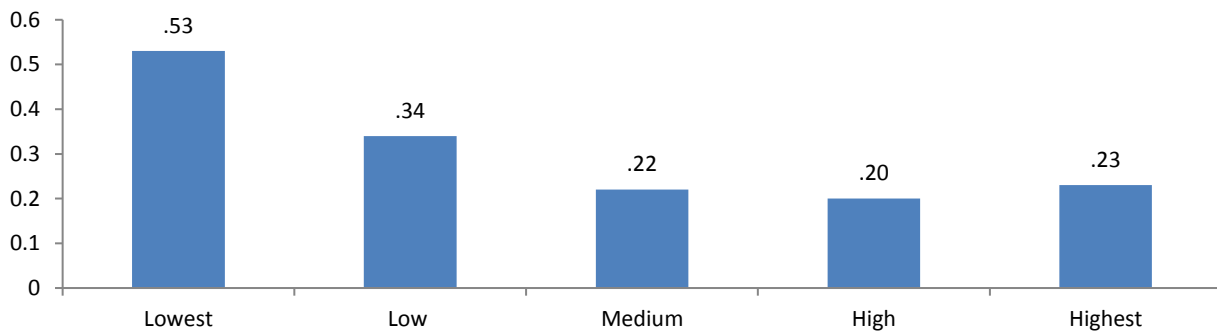


Other variables controlled in the model: gender, attainment group, field of study entered, course level entered, average tariff points of institution entered. N=10555.

Those in the lowest attainment quintile were more strongly likely to be movers than those in other quintiles (Figure 5). Analysis of interaction effects showed that those in the lowest attainment group no matter their social class were more likely to be movers than entrants

in other class and attainment group combinations. Working and intermediate class entrants in the lowest attainment group were therefore more likely to be movers than managerial and professional class entrants in the low to highest attainment groups, despite mobility being more likely overall for managerial and professional class entrants. These findings suggest that those specifically in the lowest attainment group had the greatest difficulty obtaining a place within Northern Ireland. This is likely to reflect institutional supply issues (see briefing paper on patterns and destinations).

Figure 5: Probability (marginal effect) of being a mover by attainment group, estimated from logistic regression model for NI-domiciled 2012 young full-time entrants



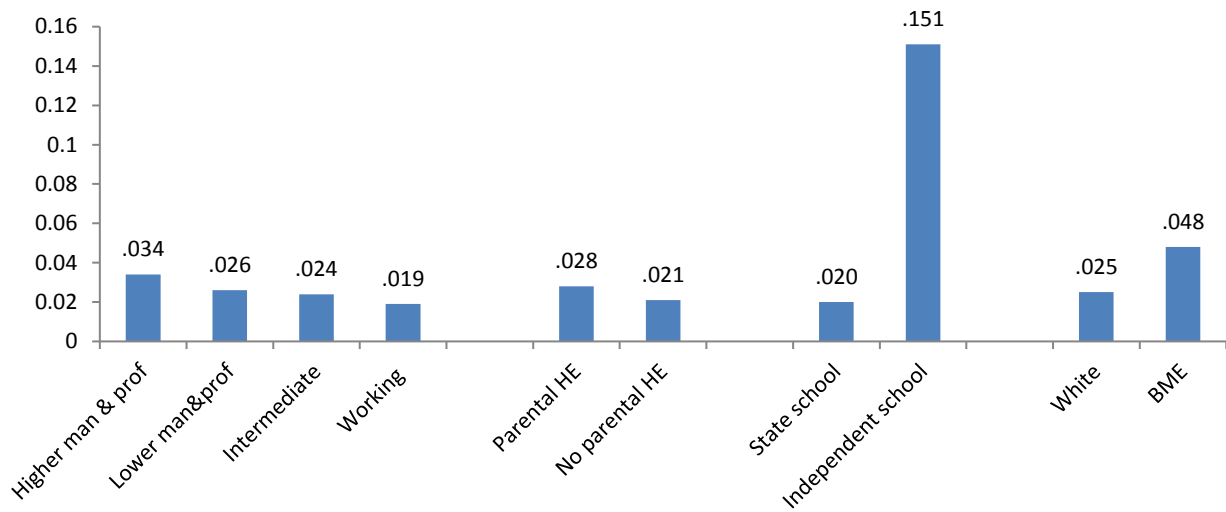
Other variables controlled in the model: gender, social class, ethnicity, parental education, home area participation rate, field of study entered, course level entered, average tariff points of institution entered. N=10555.

Scotland-domiciled students

The findings for Scotland-domiciled students firstly show the very different scale of probabilities of moving compared to entrants from Wales and Northern Ireland due to low outward mobility (5% of entrants), and less scope for differentiation between characteristic groups in the probability of moving (

Figure 6). The findings do nonetheless illustrate that mobility out of Scotland was positively associated with socio-economic advantage. By far the strongest separate effect was that of a student having attended independent school, for whom the probability of being a mover is estimated at 15% compared to only 2% for students from state schools. This effect is separate to that of social class, attainment or parental education, and as such suggests that independent schools in Scotland are preparing pupils for and/or ensuring knowledge of HE options in England. This school-type effect may also be picking up the impact of family wealth on cross-border mobility, if this is not accounted for by parental social class.

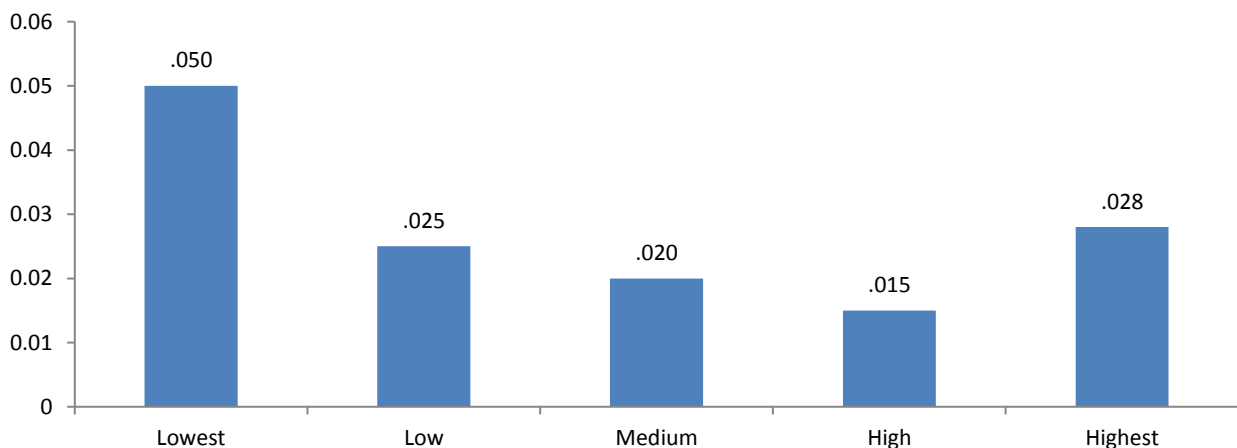
Figure 6: Probability (marginal effect) of being a mover by social characteristics, estimated from logistic regression model for Scotland–domiciled 2012 young full-time entrants



Other variables controlled in the model: gender, attainment group, field of study entered, course level entered, average tariff points of institution entered. N=21540.

Those in the lowest attainment group, no matter their social class group, were more likely to be movers than those in other attainment groups (Figure 7). However those in the higher managerial and professional class group were more likely to be movers than other classes within each attainment group, particularly in the lowest and highest attainment group. The propensity for higher attainers to be mobile may be explained by the motivation to enter high tariff institutions. That of low attainers may be due to relatively low supply of lower tariff provision, but the more socio-economically advantaged appeared to be take relatively more advantage of mobility in response to this contextual factor. It can be noted however that the diversion of lower attainers to HE in colleges rather than HEIs may affect the relative socio-economic advantage level of entrants to lower tariff HEIs, and potentially helps explain this finding.

Figure 7: Probability (marginal effect) of being a mover by attainment group, estimated from logistic regression model for Scotland–domiciled 2012 young full-time entrants

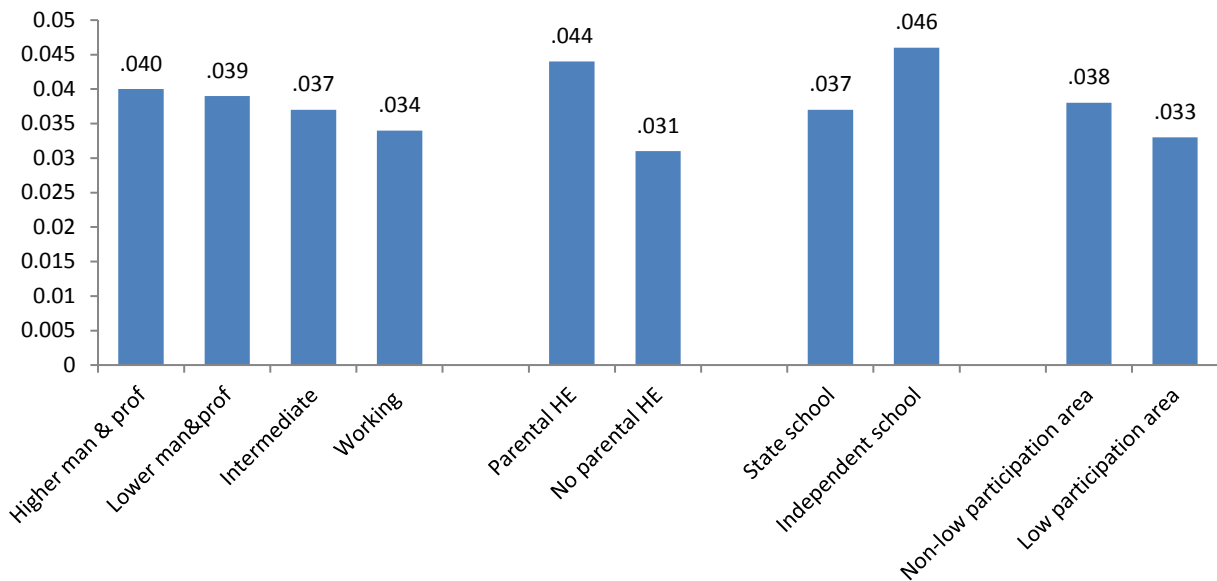


Other variables controlled in the model: gender, social class, ethnicity, parental education, school type, field of study entered, course level entered, average tariff points of institution entered. N=21540.

England-domiciled students

The findings for England-domiciled students show a positive association between social class and moving, but that once other factors were controlled, the social class effect was not as strong as may have been predicted (Figure 8). However the class, parental education, school and home area participation rate findings all indicate that the probability of moving was stronger for these measures of socio-economic advantage.

Figure 8: Probability (marginal effect) of being a mover by social characteristics, estimated from logistic regression model for England-domiciled 2012 young full-time entrants

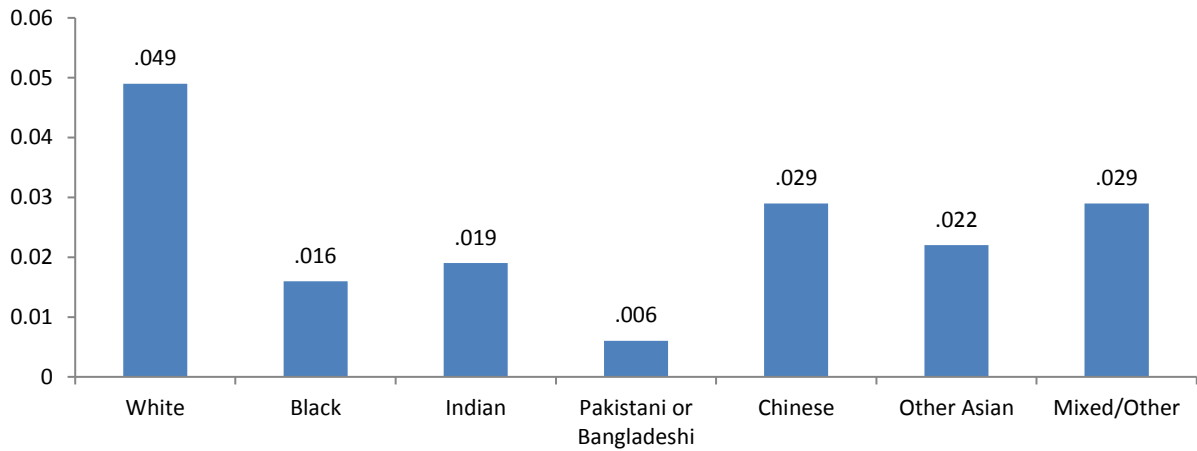


Other variables controlled in the model: gender, ethnicity, attainment group, field of study entered, course level entered, average tariff points of institution entered. N=230395.

Regression modelling also confirmed that BME entrants were less likely than White entrants to be movers (

Figure 9). England-domiciled students differed to those of the devolved administrations on this measure, which is potentially explained by the greater ethnic diversity in England compared to the other countries. For those BME students who take into account ethnic mix of institutions in their HE choices, the effect would be greater mobility into England rather than out of it.

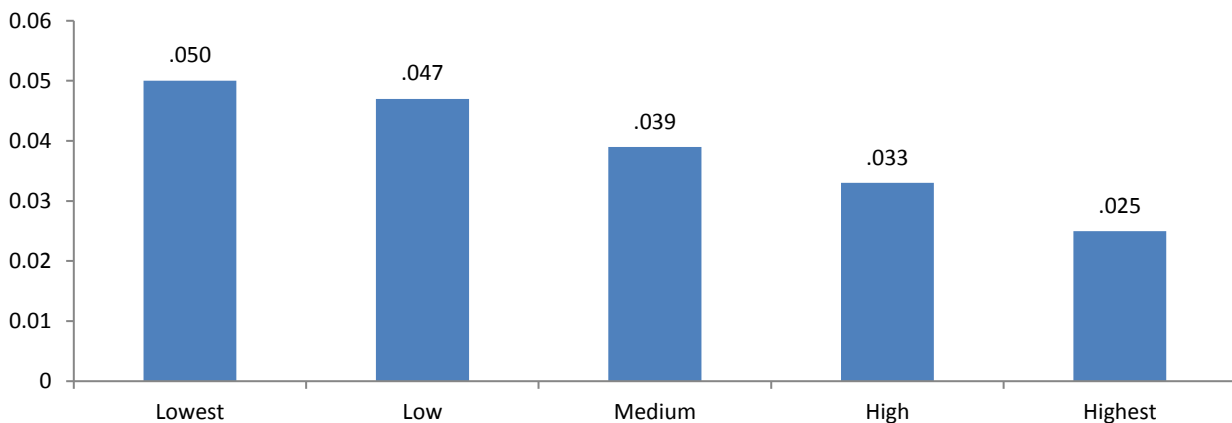
Figure 9: Probability (marginal effect) of being a mover by ethnic group, estimated from logistic regression model for England–domiciled 2012 young full-time entrants



Other variables controlled in the model: social class, parental education, attainment group, school type, home area participation rate, field of study entered, course level entered, average tariff points of institution entered. N=230395.

Those from the highest attainment groups had the greatest probability of moving (Figure 10). Analysis of interaction effects showed that the difference in probability of mobility between White and BME entrants was smaller amongst high than low attainers, suggesting that provision within England was more available or preferences of high attainers were likely to be oriented towards high status institutions located in England, but particularly so for BME students.

Figure 10: Probability (marginal effect) of being a mover by attainment group, estimated from logistic regression model for England–domiciled 2012 young full-time entrants



Other variables controlled in the model: gender, social class, ethnicity, parental education, school type, home area participation rate, field of study entered, course level entered, average tariff points of institution entered. N=230395.

Summary and implications

Socio-economic advantage is more strongly associated with moving country than staying within the country and with moving to higher tariff institutions relative to staying, suggesting that it does contribute to inequalities in HE participation. However there are important differences between student groups, as well as in relation to which country or region students move to, and in relation to country of domicile, these differences raise issues in terms of the effect of country-level sectoral and policy factors on individual action and the costs of that action. The findings summarised across the two briefings suggest that the prospective students who are most concerned with being able to access cross-border institutions are:

- those who are seeking to enter a field of study at a tariff level that matches their attainment and is difficult to access in the home country;
- those who live relatively close to cross-border institutions;
- those who live in an area where mobility of some form is required due to lack of accessibility of HEIs;
- those who are seeking to enter very high tariff institutions unavailable at home; and
- those who would rather study in a location which is different to, or simply far from, their home area.

In all of these categories there is a mix of students, but the last two most strongly concern the most socio-economically advantaged. Having policy conditions in which mobility is possible does also benefit those from less advantaged backgrounds. They are the ones most likely to be affected by further increases in fee differences, loss of portability of fee loan or living support, or reduced availability of places in the home country, as they would be least likely to have the resources to mitigate the increased costs and risks of moving. This may have a negative impact on the role of cross-border mobility in increasing access for widening participation groups. In addition, as BME students from the devolved administrations are relatively more likely to be movers than are White students, additional costs of being a cross-border student disproportionately affect BME students. Across the UK as a whole these effects vary by where students live, as a consequence of the territorial frame of reference for policy-making in the four countries of the UK in the context of devolution (Raffe, 2013; Whittaker, Raffe & Croxford, 2015).

References

Raffe, D. (2013). Was devolution the beginning of the end of the UK higher education system? *Perspectives: Policy and Practice in Higher Education*, 17(1), 11-16.

Whittaker, S., Raffe, D., & Croxford, L. (2015). Cross-border flows of students within the UK. In S. Riddell, E. Weedon, & S. Minty (Eds.), *Higher Education in Scotland and the UK: Diverging or Converging Systems*. Edinburgh: Edinburgh University Press.

Related CREID publications

Whittaker, S. (2017). *Patterns and destinations of 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:

Whittaker, S. (February, 2014). [Working Paper 2: Student cross-border mobility within the UK](#). Edinburgh: CREID, University of Edinburgh.

Croxford, L. & Raffe, D. (March, 2014). [Working paper 4: Student flows across the UK's internal boundaries: Entrants to full-time degree courses in 2012](#). Edinburgh: CREID, University of Edinburgh.

Croxford, L. & Raffe, D. (June, 2014). [Working paper 8: The impact of the 2012 tuition fee changes on student flows across the UK's internal borders](#). Edinburgh: CREID, University of Edinburgh.

Related CES publication

Croxford, L. & Raffe, D. (2013). CES Briefing No. 62: Participation in full-time higher education 1996-2010: a 'home international' perspective. Retrieved at <http://www.ces.ed.ac.uk/briefings/>

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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