# Cross-border HE flows between Wales and England: issues of location, supply, and student characteristics

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# Background and data

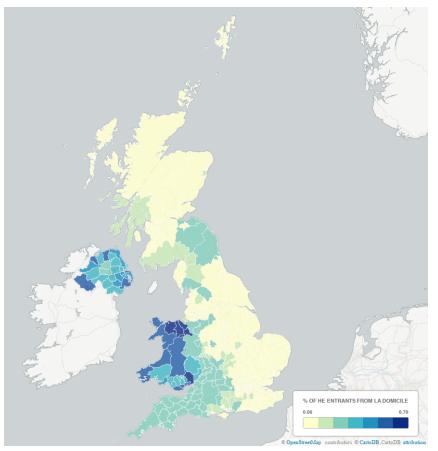
- Part of a UK-wide study.
- HESA student census data 1996-2012.
- U21 full-time entrants to HEIs.
- Multiple imputation for missing data: parental social class, whether parent has HE qualification, attainment group (UCAS tariff).
- Usual caveats apply to the social class and parental education data.
- N young FT movers: 6100; N mature FT movers: 900.

Today:

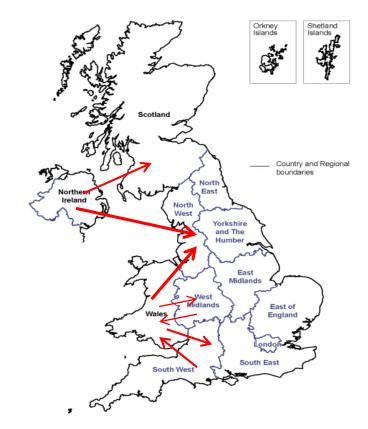
- Patterns and destinations of outward flows.
- Characteristics of movers from Wales.
- Patterns and destinations of inward flows.
- Characteristics of movers in from England.

## **Cross-border flows across the UK**

Percentage of young full-time entrants in each local authority of domicile who are cross-border movers, 2012



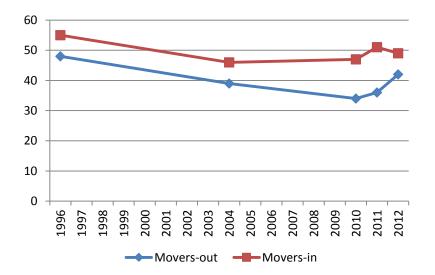
Main directions of UK cross-border flows, young full-time entrants 2012



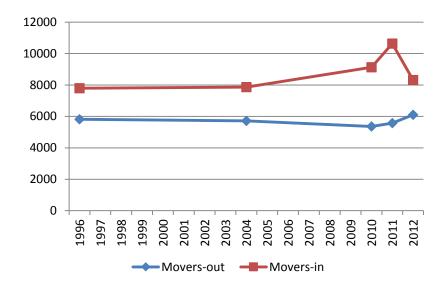
Contains Ordnance Survey data Crown copyright and database right 2013

## Wales-England flows: 1996-2012

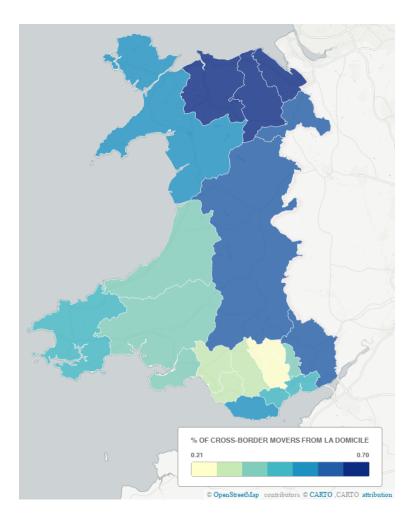
**Percentage** of young full-time Wales-domiciled entrants at RUK HEIs (movers-out) and RUKdomiciled entrants at Welsh HEIs (movers-in) – five years of entry



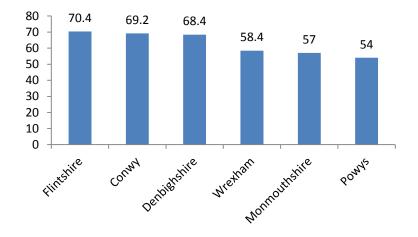
**Number** of young full-time Wales-domiciled entrants at RUK HEIs (movers-out) and RUKdomiciled entrants at Welsh HEIs (movers-in) – five years of entry



## Mobility by local authority domicile

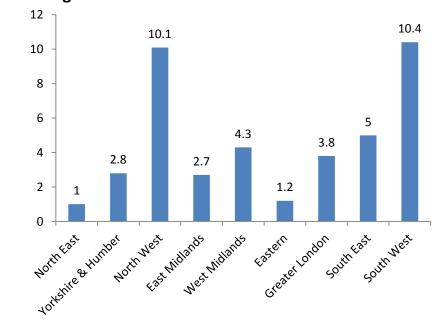


- Ranges from 15% of young entrants from Blaenau Gwent to 70% of entrants from Flintshire.
- Over half of entrants from 6 counties were movers-out:

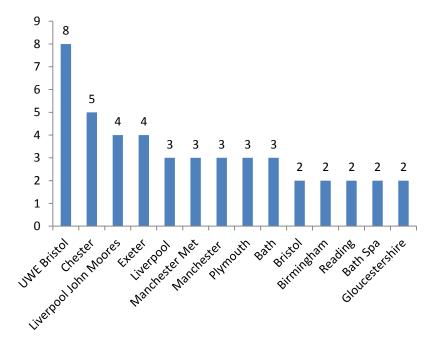


#### Destinations of Welsh movers: regions and institutions

Percentage of Wales-domiciled 2012 full-time young entrants entering HEIs in each **English** region



Percentage of Wales-domiciled 2012 full-time young entrants to the most frequently entered **English HEIs** 



## Institutional supply by average UCAS entry tariff

#### Institution tariff group supply ratio, by national system, young full-time entrants, 2012

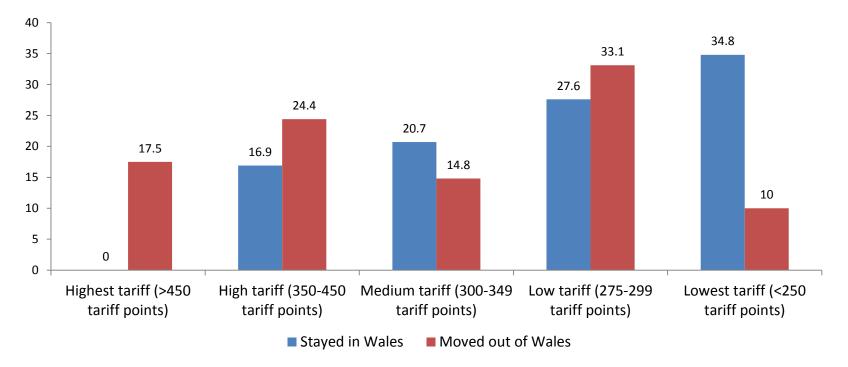
	England	Scotland	Wales	Northern Ireland
Lowest	1.07	0.4	1.34	0
Low	1.02	0.58	0.98	1.83
Medium	0.98	1.23	1.29	0.16
High	0.95	1.16	1.04	2.1
Highest	0.98	2.24	0	0

Distribution measure of institution type in each country compared to whole UK.

For example, the percentage of UK students who entered Welsh low tariff HEIs divided by the percentage of UK students to all UK low tariff HEIs.

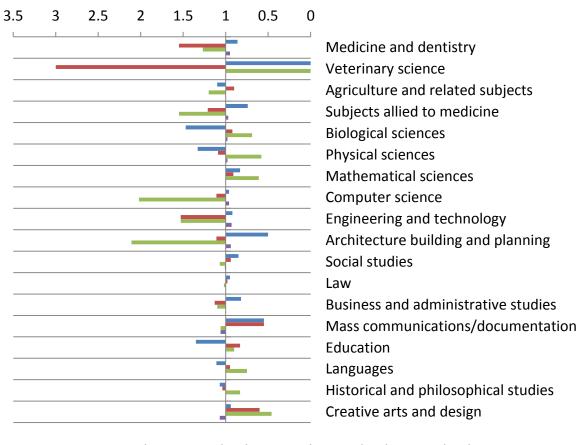
#### Movers and stayers by institution tariff group

Percentage of Wales-domiciled stayers and movers by institution tariff group entered, young fulltime entrants 2012



## Relative supply of fields of study by country

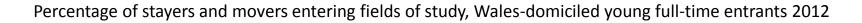
Field of study supply ratio, by national system, young full-time entrants 2012

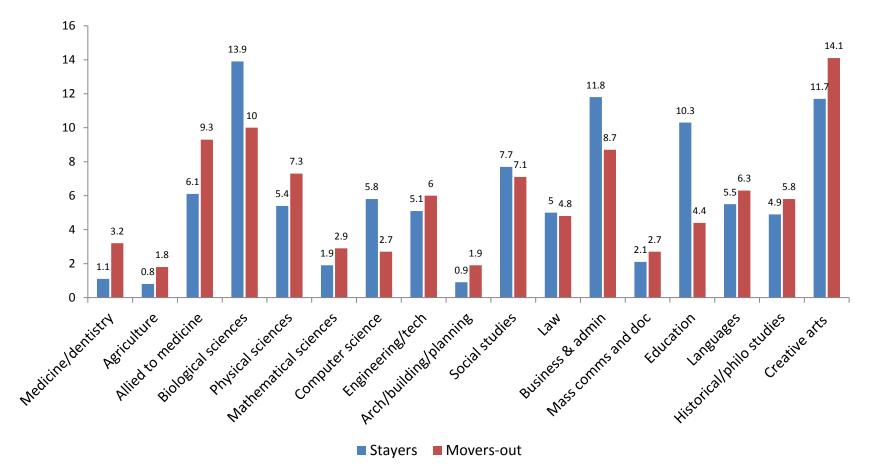


■ Wales ■ Scotland ■ Northern Ireland ■ England

The percentage of UK entrants to each field of study in each country system divided by the percentage of UK entrants to the field in the whole of the UK. Indicates 'under-supply' and 'over-supply' relative to all UK supply.

## Movers and stayers by field of study



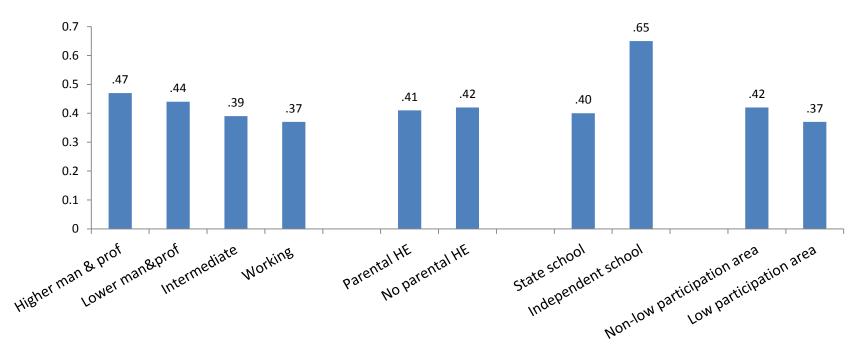


## Characteristics of movers and stayers: descriptive summary

	Stayers (%)	Movers (%)	Stayers (N)	Movers (N)
Female	54.8	56.8	4650	3460
Male	45.2	43.2	3830	2635
Social class				
Higher managerial and professional	17.9	26.7	1520	1630
Working class	30.2	20.5	2565	1255
Parental education				
Parent with HE qualification	57.3	65.6	4865	4000
Ethnicity				
White	93.6	91.8	7860	5570
BME	6.4	8.2	540	500
Attainment				
Highest quintile	13	27.4	1105	1670
Lowest quintile	25.4	12.7	2155	775
Home area				
Low participation area	13.2	8.8	1110	535
School type				
Independent school	2.1	8.6	170	510
Total	58.2	41.8	8485	6100

## Students' social and educational background: probability of moving

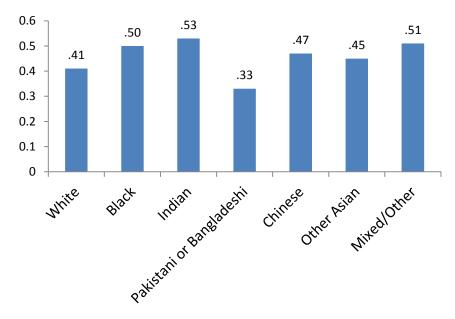
Probability (marginal effect) of being a mover by social characteristics, estimated from logistic regression model for Wales–domiciled 2012 young full-time entrants



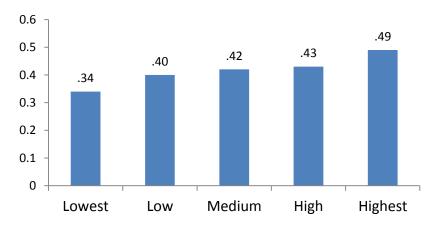
Other variables controlled in the model: gender, ethnicity, field of study entered, course level entered, average tariff points of institution entered. N=14383.

#### Students' ethnicity and attainment: probability of moving

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



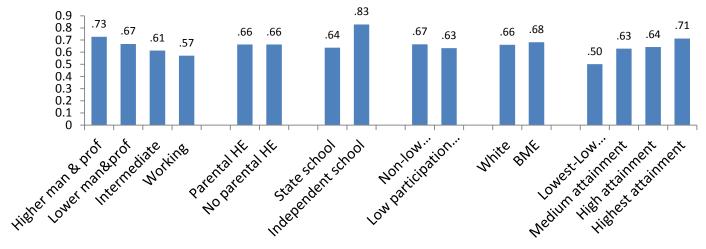
Probability (marginal effect) of being a mover by **attainment group**, estimated from logistic regression model for Wales–domiciled 2012 young full-time entrants



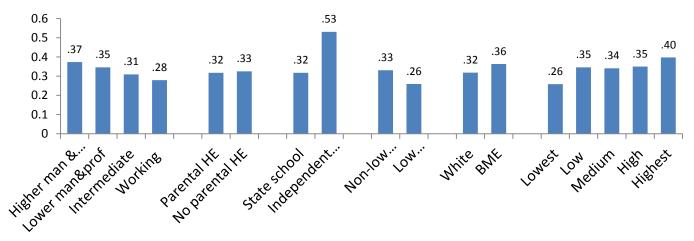
Other variables controlled in the model: social class, parental education, school type, home area participation rate, field of study entered, course level entered, average tariff points of institution entered. N=14383. Other variables controlled in the model: gender, social class, ethnicity, parental education, school type, home area participation rate, field of study entered, course level entered, average tariff points of institution entered. N=14383.

#### Movers to higher and lower tariff institutions

Probability (marginal effect) of being a mover by social characteristics, estimated from logistic regression model for Wales–domiciled 2012 young full-time entrants to **higher tariff** institutions



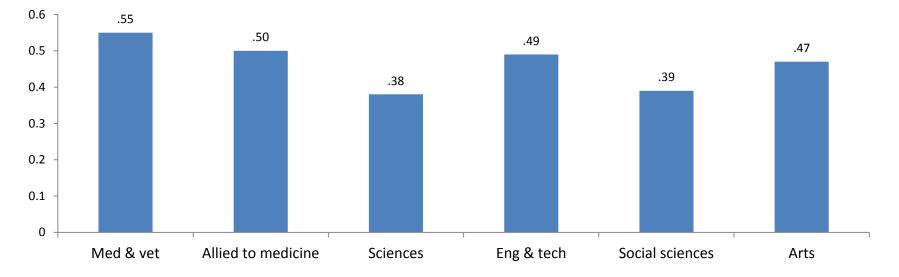
Probability (marginal effect) of being a mover by social characteristics, estimated from logistic regression model for Wales–domiciled 2012 young full-time entrants to **lower tariff** institutions



Other variables controlled in models: gender, whether from low participation area, field of study entered. N higher: 3726. N lower: 7448.

## Field of study revisited: controlling for characteristics and institution tariff

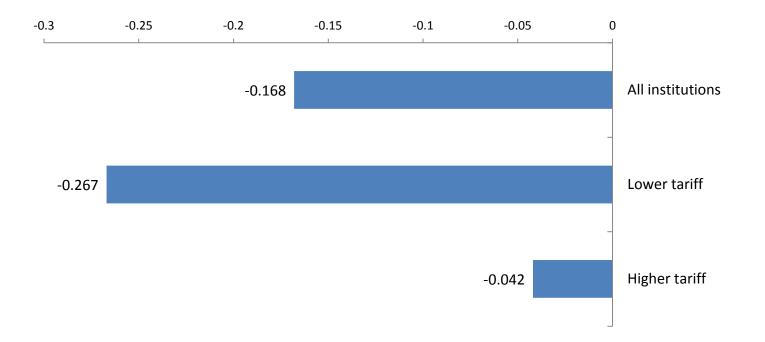
Probability (marginal effect) of mobility by field of study entered, estimated from regression model for Wales-domiciled 2012 young full-time entrants



Other variables controlled: gender, social class, ethnicity, parental education, attainment group, school type, whether from low participation area, course level, tariff score of institution entered. N=14383.

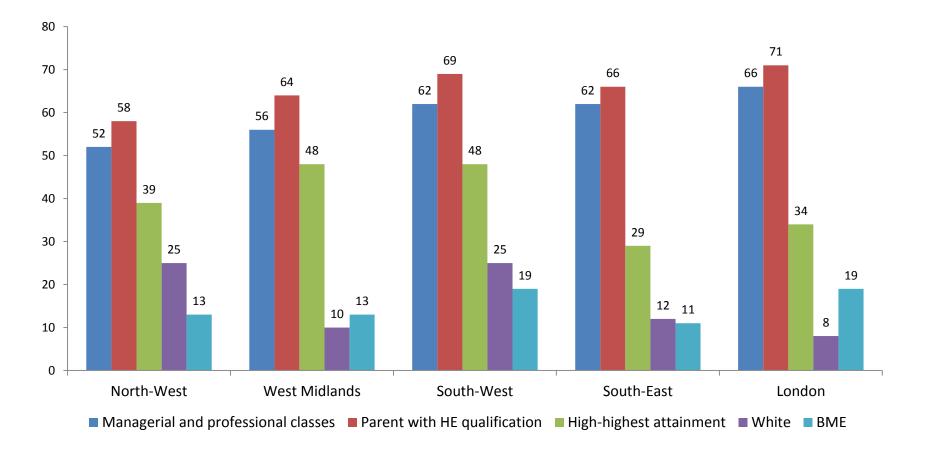
## Field of study supply and institution type: probability of moving

Average marginal effect of field of study supply ratio on probability of being a mover, Walesdomiciled 2012 young full-time entrants to institution tariff groupings



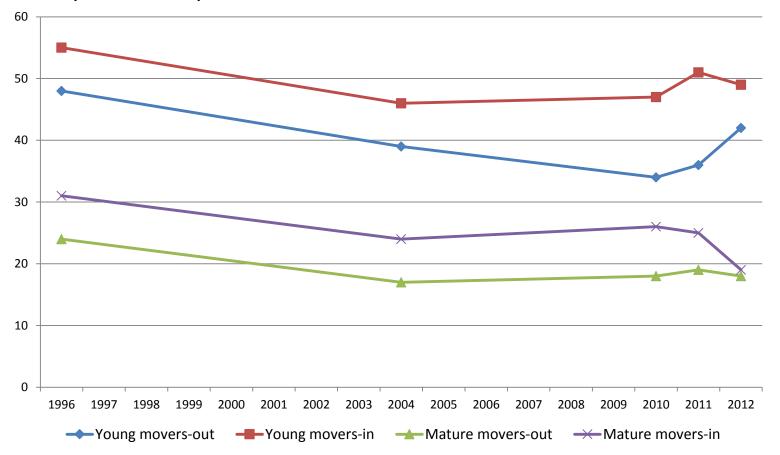
## **Student characteristics and regional destinations**

Percentage of Wales-domiciled 2012 young full-time movers by social characteristics – movers by region of HEI entered and selected characteristics



## Mature students: flows

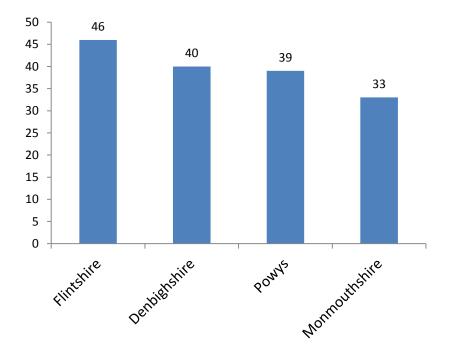
**Percentage** of mature and young full-time Wales-domiciled entrants at RUK HEIs (movers-out) and RUK-domiciled entrants at Welsh HEIs (movers-in) – five years of entry



## Mature movers: home and destination regions

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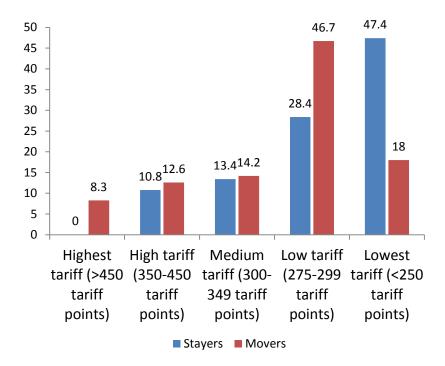
Percentage of Wales-domiciled 2012 full-time mature entrants who were movers: **counties of domicile** with highest percentages of movers Percentage of Wales-domiciled 2012 full-time mature entrants entering HEIs in **English regions** 



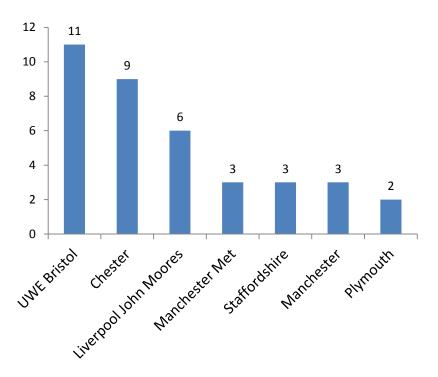


## Mature movers: Institutions entered

Percentage of Wales-domiciled stayers and movers by **institution tariff group** entered, mature full-time entrants 2012

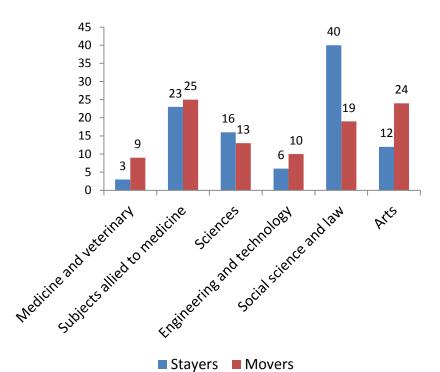


Percentage of Wales-domiciled 2012 full-time mature entrants to the most frequently entered **English HEIs** 

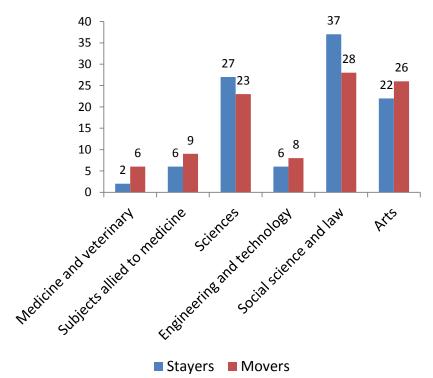


## Field of study entered: mature and young movers and stayers

Percentage of stayers and movers entering fields of study, Wales-domiciled **mature** full-time entrants 2012

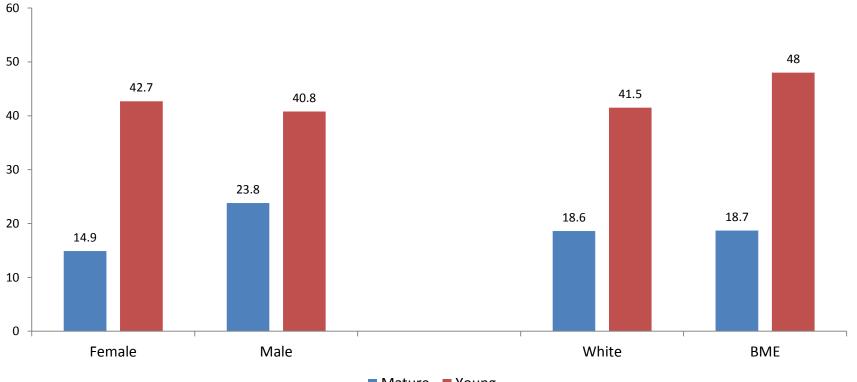


Percentage of stayers and movers entering fields of study, Wales-domiciled **young** full-time entrants 2012



## Comparing gender and ethnicity of mature and young movers

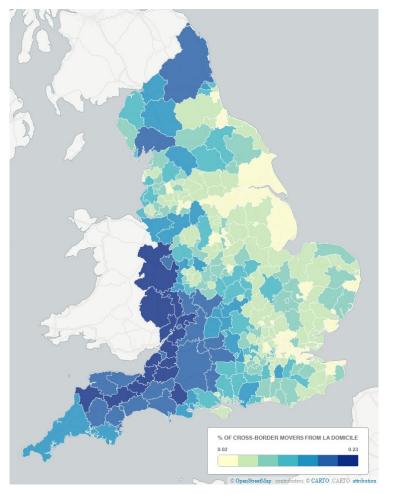
Percentage of mature and young movers by gender and ethnicity, full-time entrants 2012



■ Mature ■ Young

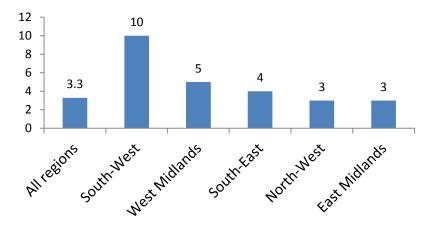
### **Domicile of English movers-out**

Percentage of young full-time 2012 entrants who were cross-border movers, by English LA domicile



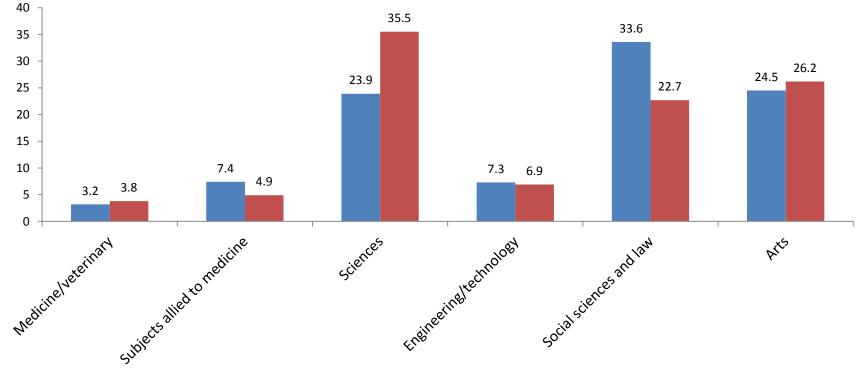
- 5% of England-domiciled entrants crossed a border 3.3% went to Welsh HEIs.
- They were most likely to come from LAs and regions close to Wales.

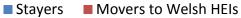
#### Percentage of England-domiciled entrants to Welsh HEIs by region of domicile



## English movers and stayers: fields of study

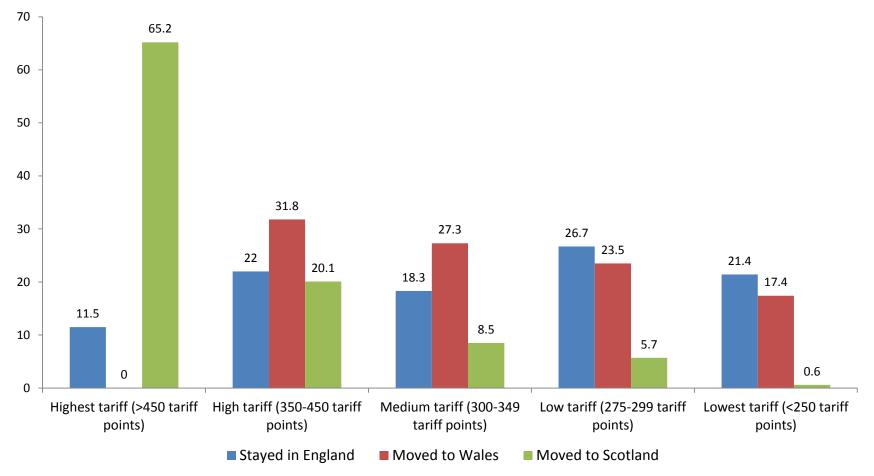
Percentage of England-domiciled 2012 young full-time stayers and movers to Wales entering field of study groups





## English movers and stayers: institution type

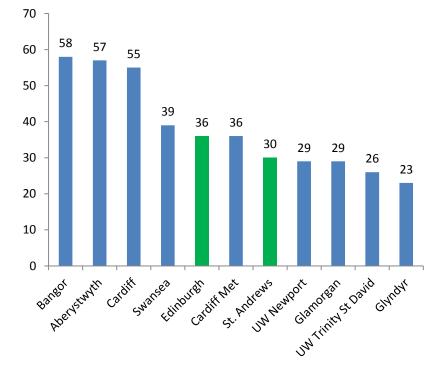
Percentage of England-domiciled 2012 young full-time entrants who were movers and stayers by institution tariff groups entered



Most frequently entered universities by Englanddomiciled movers, young full-time entrants 2012

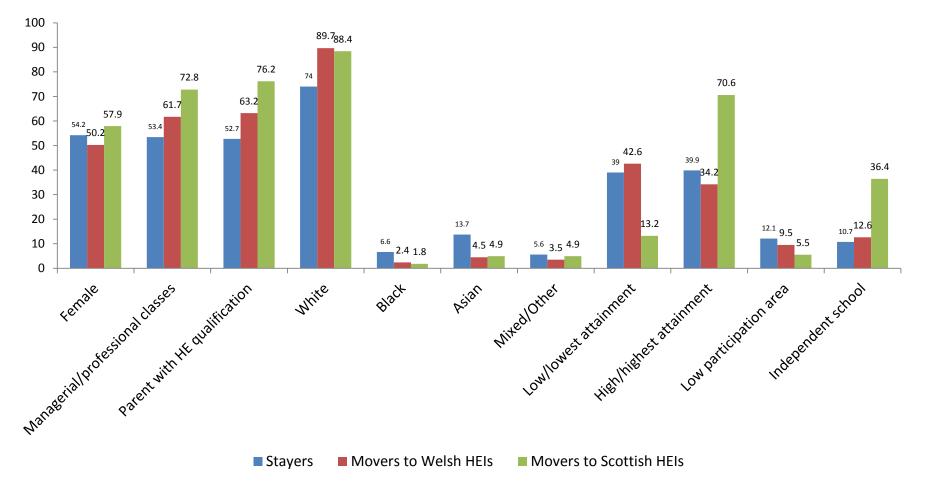
25 22 20 15 13 11 10 10 8 7 6 5 0 Abertstunth Edinburgh Swanses Garorean Cardithers St. Andrews Cardiff Baugor

UK institutions with the highest percentages of RUK entrants, all UK and international young full-time entrants 2012



#### **Characteristics of England-domiciled movers and stayers**

Percentage of England-domiciled young full-time stayers, movers to Wales and movers to Scotland by selected characteristics



## Summary: Institutions and fields of study

- Cross-border mobility is likely to be proximal, in relation to home and destination area. Around half of movers are accounted for by 14 English HEIs.
- Movers are more likely than stayers to enter a wide range of fields of study, but particularly medical and arts subjects. Some of these fields of study have relatively low distribution in Wales compared to whole UK; and mainly associated with higher tariff institutions.
- Stayers are more likely to enter fields which are more common at lower tariff institutions, and overall more likely to be relatively well-supplied in Wales compared to the whole UK.
- Welsh HEIs are not represented among the highest tariff institutions, and there is relative under-supply of 'low' but not 'lowest' tariff institutions. Mobility is common to low, high and highest tariff institutions, which may reflect supply issues.
- The relationship between mobility and field of study supply is stronger for entrants to lower tariff institutions.

## Summary: Student characteristics and differences in mobility

- Movers relatively socio-economically advantaged, compared to stayers entering both higher and lower tariff institutions – importance of financial and social resources in mobility?
- **But parental HE not associated with mobility** a cultural resource not required when mobility is so normalised?
- Mobility associated with higher attainment levels than staying, across social characteristics – lack of provision in Wales or high attainers seeking positional goods?
- But a lot of social diversity amongst movers, particularly amongst those at NW HEIs mainly from North Wales impact of proximity and lack of accessible institutions locally?
- Stronger relationship between socio-economic advantage and longer distance mobility more important for the relatively privileged to move far, or for the less privileged to stay closer to home?
- BME students the most likely to leave Wales, particularly amongst lower tariff institution entrants, and more likely to go to London importance of ethnic diversity of location for some BME students?
- But Chinese and Mixed/Other group students were relatively likely to enter higher tariff institutions BME analysis masks differences between groups.

## HE policy and mobility: summary points

- Portable student support and common applications system makes crossborder study feasible – for those from all backgrounds.
- But not all have equal capacity and propensity to move staying as positive choice or constrained by circumstance.
- Less mobile students least likely to be able to respond to changes in funding or availability of places in Wales.
- Mobility to England may become more important for students from the DAs.
- But for Welsh students only, moving should not increase fee debt.
- If students leave Wales unwillingly due to unavailability of appropriate or preferred HE options, is it enough that student support is available to them?