END OF CYCLE REPORT 2018

Patterns by applicant characteristics

CHAPTER 4
## CONTENTS

1. Introduction 3

2. POLAR4 4
   2.1 POLAR4 equality gap remains large

3. SIMD 6
   3.1 Scottish domiciled pupils from the most deprived areas experience biggest increase in entry rate

4. Gender 8
   4.1 Entry rate gap between men and women continues to widen

Notes to the report 10
   Ethnic group, free school meals, and the multiple equality measure (MEM)
   Numbers in Scotland 11

Glossary 12
1. INTRODUCTION

This report is part of the second release of UCAS’ End of Cycle Reports for the 2018 undergraduate admissions cycle.

As an independent charity, UCAS publishes timely data and analysis about demand for, and progression and admission to higher education, to contribute to public debate about education, access, and social mobility.

This year, we are publishing our end of cycle data and analysis in four releases, between 29 November and 31 January 2019, with the first release published 25 working days after the 2018 cycle closed. Weekly, between 29 November and 13 December, we are publishing a series of detailed analysis reports covering the entire 2018 cycle. These cover acceptance, offer, and entry rates, and differences by applicant background. On 13 December, we will also publish a series of analysis reference tables and data sets for the 2018 cycle. On 31 January, we will publish end of cycle provider-level application data, together with provider-level data on unconditional offer-making. This release will include analysis of trends in application rates by country, sex, and background, with recent years for comparison, and further analysis of offer-making.

Differences in the likelihood of progression of young people into higher education (HE) exist according to gender, socio-economic background, ethnic group, income, and other measures of equality. It is in the context of the series of publications about the admissions cycle for 2018, that this report provides a summary of trends in the entry rates of UK domiciled students from different background groups, with a focus on POLAR4, Scottish Index of Multiple Deprivation (SIMD), and sex. This report covers UK domiciled applicants to full-time undergraduate degree level courses in the UK, focusing on 18 year olds.

Representation of different student groups in HE can be assessed by analysis of their entry rates – the proportion of students from these groups who enter HE. The entry rate of 18 year olds is often most useful for assessment of equality, as they comprise the largest single age group who enter HE through UCAS in any given year (52 per cent of all UK acceptances in 2018). Despite a decreasing 18 year old population, and decreasing numbers of 18 year old acceptances, the UK 18 year old entry rate increased again in 2018 by 1.2%, with 33.0 per cent of the UK 18 year old population entering HE through UCAS. This indicates that, despite falling numbers of acceptances, when placed in the context of a declining 18 year old population, the demand for HE is still increasing. The growth observed this year is, however, around half of that seen last year.
2. POLAR4

2.1 POLAR4 equality gap remains large

POLAR4 is a geography-based measure of disadvantage, classifying local areas (middle layer super output areas [MSOA]) into five quintiles based on the proportion of the young population (18 and 19 year olds) who enter HE from that area. Areas classified as POLAR4 quintile 1 (Q1) are those that show the lowest rates of HE participation, and are considered to be the most disadvantaged areas, while those in quintile 5 (Q5) are considered to be the most advantaged areas.

Except for Q3, the 18 year old entry rate increased across all POLAR4 quintiles in 2018; with the largest increases among those living in the most disadvantaged areas. The entry rate of pupils from POLAR4 Q1 increased by 1.8 per cent proportionally, from 19.3 per cent in 2017 to 19.7 per cent in 2018, while that of Q2 experienced the largest increase of any quintile, rising by 2.3 per cent proportionally since 2017. In contrast, the entry rate of pupils living in the most advantaged areas, those in POLAR4 Q5, had the smallest increase of any quintile, rising by just 0.8 per cent from 46.1 per cent in 2017, to a value of 46.5 per cent in 2018.

FIGURE 1:

UK domiciled 18 year old entry rate by POLAR4 quintile (Quintile 5 = most advantaged)

1 For more information, see the Office for Students (OfS). Analysis of POLAR3, the precursor to POLAR4, displays similar patterns of behaviour to those observed for POLAR4.
As a result of these changes, the entry rate gap (defined as the ratio of the Q5 entry rate to the Q1 entry rate) between pupils from the most advantaged areas and the most disadvantaged areas fell in 2018, with students in Q5 2.36 times more likely to enter university than those from POLAR4 quintile 1. This is consistent with the trend across the period, which has seen the gap narrow every year since 2006.

This sector-wide trend was seen for students domiciled in England, Scotland, and Northern Ireland, where, in each of these UK countries, the proportional increase in entry rate of Q1 was over twice that of Q5, resulting in a narrowing of the entry rate gap between the most advantaged and most disadvantaged groups. Wales was the only country of domicile where the entry rate gap increased in 2018, due to a combination of an increase in the Q5 entry rate, coupled with a fall in the Q1 entry rate.

Higher and lower tariff providers displayed similar patterns in 2018 to that seen across the sector as a whole, with the entry rate gap between the most advantaged and most disadvantaged pupils narrowing. Despite the progress made in reducing this gap at higher tariff providers over the last few years – the gap has reduced every year since 2009 – the gap remains large, with pupils in Q5 5.74 times more likely to enter this provider group than those from Q1 (compared to lower tariff providers, where disadvantaged students are nearly as likely to enter as their more advantaged peers). There is also indication that progress in closing this gap may be slowing, with the reduction seen this year only around a fifth of that seen in recent years.

For the first time since 2011, the entry rate gap at medium tariff providers increased in 2018, with pupils from advantaged areas 2.17 times more likely to enter this group of providers than pupils from disadvantaged areas, up from a value of 2.15 in 2017.

**FIGURE 2:**

UK domiciled 18 year old POLAR4 entry rate ratio (Quintile 5: Quintile 1) by provider tariff group

By the time students have had the opportunity to enter university at age 19, there is a narrowing of the gap in entry between pupils from POLAR4 Q5 and POLAR4 Q1. The entry rate gap among the 2017 young cohort (those who were aged 18 in 2017, and 19 in 2018), was such that students from the most advantaged areas were 2.26 times more likely to enter HE by age 19 than those from the most disadvantaged areas, compared to 2.39 times when just considering those who entered HE by age 18.
3. SIMD

3.1 Scottish domiciled pupils from the most deprived areas experience biggest increase in entry rate

The Scottish Index of Multiple Deprivation (SIMD) is a geography-based, relative measure of deprivation for Scotland, assigning small areas a 1 – 5 classification, based on the deprivation level in that area. Students in SIMD quintile 1 (Q1) are considered to be those living in the most deprived areas, and those in quintile 5 (Q5) considered to be those living in the least deprived areas.2

The entry rate of 18 year old students domiciled in Scotland increased across all SIMD quintiles in 2018. For the second successive year, the biggest increase was in those students from the most deprived backgrounds, with the SIMD Q1 entry rate increasing by 5.5 per cent proportionally, to a value 13.0 per cent. The entry rate for those pupils from the least deprived backgrounds increased in 2018, following a fall in 2017. This was a smaller proportional increase than that seen for SIMD Q1, meaning that for the third year in a row, the entry rate gap between these two groups fell, with those in SIMD Q5 3.26 times more likely to enter HE than those in SIMD Q1 in 2018.

FIGURE 3:
Scottish domiciled 18 year old entry rate by SIMD 2016 quintile (Quintile 5 = least deprived)

2 For more information, see the Scottish Government
A large proportion of Scottish domiciled acceptances are from older age groups (45 per cent were aged 20 or older in 2018), with around 20 per cent of these coming from the most deprived areas (SIMD Q1). As such, the SIMD young cohort entry rates have been extended to include 20 year old HE entrants, in addition to 18 and 19 year olds.³

There is a narrowing of the entry rate gap between those students in SIMD Q5 and those in SIMD Q1, by the time students age 20 have entered university. For the 2016 young cohort (those who were aged 18 in 2016, 19 in 2017, and 20 in 2018), those from the least deprived areas were 3.21 times more likely to enter HE by age 20 than those in the most deprived areas, compared to 3.97 times when just considering those who entered HE by age 18. In recent years, the young cohort entry rate gap has typically been narrowing at a faster rate than that for 18 year olds alone, indicating that progress is being made in reducing the SIMD equality gap among students entering university at older ages.

³ Please see ‘Numbers in Scotland’ in the Notes to the report section at the end of the report
4. GENDER

4.1 Entry rate gap between men and women continues to widen

Women have been more likely to enter higher education than men since the 2006 cycle. In 2018, the increase in UK 18 year old entry rate was reflected across both men and women, with 28.0 per cent of men, and 38.3 per cent of women entering higher education – the highest recorded proportions of each gender. The proportional increase for women was nearly twice that of men, however, meaning the entry rate gap between these genders increased.

The gap between women and men has grown wider each year since 2013, with women 36.7 per cent more likely than men to enter HE in 2018, compared to 31.4 per cent in 2013. In 2018, the widening of this gap was driven by entry to medium and lower tariff providers, with both provider groups experiencing a greater proportional increase in the entry rate of women than men. In contrast, there was no increase in the gender gap at higher tariff providers, where women remained 29 per cent more likely to enter HE than men (compared to 50 per cent more likely at lower tariff providers).

FIGURE 5:
UK domiciled 18 year old entry rate by gender

The larger population size of England compared to the other UK countries means that changes in patterns of English domiciled applicants tend to dominate patterns seen for the UK as a whole. Indeed, when this data is considered at country of domicile level, it was only among students domiciled in England where there was an increase in the gender gap in 2018 – for those domiciled in Wales the gender gap remained constant, and for Scotland and Northern Ireland the gap narrowed. However, all UK domiciles show a trend of a widening gender gap across the twelve-year period from 2006 to 2018.
There is a slight narrowing of the gender gap by the time applicants have had the opportunity to enter university at age 19. Looking at the 2017 young cohort (those who were aged 18 in 2017, and 19 in 2018), women were 32.5 per cent more likely to enter HE by age 19 than men, compared to 35.8 per cent when just considering those who entered HE by age 18. Despite this narrowing by age 19, the gender gap for the young cohort as a whole continues to widen each year, driven by an increasing gender gap at age 18.
NOTES TO THE REPORT
It is our intention to publish commentary on the patterns of entry rates split by ethnic group, free school meals status, and the multiple equality measure (MEM) group for the 2018 cycle, in January 2019.3

3 For patterns of entry rates on ethnic group, free school meals and MEM group up to the 2017 cycle, please see the UCAS Undergraduate End of Cycle Report 2017: Patterns by applicant characteristics. For more information on the MEM, please see the MEM summary and technical reports.

UCAS covers the overwhelming majority of full-time undergraduate provision for people living in England, Wales, and Northern Ireland, so the statistics on acceptances or entry rates can be taken as being very close to all recruitment to full-time undergraduate higher education.

In Scotland, there is a substantial section of higher education provision not included in UCAS' figures. This is mostly full-time higher education provided in further education colleges, which represents around one third of young full-time undergraduate study in Scotland, and this proportion varies by geography and background within Scotland. Accordingly, figures on entry rates or total recruitment in Scotland reflect only the part of full-time undergraduate study that uses UCAS.

In 2014, there were fewer very late acceptances than in other cycles recorded in the UCAS data for some Scottish providers. These changes may mean the number of applicants and acceptances to Scottish UCAS providers in 2014, recorded through UCAS, could be understated by up to 2,000, compared to how applicants and acceptances have been reported in recent cycles. This means that comparing 2014 applicants and acceptances for Scottish providers (or those from Scotland) to other cycles, may not give an accurate measure of change.

In 2015, around 120 courses at Scottish providers which were previously part of the UCAS Teacher Training scheme, moved into the UCAS Undergraduate scheme. As such, the number of applicants and acceptances to Scottish providers in 2015 recorded through UCAS will include those which were previously part of UCAS Teacher Training. This means, comparing 2015 applicants and acceptances for Scottish providers (or those from Scotland, particularly those aged 21 or over) to previous cycles, may not give a like-for-like measure of change.
### Glossary

| **Acceptance** | An applicant who, at the end of the cycle, has been placed for entry into higher education. |
| **Age** | This analysis uses country-specific age definitions that align with the cut-off points for school and college cohorts in the different administrations of the UK. For England and Wales, ages are defined on 31 August, for Northern Ireland on 1 July, and for Scotland on 28 February the following year. Defining ages in this way matches the assignment of children to school cohorts. For applicants outside the UK, a cohort cut-off of 31 August has been used. |
| **Applicant** | A person who has made an application in the UCAS system. Counts of applicants include those applying through the main scheme, late applicants direct to Clearing, and Records of Prior Acceptance (RPAs). |
| **Base population estimate** | The population estimates are based on Office for National Statistics mid-year estimates, and national population projections (published in June 2015). For 16 to 20 year olds, the estimates are obtained by ageing 15 year olds from the appropriate number of years earlier. This approach avoids the estimates being susceptible to changes in net migration (including overseas students) during these ages. Older ages are obtained from the mid-year estimates, and national population projections without ageing. In both cases, the estimates are adjusted from age at mid-year to age on the country-specific reference dates, using the monthly distribution of births. Analysis of application and entry rates by area-based background are supported through small area population estimates, available from the Office for National Statistics, National Records for Scotland, and the Northern Ireland Statistics Research Agency. These small area population estimates have been revised to be consistent with the national level population estimates. |
| **Cohort** | A group of the population all born in the same academic year, who are, for example, all aged 18 on a particular reference date. The cohort entry rate combines the proportion of the 18 year old population who were accepted for entry at age 18, with the proportion of that same population who were accepted for entry at age 19, a year later. These rates have the drawback that they cannot yet be reported for the cohort that was aged 18 in 2018, since they have not yet had the opportunity to apply at age 19. |
| **Domicile** | Declared area of permanent residence. |
| **Entry rate** | Number of acceptances from a UCAS application cycle divided by the estimated base population. |
| **Entry rate ratio** | Also called ‘equality gap’. For a particular equality variable (e.g. POLAR4 quintile), this is the ratio of the entry rate of the group that is most likely to enter higher education (the ‘advantaged’ group in this context), to the entry rate of the group that is least likely to enter higher education (the ‘disadvantaged’ group in this context). The value of the entry rate ratio indicates how many times more likely the advantaged group is to enter higher education than the disadvantaged group. A value of 1 indicates the disadvantaged group is as likely to enter higher education as the advantaged group, and as such there is no ‘equality gap’ between the two groups. Examples of equality gaps are the ‘POLAR4 equality gap’, which is the entry rate ratio of POLAR4 quintile 5 to POLAR4 quintile 1, and the ‘gender equality gap’, which is the entry rate ratio of women to men. |
Free school meals (FSM) | Free school meals – a means-tested benefit that can be used as an indicator of low income, which has been sourced from the National Pupil Database (NPD). Changes to the coverage of the free school meal indicator in the School Census for the 2013/14 academic year, affecting those applying in the 2016 cycle aged 18, have made it necessary to adjust identification of the FSM group in the UCAS data. This means that entry rates reported for the FSM and non-FSM groups differ slightly from those in previous end of cycle reports.

Higher education | Higher education

Higher tariff provider | A provider that belongs to the higher tariff group, from the grouping of providers based on the average levels of attainment of their UK 18 year old accepted applicants (summarised through UCAS Tariff points) in recent cycles. The other two groups are medium tariff providers, and lower tariff providers. Each group of providers accounted for around a third of all UK 18 year old acceptances in recent cycles.

Multiple equality measure (MEM) | The multiple equality measure (MEM) brings together information on several equality dimensions, for which large differences in the probability of progression into higher education exist. These equality dimensions include sex, ethnic group, where people live (using the POLAR3 and IMD classifications), secondary education school type, and income background (as measured by whether a person was in receipt of free school meals [FSM], a means-tested benefit while at school).

These equality dimensions are combined using statistical modelling techniques, and a linked data set of pupils in English schools who were aged 18 between 2006 and 2010 (source: National Pupil Database and School Census, Department for Education). The probability of entry to higher education aged 18 is then calculated based on these equality characteristics and their combinations.

These probabilities are then used to aggregate pupils into groups, where group 1 contains those least likely to enter higher education (‘most disadvantaged’ in this context), and group 5 contains those most likely to enter higher education (‘most advantaged’ in this context). The composition of these groups, and their entry rates, can then be calculated and the trends in these assessed over time.

POLAR4 | Developed by the Office for Students (OfS), and classifies small areas across the UK into five groups, according to their level of young participation in HE. Each of these groups represents around 20 per cent of young people, and is ranked from quintile 1 (areas with the lowest young participation rates, considered as the most disadvantaged), to quintile 5 (highest young participation rates, considered most advantaged). POLAR4 is the successor to POLAR3

Provider | A higher education provider – a university or college.

SIMD | Scottish Index of Multiple Deprivation identifies small area concentrations of multiple deprivation across all of Scotland, providing a relative measure of deprivation among small areas (data zones). In this report, the SIMD 2016 has been used to group areas in each year in the times series, from 2006 to 2016.

UK | United Kingdom. Excludes the Channel Islands and the Isle of Man.