

Discussion Paper: UCAS applications, offers and acceptances

This is one of a number of discussion papers that will be published on the [Commissioner for Fair Access website](#) on key issues relating to fair access. The aim is to bridge the gap between detailed research (where it exists), which is often only accessible to experts, and the wider public conversation, especially in political circles and the media. The hope is that these papers will contribute to, and stimulate, that conversation by presenting data and evidence as accessibly and objectively as possible. Each paper will also include a commentary section by the Commissioner.

This paper considers:

- trends in applications, offers and acceptances over recent years and the changing policy context;
- how offer making behaviour and the applicant pool varies by institution;
- the Commissioner’s thoughts on the strengths and challenges highlighted by the UCAS data.

Background

The Commission on Widening Access (CoWA) proposed a set of Higher Education (HE) entrant targets, including interim targets specifically intended to drive progress in universities:

- 10% of full-time first degree entrants from 20% most deprived backgrounds¹ at every individual university by 2021
- 16% of full-time first degree entrants from 20% most deprived backgrounds¹ at universities as a whole by 2021, and 18% by 2026

University entrant figures (published by the Higher Education Statistics Agency) provide a useful overview of the scale of the challenge represented by these targets. The Commission’s [technical paper](#) showed that, in 2014/15, the percentage of full-time first degree entrants from the 20% most deprived areas (SIMD Q1) areas was 10% or higher in thirteen of the eighteen universities in Scotland that were included in the analysis². In universities as a whole, the percentage of full-time first degree entrants from SIMD Q1 areas was 14% in 2014/15.

UCAS data on applications, offers and acceptances allows us to look at the demographics of the applicant pool and offer making behaviour at each institution, shedding further light on the scale and nature of improvement required.

The data used throughout this paper is for 18 year olds³ domiciled in Scotland who applied⁴ to study on full-time courses at Scottish universities i.e. those applying directly from school. We have focussed on 18 year olds because UCAS publish a richer set of data for this group than for all ages. This means, however, that the data presented only covers a sub-group of full-time first degree entrants so should not be used to make direct comparisons against the CoWA targets. In recent years, almost half of full-time first degree entrants were aged 18 and around 9% of those entrants were from SIMD Q1 areas i.e. there is greater underrepresentation among 18 year olds. It could be argued, therefore, that institutions will have to improve representation in this age group to make meaningful progress for full-time first degree entrants as a whole.

Trends in applications, offers and acceptances over time

Before looking at trends in applications, offers and acceptances, it is important to consider how the higher education policy landscape has changed over recent years (Table 1). Key developments include the implementation of Outcome Agreements in 2012/13 and the introduction of additional funded places for widening access in 2013/14.

Application rates—percentage of population that applies

The application rate for 18 year olds from the 20% most deprived areas in Scotland (the percentage of all 18 year olds in SIMD Q1 areas who applied to university through UCAS) has increased steadily since 2011, due to an increase in the

1. The Commission defined entrants from deprived backgrounds as entrants from the bottom 20% of areas according to the [Scottish Index of Multiple Deprivation](#) (i.e. ‘SIMD 20’, ‘SIMD quintile 1’ or ‘SIMD Q1’ areas) but also recommended that a robust set of measures should be developed to supplement SIMD.
2. The Open University was excluded from the analysis as the interim targets relate to full-time first degree entrants.
3. For Scottish domiciled applicants, UCAS uses age on February 28th in the year after application i.e. in the 2016 applicant cycle, where the majority of those placed will enter university in academic year 2016/17, age at February 28th 2017 is used.
4. Data includes only applicants who had applied by the UCAS June deadline i.e. excludes late applications.

Table 1: Policy context, Pre-2010 to 2016/17

Pre-2010	2005/06: First Learning For All report published by SFC. This has become the regular reporting mechanism for progress on widening access (latest version). 2008/09: SFC's Access and Inclusion Committee formed. 2008/09: 5 year funding for regional articulation hubs (up to 2012/13, extended for further 3 years).
2010/11	Schools for Higher Education Programme (SHEP) formed from Widening Access Regional Forums, Access to High Demand Professions Programme begins, Scottish Wider Access Programme (SWAP) continues.
2011/12	Putting Learners at the Centre , Scottish Government pre-legislative paper specifically identifying widening access as a priority and referring to introduction of Widening Access Outcome Agreements.
2012/13	Institutional Outcome Agreements implemented. These publicly established what colleges and universities committed to deliver in return for their SFC funding, with specific reference to widening participation/access .
2013/14	SFC commenced a four year programme of investment in additional funded places to widen access to higher education (727 Additional Access Places for students from SIMD 40 areas i.e. Q1 and Q2) and increase articulation between colleges and universities (1,020 Additional Articulation Places). Post-16 Education (Scotland) Act placed the SFC and post-16 education bodies' obligations to widen access onto a statutory footing.
2014/15	First Minister's Programme for Government announced ambition that 20% of university entrants will come from the most deprived 20% of the population, and establishment of CoWA to advise on clear milestones and practical steps to meet that ambition.
2015/16	March: final report of CoWA published, A Blueprint for Fairness . May: recommendations of CoWA accepted by Scottish Government.
2016/17	Appointment of Commissioner for Fair Access, Professor Peter Scott.

number of applicants and a fall in the 18 year old population over this period (Chart 1). The Q1 application rate was 16% in 2016, the highest figure on record, but still relatively low compared to the rates for other quintiles. For comparison, the Q5 application rate was 52% in 2016, meaning over half of 18 year olds in the least deprived areas applied to university. The actual number of applicants from Q5 (6,160) was three times higher than from Q1 (2,025). The number of applicants from Q4 (4,705) and Q3 (3,515) were also substantially higher and it is important to keep this in mind as we look at trends in offer rates.

Offer rates—percentage of applications that get offers
Offer rates for SIMD Q1 and Q2 increased steadily between 2011 and 2014 in contrast to the rates for other quintiles (Chart 2). Offer rates for Q1 and Q2 then decreased between 2014 and 2016 but these decreases were replicated across the other quintiles which might reflect the increasing number of applicants (and therefore applications) for a finite and relatively stable number of places i.e. as the number of applications increases, each application is less likely to receive an offer.

Offer rates for SIMD Q1 and Q2 were over 5 percentage points higher in 2016 than in 2011, with Q1 applications just as likely to receive an offer as Q4 applications, and Q2 applications as likely to receive an offer as Q5 applications. This suggests that institutions were actively trying to bring in more students from Q1 and Q2 between 2011 and 2016.

Comparing the offer rate for each SIMD quintile to an

Chart 1: Application rates by SIMD quintile, 2011 to 2016

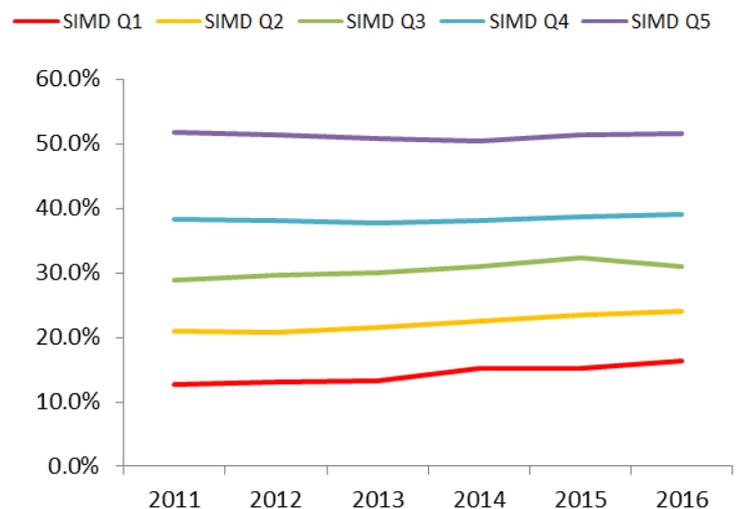
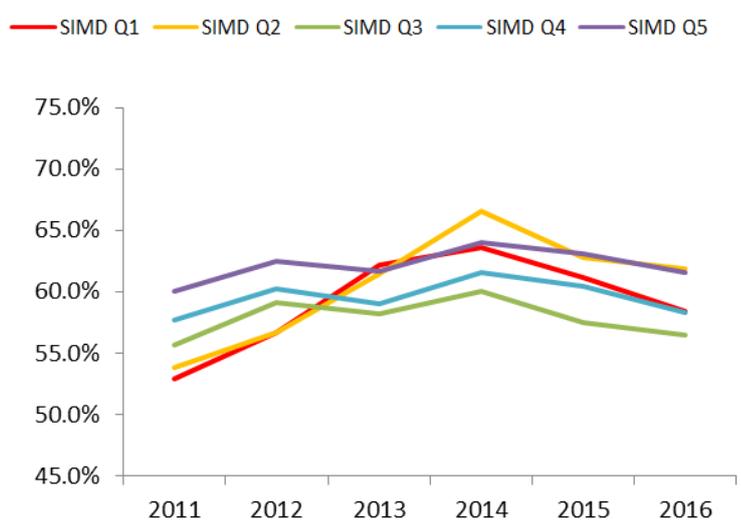


Chart 2: Offer rates by SIMD quintile, 2011 to 2016



appropriate average offer rate provides further insight. The average offer rates calculated by UCAS represent the offer rate for all applications to the same courses and with the same grades as the group being looked at (e.g. average offer rate SIMD Q1 is the offer rate for applications with the same grade profiles as SIMD Q1 applications to the same courses). The average or 'expected' offer rates for each SIMD quintile increased between 2011 and 2014 then decreased over the subsequent two years but remained above 2011 levels (Chart 3). The expected offer rate is highest for Q5, followed by Q4 and so on, and the gap between quintiles has widened slightly since 2011.

Chart 4 looks at the difference between average offer rates and actual offer rates for each SIMD quintile. If the actual offer rate for a group is lower than the average (i.e. the difference is negative) then applications from the group are less likely to receive an offer than we would expect based on course choice and grades alone.

In 2011, applications from Q1 and Q2 received offers at a rate that was lower than expected (by around 2 percentage points). In 2013 this changed and applications from Q1 and Q2 received offers at a rate that was higher than expected (again, by around 2 percentage points). Over subsequent years the gap grew for Q2 (4 percentage points above average in 2016) and decreased slightly for Q1 (1 percentage point above average in 2016). The offer rates for other quintiles are in line with expectation (Q5) or lower than expected (Q4, Q3), having decreased relative to the average since 2011.

In 2016, Q3 applications (those from people in the 40% to 60% most deprived areas) were least likely to get an offer (Chart 2) and also less likely to get an offer than expected, given choice of subject and grades (Chart 4). These patterns provide an insight into how offer making behaviour has changed over recent years but do not necessarily predict how the system would rebalance itself if the number of SIMD Q1 applicants increased further.

Acceptance rates—percentage of applicants placed

Applicants who were not placed might have failed to meet the conditions of the offers they received, or might have chosen not to take up any of their offers. Chart 5 shows how acceptance rates for SIMD Q1 and Q2 increased steadily between 2011 and 2013, in contrast to the rates for other quintiles. This is similar to the trend in offer rates over the same period. Acceptance rates for Q1 then decreased to 2011 levels over the following two years whilst the rates for Q2 remained around the higher 2013 level. In 2016, 60% of applicants from SIMD Q1 and 68% from SIMD Q2

Chart 3: Average offer rates by SIMD quintile, 2011 to 2016

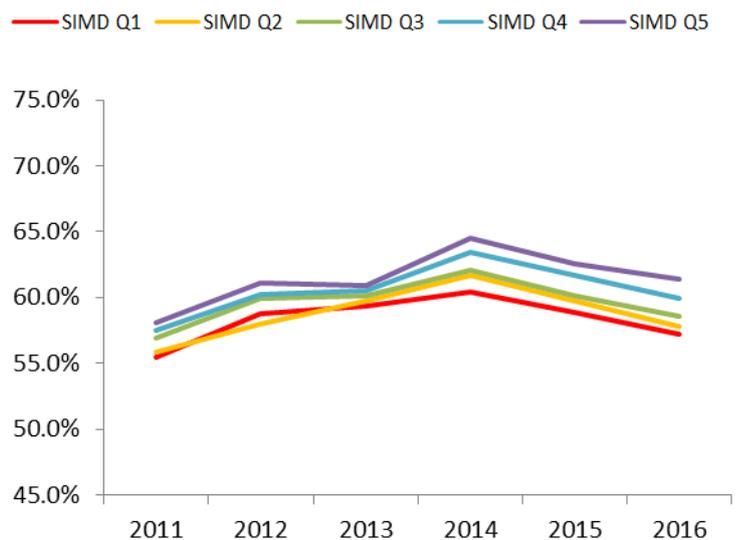


Chart 4: Difference between actual offer rates and average offer rates by SIMD quintile, 2011 to 2016

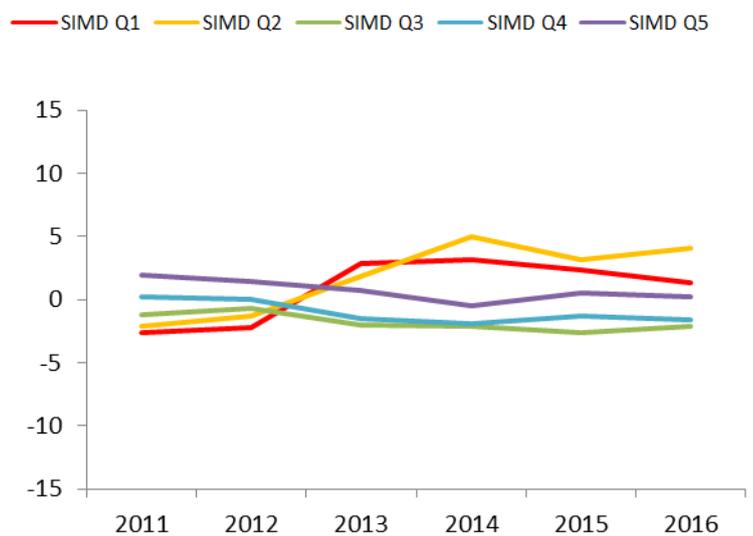
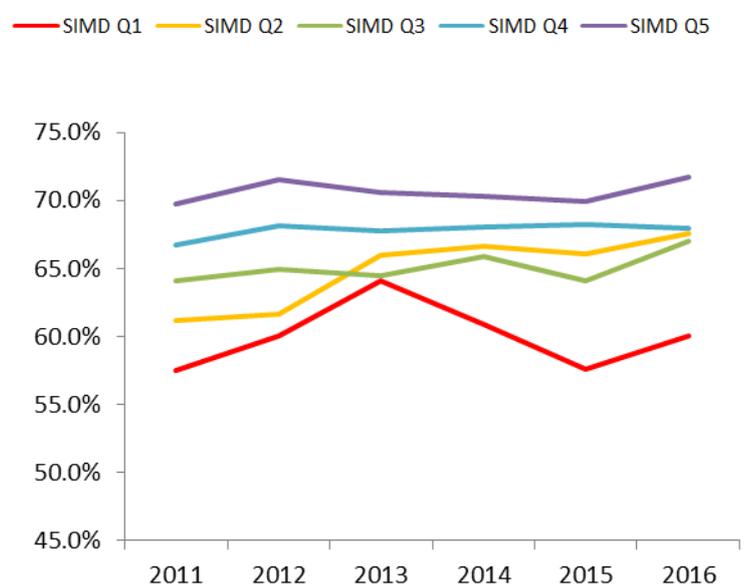


Chart 5: Acceptance rates by SIMD quintile, 2011 to 2016



were placed. For comparison 72% of applicants from Q5 were placed.

The Q3 acceptance rate was relatively stable between 2011 and 2015 before increasing to 67% in 2016. This suggests that although, as noted earlier, applications from this quintile have become less likely to get offers over recent years, those who applied were ultimately just as likely to be placed.

Entry rates—percentage of population placed

In comparison to other quintiles, 18 year olds in SIMD Q1 areas are less likely to apply, just as likely to get offers if they do, but still less likely to be placed. The result is that the relative gap in application rates, is effectively mirrored in entry rates. The Q1 entry rate was 10% in 2016, the highest figure on record for this group, but still relatively low compared to the rates for other quintiles. For comparison, the Q5 entry rate was 37% in 2016, meaning over one third of 18 year olds in the least deprived areas entered university, and the actual number of placed applicants from Q5 (4,415) was three times higher than from Q1 (1,215).

Offer making behaviour and applicant pool by institution⁴

Charts 7 and 8 show how individual institutions compare in terms of their SIMD Q1 offer making behaviour and applicant pool, two factors which will influence the number and percentage of SIMD Q1 students actually entering each university.

The horizontal axes show the percentage point difference between the actual offer rate for SIMD Q1 applications and the expected offer rate (as defined earlier) i.e. the offer making behaviour of institutions. A positive value means that applications from SIMD Q1 areas were more likely to receive an offer than would be expected based on grades and subject choice. A negative value means that applications from SIMD Q1 areas were less likely to receive an offer than expected.

The vertical axes show the percentage of 18 year old applicants from SIMD Q1 areas i.e. the makeup of application pool each institution had to work with. A higher value means an institution had relatively more SIMD Q1 applicants. The bubbles representing the universities are sized according to the actual number of SIMD Q1 applicants to the institution (averaged over the period).

As illustrated previously (see Charts 2 and 4), there was a clear shift in offer making behaviour at national level between 2012 and 2013. Chart 7 covers the period before that shift (2010 to 2012) and Chart 8 covers the period since (2013 to 2016). These charts illustrate how offer making changed between the two periods

Chart 6: Entry rates by SIMD quintile, 2011 to 2016

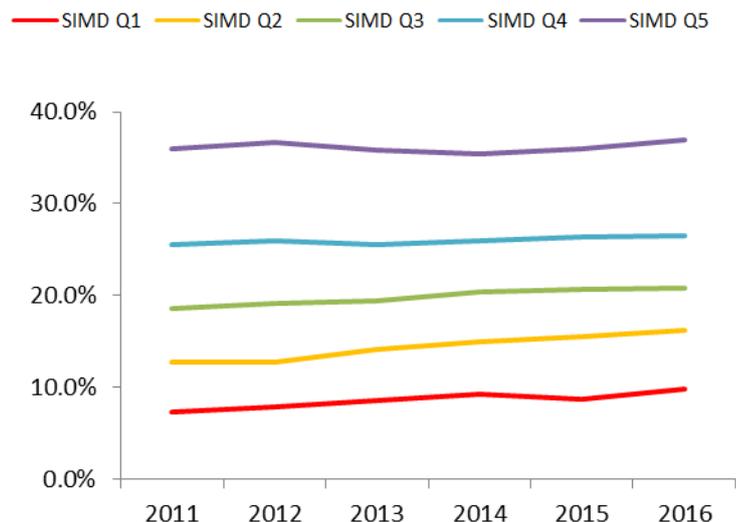


Chart 7: Average difference in actual and expected offer rates for SIMD Q1 vs percentage of applicants from SIMD Q1, by institution, 2010 to 2012

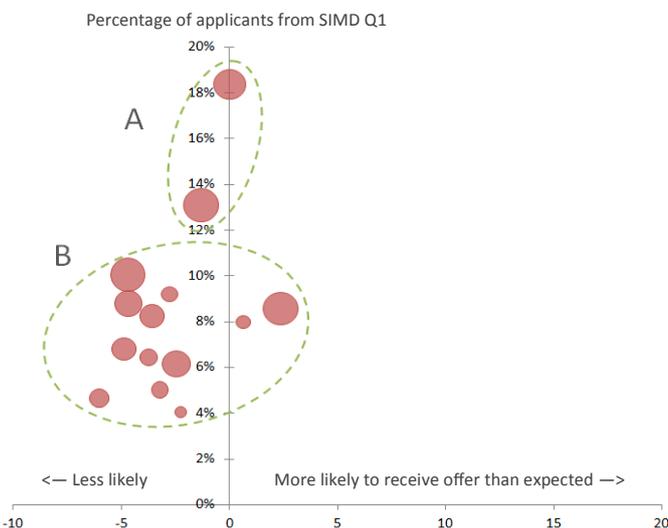
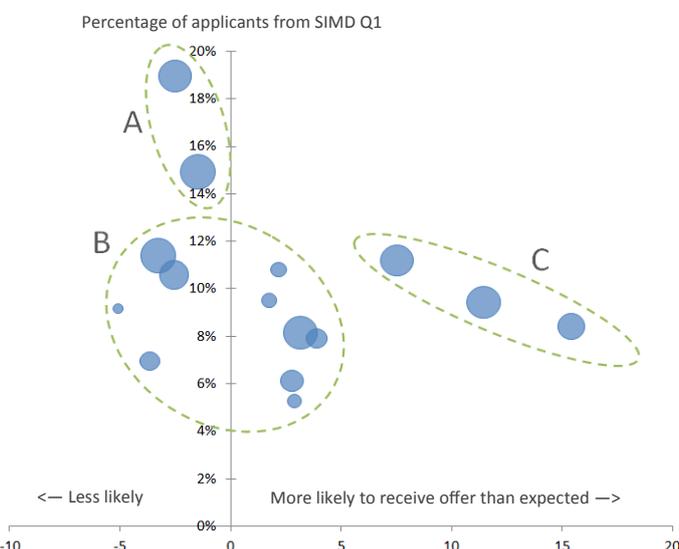


Chart 8: Average difference in actual and expected offer rates for SIMD Q1 vs percentage of applicants from SIMD Q1, by institution, 2013 to 2016



at individual institution level, with nine institutions making offers to SIMD Q1 applications at higher than expected rates in 2013 to 2016, compared to two institutions in 2010 to 2012. Three institutions made offers to SIMD Q1 applications at a substantially higher rate than expected during 2013 to 2016.

Applicants from SIMD Q1 were underrepresented in the applicant pools for all institutions, in both periods, but there was considerable variation between institutions. This variation is likely to reflect several factors including geographical location, local population demographics, entrance requirements and the amount (and effectiveness) of engagement and recruitment activity. There was a slight increase in overall representation in 2013-2016 but again there was variation across institutions with some seeing decreases in the percentage of applicants from deprived areas.

The data for both periods suggests there is not a strong relationship between the two variables, i.e. in general, institutions with a relatively low percentage of applicants from SIMD Q1 areas do not necessarily tend to have higher than expected offer rates for SIMD Q1 applications, or vice-versa.

As such, the two variables together should be thought of as providing a descriptive picture, rather than a predictive one. They illustrate the variation in the circumstances and approaches of institutions across Scotland and allow us to identify three groups with similar characteristics:

A: Relatively high percentage of SIMD Q1 applicants, SIMD Q1 offer rates similar to / lower than expected

The SIMD Q1 applicant representation and offer making of this group, was relatively static between the two periods, although there were modest increases in representation and decreases in actual offer rates compared to expected.

Despite there being little evidence of a more general relationships between the two variables, one possible interpretation of this combination of characteristics is that institutions whose SIMD Q1 applicant representation is closer to 20% would be less inclined to make offers at higher rates than expected for SIMD Q1 applicants, assuming the aim was fair representation for this group among actual entrants (i.e. 20% of entrants, not as many as possible).

Another potential explanation is that some of the specific circumstances that give rise to relatively high SIMD Q1 applicant representation make it difficult to make offers at higher rates than expected for SIMD Q1 applicants (i.e. having relatively lower entrance requirements in the first place makes it difficult to lower entrance requirements further).

B: Relatively lower percentage of SIMD Q1 applicants, SIMD Q1 offer rates similar to expected

The majority of institutions can be found in this group (in both periods). There is a fairly large degree of variation between institutions in terms of the applicant pool and offer making, and no clear relationship between the two variables or obvious explanation for the distribution observed.

This group's SIMD Q1 offer rates generally ranged between 5 percentage points lower and 5 percentage points higher than would be expected given subject choice and grades. The percentage of applicants from SIMD Q1 ranged from 4% to 11%. The general pattern of change, between 2010 to 2012 and 2013 to 2016, was a modest increase in both representation and actual offer rates compared to expected.

C: Relatively lower percentage of SIMD Q1 applicants, SIMD Q1 offer rates higher than expected

There were no institutions in this group in 2010 to 2012. In 2013 to 2016, however, three institutions had SIMD Q1 offer rates that were substantially higher than expected. The institutions in this group saw modest increases in the percentage of applicants from SIMD Q1 areas, in line with other groups. The change in the difference between actual offer rates compared to expected offer rates between the two periods, however, was substantial. Two of the three institutions in this group recorded negative values in 2010 to 2012 meaning their SIMD Q1 offer rates were lower than expected i.e. they could be found on the left hand side of group B in 2010 to 2012 (Chart 7). The magnitude of changes observed suggests that these institutions made a deliberate and focussed effort to increase offer rates for applications received from 18 year olds in the 20% most deprived areas in Scotland between 2013 and 2016.

5. UCAS publish equalities information at institution level for 'larger institutions' only i.e. for fifteen of the eighteen Scottish institutions covered by the Scotland level data. The equalities data and documentation are available online via the following link: [2016 entry UCAS Undergraduate reports by sex, area background, and ethnic group](#).

Commissioner's Commentary

The picture that emerges from this analysis of applications, offers and acceptances by SIMD quintile is mixed. Progress has been made towards fairer access, although perhaps not at a rate that suggests the interim 2021 targets for universities (10 per cent for all institutions) and nationally (16 per cent) will be easy to meet.

If all full-time first-degree entrants regardless of age are included, progress towards the national target for 2021 has been encouraging, 14 per cent are from SIMD 20 areas (only a 2 percentage point gap). But if only entrants aged under-21 are considered, the gap is much wider (5 or 6 percentage points). This difference tends to muddy the water, and justify a range of reactions from 'we are getting there' to 'much more needs to be done'. On balance, while the actual target covers entrants of all ages, it is probably better to opt for challenge than complacency.

But a gulf remains between the opportunities available to potential students who live in the most advantaged areas and those who live in the most deprived. The former are more than three times as likely to apply in the first place, and their entry rate is also three times greater - despite the fact that universities have pushed up their offer rate for SIMD 20 and 40 students. The allocation of additional places for SIMD 20/40 by the Scottish Funding Council clearly had an impact, although, predictably perhaps, the data suggests that students in SIMD 20 to 40 may have benefited more than SIMD 20 students. There is still a 12 percentage point difference in the chance of their applications being translated into acceptances compared with potential students from the least disadvantaged areas.

This suggests a step-change may be needed to achieve fair access. Incremental improvement, based on existing initiatives and interventions, is unlikely to be sufficient. One possibility is a further allocation of places for SIMD 20 (and 40?) students, although public expenditure priorities are for the Government to establish. Another is the more vigorous enforcement of access targets in outcome agreements. But the major drive must continue to come from the commitment of institutions themselves.

This analysis has identified three institutional clusters, as judged by their circumstances and approach to fair access:

- The first cluster is of access-oriented universities which already receive applications from (and accept) large numbers of SIMD 20 students, because fair access is a core element in their missions (even their DNA) but also because they recruit rather than select students (in most but not all subjects). The risk here is that these universities will think they have done enough, and maybe focus on other strategic objectives (which are more highly rewarded in league tables);
- The second cluster is of universities which have been less successful in attracting applications from SIMD 20 students. The reasons for this comparative lack of success are likely to be complex, reflecting perhaps subject range and also geography. It would be misleading, as well as unfair, to automatically attribute it to lack of effort or commitment. For some of these universities, however, higher entry standards may be an additional factor. This suggests that further work may be needed to demonstrate that achieving fair access and pursuing a 'world-class' reputation, notably in research performance and global competitiveness, are complementary not contradictory agendas.
- The third cluster is of universities that, despite having higher entry standards in general, nevertheless have been successful in increasing their offer for students from less advantaged backgrounds (and recruiting greater numbers). They are a key group which can share good practice with other institutions that have so far been less successful. Their success can also inspire confidence that the Government's targets are achievable without compromising academic quality.

The focus in this paper has been on the applications – offers – admissions cycle. Institutions have made major efforts to be 'fair' in their processing of the applications they receive, although some are still attracting too few applications from SIMD 20 areas. But the overall number of SIMD 20 applications also needs to be increased. Otherwise there is a risk institutions will simply compete for this limited pool of applicants, perhaps leading to a redistribution of SIMD 20 students across the system that is not always in the best interests of learners.



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