Oxford and Cambridge – How different are they?

Juliet Chester and Bahram Bekhradnia

Introduction

1. This report considers the place of Oxford and Cambridge in the UK's higher education system, in particular whether they are distinctive or simply at the end of a continuum that contains other 'elite' universities. Whilst the 'elite' group of UK institutions may be defined in a variety of ways, this report focuses specifically on Oxford and Cambridge, comparing them with other research intensive institutions – including those in the Russell group of universities and members of the 'golden triangle' of institutions in the south east of England[1] – with respect to measures of quality and resources.

2. On most measures of research performance – both in this country and internationally – Oxford and Cambridge are consistently among the highest ranked universities, and have been shown to outperform UK competitors with respect to the combined scale and quality of their research across a wide range of subject areas.[2] The available comparable measures of undergraduate student ability and key indicators of the quality of the student experience, suggest that Oxford and Cambridge are also distinctive with respect to their ability to attract the highest performing undergraduate students as well as in the learning environment provided for full-time undergraduates.[3] The two universities also, as is often noted, far outstrip their competitors in terms of income from endowments and other private sources, which is a result both of their longevity and of their ability to attract funds from alumni and other donors.

3. In comparison with prestigious institutions in the United States, which dominate the highest rankings in international league tables, Oxford and Cambridge are significantly more reliant on public funding for undergraduate teaching and have significantly higher numbers of full-time undergraduate students.[4] Within Europe, there are no countries that have HE institutions with

---

[1] The 'golden triangle' of institutions is defined here to include Oxford, Cambridge, Imperial College London, University College London and the London School of Economics and Political Science.

[2] See, for example, the 'Power rankings' produced by Research Fortnight which take both the quality profile of an institution and the number of staff submitted into account. Oxford and Cambridge are ranked first and second respectively in the overall 'Power' rankings.

[3] This report focuses on undergraduate student profiles and outcomes rather than those of postgraduates, although some data (e.g. on career destinations) include the latter.

[4] For example, Harvard had 6,837 full-time undergraduates enrolled in October 2007 (http://www.provost.harvard.edu/institutional_research/factbook_archives.php) compared to 11,760 full-time undergraduates at Cambridge and 11,450 at Oxford in the academic year 2007-08 (based on HESA FPE populations).

such presence as global academic brands – the UK is the only European country whose HE institutions regularly feature at the top of international league tables.

4. Questions about the place of Oxford and Cambridge within the UK's HE system have been raised both within and outside these universities in the course of debates over the future direction of the sector – and particularly the balance between public and private funding. For example, the prospect of 'privatisation' for undergraduate teaching was raised during the 1997 debate over the future funding of Oxford and Cambridge College fees.[5] In 2004, it was raised again in the context of suggestions that a fee cap of £3,000 was both financially restrictive and could only be charged if some control over admissions policies was conceded.[6] Some external commentators have argued that financial independence would be the surest and most rational way of maintaining excellence at these institutions.[7] Others have claimed that the country as a whole benefits by supporting two institutions which 'constitute the UK's only truly global academic brands'.[8] More recently, as the review of the current fee cap nears, and following the funding allocations resulting from 2008 RAE, there has been some heated debate over whether the presence of Oxford and Cambridge within the system distorts public funding priorities and prevents the development of a flourishing, diverse sector serving the needs of the majority of the student population.[9]

5. The future shape of the UK HE sector – and the way in which funding and other policy decisions can and should influence this – will be brought into sharp focus over the next year. The principal developments that will frame this discussion are: the debate that will follow the recent publication of the Government's framework for the development of higher education over the next ten to fifteen years; the review of variable fees in England; and consideration of the funding decisions related to the results of RAE 2008, as well as the continued development of the Research Evaluation Framework. Whilst the Government is likely to take as broad a view as possible in defining the features of the 'world

---

[5] http://www.timeshighereducation.co.uk/story.asp?storyCode=104644&sectioncode=26.
[6] http://www.guardian.co.uk/uk/2004/oct/06/highereducation.accesstouniversity; http://www.guardian.co.uk/education/2004/oct/14/highereducation.accesstouniversity. These comments suggested that the HESA benchmarks for the recruitment of students from under-represented groups were 'targets' which, in future, might determine whether or not a university would charge higher fees.
[7] http://www.timesonline.co.uk/tol/comment/columnists/guest_contributors/article506403.ece.
[8] C. Higgins (Vice Chancellor and Warden of Durham University), 'Our stars were not born in a vacuum', Times Higher Education http://www.timeshighereducation.co.uk/story.asp?storycode=209262
[9] http://www.independent.co.uk/news/education/higher/roger-brown-do-we-need-to-have-worldclass-universities-818376.html; http://www.timeshighereducation.co.uk/story.asp?sectioncode=26&storycode=404577.

class' HE system it hopes will be sustained into the future[10] there will be many who will argue that decisions over the appropriate support of Cambridge and Oxford will be critical to the international standing of UK universities and to shaping national perceptions of excellence. Others will argue that to focus on these two universities will damage the rest of the sector.

6. This report does not seek to answer these questions, but explores in more detail the extent to which Oxford and Cambridge are exceptional within the context of UK universities and raises some questions about the implications of this for the rest of the UK sector.[11] It looks firstly at their ability to attract the highest achieving undergraduate students[12] and to promote exceptionally successful outcomes for these students through the distinctive form of teaching offered. It then considers how the perception of socially restrictive access to these benefits (and the reality of a socially skewed student population) has shaped policy debates relating to widening access and successful participation in HE. The report also considers the extent to which the research carried out at these universities is exceptional in comparison with other research-intensive institutions. It concludes that whilst the overall quality and impact of the research carried out here is mirrored in a small number of research-intensive and specialist institutions, it is the combination of quality, scale – the total number of research active staff – and range – the number of areas in which high quality research is produced – that is distinctive. The final section explores the concentration of resources at Oxford and Cambridge in more detail and considers the extent to which the additional resources held by both institutions might affect their competitive position relative to other UK institutions, given what we know about the deficits on publicly-funded teaching and research.

7. In general, the report compares Oxford and Cambridge with those institutions within the Russell Group of universities that perform best in most comparative analyses – and in particular Imperial College London, the London School of Economics (LSE) and University College London (UCL) – in order to establish whether they are just two among a group of high performing institutions, or if they are distinctive.

---

[10] In its guidance to the individuals it asked to contribute to the HE debate, the then Department for Innovation Universities and Skills (DIUS) stressed that 'We are asking contributors to think about long-term challenges – about how we can build on and improve our performance in global terms in the period to 2020 so that the HE system we have in 2020 is world class'.

[11] We do not look in detail at the more general economic impact of each institution. This has, in any case, already been explored in some detail in *The Impact of the University of Cambridge on the UK Economy and Society* (Library House, June 2006).

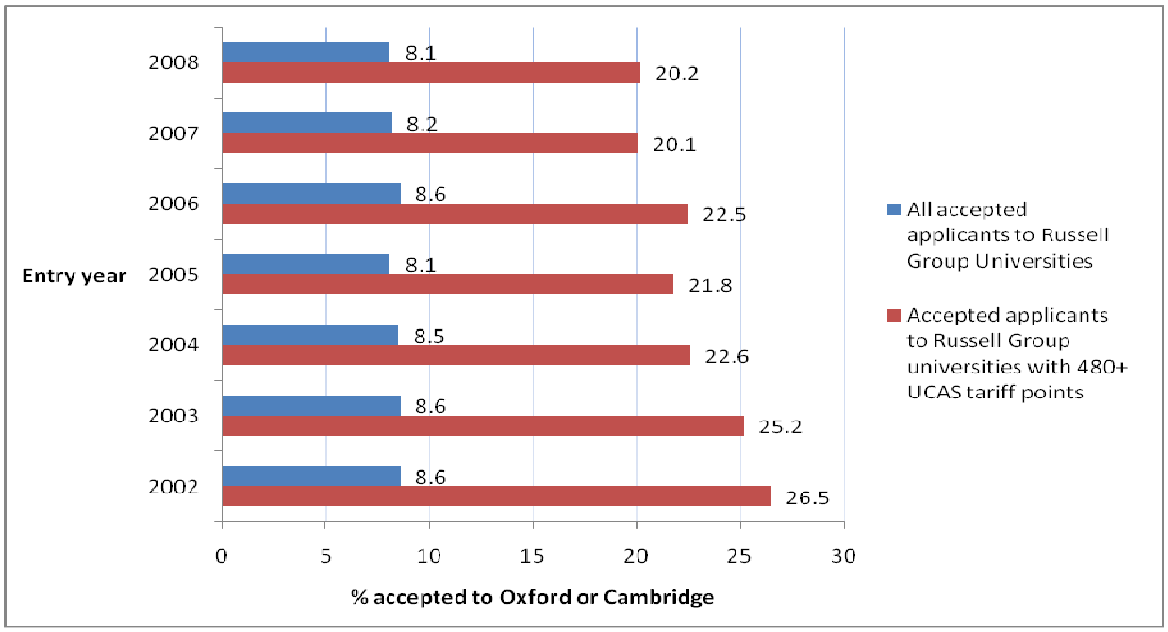
[12] As measured by their school-level qualifications.

Student ability and teaching quality

8. Undergraduate students with exceptionally high levels of prior academic achievement are significantly 'over-represented' at Cambridge and Oxford. The most widely used measure of academic performance is the UCAS tariff points of accepted applicants. Students with 480 or more UCAS tariff points comprise approximately the top 10 per cent of all accepted UCAS applicants in terms of their qualification levels.[13] Figure 1 considers the cohort of applicants who were accepted to the Russell Group of universities in each of the entry years 2002 to 2008. It can be seen that Oxford and Cambridge's market share of applicants with the highest UCAS points in 2002 (26.5 per cent) was three times higher than its market share of all Russell Group applicants (8.6 per cent). In 2008, Oxford and Cambridge's market share of Russell Group applicants with the highest UCAS points was slightly lower (around 20 per cent) but this is still two and a half times higher than their market share of all Russell Group applicants in that year (8.1 per cent). Figure 2 compares this ratio (market share of Russell Group applicants with 480+ points : market share of all Russell Group applicants) for Cambridge and Oxford with the same ratio for Imperial College London and the London School of Economics (LSE) over the last five years. It will be seen that there is a significant gap between Oxford and Cambridge on the one hand and Imperial and LSE on the other.

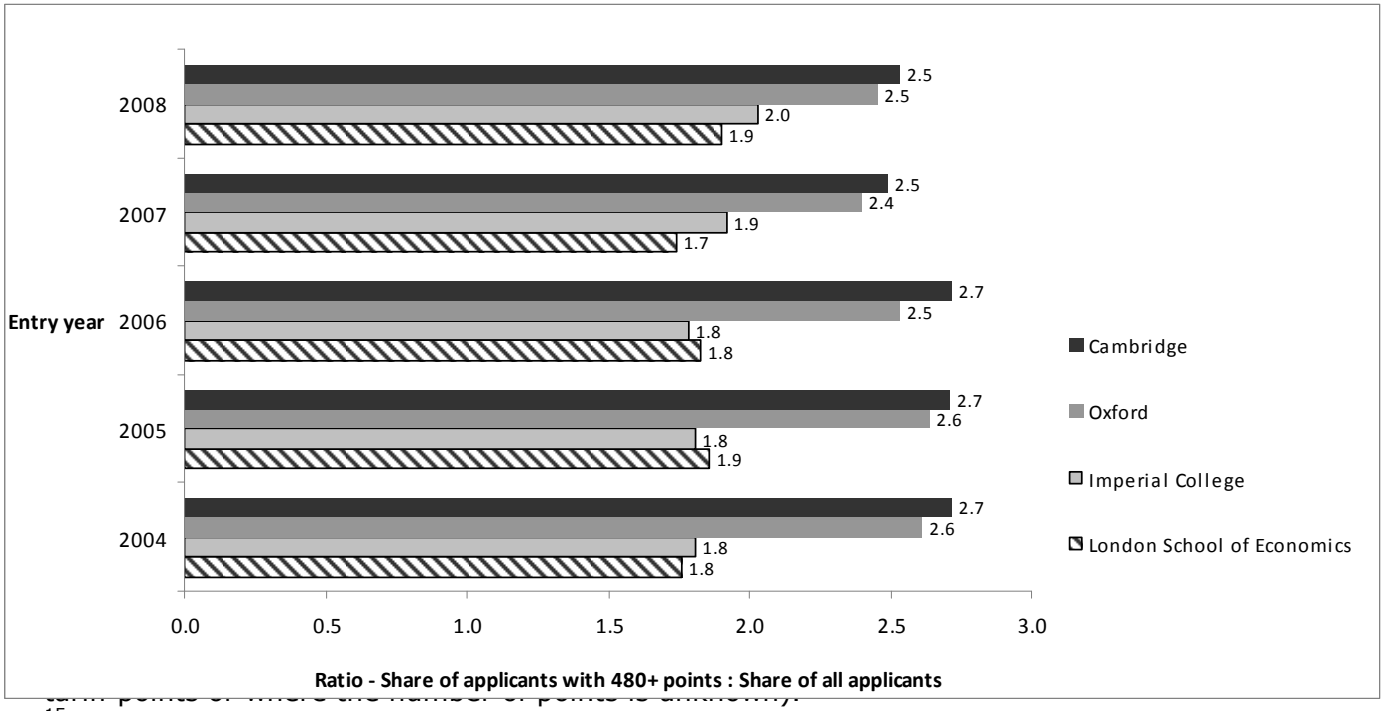
[13] In 2008, 13 per cent of UCAS accepted applicants with at least 1 UCAS tariff point had point scores of 480 or more.

Figure 1: Oxford and Cambridge's market share of accepted applicants to Russell Group Universities (2002 – 2008)[14]



Source: UCAS

Figure 2: Ratio - Market share of Russell Group applicants with 480+ points : market share of all Russell Group applicants (Cambridge, Oxford, Imperial, LSE)[15]

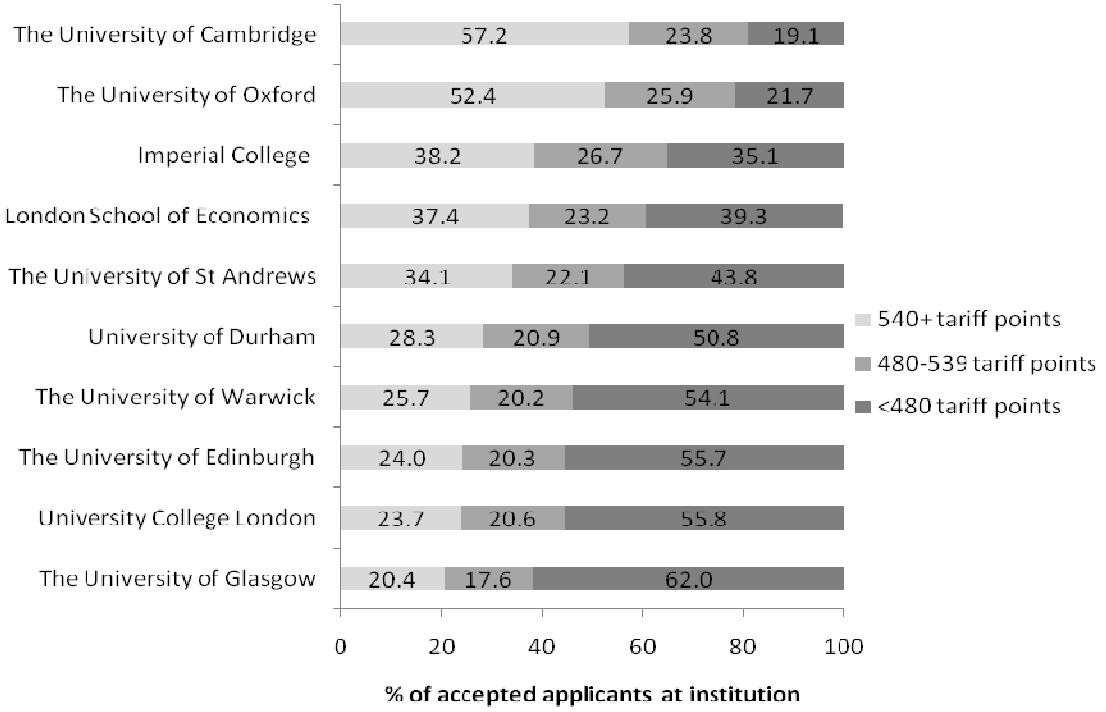


[15] The ratio shown here is the institution's market share of accepted Russell Group applicants with 480+ tariff points divided by its market share of all accepted Russell Group applicants. These four institutions had the highest ratios (market share of Russell Group applicants with 480+ points : market share of all Russell Group applicants) in each year.

Source: UCAS

9. An exceptionally high proportion of the entrants to Oxford and Cambridge can therefore demonstrate the highest levels of prior achievement. This is further illustrated in Figure 3 below, which compares the distribution of undergraduate entrants in 2008 by UCAS tariff bands at each of the 'top 10' institutions (with respect to the proportions of students with 480 or more UCAS tariff points).

Figure 3: Distribution of accepted UCAS applicants (2008 entry) within institutions by UCAS tariff score



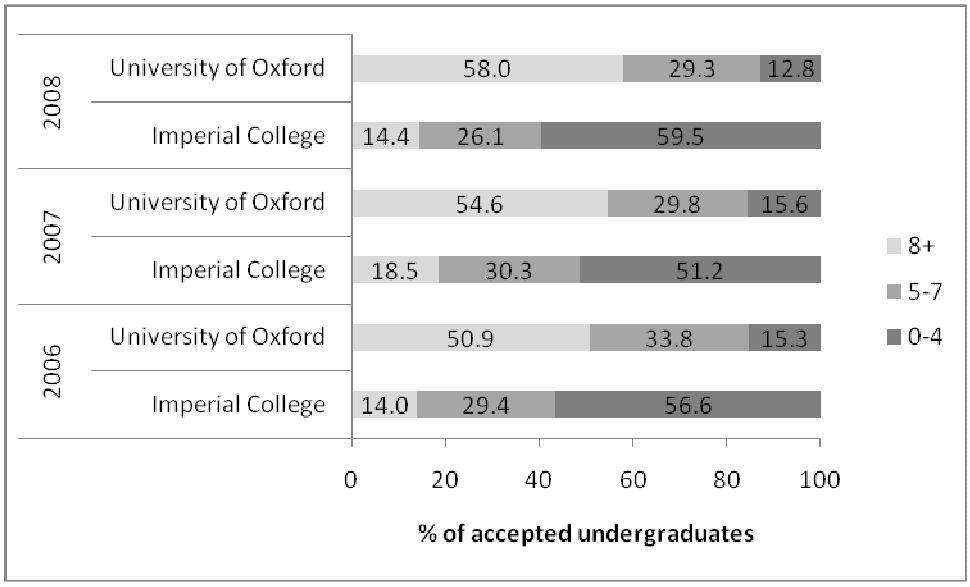
Source: UCAS

10. Figure 3 reveals that the differences between Oxford and Cambridge and these other institutions in 2008 were most significant with respect to the balance between students with very high levels of attainment (540 or more UCAS points) and those with fewer than 480 UCAS points. It can be seen, for example, that 52.4 per cent of accepted applicants to Oxford had 540 or more UCAS points, compared to only 38.2 per cent of accepted applicants to Imperial (the next

highest after Oxford and Cambridge). This difference of 14.3 percentage points is substantial compared to the difference of only 0.7 percentage points between the proportion of these students at Imperial and the proportion at LSE.

11. The GCSE profiles of those accepting offers at Oxford and at Imperial appear to suggest even more significant differences in the academic profiles of students at each institution. Figure 4 below shows the distribution of accepted 'Home' undergraduates for entry in 2006, 2007 and 2008 by the number of A*s at GCSE. It can be seen that, for example, in 2008, the proportion of accepted undergraduates with eight or more A*s at Oxford (58.0 per cent) was around four times the proportion at Imperial (14.4 per cent). More than twice as many accepted applicants to Oxford (87.3 per cent) had 5 or more A*s at GCSE than at Imperial (40.5 per cent).[16]

Figure 4: Distribution of accepted undergraduates at Oxford and Imperial by number of A*s at GCSE[17]



Source: Admissions data provided by University of Oxford and Imperial College

[16] However, it should be noted that Imperial has a higher proportion of undergraduates studying science subjects, for which the cross-disciplinary skills required for students to attain multiple A*s may not be considered so important.

[17] The dataset for each University includes accepted 'Home' (i.e. UK-domiciled) applicants to undergraduate courses, with 7 or more GCSEs. Graduates of other universities are excluded. The data will include some mature first degree students who took GCSE exams before the A* was introduced (i.e. between 1988 and 1993). However, since both institutions have relatively small numbers of mature students – for example 3.9 per cent of first degree entrants to Oxford in 2006-07, and 5.5 per cent of first degree entrants to Imperial in 2006-07 were mature students – the data overall will not be significantly skewed by their inclusion.

12. Whilst it may be difficult to make direct comparisons between institutions because of differences in their subject profiles, these data nevertheless suggest that students with the highest prior academic achievement are, on average, very much more likely to enroll at Oxford or Cambridge than at other prestigious institutions. They do not tell us how much of this is due to differences in attainment profiles of students who apply and how much is due to differences in the profiles of those who are accepted. Figures 5 and 6 below provide some further insight into this question by comparing the average number of A*s at GCSE for applicants; for students to whom offers were made ('offers') and for students who were finally accepted ('acceptances').

13. It can be seen that for Oxford the average number of A*s is slightly higher among accepted applicants than among students to whom offers are made whereas at Imperial the opposite is true – the average number of A*s is slightly higher among students to whom offers are made than among accepted applicants. This suggests that Imperial may 'lose' some of its higher achieving students to other institutions to a greater extent than Oxford.[18] However, the differences are relatively small compared to the difference in the average number of A*s between Oxford's and Imperial's applicants: applicants to Oxford had nearly twice as many A*s at GCSE, on average, as applicants to Imperial.[19] In other words, the effect of 'losing' high-achieving students at the offer stage is far less significant than the achievement profiles of applicants, in explaining the differences in the average number of A*s at GCSE among UK undergraduates at Oxford and at Imperial.

14. A broader issue raised by these data, however, is the difference between Imperial and Oxford with regard to the level of certainty they have that an offer made will translate into a place accepted. Looking at the conversion rate of offers to acceptances at Imperial,[20] the conversion rate of offers to acceptances was 41.1 per cent for entry in 2008. For all UK students applying to Oxford for entry in 2008 the conversion rate was 92.5 per cent, and for all of Cambridge's admissions (including overseas students) the conversion rate was 86.8 per cent.[21] Of course, it is not possible to determine from these data alone the proportion at each institution declining their offer and the proportion who fail to meet the conditions set, but it is nevertheless highly likely that the proportion of

---

[18] Although these data alone do not of course tell us how many of these students rejected their offer and how many failed to meet their conditions.

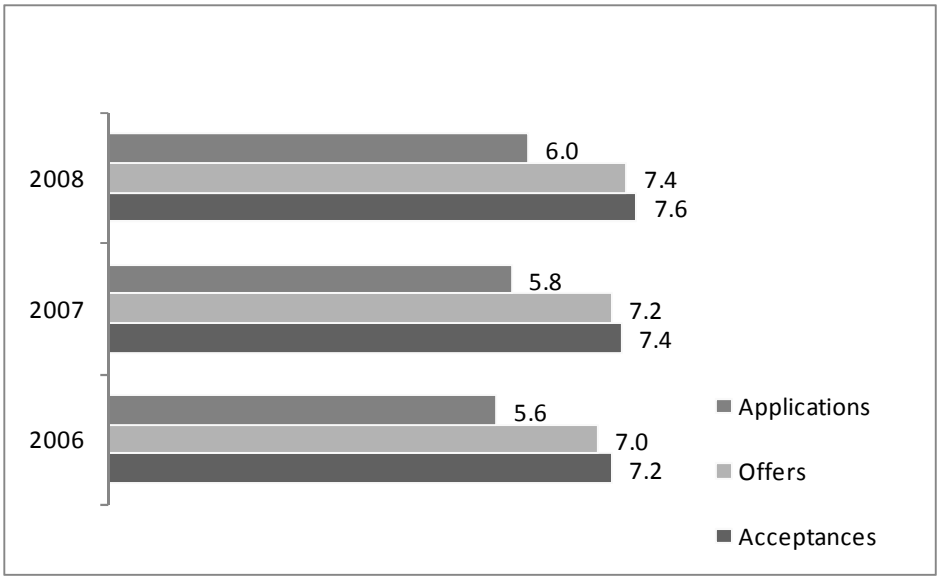
[19] This again may be related to higher number of students studying science subjects at Imperial.

[20] Based on UK students applying with at least 7 GCSEs for entry in 2007 (excluding graduates of other universities).

[21] Derived from Oxford's published admissions statistics for entry in 2008 (http://www.ox.ac.uk/gazette/univstats/) and correspondence with the Oxford Undergraduate admissions office (2,971 offers to UK domiciled students, 2,748 final acceptances) and from http://www.cam.ac.uk/admissions/undergraduate/statistics/university.html (3,531 offers and 4,066 final acceptances).

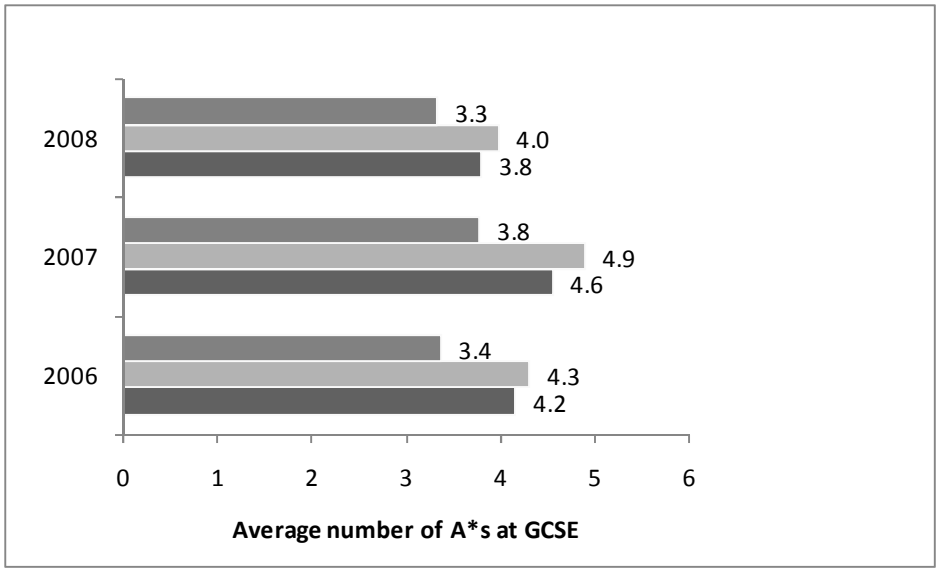
undergraduates declining an offer from Imperial is significantly higher than the 1.4 per cent of UK domiciled students who were made an offer of an Oxford place for 2008 and declined it.[22]

Figure 5: Average A*s at GCSE for applications, offers and acceptances, University of Oxford



Source: Admissions data provided by University of Oxford

Figure 6: Average A*s at GCSE for applications, offers and acceptances, Imperial College



[22] The figure of 1.4 per cent refers to the proportion of the 2,971 UK domiciled students who were made an offer of a place for entry in 2008 or deferred entry in 2009 and rejected that offer (43 students). The authors are grateful to the Oxford Undergraduate admissions office for providing this information.

Source: Admissions data provided by Imperial College

15. These data do not necessarily show, however, that the 'brightest' students – those with the greatest academic potential – are concentrated at Oxford and Cambridge. This is principally because the tariff scores used here do not take account of the educational context of these academic achievements.[23] In 2006, for example, the proportion of accepted degree applicants from independent schools with tariff scores of 480 or more (21.5 per cent) was more than twice the proportion of applicants from the maintained sector who had tariff scores of this level (10.3 per cent).[24] The proportion of UK entrants from the independent sector in the same year was much higher at Cambridge (42.4 per cent) and Oxford (47.0 per cent) than, for example, at Imperial (38.0 per cent), LSE (34.1 per cent) or University College London (UCL) (33.4 per cent).[25] It is difficult, however, to quantify the effect of educational background on a student's achievement levels – and to disentangle this from other factors, such as parental background, which affect educational achievement. It is perhaps even more difficult to assess and compare levels of academic potential – the likelihood of a student succeeding on a particular course at a particular institution. Another point to note is that these data do not capture information about undergraduates with no UCAS tariff points. Table 7 below shows the proportion of accepted UCAS applicants with 0 tariff points or for whom the number of tariff points was unknown (for entry in 2008) in the institutions shown in Figure 3 above. It can be seen that the number of these students as a proportion of all accepted applicants in this year ranged between 12 per cent at Oxford and 31.9 per cent at St Andrews.

Table 7: Proportion of UCAS accepted applicants with 0 or unknown tariff scores

Institution	Proportion of UCAS accepted applicants with 0 or unknown tariff score (2008 entry)
The University of Oxford	12.0
The University of Cambridge	12.9
University of Durham	15.2
Imperial College	18.1
London School of Economics	18.5
The University of Glasgow	20.1
The University of Warwick	20.5
The University of Edinburgh	21.0
University College London	23.6
The University of St Andrews	31.9

[23] A secondary factor is that the average UCAS tariff score differs substantially by subject.
[24] Derived from data available via the UCAS website's statistical enquiry tool (www.ucas.com). 'Accepted degree applicants here refers to Home accepted degree applicants applying through UCAS with at least 1 UCAS tariff point. There are also differences within the maintained sector (for example, only 2.7 per cent of applicants from further and higher education had 480 or more UCAS tariff points but 17.5 per cent of degree applicants from grammar schools had tariff scores within this band).
[25] Based on HESA data for young undergraduate degree entrants in 2006-07.

16. Despite the caveats that have been rehearsed above, it does appear that the students who go to Oxford and Cambridge really are exceptionally able, at least as measured by prior qualifications. However, quality of teaching in higher education is an altogether more difficult variable to measure using the available data. International league tables have used the staff-student ratio as a proxy for teaching quality; some national league tables also consider expenditure per student or spending on facilities and services. But these are 'input' variables and do little more than measure the level of resources available to a university. Alongside these 'input' variables, national league tables also make use of 'output' variables, including completion rates, the proportion of students with good degrees, graduate career prospects and the results of the National Student Survey. In the latest national league tables (published in 2009), Oxford and Cambridge were the first and second ranked institutions with respect to completion rates (Times) and the proportion of students with good degrees.[26]

17. Despite legitimate doubts concerning some of the output variables, some warrant further consideration. The results of the National Student Survey from 2007-8 suggest that a distinctive feature of Oxford and Cambridge is their combination of world-leading research with high levels of student satisfaction.[27] Table 8 below shows, for institutions which had at least 25 per cent of their research activity classified as 'world-leading' (4*) in RAE 2008 – Oxford, Cambridge, Imperial College, UCL and the LSE - the number of questions where their scores were the highest, and second highest, of the HE sector, and the number where they were above average for the sector.[28] It can be seen that either Oxford or Cambridge had the highest percentage score for seven of the 22 questions, whereas the other three institutions did not rank first or second in any of the questions. The number of questions where Oxford and Cambridge scored above the average for the sector was also significantly higher than the number where the other three institutions did so.

[26] The national league tables use HESA data and the National Student Survey to measure these variables. The rankings for the other variables are as follows: Graduate career prospects: Cambridge =3, Oxford = 7 (Times); Staff-student ratio: Oxford = 3, Cambridge = 6/4= (Times & Sunday Times/Guardian); Services and facilities spend: Oxford = 2, Cambridge =3 (Times); Expenditure per student: Oxford = 1, Cambridge = 4 (Guardian); Student satisfaction (NSS results): Oxford = 3, Cambridge = 1 (Times).

[27] The results of this survey rather than the 2008-9 survey are used, because Oxford did not have a high enough response rate in 2008-9 for data to be included at the institutional level.

[28] The percentage 'score' in this context is the percentage of students agreeing with the statement in the survey question.

Table 8: Scores in NSS questions (2007-8) relative to whole HE sector[29]

	Ranked 1st	**Ranked 2nd**	**Above sector average**
	Number of questions (out of 22 in total)		
University of Oxford	4	2	21
University of Cambridge	3	7	19
University College London	0	0	12
Imperial College	0	0	8
London School of Economics	0	0	8

Source: Unistats

18. Table 9 shows the ranking of these five institutions against each other. It can be seen that in 15 of the 22 questions considered here Oxford and Cambridge exclusively shared the first and second rankings. In order to identify where both Oxford and Cambridge might be especially distinctive with respect to the rest of the sector, the questions in the table are sorted by the difference between, on the one hand, the percentage point gap between the first and second ranked institutions and, on the other, the percentage point gap between the second and third ranked institutions. The table suggests that, in the context of this survey, Oxford and Cambridge are most clearly differentiated from their peer institutions with respect to students' assessments of the quality of feedback they receive (Q9). There is also marked differentiation in the question relating to the detail of feedback (Q8) and questions addressing access to advice and facilities (Qs 12, 18 and 10). Figure 10 illustrates these differences for the first five questions in the table. It is notable that all of these features are ones where an impact would require significant investment of resources.

Table 9: Comparative scores of Oxford, Cambridge and other 'G5' institutions

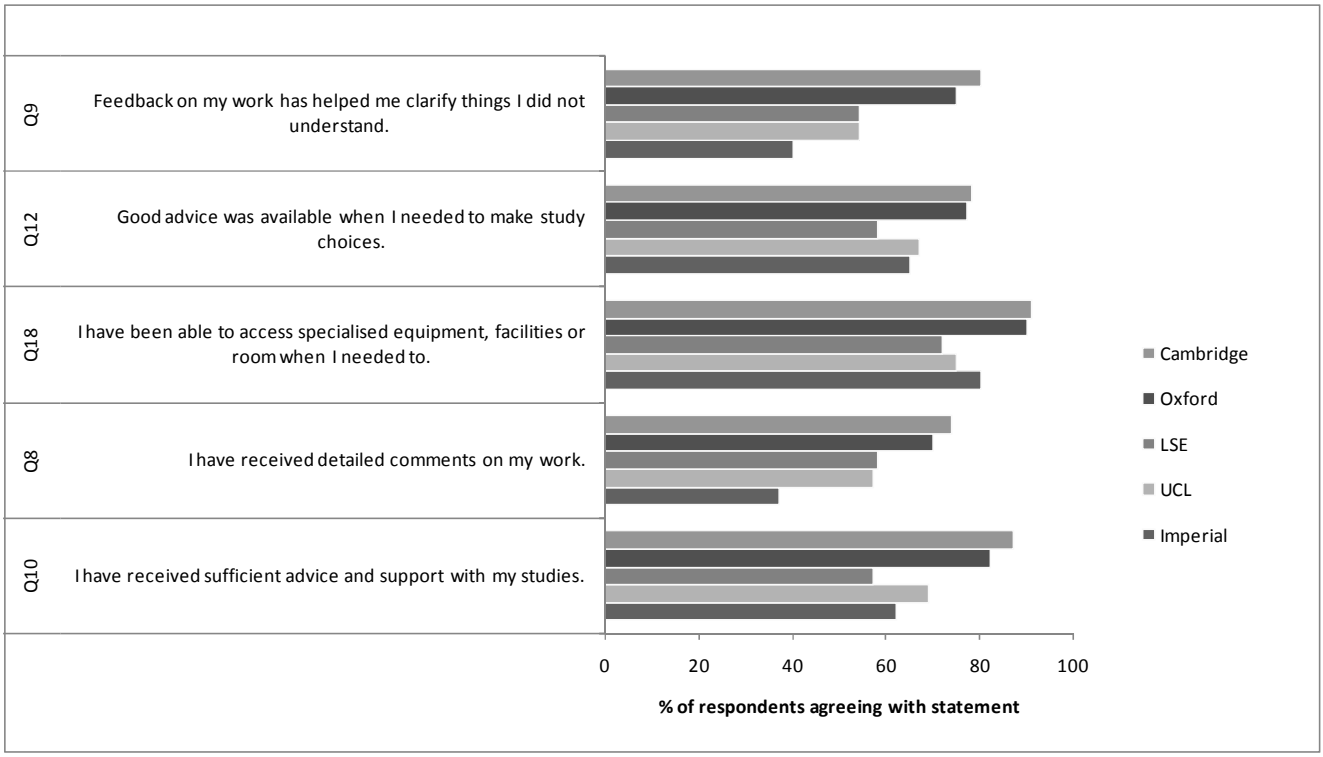
	%age of respondents agreeing with statement					Ranking			Gap between 1st and 2nd ranked (%age points)	Gap between 2nd and 3rd ranked (%age points)	Variance
Question	Ox	Cam	LSE	UCL	Imp	1	2	3	(a)	(b)	(b) - a)
Q9	75	80	54	54	40	Cam	Ox	LSE/UCL	5	21	16
Q12	77	78	58	67	65	Cam	Ox	UCL	1	10	9
Q18	90	91	72	75	80	Cam	Ox	Imp	1	10	9
Q8	70	74	58	57	37	Cam	Ox	LSE	4	12	8

[29] Excludes small and specialist HE institutions with fewer than 300 respondents (leaving a total of 109 institutions). Rankings are based on the percentage of students agreeing with the statement in the survey question. The number of questions includes those where the first and/or second rankings were shared between a number of institutions. The average for the HE sector also excludes small and specialist HE institutions with fewer than 300 respondents.

Q10	82	87	57	69	62	Cam	Ox	UCL	5	13	8
Q16	97	95	82	86	85	Ox	Cam	UCL	2	9	7
Q3	93	92	72	84	78	Ox	Cam	UCL	1	8	7
Q2	88	87	62	80	71	Ox	Cam	UCL	1	7	6
Q4	96	95	84	89	87	Ox	Cam	UCL	1	6	5
Q17	97	96	83	84	90	Ox	Cam	Imp	1	6	5
Q22	92	93	77	88	85	Cam	Ox	UCL	1	4	3
Q6	78	78	76	73	69	Cam/Ox	--	LSE	0	2	2
Q11	90	93	83	85	77	Cam	Ox	UCL	3	5	2
Q13	82	83	79	77	77	Cam	Ox	LSE	1	3	2
Q14	81	83	84	74	79	LSE	Cam	Ox	1	2	1
Q1	91	92	78	90	84	Cam	Ox	UCL	1	1	0
Q19	79	74	62	73	76	Ox	Imp	Cam	3	2	-1
Q15	81	85	82	77	78	Cam	LSE	Ox	3	1	-2
Q5	56	63	59	57	58	Cam	LSE	Imp	4	1	-3
Q20	83	75	62	77	78	Ox	Imp	UCL	5	1	-4
Q21	85	81	67	78	81	Ox	Cam/ Imp	--	4	0	-4
Q7	69	79	69	58	43	Cam	Ox/LSE	--	10	0	-10

Question descriptions	
Q9	Feedback on my work has helped me clarify things I did not understand.
Q12	Good advice was available when I needed to make study choices.
Q18	I have been able to access specialised equipment, facilities or room when I needed to.
Q8	I have received detailed comments on my work.
Q10	I have received sufficient advice and support with my studies.
Q16	The library resources and services are good enough for my needs.
Q3	Staff are enthusiastic about what they are teaching.
Q2	Staff have made the subject interesting.
Q4	The course is intellectually stimulating.
Q17	I have been able to access general IT resources when I needed to.
Q22	Overall, I am satisfied with the quality of the course.
Q6	Assessment arrangements and marking have been fair.
Q11	I have been able to contact staff when I needed to.
Q13	The timetable works efficiently as far as my activities are concerned.
Q14	Any changes in the course or teaching have been communicated effectively.
Q1	Staff are good at explaining things.
Q19	The course has helped me present myself with confidence.
Q15	The course is well organised and is running smoothly.
Q5	The criteria used in marking have been clear in advance.
Q20	My communication skills have improved.
Q21	As a result of the course, I feel confident in tackling unfamiliar problems.
Q7	Feedback on my work has been prompt.

Figure 10: Comparative scores of Oxford, Cambridge and other 'G5' institutions in NSS (selected questions)



Source: Unistats

19. Students at Oxford and Cambridge also say that they spend, on average, more hours studying during term time than students at other universities. This may be linked to the collegiate teaching system and the high volume of feedback this implies (although we cannot make direct comparisons between institutions with respect to volume of feedback students receive).[30] Table 11 below compares the total weekly workload (both teaching and private study) for subjects offered by both Cambridge and Oxford with the average weekly workload at other institutions. Specifically, it shows the average hours invested per week for each subject and where Cambridge and Oxford are ranked on this measure. It also shows the difference, in percentage terms, between this subject average and the subject average for all universities, and for all Russell Group institutions. It can be seen that Cambridge and Oxford are ranked first and second respectively in all of these subject areas with the exception of medicine (where they are ranked joint third). Across the range of subjects where comparisons may be made with averages across the sector, it can be seen that students at Cambridge invest, on average, over 50 per cent more hours than students at other institutions (other

[30] It has been shown that students work hardest where there is a high volume of formative-only assessment and feedback: Gibbs, G. & Dunbar-Goddet, H. (2007) The effects of programme-level assessment environments on student learning. Higher Education Academy (http://www.heacademy.ac.uk/ourwork/research/teaching/projects).

than Oxford) and those at Oxford invest, on average, over 40 per cent more hours. Substantial differences remain when the comparison is restricted to all Russell Group institutions: students at Cambridge invest, on average, over 40 per cent more hours per week – and those at Oxford over 30 per cent more hours per week – than those at all Russell Group universities.[31]

Table 11: Total weekly workload for undergraduate students at Cambridge and Oxford in comparison with the sector

	Rank		**Hours invested per week**		**% above Russell Group average**		**% above Imperial**		**% above LSE**	
Subject	Cam	Ox	Cam	Ox	Cam	Ox	Cam	Ox	Cam	Ox
Medicine	3=	3=	42.1	42.1	-	-	14.4	14.4	-	-
Biological sciences	1	2	41.9	36.8	56.9	37.8	40.1	23.1	-	-
Physical sciences	1	2	44.8	39.7	47.9	31.0	50.8	33.7	-	-
Mathematics	1	2	36.6	34.4	-	-	20.4	13.2	-	-
Engineering & Technology	1	2	41.1	36.0	36.1	19.2	21.2	6.2	-	-
Social studies	1	2	34.7	33.6	46.4	41.8	-	-	43.4	38.8
Law	1	2	41.4	40.1	31.8	27.7	-	-	48.4	43.7
Historical & Philosophical Studies	1	2	36.1	32.9	46.2	33.2	-	-	63.3	48.9
Average % difference across comparator subjects	**-**	**-**	**-**	**-**	**44.2**	**31.8**	**29.4**	**18.1**	**51.7**	**43.8**

Source: HEPI

20. There are also some significant differences when comparisons are made directly with Oxford and Cambridge's peer institutions. Table 12 below shows the total hours invested by students at Imperial and at LSE. It can be seen that the differences in the subjects which can be compared with LSE are, on average,

[31] These figures are based on the results of surveys of undergraduate students in 2006 and 2007, which are summarised in the HEPI report, 'The academic experience of students in English universities' (September 2007). The rank and number of hours invested at Oxford and Cambridge are drawn from the tables in Annex E of the report. Because of a change in the subject classification, the results for Mathematics shown here are based on 2006 survey data only. The subjects included are those with sufficient numbers of survey respondents to be included in Annex E of 'The academic experience of students in English universities' and which are offered by both Oxford and Cambridge. The sector averages and Russell Group averages for each subject are taken from Table 10 on page 11 of 'The academic experience of students in English universities'. The sector and Russell Group averages here are for Medicine and Dentistry combined, rather than Medicine, and for Mathematics and Computer Studies combined (using 2007 data), rather than Mathematics. These subjects are therefore excluded from the comparative calculations.

more substantial than those for the Russell Group as a whole. However, the comparison with Imperial shows, on average, a reduced differential in the number of hours invested when compared with the Russell Group as a whole.[32]

Table 12: Comparison of hours invested by students at Imperial and LSE with hours invested by students at Oxford and Cambridge [1]

Subject	Rank		Hours invested per week		% above Imperial		% above LSE	
	Imp	LSE	Imp	LSE	Cam	Ox	Cam	Ox
Medicine	10	-	36.8	-	14.4%	14.4%	-	-
Biological sciences	6	-	29.9	-	40.1%	23.1%	-	-
Physical sciences	9	-	29.7	-	50.8%	33.7%	-	-
Mathematics	5	-	30.4	-	20.4%	13.2%	-	-
Engineering & Technology	5	-	33.9	-	21.2%	6.2%	-	-
Social studies	-	16	-	24.2	-	-	43.4%	38.8%
Law	-	14	-	27.9	-	-	48.4%	43.7%
Historical & Philosophical Studies	-	20	-	22.1	-	-	63.3%	48.9%
Average % difference across comparator subjects	-	-	-	-	29.4%	18.1%	51.7%	43.8%

21. It is difficult to determine the extent to which these differences are attributable to the shorter terms at Oxford and Cambridge – eight weeks of full teaching rather than the ten weeks typical of other institutions. A full comparative assessment would arguably only be possible if academic work during vacations were also included, and if data were available from students in all years of study (rather than just the first and second year students included in this sample). From the available data it is, however, possible to conclude that, by their own assessment, first and second year students at Oxford and Cambridge put in substantially more effort during the time they are required to be present at their institutions.

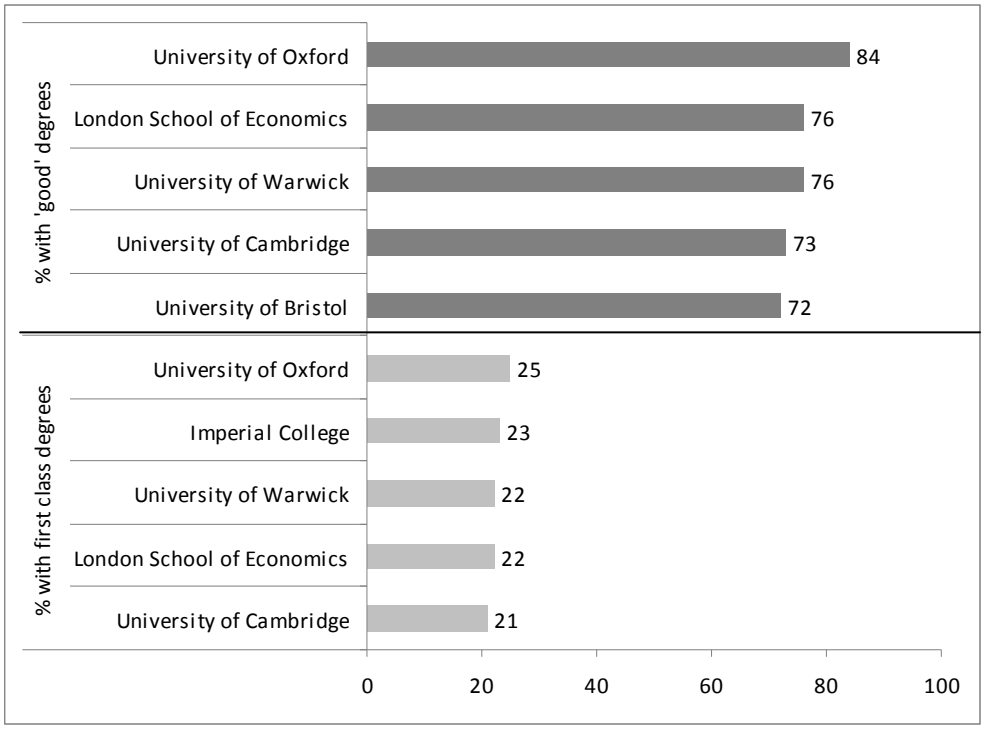
[32] These figures are based on the results of surveys of undergraduate students in 2006 and 2007, which are summarised in the HEPI report, 'The academic experience of students in English universities' (September 2007). The rank and number of hours invested at Oxford and Cambridge are drawn from the tables in Annex E of the report. Because of a change in the subject classification, the results for Mathematics shown here are based on 2006 survey data only. The subjects included are those with sufficient numbers of survey respondents to be included in Annex E of 'The academic experience of students in English universities' and which are offered by both Oxford and Cambridge.

22. In terms of the outcomes for their students, Oxford and Cambridge do not appear to be distinctive in terms of degree results or initial career destinations. As shown in Figure 13 below, whilst Oxford had the highest proportion of students achieving 'good' degrees (a 2:1 or above) of any Russell Group institution in 2008, Cambridge had a lower proportion of students graduating with 'good' degrees than either LSE or Warwick. Similarly, Oxford had, by a small margin, the highest proportion of students achieving first class honours, whilst Cambridge had a slightly lower proportion than Imperial, Warwick and LSE.[33] It is perhaps surprising that the two universities do not outperform the rest of the sector on this measure, given the higher prior achievements of their students on entry and the higher number of hours invested during term time. It may be, however, that this pattern owes something to variations in the standards required for the same degree classification at different institutions. The reliability of the current system of degree classifications as a robust and comparable measure of graduate quality continues to be questioned from both within and outside the sector.[34]

[33] These data are based on all subjects and all modes of study, and include students whose degrees are 'not subject to classification'. It should be noted that the proportion of such students varies among the institutions listed here – from 0 per cent at LSE, through 8 per cent and Oxford, 15 per cent at Cambridge and 18 per cent at Imperial College.

[34] See, for example, Quality Matters: The classification of degree awards (QAA, April 2007), The academic experience of students in English universities (HEPI report 27, October 2006) and the recent comments on the inadequacies of the degree classification system by the President of Universities UK and the Chairs of the 1994 Group and Million+ Group before the Innovation, Universities, Science and Skills (IUSS) Select Committee (http://www.publications.parliament.uk/pa/cm200809/cmselect/cmdius/uc170-i/uc17002.htm). Some of these concerns are reflected in the IUSS Select Committee report on Students and Universities, published in August 2009, which had some trenchant comments about the unreliability of the present arrangements.

Figure 13: Degree classifications in 2008 in top 5 Russell Group institutions[35]



Source: Unistats

23. Another area where there is no obvious 'outperformance' of the rest of the sector by Oxford and Cambridge is initial graduate career prospects – specifically, the proportion of students in graduate jobs six months after graduation. 86 per cent of those graduating from Cambridge in 2008 were in graduate jobs after six months; the equivalent figure for Oxford was 85 per cent.[36] This is lower than the equivalent proportions of those graduating from LSE and Imperial in the same year (91 per cent) and only slightly higher than the proportion of 2008 UCL graduates in graduate jobs (84 per cent).[37] However, this variable is unlikely to be an especially useful measure of differences in employment outcomes for students in different institutions, despite its inclusion as an indicator in two of the major national league tables. Firstly, the difference between institutions in this respect is not statistically significant; and secondly, experience six months after graduation is not a particularly meaningful time to measure employment outcomes.[38]

[35] The chart shows the top 5 ranked Russell Group institutions (in England, Wales and Northern Ireland only) in terms of the percentage of students achieving 'good' degrees (a 2:1 or above) and the percentage achieving first class degrees.
[36] In all subjects for which data were available. Note these data include postgraduate as well as undergraduate students and encompass both full-time and part-time students.
[37] Source: Unistats data for 2007-08.
[38] Cf. HEFCE 2008-14, Appendix C.

24. The available data suggest a link between attendance at Cambridge and higher lifetime earnings, although not one that can be clearly shown to exist independent of other attributes such as subject of study and social background. An analysis of the earnings of Cambridge alumni from 2005, which compared the average earnings of Cambridge graduates in various age cohorts with the national average for higher education graduates in each of these cohorts, showed, for example, that the starting income for Cambridge graduates was around one and a half times higher, on average, than that of graduates from other institutions.[39] However, this analysis makes no allowance for any differences in subject mix between the Cambridge group and the national group (which is problematic given what we know about the effect of subject on lifetime earnings)[40], nor does it show that the wage premium exists independently of other factors such as social and educational background.

25. On the other hand, a recent study[41]looking at the relationship between earnings and a university's ranking against various measures of institutional 'quality' [42] has suggested a positive correlation between an institution's scores against these quality measures and lifetime earnings, independent of social and educational background. Moreover, the relationship between measures of 'quality' and wages was shown to be a non-linear one – in other words, students who go the most prestigious universities benefit the most. However, whilst Oxford and Cambridge are likely to score highly in each of the measures of institutional 'quality' used here, it is not possible to draw evidence about a specific 'Oxbridge' premium from these data.[43] Nor is any of the 'quality' measures used here actually a measure that allows for differences in 'inputs' such as prior qualifications, social capital or institutional resourcing.

26. It is certainly true that high-status professions remain dominated by those who were educated at Oxford and Cambridge, although again the available analyses do not allow us to conclude that this effect exists independent of other student attributes (including, for example, type of school attended). For example, one recent study of 500 leading individuals in the fields of politics, law, journalism, medicine and business showed that nearly half of these individuals (47 per cent) were educated at either Oxford or Cambridge. In total, 25 British prime ministers have been educated at Oxford, 15 at Cambridge and 13 of the 20

[39] The impact of the University of Cambridge on the UK economy and society
[40] *Research Report: The Economic Benefits of a Degree* (Universities UK (2006)). Available at: bookshop.universitiesuk.ac.uk/downloads/research-gradprem.pdf.
[41] I. Hussain, S. McNally, and S. Telhaj, University quality and graduate wages in the UK (London School of Economics, Centre for the Economics of Education, 2009).
[42] The measures are: Tariff scores, retention rate, faculty-student ratio, RAE score, mean faculty salary, expenditure per pupil.
[43] Neither Oxford nor Cambridge were among the 33 institutions from which the cohort of 1995 graduates was drawn, and only one of the two was included in the sample of 38 institutions from which the 1999 cohort of graduates was drawn.

British prime ministers of the 20th century went to either Oxford or Cambridge. A recent analysis of Who's Who entries has demonstrated the continued pre-eminence of Oxford and Cambridge graduates among the UK's social elite (defined as those with entries in Who's Who). The two institutions educated approximately 5 per cent of the UK's undergraduate population during the 1970s and 1980s, but accounted for over 20 per cent of the elite between 1995 and 2008.[44] Thus, whilst the expansion of higher education in the 1960s and early 1970s increased the proportion of graduates from other universities among this social elite, the reduction in the proportion with degrees from Oxford or Cambridge was much less than might have been expected. In fact, this analysis suggests that Oxford and Cambridge graduates actually had a higher chance of entering the social elite relative to their peers at other institutions following this period of HE expansion than they did before it: Graduates of Cambridge or Oxford born between 1949 and 1966 were three times more likely than graduates from other Russell Group institutions (excluding those in London) to feature in Who's Who, whilst those born between 1902 and 1916 were twice as likely to do so.[45]

27. A closer analysis of Who's Who entries highlights the particular pre-eminence of Oxford and Cambridge graduates among the elite within knowledge and professional performance based careers. This conclusion is supported by the available data on the higher education backgrounds of those in professorial positions in UK universities.[46] Of the 14,088 professorial level staff currently employed at UK institutions, 13.4 per cent had at least one degree from Oxford and 13.2 per cent had at least one degree from Cambridge. Around a quarter (25.4 per cent) had at least one degree from either Oxford or Cambridge. The proportion of these staff with Oxford or Cambridge qualifications is much higher than the proportion who graduated from other research-led UK universities. For example, only 2.9 per cent of these staff had at least one degree from the University of Bristol, and the same proportion have at least one degree from the University of Edinburgh. It is the same for other universities. The University of Cambridge also has more Nobel Prize-winning graduates[47] than all other UK institutions combined – 73 in total – whilst a further 26 Nobel Laureates studied at Oxford. These figures dwarf the number of Nobel prize-winning graduates from other UK HE institutions: the University of Manchester comes closest with eight

[44] i.e. first time entries in Who's Who in each of these years.
[45] Working paper by G. Williams and O. Filippakou. The authors are extremely grateful to Professor Williams and Dr Filippakou for sharing this work.
[46] Based on data from the Yearbook of the Association of Commonwealth Universities (ACU) from January 2009. This is in fact more reliable than the data on educational background provided in Who's Who, which, as the authors of the analysis discussed above acknowledge, does not follow a standard format nor allow for a clear distinction between undergraduate and graduate degrees. The authors are grateful to Oliver Lewis for drawing this data together.
[47] Those who attended as undergraduate or graduate students (analysis undertaken in December 2008).

Laureates among its alumni, whilst Imperial, LSE and Liverpool have four Laureates each from among their alumni.

28. In summary, Oxford and Cambridge attract a significant proportion of the highest-achieving students, which makes the profile of their student body stand out against other comparable institutions. Their students are significantly more likely to report that they receive good quality formative feedback, and to say they work longer hours during term time, than their peers at other institutions. The extent to which the institutions themselves are distinctive in terms of the value they 'add' to these students is, however, difficult to judge using the available evidence. There are, however, a number of indications that Oxford and Cambridge graduates have sustained their position among high-status and high-influence professions.

29. With this in mind, it is easy to see how the question of fair access to Oxford and Cambridge has influenced – some might say disproportionately – the rhetoric of the widening participation debate and the conditions placed on institutions wishing to charge higher fees. There is certainly a question as to whether the Government's widening participation agenda would have become so enmeshed with the question of fair access to selective institutions if Oxford and Cambridge were not part of the UK's publicly funded HE system. The prevalence of the fair access question manifests itself in a number of ways: for example, in the expectation that institutions' Widening Participation Strategic Assessments submitted to HEFCE should include a 'high-level statement' on admissions 'showing how the institution will ensure transparency, consistency and fairness through its own internal procedures'.[48] Similarly, as an earlier HEPI report[49] has pointed out, the Government explicitly anticipated that the bursaries offered by institutions as a corollary of higher fees would be higher in institutions with the least diverse student populations – in other words they saw financial support as an instrument of fair access (although there is no evidence that it has helped achieve this aim).

30. Within the debate over fair access to the most prestigious UK institutions, the scrutiny of admissions to Oxford and Cambridge remains foremost. As Government ministers have said,[50] the undergraduate admissions figures for Oxford and Cambridge offer a more powerful illustration of the stratified English education system than other groups of prestigious institutions taken as a whole.

---

[48] HEFCE 2009/01.

[49] Financial support in English universities: a national bursary scheme (HEPI September 2008)

[50] Cf. Bill Rammell's speech at the Guardian's Higher Education Summit in 2008, which compared the representation of students from lower socio-economic groups at Oxford and Cambridge specifically (1 in 10) with the figures for the Russell group (1 in 5) and non-Russell group institutions (1 in 3) (http://www.dius.gov.uk/news_and_speeches/speeches/past_ministers/bill_rammell/he_summit).

Thus whilst 19.6 per cent of full-time undergraduate entrants to all Russell Group Universities in 2007-8 came from lower socio-economic groups, only 11.0 per cent of the entrants to Oxford and Cambridge were from these groups. Similarly, whilst not much more than half the entrants to Oxford and Cambridge in this year were from state schools or colleges (57.0 per cent), around three quarters (75.7 per cent) of the Russell Group entrants as a whole were from the maintained sector.[51] The congruence of the academic and social elite in Cambridge's and Oxford's undergraduate student intake – and enduring suspicions about the extent to which admissions decisions are based on the latter rather than the former – help explain why a great deal of the focus is directed at these institutions rather than the apparent inequities in the English secondary education system that lead to some schools outperforming others to such a significant extent. They help explain, for example, one Vice Chancellor's comment in October 2008 that Oxford and Cambridge should forego public funding, since they serve as 'rather superior finishing schools.'[52]

31. The perception that Oxford and Cambridge 'favour' those from particular social and educational backgrounds – or that they have not successfully persuaded exceptional students from a broader range of backgrounds to apply in the first place – is fuelled in part by the enduring difference between the widening participation benchmarks calculated by HESA and the actual composition of the student body at Oxford and Cambridge. This is illustrated in Figures 14 and 15 below, which show, for Oxford and Cambridge and for other Russell Group institutions, the proportion of first degree entrants from state schools and from lower socio-economic groups (NS-SEC 4-7) as a proportion of the HESA benchmark for each year.

[51] Based on HESA Performance Indicators from 2006-07.
[52] Vice Chancellor of London Metropolitan University, cited in the Times Higher Education (16 October 2008): http://www.timeshighereducation.co.uk/story.asp?storycode=403949.

Figure 14: Proportion of students from state schools or colleges as percentage of HESA benchmark[53]

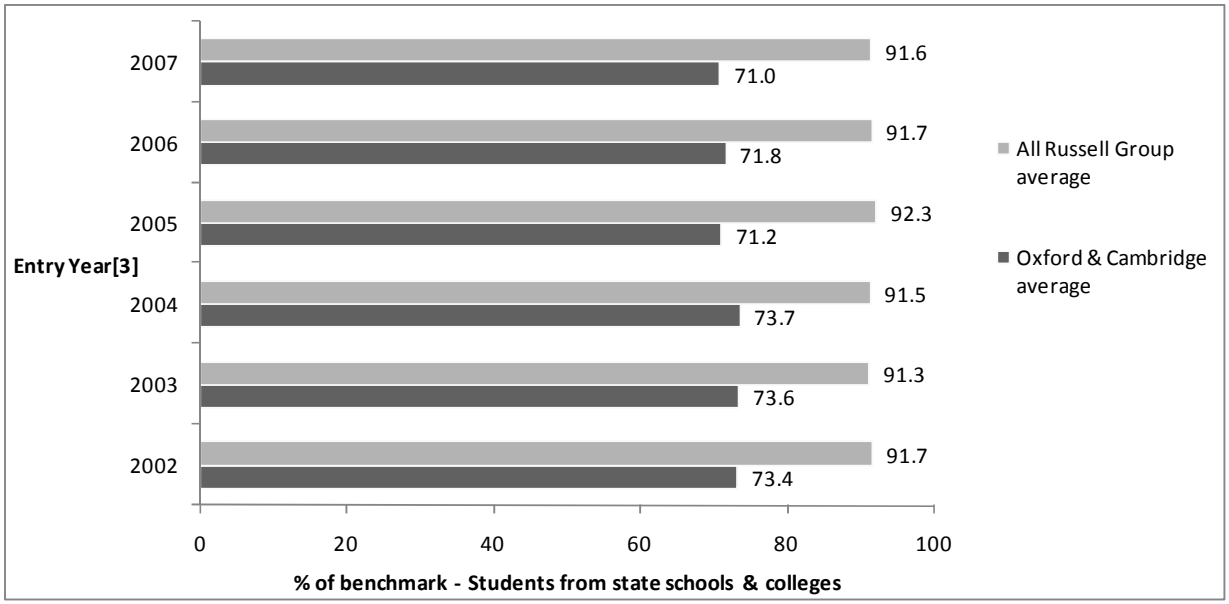
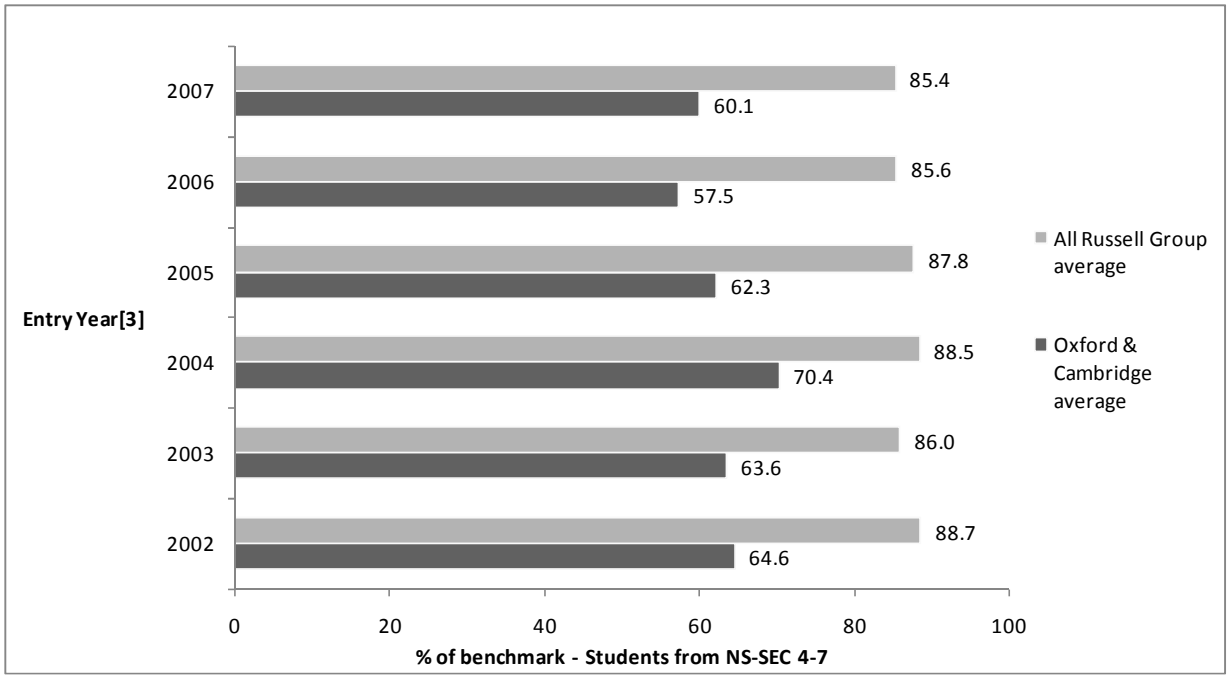


Figure 15: Proportion of students from lower socio-economic groups (NS-SEC 4-7) as percentage of HESA benchmark



[53] Source: HESA Performance Indicators. These figures refer to the actual proportions and benchmarks for young full time first degree entrants. The standard benchmark is used rather than the location-adjusted benchmark, since the latter is not available for the Russell Group institutions outside England. The average shown for each group is the average of the [actual entrants % / benchmark %] for each institution. Data for 2002 and 2003 entry include both the University of Manchester and UMIST. No data for Cambridge were available for 2005 entry so the Oxford & Cambridge figure for this year uses Oxford data only.

Source: HESA

32. It can be seen that, since 2002, the actual proportion of Oxford and Cambridge entrants from state schools and colleges has been, on average, no higher than 73.6 per cent of the benchmark calculated for each institution. In contrast, the actual proportion of all Russell Group entrants from state schools and colleges has been, on average, no lower than 91.3 per cent of the benchmark. A similar contrast exists with respect to students from lower socio-economic groups – the proportion for Oxford and Cambridge has been, on average, no higher than 70.4 per cent of the benchmark, in comparison with a minimum average of 85.4 per cent of the benchmark for the Russell Group as a whole.

33. Concerns over the composition of the student bodies at Oxford and Cambridge are also fostered by research into the fortunes of high achieving students from different schools and colleges, such as the recent report by the Sutton Trust which showed that some of the most academically high performing schools – many of them independent or grammar schools – have a much higher 'hit rate' in admissions to Oxford and Cambridge than others.[54] Whilst this report also looked at other prestigious institutions (the 'Sutton Trust 13'), it was only for Oxford and Cambridge that institution-specific admissions data were provided, and it was Oxford and Cambridge which dominated much of the media commentary and subsequent analysis.[55]

34. When Oxford and Cambridge are compared with other institutions individually, however, their distinctiveness is not quite so obvious. Table 16 below shows the five institutions from among the Russell Group and 'Sutton Trust 13' with the lowest number of entrants from state schools / colleges, and with lowest number of entrants from lower socio-economic groups, as a proportion of the HESA benchmark in 2004 and in 2007. It can be seen that in 2004there was a more significant difference between Oxford and Cambridge with respect to performance against the benchmark for state schools / colleges than between Cambridge and the next 'ranked' institution (Imperial). In 2007, the difference between Oxford and Cambridge was comparable to the difference between Cambridge and Durham. With respect to students from lower socio-economic groups, it could be argued that in 2007 Oxford and Cambridge stood out from the next 'ranked' institution (Bristol), but in 2004 they were closer to meeting their

[54] University Admissions by Individual Schools (September 2007), available at http://www.suttontrust.com/annualreports.asp. The report also looked at the 'hit rate' for different schools with respect to other prestigious universities (the 'Sutton Trust 13') but much of the response focused on the Oxford and Cambridge statistics.

[55] See, for example, http://www.telegraph.co.uk/news/uknews/1563626/100-schools-dominate-Oxbridge-admissions.html and http://www.guardian.co.uk/commentisfree/2007/sep/23/comment.britishidentity.

benchmarks than some other institutions and it is therefore difficult to say whether this represents a longer-term trend.

Table 16: Proportions of entrants from under-represented groups as percentage of HESA benchmarks

Proportion of students from state schools and colleges (% of HESA benchmark)				Proportion of students from NS-SEC 4-7 (% of HESA benchmark)			
2004		2007		2004		2007	
Oxford	71.6	Oxford	68.9	Bristol	68.4	Cambridge	59.8
Cambridge	75.7	Cambridge	73.1	St Andrews	68.9	Oxford	60.3
Imperial	76.8	Durham	77.2	Cambridge	69.7	Bristol	69.2
UCL	79.8	St Andrews	77.5	Oxford	71.1	St Andrews	70.4
LSE	80.5	Bristol	78.4	Nottingham	75.8	Durham	71.9
Oxford	71.6	Oxford	68.9	Bristol	68.4	Cambridge	59.8

35. There are numerous difficulties, in any case, in assessing admissions to Oxford and Cambridge – or indeed to any institution – against prior achievement data. The HESA benchmarks have been criticised both by Oxford and Cambridge and by the Russell Group because they include a range of qualifications other than the A levels judged most likely to form suitable preparation for traditional academic courses. Even if admissions to Oxford and Cambridge are compared solely against students studying more traditional qualifications, it remains the case that whilst around 12 per cent of A level candidates achieve 3 or more A grades at A level,[56] only around 2 per cent of A level candidates in a given year attain a place at either university.[57] Highlighting differences in the outcomes of high achieving students from different educational backgrounds only begins to address a much broader question, which it remains a challenge for the sector as a whole to answer: How effective are institutions in selecting the students who will do best on their courses?

36. As the former chief executive of HEFCE has argued, 'admission to a university or HE programme is not a reward for past educational achievement but is about unlocking potential.'[58] According to the recent review of universities'

[56] In 2008, 12.1 per cent of the 256,622 candidates entered for GCE/VCE/Applied A levels achieved 3 or more grade As (http://www.dcsf.gov.uk/rsgateway/DB/SFR/s000827/index.shtml).

[57] The total number of A level 'pre-qualification' students (i.e. students expecting A level results in 2008) accepted to Oxford for 2008 entry was 2,466 (98.4 per cent of whom had the equivalent of 3 or more A grades at A level. The total number of A level students accepted to Cambridge for entry in 2008 was 2,858 (98.3 per cent of whom had the equivalent of 3 or more A grades at A level, excluding general studies). Note that these figures will include some students studying overseas and, in the case of Cambridge, students who had taken their A levels earlier than 2007, who would not be included in the DCSF figures.

[58] D. Eastwood, 'Quietly flows the Don? Higher education, turbulence, and timeless verities', Perspectives 12:4 (2008), 95.

responses to the Schwartz report, however, '[i]t is not clear . . . whether institutions are getting better in their ability to select those students who can complete their studies. There seems to be more monitoring but less evidence of evaluation, this is also true of the use of assessment methods.'[59] The reference to the evaluation of assessment methods is interesting in the context of Oxford and Cambridge, whose methods of assessment, whilst having much in common, also diverge in some significant respects (for example, in the use of subject-specific tests prior to the interview stage and in the information required of applicants with respect to performance in AS level exams). It is also interesting in the context of research published by HEFCE that shows that pupils from independent schools perform less well at University than pupils from state schools with similar A-level achievement. It might be argued, therefore, that grade for grade there ought to be fewer independent school pupils Oxford and Cambridge than state school, whereas the opposite is the case.

37. Oxford and Cambridge have replied to the criticisms of the social makeup of their student body and their selection processes by insisting – as other Russell Group institutions are insisting – that they are only concerned with academic considerations in selecting between two competing and evenly matched students. In particular, they insist that they are not and will not become engaged in social engineering. This reluctance explicitly to discriminate in favour of students from disadvantaged backgrounds is in contrast to the most prestigious American universities, which recognise that making increasingly fine distinctions on academic grounds between extremely able applicants is unlikely to be fruitful, and so explicitly seek to achieve as socially balanced an intake is possible, while maintaining academic standards.[60] Although Oxford, for example, says that it takes 'contextual information' into account in deciding whether to make an offer, this is not within the framework of a policy of seeking to achieve a more diverse social make-up in its undergraduate student population.

38. A related question is what part universities themselves should play in shaping the potential pool of their applicants. In other words, what do effective partnerships between universities and schools look like? The former Secretary of State for Innovation, Universities and Skills said recently that 'Education is the most powerful tool we have in achieving social justice. From that recognition, the responsibility arises - not to lower standards - but to seek out, support and nurture talent, wherever it exists'.[61] What this might mean for the nature of

---

[59] Fair admissions to higher education: a review of the implementation of the Schwartz report principles three years on (Centre for Education and Inclusion Research, Sheffield Hallam University and Institute for Access Studies, Staffordshire University, December 2008).

[60] See for example 'The Shape of the River' by Bowen and Bok, where the former presidents of Princeton and Harvard explain why they explicitly seek to achieve a social and ethnic mix in their intakes.

[61] http://www.dius.gov.uk/speeches/denham_uuk_110908.html.

partnerships between the most selective universities and schools and colleges across the country is far from clear. Part of the reason for this is that the evidence base for 'what works' in unlocking and nurturing talent among those groups who are under-represented at such institutions remains relatively sparse.[62] Nor can there be said to be broad agreement about the extent to which this responsibility might be taken on directly by universities themselves.

39. The need to engage with these questions is by no means limited to the most selective universities. In fact, the focus on the issue of fair access to such institutions may be such as to suggest that a disproportionate amount of concern is directed towards the fortunes of these students in the context of widening successful participation in higher education. The 'missing 3,000' students at selective institutions identified by the Sutton Trust nine years ago is dwarfed, for example, by the far more significant number of students with 7 or more GCSEs grades A*-C who fail to progress to Level 3 - some 70,000 students by the age of 18 or nearly 50,000 by the age of 19 according to the Government's figures – or by the 60,000 students who are at some point in the top 20 per cent of their cohort and do not progress to university. Similarly, the difference in earnings between graduates of different institutions is less significant than the difference in earnings between graduates and non-graduates. According to a recent report on this subject, the estimated lifetime wage premium deriving from attending a 'higher quality institution' (i.e. 1 standard deviation higher than some alternative) was £35,207 (net present value).This is only a fraction – 12.5 per cent – of the estimated difference in average lifetime earnings between a student leaving school at age 16 with no qualifications and a graduate of any university.[63]

Research quality

40. The place of any institution relative to the rest of the sector with respect to research activity may be assessed with reference to the results of the 2008 Research Assessment Exercise (RAE2008). In RAE2008, each submission received a 'quality profile' presenting in blocks of 5% the proportion of research activity in the submission judged to have met each of four quality levels, from world-leading (4*) to nationally recognised (1*).[64] These overall quality profiles take into account research outputs, esteem indicators and research environment,

---

[62] The recent report from the Panel on Fair Access to the Professions (July 2009), whilst commending partnerships between universities and local schools, acknowledged the lack of good data available to judge the effectiveness of widening participation activity (http://www.cabinetoffice.gov.uk/strategy/work_areas/accessprofessions.aspx). The Government's HE Framework announced that Sir Martin Harris, the Director of Fair Access, will advise the Government on 'further action that could be taken to widen access to universities' early in 2010.

[63] Hussain et al.,University quality and graduate wages in the UK, pp.12-13.

[64] The quality profiles also show the proportion of the submission judged to be 'unclassified' (either below nationally recognised standards or not considered as research for the purposes of the RAE).

and therefore include factors such as peer reviewed publications, membership of external boards, research income, and numbers of postgraduate students. The number of FTE staff submitted was included alongside this quality profile. The performance of Oxford and Cambridge relative to the rest of the sector in RAE2008 depends on the way in which these data are interpreted. For example, where institutions are ranked solely on the grade point average of the quality profiles for all submissions at each institution among multi-faculty universities , Cambridge is ranked first and Oxford second, with LSE. Imperial and UCL then following in fourth and fifth places respectively. The 'Power' rankings produced by Research Fortnight, which take both the volume of staff submitted and the quality profile of institutions into account, Oxford and Cambridge are placed first and second respectively, whilst UCL is third, Imperial sixth and LSE twenty-seventh. This combination of volume and quality is also illustrated by the proportion of Oxford and Cambridge staff in submissions of the highest quality. For example, staff from Oxford and Cambridge accounted for over a third (34.3 per cent) of all submitted FTE staff in submissions with at least 35 per cent of activity rated world-leading (4*).[65] These staff were working in a wide range of subject areas: Oxford had 24 units of assessment with at least 35 per cent of world-leading research activity, and Cambridge had 25. By way of comparison, UCL , had nine units of assessment with this level of world-leading research activity, LSE had seven and Imperial had six.

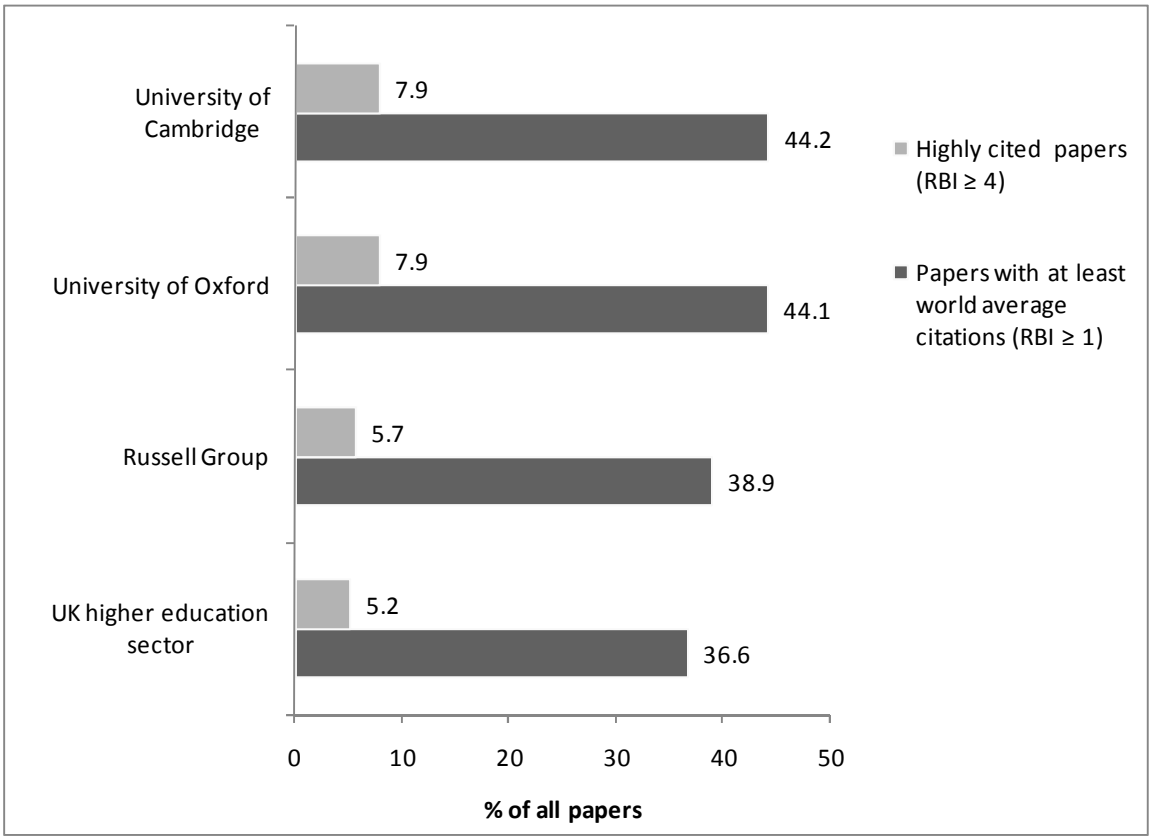
41. One indicator of research impact that is not incorporated directly in the RAE2008 profiles is bibliometric analysis, specifically citation analysis for research papers. One caveat here is that bibliometric data for a particular publication, whilst clearly indicative of impact within the research community, are not necessarily indicative of the quality of a particular publication. The citation rates for papers produced by UK institutions have, however, been used for some years to assess the performance of the UK research base relative to other countries. Of particular interest in terms of research impact are those papers cited at least four times as often as the relevant world average, since this group may be considered 'highly cited' papers.[66]

42. Figure 17 and Table 18 below compare the proportion of all papers produced by Oxford, Cambridge, all Russell Group institutions and the whole HE sector between 2002-06, which fall into this category. They also show the proportion that were cited at least as often as the relevant world average. Those with a 'rebased impact' (RBI) of 1 or more are cited at least as often as the relevant world average; those with a RBI of 4 or more are cited at least four times as often as the relevant world average. It can be seen that the proportions of papers in each of these categories are slightly higher for Oxford and Cambridge considered on their own than for all Russell Group institutions and for the sector

[65] Oxford and Cambridge accounted for 8.7 per cent of all submitted FTE staff in RAE2008.
[66] This is the definition used by Evidence Ltd.

as a whole. The proportion of highly cited papers at both institutions is 2.2 percentage points (39 per cent) higher than the whole Russell Group and 2.7 percentage points (52 per cent) higher than the sector as a whole. The Russell Group on the other hand has only a 0.5 percentage point (10 per cent) advantage over the sector as a whole, and if the 'Golden Triangle' institutions are excluded actually performs less well than the UK sector average (see paragraph 44 below).

Figure 17: Extract of citation data for papers published 2002-2006 - comparison of Oxford and Cambridge with the sector and the Russell Group



Source: Evidence Ltd

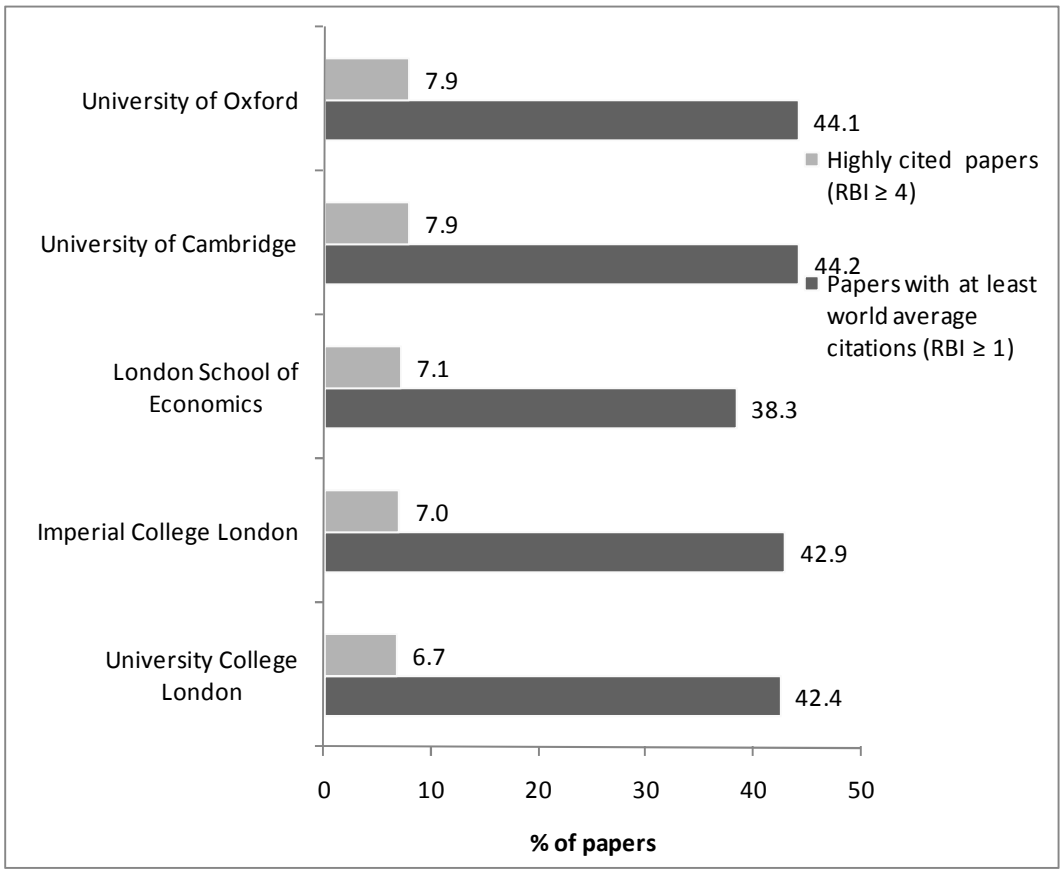
Table 18: Extract of citation data for papers published 2002-2006 - comparison of Oxford and Cambridge with the sector and the Russell Group

Articles and reviews published by:	**At least world average**		**Highly cited papers**		**Total papers**
	% of total papers	No. of papers	% of total papers	No. of papers	
University of Cambridge	44.2%	10,633	7.9%	1,900	24,056
University of Oxford	44.1%	9,957	7.9%	1,784	22,578
Russell Group	38.9%	79,475	5.7%	11,645	204,307
UK higher education sector	36.6%	112,238	5.2%	15,946	306,661

Source: Evidence Ltd

43. The data in Figure 17 and Table 18 do not tell us, however, how Oxford and Cambridge compare to other institutions with similar levels of Research excellence. Figure 19 and Table 20 therefore compare the profiles for Oxford and Cambridge with those for other multi-faculty HE institutions which had at least 25 per cent of their research activity classified as 'world-leading' (4*) in RAE2008 – Imperial College, UCL and the LSE. It can be seen that a higher proportion of Oxford's and of Cambridge's papers were highly cited than any of the other institutions selected here. The differences are small, however, ranging from 0.8 percentage points (11 per cent) compared to the LSE to 1.2 percentage points (18 per cent) in comparison with UCL, and all of these institutions had a higher proportion of highly cited papers and papers cited at least as frequently as the relevant world average than the whole of the Russell Group and the whole of the UK HE sector. Translating these percentage point differences into actual publications shows that Cambridge published 399 more highly cited publications than UCL and 448 more than Imperial, whilst Oxford published 282 more highly cited papers than UCL and 331 more than Imperial over the period 2002 – 2006.

Figure 19: Extract of citation data for papers published 2002-2006 - comparison of Oxford and Cambridge with selected 'golden triangle' institutions



Source: Evidence Ltd

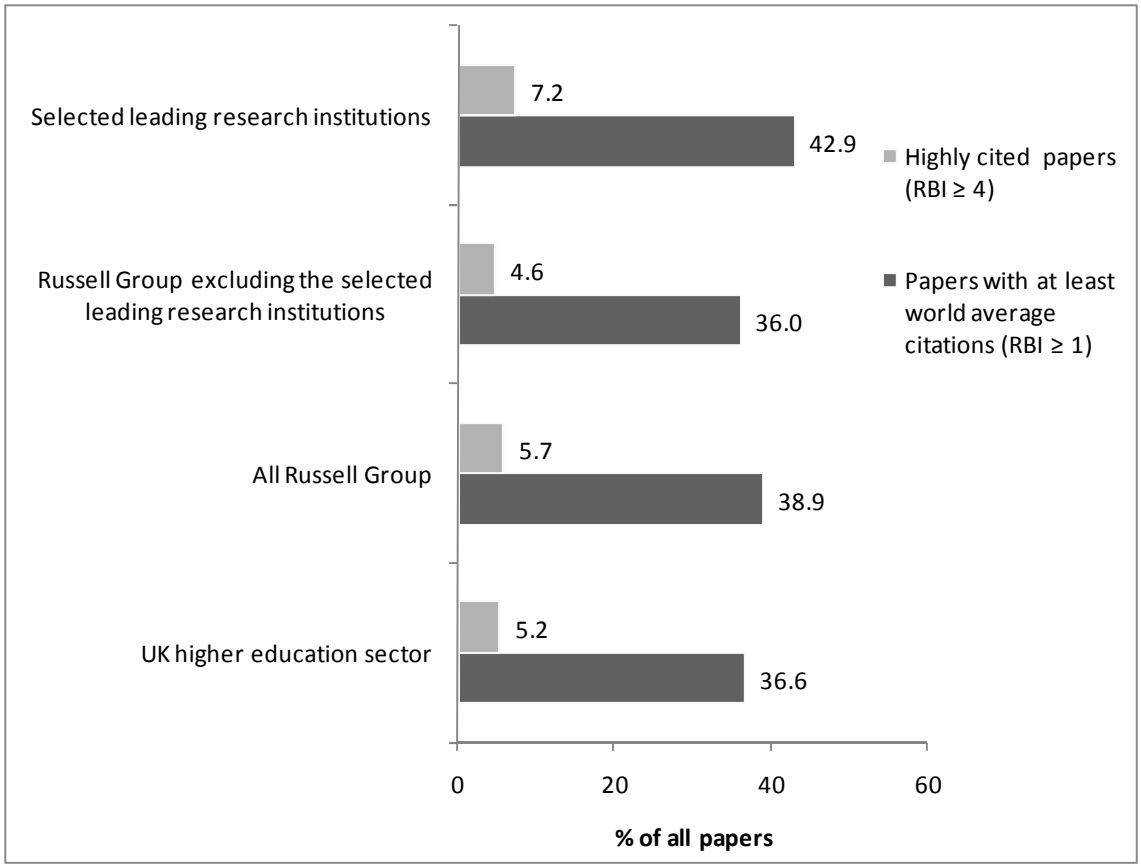
Table 20: Extract of citation data for papers published 2002-2006 - comparison of Oxford and Cambridge with selected 'golden triangle' institutions

Articles and reviews published by	**At least world average (RBI ≥ 1)**		**Highly cited papers (RBI ≥ 4)**		**Total papers**
	% of total papers	Number of papers	% of total papers	Number of papers	
University of Cambridge	44.2%	10,633	7.9%	1,900	24,056
University of Oxford	44.1%	9,957	7.9%	1,784	22,578
University College London	42.4%	9,504	6.7%	1,502	22,414
Imperial College London	42.9%	8,900	7.0%	1,452	20,746
London School of Economics	38.3%		7.1%		1,944

Source: Evidence Ltd

44. Of perhaps more significance is the fact that these institutions collectively appear to be critical in sustaining the position of the Russell Group relative to the rest of the sector. Figure 21 and Table 22 show the same citation data for these institutions and the remainder of the Russell Group universities and compares these against the UK sector as a whole. The proportions of papers published by the remaining Russell Group institutions that are cited at least as frequently as the relevant world average, and the proportion which are highly cited, are in fact lower than for the sector as a whole.

Figure 21: Extract of citation data for papers published 2002-2006 - comparison of selected 'golden triangle' institutions (Cambridge, Oxford, Imperial College, LSE, UCL) with other Russell Group and UK sector



Source: Evidence Ltd

Table 22: Extract of citation data for papers published 2002-2006 - comparison of selected 'golden triangle' institutions (Cambridge, Oxford, Imperial College, LSE, UCL) with other Russell Group and UK sector

Articles and reviews published by	**At least world average (RBI ≥ 1)**		**Highly cited papers (RBI ≥ 4)**		**Total papers**
	% of total papers	Number of papers	% of total papers	Number of papers	
UK higher education sector	36.6%	112,238	5.2%	15,946	306,661
All Russell Group	38.9%	79,475	5.7%	11,645	204,307
Russell Group excluding the selected leading research institutions	36.0%	42,174	4.6%	5,389	117,150
Selected leading research institutions	42.9%	37,390	7.2%	6,275	87,157

Source: Evidence Ltd

45. The available data suggest that it is only when scale and quality are combined that Oxford and Cambridge stand out among the leading research

institutions in the UK. Based purely on the quality of staff submitted for assessment the picture is more mixed, with specialist institutions performing as well or better than Oxford and Cambridge in the latest assessment of research quality.

46. In terms of research impact, Oxford and Cambridge can be shown to have published significantly higher proportions of highly cited papers and a significantly higher number of overall papers, between 2002 and 2006 than other leading research intensive universities. They therefore could be said to make the most significant contribution to the performance of the UK research base in this respect relative to other countries. It is also notable that they do so whilst performing highly with respect to undergraduate teaching, as described in the previous section, and in particular achieving higher levels of undergraduate student satisfaction – particularly with respect to formative assessment – than other research intensive universities. The proportion of undergraduates at Oxford and Cambridge is also considerably higher than the proportion at comparable US universities: the average proportion of undergraduates enrolled at all Ivy League universities and MIT in 2007-08 was 53.9 per cent – at Harvard and Yale the proportions were 34.5 and 46.4 per cent respectively. In contrast, 69.0 per cent of Cambridge's student population in 2007-08, and 67.0 per cent of Oxford's, were undergraduate students.[67]

Resources

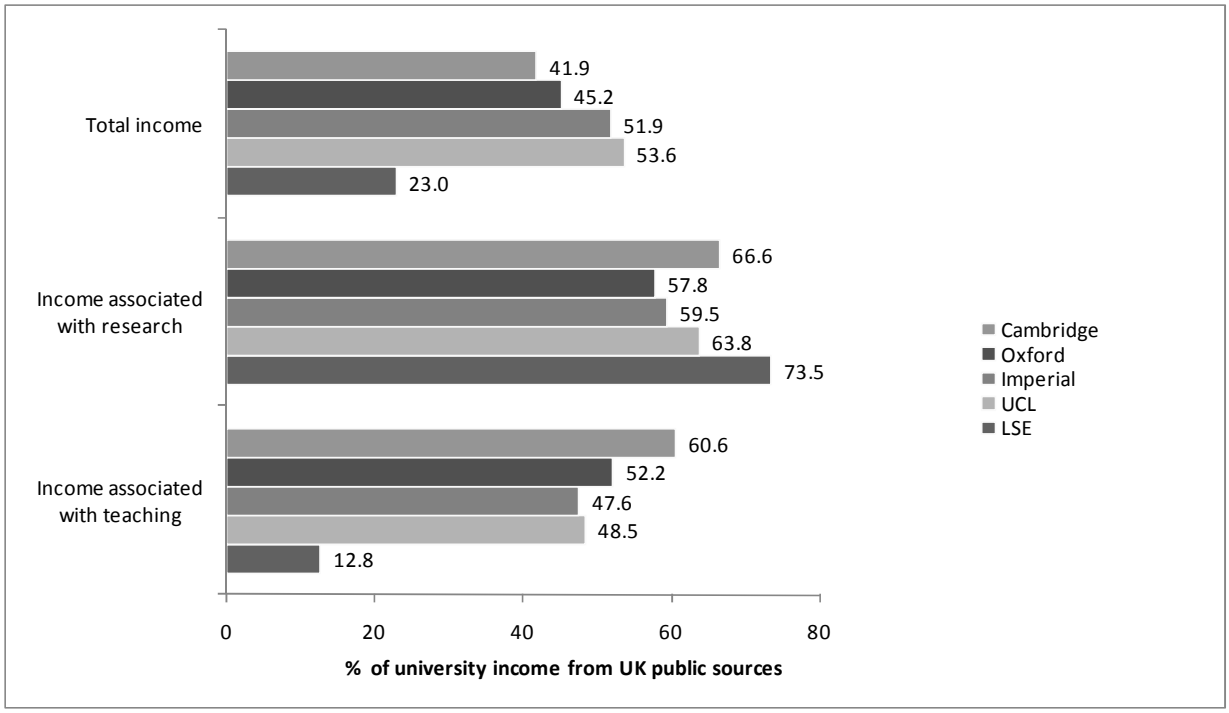
47. Funding from the UK government is currently a significant source of income for Oxford and Cambridge. In terms of overall university-level income and the major sources of university-level income associated specifically with research, the proportion of UK government funding from which Oxford and Cambridge benefit is comparable to others.[68] Figure 23 below shows, for 2007-08, the proportion of each university's total income, and the proportion of the primary sources of income for research and teaching activities, derived from UK government departments and other UK public bodies. The chart also provides the same data for Imperial College, University College London, and LSE).

[67] Source for US statistics: Each University's submission to the US News & World Report Survey; Source for UK statistics: 11,760 full-time undergraduates at Cambridge and 11,450 at Oxford in the academic year 2007-08 (based on HESA FPE populations).

.

[68] The proportions shown here do not include the Colleges' income.

Figure 23: Proportion of university-level income from UK public sources (those where the income is principally derived from UK government or other UK public bodies)[1]



[2]

[3]

Source: HESA, 2007-08 data

Notes to Figure 23

[1] The sources of income classified as 'UK public sources' for this report are those where the income is principally derived from UK government or other UK public bodies. These incorporate the following HESA fields:

(a)Funds associated with research activity:

(i)HEFCE recurrent grants for research

(ii)Research grants and contracts from DIUS research councils

(iii)Research grants and contracts from UK central govt and local, health & hospital authorities

(b)Funds associated with teaching activity:

(iv)HEFCE recurrent grants for teaching

(v)Tuition fees for Home and EU students met through government tuition fee loans or tuition fee waivers

(c)Other

(vi)Other services rendered by UK Central Government/local authorities, health and hospital authorities and EU Government bodies

(vii)Grants from local authorities

(viii)Income from health and hospital authorities (excluding teaching contracts for student provision)

[2] Income associated with research activity consists of the sources described in (i) – (iii) above, together with any other income attributable under HESA to 'Research grants and contracts'.

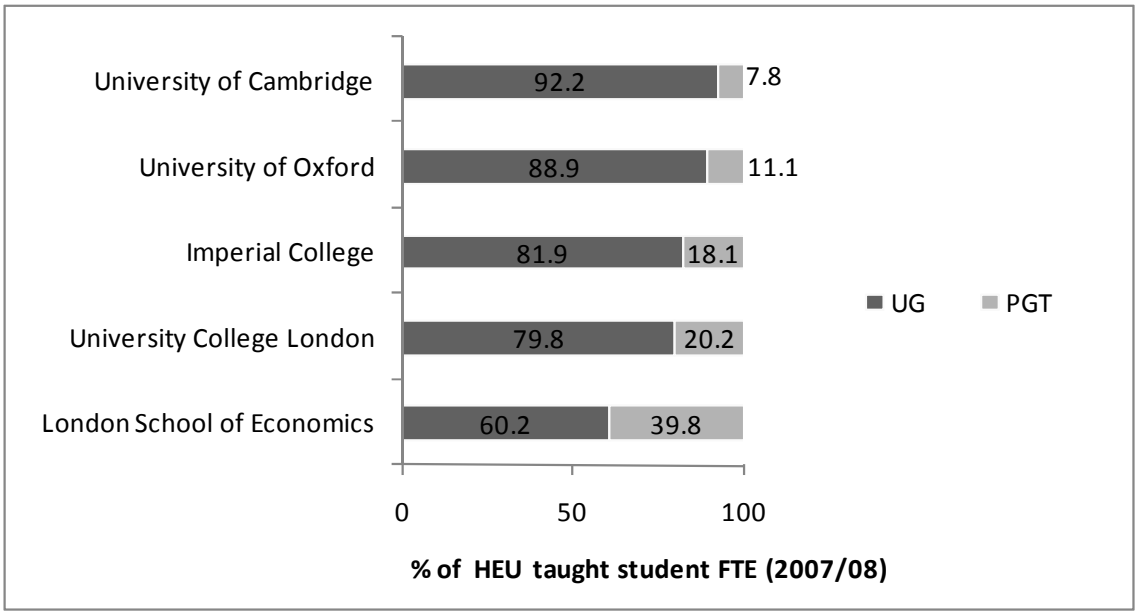
[3] Income associated with teaching activity consists of the sources described in (iv) and (v) above, together with any other income attributable under HESA to 'Tuition fees and education grants and contracts'.

48. It can be seen that the proportion of university-level income (i.e. excluding the colleges' income) from UK public sources at Oxford and Cambridge is comparable to the proportions at UCL and Imperial. When this income is broken down into teaching and research income, the differences between Cambridge and Oxford are more significant than the differences between Oxford and Imperial or UCL. LSE looks considerably different from these other institutions because of the large proportion of overseas students.

49. Where Oxford and Cambridge are distinctive in comparison with these other research intensive institutions is in the proportion of their Home and EU (HEU) taught students – the vast majority of whom will be fundable by HEFCE[69] – studying at undergraduate level. This is illustrated in Figure 24, which shows the breakdown of FTE taught postgraduate (PGT) and undergraduate (UG) students at the same group of institutions. Although the notional rate of HEFCE teaching grant per FTE student varies by price band, the calculations made by HEFCE assume a higher rate of funding for UG than for PGT students in all cases with the exception of courses with regulated PGT fees.[70]

[69] An average of 3 per cent of all HEU students at these institutions were ineligible for fees at the 'Home' rate in 2007/08. Some of these students will be funded by other agencies.
[70] See HEFCE 2008/33 p.14 for the notional rates of HEFCE teaching grant per FTE student for 2008-2009. The notional HEFCE grant rate for FT and PT PGT students, as a proportion of the notional rate for FT UG students on regulated courses, is as follows (based on 2008-09 rates): Price Group D: 0 per cent; Price Group C: 31 per cent; Price Group B: 51 per cent; Price Group A: 81 per cent.

Figure 24: Breakdown of HEU taught student FTE populations[1]



Source: HESA, 2007-08 data

50. Whilst the overall number of overseas students at Oxford and Cambridge – particularly at undergraduate level – is low relative to some other institutions, the existence of the Oxbridge 'academic brand' may play an indirect role in stimulating international demand for the UK HE sector as a whole. It is difficult, however, both to define exactly how the global reach of two institutions might enhance international student demand for UK higher education, and to quantify the extent to which it does so relative to other potential quality indicators, such as evidence of the investment value of a UK degree for overseas students.

51. Oxford and Cambridge are particularly distinctive in the funding they receive which relates to the collegiate teaching system. The funding benefit they receive has, however, reduced substantially over the last ten years. In 1998 an agreement was reached which was intended to reduce by approximately one third the net income from both undergraduate and postgraduate College fees (£44.5 million in 2008-09 terms) over a ten year period. As can be seen in Table 25 below, this was equivalent to a 46 per cent reduction in the income from undergraduate college fees. The income from the targeted allocations that replaced the College fees[71] has in fact amounted to a 37 per cent reduction in net income from undergraduate fees at the end of the transitional period.[72] The reason that this reduction is less than the assumed reduction when the new

[71] Old and Historic Buildings, Institution-specific funding (incorporating the old premium for small institutions) and QR funding for College fellows.
[72] It would be extremely difficult to estimate the net reduction in all college fees (both undergraduate and postgraduate) because some postgraduate college fees are no longer paid directly and are instead subsumed within block grants from Research Councils.

arrangements were agreed in 1998, is that the QR income associated with College-employed staff was much higher after the 2001 RAE. The effect of this is illustrated in Table 25, which shows that the amount of QR income associated with Cambridge (£6.07m) and Oxford (£6.76m) – a total of £12.8m – was nearly twice the assumed income on which the settlement was based (£7m). If the QR income associated with College-employed staff had remained, in real terms, at 1999-2000 levels, then by 2008-09 the reduction in net undergraduate fee income would have been higher (around 44 per cent).

Table 25: College fee settlement (all figures in 2008-09 terms)

	Income from old system	**Agreed settlement (Dec 2008)[3]**		**Actual HEFCE funding 1999-2000[4]**		**Current HEFCE funding 2008-09[5]**	
Income Source [1]	Total income for UG fees (£000s)	Approximate proposed income (£000s)	Proposed reduction in UG College fee income (%)	Total income (£000s)	Actual reduction in UG College fee income (%)	Actual total (£000s)	Actual reduction in UG College fee income (%)
Cambridge							
Undergraduate (UG) college fees (net of HEFCE grant reduction)	22,292	0		0		0	-
Old & historic buildings	-	3,972				4,271	-
Small institutions / Institution specific	-	4,228				2,942	-
Additional T Grant funding[2]				8,366		-	
QR for college staff	-	3,715		3,742		6,070	-
Total Cambridge	22,292	11,915	46.6%	12,108	45.7%	13,283	40.4%
Oxford							
Undergraduate (UG) college fees (net of HEFCE grant reduction)	24,983	-	-	-	-	-	-
Old & historic buildings	-	4,997				5,214	-
Small institutions / Institution specific	-	5,381				4,567	-
Additional T Grant funding				11,421		-	
QR for college-employed staff	-	3,331		3,318		6,760	-
Total Oxford	24,983	13,708	45.1%	14,739	41.0%	16,541	33.8%
TOTAL OXFORD & CAMBRIDGE	**47,275**	**25,623**	**45.8%**	**26,847**	**43.2%**	**29,824**	**36.9%**

Source: HEFCE

Notes to Table 25

[1] Uprated using GDP deflator (September 2008). The amount of funding from these sources is derived from publicly available information from HEFCE (including assumed income from the agreed settlement at http://www.hefce.ac.uk/News/hefce/1998/oxcamfee.htm), and, for QR funding for college staff, from additional correspondence with HEFCE.

[2] Excludes transitional funding, which ended in 2008-09.

[3] Outlined at http://www.hefce.ac.uk/News/hefce/1998/oxcamfee.htm (assumed income figures uprated to 2008 levels).

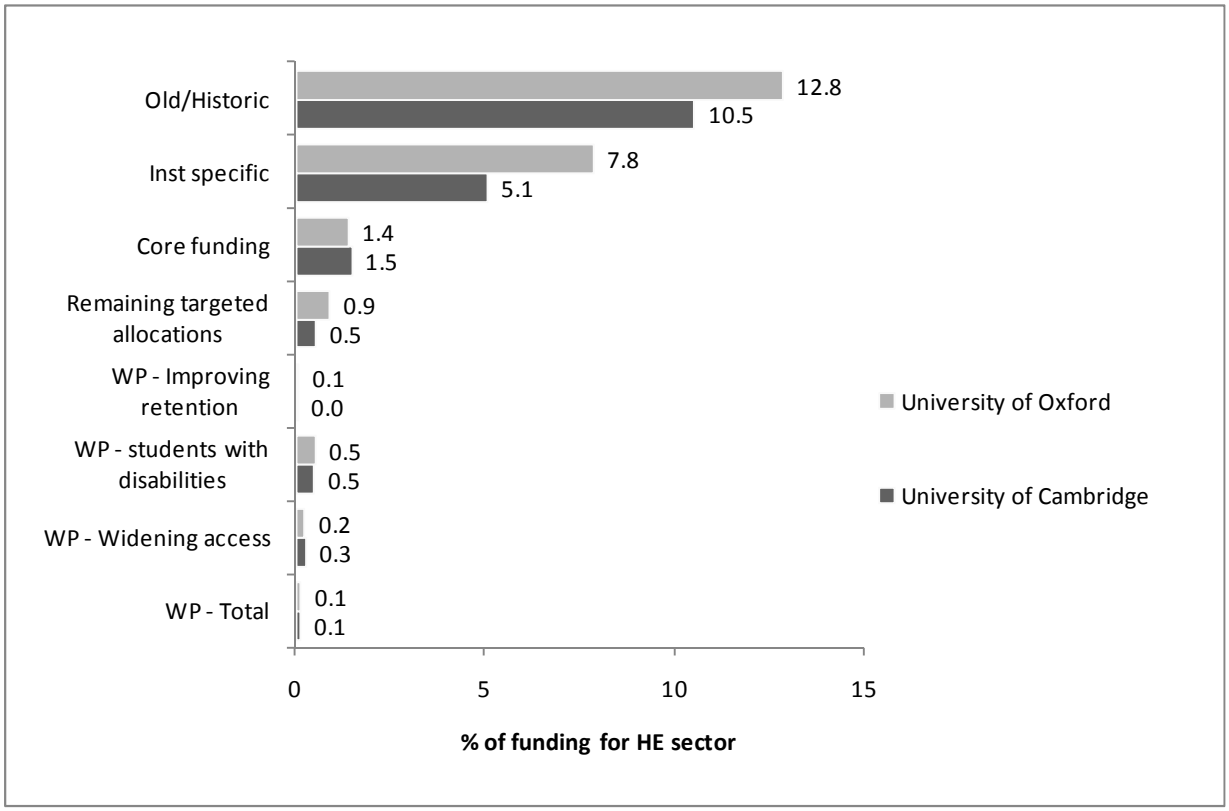
[4] Prior to 2008-09 the Old and Historic and small institutions premiums were used as part of the calculation of the notional resource (the 'benchmark' figure for each institution) and then an amount was added separately to the total teaching grant.

[5] From 2008-09, rather than being used to generate the notional resource, these institutional premiums became targeted allocations made directly to institutions. The small institutions premium became part of institution-specific funding.

52. As can be seen in Table 25, the income associated with this settlement amounted to £29.8 million, or an additional £1,189 per FTE HEU undergraduate per year at Cambridge and £1,469 per FTE HEU undergraduate per year at Oxford at the end of the transitional funding period (2008-09).[73] Were the original funding of college fees to have stayed in place, these figures would have been £1,996 and £2,219 respectively. Oxford and Cambridge are not the only beneficiaries of these allocations – with the exception of QR funding for College-employed staff – but they are the most significant beneficiaries.[74] Figure 26 below shows Oxford and Cambridge's share of funding for old and historic buildings and share of institution-specific funding against their share of core teaching funding and other targeted allocations in 2008-09. It can be seen that Oxford and Cambridge's share of the targeted allocations for Old and Historic Buildings was more than eight times their share of core teaching funding, and their share of institution-specific funding was four and half times their share of core teaching funding.

[73] Based on 2007-08 HESA figures. Although of course it is not only numbers of HEU undergraduate students that determine this funding but also HEU PGT students fundable by HEFCE and college-employed research staff.
[74] Compared with other general HE institutions (with respect to institution-specific funding).

Figure 26: Oxford and Cambridge share of selected HEFCE teaching funds 2008-09



Source: HEFCE 2008-09 allocations

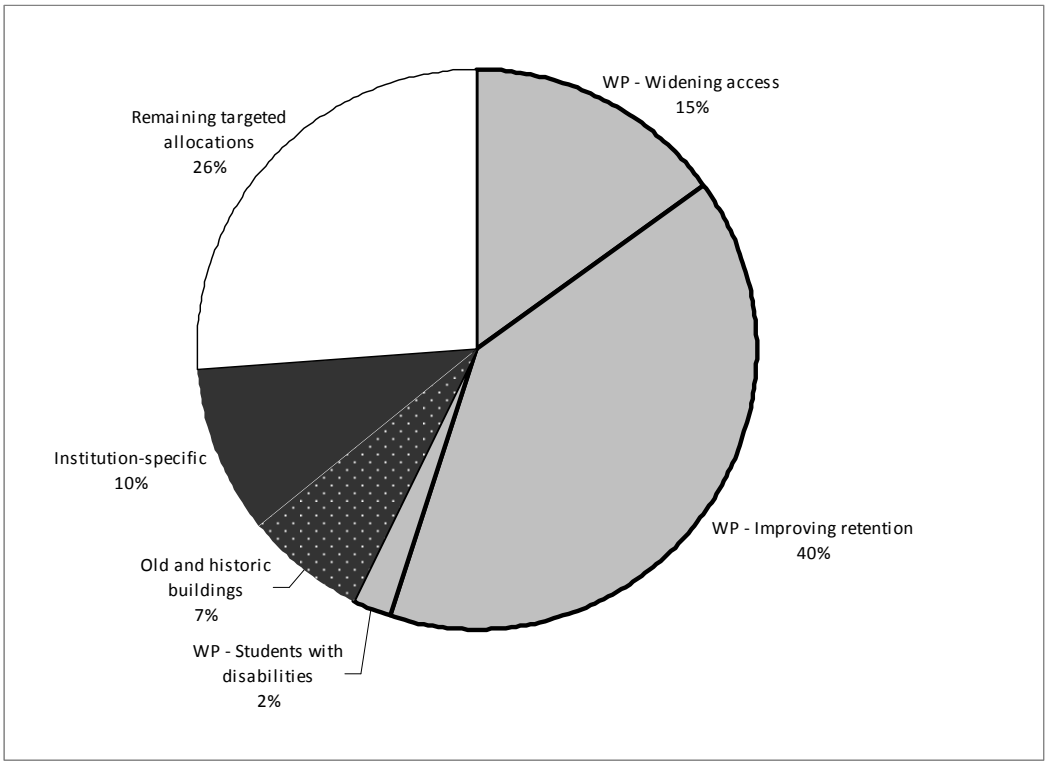
53. Although running at only 60 per cent of the level in 1998, this nevertheless means that Oxford and Cambridge together receive £30 million per year of public funding specifically to maintain the collegiate system which, arguably, enables the exceptional teaching that they provide. Although the explicit subsidy for college fees was withdrawn in 1998, the additional funding elements - Old and Historic buildings, Small Institutions and especially QR for college staff - were introduced effectively as a means of enabling public subsidy to continue for the college system.

54. HEFCE has recently consulted the sector on proposals to withdraw the old and historic buildings funding, together with two other targeted allocations.[75] If these proposals are accepted, it would significantly reduce the benefits that Oxford and Cambridge derive from one substantive element of these special payments.

[75] The consultation proposes that the following three targeted allocations be withdrawn from recurrent teaching funding from 2010-11 (possibly phased in over a number of years): old and historic buildings; accelerated and intensive provision of postgraduate taught subjects in price band D; foundation degrees.

55. Compared with other policy-specific funding, however, the amounts allocated here are relatively small. Figure 27 below shows the proportions of widening participation and other targeted allocations provided to English HE institutions in 2008-09. It can be seen that the largest single allocation is widening participation funding for retention purposes (of which Oxford and Cambridge received only 0.1 per cent in 2008-09), and that widening participation funding as a whole accounts for 57.2 per cent of all targeted allocations. On the other hand, no single institution (with the exception of the Open University) benefits from any widening participation funding streams relative to the rest of the sector to the same extent as Oxford and Cambridge benefit from the allocation for Old and Historic buildings.[76]

Figure 27: Breakdown of HEFCE funding for WP and other targeted allocations in English HEIs (2008-09)



Source: HEFCE 2008-09 allocations

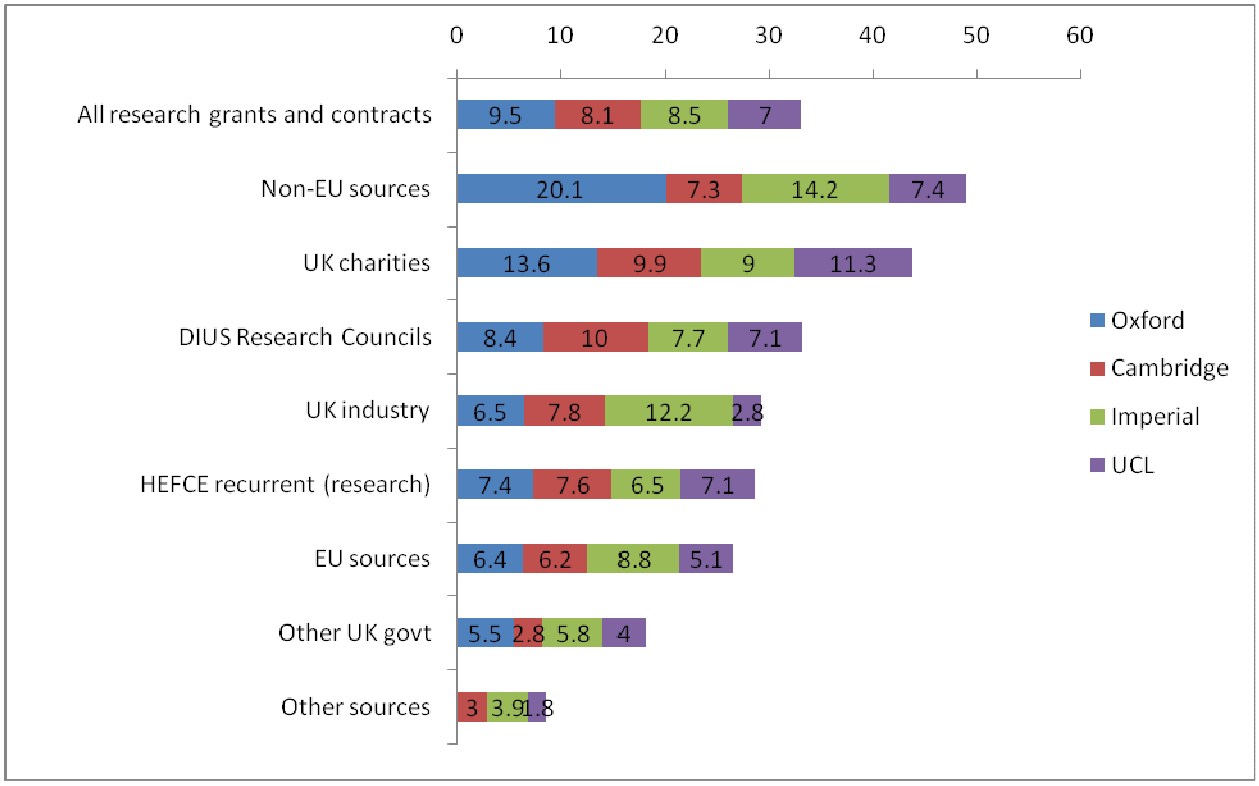
56. Thus while the need to sustain Oxford and Cambridge teaching remains influential in determining the distribution of available funding for teaching, it is far

[76] The Open University received 19.5 per cent of Widening Access funding in 2008-09 but the next largest share was held by the University of Teesside (4.1 per cent). The Open University also had the highest share of retention funding (6.4 per cent; followed by Manchester Metropolitan University with a 2.5 per cent share). Manchester Metropolitan also had the highest share of funding for students with disabilities (3.9 per cent). The Open University had the highest share of total WP funding (9.7 per cent) followed by Manchester Metropolitan (2.5 per cent).

from an over-riding consideration in the distribution of public funding for higher education in England. Similarly, the existence of Oxford and Cambridge within a system of publicly funded higher education teaching has not, as yet, resulted in maximum fee levels for HEU undergraduates anything like those charged to undergraduates at the private US universities. While it can be argued that Oxford and Cambridge distort public funding allocations, they only do so to a modest extent.

57. However, the broader picture of the distribution of government funding for research is not so much one of dominance by Cambridge and Oxford but one of a sustained concentration of government research funding in a small number of institutions, with Oxford and Cambridge among the principal beneficiaries. This is illustrated in Figure 28 below, which breaks down the market share (across English HEIs) of all types of research funding at Oxford and Cambridge (for 2007-08), and compares this with peer institutions of comparable size (UCL and Imperial). It can be seen that there is a broad similarity in the market share of funding from all of these sources, and that there is no evidence of Oxford and Cambridge dominance in comparison with these other research intensive institutions. Between them, these institutions received total research funding amounting to around a third of the total available for English HEIs, and a similar amount of the total Research Council funding. The amount received from HEFCE recurrent research funds was equivalent to around 30 per cent of the total distributed to English HEIs. The market share of research income from non-EU sources and UK charities was even higher – although the total sums involved here are smaller.

Figure 28: Market share of research funding broken down by source (2007-08)[77]



Source: HESA

Table 29: Market share of research funding broken down by source

	ALL research funds	Non-EU Sources	UK Charities	DIUS Research Councils	UK Industry	HEFCE recurrent (research)	EU Sources	Other UK Govt	Other sources
Value of research funding to all English HEIs (£ million)	3,011	191	565	1,119	221	1,410	263	486	38
Total market share of funding to English HEIs of the four institutions (%)	33.0	48.9	43.8	33.3	33.0	29.3	28.6	26.5	18.0

Source: HESA

58. Two points are interesting to note, however. The first is that whilst the extent of concentration in research funding essentially remained the same after the 2001 RAE, it reduced significantly following RAE2008. This is illustrated in

[77] The categories UK charities, EU sources and non-EU sources are amalgamations of the relevant HESA categories. The category 'Other UK Government' refers to income from UK central government bodies/local authorities, health & hospital authorities. The category 'UK Industry' refers to income from UK industry, commerce & public corporations

Table 30 below, which illustrates the change in the number of institutions receiving a share of 90 per cent of mainstream QR funding and the number receiving a share of 75 per cent of this funding following each of the 2001 and 2008 RAE exercises. It can be seen that the number of institutions receiving a share in each case remained the same between 2001-02 and 2002-03 but increased between 2008-09 and 2009-10. The table also shows the percentage of mainstream QR cash allocated to Oxford, Cambridge, UCL and Imperial. Again, it can be seen that there was relative stability here following the 2001 RAE but more variable outcomes after RAE2008, with both Imperial and UCL experiencing a significant reduction in their market share of mainstream QR funding.

Table 30: Outcomes of 2001 and 2008 RAE exercises (total institutions in 2009-10 = 130)[78]

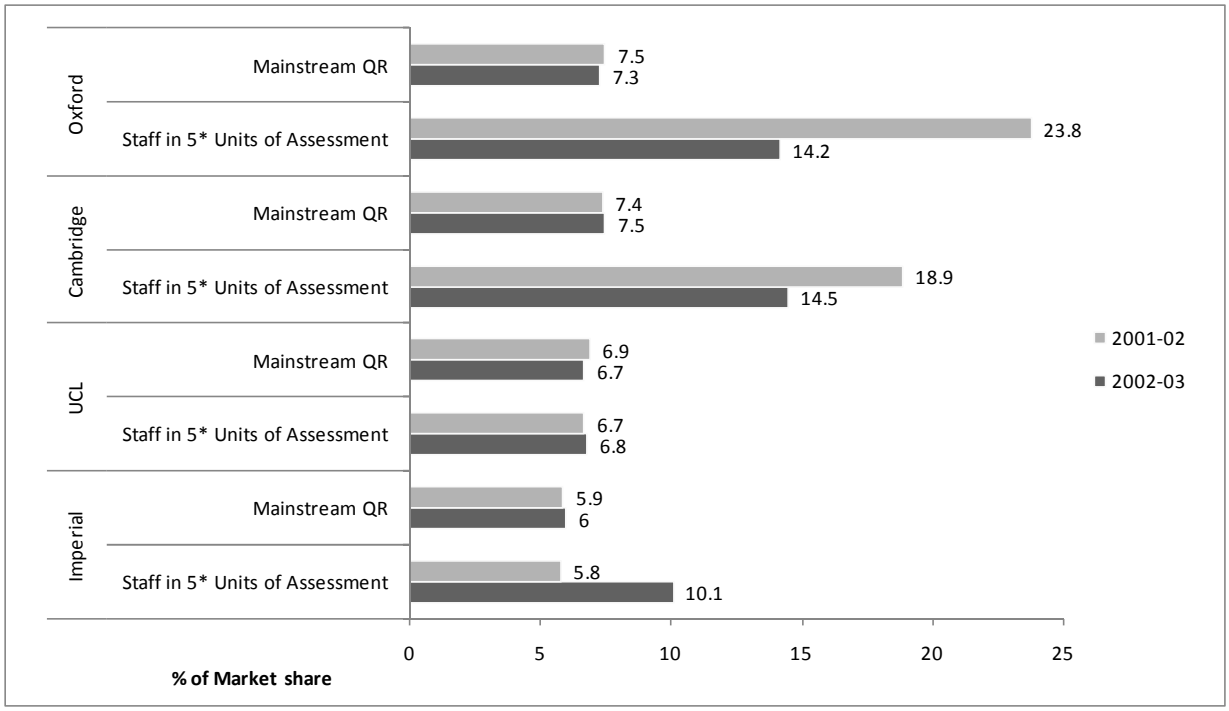
	90% of mainstream QR	75% of mainstream QR	Proportion of mainstream QR			
	# of institutions	# of institutions	Oxford	Cambridge	Imperial	UCL
2001-02	42	24	7.5%	7.4%	5.9%	6.9%
2002-03	42	24	7.3%	7.5%	6.0%	6.7%
2008-09	38	22	7.0%	7.2%	5.5%	6.3%
2009-10	48	26	6.9%	6.9%	4.6%	5.6%

Source: HEFCE

59. The second interesting funding outcome to note is that, despite the relative stability in funding for these institutions following the 2001 RAE, there were significant differences in the changes to their market share of staff in the highest ranked departments. This is illustrated in Figure 31 below, which shows the market share of mainstream QR funding and of staff in 5* rated Units of Assessment in 2001-02 (based on the 1996 RAE) and in 2002-03 (based on the 2001 RAE) held by Oxford, Cambridge, Imperial and UCL. It can be seen that UCL and Imperial retained a similar share of QR funding, but at the same time maintained (in UCL's case) or increased (in Imperial's case) their share of staff in 5* rated Units of Assessment. In contrast, Oxford and Cambridge retained a similar share of QR funding but their share of staff in 5* rated Units of Assessment decreased. This is not what would be expected – one would expect the share of QR funding to go hand-in-hand with the share of top-rated staff, as has been the case with UCL, Imperial and other universities. Oxford and Cambridge have been able to retain their funding despite a reduction in the number of staff relative to others.

[78] 130 HEIs received QR funding in 2009-10 - mergers since 1996 are reflected in the figures. The lower proportions of mainstream QR in 2008/09 (compared with 2002/03) are in large part a reflection of the change in funding for charities research in 2006 (when this element was moved out of mainstream QR).

Figure 31: Change in market share of FTE Category A staff (funded from general funds) in HEFCE Mainstream QR funding and staff in 5* Units of Assessment



60. Oxford and Cambridge benefit from two sources of income which other institutions do not: significant endowment income and transfers from each institution's University Press. In 2006-07, the combined value of the endowment and investment assets of Cambridge University and its Colleges was £4.1 billion, of which two thirds belonged to the Colleges' endowments.[79] The equivalent figure for Oxford was £3.3 billion, of which around 80 per cent belonged to the Colleges.[80] In 2006-07 Oxford's total income from endowments was £117.7 million, of which three quarters was College endowment income, whilst Cambridge's total income from the same source is likely to have been around £130 million.[81] This total income dwarfs the endowment income of other

[79] University of Cambridge Press release 27 November 2006 (http://www.admin.cam.ac.uk/news/press/dpp/2006112701).

[80] http://www.ox.ac.uk/about_the_university/facts_and_figures/financial_statements.html (University endowment assets of £680.8m)
http://www.ox.ac.uk/about_the_university/facts_and_figures/college_finances08.html (College endowment assets of £2,664m)

[81] The aggregate income from endowments for the Oxford Colleges was £89.4 million in 2006-07 (http://www.ox.ac.uk/about_the_university/facts_and_figures/college_finances08.html), whilst income from the University's endowments was £28.3 million (http://www.ox.ac.uk/about_the_university/facts_and_figures/financial_statements.html). The figure for Cambridge is a combination of the University's income of £38.3 million from the published Cambridge accounts (http://www.admin.cam.ac.uk/reporter/2008-09/special/09/ Section A) and an estimate of aggregate College income from endowments. This estimate is based on College endowments being two thirds of the total endowment of £4.1 billion (University of Cambridge Press release 27 November 2006) - £2.7 billion –

institutions: the next richest English institution in absolute terms is the University of Manchester, with an endowment income of £15.6 million in 2006-07 – less than 15 per cent of Oxford's or Cambridge's income from this source. Whilst the income Cambridge receives from its endowment is significantly higher than Oxford's, Oxford receives significantly more than Cambridge in annual transfers from its University Press. Annual transfers from the Oxford University Press (OUP) to Oxford University amount to around £25 million, whilst the 2006-07 transfer from the Cambridge University Press (CUP) to Cambridge University was worth £1.8 million. The annual subvention from OUP to the University each year is complemented by 'special transfers' which can substantially exceed this amount. This was the case, for example, in 2009, meaning that the combined transfers (including a small transfer accounted for as benefits in kind) were worth around £100m.[82]

61. The amount Oxford and Cambridge raise from donations significantly exceeds the average for the sector and even the average for other prestigious institutions. This is illustrated in Table 32 below, which shows the average annual philanthropic cash income over the period 2004-2007, and what this represents per FTE student, for Russell Group institutions as a whole and for Oxford and Cambridge (note that this excludes income from donations made to the Oxford and Cambridge colleges).

Table 32: Average annual philanthropic cash income for Oxford and Cambridge and other Russell Group Institutions[83]

	Oxford and Cambridge	**Other Russell Group (excl. Cardiff)**	**Difference**
Average annual philanthropic cash income (2004 - 2007)	£120,000,000 (min.)	£105,400,000	£14,600,000
Average per FTE student (2006-07 figures)	£3,204	£318	£2,887

Source: Ross-CASE Survey 2006-07: Final report (November 2008)

62. It can be seen that the additional income per FTE student at Oxford and Cambridge amounts to almost £3,000 per annum, although of course not all of the cash raised would be spent on students. The average alumni participation rate at Oxford and Cambridge (11.1 per cent) is more than nine times the

---

and assumes the same rate of return on this investment as the rate of return on the Oxford Colleges' (3.4 per cent,).

[82] http://fds.oup.com/www.oup.com/pdf/OUP_Annual_Report_2008-09.pdf

[83] See http://www.natcen.ac.uk/rosscasesurvey/documents/Ross-CASE-Final-2006-7.pdf. The figure given for Oxford is a minimum - the report notes that each institution stated mean cash income figures of over £60 million per year over the period. The mean income for the other Russell group institutions was £6.2 million, so this figure has been multiplied by 17 in Table 32 (Cardiff University did not participate in the survey).

national average of 1.2 per cent and also nearly six times the average for other Russell Group universities (1.9 per cent).[84] Some of the Colleges are also able to demonstrate an even more exceptional rate of return. For example, University College in Oxford claims that 30 per cent of its alumni made a gift to the College in 2006-07, over two and a half times the rate of giving to the University, and 25 times the rate for the sector as a whole.[85]

63. Although they benefit considerably in comparison to other UK universities, neither Cambridge nor Oxford is yet, however, in anything like the position of the private American universities with respect to their endowment levels. Harvard's endowment was worth $29.2 billion (£17.4 billion at current exchange rates) – over four times Oxford's endowment – whilst Yale's total endowment was worth $18 billion (£10.7 billion).[86]

64. Of course it is not enough simply to consider resources without considering the additional expense Oxford and Cambridge incur, in particular, through the collegiate teaching system (though another way of looking at this of course is that it is precisely their higher income that permits the collegiate teaching system, and tutorials in particular). It is extremely difficult to analyse the implications of this additional cost using the information publicly available. A 'case study' by OxCheps into the cost of teaching at Oxford from 2002-03 suggested that the Colleges invested an average of nearly £9,000 per full time undergraduate (in 2008 terms). This figure included, however, 'core research costs',[87] on the basis that 'the presence of research and the provision of tuition by those engaged in such research help define and distinguish the quality of education at top universities'. Figures released by Cambridge in 2004 suggest that the colleges collectively spent £86.8 million (in 2008 terms) on educating students. This would amount to an average of around £6,000 per Home and EU student.[88] But this average does not account for differences in the resource requirements for undergraduate and graduate students, nor is it clear exactly what provision it includes.[89] Some colleges have provided estimates of how much it costs them to educate undergraduate students each year as part of their fundraising literature. These estimates can vary substantially, however. For example, one Cambridge College estimates that it subsidises HEU undergraduate teaching to the tune of

[84] Although, as the Ross-Case survey notes, other universities also raised funds well above the overall mean (particularly other institutions in the Russell Group) and both the Russell Group and 1994 Group recorded strong percentage growth between 2005-06 and 2006-07.
[85] University College, Oxford Annual fund brochure for 2008-09 (http://univalumni.org/Document.Doc?id=422). .
[86] http://www.news.harvard.edu/gazette/2006/09.21/99-endowment.html; http://www.yale.edu/opa/arc-ybc/v35.n4/story15.html.
[87] Only sponsored research is excluded from this.
[88] Cambridge had 14,757 FTE HEU students in 2004-05, meaning that expenditure of £86.8 million would amount to an average of £5,882 per FTE student.
[89] It also assumes that the colleges do not subsidise students from overseas.

£1,750 per year, whilst an Oxford college estimates that its subsidy for 'teaching and non-academic provision' is nearly four times that amount – £6,000 – every year for each HEU undergraduate.[90]

65. It is similarly difficult to estimate the cost of undergraduate teaching at the University level and how this might compare with other institutions (in the context of a sector-wide deficit on publicly funded teaching of around £254 million).[91] The Oxford case study by OxCheps put the cost of undergraduate teaching to the University (excluding the colleges) at around £17,900 (in 2008 terms) per full time student. Yet this figure significantly exceeds the estimate offered by Cambridge at the launch of its 800th Anniversary campaign in 2005 – around £14,700 (in 2008 terms) for both the University and the colleges – little more than half the OxCheps equivalent estimate. In summary, while it is difficult to be sure of the exact cost of undergraduate teaching at Oxford and Cambridge, it is certainly substantially more than elsewhere, and it is difficult also to estimate the relative advantage gained from the additional income when set against additional costs. Put another way, it is difficult to quantify the full implications for Oxford and Cambridge of providing collegiate undergraduate teaching – both the costs of this and the resources they provide at the University level – under the constraints of what some in those universities see as a relatively low cap on HEU undergraduate tuition fees.

66. One consequence of charging variable fees is that, like any English universities, both universities divert part of this fee income into undergraduate bursaries. Oxford and Cambridge currently offer the most generous means-tested bursaries of any English institution, although the minimum means-tested bursary offered to new English-domiciled entrants to Oxford and Cambridge who were in receipt of the full maintenance grant (£3,150) did not differ substantially from that offered by Imperial College (£3,000).

67. With respect to the cost of carrying out research of the scale and range seen in Oxford and Cambridge, it should be noted that both publicly funded and non-publicly funded research currently run at a combined deficit across the sector of around £2 billion, with the majority of this (62.5 per cent) accounted for by the deficit on publicly funded research.[92] As has been shown above, Oxford and

---

[90] Estimates from Clare College Cambridge Financial Review 2006-07 (uprated to 2008/09 terms using GDP deflator) - http://www.clare.cam.ac.uk/about/documents/FinancialStatement.pdf - and the University College Oxford Annual fund brochure for 2008-09 (http://univalumni.org/Document.Doc?id=422) respectively. The same amount can be found in the University College Campaign brochure for 2009/10: http://univalumni.org/Document.Doc?id=678).

[91] This was the overall deficit on publicly-funded teaching for all UK HEIs according to 2006-07 TRAC data (HEFCE Circular Letter 14/2008). Note that, according to these TRAC figures, non publicly-funded teaching activity operated at a surplus of £477 million.

[92] HEFCE Circular Letter 14/2008 (Transparency Review data for UK HEIs, 2006-07).

Cambridge are reliant on research funding from public sources[93] to a similar extent as some of their major competitors and it would therefore be inappropriate to regard this as a specifically 'Oxbridge' issue. In any case, the introduction of Full Economic Costing has been designed to help address the sustainability of the UK's research base. It is possible that the phasing in of full economic costing for publicly-funded research will allow Oxford and Cambridge's relatively higher share of QR income and their much higher share of endowment income to be used to sustain a more advantageous position from which to bid for research grants.

68. Whilst it is therefore difficult to be precise about the benefit of these additional resources when balanced against additional costs, they certainly help Oxford and Cambridge to sustain the scale of their research activity and the resource-intensiveness of their teaching in an environment of relatively scarce resources with respect to both activities. It is clear that the exceptional nature of Oxford and Cambridge – in both research and teaching – is enabled by the significantly greater resources they enjoy, both public and private.

Conclusion

69. This report has suggested that Oxford and Cambridge are significantly and qualitatively different from their peer institutions with respect to their undergraduate student populations. Significantly more undergraduate students with UCAS points that place them in the top 10 per cent of their peer group are likely to enroll at Oxford or Cambridge than at other prestigious institutions. Oxford and Cambridge's market share of applicants with the highest UCAS points was two and a half times their market share of all Russell Group applicants in 2007. The result of this is that the academic profile of undergraduate students at other highly regarded institutions differs substantially from that at Oxford or Cambridge. This report has illustrated the differences by looking specifically at the GCSE scores (number of A*s) of entrants to Oxford and Imperial. It can be seen that, whilst some of this difference may be accounted for by a 'loss' of the highest achieving students to other institutions after an offer is made, the principal driving factor is the differences in the profiles of each institution's applicants.

70. However, this should not lead to the conclusion necessarily that other institutions suffer because the 'brightest' students are concentrated in Oxford and Cambridge. Measures of prior achievement do not in themselves measure the extent of a student's academic potential, nor whether they will excel on a particular course. It should also be noted that the UCAS tariff data exclude overseas students, who account for a much more substantial proportion of undergraduate students at other prestigious institutions than at Oxford or

[93] Note, however, that the classifications used to identify funding from 'UK govt and other UK public sources' in Figure 23 above are not coterminous with the classification of 'publicly funded research' in the Transparency Review data.

Cambridge. What is more difficult to determine from the available data, but is perhaps a more important policy question for the sector, is whether the existence of Oxford and Cambridge makes it more difficult for other institutions to attract the students best suited to their courses. The evidence in this report, though focused on a comparison between only two institutions, suggests this is likely to be the case. The comparability of outcomes – in terms of 'good' degree results – between Oxford and Cambridge and some of their competitor institutions might suggest that there is relatively little for the sector to be concerned about in this respect. But the widely acknowledged limitations of the current degree classification system as a measure of student achievement mean that this is not in itself evidence enough that the existence of Oxford and Cambridge has little effect on the ability of other institutions to recruit the best students for their courses.

71. A related question is whether the apparent value placed by some of the highest achieving students on a place at Oxford and Cambridge is justified by the available evidence on the nature of the teaching provided and students' post-graduation prospects. This report has interrogated the results of the National Student Survey and found that in a number of respects Oxford and Cambridge score significantly better than some of their major competitors, and particularly with regard to the questions relating to the level of detail and the quality of feedback received. It is also apparent that far greater demands are placed on students at Oxford and Cambridge in terms of the higher number of total hours invested during term time, which this report has shown is substantially higher, on average, for students at Cambridge and Oxford than for those at other Russell Group universities.

72. With regard to the future prospects for students attending Oxford or Cambridge, there is some evidence to suggest that, in terms of social influence, the advantage of attending Oxford and Cambridge has not only been sustained against the backdrop of higher education expansion in the 1960s but has actually increased relative to other prestigious institutions. These graduates are particularly well represented in certain fields, and in particular with regard to senior academics, where they make up around a quarter of staff currently employed in UK HE institutions. The evidence for the specifically pecuniary benefits of attending Oxford or Cambridge remains patchy – the most robust data available (based on cohort studies of recent graduates) have focused on prestigious or 'high quality' institutions rather than Oxford and Cambridge specifically, although Oxford and Cambridge are likely to perform well against the measures of quality used in a recent study. This study also showed that the positive effect on wages could be shown to hold even taking into account the differences in the social background of students, although it is difficult for firm conclusions to be drawn in this respect given the fairly narrow social base in the first place.

73. This report has suggested that the reported experience of highly personalised teaching and the perceived social and pecuniary advantages of an Oxbridge degree (all of which have some, if not conclusive, evidence to support them) make the question of whom they recruit all the more important. This has therefore significantly influenced the debate over widening access to higher education. The persistent gap between the social and educational profile of Oxford and Cambridge's students and the sort of profile that might be 'expected' on the basis of prior achievement fuels ongoing concerns about the equitability of the admissions process and the two universities' ability to attract a wide range of applicants. But these concerns serve to obscure the more significant question that needs to be addressed by the sector: how effective are higher education institutions as a whole in selecting the students who will do best on their courses? If universities are to be judged on their ability to unlock potential among students, how should this potential be measured and, perhaps, nurtured by the sector?

74. It is also suggested that these universities are unduly narrow in their recruitment criteria. For fear of being accused of 'social engineering' they have resisted calls to emulate the most prestigious American universities and seek explicitly to achieve a better social mix in their undergraduate populations, while maintaining an insistence on the highest standards.

75. In relation to research activity, the report has suggested that it is in the combination of the scale – including the range of research areas – and quality that Oxford and Cambridge stand out. Bibliometric profiles suggest that they make the most significant contribution to the highly cited publications that sustain the UK's global research position. This is achieved alongside a focus on undergraduate teaching and thereby helps sustain the perception of a strong link between research quality and teaching quality. It might be argued that this does little to promote the development of more rigorous measures of teaching quality, applicable to an increasingly diverse sector.

76. In terms of resources, it has been shown that Oxford and Cambridge are heavily reliant on public funding as a proportion of university-level income. The proportion of Home and EU students among their undergraduate populations and the balance between undergraduates and taught postgraduates means that Oxford and Cambridge are more reliant on public funding for teaching (including tuition fee loans) than other prestigious institutions. They also receive additional funding amounting to £1,189 per FTE HEU undergraduate per year at Cambridge and £1,469 per FTE HEU undergraduate per year at Oxford from the taxpayer as a result of the College fee settlement (i.e. not directly towards the college fee but nevertheless resulting indirectly from the additional costs inherent in the collegiate teaching system). The targeted funding streams from which Oxford and Cambridge derive the most benefit are, however, much smaller in size than the targeted funding for recruiting and supporting students from under-

represented groups. Thus while the need to sustain Oxford and Cambridge's teaching system remains influential in determining the distribution of available funding for teaching, it is far from an over-riding consideration in the distribution of public funding for Higher Education in England.

77. The resources that Oxford and Cambridge enjoy are substantially greater than any other institution in the United Kingdom, and without doubt it is this fact above all that has enabled them to stand out as exceptional universities in the UK and Europe, but also, on most measures, in the world.