HIGHER EDUCATION SUPPLY AND DEMAND TO 2020[1]

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1. This report is produced in a very different policy environment to that in which earlier HEPI reports on supply and demand in HE were produced, with substantial evidence of an increasing level of unmet demand. This report assesses the extent of that unmet demand and its nature, and considers how this might develop in the future. It should be noted that it is largely concerned with the interactions between universities and students, and although it does touch on the impact of changes in the labour market on demand, that question is not fully treated. Nor does it discuss the possible impact of changes in the fee regime.

2. It is difficult to say when the Robbins principle – that all who are qualified should be able to enter higher education if they wish – broke down. Analysis of UCAS data reveals that throughout the last decade there was a significant number of applicants with more than 80 UCAS tariff points (the equivalent of 2 E grades at A-level, traditionally the minimum requirement for entry to University) who were not offered places or who failed to enrol for other reasons, but this may always have been the case. For the purpose of this report, a significant policy change is taken to have occurred in 2008, when the government's explicit squeeze on student numbers began.

3. With this policy change, and also with the increasing number of applicants with no formal qualifications (analysed further below) – an increasing number of whom may reasonably be assumed to lack the intellectual attributes needed for higher education – it can no longer be assumed either that those failing to obtain a place are not qualified nor that those who fail to get a place represent qualified but unsatisfied demand. If the government decides to implement the Browne Committee's recommendation that it should each year set a threshold of UCAS tariff points beneath which applicants are deemed ineligible for loans (and therefore, effectively, ineligible to enter higher education), then that will add a further layer of complication to the concept of "demand": applicants who would previously have been deemed eligible but who may not be able to find a place will in future be deemed "ineligible".

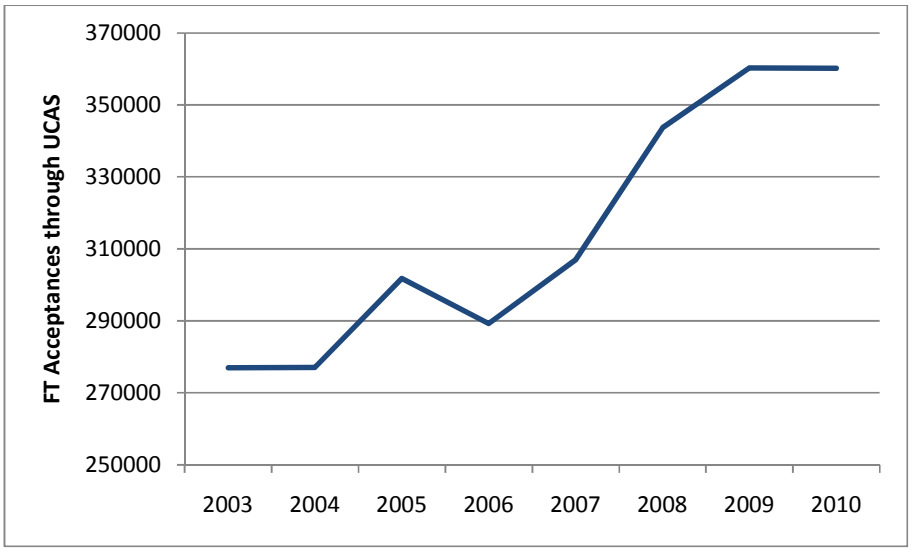
Recent trends

4. Numbers in higher education have risen consistently over the past two decades, and the January 2011 HESES revealed 1.033 million home and EU full-time undergraduate students at English higher education

[1] To save space this summary report does not include references, which are available in the full report on the HEPI website – www.hepi.ac.uk/publications

institutions and 1.226 million full time equivalent undergraduate students (i.e. including part-time and sandwich year students) – the highest number ever. Considering only new entrants for full-time undergraduate study, Figure 1 shows that with the exception of 2006-07 – the year of the fee increase - these rose consistently each year until 2009 and 2010 when they reached 360,000.

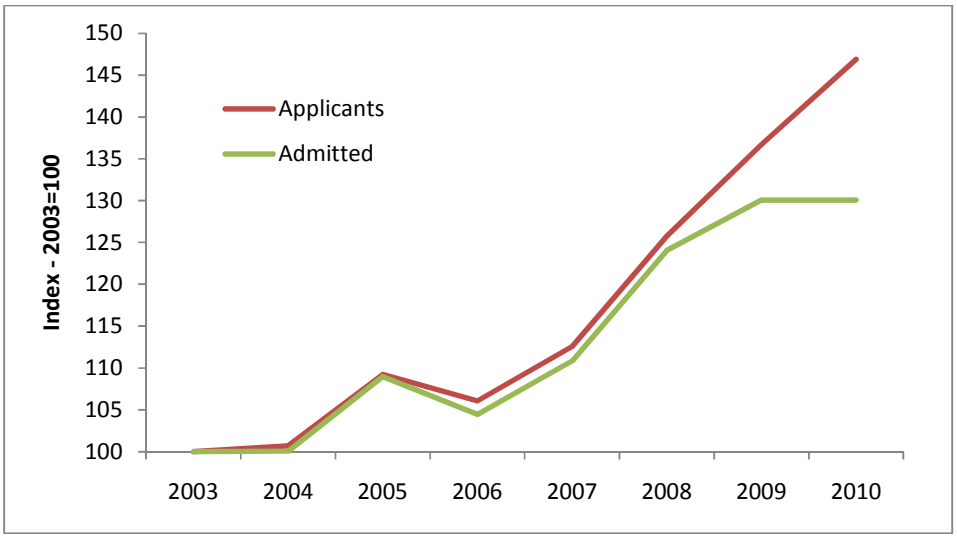
Figure 1. English Domiciled Full-time Undergraduate UCAS acceptances



5. What is curious is that whereas in the past higher education numbers went hand-in-hand with A-level numbers, in recent years the rate of increase in higher education entry has been about twice that of the number of A-level passes. The explanation for this discrepancy becomes apparent later in this report. Part-time numbers have also increased over the last ten years, though there was a small decrease in 2009.

6. Reference was made above to the fact that there is unmet demand, and this is returned to later in this report. Here it is sufficient to note that the growing number of entrants to higher education has in the last two years been marked by an even faster growing number of applicants, as Figure 2 shows. Whereas until 2008 the number of applicants and of entrants rose more or less in parallel, it is clear that there has been a divergence in the last two years with the number of applicants rising more rapidly than the number of acceptances.

Figure 2: Applicants and enrolments to higher education through UCAS



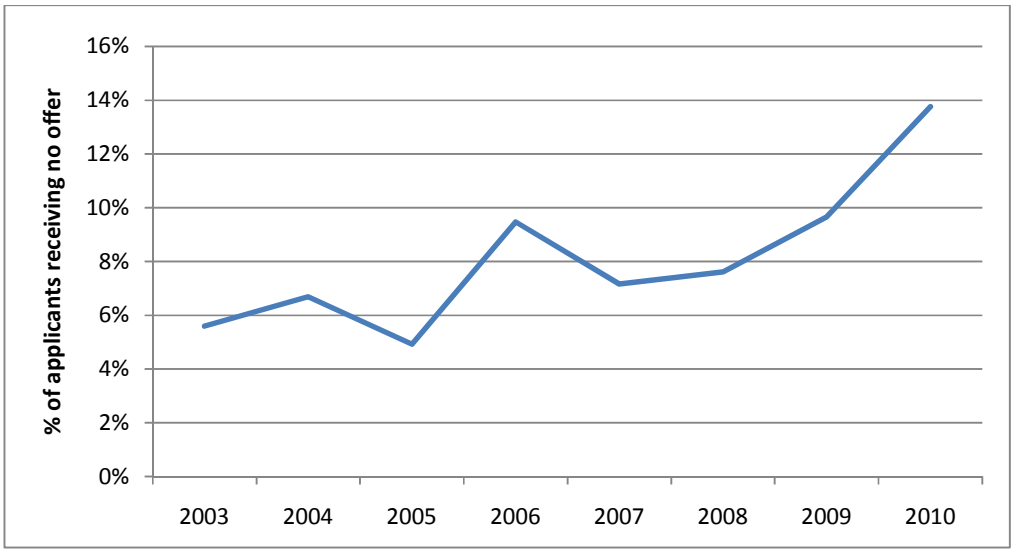
7. The number of applicants has increased in the past six years at a rate more than 50 per cent faster than the number of acceptances (and therefore, for the purpose of this report it is assumed the number of places available), and in 2010 there were more than 135,000 applicants who failed to enter higher education[2] (not all of these will have failed to receive offers, but that is the case with over half – over 68,000 of the 135,000). At this stage it is sufficient simply to note this fact. The implications and the characteristics of the increasing demand are considered further below.

8. One of the reasons for the growing gap between supply and demand is the cap on numbers imposed by the previous government and repeated by the present. Caps have been in place since 1994, and there has been some control over student numbers since then. However, since 2008 when the government removed 10,000 planned funded places the cap has been set at a level explicitly and significantly below demand, leading to much greater levels of unsatisfied demand.

9. Figure 3 below shows how in recent years an increasing proportion of applicants have failed to receive offers. Undoubtedly, some of these include applicants whose application was unrealistic as well as those who were qualified but for whom sufficient places simply did not exist. It is nevertheless of note that the proportion failing to receive offers increased from 6 per cent of applicants in 2003 to 10 per cent in 2009 to the 2010 level of nearly 14 per cent.

[2] This is considerably lower than the 200,000 referred to in newspaper headlines, the majority of the difference being accounted for by international students failing to secure places.

Figure 3: The increasing number of applicants with no offers, by year of entry



10. The data shown here relate only to full-time applicants. No information is available on unsatisfied demand from part-time applicants, but given the financial and other incentives that universities have to recruit full-time students over part-time, there is no reason to believe that there is less unsatisfied demand from part-timers.

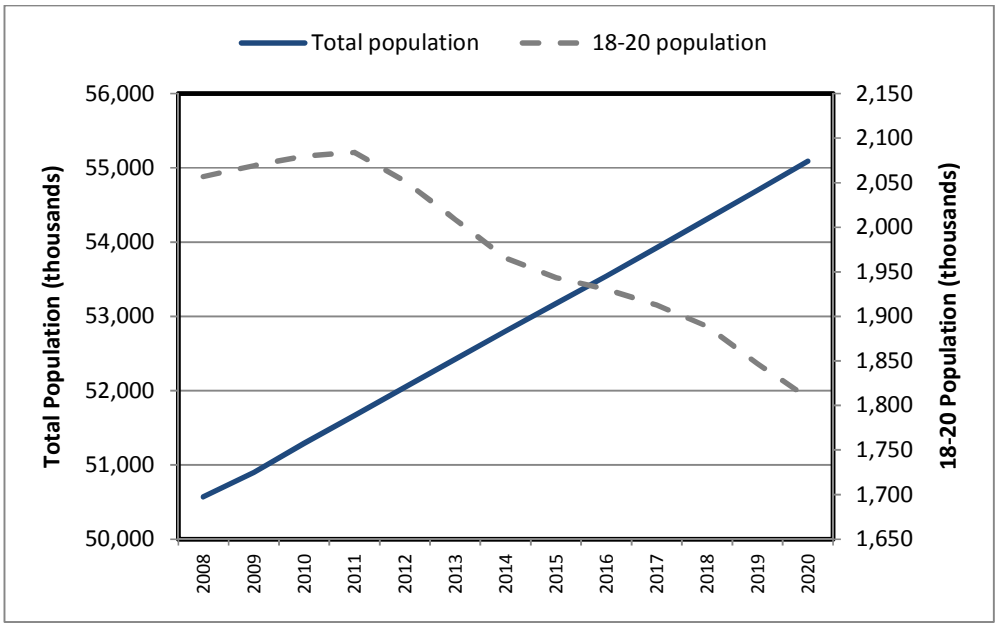
Future demand

Demography

11. Students under 21 years old remain the dominant group in higher education, and so the changing size of this population remains by far the most important influence on higher education demand, the proportion of younger students having stayed constant at about 74 per cent of the total for over 10 years.

12. As can be seen in Figure 4, though the overall population of England is projected to increase steadily - by 7.4 per cent between 2010 and 2020 - the 18-20 population is projected to fall by 13 per cent, after peaking in the current academic year. On the face of it, this would appear to indicate a reduction in demand.

Figure 4. Population projections until 2020



13. However, as has been discussed in previous HEPI reports, participation rates differ between social groups. The full-time young participation rate (18-20-year olds) for lower socio-economic groups is approximately half that of higher socio-economic groups, though the gap has narrowed in recent years. As a result, even if the size of the total population declines, the changing social mix of the population – discussed in earlier HEPI reports – and in particular a growing middle class, together with greater fertility among the more affluent social groups, will lead to greater demand for higher education than there would otherwise be.

14. Table 1 sets out the changes in full time undergraduate student demand that would occur between 2007-08 and 2020-21 arising purely from different rates of population growth by sex and social group, and accounting for the different levels of participation of these groups. It shows that based on demographic change alone (i.e. if all else were equal) there would be an estimated 4.2 per cent fall in demand. As in previous years the decline has been dampened by over 40 per cent as a result of the higher birth rate of higher socio-economic groups. That is to say, if it were not for the fact that the better off groups have been having more babies and that their numbers are increasing relative to others, instead of a 4.2 per cent decline the decline in demand from the 18-21 population would be 7.0 per cent.

Table 1. Estimated change in full-time undergraduate demand due to demographic change

	Estimated demand in 2007-8 (2007-8 student numbers)	Change in demand by 2020-21 (without social class effect)	Change in demand by 2020-21 allowing for social class effect	Total demand by 2020-21 allowing for social class effect
All males	375,043	-28,980	-18,179	356,864
All females	482,405	-31,126	-17,723	464,682
All	857,448	-60,106	-35,902	821,546

15. Part-time demand is also susceptible to demographic changes, though to a lesser extent. Again, due solely to demographic changes, an increase of 5.2 per cent in part-time demand is projected, largely resulting from projected increases in the 25-34 population over this period.

16. Taking full-time and part-time demand together, and if demographic change were the only influencing factor, there would be demand for just over 1,000,000 FTE higher education places in 2020-21, compared to about 1,028,000 in 2007–8 - a reduction of about 2.8 per cent.

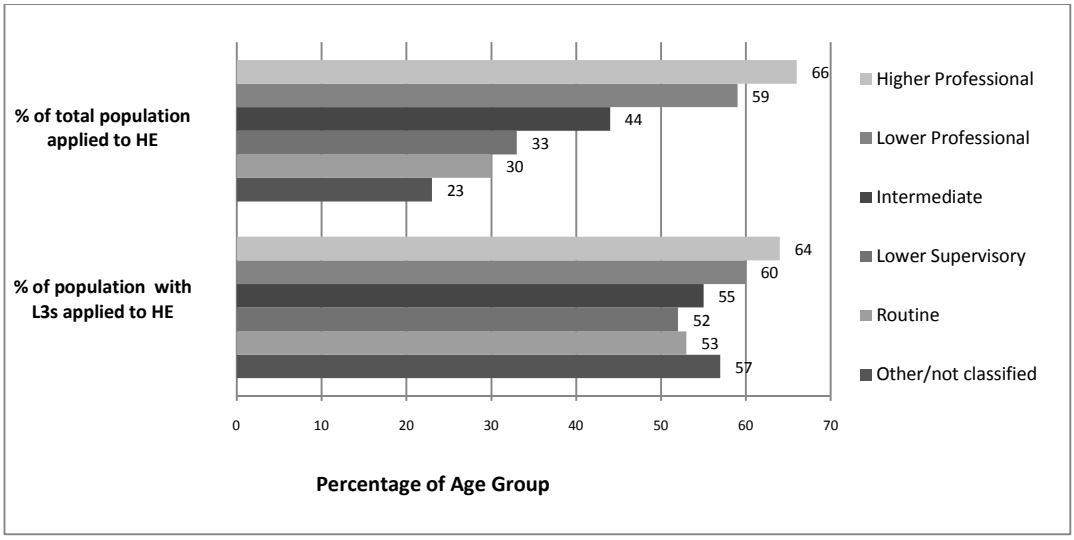
Attainment

17. Other things being equal, the more qualified the school population, the greater the demand for higher education, and an increase in attainment at school will mean that a greater proportion of the young population will participate in higher education. According to the most recent Youth Cohort Study, 81 per cent of the students who took A levels having previously obtained 5 A*-C GCSEs had either entered higher education by 18 or had accepted an offer to enter at 19. A further 3 per cent had applied and were awaiting a response from a university. This section examines the levels of attainment of young people and how this impacts on demand.

18. Young people with A levels are the critical group when it comes to higher education entry, but more generally previous (mainly school) academic attainment is the most important driver of demand from young people for full-time higher education. This very largely explains why demand rates differ between social groups. For example, the raw data show that 66 per cent of pupils from "higher professional" families applied to higher education, compared to 33 per cent of pupils from "lower supervisory" families. However, as Figure 5 illustrates, when the comparison is made only between those with a level 3 qualifications, the difference reduces from a gap of 33 percentage points to just 12.

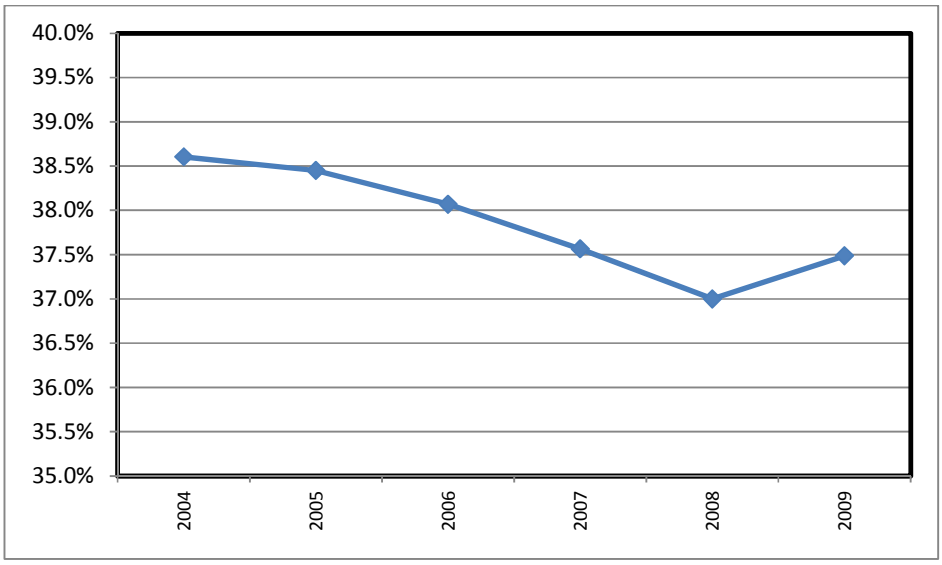
19. This finding is echoed in recent work by the Institute of Fiscal Studies (IFS) , which sought to test HEPI's previously published conclusion about this, and concluded that "if anything, high performing individuals in the most deprived quintile have slightly higher participation rates in HE than those in the top four quintiles".

Figure 5. HE attendance at age 18 and attainment of Level 3 by parental occupation



20. Although there are other Level 3 qualification, A levels are by far the most popular, and the one most commonly possessed by English HE entrants, as well as a reliable predictor of whether or not a student will go on to HE. Figure 6 shows recent changes in A level take-up from which it will be seen that achievement at this key point in the HE supply chain decreased marginally in four of the last five years.

Figure 6. Proportion of 19-year olds attaining Level 3 via A levels



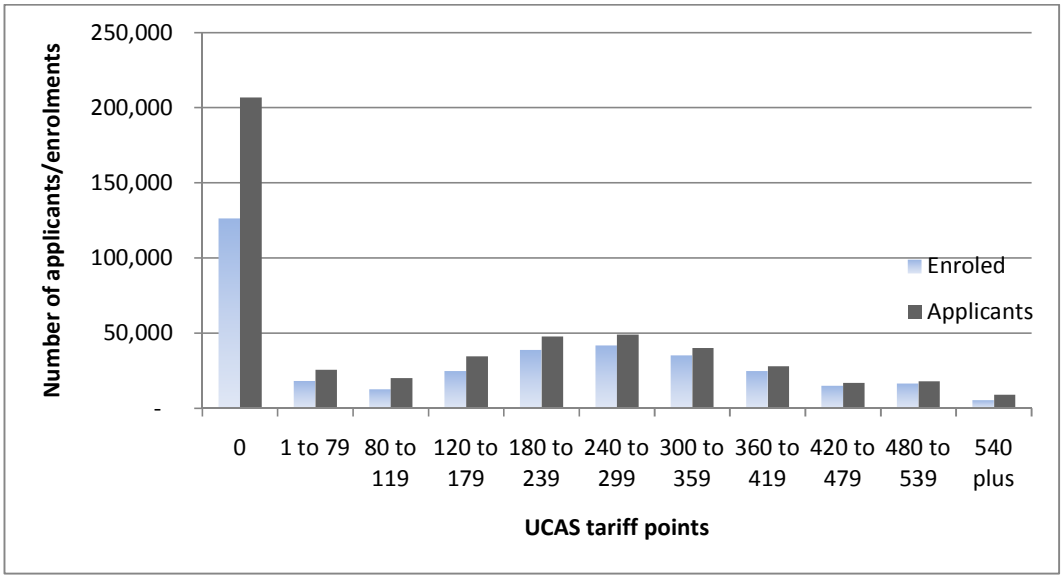
21. This is not to say that other qualifications do not produce demand for higher education, and the full report shows that the nine percentage point increase in the proportion of 19-year olds with Vocationally Related Qualifications (VRQs) may have increased higher education demand by around 16,000. However, conversion rates from VRQs to higher education are lower than – less than half that of - A levels, which combined with the much higher numbers taking A levels means that A levels remain overwhelmingly the most important qualification route into HE.

22. Although possession of level 3 qualifications – and in particular A-levels – remains the strongest indicator of propensity to apply for and enter higher education, a strong recent trend has been the increasing number of applicants without any qualifications recognised by UCAS in its tariff system. Figure 7 below shows the number of applicants and entrants in 2010 with different UCAS tariff scores in bands. It will be seen that by far the largest group of entrants are those with no tariff points at all. This goes a long way towards explaining how it is that, despite the trend in A-level uptake, applications to University – and the number of unsuccessful applicants – have increased recently. Nearly half of the increase in applicants through UCAS between 2008 and 2010 was accounted for by people with no tariff points at all, and such people accounted for nearly 70 per cent of the increase between 2007 and 2008.

23. Unfortunately, the characteristics of these students with no UCAS tariff points are not known. Some will have overseas qualifications and some will have other, often professional, level 3 equivalent qualifications not recognised by UCAS; but it is reasonable to suppose that they also represent able people who left school with few qualifications, and who are seeking to improve their life chances. It is one of the strengths of the UK's

higher education system – and a feature that sets it apart from most others in Europe – that such second chance higher education is possible.

Figure 7: UCAS tariff points of all applicants and enrolments through UCAS



Latent demand

24. On the face of it, with demography suggesting a small decline in demand if all else were equal, and with no increase in the achievement of A-levels in recent years, there would be likely to be little if any growth in demand. However, previous reports have pointed to disparities that are likely to lead to a level of demand well above that suggested by population alone – effectively, these represent areas where there is clear "room for improvement". One such area, identified in the last HEPI report on supply and demand, is the high level of non-progression by pupils who have achieved good GCSE results. Table 2 shows for example that 55 per cent of students from the 2003-4 Key Stage 4 cohort who obtained 8 GCSEs did not progress to higher education by 19, and that 26 per cent even of those achieving 10 or more GCSEs did not do so either.

25. A major factor in this non-progression to higher education is that many of those concerned did not progress to Level 3. As Table 2 below also shows, in 2009 29 per cent of students who obtained 8 GCSEs did not progress to Level 3 by age 19, nor did 10 per cent of pupils who obtained 10 or more GSCEs, despite being among the most highly qualified of their cohort. If some of these apparently able and well-qualified young people were to continue with their education, then this would have a significant impact on higher education demand.

Table 2: Non-progression beyond GCSE

GCSEs (A*-C) at 16	Number without L3 qualification by 19 as a % of relevant group	Number not in higher education by 19 as a % of relevant group
0	96%	**99%**
1-4	76%	**91%**
5	56%	**79%**
6	50%	**73%**
7	40%	**65%**
8	29%	**55%**
9	16%	**38%**
10+	10%	**26%**
Total	51%	**69%**

26. Previous reports have shown how A-level attainment varies according to gender, social background and region, and the full report provides up-to-date information about this. All of these discrepancies suggest that there are substantial numbers of able young people who do not at present continue in education or achieve the outcomes of their equivalently qualified peers. If and when these discrepancies begin to be resolved, then there will be a substantial increase in HE demand.

27. Perhaps the most important recent development that will undoubtedly impact on demand concerns the policy – introduced by the last government, and maintained by this -- that from 2013 young people may not leave education and training until the age of 17 and from 2015 until the age of 18 – the first rise in the age for leaving education and training since 1972. This means that from 2015 some of those identified above who leave school at present after their GCSE exams will have to remain in some form of education or training until 18. This is likely to mean increased numbers of students taking Level 3 qualifications, and certainly some of those will be candidates for higher education, though the extent to which this will impact on demand cannot at present be assessed.

Supply and demand – a growing gap

28. Earlier sections of this report have shown how in recent years a growing number of applicants have failed to obtain places at University. The majority of these have no UCAS tariff points, but at 35 per cent of all entrants those with no UCAS tariff points also represent the largest single group of those who are accepted. Table 3 below summarises the tariff point profile of applicants who do not enter university either because they fail to obtain an offer, or because they decline the offers they receive or because they withdraw from the process or for "other" reasons. It will be seen that although in 2010 39 per cent of applicants with no tariff points

failed to enter higher education, so did 13 per cent of applicants with 300 tariff points or more, which equates to 3 grade Bs and above at A-level.

Table 3: Applicants to UCAS by tariff points

Tariff Points	No offers/Reject	Declines	Withdraw	Other	Total Non-enrolled applicants	Enrolled	Enrolled as proportion of all acceptances	Enrolled in as % of applicants with this tariff score
0	51,273	15,975	4,685	8,456	80,389	126,326	35%	61%
1 to 79	3,329	3,073	688	239	7,329	18,217	5%	71%
80 to 119	2,609	4,100	606	118	7,433	12,626	4%	63%
120 to 179	2,899	5,585	1,154	109	9,747	24,865	7%	72%
180 to 239	2,309	5,006	1,368	100	8,783	38,977	11%	82%
240 to 299	1,616	4,124	1,308	66	7,114	41,886	12%	85%
300 to 359	1,138	2,546	1,167	29	4,880	35,245	10%	88%
360 to 419	773	1,500	884	15	3,172	24,957	7%	89%
420 to 479	485	722	545	9	1,761	15,122	4%	90%
480 to 539	415	591	597	7	1,610	16,472	5%	91%
540 plus	1,402	1,698	288	70	3,458	5,515	2%	61%
Grand Total	**68,248**	**44,920**	**13,290**	**9,218**	**135,676**	**360,208**	100%	78%

29. This discussion is complicated by the fact that those with less than 80 UCAS tariff points – less than the equivalent of two grade Es at A level – account for more than two thirds of the increase in the number of applicants who failed to receive offers. Some of these will have failed to receive offers because they were deemed unsuitable for higher education study. So it is unhelpful to consider all applicants who fail to enrol as representing "unmet demand". However, a significant majority of such applicants did succeed. The full report provides calculations intended to distinguish between qualified and unqualified demand, and to treat only the former as "unmet demand".

30. On the basis of calculations set out in the full report, unsatisfied qualified demand among those with fewer than 80 tariff points in 2010 was over 22,000. It is assumed also that all those who applied with more than 80 points but did not receive offers, who withdrew or who declined offers that they received, of whom there were more than 40,000 in 2010 (up from 30,000 in 2009), also represent unsatisfied demand. So there was unsatisfied qualified demand of 62,000 in 2010, (up from 38,000 in 2009) – equivalent to about 17.3 per cent of those who entered higher education through UCAS, and an increase of over 60 per cent from the previous year.

31. The present level of unsatisfied "qualified" demand – at about 17 per cent of entrants - is significant, and appears to be growing rapidly, though there has always been a number – even of well-qualified applicants

– who have failed to obtain places. And on top of this, as discussed above, there is considerable latent demand that may well emerge.

32. Looking forward, the previous HEPI report on demand suggested that even on modest assumptions about future catching up of males with females and without making any assumptions about disadvantaged social groups improving their participation rates towards those of more privileged groups, there could be demand for as many as 100,000 more places in 2020–21 than in 2008–09 when that report was written, an increase of 10 per cent. There are indications that some catching up by disadvantaged social groups may have begun already. It remains to be seen whether males also begin to improve their performance relative to females, but it is not unreasonable to assume that at some point they will. And it should be noted also that this projection of demand assumes only a partial catching up by males, and that the gap with females will be reduced only by half. So 100,000 is taken here to represent a reasonable assumption about the increase in total demand for places that there could be in 2020–21 if demand were not constrained – about 30,000 new places per year, and 8.5 per cent more than the number of entrants through UCAS in 2010.

33. In 2010 there were 360,000 places for new entrants through UCAS, and unsatisfied demand of about 62,000. The government has announced that 10,000 entrant places will be cut in 2012. Unless these are reinstated, and a substantial number of additional places provided, there could be as many as nearly 100,000 disappointed applicants in 2020 – over 20 per cent of the number of applicants to UCAS in 2010. This is a very large number, and could have profound implications. It would represent a large scale retreat from the Robbins principle, the early signs of which are already apparent, and would be particularly ironic in light of the imminent rise in the statutory age for leaving education and training. These two policies combined run the risk of raising expectations and ensuring that these expectations cannot be met.

34. The most likely immediate response of the government will be to seek ways of enabling additional numbers but without any increase in cost to itself. The shorter – two year – courses that both this and the previous government have encouraged will make only a very limited contribution to a solution. So the most likely eventual outcome is a yet further increase in the cost of higher education to the student – or rather the former student in work – either by an increase in the rate of interest on their loans or by an increase in the rate of "tax" on their income (currently 9 per cent), or by an adjustment to the salary threshold at which repayments begin (which can easily be done by a change in the basis on which the threshold is indexed) or by an extension of the period over which repayments must be made from the presently proposed 30 years.