

# Demand for Higher Education to 2020 and beyond<sup>1</sup>

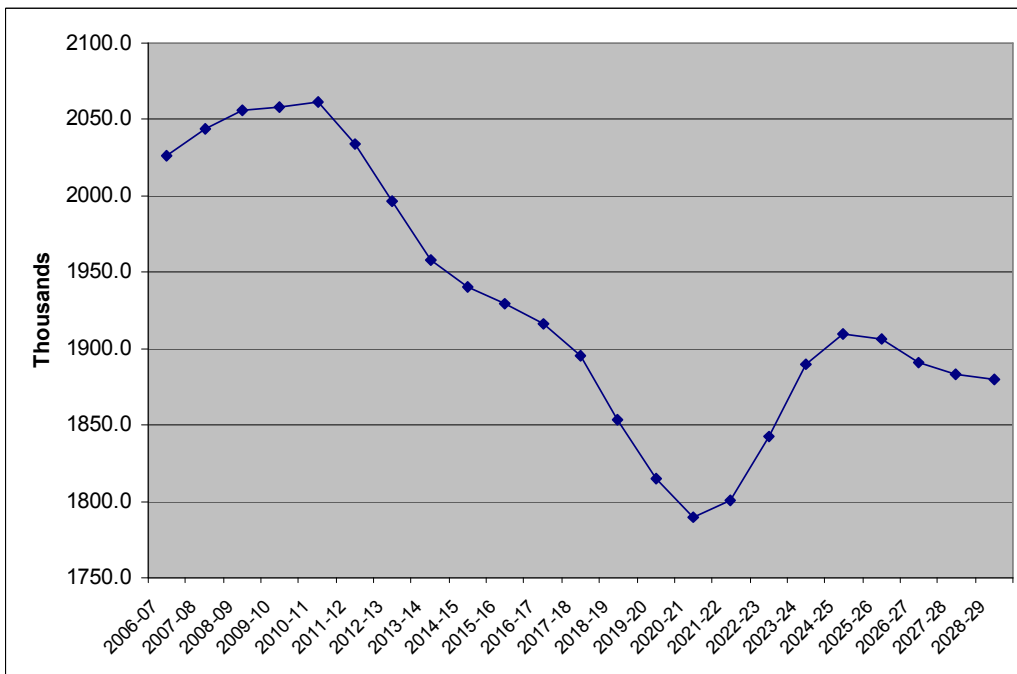
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1. The purpose of this report is not to provide firm projections – any such projections are almost certain to prove wrong. Rather it is to discuss the influences and uncertainties surrounding future HE demand, and to illustrate the impact of some of these on future numbers. The report begins by considering the two determinants of higher education demand - changes in the population from whom students are drawn, and the ability and willingness of this population to participate in higher education – and concludes by summarising alternative scenarios for the future.

## Demography

2. 67 per cent of full-time higher education first degree entrants are under 21, and 85 per cent are under 30. These are still the groups that dominate higher education entry, and nothing has changed in this respect in the recent past. Figure 1 below shows how, after peaking in 2010-11, the number within the 18-20 age group declines significantly for the following decade – by more than 12 per cent between 2010-11 and 2020-21.

Figure 1: 18-20 year olds from 2006-7 to 2028-29



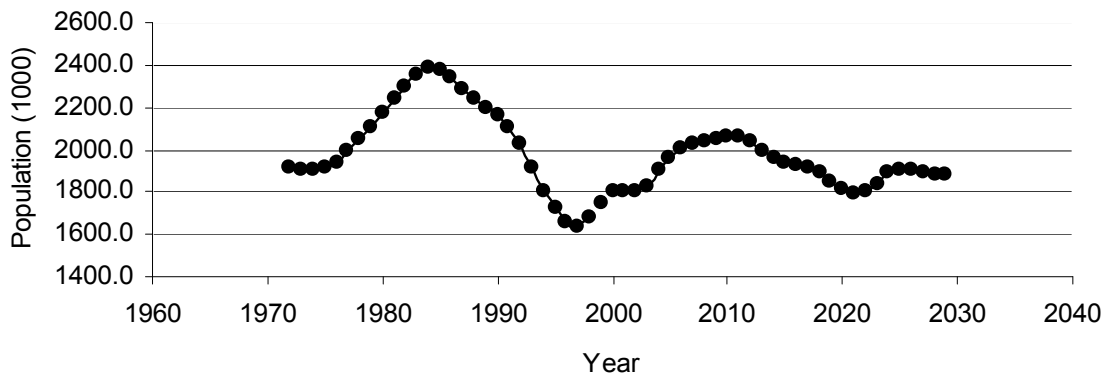
<sup>1</sup> In the interest of brevity full references and sources are for the most part not given in the summary report, but can be found in the full report on the HEPI website, [www.hepi.ac.uk](http://www.hepi.ac.uk). Similarly more detailed calculations than are shown here can be found in the full report.

3. During the four years beyond 2020-21 the 18-20 population will increase by 6.7 per cent, and then from 2024-25 will flatten out, well below the 2010-11 peak. So, looking forward 25 years, there will be a significant reduction in the population that comprises the main client group for higher education.

4. Taking all age groups, if the population changes were simply reflected proportionately in student demand, then student numbers would increase by 25,000 between now and 2010-11, decrease by more than 85,000 between then and 2020-21, and finally increase a little; but by 2024-25 would still be some 25,000 below today's levels. However, the future is unlikely to be as turbulent as demographics alone might suggest.

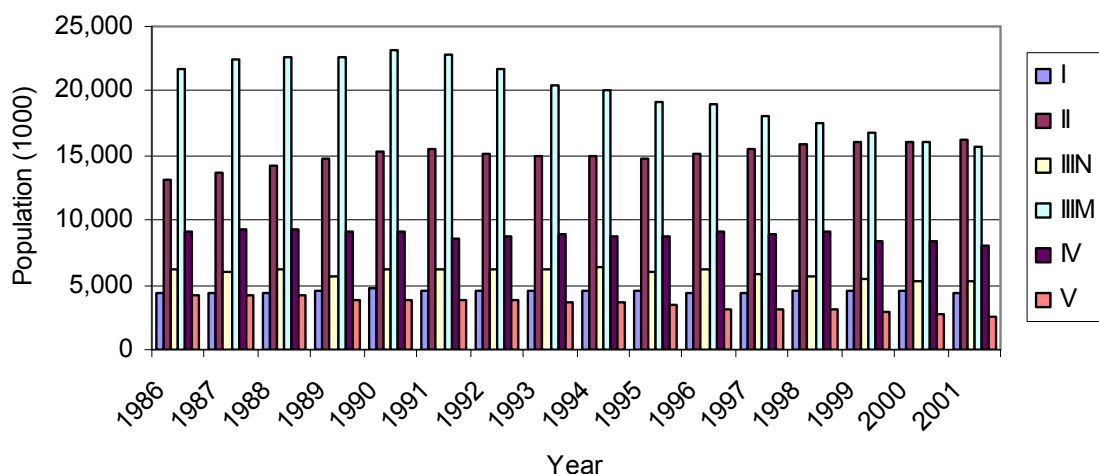
5. A significant decline in the population does not necessarily equate to a decline in the demand for higher education. Figure 2 shows that the population was actually on the decrease in the late 1980s and early 1990s when demand for higher education increased dramatically, whereas the Government of the day anticipated and planned for a sharp decline, in line with demography. The reason demand grew was in part because of increased school staying on and educational attainment following the introduction of the GCSE, and in part because the decline in births was concentrated among the social groups that participated least in higher education.

Figure 2: 18-20 population 1972-2030



6. Figure 3 below shows the profiles of the 18-year-old population, differentiated by the socio-economic group of the father at the time of the child's birth. Between 2004 and 2019 the number in socio-economic group I will grow by about 3 per cent and in socio-economic group II by 20 per cent, whereas in group III it will fall by 14 per cent, in IIII by 29 per cent, in IV by 12 per cent and in V by 37 per cent.

Figure 3: 18 year olds by father's social class at birth

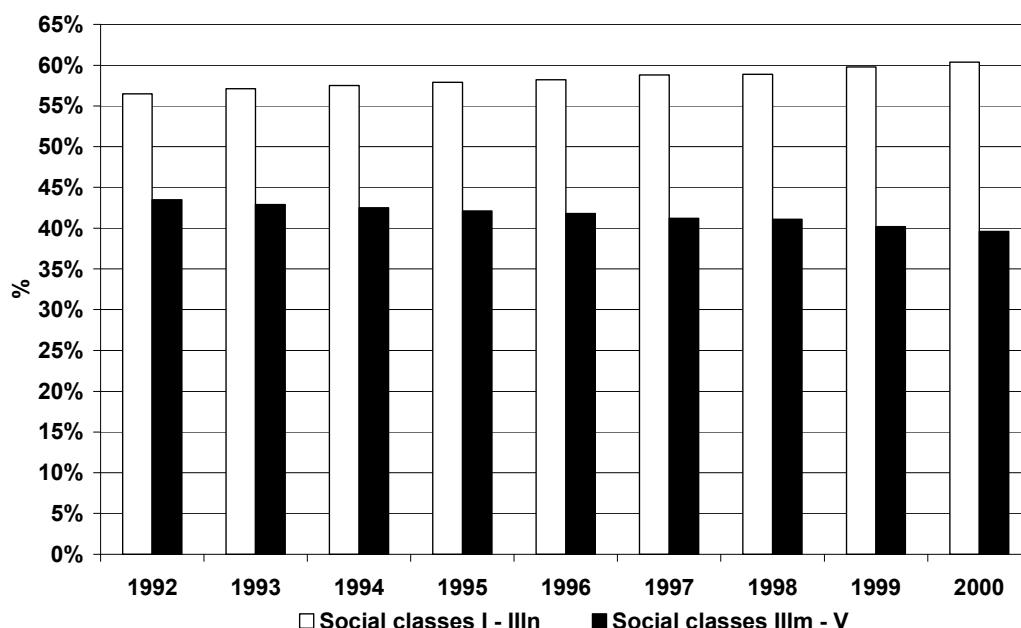


7. So, as in the previous period of population decline, the future decline in the 18 to 21-year-old population is likely to be in the groups least likely to participate in higher education. Those that participate the most will increase slightly.

8. The effect on higher education numbers of the decline in the 18-20 population will be substantially dampened as a result of the differential births by social class: between now and 2020-21 the reduction in demand from full time students resulting from the demographic decline alone will be less than 25,000 instead of the 60,000 that might be expected without taking the social class differential into account. Between the population peak of 2010-11 and 2020-21 the decline will be less than 50,000 instead of 85,000.

9. Part of the reason for the difference in births between social groups is that there has been substantial movement between the social groups in the decade after the 1991 census: the gap between the proportion of the population in the highest three social groups and the lowest three has grown by two thirds in a decade (i.e. there are more people in the highest groups and fewer people in the lowest). Figure 4 below is reproduced from a recent DfES report, and shows the changing social class makeup of the population.

Figure 4: Change in proportions of GB working age population in social classes I-IIIIn and IIIIm-V



10. In 1992 56 per cent of the population were in the highest three categories and 44 per cent in the lowest three. In 2000 this ratio had changed to 61 per cent and 39 per cent. The changing social class structure of the population will have the effect of dampening even further the raw effects of demography.

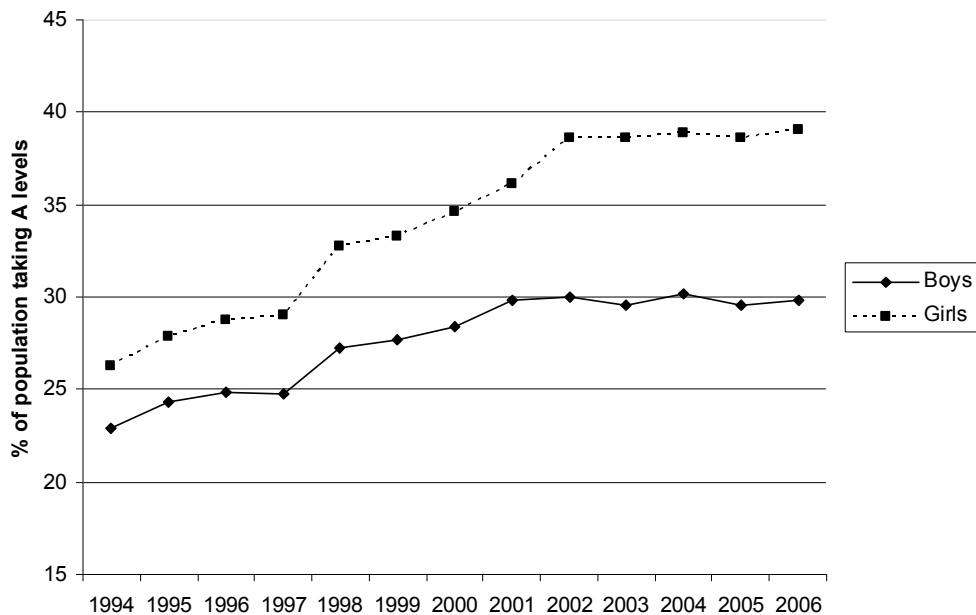
## **Participation**

### A levels

11. The proportion of young people taking GCE A levels is the major factor in influencing the numbers that go on to higher education, and 84 per cent of those with GCE A levels do so. The proportion of the 17-year-old population achieving two A levels (GCE and VCE) has stalled recently, having increased steadily from 24.6 percent in 1994 to 34.2 percent in 2002. Although the 2006 level was above that of the previous year, it was barely different from 2002.

12. In last year's report we highlighted the significant gender difference in participation at A-level. This is relevant for two reasons. First, it is a matter of concern in itself that boys appear to be underperforming to such a great extent; and second, the fact that boys participate so much less than girls suggests that there is substantial scope for their numbers to increase, if and when boys begin to participate to the same extent as girls. It will be seen from Figure 5 that the difference in performance between boys and girls shows no sign of narrowing - indeed, it has worsened somewhat in the last year.

Figure 5: A level participation by gender

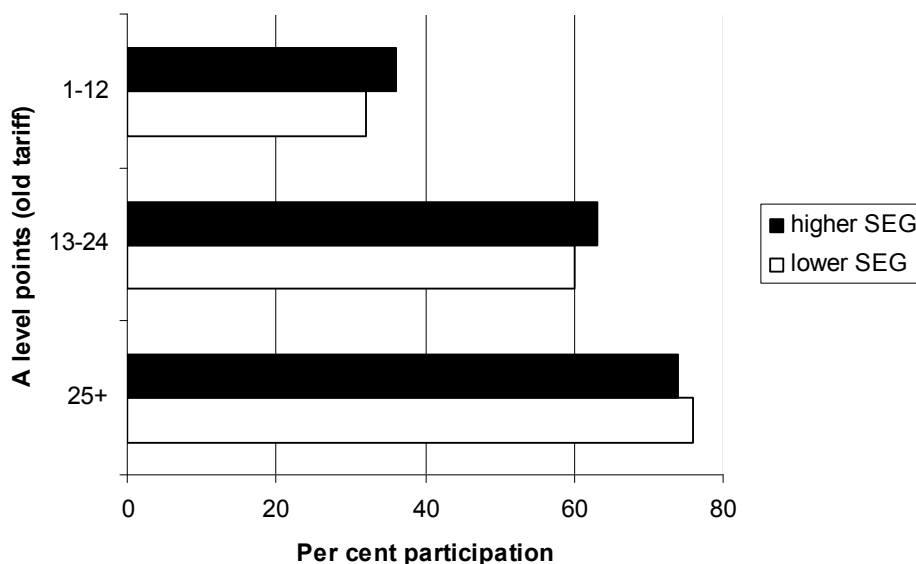


13. However, the differences are not amplified in HE application, post-A level, and 83 per cent of men and 85 per cent of women (84 per cent altogether) of those with GCE A levels, and 49 per cent of men and 44 per cent of women (46 per cent altogether) of those with VCE A levels, are in HE by 19.

14. There is, therefore, no indication as yet that school performance is improving in a way that will allow us to conclude that there is going to be a substantial improvement in A-level performance, and so in higher education participation. It is profoundly to be hoped that the various government initiatives intended to achieve this - Aimhigher and Educational Maintenance Allowances, for example - will have this effect, but there is no sign of that at present.

15. It cannot be emphasized too strongly that it is differential school achievement that determines differential participation in higher education. Social class is not the issue here - the disparity of entry to higher education simply reflects differences in school achievement. Figure 6 below shows that grade for grade there is little difference in HE participation among those from different social groups who obtain A levels.

Figure 6: Participation in HE by social class and A level scores



16. Widened participation will not be achieved until the disparity of achievement at school is addressed successfully. If it is, then the indications are that class will not be a barrier to participation in higher education. And that in turn would have major implications for higher education demand. But until such time, no assumptions can be made about increasing demand from the lowest-participating social groups.

Other level 3 qualifications

17. Figure 7 below suggests that there has been an encouraging increase in young people with Level 3 NVQs and VRQs<sup>2</sup>. However, care is needed in reading too much into these increases. Almost all the growth comes from VRQ level 3s, whose numbers are shown as rising from 14,000 in 2004 to 36,000 in 2005 and 44,000 in 2006. However, much of this apparent increase was as a result of improved data collection and coverage, and the underlying increase was smaller. Moreover, in terms of numbers these are much less significant than those with GCE and VCE A levels, and in terms of preparation for higher education, they are even less significant, for the good reasons set out in the HEPI report on vocational routes to higher education<sup>3</sup>. Figure 8 shows both the absolute numbers of young people taking Level 3 NVQs and VRQs, and the numbers entering higher education with these qualifications, and compares these with GCE and VCE A levels.

<sup>2</sup> NVQs are the National Vocational Qualifications, and VRQs are Vocationally Related Qualifications. Both are work-related, and generally pursued in employment.

<sup>3</sup> *Vocational A levels and university entry: is there parity of esteem?* (HEPI, 2007)

Figure 7: Number of students under 21 obtaining different level 3 qualifications

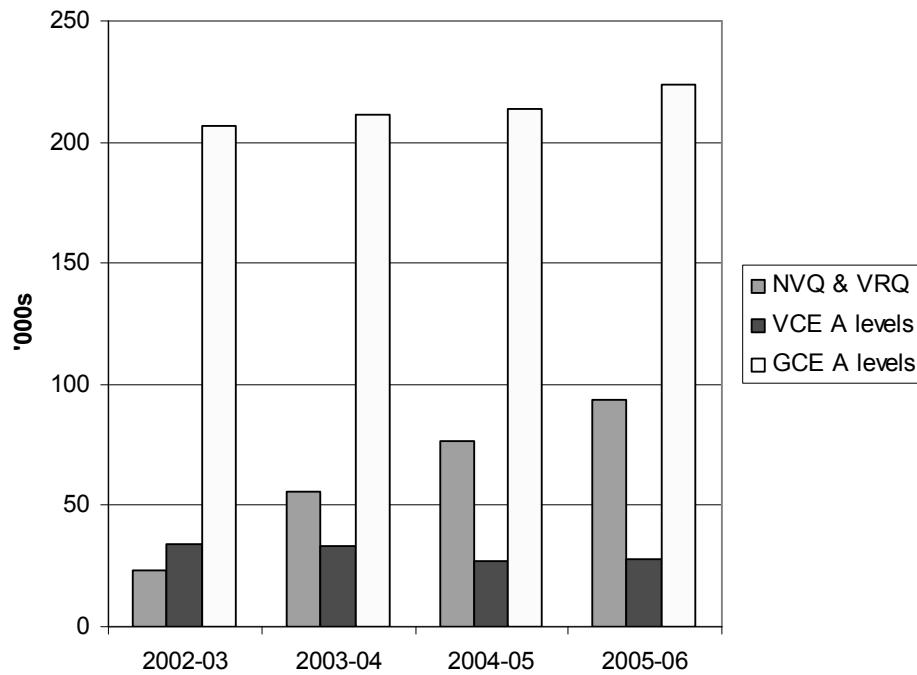
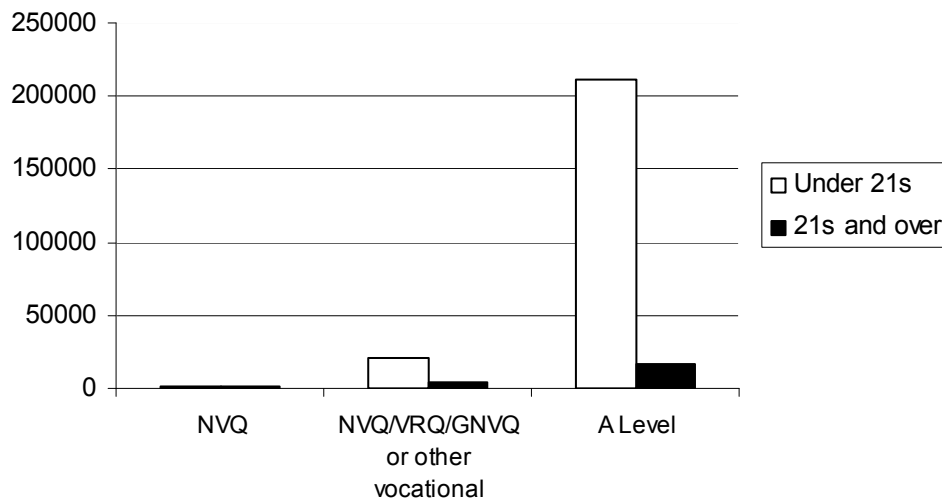


Figure 8: Qualification on entry to HE



18. Essentially, NVQs and VRQs are taken by those with the weakest performance at GCSE, and are intended to provide employment-related skills in their own right, and not to prepare pupils for higher education. Things may change with the introduction of the new level 3 diplomas, but for the time being, GCE and VCE A levels are by far the most significant qualifications for HE entry.

19. Nevertheless, increases in the number of young people taking vocational qualifications at level 3 are possible. Despite the earlier proviso concerning data coverage, there almost certainly have been increases recently in the numbers taking NVQs and VRQs at level 3, and although only a small proportion (probably

about one third) of those go on to higher education, any future increase in vocational level 3 numbers will lead to increases in higher education participation. By way of illustration, if the number of young people with VRQs were 50 per cent higher than those shown in Figure 8 above, then the number of higher education entrants would be 7,000 or so higher, implying an increase in total numbers of 20,000 or so.

### Recent increases in participation

20. Each year, the Government calculates a Higher Education Participation Rate( HEIPR), measuring participation in higher education - both full-time and part-time - by the under-30s. Since 1999-2000 it has stood as follows:

Table 9: Changes in the Higher Education Initial Participation Rate

	1999-2000	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06
% HEIPR	39.3	39.7	40.2	41.2	40.3	41.3	42.8

21. The HEIPR increased by two percentage points between 1999-2000 and 2004-05<sup>4</sup>. Within the HEIPR calculations, the DfES calculates separately the participation rate of the under-21s, and it also calculates full-time and part-time participation separately.

22. Nearly half of the increase has occurred among full-time under 21-year-olds, despite the lack of increase in A level participation. The data needed to interpret this are not available, but it could be that there has been an increase in the proportion of those with A levels who go to higher education. With 84 per cent of those with GCE and 51 per cent of those with VCE A levels estimated in 2002-03 to go on to higher education, there is ample leeway for this. However, such an explanation also suggests that, without reductions in the standards required for admission, the scope for further increases in student numbers from this source is limited.

23. Whether or not the recent increases represent a trend cannot yet be stated confidently - and in any case an increase in the proportion of those under 21 with A levels who go on to higher education will reduce the population from which older students can in due course be recruited. A very crude extrapolation of the recent increases would raise the HEIPR to 47 per cent by 2020. However, even a more cautious assumption of half this increase would imply a student number total in 2020 that is 50,000 higher than continuation of an unchanged HEIPR of 42 per cent.

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<sup>4</sup> The 2005-06 jump in the HEIPR was a one-off, and reflects the large increase in full-time young students entering university in that year, to avoid the new fee arrangements. The 2006-07 HEIPR, when that is calculated, will show a large decline.



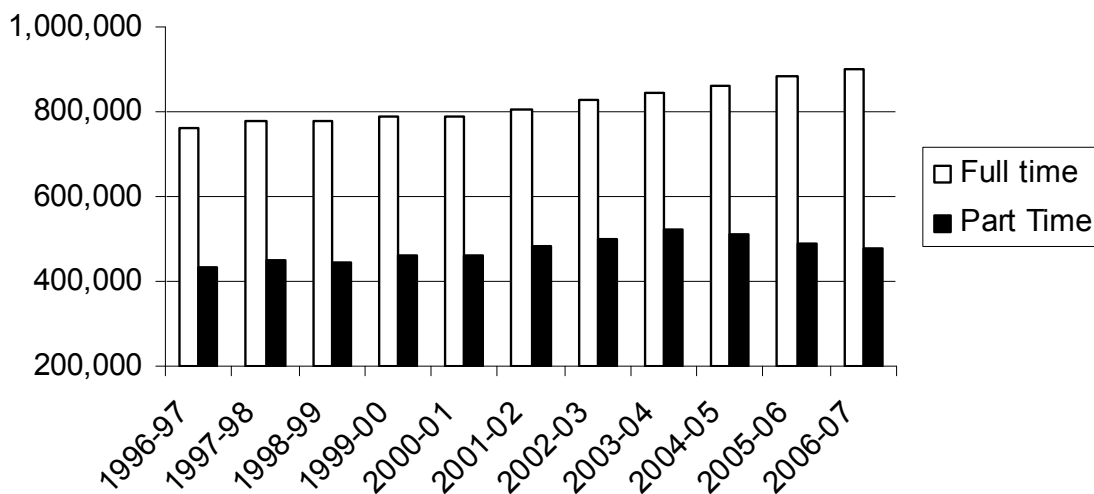
## Mature, part-time and EU demand

24. The Leitch report suggested that if 50 per cent of young people below the age of 30 participate in higher education then this will lead to an increase in the 19-65 population educated to level 4 from 29 per cent to 40 per cent by 2020<sup>5</sup>.

25. However, Leitch goes further and argues that an aspirational target would be that approaching 45 per cent of the working population should be educated to this level by 2020. If, as seems apparent from the analysis of this report, neither the 40 per cent nor the 45 per cent figures are likely to be achieved through increases in full-time young students, achievement of these aspirations would require substantial increases in other groups – in particular part-time and mature students in employment.

26. Figure 10 below shows that both the absolute numbers and the rate of growth of part-time students fall well short of those of full-time students. It will take the sort of radical changes in behaviour by employers and employees that the Leitch report envisages to achieve the kind of increases required, and it remains to be seen if that is achieved.

Figure 10: Growth in full-time and part-time undergraduates

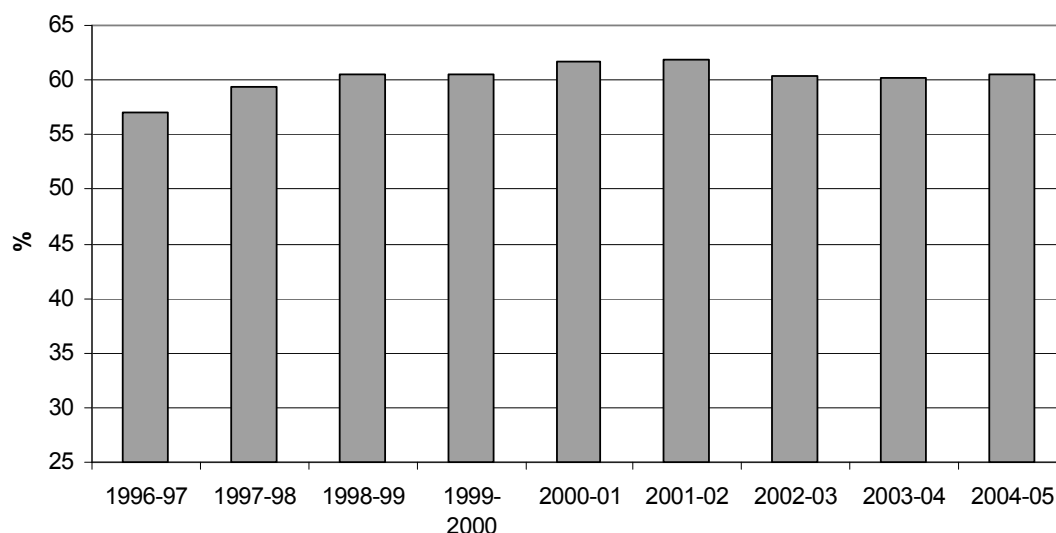


27. Nevertheless, part time numbers can be expected to increase naturally, even without the effect of policy changes. The decline in the young population has a smaller impact on part-time numbers, and the increase in the older populations a greater impact. Although the increases are not sufficient to offset the decline in full time numbers, demography alone, even without increased participation, will lead to 16,000 or so more FTE part time students by 2020-21.

<sup>5</sup> Level 4 is the lowest level of higher education qualification.

28. As far as mature students are concerned, no separate projection is made of demand, mainly because the great majority of mature students in higher education are part-time, and part-time demand has been discussed above. Figure 11 below shows that there has been barely any change recently in the proportion of part-time entrants who are 30 and over.

Figure 11: Proportion of part-time undergraduate entrants aged 30+



29. However, government policy is clearly that much of the future growth in higher education should come from students who are in employment and should be directed at developing skills which are immediately and directly required by employers. Nevertheless, it is far from clear how much demand there will be for such provision, and HEFCE has, in its recent invitation to universities to bid for additional student numbers, wisely started in a modest way, inviting bids for just 5,000 such places. For the time being it would be unwise to disturb student number projections as a result of this policy, but if there does turn out to be a latent demand from employers for such provision, then this could impact significantly on higher education numbers.

### EU Students

30. The UK accepts more students from other EU countries than any other member state. In 2005-06 nearly 60,000 EU undergraduate students attended UK universities, and according to UCAS the number of applicants for 2007 entry is currently showing a 15.5 per cent increase over the equivalent period in 2006.

31. The success of our universities in recruiting EU students is two-edged. On the one hand, they represent a valuable source of students – often highly gifted and motivated, as may be imagined of students who choose to study in a foreign country. On the other hand, in the EU as a whole the number of young people

will reduce by over 20 per cent between now and 2020. It is, therefore, highly unlikely that increased demand from EU students will help offset any reduced demand from home students after 2010-11. Indeed, if English universities succeed in holding on to their present numbers, this would represent a relative increase of about 20 per cent, and is probably the most optimistic outcome that can be anticipated.

## **Conclusion**

32. As previously, alternative projections are offered. The base projection takes as its starting point that there will be no improvements in the drivers of participation, and can be regarded as somewhat pessimistic. On this basis:

- By 2020-21 there will be a reduction of over 23,000 full time and growth of about 16,000 FTE part-time students – a decline of around 7,000 FTEs altogether – compared to 2006-07 numbers. Although that may seem effectively a 'no change' situation compared to 2006-07, numbers will continue to grow between now and 2010-11, as a result of the demographic growth of 18-20 year olds. So between the peak in 2010-11 and 2020-21 there will be a reduction of about 50,000 full time students and an increase of less than 10,000 FTE part-time students – a reduction of 40,000 FTEs altogether
- There is little on the downside likely to lead to demand lower than that described here. The main unknown in the future is the possibility that student fees will increase. Experience with the introduction of fees in 1998 and their increase in 2006 suggests that fees at present levels do not impact the inclination of students to participate in higher education. That does not mean, however, that if there were a large-scale and significant increase in fees there would be no impact, but such a development is unlikely. What is far more likely is that each university will set fees at a level that does not impact demand for that university. Some may well set much higher fees if permitted to do so, without reducing intakes. Many - probably most - will maintain fees at around their current levels. Overall demand is unlikely to be affected by changes in fees, so this projection should be regarded as the minimum likely over the next 15 years or so. The uncertainties are almost all on the upside.

33. The main developments that may confound this projection on the upside are:

- Significant improvements in school performance of pupils from those groups that have hitherto underperformed – the lower social groups, and boys in particular. These are the targets of a considerable amount of government-inspired activity, and although the results of these measures so far have been disappointing, eventual success is by no means to be ruled out. If they succeed, then that will of course herald major and wide-ranging social change more generally, and the implications will be felt far beyond our universities

- The new requirement for all young people aged 16-18 to participate in some form of education and training. This will give rise to more people with a level 3 qualification. However, it is unlikely that this will impact greatly on higher education demand
- The effect of the new 16+ level 3 diploma remains to be seen. Introduction of Curriculum 2000 in the late 1990s - and even more so the introduction of GCSEs in the late 1980s - had the effect of encouraging additional young people to stay on at school and obtain level 3 qualifications, and impacted significantly on higher education demand. If the new diploma has a similar effect then this will increase demand for higher education beyond that shown here. The effect of the new diplomas will need to be monitored
- Associated with the above, a large increase in the number of young people taking vocational qualifications, and an increase in the proportion of those doing so that go on to HE. At present – because of the small proportion of those with NVQs and VRQs who progress to higher education, even if there were a large increase in the number of such students, the impact on HE participation would be modest
- An increase in the proportion of those with A levels who go to university, and a consequent continuing improvement in the HEIPR to 47 per cent
- A major increase in participation by part-time and mature students. These are the targets of the most recent government initiatives in higher education, which aim to encourage employers to be much more active in seeking to upskill their employees, and to encourage universities to respond to the anticipated demand from employers. It is too early yet to say if the Government's aspirations here will yield fruit, but if so then this too could potentially give rise to substantial additional demand.

34. These are all optimistic and highly uncertain developments. It is very unlikely that all of them will come about, but it would be unwise to assume that none will do so. For the purpose of comparison with the base projection, if the recent increase in the HEIPR becomes a trend, and we achieve a HEIPR participation rate of 45 per cent participation by 2020, then this would imply an increase of 10,000 or so students between the population peak in 2010-11 and 2020-21 – in contrast to the decline of 40,000 shown on the base projection. And since such an improvement in the HEIPR would very likely come about by improved participation by the social groups that do not fully participate at present and/or an improvement in the participation of boys, this is a reasonable basis for illustrating an alternative projection to set against the base projection shown above.