

The impact on demand of the Government's reforms of higher education

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Introduction

1. This report follows that produced by HEPI in 2011 that analysed the higher education White Paper. It forms one of a series which will look at how higher education has changed following the introduction of the reforms in 2012. These assessments are necessarily piecemeal if they are to be timely. It will be many years before some outcomes are seen, while others will be clearer far sooner.
2. A central concern about the changes introduced in England in 2012 has been whether they would reduce demand for higher education, and particularly by those from disadvantaged backgrounds. Would participation be reduced and narrowed? Also, with the most selective institutions generally charging the highest fee levels, there was a further concern that the less well off would not apply to those, damaging efforts to secure 'fair access'. Efforts to address these concerns - increased maintenance loans, grants and scholarships, and a repayment scheme which reduces the rate of repayment for most - have resulted in significantly higher costs to the Government than would otherwise have been the case.
3. We agree that these are crucial issues, but our view remains that it is too early to judge whether the reforms taken as a whole will discourage students in general, and disadvantaged students in particular. Firstly, we have no reliable estimates of the numbers of entrants and no information at all on part time provision. Further, the first year of the new arrangements can be expected to produce large but temporary disturbances to the patterns of applications and entry, which are difficult to separate from any longer term changes at this stage.
4. However, punditry abhors a vacuum, and the online, broadcast and print media have provided confident assessments as to what has happened despite the lack of information.' Tuition Fees Hitting Uni Applications', 'University applications down by 50,000', 'University chiefs fear for the future after admissions chaos', give a taste of the consensus.
5. Nor is it just the media that has come to such conclusions. The Independent Reviewer on Social Mobility and Child Poverty recently noted that "the new fees regime has induced widespread concern" and that "around one young applicant in 20 who would have been expected to apply in 2012 did not do so, equating to approximately 15,000 applicants 'missing' from the system". With this in mind we feel it is important even at this early stage to look at the available data, and to assess its meaning.
6. This summary report focuses on young applicants. Interpreting mature application rates is much more difficult. Firstly, identifying the relevant underlying population is more complex, because many in the population from which applicants are drawn will already have graduated, and because mature

entrants will be less constrained as to when they apply or reapply. These points are made by UCAS, who stress how hard it is to assess the changes in application rates. To this we should add that we have no data at all for part-time study yet, which is an important component of mature higher education participation. In the full report¹ we do show how mature application rates have changed, and make some observations.

Information sources

7. There are three sources of information about applications in 2012. UCAS has published two reports and the Independent Commission on Fees (ICF) has published the first of a series.

8. The first of the UCAS reports aims to establish the extent of changes to the number and nature of applications in 2012 after taking into account changes in the size of the populations from which the applicants were drawn, and the trends in previous years. By contrast, the ICF aims to assess the impact of the increase in fees on application and admission trends. Despite this, the ICF also uses UCAS applications data, giving some further tables to the already extensive analysis by UCAS. It will be interesting to see if they are able to isolate the effect of higher fees in the future. This will be extremely difficult, perhaps impossible, given all the other changes made at the same time.²

9. The second UCAS report gives an early count of the numbers of accepted applicants by the year they intend to start their studies, taking into account those who deferred their entry. This was produced just as some institutions, which had expected to select from a large pool of well qualified applicants, were reporting difficulties in attracting enough applicants to maintain their student numbers.

Characteristics of applications

10. The UCAS analysis did not find many dramatic changes in the nature of the applications. Indeed most of the findings reported 'no change' or 'no substantial change'. For applicants in general they found:-

- No substantial move away from courses charging higher fees
- No move towards living at home
- No move to courses leading to higher starting salaries

11. Specifically for applicants from disadvantaged backgrounds they found:-

- No move away from courses charging higher fees
- No move away from more selective (higher tariff) universities

¹ Available online at www.hepi.ac.uk

² In this report we will often refer to 'fee increase effects' but this should be taken as shorthand for 'fee increase and other changes to maintenance grants and loans and repayment conditions.'

Fee increases compared with no fee increases

12. This report is concerned with students from England, whose maximum fee has increased from £3,375 (£1,820 if studying in Scotland) in 2011 to £9000 in 2012 if studying anywhere in the UK. To interpret the observed changes we compare their experience with that of students from Scotland who did not experience an increase in fees. We will also be looking back at the fee increases from £1175 in 2005 to £3000 in 2006 charged to most students from England.

13. Applicants from Scotland provide a good comparator group. The numbers are relatively large, and for nearly all applicants from Scotland there were no fees in 2011 or 2012. Only those studying outside Scotland, less than 6 per cent, would pay fees³. Further, students in Scotland could be confident that the fee increases would not affect them. Since devolution Scotland has had powers over student finance, and fees were abolished for entrants in 2000. The endowment charge that was introduced with the abolition of fees, payable after graduation, was also abolished in 2008, making higher education for students from Scotland at Scottish universities free. Nearly all prospective students from Scotland could safely assume that the maximum fee rises for students in England, in 2006 and in 2012, would not apply to them.

14. Wales is in some respects a better comparator than Scotland: both pre-university education and the higher education experience of students from England and Wales are similar. However, though most students from Wales did not see an increase in fees in 2012, the history of fee levels for these students is complicated, and the trends in application rates are not presented in this summary report. In the full report application rates for students from Wales are included⁴.

15. The numbers of applicants from Northern Ireland are relatively small, and the changes to their fee arrangements do not lend themselves to straightforward comparisons. They are not included in our analysis.

Young application rates⁵

16. UCAS reported that the application rate of 18 year old applicants from England fell by one percentage point between 2011 and 2012. They found that the fall was greatest for those from more advantaged backgrounds, though this difference could for the most part be understood from the specific trends in application rates for applicants from different backgrounds from 2006 to 2011. Over this period the rates for disadvantaged groups rose faster than for the advantaged, and so the falls in rates in 2012 could be expected to be smaller for the disadvantaged groups. This point was largely ignored by the media with the

³ 94.2 per cent of first year full-time undergraduate students from Scotland registered at HEIs in Scotland in 2010-11. Almost all students registered at FEIs will be studying in Scotland.

⁴ Available online at www.hepi.ac.uk

⁵ The 'application rate' is the number of applicants (not applications) divided by the relevant population

Daily Mail's headline, 'Tuition fee rise HAS turned thousands of middle class students off going to university ', typical of much of the reporting.

17. The overall decline is striking. The fall against trend equates to one applicant in twenty, approximately 15,000 missing applicants⁶. It is this key finding that has received most attention.

18. Is this reduction in the application rate reported by UCAS the result of a temporary effect of the introduction of the new arrangements, perhaps combined with other factors, or a result of the change itself leading to a more enduring reduction in higher education demand? It is too soon to say for certain, but we believe it is possible, even likely, that the longer term effects will be much smaller than the UCAS findings imply.

Temporary effects on introducing new arrangements

19. Maximum fees were £3375 in 2011 and £9000 in 2012, so for those who had the choice, entering in 2011 led to a saving of at least £16,875 for a three-year course with maximum fees, ignoring any future fee rises and interest charges. For those aged 18 in 2011 this was the likely cost of taking a 'gap' year, or retaking A-levels, and applying aged 19. It would not be surprising if at least some who would have entered at 19 in 2012 had decided to enter at 18 in 2011 instead. The question is, how many did so? In this examination of 'change introduction' effects we simplify the discussion by looking at young applicants, that is those who applied aged 18 in 2011 and 19 in 2012. The relevant group is those who would have entered higher education at 19 were it not for the fee increase, but decided to enter at 18 in 2011 instead. There are three relevant 19 year old application paths.

Application paths to 2012 entry aged 19	Application made?	
	2011	2012
Deferred entry	Yes	No
'Pre-planned' 2012 entry	No	Yes
'Changed-plans' 2012 entry	Yes	Yes

20. Subject to being accepted, each of these paths leads to entry at 19, and if the numbers taking these paths are reduced, then the number of entrants, subject to supply constraints, will be higher in 2011 and lower in 2012 as a result of the **introduction** of fees, even if the higher fees themselves did not reduce demand. However, each path has a different impact on application rates.

21. The deferred entry route involves the complete application process in 2011, but with the institution reserving a place for 2012. Unlike the fee introduction in

⁶ That is those who were expected to apply but did not do so

1998 and the fee rise in 2006, these applicants with deferred places will have to pay the new higher fee. A change to the numbers of applicants obtaining deferred entry has no impact on the application rates.

22. The 'pre-planned' 2012 entry route is that followed by applicants who have firm plans to enter at 19 and do not apply in 2011. If these applicants decide differently, due to the introduction of higher fees, this will increase the 18 year old rate in 2011 and decrease the 19 year old rate in 2012 compared to what would be expected if there had been no change in fee levels.

23. The 'changed-plan' 2012 entry route will include those who fail to secure a place on a course they want, both through the main application process and clearing in 2011. It will also include those applicants who meet the conditions of the offer they have accepted, but have a change of mind as to what they want to study. Having applied in 2011, these applicants would apply again in 2012. If due to the increase in fees, these applicants do not apply in 2012, it is difficult to determine whether this is due to the introduction of the changes, or the changes themselves. For example, the applicant who has the grades for her insurance, but not preferred offer who, without the fee rise, would have tried again in 2012 for her first choice but, because of the fees increase, takes up her insurance offer, has been impacted by the 'introduction' effect. But the applicant who fails to get any place in 2011, and would have applied in 2012 if it were not for the fees but does not, and would not have applied at 18 had there been higher fees, is impacted by the change itself. Applicants deciding not to follow 19 year old entry by this path, whatever the cause, will decrease the 19 year old application rate but leave the 18 year old rate unchanged.

Deferred entry

24. Though it does not affect the application rates, the deferred entry route is interesting because it should show up 'introduction' effects and also it gives us some information about 2013 entry rates. Figure 1 shows the proportion of deferrals for accepted applicants domiciled in England and Scotland of all ages by year of application.

25. The expected dip for 2011 in England is clear. The proportion of deferrals from those domiciled in Scotland is falling through the whole period, but 2011 does not stand out as exceptional. This is what we would expect given these students do not have to pay fees throughout the period⁷. This provides further evidence of what will be temporary effects for applicants from England in 2012, and suggests that 2013 will see a return to more usual pattern of applications.

⁷ These figures refer to applicants from Scotland to institutions in Scotland so none pay fees.

Figure 1: Proportions of deferrals by year of application



Applications at aged 19

26. Figure 2 shows the proportions of young cohorts applying at 19 domiciled in England and Scotland. The years refer to when the applicants were 18, not when they applied. We can see that for both countries there is a trend towards a higher proportion of 19 year old applicants.

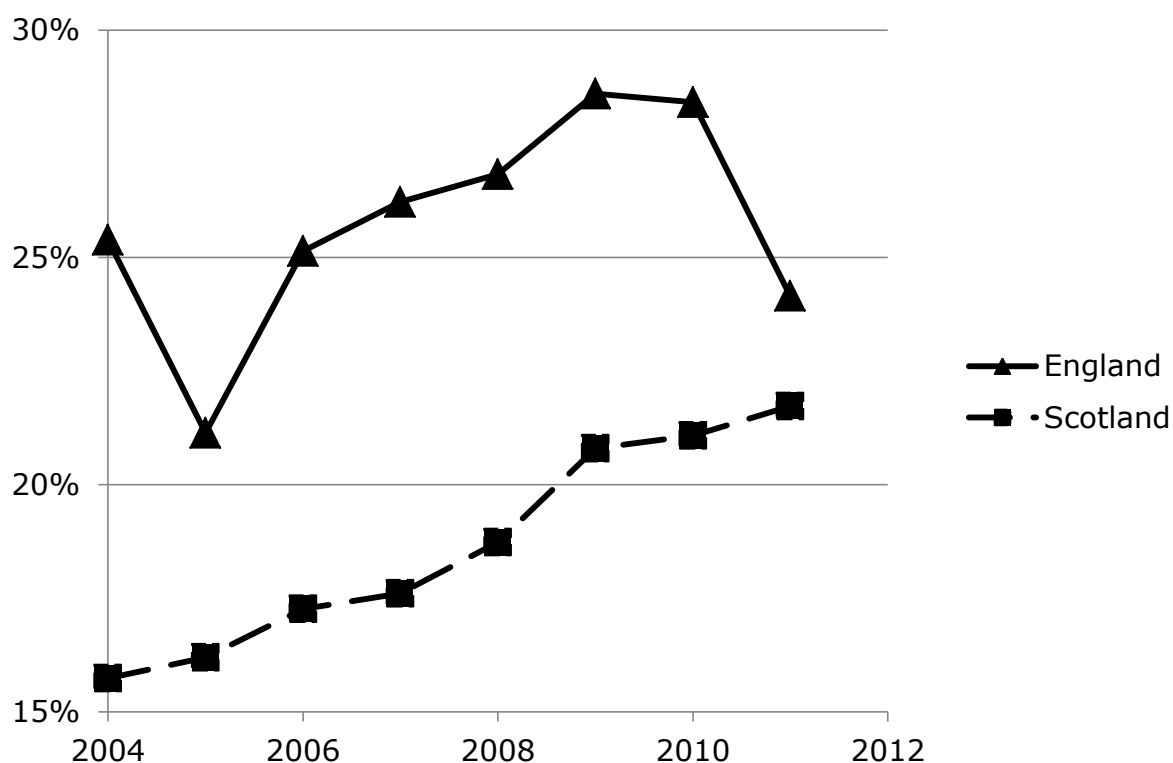
27. For the 2006 fee rise to £3000 we would expect this ratio to decrease in 2005, and that is what we find for applicants from England. There is no equivalent dip in the ratio for students from Scotland, as we would expect, given that there was no increase in fees for these students.

28. For the 2012 fee rise we do not have the complete picture, as we do not know how many students aged 18 in 2012 will apply aged 19 in 2013. For England we can see a 'half dip'⁸ in the ratio, which will become a 'full dip' if 2012 sees a return to the proportion of 19 year old entrants, as happened in 2006. For applicants from Scotland there is no evidence of a half dip. This was expected as these applicants had no disincentive to apply aged 19 in 2012.

29. Both the 'full dip' and 'half dip' for students from England in 2005 and in 2011 are consistent with some applicants avoiding the fee increases in 2006 and 2012.

⁸ We call a 'full dip' where a V shape pattern is observed. So for a 'full dip' three year's data are required. A 'half dip' has one half of the V. Whether or not it becomes a 'full dip' (that is whether the second part of the V materializes will depend on numbers recruited in 2013.

Figure 2: Number of 19 year old applicants as a proportion of 18 and 19 year old applicants by year aged 18



What would have happened had the fee rise not been introduced?

30. In order to draw conclusions with the limited information available, it is necessary to make assumptions. Here we present two alternatives, one based on assuming that past trends will continue, as described by UCAS, and one that makes assumptions about the 'introduction' effects.

Extrapolation of past trends

31. According to UCAS:-

"For all countries young application rates have generally increased over the past five years. There is no sign of any above trend increases in application rates in 2011 that would have resulted from people who would normally apply at age 19 (in 2012) applying at age 18 (in 2011) instead."

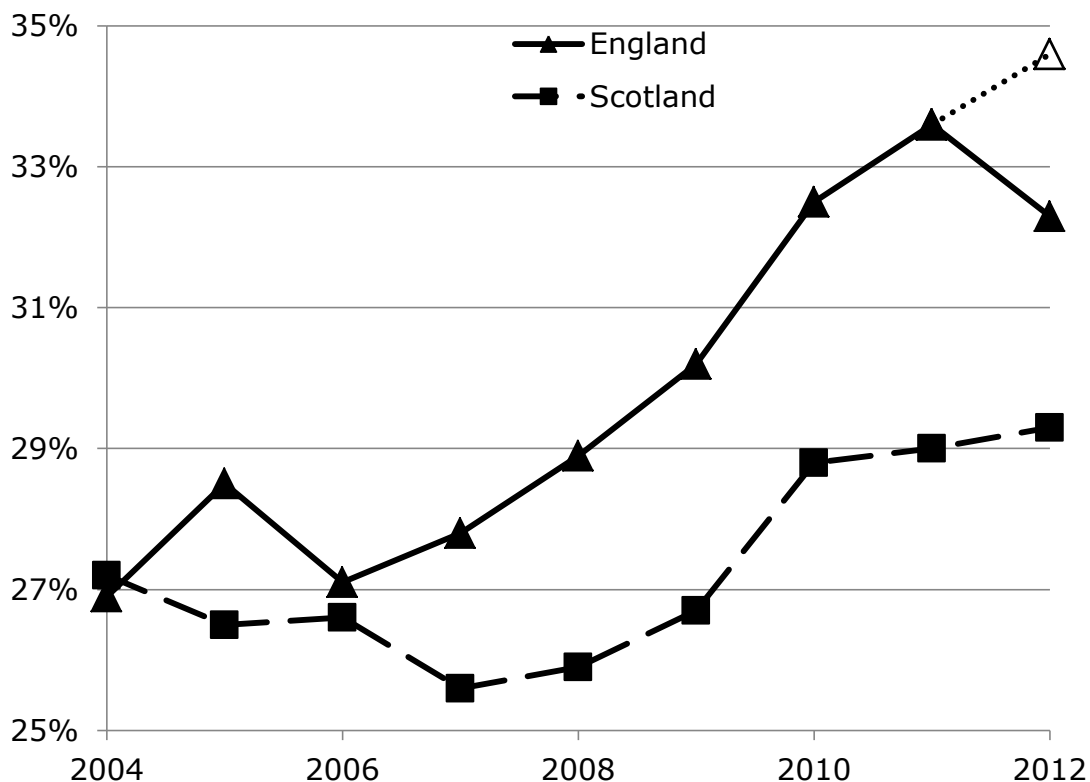
Using the evidence of past trends, no adjustment is made to 2011 application rates. The trend in applications is also used to decide what the application rate would have been in 2012, were there to have been no change in the fee arrangements. This provides an estimate of the fall in 18 year old application rates in 2012 compared to what was expected

"the application rate decreases by just over one percentage point in 2012 compared to 2011 value . . . "

This fall “is against a trend since 2006 of increases of at least one percentage point a year. If it is assumed that the recent trend of a one percentage point increase each year in England would continue in 2012 then the observed decrease of around one percentage point would represent a fall in the application rate against this assumption of around two percentage points.”

32. The two percentage points are then described as one in twenty applicants or approximately 15,000 applicants. This ‘extrapolation of past trends’ approach is represented in figure 3. The dotted lines and unfilled marker represent what is ‘expected’, or would have happened without the fee increases for applicants from England.

Figure 3: 18 year old applicant rates – UCAS extrapolation



Adjusting for introduction effects

33. The evidence from both the plot of deferrals (figure 1) and of the proportions of 19 year old applicant rates (figure 2) supports the contention that applicants have changed their behaviour to avoid the higher fees using the unique opportunity available as the fees are introduced.

34. We would expect these ‘introduction effects’ to lift the 2011 18 year old application rate, but by how much? We cannot estimate this without making some assumptions. Firstly, we assume that the drop in the proportion of 19 year

old applicants in 2012 can be accounted for entirely by applicants avoiding the increases fee by changing their plans as to **when** to enter, rather than **whether** to enter. If this is the case, we would expect the 'half dip' for 2011 plotted in figure 2 to become a 'whole dip' with 2013 data, as occurred for the 2005 dip with data from 2007. In other words, the reduction in the proportion of applicants aged 19 will turn out to be temporary.

35. Next, we need to estimate the numbers of 'pre-planned' and 'changed-plans' application paths that would have been taken by those who switched from 2012 entry at 19 to 2011 entry at 18. UCAS estimate that 'just under half' the fall in the 19 year old application rate in 2012 is explained by the against trend increase in acceptance rates in 2011⁹.

36. This provides our estimate of the number of the missing 19 year old applicants in 2012 that would have been 'changed-plans' entrants. We further assume that the remaining missing 19 year old applicants would have been 'pre-planned' entrants. In creating figure 4 we took a value of 0.5, so making a slightly smaller reduction in the 2011 18 year old rate than UCAS's estimate would imply. The proportion of those who would have been 'changed plans' applicants may have been different for the 2006 rise in fees, when acceptance rates generally were much higher. If this gave less slack for an increase in acceptance rates in 2005, this would imply that the proportion in the 2006 19 year old 'application dip' that would have been 'pre-planned' was higher, but we use the same value, 0.5, as for 2012.

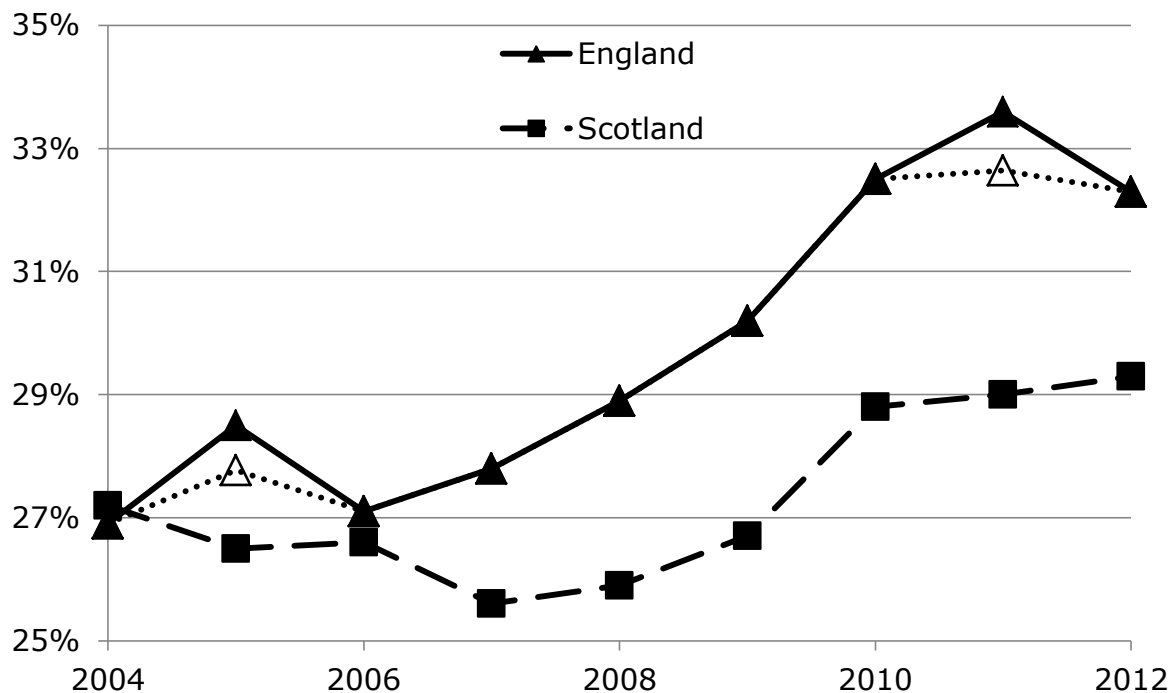
37. Of course the 19 year old rate in 2011 may itself be lifted by those who would have applied in 2012 aged 20 applying aged 19 in 2011 instead. This would increase the size on the difference in 19 year old rates between 2011 and 2012 and lead to a bigger adjustment in the 18 year old rate than should be applied. To allow for such effects we started with the trends in 21 year old application rates and worked back adjusting the younger age application rates.

38. This 'adjusting for introduction effects' approach is represented in figure 4. The dotted lines and unfilled marker represent what is 'expected', or would have happened for applicants from England without the fee increases. The adjustments are applied for the fee increases in 2006 and 2012 for applicants from England. No adjustments are made to the application rates for applicants from Scotland.

39. We see that from 2007, after adjustment, the plots are now broadly similar for both countries, showing accelerating application rates, followed by a deceleration. Between 2011 and 2012, there is still a small decrease in rates from England (0.3 per cent, after adjustment), but this decrease are not very different from the increase from Scotland.

⁹ See UCAS, 2012a, paragraph 90.

Figure 4: 18 year old applicant rates – adjusted introduction effects of fee rises in 2006 and 2012



40. The adjustment for the 2006 rise in fees only partly removed the 'spike' in the 18 year old application rate from England in 2005. This may be because the assumed proportion of what would have been 'pre-planned' entries was too low, as we suggested might be the case.

Growth in applications since 2006 and 2007

41. Application rates from England grew at an accelerating rate from 2006 and rates from Scotland grew from 2007. Both countries had the biggest increase between 2009 and 2010 but, if the adjustment for introduction effects is accepted (figure 4), growth slowed down from 2010 for applicants from England as well as from Scotland. Why should this be?

42. Part of the answer may be due to the labour market conditions following the financial crisis in 2008. From the Spring of 2008 there was an exceptionally rapid growth in youth unemployment until mid 2009 when it stabilised, though at a high rate, so there was no further impetus to increase the higher education application rate. This would be expected to have an impact on both countries.

43. Whatever the explanation, after what looked like accelerating growth similar to what was seen from England, growth is slow from 2010 for applicants from Scotland. This, we think, means that extrapolating from the increases from England up to 2010, first to 2011 to conclude that the rates for that year were

not lifted by fee introduction effects, and then to 2012 to get an expected rate for that year, is unsafe; that is, the scenario shown in figure 3 is unsafe.

44. We think it is more likely that the unadjusted 18 year old application rate for 2011 for England was apparently 'on trend' because, while the underlying rate had actually stabilised, the observed rate was lifted to the trend line by the boost from applicants' reduced propensity to apply aged 19.

Conclusion

45. With just one year of data with the higher fees, we cannot be certain as to their impact, as distinct from the temporary impact from introducing the change. However, we think the estimate of 15,000 less than expected 18 year old applicants should be viewed as an upper bound. Our assessment of the evidence is that it is far more likely that demand, as measured by application rates, has not been reduced by the increase in fees to any material extent, and that it is more likely that the numbers of applicants are as expected after taking into account the transitory effect of introducing higher fees. This means the immediate impact of the fees themselves has been negligible.

46. We should not conclude from this assessment that the new arrangements have had no impact on demand for certain, only that that seems more likely. As more data becomes available the picture will become clearer. Nor should we assume that if, say, higher fees in themselves (rather than their introduction) have not been a deterrent to apply in 2012, this will continue to be the case in the future. Most of the young people charged £9000 fees in 2012 will have been 'on track' to university since before the changes were announced. Even though the 'introduction effects' are temporary, the 'change effects', or lack of effects, may not be. And in part the decisions of young people in future may depend on the experiences of those who are starting university this year, and what story they have to tell to their friends and family.

47. Nor should we forget that while increased demand may be a necessary condition for increased and widening participation and 'fair' access, it is not sufficient. Both the total number of funded places, and the way they are distributed may turn out to be more important than any changes in demand. The Government believed the new mechanisms for allocating places to universities will increase students' choice but, as we argued in our previous report the opposite may turn out to be the case, particularly as funded places are to be reduced from 2011 levels. This makes it even more important to 'wait and see' before coming to definite conclusions about the overall impact of the measures introduced from 2012 on student numbers, on access and on widening participation.