

The cost of the Government's reforms of the financing of higher education – an update

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1. This update sets out the information that has become available since our last report on the cost of the Government's reforms (Thompson et al, 2012) and considers some of the criticisms made of that report. By far the biggest change has been the announcement on 5 December by the Chancellor of the Exchequer that Government was to 'abolish the cap on student numbers altogether'. Our first thoughts on this radical development are set out under the final heading – 'The Autumn Statement'. The other headings follow directly from our 2012 report, making four in all. They are:-

- The cost of loans
- Government's cost of borrowing - the discount rate
- The impact of fee increases on inflation
- The Autumn Statement

The cost of loans

Introduction

2. Student loans are subsidised by Government to remove disincentives to study and to ensure they are 'progressive', that is to make the repayments higher for those who earn more. The total cost to Government has the following elements: the number of students, their loan entitlements, the loan take-up rates and the Resource Accounting and Budgeting (RAB) charge, the ratio of loan subsidy to the total loans.

3. We will consider student numbers under the final heading 'The Autumn Statement'. Most of the other discussion about the cost of loans concerns the RAB, which, for individual students, depends on the size of their loans, the repayment terms, their earnings, inflation and average earnings over the repayment period, and the discount rate. The final parameter in this list, the discount rate, will be discussed under its own heading.

4. The estimation of the RAB charge is far from easy, and any serious attempt involves the construction of a complex model. Further, to have any confidence in the results, the model needs reliable forecasts of a range of measures, in particular the distribution of the earnings of former students over more than three decades. Some commentators have referred to this or that as the 'HEPI estimate' of the RAB charge. We have not made any estimates. All we have done is to use the BIS 'simplified model', available to anyone, to explore various 'what ifs', and to assess the plausibility of the various assumptions made in the light of publically available evidence. We concluded that the estimates were highly uncertain, and probably optimistic. The uncertainty is inevitable given the repayment conditions, which mean that a large part of the repayments will be made far in the future, and therefore it is unlikely that a way will be found to significantly reduce this uncertainty. Since March 2011 to the most recent estimate, the official RAB has increased from 30 per cent to between 35 and 40 per cent (Willetts, 2013d).

5. Some commentators have complimented us for the prescience of our critique of the RAB charge, but the reality is we had not fully anticipated the changes that have led to these revisions. It will be some time before we know whether our biggest concerns, like the assumption that earnings increases will be uniform, turn out to be well founded.

6. The RAB is important. According to Government a 1 percentage point increase in the RAB equates to £100 million extra expenditure in 2014-15 (Willetts, 2013d). So a 10 percentage point increase amounts to about £1 billion per year of unbudgeted expenditure. It should be appreciated that the RAB affects the BIS's departmental expenditure, which, in the context of higher education policy is what we are usually concerned with. However, it does not have immediate impact on the public debt (Public Sector Net Debt or PSND), which increases by the whole amount loaned until repayments are actually made. This other way of accounting for the cost of loans will be important in our discussions of 'Cost of Government borrowing – discount rate' and the 'Autumn Statement'.

7. Following the Autumn Statement it is clear Government is putting the sale of the loans at the heart of its policy for the funding of higher education, so is the RAB still relevant? Yes. The feasibility of selling loans at all, and the proceeds that will come from any sale, depend on both the best estimate of the size and timing of repayments, and the uncertainty associated with that estimate. Both of these are reflected in the RAB estimate.

Take-up and size of fee and maintenance loans

Fee loans

8. In our report (Thompson et al, 2012, paragraph 19), we pointed out that the BIS assumed that the average fee loan would be £7579, significantly lower than the estimated fee net of fee waivers which we estimated to be £8234¹. We accepted that it was reasonable for Government to wait until the actual fee loan figures were available, but we argued that the final figures would lead to increased costs estimates.

9. The Student Loan Company has now published provisional figures for fee loan take up². They show that the average fee loan award (as of 25/11/12) was £8050, while the average fee loan paid was £7490. This provisional figure for the average fee loan actually taken out is actually slightly lower than that assumed by BIS, which implies that, all other things being equal, the tuition fee loan costs to Government would be lower than estimated.

10. The £8050 fee loan awarded is lower than our estimate or OFFA's published figure. This is to be expected given the fact that our and OFFA's estimates did not include alternative providers. (The equivalent SLC figure for loan awards to students at public providers is £8230.) It may also be the case that those who pay 'up front' will on average have higher fee less waiver payments.

11. Most of the difference between the loans awarded and actually paid is thought to be due to two main factors. Firstly, many of the awards will not take account of fee waivers, which will only be confirmed as the fees are actually paid. Secondly, students who discontinue their studies part way through the year do not have to pay the whole fee. It is also possible that some students may elect to pay part of the fee 'up front', though it seems unlikely that, having decided to take a fee loan, many students would choose this option.

12. Whatever the reasons for the difference between loans awarded and loans paid, the current BIS fee loan assumption seems about right for 2012-13, if not slightly pessimistic. The only caveat concerns the cut off date on 31 August. In the past the SLC have found that there were very few payments after that date. However, in 2012-13 there were more

¹ This was our best estimate with the data then available. OFFA has since published figure of £8,156 (OFFA, 2012). This includes HEIs and FECs but excludes private providers.

² See SLC (2013). Unless otherwise stated all the figures quoted refer to full time students domiciled in England studying at providers in the UK and EU (outside UK) students studying at providers in England. Providers include public and alternative (that is private) institutions.

courses starting later in the academic year leading to more late payments. It is not yet clear whether these late payments will make a material difference to the final average fee loan.

13. In future years, the average fee loan is likely to increase. The average fee less waivers for public providers showed year on year increases 2012-13 and 2014-15³. Also, in 2012-13 all the students were in their first year, and the incidence of discontinuation in the first year is higher than for subsequent years of study⁴.

Maintenance loans

14. The SLC figures for paid average maintenance loans is £4300, a little higher than the £4121 we assumed for the BIS simplified model. We would not expect these to be exactly the same as they are not based on exactly the same populations. Again it is possible that this figure will increase when late payments are included. We would also expect the value in future years to increase as the proportion of students leaving during the year decreased.

Loan take-up

15. The White Paper costings were based on a 90 per cent fee loan take up and 80 per cent maintenance loan take up (Thompson et al, 2011). To calculate what the take up actually was requires data from HESA, data from further education colleges and data from alternative providers, and these are not yet available, and so there are no official figures yet for 2012-13.

16. The data that are available suggests that the take-up assumptions used in the White Paper costing for fee loans will be equalled and for maintenance loans they will be exceeded. In 2011-12 the take up rates were 87.0 per cent and 87.5 per cent for fee and maintenance respectively (English domiciled students, public providers.) Between 2011-

³ Estimated / expected average fees less waivers for HEI and FECs were: 2012-13 £8156, 2013-14 £8246, 2014-15 £8425 (OFFA, 2012 and 2013)

⁴ Information on the numbers of students leaving during the academic year has not been published. There are problems in accurately capturing the date of leaving and historically no records have been collected by HESA for those leaving very early in the course. However, the increased risk in the first year is demonstrated by the percentage of students becoming inactive, which decreases with year of study. See table SN4 of the PIs published by HESA. (www.hesa.ac.uk/)

12 and 2012-13 the numbers of students taking out loans increased slightly while the number of full-time fundable students decreased⁵.

17. It should be remembered that only a minority of the students included in the 2012-13 figures will have been borrowing under the new arrangements, so any figures for 'new system' loan take up based on these figures should only be taken as first rough indications. However, it does appear that the new arrangements have not led to a marked increase in the proportion of students, and their families, financing themselves and paying fees 'up front'. Up until now the take up rate has been highly uncertain. On the one hand, the big increase in fee levels will have made it impossible for some who would have paid up-front to do so. On the other, the interest rates of up to RPI plus 3 per cent per annum could have discouraged loan take by those with savings or access to cheaper loans from other sources. Increased loan avoidance does not seem to have happened, at least to any great extent.

18. The OBR report 'higher-than-expected take-up of loans in 2012-13' (OBR, 2013). It is hard to assess the significance of this statement since we do not know how they arrived at a count of those eligible for a loan, but again, it suggests that loan take-up has at least held up with the introduction of the new loans.

Cost implications

19. Taken together the fee and maintenance loans per borrower for 2012-13 'new system' borrowers seem close to what BIS is assuming. However, should the average fee loan increase in future years, which seems likely, there would be increased costs. An increase in the average loan increases costs both by increasing the RAB and by the increase in total sum borrowed. As a rough rule of thumb a £100 increase in the fee loan would increase costs by about £50 million per annum⁶.

20. We do not yet know what loan take-up will be but suppose both fee and maintenance rates were 90 per cent. This would increase costs

⁵ The loan take up figures are from SLC (2013). The numbers taking up loans between 2011-12 and 2012-13 increased by 2.4 per cent (fees) and 0.5 per cent (maintenance), while the number of full-time, fundable undergraduate students decreased by 1.1 per cent (HEFCE HESES and HEIFES data, columns 1 +2, from HEFCE web site.) The HEFCE survey count is not the same as the population eligible for a loan, but it gives an indication of how that population has changed.

⁶ Estimate based on White Paper costing model (Thompson et al, 2011, Appendix 1) with full-time RAB = 35.00 per cent and fee loans = £7500 compared to 35.22 per cent and £7600. All other parameters as given.

compared to the White Paper assumptions by about £140 million per annum⁷.

Recent and future earnings

OBR forecasts used in the BIS model

21. The estimates from the BIS model are insensitive to long term growth in average wages. This is because the projected earnings of former students and the future repayment threshold level are both increased annually in line with average earnings.

22. However, the BIS model is sensitive to changes in average 'cash' earnings between 2009 and 2016. This is because the threshold for the first year of repayments is set at £21,000 (2016 prices) and the graduate earnings data in the model are updated from 2009 in line with average earnings. If the average earning increases are reduced up to 2016 the graduate earnings will be lower relative to the threshold, and repayments will be lower. This potentially impacts on the repayments through the whole 30 year repayment period, because of the annual updating of the threshold.

23. The OBR forecasts for earnings in December 2012 (OBR, 2012) reduced the average earnings forecast in the years up to the start of repayments in 2016, and this was probably an important factor in BIS increasing their RAB estimate from 32 per cent to 35 per cent. The most recent OBR forecasts (OBR, 2013), shows a further small reduction in the increase in average earnings between 2009 and 2016⁸. Though not enough on its own to lead to a further revision of the RAB, it will bring a further small upward pressure.

Why the earnings distribution is important

24. We have done no further work on the impact of a changing distribution of earnings, but in the context of the other factors under discussion, it is important that their potential impact is recognised⁹.

⁷ White Paper costing model (see above) with maintenance loan take-up = 80 per cent compared to 90 per cent. RAB = 35 per cent, all other parameters as given.

⁸ The forecast increase in average earnings between the first quarter of 2009 and the first quarter of 2016 was 22.0 per cent in the 2012 OBR forecast and 20.5 per cent in the 2013 OBR forecast. OBR, (2012 and 2013), Supplementary economy tables, table 1.4, Average earnings index (Q1 2007 = 100). We estimate this would increase the RAB by 0.1 to 0.2 per cent, within the 'noise' of RAB estimates.

⁹ For a fuller account of our work on the possible impact of a change in the earnings distribution, see Thompson et al (2012), Annex A.

25. The distribution of the assumed average increases in earnings can be more important than their average level. In our modelling we showed, for example, that in a scenario where the lowest 80 per cent had their long term income growth cut to only a quarter of the OBR projected rate, and all the savings went to enhanced increases to the top 20 per cent, the RAB cost increased by a further 4.2 percentage points.

26. It seems likely that, even if the career growth in earnings is maintained on average, the spread will increase. That is, while top earners may see an even bigger growth in earnings over their lifetime, those in the lower range of earnings will not see the growth in earnings over their careers that has been typical, at least for men, for those in 'graduate' jobs in the past. In the USA only high earners have seen increases in real earnings over three decades, and in the UK increasing dispersion of graduate earnings is now being observed.

27. The fact that top earners earn very much more does not mean that they will pay any more by way of loan repayments, and their high salaries will not compensate for the lower salaries and consequently lower loan repayments of others. And if median and low earners earn less than has been assumed then that will reduce the loan repayments, and increase the cost to the Government.

Earnings for recent HE undergraduate qualifiers

28. The HESA Destination of Leavers from Higher Education (DLHE) survey provides information on qualifiers. Most full-time students qualify in the summer and report their earnings for the following January. We included undergraduate leavers earnings growth derived from DLHE in our 2012 report¹⁰. Table 1 updates that information with the most recent survey for 2011-12 qualifiers most of whom will report earnings in January 2013. For comparison we also show average earnings growth from the most recent OBR report.

29. We see that the cumulative growth in the earnings of recently qualified undergraduates from 2009 is much lower than average earnings which themselves, as we have noted, are lower than had been expected in earlier forecasts. Unless the earnings of HE qualifiers dramatically increase over the next few years, repayments in 2016 look likely to be lower than expected. These results are consistent with findings from other sources. For example, using the Labour Force Survey, it was shown that the earnings of those aged between 21 and 26 with a first degree as their

¹⁰ See Thompson et al, 2012, Annex A, table 2. This also included earnings information from the BIS simplified model, which are now out of date following BIS's revisions of their RAN estimate.

highest qualification increased by just 1 per cent in cash terms (Elias et al, 2013).

Table 1: Changes in Annual changes in average earnings for recent graduates

	Annual increases		Cumulative increases (2009 = 100)	
	Recent graduates	Average earnings	Recent graduates	Average earnings
2009	2.6%	-1.7	100.0	100.0
2010	0.5%	4.7	100.5	104.7
2011	0.2%	1.1	100.7	105.8
2012	0.1%	3.4	100.8	109.5
2013	0.3%	-0.4	101.2	109.0
2014		3.6		112.9
2015		3.1		116.4
2016		3.5		120.5

Recent graduate figures derived from the HESA DLHE survey. Population: English domiciled undergraduate qualifiers from full-time undergraduate courses, registered at a UK HEIs, who provided a full response to the DLHE survey, including their salary, and reported that they were employed full-time in paid work in the UK. The survey was changed for the 2011-12 qualifiers (reported as 2013 earnings in the table). To ensure the results were comparable, the algorithm for earlier years was modified from that used previously. This only resulted in small changes to the earnings figures. From unpublished work carried out by HEFCE.

Average earnings from OBR, (2013), Supplementary economy tables, table 1.4, first quarter rows, 'Average earnings growth (per cent)' and 'Average earnings index (Q1 2007=100)' columns.

30. It is possible that those who graduate in 2015 will catch up as the economy starts to grow, but it is also possible that, on average, their long term career prospects are affected by a difficult start. Repayments in the early years of the new loans scheme will probably be lower than expected, and whether there will be long term effects is unclear. The NAO cites research which shows that though the impact of graduating during a

recession reduces as the graduates progress through their career, it was found to persist for as long as ten years¹¹.

Another RAB estimate

31. We previously reported that London Economics had estimated the RAB charge at 37.0 per cent in the work they undertook for BIS in estimating the returns to higher education (Conlon G et al, 2011). This year they completed a study looking at different higher education funding systems (Conlon G, 2013). Their RAB estimate for full-time students with the current fee and repayment conditions was 39.4 per cent.

Further analysis of lifetime earnings

32. BIS commissioned a major study into the impact of degrees on the lifecycle of earnings (Walker et al, 2013). Because graduate earnings relative to the rest of the population have a big impact on the RAB, it seems likely that this research might help us come to a view about RAB estimates made by others, even though this study did not itself produce an estimate.

33. The study aimed to extend, verify and refine previous work commissioned by BIS and carried out by London Economics (Conlon et al, 2011), the same work referred to above that estimated the full-time RAB as 37.0 per cent. This new study had some important additional features. Firstly, 'drop-outs' were identified, not perfectly or completely, but few studies even attempt this. Secondly, they took account of the distribution of earnings, rather than using average values. They found substantially higher lifetime net earning differentials for graduates over non-graduates than found previously. Also no reduction in the graduate non-graduate differential was found through the expansion of higher education from the late 1980s and early 1990s. Finally they found that controlling for dropouts made little difference to their conclusions about the graduate premium.

34. This work addressed two of our concerns about RAB estimates, the fact that not all borrowers qualify and that we need to take account of the distribution of earnings. The results imply that graduates earnings advantage over non-graduates is higher than previously thought, that these differentials remain as the graduate population increases, and that allowing for dropouts makes no difference. It might be thought this was a basis for optimism about the RAB. That, it turns out, only follows from a superficial reading of the results. (Note that the authors make no inferences about the RAB charge, or claim that their results were relevant. Our concerns arise because other far less rigorous studies into the returns

¹¹ See NAO (2013b) and reference therein.

to higher education that have been used by Government to dismiss our concerns about RAB estimates.)

Higher differentials compared to previous studies

35. The study identifies several reasons why higher differentials are found. The London Economics study determined the returns for different highest qualifications, degree and no postgraduate qualification, Masters degree and no higher, and so on, whereas this new study compared those with and without a first degree, irrespective of subsequent qualifications. This gives more useful information to the typical 18 year old deciding whether to go to university. In large part the new study found higher differentials because it was measuring something different. Since the London Economics study came up with a RAB value of 37 per cent it seems likely that both sets of results are consistent with such an estimate.

The distribution of earnings

36. This study did not aim to see if the distribution of earnings has changed through time. Rather they simulated the impact of a degree on a distribution of earnings rather than just using the average effect which is what most RAB models do. The effect of taking account of extreme values is quite different when calculating the RAB compared, for example, with calculating the social returns, which need estimates of tax receipts. The very high earners will pay more tax than ordinary high earners, but they will pay no more, and possibly less, in student loan repayments.

Drop outs

37. In this study dropouts were part of the control rather than the treatment group. The 'treatment' was gaining a degree, not going to university. Taking account of dropouts meant distinguishing between those who had, and had not entered university amongst the control 'no degree' group. For the RAB calculations we are concerned about those who start their degree and take out a loan, whether or not they complete. The study also found that men who dropped out earned the same as those who did not go to university, while women who dropped out earned less. So a RAB estimate based on the earnings of graduates alone may be pessimistic. It depends on whether the loan data includes non-graduates, because non-graduates should, on average, have smaller loans. An estimate that included loan data for those who drop out, but only earnings data for those who qualified, would probably underestimate the RAB.

No change differentials with expansion

38. This is not the first study to find that the graduate premium held up through the great expansion of higher education. In our 2012 report we

discussed whether this should give us confidence that the 'graduate premium' will hold up in the future, given that even without an increase in participation rates, the proportion of the population with higher education qualifications will continue to increase, as the 1960s students retire and are replaced by graduates from the 21st century. There is evidence the picture has gradually changed with later cohorts, from those typically entering higher education in the late 90s, when the graduate premium started to fall, especially for women. In addition, the dispersion of earnings has increased, so that those in the higher earning profiles have not seen a decline. For more details see the 2012 report¹².

Conclusion

39. The recent study commissioned by BIS gives new insights about the relative earnings of graduates and non-graduates, but a reading of this work that concluded that the results meant we should have more confidence in RAB estimates would be unjustified.

Earnings and repayments – NAO report

40. The NAO report (NAO, 2013a 2013b) is mainly concerned with the effectiveness of BIS, the SLC and HMRC in the collection of student loan payments, but it also contains some observations about the forecasting methods. These forecasts are discussed in terms of existing loans and repayments, but the observations made are relevant to the new loans being taken out by students starting the university courses from 2012-13.

41. Using the BIS model they examined the effect of replacing OBR economic growth and inflation estimates (as used by BIS) by using estimates from the Bank of England and the IMF. These alternatives gave lower RAB vales, showing that the BIS's choice has been 'prudent'. However, they warn that even using OBR inputs, the results 'will not necessarily fully reflect the economic climate'. In particular they point to evidence which suggest that past growth in graduate earnings will not continue as the model assumes, and that there is evidence which suggests that future growth will not be uniform, that is there will be 'dispersion' of income growth - which is also an assumed, and which is discussed above. We had identified future earnings growth and especially dispersion as the two most important reasons for treating the RAB estimates as uncertain and optimistic.

42. The report shows that the forecast of repayments from BIS's HERO model exceeded actual repayments in both 2010-11 and 2011-12. This is the same underlying model that has been used to estimate the

¹² See Thompson (2012, Annex A paragraphs 39 to 42.

RAB costs for 2012-13 and later entrants, so we have another indication that the longer term RAB estimates are optimistic. Overall, the NAO report is supportive of the position we have taken¹³.

Government's cost of borrowing - the discount rate

43. The Minister of Universities and Science criticised our earlier report as one sided (Willetts, 2012), mainly because we had neglected to take account of the assumed cost to Government of borrowing, which he said had exaggerated the public costs. He claimed that the Government estimate was at the 'middle of a range of forecasts', between that suggested by some (unnamed) economists and the HEPI analysis.

44. Leunig (Leunig, 2012) and Shephard (Shephard, 2013) have made the case for Government to reduce the 'discount rate', currently set at 2.2 per cent per annum, which is often described as reflecting the cost over and above inflation to Government of borrowing, assuming all loans are repaid. The arguments are complex, but at their heart is the observation that Government could finance student loans through borrowing in the gilts market more cheaply than reflected in the current discount rate. Of course this could change. In future the costs of this borrowing could, probably will, increase, but the cost for the current student cohorts would be fixed by the long term bonds taken out as the loans were made.

45. The discount rate used in the RAB calculation is set by the Treasury, and any change in assumptions about this would need to be made by them. We asked the Treasury to comment on these points; their response is at Annex A. Setting the discount rate is made in compliance with international accounting standards. Let us suppose that those standards supported a reduction in the discount rate and it was decided that the rate should be reduced. This would reduce the RAB estimate and BIS's costs, but the normal concomitant change would be a reduction in BIS's budget, so that there would not provide extra funds, for example to increase student numbers. Further, suppose the discount rate, and hence the RAB estimate, were reduced, but that repayments were subsequently predicted to be lower than those assumed when the original calculations had been made. Even if the resulting RAB was still lower than the current RAB based on a 2.2 per cent per annum discount rate, it is likely that the Treasury would expect the increased costs due to lower repayment rates and lower RAB to be met from savings within BIS's remit. The implications

¹³ We would make just one criticism of the way the evidence is presented. Throughout the report we find references to 'graduates', for example 'graduate earnings', 'the borrower graduates', etc. Not all loan borrowers will necessarily be graduates or holding any HE qualifications. Many take out loans and leave without qualifying. NAO acknowledge this but only in a footnote in the Technical Paper.

for higher education would be just as serious as would be the case with the current discount.

46. The main points in the Treasury's position are anticipated by Shephard, who acknowledges that his argument needs to be more subtle when applied to the National Accounts. The problem can be presented in different ways but, put simply, it arises because though a reduction in the RAB charge will reduce the departmental spending, it will not have the same effect on the Public Sector Net Debt (PSND) which includes the totality of student loans at the time when they are made, not just the RAB costs, and is only reduced when students repay. The 'student loan book', the Government asset created by student loans, is not included within the PSND because it is not classified as a liquid asset. The case made by both Leunig and Shephard hinges on student loans being a special case. So far, it seems, this argument has not been accepted by the Treasury, or if they have, they are unable or unwilling to implement an arrangement which would effectively separate student loans from other Government debt.

47. Under these circumstances we think it is unwise to treat the current discount rate as a safety net which insures the Government higher education policies against lower than expected repayment rates; and indeed, the Government seems to have stopped claiming this as evidence that its RAB estimate is in the middle of two extremes.

The impact of fees on inflation

48. Tuition fees are included in the calculation of both the Retail Price Index (RPI) and the Consumer Price Index (CPI). The increase in fees from 2012-13 will have therefore increased inflation and thereby various state benefits linked to inflation, thereby increasing expenditure. We estimated this increase to be up to £1.14 billion per annum.

49. However, since then Government decided not to continue to update welfare benefits in line with the CPI, most of the impact will not occur. The state pension continues to be uprated with the 'triple-lock' guarantee and rises by the highest of average earnings growth, CPI inflation and 2.5 per cent. The CPI figure for September 2013, which would usually inform the increases from April 2014 was, 2.7 per cent, higher than average wage increases at 2.5 per cent.

50. We estimated that the 2012-13 increase in fees will have contributed 0.24 per cent to this September's inflation¹⁴, and as a result the state and public sector pensions would be uprated by 2.7% instead of

¹⁴ See Thompson et al (2012), Annex B

2.5 per cent. The 0.2 per cent extra expenditure equates to £290 million¹⁵.

51. Increased annual costs could be triggered in future years as further cohorts entering universities with the new fee arrangements produce further inflation effects. However, given that welfare benefits are not linked to inflation, this depends on whether inflation is higher than 2.5 per cent and the percentage increase in average earnings, apart from the small impact on expenditure on public service pensions.

The Autumn Statement

52. A rising RAB charge would put pressure on public expenditure and in our previous report we considered the ways that any shortfall might be met. One of the possible options was to hold down student numbers, which, in view of the then OBR assumption that numbers would be 'flat', seemed to be a likely possibility. So, the news that Government was going to remove the cap on student numbers came as a surprise.

53. Others have welcomed the announcement because it means more of those who can benefit from higher education will be able to do so. We believe that such a welcome is premature until we know how the expansion will be funded, and what the consequences will be of meeting the increased costs. Not since the early 1990s has the Government given an open-ended commitment to provide funding for as many students as universities might recruit. The consequences for the future shape and costs of higher education are potentially as significant as all that we have seen from the 2012 changes so far. It will take some time to tease out the details and consequences of the changes, but we give our first assessment here. (Unless stated otherwise, all references are to paragraphs in the Autumn Statement (HMT, 2013b) as 'HMT- paragraph', or to the OBR Economic and fiscal outlook (OBR, 2013) as 'OBR – paragraph'.)

54. The cap is to be raised for publically funded institutions by 30,000 entrants per year in 2014-15. From 2015-16 the cap is to be removed, which the Government believes will enable a total extra 60,000 entrants

¹⁵ (State pensions £109.7 billion + public service pensions £37.0 billion) x 0.2% = £293 million. State Pensions HMT (2013), page 83, table 6.4. Public sector pensions OBR (2013), page 137, table 4.27.

per year to be recruited (HMT-1.202)¹⁶. This is the number that the Government believes will meet unmet demand. In 2014-15 private institutions are to have their numbers controlled on the basis of 2012-13 levels, but from 2015-16 they will be 'freed in a similar manner as for HEFCE-funded provision' (HMT-1.204). Despite the Government representing this announcement of a removal of the cap on student numbers, it may nevertheless represent an implicit cap – present numbers plus 60,000 additional entrants per year. The Government announcement is silent about what will happen if universities seek to recruit more than this number.

55. An extra 60,000 entrants would represent a significant expansion, particularly as even zero growth would mean an increase in the participation rate up to 2020, due to decreases in the numbers in the relevant age cohorts¹⁷. Were the unmet demand to be less than 60,000, the cap could be lifted at lower cost than is anticipated. In the Government's eyes this would not represent a failure. The Robbins' aspiration for all those with the ability and wish for study to be able to find a place would have been met, and, just as important, the Government's aim to free higher education providers from student number controls as a way to increase competition would be realised. If more than 60,000 students were recruited that would create a budgetary problem, but it might be offset by the introduction of market conditions whose benefits could include downward pressure on costs and improvements in quality. Whether increased competition would improve quality, as is asserted (HMT-1.204), can be contested. It certainly should not be assumed that competition automatically improves quality¹⁸. There is some recognition of this by Government, with their concerns about quality following the rapid expansion of provision by private providers (HMT-1.204). However, the value and risks of competition is a different issue, and here our main concern is with costs of lifting the cap and how those costs will be met.

¹⁶ We have not yet found the source of the estimate of unmet demand at 60,000. The Minister of State for Universities and Science using UCAS application estimated a shortfall of 50,000 following the methodology of the Browne Review, and showed that, using the approach used by Robbins, the latent demand could be much larger (Willetts D, 2013c). HEPI has previously shown something similar and also that if the participation of men were to equal that of women this would need about 130,000 extra places (all years of study). (Bekhradnia, et al, 2008, paragraph 52.)

¹⁷ Based on population projections published in HEPI Demand report, (Bekhradnia et al, 2008).

¹⁸ For discussion of the way universities compete, and its relation to quality Thompson et al (2011) pages 27 to 32.

A Cap without Controls?

56. Assessing historic unmet demand is difficult, and predicting it in the future is even more difficult, and while the demand may be fully met by a 60,000 increase in entrant numbers, it would be unwise to count on it, particularly with universities encouraged to expand. With the entrepreneurial spirit that the Government wants to cultivate, providers can and probably will find latent demand and even create new demand. Already large numbers of students with no UCAS tariff scores enter higher education. No one can know how many more might be sought out and recruited by universities exercising a new freedom to recruit without limit. And EU students represent an almost unlimited additional potential source of demand. Given the importance the Government attaches to reducing public debt, it seems unlikely that the Treasury would agree to the open-ended financial commitment implied by a complete lifting of student number limits. There is presumably a budget, which means that there must be an assumed limit on student numbers, or a plan to reduce the unit of public funding if the numbers assumed in the budget are exceeded.

57. The conundrum is how to remove controls on providers while ensuring the total numbers are within the planned spending commitments, that is how to implement a 'soft cap'. One option would be to wait and see what happens, with restoring controls as an option in reserve. The Government has said that it 'reserves the right to reimpose number controls on institutions that expand their student numbers at the expense of quality' (HMT-1.204). But this may not provide any sort of effective control in the event of budget overrun. The problem may not manifest itself as poor quality institutional provision: but the control will anyway need to be exercised for purely budgetary reasons.

58. The other option would be for Whitehall to become the sector's admissions tutor by setting minimum entry qualifications for higher education entry; this is the Browne Review proposal. Such an arrangement has major implications for university autonomy and also for widening participation (given the high number of students admitted without qualifications recognised by UCAS). Also the practical problems of defining what constitutes the minimum entry qualifications should not be underestimated. But neither of these two difficulties stopped Government introducing a 'Browne-lite' change by removing caps on recruitment of students with high grades. There is a hint that such a 'soft cap' might be favoured. The expansion is to provide for young people 'who have the grades to enter higher education' (HMT-1.202). What qualifications? What grades? Who decides?

Meeting the costs

59. The cost of the proposed expansion of student and teaching grants is estimated to be £720 million per annum by 2018-19. And the loan subsidy will increase by £700 million per annum 'in the medium term' (HMT-1.203). Assuming that the expansion reaches 60,000 entrants per year, and that these are full-time students averaging three years of study¹⁹, this equates to £7900 per student year. This shows an intention to expand without reducing the unit of resource²⁰. Since the publication of the White Paper introducing £9000 fees and new repayment conditions, the Government's estimate of the RAB cost has increased from 30 per cent to between 35 and 40 per cent²¹. Should there be further increases in the RAB, the £700 million cost for loan subsidies would also increase. We think this is possible, or even likely, given that the extra marginal students recruited would be expected to have lower average earnings on leaving higher education.

60. How are these additional spending commitments to be met? The increase in student loans, and student and teaching grants will increase spending by £1.42 billion a year according to the Government's estimates. Unless savings are made elsewhere, they will need to increase the higher education budget. There is no commitment to such an increase. We are told that 'this expansion is affordable within a reducing level of public sector net borrowing as a result of the reforms to higher education finance the government has enacted' (HMT-1.203). Yet the current plans before the decision to expand must surely have taken account of those reforms. The OBR makes clear that such expenditure 'would reduce the amount available for departments to spend on other things when plans for those years are set out in future spending reviews' (OBR-1.9).

61. The increase in student numbers does not only affect departmental expenditure, it also has a distinct and bigger impact on the

¹⁹ This is a conservative assumption. According to HEFCE the usual mix of course lengths and non-continuation patterns would imply an average length of 2.7 giving an average cost of £8765

²⁰ The estimated average public cost for new system students in 2014-15 will be £6500 (Willetts, 2013b, slide 14 of PowerPoint presentation). This is lower than the implied unit cost in the Autumn Statement, even after allowing for four years of inflation, and it has a much higher proportion of loan subsidy (£4200). It has been suggested that the difference could be due to the 2014-15 figures incorporating the proposals to replace grants with loans that have been reported in the Guardian (Malik et al, 2003).

²¹ A RAB value of 30 per cent was quoted in the White Paper, but the White Paper cost calculations used 32 per cent (Thompson et al, 2011). For the latest estimate see Willetts, (2013d).

public debt. Before repayments on the extra loans start being paid to any significant extent the Public Sector Net Debt (PSND) will increase by about £2 billion for each year²². The solution proposed by the Government to the problem posed by these increased costs is to sell the pre-2012 income contingent loans book, and use the proceeds from this sale to finance the additional loans over the forecast period (HMT-1.203). The sale will be in five tranches and the proceeds for the first four are shown as adding £2.3 billion a year to the 'Net Cash Requirement' from 2015-16 to 2018-19 (HMT-2.10, table 2.5). This sale will reduce the future receipts from repayments. According to the OBR, by 2018-19, selling the loan book reduces Government income through loan repayments by 'just under £1 billion in 2018-19' (OBR-4.145). So although by then some repayments from the additional entrants in 2014-15 through to 2017-18 will have started to come through, the repayment receipts will be negligible in comparison with the £1 billion annual loss of income from the loan book sale. The loss of repayments means that the all five tranches of the sale will only provide net proceeds to cover the increased debt from expansion to 2019-20. From 2020-21 onwards there will be a cumulative shortfall, unless there were further loan book sales.

62. The future repayments from income contingent loans are more uncertain than repayments from mortgage loans, so this coming sale will be more difficult and the net proceeds are likely to be proportionately lower. The Government is confident that will raise between £10 billion and £15 billion with a central estimate of £12 billion (HMT 2.16). Given the history of attempted loan book sales, some may argue that this policy is not without risk, for example that no deal can be made at a price that makes the sale worthwhile. However, for the purposes of this discussion we will assume that the sale is successful, and that it releases £12 billion²³.

63. The problem remains that while the proceeds from the tranches of sales last five years, the increased numbers of students continue to add £2 billion a year to the public debt after these sales are completed. When questioned about the sustainability of the approach, a BIS source was

²² Assuming a RAB charge of 35 per cent; the debt must be £700 million x 100 / 35 = £2 billion. This is for 'the medium term'. For 2018-19 the figure given is £1.93 billion (HMT-2.10 table 2.5)

²³ We make this assumption in order to progress our examination of the case made in the Autumn Statement, though a sale is not certain. According to a BIS information sheet, 'the decision to go ahead with any sale has not yet been taken and will require a full assessment of the value for money to the taxpayer of selling the loans versus retaining them'. There is no explanation as to what would happen to the plans to remove the cap should the loans not be sold.

reported as saying, 'new student loans get taken out all the time, so there are always in theory newer loans the government could sell on' (Ramesh, 2013). Such an argument does not stand up. The loan sale proposed is based on a loan book built up over many years; it cannot be repeated, at least not as frequently as would be required. It has many of the characteristics of a Ponzi scheme, relying on diminishing future income to make good increasing present deficits. When all the pre-2012 student loans are sold, the challenge of selling the loans given to more recent entrants will be much more difficult. This is because the repayment terms for the post 2012-13 entrants are more complex, with a longer repayment period, and more of the repayments expected decades hence.

64. The problems are summed up more succinctly by Carl Emmerson, Deputy Director of the Institute for Fiscal Studies. He pointed out that the idea that new loans will be financed by selling the old student loan book is 'economically nonsense as selling an asset for what it is worth does not strengthen the public finances'²⁴.

65. At best the current policy can only be a bridge for a few years prior to an increased budget for higher education, or to reduced student numbers, or to a cheaper package. The elements of such a lower-cost package have been well rehearsed: maintenance grants turned into loans, less generous loan repayment terms, cuts in the teaching grant or cuts in other parts of the HE budget.

Conclusion

66. In conclusion, the lifting of the cap is to be welcomed in so far as it will extend opportunities to benefit from higher education. The Government also sees the removal of the cap as a way freeing providers from student number controls and thereby encouraging competition. It should be understood that increased competition carries risks as well as opportunities. It seems that, after their experience in providing competition from private providers, Government may be recognising at least some of those risks. But a much greater concern is that the proposals do not seem sustainable in the medium term, leading to even greater uncertainty as to what students and HE providers can expect in the near future.

²⁴ Also see comments by Paul Johnson, Director of IFS at the IFS Autumn Statement 2013 briefing. www.ifs.org.uk/projects/423

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Annex A: Government cost of borrowing

We asked for the rationale behind the 2.2 per cent 'discount' or 'cost of borrowing'. The following explanation was provided by HM Treasury on 19 November 2013.

The 2.2 per cent real rate is the same rate that was applied to student loans before the introduction of International Financial Reporting Standards to the UK central government. It was the rate used for provisions and was reviewed at each spending review. It is an historic rate that is based on UK index-linked gilts.

HM Treasury has since reviewed the methodology for the discount rate used for provisions, to improve compliance with International Accounting Standard 37 Provisions, Contingent Liabilities and Contingent Assets. Currently, when accounting for financial assets like student loans the HM Treasury Financial Reporting Manual 2013-14 applies the following interpretation of International Accounting Standard 39 Financial Instruments: Recognition and Measurement: 'Where future cash flows are discounted to measure fair value, entities should use the higher of the rate intrinsic to the financial instrument and the real discount rate set by HM Treasury as applied to the flows expressed in current prices'.

HM Treasury intends to review this interpretation in conjunction with future work on financial instrument accounting standards, including future decisions on the application of International Financial Reporting Standard 9: Financial Instruments for the public sector.

However, when considering the impact of discount rates on Government decisions it is important to distinguish three different rates used in Government spending. Firstly, there is the actual cost of capital – the interest rate on government borrowing. Secondly, there is the Green Book discount rate used for project appraisal, based on a social time preference methodology. Finally, there is the discount rate used in financial reporting and the budgeting regime.

At Spending Review 2010 and subsequent Budgets and Autumn Statements, the Government has set the overall fiscal envelope. This envelope takes account of expected tax revenues, debt issuance and debt interest payments. The Government's cost of capital is currently relatively low. This is taken into account in the decision on overall fiscal affordability.

The debt issuance forecast translates into the Debt Management Office's (DMO) financing remit, set annually by the Government. The remit sets the proportion of index-linked issuance for the year. This proportion is based on broad factors such as the overall cost effectiveness of index-

linked gilts relative to conventional gilts, the level of inflation risk the government wants to expose itself to, and the relative demand in the market. The government does not hypothecate debt or take into account specific cash flows when setting the DMO's remit.

Once the fiscal envelope is set, the Government determines spending priorities with reference to the methodology set out in the Green Book. The fiscal envelope is fixed and debt is not hypothecated, so the cost of capital is equal across all projects. This means that a change in the cost of capital does not change the ranking of projects. Instead, the Government uses a social time preference discount rate for ranking projects, which does not change with real gilt yields. This rate reflects an interest in value to the public, rather than profit for the public sector. The Green Book discount rate does not attempt to take project-specific risk into account. This is as far as possible built into the costs of the proposal.

A change in the discount rate set by HM Treasury for financial assets, like student loans, would not therefore change the decision on, for example, student numbers. A change in this discount rate does not change the projected cashflows or the fiscal envelope and would not change the priority ranking of different spending proposals using the Green Book methodology. If the discount rate set by HM Treasury for financial assets were changed, the relevant departmental budgets would normally be restated, in accordance with the Consolidated Budgeting Guidance.