

The cost of the Government's reforms of the financing of higher education

John Thompson and Bahram Bekhradnia

Summary

1. This report follows those produced by HEPI on the Browne Review, the Government's response and the higher education White Paper. Our 2011 report was critical of the assessment of the cost of the White Paper's proposals. Based on further information and analysis that has become available since, and in particular following the Government's welcome release of a simplified version of the model on which its calculations are based, we have carried out further analysis. Our conclusion is both that the Government's assessment of the Resource Accounting and Budgeting (RAB) cost (the net cost to the Government of the loans that it makes) still depends on highly uncertain and optimistic assumptions and remains too low, and that the inflationary effects of the proposals (student loans form part of the basket that is used to calculate inflation) will lead to a rise in those benefits whose value is adjusted according to inflation, and so to increased government spending.

2. If we are right, the effect will be to reduce any savings from the new policies, and could even mean that there are no savings to be had. Consequently, either future taxpayers will need to pay more, or other parts of the higher education budget will need to be cut, or student numbers will need to be held down even further than presently planned, or former students will have to repay more¹.

Background

3. In earlier reports we looked at the claims made that the new arrangements for financing higher education would reduce the cost to the taxpayer. A key part of that analysis looked at the estimated cost of the loans that would be provided for the increased fees. Since then the only significant hard information that has become available concerns the fees that universities are charging (including the fee charged net of waivers). We will not know the exact distribution of fees, how many students take out loans, and how much they borrow over their course, for some time, and liability to make repayments only starts in 2016. A final value of the mean net fee, and its distribution, will only be possible when we have this information and when firm student numbers become available.

¹ This report provides a summary of the full report, which together with Annexes containing detailed analyses and calculations can be found at www.hepi.ac.uk

4. Since publication of analyses by UCAS and the Independent Commission on Fees their findings have been widely interpreted as showing the new arrangements have reduced demand. The Daily Mail headline, 'Tuition fee rise HAS turned thousands of middle class students off going to university' gives a flavour of the comment. Though neither UCAS nor the Commission reached such firm conclusions, it is possible to see how others may have done so from their analyses. This issue is central to much of the debate about the new arrangements. Will higher fees deter students and set back progress in widening participation and ensuring 'fair access'? It also has cost implications: if demand falls and the number of loans decreases, the Government will make savings. We have reviewed the evidence and concluded that though too early to be sure, there is no good evidence to expect a significant demand reduction after the immediate effects of the introduction of higher fees. We think it safe to anticipate that all the funded places planned by the Government will be filled², particularly as it plans to reduce the number of these.

5. Despite these gaps, and the provisional nature of the new information, there are several reasons to revisit the issues of the public deficit and debt. Firstly BIS have continued to develop their model for estimating the RAB cost and have recently provided details of the methods and a simplified version of their model. We have used this to revisit our assessment of the uncertainties and likely bias in the RAB estimate. Secondly, others have looked at the new arrangements and raised issues we did not consider in our earlier review. In particular the Intergenerational Foundation 'False Accounting?' report describes how the impact of higher fees on inflation could affect the deficit reduction, and why the public debt needs to be considered as an issue in itself. Third, the Office for Budget Responsibility (OBR) has published two further reports which are relevant to the discussion. And finally, although firm figures are not available, we now have a revised if provisional value for net fees.

Fees less waivers

6. When the Government first announced its proposals it described a fee level of £6000 pa as the "basic threshold" which would "act as a discipline on universities and will ensure that they have to hold down their costs." The maximum £9000 fee would only be charged in "exceptional circumstances". We did not share this expectation and wrote that we had "every reason to expect – not immediately but over time – most universities to increase their fees towards £9,000". Over the months that

² This assumes that Government will not continue to pursue a policy of reducing places from highly popular universities and giving them to colleges and universities which have historically had difficulties recruiting, but which have lowered fee levels to qualify for the bidding process.

followed it became clear that this was nearer the mark, and indeed it looked as if it would not take as long as we had expected for £9000 to become the norm. By the time the White paper was published, despite pressure from Government through OFFA to introduce fee waivers, we estimated the average 'fee less waivers' to be £8228.

7. With the White Paper the Government attempted to gain control over fee levels by reducing the number of students (other than those with top A level grades) in universities that charged more than £7500 and proposing to make further such reductions year after year. We concluded nevertheless that even those universities most likely to see reductions in their student numbers would be reluctant to reduce fees because it would be damaging to accept that they were unable to recruit high-achieving students, the high fee in itself being taken as indicating prestige. Even those with the lowest proportion of highly qualified students seemed likely to take a 'wait and see' stance.

8. We concluded, "if universities with these characteristics believe that the Government will make margin cuts year on year, their best policy is to reduce fees without delay. If they think a change of policy is possible, they may be inclined to put off the decision." 'Putting off' seems to be what most universities did. Our estimate now of the average fee less waivers is £8234³, within the margin of error of our earlier estimate.

9. It is unclear what the Government's position is now, having reduced the numbers confiscated from institutions charging £7,500+ from 20,000 in 2012-13 to just 5,000 in 2013-14, so reducing the incentive to reduce fees. Perhaps it thinks that extending the 'high achieving' threshold of students outside the quota controls from 'at least AAB grades at A-level or equivalent' to 'at least ABB grades', as is now proposed, will result in pressure to reduce fees. If so, it is mistaken. Most universities will judge their higher fee levels an asset in recruiting these students.

10. It seems that the Government is going to absorb the costs of the higher than expected fees⁴, mitigated by an unstated policy of not up-rating them at all and allowing the real value of the maximum fee to fall.

The RAB Estimate

11. The Resource Accounting and Budgeting (RAB) cost is the long-run real-terms cost to the Government of the loans that it makes.

³ In the printed version of this summary report the figure of £8287 was wrongly stated

⁴ We estimate these to be about £350 million pa using the costing model at Appendix 1 of our report on the White Paper, wrongly stated in the . printed version as £370 million pa

12. The main features in determining the RAB are the size of the loans and the earnings of former students in the future (which, together with the repayment terms will determine the rate of repayment). These are the features which we were able to explore using the BIS' simplified model, and which are central to our assessment of the RAB estimates. It needs to be noted that the simplified model only considers full-time home students who graduate within three years, and who repay their loans at the minimum rate. The actual costs will depend on other factors, some by impacting the RAB, some in other ways. The resulting uncertainties are even greater than those arising from the scope of the simplified model. These include the likely take-up by part-time students, the repayment rates of EU students and the incentive for former students to emigrate.

13. The new terms of the loan, in particular the real interest rates, may affect the proportion paying 'up-front' or repaying at an accelerated rate, and our expectation is that the higher interest rates will lead to an increase in both of these. (The current loan rate for student starting in October 2012 will be about 6 per cent, far higher than available from a savings account, and even higher than the best buy mortgages.) The most likely impact will be to reduce the Government's costs, but not necessarily. If up-front payments are made disproportionately from future high earners, and if accelerated repayments are mostly made by those whose earnings put them in the high interest level, the income generated from these will be reduced, increasing the cost of the scheme overall. As early repayments will be made by those from the wealthiest backgrounds, this also has implications for social equity, but this is not considered here.

14. The White Paper quoted a RAB cost of 30 per cent, though the BIS costings published at the time used 32 per cent for full-time student loans and 65 per cent for part-time. The discrepancy has never been explained, although ministers have continued to speak of a 30 per cent RAB cost. As we pointed out last year, the difference between RAB costs of 30 and 32 per cent amounts to £190 million per year. The current official estimate, taking account of the upward pressures on the RAB discussed below (the reduced assumption about future earnings for example), is 32 per cent. For reasons discussed below, this remains optimistic, and seriously understates the likely cost of the Government's policies.

15. Since the Government first announced its proposals in November 2009, we have consistently pointed out that the cost of the policy is likely to be higher than it has admitted. Initially, when the Government's plans were first announced, we pointed out the implausibly high average salaries that followed from their assumptions, in particular that the average male graduate would earn £99,500 per year in real terms 30 years after graduation. As described above we also challenged the assumption that £9000 fees would be exceptional. These are important

because the higher the fee the greater the loan cost, and the lower the income of former students the lower the repayment rates.

16. As far as average earnings are concerned, BIS has now developed a new model to estimate the RAB cost, and has moved from the previous Treasury assumption of an average increase in earnings of 2 per cent per year to the latest OBR long term projections of 1.3 per cent. This, with other changes, means that males at the end of the repayment period are expected to earn £76,500 pa on average, rather than £99,500. Though still very high, this is a move in the direction of greater realism.

17. We estimate that the new assumption about long-term average earnings increases the RAB costs by 1.7 percentage points. The impact on the RAB estimate is not as great as might be expected because the repayment thresholds change each year with average earnings.

18. While the new BIS model reduces the long term average earnings growth assumption, it continues to assume that that growth applies equally across all earnings levels. We have modelled various scenarios of the distribution of salary increases, including one where the lowest 80 per cent have their long term income growth cut to only a quarter of the OBR projected rate, and all the savings go to enhanced increases to the top 20 per cent. On that scenario the RAB cost increases by a further 4.2 percentage points.

19. The new model continues to assume an average fee loan of about £7500 (actually £7579), despite the evidence from OFFA that average fee levels are substantially higher. Our most recent estimate is £8234. The Government has decided that rather than revise its assumptions with every new estimate of fee levels, it will make changes, if required, when the level of fee loans is known for certain, sometime towards the end of 2013. In itself the decision not to update the assumption about fees and loans until final information is available may be reasonable, but it must be understood that it leads to a RAB cost that is significantly lower than it should be. Our current estimate of the average fee – £8234 – would add 1.4 per cent⁵ to the RAB charge, other things being equal.

20. So the reduced long term earnings assumptions in the latest BIS model, and the fact that fees are higher than is assumed in the model, both impact on the RAB estimate, though the impact is not as great as might have been imagined. However, there are other even stronger reasons for concluding that the RAB estimate is uncertain, and in general optimistic.

⁵ In the printed version of this summary report the figure of 1.5% was wrongly stated

21. Because the repayment thresholds were set for 2016 in cash terms, to be followed by annual updates in line with average earnings, the costs are highly dependent on the growth in cash, not real, average earnings between now and 2016. Low inflation implies higher RAB costs. Though it may not have the same impact over the longer term, there is evidence that the earnings of newly qualified graduates have seen very low growth in recent years, even in cash terms, suggesting that at least for the early years of the scheme repayments will be lower than expected.

22. What were and remain the most doubtful assumptions are

- a. that the 'career' growth in earnings that most graduates are estimated to have enjoyed historically will be repeated
- b. that this will not only be true on average, but that the distribution of earnings will remain the same. This is unlikely, as has become clearer since our original analysis, with evidence showing a growing difference between high and low earning graduates.

23. These assumptions are key to the estimates made by both BIS and other such as the Institute for Fiscal Studies. Unlike some of the other assumptions we have discussed, the RAB is sensitive to these. We cannot of course say what the future will bring, but it is incumbent on those making decisions about public policy, and particularly ones that have such significant cost implications, to make the most realistic assumptions they can. Both of these assumptions are critical and both are probably wrong.

24. As far as earnings growth is concerned, it is far more plausible to assume that those who are going to university in 2012 will not, on average, see the same growth in earnings relative to the population as a whole over their working lifetime as those who entered in the late sixties and seventies when the participation rate was less than half what it is today, and when so many changes have taken place in the wider economy. It is true that after the last rapid expansion, in the late 1980s and early 1990s, the 'graduate premium' held up better in the early part of those graduates' careers than many anticipated. But there are signs that the premium is weakening, and some argue that the protection that graduate employment has had from outsourcing and other forms of competition cannot be expected to continue. It is the 'career' earnings growth over a working lifetime which determines whether earnings rise above the repayment threshold and into high interest levels. Without an assumption as optimistic as that made by the Government, the RAB would be much larger.

25. As we have seen in the context of assumptions about long term growth in average earnings, the distribution of the increases can be more important than their average level. 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.

26. As we pointed out last year, 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. Assuming, as the Government has done, that the career growth in salaries will be maintained not just on average, but for all earning levels, may lead to an overstatement of the loan repayments that the Government will receive and an understatement of the RAB cost. The simplified model can illustrate this. In the model the average earnings for the lowest 90 per cent of males shows an increase of 315 per cent over the 30 year repayment period. However, if the earnings growth of the bottom 90 per cent is reduced to 204 per cent, and the savings passed on to the top 10 per cent with the average graduate premium remaining unchanged, the RAB costs for men increases by over 7 percentage points.

27. The Minister for Higher Education, in providing evidence to the Business, Innovation and Skills Committee, said, "I read lots of accounts of how, for example, the RAB charge, which we have estimated at 30%, is going to be very different. . . we have had those estimates checked by the Office for Budget Responsibility (OBR) and the Institute for Fiscal Studies (IFS) have done their estimates " And in a Times Higher article he claimed the IFS "following a more sophisticated methodology [than HEPI's], estimates the [RAB] to be around 30 per cent".

28. Although we do not have access to the IFS model, and they have not answered our requests for information about it, the results of their modelling have been published. Assuming long-run average real-terms earnings growth of 2 per cent per year (the Government's original assumption), they estimated a RAB cost of 33 per cent. This was their central estimate, and was 3 percentage points higher than the RAB cost claimed in the White Paper and 1 percentage point higher than that contained in the papers that accompanied the White Paper. For a "pessimistic" estimate long-term earnings growth was reduced to 1.5 per cent per year, and the IFS's own "pessimistic" values replaced OBR estimates of medium term earnings growth. The IFS "pessimistic" long-term assumption is probably actually less pessimistic than the most recent assumptions used by BIS (for example, the IFS assumed average real-

terms annual salary increases of 1.5 per cent compared to the 1.3 per cent which is probably the equivalent figure using BIS' assumption, based on OBR figures). This "pessimistic" RAB cost comes out at 37 per cent.

29. The IFS' "pessimistic" estimate, which leads to a 37 per cent RAB estimate compared to the Government's present estimate of 32 per cent, continues to assume broadly that the growth in graduate career earnings will be maintained on average, and that the dispersion of these earnings will stay the same. IFS are fully aware of these uncertainties and warn that predicting the earnings of future graduates poses severe difficulties.

30. The Minister for Higher Education should stop saying that the IFS has endorsed the Government's estimate of a 30 per cent RAB cost. Its estimate was always higher than the Government's, and the projection that most closely incorporates the Government's present assumption of long term earnings growth has a RAB cost of at least 37 per cent. The difference between a RAB cost of 30 per cent and one of 37 per cent amounts to £0.68 billion per year.

31. The Minister's reassurance that the OBR had checked the Government's estimate of the RAB turns out to be potentially misleading as well. While the OBR was given the opportunity to challenge the methodology and underpinning assumptions of the model, it, so far as we can establish, did not go further than this.

The impact of fees on inflation

32. Tuition fees are included in the calculation of both the Retail Price Index (RPI) and the Consumer Price Index (CPI). The OBR has estimated that the increase in fees is expected to add 0.2 per cent to the CPI as the first cohort pays the new fees in 2012. This increased inflation will lead to bigger rises in various state benefits and Civil Service pensions which are uprated annually in line with the CPI.

33. This much is generally accepted. What is not agreed is the size of the additional expenditure that will be generated. A cost of up to £2.2 billion pa has been claimed. We do not believe this credible and estimate that the range should be £420 million pa to £1.14 billion⁶ pa.

34. The higher figure assumes that the higher fees will continue to increase inflation beyond the initial increase arising from the entrants starting in the autumn of 2012, and that this continuing impact will give rise to increased public expenditure. However, the Government may take action to prevent this happening.

⁶ In the printed version of this summary report the figure of £1.15 million was wrongly stated

35. The higher figure would take most of the £1.3 billion pa savings that the reforms were projected to make using the White Paper's assumptions. Just increasing the fee assumption from the £7500 used in the White Paper to our estimate of £8234, even without any changes to the underlying assumptions about future earnings, repayments etc., would more than wipe out the 'savings'.

The impact on the Public Sector Net Cash Requirement (PSNCR) - the deficit -and the Public Sector Net Debt (PSND) - the debt

36. So long as the Government bases its calculations on a RAB cost of 32 per cent it can claim that the deficit will be reduced. The expected savings would be even greater if the RAB cost of 30 per cent quoted in the White Paper were used. However, if as seems apparent the RAB cost is much higher, and public spending increases because of the inflationary impact of fee rises, then the reduction in the deficit will be much less – perhaps less than zero. If, as we expect, it becomes evident that the RAB cost has been underestimated, it is unclear what would trigger a decision to revise it - perhaps a decision from the Treasury or a different part of Government, a challenge from the OBR or ONS, or else an attempt to sell the loan book. However if, as appears clear, the real cost of the loans has been underestimated by the Government, at some point there will have to be an adjustment.

37. Although expected future repayments reduce the deficit at the time that the loans are made, and so the RAB cost impacts on the extent of the deficit, the debt is different. Repayments only reduce the PSND at the time they are paid, not before. Because of the sums involved, and the long time period for - and therefore uncertainty of - repayment, the impact of students' loans on the debt is of concern, irrespective of the RAB charge. The most recent OBR projections show the PSND from student loans peaking at 6.1 per cent of GDP in the early 2030s and then falling slowly to 4.4 per cent by 2061-62, still a high figure⁷.

38. Given the size of this contribution to the debt, it is not surprising that OBR wishes to refine these estimates, and has commissioned BIS to model projections of loans and repayments over the next 50 years:

“We have commissioned the Department for Business, Innovation and Skills (BIS) to model projections of loans and repayments over the next 50 years. Our key assumptions here are that student numbers are assumed to be flat at their current numbers and the initial average fee loan per student is £7,000. We also assume that

⁷ The values in the printed version were early OBR figures which have since been updated.

the tuition fee cap and maintenance grants and loans are uprated in line with earnings after the forecast period."

39. These key assumptions on student numbers, fee loans and the uprating of fees, loans and grants are of interest for two reasons. First, given what we understand about the RAB estimates, should they be viewed as the most likely outcome? Secondly, they can be assumed to reflect Government policy and expectations, or at least what OBR takes these to be. Considering each in turn in reverse order:

Fees and loans uprated with earnings

40. This is assumed to occur after the forecast period - that is after 2016-17. In its modelling BIS is assuming that fees and loans will increase with inflation before then. Both of these assumptions seem pessimistic - that is they will inflate the debt to more than seems likely.

Average fee loan per student is £7,000

41. BIS has assumed an average fee loan per borrower of £7777 and 90 per cent take up - an average loan per student in the system of £7,000. The fee per borrower takes into account those who take loans of less than 100 per cent, and those who do not pay the full fee because of non-completion. The Government's assumption and OBR's differ in this respect. The OBR's is more pessimistic - we would consider it to be more realistic - than that currently used to estimate the RAB charge.

Flat student numbers⁸

42. The change in population size means that even with flat numbers the participation rate will rise until about 2020, after which it falls, dipping below current rates around 2026-2027. This shifting participation rate does not seem plausible.

43. Much attention has been paid to the impact of the new arrangements on demand for higher education, but the constraints on supply, if followed, maybe of more significance

44. So long as student numbers do indeed remain flat these assumptions look balanced - if anything they may give an over-estimation of debt. But if, as seems likely, BIS estimate the level of repayments using the same assumptions about future earnings as they have for the RAB, then we would view them as optimistic. It is to be hoped that the OBR, in line with its intention to 'probe the robustness' of its central

⁸ Flat' means continuing with the numbers planned for the current spending review, which means a cut of 1.7 per cent compared to 2011-12.

forecasts, will ask BIS to produce projections of loans and repayments under a range of assumptions about the growth in earnings.

Conclusion

45. One of the main justifications for the introduction of these reforms, was that they would reduce public expenditure, reduce Government borrowing, and put the future funding of higher education on a sustainable footing. There may be other arguments in their favour, but this justification does not stand up. A reduction of the PSNCR on the scale claimed is unlikely - it is even possible that there will not be any reduction whatever. Further, given the size of the loans and the repayment period, the PSND will increase substantially over the first half of the century.

46. In conclusion therefore, it is likely that the Government's budgetary assumptions have seriously understated the cost of the new policies as:

- a. loan repayments will be less than anticipated, and so the RAB cost will be higher; and
- b. there will be additional expenditure from other departments' budgets, as inflation leads to an increase in benefits.

47. To put a figure on the extent of that shortfall would entail making predictions about what is unpredictable, but it is likely to be substantial. For example, taking the lower value of the inflation impact (£0.42 billion), a RAB value equal to the IFS pessimistic estimate of 37 per cent, and a more realistic fee loan assumption of £8000 - the increased cost will be over £1 billion per year. Such a cost would virtually eliminate the savings that the Government claims its policies will generate of £1.3 billion per year. A slightly higher RAB cost - or a slightly greater inflationary effect than the most optimistic that we have considered here - would mean that the present policy is actually more expensive than the one it has replaced.

48. The shortfall may not be apparent right away, and it is clear that the Government continues to deny it despite evidence to the contrary. If such denial continues, this will mean that the consequences will be some other Government's problem to resolve. But the problem will not disappear, and the books will need to be balanced in due course.

49. What measures will be available to balance the books in future? When we have discussed this previously, we have identified three candidates for meeting the shortfall:

- a. The remaining HEFCE grant could be reduced. As a large part of this is in respect of research funding and funding for STEM subjects, and the beneficiaries of that funding are largely among the old

universities, the effects of such actions would impact most on those institutions

b. Student numbers could be held down. Numbers were already being cut. Reduced numbers will mean reduced loans, and therefore reduced loan subsidies by the Government. The RAB cost will not reduce, but the total cost to the Government will do so because volumes will be lower.

c. Loan subsidies provided by the Government could be reduced. The RAB cost is so high because loans are subsidised. The greater the subsidies, the greater the RAB cost. If the interest rate increased, the repayment threshold were reduced, the percentage of salary taken to repay the loans were to increase or the 30 year cut-off beyond which loans are forgiven were lengthened, then the RAB cost would reduce, but at the expense of those who had taken out loans. The reason that the Government has been unwilling to give commitments about honouring in the future the conditions under which students are presently taking out loans is to leave this option open as a means of balancing the budget.

50. In setting out the last of these options we previously had in mind modifications to the repayment conditions for new students. But in fact every student seeking a loan has to sign up to the following condition:

“You must agree to repay your loan in line with the **regulations that apply at the time the repayments are due** and as they are amended.” (Emphasis added)

This is not a new condition, but the size of the loans, and the time it will take for them to be repaid increases the risk that it will be invoked.

51. In its response to criticism of its calculations of the RAB cost, the Government has responded that estimating what will happen so far into the future is an uncertain business. The Minister for Higher Education told the Business, Innovation and Skills Committee that, “nobody can know” what the RAB charge is going to be. That is true, but indeed that is one of the main criticisms of the Government's actions. Quite apart from the likely underestimate of the costs, discussed above, is the fact that the Government is implementing a policy about whose cost, on its own admission, it can have no clear idea and which is potentially building up large liabilities for future generations to redeem.