

Breaking the logjam

Nicholas Barr

May 2011

London School of Economics

Submission to the Business, Innovation and Skills Committee,
The Future of Higher Education, Session 2011-12, HC885,
<http://www.publications.parliament.uk/pa/cm201012/cmselect/cmbis/c885-vi/c88501.htm>

Contents

Executive summary

1 The backdrop

- 1.1 Objectives
- 1.2 The 2006 reforms: a genuine strategy

2 What's right

- 2.1 Why it is right to raise the fees cap
- 2.2 Why it is right to raise the interest rate on student loans

3 What is wrong – and what should be done to fix it?

- 3.1 Why it is mistaken to abolish taxpayer support for teaching
- 3.2 Why the changes to student loans are mistaken
- 3.3 The real policies to widen participation

4 Conclusion

Appendix 1: Human capital matters

Appendix 2: Competition in higher education is beneficial

Box 1: What is wrong with interest subsidies

Box 2: The external benefits of higher education

Box 3: The RAB charge: student loans in the public accounts

Box 4: The effect on measured public spending of replacing T grant by loans

Figure 1: Current system: subsidy as per cent of total loan, across decile of lifetime earnings distribution

Executive summary

Objectives

1. There is wide agreement about three major objectives of higher education policy: quality, access and size.
2. A major distortion in the existing system is the interest subsidy, which makes student loans expensive in fiscal terms, with ill-effects that include the cap on student numbers.

What the reform proposals get right

3. I have argued elsewhere (Barr, 2010a; Barr and Shephard, 2010; Barr and Johnston, 2011) that, in pursuing those objectives, the reforms are right in two important respects:
 - 1) INCREASING THE FEES CAP over time brings more resources into higher education and strengthens competitive incentives.
 - 2) RAISING THE INTEREST RATE ON STUDENT LOANS reduces the fiscal cost of the loan system, facilitating expansion of student numbers and rectifying a highly regressive element in the current system.
4. These reform directions are both essential elements in a strategy to liberalise student numbers, which in turn is essential to achieving the core objectives. Relaxing the numbers constraint:
 - Directly facilitates the size objective;
 - Contributes to access: if places are scarce, it is likely to be students from disadvantaged backgrounds who are crowded out; and
 - Contributes to quality, since excess demand mutes the beneficial effects of competition on quality.

What is wrong with the reform proposals

5. Three further elements in the reform proposals largely or wholly negate these potential benefits.
 - 3) ABOLISHING TAXPAYER SUPPORT (T GRANT) for most subjects ignores the fact that higher education has social benefits in addition to private benefits (Barr and Shephard, 2010, paras 6-19); the resulting risks are that too few students will apply to university, that quality will suffer, or both.
 - 4) SUBSTANTIALLY INCREASING THE REPAYMENT THRESHOLD. Specifically, the proposal is to raise the threshold at which loan repayments start from £15,000 per year to £21,000, and to index the threshold to earnings. These changes significantly erode the repayment performance of loans (Barr and Johnston, 2011). The resulting high cost creates a fundamental problem. In the current system the interest subsidy makes loans fiscally expensive, hence the numbers cap. Under the proposed reforms the interest subsidy problem is rectified but loans continue to be fiscally expensive because of the large increase in the repayment threshold. Thus the new system creates the same problem – the numbers cap – for the same reason – the high cost of loans.
 - 5) ABOLISHING EDUCATION MAINTENANCE ALLOWANCES AND AIMHIGHER. Though it is intuitively obvious that ‘free’ higher education widens participation, the view is

mistaken. The evidence is now very strong that the main impediment to participation is the lack of prior attainment: people do not go to university because they do not even get to the starting gate. The English record on participation was shameful before fees were introduced, and participation has improved sharply in recent years precisely because policy focused on improving school results (HEFCE 2010). Abolishing Education Maintenance Allowances and AimHigher is therefore profoundly mistaken since both policies directly address problems of participation at their source.

What solutions

6. The current proposals will not stand the test of time. Barr and Shephard (2010) set out arrangements that put things back onto a sound strategic basis, in particular:

- Restoring some T grant as a block grant for each university, possibly tapered so that institutions which charge lower fees receive more grant; and
- Arranging student loans so that (a) most graduates repay in full and (b) the cost of the remaining loss falls on the taxpayer as little as possible.

If these arrangements cannot be put into place during the present round of reforms, they should form the basis of the next round.

7. The bare minimum that should be done now is to freeze the repayment threshold. Another short-run option which is compatible with a longer-term strategy is to introduce university-specific insurance premiums to cover at least part of the loss on loans.

8. FREEZE THE REPAYMENT THRESHOLD AT £21,000 IN NOMINAL TERMS FOR THE TIME BEING. Note that raising the threshold reduces monthly repayments most for graduates earning £21,000 or more, less for graduates earning between £15,000 and £21,000, and not at all for graduates earning less than £15,000. Thus there is a trade-off between indexing the repayment threshold, which gives the smallest benefit to low earners, or freezing the threshold, thus reducing the cost of loans and making it possible to allow more people into the system. Put another way, the high threshold benefits insiders whereas a lower threshold, facilitating expansion, benefits outsiders. A threshold of £21,000 (or less) contributes more to access and expansion than indexing the threshold to prices, let alone to earnings.

9. INTRODUCE A UNIVERSITY-SPECIFIC INSURANCE PREMIUM, at least for students in excess of the HEFCE quota. In this arrangement, universities would be allowed to increase student numbers on the basis that each university pays an insurance premium that covers the non-repayment of loans by its graduates. The previous paragraph noted that a high threshold makes loans expensive; this is equally true for universities. Thus lowering the repayment threshold is relevant not only to the exchequer but also to Vice-Chancellors – the choice of loan threshold and the ability to have off-quota students at low or zero cost to the Treasury are linked.

10. Why, in conclusion, does fixing an incontinent loan system matter? This is not a matter of ideology, but deeply practical. Fixing the loan scheme is essential to relax numbers constraints, which in turn is necessary to achieve the three core objectives. Doing so would also make it possible to liberalise the availability of loans to part-time students (on which a commendable start is being made) and to offer loans to postgraduates (an inexplicable and mistaken omission in the reform proposals).

Breaking the logjam¹

Nicholas Barr²

London School of Economics

1. This submission responds to the proposals of the Browne Review (Independent Review of Higher Education Funding and Student Finance, 2010) and the government's response. It argues (Section 2) that the reform proposals are right in that they:

- 1) Raise the fees cap, and
- 2) Raise the interest rate on student loans,

but wrong (Section 3) in in that they:

- 3) Abolish taxpayer support for teaching (the T grant) for most subjects;
- 4) Make the loan repayment terms too generous; and
- 5) Abolish Education Maintenance Allowances and AimHigher.

The latter three elements largely negate the gains from the first two. Section 4 summarises recommendations.

1 The backdrop

1.1 Objectives

2. The analysis that follows is based on a series of arguments:

- Human capital matters, to meet the technologically-driven increase in the demand for skills (Appendix 1);
- Competition is beneficial in helping higher education to meet the needs of students and employers (Appendix 2).

3. Higher education matters because knowledge for its own sake is important, as is the transmission of core values. To that extent, nothing has changed. In contrast with earlier

¹ Parts of this note draw on Barr and Shephard (2010).

² Professor of Public Economics, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, UK: T: +44-20-7955-7482; E: N.Barr@lse.ac.uk; <http://econ.lse.ac.uk/staff/nb>.

years, however, higher education now matters also for national economic performance and for individual life chances.

4. More specifically, the major objectives policy for higher education are taken to be:

- Quality (improving);
- Access (widening);
- Size, to eliminate excess demand for university places.

5. The third objective is often overlooked. Achieving the objective is important, first, to ensure that Britain invests sufficiently in skills. Size also assists access: if there is a shortage of places, the likelihood is that the most disadvantaged will be crowded out. Size is relevant also to achieving the quality objective. The strategy for improving quality has three elements: competition, robust quality assurance, *and* eliminating the shortage of places. The last is central. In a competitive market, if the quality of university X declines, the effect is to reduce demand, creating downward pressure on quantity and price (i.e. fewer students, paying lower fees). Excess demand for places largely negates those pressures.

6. If competition is to have beneficial effects on quality, excess demand for university places has to be eliminated. In principle this could be done by (a) allowing fees to rise enough to choke off excess demand, or (b) allowing the supply of places to increase. Given the centrality of human capital to national economic performance, option (a) is a thoroughly bad one. What is needed is an increase in supply. I am not recommending completely liberalising student numbers, but that any control of numbers should be considerably more muted than at present.

7. All political parties agree with the objectives in paragraph 4; so do virtually all commentators. My twofold criticism of the proposed reforms is very simple:

- They will fail to achieve those objectives;
- With the modifications described in Section 3, they could achieve those objectives.

1.2 The 2006 reforms: a genuine strategy

8. ECONOMIC THEORY points to three lessons (discussed more fully in Barr, 2004; 2010a) which should shape the finance of higher education:

- Competition is beneficial (Appendix 2);
- Graduates (not students) should contribute to the cost of their degrees for the reasons discussed more fully in section 3.1; and
- Well-designed loans have core characteristics: in particular, loans should have income-contingent repayments, should be large enough to cover fees and living costs, so that higher education is free, or largely free, to the student, and should charge an interest rate related to the government's cost of borrowing. The ill-effects of violating the last point are discussed in section 2.2.

9. These lessons suggest a strategy with three elements.

- Variable fees: universities are financed from a mix of taxation and tuition fees. Each institution sets its own fees. Fees give institutions more resources to improve quality and, through competition, help to improve the efficiency with which those resources are used. Students, however, generally cannot afford to pay fees, hence the second element.
- A good loan system: student support is through loans with income-contingent repayments and large enough to make higher education largely free at the point of use.
- Active measures to widen participation: if the world comprised only middle-class students, the first two elements would suffice. Since that is very far from the case, the third element, discussed more fully in section 3.3, addresses participation.

10. THE 2006 STRATEGY was based on the analysis in the previous two paragraphs.

- *Fees*. The 2004 Higher Education Act replaced the previous upfront, centrally-set flat fee by variable fees. In contrast with the earlier regime, fees are covered by a loan, and so can be deferred until the borrower starts to earn.

- *Loans.* The previous system provided a maintenance loan, with income-contingent repayments of 9% of income above £10,000. There was no loan to cover fees, and the maintenance loan was too small. The reforms introduced a loan to cover fees, increased the size of the maintenance loan, and raised the threshold at which repayments start to £15,000 per year. Any loan that remains unpaid after 25 years is forgiven. The maintenance loan and fees loan charged a zero real interest rate.³
- *Policies to widen participation.* The reforms restored maintenance grants, required universities to provide bursaries, and established an Office for Fair Access. Importantly, other reforms tackled inequalities earlier in the system.

2 What's right

2.1 Why it is right to raise the fees cap

11. WHY FEES? The argument for fees is threefold.

- *Affordability:* fiscal constraints make it impossible for the taxpayer to finance a large, high-quality system of higher education. Fees bring in additional resources for the university system.
- *Efficiency:* variable fees, by strengthening competition, help to create incentives to use those additional resources efficiently.
- *Equity:* since it is disproportionately students from better-off backgrounds who go to university, undue reliance on taxpayer finance is regressive.

12. WHY HAVE A FEES CAP. Though the case for variable fees is strong, there are reasons for establishing a maximum level of fees, i.e. some form of price control. In the short term, the cap needs to be high enough to bring in extra resources and, by strengthening competition, to improve the incentives to use those resources efficiently, but low enough to maintain long-term political support for the strategy and to allow institutions less used to competition the time to develop the necessary management capacity.

³ The intention of the reforms was to charge an interest rate related to the government's cost of borrowing, but it was decided at a late stage that that was politically a step too far. Given the Second Reading majority of 5, this reading was accurate.

13. There is an additional, longer-term argument. Though universities compete in terms of teaching, some universities are also selling access to the student's network of peers and, in this latter respect, have an element of monopoly power. Such monopoly power, it can be argued, is part of the explanation for the very high level of fees at some US universities. The resulting monopoly rent is not distributed to shareholders but ploughed back into facilities, a distortionary upward bias on spending which, it can be argued, leads to quality which is inefficiently high.⁴

14. WHY IT IS RIGHT TO RAISE THE FEES CAP. The cap of £3,000 was too low: it brought in useful additional resources, but not enough, and led to a situation where there was no variation in price, muting competitive incentives. Thus the increase in the fees cap is right, though, as argued below, the abolition of taxpayer support for teaching in most subjects (section 3.1) and faulty loan design (section 3.2) call into question whether the extent of the increase was right.

2.2 Why it is right to raise the interest rate on student loans

15. WHY LOANS? The argument for income-contingent loans is set out in evidence to the Education and Skills Committee (Barr, 2002) and the Browne Review (Barr, 2010a). They bring in private resources on a substantial scale, but in a way that provides automatic protection for low earners. There are good reasons for having a loan rather than a graduate tax, discussed more fully in Barr (2010b), including:

- Public money: a tax is irredeemably public finance, ruling out net private finance until the present value of cumulative repayments by graduates outweighs the relevant cumulative upfront outgoings by government.
- Closed-ended finance: with a graduate tax, the Treasury continues to control the funding envelope; thus institutions compete for resources in a zero-sum game.
- Fails to foster quality because competitive pressures are muted.
- A closed-economy model: it is not possible to collect repayments from EU students who subsequently work outside the UK, nor from UK graduates working abroad.

⁴ The problem is recognised. As the President of a private US university has put it, 'It's time to call an end to the amenities arms race.'

16. WHAT IS WRONG WITH INTEREST SUBSIDIES? The intuition of interest subsidies is clear but mistaken. With conventional loans an interest subsidy would, for example, help first-time house buyers by reducing monthly repayments. Income-contingent repayments turn the argument upside down: if a person's repayment is $x\%$ of her earnings, a lower interest rate has no effect on monthly repayments, but instead shortens the repayment period. Consider a person who repays his or her loan after 10 years with a zero real rate, but takes 12 years with an interest rate equal to the government's cost of borrowing. The higher interest rate has no effect on monthly repayments until the later years of the loan (in this example years 11 and 12), when repayments continue when otherwise they would have stopped.

17. The efficient interest rate should be related to the cost of finance, for example, the government's borrowing rate. Charging an interest rate below the government's cost of borrowing creates a blanket interest subsidy. For the reasons set out in Box 1, that subsidy is inimical to all the core objectives.⁵

Box 1: What is wrong with interest subsidies

When loans have income-contingent repayments and forgiveness of any loan balance that remains outstanding after (say) 25 years, interest subsidies have not a single virtue and many vices.

Cost. The interest subsidy is expensive in fiscal terms. There are at least three reasons why the high cost should not be surprising:

- The subsidy applies to all borrowers for the whole loan and for the entire duration of the loan. Thus not even the best-paid graduates repay their loans in full.
- The duration of repayments is long; this is desirable, since it is efficient if the length of a loan is related to the life of the asset, hence 3-year car loans but 25-year home loans. But with an interest subsidy, the longer the loan, the more costly the subsidy.
- Borrowers face an incentive to arbitrage: students who do not need the money borrow as much as they can and save the money, making a profit on the interest rate.

These high costs lead to further ill effects.

⁵ These arguments are well known – see, for example, my evidence to the Education and Skills Committee (Barr, 2002, paras 29-42).

Impediments to quality and size. Student support is often politically more sensitive than direct spending on universities. Within a given budget, the cost of the interest subsidy crowds out finance for teaching and research, putting quality at risk. More dramatically, the cost of the interest subsidy is one of the direct causes of the current shortage of places.

Impediments to access. Because loans are expensive, they are rationed in size or number. They may not cover tuition fees; or they cover only part of living costs; or they may exclude some groups, for example, part-time and postgraduate students, and students in non-university tertiary education. The effect is most likely to harm students from poor backgrounds, who are less likely to have access to family support.

Regressive. Interest subsidies do not help students (graduates make repayments, not students). They help low-earning graduates only slightly: people with low earnings make low or no repayments; and if earnings remain low over the long term, unpaid debt is forgiven. Interest subsidies do not help high-earning graduates with low earnings early in their career, since with income-contingent loans, their monthly repayments will be low; the interest rate affects only the duration of the loan. Thus the major beneficiaries are successful professionals in mid-career, whose loan repayments are switched off (say) after 10 years rather than after (say) 12 years with a higher interest rate. This is not the group that the policy was intended to help.

18. EMPIRICAL EVIDENCE. Figure 1 shows estimates of non-repayment of loans by decile of the lifetime earnings distribution,⁶ and illustrates the important distinction between two sources of redistribution.

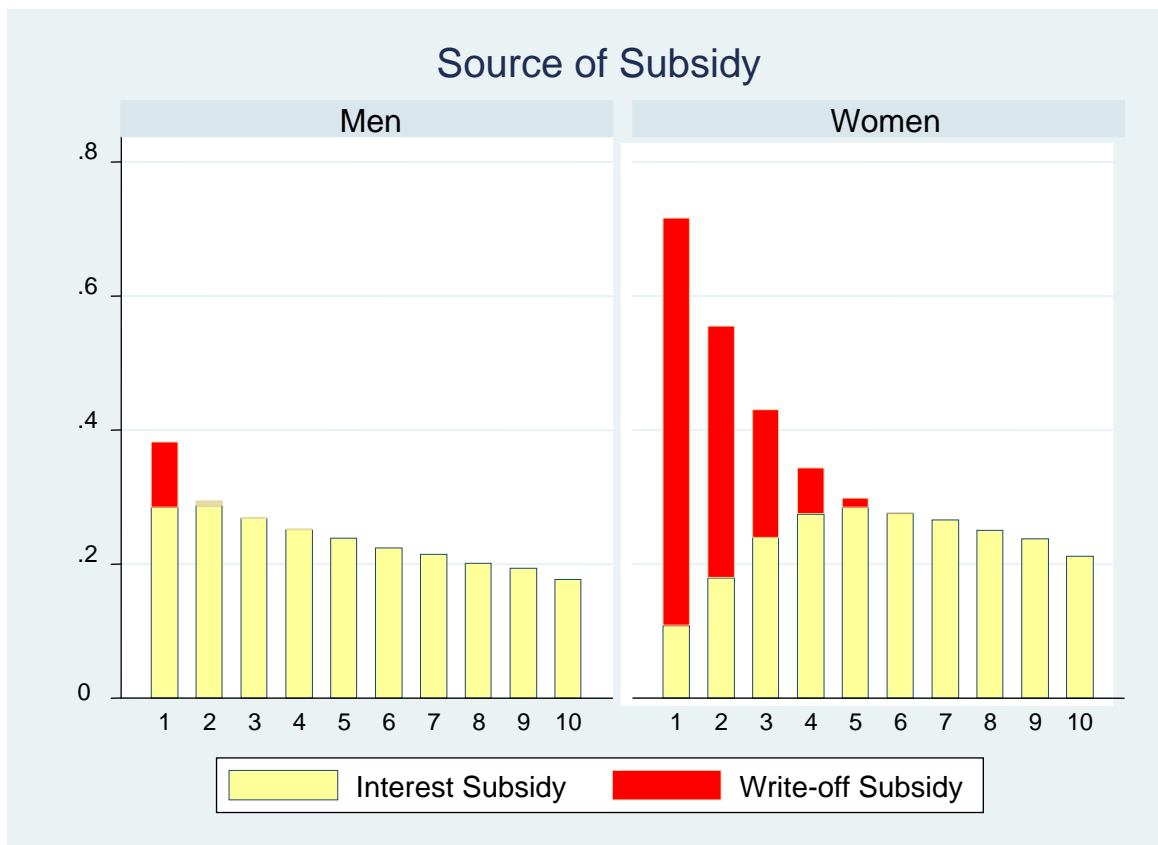
- Forgiveness after 25 years (the darker shading): this part of the system, which benefits people with low lifetime earnings, is well-targeted social policy spending and a deliberate feature of the system.
- The interest subsidy (the lighter shading): this part of the system benefits people who repay their loan within 25 years. This subsidy, *given 25 year forgiveness*, has all the disadvantages outlined above and no offsetting advantages.

19. The figure shows how forgiveness after 25 years (the darker shading) mainly benefits the lowest earners. Since women on average have lower lifetime earnings than men,

⁶ The figures are for graduates who took out the maximum loan for a 3-year course living outside London and away from home

forgiveness after 25 years mainly benefits female graduates. In contrast, the zero real interest rate (the lighter shading) benefits graduates in medium and higher deciles of male earners almost as much as those in lower deciles. There are gains also for earners in the upper deciles of the female earnings distribution. The results show clearly that not even the highest graduate earners repay in full in present value terms.

Figure 1: Current system: subsidy as per cent of total loan, across decile of lifetime earnings distribution



Source: Barr and Johnston (2010, Figure 1), using data on salary paths from the Institute for Fiscal Studies.

3 What is wrong – and what should be done to fix it?

20. Raising the fees cap and increasing the interest rate on student loans reduces the taxpayer cost of higher education, contributes to efficiency, and is progressive, and thus facilitates quality, access and size.

21. Other elements in the reform package, however, largely negate these potential gains.

This section points to three sets of problems:

- Insufficient taxpayer support for teaching, with potential harmful effects on numbers of students applying and/or on quality (section 3.1);
- An expensive loan system, with harmful effects on student numbers (section 3.2); and
- A continuing focus on the wrong policy mix to widen participation (section 3.3)

3.1 Why it is mistaken to abolish taxpayer support for teaching

22. The reforms propose that taxpayer support for teaching the arts and humanities and the social sciences (the ‘chalk and talk’ subjects) should be largely abolished. This is mistaken because it ignores the external benefits of higher education.

23. Economic theory argues that where an activity generates benefits to society over and above those to the individual, a pure market will lead to too little of that activity taking place. A person who pays to be vaccinated against measles benefits personally because he will not get measles (the private benefit) but also confers a benefit on others because they will not catch measles from him (the external benefit). In the absence of a subsidy, too few people will choose to be vaccinated. The same argument applies to higher education, which creates external benefits in the ways set out in Box 2.

Box 2: The external benefits of higher education

Education creates external benefits in a range of ways.

Future tax payments. If education increases a person’s future earnings, it increases her future tax payments. Her investment in education thus confers a ‘dividend’ on future taxpayers. In the presence of such an externality, the resulting flow of investment will be inefficiently small. A standard solution is an appropriately designed subsidy. For precisely that reason, most countries offer tax advantages for a firm’s investment in physical capital.

Production benefits arise if education makes someone more productive, and also makes others more productive. Individuals may become more adaptable and better able to keep up with technological change. The economic spin-offs of an occupationally mobile population are relevant in this context. It is not surprising that much high-tech industry occurs

in clusters near leading universities, like Silicon Valley, Cambridge (Massachusetts), and Cambridge (England), and education lies at the heart of endogenous growth theory.

Cultural benefits. Education can create cultural benefits in the form of better parenting, through increased civic engagement and, though harder to document, by strengthening tolerance of diverse views.

24. That some of these externalities are hard to measure does not make them unreal. The first is unambiguous. As regards growth effects, the case for widening and deepening human capital is not simply as investment, but also as insurance (the risk of under-investing is that of being overtaken by South Korea).

The problem

25. When deciding whether or not to go to university people consider only their private benefit. As a result, in the absence of a subsidy, demand will be below its efficient level. Abolishing taxpayer support for teaching (the T grant) in the arts and humanities, and the social sciences risks precisely that effect. Specifically, the absence of any subsidy risks either or both of two outcomes:

- If universities increase fees by the full amount of the withdrawn subsidy, the risk is that too few students will apply;
- If universities do not increase fees to cover the lost subsidy, the risk is an inefficient reduction in quality.

26. Why was this policy adopted? There are good grounds for arguing that a major reason for replacing T grant by loans is that, for technical reasons, the change reduces PSBR. The reasoning (Box 4) is explained most easily as part of the discussion of student loans, in section 3.2.

What should be done

27. The simple solution is to restore T grant at a level between zero and the current level but, to control public spending, to award it as a block grant to each university.

28. A more sophisticated approach (Barr and Shephard, 2010) notes that though the externality argument for subsidies is generally correct, it does not hold where demand is price inelastic, i.e. where the number of people applying to Oxbridge would change little, if at all, if fees increased by, say, £1,000, whereas a fee increase of that size would have a major impact on the demand for places at Balls Pond Road University. In that case, the absence of a subsidy for Oxbridge does not reduce demand, hence there is no efficiency loss, hence no case for a subsidy. This does not imply that there is no social benefit, merely that there is no efficiency reason for subsidising its production.

29. Building on that logic, Barr and Shephard (2010) propose a tapered T grant, awarded as block grant, such that universities charging a low fee receive the maximum T grant and universities that charge high fees receive no T grant, with a taper for intermediate fee levels.

30. The idea behind this arrangement is that that price elasticity at a university charging high fees is likely to be low, while that at a university charging low fees is likely to be higher. Thus far the argument is an efficiency one. In addition, for equity reasons, there should be a pupil premium payable for each disadvantaged student, independent of university. The premium could be paid to the university as additional income, creating an incentive to recruit students from disadvantaged backgrounds, or to the student, acting as a scholarship by paying a fraction of fees upfront.

31. In the resulting system:

- Oxbridge, charging £9,000, receives no T grant, but receives a pupil premium for each disadvantaged student (at Oxbridge such students would be the minority).
- Balls Pond Road University, charging a low fee, receives the maximum T grant plus a pupil premium for each disadvantaged student (at Balls Pond Road University, the majority).

32. **BOTTOM LINE.** Some T grant, awarded as block grant, should be restored. If this is not possible immediately, the policy should be a priority for spending on higher education as soon as the fiscal situation permits.

3.2 Why the changes to student loans are mistaken

33. The reforms propose that the threshold at which loan repayments start should be increased from £15,000 to £21,000 *and* that that threshold should be indexed to earnings. The reforms also propose that any loan that has not been repaid after 30 years (rather than 25 currently) should be forgiven.

The problem

34. The high repayment threshold has three strategic ill-effects: the high fiscal cost of loans, the incentives to universities to charge higher fees, and the fact that the distributional effects are not as progressive as presented.

35. THE HIGH FISCAL COST OF LOANS. Raising the repayment threshold from £15,000 to £21,000 is expensive because the change reduces monthly repayments not only for someone earning £20,000, but also for someone earning £100,000. Someone earning £21,000 repays £540 less per year (i.e. 9% of £6,000) under the proposed system than under the current system, and anyone above £21,000, however high their earnings, also repays £540 less per year. Thus monthly repayments are lower for most graduates, including the highest earners, which is expensive. Box 3 explains how that cost is measured.

Box 3: The RAB charge: student loans in the public accounts

Suppose that total lending to students this year is £3 billion, and that it is estimated that 30 per cent of total lending to students will not be repaid. Student loans are off budget. Thus the 70 per cent of lending that will be repaid, i.e. £2.1 billion, is not included in public spending as measured by PSBR. However, the estimated non-repayment, £900 million, appears in the BIS budget as current spending – the Resource Accounting Budget (RAB) adjustment. In short, the RAB adjustment represents the cost of loans that the government estimates will not be repaid, i.e. the loss on the loan system. For fuller discussion, see Barr and Johnston (2010, Annex 1).

36. Thompson and Bekhradnia (2010) (see also Chowdry et al., 2010b) point out that the government's estimates of the RAB charge under the proposed new arrangements are very sensitive to assumptions about the average level of fees (and hence the size of the average

loan), and to the growth of real earnings (and hence repayment performance), and conclude that the underlying assumptions are optimistic.

37. The high cost of loans creates a fundamental problem. In the current system the interest subsidy makes loans fiscally expensive, distorting higher education policy in various ways, in particular the numbers cap. Under the reform proposals the interest subsidy problem is rectified but loans continue to be fiscally expensive because of the large increase in the repayment threshold, plus indexing that threshold to earnings. Thus the new system creates the same problem – the numbers cap – for the same reason – the high cost of loans.

Box 4: The effect on measured public spending of replacing T grant by loans

Suppose that the T grant is £4,000, and that 30 per cent of student lending is not repaid (i.e. a RAB charge of 30 per cent).

The T grant is unambiguously public spending. A million students each attracting a T grant of £4,000 increases PSBR by £4 billion.

A loan of £4,000 increases PSBR by £1,200 (the RAB charge). One million students taking out the extra loan increases PSBR by £1.2 billion.

Thus replacing T grant by an equal increase in loan entitlement reduces PSBR by £4 billion – £1.2 billion = £2.8 billion.

Bluntly, what is going on is an accounting trick. There is an apparent decline in public spending (though even that might be an over-estimate), but at the cost of distorting higher education policy.

38. THE INCENTIVE TO UNIVERSITIES TO CHARGE HIGHER FEES. As well as being expensive, the higher threshold creates an upward bias in fees. Graduates of Balls Pond Road University tend to be at the lower end of the graduate earnings spectrum, those of Oxbridge at the higher end. Under the proposed arrangements, the non-repayment of loans by Balls Pond Road University's graduates does not fall on Balls Pond Road University but on taxpayers generally. Thus all universities have an incentive to charge £9,000, since the costs of non-repayment fall on others (Smith and Smith, 2010 illustrate the point by considering a degree with £9,000 fees targeted at old-age pensioners).

39. DISTRIBUTIONAL EFFECTS. The restriction in student numbers tends to harm students from less well-off backgrounds. As discussed, the increase in the repayment threshold reduces loan repayments by £540 per year for all graduates earning above £21,000. Those earning below £21,000 (presumably the intended beneficiaries of the change) benefit least: someone earning £17,000 repays £180 less per year (i.e. 9% of £2,000); someone earning £15,500 repays £45 less per year; and anyone earning below £15,000 does not benefit at all. Thus increasing the repayment threshold is (a) expensive and (b) gives the least benefit to low earners; and indexing the threshold to earnings retains this regressive pattern.

What should be done

40. Barr and Shephard (2010, paras. 23-29) discuss improving the design of the loan system in three ways, which can be used together or separately.

- Element 1: reduce the total loss on loans by reducing the repayment threshold, at a minimum keeping the threshold of £21,000 constant in nominal terms.
- Element 2: reduce or eliminate the taxpayer cost of loans by sharing the cost of remaining non-repayment between:
 - The national cohort of graduates, e.g. charging an interest rate one per cent above the government's cost of borrowing, thus extending the duration of repayments, and/or
 - The university: the charge could be levied in respect of borrowing by all of the university's students in a given year, or only for students above the institutional quota. Thus if Oxbridge charges fees of £9,000, the SLC would pay Oxbridge a fee for such students of $£(9,000 - X)$, where $£X$ is an estimate of non-repayment of loans by Oxbridge graduates for fees of £9,000, i.e. the Oxbridge RAB charge (see Box 3) for fees of £9,000.

The following discussion looks at each of these approaches in turn.

41. MAKING LOANS LESS LEAKY. Barr and Johnston (2011) estimate of the potential magnitude of the savings from keeping the £21,000 threshold constant in nominal terms. Our benchmark is the current system with a repayment threshold of £15,000 and a zero real interest rate, and assuming a total loan per student over three years of about £26,000. Our starting point (updated from Barr and Johnston, 2010) is an estimate that, averaged across all

borrowers, non-repayment is 25.8 per cent of borrowing in present value terms, i.e. about £6,800 per student. This cost is the source of the current numbers cap.

42. The reforms (a) lead to larger loans, (b) have a higher repayment threshold indexed to earnings and (c) a higher interest rate. Elements (a) and (b) add to the fiscal cost of loans, element (c) reduces the fiscal cost. The government's estimates suggest that these effects roughly offset each other so that the cost of the system remains broadly constant (though note the earlier caveat about optimistic assumptions). Barr and Johnston (2010) assume an average fee of £8,000, and consider a system with a repayment threshold of £21,000 fixed in nominal terms and a real interest rate of 3 per cent, but with a safeguard for low earners such that real debt is allowed to rise during university years but not thereafter. We estimate that, compared with the present system, the savings from freezing the £21,000 threshold in nominal terms would be 15.7 per cent of lending, or £2,218 per student, and larger if fees on average are higher than our assumption of £8,000. It is important to note that these are the savings for the cohort of students starting in 2012. The savings for later cohorts would be larger. The overall distribution of the change is progressive (Barr and Johnston, 2011, Figure 1a).

43. The reform proposals give an interest subsidy to graduates with low current income, even if they have high lifetime income. This feature adds to the cost of loans and reduces the progressivity of the system. As a more radical option for the future, it would be both desirable in policy terms and feasible administratively to award interest subsidies only to people with low lifetime income.⁷

44. In sum, there is a trade-off between indexing the repayment threshold, which gives the smallest benefit to low earners, or retaining a constant nominal threshold, thus reducing the cost of loans, hence making it possible to allow more people into the system.⁸ Keeping the threshold of £21,000 contributes more to access and expansion than indexing the threshold to prices, let alone to earnings.

⁷ The mechanism would be to award conditional interest subsidies on the basis of current earnings; those subsidies could be clawed back if the graduate went on to have high earnings in later years.

⁸ Put another way, the high threshold mainly benefits insiders, whereas a lower threshold, facilitating expansion, benefits outsiders.

45. With the right repayment threshold and interest rate, most graduates would repay their loans in full. However, the combination of income-contingent repayments (to protect graduate with low current earnings) and forgiveness after 30 years (to protect graduates with low lifetime earnings) makes a loss by design. To relax the numbers constraint, that inherent loss should fall on the taxpayer as little as possible. As noted, the costs could be imposed on graduates and/or on universities.

46. A NATIONAL COHORT RISK PREMIUM. Under this approach, higher-earning graduates who have taken out a student loan pay at least part of the loss on the loans of low earning graduates. This is done on a national basis so that on average there is a cross-subsidy from Oxbridge graduates to Balls Pond Road University graduates. The idea is explored in more detail in Barr (2010c).

47. This arrangement, however, gives all universities an incentive to charge £9,000, since neither the university nor its low-earning graduates face the resulting costs. Thus a cohort risk premium is only part of the story. What is needed in addition is:

48. UNIVERSITY-SPECIFIC INSURANCE. In this approach each university pays an insurance premium calculated actuarially to match the predicted loss on the borrowing of its students, thus removing the incentive for all universities to raise fees to £9,000.

49. The idea of university-specific insurance could be part of a reform of the entire loan system, or it could be used only on the margin. One option would be to allow universities to accept students beyond their HEFCE allocation at no cost to the taxpayer, on the basis of a university-specific RAB charge. Thus some (all) universities could take more than their quota, provided that each university pays the government £X, where X = that university's RAB charge for the loans taken up by that year's off-quota students.

50. Note that (a) an increase in fees leads to an increase in the size of loans taken out and (b) the percentage loss on loans rises with the size of the loans. Thus higher fees lead to a disproportionate increase in the loss on loans. University-specific insurance has the advantage of providing a countervailing incentive to raising fees.

51. A loan with a high repayment threshold is expensive in fiscal terms. But, for precisely the same reason, it would be expensive also for Oxbridge. Thus lowering the repayment threshold is relevant not only to the exchequer but also to universities – the choice of loan threshold and the ability to have off-quota students at zero cost to the Treasury are linked.

52. The approach of off-quota students eligible for a loan works best for universities whose university-specific RAB charge is fairly low. The RAB charge is the result of (a) graduate earnings and (b) the size of loan. Thus the approach works best:

- For Oxbridge, whose graduates have high employment rates and high earnings; and
- For small loans, e.g. for some part-time students an offer to pay fees loans only.

53. **BOTTOM LINE.** Why does fixing an incontinent loan system matter? This is not a matter of ideology, but deeply practical. Fixing the loan scheme is essential to expand undergraduate numbers, which in turn is necessary to achieving the core policy objectives. Cheaper loans also make it possible to continue to trend to offering loans to part-time students, and to extend loans to postgraduate students (given the pressures of international competition, failure to offer loans to this latter group is a serious error).

54. To those ends, at the very minimum, the threshold of £21,000 should be kept constant in nominal terms for the time being.

3.3 The real policies to widen participation

55. **BARRIERS TO PARTICIPATION.** It is often argued that it is obvious that ‘free’ higher education widens participation. But the evidence suggests something very different. The central causes of failure to participate are twofold: the prior-attainment constraint and the liquidity constraint. For most students a good system of loans and grants addresses the latter. Beyond that, to anyone who is serious about the evidence, one message stands out – *it’s school attainment, stupid*. As a researcher into early child development tragically put it, ‘By the time they are eighteen, all the damage has been done’.⁹ In 2002 (when students from poor backgrounds paid no fees), 81 per cent of children from professional backgrounds went

⁹ Leon Feinstein at a conference.

to university; the comparable figure for children from manual backgrounds was 15 per cent¹⁰ – a shameful record. Yet restricting the sample to young people with good A levels, the figure was roughly 90 per cent for both groups.

56. THE RIGHT POLICIES TO WIDEN PARTICIPATION. What does this imply for policy that really starts to improve participation (for fuller discussion, see Chowdry et al. 2010a)?

- Policies to improve attainment in school: access fails when someone leaves school at 16, usually for reasons that started much earlier. There is ample evidence of the huge importance of early child development. A central element in widening participation is to strengthen pre-university education, from nursery school onwards.
- Policies to increase information and raise aspirations: such policies include AimHigher. They should also include better advice of subject choice both for GCSE and A levels – advice both for pupils and for teachers. A further element is better explanation of how higher education finance works for the student, an area which for many years has been woeful. It is important to get across to prospective students and their parents that higher education is largely free to the student – it is graduates who repay, and that student loan repayments are a payroll deduction, not credit card debt. Saying much the same thing, from the viewpoint of the individual graduate, loan repayments are identical to a graduate tax, but one that is eventually switched off.
- More money: policies include the current system of Education Maintenance Allowances, to encourage people to stay on at school, and grants and bursaries. I am not opposed to grants and bursaries, but deeply opposed to policy that assumes that they are *all* that is necessary. Grants and bursaries, though important, are the tail; it is attainment in school that is the dog.

57. Many activities cover more than one of these elements. And many are already happening but should be increased: mentoring of schoolchildren by university students, visit days, Saturday schools, summer schools, winter schools, and the like. The major purpose of such activities is to demystify university, to give schoolchildren sources of information that are authoritative (university teachers) and with street cred (student mentors).

¹⁰ UK Education and Skills Select Committee (2002, p. 19)

58. The focus on tackling participation by action earlier in the system is already bearing fruit.

‘Substantial, sustained and materially significant participation increases for the most disadvantaged areas across the 04:05 to 09:10 cohorts are found regardless of whether educational, occupational or income disadvantage is considered. *Typically, young people from the 09:10 cohort living in the most disadvantaged areas are around +30 per cent more likely to enter higher education than they were five years previously (04:05 cohort), and around +50 per cent more likely to enter higher education than 15 years previously (94:95 cohort)*’ (HEFCE, 2010, para. 28, emphasis added).

‘Trends in social statistics – such as HE participation rates – that are associated with deeply rooted differences in advantage do not usually show rapid change. A set of robustness and credibility checks give confidence that the analysis in this report is faithfully describing HE participation trends. In particular, *the unusually rapid increases in HE participation recorded since the mid-2000s for young people living in disadvantaged areas are supported by changes in the GCSE attainment of the matching cohorts of young people*’ (*ibid.*, para. 31, emphasis added).

59. THE WRONG POLICIES.

- Abolishing Education Maintenance Allowances and AimHigher – the policies which directly address problems of participation at their source – is the most egregious error.
- Excessive focus on grants and bursaries: since impediments to participation arise long before someone starts at university, undue focus on grants targets resources at the wrong part of the problem. The error is not just an exercise in academic logic chopping. It makes the wrong diagnosis and therefore leads to the wrong prescription. It spends money on ‘free’ higher education rather than improving earlier education, and thus spends money on a policy that does not work. ‘Free’ higher education – the system in Britain for 40+ years – produced the shameful participation figures already mentioned.
- Excessive focus on loan repayments, leading to the counter-productive increase in the loan repayment threshold.

4 Conclusion

60. The advances discussed in section 2 – a higher fees cap and a real interest rate on student loans – are both essential elements in a strategy to liberalise student numbers, which itself is an essential element in achieving the three objectives – quality, access and size – set out at the start of this submission. Unfortunately, the proposals discussed in section 3 mean that the reforms will not achieve those objectives. The continuing high cost of loans has two strategic ill effects.

- Student numbers will continue to be capped, so that significant excess demand for university places will remain. That excess demand is bad not only for direct reasons, but also because it mutes the competitive incentives which contribute to the quality objective.
- Loans will gobble up resources that should be used – mainly earlier in the system – to widen participation, thus accentuating the ill-effects arising from the abolition of Education Maintenance Allowances and AimHigher.

Thus the reforms will not achieve the objectives of quality, access and size. It can be argued that overall little will change: on the one hand, higher headline tuition fees may have a small negative effect; on the other, unless the numbers cap is significantly relaxed, excess demand for places will continue.

61. WHAT NEEDS TO BE DONE, IF NOT NOW THEN IN THE NEXT ROUND OF REFORM.

- Restore at least some T grant, arranged as a block grant, perhaps tapered, so that universities that charge lower fees receive a larger T grant, as discussed in section 3.1; for fuller discussion, see Barr and Shephard (2010, paras. 6-19).
- Reform the loan system so that its fiscal costs are as small as possible:
 - Over time reduce the real threshold at which loan repayments start (Barr and Johnston, 2011);
 - As far as possible, relieve the taxpayer of the remaining loss on loans, which should be shared between the cohort of graduates (through a national cohort risk premium) and universities (via a university-specific RAB charge), as discussed in section 3.2 (for fuller discussion, see Barr and Shephard, 2010, paras 20-29).

These reforms to the loan system make it possible to liberalise student numbers, to extend the availability of loans to part-time students, and to offer loans to postgraduates.

- Divert resources to address the real impediments to participation. Rather than require universities to pay large bursaries, encourage them to contribute to the finance of remedial reading in inner-city primary schools.

62. WHAT IS THE BARE MINIMUM THAT SHOULD BE DONE NOW.

- Freeze the £21,000 threshold in nominal terms for the time being (Barr and Johnston, 2011).
- Consider introducing a university-specific insurance premium, at least for students in excess of the HEFCE quota.

Appendix 1: Human capital matters

There are at least two strategic sets of arguments emphasising the importance of investment in skills.

Technological advance is a key driver. First, though it can reduce the need for skills—for example, computers have become more user-friendly—technological advance mostly increases the demand for skilled workers and reduces the demand for unskilled workers. The evidence points to skill-biased technical change (i.e. new technologies that favour more skilled workers) being an important part of the explanation.

Secondly, change is increasingly rapid, so that knowledge has a shorter half-life: thus skills need to be updated, and need to be flexible enough to adapt to changing technology. Put another way, investment in broad, flexible skills offers a hedge against technological dynamism. Specific skills may become redundant, but education and training should give people general skills, saving the resources that would otherwise have to be devoted to retraining labour whose skills had become outdated or, at worst, to supporting workers socially excluded as a result of technological advance.

A separate argument is that widening and deepening human capital should be seen not only as investment, but also as insurance against being overtaken by countries with greater investment in skills.

These changes explain the movement into the ‘information age’, meaning a need for education and training that is (a) larger than previously, (b) more diverse, and (c) repeated, in the sense that people will require periodic retraining.

Demographic change creates a second argument. The rising proportion of older people in many countries presages high spending on pensions and other age-related activities such as medical and long-term care. The solution is to increase output sufficiently to meet the combined expectations of workers and pensioners. If the problem is that workers are becoming relatively more scarce, the efficient response is to increase labour productivity. Demographic change is thus an argument for additional spending on investment both in technology and human capital.

Appendix 2: Competition in higher education is beneficial

In most countries, higher education has, in essence, been centrally planned. The case against this approach is not ideological, but rooted in the economics of information. The core of the argument is that students (in sharp contrast with school children or people with complex medical problems) are well-informed, or potentially well-informed, consumers, and hence better able than planners to make choices which conform with their interests and those of the economy. Though that proposition is robust for many students, there is an important exception: people from poorer backgrounds might not be fully-informed, with major implications for access, discussed below.

On the supply side, central planning, whether or not it was ever desirable, is no longer feasible. Technological change has led to more universities, more students, and much greater diversity of subject matter. The myth that all universities are the same and should be funded equally is no longer credible. In principle, differential funding could be implemented by an all-knowing central planner, but the problem is too complex for complete reliance on that mechanism: mass higher education needs a funding method in which institutions can charge differential prices to reflect their different costs and objectives.

In contrast with central planning, a competitive environment creates incentives for universities to be more responsive to demand from student and employers. Such competition needs to be supported by an effective system of quality control.

References

- Barr, Nicholas (2002), 'Funding Higher Education: Policies for Access and Quality', House of Commons, Education and Skills Committee, *Post-16 Student Support*, Sixth Report of Session 2001-2002, HC445, TSO, pp. Ev 19-35.
- Barr, Nicholas (2004), 'Higher education funding', *Oxford Review of Economic Policy*, Vol. 20, No. 2, Summer, pp. 264-283.
- Barr, Nicholas (2010a), *Paying for higher education: What policies, in what order?*, Submission to the Independent Review of Higher Education Funding and Student Finance, http://econ.lse.ac.uk/staff/nb/Barr_HEReview100215.pdf
- Barr, Nicholas (2010b), A properly designed 'graduate contribution' could work well for UK students and higher education – even though the original 'graduate tax' proposal is a terrible idea, <http://blogs.lse.ac.uk/politicsandpolicy/?p=3737>
- Barr, Nicholas (2010c), 'Student loans to protect low earners', Research Note, Policy Exchange, http://www.policyexchange.org.uk/images/publications/pdfs/Student_loans.pdf
- Barr, Nicholas and Johnston, Alison (2010), Interest subsidies on student loans: A better class of drain, http://econ.lse.ac.uk/staff/nb/BarrJohnston_Interestsubsidies100528.pdf
- Barr, Nicholas and Johnston, Alison (2011), Saving student loans, <http://econ.lse.ac.uk/staff/nb/BarrJohnstonLoanthreshold110421.pdf>
- Barr, Nicholas and Shephard, Neil (2010), Towards setting student numbers free, http://econ.lse.ac.uk/staff/nb/Barr_Setting_numbers_free_101217.pdf
- Chowdry, Haroon, Crawford, Claire, Dearden, Lorraine, Goodman, Alissa and Vignoles, Anna (2010a), 'Widening participation in higher education: analysis using linked administrative data', IFS Working Paper W10/04, <http://www.ifs.org.uk/publications/4951> .
- Chowdry, Haroon, Dearden, Lorraine and Wyness, Gill (2010b), 'Higher Education Reforms: Progressive but Complicated with an Unwelcome Incentive', IFS Briefing Note 113, <http://www.ifs.org.uk/bns/bn113.pdf>
- HEFCE (2010), *Trends in young participation in higher education: core results for England*, Higher Education Funding Council for England, http://www.hefce.ac.uk/pubs/hefce/2010/10_03/10_03.pdf
- Independent Review of Higher Education Funding and Student Finance (the Browne Review) (2010), *Securing a sustainable future for higher education: An independent review of higher education funding and student finance* (The Browne Review), <http://hereview.independent.gov.uk/hereview/>
- Smith, Alasdair and Smith, Iain (2010), 'Saga touts', *Times Higher Education*, 2 December, <http://www.timeshighereducation.co.uk/story.asp?sectioncode=26&storycode=414470>
- Thompson, John and Bekhradnia, Bahram (2010), The government's proposals for higher education funding and student finance – an analysis, Oxford, Higher Education Policy Institute, HEPI Report no. 50,, <http://www.hepi.ac.uk/466-1875/The-government's-proposals-for-higher-education-funding-and-student-finance-%e2%80%93-an-analysis.html>, and Addendum issued on 14 December 2010
- UK Education and Skills Select Committee (2002), *Post-16 Student Support*, Sixth Report of Session 2001-2002, HC445, London: TSO.