Breaking the logjam

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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:

 x Directly facilitates the size objective;

 x Contributes to access: if places are scarce, it is likely to be students from disadvantaged backgrounds who are crowded out; and

 x 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.

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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:

x   Restoring some T grant as a block grant for each university, possibly tapered so that institutions which charge lower fees receive more grant; and

x   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 logjam[1]

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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:

x   Human capital matters, to meet the technologically-driven increase in the demand for skills (Appendix 1);

x   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

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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:

x   Competition is beneficial (Appendix 2);

x   Graduates (not students) should contribute to the cost of their degrees for the reasons discussed more fully in section 3.1; and

x   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.

x   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.

x   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.

x   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.

x   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.

- x **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]

- x **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.

- x 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.

- x Efficiency: variable fees, by strengthening competition, help to create incentives to use those additional resources efficiently.

- x 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.

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[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

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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.

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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.

   x   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.

   x   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,

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

forg... ...r 25 years mainly benefits ... ...uates. In contrast, the zero real interest rate ... ...(shading) benefits graduate... ...h and higher deciles of male earners alm... ...as those in lower deciles. ...ains also for earners in the upper dec... ...male earnings distribution ...s show clearly that not even the highest grad... ...s repay in full in present va...

Fig... ...t system: subsidy as per... ...oan, across decile of lifetime earnings dist...
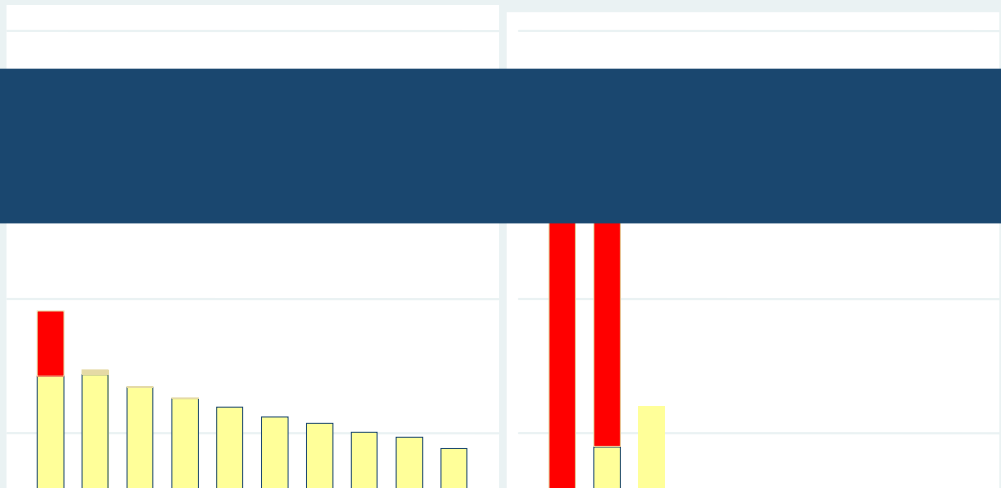
facilitates quality, access and size.

21.   Other elements in the reform package, however, largely negate these potential gains. This section points to three sets of problems:

- x Insufficient taxpayer support for teaching, with potential harmful effects on numbers of students applying and/or on quality (section 3.1);

- x An expensive loan system, with harmful effects on student numbers (section 3.2); and

- x A continuing focus on the wrong policy mix to widen participation (section 3.3)

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.

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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:

- x If universities increase fees by the full amount of the withdrawn subsidy, the risk is that too few students will apply;
- x 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:

x 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).
x 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).

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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

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.

    x

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

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 expens

to university; the comparable figure for children from manual backgrounds was 15 per cent[10] – 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)?

- x 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.

- x 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

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 participati

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.

x 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.

x Freeze the £21,000 threshold in nominal terms for the time being (Barr and Johnston, 2011).

x 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.

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