## **Higher Education Funding**

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Many readers are no doubt currently deciding whether or not to attend higher education. If one thinks of education as a pure investment good, neo-classical economic theory asserts that the decision is based on an individual's comparison of two discounted earnings streams: those (s)he would expect to receive with and without a degree. If the earnings stream with a degree - net of the costs of the degree - is larger than that without a degree, the individual will invest in higher education.

If only the decision were so straightforward! Because of uncertainty over future labour market conditions, you cannot ever know your future earnings streams. And how would you estimate the costs of obtaining the degree? This would depend on how you would finance the investment.

Imagine a world with no government. Without any source of personal income, how would you pay for tuition fees and living expenses? Depending on your family background, you might have different options available - such as bank loans, parental contributions and part-time work - all of which would have differing costs associated with them.

If you opt for a bank loan you might be confronted with a number of obstacles. First, banks may be reluctant to lend to fund participation in a degree course. The prospect of increased future earnings does not provide the same security as a tangible asset (such as a house for a mortgage) to use as collateral. Banks fear 'moral hazard' - that borrowers might not act so as to maximise their ability to repay loans - and 'adverse selection' - that some potential students might borrow even though their private information suggests that they are a high risk for the bank. In the face of these twin threats, banks may charge inefficiently high interest rates when lending to fund education, or may simply ration loans. A possible solution is for parents to provide funds or to guarantee a loan, in which case you would be at a distinct disadvantage if you were from a relatively poor background.

Second, there is some degree - pardon the pun - of uncertainty over future earnings. The more risk averse you are, the more you would be deterred from taking out loans lest you end up with low future earnings and ensuing problems with debt repayments.

The lack of an opportunity to insure against this risk is another market failure that prevents individuals from using private loans to fund their education.

Now bring in the government. It recognises that without intervention, there is an inefficiently low level of human capital investment, because market failures prevent some people from raising the finance to fund university education. It also has an interest in the positive spillovers to society from education. It therefore intervenes to provide finance for prospective students, by subsidising both living expenses and tuition. It targets low-income families most to address the inequitable distribution of human capital investment.

But the way in which the government supports higher education is changing. In the 1960's, with only one in twenty school leavers going on to university, the UK government could comfortably rely on general taxation to fund higher education. However, one in three school leavers now goes on to university and it is generally agreed that current levels of public funding alone are no longer sufficient to provide a high-quality education for them. Between 1980 and 1997 there was a 40% decline in real funding per student in England, a period of increasing student numbers and reliance on general taxation for funding.

By the late 1990s, the government faced a significant challenge: to increase university funding so as to safeguard the quality of higher education, whilst at the same time retaining the affordability of higher education for the state and for the poorest students. The need to strike a balance was clear. Other than through taxation, the most obvious way to increase funding is to allow universities to charge higher fees. However, whilst potentially alleviating the funding constraints of universities, this could exacerbate the financial concerns of prospective students.

The Higher Education Bill proposed in January 2004 - following on from the 2003 White Paper - confronted the issues in the following way. It proposed to increase the amount charged to students for higher education through the introduction of higher (variable) tuition fees to 'top-up' the existing fixed fees of £1,125, with the provision that fees must not exceed £3,000 per annum. Due to the implications of increased fees for students, the government introduced generously subsidised loans to cover them, rendering all fee payment deferrable until after graduation. It also adjusted the student maintenance loan and grant system in an attempt to ensure that in the face of rising costs, students from low-income families would not have to find the money for higher education upfront.

Since the original top-up fee proposals were first announced in January 2003, they have attracted extensive analysis and debate. One aspect of the debate has focused on how far the proposals go towards meeting the student cost of living in university. Just how much can students expect to have to raise themselves to meet their cost of living? The National Union of Students (NUS) estimates that a student living away from home outside of London requires £9,890 for one year to cover both living expenses and tuition fees of £3,000. Figure 1 shows the various components of the Higher Education Bill support system - loans for fees, loans for maintenance, grants and bursaries across the parental income spectrum, assuming that students borrow the maximum amount of government-sponsored debt that they are entitled to (undoubtedly the reader is wise to the generous subsidies on the loans and intends to take all of them up...and even those fortunate enough to already have money for higher education are no doubt astutely planning to invest it in an interest-bearing account instead!). The expected shortfall in support for a student is the difference between the sum of these components and £9,890.

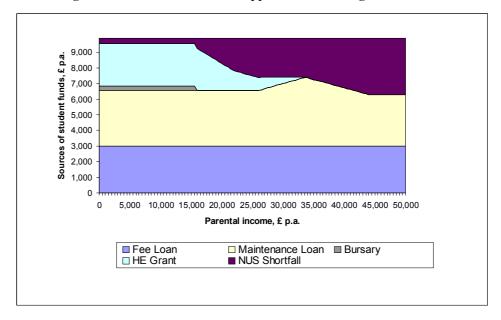


Figure 1: Non-London student support under the Higher Education Bill

It is clear from the figure that the support provided to students from the lowest income families should come close to providing the income required, if they take out their maximum loan entitlement. However, if debt aversion deters them from taking out any loans for fees, they could be £3,335 short of what they require. The level of the shortfall increases sharply with parental income above £15,970. Students from middle-income families can expect to be around £2,485 short each year if they take out all of the loans available to them. At levels of parental income above £44,000, the shortfall that would need to be met from non-government sources is £3,590 per year.

A second aspect of the debate has focused on the implications of the cost increases for individuals making their higher education choices and has stressed that individuals will be deterred from entering higher education in order to avoid accumulating 'large' debt levels. So just what are the repercussions of the government-sponsored debt for graduate net earnings?

First, the provisions for debt repayment are important to consider. The loans provided under the Higher Education Bill are 'income-contingent', in the sense that they are linked to ability to repay. Only upon earning £13,925 (in 2006-2007 prices), will the graduate start to make repayments. Further, the real interest rate is 0% and loans are written off after 25 years. These features make these loans very different from standard bank loans.

Second, the expected debt level is a central element in the financial circumstances of graduates. Debt repayments, similar to tax and national insurance (NI) payments, will be deducted at payroll. By how much can a graduate expect debt to add to their tax and NI contributions over the working lifetime? Consider a male graduate of a three-year degree who has borrowed his maximum loan entitlement throughout university, who will earn the median income for his age and education group over his working lifetime and who will take no career breaks. Depending on whether he is from a low-,

middle- or high-income family, his maximum government-sponsored debt levels on graduation will be £19,335, £21,440 or £18,665 respectively. On the basis of expected lifetime gross earnings of around £1.2 million (approximated using earnings and wage growth of current workers), he can expect to pay total tax and NI contributions of £330,000. So if he is from a low-income family, for example, the increase in his tax/NI payments is a relatively modest 5.9% (19,335  $\div$  330,000), spread as increasing payments over 19 years.

Thinking again about your decision as to whether or not to enter higher education, how might this be affected by the financing system just discussed? How does the government-sponsored debt package compare to the terms you might expect to obtain from a bank? Do you think that the increased fees might help universities to provide you with a better quality education? Perhaps most importantly, do the higher costs now mean that a university degree will no longer be worthwhile? As a forward-looking and rational economist who values the consumption as well as the investment benefits of going to university, surely not?