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Does the Fear of Debt Deter Students from Higher Education?

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Abstract

Concerns over the impact of debt on participation in higher education have dominated much of the debate surrounding the most recent reforms of financial support for full-time students in England, including the introduction of variable tuition fees. Yet few studies have attempted to explore this issue in a statistically robust manner. This article attempts to fill that gap. It examines the relationship between prospective HE students' attitudes to debt and their decisions about whether or not to enter HE. Using data derived from a survey of just under 2,000 prospective students, it shows how those from low social classes are more debt averse than those from other social classes, and are far more likely to be deterred from going to university because of their fear of debt, even after controlling for a wide range of other factors. The paper concludes that these findings pose a serious policy dilemma for the Westminster government. Their student funding policies are predicated on the accumulation of debt and thus are in danger of deterring the very students at the heart of their widening participation policies.

Key words: Higher education, student debt, student loans, student financial support, barriers to participation, widening participation

Introduction

Student funding policies in Britain are predicated on the accumulation of debt. Student loans, first introduced in 1990, became the key source of financial support for full-time higher education (HE) students following the 1998 Teaching and Higher Education Act. Similarly, the 2004 Higher Education Act relies on student loans as the mechanism for repaying, on graduation, the new variable tuition fees. So in 2006, students will take out loans to meet their living costs and their tuition fees.[1]

Student debt was a recurring theme in the lead up to the 2004 Higher Education Act, and during the Bill's second reading. Concern focused on the impact of student debt on access to HE and the Westminster government's desire to widen participation: now symbolised by their pledge to increase participation to 50 per cent of 18-30 year olds by 2010 (DfES, 2003). This paper addresses these issues, and in particular whether attitudes towards debt amongst prospective university entrants are linked to their decisions to enter higher education. It calls upon the findings from a survey, originally commissioned by Universities UK and the Higher Education Funding Council, of school leavers and further education students working toward an HE entry qualification.

This paper concentrates on the role of debt in students' HE entry decisions, and the unique contribution debt and perceptions of debt may play. However, it acknowledges Forsyth and Furlong's (2003a) observation that focusing on factors affecting whether or not a student enters HE, may mask other more subtle or 'hidden' disadvantages encountered by students from low income families. In particular, it may obscure those factors influencing their decisions about where and what to study. But, in policy terms, it is paramount that we have an understanding of what shapes prospective students' initial access to HE. This is because the government's target of 50 per cent participation, which is driving many of their HE polices, is concerned primarily with getting students through the HE door, and not with which, or what, HE door they enter.

By way of introduction, the paper charts the rise of student debt, the current government's views on student debt, and existing research on students' attitudes towards debt. It highlights the absence of studies in the UK that have systematically sought to examine the impact of debt on initial access to university. Next, the paper reports on the main findings from the survey and demonstrates how debt is a deterrent for would-be students from low social classes, but not for those from other classes. Finally, the paper considers some implications of the findings for policy.

Student funding policies and rising student debt

Student loans were first introduced throughout the UK in 1990. Yet loans did not become the main source of student financial support for students in England and Wales until the 1998 Teaching and Higher Education Act, when mandatory maintenance grants for

[1] With devolution, student funding arrangements vary within the UK. This article focuses on provision in England. The 1998 Act applies only to English and Welsh domicile students while the 2004 Act applies only to English domicile students. In Scotland since 2000, low-income students can receive bursaries, and instead of tuition fees, students contribute to a Graduate Endowment Fund on graduation. Wales similarly introduced bursaries for low-income students in 2002. At the time of writing the Scottish Executive and the Welsh Assembly were undecided about whether to introduce variable tuition fees. For a full exposition of the various student funding arrangements in the UK see Richards and Woodhall (forthcoming).

students' living costs were abolished and replaced exclusively with loans. The Act also changed the methods for repaying the loans on graduation. Repayment became more closely linked to graduates' incomes while pegging the interest rates to inflation remained unchanged. The Act also introduced means-tested tuition fees for the first time.

The 2004 Higher Education Act similarly relies on student loans as the mechanism for repaying, on graduation, variable tuition fees. All new English domicile students entering university in 2006 will pay these fees, irrespective of their means. In addition, loans for living costs will remain a central feature of student support. However, the value of these loans for maintenance will be reduced for those low-income students eligible for a new means-tested student grant, to be introduced initially in 2004.

The reforms of student funding since 1990 reflect broader moves in welfare policies towards individualisation, a more individualised concept of public interest, and away from collective provision. They have shifted the costs of going to university away from the state to students, and away from students' families to students themselves. By 2002/03, student loans and paid work were the most important sources of students' income while money from their families was far less significant (Callender and Wilkinson, 2003). In addition, more students were borrowing more money, from more diverse sources of credit, than ever before to fund their education.

With the phasing out of grants, more students are taking out student loans and borrowing larger sums of money for their living costs. Between 1995/6 and 1998/9 loan take-up rose from 59 per cent to 71 per cent, and by 2001/02 to 81 per cent. Between 1995/96 and 2002/03, the average size of the loan more than doubled from £1,252 to £3,130 (DfES, 2004). With their growing value, student loans also form a larger share of students' total income – nearly a half in 2002/3 compared with under a third in 1998/9 and a seventh in 1995/6 (Callender and Wilkinson, 2003; Callender and Kemp, 2000).

Student loans make up the majority of all students' borrowings. In 2002/03 student loans constituted 85 per cent of students' outstanding debt, up from 74 per cent in 1998/99.[2] Inevitably, with more students taking out loans and borrowing larger sums, student debt has escalated. Some 92 per cent of students graduating in 2003 anticipated leaving university with debts compared with 81 per cent in 1999 and 75 per cent in 1996. The average debt of students graduating in 2003 amounted to £8,666. This was two and half times more than the debts of those who graduated in 1998, and three and half times more than those who graduated in 1996 (Callender and Wilkinson, 2003; Callender and Kemp, 2000).

But debt is unequally distributed. Students who are poor before going to university are more likely to be in debt and to leave university with the largest debts, while better-off students are less likely to have debts and leave with the lowest debts. In 2003, students whose parental annual income was less than £20,480 owed an average of £9,708, and half owed more than £10,392. Students with parental incomes over £30,502 owed just £6,806. So on graduation, the poorest students were 43 per cent more in debt than the richest (Callender and Wilkinson, 2003).

[2] Thus, a lower proportion of students' total borrowings is now derived from commercial sources of credit and overdrafts but the average amount of money students borrow from these sources has risen threefold since 1998/99.

The government and debate on student debt

Concerns about student debt did not come onto the political agenda until Labour's second term of office. The Secretary of State for Education, David Blunkett linked access and participation to student finances, but never engaged with the issue of student debt (Blunkett, 2000). By the time Estelle Morris replaced Blunkett as Secretary of State, the political climate had changed. Tony Blair on 2nd October 2001 at the Labour Party conference declared *'We have to find a better way to combine state funding and student contributions'*. Two days later, Estelle Morris, when announcing a review of student support arrangements, talked explicitly about student debt and said:

> *'Four years ago we took the brave and right decision to expand higher education by changing the way we funded student support. However, it was clear during the General election that student debt was a major issue. I recognise that for many lower income families the fear of debt is a real worry and could act as a bar to higher education. I want to make sure that our future reform tackles this problem. Our aim is to get more children from less privileged backgrounds into higher education and we hope to better achieve this by changing the combination of family, student and state contributions.'* (DfES 2001)

The outcomes from this review were incorporated into the government's 2003 White Paper *The Future of Higher Education* (Cm 5735) and subsequently, the 2004 Higher Education Act.

Student debt, especially its impact on access and participation in higher education, was a recurring and prominent theme in the debates leading up to the 2004 Higher Education Act and during the Bill's second reading (Hansard, 27Jan 2004, Col 167-275). Indeed, just before the Bill was published, the Department for Education and Skills (DfES) issued a paper entitled *'Student loans and the question of debt'* (DfES, 2003) aimed at allaying the concerns of MPs and others.

In this DfES paper, the government acknowledges that once tuition fees are introduced, student debt will rise to an average of £15,000 by 2009/10 (which is probably a conservative estimate). However, it argues, that *'…debt need not be a significant deterrent'* (DfES, 2003 p 8) because higher education is a good investment, the costs of borrowing through the student loan system are reasonable, and student loan repayments are affordable. In other words, underpinning these policy arguments is capitalisation theory which is uncontextualised, and devoid of acknowledgement of the opportunities and constraints affecting investment decisions and the accrual of benefits. Moreover, the policy rhetoric focuses exclusively on HE as a private investment for private returns rather than as a public investment for public returns. In turn, this signals the onset of the decline in the public mission of HE with moves towards the marketisation of HE.

In addition, the document explicitly questions the notion of debt by putting the word – debt - in inverted commas, when it asks: 'Does student "debt" deter people from participating in higher education'?

The DfES paper goes on to admit that:

> *'… the Government does recognise that perception of debt is an issue. This will need to be addressed by ensuring that there is accurate and easily assessable information about the student support package and the loan repayment scheme. There are also specific groups for whom debt is more of an issue than students at large: students from poorer backgrounds, lone parents and ethnic minorities for example. The student support package has been designed with these groups in mind.'* (DfES, 2003, p 9)

The paper continues that '…*addressing issues of debt is just one way in which participation can be encouraged.'* Other steps need to be taken to encourage more young people from poorer backgrounds to go to university. *'The real deterrents lie elsewhere'*, and are associated with their lack of attainment and aspirations, and ambition to apply to universities *'…that are the best match for them.'* (DfES, 2003a, p 9)

The research evidence

What is the research evidence that debt or perceptions of debt may impact on the decision to enter HE? There is a considerable body of research that examines the complex factors affecting young people's access to higher education. Some of these studies highlight the importance of financial issues. They suggest that financial concerns play a major role in the decision making process of whether or not to enter higher education (Connor et al, 1999; Knowles, 2000; Connor et al, 2001; Davies and Williams 2001; NAO 2002; Nat West, 2003; Forsyth and Furlong, 2003; Archer et al, 2003), and that the '*overriding negative perception of going to university, for all the potential entrants, was its cost'* (Connor et al, 2001). Costs are often understood very broadly to include not only the direct costs of attending university, but also the opportunity costs in terms of lost earnings while at university (Connor et al, 2001).

Similarly, there is a consensus in this literature that prospective students from lower socio-economic backgrounds are more likely than those from better–off families to report they are deterred by the costs of HE (Woodrow, 1998; Watt, 1999; Woodrow, 1999; Connor et al, 1999; Connor et al 2001; Knowles 2000; Forsyth and Furlong, 2000 and 2003;), as are mature students in contrast to younger students (Connor et al, 1999; Connor et al, 2001; Ross et al, 2002). In addition, several of these studies cite fear of debt and the prospects of building up large debts, particularly student loan debt, as a deterrent to university entrance among qualified students, especially from low-socio-economic groups (Forsyth and Furlong, 2000; Connor et al, 2001; Archer et al, 2003; Forsyth and Furlong, 2003; Callender, 2003).

The cost of studying, however is not necessarily the main reason that potential entrants decide *against* going to university, but just one of many reasons. Costs and financial disadvantage are key barriers among a range of cultural, institutional, and dispositional factors that affect individuals' decisions to participate in post-compulsory education. Moreover, financial hurdles manifest themselves in a range of ways, not just in relation to initial access to higher education. Money matters variously affect; access, participation,

persistence, and attainment; and consequently have different effects.[3] In addition, it is recognised that students exhibit a complex web of attitudes towards money and employ a range of strategies for debt avoidance.

This paper, however, focuses on the role of debt in students' HE entry decisions rather than debt's impact on other aspects of students' behaviour and experiences because of enrolment rates are central to government HE policy, especially their 50 per cent participation target. A few of the qualitative studies cited above (e.g. Forsyth and Furlong, 2000) explore in depth prospective students' attitudes towards debt within this context and demonstrate its significance. But, inevitably given their methodological approach, they are unable to quantify, in statistical terms, debt's links with enrolment. Yet, enumerating this dynamic of debt's effect is important. When governments seek to develop evidence-based policy, as a generality, they place greater weight on quantitative data compared with qualitative data.

Yet, most of the large-scale quantitative studies treat debt in a superficial manner. They tend to rely on rather simplistic questions aimed at eliciting a wide range of potential barriers to HE participation so that debt is treated as just one of a variety of obstacles. These studies do not measure prospective students' wide ranging attitudes towards debt. Instead, they usually ask one-dimensional questions such as whether students are worried about debt or whether debts puts them off university. Nor do they examine whether debt aversion plays a unique deterrence role, after taking into account many other reasons why people may opt out of going to university.

A number of studies have considered current HE students' perceptions of towards debt, but by definition they contribute little to the overall question about its deterrent effects on university entry. However, they can give us some insights into students' borrowing behaviour and by inference, which student groups (and potential students) may be debt averse.

These studies found a consensus among existing students that debt deters others from entering higher education (Callender and Kemp, 2000; NUS, 1998; Hesketh, 1999), especially those from poorer families and those who are non-traditional students (Marks, 2001). A regular survey of students at one university shows that the proportion agreeing that student loans may put off some from entering higher education has fluctuated over time but rose dramatically following the introduction of the 1998 Teaching and Higher Education Act (Shorley et al, 2001).

Other studies suggest that students respond differently to debt and those with similar incomes but divergent characteristics may adopt different attitudes towards their financial affairs and debt (Hesketh, 1999; Scott et al, 2001). For instance, Hesketh's small-scale study of existing students conducted in the early 1990s, found that the majority were largely confident in their money matters, particularly middle class students because they had the necessary resources to survive. More importantly, they could secure additional funds if required. Less confident students were predominantly working class. They had less money and were less confident that they could secure the resources needed – both

[3] These issues are the focus of another paper – see Callender (forthcoming) The impact of tuition fees and financial assistance on access to HE in England in Johnstone et al *Cost-sharing and accessibility with respect to HE in mature economies*, Kluwer

because they were suffering from shortfalls in the assessed contribution from their families, but also because they were reluctant to take out loans, primarily because of a negative family attitude towards debt. The most anxious students were those that through financial necessity had taken out loans, but had not come to terms with the debt they had incurred.

There has been a steady rise in student loan take-up, although take-up rates remain uneven among certain student groups. Take-up is also associated with the use of other forms of credit. Indeed, Scott and Lewis (2001) found that the only significant factor predicting students' acceptability of credit and debt was student loans. Callender and Kemp (2000) found that students with loans were significantly more likely than those without them to have other commercial credit commitments of over £500, even after controlling for various factors. Similarly, Callender and Wilkinson (2003) showed that in 2002/03 72 per cent of students with loans also had other forms of commercial credit compared with only 46 per cent of students without loans. Moreover, the proportion of students relying on commercial credit had risen since 1998/99, as had the average amount they borrowed from these sources. And like other studies on the use of credit cards (Pahl, 1999), there were gender differences with men being more likely to use credit cards and borrowing more money.

Such changes signal a transformation in students' behaviour, and suggest changing attitudes towards debt. However, it is impossible to ascertain whether these trends (and students' increasing use of commercial credit), reflect broader changes in society's attitudes towards credit and debt, especially among young people, or result from other factors such as the reform of student funding arrangements. Evidence does suggest that students are more resigned to student loans (Barclays, 2002), but their attitudes towards the student loan system, and student loans in principle, are becoming more negative (Shorley et al, 2001).

None of these studies, however, allow us to estimate exactly how many or what proportion of potential students have opted out of HE because of debt. None of them systematically examine the impact of debt on access to HE. In fact, there are no comprehensive studies in the UK that do this in a methodologically robust way, controlling for demographics, a general orientation towards the benefits of going to university, encouragement received from family and friends, and other factors. Ideally, such a study would be longitudinal, tracking individuals over time. It would need to compare those entering HE with those who do not. It also would require detailed information on their attitudes to debt, as well as data on their financial circumstances.

The absence of suitable data sets to conduct such studies means that it is not possible to reach any firm conclusions about the impact of debt on prospective students' actual *behaviour*, choices, and decision-making. However, it is possible to explore potential students' *attitudes* toward debt from cross-sectional studies, although few studies have attempted this. Yet, the relationship between attitudes towards debt, and actual debt, is not clear. We cannot assume that attitudes towards debt affect borrowing behaviour. Both cognitive dissonance theory (Festinger, 1962) and self-perception theory (Bem, 1972) suggest that if people must acquire debt, they will adjust their attitudes so that they accept debt.

The gaps in the existing research prompted this new study. It is not the ideal, longitudinal study. But, unlike other pieces of empirical work, it focuses explicitly on

prospective students, and specifically explores the relationship between their attitudes to debt and their decisions about whether or not to enter HE. And significantly, unlike other studies, it quantifies the probability of prospective students opting out of HE because of their attitudes to debt. The full findings of the study are described elsewhere (Callender, 2003). Here we concentrate in more detail on the issue of debt and access to HE.

Method

This survey of prospective HE students – final-year students in Further Education Colleges (FE) and in school sixth forms, studying for qualifications that allow entry to HE – was conducted on a stratified random sample of schools and colleges in 2002. Data were collected using in-class self-completion questionnaires, handed out to pupils by teachers. There were two response rates: one by institution and one by student. On the first, 101 institutions (at 101 sampling points) agreed to take part with 82 (81 per cent) returning completed questionnaires. On the second, 1,954 out of 3,582 sent questionnaires were returned completed, yielding a 55 per cent response rate. Final data were weighted to the national profile of students by establishment type and qualification taken. For more details of the methodology see Appendix I of Callender (2003).

The sample

The majority of respondents fell into the following separate categories: female (59 per cent); under the age of 25 (94 per cent); white (81 per cent); single (91 per cent); and, childless (95 per cent). Just over half (55 per cent) came from families in the top three social class while just over a quarter were from the lower three social classes. Two-thirds of all respondents were studying in the FE sector, which included general FE colleges and sixth form colleges. This left just over a quarter of all those surveyed attending state secondary schools, and less than one in ten attending private schools. Of the qualifications being pursued, nearly half of all respondents were taking A- or A/S-levels or Scottish Highers; most of the rest were studying for some type of Level 3 vocational qualification. Just under two in five of those studying A-levels anticipated getting high grades (BBC+). In addition, nearly three-quarters had decided to enter HE and had already or intended to apply for a place. A further 12 per cent were still undecided. This left 15 per cent who had decided not to enter HE.

Table 1 shows considerable variation between respondents depending on the type of educational institution they attended. While the majority of those attending both state schools and in FE colleges were women, most of the pupils at independent schools were men. The age distribution of school leavers in both the public and private sector was similar – all were aged under 25; nearly all were single and childless. However, a sixth of FE students were over 25 and around one in ten had a partner and/or children.

INSERT TABLE ONE ABOUT HERE

One of the biggest differences between respondents at the different types of educational institution was their social class composition. Pupils at independent schools were far more likely to come from families where the chief earner was in a managerial or professional occupation. Nearly two-thirds were from such families – double the proportion in the FE sector. In addition, nearly 90 per cent of pupils at independent schools came from families in the top three social classes, compared with close to 60 per cent attending state schools and a half studying in the FE sector. Those studying in the private sector came from the wealthiest families; those in FE were from the poorest families.

Respondents' qualification, expected A-level grades and HE entry decision, all of which were interlinked, were also associated with the type of educational institution they attended. Thus, all independent school pupils were taking A-levels, nearly three-quarters expected high grades, and most had decided to go on to university. By contrast, the majority of FE students were taking vocational qualifications, only a quarter were taking A-levels, and less than a quarter of them anticipated getting high scores. In contrast to independent school pupils, just over two-thirds of FE students had decided to go to university.

Measuring debt attitudes

As suggested, qualitative studies have highlighted students' complex web of attitudes towards money and strategies for debt avoidance in relation to participation in general (e.g. Forsyth and Furlong, 2000 and 2003). However, neither these studies nor any quantitative studies have singled out students' attitudes towards debt *per se,* and attempted to quantify their impact on HE entry. The quantitative studies adopt simplistic measures of debt, which do not capture how students feel about debt and what it means to them. In our measures of debt, we try to tap deeply held beliefs about debt and money management in general, using validated indicators.[4]

Two aspects of attitudes toward debt were measured: general levels of debt aversion and a more specific cost/benefit balance judgement concerning university. In order to gauge general debt aversion, students were asked the extent to which they agreed or disagreed with three attitude statements: 'Owing money is basically wrong'; 'There is no excuse for borrowing money'; and, 'You should always save up first before buying something'. Exploratory factor analysis was used to calculate factor scores on these three items, creating one variable that reflected students' levels of debt aversion or tolerance (see Table 2).

INSERT TABLE TWO ABOUT HERE

The same procedure generated a second variable: the perceived balance of the costs and benefits of going to university (see Table 2). This was measured by asking respondents to agree or disagree to four attitude statements: 'Borrowing money to pay for a university education is a good investment'; 'Student loans are a good thing because they allow students to enjoy university life'; 'Students do not worry about their debts while at university because they will get well-paid jobs when they graduate'; and, 'It is not worth getting in debt just so you can get a degree' (recoded). Together, these measures solicited from prospective students some kind of balance of their perceptions of the debts they might accrue against their attitudes towards the short-term and long-term benefits of HE.

Results

Was social class related to attitudes toward debt?

The social class measure collapsed a six-level variable – a variant of the UK's Office of National Statistics' Social Economic Class schema – into three categories. Those assigned to the lower-income group were from a family where the main earner in the

[4] The indicators used were derived from Davies and Lea (1995) and Lea, Webley and Bellamy (2001) who have validated them.

household was in a semi-routine or routine profession, or had never worked, or was in long-term unemployment. The medium class group was comprised of those where the chief earner was in an intermediate or lower-supervisory/ technical occupation or was a small employer or own account worker. The upper class group contained those where the main earner was in managerial or professional employment.[5]

There were statistically significant differences in the attitudes toward debt (both debt aversion and the cost/benefit balance) between social classes. Those from the lower-income group were more debt averse than those in the middle and upper classes ($p<.0005$; $F_{2,1439} =9.748$). Similarly, those from the lower-income group saw a more negative balance between the costs and benefit of going to university (e.g. the costs loomed comparatively larger than the gains) than those in the middle and upper class groups ($p=.003$; $F_{2,1408} =5.738$).

But it was important to control for other factors while considering such difference, thus identifying the unique contribution of attitudes toward debt. Table 3 shows that the lower-income group was more debt averse than the other groups, even after holding constant the type of educational institution they attended (e.g. state school, Further Education College), gender, ethnicity and age.

INSERT TABLE THREE ABOUT HERE

In contrast, the class effect on the cost/benefit balance was not statistically significant once one added other explanatory variables into the regression model (not shown here for reasons of space). These additional explanatory variables were educational institution, gender, ethnicity and age – as with debt aversion (Table 3). But also included were four factors that represented a general orientation towards university: perceptions of the effect of university on the future career, the importance of going to university as a social and lifestyle experience, the degree of encouragement received from family and friends, and a general sense of what university is actually like[6].

Who is opting in and who is opting out?
Table 4 shows the percentages of those from key sub-groups who have applied/are intending to apply to university; who have decided not to apply; or are unsure. It is striking that the vast majority of those going to an Independent school were opting in to HE. Other groups most likely to apply were those from the higher social class, non-White, over 21, studying for A/AS-levels/Scottish Highers and an Access course, and those A-level students with higher expected grades.

INSERT TABLE FOUR ABOUT HERE

[5] Of course, the social class categories should not be seen as strictly hierarchically ordered, nor should they be seen as reflecting mutual exclusivity in terms of bands of income or other criteria. There may be significant overlap on many of the criteria that determine social class between individuals in each of the groups – groups that John Goldthorpe prefers to call the 'working class', the 'intermediate class' and the 'salariat' (personal communication, 2004).

[6] These factors were included in this OLS regression, and not in the OLS regression for debt aversion, because the cost/benefit balance involved some assessment of the benefits of University balanced against the financial costs. It may be that the difference in this cost/benefit balance across the social classes was merely to do with differential assessments of solely the benefits of University. Controlling for these factors allowed one to isolate the unique contribution of perceived benefits balanced against perceived costs.

Debt aversion, class and HE entry

The next step was to examine whether debt aversion and social class predicted the decision to apply to university. Table 5 presents the results of two logistic regression models estimated on the entire sample. Model I included as explanatory variables: debt aversion, socio-economic factors and educational achievement. Model II added the four variables that comprised the general orientation towards university.

INSERT TABLE FIVE ABOUT HERE

Model I shows that both types of attitudes toward debt were important, even after controlling for educational achievement[7]. The *exp*(*B*) for debt aversion of 1.230 indicated that for every one unit increase (meaning the respondent was getting less debt averse); the odds of applying to university were multiplied by 1.230, or increased by 23%. Other important factors were: social class, ethnicity, age and whether the mother has been to university.

But more than this, debt aversion survived the introduction of a broader orientation toward going to university (Model II). This was important. One might argue that attitudes toward debt were part of a cluster of overlapping factors related to HE entry: (a) class, (b) educational achievement, and (c) positive attitudes to the benefits and experience of going to university, and receiving encouragement from family and friends to apply. If we did not include all these in the regression model then it might be that debt attitudes somehow 'swallowed up' the variance, or acted as a proxy for these other factors. Yet debt attitudes remained statistically significant even after controlling for these other explanatory variables. This substantially increased our confidence in the finding that debt aversion was a deterrent factor, at least when testing the model on the entire sample.

Model II also showed that the cost/benefit balance was no longer statistically significant once one controlled for factors such as perceptions of the benefits of going to university, the degree of encouragement received from family and friends to apply, and having a good or bad sense of what university was actually like. As such, attitudes towards the positive aspects of university were more important in deciding to apply than the balancing of benefits against financial costs.

Overall then, debt aversion had a significant impact on HE entry, looking across the full sample. Holding everything else constant, the most debt tolerant individual in our sample was just over five times more likely to apply to university than the most debt averse individual[8]. The cost/benefit balance remained important until one included all the other explanatory factors, upon which the effect lost its statistical significance.

Was debt aversion a greater deterrent to those from lower-income households?

[7] This was a summary of the predicted grade data for A level and Scottish Higher students. The students who were not taking A levels or Scottish Highers were given a zero in the predicted grade variable that would otherwise range from 1 (1-199, less than EEE) to 8 (360+, or AAA+). Two dummy variables were also included, which indicated whether students were working towards AS levels or 'other qualification'. Thus, we can see the effect of type of qualification, comparing the effect of doing either AS levels or an 'other' qualification to being either an A level or Scottish Higher student with zero expected grades (Table 1).

[8] The range for the debt aversion variable was 4. Multiplying the beta coefficient of 0.407 (from Model II) by 4 and taking the exponential gave a figure of 5.09. The odds of moving from the minimum (the most debt averse) to the maximum (the most debt tolerant) were thus multiplied by 5, holding all other factors constant.

So far we have shown that, on average, debt aversion was a deterrent to applying to university. We have also shown that those in the lower-income group were more debt averse than those in the middle and upper classes. However, it may be that our analysis of the whole sample masked variability among particular sub-groups; it may be that the effect of attitudes toward debt on HE access was different according to social class.

To address this issue we introduced interaction terms into the logistic regression models, estimating whether class moderated the impact of attitudes towards debt on HE entry. Table 6 presents the parameter estimates of two logistic regression models. The lower-income group was the referent category for both models.

Starting with Model I, debt aversion had a statistically significant effect on HE entry among those in the lower-income group (see the main effect). But this was not the case for those in the middle class group. There was a statistically significant interaction between debt aversion and membership of this category (the beta coefficient of -.494 balancing out the .423 for the main effect). For the higher social class, the interaction term was not statistically significant, although the beta coefficient of -.067 meant the effect was a little weaker than in the case of the lower-income group.

INSERT TABLE SIX ABOUT HERE

We then included the full set of explanatory variables into the model. Here, the effect of debt aversion for the lower social class group was even stronger (Model II from Table 6). The interaction term for the middle-class group remained statistically significant, while the interaction term was very close to significance for the upper-class group.

Overall then, debt aversion was a factor for those from the lower income group, but not for those from the middle-class. The effect was on the cusp of statistical significance for the upper-class group.

But what about the more specific attitudes toward the debt: the balance of perceived cost against perceived benefit? Among the lower income group, the cost/benefit balance was not a statistically significant predictor in Model I or Model II (Table 6). In addition, the interactions between the cost/benefit balance and middle and higher social class membership were not statistically significant; while the beta coefficients of the interaction terms indicated that the effect increased with a movement from the lower class to the medium and (particularly) the higher class, we did not have enough evidence to say this was something other than sampling variation.

Testing the models for each social class group

We then tested the models for each social class group individually. While this was a largely exploratory approach, it was to some degree illustrative because it provided a summary of the various factors that were important for each group. The parameter estimates are not included here for space reasons.

For the lower-income group, the following factors were important: ethnicity, age, debt aversion, perceptions of the effect of going to university on future earnings, receiving encouragement from family and friends and knowing what university is like. Educational achievement was statistically significant in Model II.

For the middle-class group, the following factors were important: going to a state school, ethnicity, age, educational achievement, perceptions of the effect of university on future earnings and encouragement received from family and friends.

For the upper-class group, the following factors were important: the effect of going to university on future earnings and encouragement received from family and friends. In Model I age and the cost/benefit balance were also important. In Model II ethnicity was, but age and the cost/benefit balance were not. Nor was debt aversion – the interaction effect was on the cusp of statistical significance (Table 6) so one could conclude that debt aversion had a very weak deterrent effect, if any, for this group.

Testing the model on the A-level students

So far we have seen that debt aversion was an important factor only for those from lower-income homes, and the jury is out for the upper class (Table7). The cost/benefit balance was significant for those from the middle and upper class in simpler models but it did not survive the introduction of the full range of explanatory factors into the model. Thus far, debt aversion had a deterrent factor, but there was only good evidence for this among those from lower-income families.

But it was important to test the models on one more sub-group – this time the A-level students. Recall that the measure of educational achievement comprised predicted A-level grades (with those not pursuing these qualifications set at a base-level of zero). Consequently, full information for this important control variable was only available for the A-level student group.

Table 7 shows that, among A-level students, neither debt aversion nor cost/benefit balance was statistically significant in Model II, and indeed debt aversion was not in Model I. In fact, testing the bivariate relationship indicated that debt aversion was not statistically significant among this group. So, when considering A-level students, where we could more satisfactorily control for educational achievement, debt aversion did not have a deterrent effect on HE entry.

INSERT TABLE SEVEN ABOUT HERE

However, might it be that A-level students had, on average, a different socio-economic composition to those not taking these qualifications? Put another way, were there more middle- and upper-class students in the A-level sub-sample? Recall that debt aversion was only an issue for those from lower-income families. Might it be that there were simply too few such individuals taking A-levels?

Table 8 shows that the two groups were indeed different, in terms of social class, type of educational institution being attended, whether their mother had gone to university, and whether they were intending to apply to university. There were only 84 A-level students from the lower-income group compared to 200 in the middle-class group and 332 in the upper-class group. So when we tested the model on this sub-group, we were mostly focusing on individuals from the middle and upper classes. This might explain why debt aversion was a factor for the entire sample (Table 5) but not for the A-level students (Table 7).

INSERT TABLE EIGHT ABOUT HERE

We also tested a simple interaction effect model containing class, debt aversion and the cost/benefit balance (Table 9). Neither debt aversion nor the cost/benefit balance was a statistically significant predictor of applying to university for *any* class. This was interesting. It was not that the introduction of educational achievement into the model made the difference, now that we could mobilize this control variable more effectively. Rather debt aversion was not a factor even at the bivariate level for this group. When we could control for educational achievement most efficiently we found that it was not necessary to do so: debt aversion was not an important predictor in the first place.

INSERT TABLE NINE ABOUT HERE

But again we must go back to the small number of A-level students from the lower-income group; there were only 84 A-level students from low-income families, with only 11 who had decided not to apply to university. While the partial regression coefficient was not statistically significant, the point estimate of 0.309 (Table 9) was close to the effect size when looking at the same effect for the whole sample (0.423 – see Table 6). Standard errors increase simply as a function of an increase in sample size; it was possible, even probable, that the small *n* was simply not large enough to adequately detect an effect in the population.

Where did that leave us?
On the one hand debt aversion was a factor among those from a lower-income group not taking A-levels. On the other hand it seemed not be a factor among those from a lower-income group who were taking A-levels. Yet each had a caveat. We could not control for educational achievement as well as we hoped for those not taking A-levels. For those who were taking A-levels we had a very small sample size for people from lower-income families.

Perhaps the wisest conclusion is that we simply cannot say whether the small sample size was the reason why the effect of debt aversion among A-level students from the lower-income group was not statistically significant. Certainly no firm inferences should be made one way or the other about whether the effect holds in the population of A-level students. Moreover, we cannot say whether the failure to control for educational achievement was the reason why debt aversion had found to have a deterrent effect among those from lower-income families among students not studying for A-levels.

However, the findings did point towards a deterrent effect for debt aversion among those from lower-income families not taking A-levels. We cannot say the same thing for those studying for A-levels.

Discussion and conclusion

Our findings suggest that debt aversion is a class issue. Students from poorer backgrounds are more debt averse than those from other social classes. Among those studying for vocational qualifications such as NVQs, GNVQs, SVQ Level 3s and AVCEs debt seems a deterrence to HE. But this is only for those from lower-income families. It is a deterrence even after controlling for their aspirations and career/work objectives, the amount of encouragement they receive from their family and friends, and a whole host of other socio-demographic variables. As such, debt aversion cannot be subsumed within class-related predispositions toward HE.

This finding has important implications for the Westminster government's widening participation policies. Only around 45 per cent of young people with Level 3 vocational qualifications go on to university by the age of 21 compared with a 90 per cent entry rate among those with A levels (Corney, 2004). Thus there is considerable scope for increasing HE participation among the former, unlike the latter. They are a pool of HE entrants frequently overlooked but tend to come from lower-socio economic groups than A level students. Therefore, focusing on vocational students, could help the government to achieve its target of 50 per cent participation and to widen rather than just increase participation.

More research is needed in order to more adequately control for educational achievement. This study was hampered because the only data available were predicted A-level grades, and there was only a small number of A-level students from lower-income families. We simply were not able to assess whether debt aversion had a deterrent effect for those from poorer backgrounds studying for these qualifications.

And of course, the ways people approach, make sense of and manage debt is complex and multifarious. Elsewhere, for example, we show that debt aversion was a factor in prospective students' decisions regarding their choice of university. It was an important factor among low-income students for picking a university where the cost of living were lower; was near their home; and where the prospects of term-time employment were good. It may be that conceptualising attitudes toward debt in a different manner may alter the findings, but we think our study offers a valuable baseline on the top-line aspects of debt aversion.

Working class students are more likely than their more affluent peers to leave school early, and so lack the qualifications required for university entrance. Even, when they do remain in post-compulsory education, they are still less likely to take A Levels -the 'gold standard' HE entry qualification - and to do well in them. Thus, attainment and ability are seen as the most important factors determining HE access and are central to increasing and widening participation (HEFCE, 2001). However, these differences in staying on rates and attainment, in turn, are associated with disadvantage. Hence, as Forsyth and Furlong (2000) have suggested, when analysing access to university, there is a need to distinguish between the factors that qualify young people for higher education, and those that predispose them to attend.

And, as this study has also shown, educational ability is only part of the story. Similarly, raising achievement levels is only a partial answer to the access challenge. Neither are the only factors influencing participation, as suggested by the government and other commentators. All the respondents in the study were in their final year working towards an HE qualification, either at school or at a FE College. It is unlikely, therefore, that HE was a non-choice, an option that lay outside their normal social landscapes. For most, HE was a choice and something they had to decide upon, even if this meant refusal and rejection. And a key factor associated with low-income students' rejection of HE was debt aversion, irrespective of their academic ability and a range of other attitudes toward HE. Using Forsyth and Furlong's distinction – their concerns about debt did not predispose them to enrol in HE. Thus, debt aversion cannot be wished away by policy makers: it is not "just a trite way of saying that people do not like borrowing" (Schwartz, 2003). It is a '*real deterrent*', and is just as real as students' attainment and aspirations.

The Westminster government also maintains that student debt need not be a deterrent because HE is a good investment while the costs of borrowing through student loans are reasonable, and the repayments affordable. In other words, it justifies student loans, and the ensuing debt, by calling upon arguments about the social and economic returns of higher education. It is assumed that students are willing to take out student loans, and to accumulate debts, because they know they will benefit financially and personally from going to university. In addition, it is presumed that students will be able to afford to pay off their loans because of their enhanced human capital. Moreover, the income contingent nature of loan repayments acts as a safety net for those with low earnings who are unable to meet their repayments. It is supposed that students will view student loans as a type of long-term investment in their future with minimal financial risks.

Clearly, not all the prospective students in our study were convinced by such ideas and arguments. We have to look to other studies as to why this was the case. Certainly, the social context within which individuals view debt and make such cost/benefit calculations are very important in a socially divided society. One such context is the accumulating evidence suggests that with rising student debt, entering higher education is an increasingly risky investment decision for low-income students. Even when such students do take this risk, they are more likely than their more affluent peers to experience financial difficulties while studying (Callender and Kemp, 2000; Unite/Mori, 2004), which affects their academic performance and achievement (Van Dyke et al, forthcoming) as well as the chances of completing their courses successfully (Yorke, 2003; Archer et al, 2003). They also can expect higher than average debts on graduation (Callender and Wilkinson, 2003) but lower than average wages (Naylor et al, 2001). Indeed, failure, non-completion, financial hardship and high levels of debt are inversely related to both social class and the risks involved. The greater the risks and the higher the debt, the lower the rates of return on HE – a reality totally contrary to market theory. Hence, contrary to the government's stance, it could be argued that the fear of debt exhibited by the low-income prospective students in our study was rational. Indeed, we are now asking them to borrow more money than their parents may earn in a year.

What next?

The challenge is to move from a model of student funding that acts as a disincentive to entry, to one that is neutral in effect, or acts as an incentive, especially for under-represented groups who are debt averse. To achieve this, the policies have to be designed to acknowledge the differential impact of different funding tools on diverse income groups. The outcome of a particular policy approach, and the extent to which it has a positive, negative, or neutral impact depends on the funding mechanism, and the targeted socio-economic group. As research in the United States demonstrates, student loans have a negative/disincentive impact on the enrolment of low-income groups because of concomitant student debt, but a neutral one on mid to high-income groups. By contrast, grants have a positive outcome on the enrolment of low-income groups, and a neutral outcome for mid to high-income groups. And tuition fees have a disincentive effect on the poor and middle-income students but no impact on high-income students (St John, 1990; McPherson and Shapiro, 1991 and 1998; St John and Starkey, 1995, Heller, 1997 and 2001).

An incentive approach to student financial support could attract prospective HE students currently excluded by the funding policies. Such policies already exist in the student financial support system for instance, in areas experiencing labour shortages such as

teaching and those allied to medicine. The idea that student funding should be an incentive, lies at the heart of Educational Maintenance Allowances (EMAs), available to 16-18 year olds. EMAs were designed specifically to change student behaviour, and to act as a financial incentive to improve initial access, retention, and achievement levels and have successfully raised participation rates in post-16 education (Ashworth et al, 2001; Middleton et al, 2004). These policies are yet other examples where market principles come into play. But here, market incentives have been used for public purposes, ensuring that FE serves the public good. They are in marked contrast to the rhetoric of private investment and private returns.

To what extent do the provisions of the 2004 Higher Education Act meet this overall challenge? Inevitably, one can only speculate about their potential impact. The new means-tested grants of up £2,700 to be introduced once variable tuition fees are charged, go a long way. They are a very welcome development. Their value has increased from £1,000 since they were initially announced in the 2003 White Paper, partly because the fee remission for low-income students has been converted into an up-front grant. Consequently, in future all students will have to pay fees, irrespective of their means.

Students from families with residual household incomes of £15,210 will receive the full grant, and those whose family income is less than £33,000 will get a partial grant (DfES, 2003). According to the government, around 30 per cent of all students will receive the full grant. However, a far smaller proportion of school leavers will receive the full amount. Data from the Family Resources Survey shows that only 18 per cent of families with a dependent child aged 16-18 have incomes below £15,000 per annum. Moreover, young people receiving EMAs will not be automatically eligible for the new grant because the income thresholds for the two grants are different. A missed opportunity, which detracts from a simplified student funding system.

At the time of writing, the finer details of these grants were unavailable and any discussion of their potential impact is only conjecture. The new grants are aimed to ensure that low-income students who opt for a university/course charging the maximum fee is no worse off than they are now. So for some students, the grant will be given by one hand and taken away by another. How much students benefit, will depend on a variety of factors including their choice of university. It is impossible to tell whether the level of the new grant is high enough to overcome prospective students' fear of debt. Even if they receive a grant, students will still take out loans for living costs and thus even the poorest will incur some debt.

In addition, some students may be eligible for bursaries on top of their grants. All universities charging the maximum tuition fee will have to give low-income students a minimum of £300. Over and above this minimum, universities will have considerable freedom to be innovative and creative in what financial support they offer. The strength of bursaries is also their greatest potential weakness. They are discretionary, rather than an entitlement. Each university will decide who to give bursaries to, and how much to give. There will be no standardised eligibility criteria, nor a standardised formula for calculating their value. It is unclear what mechanisms, if any, will be introduced to ensure that the aid is distributed fairly and transparently. Evidence from current discretionary student funding shows there are inconsistencies and inequities in how funds are allocated to students in similar circumstances with similar financial needs, but attending different universities. While other evidence from the United States demonstrates that the

key beneficiaries of bursaries are middle and upper income students, not those from low-income families (Heller and Marin, 2002). Inevitably, they will lead to a more complicated student funding system, which in turn, can act as a barrier to participation. Bursaries will be a lottery.

As a recent article has commented:

"*There are a plethora of variables that universities are contending with to set the bursaries, at the heart of which lie two apparently incompatible imperatives: social responsibility and market forces. Among the questions institutions are grappling with are: do universities give lots of little bursaries or a few big ones and what effect will that have on the market? Do you give them exclusively to the needy, or do you use them as a sweetener to entice students on to less popular courses? If you give only to the needy, is there a danger that some courses will fold*?" (Curtis, 2004)

The extent to which student debt rises or falls in the future will depend largely on students' choice of university and the amount of tuition fees they have to pay. This too is likely to affect the balance between the costs and benefits of HE. In our study, undertaken before the introduction of variable fees, the benefits of HE outweighed the costs for students from middle and higher class families. Once the costs of HE rise substantially for these students, their assessment of the relative costs and benefits of HE may change too. Financial considerations and concerns about debt may, in future, influence the HE decisions, choices, and behaviour of a wider range of students than they do now, especially if the dominant rhetoric about HE remains market driven, and there is a retreat from HE's public mission. Ultimately, more dramatic changes, outside the remit of the 2004 Higher Education Act, are required to alter radically who goes to university in England. Until that happens, universities will remain the preserve of the middle classes.

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Table 1. Sample characteristics (percentages)

CHARACTERISTIC	State school	Independent school	FE sector	All
GENDER				
Male	38	58	40	41
Female	62	42	60	59
AGE				
< 25	100	100	84	94
>= 25			16	6
ETHNIC ORIGIN				
White	80	83	81	81
Non-white	20	17	19	19
SOCIAL CLASS				
Managerial and professional	38	63	31	35
Intermediate	5	2	7	6
Small employer	15	21	13	14
Lower supervisory and technical	8	1	11	9
Semi-routine and routine	10	1	15	13
Never worked/Long-term unemployed	5	2	5	4
Missing	19	10	18	18
MARITAL STATUS				
Single	95	96	89	91
Married/co-habiting	1	1	6	5
Widowed/separated/divorced	0	1	2	1
Not stated	4	3	3	3
FAMILY TYPE				
Single, childless	99	99	90	93
Couple, childless	1	1	2	2
Single, living with children	0	0	3	2
Couple, living with children	0	0	5	3
TYPE OF EDUCATION INSTITUTION				
State secondary school	100	0	0	27
Independent school	0	100	0	7
FE college (inc. sixth form colleges)	0	0	100	66
QUALIFICATION AIM				
A/AS-levels/Scottish Highers	87	100	25	48
NVQ/GNVQ/SVQ Level 3/AVCEs	13	0	64	43
Access course	0	0	5	3
Other FE qualification	0	0	6	5
DECISION ABOUT ENTERING HE				
Applied/intend to apply	78	98	68	73
Undecided	11	1	14	12
Decided not to go	11	1	18	15
EXPECTED A-LEVEL/HIGHERS GRADE				
=>280 (BBC+)	37	72	28	39
1-279 (<BBC)	37	16	45	37
Not stated	24	12	27	24
N (weighted)	528	137	1,288	1,953

Table 2. Ordinary Least Squares regression model predicting debt aversion (N=1,390; 472 missing)

Variables	B	Std. Error	*p*
(Constant)	-0.410	0.097	<0.0005
SOCIAL CLASS – reference LOW			
Medium	0.148	0.057	0.010
High	0.201	0.057	<0.0005
TYPE OF INSTITUTION ATTENDED – reference FE SECTOR			
Independent school	0.186	0.081	0.023
State school	0.120	0.048	0.013
GENDER – reference MALE			
Female	0.077	0.043	0.072
ETHNICITY – reference NON-WHITE			
White	0.227	0.059	<0.0005
AGE – reference OVER 21			
Under 21	0.061	0.077	0.428

R^2=0.035; F=7.132, df=7, p<0.0005

Table 3. Exploratory Factor Analysis models predicting debt aversion and cost/benefit balance
(N=1,390; 472 missing)

Variables	Factor loading
Debt aversion*	
Owing money is basically wrong	.620
There is no excuse for borrowing money	.608
You should always save up first before buying something	.573
Cost/benefit balance of going to University**	
Borrowing money to pay for a university education is a good investment	.755
Student loans are a good thing because it allows students to enjoy university life	.501
Students do not worry about their debts while at University because they will get well-paid jobs when they graduate	.340
It is not worth getting in debt just so you can get a degree (recoded)	.459

*Debt aversion: one factor solution, accounted for 36% of the variance
**Cost/benefit balance: one factor solution, accounted for 29% of the variance

Table 4. Decisions about HE (percentages)

CHARACTERISTIC	Opting in	Opting out	Undecided
SOCIAL CLASS			
Low	70	19	12
Medium	68	17	15
High	80	11	9
TYPE OF INSTITUTION ATTENDED			
State school	78	10	12
Independent school	98	1	1
Sixth form college	75	6	19
FE sector	67	20	13
GENDER			
Male	72	19	9
Female	73	12	15
ETHNICITY			
Non-White	90	3	7
White	69	17	14
AGE			
Over 21	81	14	5
Under 21	72	15	13
QUALIFICATION AIM			
A/AS-levels/Scottish Highers	86	6	7
NVQ/GNVQ/SVQ Level 3/AVCEs	59	24	16
Access course	93	2	5
Other FE qualification	59	18	23
EXPECTED A-LEVEL/HIGHERS GRADE			
360+ (AAA+)	99	1	0
320 - 359 (ABB+)	94	4	2
280 - 319 (BBC+)	96	3	1
240 - 279 (CCC+)	90	3	7
200 - 239 (CDD+)	79	9	13
160 - 199 (DDE+)	70	17	13
120 - 159 (EEE+)	86	7	7
1 - 119 (less than EEE)	79	13	8
N (weighted)	1,348	273	228

Table 5. Logistic regression models for HE participation
(Model I: N=1,104; 758 missing; Model II: N=1,021; 841 missing)

	Model I				Model II			
Variables	**B**	**Std. Error**	***p***	**Exp(B)**	**B**	**Std. Error**	***p***	**Exp(B)**
(Constant)	4.405	0.627	<0.0005	81.890	6.983	0.993	<0.0005	1077.823
SOCIAL CLASS – reference LOW								
Medium	-0.755	0.214	<0.0005	0.470	-0.735	0.257	0.004	0.479
High	-1.065	0.192	<0.0005	0.345	-1.075	0.223	<0.0005	0.341
TYPE OF INSTITUTION ATTENDED – reference FE SECTOR								
Independent school	2.093	1.237	0.091	8.106	1.730	1.252	0.167	5.642
State school	-0.508	0.299	0.089	0.602	-0.789	0.368	0.032	0.454
GENDER – reference MALE								
Female	0.278	0.165	0.093	1.321	0.031	0.198	0.875	1.032
ETHNICITY – reference NON-WHITE								
White	-2.098	0.333	<0.0005	0.123	-2.157	0.417	<0.0005	0.116
AGE – reference OVER 21								
Under 21	-1.305	0.294	<0.0005	0.271	-1.461	0.345	<0.0005	0.232
MEMBER OF FAMILY BEEN TO UNIVERSITY – reference MOTHER NOT BEEN								
Mother been to University	0.159	0.227	0.485	1.172	-0.078	0.279	0.779	0.925
PREDICTED GRADES								
Continuous - low to high (AS level or 'other' students = zero)	0.341	0.083	<0.0005	1.406	0.287	0.093	0.002	1.333
STUDYING FOR AS LEVELS – reference NO								
Yes	-0.328	0.526	0.533	0.720	-0.408	0.623	0.513	0.665
STUDYING FOR 'OTHER' QUALIFICATION – reference NO								
Yes	-0.331	0.412	0.422	0.719	-0.618	0.488	0.205	0.539
DEBT AVERSION - continuous								
Averse to not averse	0.207	0.105	0.049	1.230	0.407	0.128	0.001	1.502
COST/BENEFIT BALANCE OF UNIVERSITY - continuous								
Positive to negative balance of benefits and costs	-0.302	0.107	0.005	0.739	0.208	0.140	0.137	1.231
THE EFFECT OF UNIVERSITY ON FUTURE EARNINGS / CAREER - continuous								
Important to not important					-0.418	0.060	<0.0005	0.659
IMPORTANCE OF UNIVERSITY SOCIALLY / LIFESTYLE / WORTHWHILE GENERAL EXPERIENCE - continuous								
Important to not important					-0.062	0.068	0.362	0.940
DEGREE OF ENCOURAGEMENT RECEIVED FROM FAMILY & FRIENDS - continuous								
None to much encouragement					0.261	0.043	<0.0005	1.298
HAVING A GOOD IDEA OF WHAT UNIVERSITY IS LIKE - continuous								
Good idea to bad idea					-0.360	0.115	0.002	0.698

Table 6. Logistic regression models for deciding to enter HE – including interaction terms involving class and attitudes toward debt (Model I: N=1,338, 524 missing; Model II: N=1,021, 841 missing)

	Model I				Model II			
Variables	**B**	**Std. Error**	***p***	**Exp(B)**	**B**	**Std. Error**	***p***	**Exp(B)**
(Constant)	0.880	0.140	<0.0005	2.411	6.275	0.996	<0.0005	531.172
SOCIAL CLASS – reference LOW								
Medium	-0.165	0.173	0.339	0.848	-0.422	0.251	0.092	0.656
High	0.850	0.188	<0.0005	2.340	0.721	0.277	0.009	2.057
DEBT AVERSION - continuous								
Averse to not averse	0.423	0.184	0.021	1.527	1.061	0.312	0.001	2.890
COST/BENEFIT BALANCE OF UNIVERSITY - continuous								
Positive to negative balance	-0.185	0.163	0.258	0.831	0.470	0.289	0.104	1.601
INTERACTION: MEDIUM SOCIAL CLASS WITH . . .								
DEBT AVERSION	-0.494	0.229	0.031	0.610	-0.916	0.364	0.012	0.400
COST/BENEFIT BALANCE OF UNIVERSITY	-0.187	0.208	0.369	0.829	-0.047	0.336	0.890	0.954
INTERACTION: HIGH SOCIAL CLASS WITH . . .								
DEBT AVERSION	-0.067	0.242	0.782	0.935	-0.733	0.382	0.055	0.480
COST/BENEFIT BALANCE OF UNIVERSITY	-0.418	0.225	0.063	0.658	-0.632	0.360	0.079	0.531
TYPE OF INSTITUTION ATTENDED – reference FE SECTOR								
Independent school					1.781	1.261	1.994	5.937
State school					-0.785	0.376	0.037	0.456
GENDER – reference MALE								
Female					0.069	0.200	0.731	1.071
ETHNICITY – reference NON-WHITE								
White					-2.182	0.413	<0.0005	0.113
AGE – reference OVER 21								
Under 21					-1.516	0.344	<0.0005	0.220
MEMBER OF FAMILY BEEN TO UNIVERSITY – reference								
Mother been to University					0.012	0.287	0.967	1.012
PREDICTED GRADES - continuous								
Low to high (AS level or 'other' students = zero)					0.308	0.095	0.001	1.361
STUDYING FOR AS LEVELS – reference NO								
Yes					-0.362	0.634	0.568	0.696
STUDYING FOR 'OTHER' QUALIFICATION – reference NO								
Yes					-0.539	0.492	0.274	0.584
THE EFFECT OF UNIVERSITY ON FUTURE EARNINGS / CAREER - continuous								
Important to not important					-0.407	0.061	<0.0005	0.666
IMPORTANCE OF UNIVERSITY SOCIALLY / LIFESTYLE / WORTHWHILE GENERAL EXPERIENCE - continuous								
Important to not important					-0.079	0.070	0.255	0.924
DEGREE OF ENCOURAGEMENT RECEIVED FROM FAMILY & FRIENDS- continuous								
None to much encouragement					0.260	0.044	<0.0005	1.297
HAVING A GOOD IDEA OF WHAT UNIVERSITY IS LIKE - continuous								
Good idea to bad idea					-0.329	0.120	0.006	0.719

Table 7. Logistic regression models for deciding to enter HE – for A-level students (Model I: N=517; 394 missing; Model II: N=490; 421 missing)

	Model I				Model II			
Variables	**B**	**Std. Error**	***p***	**Exp(B)**	**B**	**Std. Error**	***p***	**Exp(B)**
(Constant)	2.577	1.434	0.072	13.162	8.248	2.573	0.001	3820.161
SOCIAL CLASS – reference LOW								
Medium	-0.709	0.704	0.314	0.492	-1.640	1.006	0.103	0.194
High	0.088	0.715	0.902	1.092	-0.182	0.973	0.851	0.833
TYPE OF INSTITUTION ATTENDED – reference FE SECTOR								
Independent school	1.967	1.263	0.119	7.148	2.896	1.564	0.064	18.102
State school	-0.261	0.432	0.545	0.770	0.105	0.560	0.851	1.111
GENDER – reference MALE								
Female	0.458	0.411	0.265	1.581	-0.025	0.536	0.963	0.975
ETHNICITY – reference NON-WHITE								
White	-1.795	0.912	0.049	0.166	-0.872	1.081	0.420	0.418
AGE – reference OVER 21								
Under 21	-0.069	1.171	0.953	0.934	-0.163	1.714	0.924	0.850
MEMBER OF FAMILY BEEN TO UNIVERSITY – reference MOTHER NOT BEEN								
Mother been to University	-0.633	0.478	0.186	0.531	-2.293	0.682	0.001	0.101
PREDICTED GRADES - continuous								
Low to high (AS level or 'other' students = zero)	0.354	0.098	0.000	1.425	0.345	0.125	0.006	1.412
DEBT AVERSION - continuous								
Averse to not averse	0.030	0.276	0.913	1.031	0.514	0.379	0.176	1.672
COST/BENEFIT BALANCE OF UNIVERSITY - continuous								
Positive to negative balance of benefits and costs	-0.740	0.259	0.004	0.477	-0.488	0.383	0.203	0.614
THE EFFECT OF UNIVERSITY ON FUTURE EARNINGS / CAREER - continuous								
Important to not important					-1.016	0.203	0.000	0.362
IMPORTANCE OF UNIVERSITY SOCIALLY / LIFESTYLE / WORTHWHILE GENERAL EXPERIENCE - continuous								
Important to not important					-0.460	0.190	0.015	0.631
DEGREE OF ENCOURAGEMENT RECEIVED FROM FAMILY & FRIENDS - continuous								
None to much encouragement					0.397	0.141	0.005	1.487
HAVING A GOOD IDEA OF WHAT UNIVERSITY IS LIKE - continuous								
Good idea to bad idea					0.100	0.314	0.751	1.105

Table 8. Socio-economic characteristics of A-level and non-A-level students

	Doing A-levels	Not doing A-levels
Applying to University		
Yes	88	63
No	5	21
Undecided	7	16
Class		
Low	14	26
Medium	33	38
High	54	36
Type of school/college attended		
State secondary	43	17
Independent secondary	17	1
Sixth form college	13	7
FE college	26	76
Age		
17-20	98	86
21-24	1	5
25+	1	9

Table 9. Logistic regression models for deciding to enter HE for just the A-level students – including interaction terms involving class and attitudes toward debt (N=684; 227 missing)

Variables	B	Std. Error	*p*	Exp(B)
(Constant)	1.911	0.356	<0.0005	6.762
SOCIAL CLASS – reference LOW				
Medium	-0.226	0.421	0.591	0.797
High	0.630	0.434	0.147	1.878
DEBT AVERSION - continuous				
Averse to not averse	0.309	0.478	0.519	1.362
COST/BENEFIT BALANCE OF UNIVERSITY - continuous				
Positive to negative balance	-0.199	0.454	0.662	0.820
INTERACTION: MEDIUM SOCIAL CLASS WITH . . .				
DEBT AVERSION	-0.467	0.558	0.403	0.627
COST/BENEFIT BALANCE OF UNIVERSITY	-0.429	0.526	0.415	0.651
INTERACTION: HIGH SOCIAL CLASS WITH . . .				
DEBT AVERSION	-0.184	0.580	0.751	0.832
COST/BENEFIT BALANCE OF UNIVERSITY	-0.644	0.537	0.231	0.525