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Working Paper 3

The impact of paid and unpaid work and of student debt on experience of higher education

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The impact of paid and unpaid work and of student debt on experience of higher education

In this paper we cover two important themes that have become central to HE policy and practice: the growth of student employment, particularly during term, and the extent to which debt and anticipation of debt affect the experience of HE and the choices and aspirations that final year students had as they approached the transition to the next stage of their careers. Changes in funding arrangements for UK students shifted responsibility for HE investment from government to individual learners and their families, in particular, the introduction of variable tuition fees and repayable student loans for those who were deemed to be able to afford to contribute to the cost of their HE. There are means-tested grants to enable students from lower, under-represented socio-economic backgrounds to enter HE, based on the assumption that previously excluded members of the population would be enabled to gain the long-term benefits of HE without being hampered by the burden of debt after graduation, but eligibility for these grants is relatively low and the amounts involved only cover basic costs incurred. Access to funding proved to play a role in determining whether students took paid employment during their courses and whether they had time for other activities. Most analysts have concluded that the increased financial pressure and higher levels of debt, particularly since the changes in HE funding arrangements introduced at the beginning of the 1990s have fostered an increase in students taking on paid work in parallel with their course-work during term (Humphrey, 2006; Callender and Wilkinson, 2003; Metcalf, 2003).

Students as part of the flexible workforce: economic restructuring, occupational change and student employment

When Ford *et al.* (1995) conducted their study of student paid work in four universities, only 30 per cent of students had any form of paid work but there was clear evidence that employers had identified students as a useful and flexible source of part-time labour who normally possessed above average interpersonal skills and the capacity to learn jobs quickly (Hutson, 1990). As the pressure to participate in paid work during term has grown, it has increasingly been seen by students and employers alike as a useful opportunity. The market in student part-time and temporary work, long established in some industries and in vacation months, has expanded considerably, involving commercial and public sector intermediary services work¹. Between 1998-1999 and 2002-2004 the proportion of students in paid work increased from 47 per cent to 58 per cent as debt associated with higher education participation rose after the introduction of student loans (Callender and Kemp, 2000; Callender and Wilkinson, 2003). The Student Income and Expenditure Survey in 2004 found that 56 per cent of all full-time students had undertaken paid work at some point during the academic year while the more recent 2007/08 survey somewhat surprisingly showed that this figure had decreased to 53 per cent of students in 2007/08 (Johnson *et al.* 2009). Smaller scale surveys of students at a 1992 university (Hunt *et al.*, 2004) and an old Scottish one (Carney *et al.*, 2005) had found rates of 49 per cent and 50 per cent respectively a few years earlier.

The implications for student learning of increasing student employment during term has been a major concern for those who deliver full time HE courses (Little, 2002). Numerous studies have been undertaken to explore the implications of these reforms and their impact on the areas where students live during term and on the students' progress on their courses, balancing the positive impacts of gaining work experience and the negative impact of taking time away from study and the potential to enjoy other extra-curricular advantages available to full-time students that are valued by employers – participation in sport, drama, student associations and voluntary work. Changes in funding arrangements have also ushered in another transformation, which is the increasing numbers of students studying in their home towns and regions, particularly those from relatively disadvantaged

¹ See <http://www.justjobs4students.co.uk> and http://www.gradsouthwest.com/cms/ShowPage/Home_page/Student_Zone/pleLibX1

backgrounds, rather than, as was traditional for UK undergraduates, moving to a different city where independence from family of origin was one of the associated *rites de passage* of being a student. In July 2009, a government all-party committee produced a report that advocates waiving of undergraduate HE fees for students who live at home while studying (Cabinet Office 2009). The evidence from this study suggests that this has further implications for student employment during term, as students living at home have been found more likely to have regular employment that they maintain from prior to HE entry throughout their university and college careers.

Paid work: plans and realities

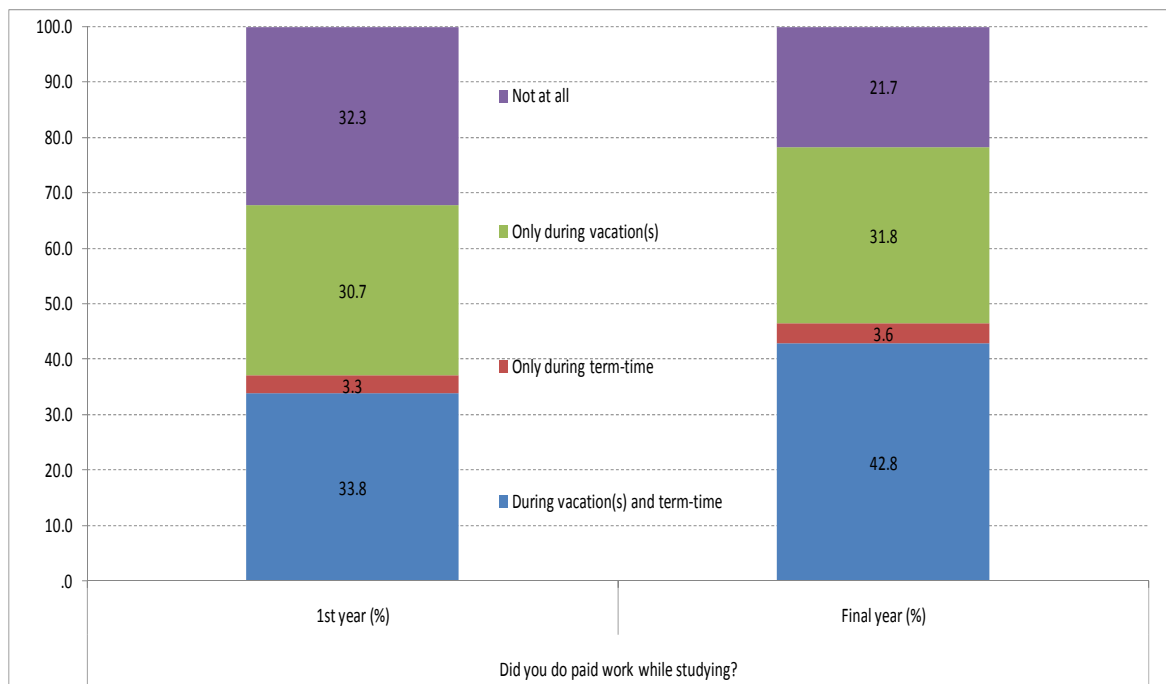
We asked participants in the Futuretrack survey about intentions about, and actual participation in, paid work during term and vacations, in the Stage 1 survey prior to HE entry, at Stage 2 asking about their first year experiences, and at Stage 3, as they approached the end of their final year which, for many, was their graduation year (*c.f.* Purcell *et al.* 2008, 2009).

The anticipation of paid work by socio-economic background is worth comment. Overall, work during holidays was more comprehensively anticipated than work during term. Work during study was most commonly planned by those from routine and manual occupational backgrounds, whereas work during holidays was more commonly envisaged by those from a managerial and professional occupational background. However, the proportions of applicants indicating that they did not intend to work either during study or during holidays was remarkably constant across all backgrounds; 32 per cent for managerial and professional and 31 per cent for each of intermediate and routine and manual backgrounds. Put another way, nearly 70 per cent of 2006 accepted UK-domiciled applicants considered that they would take some sort of paid work to help fund their higher education, and across all backgrounds, over 40 per cent anticipated taking work during both holidays and during term time. We found at stage 2, when students were asked about whether they had, in fact, been employed during their first year of study that experience had not fitted precisely with what had been envisaged: students who had expected to get paid work during term did not, while half of those who had not planned to do paid work at all had ended up with jobs of some sort; 30 per cent during term and 20 per cent during vacations.

What of the final year students, and how has their paid and unpaid work participation changed as they completed their final undergraduate year? To explore this, we compare the patterns of extra-curricular work during their first year with what was, for these students, their final graduating year². We had assumed that students may have been more likely to do paid work in the earlier stages of their studies, and to cut down on such activity in their final year, but this is not what we found. We found that, by and large, students were more likely to have had jobs during both term and vacations in their final year as Figure 1 reveals.

² *This section includes only those students who completed both Stage 1 and 3 questionnaire and were currently final year students on a three year programme of study: an un-weighted sample of 8,456 students which, when weighted to be representative of the population, gives a total of 168,918.

Figure 1 Patterns of participation in employment comparing 1st and 3rd year responses



Source: Futuretrack 2006 combined dataset: UK based final year students (weighted)*. NB.footnote 2.

The decisions to work during terms or vacations, or not to do so, did not always reflect preferences, as is discussed later in the chapter when we look particularly at those who did not have paid employment, but the extent of paid and unpaid work varied considerably, as the following comments from respondents reveal:

'I work full time as well as studying full time'
(Female, 26 and over, white, Lower tariff university, Education)

'I work one day a week on Saturdays because I need the money, even though I really dont like working or have the time to do so'
(Female, 18 and under, white, Medium tariff university, Hist & philosophical studies)

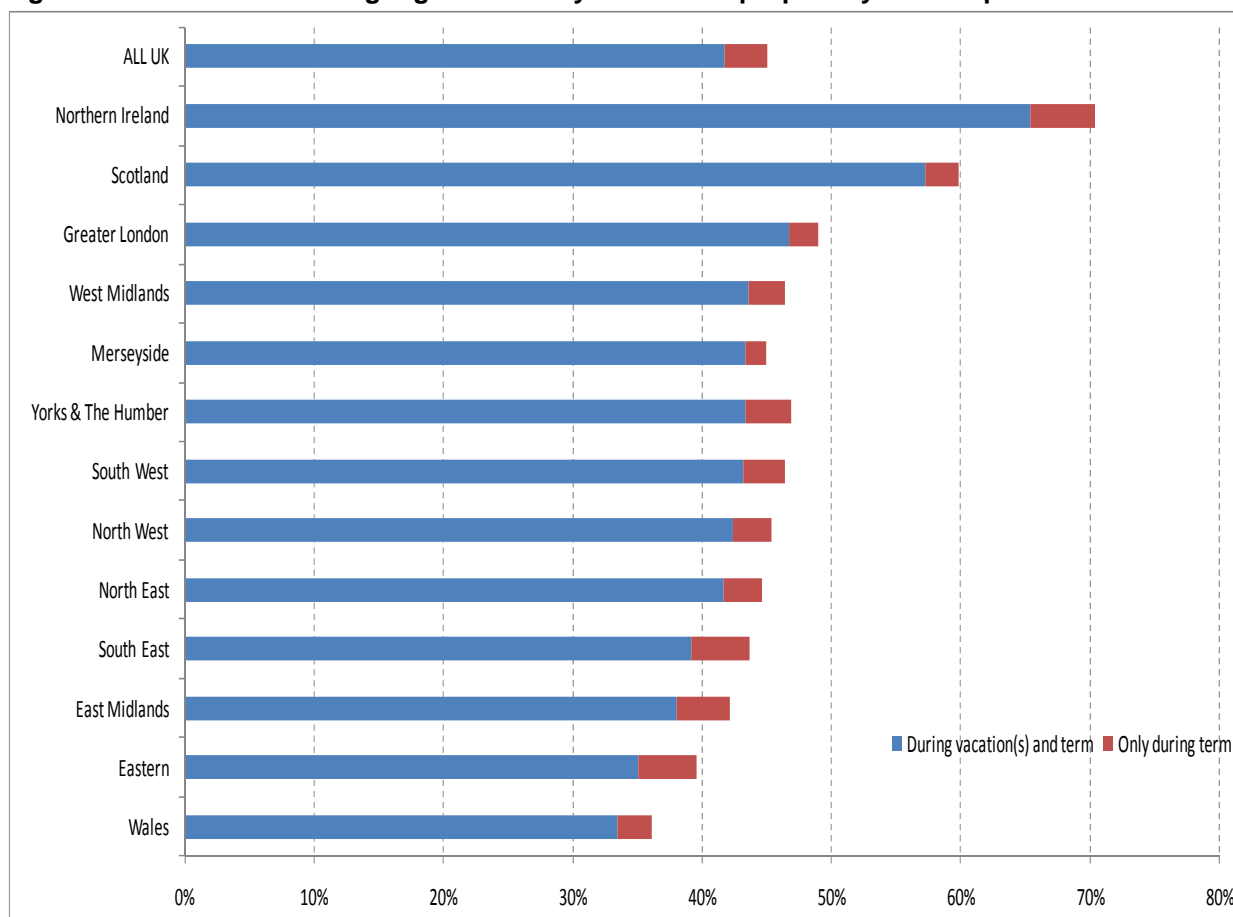
'I did have a job for about a month in the Summer vacation of 2008 at my friend's family's business but they couldn't afford to pay me properly. Also, it's a case of CATCH 22: can't get a job unless I have some more experience, can't get more experience without a job'
(Female, 18 and under, white, Medium tariff university, Hist & Philosophical studies)

'Though I do manage to fit in a few 'psychology experiments' here and there, about £5 for an hour. No more than a few hours every month.'
(Male, 18 and under, white, High tariff university, Interdisciplinary subjects)

'My course only requires me to attend at most 5 hours a week contact time with tutors and I have found previously that I have lots of spare time and I therefore choose to work. It also enhances my time management and organisational skills managing both my part-time work and the full-time course.'
(Male, 18 or under, white, Medium tariff university, Bus & Admin Studies)

The extent of involvement of final year students in paid work across the range of HEIs was far from uniform, and clearly reflected differences in opportunities as well as preferences and HEI norms and regulations, as will be explored further. Figure 2 shows how the patterns varied significantly by the region in which HEIs were located.

Figure 2 Differences among regions of 3rd year student propensity to have paid work

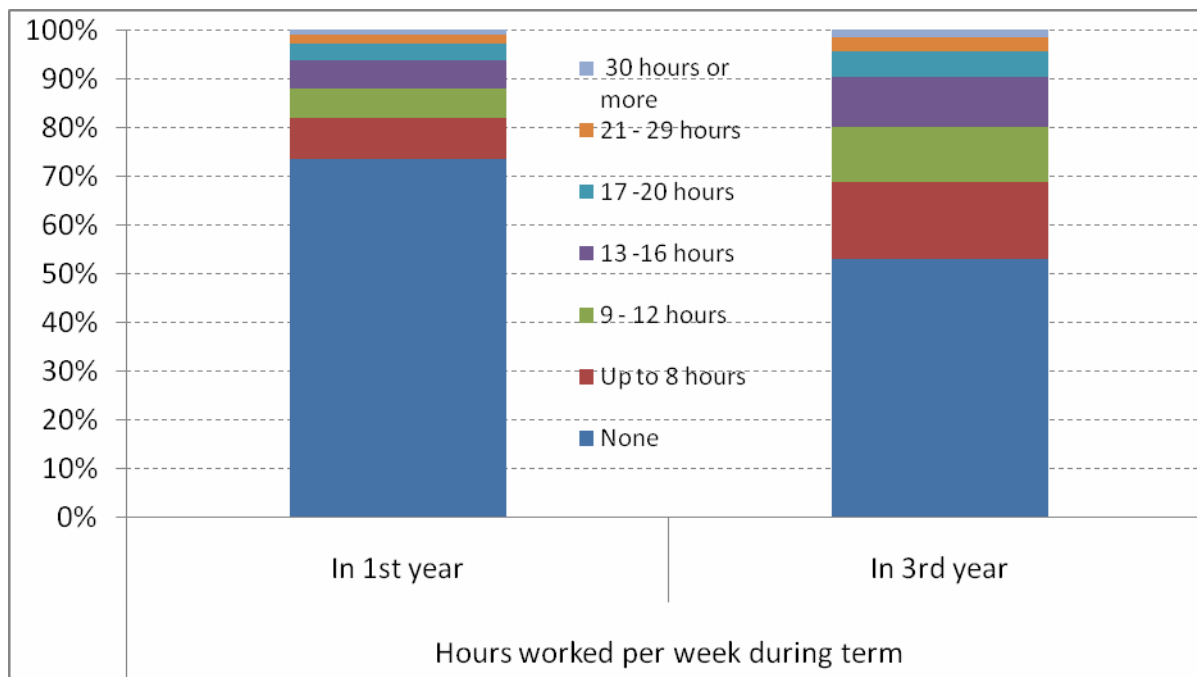


Source: Futuretrack 2006 combined dataset: UK based final year students (weighted)*. NB.footnote 2.

The proportions of students with paid work during term varied for the most part between 40 and 50 per cent, but the 'outliers' are interesting. They reflect socio-economic differences, both in terms of the student populations and the employment sectors and work opportunities available to students in regions, and the contrast between student economic activity in Northern Ireland, Scotland and Wales is intriguing, particularly given other differences in student funding in Scotland and Wales.

In addition to being more likely to have paid work, third year students also worked for longer hours per week during term than they had done in their first year. In relation to the previous figure, it is interesting that the longest hours, both in the first and third years, were reported by those attending Scottish HEIs: 12.3 hours per week in the 1st year and 15.1 in the third year. Students in HEIs in Northern Ireland were next most likely to have relatively long average hours of work, reporting 10.7 hours weekly as 'freshers' and 13.8 as finalists, whereas the gap between hours reported by students who studied in England and Wales had disappeared, with a rise from 8.3 to 12.5 hours on the part of first years in England exceeded by the growth of those studying in Wales from 6.6 to 12.7 hours. The average weekly hours worked by students who were employed during term, comparing the overall picture of responses in the first year and the third year, are shown in Figure 3.

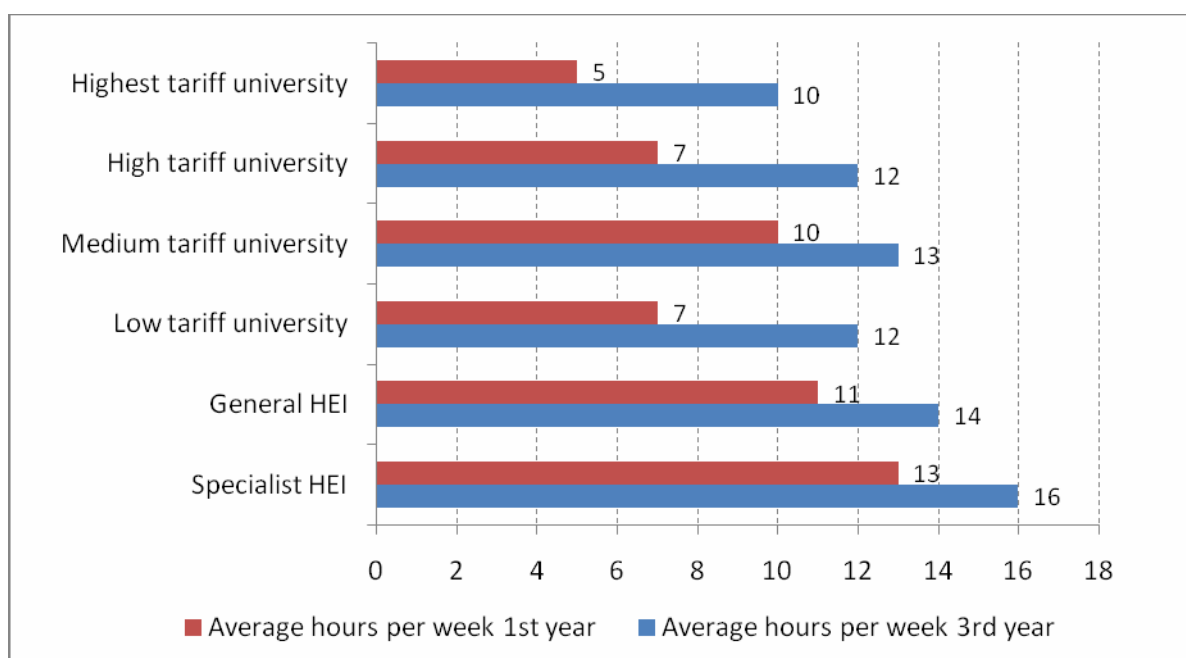
Figure 3 Incidence of term-time employment comparing 1st and 3rd year responses



Source: Futuretrack 2006 combined dataset: UK based final year students (weighted)*. NB. footnote 2.

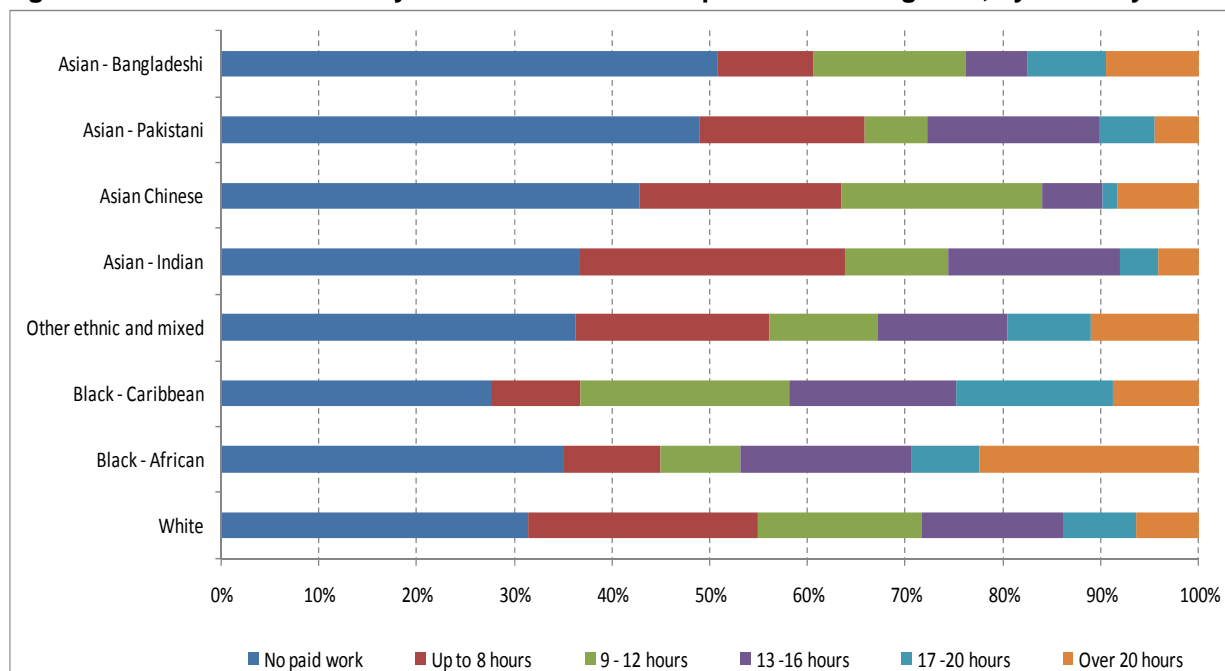
As in the first year, average hours worked by students at different types of HEI varied, but had increased in all cases as Figure 4 shows. As far as individual attributes were concerned, males worked longer hours on average than females, and their average hours of work increased more between the first and third years, with women's average term-time working hours increasing from 8 to 12.2 hours, while men's increased from 8.5 to 13.4.

Figure 4 Average hours of paid work per week by HEI type



Source: Futuretrack 2006 combined dataset: UK based final year students (weighted)*. NB.footnote 2. There are also significant differences in participation in paid work by ethnicity, and these are shown in Figure 5 for the main ethnic groups, disaggregating the responses of the main Asian and Black groups, which exhibit distinct differences.

Figure 5 Extent to which 3rd year finalists undertook paid work during term, by ethnicity



Source: Futuretrack 2006 combined dataset: UK based final year students (weighted)*. NB.footnote 2.

How 3rd year students obtained student employment

We looked next at how they had obtained these jobs. It is not surprising that more had worked for their employer before entering HE, but the extensive increase in those obtaining work through family and friends suggests that 3rd year finalists, conscious of the need for work experience to add to their CVs as they approached graduation, resorted to the networks where they had advantages in facilitating this, as well as directly seeking for work in the public domain. Some of those whose responses did not quite fit into the options offered in the multiple-choice list of possible options were very well organised and illustrate both how higher education expansion creates jobs and stimulates entrepreneurial activity, and how the flexibility of the student labour force is capitalised on by employers.

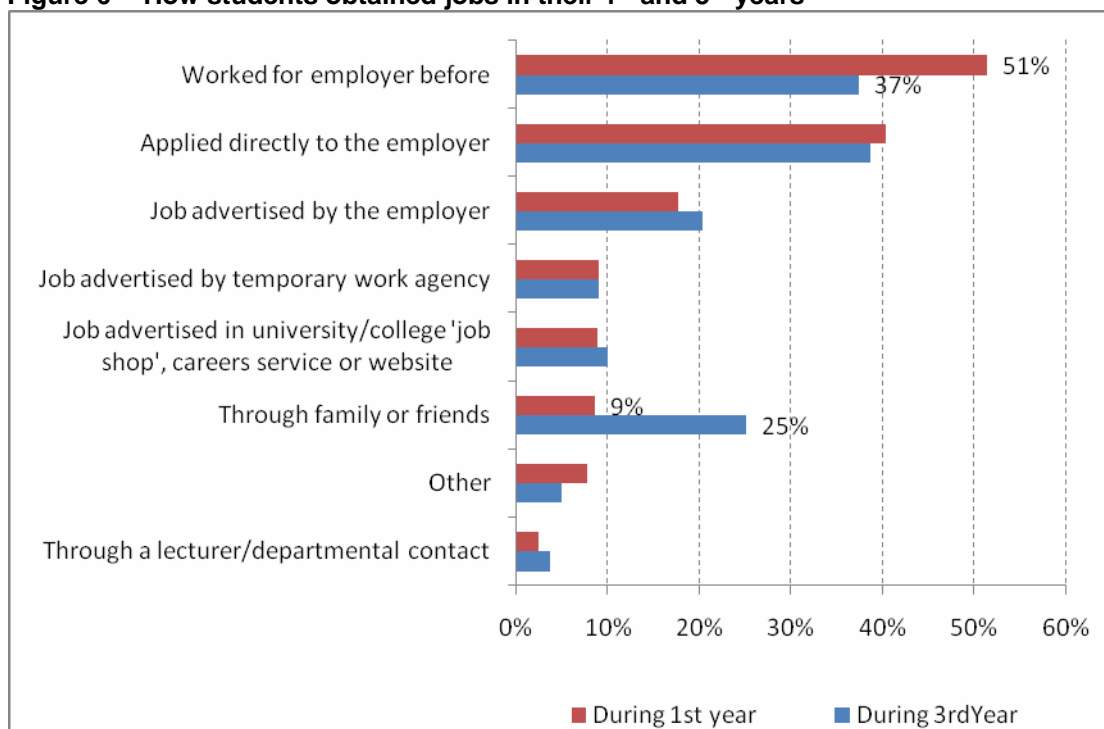
'i had the job before beginning university and was offered an annual hours contract which means i can work as and when, which seemed a good option to have.'
(Female, white, 21-25, High tariff university, Subject allied to medicine)

'[I am] employed by university hall of residence, job gets me guaranteed accommodation [in a very desirable location]'
(Male, 19-20, white, Highest tariff university, Social Studies)

'I started my own company during a gap year prior to starting university, so I also had to work to continue to satisfy clients if the company was going to.'
(Male, white, 19-20, High tariff university, Physical Sciences)

Overall, the picture was as shown in Figure 6.

Figure 6 How students obtained jobs in their 1st and 3rd years

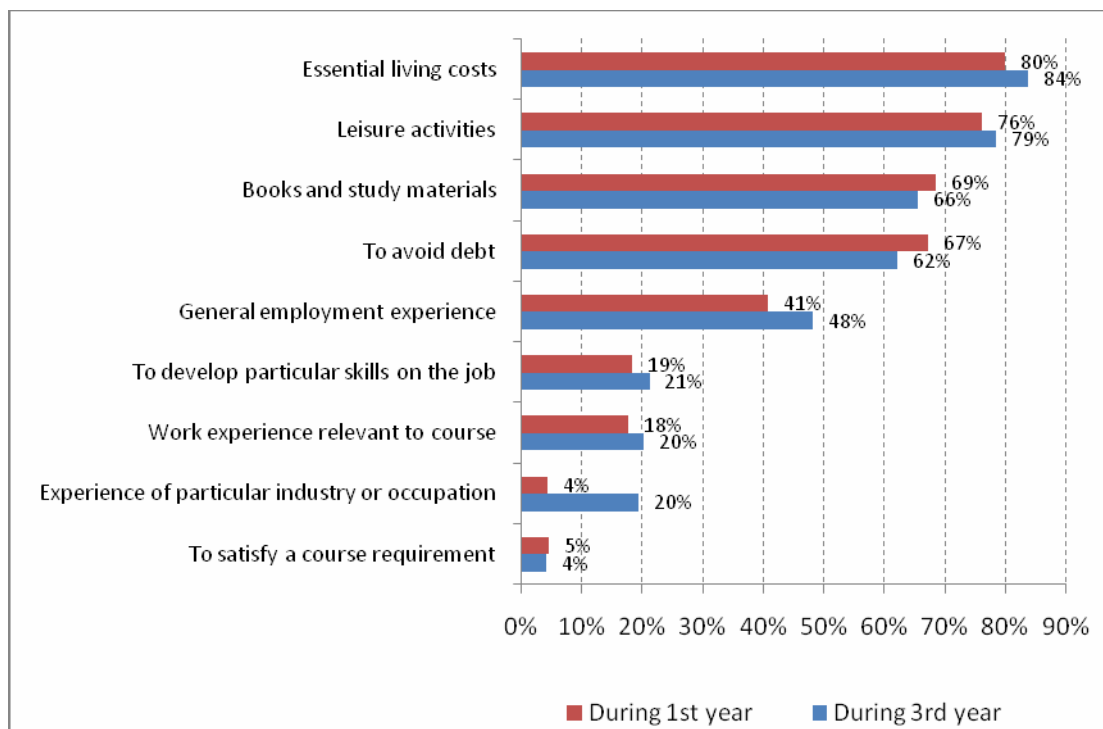


Source: Futuretrack 2006 combined dataset: UK based final year students (weighted)*. NB.footnote 2.

Reasons for doing paid work while studying

Obviously, an increase in the volume of student paid work requires explanation, and we need to examine the extent to which reasons for taking jobs have changed, along with the increase in proportions of economically-active students and longer hours of work.

Figure 7 Reasons for paid work during term during 1st and 3rd years



Source: Futuretrack 2006 combined dataset: UK based final year students (weighted)*. NB.footnote 2.

The changes are not dramatic, but significant. There is a noticeable shift towards the likelihood of giving both living costs and the desire to build up work experience as reasons for undertaking paid work. The extent of students' engagement in paid work and their enthusiasm for doing so varied considerably, as illustrated by some of the comments added to the 3rd year students' questionnaires, cited below.

'As a mature student, I have had to work in order to pay for household bills and avoid significant debt. Without employment I would not be able to continue the course.'
(Female, 26 and over, black, Medium tariff university, Subjects allied to medicine)

'I have to work to support myself through university, I have no choice. Although I feel I will benefit from the experience in the long run, I have worked all the way through uni. Good time management and anyone can.'
(Male, 18 and under, white, Medium tariff university, Business & Admin studies)

'Cause I'm the lad, I want industry experience before I graduate to make employment easier. A quality reference will do me wonders I'm sure. The money is a bonus.'
(Male, 18 or under, 'Other' ethnicity, High tariff university, Mathematics & Computing)

'Extremely overdrawn for the last one and a half years and my bursary and part time work does not pay for all the bills, mortgage etc.'
(Female, 19-20, Asian, Medium tariff university)

'Because I was really passionate about the work, which had had been doing on a voluntary basis and then got paid out of a temporary grant in summer 2007.'

(Female, 18 and under, white, Highest tariff university, Medicine and Dentistry)

'A student loan only goes so far, once rent and bills have been paid for, I found myself with little money left to actually live on. Having not come from a wealthy family where the parents pay for everything (as is the case with my housemates) I'm proud of the fact that I earn a wage and live independently.'

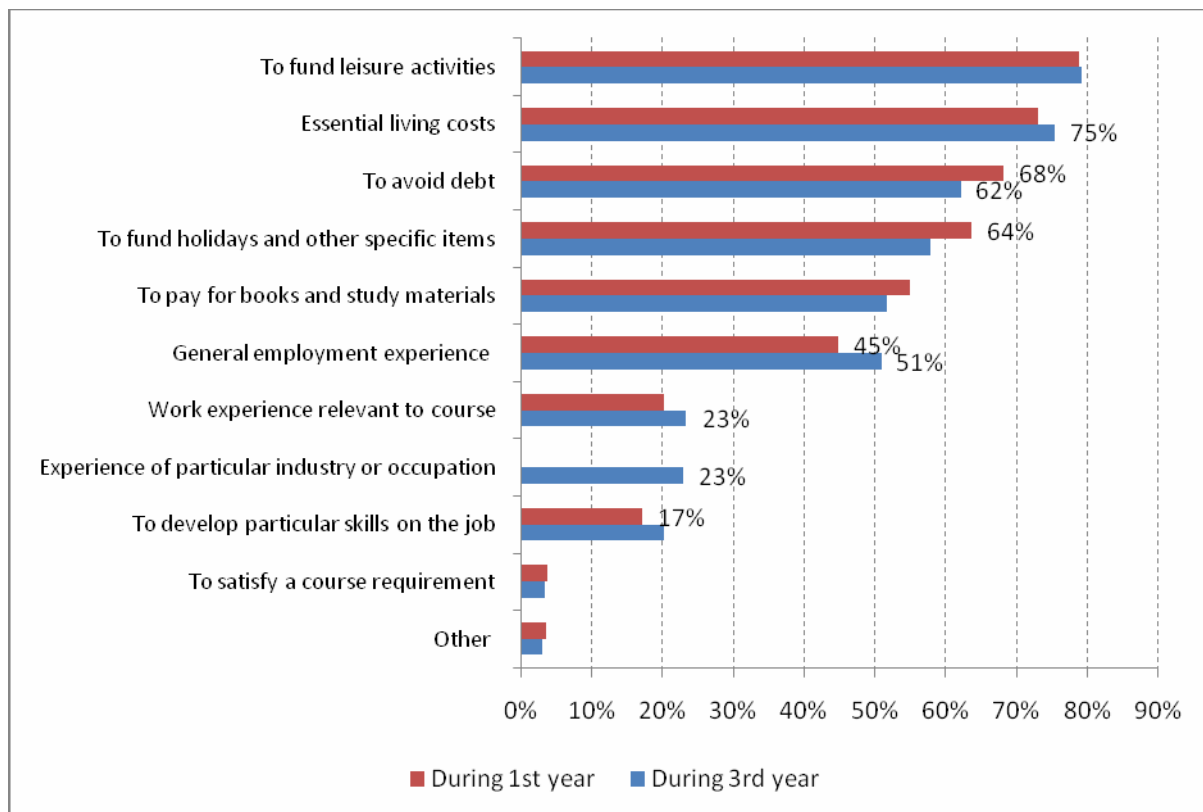
(Male, 18 or under, white, Highest tariff university, Historical & Philosophical subjects)

'because i like working. i like knowing that i'm making money. Also because i had to. i didnt get enough money from loans/grants etc to cover living costs and food as well as books/ sketchbooks etc and my parents had no money spare to offer me, so it was either be a skint boring student and get really thin, or get a job and stay healthy!'

(Female, 19-20, white, Specialist HE college, Architecture, Building and Planning)

In the same way, we see the biggest increases related to desire for work experience in reasons for paid work during vacations, shown in Figure 8.

Figure 8 Reasons for paid work during vacations comparing 1st and 3rd year responses

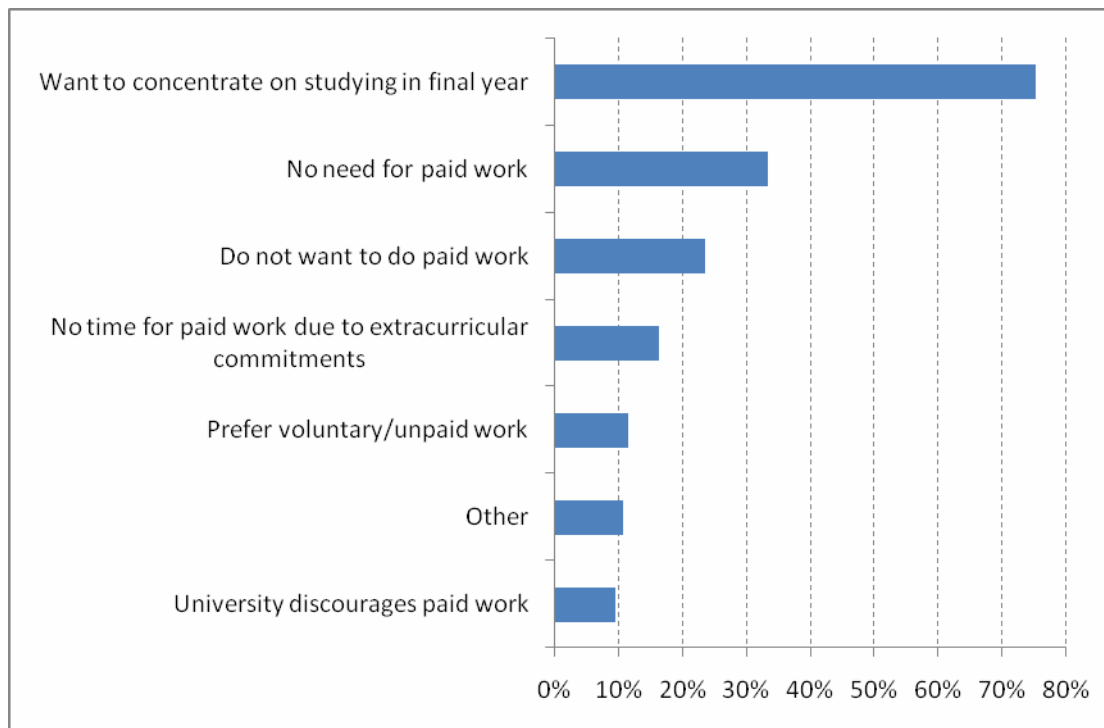


Source: Futuretrack 2006 combined dataset: UK based final year students (weighted)*. NB.footnote 2.

The option 'experience of a particular industry or occupation' was not offered in the stage 1 questionnaire, but it became clear in piloting the stage 3 questionnaire that this was a relatively common reason in the final year, as Figure 7 showed.

Although term-time work experience can be, and often is, a positive complement to study that enhances the marketability of students when they compete in the graduate labour market at the end of their courses, we saw that a substantial minority did not engage in any paid employment during their courses. Figure 9 gives the reasons they provided.

Figure 9 Reasons for not doing paid work in 3rd year



Source: Futuretrack 2006 combined dataset: UK based final year students (weighted)*. NB.footnote 2.

As we explored in the Stage 2 report, there are clearly relationships between type of course, type of university and socio-economic background here, as these distributions demonstrate. Balancing paid work and study, particularly where the former has little relation to the latter, has been found to cause stress related to the need to juggle paid work and academic study at the same time (Curtis and Shani, 2002, Pickering and Watts, 2000). The combined impacts of less time spent on study, leading to missed lectures, the achievement of lower marks and less participation in social university life, may all combine to affect the student's ability to compete in the graduate labour market.

Although the Futuretrack data cannot yet throw light on the relationship between *actual* achievement and outcomes, it may be significant that the average hours of paid work reported by students was correlated with the class of degree they *expected* to be awarded, ranging from those whose average hours worked were 11.8 and expecting to get 1st class honours, to 13.8 hours by those anticipating a third class honours degree and 15.2 by those expecting to get an ordinary degree. Of course, this is an unreliable indicator, but the stage 4 survey, to be conducted two years after graduation in Winter 2011/12 for those who completed three year undergraduate degrees, will reveal the extent to which predictions hold. It is also clear that students who engaged in term time employment are less likely to have been involved in university social life or extra-curricular activities (Humphrey, 2006; Purcell *et al.*, 2005). In the stage 3 survey we find a clear relationship between propensity to rate 'Being a student at the university or college where I studied was a positive experience overall' positively and hours of term-time work reported. Those agreeing strongly with this statement (giving a rating of 1 or 2 on a 7-point positive to negative scale) ranged from exactly three quarters of those who had a job for less than eight hours to 55 per cent of those working for 30 hours or more.

Reasons for not doing paid work

Of those who did not work and provided 'other' responses or supplementary comments in the questionnaire, most referred to lack of availability of jobs, or of jobs that they were unable to take, as some of the quotes below reveal. The numbers are too small to provide robust evidence of differences among regions, but of these responses, there seems to be an inverse relationship between experiencing job scarcity and the propensity of students to undertake paid work during term in the regions concerned. The regions where 3rd year students were most likely to have reported doing paid work during term were also those with the highest number of reluctant non-employed students: London, the North West, Wales and the East Midlands and the fewest were studying in Northern Ireland, Scotland, the North East of England and the East Midlands, where student work rates were at the high end of the spectrum. Several respondents suggested that less urban areas and areas with seasonal industries presented a particular challenge to students. The grouped quotes that follow give a flavour of the comments made:

Difficult of finding jobs in locality of study

'I live in [a named area where] job opportunities are few and far between.'
(Male, 19-20, white, High tariff university, Physical sciences)

'I would very much like paid work but find that I am unemployable due to my lack of experience which I feel is further accentuated by the fact that [name of university city] is a very small city with a very dense population of students with the numerous institutions based there.'
(Female, 18 and under, white, High tariff university, interdisciplinary subjects)

'Despite the lack of time I still need a job but sadly, although I've tried, not many places are hiring in my area and when places are there is a great number of people who also apply'
(Male, 21-25, white, Lower tariff university, Engineering, technologies)

Lack of opportunities generally

'Because at this time ('credit crunch' and job losses), there are no jobs available for me. Especially since I am still a student, no-one is willing to hire a student, considering the lack of jobs for people who are available for full-time work.'
(Female, 19-20, Asian, Medium tariff university, Biology, Veterinary Science, Agriculture & related)

'I want to do paid work, applied for many jobs but wasn't accepted'
(Male, 18 and under, white, Medium tariff university, Mass communication and documentation)

'It was difficult to get a job this year and eventually after a month of trying, I decided to concentrate on studying during term and travelling during breaks.'
(Female, 19-20, Asian, Overseas, Social studies)

The constraint of coursework and schedules

'Very difficult to apply for paid work due to the shift work placements which are 50% of my course.'
(Female, 18 and under, white, Medium tariff university, Subjects allied to medicine)

'It is quite hard to get into part-time jobs and flexible hours at the same time as being a full-time final year student studying at university.'
(Female, 18 and under, Asian, Lower tariff university, Interdisciplinary subjects)

'It has been difficult to find paid work but I have taken it in good stride as I have to concentrate on studying in my final year.'

(Female, 19-20, black, High tariff university, Law)

'Struggling to find a job with the right hours and flexibility'

(Male, 19-20, white, Medium tariff university, Mathematical & Computing Sciences)

'I had to do lots of voluntary placements for my future career plans so I had no time to do paid work as these placements were full time.'

(Female, 19-20, white, High tariff university, Biology, Veterinary Science, Agriculture & related)

The pressure of other responsibilities and constraints

'I cannot do paid work as I am a single parent and would need to pay childcare which cannot afford.'

(Female, 26 and over, white, High tariff university, Subjects allied to medicine)

'I spend a lot of time travelling to and from home and uni, so would find it difficult to commit my time to hours at a job at home or at uni.'

(Female, 19-20, white, Medium tariff university, Biology, Veterinary Science, Agriculture & related)

'I am a mature student and when not studying I am running a house and looking after two teenagers, a husband and a child under 10 so who has the time to work as well? Don't I work enough as it is?'

(Female, 26 and over, white, Lower tariff university, Education)

Ambivalence about balancing work and concern about effect on studies

'Although I do not need to do any paid work, I would like to in order to reduce the debts I will be in by the end of my degree. However I have been unable to find any suitable part time jobs.'

(Female, 18 and under, white, High tariff university, Interdisciplinary subjects)

'No time to do paid work as I want to concentrate on my studying but also I have done so much work experience last year in the UK (during term time) and abro'

(Female, 19-20, white, Specialist HE college, Creative arts & design)

'I worked two jobs during the summer so I could save enough to make it so I could survive without a job in my final year in order to concentrate on my degree.'

(Male, 18 and under, white, Highest tariff university, Mathematical & Comp sci)

'I worked during my first year and half of my second year. I felt as though the work load increased and my studies would be affected from my time spent at work.'

(Female, 21-25, white, Lower tariff university, Education)

Considering the evidence above, it is likely that the types of paid work done by students alongside their studies, as well as the number of hours, varies systematically in line with other advantages and disadvantages that they bring with them, or encounter in HE, as educational and social advantage and disadvantage. If we look back at educational background prior to HEI entry, we find that those most likely to have done paid work during term in their 3rd year had entered via FE colleges (45 per cent), closely followed by those who went to state school (43 per cent). Those from selective schools were less likely to have done so (38 per cent), while the least likely were those from independent fee-paying schools, of whom only 27 per cent had been employed during term. These findings reinforce

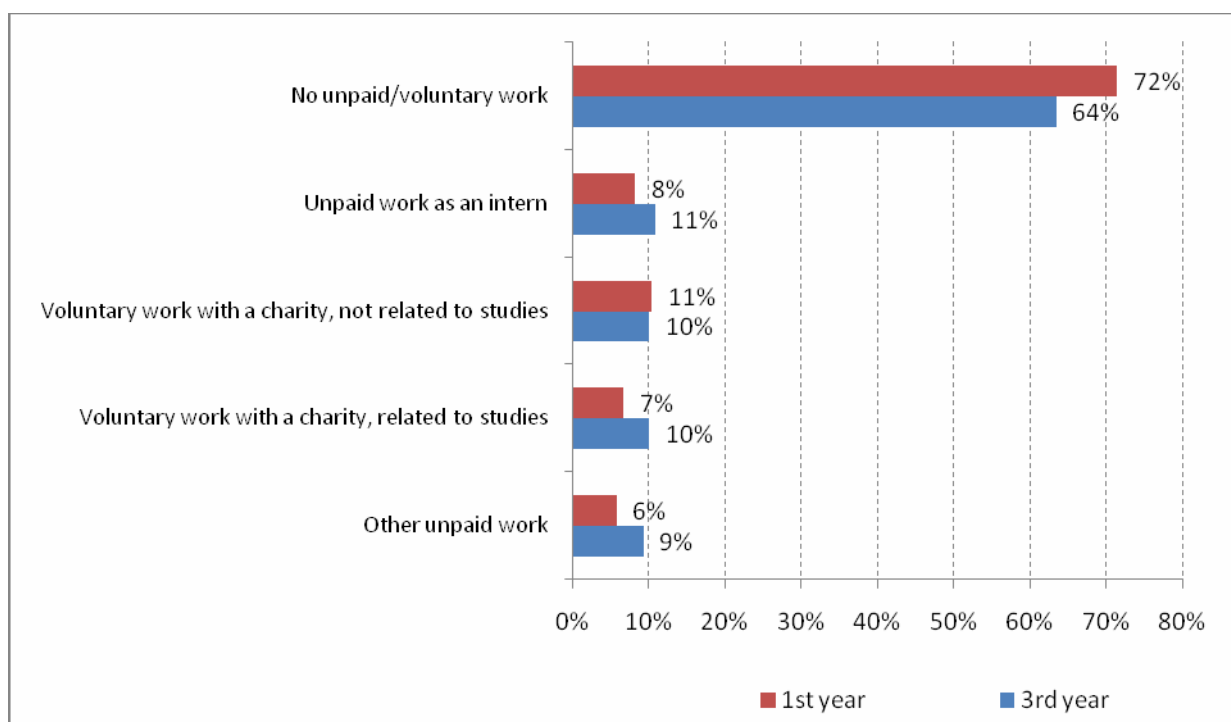
those of other recent research where it was found that students who worked during term were overwhelmingly from state schools rather than from independent, privately funded schools, leading the author to conclude that ‘structured inequality, an inherent feature of a divided secondary education system, is being pulled firmly into HE’ (Humphrey, 2006: 286).

Voluntary and unpaid work

There is a long-established tradition of students engaging in charitable and community service activities and in the development of such initiatives, as illustrated by the ‘Rag week’ activities organised by students at many HEIs. Recently, the encouragement to see such experience as highly desirable in relation to providing an advantage to students when they graduate has been amplified. Alongside this, there has been an increase in both the requirement to build up work experience in particularly competitive areas of the labour market and the spread of unpaid internships and work experience to a wider range of industries than hitherto. Employers have increasingly been encouraged by policymakers to undertake such initiatives, as discussed by Holdsworth and Quinn (2010). A supplementary study of the stage 1 Futuretrack data on this topic was recently undertaken by Holdsworth (2010). Her concern was more with identifying the extent of charitable activities and community service participation among students than unpaid work *per se*, although ‘To gain experience for my future career’ was the most frequently mentioned reason, followed by ‘To learn new skills’. However, as reported at stage 2 (Purcell *et. al*: 2008: 91-92), Holdsworth’s analysis confirmed the complexity of the first year motivations and the overlaps between instrumental and altruistic reasons for unpaid work.

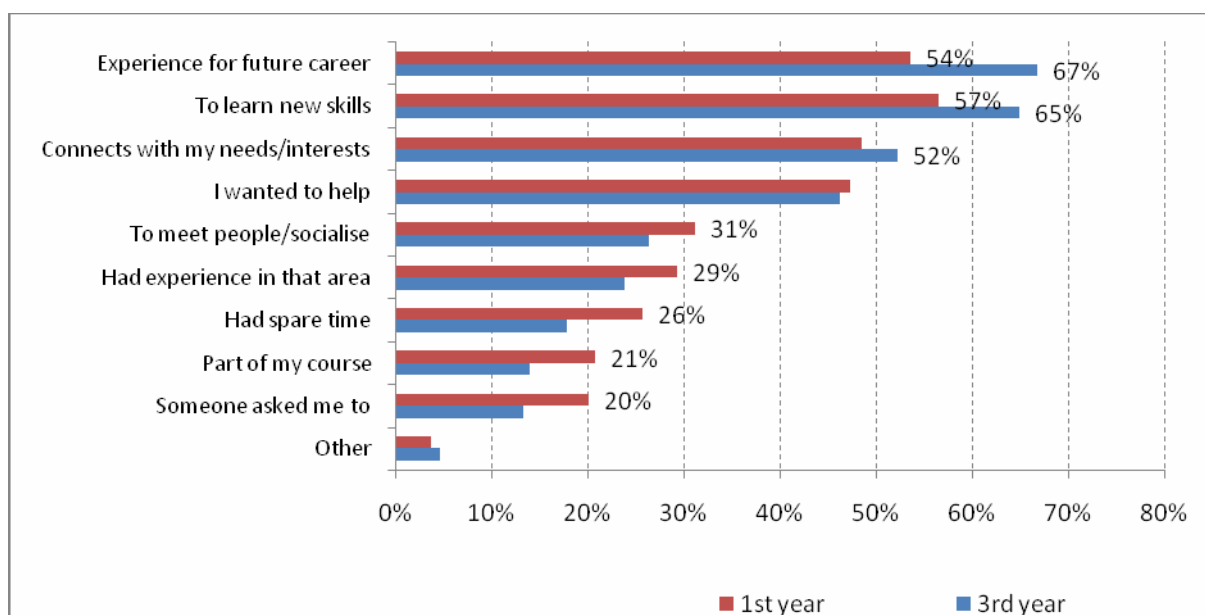
We see in the 3rd year responses that the proportions of students undertaking unpaid and voluntary work increased to over a third among final year students, to a greater extent in relation to coursework or career-related activities than to cover costs, as is shown in Figure 10, and this is reinforced clearly by the reasons given by them for such work in Figure 11.

Figure 10 Incidence as types of unpaid or voluntary work in 1st and 3rd years



Source: Futuretrack 2006 combined dataset: UK based final year students (weighted)*. NB.footnote 2.

Figure 11 Reasons for unpaid work in years 1 and 3



Source: Futuretrack 2006 combined dataset: UK based final year students (weighted)*. NB.footnote 2.

Expected debts and earnings at graduation

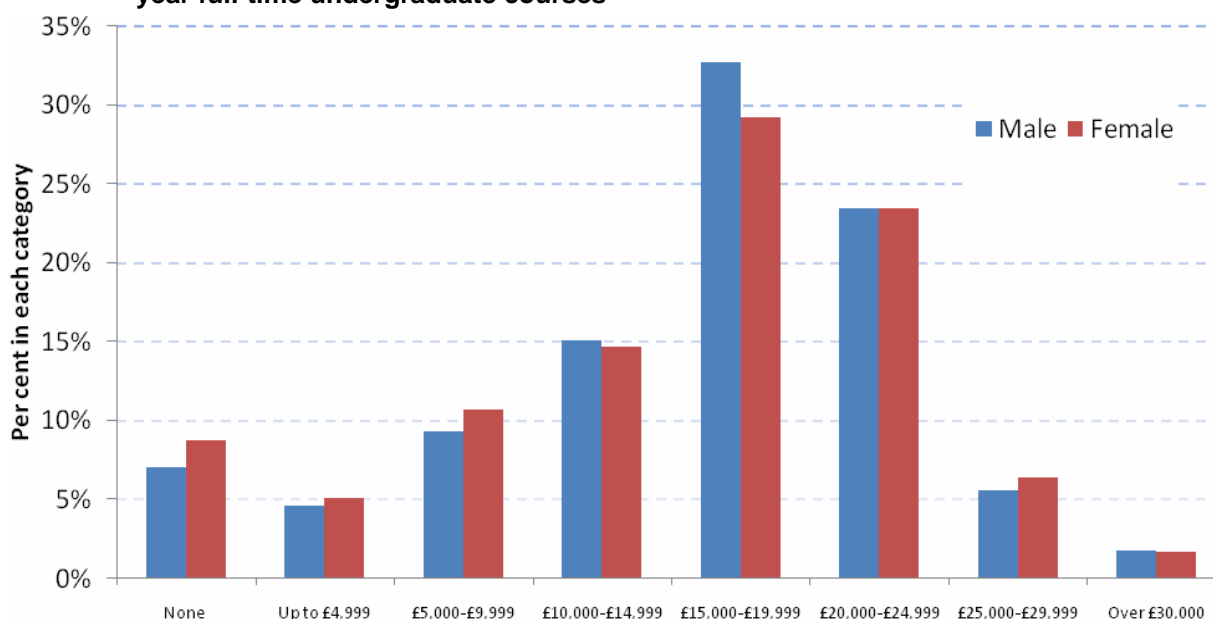
The Higher Education Act 2004 provided the legislative framework for a number of important changes in the financial arrangements of full-time higher education students. The most significant change to the system of tuition fees, loans and grants was the introduction in 2006 of variable tuition fees of up to £3,000 per year for new students beginning a course of study. Such fees can vary between courses and universities, and increases were limited to the rate of inflation until 2010. Simultaneously, the fee grant was abolished, requiring all students to pay fees in full. However, fees could be deferred by taking out a means-tested student loan to cover the full cost of fees. This loan is repaid in the same way that any loan for maintenance is repaid, via monthly salary deduction for those earning £15,000 a year or more after graduation.

Most Futuretrack respondents started their full-time higher education studies in October 2006. They are the first cohort to pass through the higher education system with the new system of variable tuition fees and loans for fees. We anticipated that these arrangements would have a major impact upon the extent of expected indebtedness of students as they complete their courses. In this section we focus on the expected debts and earnings of UK-domiciled students who started a full-time three year undergraduate degree course in 2006.

The extent of expected debts at graduation

In stage 3 we repeated a question asked at stage 2 - the time at which they were completing their first year of study. The question put to them at each stage was: 'What amount of repayable debt do you expect to have at the time of your graduation? (*Do not include mortgages or existing debt prior to your study*)'. Figure 12 shows the distribution of responses to the categories of debt listed on the questionnaire.

Figure 12 Expected personal repayable debt at graduation: UK-domiciled students on three year full-time undergraduate courses



Source: Futuretrack 2006 combined dataset: UK based final year students (weighted)

Male students expect to have higher levels of debt than women on completion of their studies, with 25 per cent of women reporting expected levels of debt of zero or less than £10,000 compared with 21 per cent for men. We note that 31 per cent of respondents stated that they expected to owe £20,000 or more at the time of graduation. Of these, approximately 8 per cent of third and final year undergraduates expect to have accumulated debts of more than £25,000 whilst studying for their degrees.

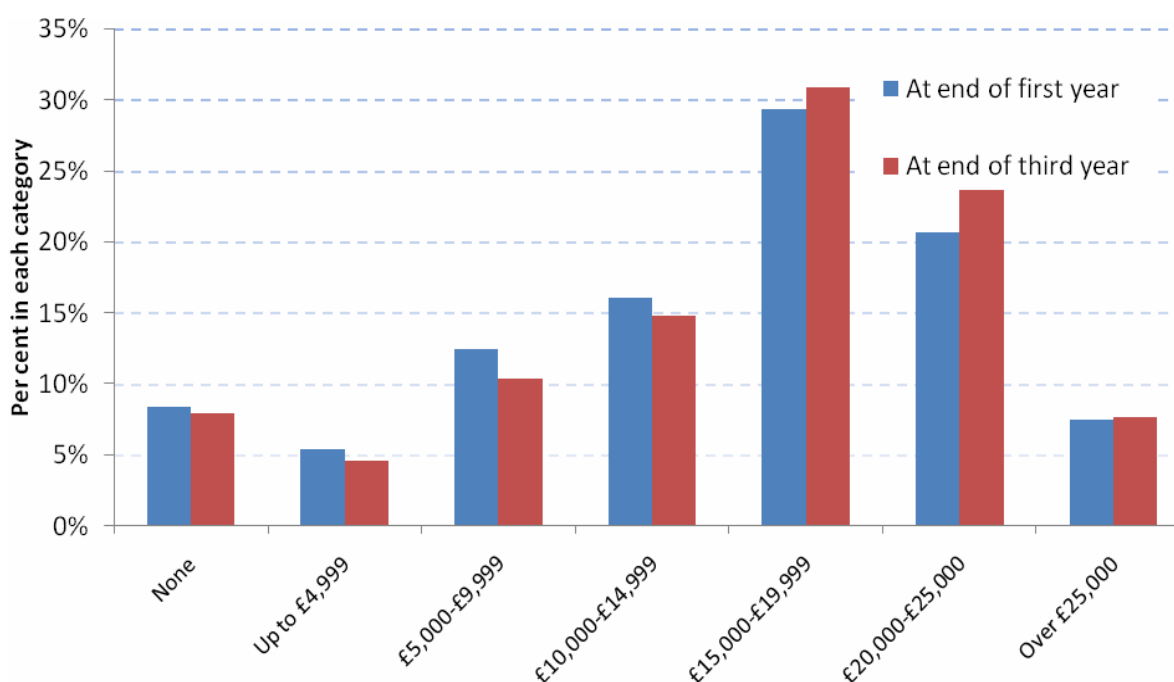
Comparisons with earlier cohorts of students are difficult, because of differences in the ways in which other surveys collect information on debts. The closest comparisons that can be made come from the Student Income and Expenditure Surveys (SIES) for 2004/05 and 2007/08 (Johnson *et. al.* 2009). These surveys use the concept of **net debt**, defined as borrowing minus savings. The reported average levels of net debt in the SIES refer either to all undergraduate students in English higher education institutions or to first year students. For all full-time students the SIES reports that **net debt at the time of each survey** rose in real terms from an average value of £5,561 in 2004/05 to £6,337 in 2007/08. For third and final year full-time undergraduates in stage 3 of Futuretrack, we record an average value of **expected debt on graduation** of £15,700. Given that the 2007/08 SIES is an average for all undergraduates, many of whom would have started their courses before the introduction of variable tuition fees and tuition fee loans, this average expected levels of debt we record at Futuretrack stage 3 appears both feasible and realistic.

Debt continues to mount while studying

While comparison with other surveys is difficult, the inclusion of this same question at stage 2, when students were completing their first year of full-time study, means that we can track how expectations of debt on graduation have changed.

Figure 13 shows this comparison for those students who responded to this question at stage 2. The proportion of students expecting to have accumulated debts of over £20,000 during their studies has increased from 28 per cent when they were completing their first year at university to 31 per cent as they complete their final year.

Figure 13 Anticipated debt on graduation (excluding pre-existing debts and mortgages)



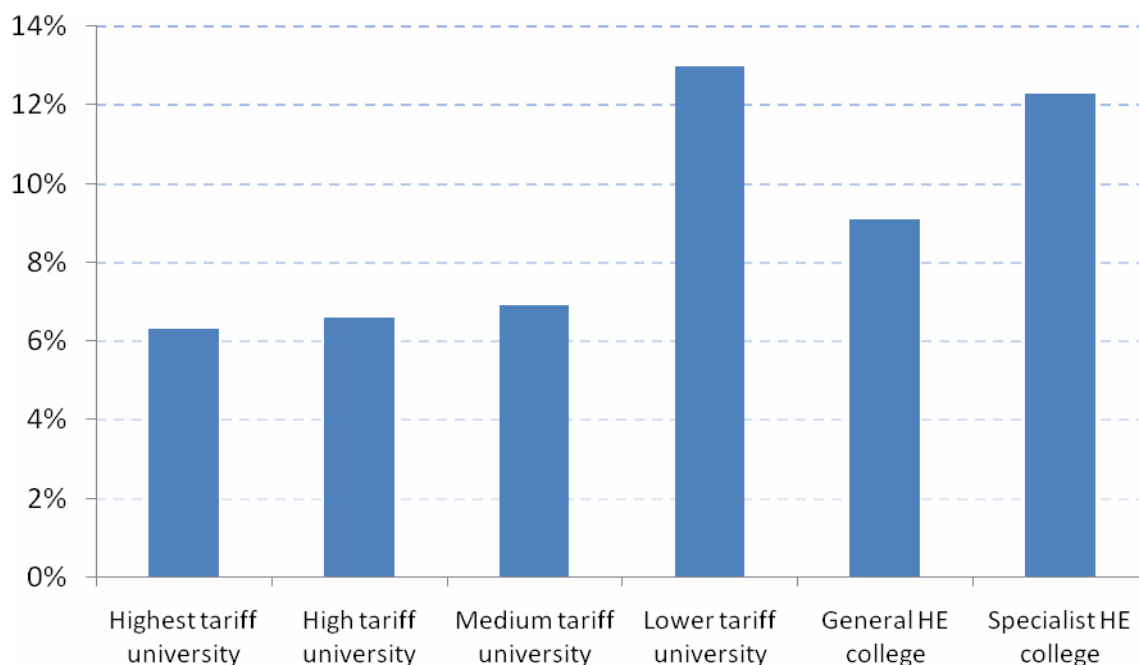
Source: Futuretrack 2006 combined dataset: UK based final year students (weighted)

In the predominant category (expected debts on graduation in the range £15,000 to £19,999), the proportion of students reporting such levels of expected debt rose from 29 per cent at the end of their first year to 31 per cent at the end of their final year of full-time undergraduate study.

We conducted a more detailed analysis of factors which are associated with expected levels of debt on graduation reported by participants at stage 3. This did not reveal any significant relationship with ethnicity or with whether or not the respondent undertook paid work during term-time or vacation. However, it did show a relationship with age and with socio-economic background. Students aged over 26 at the time of embarking on HE reported average expected levels of personal debt which were approximately £3,000 lower than younger students. Those students who were classified as coming from semi-routine occupational backgrounds were expecting to have personal debts on graduation approximately £1,000 on average higher than those from higher managerial social backgrounds. The relationship between anticipated debts and type of institution attended is also interesting. Figure 14 shows the proportion of students reporting expected debts to be more than £25,000 on completion of

their studies. Students at lower tariff universities and specialist HE colleges reported significantly higher levels of debt above £25,000 than do students who had studied in other categories of higher education institutions.

Figure 14 Percentage of third year completers anticipating debts of more than £25,000 on graduation



Source: Futuretrack 2006 combined dataset: UK based final year students (weighted)

More than one in eight of final year students attending a 'low tariff entry' university reported expected debts of £25,000 or more on graduation, compared with only one in 16 at other universities.

What is the possible effect of debt on future options?

Final year students on three year undergraduate degree courses were asked whether or not they felt that their postgraduate options/expectations were limited by the debt that they were likely to have incurred while undertaking their degree. Approximately half of all respondents indicated that their options would be affected in some way. For those who did so, it can be seen in Figure 15 that the scale of the expected debt on graduation is adversely associated with future plans/expectations. The most significant effect is on the desire to undertake postgraduate studies, with over one third of those reporting debts of £15,000 or more stating that the prospect of further debts inhibited their decision to pursue postgraduate study.

Figure 15 Future options and accumulated debt



Source: Futuretrack 2006 combined dataset: UK based final year students (weighted)

'I am not overly influenced by the prospect of repaying of government loans, given my understanding of how the repayment scheme works. I may, however, take jobs like waitressing or temping in order to pay for money owed to the bank because of my overdraft.'

(Female, 18 or under, Asian, Highest tariff university, Interdisciplinary Subjects)

'Given the current recessionary climate, graduate employment may be lower than expected, meaning that 'settling' on a job is now a realistic expectation, especially considering the initial salary expected now is much less and worth less than when the Student Loan/Top-Up fees were first agreed.'

(Male, 21-25, Asian, Medium tariff university, Business and Admin. Studies)

'Cannot afford to go travelling or gain work experience on unpaid, expensive placements abroad.'

(Female, 19-20, White, High tariff university, Physical Sciences)

'It will affect my options. I need to complete a Legal Practice Course at a different institution to become a solicitor. My search for courses is being partially governed by the cost rather than solely the quality.'

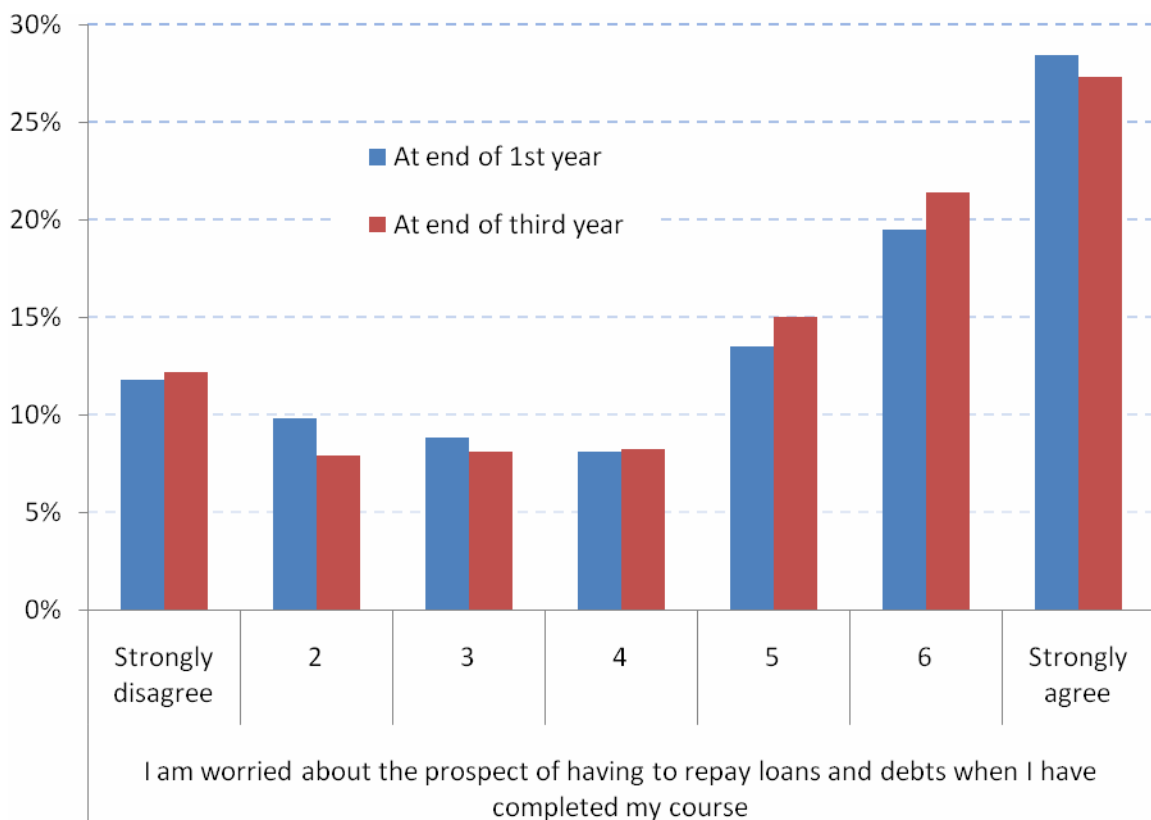
(Male, 18 or under, White, High tariff university, Law)

'I will be able to take a postgraduate course, but will then have to take a job that would not be my first choice. I will also have to live with my parents in order to pay back my debt - they live in a rural area, which will heavily affect the type of job I can get'.
 (Female, 19-20, White, High tariff university, Interdisciplinary subjects)

Who worries most about debts?

Finally, we explored the extent of worries about debt. We repeated a question asked at stage 2 about the extent of their worries about the prospect of having to repay loans and debts when their course is completed. Responses were recorded on a 7 point scale, ranging from strong disagreement at one end to strong agreement with this statement at the other. Figure 16 shows how the distribution of the responses on this scale had changed between their first year and their third year, with a shift towards more agreeing with the statement in their final year than was the case in their first year. Multivariate analysis of the responses on this scale at stage 3 (see Table 1) shows that men tended to worry less about expected debt than women, and that higher expected earnings on graduation also lessens these worries.

Figure 16 Change in extent of worries about debt from 1st year of study to 3rd year of study



Source: Futuretrack 2006 combined dataset: UK based final year students (weighted)

Table 1: Multivariate analysis of extent of worries about debt

	B	Std. Error	t	Sig.
(Constant)	4.116	.559	7.359	.000
Anticipated debt on graduation				
Up to £4,999	1.483	.092	16.092	.000
£5,000-£9,999	2.110	.072	29.235	.000
£10,000-£14,999	2.396	.070	34.453	.000
£15,000-£19,999	2.403	.062	38.703	.000
£20,000-£24,999	2.587	.065	39.964	.000
£25,000-£29,999	2.795	.089	31.578	.000
Over £30,000	3.092	.119	26.078	.000
Male	-.217	.036	-6.057	.000
Stage 2 worry score (1=not at all worried, 7= very worried)	.389	.009	45.021	.000
Natural logarithm of expected earnings	-.329	.056	-5.857	.000

$R^2 = 0.465$

Dependent variable is a linear scale on which the respondent has positioned agreement or disagreement with the statement 'I am worried about the prospect of having to repay loans and debts when I have completed my course'. '1' denotes strong disagreement, '7' denotes strong agreement.

N=8,769 (Stage 3 respondent on full-time course started in 2006, and completing in 2009, UK-domiciled and responding to the same question in stage 2)

As some of the earlier comments cited show, student attitudes to debt ranged from cavalier to evidence of significant levels of worry and concern to repay debt as soon as possible.

'Couldn't care less about the debts - I might care 'tho if the cost of living abroad to study postgrad is exponentially higher.'

(Male, 18 or under, 'Other' ethnicity, High tariff university, Mathematics & Computing)

'I will not allow my debts to hinder my professional development'.

(Male, 18 or under, black, High tariff university, Veterinary Science, Agriculture & related)

'I will start work immediately rather than taking a gap year'.

(Male, 18 or under, white, Highest tariff university, Interdisciplinary subjects)

Expected earnings after graduation

Futuretrack respondents at stage 3 who were in their final year of a three year full-time undergraduate degree course were asked the following question:

'When you start work after completing your studies how much do you realistically expect to earn per annum before income tax, national insurance and other deductions?'

The mean value of the response to this question in 2009 was £19,665, which is slightly lower than the mean value of expected earnings of £19,800 recorded in the 2007/08 Student Income and Expenditure Survey (SIES). However, this difference may not reflect a decline in expected earnings over the one year separating these two estimates, given that the SIES relates to a sample of all undergraduate students in full-time courses in England only rather than the third year UK finalists in Futuretrack. Analysis of the SIES data on expected earnings shows that men expect higher average earnings than women, those from higher socio-economic backgrounds expect higher earnings, as do students recording Black and Asian ethnic origins. In terms of subjects, the SIES reveals lower expectations among those studying for an 'undergraduate degree in creative arts and humanities'³. These findings are reproduced within the analysis of Futuretrack third year completers. We adopt here a multivariate framework, allowing us to disentangle the separate effects of a wide range of factors on expected earnings. Detailed results are shown in an annex. Table 2 below extracts the most important relationships revealed by this analysis.

Table 2: Factors associated with expected earnings after graduation

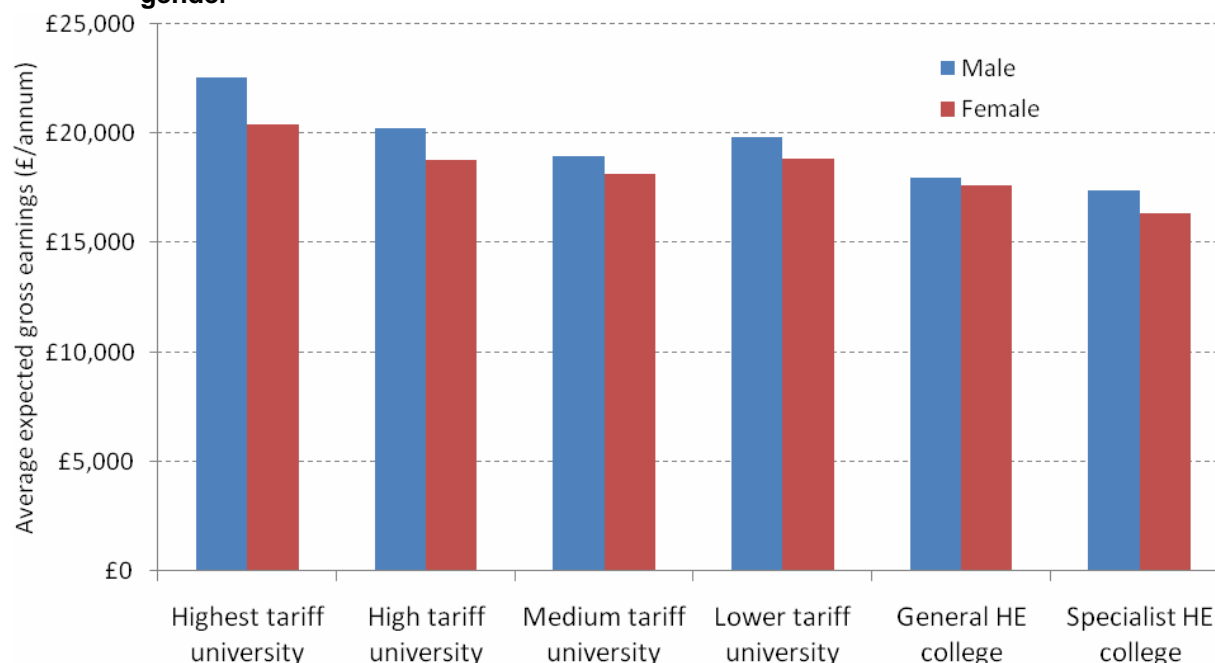
Factors positively associated with expectations of earnings after graduation	Factors negatively associated with expectations of earnings after graduation
Male	Female
Law, Social Studies	Biology, Veterinary sciences, Physical sciences, Architecture, Mass communication, Classics History, Creative arts, Interdisciplinary subjects
Highest tariff university	
Black, Asian or Mixed ethnic background	
Older age groups	
Already having applied for jobs	Not yet applied
Clear about future plans	No idea about future plans
	Disability/health problem restricting ability to do academic work
Planning full-time postgraduate course	Planning temporary employment

Interestingly, this analysis indicates that socio-economic background has no separate significant effect on expected earnings after including factors such as the type of higher education institution at

³ The SIES also shows higher than average expectations of earnings among medicine and dentistry students and lower than average expected earnings for language students. Given that most such students are on four year degree courses, they are not included in this analysis of third year completers from Futuretrack.

which the respondent was studying. A strong relationship is also observed between those studying at the elite universities (highest entry tariff). Figure 17 shows that men at such institutions expect to earn approximately £6,000 per year more than women studying at specialist HE colleges.

Figure 17 Average expected earnings by type of institution (HEI access classification) and gender



The multivariate analysis shows a wide variety of influences associated with expected earnings. There is also evidence here of a relationship between expected debt on graduation and expected earnings. For those reporting some expected level of debt below £20,000, their expected earnings are approximately 2 – 4 % lower than those who expect to have no debts on graduation. For those with debts expected to be over £20,000, there is no significant difference in their expected earnings compared with those who expect to have no debts on graduation.

Summary

- Students in their third and final year of HE were more likely to have paid work that they had had in their first year: 47 per cent had had some paid work during term, three-quarters had done some paid work during vacations, and only 22 per cent had done no paid work whatsoever.
- In most regions, between 40-50 per cent of the finalists had undertaken paid work, but students in Northern Ireland and Scotland were considerably more likely to have done so, whereas those in Wales and the East of England were least likely to have had such jobs.
- The weekly hours of term-time working had also increased since the first year student survey. Women's average hours of paid work during term had risen from eight to over 12 hours per week, while men's had increased from eight and a half to 13.4.
- The extent of participation in paid work during term was correlated with the type of HEI attended; those at HE colleges and low tariff universities reported longest hours of work, those at the highest tariff HEIs least. BUT the average hours of paid work among those in the highest tariff category had doubled between first and third years, from five to ten hours weekly.
- Males worked longer hours in jobs than females; Black Caribbean were most likely to have paid work, followed by White students, those in the 'other ethnic minorities and mixed' group, Black African and those from an Asian Indian background were most likely to have worked very long

hours. Asian Bangladeshi, Pakistani and Chinese UK students were least likely to have undertaken paid work during term in their final year

- Comparing how third year students had obtained their paid jobs, they were more likely so have done so via family and other networks than in their first year.
- Growing reasons for doing paid work during term were to pay for essential living costs and leisure, and to get work experience of a particular industry or occupation or generally and the pattern of reasons for vacation work was similar: necessity and the need to get experience. It is clear that the message that employers look for work experience has got through.
- The amount of voluntary or unpaid work done by finalists was less than in their first year, but where it had grown, it tended to be unpaid work as an intern or related to studies. The reasons where there had been the biggest growth were 'experience for future career' and 'to learn new skills'.
- The Futuretrack survey reinforces previous findings that participation in paid work during term is related to educational and socio-economic advantage and disadvantage. It is too early to investigate either the positive or negative impacts of paid work on academic achievement or opportunities, but students working long hours were more likely to be dissatisfied with various aspects of their courses, to predict lower grades for themselves than those who worked less, and to participate less in other extra-curricular activities.
- We found evidence of both unwilling participation in paid work and frustration that paid work was not available in a significant minority of the cases where students did not have jobs. Job shortages related to particular locations or to the recession in general were commented on, as was the difficulty in finding work sufficiently flexible to fit with the demands of coursework.
- Many mature students reported family and community responsibilities that precluded paid work, but which in themselves constituted work and caused stress alongside study requirements, emphasising the heterogeneity of both the student population and their support and information needs.
- Nearly a third (31 per cent) of the third year finalist respondents expected to have debts of over £20,000 on completion of their courses, and in this group, 8 per cent expected debts of over £25,000. Male students anticipated higher debts, on average, at the end of their course than females.
- The scale of debts anticipated by these students had increased as their studies had progressed, leading to an increase in the average level of debt predicted and higher proportions expecting debts of over £20,000.
- Those attending HEIs at the 'higher tariff' end of the spectrum were least likely to have been accruing high debts than those at the lower end. Those at the low tariff universities were most likely to expect to end up with debts of over £25,000, followed by those at Specialist HE colleges, whereas those at the highest tariff universities were half as likely do so.
- Those with accumulated debt of £15,000 or more were more likely to predict that their future options would be constrained by debt. Nearly 60 per cent of those whose debt fell below the £15,000 level reported that their career options would not be restricted, compared to well under half of those whose debts already exceeded £15,000. They were more likely to say that they would like to do a postgraduate course, but did not wish to add to debts, or that they would have to settle for a less attractive job than they would prefer, in terms of career aspirations, so that they could pay off debts, or to have reported that the locations where they would be able to seek employment would be limited (mainly because of a need to return to parental homes for support while engaging in job-search).
- Third year students reported an increased tendency to agree with the statement 'I am worried about the prospect of having to repay loans and debts when I have completed my course'.
- Men worried less than women about debts. This may reflect their higher expected earnings, which we also looked at in this chapter.
- The average earnings expected by the Futuretrack sample of students about to graduate in summer 2009 was £19,665.

- Third year finalist males, those who were studying Law or Social Studies, those attending the Highest tariff universities, those from Black, Asian or Mixed ethnicity backgrounds, those in older age groups and those who had already applied for jobs or were planning full-time postgraduate study had higher earnings expectations.
- Third year finalist women, those who were studying Biology, Veterinary Sciences, Physical sciences, Architecture, Mass Communication, Classics, History, Creative Arts and Interdisciplinary subjects, those with a disability, and those who had no clear direction in mind, having not yet applied for jobs and planning temporary employment, had relatively lower expectations.
- Socio-economic background had no significant impact on expected earnings, but type of HEI and gender did, with males at the highest tariff universities expecting an average starting salary of £2,000 per annum more than women from similar HEIs and £6,000 per annum more than women at Specialist HE colleges whose male peers expected to earn on average £1,000 more. These relativities, at least, are likely to be realised, on the strength of existing graduate earnings patterns.
- There is evidence of a relationship between expected debt and expected earnings, but the picture is mixed, with no significant difference between those declaring that they will have no debts on graduation and those expecting debts of over £20,000, but those predicting debts under £20,000 predicted somewhat lower earnings, on average.

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Annex

Table A6.1: Factors associated with expected earnings after graduation, third year full-time completers

	Unstandardized Coefficients		t	Sig.
	B	Std. Error		
(Constant)	9.605	.024	402.315	.000
Male	0.060	.006	10.379	.000
Subject studied				
Medicine and Dentistry	n.a.			
Subjects allied to Medicine	-0.027	.012	-2.367	.018
Biology, Veterinary Science, Agriculture and related	-0.082	.010	-7.925	.000
Physical Sciences	-0.056	.014	-4.174	.000
Mathematical and Computer Science	0.022	.014	1.561	.119
Engineering, Technologies	-0.004	.021	-.195	.845
Architecture, Build and Plan	-0.123	.023	-5.405	.000
Social Studies	Ref.			
Law	0.049	.013	3.635	.000
Business and Admin studies	-0.025	.013	-1.975	.048
Mass communication and Documentation	-0.173	.017	-10.165	.000
Linguistics and Classics	-0.087	.014	-6.423	.000
Languages	n.a.			
History and Philosophical studies	-0.079	.012	-6.345	.000
Creative Arts and Design	-0.184	.012	-14.942	.000
Education	-0.012	.015	-.816	.415
Interdisciplinary subjects	-0.047	.010	-4.802	.000
HEI access classification				
Highest tariff university	0.099	.007	13.547	.000
High tariff university	0.031	.007	4.458	.000
Medium tariff university	ref			
Lower tariff university	0.024	.009	2.829	.005
General HE college	-0.047	.026	-1.837	.066
Specialist HE college	-0.013	.015	-.816	.415

Overseas	0.059	.025	2.386	.017
Ethnicity				
Asian	0.051	.010	5.058	.000
Black	0.092	.016	5.765	.000
White	ref			
Mixed	0.053	.015	3.498	.000
Other	-0.017	.020	-.830	.406
Age group				
18 and under	-0.012	.006	-2.083	.037
19-20	ref			
21-25	0.036	.009	3.811	.000
26 and over	0.085	.009	9.315	.000
Socio-economic status				
Higher managerial and professional occupations	0.014	.008	1.838	.066
Lower managerial and professional occupations	Ref.			
Intermediate occupations	-0.005	.009	-.505	.613
Small employers and own account workers	-0.004	.012	-.336	.737
Lower supervisory and technical occupations	-0.013	.012	-1.021	.307
Semi-routine occupations	-0.008	.010	-.733	.464
Routine occupations	-0.010	.012	-.848	.397
Social class not known	0.009	.007	1.170	.242
Has already applied for jobs	0.045	.006	7.372	.000
Clarity about future plans				
Clear idea (1)	0.063	.010	6.167	.000
(2)	0.022	.010	2.165	.030
(3)	-0.003	.011	-.260	.795
(4)	Ref.			
(5)	-0.022	.012	-1.774	.076
(6)	-0.026	.012	-2.142	.032
No idea (7)	-0.039	.013	-2.951	.003

Expected personal debt on graduation				
None	ref			
Up to £4,999	-0.026	.013	-1.947	.052
£5,000-£9,999	-0.017	.011	-1.603	.109
£10,000-£14,999	-0.043	.010	-4.238	.000
£15,000-£19,999	-0.039	.009	-4.311	.000
£20,000-£24,999	-0.028	.009	-2.933	.003
£25,000-£29,999	-0.005	.013	-.396	.692
Over £30,000	0.001	.018	.051	.959
Paid work while student				
During vacation and term-time	0.02	.007	2.867	.004
Only during vacation	0.052	.007	7.265	.000
Only during term-time	0.006	.014	.436	.663
Not at all	Ref.			
Own strengths and weaknesses				
Written communication	0.008	.003	2.589	.010
Spoken communication	0.006	.003	1.674	.094
Numeracy skills	0.015	.003	5.752	.000
Computer literacy	-0.001	.003	-.445	.657
Self-confidence	0.011	.003	3.360	.001
Self-discipline	0.004	.003	1.568	.117
Ability to work in teams	-0.001	.004	-.216	.829
Leadership skills	0.023	.004	6.466	.000
Creativity	-0.013	.003	-4.602	.000
Disability/health problem restricting ability to do academic work	-0.021	.010	-2.237	.025
Plans for year after graduation				
	Ref.			
Obtain employment related to longer-term career plans	0.025	.019	1.365	.172
Become self-employed	-0.049	.008	-6.276	.000
Temporary employment while considering longer-term plans	-0.034	.018	-1.899	.058
Temporary employment while paying off debt	0.041	.007	5.639	.000
Full-time postgraduate course				

Undertake vocational training	0.027	.013	2.130	.033
Travel or take time out	0.018	.010	1.789	.074
Don't know	0	.015	.010	.992
Other	0.012	.023	.506	.613

$R^2 = 0.221$

Dependent variable is natural logarithm of expected annual gross earnings when respondent starts work after completing studies

N=10,984 (Stage 3 respondent on full-time course started in 2006, and completing in 2009, UK-domiciled)