Are we paying too much or too little for Higher Education?

Abstract

Given the recent controversy regarding tuition fees, the primary focus of this essay will be University education. In January 2004, the Labour Government increased tuition fees to a maximum of £3000 per year, and December 2010 saw the coalition Government increase fees further, to a maximum of £9000 per year. If Higher Education (HE) were a normal good, we would expect participation rates to fall as a result. However, participation rates have soared in recent years, seemingly unresponsive to fee increases. With the proportion of graduates in the UK labour force standing at 13% in 2006 (Zhu and Walker, 2008), and the persistent flood of graduates exiting universities on an annual basis, there is considerable competition for graduate jobs. This places added pressure on the prospective student, as the decision to go to university is the most financially significant it has ever been. If students decide to continue to HE, which subjects yield the greatest return? Is HE more advantageous for women or men? From the year 2006, UK universities were able to charge a maximum of £3000 per year to full-time undergraduate students, and 94% of universities did. With this in mind, one would expect the same to occur for the recent fee increases, with £9000 being the norm among the majority. Are we paying too much or too little? Evidence certainly points towards the latter.

Introduction

In recent years, HE has become increasingly popular, sparking a marked increase in participation. The number of first-time entrants entering HE increased from 285,000 in 2006/7 to 313,000 in 2008/9 (BIS, 2010), despite increased tuition fees. Moreover, initial participation rates rose both for males (37.9% to 40.0%) and females (49.1% to 51.2%) between academic years 2007/08 and 2008/09. As we would expect, the most significant growth in initial participation rates are attributed to 18 year olds, showing an increase of 0.8% between 2007/08 and 2008/09. This represents a change in preferences as more individuals are opting to increase their human capital by engaging in HE, perhaps in an attempt to increase their value to an employer. Basic economics tells us that rational agents will undertake an action if there is an incentive to do so. With this in mind, this essay will discuss the returns to education in order to understand the incentives that have resulted in increased participation rates. Furthermore, in order to discuss whether we are paying too much or too little for HE, such returns will be related to the costs foregone by a student.

Returns to Higher Education

In our discussion of whether we are paying too much for HE, we must look at the returns to a degree. Private financial returns to HE, or the percentage increase in the individual's hourly wage as a result of graduating, exist for both males and females. However, research suggests such returns are higher for women. It is thought that as a result of the uncertainty associated with enrolling on a HE course, students will attempt to minimise risk by studying a subject from which they are able to achieve the highest return (Naylor et al., 2000). This becomes increasingly relevant when one considers the recent fee overhaul. With UK universities able to charge up to £9000 per year (from 2012-13), prospective students may decide against undertaking longer degree courses such as Medicine and Chemistry (usually 6 and 4 years respectively), and instead decide to study a degree of typical length (3 years). In addition, the returns to HE differ by degree subject, and thus when deciding whether or not to progress to HE, a prospective student faces an added risk as they are unaware of the degree class they will achieve. For male graduates, the additional earnings premium from obtaining a first class honours degree is 5.6% higher than that of the representative graduate, whilst male graduates with a third class degree experience wages 6.3% lower (Naylor et al., 2000). For females, there is an additional premium of 2.4% for a first degree, whilst female graduates with a third class degree earn 5.8% less than the average graduate.

Blundell et al. (2000) used NCDS[1] data to examine the returns to HE. The rates of return to be discussed are the percentage increases in hourly wage as a result of holding a degree, relative to those who were able to attend university (i.e. hold at least one A Level), but did not. The NCDS data features individuals at the age of 33, thus capturing individuals pursuing a career whilst eliminating any fluctuations in earnings that may be apparent shortly after graduation.

[1] British National Child Development Study (NCDS). This study follows 2529 individuals (1251 men, 1278 women) working in Britain who were aged 33 in 1991 who hold at least one A Level. 76% of men and 71% of women with A Levels have gained a HE (HE) qualification by the age of 33.

market. This means that a person with 2 or more A Levels, who has decided not to go to University, gains the grey area (the indirect costs assumed by the degree holder). The non-University goer foregoes no direct or indirect costs, and receives earnings to the value of the area under his or her earnings profile. Now we turn to the degree student, who is responsible for costs summing to the value of the grey area. Indirect costs (foregone earnings) form part of this area, and are the opportunity cost to the degree holder of not entering the labour market. As is clear from the diagram, the annual earnings premium to the degree holder is given by the value of the green area. The degree holder receives the value of the area under his or her earnings profile, which includes the green area and the area directly below it. The diagram captures the additional returns to degree level study and accurately portrays a popular finding in human capital research, this being that the returns to HE increase over time. The initial advantage of holding a degree facilitates faster career development (particularly in the early stages of graduate employment), and as a result, the age earnings profile of a degree holder is steeper than that of an individual with two or more A Levels.

Ultimately, PricewaterhouseCoopers (2005) report that the average graduate earns approximately £129,000 more than an individual with two or more A Levels throughout the course of his or her working life. The analysis presented in this section certainly provides weight to the idea that tuition fees of £9000 are justified. With current UEA tuition fees (for the 2010-11 academic year) standing at £3290, an additional £5710 per year (£17130 over three years) would at worst make a minor dent in the additional lifetime earnings the average UEA graduate could expect to receive. Therefore, without being prematurely conclusive, one can certainly argue that we are not paying too much for HE. To be discussed now are the costs of HE.

Costs of Higher Education

In our discussion of whether we are paying too much or too little for HE, we now consider the costs to students. UK tuition fees stand at £3,290 per year, and this is of course the amount currently charged by UEA for an Economics Degree. However the costs of HE not only include tuition fees, but accommodation and other living costs, for which the student is responsible, either during or after study. Under the latest tuition fee overhaul, students will be expected to begin student loan repayments once they are earning over £21,000 per year, an increase of £6,000 on the current threshold. However, 89.1% of 2009 graduate starting salaries exceeded £22,000 (AGR, 2009), and as a result, one cannot help but overlook the possible benefits of increasing the repayment threshold to £21,000.

The annual cost of studying a University course was £1,545.50 in 1988-89, and this increased by 311.5 percent dramatically over the course of two decades, reaching £6,360 for the academic year 2009-10 (Daily Mail, 2010). The last time a tuition fee cap was introduced, 94% of UK Universities charged the maximum possible. With this in mind it would not be out of the question to assume that the vast majority of Universities will do the same for the academic year 2012-13, when the latest cap of £9000 takes effect. Evidence suggests that when UK Universities are able to charge £9000 per year, the annual cost of studying a Degree will jump to £12,750 per year (£38,250 for a 3 year Degree). Referring back to the estimation of additional graduate earnings over an individual's working life (PricewaterhouseCoopers, 2005), a Degree holder can expect to earn an extra £129,000. A simple calculation, subtracting the average cost of study for a 3 year Degree from this estimated lifetime earnings premium (£129,000 - £38,250), gives a net lifetime earnings premium of £90,750. Of course, this is just a numerical example, and thus should be taken lightly in terms of analysis. However, it is helpful in allowing us to represent the gulf between what the student pays for their degree, and on average, what they can expect to gain from it in terms of additional income.

The latest tuition fee cap and accompanying policies focus on shifting the financial responsibility for HE away from the state and towards the individual. However, at present the exchequer benefits considerably from University Graduates. Whilst University students are (broadly speaking) not paying income tax, the UK Government receives additional tax revenues from graduates as they gain employment after University. The graph below (PricewaterhouseCoopers, 2005) displays the returns present to the Exchequer by degree subject. As we can see, there are some degree subjects, such as Management, for which the exchequer rate of return exceeds the return to the degree holder. As PricewaterhouseCoopers (2005) highlight, it costs the UK Government £21,000 to provide the average graduate with a University education. However, the additional income tax and national insurance the Government collects from the average Degree holder over his or her working life is £93,000. As a result, given the substantial returns to the exchequer, one must question why the UK Government is shifting financial accountability away from the state. Naturally, the UK Government has an interest in maximising the number of graduates in the UK, and although research suggests that tuition fee increases do little to dampen HE