

## **Informed choice? The new English student funding system and widening participation**

Nick Adnett\* and Diana Tlupova

*Institute for Education Policy Research, Staffordshire University, Stoke-on-Trent, UK*

The new English system of student finance seeks to resolve a higher education policy trilemma created by government's desire to switch more of the costs on to students, whilst seeking to promote both increased and widening participation. The rationale for this new funding system is based upon orthodox economic analysis which, the authors argue, rests upon inappropriate assumptions. Survey evidence from recent entrants is presented to support this critique and to question whether the current system can promote both informed student decision-making and widening participation.

**Keywords:** HE entrants; tuition fees; widening participation

### **I. Introduction**

There are fundamental economic pressures on Western governments to switch more of the costs of higher education on to students and their families. At the same time other economic and social pressures are encouraging those governments to both increase and widen participation in higher education. In this paper we investigate the tensions, if not contradictions, between these three objectives, taking recent English experience as a case study and employing the orthodox economic analysis favoured by recent British governments. We utilise that analysis to provide a new perspective on the objective of widening participation and in doing so we develop an initial assessment of the impact of the new system, especially increased bursary provisions, on fair access and widening participation.

Watson (2006) argues that: 'At its heart, of course, widening participation is an issue of social justice' (2), but points out that in the UK when developing its policy, the Government has relied primarily on an economic rationale. It is on the latter that we focus in this paper in our analysis of the attempt to reconcile the policy trilemma presented in Figure 1. This illustrates the basic conflict facing higher education policy. The Government is trying to reduce its expenditure on higher education by switching a higher proportion of the costs to students, but at the same time recognises that to achieve its wider economic and social objectives an increase in, and widening of, participation in higher education is required.

Our analysis of how the attempted reconciliation of these three objectives is progressing in England is structured as follows. In the following section we briefly identify the trends in the pattern of expenditure on higher education in developed economies, examine the nature of the pressures on government funding and explain the underlying causes of the attempts by governments to switch more of the funding burden of higher education on to students and their families. In Section 3, we consider the concept of widening participation from the perspective of orthodox economic analysis. In doing so we address the question of what determines the

---

\*Corresponding author. Email: [n.j.adnett@staffs.ac.uk](mailto:n.j.adnett@staffs.ac.uk)

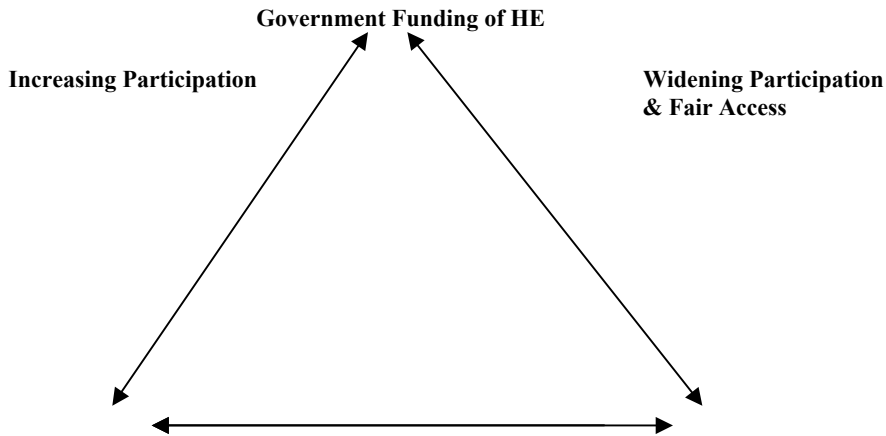


Figure 1. The higher education policy trilemma.

optimal participation rate in higher education and the efficient allocation of students across higher education institutions. In Section 4 we turn to analyse the decision-making of potential entrants to higher education. We use the orthodox human capital model of the higher education participation decision, favoured by the Government, to examine how the new English system of student finance is supposed to influence the behaviour of entrants. The appropriateness of the assumptions underpinning this analysis is then critically examined and insights from optimal tax theory, behavioural economics and US experience of complex systems of student finance are used to explain the generally lower than expected take-up of bursaries in England (Office for Fair Access 2008). Section 5 contains some initial results from a survey of recent higher education entrants as to the nature of student decision-making and the extent to which they have behaved as assumed by orthodox economic theory. We conclude our discussion in Section 6 by providing an initial assessment of the extent to which the new student finance system can assist in the reconciliation of the Government's conflicting policy objectives.

## 2. Government funding of higher education: recent trends

Since productivity in higher education has, so far, generally grown more slowly than elsewhere in the economy, the relative price of higher education has tended to increase over time (Jacobs and van der Ploeg 2006). This process, termed 'Baumol's Cost Disease' (Baumol 1967), is common to relatively labour-intensive parts of the service sector, reflecting in higher education that labour-displacing technical progress has so far been relatively slow, with little or no displacement of highly educated workers from the process of teaching and research. Hence real expenditure per higher education student tends to rise over time (Table 1, column 2), which, together with generally rising participation rates (Table 1, column 5), creates funding problems for those countries with largely state-financed higher education systems (Table 1, column 3). These funding problems have occurred at a time when Western governments have found it difficult to raise the overall tax burden because of more mobile capital and labour, and many of them face new pressures on their expenditure as a result of population ageing. As Adnett (2006) and Hahn (2007) explain, these factors have encouraged governments to seek to shift a greater share of these higher education costs on to the students and their families. Consistent with this analysis, in countries of the Organisation for Economic Co-operation and Development private expenditure on higher education has been growing in recent years at a rate of more than twice that of public expenditure (Hahn 2007).

Table 1. Tertiary education indicators, 2003. Source: Organisation for Economic Co-operation and Development (2007).

|              | Public expenditure on tertiary education (as a % of Gross Domestic Product) | Educational expenditure: tertiary level (constant 2003 prices, 1995 = 100) | Public expenditure as % of all expenditure on tertiary institutions | Net entry rate in tertiary type A | Enrolment in total tertiary education <sup>1</sup> (1995 = 100) |
|--------------|---|--|---|-----------------------------------|---|
| UK           | 1.1   | 120  | 70.2  | 52                                | 124   |
| USA          | 1.5   | 133  | 42.8  | 63                                | n/a   |
| OECD Average | 1.3   | 146  | 76.2  | 53                                | 149   |
| EU19 Average | 1.3   | 147  | 85.0  | 52                                | n/a   |

<sup>1</sup>Figures are for 2004.

These pressures on government funding of higher education coincided with other pressures to increase and widen participation in higher education. In Europe, the Lisbon Strategy has championed the notion that the development of the knowledge-based economy has caused economic competitiveness to increasingly be dependent upon a country's human capital (Schleicher 2006). The growing acceptance of the proposition that technology is increasingly skill biased and that the skill and knowledge intensity of production is therefore increasing over time (Machin 2004) has encouraged many European governments to attempt to close the tertiary participation gap with the USA (Table 1, column 4). Whilst in principle 'increasing' is distinct from 'widening' participation in England, and Cardak and Ryan (2007) similarly argue in Australia, participation rates in higher education amongst those completing academic secondary pathways are so high that further increases must predominantly rely upon inducing more students from groups currently under-represented. Hence the policy trilemma introduced above is increasingly becoming a dilemma in some countries. In turn this would seem to require increased government expenditure on raising educational aspirations amongst non-traditional student groups and providing greater financial incentives for youths from these groups to remain in post-compulsory schooling. Hence Western governments face this difficulty of reconciling their perceived need to switch more higher education costs on to students whilst increasing and widening the overall higher education participation rate and achieving fair access.

In England the Government's response in the 2004 Higher Education Act was to strengthen the quasi-market in higher education, deregulate tuition fees and radically restructure the student funding system. Table 2 summarise the main changes. Initially 94% of higher education institutions chose to charge the maximum tuition fee and those doing so were required to provide bursaries of at least £300 a year to students from low-income families to supplement their grants and maintenance loans. It is important to note here that bursaries are distinct from scholarships in that the former are awarded on the basis of financial need whilst the latter are predominantly awarded on the basis of merit. In addition, an Office for Fair Access (OFFA) was established to monitor the new system with the brief to ensure that the introduction of higher tuition fees did not have a detrimental effect on widening student participation. In its first monitoring report (Office for Fair Access 2008), it calculated that as a result of the new tuition fees higher education institutions had gained an additional revenue of nearly £450 million. It was initially estimated that around 30% of this revenue would be spent by higher education institutions on student bursaries and additional outreach activities, though OFFA reports that only

Table 2. Summary of the old and new student funding systems in England.

| The 'Old' System                        | The 'New' System   |
|---|--|
| Tuition fee                             | Tuition fee  |
| – students would pay £1200 in 2006–2007 | – from 2006–2007 students pay up to £3000  |
| – exemptions based upon parental income | – no exemptions  |
| – fixed fee rate                        | – variable fee rate  |
| – upfront fee                           | – deferred fee (subsidised loans: zero real interest rate, 25 year debt write-off) |
| Before 2004–2005 no grant               | Means-tested grants up to £2700 plus additional bursaries                          |
| Subsidised loans for living costs       | Subsidised loans for living costs  |

The maximum tuition fees, government grant and loan and mandatory bursary all increase annually in line with inflation. The figures above applied to the 2006–2007 academic year.

around £96 million was recycled in bursaries and £20 million in outreach, in total around £25 million less than expected (Office for Fair Access 2008).

### 3. An economic analysis of widening participation

Any economic rationale for widening participation must depend upon there being net social welfare gains from achieving a more equal distribution of participation rates across social groups. The general consensus is that private rates of return to participation in higher education remain above the expected rates of return of alternative investment opportunities of similar risk (Adnett and Slack 2007). Notwithstanding periodic attempts to quantify the social returns to higher education, policymakers have conventionally assumed that social rates of return broadly reflect the private rates, which leads to the further presumption that a rise in the participation of 'under-represented' groups would be welfare enhancing to society. Since no 'over-represented' groups have been explicitly identified, in England widening participation has from this perspective become bundled together with increasing overall participation in higher education. A more general concern with widening participation has conventionally been predicated on the proposition that particular social groups are unfairly under-represented in higher education (Gorard et al. 2007). However, establishing whether there is 'unfair' under-representation is, as pointed out by Gorard et al., problematic given the selective nature of entry into higher education and the inability to isolate the contributions which school, peer group and family effects make to prior student attainment.

As can be seen from the above discussion, and as pointed out by Watson (2006), in the UK widening participation has predominantly been associated with a 'deficit' model, that is, a concern with under-represented groups and this phrase was enshrined in the 2004 English Higher Education Act. Indeed, the then Secretary of State's 2006 letter of direction to the Higher Education Funding Council of England specifies:

The second [priority] is on widening participation in HE [higher education] for low income families, where in spite of the recent progress we have made we do not perform well enough. A low rate of participation in HE amongst the lowest socio-economic groups represents entrenched inequality and in economic terms a waste of human capital. (DfES 2006, 2)

It is not clear how this under-representation inevitably leads to 'a waste of human capital'. Presumably the Secretary of State was arguing that the lowest socio-economic groups are systematically under-investing in education in the sense that there are currently unrealised net private and social benefits from higher participation rates amongst these groups. Adnett and

Slack's (2007) survey suggested that the evidence base for such a conclusion remains weak. We know little about the net private benefits to marginal non-traditional entrants to higher education and even less about the net social benefits from a rise in their participation. In part the reason for this knowledge gap is the lack of appropriate comparator groups and the small number of respondents in these categories in cohort data (Gorard et al. 2007).

We can develop from the Secretary of State's directive an insight into optimal patterns of participation from orthodox economic analysis. Horizontal equity would seem to require that at the margin government policy encourages different social groups to invest in education up to the point where the marginal net rates of return are equalised at the social rate of time preference. However, this ignores potential differences in the perceived costs and risks of educational investments and time preference across social groups. The labour market may also reward educational attainment differently for these different social groups. Moreover, government policymaking should be informed by social welfare considerations, which require acknowledgement of externalities. In particular, given the apparent strength of the inter-generational transfer of investments in human capital (Blanden, Gregg, and Machin 2005; Blanden, Gregg, and Macmillan 2007), the present value of the social rate of return from raising participation rates amongst low socio-economic groups may be extremely high. The conceptual and empirical problems in estimating these determinants of the optimal pattern of higher education participation rates across social groups, even when concentrating only upon economic considerations, explain the reluctance of most governments to specify quantitative targets in this area. However, the Government has explicitly adopted a participation target of 50% of those aged between 18 and 30 by 2010, though a rationale for this particular target has never been fully articulated.

In the absence of empirical evidence on the relative size of the key determinants above, governments typically attempt to pursue a more modest higher education policy objective: assigning selective subsidies in an efficient manner (Paulsen 2001). From this perspective the key policy issue concerns whether subsidies are targeted upon those groups where participation is lowest in relation to their socially desirable level (Hoenack 1982) and whether such subsidies are effective in raising participation in these groups. However, in trying to operationalise the latter condition we come back to the problem of the inadequate evidence base for policymaking in this area.

Our discussion above suggests that we lack an adequate conceptual and empirical base to operationalise the objective of widening participation in higher education. This, however, has not prevented governments from designing policies to seek to achieve these objectives and we now turn to analyse the recent reforms to the student finance system in England.

#### **4. The (overly?) simple economics of the new student finance system**

The basic economic logic behind the introduction of variable tuition fees accompanied by the reintroduction of grants and expansion of bursaries (means tested or allocated on other under-represented criteria) is to shift higher education costs from taxpayers to students without reducing or narrowing participation rates. In the context of the orthodox human capital analysis of educational decision-making, these changes mean that those future potential participants in higher education now face different economic incentives. More specifically, in so far as the Government is successful in shifting more of the costs of higher education provision on to students, then the latter's costs of participation rise, and for a given graduate wage premium, their expected rate of return from investing in higher education will be lower. Assuming that there is a normal distribution of expected rates of return, then some marginal entrants will no longer expect to receive a sufficiently high return to warrant entry and participation rates will fall, other things being equal. This is the normal price mechanism at work. However, given the

Government's concern to increase and widen participation in higher education for economic or social reasons, it sought to avoid this consequence by targeting grants and bursaries at these marginal students. If it is successful in its targeting then, other things being equal, participation rates may be unaffected by the overall shift in funding, with non-marginal students suffering a fall in their rents, that is, their rates of returns in excess of those needed to induce their participation.

Effectively, through this new funding system the Government has redistributed part of the previous subsidy away from the intra-marginal students to present and future marginal entrants and the general taxpayer. Dearden et al. (2007) estimate the likely size of these distributional effects, though they are unable to fully incorporate into their analysis the expanded provision of bursaries. They suggest that as a result of the impact of grants and bursaries individuals from the lowest part of the parental income distribution will typically find a sizeable net reduction over their lifetime in the cost of their higher education. Women with the lowest lifetime graduate earnings will also see a reduction, whilst higher-earning graduates will experience an increase in the cost of their higher education.

In essence, this new system is trying to reduce the average economic returns to participants in higher education, without at the margin reducing the incentives to participate. Indeed by requiring higher education institutions to increase their outreach programmes, whilst extending Educational Maintenance Allowances for those remaining in post-compulsory secondary education, the Government is hoping that an overall increase in staying-on rates, together with continuing 'high' graduate premia, will induce future widening and increasing participation in higher education.

The other element of these recent reforms is the deregulation of tuition fees and extension of university-based bursary provision. Together these enable individual higher education providers to increase the extent to which they compete in the quasi-market in terms of the 'price' of their products and, if they wish, to target financial incentives at favoured potential entrants. This was viewed by the Government as part of the deregulation of the higher education market in which, as Callender and Jackson (2008) explain, well-informed student choice was to drive the quality agenda and ensure efficient 'matches' between students and higher education providers.

There are a number of crucial assumptions implicit in the orthodox analysis of educational decision-making underpinning the new English system of student finance. Firstly, it assumes that traditional students, those in the new system who receive no additional targeted funding, all expect to receive rents from higher education participation. To the extent that certain groups may be 'over-represented' in higher education, then this will not be the case and some potential students from medium/high income families with relatively low ability, high levels of risk aversion or who are not attracted by graduate occupations will be dissuaded from entry by the higher tuition fees. Such a consequence may be viewed as increasing social welfare, but only if there are no compensating positive externalities resulting from their participation in higher education.

More crucially from the widening participation perspective, the orthodox analysis is based on the supposition that participation decisions of marginal entrants are primarily rational investment decisions, sensitive to financial incentives. It further assumes that these potential students are well informed about these financial considerations, that is, they can easily acquire and interpret the information they require to make these rational investment decisions. In other words, it assumes that potential non-traditional entrants to higher education can calculate that their liability to pay higher tuition fees is more than offset by the combination of grant, loan, scholarship and/or bursary available to them. However, as London Economics (2007) concluded in their report for Million Plus:

The student finance system for full-time students in the UK is exceptionally complicated. The combination of differential fees, fee loans, maintenance loans, fee grants, maintenance grants, bursaries and the Education Maintenance Allowance make the entire package almost impossible to understand. (64)

For those students from lower-income families potentially eligible for a bursary and scholarship there is now a need to acquire and interpret additional complex financial information at the individual university level. Put simply, the new student finance system places the greatest burden in terms of collecting, collating and analysing complex information on those decision-makers who, previous research suggests, are likely to face the greatest difficulty in handling these tasks (Gorard et al. 2007).

Evidence from the USA, examined below, suggests that it is only simple and certain programmes of financial support which have proved to be effective in encouraging higher education participation amongst the targeted under-represented group. The US system is a particularly useful comparator for the English system discussed above, since the US Government finances less than half of higher education costs (see Table 1 above), using a variety of programmes (Pell Grants, Stafford Loans, The Hope and Lifetime Learning Tax Credits, etc.) to target financial assistance at the marginal non-traditional student. However unlike in the UK, there is a large participation gap between different groups of qualified entrants with, for example, just 7% of high school sophomore students from the lowest quartile of socio-economic status eventually graduating compared with 60% of those from the highest quartile (Dynarski and Scott-Clayton 2007). Long's (2008) review of US evidence concludes that students respond differently to different types of student aid. She finds that properly designed grants have proven to be effective in influencing student decisions, whilst the research evidence on loans suggests that they are less effective in increasing enrolment. Though Singell, Waddell, and Cur's (2005) review of the evidence concludes that the effects of federal programmes of targeted needs-based student aid 'are modest and often insignificant' (1), Long argues that such policies are more effective in increasing access for low-income students than other forms of aid. Moreover, she points out that many merit-based programmes tend to favour more affluent students.

Dynarski and Scott-Clayton (2006, 2008) use the economic analysis of optimal tax theory, together with insights from behavioural economics, to explain the apparent low effectiveness of needs-based programmes in the USA. We now utilise their approach to reassess the merits of the new English student finance system, whilst emphasising the need to distinguish between the different elements of this new system.

The new English system has some of the characteristics consistent with the principle of efficient funding: those who benefit will pay more of the costs, but at a time when they are able to do so. In addition, the income-contingent loans mean that students can defer payment of the costs of their higher education until established in the labour market, providing some insurance against low post-higher education income (Barr 2004). However, the targeting of additional financial aid, through grants and bursaries, on the basis of ability to pay inevitably increases the complexity of the student finance system. Moreover, the decision to devolve the design and implementation of bursaries to individual higher education institutions creates a further layer of administration and complexity. The attempt to more carefully measure 'ability to pay' has created significant additional administrative costs on higher education institutions, even when sub-contracting has been used. (Ramsden and Brown [2007] report that in 2006–2007 102 of 124 higher education institutions surveyed sub-contracted administration of the statutory bursary scheme to the Student Loan Company.)

Crucially, given that the expansion of grants and bursaries is motivated by a desire to redistribute wealth, if the compliance costs on the recipient groups are high then the net social welfare gains, if any, from a given redistribution are reduced. Compliance costs include the time and other resources required to learn about the system, collect and collate all the required information and complete the application process. Whilst it is common to assume that low-income families have a relatively low opportunity cost of time, it is likely that the length of time they require to access and process the necessary information to take up means-tested benefits is relatively high,

given their lower relevant social and cultural capital (Mitton 2007). Non-traditional student families have parents with little prior experience of the application process and fewer friends, classmates and siblings attending higher education or facing the same application process. Moreover, given that application for student aid is an infrequent or one-off event for the families of potential non-traditional students there is little learning taking place, whilst the frequent revisions by higher education institutions to their bursaries and scholarships regulations (the Office for Fair Access [2007] reports that 81 of 124 higher education institutions revised their access agreements in the first year of operation) means that what learning that has taken place may soon become redundant. Language and the absence of internet at home may be further factors increasing compliance costs amongst these groups. Thus as Dynarski and Scott-Clayton (2006) argue, increases in complexity which accompany increased targeting of financial assistance may actually cause the marginal compliance costs to exceed the additional funds released.

There are additional factors which behavioural economists have shown affect decision-makers' behaviour which our simple orthodox economic model has neglected. In the orthodox economic analysis, higher education participation is viewed predominantly as an investment decision in which students make up-front sacrifices (studying, foregoing earning, etc.) in order to receive back-loaded benefits (earnings premia, better jobs, higher social status). However, Callender and Jackson (2008) find that for low-income British students these costs of higher education are often seen as a debt rather than as an investment. The new student finance system relies increasingly on student loan debt and debt aversion is therefore a potentially important factor in determining student choice (Pennell and West 2005). Callender and Jackson (2005) found that fear of debt was more likely to deter potential entrants from the lower social classes from applying to a British university than those from middle or upper class backgrounds.

Notwithstanding debt aversion, individuals do not always act in the manner assumed by orthodox economic analysis, as shown by the low take-up of smoke detectors and under-investment in pension funds. People exhibit time-inconsistent preferences which may cause them to systematically under-invest in welfare-enhancing activities such as higher education participation. In addition, Kahneman and Tversky (2000) have shown that people are loss averse in the sense that they systematically weigh losses more heavily than gains and attach low weights to outcomes that are probable rather than certain. Hence, in aggregate potential students may tend to underestimate the rates of return to higher education participation and the extent to which this tendency systematically varies across different groups of potential students may affect widening participation.

Dynarski and Scott-Clayton (2006) also raise the issue of default behaviour whereby seemingly minor obstacles prevent welfare-increasing behaviour. They cite Avery and Kane's (2004) study which found that whilst few low-income seniors explicitly decided against entering college, by failing to make the right option choice, by missing a deadline or by failing to complete the required forms successfully, they failed to enter higher education. In part they lacked the institutional and social support necessary to generate a successful application. Additionally, Chevalier et al.'s (2007) investigation of two British datasets suggests that high school students with a more positive view of their academic abilities are more likely to expect to continue to higher education even after controlling for observed measures of ability and other student characteristics. Finally, Dynarski and Scott-Clayton (2006) argue that the US federal programmes create identity salience, whereby the application process discourages higher education participation by inducing guilt and alienation. They point to application forms which contain negative cues to poverty and criminal activities and a signing statement which warns at length about the penalties, including imprisonment, for false or misleading statements.

Consistent with these arguments, OFFA (2008) report that a key concern in the first year of operation of the new system was the inability of higher education institutions and the Student



Loan Company (SLC) to ensure that many eligible students received bursaries. Overall OFFA calculated that English higher education institutions spent nearly £20 million less than anticipated of their additional fee income on bursaries in the first year of the scheme. Whilst in part this may be due to higher education institutions systematically over-estimating likely expenditure on bursaries, there are indications that information and procedural failures led to many qualifying students not receiving bursaries. Indeed OFFA reports that the SLC estimates that as many as 12,000 students assessed by their Local Authority as eligible for a full Higher Education Maintenance Grant did not give permission for their assessed household income to be made available to their university or college, effectively preventing themselves from receiving a means-tested bursary.

In this section we have challenged some of the assumptions on which the simple economics argument underpinning the new English system of student finance is based. Clearly the extent to which these criticisms are justified, and indeed whether the new system will in aggregate assist increasing and widening higher education participation in England, cannot be resolved without carefully designed empirical studies. In the absence of time series data, in the following section we report initial findings from surveys of entrants to higher education.

## 5. The new student finance system: some initial findings

The findings reported below are derived from surveys of entrants to higher education. As such they are unable to provide evidence about those potential participants who chose not to enter higher education. We have argued above that relatively few A level qualified students fail to enter higher education, thus making quantitative analysis of their behaviour problematic (Gorard et al. 2007). However, much of our argument above concerned a critique of the assumption, seemingly implicit in the new student finance system, of well-informed rational decision-makers altering their behaviour regarding higher education participation in response to relatively small and short-term financial incentives. To the extent that we find evidence that such a model is inappropriate for a significant proportion of current entrants, this does provide indirect support for the argument that non-entrants or potential future entrants from non-traditional student groups would be similarly insensitive to the financial incentives provided in the present system. As such the evidence summarised below complements that provided from surveys of potential entrants to higher education reported in Callender and Jackson (2008) and Davies et al. (2008).

The evidence we report is from a survey of entrants to University X conducted in August and September 2006, the year in which variable tuition fees were introduced.<sup>1</sup> Overall the response rate was 38% (1028 respondents); with the initial mail-based survey being complemented by responses collected in lectures with any duplicate responses being omitted from the later analysis. The combined sample was broadly representative of this University's intake, with female, mature entrants and students of Asian and Black origins being slightly under-represented compared to the national profile of entrants to English higher education institutions in 2006–2007. Further details of the methodology and more detailed analysis can be found in Tlupova (2008).

Given our analysis above, we were particularly interested in how well these students had coped with the information demands of the new system. The responses indicated that nearly three-quarters of respondents *felt* that they were well informed about tuition fees, bursaries, scholarships and grants available. When analysing how well informed they *actually were*, we found that overall students were well informed about the level of tuition fees, with only around one in seven not knowing the correct tuition fee. Nevertheless, a sixth of students were not able to compare the tuition fee at University X with that at the other universities they had chosen.

As anticipated, students appeared to be more unaware about the availability and relative generosity of bursaries and scholarships than grants. More than one-third of students did not

know whether they would receive a bursary and if so how much it would be, including nearly a third of those who thought of themselves as being 'well informed'. Over half of those students who felt that they were well informed about the new student finance system did not know how the bursaries at University X compared with bursaries at their other chosen university. Similarly a sixth of those students who felt that they were well informed about the new student finance system did not know what level, if any, of maintenance grant they would receive.

More detailed analysis suggested that more than one in three students from non-white ethnic backgrounds felt not well informed about fees, bursaries, scholarships and grants available, more than twice the average. Entrants who lived locally to University X were also significantly less likely to feel well informed and these local students were significantly more likely to come from lower socio-economic status groups, though we did not identify a separate significant social class effect. In both of these cases the evidence suggested that these groups were, in reality, significantly less well informed.

Students were asked the three main reasons for their choice of University X, and, when unprompted, financial factors were mentioned by only around 7.5% of respondents. Only when a similar question was formulated as a close-ended response did around a third of entrants choose 'cost of living in the area', 'level of tuition fee' or 'scholarship/bursary provided by the university' as important factors in their final choice of university.

In part these responses may reflect bedding-in problems with the new system identified in the initial OFFA (2008) monitoring of access agreements. Notwithstanding these initial problems, we favour two further possible complementary interpretations of the pattern of responses summarised above. Firstly, that for the overwhelming majority of students the new system creates no or little financial incentives to favour any particular higher education institution, excepting the cost-savings from attending a local provider (Davies et al. 2008). The small variation in tuition fees across institutions and the relatively small bursaries provided by most of them mean that any likely short-term financial premia from attending a particular institution are, for most students, dwarfed by differences in the cost of living and travelling costs. Secondly, those few students who do face significant financial incentives largely are frequently not aware of it at the time they choose a higher education institution, and those who are do not primarily base their decision on the financial factors targeted by the new policy. Thus even if the orthodox analysis summarised earlier provides an appropriate model for summarising participants' decision-making, the financial incentives generated by the present system are generally weak and incompletely understood. The implications of these initial findings of the impact of the new English student finance system are now explored in the concluding section.

## **6. Conclusion: is the trilemma reconciled?**

Governments are faced in the global knowledge-based economy with resolving likely conflicts between three competing objectives of their higher education policies: increasing participation, widening participation and switching more of the funding of higher education to students and their families. Their success in resolving this policy trilemma has important implications for the maintenance of the international competitiveness of their economies and the promotion of social justice. Previous attempts at increasing higher education participation appear to have sacrificed equity for efficiency, as students from more affluent families disproportionately benefited from the additional funded places (Woessmann 2006). Given that in England the main immediate cause of unequal access to higher education is a lack of prerequisites reflecting inequalities at a much earlier stage of the education life cycle, then any revisions to the student finance system are likely to have only marginal effects on widening participation.

We have found some initial evidence suggesting that the new English student finance system, particularly the expansion of institution-specific bursaries, has significantly increased the complexity of student decision-making and is providing information too late or incentives too small to significantly affect participation decisions. Many students eligible for financial support seem to be either unaware of their eligibility or unwilling to apply for bursaries even after starting their courses. As Dynarski and Scott-Clayton (2007) point out, decision-makers have to be aware of price discounts in order to respond to them, and delivering a subsidy after a student has made their decision is not an effective way of raising or redirecting demand. While online tools such as the Department for Innovation, Universities and Skills's bursary map can help to improve information flows, the problems of complexity and timing are systemic and, in part, the result of devolving responsibility for cross-subsidising to individual higher education institutions. If the commitment to promoting 'fair access' and 'student diversity' at individual English institutions was being taken seriously then such devolution may be desirable; since this is not currently the case then a more centralised system seems to be desirable on both efficiency and equity grounds.

### Acknowledgements

Earlier versions of this paper were presented at the British Educational Research Association and the Society for Research into Higher Education conferences. The authors are grateful for comments received from participants at those conferences, additional ones from Peter Davies and Colin McCaig and from two anonymous referees.

### Note

1. We conducted a similar survey at University Y at the same time, the results of which were broadly similar.

### Notes on contributors

Nick Adnett is Professor of Economics and a member of the Institute for Education Policy Research at Staffordshire University. He has written on a wide range of educational policy areas including most recently aspects of student finance, widening participation and fair access.

Diana Tlupova is a research scholar in the Institute for Education Policy Research at Staffordshire University. Her research programme is concerned with the analysis of the effects of recent changes in student finance in England.

### References

- Adnett, N. 2006. Student finance and widening participation in the British Isles: Common problems, different solutions. *Higher Education Quarterly* 60, no. 4: 296–311.
- Adnett, N., and K. Slack. 2007. Are there economic incentives for non-traditional students to enter HE? The labour market as a barrier to widening participation. *Higher Education Quarterly* 61, no. 1: 23–36.
- Avery, C., and T. Kane. 2004. Student perceptions of college opportunities: The Boston Coach Program. In *College choices: The economics of where to go, when to go, and how to pay for it*, ed. C. Hoxby, 335–94. Chicago: University of Chicago Press.
- Barr, N. 2004. Higher education funding. *Oxford Review of Economic Policy* 20, no. 2: 264–83.
- Baumol, W. 1967. The macroeconomics of unbalanced growth: The anatomy of an urban crisis. *American Economic Review* 57, no. 3: 415–26.
- Blanden, J., P. Gregg, and S. Machin. 2005. Educational inequality and intergenerational mobility. In *What's the good of education? The economics of education in the UK*, ed. S. Machin and A. Vignoles, 99–114. Princeton, NJ: Princeton University Press.
- Blanden, J., P. Gregg, and L. Macmillan. 2007. Accounting for intergenerational income persistence: Noncognitive skills, ability and education. *Economic Journal* 117, no. 519: C43–C60.

- Callender, C., and J. Jackson. 2005. Does the fear of debt deter students from higher education? *Journal of Social Policy* 34, no. 4: 509–40.
- . 2008. Does the fear of debt constrain choice of university and subject of study? *Studies in Higher Education* 33, no. 4: 405–29.
- Cardak, B., and C. Ryan. 2007. Participation in higher education: Equity and access – are equity-based scholarships the answer? Social Science Research Network. <http://ssrn.com/abstract=1013983>.
- Chevalier, A., S. Gibbons, A. Thorpe, M. Snell, and S. Hoskins. 2007. Students' academic self-perception. IZA Discussion Paper No. 3031.
- Davies, P., K. Slack, A. Hughes, J. Mangan, and K. Vigurs. 2008. Knowing where to study? Fees, bursaries and fair access. Research conducted for the Sutton Trust, Staffordshire University Institute for Education Policy Research.
- Dearden, L., E. Fitzsimmons, A. Goodman, and G. Kaplan. 2007. Higher education funding reforms in England: The distributional effects and the shifting balance of costs. Institute for Fiscal Studies Working Paper No. 18/07.
- Department for Education and Skills (DfES). 2006. *Grant letter from the Secretary of State, issued 31 January 2006*. London: DfES.
- Dynarski, S., and J. Scott-Clayton. 2006. The cost of complexity in federal student aid: Lessons from optimal tax theory and behavioural economics. *National Tax Journal* 59, no. 2: 319–56.
- . 2007. College grants on a postcard: A proposed simple and predictable federal student aid. Harvard University: John F. Kennedy School of Government Faculty Research Working Paper No. RWP07-014.
- . 2008. Complexity and targeting in federal student aid: A quantitative analysis. Harvard University: John F. Kennedy School of Government Faculty Research Working Paper No. RWP08-005.
- Gorard, S., N. Adnett, H. May, K. Slack, and L. Thomas. 2007. *Overcoming the barriers to higher education*. Stoke-on-Trent, UK: Trentham Books.
- Hahn, R. 2007. *The global state of higher education and the rise of private finance*. Washington, DC: Global Center on Private Financing of Higher Education, Institute for Higher Education Policy.
- Hoenack, S. 1982. Pricing and efficiency in higher education. *Journal of Higher Education* 53, no. 4: 403–18.
- Jacobs, B., and F. van der Ploeg. 2006. Guide to reform of higher education: A European perspective. *Economic Policy* 21, no. 47: 535–92.
- Kahneman, D., and A. Tversky. 2000. *Choices, values and frames*. Cambridge: Cambridge University Press.
- London Economics. 2007. *Economic intelligence report on student finance regime: Final report for Million Plus*. London: London Economics.
- Long, B. 2008. The effectiveness of financial aid in improving college enrollment: Lessons for policy. Harvard Graduate School of Education. [http://gseacademic.harvard.edu/~longbr/Long\\_Effectiveness\\_of\\_Aid\\_Lessons\\_for\\_Policy\\_\(1-08\)](http://gseacademic.harvard.edu/~longbr/Long_Effectiveness_of_Aid_Lessons_for_Policy_(1-08)).
- Machin, S. 2004. Skill-biased technical change and educational outcomes. In *International handbook on the economics of education*, ed. G. Johnes and J. Johnes, 189–210. Cheltenham, UK: Edward Elgar.
- Mitton, L. 2007. Means-tested higher education? The English university bursary mess. *Journal of Further and Higher Education* 31, no. 4: 373–83.
- Office for Fair Access. 2007. *OFFA annual report and accounts 2006/7*. Bristol, UK: OFFA.
- . 2008. *Access agreement monitoring: Outcomes for 2006-07*. Bristol, UK: OFFA.
- Organisation for Economic Co-operation and Development. 2007. *Education at a glance 2006*. Paris: OECD.
- Paulsen, M. 2001. The economics of the public sector: The nature and role of public policy in the finance of Higher Education. In *The finance of higher education: Theory, research, policy and practice*, ed. M. Paulsen and J. Smart, 95–132. New York: Agathon Press.
- Pennell, H., and A. West. 2005. The impact of increased fees on participation in higher education in England. *Higher Education Quarterly* 59, no. 2: 127–37.
- Ramsden, B., and N. Brown. 2007. *Variable tuition fees in England: Assessing the impact on students and higher education institutions. A second report*. London: Universities UK.
- Schleicher, A. 2006. *The economics of knowledge: Why education is the key for Europe's success*. Brussels: The Lisbon Council.
- Singell, L., G. Waddell, and B. Curs. 2005. Hope for the pell? The impact of merit-aid on needy students. Social Science Research Network. [http://papers.ssrn.com/paper.taf?abstract\\_id=616783](http://papers.ssrn.com/paper.taf?abstract_id=616783).
- Tlupova, D. 2008. Student finance and choice of university: Analysis of a survey of 2006/7 entrants. Staffordshire University Institute for Education Policy Research Working Paper No. 2008/42.
- Watson, D. 2006. How to think about widening participation in UK HE. Higher Education Funding Council for England discussion paper.
- Woessmann, L. 2006. Efficiency and equity of European education and training policies. CESifo Working Paper No. 1779.