Funding Mass Tertiary Education: Assessing Alternative Policies and their Trade-Offs in England.

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Abstract

England has experienced a variety of funding systems in tertiary education during the past three decades and there are currently several alternative policy proposals on the table. Each policy involves different trade offs. The first part of the article examines the current funding arrangements in the higher and further education sectors, and the debates on the strengths and weaknesses of these. The second part looks at alternative funding proposals and how they measure up in terms of affordability and equity in access and cost sharing.

The funding of tertiary education has become a contentious issue in many developed - and some developing - countries. This is because financing mass provision begs difficult questions about equity, social mobility, intergenerational inequality, economic efficiency, and the relationship between the state and markets in the delivery of public services.

Mass participation in tertiary education is expensive and the question of 'who pays' becomes a highly charged ethical issue. Depending on their political traditions and economic circumstances, countries make different choices, each involving certain trade-offs. In the majority of continental European countries, for instance, study at this level is still largely tuition-free for home students and the costs are borne out of general taxation. However, in some cases this has meant restricting participation or less generous funding for universities and other provider institutions. By contrast, in East Asian and English-speaking countries, where participation rates are generally very high, with universities quite well funded (notably in the UK and the US), students are required to pay a substantial portion of the costs through tuition fees, albeit in some cases with subsidised

government loans (Liu et al, 2016). These choices have different equity implications in terms equity in access and, relatedly, equity in how the costs are distributed.

The UK provides a useful case study of some of the policy choices available and the issues at stake. Tertiary education in Britain has seen numerous changes in funding regimes during the past 20 years, and there are now somewhat different funding systems in place in England, Scotland and Wales. These changes have often been contested, particularly in England, where there have been fierce political debates, particularly in relation to higher education funding changes. Alternatives to the current systems of fees and loans in higher education have been proposed by several opposition parties as well as by academic researchers. A wide ranging independent inquiry (Augar, 2019), commissioned by the Government, has now proposed a raft of reforms relating to the funding of post-18 provision in both universities and further education and training.

This article will focus on the recent policy proposals in England. The first part will examine the current funding arrangements in the higher and further education sectors, and the debates on the strengths and weaknesses of these. The second part will look at alternative funding proposals and how they measure up in terms of affordability and equity in access and cost sharing.

The Current Funding System

Higher Education

Until 1998, undergraduate higher education provision for home students in England was funded almost entirely through general taxation, with public funds allocated to universities first by the University Grants Committee (a Government advisory committee dating back to 1918) and latterly (from 1989) by the Universities Funding Council, which was directly answerable to Parliament. Students from less affluent families were entitled to means-tested maintenance grants which were also funded through general taxation. This system began to change as a result of the recommendations of the Dearing Review of higher education funding (Dearing, 1997). These were designed to allow expansion of undergraduate numbers with an increase in the unit funding level to universities.

Dearing proposed that undergraduate students should contribute up to £1000 for each year of undergraduate tuition, payable when students found employment after graduation. In the event, from 1998, government introduced the tuition fee, but this was payable up-front on a means-tested basis. Maintenance grants were scrapped and income-contingent loans introduced to cover student living costs (Belfield et al, 2017). Subsequent governments raised the maximum fee level in several large steps, while arrangements for funding students living costs also changed on several occasions. In 2006 the Labour Government brought back maintenance grants and introduced income-contingent tuition fees loans. Universities were allowed to set their own fees, up to a maximum £6000 pa, and almost all undergraduate courses were charged at this rate. Since direct teaching grants to universities remained unchanged these measures substantially increased income to universities. In 2012 the Conservative-led Coalition Government raised the tuition fee cap to £9000 pa for full-time (FT) courses, so that fee income could largely replace the direct teaching grants to universities which were substantially reduced. Tuition fee loans were increased to meet higher fee levels, and were now subject to interest charges at 3 percent over the inflation rate. With universities again opting to charge this maximum fee on almost all courses average teaching income to universities also increased by 25 percent (Belfield et al, 2017, p.3).

Under the current system universities can charge up to £9250 pa for FT undergraduate courses and most do so. Home and EU students are offered income-contingent loans to cover both tuition fees and living costs which are underwritten by government and managed through the Student Loan Company. Loans, plus the interest on these, must be repaid by graduates once they are in employment and earning over £25 000, with a repayment rate of 9 percent pa on income over this threshold. At the same time universities can now decide how many undergraduates to recruit, since the government cap on student numbers was removed in 2015/16. These measures, taken together, create a more market-oriented system, where university financial autonomy is increased and government contol over the public costs of undergraduate education is reduced (McGettigan, 2013).

It is estimated that only around 25 percent of graduates will pay off their loans in full before these are written off after 30 years (Belfield et al, 2017, p. 19). Estimates of the overall long-run cost to Government of its student loans vary but typically are at around 45 percent of the total Government outlays on loans. Although fees now largely replace direct government teaching grants to

Universities, direct subsidies for high cost subjects in 2017-18 still represented a further £1.2 bn pa in public funding of higher education (Hantzsche and Young, 2019).

Further Education

Public funding for Further Education and Training in England has evolved somewhat differently. Before 1993 Colleges of Further Education were funded largely by Local Education Authorities (LEAs) from a mixture of local and national taxes. College funding allocations were all retrospectively calculated from the previous years' costs for full-time equivalent staff numbers and levels of unit funding varied significantly between institutions and across LEAs (Green and Lucas, 1999). The incorporation of colleges in 1993 then brought major changes with local authorities ceasing to fund and control colleges. A new national system of FE began to emerge - later reinforced by the creation in 1992 of the Further Education Funding Council (FEFC) as a non-departmental body of the Department for Education and Skills. A complex set of national funding formulae were subsequently put in place, placing burdensome bureaucratic reporting conditions on colleges. However, despite the emerging national funding system, the further education sector remained multiply fragmented, catering to various constituencies (including 16 - 19 year olds on upper secondary academic and vocational programmes; apprentices on day-release; as well as adult leaners) and accountable to a fluctuating array of government regulatory bodies (Lucas in Green and Lucas, 1999).

During the past twenty years, there have been major new initiatives on apprentice training; at the same time further education and training policy has become increasingly market-oriented, encouraging a growing number of independent training providers into the sector. All of this has contributed to a larger but also more fragmented sector. There are currently 200 general and specialist Further Education Colleges; 1 179 privately-owned 'Independent Training Providers' (ITPs); and some 312 'other publicly-funded providers', including local authorities providing adult education classes (Augar, 2019, pp. 11, 19). The colleges cater for about or 1.4 m adults aged 19 years and older (of whom 149 000 were studying for higher education qualifications in 2016/17) and 530 000 students aged 18 or under (in 2017/18) (Augur, 2019, p. 117); ITPs enrol over 700 000 trainees (mainly apprentices on Level 2 programmes). The Augar review commented that 'FECs have become providers of everything for everyone' (Augar, 2019, p 120); but the further education and training as a whole is even more diverse.

The qualification and funding systems reflect this extreme diversity. In 2015 there were officially over 21 000 different regulated vocational qualifications offered by 158 different awarding organisations (Sainsbury, 2016, p.41). Due to the broad range on courses they offer, FE colleges are subject to multiple regulatory regimes, including five different bodies overseeing provision, quality assessment and qualification design in different programme areas (Augar, 2019, p. 129). Funding for colleges and ITPs comes from a variety of public bodies (Augar, p. 120) each with their own funding formulae. Different programme areas typically attract different funding rates per student.

The Augur review concludes that the funding rules for colleges are overly complex and inflexible and highly burdensome for colleges to administer. Funding per student to colleges is also much lower than that to universities. The base rate for colleges for each FT student receiving tuition-free education varies between £3 300 pa (for 18 year olds) and £4 000 pa (for the more numerous 16 and 17 year olds) (Augar, 2019, p. 121). University income for teaching undergraduates includes, for each FT student, £9 250 pa in tuition fees plus an average of around £1100 in Government-funded teaching grants (See Green and Mason, p. 24). Income per FT student in universities exceeds that in colleges by a factor of 2.5.

The funding systems for the further and higher education sectors are thus very different. University teaching is primarily funded through fees which universities themselves determine, although these are subject to a maximum level set by government. Colleges are funded according to centrally-determined lists of prices for different courses. Universities enrol as many students as they wish; college enrolments are capped for each year by their centrally-controlled funding contracts. The majority of home and EU students in universities are eligible for public financial support for fees and maintenance costs from a single student loan system. Students in colleges have much more restricted access to Advanced Learner Loans, which may cover tuition fees, but not living costs. Most importantly average income per student is much higher in universities than in colleges.

The Strengths and Weaknesses of the current Funding System.

The Dearing Report made the case most comprehensively in 1997 that graduates should contribute towards the costs of the degree courses from which they receive significant private benefits in

future employment and income. While higher education undoubtedly generates public goods from which everyone benefits (Green and Mason, 2017; Marginson, 2007; McMahon, 2009) non-graduate taxpayers should not be expected to pay, the report argued, for the private gains which accrued to graduates from the wage premia associated with their degrees. While there are still dissenters from this view, and while some political parties still advocate a return to tuition free higher education, it would be fair to say that the graduate contribution principle has now been quite widely accepted in public debate in England. Nevertheless, there are bitter controversies about how much they should pay, how the costs of higher education should be distributed between general taxpayers and graduates, and indeed amongst graduates, and what system of funding for higher education best meets the criteria of affordability, equity and supporting the national economy.

Supporters of the current fees and loan system - including notably David Willetts, minister responsible for the 2012 reforms - argue that the current system is effective in supporting universities to deliver the research and skills needed by the economy while at the same time being equitable in terms of access to higher education opportunities and how the costs of these are shared. They point to the high international standing British universities, and to the contribution the sector makes to UK GDP through its research and from the income generated from teaching international students (together estimated at £21.5 bn in 2015/6, of which £11.9 bn for international student fees: Augar, 2019, 2014/5, p.68). They also stress that participation in higher education has risen rapidly - from 20 percent of young people in 1990 to near 50 percent today - and that this expansion has continued despite the imposition of tuition fees. Rising undergraduate enrolments, they claim, has widened access to higher education, with evidence suggesting an increase of at least 50 percent since 2009 in the participation for disadvantaged 18 year olds in FT higher education (Augar, 2019, p. 68). Advocates would also claim that funding system spreads the costs of higher education fairly. Graduates repay their loans in proportion to their incomes and, with students debts written off after the years, less that 30 percent are predicted to pay back their student loans in full.

Some of these claims are contested or, at least, qualified. Few would deny that universities make a substantial contribution to the economy, but many would argue that the skills they deliver are not well matched with those demanded in the labour market (Mason, forthcoming 2019). It is

certainly true that full-time undergraduate enrolments have continued to rise despite tuition fees, but, at the same time, enrolments of part-time and mature students have declined sharply. Between 2010-15, part-time enrolments by England-domiciled persons on undergraduate HE courses in UK universities and English FE colleges fell by 51% and have continued to fall since (Callender and Thompson, 2018). Expansion of undergraduate higher education has no doubt made access more socially inclusive than it was. However, opportunities for different social groups to access higher education, particularly at prestigious 'Russell Group' universities, remain very unequal. Compared with their disadvantaged peers, advantaged 18 year olds were still more than twice as likely to enter FT higher education and 5.7 times as likely to go to elite universities in 2018 (Augar, 2019, p. 89).

Whether the costs of higher education are spread fairly is still much disputed. It is true that the graduate loan repayments work like a progessive tax in that higher graduate earners make higher annual repayments and that whilst the highest earners will pay back all their loans debt the majority, earning less, will not repay all their debt. However, the ten percent who do not take out loans, and those who pay off their loans early, will avoid interest charges, and thus pay less for their degrees than others who have be paid off all or most of their loan debt. This latter group tend to come from more affluent families or earn high salaries after graduation.

The way that costs are distributed between general taxation and graduate contributions is also contested. The IFS estimates that for English domiciled FT undergraduates starting their degrees in 2017 government will spend £51 700 up front (96 percent of which in loans). In the long run graduates will on average repay £34 000 (65 percent) of these costs, leaving a government subsidy of £17 700 per student (Belfield, 2017 p. 10). Some would argue this gets the cost-sharing balance wrong. Albertson (2017), for instance, argues that the public benefits of degrees - both through additional graduate tax revenues and through the social benefits that graduates bring to society - exceed private gains of graduates (in a ratio of 58:42) and that a fair graduate contribution to the total costs of a degree, including tuition and maintenance costs, would be around 40 percent rather than two thirds as now. This, he says, would be achieved by government paying tuition costs and students paying their own living costs.

The most sustained criticisms of the system relate to the high level of tuition fees and accumulated student debt. The average student now graduates with around £50 000 of student loan debt

(Belfield, 2017). When graduates start earning over £25 000 they repay at 9 percent on income over the threshold, so, for example, at £900 per year for a graduate earning £35 000 pa. This represents a substantial additional financial burden for graduates who are also required to spend historically high proportions of their incomes on rent and mortgages (Green, 2017).

Student debt is high because tuition fees (and living costs in some cities) have risen to a very high level. Contrary to the expectation of the 2012 system's architects, allowing universities to set their own fees (up to the maximum) did not create a price-competitive higher education market. Universities have generally charged at the maximum level for all courses, since price is taken as a marker of quality, and students accept high prices since paying for these is deferred by the loan system. As a consequence of the sharp rises in tuition fees since 2006 average tuition fees in England are now higher than in any other country barring the USA (in private universities) with public and private spending per student second only to the USA and Luxemburg (Augar, 2019, 2017).

There remain legitimate concerns about whether students are always getting good value for money for their courses when some 40 percent of graduates have not found graduate level jobs ten years after graduation (Augar, 2017; Green 2017) with evidence suggesting that wage returns to some types of degree, particularly from less prestigious universities, have very low, or even negative, wage returns (Augar, 2017, p 93). Student satisfaction generally remains high according to the surveys, but only 38 percent in the 2018 National Student Survey thought they were getting good value for money (Augar, 2019, p. 90). These concerns focus particularly on courses, as in the social sciences and humanities, which generally cost less to deliver than the fees charged. Universities argue that costs for delivering some STEM and laboratory- based courses greatly exceed what they receive in fees and tuition grants, and that they need to cross-subsidies these from the fees from lower-cost humanities courses. This is no doubt true but does not placate the doubters. An investigation conducted by KPMG for the Augar Review into how universities spend their fee and grant income for teaching showed that a large proportion goes on non-teaching activities - including 12 percent for maintaining estates, 35 percent on corporate activities and central services and 10 percent on investment. Only 42 percent went to direct departmental spending on teaching. UK universities spend proportionally less on teaching and more on non-teaching staff and non-staff costs than their counterparts overseas (Augar, 2017, p. 73).

A related concern raised by the Augar report is that the freedom of universities to set their own fees may be changing priorities in certain ways which may distort the mission of a public university. University income for teaching has risen very rapidly in the past two decades both in unit funding levels and overall. University resources per student for publicly-funded degrees rose from around £18 000 in 1998 to £28 00 in 2018 (real terms at 2017 prices). Sector income from public funding for teaching rose at 3 percent pa in real terms from 2010/11 to 2016/17 (Augar, 2019, p. 66). This has incentivised a drive for expansion in students numbers in many universities. Some believe this to be overly rapid, leading to lower admission standards, grade inflation in degrees, and overly stretched physical and human resources (with, for instance, the staffing of courses becoming overly reliant on the use of teaching assistants on short-term contracts). In anticipation of continuing rises in students numbers, universities have also often made very large investments in new estate, which entails some risk, not least because the declining population of 18 year olds and Brexit effects on EU student recruitment may thwart the 10 percent increase in recruitment by 2022 which the sector predicts (Augar, 2019).

The funding system may also be changing the patterns of course recruitment with negative consequences for the national economy. There is currently a financial incentive to increase enrolments to first degree (bachelors-level) courses, such as in social science and the humanities, which cost less to deliver than the income raised in fees, whereas recruiting to high cost subjects represents a loss. The Augur report notes that the 20 percent increase in students studying social science since 2013/4 is double the average increase for degree courses. At the same time recruitment has declined in some degree subjects, such as computer science, and in sub-degree courses (such as HND and HNC), despite the clear demand in the economy for those with high level computer science skills and higher technician level skills (Mason, forthcoming, 2017).

Other problems with the current system which increasingly feature in public debate concern the inequalities in public funding for students in higher education and further education and the manifest intergenerational inequity of a system that charges today's young people for an education which their parents' generation had largely free of charge.

The inequalities in levels of public funding for students in higher education and further education have already been mentioned (Augar, 2019, p. 5). The average base rate for funding universities for full time undergraduates students exceeds that for colleges by a factor of 2.5. Non-university

adult and further education has also suffered large reductions in funding during the past decade due to declining provision and participation, particularly in adult skills learning (where numbers involved declined by 36 percent between 2012/13 and 2017/18 : Augar, p. 119). FECs suffered a 23 percent real terms decline in total income between over the period while total government spending on adult skills more generally (including adults learners in FECs and in other adult training provision) fell by approximately 45 per cent in real terms (Augar, 2019, p. 119). This compares with an increase in university income for teaching of some 25 percent since 2012 (Bielfeld, 2017, p. 6).

The worsening financial situation for FECs and other adult education providers clearly affects the quality and attractiveness of the range of provision offered to the half of young people who do not undertake undergraduate degrees. It also has significant implications for how well tertiary level education and training meet the needs of the labour market and national economy, particularly with regard to craft and technician level skills.

It has long been noted that output of intermediate skills has been low in England by comparison with that of many of our trading partners (Brown, Green and Lauder, 2001). This relative deficit has been exacerbated in recent years by the precipitous decline in enrolments on sub-degree techician-level courses such as the Higher National Diploma and Certificate courses which were formerly held in such high esteem. Between 2000/1 and 2016/7 enrolments declined from 63 900 to 15 000 on HND courses and from 48 700 to 19 500 on HNC courses. As a result only two percent of university students currently study on technical courses at this level and only four percent of 25 year olds in England hold a Level 4 or 5 technical qualification as their highest qualification (Augar, 2019, p, 20). The decline is arguably a direct result of changes in the funding system. Colleges say that they do not have the resources to run technician level courses cost-effectively and consequently do not promote them. At the same time, universities now have a reduced incentive enrol students on such courses since they can recruit unlimited numbers on undergraduate degrees (since 2015) which are more profitable (particularly in low cost subjects).

This imbalance is arguably detrimental both to students and to the economy. There are known shortages in the supply of craft and technician levels skills in a number of areas, particularly for electrical and vehicle technicians (Augar, 2019, p. 25), and these shortages would increase with a UK exit from the EU. Shortages in intermediate skills are likely to be damaging to productivity in

a number of sectors. At the same time, many young people are losing out by not undertaking such courses whose degrees attract a significant returns in the labour. Research suggests that holders technician qualifications (at Levels 4 and 5) earn around £2 0000 pounds more pa than those with only Level 3 qualifications by age 26 (Augar p. 26), whereas, as noted before, wage returns for a substantial proportion of bachelor degree graduates are negligible or even negative.

Lastly, but not least, there are the glaring intergenerational inequalities in the current system of higher education funding. These have been almost ignored in the major reviews of higher education funding (including those by both Dearing and Browne) (Green and Mason, 2017); and have barely featured in debates amongst funding experts, which have mostly focused on other kinds of inequality. However, they are now very much part of the wider public debate on intergenerational equity which is now gathering momentum (see Green, 2017, and the work of the Intergenerational Foundation).

The basic facts are as indisputable as they are obvious. Young people today are paying high fees for an undergraduate education than previous generations had for free. Graduates now aged 39 or over, who were home or EU undergraduate students before 2000, typically did not pay tuition fees at all, whilst those aged 39 or younger have paid fees at varying rates, the younger the higher. In generational terms this means that almost all of the English and EU graduates from generation X and the Baby Boomer generation had free higher education, whilst Millennials, born after 1980, and typically entering university after 1999, have paid fees, with younger Millennials paying ther most. The discrepancy is rarely addressed and even more rarely justified, except by the argument that free higher education has now become unaffordable due to the increase in numbers. For the Millennial generation paying high fees for opportunities their parents had for free, at a time when young adults are also having to pay more than ever before to rent or buy a home, is a blatant intergenerational inequality.

Alternative Funding Proposals

A number of alternative funding systems have been proposed in recent years, some of which covering higher education alone (ISCED 5A) , and some designed to apply to both further and higher education in colleges and universities (including ISCED levels 5A, 5B and 4 and post-18 education generally) . The second part of this article examines the strengths and weaknesses of a number of radically different proposals for funding system reform, leaving aside the plethora of

policy proposals for simply modifying the existing systems. Each proposal is found to involve trade offs with none meeting all the ideal criteria for an effective way of funding tertiary provision. In conclusion the article suggests a way forward involving a combination of features from different proposals.

Scrapping Tuition Fees for Higher Education

Criticisms of the of fees and loans system for higher education reached a peak in the period after the raising of the tuition fee cap to £9 000 pa in 2016. Various alternative proposals were put forward, most prominently by the opposition Labour Party. In their manifesto published in the run-up to the General Election in 2017, the Labour Party promised to scrap tuition fees for all English-domiciled higher education students within a year, whilst also reintroducing maintenance grants for students from less affluent families (based on a means test). Subject to reciprocal arrangements being agreed with other EU countries this would also be applied to EU students. They estimated the costs of the policy to government at £9.5 bn pa, to be paid for by raising higher rate tax from the current 40 percent to 45 percent for those earning over £80 000 and 50 percent for those earning over £110 000. At a subsequent Labour Party conference the Labour shadow chancellor, John McDonald, also promised to cancel all student debt at a total cost of 20bn, although this pledge was subsequently qualified. An IFS report (Belfield et, May 2017) subsequently largely confirmed these figures. They calculated that the long-run costs to government of reintroducing maintenance grants and scrapping fees for future full-time entrants to higher education, would be around £8 bn pa at 2017 prices. Cancelling current student loan debt would cost around £30 bn altogether, somewhat more than Labour's prediction. As a result of subsequent changes to funding system, the costs of implementing the new policy would no doubt change.

Labour's proposals were undoubtedly popular amongst younger voters, but they were immediately castigated for being under-costed and for the large increases in the budget deficit which would result. The first claim was largely debunked by the IFS estimates. The second claim no longer applies. Due to the accounting conventions applied at the time, while direct government funding to universities appeared in the annual budget deficit figure, government costs for student loans did not until many years in the future when loans were written off. So replacing fees with direct teaching grants to universities, as Labour proposed, would have caused a large increase in the

current deficit. However, since the government has now been obliged to make the cost of student loans visible in the deficit, the new policy would make less difference.

However, there are other concerns about the Labour's policy which are likely to be more durable. Firstly, although it is quite possible to fund higher education costs from increases in the higher rate income tax - which is after all at an historically low level - there are many other urgent claims on such new revenues, and this particular one would be extremely unpopular amongst higher earners who had not benefitted from higher education (Green and Mason, 2017). Secondly, although the proposal clearly addresses one blatant source of international equality (fees only paid by Millennials), it could introduce another in the form of higher lifelong tax obligations for this generation of graduates compared with the preceding generation (Belfield et al, May 2017). Thirdly, and possibly most important, it does not address the inequality in the public resources devoted undergraduate learners compared with those for learners in further education.

An All-Age Graduate Tax Proposal

Another alternative for funding higher education would be to replace fees and loans with an all-age graduate tax (Green, 2017; Green and Mason, 2017). Graduate taxes have often featured in debates about higher education funding and were reviewed briefly by the Dearing Review. However, previous policy discussions have not specified that the tax should be paid by graduates of all ages. The proposal from Green and Mason in 2017 thus introduced a novel dimension in the funding debate.

Their proposal recommended the reintroduction of maintenance loans for undergraduates available on a means-tested basis, as in the past, but at enhanced levels. They also recommended that tuition fees and loans for first degree higher education study should be replaced by a tax on graduates of all ages. As in Labour's proposal, this would mean formally cancelling current students debts which would be converted into an obligation to pay graduate taxes (Green, 2017). The liability to pay the graduate tax would fall on all graduates domiciled in England who had received subsidized higher education in England - including, potentially those in retirement - whose incomes exceeded £21 000 (the then threshold for loan repayments). Graduates would be excluded from liability if they had paid full tuition fees (international students) or if their degrees were obtained abroad.

An all-age graduate tax, it was argued, would have three key advantages compared to the present HE fees and loans system. First, in the interests of inter-generational equity, this tax would be applied to *all* existing generations of graduates, not just recent graduates who have taken out loans for fees and maintenance. Second, annual graduate tax payments for those over the £21,000 income threshold would be lower – in most cases substantially lower - than loan repayments under the current system and would therefore represent less of a financial burden on younger graduates who may also be struggling with high rents and mortgage payments. Third, an all-age graduate tax would contribute substantially to government tax revenue from the first year that it was introduced and thus provide a more secure fiscal foundation to HE finances than can be achieved through the present loan system.

The graduate tax would be collected, like loan repayments, through the tax system. As is the case with those on higher incomes, generally, all graduates would be required to make a self-assessment tax return to the tax authorities (HMRC). In the case of graduates this would specify their degree and where it was received, thus enabling HMRC to verify their graduate tax liabilities. Green and Mason suggested two options for the rate at which the tax should be levied on employed graduates. One option was for a 2.5 percent tax on the taxable income of employed graduates in England, aged 20-64, whose gross annual income exceeded the £21,000. Option two, applied to the same group, was for a 2.0 percent tax on taxable incomes in the basic rate tax band and a tax of 3.0 percent of taxable income in the higher rate tax band. The tax rate would be staggered on incomes between £21 000 and £25 000. For the purposes of calculating the tax revenues which would be generated by the tax Green and Mason (2017) used data from the UK Labour Force Survey and focused on graduates aged 20-64 because of the relatively large sample sizes available for that age group (compared with the small sample available for those over 64). Using these data, and also data on enrolments from the Higher Education Statistics Authority (HESA), they were able to estimate: 1) the tax costs for graduates liable for the tax by comparison with what they would have paid in loan repayment; 2) the total revenues which would have been raised from the tax had it been levied in 2016; and 3) the proportion of the total 2016 costs of higher education for the liable students which would have been covered by the tax.

For recent graduates the reduction in monthly outgoings under GT Option 1 for an all-age graduate tax would make a considerable difference to net incomes. For example, for those with a middling

gross annual income of £35,000, monthly outgoings would decline from an expected £105 per month in loan repayments to £50 per month in tax payments. It was only when the gross annual income of employed graduates aged 20-64 rose to £60,000 that their monthly graduate tax payments approach the level of monthly loan repayments then expected of recent graduates earning £35,000. In the case of Option 2, the equivalent level of monthly payments would only apply to graduates with gross annual incomes of approximately £64,000 (Green and Mason, 2017, pp. 15, 16).

The estimated revenues raised from the tax would have been considerable, even taking out of account potential revenues from those aged over 64 and from those domiciled in England but with degrees attained in universities in Scotland. Under GT Option 1 the estimated total annual revenue was approximately £3.68 billion. Under the more progressive GT Option 2 it was slightly higher at £3.76 billion (Green and Mason, 2017, pp, 20, 21). The total public costs of providing tuition (including the costs of fees and direct government grants) and maintenance for full- and part-time students studying towards First degree qualifications in England in 2016 was estimated at £12 bn. Annual revenues of around £3.7 bn from the Option 2 graduate tax would have covered a substantial 31 percent of these costs (Green and Mason, 20917, p. 24). However, graduates would be contributing significantly less as a proportion of total costs than the 65 percent which long-run estimates suggests that graduates will be repaying under the current system (Belfield, 2017 p. 10). Another advantage of the graduate tax would have been that the government would have immediately received graduate tax revenues of some £3.7 bn pa, more than double the £1.66 bn of student debt which was repaid in 2015-16 (ONS, 2017).

Problems with the all-age graduate tax

The proposal for an all-age graduate tax received considerable press coverage, much of it negative. Advocates of measures to reduced intergenerational inequality generally approved, but there was widespread surprise, and consternation, amongst other about a proposal for what was dubbed a ‘retrospective tax’ which earlier generations of graduates had never expected to pay. The surprise was hardly surprising in a country where government policy had consistently sought to appease the dominant ‘grey vote’ over many decades, and where the growing evidence of intergenerational inequality had been systematically ignored (Green, 2017). However, claims that such retrospective

taxation was unusual or unfair were specious since all new taxes (unless only applied to certain age groups) necessarily involve changes in the costs and benefits of decisions taken in the past.

However, a number of valid concerns were raised about the tax which, in some cases, point to genuine problems. One concern relates to the difficulty of identifying who is eligible for the tax since no complete national record exists on the exact qualifications of individual graduates and where they were awarded. The solution to this is to identify tax liability through self assessment tax returns, and the checks on these undertaken by HMRC, as is the case currently with the self-employed and higher earners. However, requiring all graduates to submit self-assessment returns would considerably increase the volume of returns to HMRC thus increasing the costs of monitoring. Another problem is that graduates otherwise eligible for the tax could evade paying by moving abroad. Whereas graduates with student loans are legally liable by their contracts to repay their loans wherever they live - and in danger of legal action in they do not - it would be very difficult to enforce payment of graduate taxes by those living abroad. As a result some of the potential revenue would be lost, although it may be doubted how many graduates would move abroad simply for this reason (Green and Mason, 2017).

There are other, arguably more important, problems with the tax. Firstly, although Green and Mason were correct to say that the graduate tax would raise more immediate revenue for government than the existing system, this advantage does nor last forever. A statistical modelling of the future revenues from the Graduate tax, conducted for the LLAKES Centre by the National Institute of Economic and Social Research (Hantzche and Young, forthcoming, 2019), shows that the population eligible for the graduate tax grows, and considerably outnumbers those on students loans under the current system until the late 2030s. However, with a graduate tax rate of 2.5 percent, payable on incomes over £25 000 - the threshold currently applying for loan repayments- annual graduate tax revenues only exceed annual student loan repayments until around 2030. The revenue advantage has disappeared, despite the growing proportion of graduates in the labour market, because of the growing proportion of these having loan obligations and becoming liable to repay their loans. According to NIESR, from the 2030 graduate tax rates would have to be raised to at least 4 percent after 2030 to maintain a revenue advantage over the predicted loan repayment from the current system. At this level the graduate tax for recent graduates becomes no less burdensome than loan repayments, rendering the graduate tax policy less attractive as an

alternative to younger graduates. The second major limitation of the graduate tax proposal is that, whilst it to some extent addresses intergenerational policies, it does nothing to address the evident intra-generational inequalities in the resources available to those who go into higher education and the remainder who take further education and training.

National Learning Entitlement.

The Augar report (Augar, 2019) makes a number of recommendations which seek to address the inequalities in funding between further and higher education in England which it brings to light in forensic detail. Nevertheless, it comes somewhere short of harmonising funding across the two sectors. Its proposed reforms to further education funding and student support, while welcome, would leave the funding arrangements in the sector very complicated, and still quite different from those for higher education.

The most radical reform proposal to date for instituting a unified funding system across the two sectors comes from in the form of a 'national post-18 entitlement' (NLE) (Schuller et al, 2018). Under this scheme, all adults reaching the age of 18 would receive an entitlement to two years of tuition free, publicly-provided, or publicly-recognized education and training. The entitlement would apply to further and adult education colleges as well as to universities and could be used flexibly for part-time study over a number of years. Course fees would only be charged in the third and subsequent years of study. The authors recommend that these could be covered by students taking out loans or by some form of graduate tax or by employer sponsorship (in the case of employees studying part-time).

A NLE system of this sort would go a long way to harmonising funding between the further and higher education sectors, at the same time as rectifying some of the imbalances in the current uptake in adult education and training.

The NLE would be likely to promote participation in the short-cycle tertiary courses (like Foundation degrees and Higher National awards) which have suffered a rapid decline in recent years, thus depriving the economy of much need technician-level skills. It would revitalise the long tradition of 'two plus two' courses offered by some British higher education institutions whereby two years of study for Foundation degrees or Higher National awards at FECs is followed by two years study to complete First degrees at an associated university (Parry et al, 2012). The

NLE would cover the first two years of study but not the second two years. This could encourage more people gaining sub-degree qualifications to seek employment in technician-level jobs instead of going on immediately to complete First degree studies (Mason, 2019, forthcoming). The NLE would also be likely to encourage higher adult uptake of courses at Levels 2 and 3, since these would now be available free of charge to adults of any age, whether or not they had taken a qualification at this level before.

To make the scheme affordable Schuller et al suggest that public funding for the tuition-free provision undertaken under the NLE should be at about £5000 pa annum for full-time students to both colleges and universities. They estimate that with an uptake of 60 – 80 percent, and with not all students using the full entitlement, the costs would amount to about £5 bn at current prices for each new age cohort of 18 year olds provided with the entitlement (700 000 (18 year olds) x 0.7 (uptake rate) x £5 000 (FT costs pa) x 2 (years)). This equates to total public costs of £5 bn per annum. With an additional £2 bn set aside each for helping universities to adjust to the lower resourcing for NLE students, this would equate to public costs of around £7 bn pa. This would be considerably lower than the £10.3 bn that Augar (Augar, 2019) estimates government spends up front each year for full-time undergraduate provision in universities and full and part time provision in colleges. However, the proposal does not allow for the costs of student maintenance. It assumes these costs would be lower than currently, as the scheme would encourage more students to study close to home, but the effects of not providing maintenance grants would be to massively increase social class gaps in access to the more prestigious universities. Adding for the costs of grants would bring the total costs close to the current up-front government annual spending on universities and colleges.

The difficulty with implementing such a scheme would lie in persuading universities to accept a lower rate of funding for the teaching of the first two years of undergraduate courses. Schuller et al (2018) cost the scheme on the basis of £5 000 of public funding per year for universities and colleges for each full-time equivalent student studying within the NLE scheme. This base rate would increase the base rate funding currently offered to FECs for 18 year olds by about 50 percent. It would also be above what KPMG estimates for the average direct departmental spending in universities on the teaching of undergraduates. However, it is a long way below the

average £10 000 plus of resources which universities currently receive in tuition fees and direct government grants per annum for teaching undergraduates.

Bridging this gap further would be possible if universities were allowed to charge more than the current fee cap for post NLE student in their third or later years of study. Alternatively one or, exceptionally, two additional undergraduate years might be funded through direct grants from government which could be recouped through the revenues from a low-level graduate tax.

A combination of both these policies would be affordable and contribute to ameliorating the current inequalities in access and student support which apply in England both across and within generations.

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References

Albertson, K. (2017) 'The Economic Inefficiency of Student Fees in England: Why Paying Tuition Fees from the Public Purse Makes Sense.' Intergenerational Foundation, London.

Augar, P. (2019) *Independent Panel Report to the Review of Post-18 Education and Funding*. HMSO, London.

Belfield, C., Britton, J., Dearden, L. and van der Erve, L. (2017) *Higher Education Funding in England: Past, Present and Options for the Future*, IFS Briefing Note BN211. Institute of Fiscal Studies, London.

Belfield, C. Jack Britton and Laura van der Erve (2017) *Labour's Higher Education Proposals Will Cost £8bn Per Year, Although Increase the Deficit by More. Graduates who Earn Most in Future Would Benefit Most*, Observation, 11th May, Institute for Fiscal Studies, London.

Brown, P, Green, A. and Lauder, H. (2001)**,** Oxford University Press. *High Skills: Globalization, Competitiveness and Skills Formation*

Callender, C. and Thompson, J. (2018), *The Lost Part-Timers: The Decline of Part-Time Undergraduate Higher Education in England*, London: The Sutton Trust.

Crawford, C., Crawford, R. and Jin, W. (2014) *Estimating the Public Cost of Student Loans*, IFS Report R94. Institute of Fiscal Studies, London.

Dearing Report (1997) *Higher Education in the Learning Society Main Report*. Her Majesty's Stationery Office, London. Available at:

http://www.educationengland.org.uk/documents/dearing1997/dearing1997.html

Green, A. (2017). *The Crisis for Young People: Generational Inequalities in Education, Work, Housing and Welfare*. Palgrave, London.

Green, A. and Lucas, N. (eds) (1999) *Further Education and Lifelong Learning: Realigning the Sector for the 21st Century*, Institute of Education, London.

Green, A. and Mason, G. (2017) *The Case for an All-Age Graduate Tax in England*. LLAKES Research Paper 61. UCL Institute of Education.

Hantzsche, A and Young, G. (2019) 'Financing Higher Education in England; The Effects of Replacing Income Contingent loans with an All-Age Graduate Tax'. National Institute of Economic and Social Research, London.

Higher Education Statistics Agency (HESA) (2017a), *Higher Education Student Enrolments and Qualifications Obtained at Higher Education Providers in the United Kingdom 2015/16*, Statistical First Release 242. Higher Education Statistics Agency, Cheltenham. Available at: https://www.hesa.ac.uk/news/12-01-2017/sfr242-student-enrolments-and-qualifications

Mason, G. (2019, forthcoming) *Higher Education, Initial Vocational Training and Continuing Education and Training: Where Should the Balance Lie?* LLAKES Research Paper 65, UCL Institute of Education

Marginson, S. (2007). 'The Public/Private Divide in Higher Education: a Global Revision', *Higher Education*, 53 (3): 307-333.

McGettigan, A. (2013) *The Great University Gamble. Money, Markets and the Future of Higher Education*. Pluto Press, London.

McMahon, W. (2009). *Higher Learning, Greater Good: The Private and Social Benefits of Higher Education*. Hopkins University Press, Baltimore.
Sainsbury, D. *Report of the Independent Panel on Technical Education*, HMSO, April 2016.

Schuller, T., Tuckett, A. and Wilson, T. (2018) *A National Learning Entitlement: Moving beyond University Tuition Fees*, Research Paper No. 63, Centre for Research on Learning and Life Chances (LLAKES), UCL Institute of Education.