

IEA Discussion Paper No.115

SETTING UNIVERSITIES FREE

How to deliver a sustainable
student funding system

Peter Ainsworth and
Tom McKenzie

October 2022



BRITAIN UNLIMITED

This paper forms part of **BRITAIN UNLIMITED**, our blueprint for Britain in 2030 and beyond. Through a comprehensive programme of publications, podcasts, films, events and more, **BRITAIN UNLIMITED** will explore the opportunities for rebooting Britain in the post-Brexit, post-pandemic world.

IEA papers are designed to promote discussion of economic issues and the role of markets in solving economic and social problems. As with all IEA publications, the views expressed are those of the author and not those of the Institute (which has no corporate view), its managing trustees, Academic Advisory Council, or other senior staff.

Contents

| | |
|--|----|
| About the authors | 4 |
| Summary | 6 |
| Introduction | 8 |
| A risk-sharing alternative to the current system | 10 |
| The loan scheme adopted | 12 |
| The FAIR system: a proposal | 22 |
| The FAIR system in operation | 28 |
| Further consequences | 31 |
| Conclusion | 38 |
| References | 39 |
| Appendix: sample terms of FAIR contract | 42 |

Peter Ainsworth is the Managing Director of Consulting AM, a consulting firm that assists for-profit and not-for-profit firms with the management of business and investment risk in all their manifestations. Previously, he founded and headed EM Applications, an investment risk software business, he worked for Investec Asset Management as Head of Product Development and for Drexel Burnham Lambert as Manager of Quantitative Marketing. His interest in the problem of how to encourage training by corporations and pay for a university education was first sparked by a 1994 article in *The Economist*, which published his letter response. In 2010, at the request of the Russell Group, that letter became a paper setting out the Funding with Affordable Income-based Repayments (FAIR) funding system and, in 2014, the IEA's Discussion Paper: 'Universities Challenged: The Free-Market Graduate Tax'. Peter has a BA in Economics from the University of Cambridge.

Tom McKenzie is Professor of Economics at CBS International Business School, Germany and Honorary Research Fellow at the University of Dundee, Scotland. Other institutions where he has taught and conducted research include the University of Cologne, Bayes Business School and Antalya Bilim University. Often wondering, 'who pays for that and why?' in the different places where he has lived and worked, Tom has developed a keen interest in public economics and the competing and complementary roles of the private, public and voluntary sectors. In 2019, he collaborated with Peter in the IEA award-winning proposal to create 'nest egg' funds for young people in the UK for their lifetime learning. Tom holds degrees in the economic sciences from the universities of Bonn and Cologne.

Summary

1. The provision of a higher education to a student is a service like few others. For the service to deliver value requires the active participation of the recipient. Even then, the range of possible outcomes – whether measured as personal or career development – is very wide.
2. The heavy burden on the UK taxpayer from student loan losses is necessitating a reduction in state support for higher education.
3. Given high inflation the decision to freeze tuition fees until 2024–5 will erode the real value of university income. The Russell Group forecasts this will cause significant losses and severe financial problems for the sector and a number of vice-chancellors have called for the freedom to set much higher tuition fees.
4. Many students get a poor deal. A large proportion will suffer an effective earnings loss from attending university. They face loan costs which have become more demanding, with a liability that can last 40 years and a capital repayment value that grows with (currently very high) inflation.
5. The moral hazards of a system where institutions are paid on sale (enrolment) rather than performance (outcomes) has resulted in abuses of the system such as the recruitment of unsuitable students, an explosion in the number of unconditional offers and the launch of courses with poor economic value.
6. The guild-based apprenticeship system produced skills training and industry-wide innovation for more than 500 years. It transmitted both explicit knowledge and tacit skills to the apprentice, readying them for employability and mastery.

7. The government considered a modern version of the medieval apprenticeship 'income-sharing' approach prior to the 2012 reforms. It was rejected as it was thought to be administratively complex.
8. Subsequently, Open Banking legislation and the Financial Conduct Authority's (FCA) openness to financial innovation has allowed the launch of Fintech start-up companies which now offer private sector income-contingent loans whereby universities share both in graduates' income and in their return on education investment risk.
9. Private sector income-contingent lending to pay for higher education has also been growing in the United States and Germany.
10. Deregulating tuition fees, with any premium over the state loan amount covered by private sector income-contingent lending, increases sector resources while addressing the current system's moral hazards leading to a long-term sustainable settlement of the university funding problem.

Introduction

Although frequently praised as ‘World Class’ (Augar 2019: 5), it is clear that the UK’s university system and the service it delivers to students and society leaves much to be desired. Universities are accused of offering places to unsuitable students; making too many unconditional offers; delivering courses with poor economic returns; overpaying their vice-chancellors and principals; doing too much of their teaching online; and infringing academic freedom. In what follows, it is argued that many of these difficulties can be explained substantially or partly by the arrangements by which students are funded. Those arrangements create a ‘moral hazard’ in the sense that universities have an incentive to recruit students for the fees they will then receive but they face few or no risks related to the career success of graduates that would be expected to flow from the education provided. The misalignment of risks and incentives in the present funding system arose, in part, from misconceptions and faulty analysis in the three major reviews of higher education funding. The problems in the sector can be ameliorated by gradually abandoning the current approach and adopting the key elements of the Funding with Affordable Income-based Repayments (FAIR) proposal, first made in 2010, in support of which evidence is now accumulating.

The three reviews of higher education were those of Dearing (1997), Browne (2010) and Augar (2019).¹ They shared the following objectives:²

1. Support the international competitiveness of the UK higher education sector.
2. Facilitate access to higher education for young and mature students.

1 References herein to ‘Dearing’, ‘Browne’ and ‘Augar’ are to the respective report, not the individual.

2 See the terms of reference, introductions or body of each report.

3. Maintain educational standards.
4. Improve the effectiveness of teaching.
5. Increase the responsiveness of learning to employment needs (employability).
6. Offer value for money to students and taxpayers.
7. Reduce public investment in higher education to ensure the system is sustainable.

The Browne Review, intending to meet these objectives, led to the adoption of the current system of student funding. Under this system, where a student cannot, or chooses not to, pay their own tuition fee charge upfront, it involves universities³ receiving an amount of money from the government, currently up to £9,250 per annum, per student. At the point of payment and receipt of this fee, no questions on the value of the course, the quality of teaching or the suitability of the student are asked or arise. The university collects its fee on the enrolment of the student, risk-free. Students who take the government loan acquire a liability as graduates to make payments to the government at 9 per cent of their income above a given ‘threshold’ level, capped at the real value of the loan and written off if not repaid after a specified length of time. Taxpayers bear losses where the repayments do not cover the government’s cost of making the loan.⁴

-
- 3 The 114 universities in the ‘Approved (Fee Cap)’ category, which gives them the right to charge up to the amount of the maximum student loan (see OfS register). The universities categorised as ‘Approved’ (without reference to the fee cap) currently face no limits on the fees they may charge, but their students can only borrow a smaller amount from the state. (https://docs.google.com/spreadsheets/d/1WmKaLsPBUgEMjOpi3ZoHdhYnyjFrm_Sp/edit?usp=sharing&ouid=114006352655107181112&rtpof=true&sd=true).
 - 4 If the government has to write off a loan of, say, £10,000 forty years after it was issued the cost to its balance sheet (the cost to the taxpayer) is the accumulated cost of that loan amount and the interest rate it would have to have paid in the gilt market to borrow that amount each year. In practice this loss is estimated at the point that the loan is issued and written off (charged to taxpayers) at that point. The write-off amounts are then adjusted annually based on repayment patterns and policy changes over time.

A risk-sharing alternative to the current system

Prior to the government adopting the present system, Peter Ainsworth, through Treasury contacts, had presented it with an alternative. The FAIR scheme had been written up at the request of the Russell Group, who were seeking ways to secure additional resources for higher education that might be acceptable to a government in the midst of an austerity programme. The FAIR scheme met the objectives by means of risk-sharing agreements between student and institution through which the University would be paid through the receipt of a share in a graduate's earnings.

Tailored to the situation at the time, the initial FAIR paper proposed that state-funded loans could remain at the then current £3,000 level, but suggested that universities be allowed to charge tuition above that level and secure the funds to pay the increment privately. To ensure access was maintained, a student would not need to make any FAIR payments prior to graduation and the repayment obligation would be tied to their income. FAIR proposed either that universities could take all the risk related to future graduate payments themselves, borrowing to fund current spending, or that they could seek investors who would purchase the rights to receive the graduate payments. Although formally the approaches differ, they are substantively the same. As investors will purchase rights based on their estimation of graduate earnings, in all cases the income of the university is tied to the income of its graduates.⁵ The *Financial Times* reported that: 'Under the policies floated by the Tories, undergraduates

5 For simplicity, all approaches are referred to as the student contracting directly with the university as this is the effect of the arrangements, although in practice there may be a regulated financial intermediary.

would pledge to pay a share of their future income to the universities they attend as part of their fees.⁶

While, on the face of it, FAIR is similar to the current government model, the key difference is that the contract⁷ is directly and/or effectively between student and university. The effect of this direct link between institution and scholar is that the university then shares in the risks their students face and the interests of the two parties to the contract are aligned for the long term (McKenzie and Sliwka 2011).

6 'Graduate top earners face paying most', *Financial Times*, 9 September 2010.

7 Contracts would be regulated by the Financial Conduct Authority.

The loan scheme adopted

Nevertheless, the government decided to continue to control tuition fee maxima and make corresponding income-contingent loans to students.⁸ It may have been influenced by the understanding at the time that loan losses needed only to be recognised at the end of the 30-year life of the loans, so hiding the true present cost.

However, in 2018, the Office for National Statistics (ONS) determined that anticipated loan losses should be accounted for at the time the loans were issued.⁹ With loan losses running at around 50 per cent of face value,¹⁰ around £10.5 billion in 2018–19,¹¹ this is a significant, growing and increasingly unaffordable expense when, since the 2008 financial crisis, government debt ballooned from 41 per cent of gross domestic product in 2007 to 102 per cent in 2021.¹²

Consequently, the Augar Report of 2019 had a primary focus on the ‘reduce public investment’ objective, which became even more pertinent following the £407 billion spent on 2020–2 Covid-19 and lockdown policies. Responding to the report, the government published its ‘Higher Education

8 It was reported in the *Financial Times* that the ‘Equity’ (FAIR) scheme was considered administratively complex: ‘Graduate top earners face paying most’, *Financial Times*, 9 September 2010.

9 ‘New treatment of student loans in the public sector finances and national accounts’, Office for National Statistics, 17 December 2018

10 Blended estimate, see <https://explore-education-statistics.service.gov.uk/find-statistics/student-loan-forecasts-for-england/2021-22>. The estimated rate of losses for the 2022–3 cohort and later will be reduced should the February 2022 policy changes pass into law.

11 Augar (2019: 81).

12 ‘UK government debt and deficit: December 2021’, Office for National Statistics, 29 April 2022 (<https://www.ons.gov.uk/economy/governmentpublicsectorandtaxes/publicspending/bulletins/ukgovernmentdebtanddeficitforeurostatmaast/december2021#government-debt>).

Policy Statement’ on 24 February 2022 (DoE 2022). The new policies announced therein included a freeze until the 2024–5 academic year of the maximum tuition fee¹³ at £9,250, a reduction in the income level at which graduates make repayment to £25,000¹⁴ and an increase in the repayment term from 30 to 40 years so that, except for those who repay the loan promptly, graduates will see 9 per cent of their income over the income threshold deducted from their pay packet almost up until retirement.

The policy statement claimed that, with these changes, the system for funding students would, for decades, be sustainable for universities, students and the taxpayer.¹⁵ However, due to inflation, the real value of the £9,250 tuition fee cap, measured in 2012 prices, would fall far below the £9,000 level introduced in 2012. This falling income per head will, the Russell Group said, threaten the financial survival of many institutions as losses per undergraduate taught rise from £1,750 in 2021–2 to around £4,000 in 2024–5. Disagreeing that the proposals would be sustainable, it plead for ‘a truly sustainable funding package that protects the unit of resource in real terms’.¹⁶

The policy statement is not yet law and was published prior to the change in leadership. It is not, therefore, certain that it will be enacted. The resistance shown by the sector will make it hard to put into effect unless the reforms proposed herein, which provide additional resources for universities at no cost to the taxpayer, are introduced at the same time.

A further aspect of this problem arises from the increasing number of students. The proportion of UK-domiciled 18-year-olds applying to attend university had been and continues to increase. By February 2022, for September entry, there were 320,420 applications, an increase of 4.6 per cent over 2021.¹⁷ This represents a new high of 43.4 per cent of that year group. Assuming applications track the number of 18-year-olds in the population they are set to grow a further 10 per cent over the next five years

13 This includes AY2024-5 and is the amount applicable to ‘Approved (Fee Cap)’ universities.

14 Frozen at £27,295 for existing students.

15 ‘Higher education policy statement & reform consultation’, Department for Education, 24 February 2022 <https://www.gov.uk/government/consultations/higher-education-policy-statement-and-reform>.

16 A new funding package for high-quality education. Russell Group 26 May 2022 https://russellgroup.ac.uk/media/6070/26052022_external_briefing_sustainability.pdf.

17 See Universities and Colleges Admissions Service (UCAS) January deadline – Age. xlsx drawn from csv of same name available from UCAS as filename ug_january_equal_consideration_dealine_2022_1.zip.

even if participation rates are stable. At the current inadequate¹⁸ level of the tuition fee, this will put further pressure on universities' finances while, at the same time, creating an increasing fiscal burden for the government.

In addition to this problem, the system delivers poor value for students. The relevant consideration is the students' future earnings premium relative to equivalent non-graduates,¹⁹ and this appears to be in decline. In 2011, it was estimated that the return to an undergraduate degree – the income gain compared to non-graduates with 2 or more GCE A levels – stood at 27 per cent (Conlon and Patrignani 2011). Britton et al. (2016: 54) noted the 'sheer scale of the variation in graduate earnings, even between graduates from the same institutions and taking the same subjects'. This led to negative returns for many graduates. Out of the whole sample there were some universities (23 for men and 9 for women) where the bottom half of graduates earned less than equivalent non-graduates, ten years after graduation (Britton et al. 2016: 36).²⁰ In 2019, a comparison of the financial return to a degree found that it had fallen from 19 per cent for the children born in 1970 to 11 per cent for those born in 1989–90 (Boero 2019). By 2020, taking account of taxes and student loan repayments, 20 per cent of undergraduates get a negative financial return from going to university – their net income would have been higher had they not attended (Britton et al. 2020: 8). In 2021, another study concluded that while there

18 As claimed by the Russell Group.

19 How much a graduate earns relative to the counterfactual – a non-graduate with equivalent academic achievement prior to university. Weak premiums erode the general case for higher education.

20 A negative return meant that, ten years post-graduation, they were earning less than the bottom half of non-graduates. Hence, half of the graduates of these institutions were earning less than they would have done, all other things being equal, if they had not given up three years of potential earnings to attend university. The authors posited that this might be a regional effect; the universities might be in areas where earnings were lower than the national averages so their graduates' earnings, assuming they stayed in the area, would be based on a lower norm than a national measure of all non-graduates. Were this the case, it would make a powerful argument for the differentiation of fee levels and more general deregulation so that such institutions could develop competitive strategies that benefitted from their low local cost base.

was a 'large payoff to high ability students attending elite universities',²¹ the overall picture was that men only achieved a return of 7 per cent by age 30 (Britton et al. 2021: 22).²²

The 'sheer scale' of the variation in earnings also has implications for attempts to ensure 'quality' by fiat. Table 1 shows the proportion of students earning in each salary band based on the subject that they studied, drawn from a Higher Education Statistics Agency (HESA) post-graduation survey.²³ Whereas average earnings are used to suggest that, for example, studying medicine will guarantee high wages and choosing creative arts will disappoint, the wide distribution of outcomes shows that this is misleading. Just two years out of university, all subjects²⁴ see some graduates with earnings of less than £24,000, and all but psychology and education have a proportion over £36,000. Such a broad range of possibilities by subject suggests that the causal link is not strong and other factors such as the graduate's own efforts, choices and luck will also be playing a significant role. Consequently, financial incentives that impact upon the graduate's efforts and choices are important for improving outcomes.

21 Naming in particular Oxford, Cambridge, the London School of Economics and Imperial College London.

22 Gross annual earnings for men are 7 per cent higher than for the counterfactual. The figures for women appear better, at 24 per cent, but may suffer bias from the fact that female higher education leads to having fewer (if any) children (Cornett 2020).

23 The extract has reduced the number of salary bands and limited the subjects to those with at least 3,000 respondents. The total sample was 94,404, about a third of graduates.

24 All shown in the Table 1, which were those with over 3,000 respondents and assumed to be most common and accounting in aggregate for most students. The categories are decided by HESA. The data can be arranged differently.

Table 1: Earnings outcomes by subject studied

| Subject area of degree/Earnings band | Up to £23,999 | £24,000 - £26,999 | £27,000 - £29,999 | £30,000 - £32,999 | £33,000 - £35,999 | Over £36,000 |
|---|---------------|----------------------|----------------------|----------------------|----------------------|-----------------|
| Medicine and dentistry | 2% | 4% | 17% | 19% | 19% | 38% |
| Subjects allied to medicine | 16% | 57% | 10% | 10% | 3% | 3% |
| Biological and sport sciences | 55% | 21% | 11% | 7% | 3% | 2% |
| Psychology | 67% | 17% | 7% | 6% | 2% | 0% |
| Engineering and technology | 19% | 19% | 23% | 18% | 8% | 11% |
| Computing | 31% | 20% | 12% | 14% | 7% | 15% |
| Social sciences | 43% | 17% | 13% | 13% | 6% | 9% |
| Law | 60% | 16% | 8% | 6% | 2% | 8% |
| Business and management | 49% | 20% | 11% | 9% | 4% | 8% |
| Language and area studies | 53% | 23% | 11% | 7% | 3% | 3% |
| Historical, philosophical and religious studies | 51% | 22% | 12% | 8% | 3% | 4% |
| Education and teaching | 34% | 34% | 18% | 10% | 3% | 0% |
| Design, and creative and performing arts | 71% | 16% | 5% | 4% | 2% | 3% |

Source: HESA, UK domiciled graduates in full-time paid employment in the UK by subject area of degree and salary band (table 30). Academic year 2019–20 (<https://www.hesa.ac.uk/data-and-analysis/graduates/table-30>). Colour indicates magnitude of data points.

These problems can be understood as arising from a number of errors or limitations in the approach taken in the three reviews of higher education. It was accepted by the reviews that students would be unable to pay for their courses until after they had graduated. But beyond that, they erred in understanding the consequences of different funding arrangements.

One issue that received attention was that of the question of whether a tax on graduates was to be preferred to an income-contingent loan. Two principal reasons have been given for preferring the loan. One is that the receipts of a tax could not be hypothecated²⁵ to finance education. Dearing claimed this specifically.²⁶ Browne likewise criticised a graduate tax as it would ‘make universities reliant on government for all their teaching funding’.²⁷ Dearing stated that ‘tuition contributions will enable students to be more demanding of institutions if they are making a direct contribution to the costs of their tuition’,²⁸ and Browne that an income-contingent loan would create a ‘[d]irect funding relationship between student and university’.²⁹

25 Reserved, set-aside and not subject to political vagaries.

26 Dearing (1997: 314) 20.28.

27 Browne (2010: 52).

28 Dearing (1997: 326) 20.68.

29 Browne (2010: 53).

In fact, the revenue from state-issued loans is no more insulated from this risk than are tax receipts.³⁰ Student loan revenue is different in form to a tax but is substantively the same because all loan terms, including the initial capital value which determines maximum tuition fees, are decided by the government which is the recipient of all repayments.

It is commendable that both reports recognised the value of a direct payment relationship between student and institution but, as their proposals called for the government to pay the costs of learning upfront,³¹ there is, in fact, no direct funding relationship. Universities remain substantively 'reliant on Government for all of their teaching funding'. Having accepted a place, a student in practice has no ability to exert any financial pressure on their university at all once they are in a position to understand the service on offer.

Table 2 shows a sample of the changes the government has made to the tuition fee cap – the initial capital value of the loan – and, consequently, to the resources flowing to the sector. Often the 'change' has been to ignore the annual effect of inflation, such that it appears to change nothing but in practice makes a real³² change in the value of the cap. Table 2 also shows the changes in the real value of the threshold, so varying the effective cost of any given tuition fee to the student 'customer'.

30 Dearing recognised that the ICL faced political risk, suggesting that changes to the proportion of tuition costs to be met by the Income Contingent Loan (ICL) can only be increased with an affirmative resolution of both Houses of Parliament, stating that with this provision: 'The contributions made by graduates in work in this way should be reserved for meeting the needs of higher education.' But Dearing did not contemplate that the tuition fee levels themselves (and number controls) would be politically dependent.

31 Browne (2010: 6).

32 Accounting for inflation for which here the Consumer Prices Index (CPI) is used though the Russell Group policy response used RPI.

Table 2: Capricious setting of tuition fee amounts and repayment terms create uncertainty in resources and liabilities

| Year | CPI level ³³ | Maximum fee (nominal figure) | Maximum fee in 2012 prices ³⁴ | Change in real maximum fee relative to 2012 (%) | Repayment threshold (nominal figure) | Repayment threshold in real 2012 terms |
|------|-------------------------|------------------------------|--|---|--------------------------------------|--|
| 2012 | 94.60 | £9,000 | £9,000 | 0 | £21,000 | £21,000 |
| 2013 | 97.10 | £9,000 | £8,768 | -3 | £21,000 | £20,459 |
| 2014 | 99.00 | £9,000 | £8,600 | -4 | £21,000 | £20,067 |
| 2015 | 99.30 | £9,000 | £8,574 | -5 | £21,000 | £20,006 |
| 2016 | 99.50 | £9,000 | £8,557 | -5 | £21,000 | £19,966 |
| 2017 | 101.40 | £9,250 | £8,630 | -4 | £21,000 | £19,592 |
| 2018 | 104.40 | £9,250 | £8,382 | -7 | £25,000 | £22,653 |
| 2019 | 106.30 | £9,250 | £8,232 | -9 | £25,275 | £22,493 |
| 2020 | 108.20 | £9,250 | £8,087 | -10 | £26,575 | £23,235 |
| 2021 | 109.00 | £9,250 | £8,028 | -11 | £27,295 | £23,689 |
| 2022 | 114.90 | £9,250 | £7,616 | -15 | £27,295 | £22,473 |
| 2023 | 124.09 | £9,250 | £7,052 | -22 | £25,000 | £19,058 |
| 2024 | 134.02 | £9,250 | £6,529 | -27 | £25,000 | £17,647 |

After initially setting the cap at £9,000 it has only been increased once, leading to real value reductions in every year apart from 2017. Given that tuition fee levels are visible to students and consequently politically sensitive, with opposition parties typically offering reduced fees at election time, in practice university resources suffer the same sensitivity to political vagaries as they would under a graduate tax.

The Augar Report, despite observing that '[m]arket competition exists but not on the terms intended',³⁵ and that there is 'extremely limited competition on price', with 98 per cent of full-time students paying the maximum fee,³⁶ rejected the proposals that were put to it to allow differential fees, where 'institutions would take on some of the risk of their graduates not repaying their loans', preferring the appearance of competition over the reality. The reason given for rejection was because 'such a scheme [...] would lead to spirals of improvement or decline, depending on a provider's reputation

33 Source: ONS CPI INDEX 00: ALL ITEMS 2015=100; 8 per cent assumed for 2022-3 and 2023-4.

34 Adjusted each January for change in CPI; 8 per cent CPI inflation assumed for 2023 and 2024.

35 Augar (2019: 80).

36 Augar (2019: 69).

and quality'. That is, of course, the very point of a competitive system – to reward those that offer the superior product and encourage the less successful to copy best practice and escape 'downward spirals' as, for example, the University of Hull has done.³⁷

Another significant problem is that the reviews did not consider the effect of funding arrangements on the behaviour of the universities. Since universities are, in effect, paid for enrolling students, rather than on the basis of any measure of outcomes, they face no kind of risk beyond recruitment. This lack of risk sharing disconnects them from an economic interest in delivering the outcomes the students, employers and taxpayers reasonably require. That makes achievement of the objectives of the reviews difficult if not impossible.

Augar, as outlined above, shows awareness of this point but, in relation to moral hazard, only specifically refers to the Office for Students (OfS) reluctance to provide financial support to universities in financial difficulty.³⁸ As with Dearing and Browne, Augar does not make the connection between the incentives embedded in the fixed price government-funded loan system and the unhelpful institutional behaviour that it documents.³⁹

Finally, it would have been highly desirable for the reviews to have given more attention to what had worked in the past. As Seldon has argued, 'decisions informed by history will be sounder than those which ignore it'.⁴⁰ Even in the ancient world there were alternative funding methods. One approach – that of the Sophists – usually involved charging an upfront fee. This puts the risk of receiving poor quality tuition on the students, but they are at least free to withdraw their custom when they wish. As Smith (1776) noted, poor teachers do not keep their students for long on these terms.

While these arrangements were primarily concerned with the imparting of explicit knowledge, the medieval craft guilds were equally concerned with imparting tacit knowledge (Lyon 1920).⁴¹ The guilds were associations

37 'Hull transformation based on international recruitment', *Times Higher Education*, 19 July 2022 (https://drive.google.com/file/d/1ZQUie_6AXiOXpUdFHwOZGTR0Z_y57cpH/view?usp=sharing).

38 Augar (2019: 98).

39 Augar (2019: 75–8): 'competition' had manifested as cash and in-kind inducements to prospective students, there had been significant grade inflation, entry requirements were being lowered and there was explosive growth in unconditional offers.

40 Anthony Seldon (2022) Why history matters in policy. *The Mandarin*, 3 August (<https://www.themandarin.com.au/196182-why-history-matters-in-policy/>).

41 Broadly, explicit knowledge can be documented, tacit knowledge (skill) cannot.

which were often themselves referred to as universities, such as ‘the university of smiths, the university of tailors’ etc. (Smith 1776;⁴² Ogilvie 2014). A key element of their role was to police the training of apprentices by their masters with the intention that they should become qualified journeymen and, in due course, masters themselves.

The economics of an apprenticeship were that the master would provide accommodation, sustenance and training to the apprentice, who would in turn agree to work exclusively for the master for a period of time at wages which increased over time, as they became more skilled, but which nevertheless were set below the value of the apprentice’s work to the master.

The arrangement shared risks: the master was at risk of loss if the student turned out to be a poor learner, while the student would suffer if the master was a poor teacher. It also shared returns: good teaching by the master would lead to the student becoming productive beyond the cost of their wages and the master would then share in the surplus value of the student’s output. The alignment of interests arising from this risk and return sharing would mean that the ‘university’ in this arrangement would:

1. select to teach those students that appeared to have natural talents suited to the given course of study and so be likely to make them successful in that trade; and
2. seek to impart the relevant knowledge and skills in such a way as to make the student proficient at a high level, as quickly as possible and with the least cost in teaching time.

While the student would:

1. think carefully before committing to learn a particular trade due to the considerable investment of time and effort required; and
2. be under an obligation to evidence learning with valuable production in order to achieve the desired qualification.

42 PART II – Inequalities occasioned by the Policy of Europe. ‘Seven years seem anciently to have been [...] the usual term established for the duration of apprenticeships in the greater part of incorporated trades. All such incorporations were anciently called universities [...]. The university of smiths, the university of tailors, etc. are expressions which we commonly meet with in the old charters of ancient towns.’

Although the student was required to supply their labour, they faced no upfront or living costs and so apprenticeships in this period were, in theory at least,⁴³ available to all regardless of financial resources.

As should be clear, this funding model had advantages for both apprentice and master given that the nature of the contract between them was necessarily incomplete – it was no trivial matter to codify exactly what each party was required to contribute.

43 In practice, there were laws that stipulated that students had to come from families of some means, to reserve the high-paying trades for the higher social classes, and premiums could be commanded by masters with good reputations for teaching valuable skills. But the law was not always obeyed, and poor students could avoid the premium by agreeing a longer indenture.

The FAIR system: a proposal

The FAIR scheme is a modernised version of the apprenticeship arrangements that prevailed when universities were incorporations that trained students in exchange for a share in the output of their skilled labour. Given tax law⁴⁴ and the limited range of activities of a university,⁴⁵ the modernised equivalent of a 'share in output' is a 'share of income'.

Following the implementation of the 2012 reforms, FAIR was published by the IEA as the 'Free Market Graduate Tax' (Ainsworth, 2014). This version took account of the increase in tuition fees to £9,000, noted that the scheme was uneconomic and put forward an idealised solution of a wholesale replacement of government-backed loans with FAIR contracts between a student and their university. The latter gained the freedom to set tuition fees at any level, but the terms of the FAIR contract were, by law, standardised. This standardisation was appropriate at the time due to the novelty of such arrangements as it would, *inter alia*, aid comprehension. A consequence of the standardisation of terms would be that the expected returns may bear little relation to the tuition fee.

In its essentials, the FAIR scheme has just four elements: (1) the financial contract ties the financial interests of a university to the long-term earnings outcomes experienced by its graduates, (2) the university is free to set upfront tuition fees at any level, (3) any student must be free to choose between upfront payment and entering into a FAIR contract and (4) the FAIR contract terms should be income contingent with no interest rate.

44 For example, tax might be charged on the education provided as a benefit in kind.

45 To exactly copy the historic model, universities would need to be engaged in every occupation that a student may wish to enter. In the main, universities only trade in education, where the historic model holds, with some postgraduate students required to provide teaching services in exchange for their own education.

The obligation is to pay a certain share of income, subject to income being above a threshold level, for a fixed maximum period.

At the present time, with the government facing many competing claims for expenditure and maximum undergraduate tuition fee levels falling in real terms, there is an immediate need for a private source of additional funding for universities, as was the case in 2010. FAIR can, consequently, best be introduced as a top-up scheme, allowing institutions and students to experiment and learn without being totally reliant on a new approach. The government should then continue the freeze in loan amounts so that, over time, the idealised system, where universities are funded independently from government, is approached.⁴⁶

Given that legislation already provides for the maximum student loan by category of provider, the legislative changes required to put the FAIR principles into practice are very limited. As the FAIR proposal originally suggested,⁴⁷ universities⁴⁸ would become free to charge any level of domestic undergraduate tuition fees, a freedom already enjoyed by the 'Approved' universities on the OfS register. The benefits of the fee cap regime would instead be subject to the condition that, to the extent that the fee exceeds the amount of the maximum state loan, the institution must ensure that the increment is payable after graduation on an income-contingent basis.

The university would be free to set the terms of the risk-sharing agreement as it saw fit, subject to FCA regulations, which require that any such terms be 'affordable'. Whether the university takes the whole repayment risk itself or seeks external investors to share that risk, in exchange for some return, would be at its discretion. Having external investors would reduce the university's cash flow risk, while its long-term capital risk⁴⁹ would still depend on its success in delivering strong graduate earnings outcomes.

As the share of funding that is driven by outcomes increases and the universities have a growing incentive to focus on the employability of their graduates, so the government can lighten the regulatory burden on the sector, which is a contributor to administrative bloat and cost pressures.

46 Government grants may continue to be useful to achieve non-economic objectives or in situations where there is clear market failure.

47 See also, Ainsworth (2014).

48 Those (348) institutions categorised by the OfS as 'Approved (Fee Cap)'.

49 Whether it recovers the interest- and inflation-adjusted value of tuition fees forgiven.

The OfS could develop into an organisation focused on advising and supporting the sector rather than reprimanding it. Solving the problem of how best to create long-term value through higher education for a diverse mix of students is non-trivial, and a system that supports institutions in experimenting with new approaches is more likely to deliver productivity gains than one that penalises failure.

As the real value of government loans diminishes, the state could continue to recognise the social and non-monetary value of higher education by copying Germany and making tuition fees (including income-contingent loan repayments) tax deductible. That would be a much less rigid approach to supporting people to obtain the benefit of education throughout their lives than having the government set multiple levels of funding.

An example of the terms of a FAIR contract are set out in the Appendix. Terms are set so that the 'good credits' – those who end up with high earnings – pay more to compensate the university for the inevitable part and full defaults of the 'poor credits'. Universities can set the maximum payable to take account of the expected range of earnings outcomes. Where the distribution is narrow – the course has a high probability of delivering a certain income level – the multiple could be low. Where uncertainty is high, such that both student and institution face considerable risk, the lucky few should be willing to make much greater contributions as a form of after-the-event insurance premium.

It would be hoped that the fact that graduates will be making payments to their alma mater, an institution which is often held in some affection, will encourage them to appreciate the benefit they received from the institution and consider the continuation of payments, perhaps at a lower rate, even after they are free of the contractual obligation. Universities could give recognition to contractual payments from high earners above the deferred amount in the same way they currently recognise voluntary payments – as donations, recorded in yearbooks, etc. – and reserve a part of the excess to build endowments.

Although the cash flows from a FAIR-style risk-sharing agreement are akin to those of an equity investment – they may, contractually, be nil and, to the extent that they are of value, their value is a function of 'profitability' (graduate income) – for regulatory purposes such arrangements are, at least in the UK, treated as consumer loans. Income-contingent loans are perhaps best thought of as equity-like debts where the specific terms, in

particular the threshold and the maximum repayment, can make their cash flows more debt-like or more equity-like.⁵⁰ This arrangement therefore means that universities have a direct interest in the earnings of their graduates. This would encourage them to design courses that suit employers, incorporating the tacit skills acquired through work experience,⁵¹ and to make the careers service a more central focus of university provision. Not only would the institution seek to advise on careers but also to take a more proactive role, directly or through agents, in finding work for graduates and following up to support those alumni who fall on hard times.

The guild apprenticeships taught both explicit and tacit knowledge, the latter including management, socialisation and community/political skill (Lyon 1920). Indeed, contrary to employers' need for graduates with tacit work skills,⁵² it is the present heavily regulated system that has a narrow bias towards factual information that can be evidenced as a specific knowledge 'gain'. It does not compensate, or give recognition to, universities if they seek to improve tacit skills. The FAIR system counterbalances that regulatory handicap, so that providers have an incentive to concern themselves with all aspects of a student's learning to ensure that, as far as is reasonably practicable, at graduation they are equipped to take on a role worthy of the commitment they have made.

The moral hazards that arise when the university is insulated from the risks involved in educating youngsters for an uncertain future are mitigated when its own revenues are at risk if outcomes are poor. Attempting to control the effects of moral hazard through regulation has been shown to be ineffective. Financial incentives aligned to outcomes are more robust to game playing.

Maintenance loans would continue to be provided by the state, in the short term, but should be on a commercial basis. In particular, private sector income-contingent loans charge the share payable on gross income, not on the excess of gross over the threshold. This retains the notion of the threshold, so that there is no liability if earnings are too low, but once earnings reach the threshold level the obligation is much greater. There is no 'outcome risk' related to accommodation and sustenance – they are consumed immediately – whereas the low cost of the state income-

50 For example, a high threshold and high maximum repayable is more equity-like, while a low threshold and low maximum is more debt-like.

51 Simulated if actual is not feasible.

52 Dearing 1997, s3.54A.

contingent loans creates a moral hazard driving the student to ‘overconsume’ beyond what is necessary. A greater repayment obligation would encourage students to make more efficient use of accommodation – preferring local universities and two-year degrees, for example. A switch to commercial terms would increase the repayment rate so that the cost to taxpayers is reduced and, in consequence, the threshold reduction and increased term proposed in the 2022 policy statement may not be needed.

The FAIR scheme, with variable pricing and terms, would have the effect of recognising the wide range of educational needs and outcomes and would grant universities the freedom to tailor their offerings accordingly. Current practice in the UK, USA and Germany sees a wide range of parameters for the loans as institutions address different needs and as they learn what is most popular and effective. Nevertheless, as a rough indication, using HESA data for 2019–20 graduate salaries, if universities were to set terms at 3 per cent of gross income over ten years, subject to a threshold of £25,000, the majority of providers, for whom HESA has collected data, should receive incremental income approximately sufficient to return their tuition fee income to the real level it had in 2012.⁵³

With these provisions in place, there is a fairer allocation of risks between the three parties involved in funding higher education. As shown in Table 3, the taxpayer is the only party with a high risk in the present system, whereas under FAIR both student and university also face outcome risk.

⁵³ This is a very approximate calculation. It uses salaries reported in one year, a few years out of university. It understates returns by taking no account of income growth over time and may overstate returns if the HESA sample is biased against low earners. The Longitudinal Education Outcomes (LEO) database would be more comprehensive, though real-world experience of repayments would be of most value.

Table 3

| Financial contribution/ stakeholder | Comparative magnitude of repayment risk by stakeholder | | |
|---|---|------------|----------------|
| | Student | University | State/taxpayer |
| Current system | | | |
| Current state non-commercial income-contingent loan | Low | Nil | High |
| FAIR proposal | | | |
| University-provided income-contingent loan (top-up, growing over time) | Medium | High | Nil |
| State-provided commercial income-contingent loan (for maintenance) | Medium | Nil | High |
| State-provided tax deductibility on repayments | Low | Nil | Low |

The FAIR system in operation

Although details vary, systems like the FAIR proposal are in operation. Purdue University, Indiana, in the USA, is generally recognised as the first major institution to have implemented a risk-sharing scheme along the lines proposed. It launched its 'Back-a-Boiler'⁵⁴ scheme in 2016 whereby, for those who had exhausted their entitlement to federal loans, it offered to forgive tuition fees in exchange for a share in a student's future income. The terms of the Income Share Agreement (ISA), as such contracts have come to be known in the USA, varied by type of major (subject) studied. Currently, over 1,600 contracts have been entered into, representing total tuition fee funding of more than \$17.9 million. The subjects being studied that have been funded include more than 150 different majors, with the top faculties being: engineering, polytechnic institute, health and human sciences, science, liberal arts, agriculture and management (Purdue University 2022).⁵⁵

A number of Fintech companies have been launched to offer administration services to US universities and vocational schools that wish to offer risk-sharing agreements as an optional way to pay for tuition. Stride Funding,⁵⁶ which is just three years old, has already funded students at nearly 175 universities.⁵⁷

54 A 'boilermaker' is a graduate of Purdue.

55 'Worried about how to pay for your Purdue education?', Purdue (<https://www.purdue.edu/backaboiler/>).

56 <https://www.stridefunding.com/>.

57 The US Department of Education records nearly 4,000 colleges and universities with degree-awarding powers. 'How many universities are there in the US and why that number is changing', *US News*, 27 April 2021 (<https://www.usnews.com/education/best-colleges/articles/how-many-universities-are-in-the-us-and-why-that-number-is-changing#:~:text=Though%20the%20U.S.%20Department%20of,schools%20in%20the%202021%20rankings>) (https://nces.ed.gov/programs/digest/d20/tables/dt20_317.10.asp?current=yes).

Meratas⁵⁸ claims to be the ‘Leading Income Share Agreement Program’ and offers a funding platform for a range of deferred payment schemes and currently lists 195 vocational schools as partners. Leif⁵⁹ also administers ISAs for universities and was the source of data on over 7,500 ISA contracts that supported an analysis of racial and gender effects that concluded that ISAs appear to be non-discriminatory (Pollack and Sullivan 2022).

Among the other universities offering ISAs are: Lackawanna College, Clarkson University, Messiah College, University of Utah and Robert Morris University.⁶⁰ To encourage adoption among disadvantaged groups, the charity Student Freedom Initiative last year launched an ISA⁶¹ for students of nine historically black colleges and universities.⁶²

Germany, with 19 private universities and 93 private universities of applied sciences,⁶³ has a longer history of the private financing of university tuition fees through risk-sharing agreements. The growth of the use of risk-sharing agreements may have been helped by the fact that the government does not cover the cost of an education at a private university but does provide for the tax deductibility of tuition fee payments by the graduate. Two of the leading providers are ‘Brain Capital’, operating since 2007, which has 33 partner universities and has financed over 7,500 students studying more than 500 different courses,⁶⁴ and Chancen, founded in 2016, which last year received €24 million from the European Investment Fund to back more than 2,000 students through ISAs.⁶⁵ In both cases, the general rule is that the funding is sourced from private investors, though the University of Lübeck, for example, has set up its own fund.

The United Kingdom, with few private universities and generous state provision, has historically had less need for alternative sources of risk-sharing funding. However, the growing number of ‘bootcamps’,⁶⁶ where the student cannot obtain a government loan to pay tuition fees, has

58 <https://meratas.com/>.

59 <https://www.leif.org/company>.

60 <https://studentloanhero.com/featured/schools-bachelors-income-share-agreements/>.

61 Which they call a ‘Student Freedom Agreement’.

62 <https://studentfreedominitiative.org/>.

63 <https://www.studying-in-germany.org/private-universities-in-germany/>.

64 <https://www.braincapital.de/ueber-uns>.

65 ‘Germany: CHANCEN eG receives European support for providing student financing’, EU Press Release, 2 December 2021 (https://www.eif.org/what_we_do/guarantees/news/2021/chancen-eg-receives-european-support-for-providing-student-financing.htm).

66 Private institutions offering intensive short courses, usually of less than six months, that have a specific vocational focus typically related to technological careers.

created a need for affordable financing. At the same time, the EU's Open Banking Regulations⁶⁷ have reduced the administration cost of confirming a graduate's income⁶⁸ and the FCA has been open-minded about how new financial products might fit within the regulatory ambit.

As a result, there are now two start-up Fintech firms able to offer income-contingent loans to students and universities in the UK. Interestingly, they operate in slightly different ways. StepEx was the first to secure FCA authorisation in mid-2019 and acts purely as an administrator for 'Future Earnings Agreements' on behalf of 25 bootcamps and Cranfield University, London Business School, the University of Cambridge's Judge Business School, Regent's University and the University of Buckingham.⁶⁹ The last two, both 'private' universities with OfS 'Approved' status, facing no limits on fees, make funding along the lines of FAIR available for undergraduate study, while the 'public' universities' offers relate to postgraduate study.⁷⁰ In April 2022, Career Advance Finance Limited, trading as StudentFinance,⁷¹ also secured regulatory authorisation to operate in the UK. It acts as both administrator and investor. Its approach is to monitor the payments it receives from graduates, and where those payments deviate from expectations, they adjust the terms they offer to the university.

While both companies are small and new, their existence proves that it is now possible for the private sector to efficiently administer income-contingent loans in the UK. While investment funds are small at present, their existence and the growth of investor-funded income-contingent lending in the USA and Germany confirm that there is investor appetite for graduate income-related returns. As long-term repayment rate data accumulate over time, investment uncertainty risk will decline, and there is every reason to expect that the supply of investment funds will grow.

67 Revised Payment Services Directive (PSD2, Directive (EU) 2015/2366).

68 By requiring banks, when so requested by a customer, to provide third parties with access to information about transactions within the customers account.

69 <https://www.stepex.co/our-partners/>.

70 <https://www.regents.ac.uk/future-earnings-agreement>; <https://www.buckingham.ac.uk/future-earning-agreements/>.

71 <https://www.studentfinance.com/>.

Further consequences

The proposed scheme would bring a host of improved outcomes, which include the following.

Supporting international competitiveness

The proposals create the potential for significant additional sector resources, so facilitating an improvement in international competitiveness. Making loan repayments direct to the university, with the highest earners contributing most, will inculcate the mindset that the university has helped the graduate and should be paid accordingly. That should help to raise donations (Brown et al. 2014) and build endowments. Repayments to the state, on the other hand, appear as just another tax.

Facilitating access to higher education for young and mature students

Since repayments to the university are income contingent and payable only on graduation, access should not be affected. Headline tuition fee levels will increase but, as they were much higher in real terms in 2012 and participation has been on an upward trajectory, there is no evidence that higher notional tuition fee amounts are a material deterrent to access. The government is consulting on reducing access – to those with lower-graded GCSEs for example – for budgetary reasons. With the proposed scheme in place the government could instead simply reduce the state loan level for such students, allowing universities to look at each case on its merits and fill the funding gap themselves where appropriate.

When Purdue first introduced its risk-sharing scheme it did not disclose the terms of the ISA until after a student had made an enquiry. That made it possible, subsequently, to test whether ISA take-up was biased in any way – whether there was greater reluctance by disadvantaged groups,

for example, or whether certain subjects were preferred over others. No evidence of either was found (Mumford 2020). There was some evidence that on graduation the students who took out an ISA subsequently chose lower-paying occupations. That may be the lower fixed burden of income-contingent payments allowing them to start in a career which better suits their interests and preferences, and which may pay off better financially in the long term. This moral hazard, to the extent that it is considered a risk, can be afforded by setting the tuition fee at a higher level relative to the expected returns from the risk-sharing agreement. That would mean that the high earners – by which is meant those students who are wealthy and/or expect to be high earners – make a larger than average contribution through upfront payment of the tuition fee.

Maintaining educational standards and improving the effectiveness of teaching

Since the income of the university becomes dependent, in part, on the level of earnings of its graduates, it would have every incentive to improve the effectiveness of teaching and the standard of education received by its students in order to improve their employability. Where the state pays the institution at the point when the student begins to study, the university's income depends on recruitment success but has no clear link to standards. The change can only be to the benefit of students and their future employers. The additional resources made possible by the elimination of the fee cap should facilitate increased rates of pay for the most effective teachers.

One particular consequence is that, to the extent that open-mindedness, empathy and critical thinking are traits which increase the probability of success in high-paying occupations (Kmieciak 2019), the university will have a financial incentive to support academic freedom that will act as a counterweight to any wish on the part of academics or students to pursue a political agenda.

Increasing the responsiveness of learning to employment needs

As above, improved employability would increase the income of the university so driving responsiveness. It seems reasonable to expect that since the university's financial success is aligned with that of its graduates, to the extent that a vocational focus aids employability, it will become a driving motivation for the institution.

Offering value for money to students and taxpayers

As interests are aligned, the university's pursuit of its own financial interests will result in better outcomes for students. Cross-subsidisation between courses, which is unfair to students on lower-cost courses which subsidise higher-cost courses,⁷² will be reduced in the absence of a fixed stipend provided by the state. The cost of each course and the respective employability gain would be connected through the risk-sharing agreement.

The burden on the taxpayer would fall as inflation erodes the real value of tuition fee loans year by year. The 2020–1 outlay of £19 billion⁷³ would fall below £10 billion⁷⁴ by 2033–4.⁷⁵ Assuming a continuation of the default rate of 50 per cent,⁷⁶ the government could save £60 billion over twenty years.⁷⁷

Post-graduation support

Risk-sharing agreements would result in universities maintaining a direct economic interest in the financial success of their alumni. Universities would thus be expected to support the careers of their graduates for the duration of the contracts.

Reducing public investment in higher education and thereby making the system sustainable

Since all additional resources are raised through private financial arrangements, the burden on public investment falls over time. Real sustainability is ensured since the sector has access to a source of finance adequate for it to be fully resourced and internationally competitive. Grants for high-cost subjects could be reduced since such subjects tend to lead to high-paying careers and so higher fees could be more easily financed through private, income-contingent loans.

72 Augar (2019: 70–1).

73 Source: Department for Education. This includes maintenance.

74 In 2020–1 values.

75 Assuming inflation of 5 per cent per annum – this may be low, or may be high.

76 The overall figure (resource accounting and budgeting charge) for 2020–1 is 51 per cent. The proposal allows maintenance loans to grow but by changing terms should improve repayment rate. The real total decline and the 50 per cent default rate is a blended estimate.

77 This is a back-of envelope estimate. DoE (2022 4) stated that the loan book would reach half a trillion - £500 bn - by 2043. Shrinking the tuition fee loan book and setting commercial terms for maintenance loans has the potential to save very significant sums. The ONS will recognise some or all of this saving upon the freezing of tuition levels and commercial terms for maintenance loans becoming law.

Justifiable vice-chancellor pay

As the proportion of university income provided publicly declines over time and a more competitive environment develops, so the logic that there should be a link to public or charitable sector salaries falls away. Where a vice-chancellor has overseen growth in institutional resources arising out of better outcomes for students, funded without reliance on the public purse, the common practice of using private sector comparables becomes appropriate and beyond reproach.

Courses which appear to have poor economic returns

Given that there is variation in the cost of teaching different courses, and as the majority of costs are fixed (estates, central costs) rather than variable (teaching) (Augar 2019: 73), there is a methodological problem with assessing, in the government's scheme, the economic return to a course based on income levels and loan losses. Many studies report the returns to undergraduate education on the basis that the tuition fee represents the cost of the degree. That may be correct in terms of the amount the government pays the university for the student to enrol on that course, but by failing to distinguish between average and marginal cost it leads to a misleading valuation of different courses.

It may be that, at the margin, certain courses are economically viable even if income outcomes are low.⁷⁸ For example, the marginal costs per creative arts student may be very low as a high proportion of the course could involve the student working on their own projects. Conversely, the return to medicine, which typically ranks as one of the most reliable routes to high earnings, does not take account of the lost earnings cost of seven years of study and the large payments made (outside the higher education sector) to NHS hospitals to train students on the wards.⁷⁹ If the full cost of around a quarter of a million pounds was charged to the student the return on investment in a medical education would fall, bringing down the overall average (for students on all courses) and causing the return to be negative for a greater proportion.⁸⁰

78 Putting to one side non-economic returns which, by definition, are hard to measure.

79 'The cost of training a doctor', *Full Fact*, 21 October 2016 (<https://fullfact.org/health/cost-training-doctor/>).

80 If the mean of a normal distribution is shifted to the left, a larger part of the distribution will be to the left of the nil return point.

In an environment where universities set their own fees and repayment terms, they will seek to ensure that the marginal student covers the marginal costs of providing their education. Assuming that marginal cost to be around the level of the share of teaching cost (42 per cent⁸¹), a university will be satisfied with much lower returns on certain courses than a government that has paid a fixed amount per student per course. The university is able to consider all students as a portfolio, accepting lower returns from some that have value at the margin even if they do not cover overhead costs. On the other hand, medicine courses, for example, could be charged at much higher rates, so reducing the pressure on government finances and ending the anomalous need for places to be capped when money is short.⁸² This sentence is tied to the point above.

Nevertheless, while private risk-sharing funding allows much more flexibility in course provision and student recruitment, any course that failed to produce an economic return that the university could afford to accept would be modified or terminated naturally without the need for regulatory intervention.

Unsuitable students

As with courses, so with students. Assuming the university has capacity, it should be willing to accept students so long as there is a reasonable prospect of them covering the marginal cost of provision. If it is, for historic reasons, difficult for the institution to recruit many students with above average GCSE credentials, it could position itself as a provider of lower-cost courses that were still worthwhile for less able students, even if earnings outcomes were far adrift of what the elite achieve. Where the institutions are taking risk, and the burden on the taxpayer is reduced, it is possible for more flexible teaching solutions to be developed. This allows lower-cost provision which could be made economic despite lower expected income-linked returns.

It is possible to hold the views both that a greater share of the population should attend university and that fewer of them should do so at age 18. Many may get more benefit from a higher education later in life when they are clearer about what they want from an education. The current system

81 Augar (2019: 73).

82 The University for Buckingham, for example, charges £173,232 (<https://www.buckingham.ac.uk/courses/undergraduate/mb-chb-medicine-45-year-degree#fees-info-link>).

discourages universities from advising students to take time out. Where the universities share in the risks and returns of a higher education, they have an incentive to consider whether a prospective student is ready for further study and to set stricter tests for admission – though such tests may be motivation rather than grade point related.

There is a risk of adverse selection in any income-contingent scheme whereby students who have no real interest in education or career advancement apply for courses in the expectation that they will in due course earn little and so have a nil or negligible repayment obligation. This may be one cause of currently poor outcomes for many graduates. Where the university issues the loan, it faces the same risk as the government but is better placed than the state to address the problem. It is able to evaluate each applicant and consider not, perhaps, whether they would ever benefit from a higher education, but whether they are ready to do so at the present moment.

Too much online teaching

Even absent the Covid-related necessity for increased online teaching, there remain sound economic reasons for experimenting with hybrid methods with varying mixes of online and in-person teaching. There is both a cost and an access aspect. If costs can be reduced with no impact on outcomes, value for money is improved. If the need to be physically present is reduced, access is improved for mature and other students who may have work or care responsibilities, or who simply wish to avoid the cost of living away from home. If too much online teaching negatively affects outcomes, under the risk-sharing scheme, universities will increase in-person provision without the need for regulatory intervention.

Proliferation of unconditional offers

Unconditional offers make commercial sense under the present system where the institution is paid for recruitment. The more students it can induce to accept a place, the greater its financial gain. If the university relies, even in part, on superior graduate earnings to recover its costs and generate a surplus, it would be against its own interests to attract students who are not suitable.

While the most attractive student for the university is the one that will go on to earn a significant income, establishing which students that will be is subject to a high degree of uncertainty. As career earnings develop over

a long time after education, the prudent strategy would probably be to seek a diverse range of types of students, some considered likely to earn a high income quickly, some later in their careers and some who might pay upfront.⁸³ The most important consideration is to minimise the proportion likely to earn below the threshold regardless of the quality of their education. Universities would no doubt try to address that at application stage. Given Equality Act obligations, a university would not be free to discriminate on any basis other than expected earnings.

83 Often it will be the wealthy who pay upfront. As the university in this scheme gains the freedom to set tuition fees at any level, it can account for this. For example, it could set fees at international levels while offering terms on the FAIR contracts that are unlikely on average to return so much.

Conclusion

A sustainable system for the funding of home undergraduate students must pass these tests: (1) it must be affordable to graduates and taxpayers, (2) universities should benefit from sufficient income to make them internationally competitive and (3) the remuneration should align with successful outcomes for students so that the system does not create moral hazards and counterproductive behaviour.

The present state-centred proliferation of income-contingent loans does not successfully meet any of these objectives. The post-Augar policy statement reduces the cost to the taxpayer but does so at the expense of the institutions and graduates. It does nothing material to reduce the regulatory burden on universities nor improve earnings outcomes for graduates. Without the reforms outlined herein, it may not be politically feasible.

By allowing universities to launch their own income-contingent loan schemes to top up the frozen maximum tuition fees, either directly or via financial intermediaries, the economic interests of the institutions would become aligned with those of graduates and taxpayers – the better the career outcomes of their alumni the greater their own resources would become.

Such an approach was considered prior to the 2012 reforms but was rejected as administratively complex.

There are now such schemes operating in the USA, Germany and, very recently, in the UK, confirming that the operational hurdles have been overcome.

Engaging a range of different funding methods, whereby universities, as well as students and the state, share in the risks, benefits and costs, is the sustainable solution that has till now eluded the UK.

References

- Ainsworth, P. (2014) Universities challenged: funding higher education through a free-market 'graduate tax'. IEA Discussion Paper, October. London: Institute of Economic Affairs.
- Augar, P (2019) Review of post-18 education and funding. London: Her Majesty's Stationery Office 2019
- Boero, G., D. Cook, T. Nathwani, R. Naylor and J. Smith (2019) The return to a degree, new evidence based on the birth cohort studies and the labour force survey. October. Higher Education Statistics Agency and Warwick University.
- Britton, J., L. Dearden, N. Shephard and A. Vignoles (2016) How English domiciled graduate earnings vary with gender, institution attended, subject and socio-economic background. IFS Working Paper W16/06. London: Institute for Fiscal Studies.
- Britton, J., L. Dearden, L. van der Erve and B. Waltmann (2020) The impact of undergraduate degrees on lifetime earnings. IFS Research Report, February. London: Institute for Fiscal Studies.
- Britton, J., L. van der Erve, C. Belfield, A. Vignoles, M. Dickson, Y. Zhu, Ian Walker, L. Dearden, L. Sibieta and F. Buscha (2021) How much does degree choice matter? IFS Working Paper 21/24. London: Institute for Fiscal Studies.
- Brown, J. R., S. G. Dimmock and S. Weisbenner (2014) The supply of and demand for charitable donations to higher education. Pp 151–74. December. National Bureau of Economic Research.

- Browne, J. (2010) Securing a sustainable future for higher education. London: Department for Business, Innovation & Skills.
- Conlon, G. and P. Patrignani (2011) The returns to higher education qualifications. BIS Research Paper Number 45, June. London: London Economics on behalf of the Department for Business, Innovation and Skills.
- Cornett, A. (2020) Analyzing the relationship between female education and fertility rate. *Drake Undergraduate Social Science Journal* (Spring).
- Dearing, R. (1997) The Dearing Report (1997) : Higher Education in the learning society. London: Her Majesty's Stationery Office 1997.
- DoE (2022) Higher education policy statement and reform consultation, 24 February. (<https://www.gov.uk/government/consultations/higher-education-policy-statement-and-reform>).
- Kmiecik, R. (2019) Improving SME performance through organizational memory: the role of open-mindedness culture. *Journal of Organizational Change Management* (September) Vol. 32 No. 4, pp. 473-491. (<https://www.emerald.com/insight/content/doi/10.1108/JOCM-01-2019-0003/full/html>).
- Lyon, L. S. (1920) Medieval English apprenticeship as business education. *The School Review* 28(8): 585–99.
- McKenzie, T. and D. Sliwka (2011) Universities as stakeholders in their student's careers: on the benefits of graduate taxes to finance higher education. *Journal of Institutional and Theoretical Economics* 167(4): 726–42.
- Mumford, K. J. (2020) Student selection into an income share agreement. February. Indiana: Purdue University.
- Ogilvie, S. (2014) The economics of guilds. *Journal of Economic Perspectives* 28(4): 169–92.
- Pollack, E. and F. M. Sullivan (2022) Exploring racial and gender differences in ISA contract terms and repayment patterns. April. Boston: Jobs for the Future.

Smith, A. (1776) *An Inquiry into the Nature and Causes of the Wealth of Nations*. Wordsworth Editions Ltd, Ware, Hertfordshire, UK. 2012 reprint, ISBN 978-1840226881.

Appendix: sample terms of FAIR contract

| Term | Explanation | Value |
|-------------------------------------|--|--------------|
| Deferred amount | The value of tuition fees replaced by this agreement | £3,000 |
| Income share | The proportion of gross annual income that must be paid each month subject to earnings being above the minimum income threshold | 5% |
| Required count | This is the number of non-zero monthly repayments that must be paid before the obligation ends | 120 |
| Minimum income threshold | Payments are only due in any month if gross income for that month, when annualised, exceeds this figure | £26,000 |
| Maximum total amount payable | The multiple of the deferred amount that is the maximum that must be paid in the event earnings are very high; if the multiple is reached, payment obligations cease even if the required count has not been reached | 5 |
| Payment window | After this length of time, post-graduation payment obligations cease even if nothing has been paid back | 15 years |



The Institute of Economic Affairs
2 Lord North Street
London SW1P 3LB
Tel 020 7799 8900
email iea@iea.org.uk


Institute of
Economic Affairs