

SHARES IN STUDENTS

A new model for university funding

Peter Ainsworth
November 2024

About the IEA

Founded in 1955, the Institute of Economic Affairs is Britain's oldest free market think tank. Its mission is to improve understanding of the fundamental institutions of a free society by analysing and expounding the role of markets in solving economic and social problems.

The IEA publishes scores of books, papers, blogs and more – and much of this work is freely available from the IEA website: www.iea.org.uk

About the author

Peter Ainsworth, Managing Director of Consulting AM Ltd, is a leading authority in devising financial solutions that enhance accessibility and affordability in higher education. He is the author of multiple papers and articles on the University Funding problem. At the University of Buckingham, he managed the project to launch university issued student loans based on risk sharing principles and helped new entrant Xenophon College to launch a deferred payment scheme.

Contents

Summary	4
Foreword	7
Introduction	11
The state of the sector	16
An alternative model	22
What is to be done?	45
Conclusion	56
References	58

Summary

- **Urgent financial crisis:** The government's inflation-based increase in 2025 tuition fees from £9,250 to £9,535 will generate only £330 million, less than the £370 million burden created by its budget. With university finances set to continue to deteriorate, and some institutions on the brink of failure, the UK's global standing as a top-tier higher education provider is at stake. This crisis necessitates bold, innovative reforms.
- **Outdated centralisation:** Centralised state funding and control of universities, a relic of the post-1918 Haldane Report, has eroded financial independence. A century later, the report's wartime-inspired model, built on the flawed belief that government could efficiently direct the economy in peacetime, has plainly failed, with universities facing unsustainable financial pressures.
- **Learning from history:** There is much to be learned by looking back before 1918, to the mediaeval period, when the first universities were created. These were the incorporated craft guilds, which trained apprentices in exchange for a share of the apprentice's work product once they became productive. This system of aligned incentives is considered the basis of Europe's successful transmission of technical and business knowledge throughout society, leading to the Industrial Revolution. Revisiting these principles would provide a model for sustainable, incentive-aligned higher education.

- **Flawed incentives in current lending:** Where government issues student loans it frees universities from repayment risk which encourages them to focus on recruitment rather than on improving graduate employability. This results in growing enrolments but poor employment outcomes, with one in five graduates earning less than if they had not attended university.
- **Structural reform:** Drawing from the master-apprentice model, the paper proposes that universities lend directly to students. This arrangement of income contingent loan (ICL) financing will ensure universities only succeed financially if their students do. Thus, institutions would be incentivised to only recruit students who are ready for serious study and to design courses that lead to workplace success.
- **Fee autonomy with conditions:** Universities should be allowed to set their own fees above £9,535, which becomes a cap on the level of the state loan, provided they make available ICLs for any excess, ensuring access for all. This would promote financial sustainability while allowing top institutions to invest in quality, and lower-tariff universities to differentiate with cost-effective offerings. The government loan cap would remain fixed indefinitely to gradually phase out state dependency.
- **Cutting red tape:** With universities motivated by employability outcomes, regulation of course content is redundant and should be abolished. This would reduce the burden of red tape, freeing academics to design courses that will better prepare their students for successful careers.

- **Student protection:** To safeguard students, the Office of the Independent Adjudicator should be empowered to award financial compensation for misleading claims about educational outcomes. This would compel universities to make honest statements about employability prospects and the commitment required from students, thus ensuring transparency and accountability.
- **Reconsidering charitable status:** The government proposal to tax private schools challenges the notion of education as a universal charitable activity. With many universities receiving the majority of their income as payment for services which benefit, in the main, the more prosperous elements of society, the case for charitable status is weakened. There is thereby an argument for removing charitable status from universities, and instead putting investment in human capital on the same footing as investment in physical capital by, for example, making income contingent repayments tax deductible.

Foreword

Britain is a world leader in higher education. British universities are heavily overrepresented in international university rankings, and they attract a hugely disproportionate share of international students. Higher education is a growth sector and a major export industry.

But it is also a sector that consistently attracts its fair share of criticism from all sides, much of it justified. Students, current and former, complain about the heavy burden of student debt, barely justified by the meagre graduate premiums. Taxpayers complain about universities being a bottomless pit. Universities complain about chronic underfunding and about bureaucratic fetters holding them back.

There is no obvious way to address any one of those complaints without making another one worse. We could, of course, reduce student debt; that would be a political choice. But it would leave taxpayers to foot an even greater proportion of the bill, and the more universities depend on public funding, the more they will lose their independence from the state.

So what is the problem?

The basic economics of higher education is relatively simple. A university education *is* an investment in human capital, which will enable the student to achieve higher earnings in the future. A student may be poor now, but they can expect to be well-off in terms of lifetime earnings. Thus, in order to finance the cost of their tuition now, they need to find a way of tapping into those higher future earnings, and bring

a proportion of them forward into the present. Conventional debt financing instruments, such as bank loans, are not especially suitable for this. The returns to investment in human capital are too variable and unpredictable, and they are not backed by collateral.

Thus, most higher education systems rely on a mix of tax funding and student loans. Tax funding works on a pay-as-you-go basis, with those currently in work financing the tuition costs of those currently in education, who, once they enter the workforce, will start paying taxes and pay for the education of the next cohorts.

Tax financing collectivises the cost of higher education. Under that system, it no longer matters, from an individual perspective, whether the uplift in lifetime earnings resulting from university education exceeds the cost. But that system just replaces market risks with political risks for both students and universities. The state can now ration university places and tell universities what to do. That system is also problematic in terms of fairness and equity because it is a system in which non-graduates subsidise graduates.

Student loans are low-interest loans underwritten by the state and subject to terms set by the state. They shift most of the financial burden of tuition costs from taxpayers to students, or more precisely, to those students who go on to become high-earners and who are easily able to repay their loan. Students who end up in a less strong financial position will only pay back a part of the loan, or even none.

Within the current system, reform options are limited. Most education policy debates are about whether we should shift some of the financial risk from taxpayers to students, or from students to taxpayers. Peter Ainsworth's approach breaks out of that framework. He differs from most education reformers in two important respects.

Firstly, most education reformers use the term ‘human capital’ as merely a figure of speech. They are aware that human capital can be thought of as a productive asset, which, like physical capital, generates a positive rate of return for the owner by enabling them to be more productive than they otherwise could have been. But they do not do much with that analogy. Ainsworth, in contrast, takes it to its logical conclusion. If human capital is a form of capital, why should it not be possible for investors to acquire, de facto, an equity stake in it for a limited period? Under that model, ‘human capital investors’ would finance a student’s education and then receive a share of the student’s future earnings, enabled by that very human capital they helped them to build up. Given the variability of returns to investment in human capital, this seems like a more appropriate way of financing the building up of human capital than a loan, whether a student loan or a commercial one.

Secondly, Ainsworth ascribes much greater agency to universities themselves, where other education reformers just treat them as a building filled with academics who lecture at students in the hope that the students will go on to do something useful with it. In Ainsworth’s model, universities would become education financing agencies in their own right. They would educate their students initially free at the point of use, and in return, they would be entitled to a stake in their students’ future earnings.

Adopting such a system would radically change incentives for all sides involved, but especially so for universities. It would no longer be a viable business model for them to churn out large numbers of graduates poorly prepared for the world of work. Under Ainsworth’s system, universities can only be as successful as their alumni. If their alumni struggle, universities struggle; if their alumni prosper, universities prosper.

This has major implications. Other education reformers treat ‘the graduate premium’ as an exogenous variable, which universities can only observe and react to. In Ainsworth’s model, it becomes a variable which universities can influence, and would *want* to (indeed, would be desperate to) influence, depending on what they choose to teach and how.

With incentives so well-aligned, it would no longer be necessary to regulate universities. They could be left to their own devices to do what they do best.

It is an innovative proposal that, as Ainsworth is keen to highlight, is staunchly traditionalist at the same time. Universities have their roots in the old apprenticeship system, which, albeit in a world incomparably different from our own, already made use of the same basic economic logic (even though nobody at the time used terms like ‘human capital’ or ‘net present value of future skills premium streams’ to describe it). Apprentices would receive years of valuable training from skilled masters. They would later pay them back by working for them for a below-market wage for a specified period. We could say that under that system, the masters acquired a stake in their apprentices’ future human capital. This meant that it was now in their best interest to build up that human capital as quickly, solidly and comprehensively as possible. In this paper, Peter Ainsworth is rediscovering the wisdom of that old system and applying it to a world of the Fourth Industrial Revolution.

KRISTIAN NIEMIETZ

Editorial Director, Institute of Economic Affairs

London, October 2024

Introduction

‘Study the past if you would divine the future.’ Confucius advises that forward planning requires looking backward. Doing so shows that current university funding arrangements and purposes are different from their historical origins. The present system of state dependency is typically justified, in relation to teaching, by reference to a claimed public benefit that appears to relate to some non-vocational higher purpose. This view may simply be a byproduct of centuries of evolution, as universities adapted to a changing environment and society’s understanding of the purpose and nature of higher education fundamentally shifted. The present crisis in university finances calls for further evolution, this one learning from, and derived from, universities’ original form.

There is a truth that has been lost: universities began as guilds of craftsmen, incorporated collectives of masters and apprentices, designed for practical learning, vocational prosperity and social success. In *Wealth of Nations*, Adam Smith set out this forgotten heritage: ‘All such incorporations were anciently called universities, which, indeed, is the proper Latin name for any incorporation whatever.’ The ‘university of smiths’ or the ‘university of tailors’ - these were the original institutions of higher learning, where to become a ‘Master of Arts’ was as much an apprenticeship as any skilled trade (Smith 1776; Ogilvie 2014). This is the heritage we have lost, and it is this concept that holds the key to solving today’s challenges in higher education.

This history challenges the common modern perception that universities, in relation to teaching, should have a higher

purpose other than vocational preparation. The original universities, as private bodies, free of state interference, oversaw an apprenticeship system that was accomplished at communicating *both* explicit (capable of expression in written form¹) *and* tacit (incapable of expression in written form²) knowledge (Epstein 1998; De la Croix, Doepke and Mokyr 2018). The master acted as mentor to the apprentice, *in loco parentis*, teaching the student not just the craft but also the life and business skills required to succeed in a difficult economic environment, and the social skills, including morality, necessary to transform youngsters into responsible adults (Lyon 1920; Cowman 2014).

So successful was the mediaeval apprenticeship system at efficiently transmitting technical and commercial knowledge that it is argued it was at the root of Europe's industrial revolution and its consequent global economic leadership (Epstein 1998; De la Croix, Doepke and Mokyr 2018). The master-apprentice relationship was fundamentally about aligning interests – the master's income and reputation depended on the success of the apprentice, and this created a powerful incentive to ensure the apprentice's competence, reliability and long-term economic *and social* success.

In the mediaeval period, institutions like those at Oxford and Cambridge were initially associations of scholars, much like the guilds of craftsmen or tradespeople. Their current form began to take shape post-Reformation. The dissolution of monasteries under Henry VIII, following England's break with Rome in the 1530s, played a key role in this transformation. During this period, several monastic institutions were repurposed as educational colleges. For

1 The theory of how to ride a bike.

2 Actually riding a bike.

instance, in 1525 Cardinal Wolsey founded Cardinal College, later renamed Christ Church, in Oxford on the site of St Frideswide's Priory, a former monastery. Similarly, Trinity College in Cambridge was established by merging several existing religious institutions in 1546. These newly converted colleges provided a professional, work-oriented education – training, in particular, priests, a prestigious occupation of the time. The remnants of their monastic origins are still visible today, in architectural features like cloisters, which evoke the colleges' beginnings as places of religious devotion and learning.

This link between the Church and the universities may have shaped the perception that education possesses a higher or spiritual dimension, distinct from practical, vocational aims. This spiritual association might explain why the value of higher education is often seen as beyond practical debate, much like the concept of divine purpose in religion. However, this perspective does not account for the original purpose of these institutions being to prepare individuals for professional and practical roles within society. It is now time to recognise that this 'higher purpose' is an artefact of a monastical past that now holds the sector back. A return to the successful mediaeval apprenticeship model, aligning interests and focusing on employment and social competence, is needed.

The first 'governmental' intervention in the guild apprenticeship system occurred in 1563 in the form of Elizabeth I's 'Statute of Artificers'. This replaced the authority of the craft guilds with that of the state, instituting central control over the training of industrial workers and their conditions of employment (Hunt and Lautzenheiser 1968). It set out the principles of the contract between the parties – the duties of each – and confirmed that the agreement was

to be legally binding and enforceable at law. The term of the agreement was to be fixed at seven years (Cowman 2014). The Act specified the trades to which it applied. Therefore, in law, it did not apply to trades that were not listed, and they developed their own patterns of training. As the Industrial Revolution got underway from the mid-eighteenth century, and many new trades and professions prospered, while the work of some older trades was replaced, partially or wholly, by machines, so the statute became gradually less relevant. Finally, after 250 years, in 1814, it was repealed.

Apprenticeships did not die out following the repeal, but the contract was no longer standardised. Many apprentices now lived at home rather than with their employer, reducing the transmission of tacit social competence knowledge. While apprenticeship training declined in quality, education for the newly emerging professional elite began to dominate. Those universities that had historically, in the main, provided vocational training for the clergy, such as Oxford and Cambridge, succeeded in adapting to the growth of the professions by expanding provision in, for example, medicine and law. These professions were taught along apprenticeship lines. To this day, to acquire ‘mastery’ in either requires a period of tacit learning – work experience – following an initial explicit academic education. The total time to qualification remains of the order of seven years. They are two of the courses with the highest probability of above average earnings (Conlon and Patrignani 2011; Britton et al. 2016).

The 1909 Royal Commission on the Poor Laws received submissions about the unfortunate conditions faced by unskilled workers and started to shift opinion towards more state intervention in the vocational training of youth (Cowman 2014). After the perceived success of centralised state control of the economy in World War I, Richard Burdon

Haldane, an influential figure and former Secretary of State for War, was tasked with reviewing the broader structure of government in peacetime. The Haldane Report of 1918 played a pivotal role in shaping the modern British civil service and how public services, including education, were managed. Haldane's work was instrumental in creating a structure where expert-led committees provided advice on the governance of public sectors, placing emphasis on centralised planning over market-led approaches. This framework eventually led to the creation of the University Grants Committee (UGC) in 1919, which marked the beginning of state involvement in university funding and the erosion of their financial independence.

The belief in the necessity of state control for higher education grew steadily stronger, to the point where most people today are unaware that another way of operating might even exist. Tim Leunig, for example, recently 'revisited' the question of undergraduate fees but only put forward a tweaked variant on the current system, simply juggling the precise terms of the state loan (Leunig, 2024). It is time to challenge this orthodoxy. As John Maynard Keynes said in the preface to *The General Theory of Employment, Interest and Money*, 'The difficulty lies not in the new ideas but in escaping from the old ones.' To escape from this groupthink it is helpful to keep in mind the lessons of the mediaeval apprenticeship arrangements and objectives while exploring current developments.

The state of the sector

Higher education (HE) is one of the UK's 'World Class' industries (Augar 2019: 5). It contributes 2% of GDP, provides half a million jobs and generates 'exports'³ of around £10 billion per annum from the teaching of international students (ibid.: 16). The country is typically considered to be 'No. 2' in HE globally (QS 2016) with 4.1% of the world's researchers accounting for 15.2% of the world's most highly cited articles (Augar 2019: 16). The US remains the global leader, but its student debt load is problematic.⁴ China has recently confirmed its intention to become a leading country in education, but it starts a long way behind.⁵ This competitive environment nevertheless leaves open an opportunity for the UK to reform and set itself on the path to leadership in global HE.

Reform is necessary because the UK faces many of the same problems as the US. Graduate earnings relative to those of non-graduates are in decline, reducing the advantage of a university education (Boero et al. 2019) such that a significant minority, around 20% of graduates, earn less than they would have been expected to if they had not studied for a degree

3 Earnings within the UK arising from non-citizens paying tuition fees and other living costs.

4 'This is how student loan debt became a \$1.7 trillion crisis', Dickler, J., *CNBC*, 6 May 2022 (<https://www.cnn.com/2022/05/06/this-is-how-student-loan-debt-became-a-1point7-trillion-crisis.html>).

5 The State Council, The People's Republic of China 2024 'Xi stresses making solid progress toward building China into leading country in education'. Accessed 22 October 2024 (https://english.www.gov.cn/news/202409/12/content_WS66e22987c6d0868f4e8eadc9.html).

(Britton et al. 2020: 8). Between 30% and 50% of graduates are in ‘non-graduate’ employment – jobs that are not sufficiently complex to require a degree level of education (Augar 2019: 27).

Low graduate earnings result in underpayment on the government-issued student loans (ibid.: 91), leading to losses for the taxpayer estimated at 45% of the amount lent (ibid.: 22) and costing a total of around £10 billion per annum (ibid.: 81). Manifestations abound of moral hazard arising out of a system that pays a university for its success at recruiting students, but regardless of whether or not it adds value to those students’ lifetime earnings. Many students with weak academic records are offered places (ibid.: 90),⁶ attracted to courses with no apparent career benefit⁷ (Augar 2019) and seduced by marketing incentives (ibid.: 78) and unconditional offers (ibid.: 79), only to receive a debased grade of degree at the end of three years’ study.⁸

These shortcomings are occurring simultaneously with the job market impact of artificial intelligence and robotics.⁹ To be sustainable, education must be affordable and effective,

6 ‘No student loan for pupils who fail GCSE maths or English’, Turner, C., *The Telegraph*, 23 February 2020 (<https://www.telegraph.co.uk/news/2022/02/23/no-student-loan-fail-gcse-maths-english-bid-control-numbers/>).

7 ‘OfS sets out plans to crack down on poor quality courses’, *OfS*, 20 January 2022 (<https://www.officeforstudents.org.uk/news-blog-and-events/press-and-media/of-sets-out-plans-to-crack-down-on-poor-quality-courses/>).

8 ‘Universities must not allow a “decade of grade inflation to be baked into the system”’, *OfS*, 12 May 2022 (<https://www.officeforstudents.org.uk/news-blog-and-events/press-and-media/universities-must-not-allow-a-decade-of-grade-inflation-to-be-baked-into-the-system/>).

9 The FT recently reported that ‘UK graduates face tough jobs market as AI transforms recruitment’ *Financial Times*, 17 October 2024 (<https://www.ft.com/content/99435752-ac15-44de-8dd6-79467c277611>)

ensuring that students develop skills which complement such technological developments (Coulter, Losad and Scales 2022: 3). Some argue that the UK needs a radically different education system (ibid.: 3) where the university is ‘a very different creature than in the past’ (Haldane 2018: 17), while others call for no less than a revolution (Robinson 2015: 4:45).

The proposals that follow are radical, though possibly not revolutionary, building as they do on established methods and practices. Principally, it is argued that the primary problem is the focus by the government and regulators on measuring inputs rather than outcomes.¹⁰ What resources were consumed in delivering the service and what service was produced, rather than what was the long-term impact of that service on the student’s future. This misdirects efforts, limits adaptation and flexibility and wastes resources in, for example, extensive form filling and the supply of voluminous administrative data (Richard 2012: 52). The proposal is to liberate the whole tertiary education system, both HE and further education (FE), from excessive state control, while ensuring that society’s needs are served by financially rewarding institutions for delivering desirable long-term outcomes.

HE and FE (level 4 and above) are addressed together, as the dichotomy is increasingly a false one. Universities are offering more vocational and apprenticeship-based courses, while some FE colleges are able to award degrees. Both accommodate young and older students, part-time or full-

10 ‘PM was right to sack Tom Scholar from the Treasury. ‘The [Treasury] obsesses about measuring inputs, counting out the money distributed to departments, but has little clue how to measure outcomes’, Agnew, T., *The Times*, 12 September 2022 (Lord Agnew of Oulton was a minister of state at the Cabinet Office and the Treasury 2020-22). <https://www.thetimes.co.uk/article/pm-was-right-to-sack-tom-scholar-from-the-treasury-1ldjlngxj>

time. There are even mergers between the two (Stanfield 2009: s6.3). The stigma attached to vocational as opposed to academic education is being eroded (Richard 2012: 15; Augar 2019: 203). This proposal builds on that growing equality, by recognising that securing an education which improves their career prospects is the critical consideration for many graduates (Augar 2019: 86), that education which provides work experience is what is most valued by employers (Dearing 1997: s3.54) and that the state's main objective is workplace-relevant education (DoE 2022: 29). In terms of such education, as opposed to research, there is no fundamental difference in what society needs from both.

There have been a number of official reviews over the last 25 years that have been aimed at designing ways to fund and regulate tertiary education to serve society's needs in a way that would be sustainable over the long term. Dearing (1997) and Browne (2010) were focused on higher education; Richard (2012) reported on apprenticeships; while Augar (2019) looked at the whole tertiary sector. Much of the analysis of the reviews is admirable. They¹¹ show awareness of the vital need to focus on outcomes (Richard 2012: 17), that the funding system should align incentives and interests,¹² that graduates are substantial beneficiaries of HE and should contribute accordingly (Dearing 1997: s18.24), that direct payment by students of tuition costs will enable them to be more demanding of institutions (ibid.: s20.68; Browne 2010: 52–53) and that less state involvement and fewer regulations are a benefit (Browne 2010: 9; Richard 2012: 6). However, the proposals put forward by each of these reviews were

11 References to the reports, by name or otherwise, are to the document not to any individual.

12 'The entire system I am describing here depends upon the parties to the system having their incentives and interests aligned' (Richard 2012: 11).

not consistent with their analysis. Instead, they either put forward or endorsed a continuation of, or a varied form of, arrangements where the state remained the paymaster and micromanager of the sector.

In 2022, the Department of Education released a policy statement (DoE 2022) that announced the freezing until 2024/25, at £9,250, of the maximum tuition fee that may be charged to domestic undergraduates¹³ and a reduction in the repayment threshold¹⁴ for new students from £27,295 to £25,000, while increasing the term of the loan from 30 to 40 years.¹⁵ The primary purpose and effect of the changes is to reduce the burden on the taxpayer. Although students gain from a lower fee level, they lose from a lower threshold and a longer maximum repayment period. Outright losers are the institutions, which will see a decline in the real value of the annual tuition fee. Measured in terms of 2012 money, when the current arrangements started, it falls from £9,000 in 2012 to around £6,000 by 2025.¹⁶ In response, the Russell Group claimed that the policies threatened the ‘future financial sustainability’ of universities, and it and other university representatives have since sought a higher level of funding to, inter alia, protect the sector’s international competitiveness (Russell Group 2022). On 4 November 2024, Bridget Phillipson, the Labour Government’s Education Secretary, announced

13 For the 350 providers on the OfS register categorised as ‘Approved (Fee Cap)’.

14 The level of earnings below which no repayments are due.

15 The period after which the repayment obligations are cancelled even if the loan has not been repaid in full.

16 Corless, B. ‘Tuition fees for British students must be increased, university bosses warn’, *The Daily Telegraph*, 21 August 2022 (<https://www.telegraph.co.uk/news/2022/08/21/tuition-fees-british-students-must-increased-university-bosses/>).

an inflation-based 3.1% increase in the tuition fee cap, raising it from £9,250 to approximately £9,535 starting in September 2025. This adjustment makes the future marginally less problematic rather than materially better.

An alternative model

Adult education is both a consumption and an investment good. Education as consumption does not need to be ‘used’ in any way. Learning new knowledge broadens the mind and stretches horizons for lasting personal fulfilment. The experience is pleasurable in itself and, with online information and courses ubiquitous and provided at little or no cost, is available to all without need for state subsidy or regulation. Education as an investment produces a future return. By students increasing their ‘human capital’ and securing a recognised qualification from a reputable institution, employers would be expected to place a greater value on their skills and reward them with higher remuneration (MacLeod 2019). Education in this context is an intangible financial asset and may be evaluated by consideration of the investment risk and the expected rate of return.

There are two main classes of financial asset: debt and equity. In principle, a debt, or loan, is a legally binding contract whereby the borrower commits to pay the lender a specified set of future cash flows in exchange for receipt of an initial sum of money, whereas equity represents a share in the ownership of a return-generating asset entitling the holder to periodic and terminal¹⁷ distributions of uncertain magnitude. In theory, the cash flows from a debt instrument are highly certain, regardless of the income of the borrower during the period of the loan, while those from an equity investment can fluctuate significantly in accordance with the level of

17 On liquidation.

income¹⁸ of the relevant entity. In practice, there are debt instruments with a high degree of uncertainty as to their cash flows (e.g. high yield or ‘junk’ debt) and equities with highly predictable cash flows (e.g. property-owning companies¹⁹). Capital market developments over time have meant that the cash-flow characteristics of the two have increasingly overlapped. The most distinctive difference between them may now be their legal form and, in the UK, the section of the Financial Conduct Authority’s (FCA) rulebook that applies when such products are marketed to the public. In substance, there now exists equity-like debt and debt-like equity.

As a financial asset, the cash flows to be expected consequent on an individual receiving a higher education are above those of a non-graduate but subject to a high degree of risk and uncertainty (Britton et al. 2016). There is a huge variation in earning outcomes both by subject and by institution, such that knowing at time of application the historic average or median earnings for a given subject/institution combination tells the individual student little about what they themselves can expect to earn; and such information, presented without qualification, could be misleading. This high-uncertainty characteristic is more typically seen in an equity investment (Friedman 1962). From that observation, Friedman suggested that, as an individual, unlike a company, cannot sell part ownership in themselves, the appropriate form of financing of HE would be for the student to offer a share in their future income in lieu of payment of tuition fees.

18 Profit or Surplus as Equity is only issued in corporates.

19 Historically, this was the case; changed working practices post-Covid lockdowns and cost-of-living pressures on tenants may have undermined the earnings reliability of the sector.

What Friedman proposed is, to a large extent, a modernised equivalent of the mediaeval apprenticeship arrangement. Under that contract, a master in a craft would provide sustenance²⁰ and training to an apprentice and, in exchange, the latter would agree, for a fixed period of time, to work for the master. In the early stages of the apprenticeship, the value of the training and sustenance would likely exceed the value of the apprentice's work. Later, when the apprentice had acquired skills, and their work product had greater worth, in excess of the value of sustenance and any other emoluments, the master would be compensated for their investment in the apprentice's human capital. Hence, in exchange for valuable training, the apprentice was giving up a share in their future income – the difference between what the master paid them in their early productive years and what they might be able to earn if they were free to sell their services to the highest bidder.

The key difference between the mediaeval apprenticeship system and what Friedman proposed was that in the former it was the 'training institution' that would take on the financial risk associated with the arrangement, whereas in the latter it would be the state. This distinction has profound effects as, in the former, the interests of institution and apprentice/student are aligned, whereas, in the latter, the institution becomes the servant of the state.

Friedman's ideas soon led to proposals being discussed at national level, especially in the US and the UK (Palacios 2004). Gradually the notion of an 'income contingent loan' (ICL) came into being; such a loan now more commonly known, at least in the US, as an 'Income Share Agreement' (ISA). Here, to take account of different names being used in different

20 Including food and accommodation.

jurisdictions, and the confusion that may arise in the UK where the acronym 'ISA' refers to the better known 'Individual Savings Account', the term 'Risk Sharing Agreement' (RSA) (Brickman 2021) will be used. RSA is a generic term to refer to an arrangement whereby a tuition fee obligation is met by a student agreeing to make payments on graduation, for a fixed maximum period of time, of a monthly amount that is calculated by reference to their income, a mechanism whereby repayment risk is shared between the student and the counterpart to the agreement.

RSAs have both debt and equity characteristics. The repayments are defined by contract, rather than being discretionary, but they are not of a fixed amount, being determined by reference to the borrower's income. The key terms of a typical RSA are: (i) the duration – the length of time after which the payment obligation will cease, even if few or no payments have been made, (ii) the count – the maximum number of months for which non-zero payments must be made to terminate the obligation early, (iii) the cap – the multiple of the amount borrowed that sets a maximum to the repayment amount, (iv) the threshold – the level of income that must be reached in any month for there to be a non-zero payment obligation and (v) the share – the percentage of gross income that is payable when income is above the threshold.

The UK government-issued ICLs are similar to commercial RSAs, save for three key differences: (i) the government reserves the right to vary the terms of the loan; (ii) the effective cap is set indirectly through the charging of a rate of interest; and (iii) the share is charged on the surplus of income above the threshold, whereas commercial RSAs charge on gross income.

By varying, in particular, the cap and the threshold, it is possible to create more debt-like or more equity-like cash

flows. A cap of 1 times with a low threshold is closer to a debt instrument – with a high probability of modest receipts – while a cap of 10 times and a threshold far above average earnings is more like equity – with a low probability of very high returns.

For example, if we assume that a graduate population has the same distribution of earnings as for society as a whole,²¹ and a university sets the duration to ten years, to recover £10,000 on average per graduate they could set the threshold at £20,000 and either a cap of 2 times and a share of 4.17% or a cap of 5 times and a share of 3.56%. Alternatively, with a higher threshold of £30,000, the minimum cap to return the £10,000 is 3 times, where the share is 5.75% or, with a 5 times cap, the required share falls to 4.93% (ONS 1, own workings).

Another way to think of the RSA terms is as akin to progressive or regressive taxation. The higher the cap the more progressive the repayments – high earners pay more than middle and low earners. Consequently, the debate about whether tuition fees should be charged to the student or fully paid for by the taxpayer can be framed as a debate about the terms of the RSA. It is not fair for taxpayers who did not attend university who, *ceteris paribus*, are less well off than graduates, to pay through taxation for those who benefit from a higher education. Hence, putting to one side the incentives aspect of the funding system, the argument becomes whether the loan repayments are as progressive as the tax system. If a government felt that graduate repayments should be more progressive, they could legislate the minimum cap.

21 This is a pessimistic assumption on the basis that graduate earnings are, on average, above population earnings, but an optimistic assumption as it excludes non-working graduates as well as graduates who are working, and earning above the threshold, but who fail to live up to their contractual obligation.

The financial risks faced by the institution (which could be the state) where a student is paying their tuition by means of an RSA are of two types: capital and cash flow. If we assume tuition of £10,000 and an expected average repayment period of ten years, the institution faces capital risk if it does not recover by that date the £10,000 plus the interest on that amount over the ten-year period calculated by reference to its own cost of borrowing. Separately, even if the institution suffers no capital risk, it will still experience cash-flow risk. This is where it has expenses that must be funded during the early years of an RSA programme and it can, technically, become insolvent if it cannot meet its liabilities as they arise. A provider can reduce or eliminate its cash-flow risk by borrowing or by selling to, or otherwise partnering with, investors who will advance funds in exchange for a share in the RSA repayments. With investors engaged, the cash-flow risk is reduced in accordance with the proportion of tuition fees that are advanced, and the capital risk for the first cohort is reduced to the extent that investors are willing to take that risk. Investors are, of course, likely to seek higher potential returns the greater the risk they are being asked to take. If investors suffer losses on early cohorts, they will demand greater expected returns on future cohorts, so reducing the share of RSA repayments that flow to the institution.

RSAs are now used around the world to help fund students through university or technical school. In Latin America, Lumni, tracing its roots back to 2006, claims to have financed 12,600 students with RSAs,²² investing \$60 million sourced from institutions and individuals. (Lumni). In Germany, the growth of the market has been helped by the fact that although the government does not cover the cost of an

22 Its website, once translated to English, calls them 'AICs' or Shared Income Agreements.

education at a private university it does provide for the tax deductibility of tuition fee payments by the student. Two of the leading providers are 'Brain Capital', operating since 2007, which has 33 partner universities and has financed RSAs²³ for over 7,500 students studying more than 500 different courses (Brain) and Chancen, founded in 2016, which last year received €24 million from the European Investment Fund to back more than 2,000 students through RSAs (Ferrie 2021). 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.

In the US, Purdue was the first major university to offer RSAs, with its own foundation taking the investment risk. It launched its 'Back-a-Boiler'²⁴ scheme in 2016 whereby, for those who had exhausted their entitlement to federal mortgage-style loans, it offered to forgive an amount of tuition fees in exchange for a share in a student's future income. The terms of the RSA on offer varied by the type of major (subject) studied. Currently, over 1,600 contracts have been entered into, representing total tuition fee funding of more than US\$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.²⁵

Subsequently, a number of 'Fintech' companies have been launched in the US to offer administration services to those US universities and vocational schools that wish to offer

23 Which it refers to as 'Generation Contracts'.

24 A 'Boilermaker' is a graduate of Purdue.

25 'Back a boiler: ISA fund', *Purdue University*, 2022 (<https://www.purdue.edu/backaboiler/>).

RSAs. Stride Funding,²⁶ just three years old, has already funded students at nearly 175 universities.²⁷ Meratas²⁸ claims to be the ‘Leading Income Share Agreement Program’ and currently lists 195 vocational schools as partners. Leif²⁹ also administers RSAs for universities and was the source of data on over 7,500 RSA contracts that supported an analysis of racial and gender effects which concluded that RSAs appear to be non-discriminatory (Pollack and Sullivan 2022).

Among the other universities offering RSAs are: Lackawanna College, Clarkson University, Messiah College, University of Utah, and Robert Morris University.³⁰ To encourage adoption among disadvantaged groups, the charity ‘Student Freedom Initiative’ last year launched an RSA³¹ for students of nine historically Black colleges and universities.³² Stanford Law School has partnered with a non-profit to offer RSAs in place of up to US\$170,000 tuition, with repayments at 10% of postgraduation income for twelve years. A goal of the programme is to make it easier for students to pursue less

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

27 To put this in context, the US Department of Education records nearly 4,000 colleges and universities with degree-awarding powers. ‘A guide to the changing number of U.S. universities’, *U.S. News & World Report L.P.*, 27 April 2021 (<https://www.usnews.com/education/best-colleges/articles/how-many-universities-are-in-the-us-and-why-that-number-is-changing>).

28 <https://meratas.com/>

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

30 ‘9 “ISA schools” that offer Bachelor’s degrees and income-share agreements’, Prentis, A., *LendingTree*, updated 26 February 2021 (<https://studentloanhero.com/featured/schools-bachelors-income-share-agreements/>).

31 Which they call a ‘Student Freedom Agreement’.

32 <https://studentfreedominitiative.org/>

well-paid jobs that may have social value. The threshold is set at US\$100,000 with a cap at US\$225,000.³³

In the US, companies have great freedom to innovate and launch novel financial products. However, this can lead to litigation if consumers consider themselves harmed. This has been the case in relation to RSAs where some graduates have complained that the impact of the terms – particularly the potential to have to pay back a multiple of what was borrowed – was not made clear. Such litigation has led to the failure of some administrators³⁴ but has induced legislative and regulatory action to facilitate the growth of the RSA market in a way that is considered fair to consumers.

Senator Marco Rubio and others introduced the ISA Student Protection Act of 2019 into the US Senate³⁵ to standardise the terms, tax and regulatory treatment of ISAs to facilitate their adoption.³⁶ In March 2022 the Federal Education Department confirmed that ISAs which are used to finance HE should be considered to be ‘private education loans’ for the purposes

33 ‘Stanford Law gets creative on loans’, Latham, S., *LinkedIn News*, 16 September 2022 (<https://www.linkedin.com/news/story/stanford-law-gets-creative-on-loans-5438668/>).

34 ‘Colleges are already ditching Income-Share Agreements’, Yoder, S., *WIRED online*, 12 August 2022 (<https://www.wired.com/story/income-share-agreements-hechinger-report/>).

35 S.2114 ISA Student Protection Act of 2019 (<https://www.congress.gov/bill/116th-congress/senate-bill/2114/text>).

36 ‘Rubio, Young, Warner, Coons introduce innovative Higher Ed financing proposal’, *Marco Rubio*, 16 July 2019 (<https://www.rubio.senate.gov/public/index.cfm/2019/7/rubio-young-warner-coons-introduce-innovative-higher-ed-financing-proposal>).

of the Department's rules.³⁷ In September 2022 the state of California's Department of Financial Protection & Innovation said it would require providers of RSAs to be licensed under the Student Loan Servicing Act.³⁸

In the UK there is less freedom to innovate. In order to lawfully offer a financial product to consumers, a company must first register with the FCA and follow its rules in relation to fairness in product terms and disclosure. The UK government, however, excuses itself from this obligation, possibly because the 'ICLs' that it markets to students are more like a tax than a consumer loan. For example, as stated earlier, the government reserves the right to make material changes to the terms of the 'loan' at any time (SLC 2022). It could, for example, reduce the threshold (which it did, in real terms, between 2012 and 2017) or increase the duration. Such a provision would be unlikely to be considered fair in a commercial contract. The government also communicates in a manner likely to breach the FCA's requirement that all financial literature be 'clear, fair and not misleading' (FCA 2022). On the government's webpage about student loans, it is quick to promote the potential absence of any payment obligation and the small size of payments – giving examples of £6 and £11 a month – but it does not disclose, or even allude to, the 30- or 40-year obligation and the consequent total potential cost of the loan (GovUK 2022).

37 'What colleges should know about Income Share Agreements and private education loan requirements', Williams, R., *Homeroom: The official blog of the Department of Education*, 2 March 2022 (<https://blog.ed.gov/2022/03/what-colleges-should-know-about-income-share-agreements-and-private-education-loan-requirements/>).

38 'California DFPI issues proposed rules implementing Student Loan Servicing Act', Lanham, L. and Georgievski, J., *Ballard Spahr LLP*, 12 September 2022 (<https://www.consumerfinancemonitor.com/2022/09/12/california-dfpi-issues-proposed-rules-implementing-the-student-loan-servicing-act/>).

It is possible that the government's churlishness about making known the true long-term cost of a student loan contributes to the poor returns that many graduates secure from their education. By making the loan appear almost free – a pessimistic teenager may be unable to imagine earning above the threshold, so the presentation of the loan cost suggests that their three years at university will be costless – a student will be more likely to apply to university even if they are not, at that stage in their lives, ready to make the necessary commitment to study.

The UK government's 'income contingent loan' initially monopolised the UK RSA market. However, helped by the move to open banking,³⁹ which allows a company⁴⁰ to observe payments into a graduate's bank account and so cost-effectively estimate their income, and by the FCA's flexible 'sandbox' regime,⁴¹ which accommodates novel services, two entrepreneurial Fintech start-ups have secured permission from the FCA to offer RSAs in the UK.

StepEx secured FCA authorisation in mid-2019 and acts as an administrator of RSAs⁴² for 25 'bootcamps'⁴³ plus Cranfield University, London Business School, the University of Cambridge's Judge Business School, Regent's University and the University of Buckingham.⁴⁴ The latter two, both with

39 <https://www.openbanking.org.uk/regulatory/>

40 Where the consumer has granted it such permission.

41 'Regulatory Sandbox accepted firms', *FCA*, updated 21 February 2023 (<https://www.fca.org.uk/firms/innovation/regulatory-sandbox/accepted-firms>).

42 Which it calls 'Future Earnings Agreements'.

43 Independent Training Providers offering vocational courses, often in programming-related subjects.

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

Office for Students (OfS) 'Approved' status, where state loans are smaller⁴⁵ but tuition fees are not limited, make RSA funding available for undergraduate study. The other 'Approved (Fee Cap)' universities⁴⁶ use RSAs to support postgraduate study.⁴⁷ In April 2022, Career Advance Finance Limited, trading as 'StudentFinance',⁴⁸ also secured regulatory authorisation to promote RSAs in the UK. It has secured investment funds and acts as investor as well as administrator. Currently it has partnered with seven bootcamps.⁴⁹ Its approach is to monitor the payments it receives from graduates and, where those payments deviate from expectation, it adjusts the terms it offers to the provider.⁵⁰ The international evidence, and the existence of StepEx and StudentFinance, proves that it is now possible for the private sector to efficiently administer RSAs in the UK, and that investors are willing to, in part, fund students' tuition costs.

The case for government funding of the tertiary education sector as a whole on the grounds that it yields a social (public) benefit is a weak one. All non-criminal services are likely to deliver some degree of social gain. There will be differences in the magnitude of the gain, but as externalities,

45 Currently £6,165 per annum as opposed to £9,250 at 'Approved (Fee Cap)' universities.

46 Where the state loan covers the full cost of tuition.

47 'Future earnings agreement', *Regent's University London* (<https://www.regents.ac.uk/future-earnings-agreement>); 'Future earnings agreements', *The University of Buckingham* (<https://www.buckingham.ac.uk/future-earning-agreements/>).

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

49 <https://www.studentfinance.com/uk/sia>

50 For example, the advance payment may be increased or reduced in line with repayment performance to incentivise partner schools or reduce risk. Source: email from StudentFinance 9/8/2022.

by definition, are not priced in the provision of the service, which occupation delivers the largest social gains will be a matter of opinion. During Covid lockdowns, tertiary education provision was significantly reduced, while the food distribution network, including wholesalers, retailers, restaurants⁵¹ and deliverymen⁵², was considered essential.⁵³ Yet despite food distribution being literally a life-saving service,⁵⁴ it is not even partially funded by government.

The stronger potential argument for government funding of tertiary education may occur if there would be a credit market failure in the absence of subsidy. This notion relies on the fact that historically, when major banks were the only potential source of student funding, they would not lend without physical security⁵⁵ (Chapman 2006). In that world, many students who would secure an earnings gain if they had access to tertiary education, but who had insufficient resources to pay the tuition fees, would not be able to undertake study. That proposition falls foul of Javier Milei's observation⁵⁶ that there can be no market failure where parties are free to contract voluntarily and there is no state involvement. It would be political interference in the free workings of the loan market through excess regulation that was preventing the market from addressing the need.

51 Take-away services.

52 Includes women.

53 <https://www.gov.uk/guidance/essential-workers-prioritised-for-covid-19-testing#:~:text=This%20includes%3A,placements%2C%20volunteers%20and%20unpaid%20carers>

54 As it made it possible for people to isolate, so reducing transmission.

55 For example, the pledge of a house or a car.

56 Milei: Davos 2024 speech to WEF <https://www.weforum.org/agenda/2024/01/special-address-by-javier-milei-president-of-argentina/>

In any case, the historical observation is no longer relevant as, even with the state so heavily engaged in financing the sector, entrepreneurs have been filling the gaps. In the UK, the two RSA providers mentioned above stand ready to administer an RSA for any student whose course of study has a record of generating an earnings return sufficient to make repayment of the costs of the course affordable. For the RSA to be offered, the university must be willing to allow the student to 'pay' their tuition fees by means of entering into an RSA. In the absence of government-offered loans, competitive pressure would ensure that such offers were made since the university would secure a revenue gain and surplus from such transactions where the education added sufficient value to a student's future income to cover its costs. The University of Buckingham, for example, now offers such loans where government loans do not equal the full cost of tuition. For postgraduate students there are also specialist education lenders such as Lendwise⁵⁷ which will lend to students without requiring security or a guarantee. There is no credit market failure where uneconomic courses cannot be funded – instead, they need to be re-designed to offer better future earnings value or to be delivered at a lower cost.

The other possible source of market failure arises from the fact that the student does not know the value of the service with which they are being provided until long after they have made a significant financial commitment, comprising both the taking on of a debt and the sacrifice of typically three years' potential income, what might be termed 'uncertainty risk'. Because much of the cost of full-time adult education is the loss of potential earnings, this failure arises regardless of whether tuition is free, or payments are fixed or income contingent and made to the government or to the university.

57 <https://www.lendwise.com/>

The nature of education and the vagaries of life mean that no student can be certain to receive sufficient economic value from an education to justify its cost.

The singular advantage of the RSA being provided by the institution is that the interests of the institution are then aligned with those of the student, as in the mediaeval apprenticeship arrangements. The provider shares in the risk that the consumer faces. An educational institution, whether a profit-making firm or non-profit entity, needs to generate sufficient profits or surplus to remain viable. Consequently, having issued RSAs, to the extent that doing so is cost-effective and possible, it is motivated to seek to improve its students' employability.⁵⁸ The higher are its graduates' earnings the more financially successful will it be. Since the income nexus lasts until the end of the RSA duration period, the institution has an incentive to support alumni as well as students, perhaps with career advice or further training. Hence, an institution issued RSA is the most effective financial arrangement for minimising the uncertainty risk.

All other funding mechanisms, where the institution is partially or fully insulated from uncertainty risk, create an incentive for providers to recruit as many students as possible but do not directly compensate them for increasing employability nor penalise them for not so doing. Eliminating state involvement and using institution-issued RSAs as the funding mechanism is the only way to ensure that any market

58 Yorke 2004 defines as: a set of achievements – skills, understandings and personal attributes – that makes graduates more likely to gain employment and be successful in their chosen occupations, which benefits themselves, the workforce, the community and the economy.

failure arising out of the uncertainty risk⁵⁹ that students face is mitigated (McKenzie and Sliwka 2011).

Yorke (2004) defines employability as: ‘a set of achievements – skills, understandings and personal attributes – that make graduates more likely to gain employment and be successful in their chosen occupations’. The reliance on factors other than just academic achievement is supported by employers. Eighty-two per cent of respondents to a 2021 CBI⁶⁰ survey put ‘attitudes and aptitude for work’ in their top three important factors when recruiting graduates, far ahead of the 45% who listed a relevant degree or the 23% score for the degree result (grade). Second place, with 58%, was relevant work experience (CBI 2021: Exhibit 4.9). These survey results are consistent with employer sentiment over time. For example, in 2016 the CBI/Pearson education and skills survey, which included data for 2014 and 2015 as well as for 2016, found that far and away the most important factors considered when recruiting graduates, in all three years, were ‘attitudes and aptitudes’, with ‘relevant work experience’ in second place and ‘degree subject’, ‘result’ and university far behind (CBI 2016: Exhibit 54). In other evidence, Dearing (1997: s3.54) noted that the ‘strongest message’ from employers was that they wanted more students to have work experience, and Browne (2010: s1.3) observed that employers ‘frequently report that some graduates lack communication, entrepreneurial and networking skills’.

59 The benefit of an education, at the individual level, is unknown. Even if earnings are high, the absence of a counterfactual (the same student in a parallel world choosing not to take the course in question) means the student lacks the information needed to make an informed decision.

60 Confederation of British Industry. A trade body claiming to represent 190,000 businesses. <https://www.cbi.org.uk/>

Students themselves recognise the growing importance of soft skills. Pearson (2019: 26–27) reported that, in a survey of UK students, 83% felt that universities and colleges should do more to help them develop ‘human’ skills such as complex problem-solving, critical thinking, teamwork and collaboration. Eighty-six per cent believed that ‘human’ skills, including creative thinking, reasoning and collaboration would become more important over time, a greater proportion than the 79% who felt this way in relation to STEM-based knowledge.

The Tony Blair Institute has expressed the opinion that school education also puts too much emphasis on passive forms of learning focused on direct instruction and memorisation. It states that, to prosper in an increasingly digital workplace, children need help to improve personal attributes such as critical thinking, creativity, communication and collaborative problem-solving (Coulter, Iosad and Scales 2022: 3). Sir Ken Robinson was a long-time advocate of the importance of creativity in education.⁶¹

There are two types of knowledge: explicit and tacit. Explicit knowledge can be communicated by means of a written statement. Tacit knowledge is everything else. The soft or ‘human’ skills that employers and students recognise as vital for employability are tacit in nature. They are not matters that may readily be perfected by telling and understanding but require ‘performance’ – doing and practising (Davies 2015). Setting tasks and evaluating performance over many cycles is more work for both student and teacher, but education and

61 ‘Sir Ken Robinson’s legacy on creativity in education, innovation’, *Learn Tech Asia*, 23 August 2020 (<https://learntechasia.com/sir-ken-robinson-education-creativity/#:~:text=Robinson%20stressed%20the%20importance%20of,workers%2C%20rather%20than%20creative%20thinkers.>).

training without this practical application is significantly diminished in value (Pearson 2019: foreword).

While the state's wish to improve employability by providing education and training may be well intentioned, the implementation of training programmes by fiat – by an authority deciding what is to be taught – conflicts with the essential nature of tacit learning – it cannot be designed by written decree. Consequently, all educational initiatives that rely, wholly or in part, on a regulator having a say in what is to be taught, or in assessing what has been learned, are at a significant practical disadvantage in relation to their ability to make students employable.

If regulation is not to be judgemental and inevitably arbitrary – which could make it unlawful – it relies on a written codification of what is required of providers. This orients all regulated training programmes towards explicit knowledge, as that type of knowledge is capable of being expressed in writing. While explicit knowledge is of value, its significance will vary between occupations and the stage of an individual's career. In many cases, tacit knowledge – that which cannot be expressed in writing – will be the more significant determinant of employability. This may become ever more the case as artificial intelligence tools offer expert explicit knowledge on tap.

The Richard Review (2012) put it well:

We have overly detailed specifications for each qualification, extraordinarily detailed occupational standards, and a structure to apprenticeships which is rigidly enshrined in law, which attempts to ensure

accomplishment, but inadvertently constrains innovation and flexibility in teaching (6, 40)

and

the micro-level prescription of today's vocational qualifications, which drive a focus on continuous bureaucratic box-ticking (7); whereas historically, an apprenticeship was at its very heart a relationship between an employer and an apprentice, too often that is not the case today – apprenticeships instead becoming a government-led training programme. (4)

Unfortunately, despite evident understanding of the problems that arise from regulated course design, the Richard Review did not advise the abolition of bureaucratic management, but rather just a variation of the way that authorities exercised control over what is taught.

In due course, the government implemented the Richard Review and set itself a target of 3 million apprenticeships. To seek to force corporate compliance with this objective, in 2017, it introduced the 'Apprenticeship Levy' at 0.5% of an employer's payroll expense.⁶² Employers then had a 'pot'⁶³ of funds from which they could draw – but only to meet the costs of regulator-approved courses.

The logic of the levy relies on the assumption that only explicit learning is of value. It takes no account of the human capital gain made by an employee from improved relationship, analytical, problem-solving and other tacit skills

62 Subject to a deduction of £15,000, so that if payroll was less than £3m p.a., no levy payment was due.

63 A 'Digital Apprenticeship Service' (DAS) account.

though the day-to-day experience of working; skills that are developed by imitating and doing, through connections and communications with management, colleagues and clients. This is despite the longstanding evidence that tacit, human, soft skills are of vital importance for employability.

Reporting on the first year of the levy, Richmond (2018), referring to the critical observations about the state of apprenticeship training in the Richard Review, said that it appeared 'there is a real danger that the same mistakes could be made all over again' and the levy is 'focussed on too many inappropriate forms of training'. More recently, the CIPD⁶⁴ (2021) said that the Apprenticeship Levy has 'failed on all key measures'. Its research showed that the number of apprenticeships was in continuous decline, that total employer investment in training, which the levy was supposed to encourage, had fallen and that fewer small businesses were now using apprentices.

Aside from discouraging the teaching of tacit skills, regulation leads to a number of other problems. It causes significant delays in course development.⁶⁵ It causes training providers to focus on what they must do to secure state funding rather than on how they can generate positive outcomes

64 'Apprenticeship levy has failed on every measure and will undermine investment in skills and economic recovery without significant reform, says CIPD', 2021 critique.pdf, CIPD, 1 March 2021 (<https://www.cipd.co.uk/about/media/press/010321apprenticeship-levy-reform-budget>).

65 'five years it has taken to approve 360 out of "a potential 600" standards' (Augur 2019: 156).

for students.⁶⁶ It creates an incentive to emphasise low-cost courses.⁶⁷ It adds significant cost⁶⁸ and is burdensome.⁶⁹

There are a wide range of legal forms of the entities that provide HE and FE. Stanfield (2009) identifies five: Royal Charter Corporations, companies limited by shares, companies limited by guarantee, HE corporations (including other statutory corporations) and trusts. Each have their own advantages and disadvantages. Universities are almost universally charities,⁷⁰ as are the majority of FE providers.⁷¹ Being a charity brings a set of obligations that are complex, as they are often dependent on case law rather than set out in statute. There are two types of charity: exempt and registered, which report on their compliance with charity law to different regulators. The OfS, charity law regulator for the exempt charities, takes a lax approach to the enforcement of the public benefit and other charitable obligations (Synge 2020).

66 '[apprenticeship] outcomes were often not satisfactory, in considerable part because attention was given to processes required to draw down funding rather than to the requirements of the job.' (Augur 2019: 146).

67 'Current funding rules encourage providers to put on cheaper and lower-value courses that can be filled easily. Ringfenced funding and excessive bureaucracy also stop colleges and other providers from being as responsive and flexible as they would like.' (DoE 2021: 7 s7).

68 The National Audit Office estimated that the average FE college incurs expenditure of between £62,000 and £460,000 p.a. dealing with awarding organisations, and providing the required data in the required format (Richard 2012: 52).

69 'Funding rules are complex, inflexible and encourage certain types of provision for financial reasons, rather than those in the interests of students or the local economy. They do not allow colleges to respond to local labour market needs. The regulatory regime is also complex and burdensome.' (Augur 2019).

70 Source: OfS register.

71 Colleges are likely to be charities, but FE provision includes, for example, a large number of ITPs that are less likely to be so.

The many different legal forms and associated rules prevent there being a level playing field, both inhibiting competition and making it difficult to develop and grow the institutions.

The new Labour Government's flagship policy of charging VAT on private school fees and removing charitable discounts on business rates treats privately funded education as a luxury good and undermines the long-established principle that education is a public good and so deserving of charitable status and the associated tax advantages.⁷² The erosion of this principle makes it questionable whether or not charitable status remains appropriate for tertiary education providers. As charities, an obligation is to act in the institution's best interests (Stephenson and Dandridge 2019). Subsequent to the 2012 funding reforms, this, in practice, makes their behaviour at best indistinguishable from that of for-profit companies, and at worst there is a risk that behaviour will be self-serving, as there are no external shareholders able to hold management to account.

Education's status as a charitable purpose arose because it was included in a preamble to Elizabeth I's 'Statute of Charitable Uses' of 1601. That Act arose out of a desire to reduce vagrancy (Fishman 2008). As Labour is implicitly accepting, it is hard to reconcile that intent with today's substantial businesses that improve the life chances of those who will, in the main, be the wealthy of the future.

Charitable status secures two key advantages: the ability to attract tax-free donations and a significant discount⁷³

72 'Keir Starmer vows to scrap charitable status for private schools to fund catch-up programme', LBC, 28 November 2022 (<https://www.lbc.co.uk/news/keir-starmer-scrap-charitable-status-for-private-schools-to-fund-catch-up/>).

73 At least 80%.

on business rates. The first privilege can be maintained on conversion to a conventional for-profit company by maintaining a separate foundation specifically for supporting students in need. This is the route taken, for example, by the University of Law, the chairman of which is David Blunkett, Secretary of State for Education in Blair's first administration, which gave up its charitable status in 2006 (Shore and Wright 2017). The second would be lost on conversion, but it may be a hard privilege to defend given the relative stability of demand for educational services at a time when many businesses liable to rates are under pressure.

Were a charitable educational institution to convert to a conventional company, the issue of the ownership of its assets would arise. Currently the 'legal' ownership – control – of the assets resides with the trustees, typically the members of the governing council. The 'beneficial' ownership – who they ultimately belong to – is the 'public benefit', through the means of the charitable purpose – the advancement of education. Tertiary education institutions profit from economic rents arising out of a number of gifts from the state: (i) the power to award degrees or other qualifications, (ii) the right to use the descriptor 'University' in their trading names, (iii) the right to secure entry and work visas for foreigners, (iv) various initial and continuing grants, (v) the significant subsidisation of student debts to their advantage, and (vi) tax relief on donations. As these rents are at the discretion of the Crown, and were not paid for, the returns from them, which have accumulated over the years as the net assets of the institutions, are arguably the property of the Crown as representative of the public.

What is to be done?

To generate the prosperity that will enable the achievement of social goals, the UK needs a stronger, more productive, economy. It has a number of comparative advantages in tertiary education – the language, the rule of law, a tolerant society and a leading reputation – that create the potential for significant profitable expansion of the sector. To deliver on this potential, a number of reforms are needed, to: (i) generate additional financial resources for the institutions, (ii) reduce the burden on the taxpayer, (iii) facilitate access to all who might benefit from tertiary education, and (iv) ensure highly beneficial outcomes for graduates. These reforms are set out below.

Abolish tuition limits subject to RSA offer

All institutions with powers to award qualifications at level 4 and above should be permitted to set domestic undergraduate tuition fees wholly at their own discretion on condition that, to the extent that the fee level exceeds the current level of the applicable state ICL, the university must procure that all students are able to secure funding for the difference through an RSA.

This policy will generate significant additional income for the institutions at zero cost to the taxpayer. There is no evidence that it will discourage students, as earlier increases in fee levels have not inhibited the growth of demand for higher education. Postgraduate courses are not subject to fee limits

and there does not appear to be any evidence of abuse or discouragement; that market should expand if providers also made RSAs available for such courses, where fees exceed the state loan amount. Access is ensured, as there is no initial outlay, and repayments are proportional to income. As returns to the provider depend on defined and measurable graduate outcomes, the interests of the institution are aligned with that of the student so motivating it to do the best for its charges.

Institutions will have the freedom to set the terms of the RSA as they see fit. They could be the same across all courses, or could vary by course or by student, subject to the FCA's affordability condition. Tuition charges could also vary by course or student⁷⁴ to take account of the fact that the marginal cost of an additional course or student may be significantly below the average cost of provision. High-cost courses should become more economic, as they should generate the highest RSA returns and, in due course, would need fewer state subsidies. Low-return courses would be attractive if they cover marginal costs. Less well-qualified students with weaker prospects may still be attractive at the margin. The rational institution will adopt a portfolio approach of offering a diverse range of courses to insure against the risk of adverse outcomes that concentrate by subject studied. Price discrimination increases social welfare by making economic the delivery of a wider range of courses to a broader set of students.

This liberalisation would address the current issue of high-tariff universities recruiting increasing numbers of domestic students at the expense of their lower-tariff counterparts. By securing higher fees per student, high-tariff universities

74 Subject to Equality Act provisions.

can concentrate their recruitment efforts on students most likely to benefit from the quality and level of education they provide. Lower-tariff universities gain the opportunity to differentiate themselves with lower-priced, more cost-effective courses tailored to a broader pool of students better suited to their educational offerings. This approach promotes a more efficient allocation of resources and students across institutions.

There would be no requirement for any particular relationship between the incremental tuition fee and the expected return⁷⁵ on the RSA. Setting the latter below the former would account for the higher expected earnings of students of means who are most likely to pay upfront rather than enter into the RSA agreement. The institution would be free to decide whether to take all the capital and cash-flow risk itself or share the risk with investors.

If an institution wishes to charge fees above the level of the state loan without offering RSAs to meet the difference, it is free to so do but will be ineligible for government grants as is the case for the 'Approved non-fee-cap' category of institution.

Make the freezing of tuition loan levels permanent

Current policy is to freeze domestic undergraduate fees at £9,250 p.a. until 2024/25, with inflation adjustments thereafter. Under these proposals this figure is instead defined as the level of the maximum state loan and it, along with the matrix of FE loan amounts, should be held at current

75 Expected return is the average amount an institution anticipates earning from an RSA, given that the actual revenue for a given RSA is highly uncertain, varying considerably by graduate.

levels indefinitely so that, over time, the state subsidy is diminished by inflation. This gives institutions both the time and the motive to develop their RSA offering. The certainty that government support for the sector will decline in the long term will be a positive signal for the financial markets. While a future parliament cannot be bound, it may be helpful to indicate that, after twenty years, state tuition fee loan subsidies will be abolished altogether.

In the near term, maintenance loans should continue to be offered by the state but, because a part of the maintenance cost is consumption – not necessary to benefit from the education – charged like a commercial RSA where repayments are a share of gross income not of income above the threshold. This change will reduce the default rate and the cost to taxpayers, as well as facilitating a reduction in the duration of the liability. Over time the institutions should become responsible for covering maintenance costs through their RSA to encourage more efficient course delivery. Combined with the freeze on tuition loan amounts, these changes could save the taxpayer £60 billion over twenty years.⁷⁶

As RSAs, over time, account for a greater share of institutional income, the moral hazards arising where payment is on input – recruitment – with no dependency on outcome (future earnings) – should fall away. Courses with no career benefit will be improved, as they will be otherwise uneconomic for the institution. That will not mean that a given degree subject will not be offered, but that the course will incorporate more soft skills and experiential modules to enhance employability. Marketing incentives will be unattractive, as they increase the cash-flow risk for the provider. Unconditional offers are

76 Assumes 5% inflation, zero real interest rate, 40% default on tuition loans, 12% default on maintenance RSAs, own calculations.

discouraged as they may adversely lead to recruitment of ill-committed students with weaker earnings prospects. Employer confidence in uninflated degree grades will help graduates to secure better jobs. The use of RSAs should not discourage the recruitment of students with weak academic records but, now that tacit skills are recognised to be important alongside explicit knowledge, instead lead to the development of alternative ways to evaluate such students.⁷⁷ They may, for example, have favourable attitudes towards study and employment. Students who may have adequate or even good academic records but who appear to lack motivation are more likely to be encouraged by an institution to delay their participation in tertiary education.

Abolish all course content and quality regulations

With RSAs in place, the funding system will focus the system on employability, and it will become possible and necessary to ‘unleash our educators’ (Richard 2012: 6) so that they are free to incorporate a much greater proportion of tacit learning into courses, accepting that mistakes will be made, but without mistakes it is difficult to create something better (Robinson 2016). As regulation directs effort mainly towards explicit learning, inhibiting adaptation to circumstances or individuals, it must go.

The challenge of improving the development of human skills is a big one. However, it should not be insurmountable. Students

⁷⁷ See, for example, Haldane 2018: 17: ‘[...] the future university may need to be a very different creature than in the past. It may need to cater for multiple entry points along the age distribution, rather than focussing on the young. And it may need to cater for multiple entry points along the skills spectrum, rather than focussing on the cognitive.’

exist in a community with academics. Simulating the social oversight of the guild master requires some rethinking of relationships. Students are not consumers of “education” but rather junior partners in the development of their own human capital. For the learning of more technical practical skills, virtual reality systems are already widely used. InvestIN Education, for example, offers interactive simulations to help prospective students understand different careers, including medicine, engineering, investment banking, psychology, writing, filmmaking and architecture (InvestIN 2022). Given the freedom and the incentive, providers should be able to use technology to personalise education to the individual, which Robinson (2015: 15, 18) saw as the answer to the future.

The regulatory role should focus on whether the institution is fit and proper to provide a tertiary education and on monitoring the way it communicates with prospective students to ensure that all promotional material is clear, fair and not misleading. Standard disclaimers should be developed to ensure students understand that past outcomes are not necessarily a guide to future outcomes and that outcomes depend on personal effort as well as course provision.

Grant the Ombudsman the power to make compensatory awards

The Office of the Independent Adjudicator should gain the power to make enforceable financial awards in favour of graduates and against institutions where the course provision and earnings outcome have not been consistent with the promotional material supplied on recruitment. A financial award could be a money payment or a downward variation in the terms of the graduate’s RSA as appropriate. This mimics

the powers of the Financial Services Ombudsman and ensures that institutions will think carefully about representations made to students at point of recruitment, to make sure that the service to be provided, the likely earnings outcomes and the burden of effort on the student are clearly set out.

Abolish Access and Participation Plans

Make it a condition of registration that at least, say, 51% of students (including international students) are paying fees by means of an RSA and/or state ICL. That forces an institution to ensure that it recruits a sufficient number of less well-off students. As talent and future earnings potential are widely distributed, an institution has a financial motivation for seeking out students who will benefit from its offer regardless of their personal background and characteristics. The substantial costs of producing, monitoring and adhering to Access and Participation Plans can then be dispensed with.

Abolish the Apprenticeship Levy

The levy is a burdensome tax that has failed to achieve its objectives. If courses are value for money, employers will continue to use them. By encouraging the use of RSAs, training providers will be able to expand their market beyond the quantum of levy funds subject to delivering employability value. The abolition of all course content regulation will reduce costs so more can be used to improve the effectiveness of programmes. The saving of 0.5% of payroll expense will be a helpful support for businesses – which includes educational institutions – in present difficult economic conditions. There

is no cost to taxpayers, as the levy funds were ringfenced for training expenditure.

Clarify definition of public benefit in Charities Act

Amend the Charities Act so that, in relation to a charitable purpose of tertiary (level 4 and above) education, in order to satisfy the public benefit test, the entity must not operate on a commercial basis. That could be tested by reference to the proportion of income received in payment for services rendered as opposed to from third-party donations. Where an entity secures the majority of its income from service provision, the presumption must be that it is operating commercially and not charitably. If an educational institution does not pass the tests such that it has the appearance of a commercial entity, then it will no longer be considered a charity and will be required to convert to a company limited by shares.⁷⁸

If all institutions have the same legal structure, it will level the playing field and enhance competition. Operating as a for-profit company will free institutions of the obligation to weigh all activities against their charitable objective, making it much easier to develop partnerships and invest and grow into related activities. Having a board of directors to represent shareholders will provide more robust governance than a council of volunteers who represent nothing definitive.

HESA data on the financial position of the higher education sector report total tangible assets for the 2020/21 year of around £180 billion. If this were all property, it would be expected to return a commercial yield or rental of perhaps 5%. If business rates are typically 50% of market rental and

78 This may require the Privy Council to amend the charters of the applicable institutions.

charities secure an 80% discount, the additional business rates payable on conversion would be around £3.6 billion. This additional income would be a welcome support for local authorities struggling to meet growing social care costs.

Confirm beneficial ownership of charity assets

The Charities Act⁷⁹ should be further amended to confirm that, in the event that a charity ceases to qualify as a charity, where that charity's assets arose primarily or substantively through gifts from the public purse, whether that be by means of grants, income or privileges, then those assets be beneficially owned by the Crown as representative of the public (taxpayers') interest. As Margaret Thatcher said: 'There is no such thing as public money, there is only taxpayers' money' (Thatcher 1983). This would not apply to non-operating foundations where donors had contributed monies for defined purposes that were not in any way commercial, for example scholarships.

Creation of an internationally competitive industry

To preserve the independence of the institutions while giving them access to incremental capital in order to expand their provision, the state should, as soon as reasonably practicable, float its shareholding in any educational charity that converts to a company limited by shares on the London Stock Exchange (Main Market or AIM). Consideration should be given to awarding, or discounting, a part of the offer to employees to

79 And/or the Higher Education and Research Act 2017.

motivate them through ownership of a share in the means of production. (Neary, M. and Winn, J. (2015))

HESA data suggest that the total net assets of reporting institutions for 2020/21 sum to £53 billion while the aggregate surplus is £4 billion and aggregate total comprehensive income is £6 billion.⁸⁰ Vanguard⁸¹ reports that as at 30 September 2024 the FTSE100 is trading with a P/E ratio of 15.1 and Price to Book ratio of 1.8. Very approximately, as the FTSE100 may not be a good proxy for educational institutions, applying the applicable ratios, this would value the industry at £90 billion, £60 billion or £95 billion. Were these monies to be realised it would be a significant help to the government's fiscal position given its investment objectives.

There has been much talk of the 'marketisation' of the sector, but as it never gained the ability to set its own prices and remained heavily regulated there was no free market, and competition was restrained and focused on inputs rather than outputs. By creating conditions for the sector to generate income independent of the taxpayer and by freeing it from the constraints of charity law, with hundreds of firms in the tertiary education space, competition will function as expected and will drive up efficiency and standards. As the government is freezing, rather than withdrawing, its contribution to incomes, there is a robust safety net, ensuring that all have the time and resources to determine the best way forward for their institution.

Not only will the liberalisation of the sector support its growth, the flotation of many firms in an important global

80 All figures from HESA data tables, rounded to closest whole number.

81 <https://www.vanguard.co.uk/professional/product/etf/equity/9580/ftse-100-ucits-etf-gbp-accumulating> accessed 27 October 2024.

industry on the London market will support the UK's position as an important financial sector, developing expertise that can be marketed internationally.

Tax relief on RSA payments

As the burden on the taxpayer of subsidised loans declines over time, so future state support of the sector should be provided by means of tax relief on RSA repayments, as is the case in Germany. This would give investment in human capital the same status and treatment as corporate investment in physical capital. Rather than the state determining arbitrary limits for spending on courses and people, this approach leaves decision-making with the individual, who is best placed to determine whether additional education is in their interest. Each according to their need, without limit. Since a tax relief does not eliminate cost to the individual, moral hazard risk is minimised. Given the assumption that tertiary education raises income levels and so tax payable, it may be that there is no, or only a negligible, cost to the taxpayer of such relief.

Conclusion

It is time to reclaim the original spirit of universities as institutions where practical skills, intellectual growth and social and interpersonal skills development are integrated in a form of partnership. Aligning the interests of universities with those of their students, taking a long-term stake in their graduates' success, rewards institutions for a focus on employability, value for money and delivering high-quality, relevant education. Variable tuition fees with income-contingent lending mimic the financial arrangements of the mediaeval apprenticeship and offer a viable solution to the funding crisis, enabling universities to remain sustainable while ensuring equitable access for students.

This strategy also helps address the government's current financial challenges, offering immediate savings in expenditure in exchange for deferred, lower tax rates. It promotes growth, enhances productivity and generates the fiscal headroom needed for the Labour government's investment objectives to be delivered without risking instability in the bond markets.

Allowing institutions to charge fees above the level of the government loan increases sector resources, enhancing the UK's competitive edge relative to the US. By linking additional income to tangible earnings outcomes, course regulation becomes redundant, as universities will naturally improve their offerings in order to optimise outcomes, freeing academics and granting them the autonomy to innovate.

Recognising Labour's challenge to the principle that education is always deemed charitable and that many universities

operate like commercial organisations, it is time to reassess the suitability of charitable status. Full liberalisation of the sector will free it to address the many challenges it faces in the modern digital age. The potential gain to taxpayers from these policies could reach £140 billion.

Barber, Donnelly and Rizvi (2013) argued that ‘the next 50 years could see a golden age for higher education’ but warned that an ‘avalanche was coming’ and that ‘all the players in the system, from students to governments [need to] seize the initiative and act ambitiously [or] change will sweep the system away’. The way to survive an avalanche is to move quickly out of its path. These policies represent a radical leap away from danger, creating the opportunity for the UK, once the workshop of the world, now to become university to the world (Ainsworth 2010).

References

Ainsworth, P. (July 2010) An equitable approach to the private sector funding of university tuition fees. EM Applications (<https://www.fairforstudents.org.uk/wp-content/uploads/FAIR-University-Funding-Proposal-Final-Russell-based-version.pdf>).

Augar, P. (May 2019) The Augar Report, chaired by Dr Philip Augar. Independent panel report to the Review of Post-18 Education and Funding (<https://www.gov.uk/government/publications/post-18-review-of-education-and-funding-independent-panel-report>).

Barber, M., Donnelly, K. and Rizvi, S. (March 2013) An avalanche is coming: Higher Education and the revolution ahead. Institute for Public Policy Research (<https://www.ippr.org/publications/an-avalanche-is-coming-higher-education-and-the-revolution-ahead>).

Boero, G., Cook, D., Nathwani, T., Naylor, R. and Smith, J. (October 2019) The return to a degree: New evidence based on the birth cohort studies and the labour force survey. Higher Education Statistics Agency and Warwick University.

Brain (accessed 9 May 2023) <https://www.braincapital.de/ueber-uns>).

Brickman, M. (June 2021) Risk-sharing income share agreements: How a new financing mechanism can protect taxpayers and incentivize universities to offer affordable career-oriented programs. American Enterprise Institute.

Britton, J., Dearden, L., Shephard, N. and Vignoles, A. (April 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 (<https://ifs.org.uk/publications/how-english-domiciled-graduate-earnings-vary-gender-institution-attended-subject-and>).

Britton, J., Dearden, L., van der Erve, L. and Waltmann, B. (February 2020) The impact of undergraduate degrees on lifetime earnings. Research report. London: Institute for Fiscal Studies.

Browne, Lord J. (12 October 2010) Securing a sustainable future for Higher Education. The Browne Report (<https://www.gov.uk/government/publications/the-browne-report-higher-education-funding-and-student-finance>).

CBI (July 2016) The Right Combination. CBI/Pearson Education and Skills Survey 2016.

CBI (July 2021) Skills for an inclusive economy. CBI/Birkbeck Education and Skills Survey 2021 (<https://www.cbi.org.uk/articles/skills-for-an-inclusive-economy-cbibirkbeck-education-and-skills-survey-2021/>).

Chapman, B. (2006) Chapter 25 income contingent loans for Higher Education: International reforms. In *Handbook of the Economics of Education* (eds. E. Hanushek, F. Welch). Elsevier. 2: 1435–1503. ISSN 1574-0692, ISBN 9780444528193 ([https://doi.org/10.1016/S1574-0692\(06\)02025-3](https://doi.org/10.1016/S1574-0692(06)02025-3)).

‘Apprenticeship levy has failed on every measure and will undermine investment in skills and economic recovery without significant reform, says CIPD’, 2021 critique.pdf,

CIPD, 1 March 2021 (<https://www.cipd.co.uk/about/media/press/010321apprenticeship-levy-reform-budget>).

Conlon, G. and Patrignani, P. (June 2011) The returns to Higher Education qualifications. BIS Research Paper 45. Report prepared by London Economics on behalf of the Department for Business, Innovation and Skills (https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/32419/11-973-returns-to-higher-education-qualifications.pdf).

Coulter, S., Iosad, A. and Scales, J. (August 2022) Ending the big squeeze on skills: How to futureproof education in England. Tony Blair Institute for Global Change (<https://institute.global/policy/ending-big-squeeze-skills-how-futureproof-education-england>).

Cowman, K. (2014) Apprenticeships in Britain c 1890 – 1920. University of Lincoln (https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/402423/Apprenticeships_1914.pdf).

Davies, M. (2015) Knowledge – Explicit, implicit and tacit: Philosophical aspects. In *International Encyclopedia of the Social & Behavioral Sciences* (2nd edition) (ed. J. Wright) 74–90 Oxford: University of Oxford (<https://doi.org/10.1016/B978-0-08-097086-8.63043-X>).

Dearing, R. (1997). Higher Education in the learning society: Main Report. London: Her Majesty's Stationery Office.

De la Croix, D., Doepke, M. and Mokyr, J. (February 2018) Clans, guilds, and markets: Apprenticeship institutions and growth in the pre-industrial economy. *Quarterly Journal of Economics* 133(1) 1–70 (<https://www.iza.org/publications/>

dp/9828/clans-guilds-and-markets-apprenticeship-institutions-and-growth-in-the-pre-industrial-economy).

DoE (January 2021) *Skills for Jobs: Lifelong Learning for Opportunity and Growth* (<https://www.gov.uk/government/publications/skills-for-jobs-lifelong-learning-for-opportunity-and-growth>)

DoE (24 February 2022) Higher education policy statement & reform consultation. Department for Education (<https://www.gov.uk/government/consultations/higher-education-policy-statement-and-reform>).

Epstein, S. R. (September 1998) Craft guilds, apprenticeship, and technological change in preindustrial Europe. *The Journal of Economic History* 58(3): 684–713 (<https://www.jstor.org/stable/2566620>).

FCA (2022) *FCA Handbook*. CONC 3.3 The clear fair and not misleading rule and general requirements (<https://www.handbook.fca.org.uk/handbook/CONC/3/3.html>).

Ferrie, D. (2021): European Investment Fund supports Chancen eG to provide student financing. European Union website (https://ec.europa.eu/commission/presscorner/detail/es/ip_21_6529).

Fishman, J. J. (2008) The political use of private benevolence: The statute of charitable uses. Pace Law Faculty Publications Paper 487. New York: Elisabeth Haub School of Law at Pace University (<https://core.ac.uk/download/pdf/46713595.pdf>).

Friedman, M. (1962): *Capitalism and Freedom*. Chicago: University of Chicago Press.

GovUK 2022: Repaying your student loan (accessed 21 September 2022) (<https://www.gov.uk/repaying-your-student-loan/what-you-pay>).

Haldane, A. G. (23 May 2018) Ideas and institutions – A growth story. Speech given by Andrew G Haldane, Chief Economist, Bank of England, The Guild Society, University of Oxford (<https://www.bankofengland.co.uk/speech/2018/andy-haldane-speech-given-at-the-oxford-guild-society>).

Hunt, E. K. and Lautzenheiser, M. (1968) *History of Economic Thought*, p22. Armonk, NY and London: M. E. Sharpe (https://eclass.uoa.gr/modules/document/file.php/ECON616/E.%20K.%20Hunt%2C%20Mark%20Lautzenheiser%20-%20History%20of%20Economic%20Thought_%20A%20Critical%20Perspective-M.E.%20Sharpe%20%282011%29.pdf)

InvestIN (2022) InvestIN summer 2023 experiences brochure (<https://online.flippingbook.com/view/1064667082/4/#t=NCxsZwZ0LDE4MCA1MywYmjQuNzg5NzMuM-jMsMTI4LjY2LGxlZnQsYm90dG9t>).

Leunig, T. (September 2024). Undergraduate Fees Revisited. HEPI Debate Paper 39. Higher Education Policy Institute.

Lumni (accessed 9 May 2023) <https://www.lumni.net/nosotros>).

Lyon, L. S. (October 1920) Medieval English apprenticeship as business education. *The School Review* 28(8): 585–99 (<https://www.journals.uchicago.edu/doi/10.1086/437273>).

MacLeod, W. B. (April 2019) Is education consumption or investment? Implications for the effect of school competition. NBER Working Paper 25117. Cambridge, MA: National Bureau

of Economic Research (https://www.nber.org/system/files/working_papers/w25117/w25117.pdf).

McKenzie, T. and Sliwka, D. (2011) Universities as stakeholders in their students' careers: On the benefits of graduate taxes to finance Higher Education. *Journal of Institutional and Theoretical Economics* 167(4): 726–42.

Neary, M. and Winn, J. (2015) Beyond public and private: A model for co-operative higher education. *Krisis: Journal for Contemporary Philosophy* (<https://eprints.lincoln.ac.uk/id/eprint/17775/>).

Ogilvie, S. (2014) The economics of guilds. *Journal of Economic Perspectives* 28(4): 169–92.

ONS 1: ONS Percentile Income Distribution_ Income Table_3.1a_1920 (<https://www.gov.uk/government/statistics/percentile-points-from-1-to-99-for-total-income-before-and-after-tax>)

Palacios Lleras, M. (2004) *Investing in Human Capital, A Capital Markets Approach to Student Funding*. Cambridge: Cambridge University Press.

Pearson (2019) The Global Learner Survey 2019 (https://www.pearson.com/content/dam/global-store/global/resources/Pearson_Global_Learner_Survey_2019.pdf).

Pollack, E. and Sullivan, F. M. 'Exploring racial and gender differences in ISA contract terms and repayment patterns', *Jobs for the Future*, April 2022 (<https://www.jff.org/resources/exploring-racial-and-gender-differences-isa-contract-terms-and-repayment-patterns/>).

QS higher education system strength rankings (HESS) (2016). *Top Universities.pdf* (<https://www.topuniversities.com/system-strength-rankings/2016>).

Richard, D. (November 2012) *The Richard Review of apprenticeships*. (<https://www.gov.uk/government/publications/the-richard-review-of-apprenticeships>).

Richmond, T. (2018) 'The great training robbery: Assessing the first year of the apprenticeship levy', *Reform*, 13 April 2018 (<https://reform.uk/test/great-training-robbery-assessing-first-year-apprenticeship-levy/>).

Robinson, K. 'Bring on the learning revolution!', TED talk, *YouTube*, 15 September 2015 (<https://www.youtube.com/watch?v=kFMZrEABdw4>).

Robinson, K. (2016) 'Do schools kill creativity?', TED talk, *JamesClear.com*, 2016 (<https://jamesclear.com/great-speeches/do-schools-kill-creativity-by-ken-robinson>).

Russell Group (2022) (https://www.russellgroup.ac.uk/media/6079/final_external_briefing_sustainability.pdf)

Shore, C. and Wright, S. (2017) *Privatizing the Public University*. Oxford and New York: Bergahnbooks (https://www.berghahnbooks.com/downloads/intros/WrightDeath_intro.pdf).

SLC (2022) *Student loans: a guide to terms and conditions 2022 to 2023* (<https://www.gov.uk/government/publications/student-loans-a-guide-to-terms-and-conditions/student-loans-a-guide-to-terms-and-conditions-2022-to-2023>).

Smith, A. (1776) *An Inquiry into the Nature and Causes of the Wealth of Nations*.

Stanfield, G. (September 2009) Developing future university structures: New funding and legal models. Universities UK policy commentary. Glynne Stanfield, Partner, Eversheds LLP (<https://www.voiced.edu.au/content/ngv%3A33225>).

Stephenson, H. and Dandridge, N. 'Educational charities must behave charitably', *Charity Commission*, 27 June 2019 (<https://charitycommission.blog.gov.uk/2019/06/27/educational-charities-must-behave-charitably/>).

Synge, M. (November 2020) Regulation of universities as charities: one step forward, two steps back. University of Exeter (<https://www.cambridge.org/core/journals/legal-studies/article/regulation-of-universities-as-charities-one-step-forward-two-steps-back/9B59319A7A19E744ECE59FC06604B26A>).

Thatcher, M. (14 October 1983) Speech to Conservative Party Conference (<https://www.margaretthatcher.org/document/105454>).

Yorke, M. (2004) Employability in higher education: what it is – what it is not. The Higher Education Academy/ESECT (https://www.ed.ac.uk/files/atoms/files/hea-learning-employability_series_one.pdf).

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

