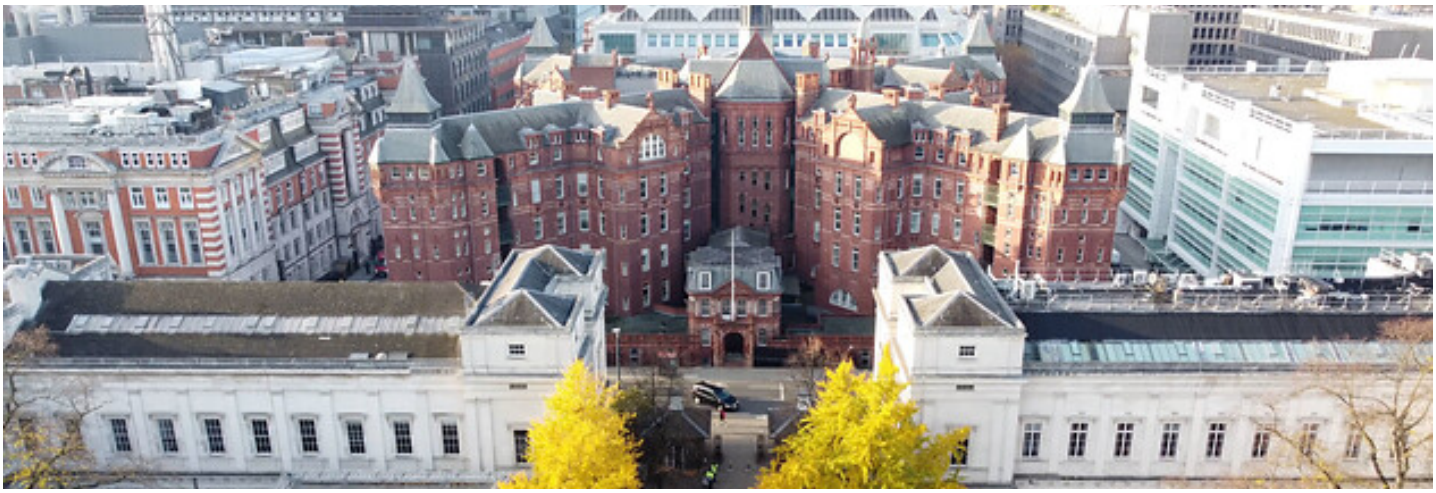
Centre for Education Policy
& Equalising Opportunities

Briefing Note: Higher Education funding: what's the problem and what are the potential solutions?

Prepared by Gill Wyness & Richard Murphy



Summary

- England's once world-leading HE system is in crisis, with both students and universities in financial hardship. This is in stark contrast to 2012 where the tripling of tuition fees to £9,000 per year put universities in a strong financial position, and freed up money for student support.
- The crisis stems from the failure of government to index-link tuition fees and support — eroding the income of both universities and students.
- There is no easy solution. Simply increasing fees back to 2012 rates would involve a one-off £3,000 per year tuition fee increase, which would come at a political cost. Other options such as abolishing fees, or introducing a graduate tax, also have serious issues.

Recommendations

- The maintenance grant should be reinstated to ease pressure on low-income students and restore some fairness into the system
- Offering certainty to students, graduates, universities and taxpayers is paramount. As highlighted by the Browne review in 2011, there is no easy way to determine the right level of investment in higher education. At a minimum, the government should immediately index link tuition fees, maintenance grants and maintenance loans.
- Reforming the system entirely risks "throwing the baby out with the bathwater" given the fundamentals of the system are good.

The Issue

England's once world-leading Higher Education (HE) system has become increasingly fragile over the last decade, with students suffering from real financial hardship, and some universities rumoured to be on the verge of collapse.

Back in 2012, it was all looking so good. While the near-threefold hike in tuition fees (from £3,000 per year to £9,000 per year) implemented that year was controversial, the income-contingent loan system at its heart ensured that students from any background could go to university, and universities were adequately funded.

Along with our colleague Judith Scott-Clayton, we evaluated the 2012 system in our paper *The end of free college in England* (Murphy et al., 2019) in which we studied the system's impact on three key measures of success: enrolments, equity and funding per student.

We showed that enrolments had held up in the face of the significant fee increase, and while the gap in participation between rich and poor students remained stubbornly wide, fears of a collapse in enrolment among disadvantaged students failed to materialise. Moreover, university funding per head, which had fallen to dangerous levels in the years leading up to the reforms, was slowly beginning to recover.

The success of the system (by these measures at least) came down to i) injecting cash into the system through tuition fees and, ii) the well-designed income contingent loans system, which ensured that no student had to pay upfront fees, and everyone had enough money to live on due to generous government-backed maintenance loans on offer. The system protected against key market failures — credit constraints, risk and uncertainty and debt aversion – an economist's dream.

So where did it all go wrong? In short, with the government's decision not to index-link tuition fees and maintenance loans. The tuition fee cap has only been allowed to increase once, by just £250 a year, since 2012. The net result is that it is now worth around 30% less than it was in 2012. This is challenging for universities, which rely on fees as a key component of their income. And it's equally difficult for students — maintenance loans — the key source of income for living costs — have not kept up with the UK's high rate of inflation, causing student hardship.

How does the English HE finance system work? The system is made up of several components, including tuition fees, maintenance loans, and additional government funding:

Tuition fees The primary source of income for HE, with tuition fees capped at £9,250 per year for home students.

Student loans Students can take out a loan to cover tuition fees and another for living costs. The Student Loans Company pays the fee loans directly to universities, and the maintenance loans directly to students. The amount a student is eligible for depends on their parents' income. Students living away from home and outside London can borrow up to £10,227, with more on offer for those studying in London.

Teaching grant The government also makes direct payments to universities for teaching, with funding linked to priorities like supporting disadvantaged students and high-cost subjects.

Repayment Fee and maintenance loans are repayable once the student has graduated and is earning over £25,000 per year. Repayment is 9% of income over the threshold. Previously, interest was charged on the loan, but this is now based on the Retail Price Index (RPI), and capped to ensure students are not being charged a higher interest rate than commercial rates. Loans are written off after 40 years.

Cash-strapped students

One of the most important features of England's high-fee system was that the injection of cash from tuition fees freed up resources that could be directed towards students. As Figure 1 shows, liquidity (which comprised maintenance grants and maintenance loans until grants were abolished, and maintenance loans thereafter) for the most disadvantaged students increased and reached record levels in 2021. But since

then, it has steadily fallen, so that the poorest students now have around £1,200 less per year in real terms since 2021 (a fall of around 10%), and are worse off, in real terms, than they were in 2016.

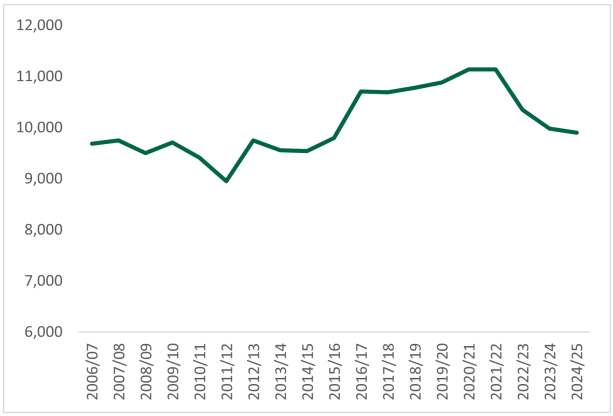
University funding is in decline

It's not just students who are feeling financial pressure; universities are too. Before 2012, a significant proportion of university funding came through the government teaching grant, with a smaller proportion from tuition fees. The 2012 reforms (and their introduction in general) were designed in part to shift the burden of payment towards graduates and away from general taxation. This was seen as a more progressive policy than free higher education, due to the high private returns from university (Barr, 2013). It was also seen as preferable to relying on government to fund the system, which is invariably low-priority in times of austerity, resulting in lower resources and numbers caps, which tend to impact low socioeconomic status (SES) students more (Murphy et al., 2017).

Figure 2 plots university funding per full-time equivalent student, both for 'domestic' undergraduate students and all student types — postgraduate, undergraduate, UK, EU and overseas students (who typically pay higher fees). Since tuition fees make up the majority of university funding, the series for domestic undergraduates is closely tied to the tuition fee increases. Thus, there was a spike in finance in 2006, when tuition fees increased to £3,000 per year, and another in 2012, in conjunction with the threefold fee increase at that time. However, as fees have essentially been frozen since 2012, apart from a £250 increase in 2017. The result is that university income from domestic students has been in decline ever since, with levels now back down to those seen in 2011.

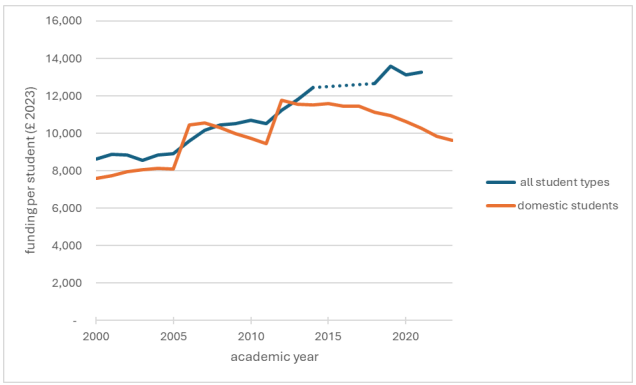
Perhaps not surprisingly then, universities have attempted to boost their balance sheets with income from students whose fees are uncapped — meaning postgraduate and international students. The latter make up a significant proportion of income, accounting for 42% of higher education course fees and 21% of all income for universities in England (Drayton et al., 2023) in the 2021–22 financial year. Over-reliance on international students is a risky strategy, particularly since international intake can be affected by government policy, as has been the case in recent years (Universities UK, 2024).

Figure 1: Maximum value of standard maintenance grant and loan



Source: House of Commons Library, 2024

Figure 2: University funding per student



Source: House of Commons Library, 2024

Impacts of funding

Student aid There is a wealth of literature showing that aid matters. Students respond favourably to increases in financial aid, with studies from the US (Dynarski, 2000, 2003; McPherson and Schapiro, 1991) and Europe (Dearden et al., 2014; Nielsen et al., 2010) finding increases in participation in Higher Education (HE) of 3–5 percentage points per $1000 spending on student aid. Many of these are summarised in an extensive review of the impact of college costs and financial aid by Dynarski et al. (2023) who conclude that aid matters for enrolment, persistence, and degree completion. The authors also emphasise that the details

matter, and that programmes with a high administrative burden on students are less successful than those that are simple and easy to access.

Pertinent to England's situation in particular is the impact of replacing one type of aid with another. In 2016, student maintenance grants were abolished, and, instead, the poorest students became eligible for larger loans to make up the difference. It is less well understood how this might have impacted enrolment, though one paper from the US (Linsenmeier et al., 2006) indicates that the switch to loans may negatively affect the participation of ethnic minority students. Either way, if the intention is equal opportunity for all, that is not consistent with low SES students graduating with larger loans than those from richer backgrounds.

Tuition fees There is less evidence on the impact of tuition fees on enrolment, and studies have mixed results, as discussed in the review by (Dynarski et al., 2023). Studies (Acton, 2021; Denning, 2017) show that community college or vocational college students are sensitive to price, though there is less evidence that this is the case for higher education students. This may be because HE tuition fee policies are often paired with changes in other elements of finance, meaning it is not possible to isolate the effect of fees. As Dynarski et al. (2023) point out, 'if increases in tuition prices are paired with increased financial aid and increased institutional quality, net effects on student outcomes may be ambiguous or even positive'. Indeed, this is the conclusion of the study by Murphy et al. (2017).

University funding Literature examining the effect of changes to university funding — and in particular, declines in government support for public higher education — on enrollments is rare. However, a US study by Deming and Walters (2017) examines the impact of tuition caps and freezes in the US, combined with changes in state higher education budgets, on student enrolment. The results reveal that it is university budgets which a large impact on enrolment (a 10 percent increase in spending increases enrolment by 3 percent) and degree completion; in contrast, tuition fee changes have no effect. They conclude that the impacts of spending on enrollment are driven by longer-run changes in course staffing or programme offerings, while the impacts on degree completion may be down to 'informal' capacity constraints such as reductions in academic support spending.

The impact of different fee and maintenance repayment systems Also pertinent to the challenges faced by the English system is the nature of our fee and maintenance loan repayment system. Again, this is rarely studied, though Murphy et al. (2017) and Barr et al. (2019) examine the similar HE finance systems of England and Australia, relative to the US student loan system. The US has a 'mortgage style' system, meaning students have to repay their loans at a set amount each month, regardless of their earnings.

Barr et al. (2019) highlight several advantages of the English and Australian income contingent loan (ICL) systems over the US system: i) ICLs are simple to administer for both employers and borrowers, ii) ICLs accurately reflect a borrower's current capacity to pay, iii) ICLs can be designed to be cost neutral to the taxpayer if desired.

However, the extent to which these features can be achieved is dependent on the parameters of the ICL system. They argue that an 'ideal' ICL system should have the repayment threshold, repayment rate, and interest rate set so that i) a graduate with 'good' earnings pays 100% or more (though with a cap on maximum overpayment), ii) distortions (such as cliff-edges) are minimised. They emphasise that minimising taxpayer subsidy is important, since a large fiscal cost creates pressure on the government to restrict the number of loans it grants (and hence the number of students), and takes money away from other potentially beneficial spending (such as maintenance grants).

Murphy et al. (2017) add that the English ICL system (at the time of evaluating it, in 2017) ensures that nothing has to be paid upfront, and that students have sufficient assistance for living expenses. These features ensure that any student can go to university regardless of their background. They suggest that these features resulted in no apparent widening of the participation gap between advantaged and disadvantaged students following England's shift to a high-fee system.

Potential solutions

The current system is beset with problems for its stakeholders. In this section, we discuss four potential solutions to the issues of declining funding for students and universities, against a backdrop of tight government budgets. For each funding model, we set out the pros and cons, from the point of view of the four main stakeholders in higher education finance: students, universities, graduates, and taxpayers.

Table 1 shows the key issues facing each of our four stakeholders — students and universities (funding recipients), and graduates and the taxpayer (funding providers). We discuss these issues for four main models, i) the current system, ii) a free tuition system (based on that in place in 1997), iii) the system proposed in the "Browne review" of HE finance in 2010, and iv) a graduate tax. Of course, many other models are possible, or variations of these models, but we choose to discuss these four models as they seem the most likely to be adopted.

1. Free tuition and financial aid First, column 1 describes a "free tuition" system — one where students face no tuition fees. As many have noted, there is of course no such thing as a free tuition system, since someone must pay, in this case the taxpayer.

Nevertheless, there are important benefits to this type of system. For students, there can be no issue with "debt aversion" when it comes to tuition fees, since there is no debt. It is also a very simple system, with no need to educate students about the terms of their repayment, and no need for complicated administrative systems to recoup tuition fee payments. It is also likely to be popular with the electorate. However, research recently undertaken by Public First (Lister and Price, 2023) calls this into question. They surveyed a representative sample of the electorate on their views about the HE finance system, and showed that while tuition fees are very unpopular with voters, once faced with the counterfactual — what would you choose not to be funded to pay for a free system — voters soon change their minds.

There are, however, several other downsides associated with a free tuition system. Firstly, such systems usually are typically "low-aid". As Figure 1 above showed, in 1997 when tuition was free, students also had far lower amounts of maintenance support than they do today. The high cost to the government of a free system inevitably ends up with them cutting back on maintenance loans and grant funding, which can be detrimental to access. The expensive nature of the system can also lead to caps on student numbers, which have also been shown to be detrimental to access; in situations where the supply of places is restricted, it is the relatively low-attaining students tend to be squeezed out, who are disproportionately those from poorer backgrounds. As has also been widely discussed in the literature (Barr and Crawford, 2005), free tuition systems are regressive. Since the taxpayer must pay, this means that individuals from all backgrounds must subsidise the university education which is mainly enjoyed by those from high SES backgrounds, who go on to reap high financial returns.

A further disadvantage of the tuition fee system is that universities themselves have no control over their own pricing or income, and are instead entirely dependent on the state. In the past, this has led to a poorly funded system as other pressures take priority.

The lack of university control allows for little variation in investment into courses by field or institution. For example, a university may wish to invest in a particle accelerator, to improve student learning, and would like to pay for it with a rise in their tuition fees.

2. Income contingent loan-based system (i.e. the current system) It was many of these issues that led the then Labour government in 1997 to reform the system into one where the cost is shared among students/graduates and the taxpayer. Although the details were different in 1998 when the system was first brought in, this paved the way for the subsequent reforms that led to the system we have now — where graduates themselves pay a share of the cost through an income-contingent loan, and universities may set fee levels up to a point (where the fee is capped). This system means that no one pays anything upfront, gives universities some control over their finances, and protects graduates from damaging repayment burdens through the insurance system that an ICL provides.

It is also far more progressive than a free tuition system, since graduates make repayments that are based on their earnings, meaning richer pay more than poorer graduates. The extent of the progressiveness of the system has varied over time, as the government has made changes to it. In particular, it has been shown that systems with higher interest rates are more progressive, since these affect better off graduates more.

However, there are still clearly problems with the current system, which tend to be more "political" in nature. Levels of "student debt" are consistently reported negatively in the media, despite the important protections built into the system to protect graduates from heavy repayment burdens. Indeed, a key failing of the current system seems to be its lack of simplicity, resulting in the inability of governments to explain it to the electorate, meaning many students and their parents are still concerned about debt, and believe that failing to repay all of their loans is a "bad thing" rather than simply the result of an important insurance mechanism. A further political problem is that the government is in charge of the fee cap, and therefore takes responsibility (and blame) for its level. The failure to increase this cap over the last 12 years has led to the crisis we face today.

3. A levy system (Proposed by the Browne Review) A third potential model, which is a variation on the current system — albeit a fairly substantial one — was proposed by the Browne Review of 2010. In this system, universities — rather than the government — were given full control over what they wanted to charge students, but were required to pay a "levy" for each additional £1000 charged over a basic fee amount (set at £6000 at the time of Browne). Thus, universities who believed they could attract students with high fees could do so and still cover their costs. This is desirable from an economics point of view since it allows for a relationship between price and quality.

It also allows for more choice, some universities may choose to charge more to invest more in staffing, equipment, or facilities. However, there is a limit to how much the market can function in a traditional way, given the student loan repayment system; there is limited incentive for students to choose "cheaper" courses, since there is not a one-to-one relationship between the tuition fee "sticker price" and what graduates go on to repay (given the latter is based on earnings). A student with the grades to access an elite institution may as well pay 'top dollar' to do so, since they will only ever repay a percentage of their income. The lack of a one-to-one relationship between fees and repayment should be borne in mind by any policymaker attempting to play the rules of the market.

4. Graduate Tax Finally, a model that is often proposed is the graduate tax. Here, there would be no tuition fees in place but, instead, graduates would pay a percentage of their income as a tax, which would then fund the university system. While students would have no debt to repay, it is less clear how the maintenance system would operate. Having a separate maintenance loan system would add unwanted complexity, so a government would likely choose instead to give all (or some) students a non-repayable grant.

A graduate tax would have the benefits of simplicity and progressiveness, but it may prove less popular than the current system with graduates themselves since, unlike our current system, there would be no way for students to pay off their debt — rather students would be paying for their degrees for the remainder of their working life. It would also have the unusual feature of being the only tax to treat graduates and non-graduates differently purely because of their graduate status, regardless of their income. It may also prove unpopular with universities since they would have no control over their income and would again be entirely reliant on the state to fund them.

But perhaps the biggest downside of the graduate tax is the length of time it would take to begin recouping money. The taxpayer would have to fund the system itself entirely until the first cohort of students graduated. Even then, since the percentage of income would likely be set at quite a low rate (reflecting the unlimited years of repayment), it would take several years after this to start recouping sufficient funds — meaning a likely "black hole" in finances to be filled in the short-term. This feature may be the ultimate reason why no other country in the world has adopted a graduate tax.

Table 1: Issues facing stakeholders

	Old System	Curent System	Browne	Graduate Tax
Students				
Debt aversion	None	Some	High	None
Financial aid	Low	Higher	Higher	Low
Simplicity	High	Average	Low	High
Graduates				
Debt risk	None	Some	High	None
Repayment	Regressive	Progressive	Progressive	Progressive
Repayment period	None	Limited	Limited	Unlimited
Repayment reflects costs?	No	Limited	Yes	No
Universities				
Control over cost	None	Limited	Full	None
Control over places	None	Full	Full	None/Some
Reliance on state	Full	Some	Low	Full
State				
Popularity	?	?	?	?
Cost	High	Low	Low	High in SR
Administrative burden	Low	Low	Higher	Highest
Brain drain	None	Some	Higher	Highest

Summary and Implications

The government is in a difficult position. There is little doubt that the current system is in great difficulty, and failing to act could result in the continued erosion of university quality, and potentially threaten the viability of some universities or courses. Socioeconomic gaps in access to HE may also widen in the face of less financial support.

University finances are rarely the priority of government — something that was clearly understood by the Blair administration of the late 1990s, who attempted to set up a new system which would allow universities to be less reliant on the state, while protecting access through generous levels of support. Successive governments have changed the parameters of this system but the key features of 2006 — no upfront tuition fees and income-contingent loans — remain in place. The current issues stem predominantly from a failure of government to increase fees and loans during years of heavy inflation (as well as, arguably, a failure of universities to plan ahead for the possibility of lean times), rather than due to a fundamental problem with the system's design. It, therefore, seems foolhardy to scrap the current system, whose principles of cost-sharing, and income-smoothing, are economically sensible.

If the government are to restore tuition fees in real terms, what should the correct level be? Browne pointed out that "There is no robust way of identifying the right maximum level of investment that there should be in higher education", so it is hard to say whether government should aim to restore fees to their 2012 level adjusted for current price levels. But just in the same way that constant change in regulation is bad for business investment, a lack of certainty over future income is bad for universities. Thus, whatever the chosen level of fees is, it should be index-linked, rather than being allowed to erode, and then be increased once a crisis beckons.

The most sensible option would, therefore, be to begin the process of restoring university and student finances towards their 2012 levels, and to ensure they are index-linked going forward. If a one-off increase is deemed too politically costly, the government could implement a phased return of fees and maintenance loans to 2012 levels, index-linking fees and student support going forward. Restoring maintenance grants for low-income students should be part of this strategy and, while expensive, would be politically popular, potentially cushioning the negative effects of fee increases.

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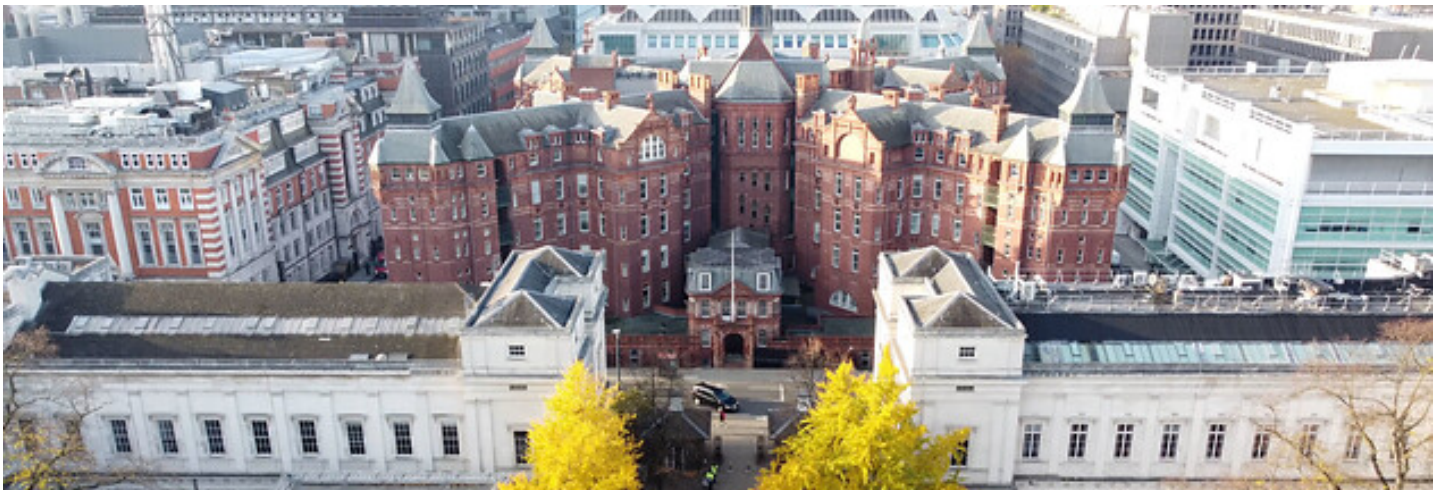

Prepared by: Gill Wyness & Richard Murphy

Contact for further information:
UCL Centre for Education Policy & Equalising Opportunities (CEPEO)
Gower Street, LONDON WC1E 6BT

Web: www.ucl.ac.uk/ioe/cepeo
Email: cepeo@ucl.ac.uk
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