



# FUNDING UNDERGRADUATES

Designing a fair market in Higher Education

Ian Mulheirn & Ryan Shorthouse



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## ABOUT THE AUTHORS

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Ian Mulheirn was appointed Director of the Social Market Foundation in October 2008. He joined the Social Market Foundation as the Chief Economist in February 2008, after three years as an economic advisor at HM Treasury. He has worked in a variety of policy areas including child poverty, savings & investment, welfare to work and higher education funding. He has also undertaken research into the drivers of worklessness in London and evaluation of the Working Tax Credit and the National Minimum Wage. He has a Masters degree in Economics from university College London and an undergraduate degree in Philosophy Politics and Economics from Oxford University.

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## SUMMARY

The SMF proposes that students are no longer charged upfront fees for undergraduate degrees, removing the need for them to take out tuition loans. Instead, tuition costs will be met by universities borrowing from Government and repaying their loans through the earnings of their graduates.

Graduates will pay a financial contribution through the Student Loans Company at a rate and above an income threshold set by government. Contributions will be paid up to a limit that is set by each university for its undergraduate courses. Graduates' contributions will cease once they reach the limit or after 25 years, whichever comes first.

To secure loans, universities will have to demonstrate that their graduates' earnings profiles are such that they can expect discounted contributions sufficient to repay the principal to government with interest. Implicitly, institutions will therefore have to set a Graduate Contribution Limit (GCL) such that their higher earning graduates subsidise their lower-earning alumni, and which take into account interest charged on institutions' loans.

Universities would compete for students on the basis of the contribution limit and the quality of the course offered, producing a market in higher education. Students would be protected from the risk of low lifetime earnings on graduation. Government would shed the entire cost of tuition loan subsidies.

This model meets the following key tests:

- Reduced public expenditure on HE;
- Maintain or increase funding to good institutions;
- Affordable access to HE for all potential students;
- A progressive solution with higher earning graduates paying more for their education than lower earning graduates;
- A market in HE, with varying graduate contributions.

## BACKGROUND

The fiscal crisis prompted the Head of the Civil Service to warn that expenditure on universities could reduce by 35% between 2011 and 2015<sup>2</sup>. The current student finance system, where the Government spends roughly 26p for every £1 subsidising student loans<sup>3</sup>, is therefore no longer viable, especially with demand for university growing. In the reforms to come, the principal aim will be to cut government spending on universities, while maintaining or increasing the quality of the student experience.

The 2006 system of student fees has been largely successful. Although a market in HE did not develop under the 2006 system, funding to universities rose<sup>4</sup> and participation in HE by students from lower socio-economic groups increased<sup>5</sup>. The broadening of participation was associated with the generous state subsidy for student finance, in the form of zero real interest rates on loans and complete debt forgiveness for graduates after 25 years. This removed the need for students to make any upfront payment for their tuition.

In the light of this experience, increasing or removing the tuition fee cap for students have been suggested as leading options for reform. But a further increase to the tuition fee cap now would be deeply problematic. As recent SMF work has shown, a rise in tuition fees would necessarily entail the loss of the student finance subsidy<sup>6</sup>. Otherwise, it would become unsustainably costly, with the subsidy increasing disproportionately due to the higher aggregate value of subsidised loans being distributed, and more of that debt being written off after 25 years. But the alternative of imposing a real rate of interest on student debt – likely to average around £32,000 on graduation if fees went to £7,000 per year – could mean that mid-earning graduates will pay around £15,000 more over their lifetimes than will those whose parents are sufficiently wealthy to pay fees on their children's behalf. Substantially higher fees would therefore be both unfair and likely to damage student access. Figure 1 shows the distributional effects of real student loan interest rates of 3% across the graduate cohort.

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<sup>2</sup> John Morgan, "The heat is on: official hints that cuts could rise to 35%", Times Higher Educational Supplement, 12<sup>th</sup> August 2010. <http://www.timeshighereducation.co.uk/story.asp?storycode=412956>

<sup>3</sup> Hansard, 10<sup>th</sup> November 2005, cWS63, Parliamentary Answer by Lord Andrew Adonis.

<http://www.publications.parliament.uk/pa/ld200506/ldhansrd/vo051110/text/51110-25.htm>

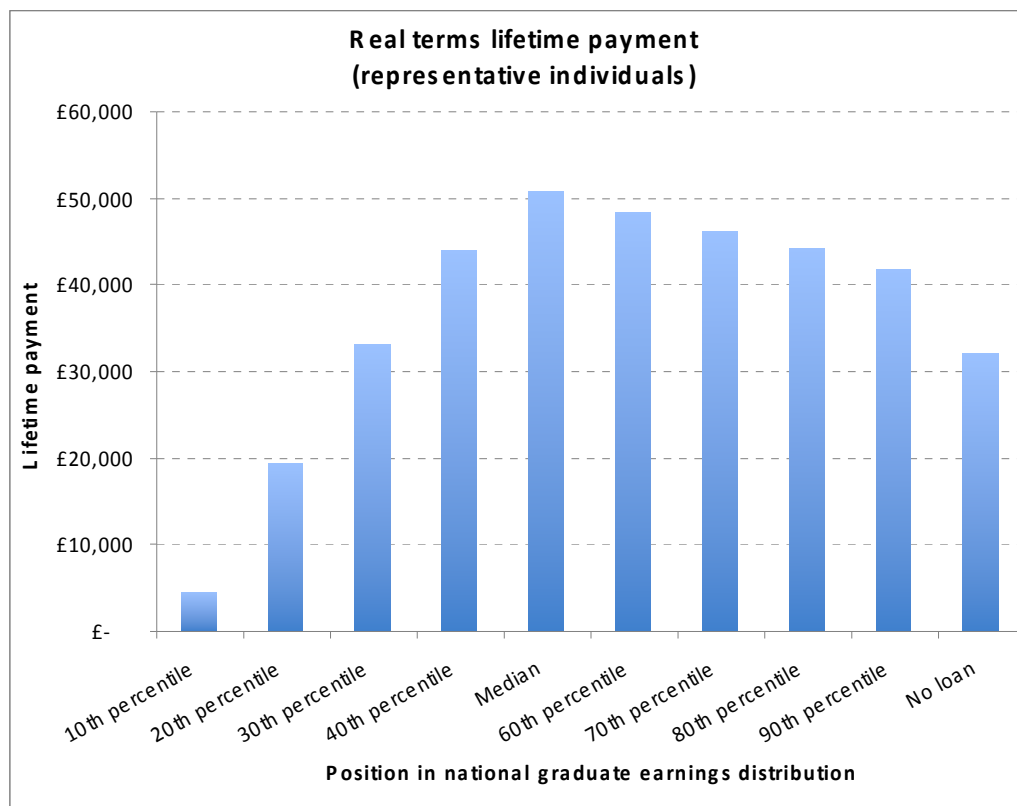
<sup>4</sup> Lorraine Dearden, Emla Fitzsimons, Alissa Goodman and Greg Kaplan, "Higher Education Reforms in England: The distributional effects and the shifting balance of costs", *The Economic Journal* (2008:118) F101

<sup>5</sup> Data from UCAS cited in Anna Fazackerley and Julian Chant, *More Fees Please? The future of university fees for undergraduate students* (London: Policy Exchange, 2010) 71.

<sup>6</sup> Social Market Foundation, "Higher Tuition Fees and Real Interest Rate to hit middle earners" (London: SMF, 2010)

<http://www.smf.co.uk/assets/files/20100913%20student%20loan%20subsidy%20analysis%20FINAL.pdf>

Figure 1: Graduate lifetime payments under a 3% real interest rate on the average student loan with £7,000 per year tuition fees, current system



Some have proposed that a graduate tax would be an effective solution to the distributional effects of higher fees. However, such an approach is undesirable. It would tie institutions to state funding, destroy the nascent market in HE that can drive more innovative and cost-effective delivery, and leave graduates with an open-ended liability to the state, unconnected to the quality of what they have consumed. The up-front costs of the system would also be prohibitive for the Treasury.

Ultimately, what is required is a system that has the following characteristics:

- Reduced public expenditure on HE;
- Maintain or increase funding to institutions;
- Affordable access to HE for all potential students;
- A progressive solution with higher earning graduates paying more for their education than lower earning graduates;
- A market in HE, with varying graduate contributions.



Whatever the new system looks like, it must entail graduates making a bigger financial contribution than they do at present. But these goals cannot all be achieved by simply shifting the cost of HE education to students in the form of higher fees without creating unfair outcomes and asking students to bear the financial risk associated with taking on a growing debt burden.

## DESCRIPTION OF PROPOSED SYSTEM

The SMF proposes a hybrid model of student finance, which takes elements of a tuition fee model and of a graduate tax approach. The system is characterised by shifting some of the risk for graduate outcomes onto universities – a form of payment by results.

### *Students/Graduates*

- For both full-time and part-time undergraduates, tuition fees are abolished. Students no longer face an up-front cost for an undergraduate degree.
- Prospective students are instead told that the cost of their degree will be met through a graduate tuition contribution, the maximum level of which is set by the institution of their choice. The payment terms for the contributions are set by government for all graduates at, for example, 4% of gross income in excess of £10,000 per year.
- The graduate contribution is limited to the lesser of: a maximum payment period of 25 years **OR** the Graduate Contribution Limit (GCL), specified by the institution at which the person studies. Graduates with more modest lifetime earnings will therefore not repay the full GCL and their payments will stop after 25 years.
- Students make their decision on which university to go to on the basis of the expected returns to the degree on offer and the GCL.
- Students still have the option to take out a loan for their maintenance or receive a maintenance grant. Maintenance loans will continue to receive the current level of subsidy but will be more heavily means tested. Repayment of these loans will be made alongside the graduate tuition contribution.

### *Universities*

- Universities borrow money from government at a real interest rate to cover two elements of cost: the government cost of borrowing and administrative costs of the system.
- To repay this loan, universities must specify a GCL that reflects the level of tuition funding they require, the earnings profile of their graduates and the repayment terms set by Government.
- The GCL is set at a level which takes into account the interest on the loans the university has borrowed and allows the contributions of the highest earners to cover the costs associated with lower-earners.
- The pricing power of different institutions will be directly related to the earning power of their graduates. Institutions that set an unrealistically high GCL, given alumni earning profiles, will not secure additional loans from government. It is therefore unnecessary to set a cap on the amount universities charge graduates.

- Universities will collect the money to repay their loans through the Student Loans Company, who will continue to collect payments from employees' monthly salaries, on the terms set by Government.

### *Government*

- Government no longer lends to students to pay for their tuition. Instead, it lends to institutions to fund up-front tuition costs.
- The components of the subsidy available in today's system - debt forgiveness after 25 years and zero real interest rates for student borrowers - are funded by higher earning graduates in the cohort rather than the state.
- Through charging the appropriate interest rate to universities – based on the graduate earnings profiles of different institutions - the system will operate at zero cost to the exchequer, hence saving the current £0.82bn tuition fee loan subsidy<sup>7</sup>.
- Government will continue to lend students a maintenance loan at current levels, providing a zero real interest rate and debt forgiveness after 25 years. However, means-testing will be extended to the full value of the loan rather than just 28% as at present<sup>8</sup>. This will yield further savings for the exchequer, the level of which would depend upon the repayment conditions applied.
- Government will still provide funding for universities through the (reduced) HEFCE Teaching Grant, to ensure that university courses deemed to be socially but not economically valuable can continue to thrive.
- Postgraduates tuition would be excluded from the system, and loans could be charged to postgraduate students at the government cost of borrowing.

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<sup>7</sup> To get the subsidy rate, see: Hansard, 10<sup>th</sup> November 2005, cWS63, Parliamentary Answer by Lord Andrew Adonis. <http://www.publications.parliament.uk/pa/ld200506/ldhansrd/vo051110/text/51110-25.htm>. To get the amount of tuition fee loans distributed, see The Student Loans Company, "Student support for higher education in England, Academic Year 2009/10 (Provisional)" (Glasgow: SLC, 2010) Table 2

<sup>8</sup> The Student Loans Company, "Student support for higher education in England, Academic Year 2009/10 (Provisional)" (Glasgow: SLC, 2010)

## DISTRIBUTIONAL IMPLICATIONS

Under the system proposed above, this hybrid model can be made to look more like a fee ('more market') or more like a graduate tax ('more progressive') according to the government's preferences. This is achieved by altering the graduate contribution payment terms:

- the income threshold;
- the payment rate; and
- the time limit after which graduate payments cease.

A low income threshold with a high payment rate for a long period ensures that all but the very lowest paid graduates will hit the GCL. This approach would make the hybrid look more like the current student loan system, since most graduates would reach the GCL. However, it would mean middle-income graduates paying substantially more over their lifetime for their undergraduate degree than under the current tuition fee system.

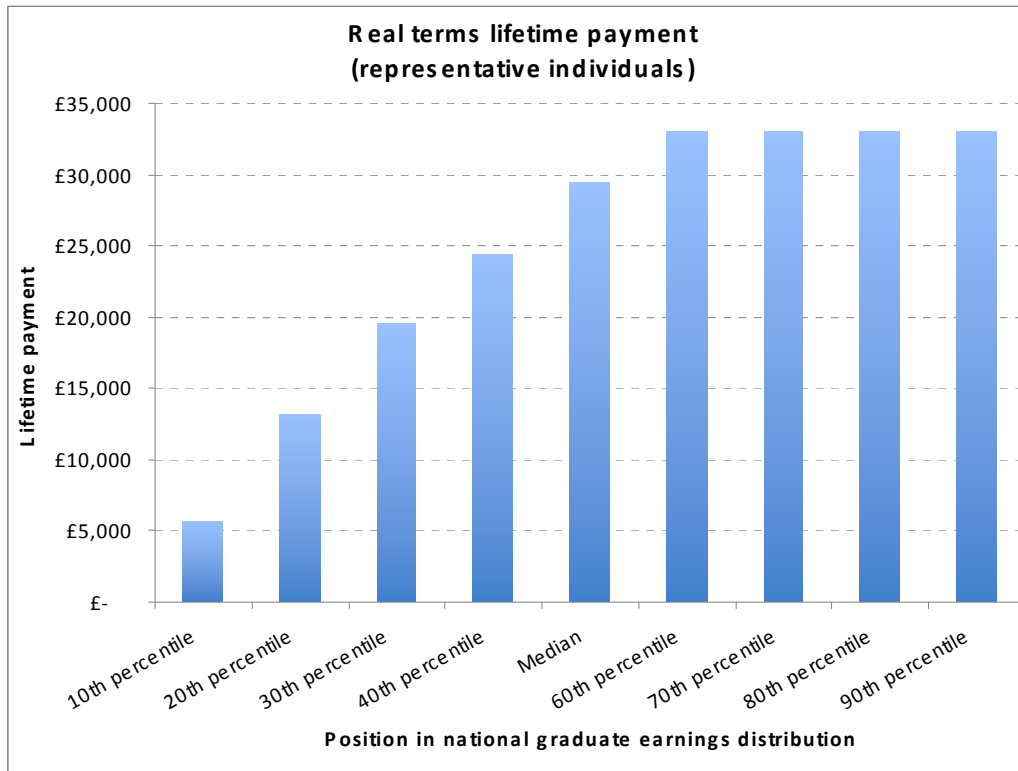
By contrast, a high income threshold with a low repayment rate for a short period would put more of the funding burden on the highest paid graduates, protecting low- and middle-income people. This approach would make the hybrid look more like a graduate tax, blunting market incentives, but making the system more progressive.

On reasonable parameters, the hybrid system effectively extends the level of protection available to lower earning graduates. In doing so, it also shifts the cost of borrowing and debt forgiveness from the exchequer and onto the graduate cohort. The highest paid graduates in the cohort then subsidise their lower-paid counterparts.

The following charts aim to illustrate the distributional effects of the SMF funding scheme for graduates from institutions of varying quality, according to where in the overall graduate earnings distribution they end up. The model uses data from the Labour Force Survey, from which graduate earnings trajectories have been derived assuming 2% real terms earnings growth.

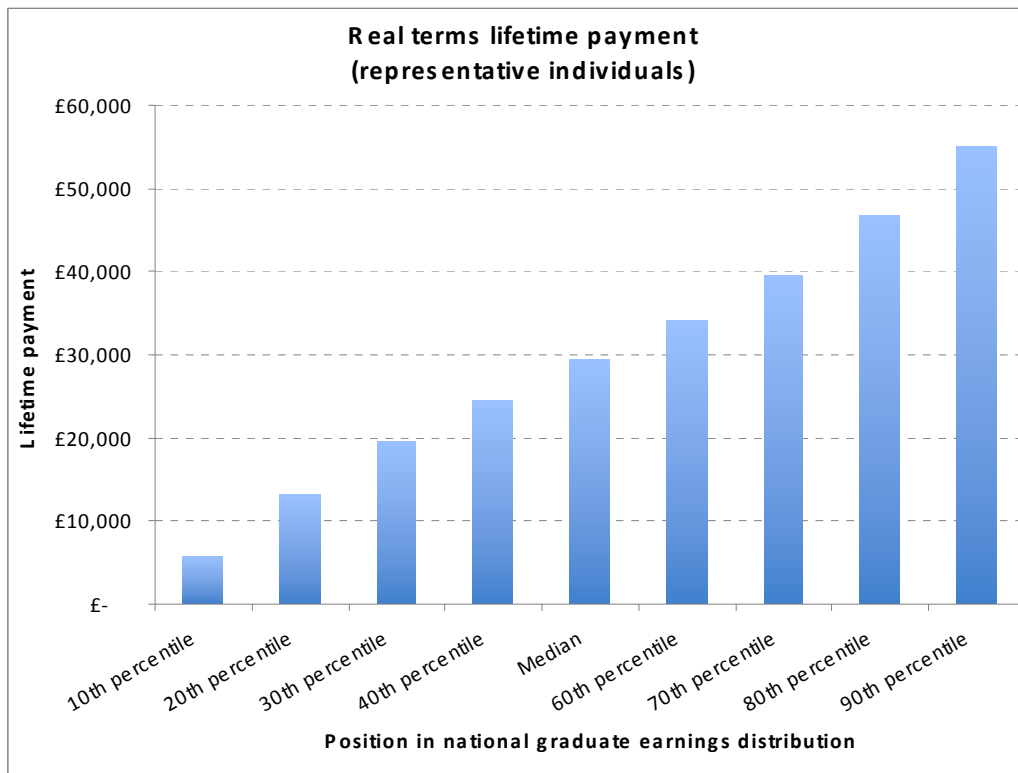
The first model, shown in Figure 2, involves a university producing a **representative cross-section** of graduate earners. In order to secure annual tuition funds of £6,000 per student, this university would need to set a GCL of £33,000. This means that graduates would repay at 4% over £10,000 until 25 years after graduation or until they had paid £33,000, when payments would cease.

Figure 2: GCL set at £33,000; repayment terms of 4% over £10,000 per year for up to 25 years; representative cross-section of graduates.



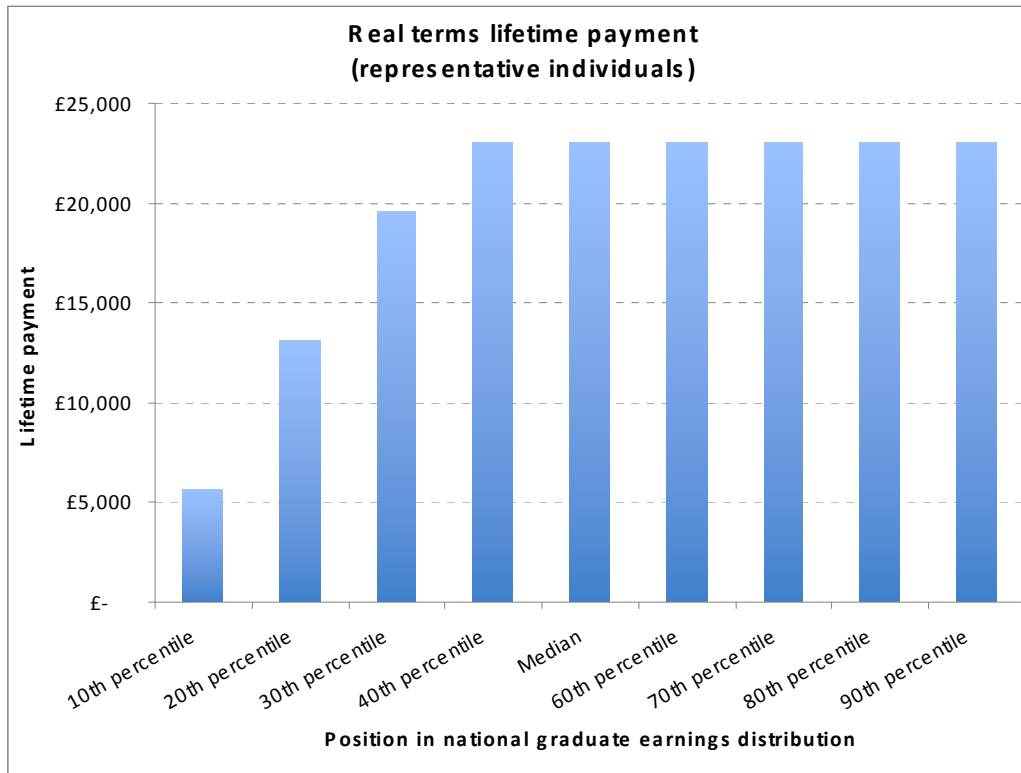
The second model, shown in Figure 3, involves a top university producing a disproportionate number of **high-earning graduates**, with some 40% of alumni earning in the top quarter of graduate salaries. In order to secure annual tuition funds of £9,000, this university would need to set a GCL of £55,000. Again, graduates would repay at 4% over £10,000 until 25 years after graduation or until they had reached the £55,000 limit.

Figure 3: GCL set at £55,000; repayment terms of 4% over £10,000 per year for up to 25 years; institution producing high earners.



The third model, shown in Figure 4, involves a less prestigious university producing a disproportionate number of relatively **low-earning graduates**, with two-thirds of alumni earning in the bottom half of graduate salaries. In order to secure annual tuition funds of £5,000, this university would need to set a GCL of £23,000. Again, graduates would repay at 4% over £10,000 until 25 years after graduation or until they had reached the £23,000 limit.

Figure 4: GCL set at £23,000; repayment terms of 4% over £10,000 per year for up to 25 years; institution producing low earners.



## HOW WELL DOES THE HYBRID SYSTEM MEET THE GOVERNMENT'S POLICY GOALS?

The hybrid model described above combines the best elements of the fees and graduate tax funding options, while limiting their negative aspects.

### *Reduced cost of HE to the taxpayer*

Under the SMF model, the cost of borrowing from Government to institutions would be set such that the state provides no subsidy. Instead, the subsidy to cover the cost of borrowing and that of lower lifetime earners, universities set a GCL, so higher-paid graduates contribute more than the direct cost of their education. This would save the exchequer £0.8bn in tuition loan subsidies.

To further reduce expenditure on maintenance loan subsidies, the Government should move to means-test the entire maintenance loan rather than just 28% of it, as at present. This would prevent the common practice of students arbitraging subsidised maintenance loans they do not need<sup>9</sup>. How much would be saved from better targeting of maintenance loans would depend upon the repayment terms set.

### *Maintaining or increasing HE funding overall*

Even with cuts to direct BIS funding, the SMF hybrid model opens up the possibility that universities with strong graduate earnings profiles will be able to maintain and increase their overall funding through the graduate contribution. This is paying universities on the results they achieve for their graduates and the wider economy. Good universities will thrive under the hybrid system.

### *Widening HE access*

As with the tuition fee and subsidised loan system introduced in 2006, under the SMF model students do not have to pay tuition costs up-front. This ability to access HE free at the point of use, and without the prospect of a growing real debt burden on graduation, has led to increased participation among the most deprived groups. The hybrid model would see this trend continue. By contrast, a real interest rate imposed on a substantially larger up-front fee level would deter students unsure of the return on their investment.

Further, in removing the notion of up-front fees, the system effectively banishes the idea that the affordability of HE is contingent on parental ability to pay.

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<sup>9</sup> Nicholas Barr and Alison Johnston, "Interest Subsidies on Student Loans: A Better Class of Drain" (London: London School of Economics, 2010) 5.



### ***A progressive formula***

The system is progressive in the sense that the highest-earners pay the maximum amount. Those doing so effectively subsidise the lower contributions made by lower-earning graduates. Consequently, students effectively share some of the risk associated with their decision to go to university with other students, but not with the taxpayer.

### ***A more competitive market in HE***

The hybrid system allows institutions to compete on the level of their GCL. This will ultimately be fairer for students, since institutions delivering better returns will be able to charge their graduates more. Graduates attending low-performing universities will no longer pay the same as those attending high-performing universities.

Universities that do not demonstrate significant returns for their graduates will be unable to secure high loans from Government. This could pose funding problems for some universities. The Teaching and Research Grant is available to support courses that are deemed to carry a social benefit but that do not derive high returns in the labour market. But universities offering courses of mainly private benefit but which do not deliver adequate returns for their graduates should be allowed to fail.

## DELIVERY ISSUES

### *Is university lending off the government's books?*

Unlike a graduate tax, which would entail an unaffordable upfront cost to the exchequer, loans to universities would count as financial transactions and would therefore not be reported in the public finances.

Government lending to institutions is effectively a modification of the existing student loan arrangements, where only the subsidy cost of student loans scores as an exchequer cost. In shifting the borrowing from students to institutions, with the graduate contribution continuing to be collected through the SLC, this arrangement should be unaltered. Since the effective interest rate charged by government rises to cover all loan costs, the hybrid system completely removes any tuition cost from the exchequer from day one.

### *Could another source other than government provide loans?*

It would be possible for commercial loan providers to provide funds to universities. But this would mean a higher rate of interest, which would push up the GCL. Government may also need to subsidise universities that cannot justify adequate loan amounts because they have under-developed graduate earning profiles.

### *Will universities skew their selection towards likely higher earners (e.g. men rather than women)?*

This could be overcome through regulation of the admissions process by the Office for Fair Access.

### *Will universities ignore courses that are socially beneficial but deliver little economic returns?*

To the extent that this is the case, there is a role for government subsidy for certain courses or institutions through HEFCE tuition funding.

### *Will less prestigious universities be penalised with an inability to secure substantial loans from Government?*

Institutions will be able to secure upfront loans from government to the extent that they can demonstrate value-added through high graduate earnings. Where institutions' graduates tend to earn little, they will be unable to secure significant sums of money and may become financially

unviable. If this makes them financially unviable, and subject to the 'socially beneficial' test, they should be allowed to fail.

***Won't graduates from low-income backgrounds pay more per month for the cost of going to university by repaying their maintenance loan and paying their GCL?***

Yes. But Government sets the terms of the payment rates for the two elements. It will do so at a total rate which is not punitive.

***Why is it fair that an individual taking a course which leads to a lower return faces the same GCL as an individual taking a different course which leads to higher returns at the same university?***

They will be protected by the suspension of graduate contributions after 25 years if they do not receive substantial returns through their earnings. But universities could decide to offer differing GCL's for different courses if they wanted.

## ANNEX 1 - COSTS

*Table 1: Government savings*

Expenditure	Status in SMF model	Amount (10/11)
Maintenance grants & other non-repayable allowances (based on 2009-10) <sup>10</sup>	Remains	£1.12 billion
Subsidy on maintenance loan (based on 2009-10) <sup>11</sup>	Remains – perhaps slightly reduced	21% of £2.7 billion = £0.57bn
Subsidy on Tuition Fee loan (based on 2009-10)	Removed	33% of £2.47 billion = £0.82bn
HEFCE Teaching <sup>12</sup>	Remains (but reduced)	£5.31bn
HEFCE Research and other <sup>13</sup>	Remains	£2.05bn
Additional funding <sup>14</sup>	Remains	£0.17bn
Tuition fee grants (based on 2009-10) <sup>15</sup>	Remains	£0.08bn
Total HE expenditure 10/11		£9.86bn
SMF model expenditure		£9.04bn (8.3% reduction)

Assuming government wants to reduce total HE expenditure by 35% by 2014, this implies a total reduction of around £3.45bn. Cutting the tuition fee loan subsidy reduces the needed savings to £2.63bn. This represents a 49.5% cut in the HEFCE tuition grant.

HEFCE grants to institutions vary according to the cost of tuition across different subjects. There are four price groups: A, B, C and D. For a student on a course in HEFCE price group:

<sup>10</sup> The Student Loans Company, “Student support for higher education in England, Academic Year 2009/10 (Provisional)” (Glasgow: SLC, 2010) Table 2

<sup>11</sup> The Student Loans Company, “Student support for higher education in England, Academic Year 2009/10 (Provisional)” (Glasgow: SLC, 2010) Table 2

<sup>11</sup> To get the subsidy rate, see: Hansard, 10<sup>th</sup> November 2005, cWS63, Parliamentary Answer by Lord Andrew Adonis. <http://www.publications.parliament.uk/pa/ld200506/ldhansrd/vo051110/text/51110-25.htm>. To get the amount of tuition fee loans distributed, see The Student Loans Company, “Student support for higher education in England, Academic Year 2009/10 (Provisional)” (Glasgow: SLC, 2010) Table 2

<sup>12</sup> Letter to HEFCE from Rt Hon Dr Vince Cable MP and Rt Hon David Willetts MP, 24 June 2010. <http://www.hefce.ac.uk/news/HEFCE/2010/grant1011/revise.htm>

<sup>13</sup> Ibid.

<sup>14</sup> Ibid.

<sup>15</sup> The Student Loans Company, “Student support for higher education in England, Academic Year 2009/10 (Provisional)” (Glasgow: SLC, 2010) Table 2

- A, a 49.5% cut would represent a reduction of £7,175 in the current level of support, which stands at £14,494. Currently around 2.5% of courses are in this bracket.
- B, a 49.5% cut would represent a reduction of £2,676 in the current level of support, which stands at £5,407. Currently around 18.5% of courses are in this bracket.
- C, a 49.5% cut would represent a reduction of £1,894 in the current level of support, which stands at £3,826. Currently around 42% of courses are in this bracket.
- D, a 49.5% cut would represent a reduction of £1,307 in the current level of support, which stands at £2,641. Currently around 37% of courses are in this bracket.<sup>16</sup>

So a university producing graduates with a representative set of lifetime earning trajectories, and teaching a representative mix of price groups A, B, C and D, the average loss in funding per student would be around £1,953 per student per year.<sup>17</sup> Does the hybrid system allow this representative university to recover the shortfall?

**Table 2: Representative university funding**

Income	Current average funding per student, per year	New funding per student
HEFCE Teaching and Research Grant assuming university teaches representative mix of price A, B, C and D courses	£3,946	£1,993
Tuition Fees	£3,290	nil
Government loan backed by graduate contribution (See Figure 2)	nil	£6000
Total	£7,236	£7,993

Table 2 shows that, on the assumptions made for a representative university in Figure 2, the hybrid funding model would bring in around £6,000 per student per year. This would more than offset the cut to the average HEFCE teaching and research grant. However, this outcome depends upon the earnings of institutions' graduates. Good universities will be able to charge more and poor ones less.

<sup>16</sup> HEFCE, *Guide to funding: how HEFCE allocates its funds* (HEFCE: Edge Hill University, 2010) 33.

<sup>17</sup> *Ibid.*, 31

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Since the Conservatives and Liberal Democrats formed a Coalition Government in May 2010, how we finance undergraduate tuition in the face of growing demand, global competition and public sector retrenchment has remained a sensitive political issue.

In this publication, the Social Market Foundation outlines a new funding model which takes the best of two existing proposals – tuition fees and a graduate tax – to build a system that creates a fair market for students and universities alike. This model ensures that access to university remains affordable for all, reduces public expenditure on the HE sector, and maintains university revenues, despite public spending cuts, for those institutions that deliver good returns for their graduates. Most importantly, the hybrid model represents a progressive system where higher-earning graduates pay more than lower-earning graduates, while creating a market that rewards institutions that deliver benefits for graduates and employers.