

Proceed with Caution

Estimating the costs associated with the student support offer



LE
London
Economics

3rd July 2018

Ms Maike Halterbeck and Dr Gavan Conlon

Our model of the **Higher Education funding system** estimates:

- The impact of the system on the **Exchequer, institutions and graduates**, for:
 - the **2017/18 cohort of first-year English-domiciled students (studying anywhere in the UK), and EU-domiciled students studying in England;**
 - **full-time and part-time students, and**
 - **all undergraduate qualifications (including first degrees and other undergraduate qualifications below first degree level).**
 - A range of **metrics** (in NPV in constant 2017/18 prices), including:
 - **The RAB charge, student loan debt on graduation, and expected lifetime loan repayments;**
 - **Total Exchequer costs including the cost of student support and Teaching Grant funding to institutions across the UK;**
 - **HEI funding in terms of tuition fee income (net of bursaries) and Teaching Grant funding from the Exchequer.**
-
- What are the **key problems with the current system?**
 - Are there any **potential alternatives?**

What are the key problems with the current system?



Limited economic growth

1

- Long run economic growth – and graduate salaries – are anaemic. The system would not be so costly if economic growth was consistently stronger.
- If average earnings growth was **1 percentage point per annum higher**, the expected Exchequer cost of the current HE funding system would decline by **£750 million** per cohort.

£8.49bn

Current Exchequer cost per cohort of HE funding system (with OBR earnings growth assumptions)



£7.74bn

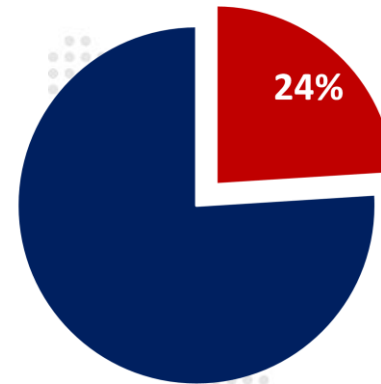
Cost per cohort of HE funding system with an additional 1 percentage point annual graduate salary growth

Narrow repayment base

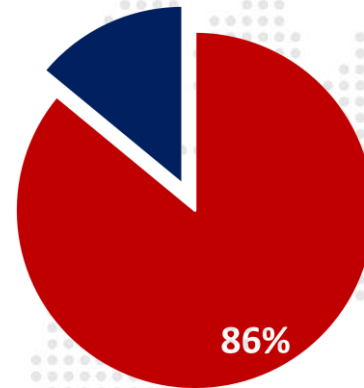
2

- Related to low earnings growth, **the loan repayment base is weak.** Not enough graduates repay any component of their student loan.
- **Almost a quarter** of full-time first degree students **don't repay *any* of their loan balance, and 86% never repay the *full* loan balance over the 30 year repayment period.**

Of full-time first degree students:



24% never
repay
anything



86% never
repay their
full loan

Political capture

3

- The current funding system is **too easily** and **quickly** manipulated.
- The decision to increase the repayment threshold to £25,000 was **hugely expensive** – increasing the cost of student support by 50% (£2.85bn) per cohort – and has resulted in much more **limited room for manoeuvre**.

£5.64bn

Cost per cohort of HE funding system with £21,000 threshold (and associated interest rate thresholds)



£8.49bn

Cost per cohort of HE funding system with £25,000 threshold (and associated interest rate thresholds)

Target chasing

- 4
- The current funding system is **targeting the wrong metrics**.
 - Policies have been implemented based on evocative – but **simplistic** – measures, such as the deficit.
 - The **wrong policies** have been implemented in an effort to impact the deficit (e.g. removal of NHS Bursaries), but these have **real-world impacts** (i.e. they are not just **fiscal illusion**).

71%

Increase in price of studying nursing and subjects allied to medicine following removal of NHS Bursaries

22%

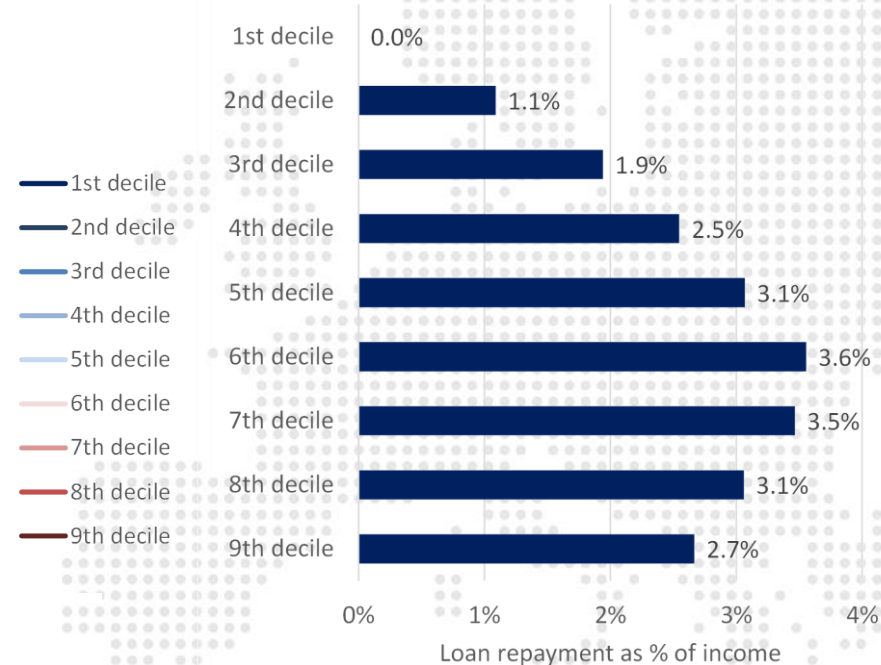
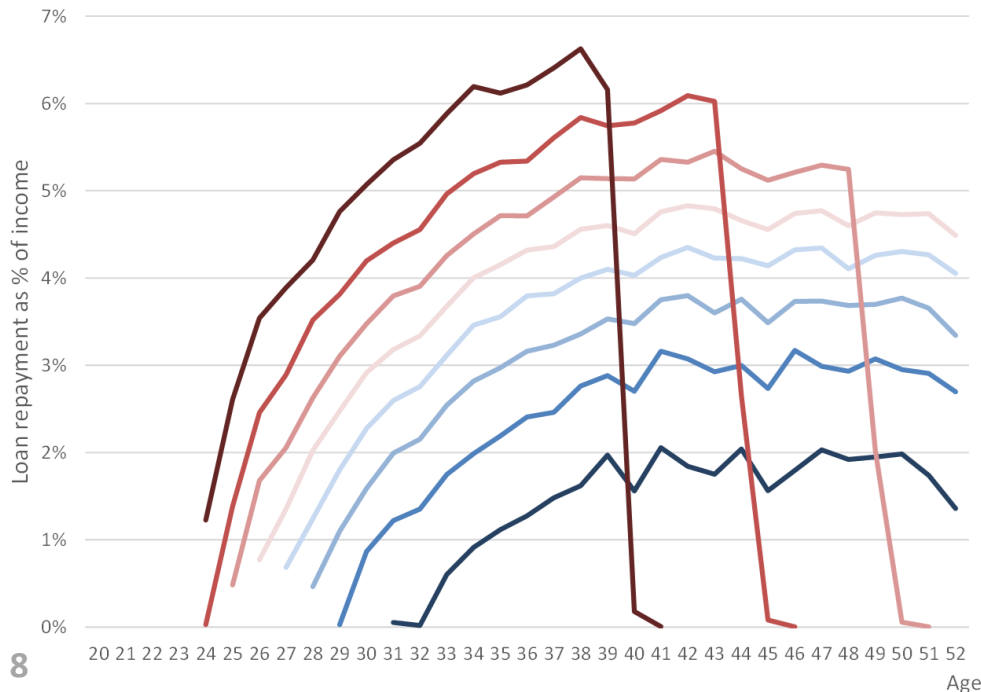
Decline in applications for nursing and subjects allied to medicine following removal of NHS Bursaries

Lack of progressivity

5

- A large proportion of graduates face a **9% marginal tax rate** for most of the 30 year repayment period (with a **51% marginal tax rate** in many circumstances).
- Over the **entire repayment period**, the system lacks **progressivity** – with mid earners repaying more (as a % of their income) than high earners.

Loan repayments as % of income, male undergraduate degree students:



Are there any potential alternatives?



Impact of current system on the Exchequer, HEIs and students

Resource flows	Amount (£)
----------------	------------

Exchequer

Cost of maintenance grant	£0m
Cost of maintenance loan	(£2,728m)
Cost of tuition fee loan	(£4,469m)
Cost of teaching grants	(£1,294m)
Total	(£8,491m)

RAB Charge	45.1%
-------------------	--------------

HEI income

Gross fee income	£9,985m
Teaching grant income	£1,294m
Cost of bursary provision	(£191m)
Total	£11,087m

Net HEI resource per student p.a.	£8,800
--	---------------

Students

Ave. debt on graduation (FTUG)	£46,000
---------------------------------------	----------------

£7.20bn

**Cost per cohort of student support with
£25,000 threshold (and associated
interest rate thresholds)**

£1.29bn

**Cost per cohort associated with
Teaching Grant**

Note: All monetary values have been discounted to net present values (using standard HMT Green Book discount rates), and are presented in constant 2017/18 prices. All monetary values per student have been rounded to the nearest £100. Debt on graduation and expected lifetime repayments per student are presented for full-time undergraduate degree students only. Gross fee income refers to fee income before the deduction of fee bursaries provided to students.

Impact of current system on the Exchequer, HEIs and students

Resource flows	Amount (£)
----------------	------------

Exchequer

Cost of maintenance grant	£0m
Cost of maintenance loan	(£2,728m)
Cost of tuition fee loan	(£4,469m)
Cost of teaching grants	(£1,294m)
Total	(£8,491m)

RAB Charge	45.1%
-------------------	--------------

HEI income

Gross fee income	£9,985m
Teaching grant income	£1,294m
Cost of bursary provision	(£191m)
Total	£11,087m

Net HEI resource per student p.a.	£8,800
--	---------------

Students

Ave. debt on graduation (FTUG)	£46,000
---------------------------------------	----------------

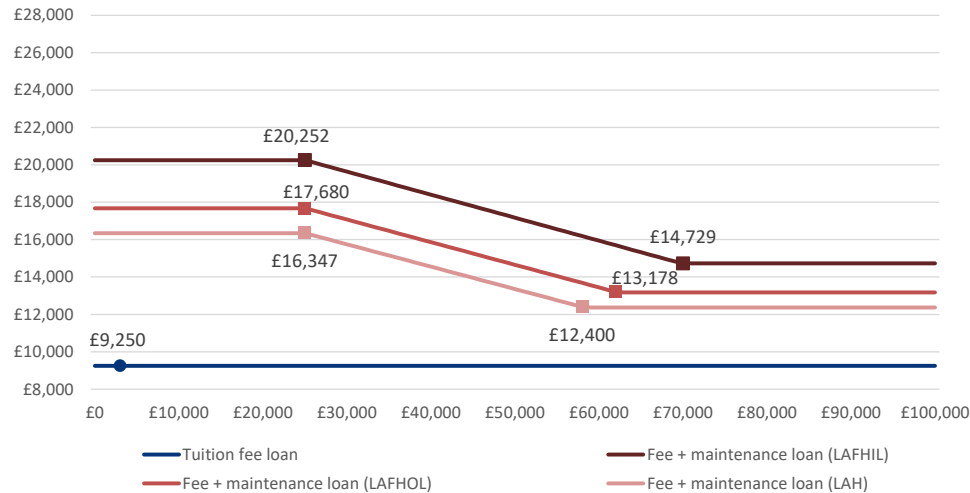
45%
RAB charge

86%
**of full-time first
degree graduates
never fully repay**

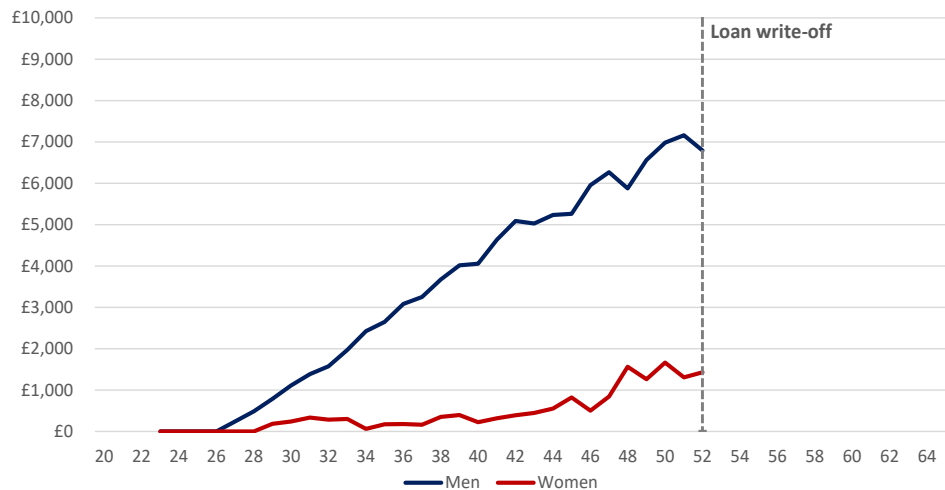
Note: All monetary values have been discounted to net present values (using standard HMT Green Book discount rates), and are presented in constant 2017/18 prices. All monetary values per student have been rounded to the nearest £100. Debt on graduation and expected lifetime repayments per student are presented for full-time undergraduate degree students only. Gross fee income refers to fee income before the deduction of fee bursaries provided to students.

Impact of current system on the Exchequer, HEIs and students

Maximum funding per student per year:



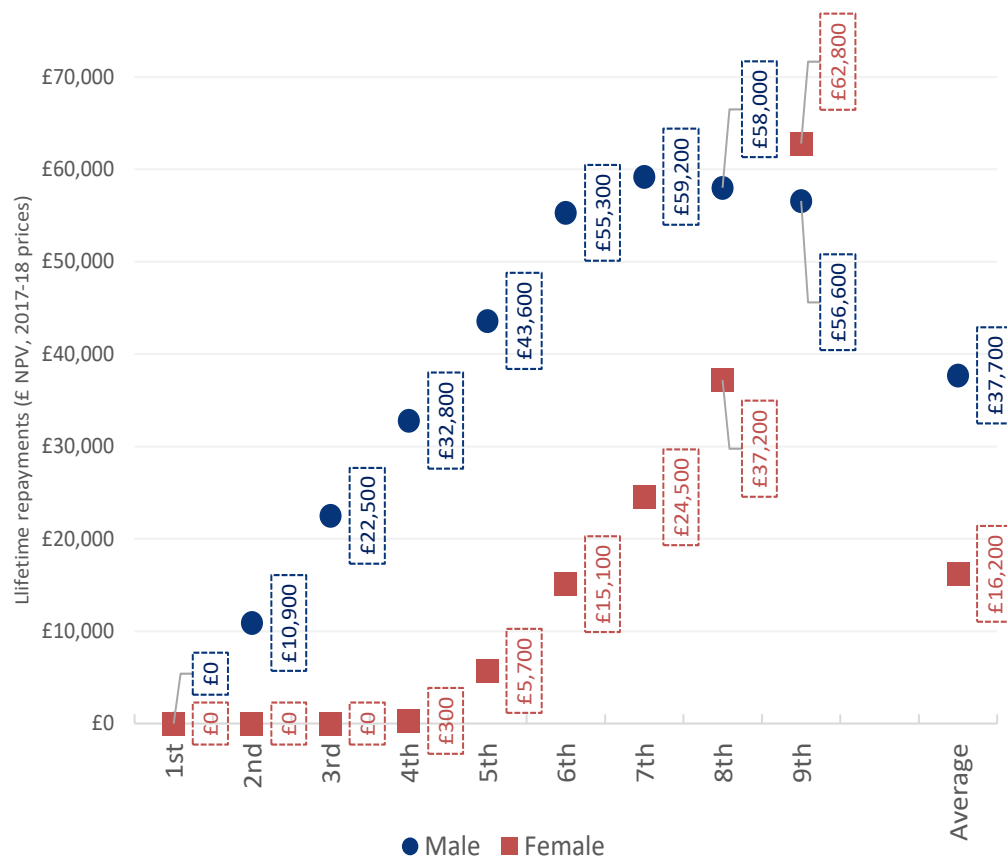
Loan repayment by graduates on 5th decile (age/gender):



The current system offers up to **£20,252** in student support per student per year – entirely provided through loans.

Impact of current system on the Exchequer, HEIs and students

Graduate lifetime loan repayments – full-time undergraduate degrees (by decile and gender)



Average loan repayments are

£37,700

for men and

£16,200

for women

(FT UG Degrees).

Note: All monetary values have been discounted to net present values (using standard HMT Green Book discount rates), and are presented in constant 2017/18 prices. All monetary values per student have been rounded to the nearest £100. Debt on graduation and expected lifetime repayments per student are presented for full-time undergraduate degree students only. Gross fee income refers to fee income before the deduction of fee bursaries provided to students.

Are there any alternatives?

Re-introduction of maintenance grants for full-time and part-time students – but at Diamond Review levels

➔ **+£3.05bn**
Max: £8,192 (LAFHOL) (£25k-£62k taper);
partially reduced loans;
PT pro-rata study intensity

Reducing the repayment threshold to personal tax free allowance level (£11,850), and halving the repayment rate

➔ **-£2.18bn**
Repayment threshold: £11,850
Repayment rate: 4.5%

Extending the repayment period to 40 years

➔ **-£1.71bn**
Repayment period: 40 years

Increasing max. real interest rate to 4%, but 0% on first £10,000 taxable income

➔ **-£0.55bn**
Maximum real interest rate to 4%
0% < £21,850; 4% > £45,000

Cancellation of maintenance loan interest accrued during study (£1,300 for FT UGs) on first repayment

➔ **+£0.49bn**
Partial loan cancellation

**Total
reduction
in long
run HMT
cost per
cohort:
-£0.90bn**

Impact of possible alternatives on the Exchequer, HEIs and students

Resource flows	Current	Proposals	Diff.
----------------	---------	-----------	-------

Exchequer

Cost of maintenance grant	£0m	(£4,396m)	(£4,396m)
Cost of maintenance loan	(£2,728m)	(£758m)	£1,971m
Cost of tuition fee loan	(£4,469m)	(£1,141m)	£3,328m
Cost of teaching grants	(£1,294m)	(£1,294m)	£0m
Total	(£8,491m)	(£7,589m)	£902m

RAB Charge	45.1%	12.3%	-32.8 pp
-------------------	--------------	--------------	-----------------

HEI income

Gross fee income	£9,985m	£9,985m	£0m
Teaching grant income	£1,294m	£1,294m	£0m
Cost of bursary provision	(£191m)	(£191m)	£0m
Total	£11,087m	£11,087m	£0m

Net HEI resource per student p.a.	£8,800	£8,800	£0
--	---------------	---------------	-----------

Students

Ave. debt on graduation (FTUG)	£46,000	£39,400	(£6,600)
---------------------------------------	----------------	----------------	-----------------

£6.29bn

Cost per cohort of student support with alternatives

£1.29bn

Cost per cohort associated with Teaching Grant

Note: All monetary values have been discounted to net present values (using standard HMT Green Book discount rates), and are presented in constant 2017/18 prices. All monetary values per student have been rounded to the nearest £100. Debt on graduation and expected lifetime repayments per student are presented for full-time undergraduate degree students only. Gross fee income refers to fee income before the deduction of fee bursaries provided to students.

Impact of possible alternatives on the Exchequer, HEIs and students

Resource flows	Current	Proposals	Diff.
Exchequer			
Cost of maintenance grant	£0m	(£4,396m)	(£4,396m)
Cost of maintenance loan	(£2,728m)	(£758m)	£1,971m
Cost of tuition fee loan	(£4,469m)	(£1,141m)	£3,328m
Cost of teaching grants	(£1,294m)	(£1,294m)	£0m
Total	(£8,491m)	(£7,589m)	£902m
RAB Charge			
	45.1%	12.3%	-32.8 pp
HEI income			
Gross fee income	£9,985m	£9,985m	£0m
Teaching grant income	£1,294m	£1,294m	£0m
Cost of bursary provision	(£191m)	(£191m)	£0m
Total	£11,087m	£11,087m	£0m
Net HEI resource per student p.a.			
	£8,800	£8,800	£0
Students			
Ave. debt on graduation (FTUG)	£46,000	£39,400	(£6,600)

12%

RAB charge

80%

Proportion of full-time first degree graduates that never repay their full loan

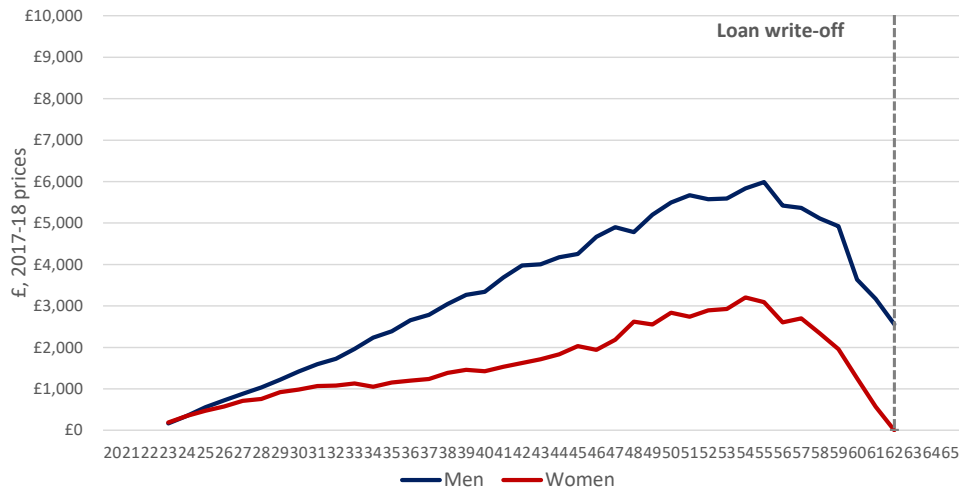
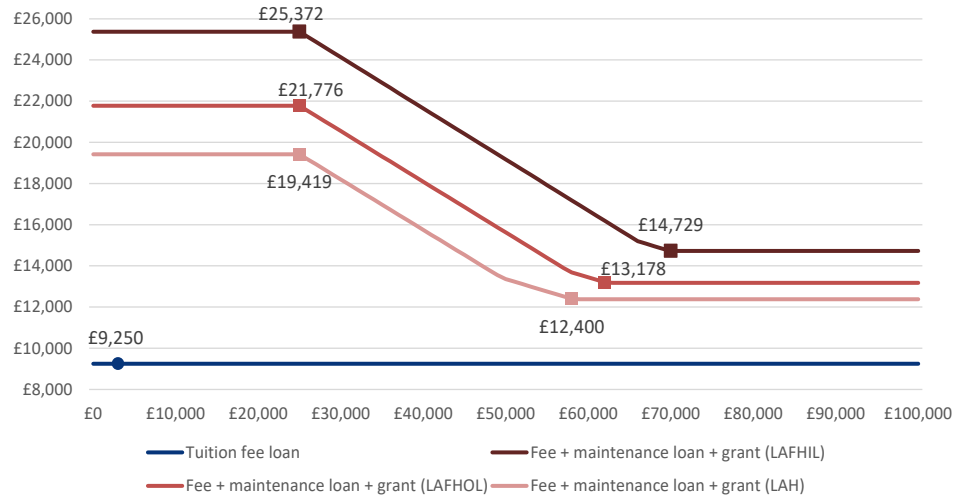
0%

Proportion of full-time first degree graduates that never repay anything

Note: All monetary values have been discounted to net present values (using standard HMT Green Book discount rates), and are presented in constant 2017/18 prices. All monetary values per student have been rounded to the nearest £100. Debt on graduation and expected lifetime repayments per student are presented for full-time undergraduate degree students only. Gross fee income refers to fee income before the deduction of fee bursaries provided to students.

Impact of possible alternatives on the Exchequer, HEIs and students

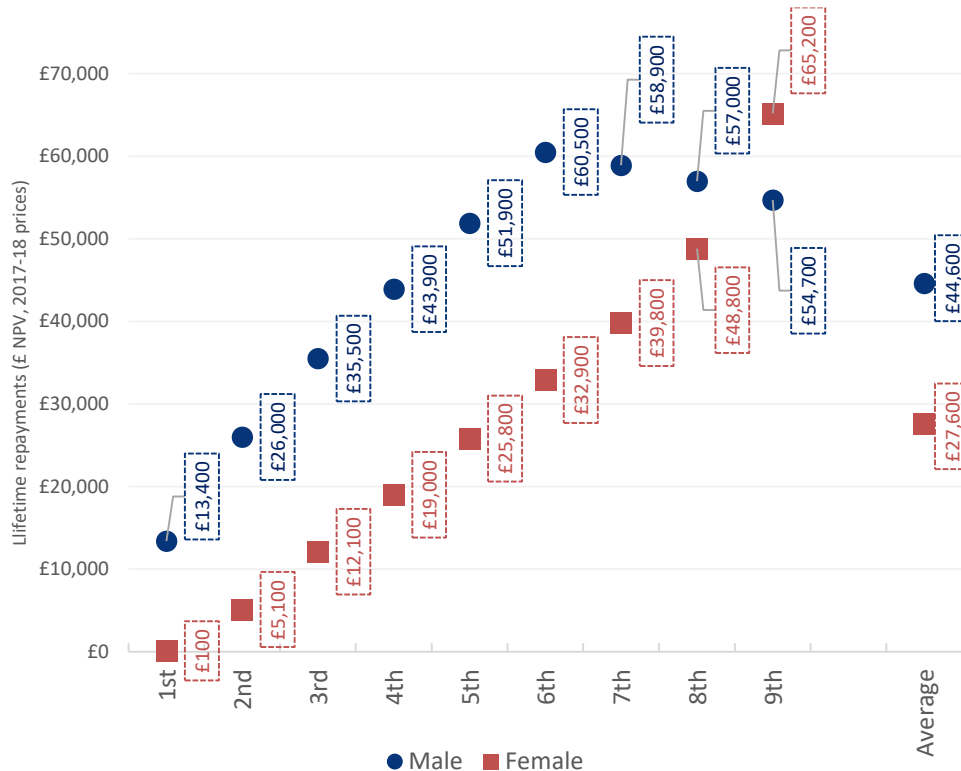
Alternative approach offers up to **£25,372** in student support per student per year - through grants and loans.



Note: All monetary values have been discounted to net present values (using standard HMT Green Book discount rates), and are presented in constant 2017/18 prices. All monetary values per student have been rounded to the nearest £100. Debt on graduation and expected lifetime repayments per student are presented for full-time undergraduate degree students only. Gross fee income refers to fee income before the deduction of fee bursaries provided to students.

Impact of possible alternatives on the Exchequer, HEIs and students

Graduate lifetime loan repayments – full-time undergraduate degrees (by decile and gender)



Average loan repayments are
£44,600
for men and
£27,600
for women
(FT UG Degrees).

Note: All monetary values have been discounted to net present values (using standard HMT Green Book discount rates), and are presented in constant 2017/18 prices. All monetary values per student have been rounded to the nearest £100. Debt on graduation and expected lifetime repayments per student are presented for full-time undergraduate degree students only. Gross fee income refers to fee income before the deduction of fee bursaries provided to students.

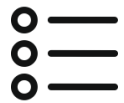
Dr Gavan Conlon, Partner, London Economics
020 3701 7703, gconlon@londecon.co.uk

Ms Maike Halterbeck, Senior Economic Consultant, London Economics
020 3701 7724, mhalterbeck@londecon.co.uk

 @LE_Education

Supplementary Information

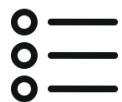




Overview and scope of model

- This presentation provides a model of a number of possible scenarios for amending the current English higher education student support arrangements. In particular, we consider:
 - The **re-introduction of maintenance grants** (previously available to first-year students starting their qualifications in 2015/16), as well as a number of variations in terms of levels and eligibility;
 - Changes in the **repayment threshold** and **interest rate thresholds**;
 - Changes in the **interest rate** associated with student loans; and
 - Specific repayment subsidies for different predominantly **public sector professions**.
- The model estimates the aggregate impact on the Exchequer, institutions and students/graduates for:
 - the **2017/18 cohort** of first-year undergraduate **English-domiciled students (studying anywhere in the UK), and EU-domiciled students studying in England**;
 - **full-time and part-time students**, as well as
 - **'other' undergraduate qualifications** below first degree level.
- The model estimates a range of **metrics** associated with the HE funding system, including:
 - The **RAB charge**, **student loan debt on graduation**, and expected **lifetime loan repayments** (by income decile);
 - **Total Exchequer costs** including the **cost of student support** and **Teaching Grant** funding to institutions across the UK;
 - **HEI funding** in terms of **tuition fee income** (net of bursaries) and **Teaching Grant** funding from the Exchequer.

All of these measures have been discounted to reflect **net present values**, and are presented in **constant 2017/18 prices**. Full details of the underpinning assumptions are presented in the supplementary Annex.



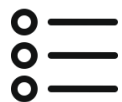
Assumptions and methodology

Student profile

- The model considers the total number of full time and part time English domiciled first year students undertaking higher education qualifications at any institution in the UK. In addition, all EU students engaged in undergraduate education studying in English HEIs are also included. We have applied various changes to HE fees and funding arrangements based on the most recent HESA data relating to the 2016-17 cohort comprising **491,075** students (**466,265** English and **24,810** EU domiciled students; **388,855** full-time and **102,220** part-time).
- Amongst full-time students, **95%** are undertaking first degrees (**33%** part-time), with **2%** engaged in Other HE (**59%**), **1%** HNCs/HNDs (**3%**), and **2%** Foundation degrees (**5%**).
- Part-time students are estimated to study at **40% FTE**
- Estimated continuation rate was estimated to be **92.6%** for full-time students and **82.3%** for part-time students
- Based on HESA data, to determine the size of maintenance loans received, first year students are categorised by gender, location of study, study intensity and living arrangements whilst in study. We assume that all students take out the maximum available loan to which they are entitled, and we base eligibility for loans using information from SLC Statistical First Releases on the proportion of students that were previously in receipt of full or partial maintenance grants. For example, the average maintenance loan received by a full-time first degree undergraduate student stands at **£6,538** per student per year.

Student profile

- The average gross tuition fee in 2017-18 is **£9,250**, but as a result of Access agreements and the provision of bursaries and fee waivers by HEIs, the net tuition fee is lower (**£9,101**). Based on average study intensity, the average part-time tuition net tuition fee was estimated to be **£3,607** per annum. We have assumed that fees do not increase over the duration of students' courses.
- We have modelled loan eligibility – by location of study (i.e. Living at Home (**21%** (full-time students)), Living away from home outside of London (**67%**), and Living away from home in London (**12%**)) - using the current thresholds provided by Student Finance England
- All analyses are undertaken by gender. For those individuals undertaking Other HE on a full-time basis, the gender split is **48/52**, with the corresponding estimates for HNCs/HNDs, Foundation Degrees and undergraduate degrees standing at **53/47**, **40/60**, and **42/58** respectively
- The average age of enrolment for full time students undertaking Other HE, HNCs/HNDs, Foundation Degrees and undergraduate degrees was **28**, **21**, **25** and **20** respectively. The corresponding estimates for part-time students were **36**, **27**, **30** and **31** respectively.
- The average duration of qualification attainment for full time students undertaking Other HE, HNCs/HNDs, Foundation Degrees and undergraduate degrees was **1**, **2**, **2** and **3** years respectively. Based on study intensity, the corresponding estimates for part-time students were **2**, **5**, **5** and **7** years respectively



Assumptions and methodology

Baseline and alternative assumptions

- In the baseline case, loans accumulate interest at RPI +3% during the period of study. Post graduation, loans accumulate interest depending on earnings, with individuals earning **£25,000** incurring a 0% real rate of interest, increasing to 3% real rate of interest on earnings of **£45,000** per annum or above. For part-time students, we apply current SLC rules in relation to the accumulation of interest during study.
- In the baseline case, we assume that loan repayment is 9% of earnings in excess of **£25,000** per annum and that all loans are written off 30 years from the date of SSRD, and that the maximum interest rate is charged on earnings in excess of **£45,000**.
- In the proposed scenario, we assume that the repayment threshold declines to **£11,850**, with interest rates increasing from zero between **£21,850** and **£45,000**.
- We further assume that the upon first repayment, one-half of the average interest accumulated during study (equivalent to **£1,300** is written off for full-time first degree holders – but applies to all students)
- In the Baseline scenario, there are no maintenance grants. In the proposed scenario, we assume that the maximum level of maintenance grant made available is the equivalent to those proposals set out in the Diamond Review (Living Wage **£7.38 per hour**) x **37 hours per week** x **30 hours per week** = **£8,192 per annum**). We assume that the maximum grant is receivable for those on household incomes of less than **£25,000**, while there is no grant available for individuals with household incomes in excess of **£58,215 (LAH) / £62,187 (LAFHOL) / £69,847 (LAFHIL)**

Baseline and alternative assumptions

- In the proposed scenario, we assume that the repayment rate stands at **4.5%** of earnings above the threshold, and that the repayment period is extended to **40 years**
- We assume that there is a withdrawal of some maintenance loan funding for those in receipt of maintenance grants (£0.50 of loan per £1 of grant)
- We assume that there is pro-rata provision of maintenance grants to part-time workers (based on study intensity)
- We assume that all thresholds increase in line with average nominal earnings growth (with forecasts taken from medium term and long term OBR forecasts).
- In relation to Teaching Grants, we assume that the average teaching grant per student – by Home Nation – is derived by dividing the total teaching grant funding in each Home Nation by the total number of students, which is the adjusted for the duration of study. The average Teaching grant per student in England, Wales, Scotland, and Northern Ireland is estimated to be **£1,146, £454, £5,521, and £2,698** per student per annum respectively. The corresponding estimates for part-time students stand at **£454, £180, £2,186, and £1,069** per student per annum
- In relation to the estimation of the RAB charge and other financial flows, we assume a real discount rate of **0.7%** as per standard practice.
- We have adopted OBR forecasts in relation to expected Retail Price Index, which were as follows between Year 1 and Year 6: **3.7%, 3.6%, 3.1%, 3.1%, 3.2%** and **3.0%**. We have also taken OBR forecasts in relation to expected nominal earnings growth between Year 1 and Year 6: **0.0%, 2.7%, 3.0%, 3.4%, 3.6%** and **4.3%**.