



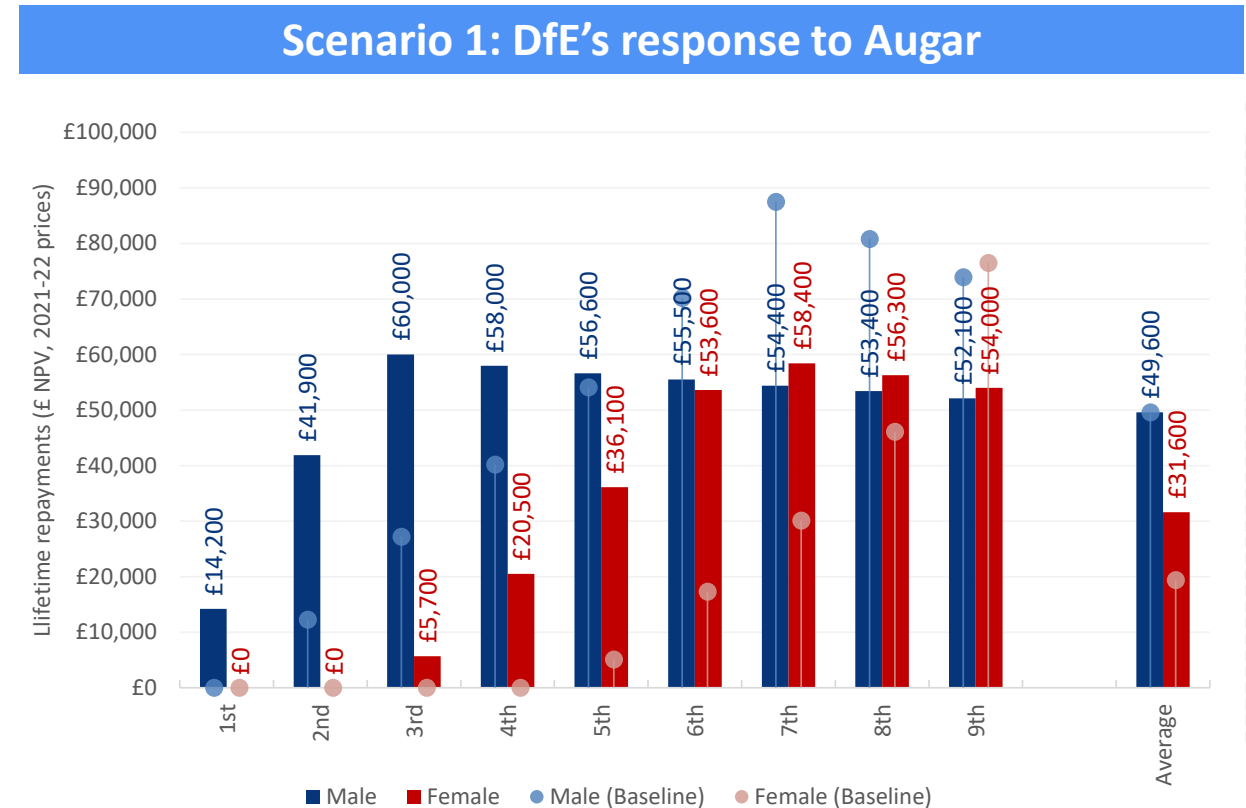
Higher education fees and funding

Presentation to the University of the Arts London, December 2022

Summary of key findings

- London Economics were commissioned by the University of the Arts London to model the costs of the [existing](#) undergraduate higher education fees and funding regime, the Department for Education's long-awaited [response to the Augar Review*](#), and [alternative approaches](#) that would achieve similar Exchequer cost savings but without the Augar response's regressive features.
- The main features of the DfE's response to Augar include:
 - The removal of real interest rates (during and after study);
 - A reduction in the repayment threshold to £25,000 (frozen until 2026-27), and a 'stealth tax' slowing down the subsequent repayment threshold uprating (with RPI, rather than average earnings growth); and
 - The extension of the repayment period to 40 years, and
- The analysis illustrates that there are **significant cost savings** from these proposals (£2.89bn savings from a base of £7.55bn); however, the DfE's response to Augar are **regressive**. The highest earning (predominantly male) graduates benefit through the removal of real interest rates (which is the main feature ensuring system progressivity). **Most other graduates are significantly worse off** (mostly as a result of the 10-year extension of the repayment period).

Total loan repayments by English domiciled FT first degree graduates (NPV in 2021-22 prices), by decile and gender

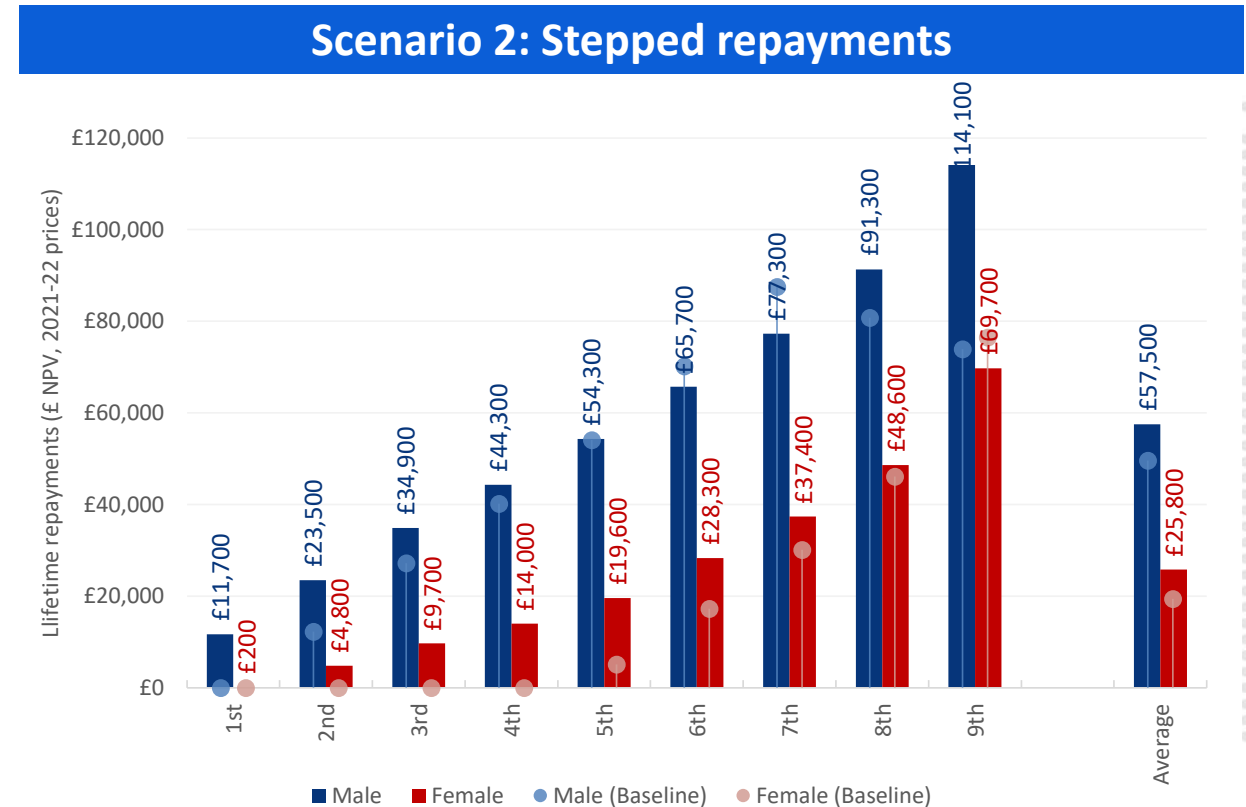


* In addition, we also modelled several [other recent proposals](#) put forward by the sector (such as reduced repayment thresholds or reduced tuition fees).

Summary of key findings

- We modelled a number of **alternative approaches**, with a focus on ensuring **comparable (or greater) savings** to the Exchequer as the Department's Augar response while **removing its regressive features**.
- The first option involved a **stepped repayment system** that would result in similar Exchequer savings as the DfE's Augar response, with the main features including:
 - Stepped repayment rates** of 3% on earnings between £12,570 and £27,570; 6% on earnings between £27,571 and £57,570; and 3% on earnings of £57,571 or more;
 - An increase in real interest rates post-graduation to 0%-5%** for earnings between £27,571 and £57,570;
 - The reversal of the stealth tax;** and
 - An increase in the repayment period by 1 year***.
- This proposal is specifically structured to ensure that **even the highest earning graduates continue making repayments until the end of the repayment period**. As a result, the increased repayments of the highest earning graduates subsidise low/middle-income graduates (in contrast to the DfE's Augar response), making the system **more progressive**.
- A significant challenge relates to **limiting the extent of prepayment / overpayment** from the highest earning graduates.

Total loan repayments by English domiciled FT first degree graduates (NPV in 2021-22 prices), by decile and gender



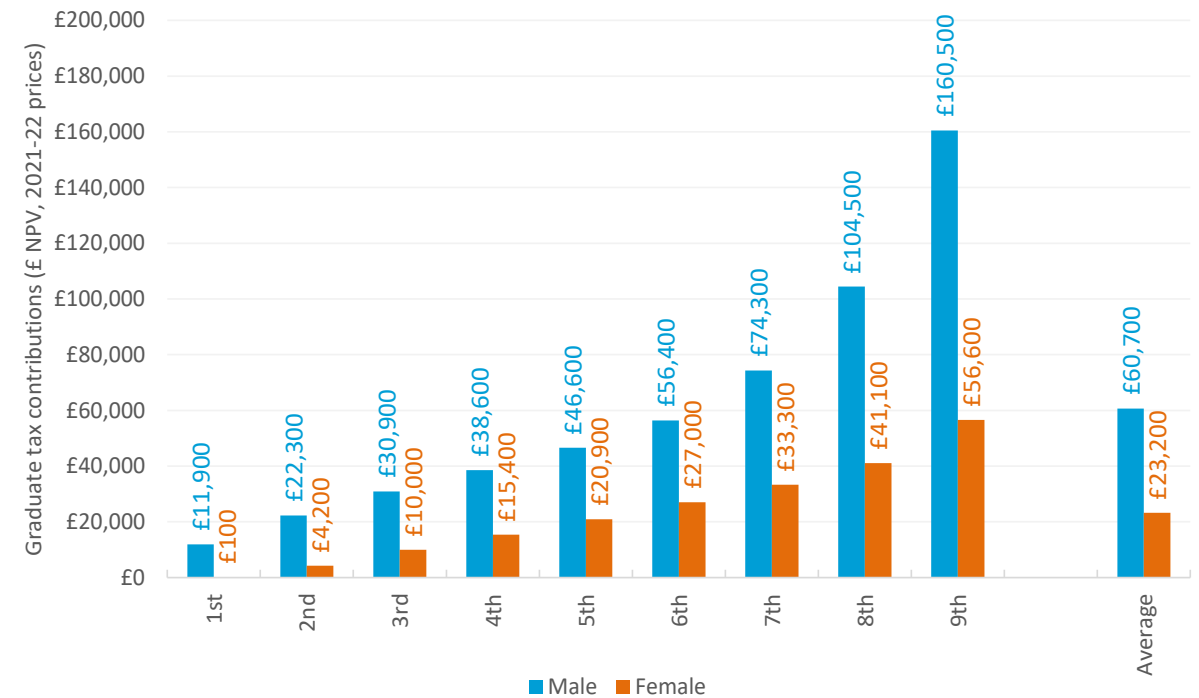
* We also modelled the stepped repayment approach incorporating the [return of pre 2016 maintenance grants](#) (requiring increasing the 'middle' repayment rate by 0.5pp (from 6% to 6.5%)), but also the [more generous Welsh maintenance grant system](#) (requiring a 1pp increase in the 'lower' repayment rate (from 3% to 4%), a 1.5pp increase in the 'middle' repayment rate (from 6% to 7.5%), and a 1pp increase in the maximum real interest rate charged (from 5% to 6%).

Summary of key findings

- The final approach modelled involved a pure graduate tax. The main features included*:
 - The **full replacement of current maintenance loans and fee loans with maintenance grants and fee grants**;
 - With thresholds mirroring current income tax thresholds, and payable until retirement (aged 65), a **graduate tax of 3.0%** on earnings between £12,570 and £50,270, and **5.5%** on earnings of £50,271 or more.
- Compared to DfE's response to Augar, this approach is again **fiscally neutral**, while ensuring a **fully progressive graduate contribution system**. The graduate tax is also more progressive than the stepped repayment system.
- Compared to lifetime loan repayments under the DfE's response to Augar, average graduate tax contributions would be **£11,100 higher** for men, but **£8,400 lower** for female graduates.
- Even though the economic costs associated with the introduction of a graduate tax are essentially identical to the DfE's response to Augar, a graduate tax would result in **an increase in the size of the government deficit** in the short term.
- As there is no notional fee or any fee and maintenance loans (or accumulated debt), there is no means of either prepayment or overpayment (with the aim of avoiding future tax obligations).

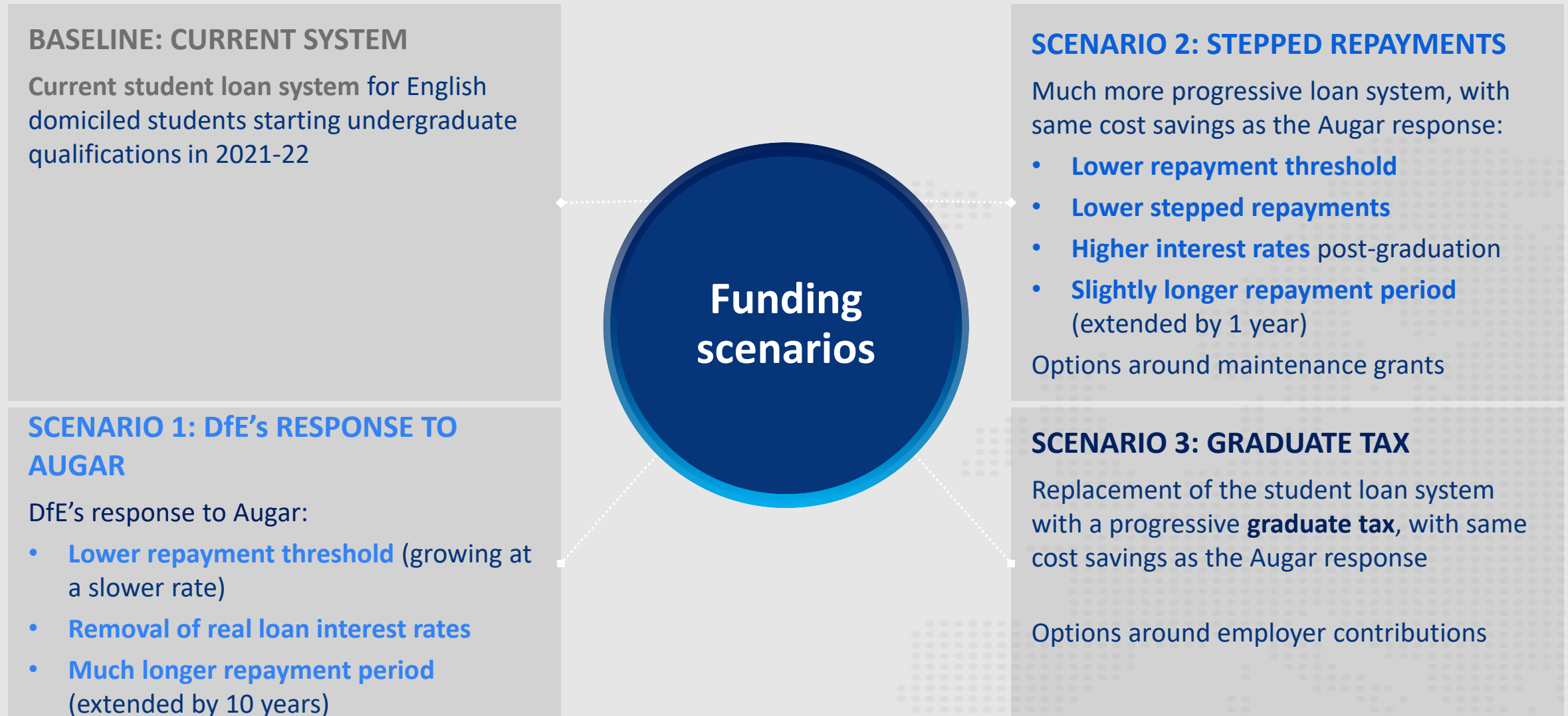
Total graduate tax contributions by English domiciled FT first degree graduates (NPV in 2021-22 prices), by decile and gender

Scenario 3: Graduate tax



* We also modelled the introduction of an Employer Levy equal to a **0.45 pp** increase in employer National Insurance Contributions. With the Levy raising **£2.59bn in total**, the graduate tax rate could thus be reduced by 0.5 percentage point across the board.

Summary of funding scenarios modelled



Discussion of potential criticisms of alternative options

- Although generating comparable savings as the DfE's response to Augar, and being significantly more progressive, there are some important differences between the stepped repayment system and the graduate tax. The graduate tax:
 - Is **significantly more generous** than the stepped repayment system in terms of maintenance support (as all current maintenance loans are 'converted' to grants);
 - Is **more straightforward** to explain and communicate (following the removal of interest rates, loans, and loan balances, and 'assimilation' within the wider tax system); and
 - Has a much **more substantial impact on the deficit** in the short term. The 'conversion' of loans to grants results in the entire value of the fee and maintenance support being considered as expenditure (rather than just the proportion of loans issued expected to be written off);
- The **most significant risk** relating to the stepped repayment system relates to ensuring that **prepayment** by the highest earning graduates does not occur (which cannot occur under the graduate tax).
- The biggest challenge relating to the graduate tax relates to ensuring that **tax avoidance** does not occur. Given the fact that EU-domiciled students are no longer eligible for fee support following Brexit (although there was limited evidence of deliberate avoidance of loan repayments by these students), the risk of tax avoidance would now be limited to English-domiciled graduates moving overseas.
- Presented in more detail in the [final section](#), there have been a **number of previous criticisms of a graduate tax** (e.g. see Section 7.1 of the [Browne Review](#)), along the following lines.
- **Impact on graduates:**
 - **The lowest earning graduates pay more.** Under both the graduate tax and the stepped repayment system, there would be **repayments by graduates earning less than the current or Department's proposed threshold for repayment** (with just **2%** of earners not expected to make any repayment, compared to **15%** under the DfE's response to Augar (and **32%** currently)). However, **total lifetime payments** for the lowest earners are lower under the graduate tax than under the DfE's response to Augar.
 - **Higher earning graduates would end up paying much more than the actual cost of their course.** However, under the current system, the variation of real interest rates with graduate earnings means that the 'price' of a course already varies depending on earnings (so higher earning graduates *already* pay more than the notional cost). It is also the case that AHSS graduates currently pay more than the notional cost of provision, while STEM graduates pay less.

Discussion of potential criticisms of alternative options

- **Impact on graduates (continued):**
 - **The system for maintenance will require support through loans (so graduates pay graduate tax as well as make loan repayments):** This used to be a valid criticism. However, the graduate tax proposals that have been modelled here **combine** both maintenance and fees into a graduate tax system, explicitly to counter this issue.
- **Impact on students:**
 - **Would a graduate tax apply to individuals who failed to complete their intended qualification?:** The current system and the DfE's response to Augar require individuals to make loan repayments on a similar basis to individuals who complete their intended qualifications. This is a **system choice** that is determined by the Department.
 - **It is unfair to compel students to pay tax rather than pay fees upfront:** There is no economic rationale to pay fees upfront (currently), and only a relatively small proportion of students currently do so. This option is removed under a graduate tax, as technically, there is no market price charged to English-domiciled students. Pre-payment (at international student rates) and removal of rights to maintenance could be allowed; however, this would be administratively burdensome.
- **Impact on public finances:** A graduate tax has an adverse impact on the deficit as compared to the current loan system; however, the impact is much more limited following the recent [change in National Accounting rules](#) (and the incorporation of the loan write-off in deficit calculations).
- **Impact on higher education institutions: A graduate tax might significantly weaken universities' independence, as they would be reliant on Government for all of their teaching funding:**
 - Higher Education Institutions are currently entirely dependent on the government for Teaching Grant and income from tuition fees. There would be **no difference** under a graduate tax, as the notional Teaching Grant under the graduate tax system presented here has been modelled to exactly equal current Teaching Grant funding and tuition fee income. The Government's decision to allocate resources to universities in respect of Teaching Grant or tuition fees would be identical to the Government's decision to determine the contribution made via a graduate tax system.
 - HEI income would continue to be **dependent on student choice**, as income would only be generated if students select to attend a particular institution. As such, there would be no difference with the current system, and criticisms relating to HEIs ignoring the student experience would be unfounded.
 - The current Departmental consultation relating to the introduction of **Student Number Controls and Minimum Entry Requirements** are likely to have a **more significant impact on university autonomy** than a graduate tax.

Introduction and overview of analysis



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Overview of the analysis

London Economics were commissioned by the University of the Arts London to **analyse potential options for reforming the English higher education funding system, as alternatives to the changes to be implemented in response to the Augar Review that were recently announced by the Department for Education (DfE)¹:**

- We estimate the impact of the full range of English fees and student support arrangements on the Exchequer, higher education institutions (HEIs), and students/graduates, for the **2021-22 cohort² of first-year English domiciled undergraduate students studying anywhere in the UK**. The analysis includes both full-time and part-time students, as well as all types of undergraduate qualifications (i.e. first degrees and others).
- The analysis incorporates the **fees and funding arrangements facing the cohort of starters in 2021-22** (as well as the estimated costs if different alternative systems had been implemented for this cohort³).
- The modelling assesses a range of **key metrics**, including:
 - The **Resource Accounting and Budgeting (RAB) charge** (i.e. proportion of the total loan balance written off), **student loan debt on graduation**, **expected lifetime loan repayments** (by gender and income decile), the % of graduates expected to **never fully repay** their loan, and the % expected to **never make any repayments**;
 - The **total Exchequer costs** (including the cost of student support associated with English domiciled HE students, and Teaching Grant funding paid to higher education institutions across the UK); and
 - **HEI funding**, in terms of tuition fee income and Teaching Grant funding (minus the costs of bursaries provided to students).

¹ See Department for Education (2022). 'Higher education policy statement and reform' ([here](#)). All

² The underlying student data are based on data (published by the Higher Education Statistics Agency (HESA)) for the 2020-21 academic year; in other words, in the absence of more recent data, we assume the same size and characteristics of the 2021-22 cohort as for the 2020-21 cohort. The analysis includes students studying at higher education institutions only (excluding further education colleges, but including alternative providers).

³ While, for the purposes of the economic modelling, the analysis focuses on the 2021-22 cohort, the alternative scenarios modelled here are not for potential retrospective changes to the system (i.e. it is assumed that these would not be applied retrospectively to previous student cohorts, but would only apply to future cohorts going forward).

Funding scenarios modelled

In addition to the Baseline (current funding system), we modelled the **DfE's response to Augar**, as well as **two alternative scenarios** that would result in the **same Exchequer cost savings as the Augar response**, but with very different distributional effects.

BASILINE: CURRENT SYSTEM

Current fees and funding arrangements for English domiciled students starting undergraduate qualifications in 2021-22:

- **Repayment threshold of £27,295**, frozen until 2022-23 (inclusive) and uprated with average earnings growth thereafter. **Repayment rate** of 9% above this threshold
- **Real interest rates** of 3% during study, and 0-3% for earnings between £27,295 and £49,130 (and 3% for earnings of £49,131 or more)
- **Loan repayment period** of 30 years

SCENARIO 1: DfE's RESPONSE TO AUGAR

This presents the announced changes under the **Department for Education's response to Augar**, including:

- The **reduction in the repayment threshold to £25,000**, frozen until 2026-27 (inclusive), and uprated with Retail Price Index (RPI) inflation thereafter (instead of (higher) average earnings growth*)
- The **removal of real interest rates**, both during and after study
- The **extension of the repayment period by 10 years, to 40 years**

SCENARIO 2: STEPPED REPAYMENTS

Alternative approach that **achieves (roughly) the same cost savings as Scenario 1**, but **eliminates the regressive distributional effects**:

- **Stepped repayments**: 3% on earnings of £12,570-£27,570; 6.0% on earnings of £27,571-£57,570; and 3% on earnings of £57,571 or more. No 'stealth tax' (i.e. thresholds increase with earnings p.a., as currently)
- **Retention of 3% real interest rates during study**, and an increase in real interest rates post-graduation to 0%-5% for earnings between £27,571 and £57,570
- **+ 1 year repayment period**

Alternative: + re-introduction of 'old' maintenance grants or current 'generous' Welsh maintenance system

SCENARIO 3: GRADUATE TAX

Alternative approach that **achieves (roughly) the same cost savings as Scenarios 1&2**, but involves a significant overhaul of the system through the introduction of a graduate tax (for both fees and maintenance):

- **Replacement of fee loans *and* maintenance loans with fee and maintenance grants** (i.e. no more student loans)
- **Replacement of the student loan repayment system with a graduate tax** of 3% on earnings of £12,570-£50,270; and 5.5% on earnings of £50,271 or more (thresholds mirror income tax system)

Alternative: + employer levy

Note: The modelling for *all* scenarios assumes a **new lower real discount rate of -1.1%** (instead of the previous +0.7% rate).

* The change to the approach to uprating the repayment threshold (with RPI, instead of average earnings growth) is also referred to as a 'stealth tax'.

Current funding system (Baseline)



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Baseline (current system): Total costs

Baseline system

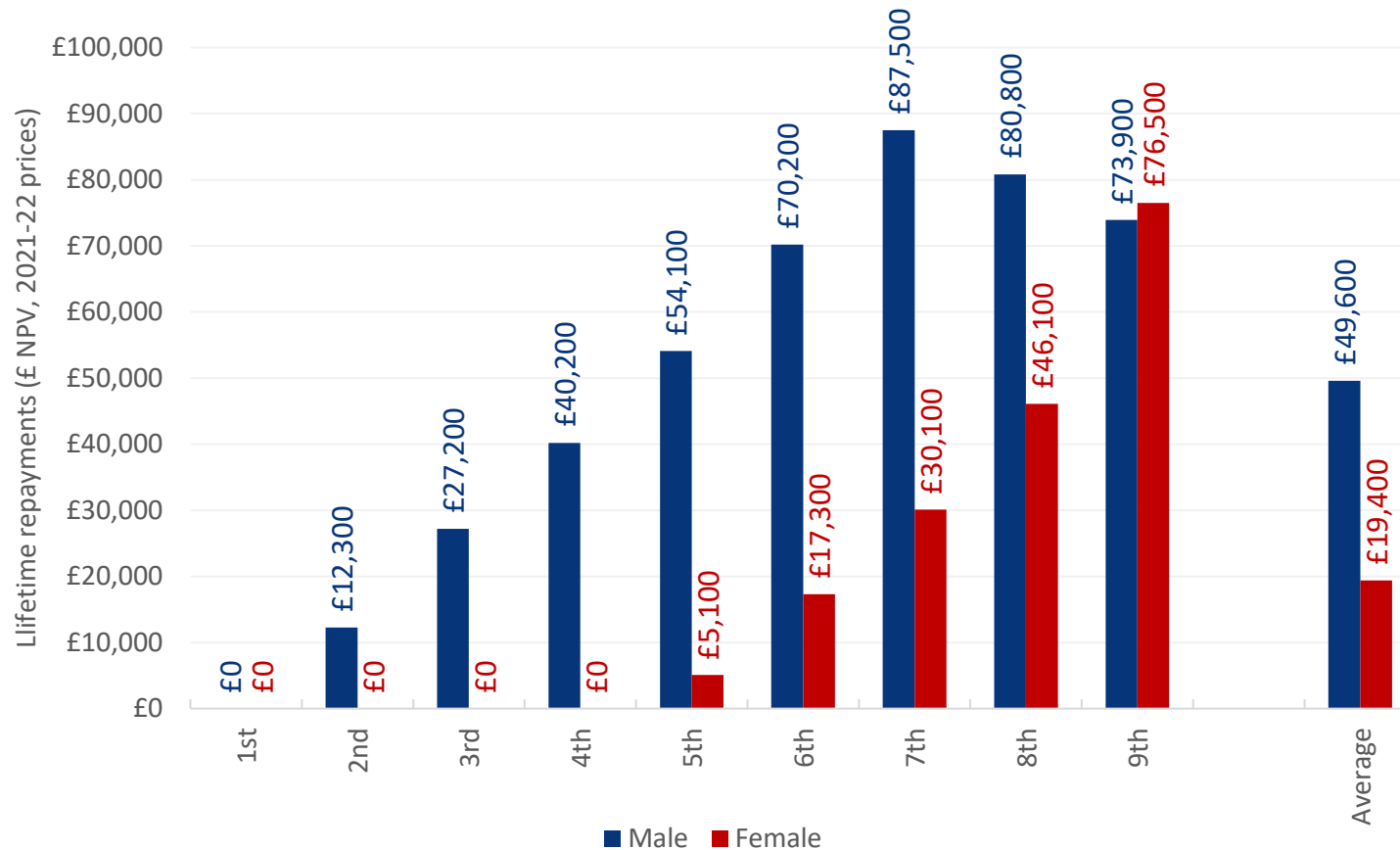
Resource flows (£/£m/%)	Baseline
Exchequer	
Cost of maintenance loans	(£2,889m)
Cost of tuition fee loans	(£3,510m)
Cost of Teaching Grants	(£1,153m)
Total Exchequer cost	(£7,553m)
RAB charge (%)	33%
% never repaying full loan/anything	88% / 32%
Higher education institutions	
Gross fee income	£10,773m
Teaching Grant income	£1,153m
Cost of bursary provision	(£202m)
Net HEI income	£11,724m
Students/Graduates (FT first degrees)	
Average debt on graduation	£47,600
Average lifetime repayments (M/F)	£49,600 / £19,400

- Under the current funding system in 2021-22 (i.e. the Baseline), the **public purse** contributes approximately **£7.553bn** per cohort of English domiciled students (**£7.480bn** from the Westminster Government and **£73m** from funding bodies throughout the rest of the UK). In terms of constituent components, given that the **RAB charge** stands at approximately **33%**, **maintenance loan write-offs** cost the public purse **£2.889bn** per cohort, while **tuition fee loan write-offs** cost **£3.510bn**. The provision of **Teaching Grants** to HEIs (for high-cost subjects) costs **£1.153bn** per cohort (**£1.081bn** for English HEIs and **£73m** for RUK (predominantly Welsh) HEIs).
- Higher Education Institutions** receive **£11.724bn** in net income per cohort, including **£10.773bn** in tuition fee income, and **£1.153bn** in Teaching Grants. Against this income, institutions contribute **£202 million** per cohort in fee and maintenance **bursaries**.
- The average debt on graduation per student in the cohort (for full-time first degree students, including accumulated interest) was estimated at **£47,600**, with average lifetime repayments of **£49,600** for male graduates and **£19,400** for female graduates.
- We estimate that **88%** of all graduates **never repay their full loan**, while **32%** **never make any loan repayment**.
- This represents an Exchequer to graduate split in contribution of **37%:63%***.

Note: All monetary values have been discounted to net present values and are presented in constant 2021-22 prices. All monetary values per student have been rounded to the nearest £100, and all totals have been rounded to the nearest £1m. Debt on graduation and expected lifetime repayments per student are presented for full-time first degree students only. Gross fee income refers to fee income before the deduction of bursaries provided to students. *For students, this includes the expected costs of maintenance (i.e. living costs) incurred during study, which we assume to be equal to the level of maintenance loan received throughout their studies.

Baseline (current system): Graduate loan repayments

Total loan repayments by English domiciled FT first degree graduates (NPV in 2021-22 prices), by earnings decile and gender

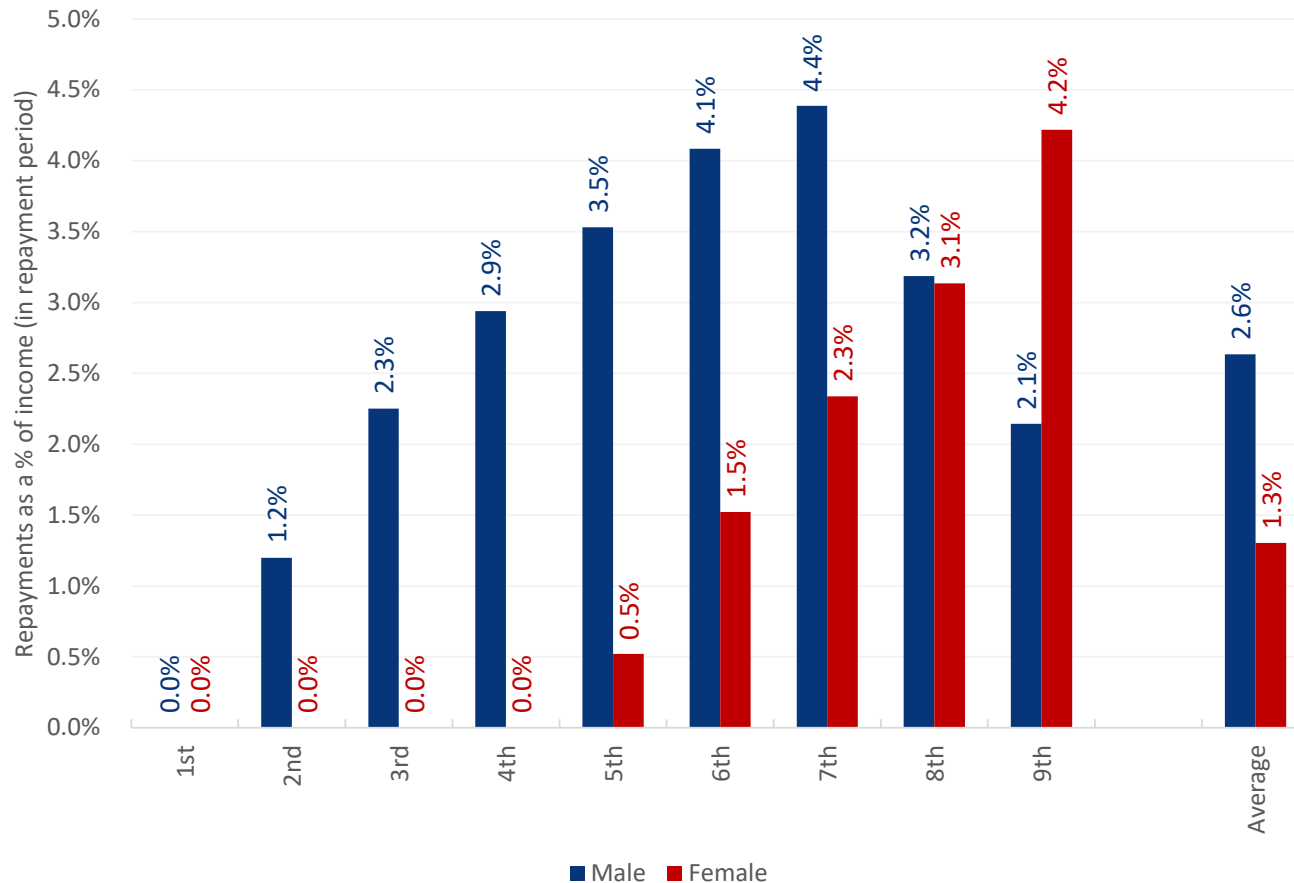


- The average repayments made by **male graduates** stand at **£49,600**; however, there is considerable variation across the earnings distribution. Male graduates in the top three earnings deciles are expected to make repayments of between **£73,900** (9th decile) and **£87,500** (7th decile), while male graduates in the bottom earnings decile make no repayments.
- **Female graduates** in the bottom four earnings deciles are not expected to make any loan repayments over the 30-year repayment period. However, repayments increase sharply thereafter. Female graduates on the 7th, 8th and 9th earnings deciles are expected to make repayments of **£30,100**, **£46,100** and **£76,500** respectively (with an average of **£19,400** across all deciles).

Note: All values have been discounted to net present values, are presented in constant 2021-22 prices, and have been rounded to the nearest £100

Baseline (current system): Loan repayment progressivity

Total loan repayments by English domiciled FT first degree graduates, as a % of income (during repayment period), by decile and gender



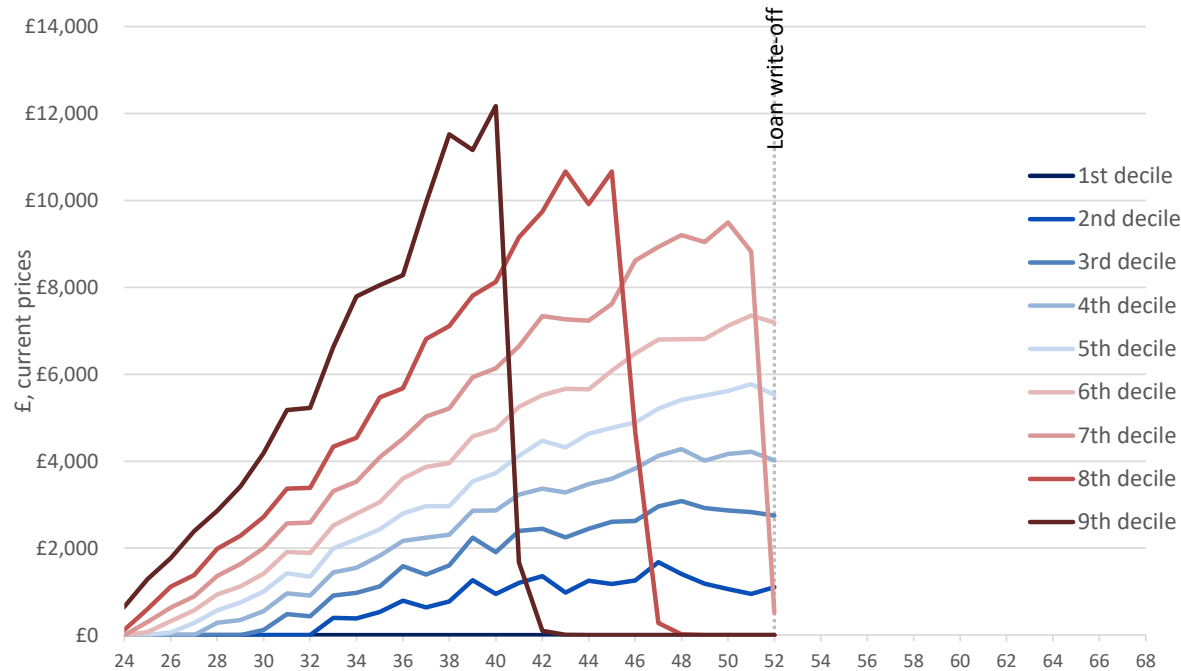
- The current loan system is **(locally) regressive at the upper end of the graduate earnings distribution.**
- Reflecting lifetime loan repayments, **up until the 7th earnings decile**, male graduates contribute an increasing proportion of their income in loan repayments (over the 30-year repayment period). For male graduates on the **7th earnings decile**, the proportion stands at **4.4%**. However, illustrating the ‘local regressivity’ of the repayment system, for higher deciles, the proportion of earnings over the period contributed as loan repayments decreases to **3.2%** and **2.1%** on the **8th** and **9th deciles**, respectively.
- Female graduates in the bottom 4 deciles make no repayments, while women on the **5th decile** contribute **0.5%** of their earnings. This increases for successive earnings deciles – reaching **3.1%** of total income over the period for women on the **8th decile** and **4.2%** on the **9th decile**.

Note: Relates to repayments as a % of income throughout the repayment period (calculated based on cash terms (not discounted), for both income and repayments).

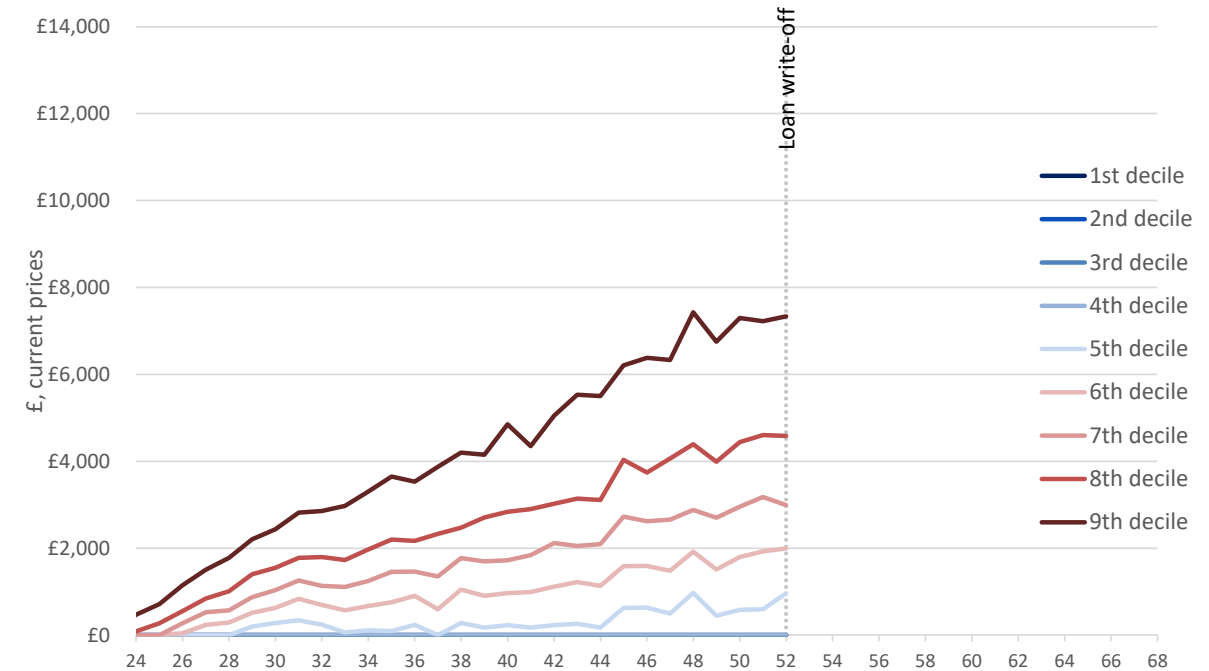
Baseline (current system): Loan repayment profiles

Lifetime loan repayment profiles (by age) for English domiciled FT first degree graduates (cash terms (not discounted) in current prices)

Baseline: Male graduates



Baseline: Female graduates



There are a several important points to note about the HE fees and funding system generally:

- **Positive real interest rates** *appear* to harm graduates. However, in reality, they are one of the few means available to retain the highest earning graduates in repayment for longer. Removing real interest rates benefits only the highest earning graduates.
- **Extending the repayment period** only affects individuals that have not repaid their full loan (i.e. low- and middle-income graduates).
- **Reducing the repayment threshold** (both directly and through a change in the uprating mechanism) has ambiguous effects depending on earnings:
 - **The highest earning graduates** – who are already expected to repay their loan – repay earlier, resulting in *lower* total repayments.
 - **Low- and middle-income graduates** are *not* expected to repay their full loan, and thus make *higher* repayments over the entire repayment period.

Scenario 1: The Department for Education's response to Augar



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Scenario 1: Total costs

Resource flows (£/£m/%)	Baseline	Scenario 1: DfE's response to Augar	Difference
Exchequer			
Cost of maintenance loans	(£2,889m)	(£1,588m)	£1,301m
Cost of tuition fee loans	(£3,510m)	(£1,916m)	£1,594m
Cost of Teaching Grants	(£1,153m)	(£1,153m)	-
Total Exchequer cost	(£7,553m)	(£4,658m)	£2,894m

RAB charge (%)	33%	18%	-15pp
% never repaying full loan/anything	88% / 32%	51% / 15%	-37pp / -17pp

Higher education institutions			
Gross fee income	£10,773m	£10,773m	-
Teaching Grant income	£1,153m	£1,153m	-
Cost of bursary provision	(£202m)	(£202m)	-
Net HEI income	£11,724m	£11,724m	-

Students/Graduates (FT first degrees)			
Average debt on graduation	£47,600	£46,200	(£1,400)
Average lifetime repayments (M/F)	£49,600 / £19,400	£49,600 / £31,600	£0 / £12,200

- Implementing all of the DfE's proposed changes to student finance arrangements would result in significant Exchequer savings of **£2.894bn** per cohort. This is equivalent to a **38%** decrease in the cost of funding per cohort. These savings are driven by lower loan write offs for both maintenance loans (**£1.301bn**) and tuition fee loans (**£1.594bn**).
- The RAB charge would be expected to decline by **15 percentage points**, to **18%**. The proportion of graduates not making *any* loan repayments over the 40-year repayment period would decline by **17 percentage points**, to **15%**.
- This represents a considerable shift in the balance of contributions, with the new Exchequer to graduate split standing at **23%:77%** (vs. **37%:63%** in the Baseline).
- HEIs are unaffected by the changes.
- The average debt on graduation declines as a result of the removal of real interest rates (by **£1,400**). Average lifetime repayments for **male graduates are unaffected**; however, average repayments for female graduates **increase by £12,200**.
- There are very important **distributional effects** associated with the DfE's Augar response (see next slide).

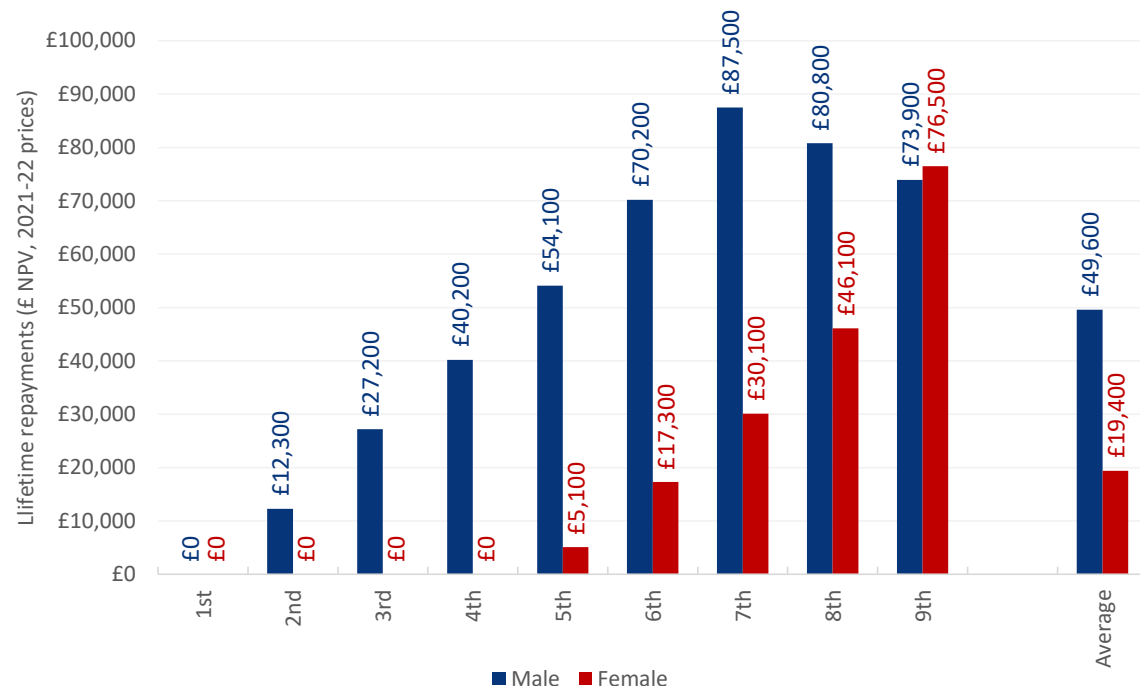
Note: All monetary values have been discounted to net present values and are presented in constant 2021-22 prices. All monetary values per student have been rounded to the nearest £100, and all totals have been rounded to the nearest £1m. Debt on graduation and expected lifetime repayments per student are presented for full-time first degree students only. Gross fee income refers to fee income before the deduction of bursaries provided to students.

Note: If the average age of commencement of all full time and part time students increased by 1 year, this would increase total Exchequer costs by £290 million per cohort.

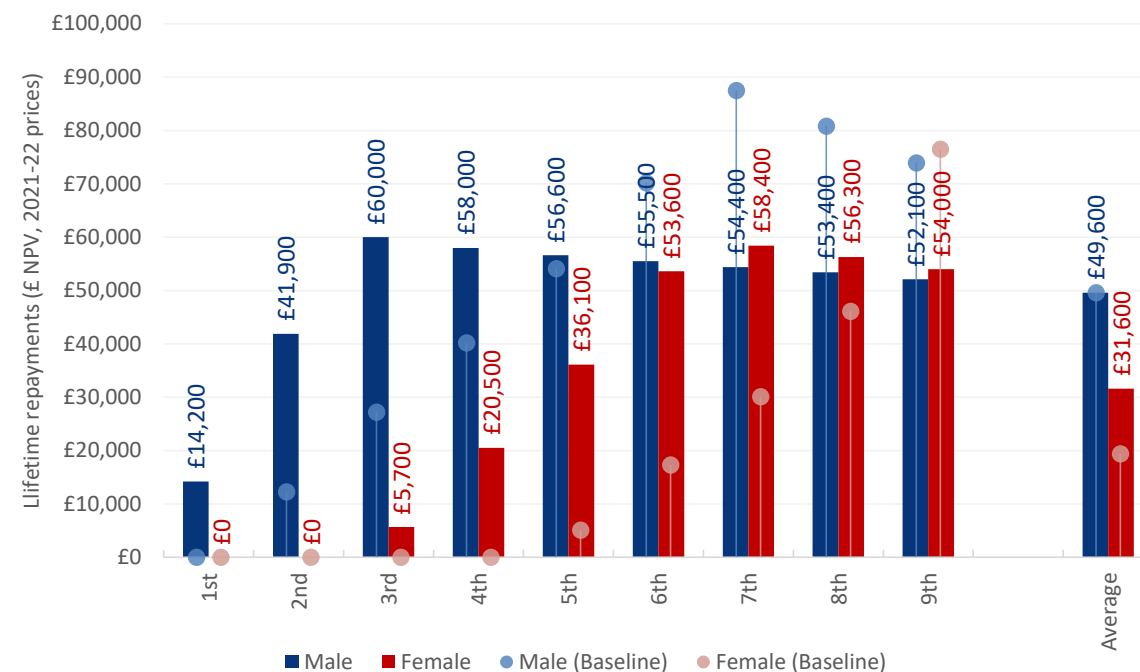
Scenario 1: Graduate loan repayments

Total loan repayments by English domiciled FT first degree graduates (NPV in 2021-22 prices), by decile and gender

Baseline



Scenario 1: DfE's response to Augar

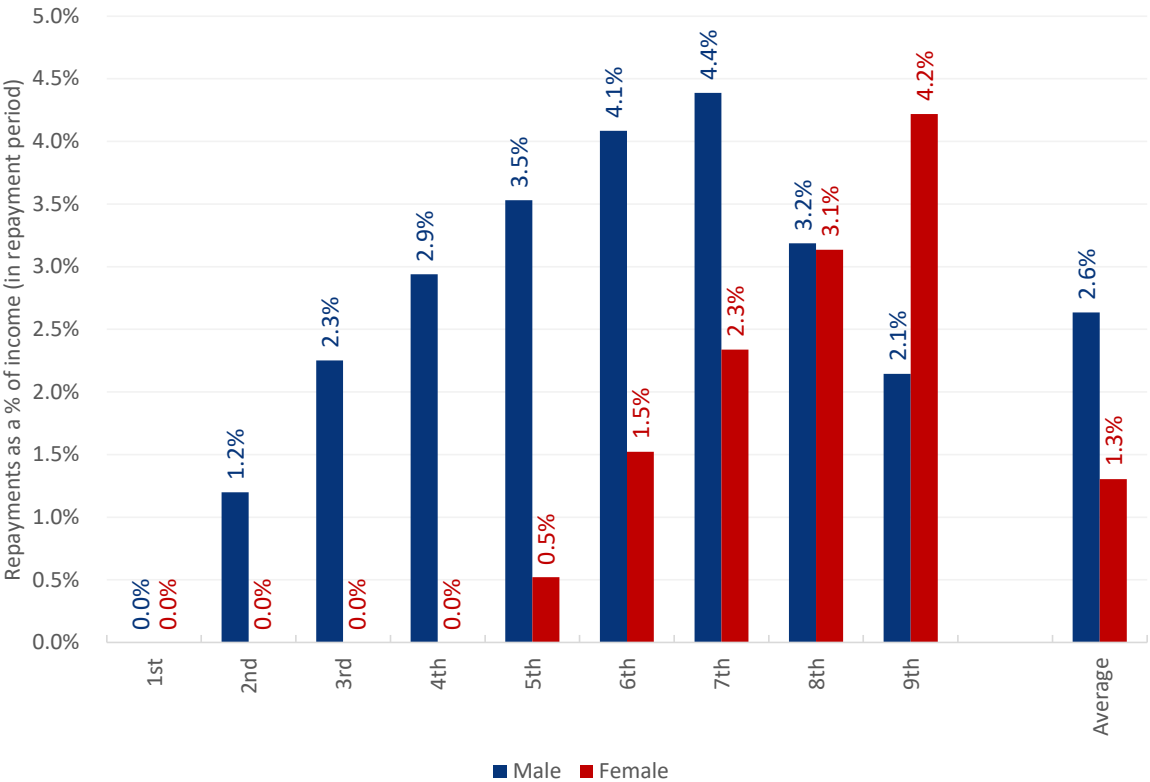


- Under the Augar system, the **reduction in the repayment threshold (and slower uprating)** and the **extension of the repayment period** *increase* the costs borne by low- and middle-income graduates. Higher earning graduates make slightly *lower* total repayments (as they repay more annually but complete their repayments sooner).
- However, the **elimination of real interest rates** essentially guillotines the repayments made by the highest earning (predominantly male) graduates. The result is a direct transfer of costs from the highest earning graduates to low- and middle-income graduates, so that **the proposed changes are regressive (and significantly worse than the potential alternatives)**.

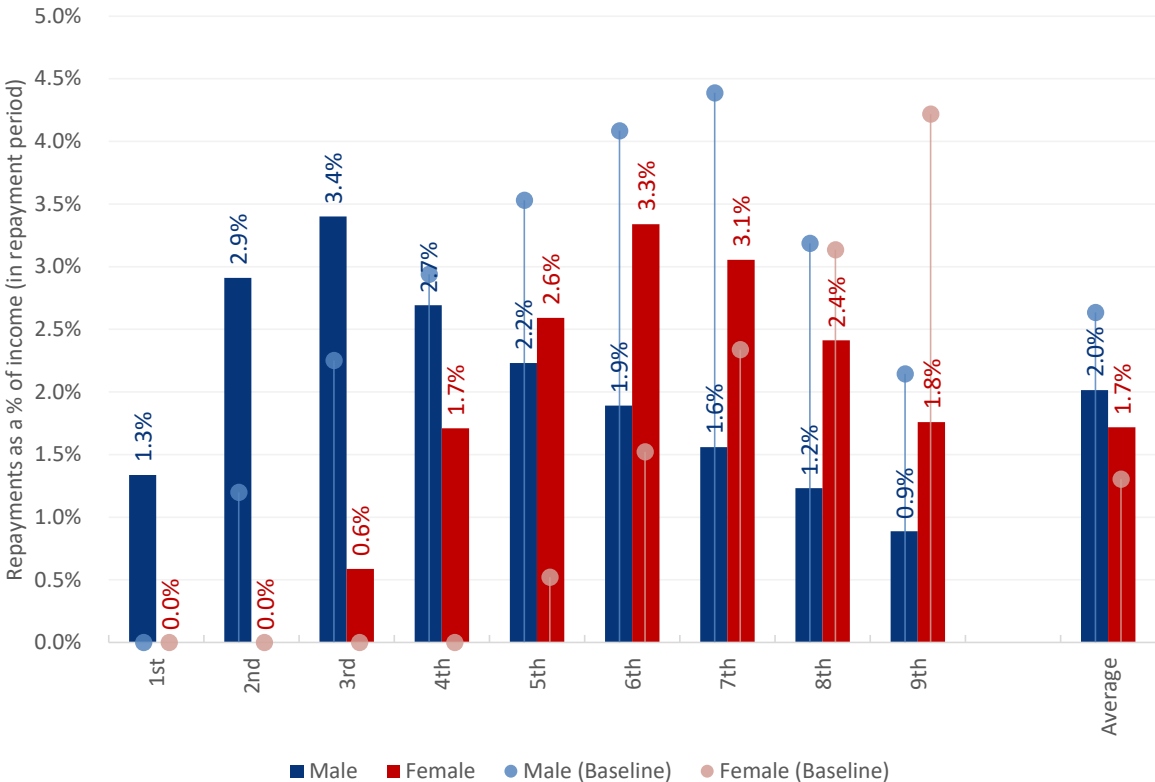
Scenario 1: Loan repayment progressivity

Total loan repayments by English domiciled FT first degree graduates, as a % of income (during repayment period), by decile and gender

Baseline



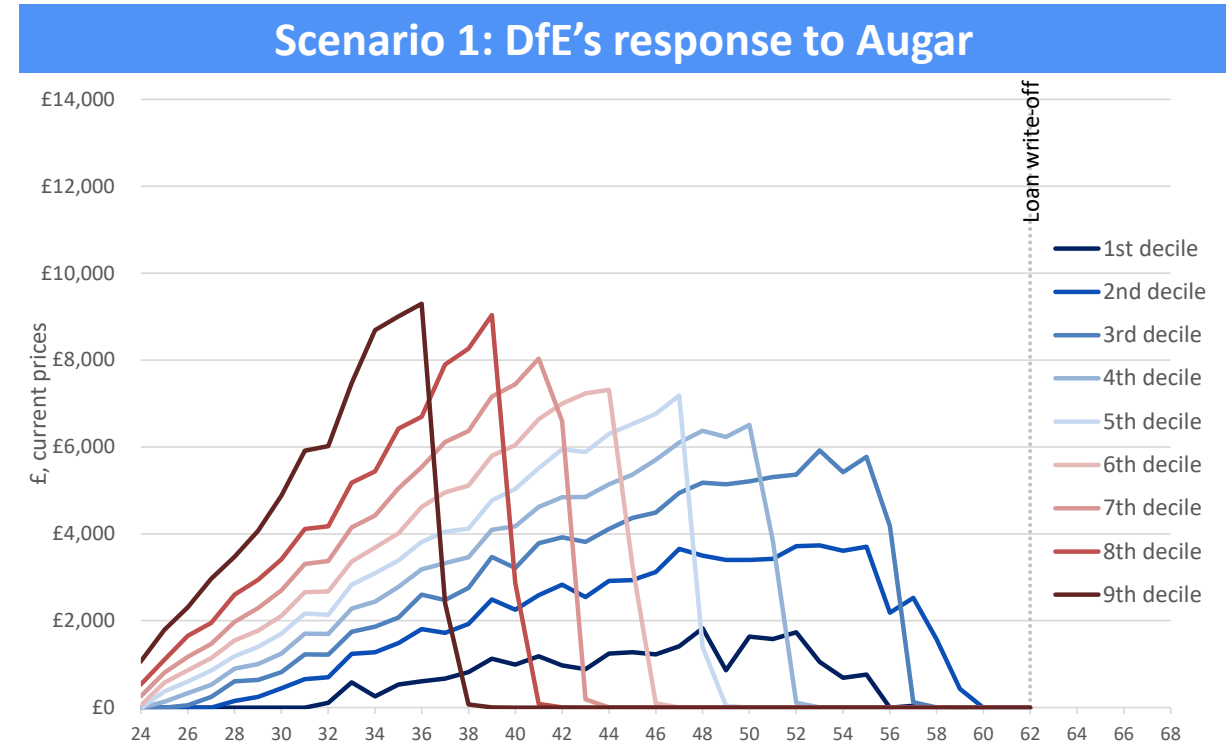
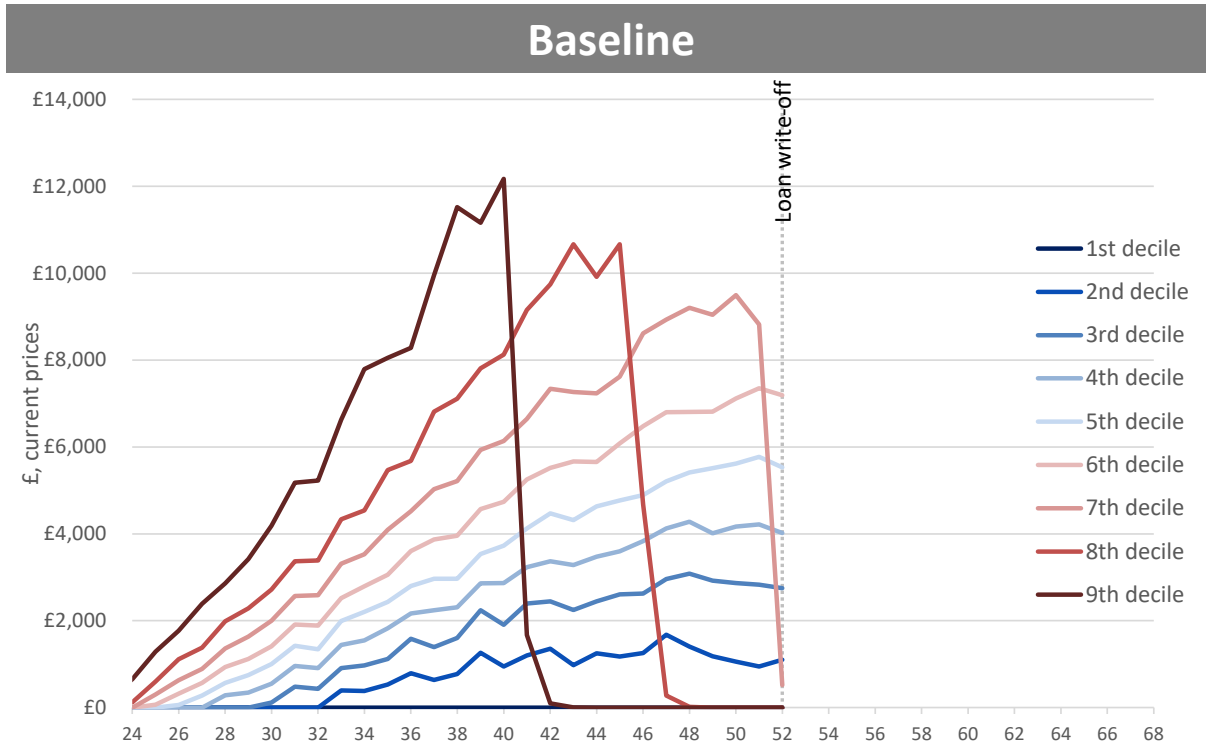
Scenario 1: DfE's response to Augar



- The combination of changes results in the system becoming **more regressive**. Male graduates on the 3rd decile and female graduates on the 6th decile now contribute the relatively highest proportion of their post-graduation earnings in loan repayments (3.4% and 3.3%, respectively (over the loan repayment period)). The DfE's Augar response will disadvantage low- to middle-income graduates, whilst benefitting those (high-income) graduates that need the least financial subsidy.

Scenario 1: Loan repayment profiles (men)

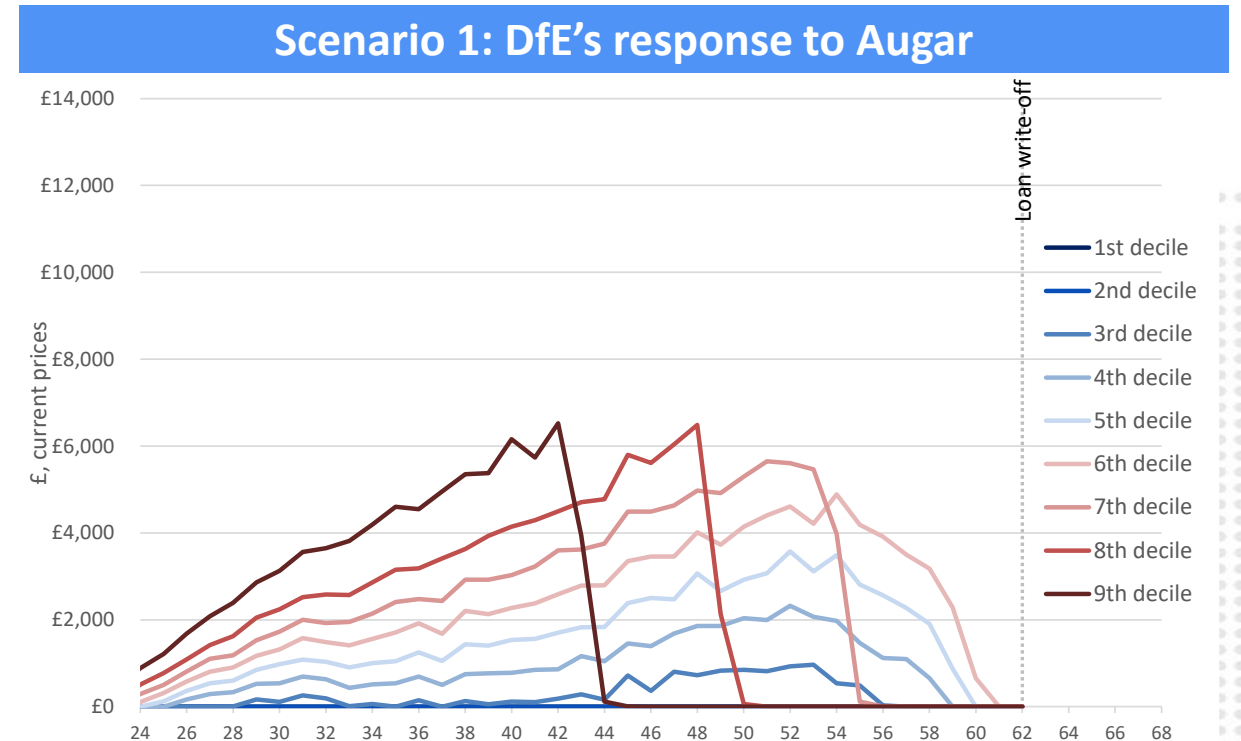
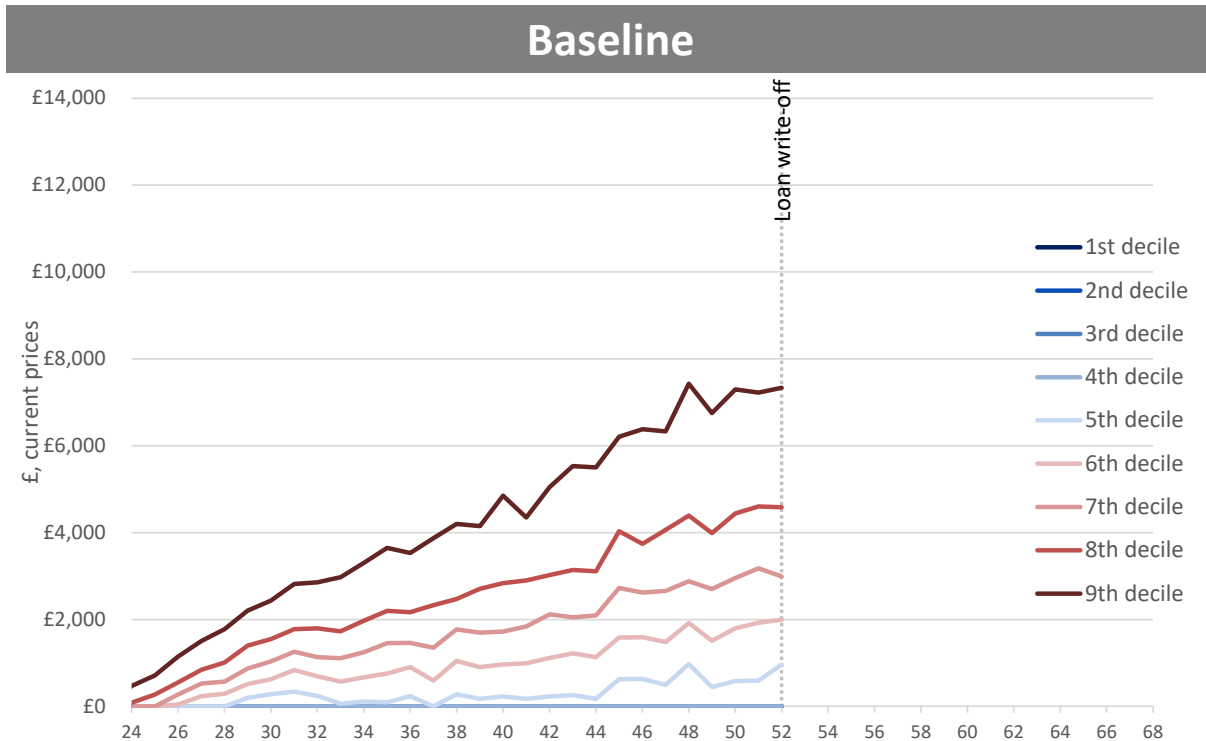
Lifetime loan repayment profiles (by age) for English domiciled FT first degree *male* graduates (cash terms in current prices)



- High-earning male graduates (6th decile and up) **benefit significantly** from the proposals (particularly the removal of real interest rates), since the changes would allow them to repay their loans more quickly.
- However, for graduates on all other deciles (who are currently *not* repaying their full loans), the lower repayment threshold and longer repayment period results in **higher lifetime loan repayments**.
- Given these changes, under the DfE's response to Augar, all male FT first degree graduates would be expected to fully repay their loans.

Scenario 1: Loan repayment profiles (women)

Lifetime loan repayment profiles (by age) for English domiciled FT first degree *female* graduates (cash terms in current prices)



- For women, **only the very top earners (on 9th decile) would benefit** from lower total loan repayments (again due to the removal of real interest rates). However, for graduates on almost all other deciles, the lower repayment threshold and longer repayment period again results in **increased lifetime loan repayments** (except for the very lowest earners (1st and 2nd decile), who would still make no repayments).
- The majority of female middle-income graduates would be made significantly worse off under the DfE's response to Augar.

Scenario 2: Stepped loan repayment system



Introduction to alternative options

The following slides present two potential alternative scenarios to the DfE's response to Augar. The **key objectives of/criteria for** these alternatives include:

FISCAL NEUTRALITY

...to achieve similar Exchequer savings as under the Augar system, to improve the sustainability of the system.

FAIRNESS

...to increase the progressivity of the funding system (both relative to the Augar system as well as the current system), and the affordability of HE (especially for the least well-off students).

EMPLOYER CONTRIBUTION

...to consider a contribution to the funding system from employers, as one of the key beneficiaries of higher education.

Throughout the analysis of these alternative options, we compare the costs/impacts associated with each alternative system to **Scenario 1 (DfE's response to Augar)** (rather than to the current (Baseline) system).

Scenario 2: Total costs

Resource flows (£/£m/%)	Scenario 1: DfE's response to Augar	Scenario 2: Stepped reps.	Difference
Exchequer			
Cost of maintenance loans	(£1,588m)	(£1,508m)	£81m
Cost of tuition fee loans	(£1,916m)	(£1,825m)	£92m
Cost of Teaching Grants	(£1,153m)	(£1,153m)	-
Total Exchequer cost	(£4,658m)	(£4,486m)	£173m
RAB charge (%)	18%	17%	-1pp
% never repaying full loan/anything	51% / 15%	96% / 2%	45pp / -13pp
Higher education institutions			
Gross fee income	£10,773m	£10,773m	-
Teaching Grant income	£1,153m	£1,153m	-
Cost of bursary provision	(£202m)	(£202m)	-
Net HEI income	£11,724m	£11,724m	-
Students/Graduates (FT first degrees)			
Average debt on graduation	£46,200	£47,600	£1,400
Average lifetime repayments (M/F)	£49,600 / £31,600	£57,500 / £25,800	£7,900 / (£5,800)

- In **Scenario 2**, with a highly targeted approach, we have specifically focused on trying to retain the highest earning graduates in repayment - to arrive at similar Exchequer savings as under Scenario 1 - while improving progressivity. This can be achieved by **increasing real interest rates applied to the very highest earners, but also reducing their repayment rate** (so they repay their loans at a slower rate). This is very counterintuitive.
- Specifically, Scenario 2 involves:
 - Retention of (3%) real interest rates during study but an **increase in real interest rates to 0%-5%** for earnings between £27,571 and £57,570 post-graduation
 - **Stepped repayment rates:**
 - 3% on earnings between £12,570 and £27,570
 - 6% on earnings between £27,571 and £57,570
 - 3% on earnings of £57,571 or more
 - **Increase in repayment period by 1 year**
- This approach is (essentially) **fiscally neutral to the public purse** (with slightly larger Exchequer savings, and roughly the same RAB charge), **but the adverse distributional effects of the DfE's response to Augar are avoided**. Compared to the Augar system, on average, male graduates pay approximately **£7,900 more**, while female graduates pay **£5,800 less**.

Note: All monetary values have been discounted to net present values and are presented in constant 2021-22 prices. All monetary values per student have been rounded to the nearest £100, and all totals have been rounded to the nearest £1m.

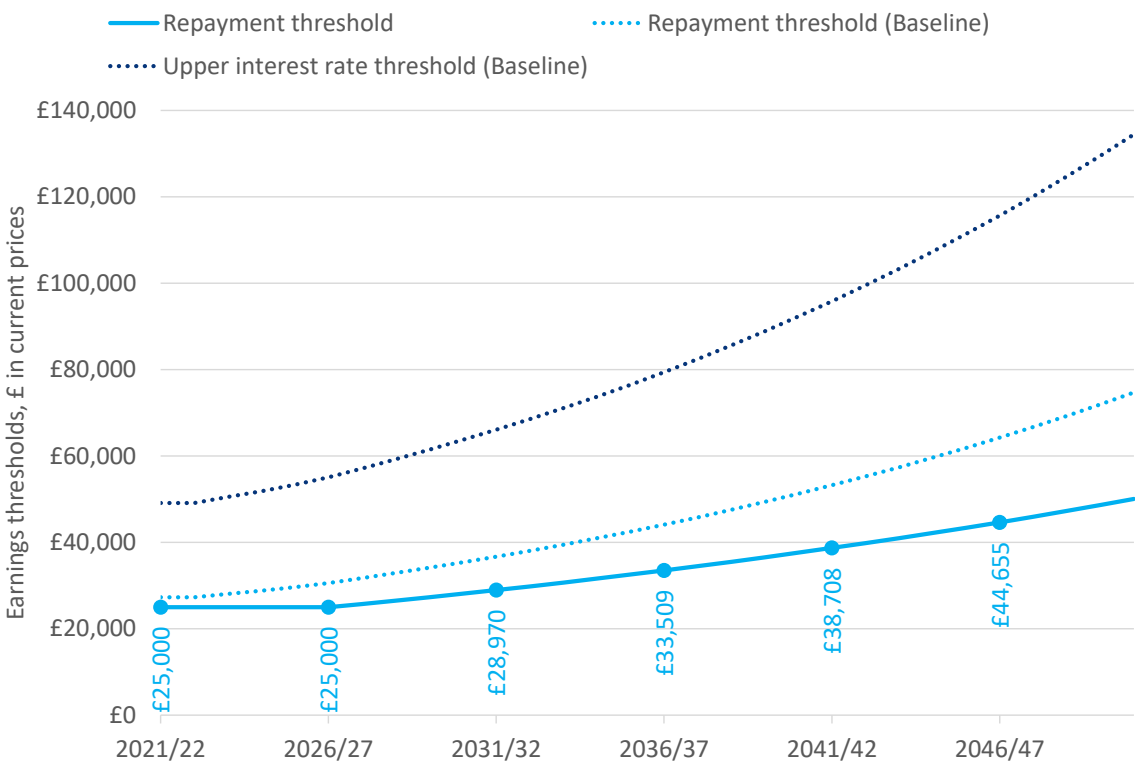
Debt on graduation and expected lifetime repayments per student are presented for full-time first degree students only. Gross fee income refers to fee income before the deduction of bursaries provided to students.

Note: If the average age of commencement of all full time and part time students increased by 1 year, this would reduce total Exchequer costs by £254 million per cohort.

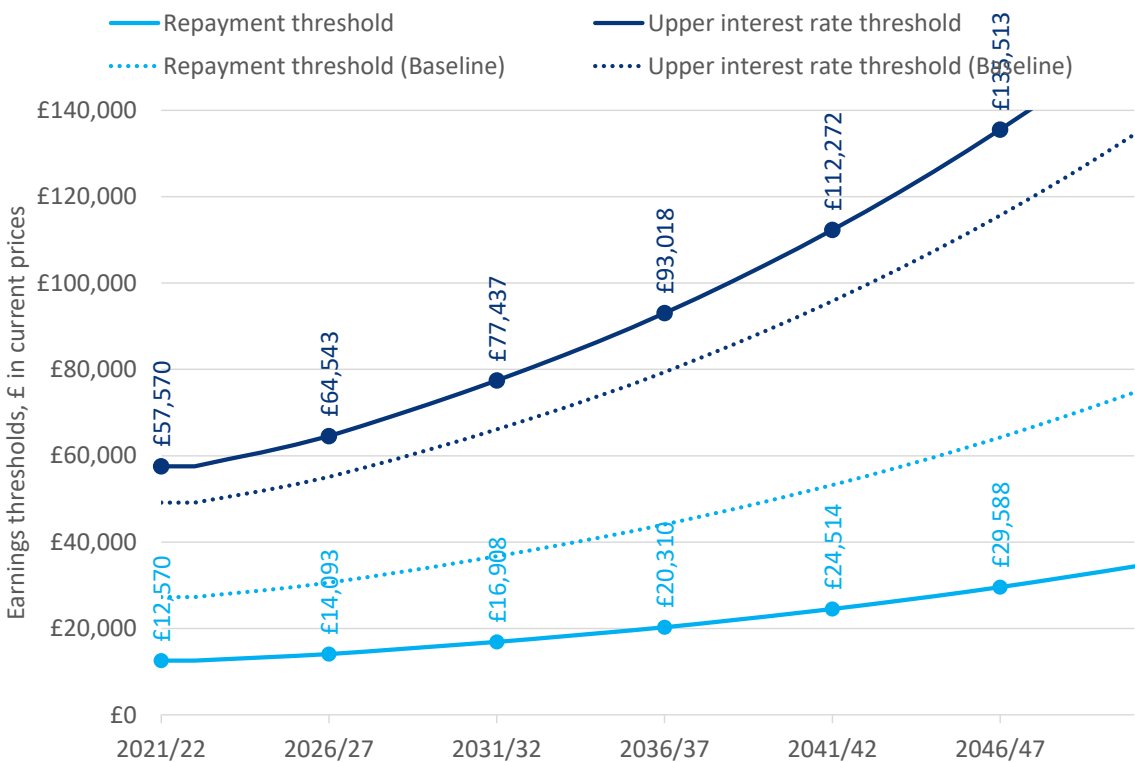
Scenario 2: Repayment and interest thresholds

Earnings thresholds for loan repayment and interest rates

Scenario 1: DfE's response to Augar



Scenario 2: Stepped repayments

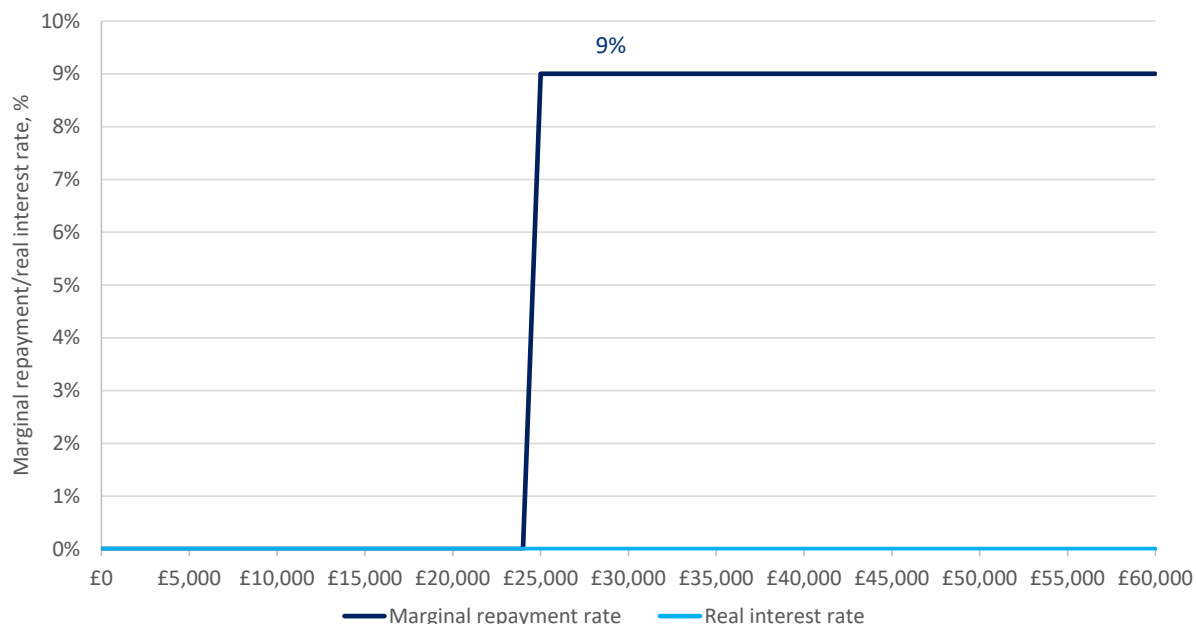


- In **Scenario 2**, we have modelled a **significant change in the repayment threshold, and associated repayment rates**. The lowest threshold for repayment is aligned with the (tax-free) Personal Allowance (£12,570), and is uprated by average earnings growth (i.e. no 'stealth tax', as in the Baseline).
- Under Scenario 2, the assumed threshold at which the highest level of real interest rate is levied is significantly higher than currently the case in the Baseline (and note that there is no real interest rate levied under the DfE's response to Augar (Scenario 1)).

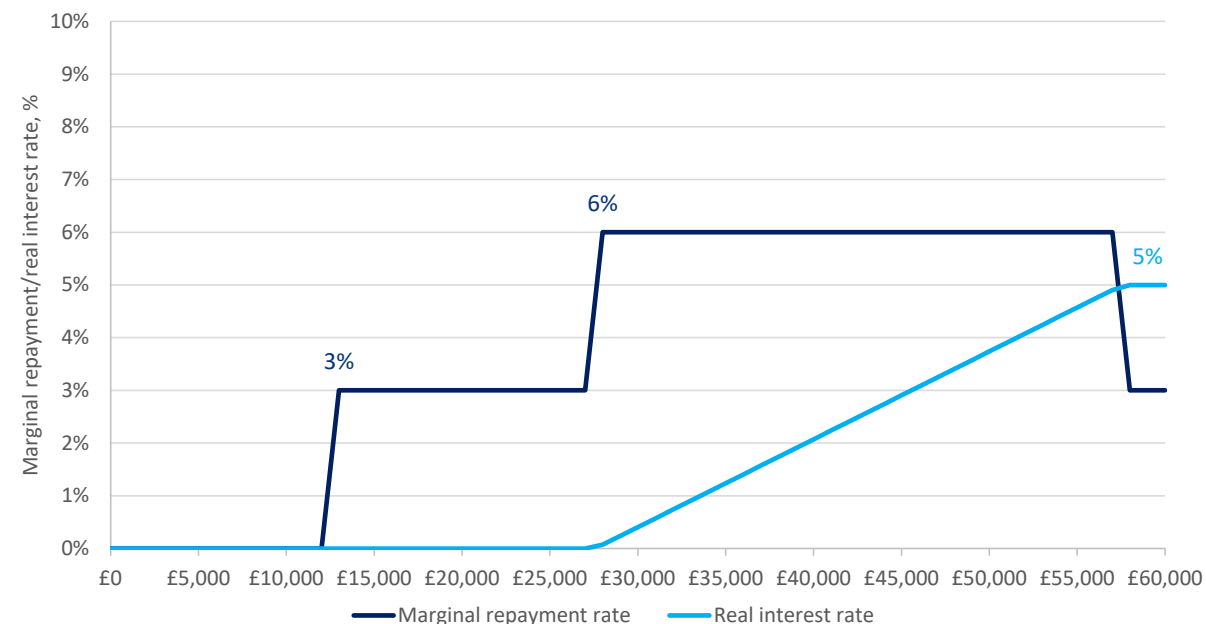
Scenario 2: Repayment and interest rates

Loan repayment and real interest rates by graduate income

Scenario 1: DfE's response to Augar



Scenario 2: Stepped repayments



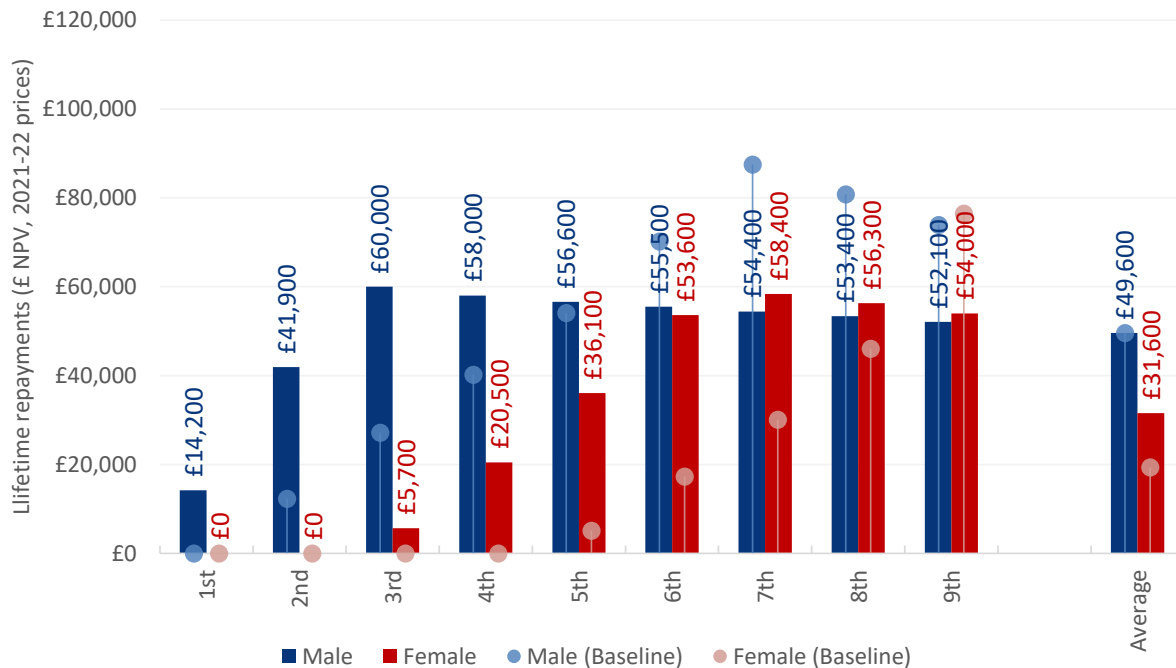
- In Scenario 2, we have also modelled a **very significant change in repayment rates**. We have assumed a stepped repayment profile, where graduates repay **3% on earnings between £12,570 and £27,570**; **6% on earnings between £27,571 and £57,570**; and **3% on earnings of £57,571 or more**. The lower repayment rate for the highest earning graduates is specifically aimed at ensuring that the highest earning male graduates ‘just’ repay at the end of the repayment period (now 31 years), to make the system more progressive. Importantly, the annual burden for a large proportion of graduates is significantly reduced as a result of the reduction from the current 9% repayment rate. This addresses many of the affordability issues faced by young graduates.
- We have also modelled an **increase in the real interest rate** (ranging between 0% and 5% for earnings between £27,571 and £57,570), as this further supports the progressivity of the system (and reverses the distributional effects associated with the DfE’s response to Augar)*.

* Currently, where the student loan interest rate is too high in comparison to the prevailing market rate, the Government will reduce the maximum Plan 2 and Postgraduate Loan interest rate by applying a cap for a set period of three months (or longer if necessary) – e.g. see the recent announcements of a cap [here](#) (due to exceptionally high current RPI rates). While not explicitly modelled here, we would assume that similar changes could continue to be made to the interest rate in exceptional circumstances.

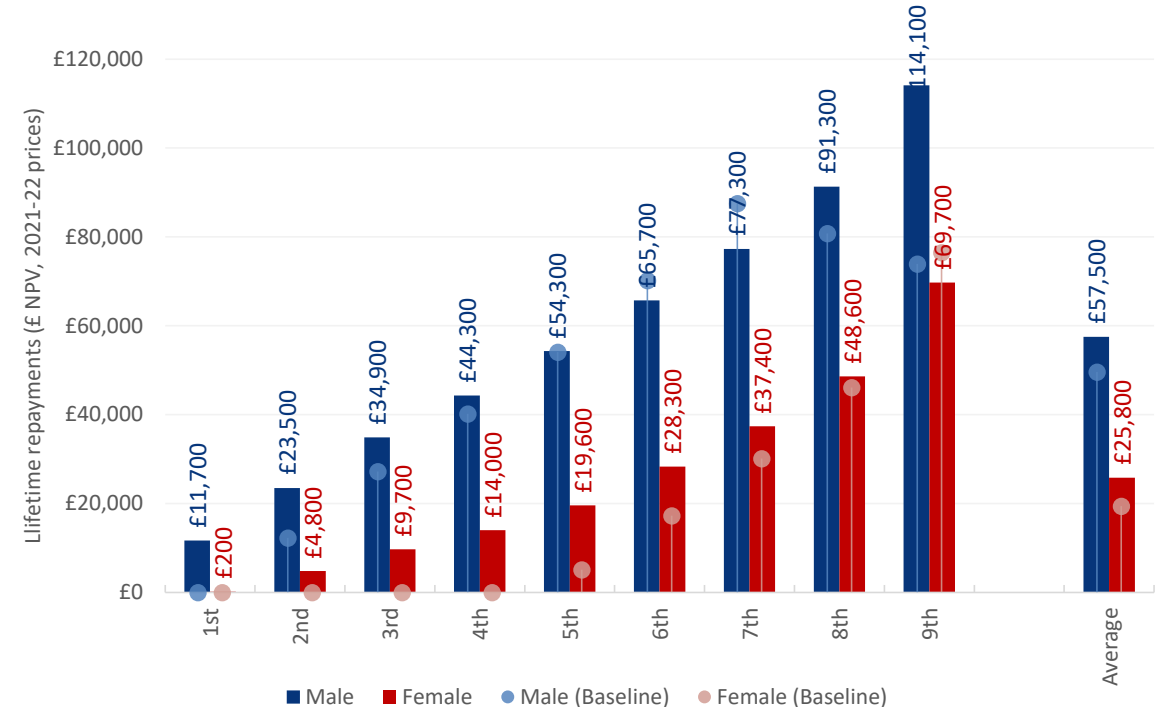
Scenario 2: Graduate loan repayments

Total loan repayments by English domiciled FT first degree graduates (NPV in 2021-22 prices), by decile and gender

Scenario 1: DfE's response to Augar



Scenario 2: Stepped repayments

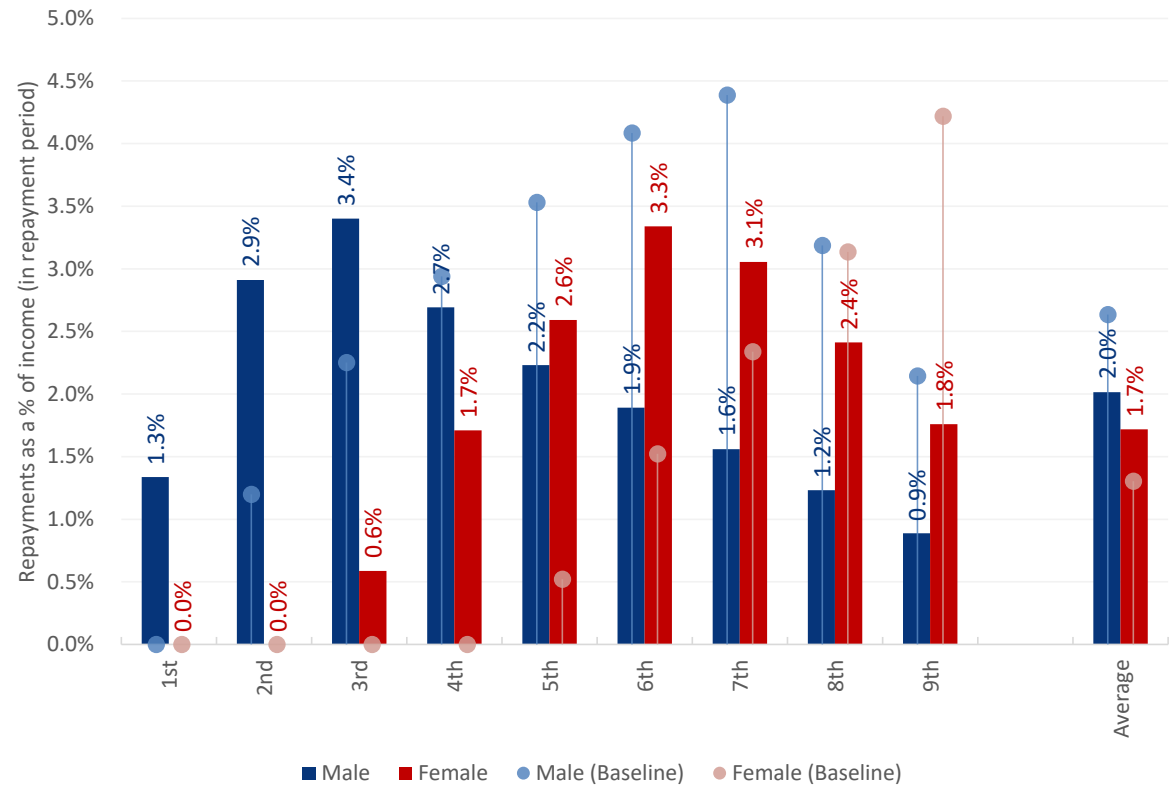


- The combined changes under Scenario 2 would make the repayment profile **much more progressive** – both compared to the current system, as well as compared to the Augar system. Male graduates in the top 4 deciles pay more than under the DfE's response to Augar, while male graduates in the bottom 5 deciles pay less. Female graduates in the top decile and the bottom 3 deciles pay more, but middle-income female graduates pay much less than under the DfE's response to Augar.
- Compared to the 10-year increase under the DfE Augar response, the small increase in the period of repayment would also result in significantly lower repayments for low- to middle-income graduates.

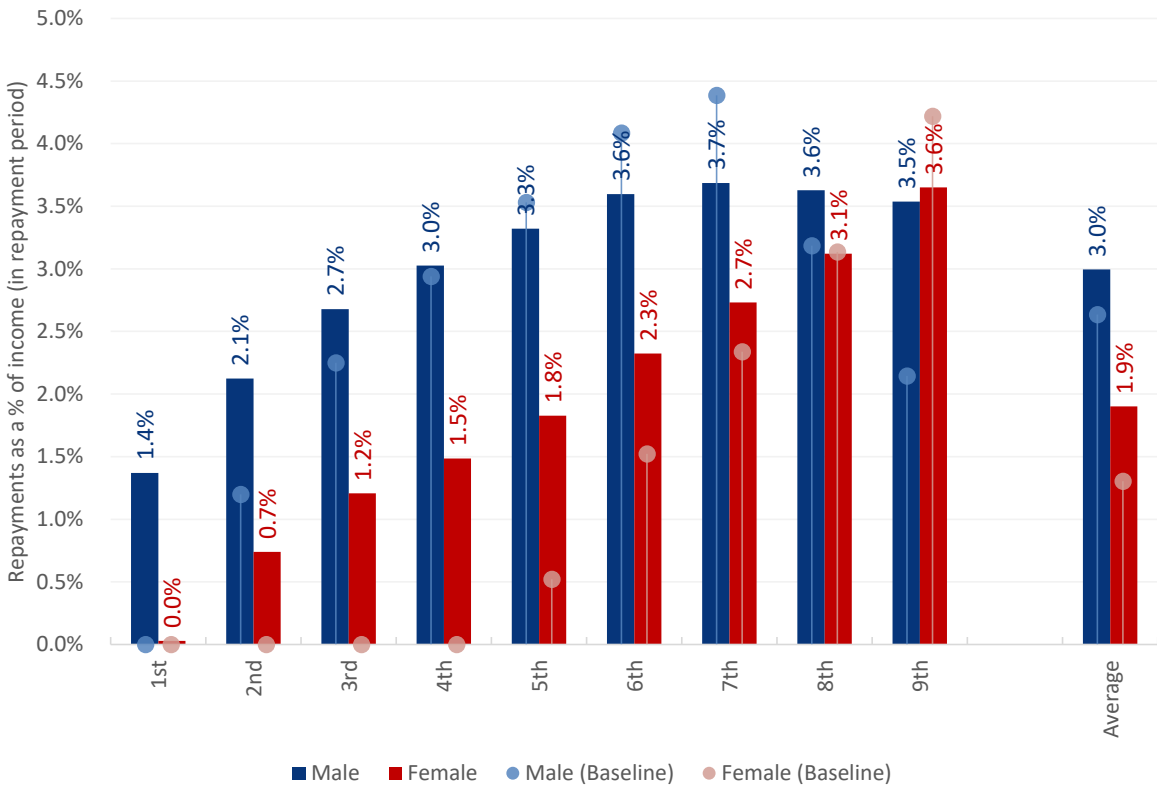
Scenario 2: Loan repayment progressivity

Total loan repayments by English domiciled FT first degree graduates, as a % of income (during repayment period), by decile and gender

Scenario 1: DfE’s response to Augar



Scenario 2: Stepped repayments

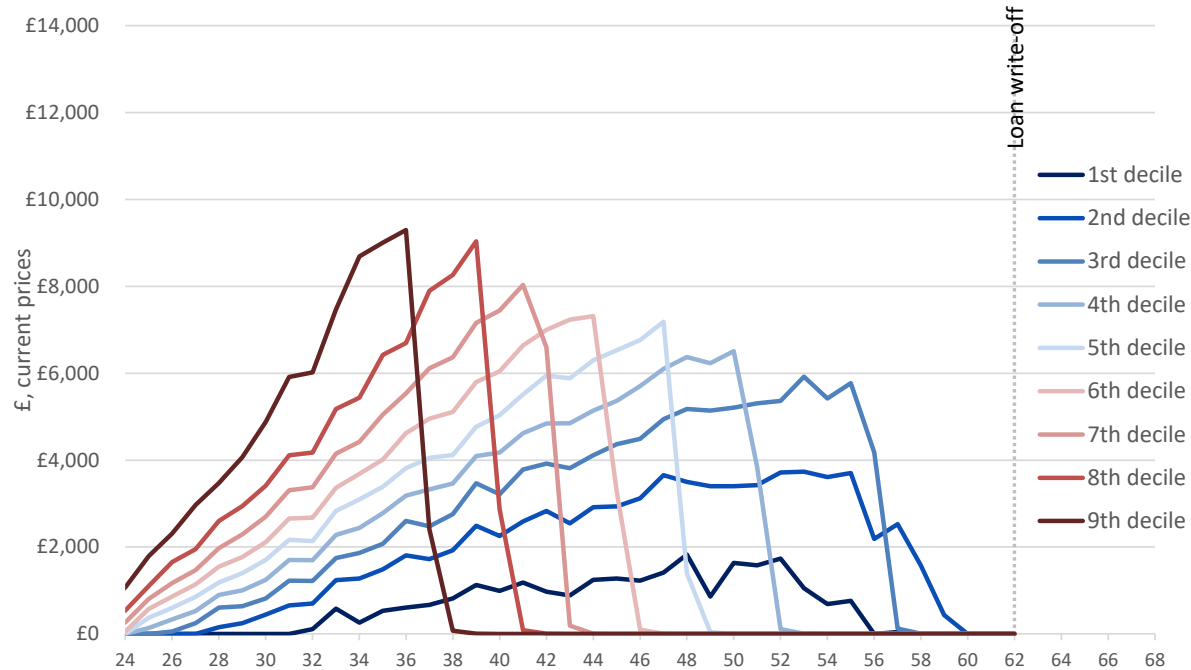


- The stepped repayment system would make the graduate repayment profile **much more progressive** – both compared to the current system, as well as compared to the Augar system.

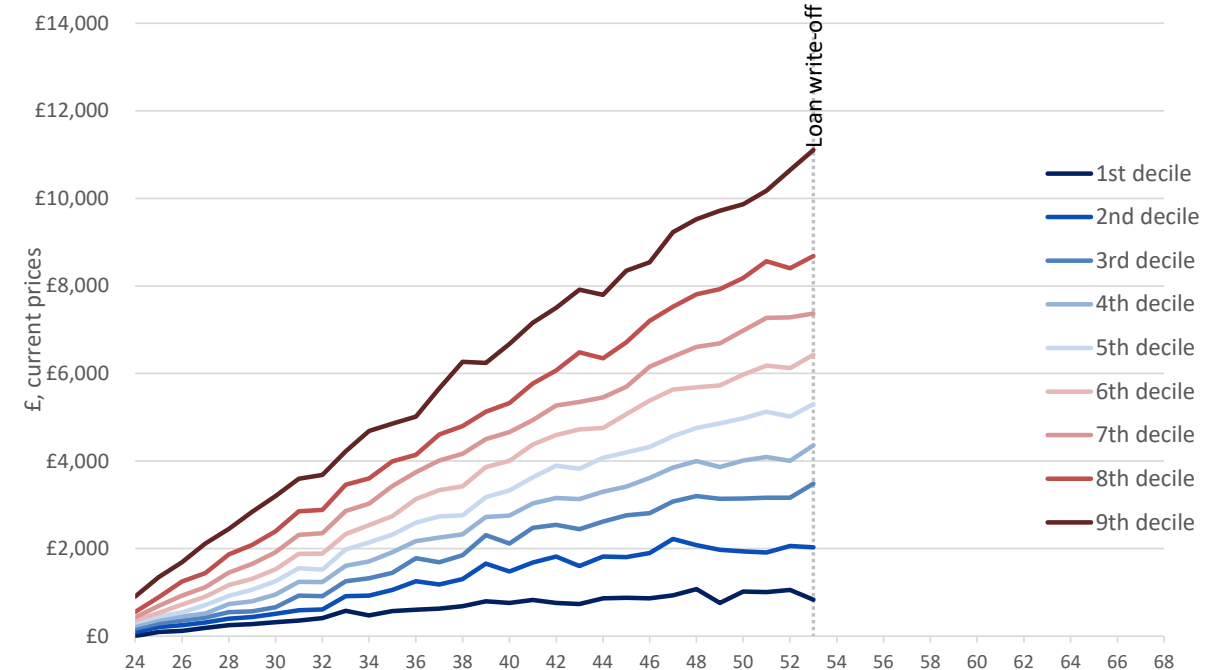
Scenario 2: Loan repayment profiles (men)

Lifetime loan repayment profiles (by age) for English domiciled FT first degree **male** graduates (cash terms in current prices)

Scenario 1: DfE's response to Augar



Scenario 2: Stepped repayments

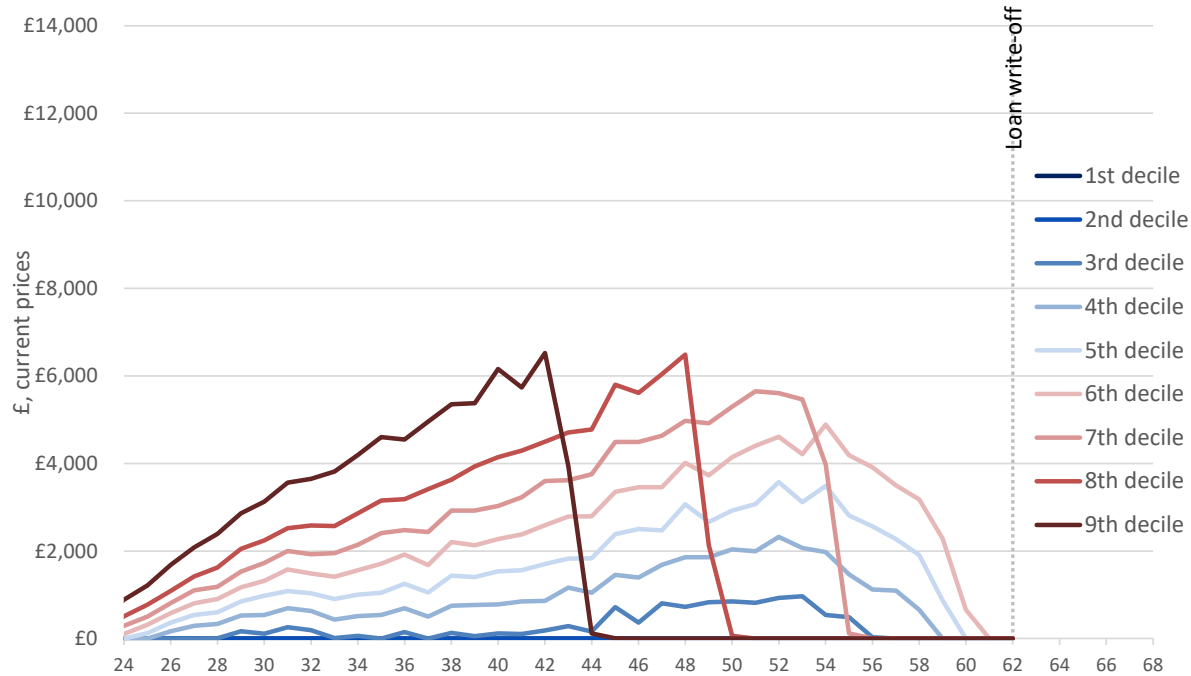


- The combination of these changes is precisely structured to ensure that **even the highest earning graduates continue repaying their outstanding loan balance until the end of the repayment period**. As a result, the repayments of the highest earning graduates subsidise low- to middle- income graduates (in contrast to the DfE's response to Augar).

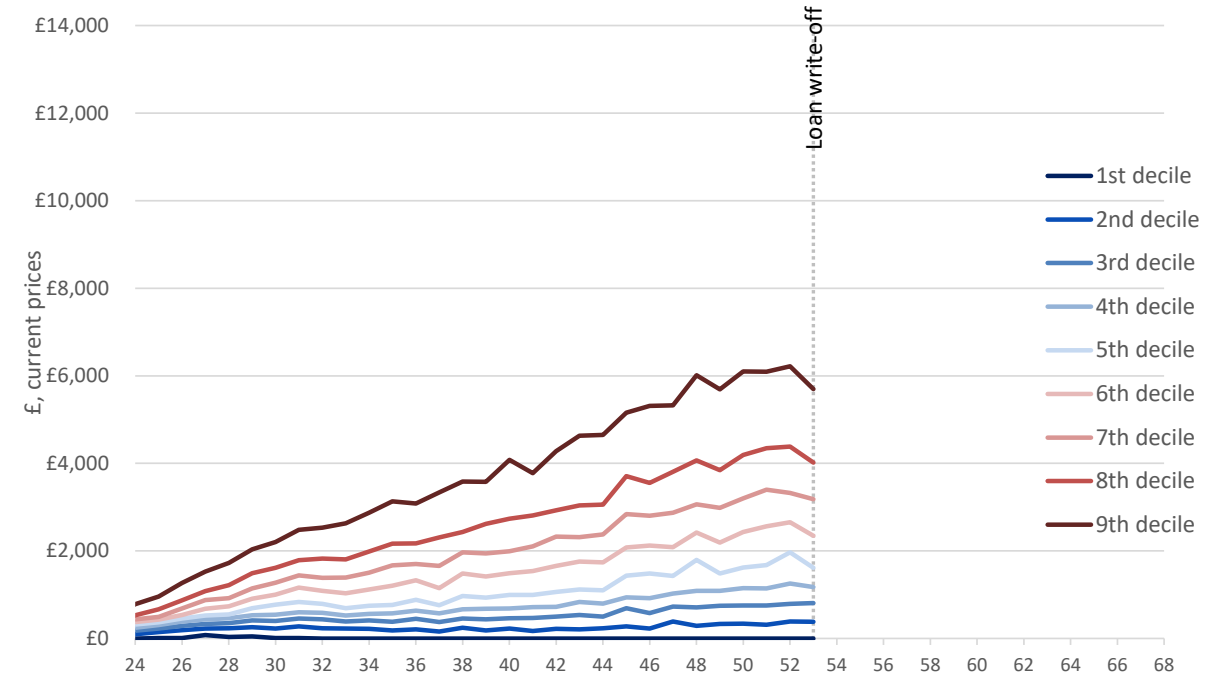
Scenario 2: Loan repayment profiles (women)

Lifetime loan repayment profiles (by age) for English domiciled FT first degree *female* graduates (cash terms in current prices)

Scenario 1: DfE's response to Augar



Scenario 2: Stepped repayments



- The combination of these changes is precisely structured to ensure that **even the highest earning graduates continue repaying their outstanding loan balance until the end of the repayment period**. As a result, the repayments of the highest earning graduates subsidise low- to middle- income graduates (in contrast to the DfE's response to Augar).

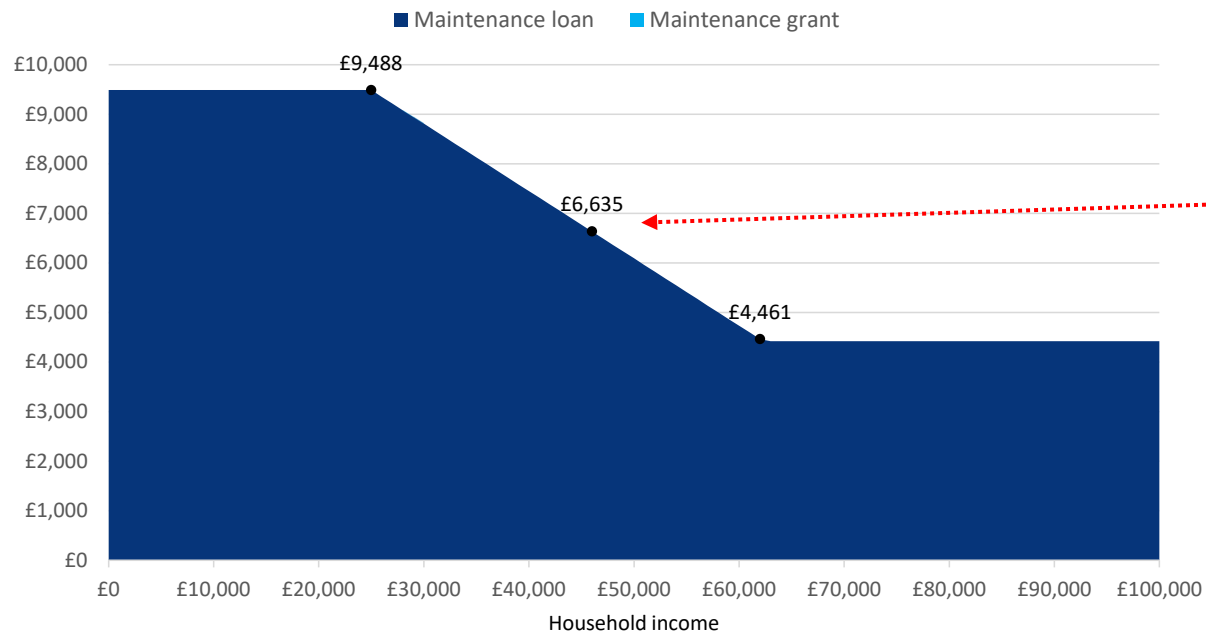
Alternative Scenario 2: Stepped repayments + maintenance grants

We further explored how the stepped repayment system under Scenario 2 could be *further* modified to accommodate the **re-introduction of maintenance grants** (for full-time students only). Specifically:

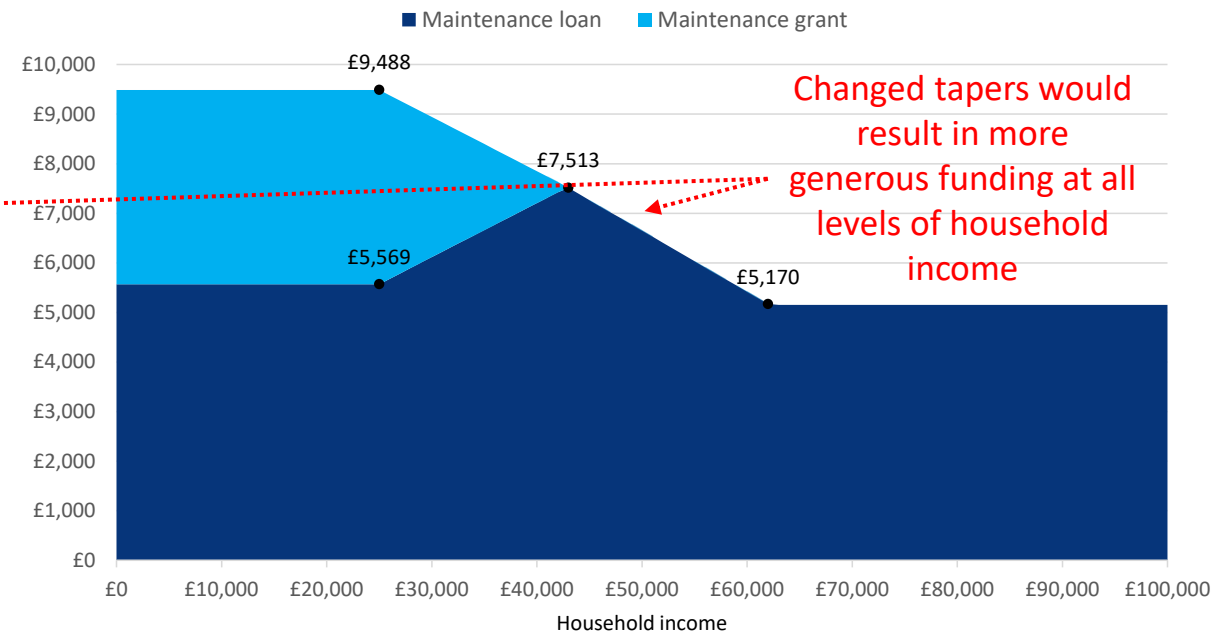
- We modelled the **(re-)introduction of maintenance grants for FT students** (up to **£3,919**), based on the grants available (and associated thresholds/tapers) to continuing students who started their studies prior to the abolition of maintenance grants in 2016/17. This would involve the partial replacement of maximum maintenance loans with grants (so that the total maximum maintenance funding available remains unchanged)*.
- To achieve similar Exchequer savings as under the 'original' Scenario 2, this could be funded through an **increase in the maximum repayment rate** from 6.0% to **6.5%** (for earnings between £27,571 and £57,570) (but the same repayment/interest terms otherwise).

Maximum maintenance funding per full-time student living away from home outside of London (LAFHOL), by household income

Scenario 1: DfE's response to Augar (same as current)



Scenario 2: Stepped repayments + maintenance grants



Note: * We have assumed that there would be no change to the maintenance funding available to part-time students (i.e. we assume that they would be eligible for the same maximum level of maintenance loans (and no maintenance grants as under the current and Augar systems).

Alternative Scenario 2: Stepped repayments + maintenance grants

Scenario 2: Stepped repayments + maintenance grants

Resource flows (£/£m/%)	Scenario 1: DfE's response to Augar	Scenario 2: Stepped reps.	Difference
Exchequer			
Cost of maintenance grants	-	(£2,115m)	(£2,115m)
Cost of maintenance loans	(£1,588m)	(£563m)	£1,026m
Cost of tuition fee loans	(£1,916m)	(£774m)	£1,143m
Cost of Teaching Grants	(£1,153m)	(£1,153m)	-
Total Exchequer cost	(£4,658m)	(£4,604m)	£54m
RAB charge (%)	18%	7%	-10pp
% never repaying full loan/anything	51% / 15%	91% / 2%	40pp / -13pp
Higher education institutions			
Gross fee income	£10,773m	£10,773m	-
Teaching Grant income	£1,153m	£1,153m	-
Cost of bursary provision	(£202m)	(£202m)	-
Net HEI income	£11,724m	£11,724m	-
Students/Graduates (FT first degrees)			
Average debt on graduation	£46,200	£42,900	(£3,300)
Average lifetime repayments (M/F)	£49,600 / £31,600	£57,500 / £26,900	£7,900 / (£4,700)

- Under this *alternative* Scenario 2, the cost of the (re-) introduction of maintenance grants for full-time students (**£2.115bn**) would be financed through a decline in the costs of maintenance loan and tuition fee loan write-offs (declining by **£1.026bn** and **£1.143bn**, respectively).
- The lower cost of loan write-offs is driven by the lower loan outlay (due to lower maintenance loans), as well as the assumed increase in the maximum repayment rate to **6.5%** (for earnings between £27,571 and £57,570).
- In the supplementary slides (see [Annex II](#)), we analyse **another alternative to Scenario 2** (where, instead of re-introducing the previous maintenance grants available in the *English* system, we explore the introduction of the maintenance grants that are currently available to *Welsh* domiciled students as part of the Welsh funding system). The Diamond approach in Wales is significantly more generous (with maintenance grants adding approximately £3 billion to the costs presented here). To fund this through the loan system, **repayment rates would need to increase by 1pp on earnings up to £27,570 (to 4.0%) and by 1.5pp (to 7.5%) on earnings between £27,571 and £57,570**. In addition, the **maximum interest rate charged at £57,570 would need to increase by 1 percentage point**.

Note: All monetary values have been discounted to net present values and are presented in constant 2021-22 prices. All monetary values per student have been rounded to the nearest £100, and all totals have been rounded to the nearest £1m. Debt on graduation and expected lifetime repayments per student are presented for full-time first degree students only. Gross fee income refers to fee income before the deduction of bursaries provided to students.

Scenario 3: Graduate tax



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Scenario 3: Total costs

Resource flows (£/£m/%)	Scenario 1: DfE's response to Augar	Scenario 3: Graduate tax	Difference
Exchequer			
Cost of maintenance grants	-	(£8,819m)	(£8,819m)
Cost of maintenance loans	(£1,588m)	-	£1,588m
Cost of tuition fee grants	-	(£10,767m)	(£10,767m)
Cost of tuition fee loans	(£1,916m)	-	£1,916m
Cost of Teaching Grants	(£1,153m)	(£1,153m)	-
Graduate tax contributions	-	£16,123m	£16,123m
Total Exchequer cost	(£4,658m)	(£4,617m)	£42m
RAB charge (%)/% of student grants not recovered through graduate tax	18%	18%	-
Higher education institutions			
Gross fee income	£10,773m	£10,773m	-
Teaching Grant income	£1,153m	£1,153m	-
Cost of bursary provision	(£202m)	(£202m)	-
Net HEI income	£11,724m	£11,724m	-
Students/Graduates (FT first degrees)			
Average debt on graduation	£46,200	£43,200	(£3,000)
Av. repayments / tax contributions (M/F)	£49,600 / £31,600	£60,700 / £23,200	£11,100 / (£8,400)

- In **Scenario 3**, we have modelled the introduction of a graduate tax to replace the current loan repayment system, to achieve comparable fiscal savings as in the DfE's response to Augar (Scenario 1) while **further improving the progressivity of the 'repayment' system w.r.t. graduate earnings**. Specifically, we modelled:
 - The full replacement of current maintenance loans and fee loans with maintenance grants and fee grants, respectively;
 - A graduate tax of **3.0%** payable on earnings between £12,570 and £50,270, and **5.5%** on earnings of £50,271 or more (with thresholds mirroring income taxes, and with no time limit, i.e. payable until retirement).
- Compared to the DfE's response to Augar, this approach is again (essentially) fiscally neutral, while ensuring a fully progressive graduate contribution system.
- The estimated proportion of fee and maintenance grants not recouped through the graduate tax (**18%**) is roughly the same as the RAB charge under Scenario 1 (**18%**). However, compared to lifetime loan repayments under Scenario 1, average graduate tax contributions would be **£11,100 higher** for men, but **£8,400 lower** for female graduates.

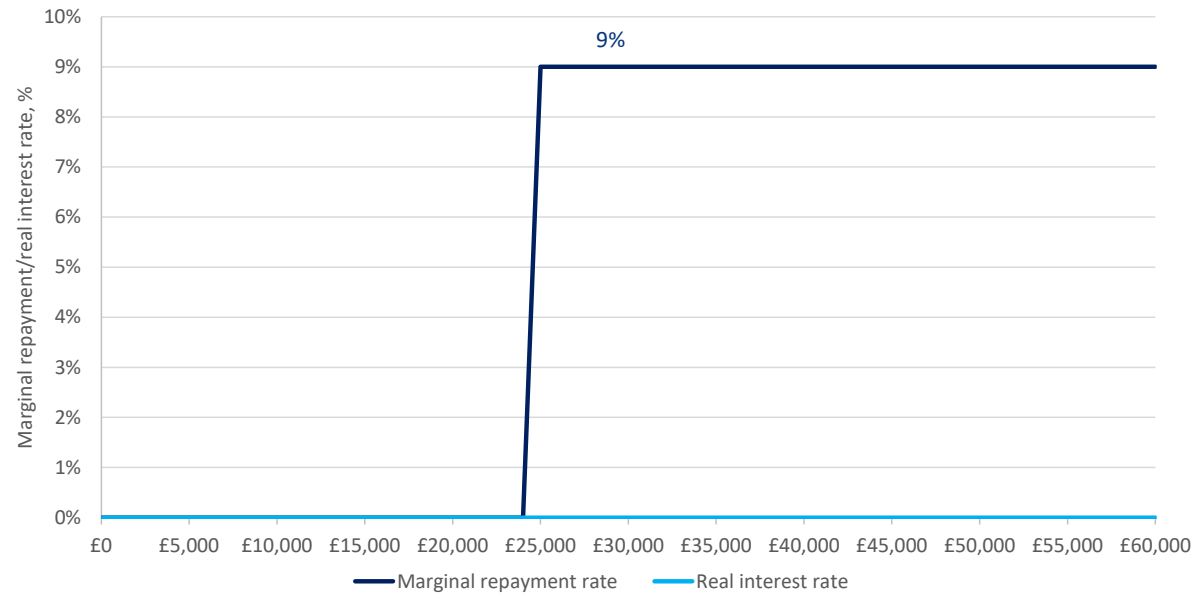
Note: All monetary values have been discounted to net present values and are presented in constant 2021-22 prices. All monetary values per student have been rounded to the nearest £100, and all totals have been rounded to the nearest £1m. Debt on graduation and expected lifetime repayments per student are presented for full-time first degree students only. Gross fee income refers to fee income before the deduction of bursaries provided to students.

Note: If the average age of commencement of all full time and part time students increased by 1 year, this would increase total Exchequer costs by £424 million per cohort.

Scenario 3: Repayment/tax and interest rates

Loan repayment and real interest rates/marginal graduate tax rates by graduate income

Scenario 1: DfE's response to Augar system



Scenario 3: Graduate tax

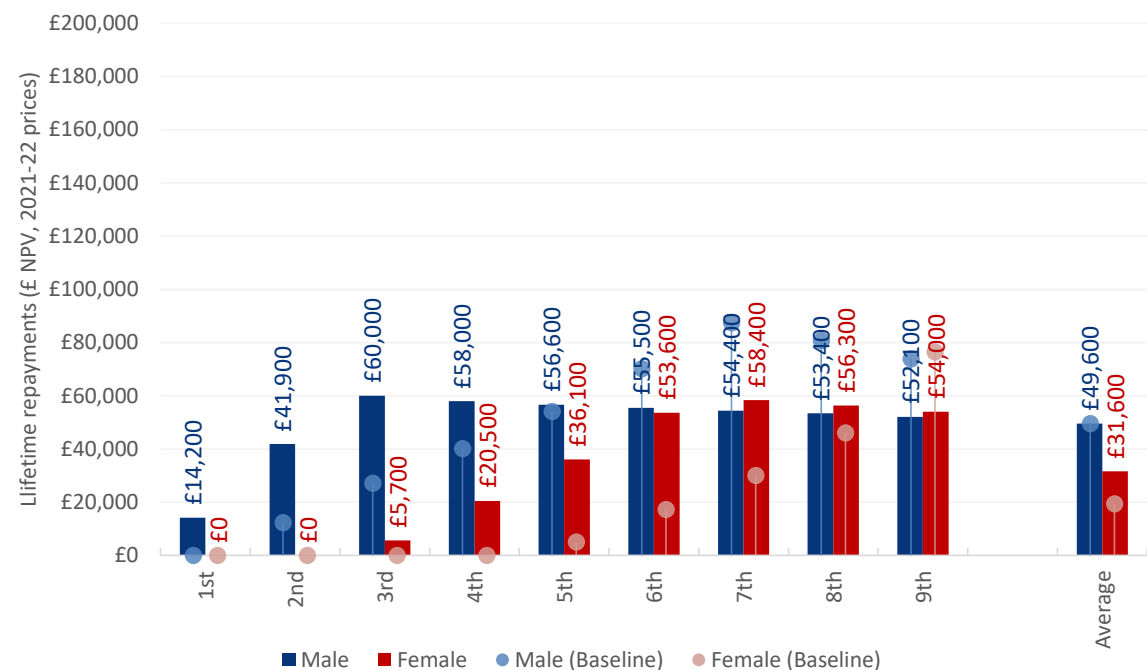


- In Scenario 3, we have modelled a **very significant change to the structure of the HE funding system**. We have assumed a progressive graduate tax, where graduates contribute **3.0% on their earnings between £12,570 and £50,270**, and **5.5% on earnings of £50,271 or more**.
- Importantly, the graduate tax implies that the student funding system is **no longer based on an individualised debt that should be repaid by each graduate** and, once repaid, results in an end in contributions. In addition, the graduate tax is **not limited to a specific time frame (i.e. no 'repayment period')**. As a result, all graduates would be expected to make contributions until their retirement (as long as their income exceeds the Personal Allowance).
- These changes imply that graduates would typically make contributions over a longer timeframe (compared to the current repayment system). However, as under Scenario 2, the *annual* burden for a large proportion of graduates would be significantly reduced as a result of the lower marginal repayment rates (as compared to the current 9% repayment rate).

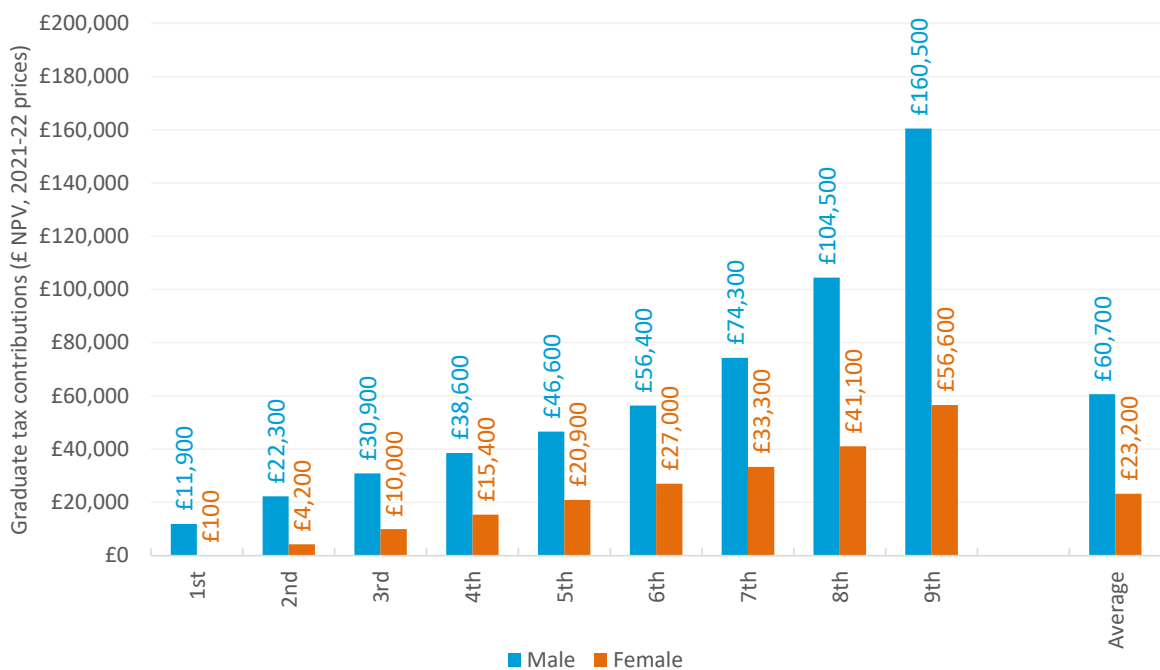
Scenario 3: Graduate loan repayments/tax contributions

Total loan repayments/graduate tax contributions by English domiciled FT first degree graduates (NPV in 2021-22 prices), by decile and gender

Scenario 1: DfE's response to Augar system



Scenario 3: Graduate tax

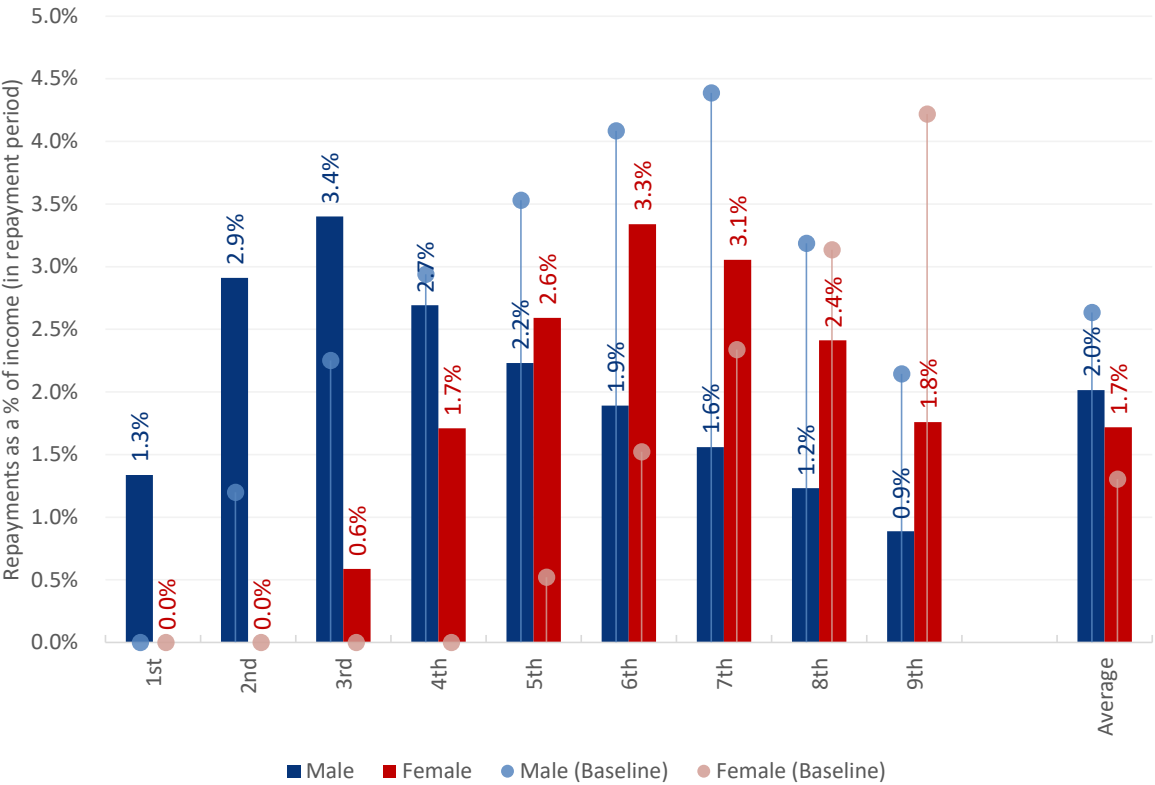


- The graduate tax would make the repayment profile **significantly more progressive** – both compared to the current system, as well as compared to the DfE's response to Augar. The graduate tax system would also be more progressive than the stepped repayment system modelled under Scenario 2.
- Under the proposed graduate tax, male graduates in the 6th decile and above, and female graduates in the top deciles and in the bottom 3 deciles, pay *more* than under the Augar system (Scenario 1). In contrast, all other graduates would contribute *less* than under the DfE's response to Augar. Reflecting their significantly larger earnings, the very highest earners (men on the 8th and 9th decile) would contribute significantly more through the graduate tax than men on the next highest decile.

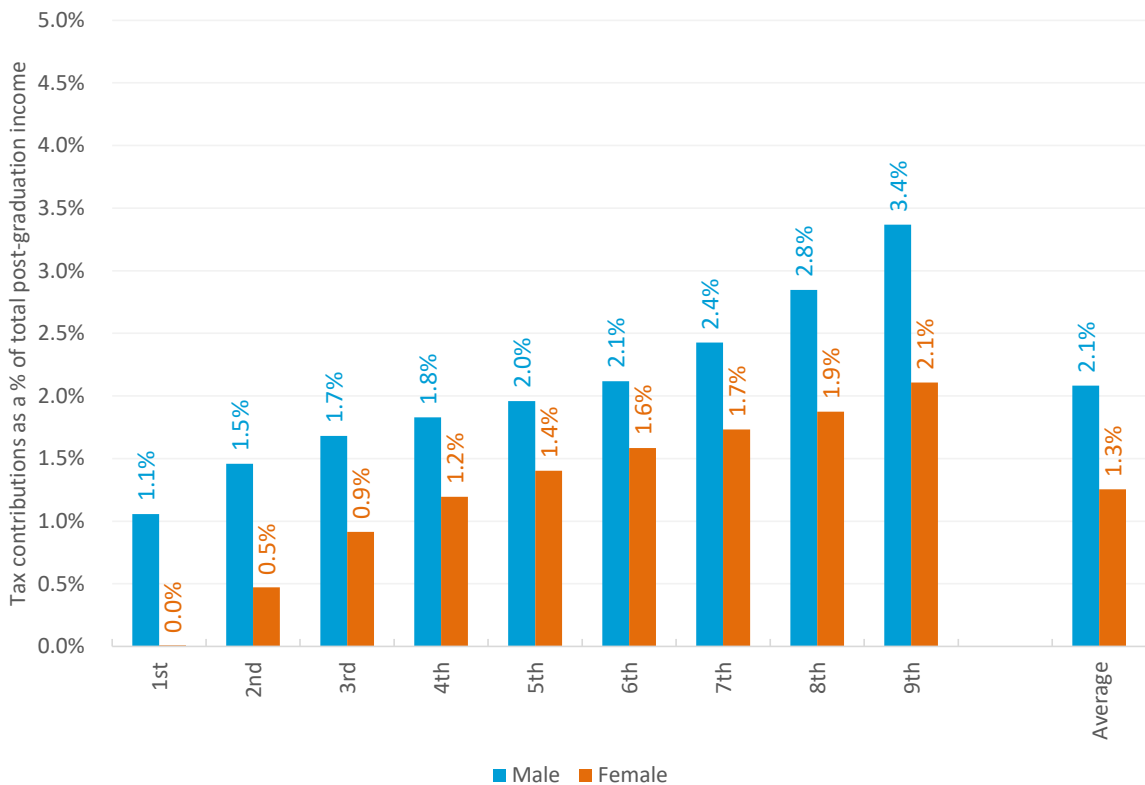
Scenario 3: Loan repayment/tax progressivity

Total loan repayments/graduate tax contributions by English domiciled FT first degree graduates, as a % of income, by decile and gender

Scenario 1: DfE’s response to Augar system



Scenario 3: Graduate tax



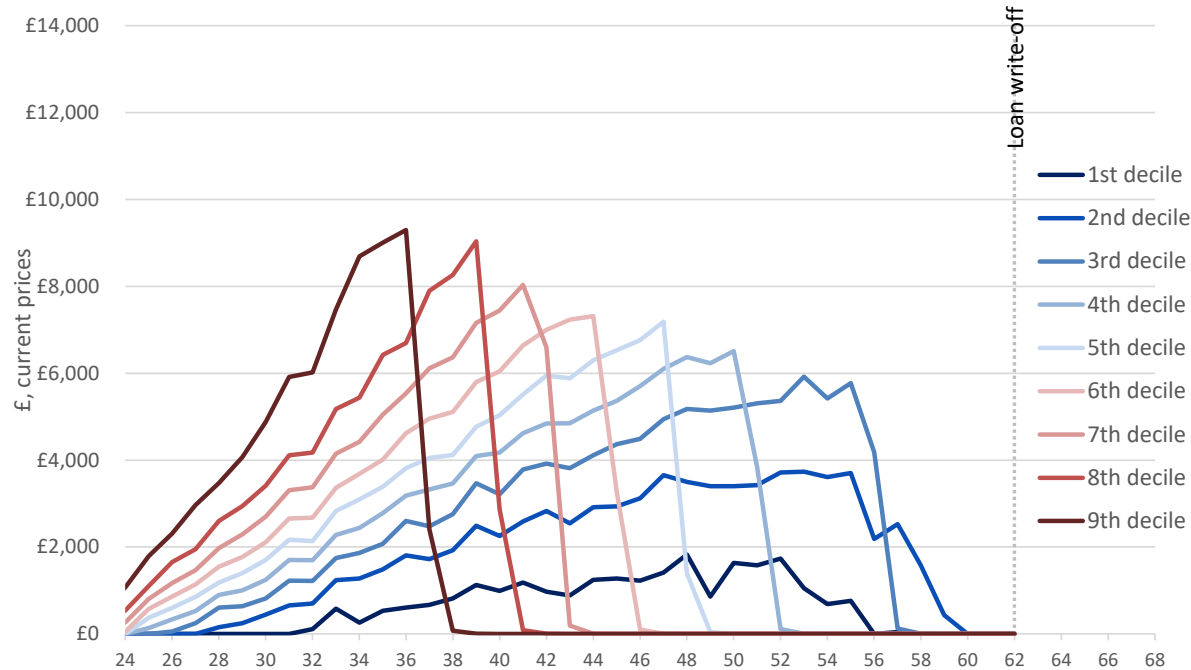
- The graduate tax would make the repayment profile **much more progressive** – both compared to the current system, as well as compared to the Augar system. The graduate tax system would also be more progressive than the stepped repayment system modelled under Scenario 2.

Note: For Scenario 1, the percentages are calculated as total repayments as a proportion of income *divided by the total loan repayment period*. For Scenario 3, percentages are instead calculated as total graduate tax contributions *divided by total post-graduation earnings* (from the Statutory ‘Repayment’ Due Date onwards (assumed to be the same as under the current system) until retirement (assumed to occur at age 65)). All percentages are calculated based on cash terms (i.e. undiscounted values in current prices).

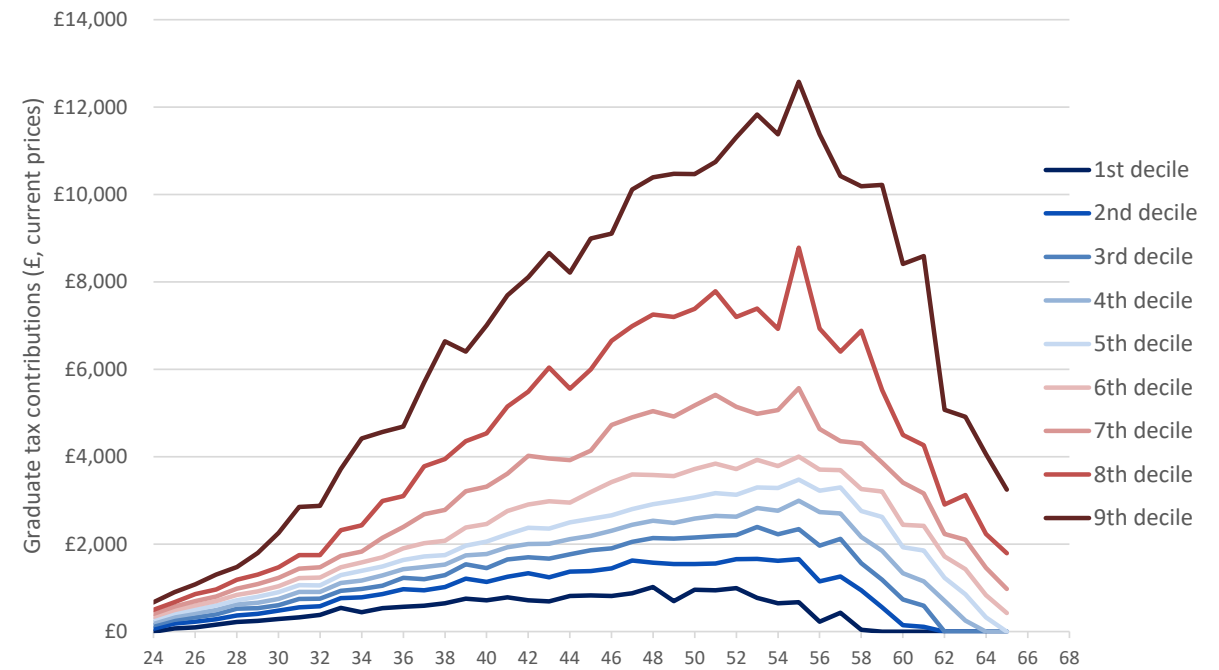
Scenario 3: Loan repayment/tax contribution profiles (men)

Lifetime loan repayment profiles/graduate tax profiles for English domiciled FT first degree *male* graduates (cash terms in current prices)

Scenario 1: DfE's response to Augar system



Scenario 3: Graduate tax

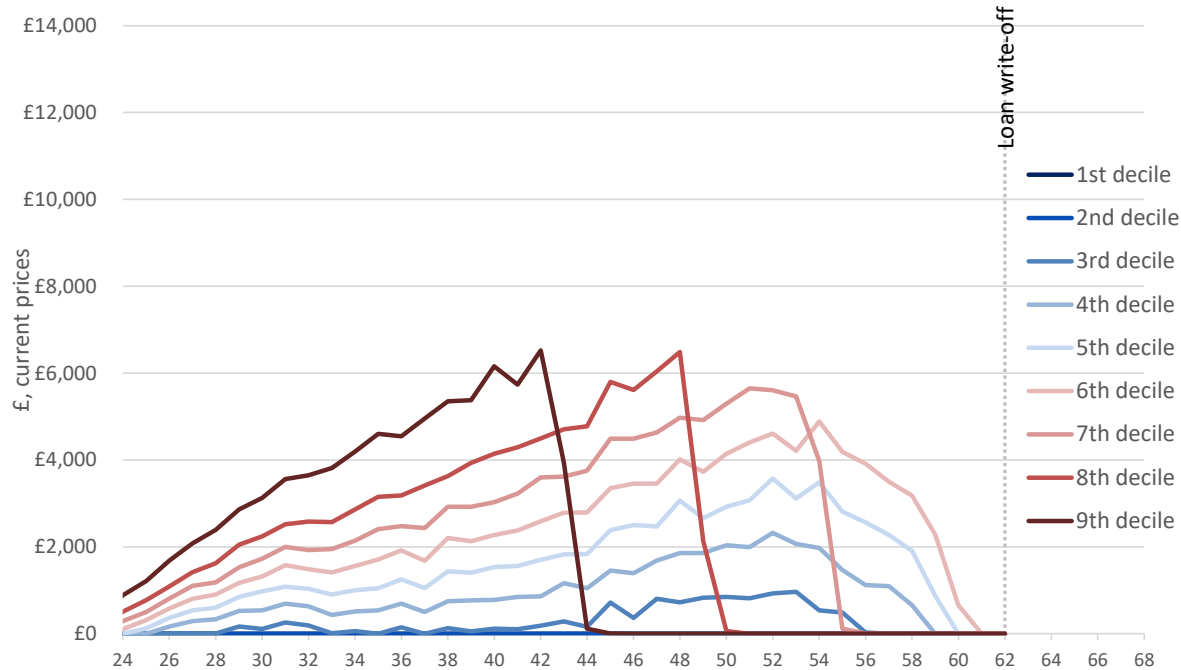


- The graduate tax would imply that **all graduates would make tax contributions for most of their working lives** (rather than being time-limited based on full loan repayment or the end of the loan repayment period).
- As a result, the **larger a graduate's earnings, the higher their tax contributions** (so that by far the largest contributions would be made by the highest-earning (predominantly male) graduates).

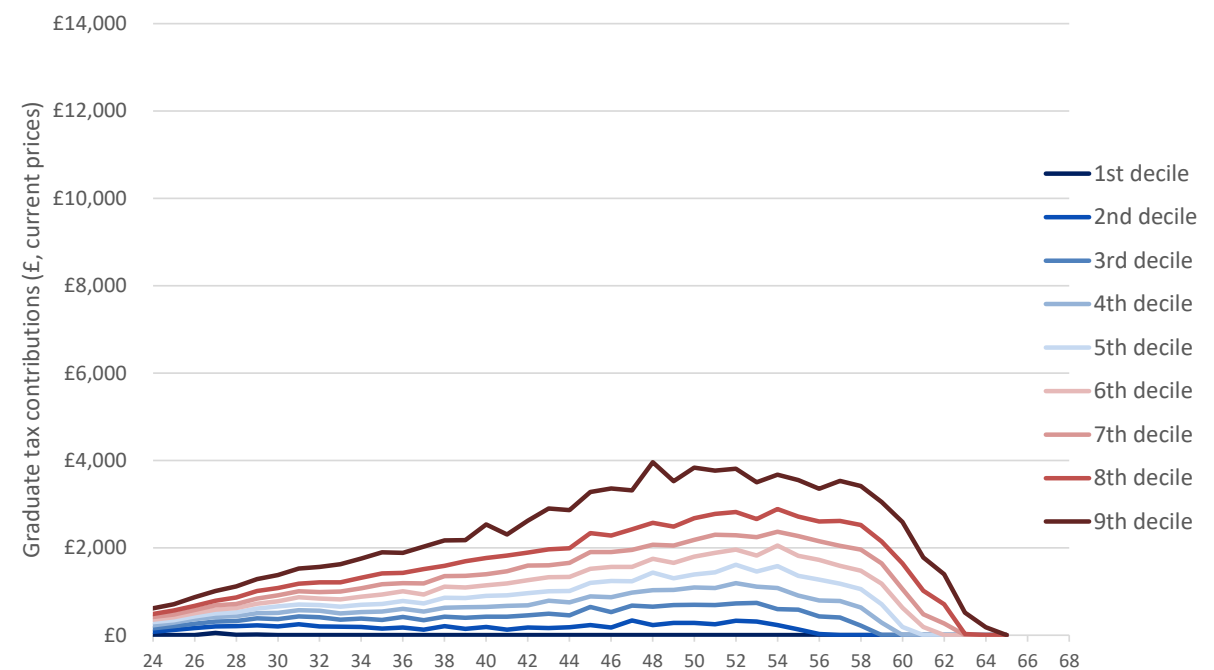
Scenario 3: Loan repayment/tax contribution profiles (women)

Lifetime loan repayment profiles/graduate tax profiles for English domiciled FT first degree *female* graduates (cash terms in current prices)

Scenario 1: DfE's response to Augar system



Scenario 3: Graduate tax



- The graduate tax would imply that **all graduates would make tax contributions for most of their working lives** (rather than being time-limited based on full loan repayment or the end of the loan repayment period).
- As a result, the **larger a graduate's earnings, the higher their tax contributions** (so that by far the largest contributions would be made by the highest-earning (predominantly male) graduates).

Alternative Scenario 3: Graduate tax + employer levy

Resource flows (£/£m/%)	Scenario 1: DfE's response to Augar	Scenario 3: Graduate tax	Difference
Exchequer			
Cost of maintenance grants	-	(£8,819m)	(£8,819m)
Cost of maintenance loans	(£1,588m)	-	£1,588m
Cost of tuition fee grants	-	(£10,767m)	(£10,767m)
Cost of tuition fee loans	(£1,916m)	-	£1,916m
Cost of Teaching Grants	(£1,153m)	(£1,153m)	-
Graduate tax contributions	-	£13,656m	£13,656m
Employer levy contributions	-	£2,589m	£2,589m
Total Exchequer cost	(£4,658m)	(£4,495m)	£163m
RAB charge (%)/% of student grants not recovered through graduate tax	18%	30%	12pp
Higher education institutions			
Gross fee income	£10,773m	£10,773m	-
Teaching Grant income	£1,153m	£1,153m	-
Cost of bursary provision	(£202m)	(£202m)	-
Net HEI income	£11,724m	£11,724m	-
Students/Graduates (FT first degrees)			
Average debt on graduation	£46,200	£43,200	(£3,000)
Av. repayments / tax contributions (M/F)	£49,600 / £31,600	£51,800 / £19,300	£2,200 / (£12,300)

- Finally, we explored by how much the graduate tax could be reduced under the potential **introduction of an employer levy** for higher education. Specifically:
 - We modelled a **0.45 percentage point increase in the employer National Insurance contribution rate** (from 15.05% to 15.50%) for individuals in the cohort in possession of undergraduate qualifications.
 - Clearly, the higher the employer levy, the lower the marginal graduate tax rates required to **achieve fiscal neutrality** (compared to the DfE's response to Augar). Under the assumed 0.45pp employer levy, the graduate tax rates could be reduced from **3.0% to 2.5%** on earnings between £12,570 and £50,270, and from **5.5% to 5.0%** on earnings of £50,271 or more.
- Under these assumptions, the employer levy contributions (**£2.589bn**) would roughly offset the lower graduate tax contributions (reduced by **£2.467bn**, from **£16.123bn to £13.656bn**).

Conclusion



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Conclusion and discussion

- Although generating comparable savings as the Department's response to Augar, and being significantly more progressive, there are some important differences between the stepped repayment system and the graduate tax. The graduate tax:
 - Is **significantly more generous** than the stepped repayment system in terms of maintenance support (as all current maintenance loans are 'converted' to grants);
 - Is **more straightforward** to explain and communicate (following the removal of interest rates, loans, and loan balances, and 'assimilation' within the wider tax system); and
 - Has a much **more substantial impact on the deficit** in the short term. The 'conversion' of loans to grants results in the entire value of the fee and maintenance support being considered as expenditure (rather than just the proportion of loans issued expected to be written off);
- The **most significant risk** relating to the stepped repayment system relates to ensuring that **prepayment** by the highest earning graduates does not occur (which cannot occur under the graduate tax as there would be effectively no tuition fee).
- The biggest challenge relating to the graduate tax relates to ensuring that **tax avoidance** does not occur. Given the fact that EU-domiciled students are no longer eligible for fee support following Brexit (although there was limited evidence of deliberate avoidance of loan repayments by these students), the risk of tax avoidance would now be limited to English-domiciled graduates moving overseas.
- There have been a **number of previous criticisms of a graduate tax** (e.g. see Section 7.1 of the [Browne Review](#)), as discussed in the following.
- **Impact on public finances:** A graduate tax has an adverse impact on the deficit as compared to the student loan system; however, the impact is much more limited following the recent [change in National Accounting rules](#) (and the incorporation of the loan write-off in deficit calculations). Compared to the DfE's response to Augar, under a graduate tax, the deficit associated with the 2021-22 cohort would be approximately **£5bn** per year larger in the first 3 years (although the graduate tax would subsequently result in a larger surplus than the DfE's response to Augar from 2034-35 onwards).
- **Impact on graduates:**
 - **The lowest earning graduates pay more.** As the Augar Review itself pointed out, *"we question the justification for a system which excludes so much of a borrower's earnings from any repayment and which helps to reinforce the "no win, no pay" element in student choice"* (see [here](#), p.170).
Under both the graduate tax and the stepped repayment system, there would be **repayments by graduates earning less than the current or DfE's response to Augar threshold for repayment** (with just **2%** of earners not expected to make any repayment, compared to **15%** under the Department's Augar response (and **32%** currently)). However, note that **total lifetime payments** for the lowest earners are lower under the graduate tax than under the DfE's response to Augar.

Conclusion and discussion

- Higher earning graduates would end up paying much more than the actual cost of their course:

Under the current system, the variation of real interest rates with graduate earnings means that the ‘price’ of a course depends on earnings (so higher earning graduates *already* pay more than the notional cost). It is also the case that AHSS graduates currently pay more than the notional cost of provision, while STEM graduates pay less.

The proposed changes under the DfE’s response to Augar are regressive, with the highest earning graduates paying **the same or less** than lower earning graduates. Instead, the graduate tax is designed to mimic the wider tax system, with those individuals benefitting most from their degree contributing the most.

Therefore, if students are entirely unaware of future earnings prospects as graduates, the graduate tax offers the ‘fairest’ outcomes to students/ graduates.

- The system for maintenance will require support through loans (so graduates pay graduate tax as well as make loan repayments):** This used to be a valid criticism. However, the graduate tax proposals that have been modelled here **combine** both maintenance and fees into a graduate tax system, explicitly to counter this issue. Assuming the same household income criteria, students are assumed to be eligible for the identical level of support under the graduate tax as under the current system (and as under the DfE’s response to Augar).

- Impact on students:

- Would a graduate tax apply to individuals who failed to complete their intended qualification?:** The current system and proposed Departmental response to Augar requires individuals to make loan repayments on a similar basis to individuals who complete their intended qualifications. This is a **system choice** that is determined by the Department. However, a graduate tax system might need to be designed to allow for non-completion in some way (through a reduction in the contribution rate).
- It is unfair to compel students to pay tax rather than pay fees upfront:** There is no economic rationale to pay fees upfront (currently), and only a relatively small proportion of students currently do so. This option is removed under a graduate tax, as technically, there is no market price charged to English-domiciled students.

One option might be to allow pre-payment at the prevailing fee rate as with international students (potentially at the rate charged to international students) and disallow any right to maintenance. However, this would be administratively complex and require significant data collection (given that international students’ fees are determined by individual HEIs).

Conclusion and discussion

- **Impact on higher education institutions: A graduate tax might significantly weaken universities' independence, as they would be reliant on Government for all of their teaching funding:**
 - Higher Education Institutions are currently entirely dependent on the government for Teaching Grant and income from tuition fees. There would be **no difference** under a graduate tax, as the notional Teaching Grant under the graduate tax system presented here has been modelled to exactly equal current Teaching Grant funding and tuition fee income. The Government's decision to allocate resources to universities in respect of Teaching Grant or tuition fees would be identical to the Government's decision to determine the contribution made via a graduate tax system.
 - HEI income would continue to be **dependent on student choice**, as income would only be generated if students select to attend a particular institution. As such, there would be no difference with the current system, and criticisms relating to HEIs ignoring the student experience would be unfounded.
 - The current Departmental consultation relating to the introduction of **Student Number Controls** and **Minimum Entry Requirements** are likely to have a **more significant impact on university autonomy** than a graduate tax.
- **Impact on taxpayers:**
 - Rather than moving towards a specific graduate tax, there are some suggestions that given the wider social benefits associated with higher education, the cost of higher education should be paid directly through other forms of direct taxation (i.e. income taxation).
 - Under the current system, the general taxpayer **already** contributes more than **£7.55bn** per cohort (declining to approximately **£4.66bn** under the proposed Augar reforms and alternative scenarios). This represents **37%** and **23%** of the total cost, respectively.
 - Replacing tuition fees with additional Teaching Grant funding results in the general taxpayer subsidising the highest earning (predominantly male) graduates. Although intuitively appealing, this is deeply regressive. Removing real interest rates works in the same way – intuitively sensible but representing a subsidy from the taxpayer to the highest earning graduates.
 - Given the nature of income taxation, and the fact that more than 50% of young people do not participate in higher education, there is a strong argument that the general taxpayer should **not** contribute more than currently the case. An increase in general income taxation is a poorly targeted mechanism to cover the costs of an educational pathway that is acquired by and benefits a specific and well-identified group of individuals. It is also likely to be regressive and distortionary.
 - A graduate tax is highly targeted and progressive – and, under the graduate tax system proposed here (in Scenario 3) – retains a c.3:1 ratio of contribution between the direct beneficiaries and wider society.

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ANNEX I

Methodology and assumptions



Assumptions and methodology

- The model considers the total number of full-time and part-time **English-domiciled** first-year students starting undergraduate qualifications **at any higher education institution in the UK** in the 2021-22 academic year. We use information published by the Higher Education Statistics Agency (HESA, [here](#)) for 2020-21, assuming that the size and characteristics of the student cohort have **remained unchanged** between 2020-21 and 2021-22. Hence, the analysis assumes that there are **533,960 first-year undergraduate English domiciled students in the cohort** (see next slide)¹.
- Based on the same HESA data, we assume the following distribution of students by **qualification level**:

Qualification level	Full-time	Part-time
Other undergraduate	2%	42%
HNC/HND	2%	1%
Foundation Degree	2%	3%
First degree	94%	54%
Total	100%	100%

- Part-time students are estimated to study at **36% full-time equivalence (FTE)**².
- Again based on HESA data ([here](#)), we assume an annual continuation rate of **93.1%** for full-time students and **85.3%** for part-time students. This is based on the proportion of students who entered higher education in 2019-20 (full-time students) or 2018-19 (part-time students) and who were still enrolled in higher education one year (full-time students) or two years after enrolling (part-time students), including all UK domiciled students studying anywhere in the UK.

- The analysis is undertaken separately by gender. Based on HESA information on graduates by gender and qualification level ([here](#)), we assume the following **gender split**:

Qualification level	Full-time		Part-time	
	Male	Female	Male	Female
Other undergraduate	47%	53%	31%	69%
HNC/HND	45%	55%	86%	14%
Foundation Degree	25%	75%	34%	66%
First degree	42%	58%	40%	60%

- We assume the following **average age at enrolment** (based on HESA information³) and **average duration of qualification attainment** (by qualification level and study mode):

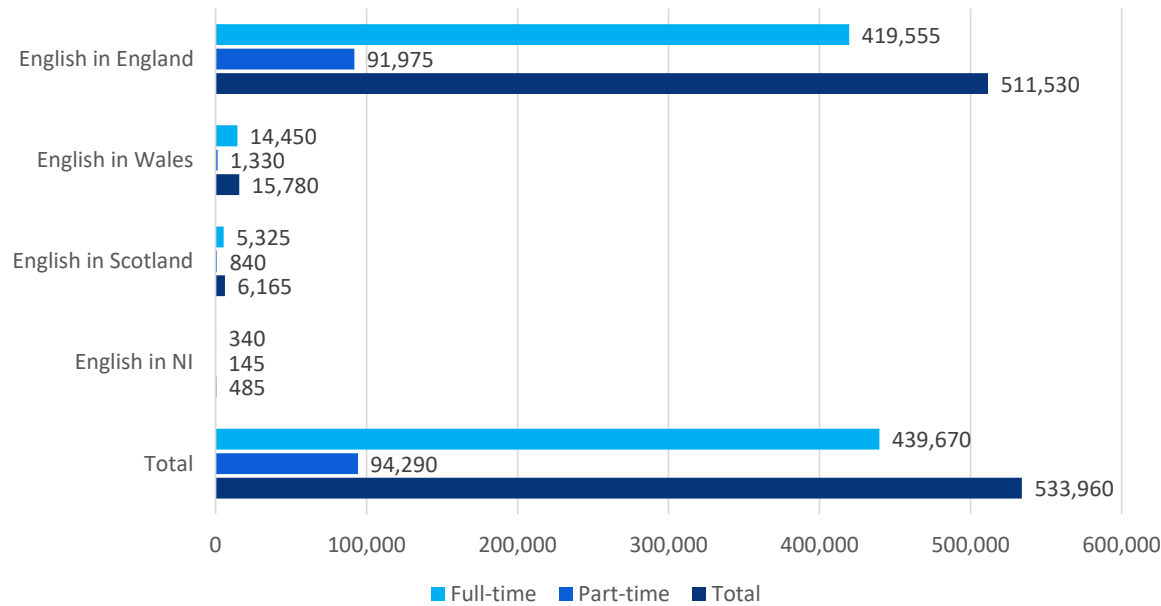
Qualification level	Age at enrolment		Study duration	
	Full-time	Part-time	Full-time	Part-time
Other undergraduate	28	36	1	2
HNC/HND	21	27	2	5
Foundation Degree	25	30	2	5
First degree	20	31	3	8

¹ The analysis includes students studying at higher education institutions only (excluding further education colleges but including alternative providers).
² Based on Callender, C., & Thompson, J. (2018). 'The lost part-timers: The decline of part-time undergraduate higher education in England' ([here](#)).
³ The assumptions in relation to the age at enrolment are based on data provided to us by the Higher Education Statistics Agency on the average age of English domiciled first-year undergraduate full-time students studying in England in 2015-16.

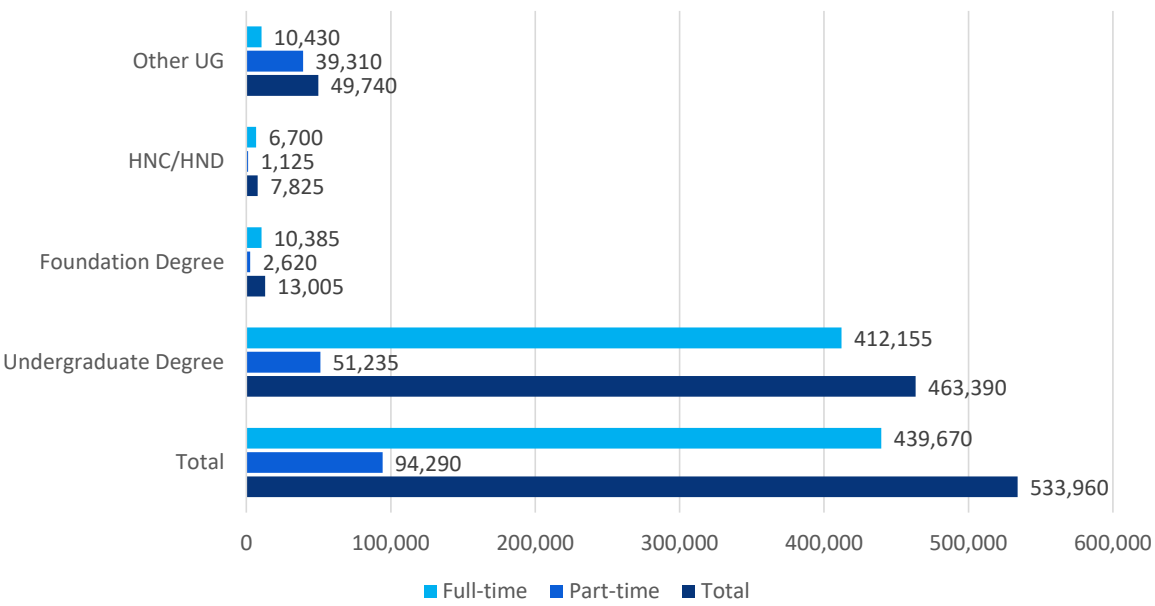
Assumptions and methodology

- The analysis is based on a total of 533,960 first-year undergraduate English-domiciled students studying anywhere in the UK:

Breakdown by location of study and mode of study



Breakdown by level and mode of study



Note: All student numbers are rounded to the nearest 5. The information is based on the 2020-21 academic year, and we assume the same size and characteristics of the 2021-22 cohort as for the 2020-21 cohort. The analysis includes students studying at higher education institutions only (excluding further education colleges but including alternative providers). Source: London Economics' analysis based on data published by the Higher Education Statistics Agency ([here](#))

Assumptions and methodology

- The maximum (gross) tuition fee chargeable to English domiciled **full-time students** in 2021-22 is **£9,250**, with an estimated average fee charged of approximately **£9,120** (rounded to the nearest £10, based on OFFA data, [here](#)). Despite the existence of Access Agreements and the provision of bursaries and fee waivers by HEIs¹, the net tuition fee remains the same in rounded terms (**£9,120**), as the majority of financial support is paid to students in the form of maintenance (i.e. non-fee) bursaries.
- The maximum (gross) fee charged to English **part-time students** is assumed to be **£3,340** (pro-rata, based on the corresponding full-time fee adjusted for part-time study intensity), with an estimated average fee charged of approximately **£3,290**. As for FT students, the relatively small fee waivers implies that the net tuition fee remains the same in rounded terms (**£3,290**).
- We assume that all students in the cohort cover these fees by taking out a **tuition fee loan** of the same amount (i.e. our model assumes maximum exposure of the student loan system).
- Based on the 2021-22 funding system, we have modelled full-time **students' maintenance loan eligibility by students' living conditions**, separately for full-time students living at Home (LAH, **23%** of students), living away from home outside of London (LAFHOL, **63%** of students) and living away from home in London (LAFHIL, **14%** of students)². For part-time students, based on the same sources, we assume that **25%** live at home (LAH), **68%** live away from home outside of London (LAFHOL), and **7%** live away from home in London (LAFHIL).
- To determine the **size of maintenance loans received**, students in the cohort 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** (i.e. again, maximum exposure of the loan system).
- In terms of students' household income, we base eligibility for maintenance loans (and maintenance grants, where applicable) on the current household income thresholds applied by Student Finance England. For **full-time students**, we combine this with information from the Student Loans Company (SLC, [here](#)) on the distribution of students by household income, based on the proportion of students that were previously in receipt of full or partial maintenance grants (in 2015-16 which was the last year that maintenance grants were available, and so constitutes the last year for which this information is available). For **part-time students**, we use the UK Labour Force Survey to estimate the distribution by household income of individuals aged 30-40 in possession of Level 3 qualifications as their highest qualification.

1. Based on OFFA data (for 2018-19), approximately **13%** of the tuition fee charged in excess of the Basic fee of **£6,165** per annum is 'handed back' to students in the form of fee and maintenance bursaries. However, the overwhelming majority of these bursaries are maintenance related (approximately **97%**). As such, the relatively minor tuition fee bursary has a negligible impact on the net tuition fee.

2. The distribution of students across these different living conditions is based on information from the 2014-15 Student Income and Expenditure Survey for England (on the proportion of full-time students living at home vs. living away from home; [here](#)), combined with HESA data on the number of first-year English domiciled full-time undergraduate students living in London vs. elsewhere in the UK ([here](#)).

Assumptions and methodology

Fees, fee loans, and maintenance loans and grants

- We assume that fees, fee loans, and maintenance loans (as well as maintenance grants, where applicable) do not increase over the duration of students' courses (i.e. we assume the same amount per student per year in every year of study).
- In the **current system** (Baseline), we estimate that the average maintenance loan received by students in the 2021-22 cohort stands at approximately **£7,380** per full-time student and **£3,030** per part-time student per year (rounded to the nearest £10). There are no maintenance grants available to English domiciled students under the current finance system.
- In **Scenario 1 (DfE's response to Augar)**, maintenance funding is the same as in the Baseline.
- In **Scenario 2 (stepped repayment system)**, in the *core* scenario presented above, maintenance funding is also the same as in the Baseline. However, for the *alternatives* of Scenario 2:
 - Under the **re-introduction of English maintenance grants** (see [this slide](#)), for full-time students, the average estimated maintenance loan decreases to **£5,750**, with an average maintenance grant of **£1,960**. Maintenance funding for part-time students is the same as in the Baseline.
 - Under the **introduction of Welsh maintenance grants** (see [Annex II](#)), for full-time students, the average estimated maintenance loan decreases to **£5,580**, with an average maintenance grant of **£4,770**. Again, maintenance funding for part-time students is the same as in the Baseline.

Inflation, growth, and discount rates

- In **Scenario 3 (graduate tax)**, we assume that the maintenance loans available under the current system (for both full-time and part-time students) are converted into equivalent maintenance grants (and that the same applies to fee loans, which would be converted into fee grants). In other words, we assume no maintenance loans, but an average maintenance *grant* of **£7,380** per full-time student and **£3,030** per part-time student per year.
- We use the most recent Office for Budget Responsibility medium- and long-term forecasts in relation to the expected **Retail Price Index** per annum, as well as expected **nominal average earnings growth** per annum ([here](#) and [here](#)).
- In terms of discount rates, in relation to the estimation of the **RAB charge and lifetime loan repayments (in Net Present Value (NPV) terms)**, we assume a real discount rate of **-1.1% + RPI** (revised downwards from **+0.7% + RPI** previously, in line with the Department for Education's most recent RAB charge estimates included in the analysis of its response to the Augar Review recommendations (see Annex B [here](#))).
- In relation to discount rates for the **estimation of aggregate financial flows across the cohort**, for the first 30 years, we assume the standard HMT Green Book real discount rate of **3.5%** (see [here](#)), with the nominal discount rate amounting to **3.5% + RPI**. The assumed rates for Year 31 onwards stand at **3.0%** in real terms, and **3.0% + RPI** in nominal terms.

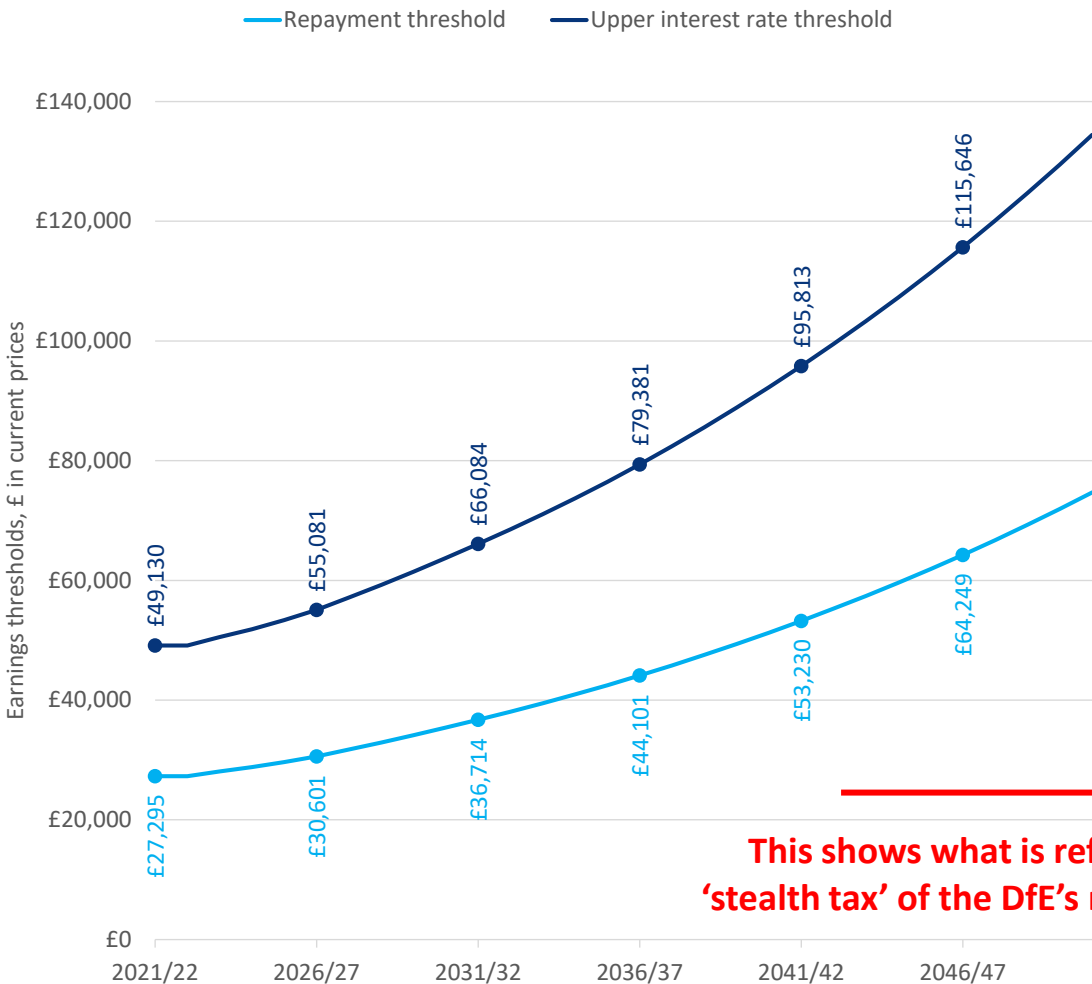
Assumptions and methodology

- Under the **current (i.e. Baseline) funding system**, tuition fee and maintenance loans accumulate **interest at 3% + Retail Price Index (RPI) inflation** during the period of study. After graduation, loans accumulate interest depending on earnings, with individuals who earn up to **£27,295** incurring interest at **0% + RPI**, increasing to **3% + RPI** for individuals with earnings of **£49,130** per annum or above (with both thresholds **frozen until 2022-23 (inclusive)**, and **uprated with nominal average earnings growth thereafter**).
- Under the **current (Baseline) system**, we assume that loan repayment is **9%** of earnings in excess of **£27,295** per annum (again **frozen until 2022-23 (inclusive)**, and **uprated with nominal earnings growth thereafter**), and that all loans are written off **30 years** from the Statutory Repayment Due Date (SRDD).
- In the **DfE's response to Augar (Scenario 1)**, based on the changes outlined in the Department for Education's response to the Augar Review ([here](#)):
 - The earnings threshold for loan repayment is reduced to **£25,000**, **frozen until 2026-27 (inclusive)**, and **uprated with RPI inflation thereafter** (rather than average earnings growth) (see next slide for more information);
 - **Real interest rates are removed both during study and post-graduation** (i.e. loan interest equals RPI inflation for all graduates, irrespective of their earnings; as a result, the previous upper earnings threshold for real interest accumulation is no longer relevant); and
 - **The loan repayment period is extended from 30 years to 40 years** (i.e. by 10 years).
- In the **stepped repayment system (Scenario 2, 'core' scenario without any maintenance grants)**:
 - A **stepped loan repayment system** is introduced, where graduates repay **3%** on earnings **between £12,570 and £27,570**; **6%** on earnings **between £27,571 and £57,570**; and **3%** on earnings of **£57,571 or more**. As in the Baseline system, these earnings thresholds are **frozen until 2022-23 (inclusive)**, and **uprated with nominal average earnings growth thereafter**;
 - **Interest rates are retained at 3% + RPI during study** (as in the Baseline), but increased post-graduation to **between 0% + RPI and 5% + RPI** for earnings **between £27,571 and £57,570** (and **0% + RPI** for individuals earning up to £27,570, and **5% + RPI** for those earning more than £57,570); and
 - **The loan repayment period is extended from 30 years to 31 years** (i.e. by 1 year).
- In **Scenario 3 ('core' scenario without any employer levy)**, the student loan repayment system is instead replaced with a **graduate tax of 3%** on earnings of £12,570-£50,270; and **5.5%** on earnings of £50,271 or more. There would be no loan interest rates or repayment period applied. The graduate tax earnings thresholds are assumed to be **uprated with nominal average earnings growth every year** (i.e. in contrast to the current student loan system, these thresholds are assumed to *not* be frozen for 2022-23 (but instead increase with average earnings growth)).

Assumptions and methodology

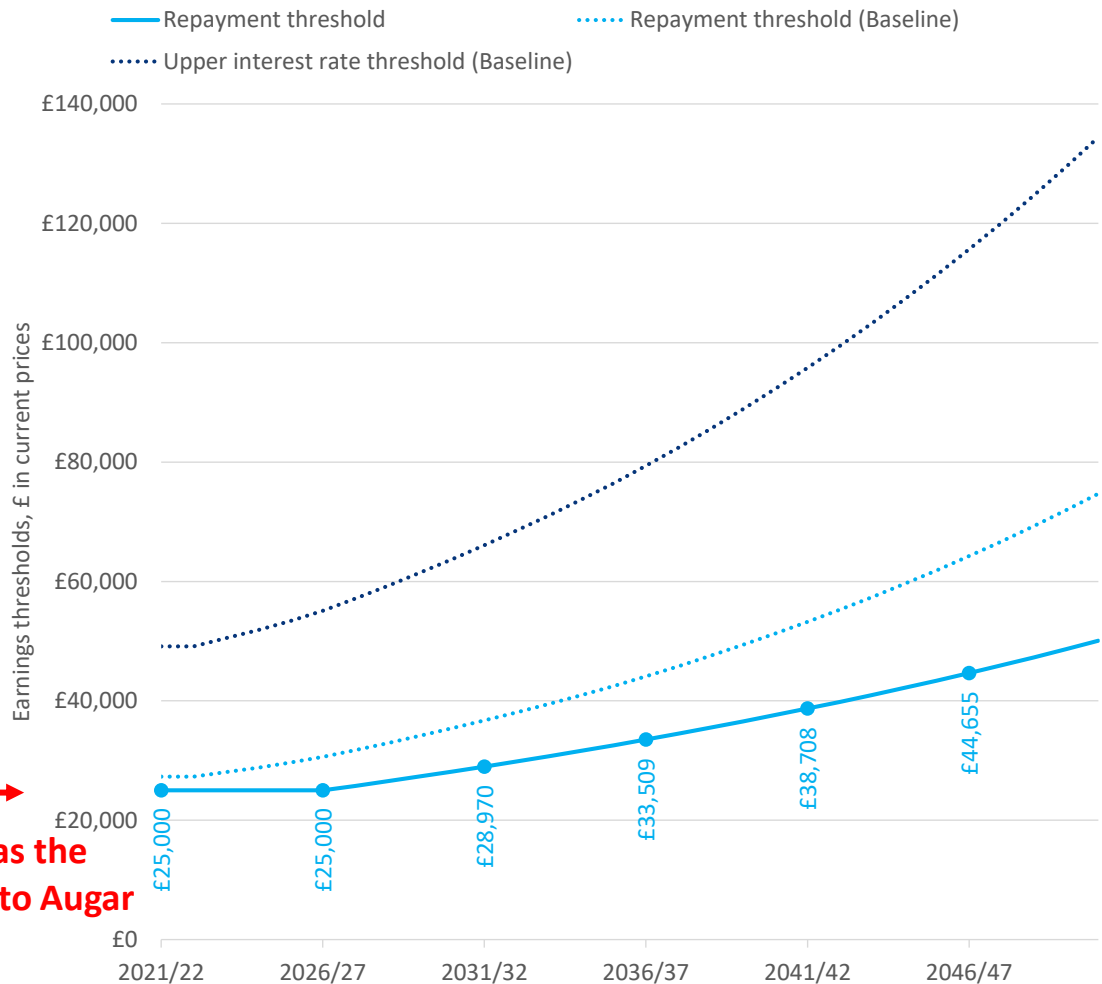
Loan repayment and upper interest rate earnings thresholds

Baseline



This shows what is referred to as the 'stealth tax' of the DfE's response to Augar

Scenario 1: DfE's response to Augar

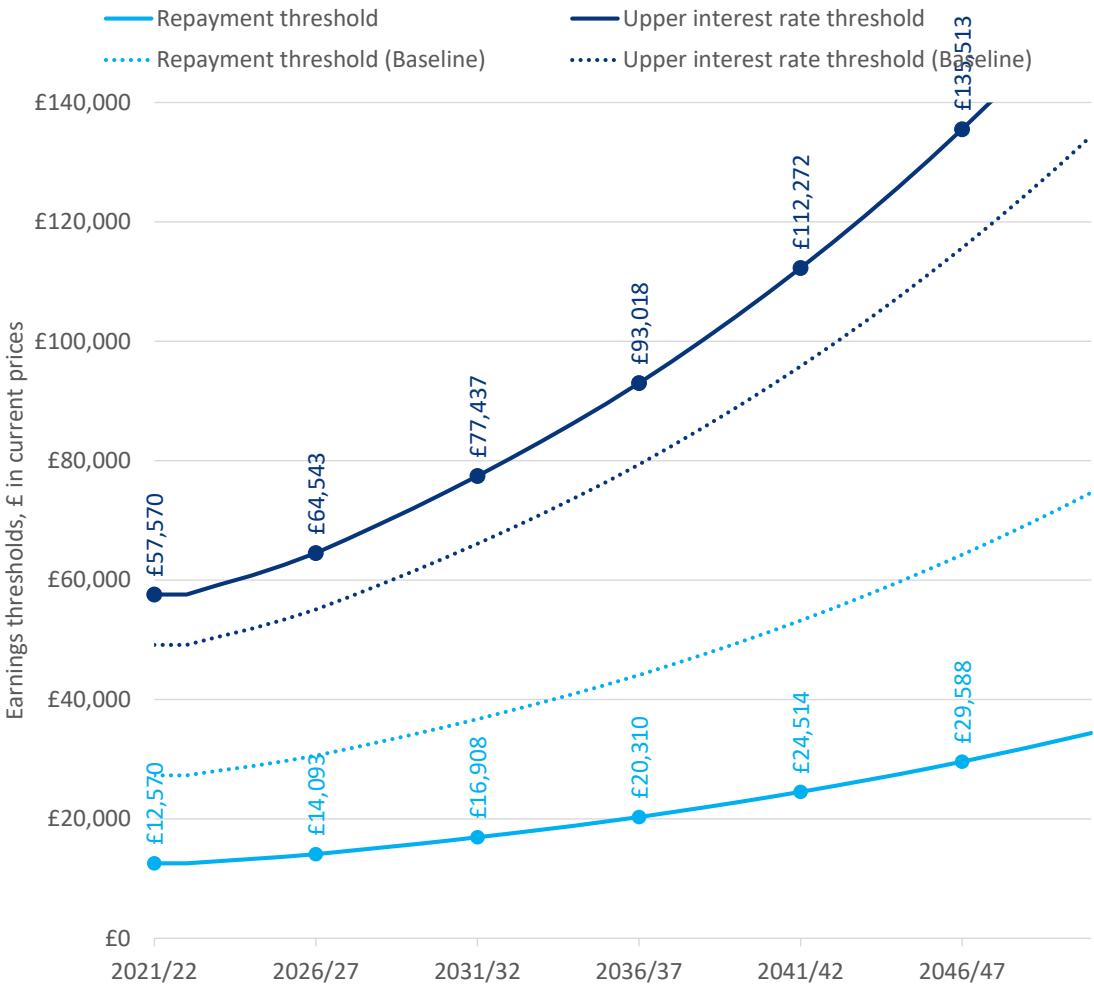


Note: All values here are presented in current prices (and are *not* discounted to net present values). In **Scenario 1**, real interest rates are removed both during study and post-graduation (i.e. loan interest equals RPI inflation for all graduates, irrespective of their earnings). As a result, the upper earnings threshold for real interest accumulation is not relevant for this scenario, so has not been presented here.

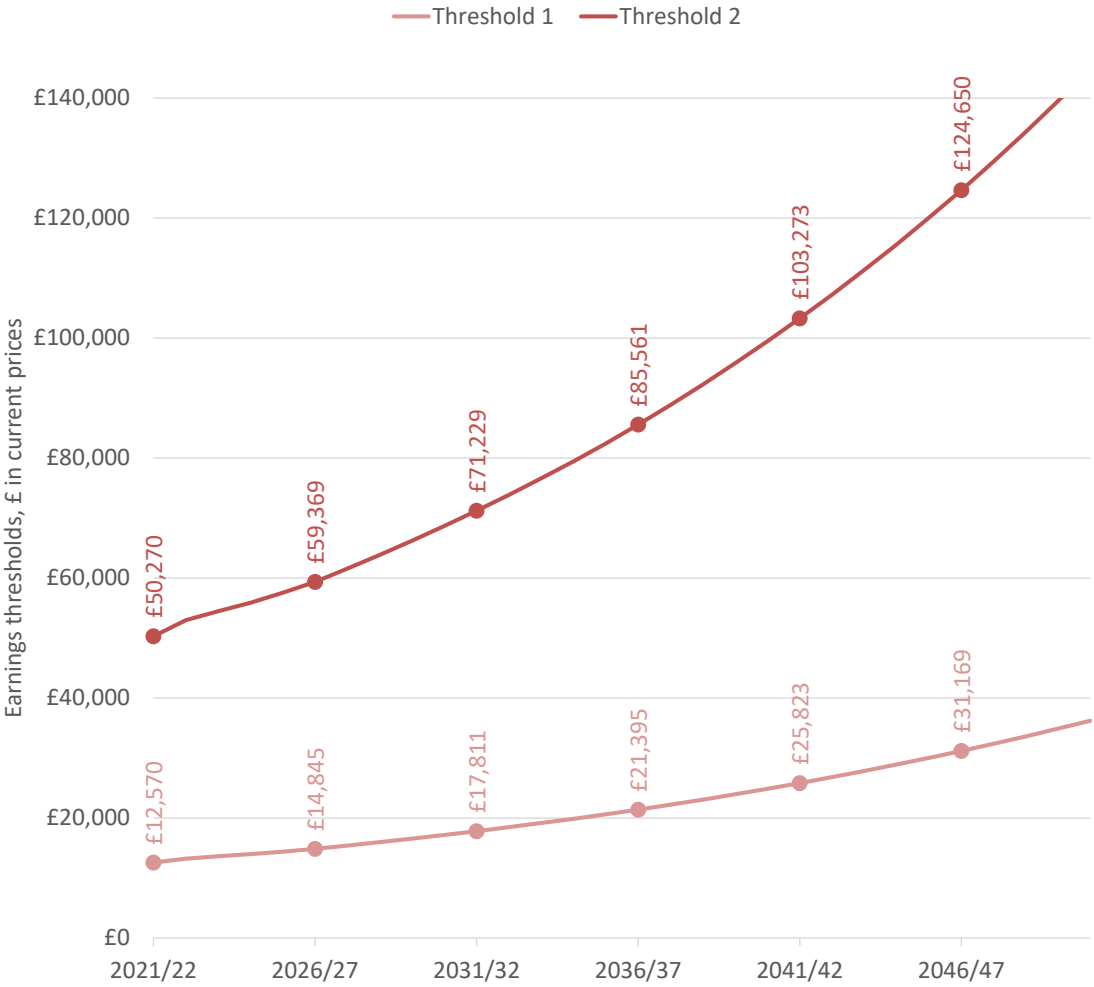
Assumptions and methodology

Loan repayment and upper interest rate earnings thresholds, and graduate tax thresholds

Scenario 2: Stepped repayments



Scenario 3: Graduate tax



Note: All values here are presented in current prices (and are *not* discounted to net present values). In **Scenario 3**, the graduate tax earnings thresholds are assumed to be **uprated with nominal average earnings growth every year** (i.e. in contrast to the current student loan system (as well as Scenario 2), these thresholds are assumed to *not* be frozen for 2022-23 (but instead increase with average earnings growth)).

Assumptions and methodology

Earnings and employment probabilities

- To estimate graduates' lifetime loan repayments and graduate tax contributions (by qualification level (i.e. first degrees, Foundation Degrees, HNCs/HNDs and other undergraduate qualifications), gender, study mode and decile), we make use of **pooled UK Quarterly Labour Force Survey data for the period 2010Q1 to 2021 Q4**.
- Using this data, we estimate the **average earnings** (in June 2021 prices) among individuals in possession of each of the different higher education qualifications*, separately by gender, income decile, and age (for first degrees) or age band (for qualifications below degree level (due to sample size), for which we subsequently generated 'smoothed' age-earnings profiles). To assess loan repayments for part-time students (who typically start repaying their loans *during study*), we further estimate the average earnings of individuals in possession of Level 3 qualifications as their highest level of attainment (used as part-time students' assumed earnings during study), separately by age, decile and gender.
- We also estimate the **average probability of being in employment**, again by qualification level, age/age band, and gender.
- Combining earnings and employment, we then estimate the **employment-adjusted annual earnings profiles** of individuals in possession of each qualification, by study mode, gender and earnings decile. We **adjust these age-earnings profiles to account for the fact that earnings are expected to increase over time** (using the above-outlined Office for Budget Responsibility forecasts of average nominal earnings growth per year ([here](#) and [here](#))).

Calculating the RAB charge

- To estimate the **RAB charge**, we assume a real discount rate of **-1.1%** as used in the Department of Education's most recent RAB charge estimates, with a nominal discount rate of **-1.1% + RPI**. We use the following equation to calculate the RAB charge:

$$RAB\ charge = \frac{NPV\ loan\ outlay - NPV\ repayments}{NPV\ loan\ outlay}$$

- In other words, the RAB charge associated with the 2021-22 cohort of students is calculated based on the net present value of the aggregate loan outlay provided to these students over the course of their studies (i.e. in total throughout all years of study), as well as the net present value of the total estimated loan repayments expected to be made by students after they graduate.

* This includes all individuals in possession of the given qualification, *irrespective of* whether that qualification was their highest educational attainment or not (e.g. the average earnings for individuals in possession of first degrees includes individuals who subsequently completed a Master and/or Doctorate degree).

Assumptions and methodology

- As outlined above, the analysis includes English-domiciled students in the 2021-22 cohort **studying at higher education institutions anywhere in the UK**. Therefore, the estimated level of Teaching Grant funding associated with the cohort includes teaching grants paid to **English HEIs** (by the Office for Students), **Welsh HEIs** (by the Higher Education Funding Council for Wales), **Scottish HEIs** (by the Scottish Funding Council), as well as Northern Irish HEIs (by the Department for the Economy Northern Ireland)¹.
- The average Teaching Grant per student studying in **England** is derived by combining assumptions on the rate per FTE student by subject band (in 2021-22) with information on the distribution of students by subject band (both provided by the Office for Students, [here](#)), as follows:

Subject band	Funding per FTE, £	% of FTE students
Band A	£10,100	2%
Band B	£1,515	22%
Band C1.1	£253	9%
Band C1.2	£122	12%
Band C2	-	19%
Band D	-	36%
Total	-	100%

- Combining this with the average ‘other targeted allocations’ funding per student (e.g. including premium funding to support retention), the average total Teaching Grant per full-time student studying in England was estimated at approximately **£960** per year. Based on average study intensity, the average funding per part-time student was estimated at approximately **£350**.

- To estimate the average level of Teaching Grant per student per year for students studying in **Wales, Scotland, or Northern Ireland**, we make use of HESA financial data ([here](#)) and student data ([here](#)) for the 2019-20 academic year. We divide the total Teaching Grant income received by institutions in each Home Nation by the total number of (first-year and continuing) UK and EU domiciled students (excluding any non-EU domiciled students and higher degree (research) students, since it is assumed that there is no Teaching Grant funding associated with these students). We adjusted for the assumed average study intensity among full-time students vs. part-time students, to arrive at separate rates of Teaching Grant funding per student per year by study mode.
- Using this approach, we assume the following **average Teaching Grant funding rates per student per year** (all rounded to the nearest £10)²:

Study location	Full-time	Part-time
Wales	£390	£140
Scotland	£3,930	£1,420
Northern Ireland	£3,110	£1,120

- As with fees, fee loans, and maintenance support, we assume that these Teaching Grant funding rates do not increase over the duration of students’ courses (i.e. we assume the same amount per student per year in every year of study). The funding rates are assumed to be the same across all scenarios.

¹ Though note that there are only relatively small numbers of students studying in the cohort studying in Wales, Scotland, or Northern Ireland.

² Note that the relatively high funding rates per student studying in Scotland and Northern Ireland are driven by the fact that these rates *include* Scottish domiciled students studying in Scotland, and Northern Irish students studying in Northern Ireland (respectively). The tuition fees charged to these students are much lower than the fees for corresponding students studying in Wales or England, and the costs of teaching these students are instead funded to a larger extent through relatively higher Teaching Grants paid by the Scottish Funding Council and the Department of the Economy Northern Ireland. The HESA financial data on total Teaching Grant income did not include a breakdown by student domicile, so it was not possible to account for these differences.

ANNEX II

Alternative Scenario 2: Stepped repayments + *Welsh maintenance grants*



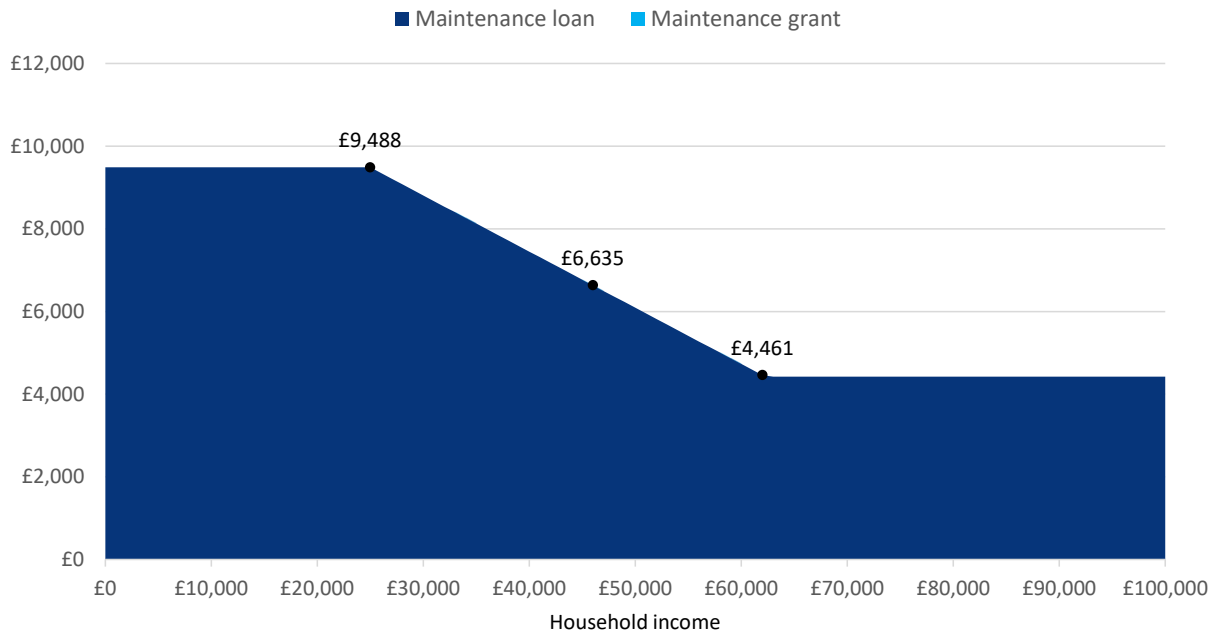
Alternative Scenario 2: Stepped repayments + Welsh maintenance grants

As another alternative to Scenario 2, we explored how the stepped repayment system could be *further* modified to accommodate the **introduction of maintenance grants equivalent to the grants available in *Wales*** (again, for full-time students only*):

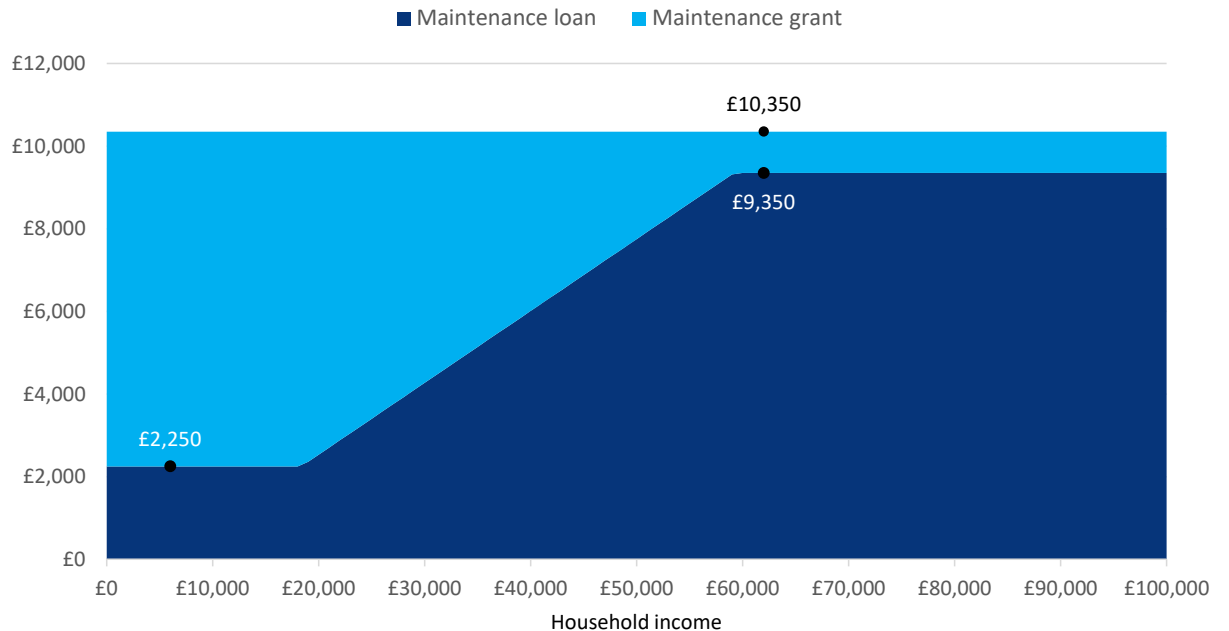
- We modelled the **introduction of (the very generous) *Welsh* maintenance grants for FT students** (up to **£8,100** for students living away from home outside of London, and with a minimum grant of £1,000), based on the grants and loans available (and associated thresholds/tapers) to Welsh domiciled students in 2021-22.
- To achieve similar Exchequer savings as under the ‘original’ Scenario 2, this could be funded through an increase in **1) the marginal repayment rates**, from 3.0% to **4.0%** on earnings of £12,570-£27,570, and from 6.0% to **7.5%** on earnings of £27,571-£57,570 (but unchanged at 3.0% on earnings above £57,570); and **2) the maximum interest rate**, from 5% to **6%** (on earnings of £57,570 or above).

Maximum maintenance funding per full-time student living away from home outside of London (LAFHOL), by household income

Scenario 1: DfE’s response to Augar (same as current)



Scenario 2: Stepped repayments + Welsh maintenance grants



5/ Note: * Again, we have assumed that there would be no change to the maintenance funding available to part-time students (i.e. we assume that they would be eligible for the same maximum level of maintenance loans (and no maintenance grants as under the current and Augar systems).

Alternative Scenario 2: Stepped repayments + Welsh maintenance grants

Resource flows (£/£m/%)	Scenario 1: DfE's response to Augar	Scenario 2: Stepped reps.	Difference
Exchequer			
Cost of maintenance grants	-	(£5,149m)	(£5,149m)
Cost of maintenance loans	(£1,588m)	£635m	£2,224m
Cost of tuition fee loans	(£1,916m)	£1,118m	£3,034m
Cost of Teaching Grants	(£1,153m)	(£1,153m)	-
Total Exchequer cost	(£4,658m)	(£4,549m)	£109m
RAB charge (%)			
RAB charge (%)	18%	-10%	-28pp
% never repaying full loan/anything	51% / 15%	86% / 2%	36pp / -13pp
Higher education institutions			
Gross fee income	£10,773m	£10,773m	-
Teaching Grant income	£1,153m	£1,153m	-
Cost of bursary provision	(£202m)	(£202m)	-
Net HEI income	£11,724m	£11,724m	-
Students/Graduates (FT first degrees)			
Average debt on graduation	£46,200	£42,400	(£3,800)
Average lifetime repayments (M/F)	£49,600 / £31,600	£65,800 / £33,300	£16,200 / £1,700

- Under this *alternative* Scenario 2, the (significant) cost of the introduction of Welsh maintenance grants for full-time students (**£5.149bn**) would be financed through a decline in the costs of maintenance loan and tuition fee loan write-offs (declining by **£2.224bn** and **£3.034bn**, respectively).
- The changes to the repayment system would imply that the Exchequer would now make a *net gain* from the student loan system. Compared to a loan outlay of **£17,638bn**, the Exchequer would receive **£19,391bn** in loan repayments. This would be necessary for the Exchequer to be able to afford the cost of the generous Welsh maintenance grants.
- The RAB charge would decline from **18%** (under Scenario 1) to **-10%**. The **negative RAB** charge arises from the fact that the interest accrued from student loans would *exceed* the Exchequer discount rate (i.e. the assumed Government cost of borrowing).

ANNEX III

Other alternatives that have been proposed



Other recent alternative proposals for reform

Given the significant Exchequer costs associated with the current system, there are a range of alternatives that have been proposed by a different organisations recently, aimed at making the system more financially sustainable. In the following, we provide a brief analysis of some of the key recent proposals:

A) REDUCED REPAYMENT THRESHOLD

The Higher Education Policy Institute ([here](#)) discussed a potential reduction in the repayment threshold from £27,295 to £19,390 (to match the repayment threshold for pre-2012 (i.e. Plan 1) student loans).

B) REDUCED TUITION FEES

AdvanceHE ([here](#)) analysed the impact of a reduction in the maximum tuition fee, from £9,250 to £7,500 – with *no* compensatory teaching grant funding to cover the reduced fee income for higher education institutions (and no other changes to the system).

C) STEPPED REPAYMENT SYSTEM

EDSK ([here](#)) have recommended an extension of the loan repayment period to 40 years, alongside a stepped repayment system (with incremental repayment rates and different thresholds than above Scenario 2):

- 3% on earnings between £12,570 and £17,570 (i.e. on the first £5,000 of earnings above the Personal Allowance)
- 6% on earnings between £17,571 and £22,570
- 9% on earnings of £22,571 or more

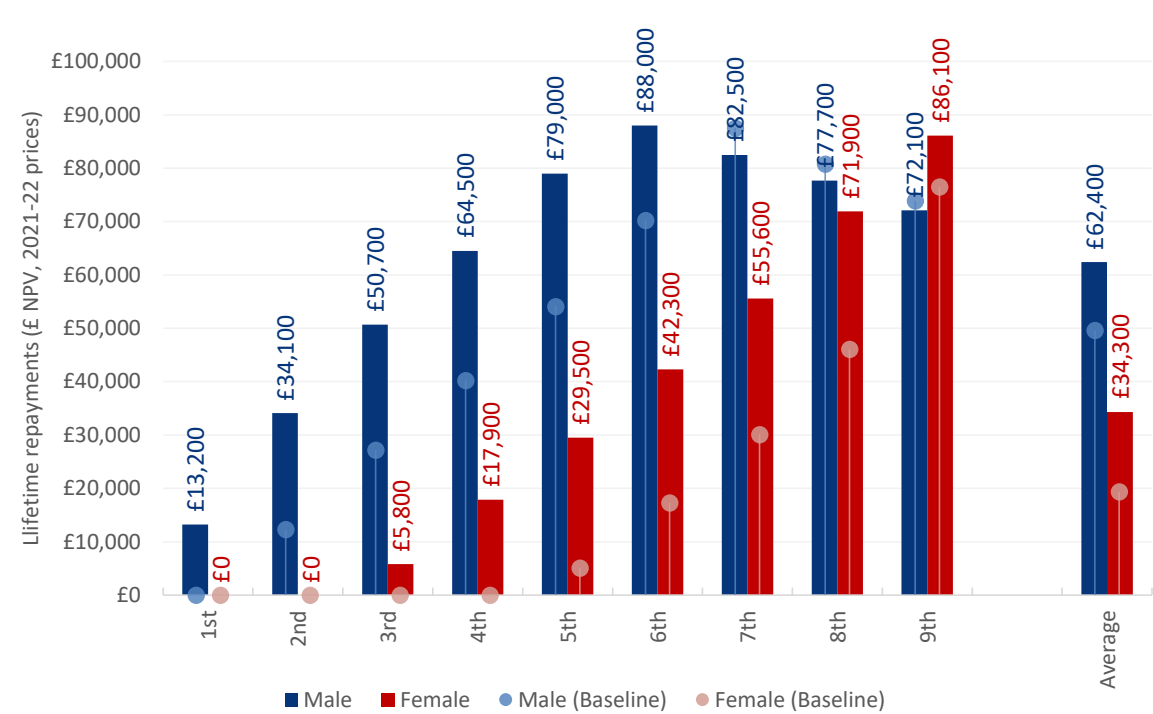
Other recent alternative proposals:

A) Reduction in the repayment threshold (from £27,295 to £19,390)

Reduced repayment threshold

- The lower repayment threshold (and reduction in the associated interest rate thresholds*) would result in a **very large reduction in the estimated Exchequer cost of the system**, from **£7.553bn** per cohort (under the current system) to **£1.744bn** (i.e. a reduction of **£5.809bn**). This is driven by a significant decline in the RAB charge, from **33%** to **3%**.
- However, **these changes would be regressive**. Low- to middle-income graduates (who currently do not fully repay their loans) would face an *increase* in their loan repayments over the 30-year repayment period. In contrast, high-income (predominantly male) graduates would make slightly *lower* total repayments, as the lower repayment threshold would allow them to repay their loans more quickly.

Total loan repayments by English domiciled FT first degree graduates (NPV in 2021-22 prices), by decile and gender



* Specifically, we would assume that interest would be accrued at 0-3% +RPI for earnings between £19,390 and £41,225, and at 3% + RPI for earnings in excess of £41,225.

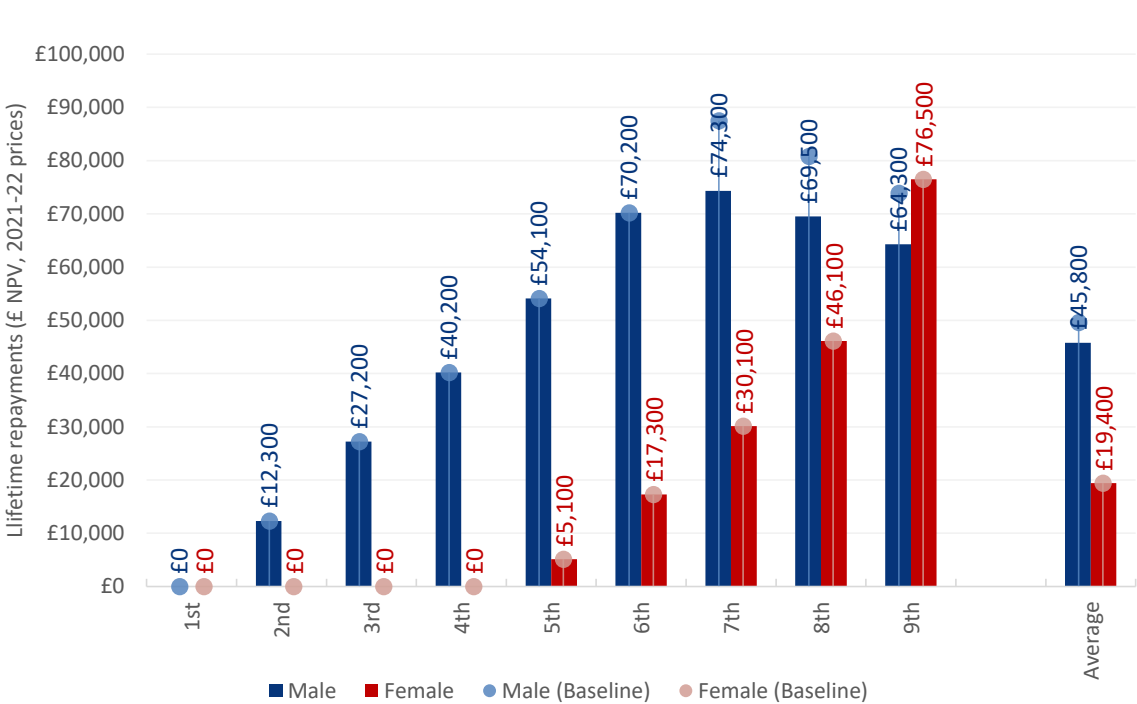
Other recent alternative proposals:

B) Reduction in the tuition fee (from £9,250 to £7,500)

Reduced tuition fees

- A reduction in tuition fees would also **reduce the Exchequer cost of the system**, from **£7.553bn** to **£6.187bn** per cohort (i.e. by **£1.366bn**). The RAB charge would decline from **33%** to **29%**.
- However, again, the repayment system **would become less progressive** than under the current (Baseline) system). Low- to middle-income graduates would be *unaffected* by the lower fees (as they currently do not ever fully repay their loans). In contrast, high-income (male) graduates would benefit from lower repayments, as the lower loan outlay would allow them to repay their loans earlier.
- Importantly, this proposal assumes that there would be **no enhanced teaching grant funding** to compensate HEIs for the reduction in their fee income. As a result, HEIs would see their income decline by an estimated **£1.920bn** per cohort.

Total loan repayments by English domiciled FT first degree graduates (NPV in 2021-22 prices), by decile and gender



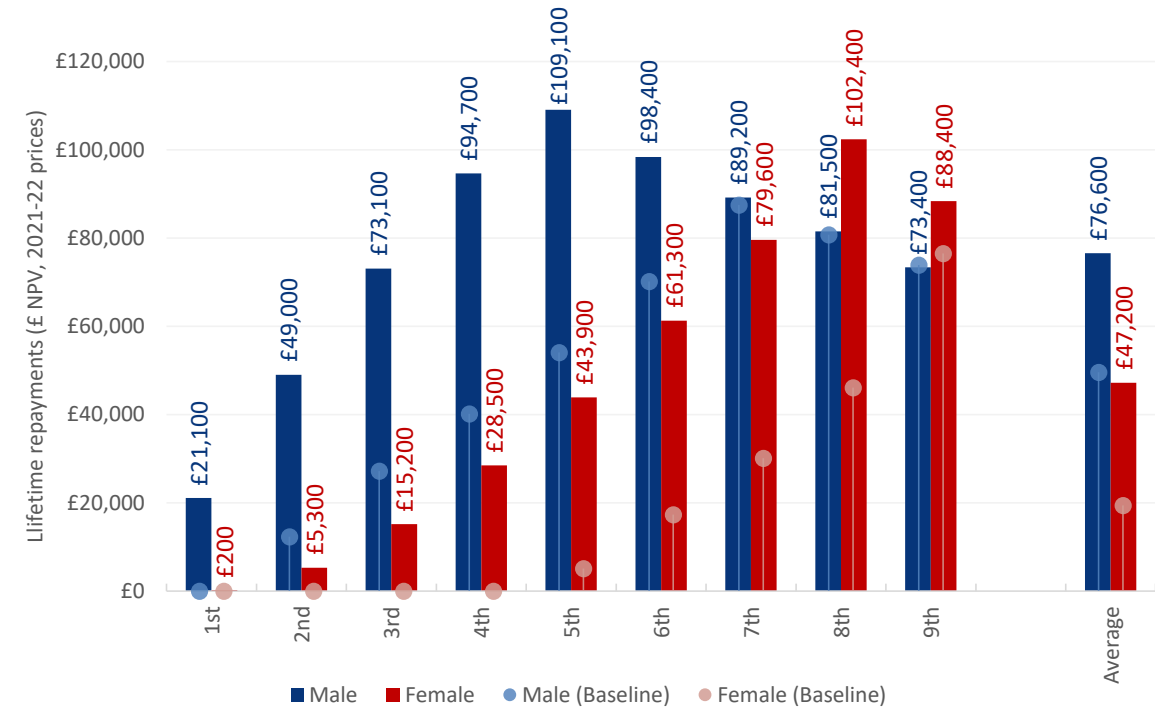
Other recent alternative proposals:

C) Alternative stepped repayment system

Stepped repayment system

- The stepped repayment system and longer loan repayment period (as proposed by EDSK) would result in a decline in the RAB charge from **33%** to **-24%**. In other words, these combined changes* would be so extreme as to result in the Exchequer achieving a **net financial benefit** from the system (of **£3.495bn** per cohort) as compared to the current *net cost* (of **£7.553bn**).
- The **negative RAB** charge arises from the fact that the interest accrued from student loans would *exceed* the Exchequer discount rate (i.e. the assumed Government cost of borrowing).
- These changes would be **deeply regressive** (and the most regressive among the three alternatives discussed here). Most graduates would face *significantly higher* loan repayments than under the current system (and over a longer period of 40 years as compared to 30). However, the highest earning (male) graduates would be essentially *unaffected*.

Total loan repayments by English domiciled FT first degree graduates (NPV in 2021-22 prices), by decile and gender



* Again, we would assume that the changes in repayment thresholds would result in a corresponding change in the earnings thresholds for interest accrual. We would assume that interest would be accrued at 0-3% +RPI for earnings between £17,570 and £22,570, and at 3% + RPI for earnings in excess of £22,570.