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Examination of higher education fees and funding in Scotland

Policy note, February 2024



Introduction and overview



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Introduction and context

- As part of a research project funded by the Nuffield Foundation, London Economics are undertaking a range of in-depth analyses in relation to higher education (HE) fees and funding arrangements across the four Home Nations of the UK, ahead of the next General Election.
- The analysis presented here provides an overview of the costs associated with the current undergraduate higher education fees and funding arrangements in **Scotland** facing the cohort of students commencing their studies in 2023-24. In parallel analyses, we are also undertaking an assessment of the current fees and funding arrangements in **England, Wales, and Northern Ireland**.
- In addition to the current (2023-24) Scottish funding system, we have also modelled three alternative scenarios (**higher tuition fees (backed by loans) and a reduction in Teaching Grants in Scotland; higher levels of maintenance support; and the introduction of real interest rates**). These alternative scenarios have been selected to illustrate the impact of different aspects of the fees and funding arrangements on students/graduates, the Exchequer, and higher education providers (HEPs). These are for illustrative purposes only, and should *not* be taken as recommendations for potential changes to the funding system.

Overview of the analysis

- We focus on the **2023-24 cohort¹** of first-year Scottish domiciled undergraduate students studying at higher education institutions (HEIs) anywhere in the UK, or at further education (FE) colleges in Scotland. The analysis includes both full-time and part-time students, and all types of undergraduate qualifications (i.e. first degrees and other undergraduate qualifications²).
- The analysis incorporates the **fees and funding arrangements** facing the cohort of starters in **2023-24**, as well as the estimated costs if different alternative systems had been implemented for this cohort.
- The modelling assesses a range of **key metrics**, including:
 - Core student loan outcomes, such as the **Resource Accounting and Budgeting (RAB) charge** (i.e. the proportion of the total loan balance written off³), **student loan debt on graduation**, and **expected lifetime loan repayments** (by gender, lifetime income decile, mode, and level of study);
 - The **total Exchequer cost** of the system associated with the cohort, including the cost of student support provided to Scottish domiciled undergraduate students studying anywhere in the UK, and the associated Teaching Grant funding paid to higher education institutions across the UK (where applicable) and FE colleges in Scotland; and
 - **HE provider funding**, in terms of tuition fee income and Teaching Grant funding received by UK HEIs and Scottish FE colleges (minus the costs of any access bursaries provided to students).

¹ The underlying student data for UK HEIs are based on data published by the Higher Education Statistics Agency (HESA) for the 2021-22 academic year, while the data on HE students in Scottish colleges (provided to us by the Scottish Funding Council) are based on 2020-21. In the absence of more recent data, we assume that the size and characteristics of the cohort have remained unchanged since 2021-22 (for students at UK HEIs) and since 2020-21 (for students at Scottish colleges). Please see the [Annex](#) for more information on our methodological approach.

² We exclude students studying for undergraduate-level institutional credits only (i.e. no formal qualifications), as these students are typically not eligible for public funding. We also exclude full-time students studying paramedics, nursing, or midwifery in Scotland, as these are subject to different funding arrangements with the Scottish Government's Health and Social Care Directorate, through the separate Paramedic, Nursing and Midwifery Student Bursary (PNMSB) scheme (note that the PNMSB does *not* apply to *part-time* students in these subjects, so these students are included in our analysis, as they are covered by the general student support package provided by the Student Awards Agency for Scotland (SAAS)).

³ As outlined in the Annex ([here](#) and [here](#)), to ensure that our methodology reflects the official DfE approach for estimating the cost of student loans in England, our analysis of the RAB charge cost relies on official discount rates promulgated by HM Treasury. As discussed in a recent report by the Institute for Fiscal Studies ([here](#)), these official HMT discount rates are much lower than the current Government cost of borrowing. As a result, the official DfE statistics - as well as our results here - likely understate the true cost of student loans to the Exchequer.

Funding scenarios

In addition to the **Baseline** (current funding system), we model **three alternative scenarios** to illustrate the impact of different changes to the system:

BASELINE: CURRENT SYSTEM

Current fees and funding arrangements for Scottish domiciled students who start undergraduate qualifications in 2023-24:

- **Tuition fees of £1,820/£1,285 per full-time first degree/sub-degree student in Scotland, and £9,250 in RUK¹. Backed by full fee grants for students studying in Scotland (i.e. effectively free fees), and fee loans for students studying in RUK².**
- **Combination of means-tested maintenance loans and grants for full-time students of up to a total of £9,000 (irrespective of living circumstances). No maintenance support for part-time students.**
- **Repayment threshold of £27,660, uprated with Retail Price Index (RPI) inflation every year. Repayment rate of 9% of earnings above this threshold. No real interest rate applied to loans (so nominal interest = 0% + RPI). Repayment period of 30 years³.**

SCENARIO 1: HIGHER FEES AND LOWER TEACHING GRANTS IN SCOTLAND

Higher fees and lower Teaching Grants for students studying in Scotland, by effectively applying the *English* fee system to Scottish students studying in Scotland:

- **Increase in tuition fees to £9,250 per full-time student studying in Scotland (and pro-rata for part-time students) – i.e. to same fees as in RUK. Backed by fee loans for all students (and no more fee grants⁴).**
- **Reduction in Teaching Grants paid to Scottish HEIs and colleges (to account for the increase in fees).**

SCENARIO 2: HIGHER MAINTENANCE SUPPORT

Increase in maximum maintenance support levels and eligibility for full-time students (only):

- **Increase in total maximum full-time maintenance support (through higher loans) to £11,400 to bring support in line with the (Scottish) Living Wage⁵.**
- **Increase in maintenance loan and grant eligibility thresholds for full-time students, based on what the 2019-20 household income thresholds would be in 2023-24 if they had been uprated with average earnings growth over time (rather than remaining unchanged since 2019-20⁶).**
- **No maintenance support for part-time students (as under the current system).**

SCENARIO 3: INTRODUCING REAL LOAN INTEREST RATES

Introduction of real student loan interest rates:

- **1% real interest rates during study and 0%-1% post-graduation for graduates earning between £27,660 and £47,660 (and 1% for graduates earning more than £47,660). Both thresholds are uprated with RPI every year (as under the current system).**

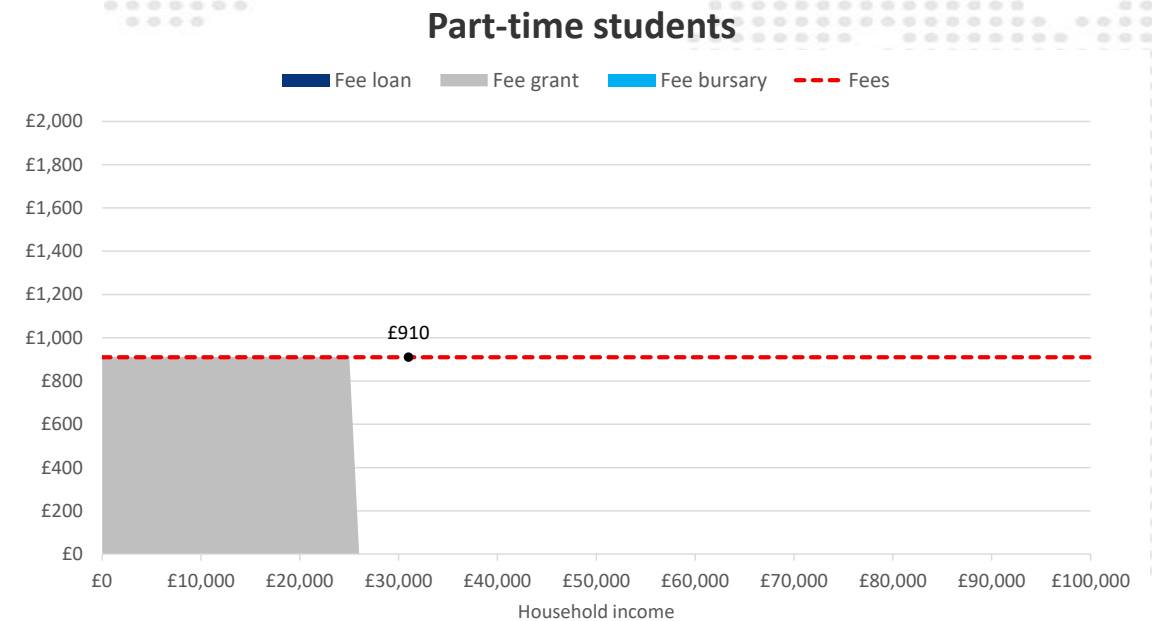
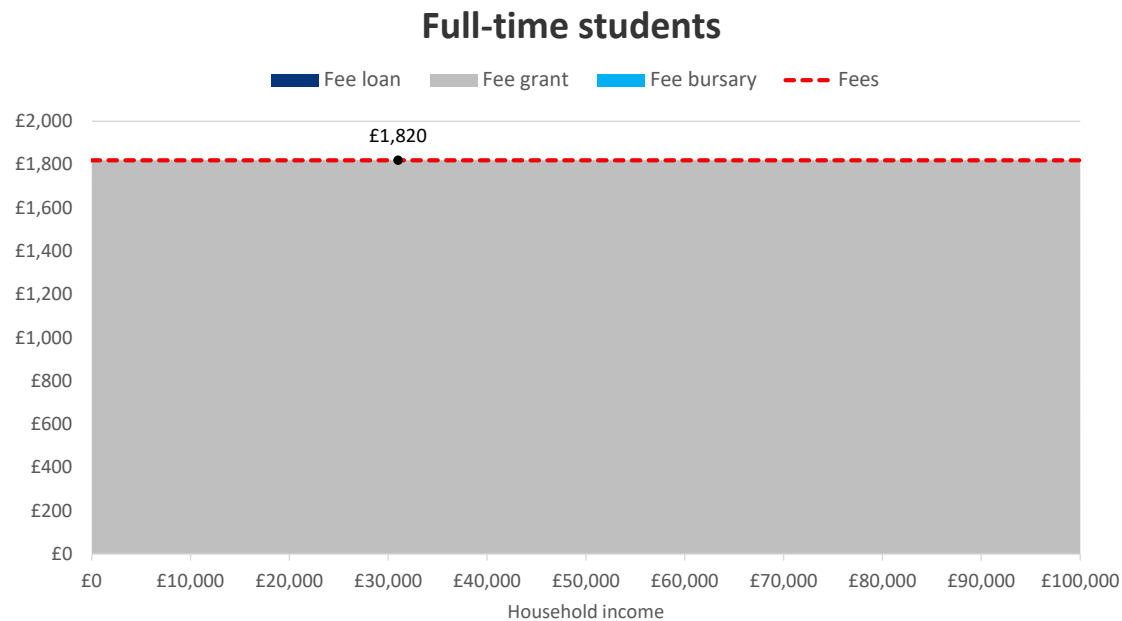
¹ Fees for part-time students are set on a pro-rata basis (i.e. based on study intensity multiplied by the full-time rate; we assume an average 50% study intensity for part-time students throughout the analysis). ² Scottish domiciled part-time students studying in Scotland are eligible for a *means-tested* fee grant (under the Part-Time Fee Grant (PTFG) scheme), while part-time students studying in RUK are typically *not* eligible for any public fee support from SAAS. ³ Students funded under the Scottish funding system are subject to the [Plan 4 loan repayment terms](#). ⁴ For consistency, under Scenario 1, we assume that part-time students studying in RUK would *also* be eligible for tuition fee loans (i.e. these loans would be available to part-time students irrespective of their location of study, in contrast to the current part-time fee grants). ⁵ The Scottish Government [recently announced](#) that, in 2024-25, total maximum maintenance funding for Scottish domiciled students would increase to £11,400 (to bring funding in line with the Scottish Living Wage ([here](#))), and this increase in 2024-25 has been taken account of throughout the analysis of the Baseline, Scenario 1, and Scenario 3. In Scenario 2, we instead ‘bring forward’ this increase in maintenance funding to 2023-24 (i.e. by 1 year) to assess the impact of this change if it had been implemented from 2023-24 onwards (i.e. in every year of study of the 2023-24 entry cohort). ⁶ The household income thresholds for maintenance funding in Scotland have remained unchanged since 2019-20. In that year, only the income threshold for maximum maintenance grant eligibility was raised (from £18,999 to the current £20,999); however, all other thresholds were left unchanged (and they have not been uprated for more than a decade). As a result of this stagnation in household income thresholds, the Scottish maintenance system has become much less generous over time (in real terms).

Current funding system (Baseline)

Baseline (current system): Fees and fee support

- Under the **current system**, the fees for **full-time** 'home' students studying in Scotland stand at **£1,820** for first degree students (£1,285 for sub-degree qualifications), supported by **non-means-tested fee grants** - i.e. effectively a 'free fees' system¹.
- Part-time** fees are the same as full-time fees, calculated on a pro-rata basis. We again assume a study intensity of 50% for part-time students, resulting in fees of **£910** for first degrees. These fees are supported through **means-tested fee grants** (available to students with household income of **£25,000 or less**).

Fees and fee support per year for Scottish domiciled first degree students studying in Scotland, by household income



Note: The figures relate to fees and fee support in 2023-24, and we assume that these figures remain 'frozen' over the cohort's entire study duration (i.e. in academic year 2024-25 and beyond). Again, also see the [Annex](#) for more information on our methodology and assumptions.

¹Given this free fees system, we assume that there are no access bursaries provided to Scottish domiciled students studying at Scottish HEIs and colleges (but we assume non-zero bursaries for Scottish students studying elsewhere in the UK, due to the much larger tuition fees charged to these students). Again, see the [Annex](#) for more information.

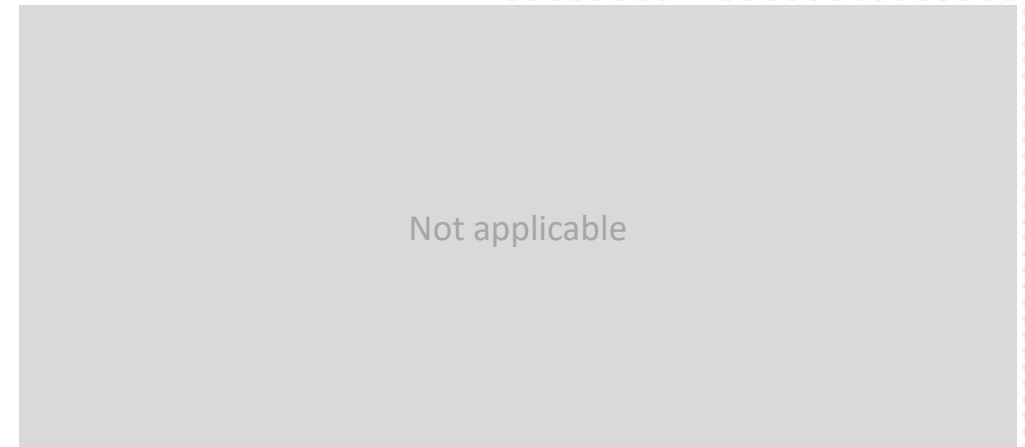
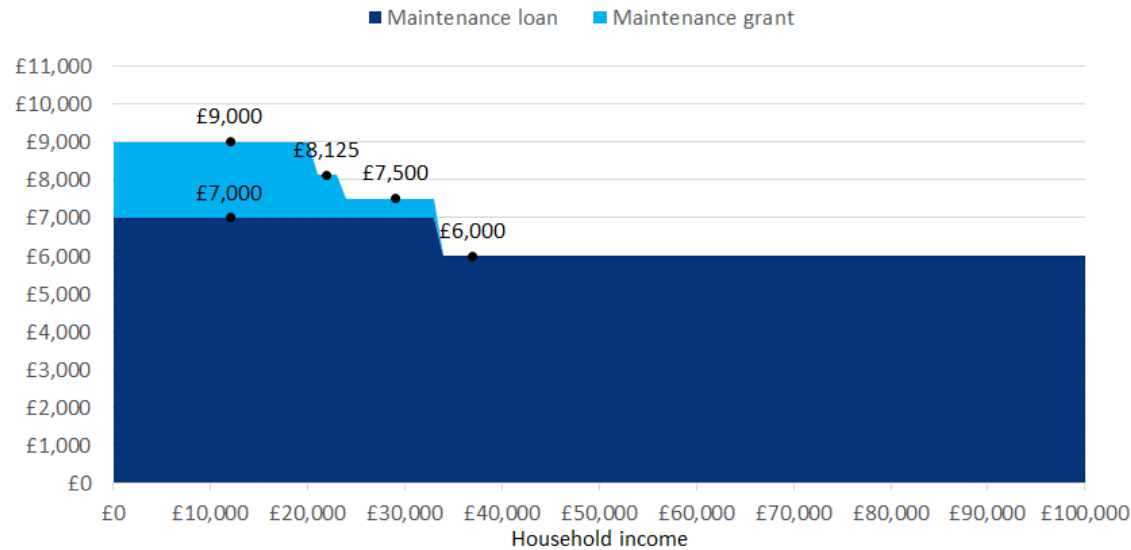
Baseline (current system): Maintenance support

- The current Scottish system provides **relatively limited maintenance funding levels**, for **full-time students only** (and, in contrast to other Home Nations, funding is independent of students' living circumstances, and there is *no* funding for part-time students).
- Under the Young Students' Bursary¹, **full-time students** are currently eligible for maximum support of **£9,000 per annum** (for household income of **up to £20,999**, through a grant of **£2,000** and a loan of **£7,000**), with a minimum of **£6,000** (for household income of **£34,000 or more**, in the form of a loan only).
- **Part-time students** are usually not eligible for any maintenance support from SAAS.

Maintenance support per year for Scottish domiciled students studying anywhere in the UK, by household income

Full-time students

Part-time students



Note: The figures relate to maintenance support (for students covered by the Young Students' Bursary) in 2023-24. The Scottish Government [recently announced](#) that, in 2024-25, total maximum maintenance funding for Scottish domiciled students would increase from £9,000 to £11,400 (through an increase in the maximum loan), and this increase in 2024-25 has been taken account of throughout the analysis of the Baseline, Scenario 1, and Scenario 3. In Scenario 2, we instead 'bring forward' this increase in maintenance funding to 2023-24 (i.e. by 1 year) to assess the impact of this change if it had been implemented from 2023-24 onwards (i.e. in every year of study of the 2023-24 entry cohort).

¹ There are two core maintenance grant packages available to Scottish domiciled students (studying anywhere in the UK): The Young Students' Bursary (YSB; for students aged under 25 before the start of the academic year), and the Independent Students' Bursary (ISB; for students aged 25 and over). Both schemes provide the same combined *total* maintenance funding per student, but with a different composition of loan vs. grant funding (where the YSB provides a larger grant but lower loan than the ISB). The YSB is the main and larger maintenance grant scheme (accounting for approximately 73% of maintenance grant funding provided in 2022-23; see [here](#)); therefore, for simplicity, our analysis assumes that *all* students who are eligible for maintenance funding are covered by the YSB. The effect of this assumption is to marginally inflate the Exchequer costs of the current system.

Baseline (current system): Total costs for cohort

Resource flows (£/£m/%)	Baseline
Net Exchequer cost (adjusted for RAB)	
Cost of maintenance grants	(£76m)
Cost of maintenance loans	(£147m)
Cost of tuition fee grants	(£247m)
Cost of tuition fee loans	(£12m)
Cost of Teaching Grants	(£884m)
Total Exchequer cost	(£1,366m)
RAB charge (%)	20.6%
Net HEP income (UK HEIs and Scottish colleges)	
Gross fee income	£326m
Teaching Grant income	£884m
Cost of bursary provision	(£1m)
Total	£1,210m
Students/Graduates (FT first degree students from Scotland studying in Scotland)	
Average debt on graduation	£32,600
Average lifetime repayments (M/F)	£33,200/£22,000

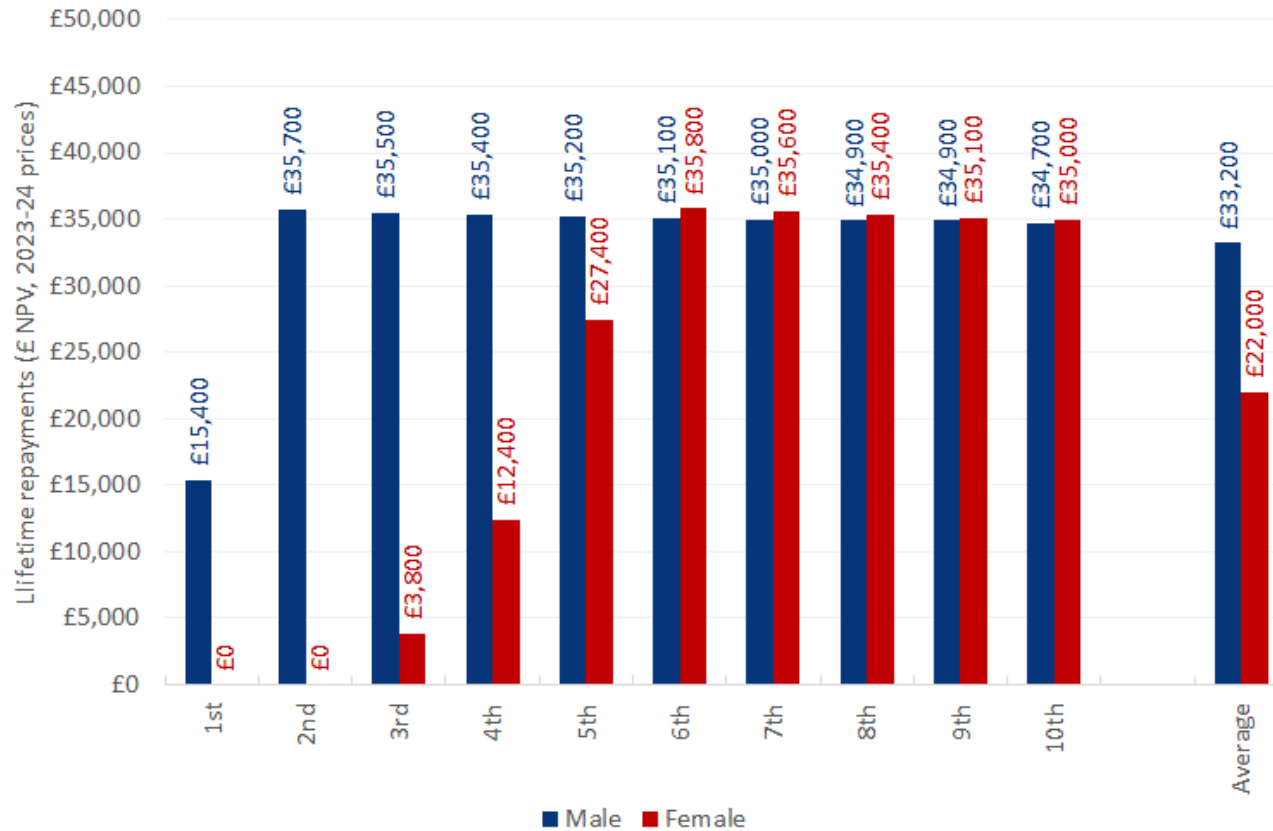
- Under the current Baseline funding system in Scotland in 2023-24, the **Exchequer** contributes approximately **£1.37bn** per cohort of Scottish domiciled students (including **£1.36bn** from the Scottish public purse, and **£4m** from HE funding bodies in the rest of the UK¹).
- The relatively low fees for students studying in Scotland imply that most of the Exchequer cost of the system relates to **Teaching Grants**, which cost **£884m** per cohort (including **£880m** for Scottish HEIs and FE colleges (allocated by the Scottish Funding Council (SFC)) and **£4m** for English and Welsh HEIs (allocated by the Office for Students and the Higher Education Funding Council for Wales, respectively)). **Fee grants and maintenance grants** cost **£247m** and **£76m**, respectively. **Maintenance loan write-offs** cost **£147m**, while **fee loan write-offs** (applicable to students studying in RUK only) cost **£12m**. The RAB charge is estimated at **20.6%**.
- The current average Exchequer cost per full-time Scottish domiciled student studying at a Scottish HEI per year (in 2023-24, across all qualification levels²) was estimated at approximately **£9,100**.
- HE providers receive approximately **£1.21bn** in net income per cohort, including **£326m** in **fees** and the above **£884m** in **Teaching Grants**. Against this income, HEIs contribute **£1m** per cohort in **bursaries** (all estimated in relation to HEIs outside of Scotland only). The average HEI income per full-time Scottish domiciled student studying in Scotland per year (in 2023-24, again across all qualification levels) was estimated at **£7,900**.
- The average debt on graduation per student (for full-time first degree students studying in Scotland) was estimated at **£32,600**, with average lifetime repayments of **£33,200** and **£22,000** for male and female graduates, respectively.

Note: All monetary values have been discounted to net present values and are presented in constant 2023-24 prices. Values per student have been rounded to the nearest £100, and totals have been rounded to the nearest £1m.

¹ This relates to Teaching Grants paid to English HEIs by the Office for Students, and to Welsh HEIs by the Higher Education Funding Council for Wales (to be replaced by the Commission for Tertiary Education and Research in August 2024). Scottish domiciled students studying in Northern Ireland typically do not attract any Teaching Grant funding, since these students are charged much higher tuition fees as compared to 'home' students studying in Northern Ireland, so that the Teaching Grants paid to Northern Irish HEIs generally apply to 'home' domiciled students only. ² Unless otherwise stated, all average values per student per year presented here relate to the first year of study for the relevant cohort (i.e. 2023-24), constitute averages across all qualification levels (i.e. first degrees and sub-degree qualifications), and are for students studying at Scottish HEIs only (but excluding Scottish FE colleges).

Baseline (current system): Graduate loan repayments

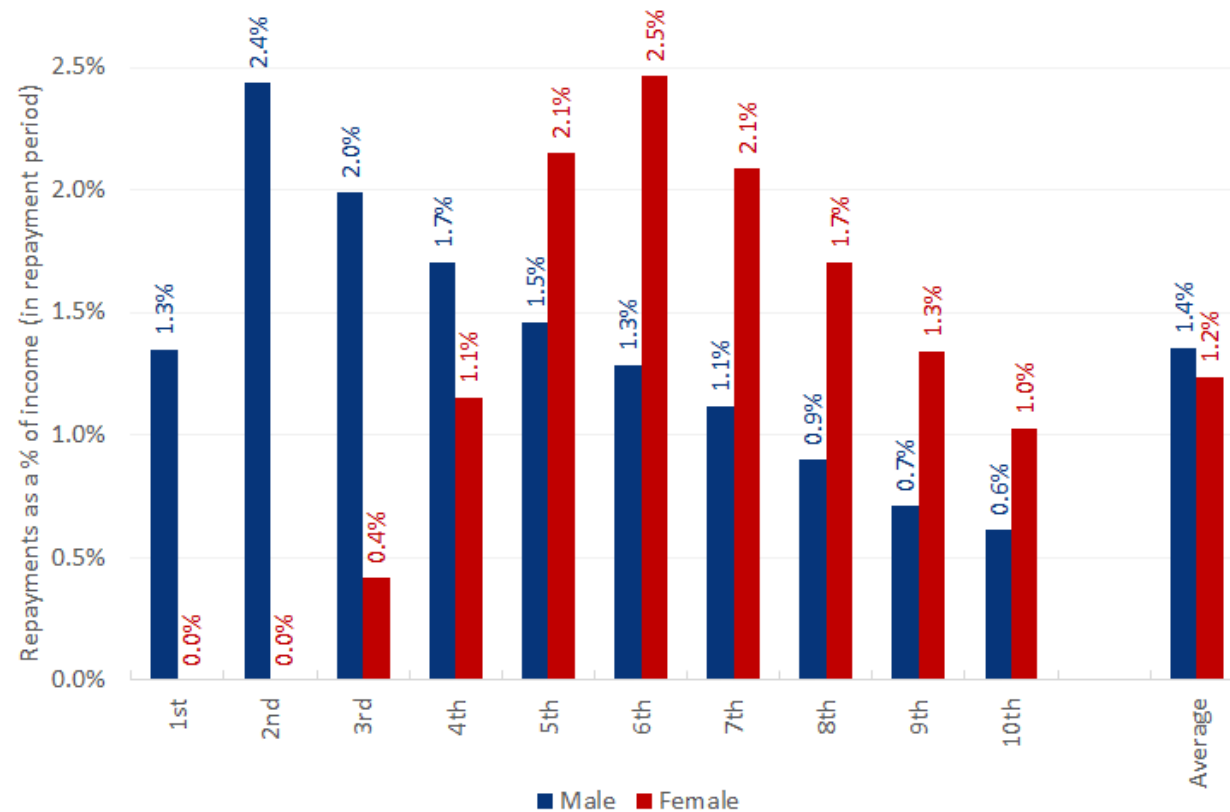
Total loan repayments by Scottish domiciled students who complete FT first degrees in Scotland (NPV in 2023-24 prices), by lifetime earnings decile and gender



- The average repayments made by **male graduates** stand at **£33,200** (for Scottish domiciled full-time first degree students studying in Scotland). Male graduates on the 2nd to 10th lifetime earnings decile all make roughly the same total level of loan repayments (in real NPV terms), standing at **£34,700-£35,700**.
- The average lifetime repayments made by **female graduates** stand at **£22,000**. Female graduates in the bottom two lifetime earnings decile are not expected to make any loan repayments over the 30-year repayment period, while female graduates on the 2nd to 4th decile make relatively low repayments. However, repayments increase sharply thereafter, with female graduates on the 6th to 10th decile all expected to repay approximately **£35,000-£35,800**.

Baseline (current system): Loan repayment progressivity

Total loan repayments by Scottish domiciled students who complete FT first degrees in Scotland as a % of income (during repayment period), by lifetime earnings decile and gender



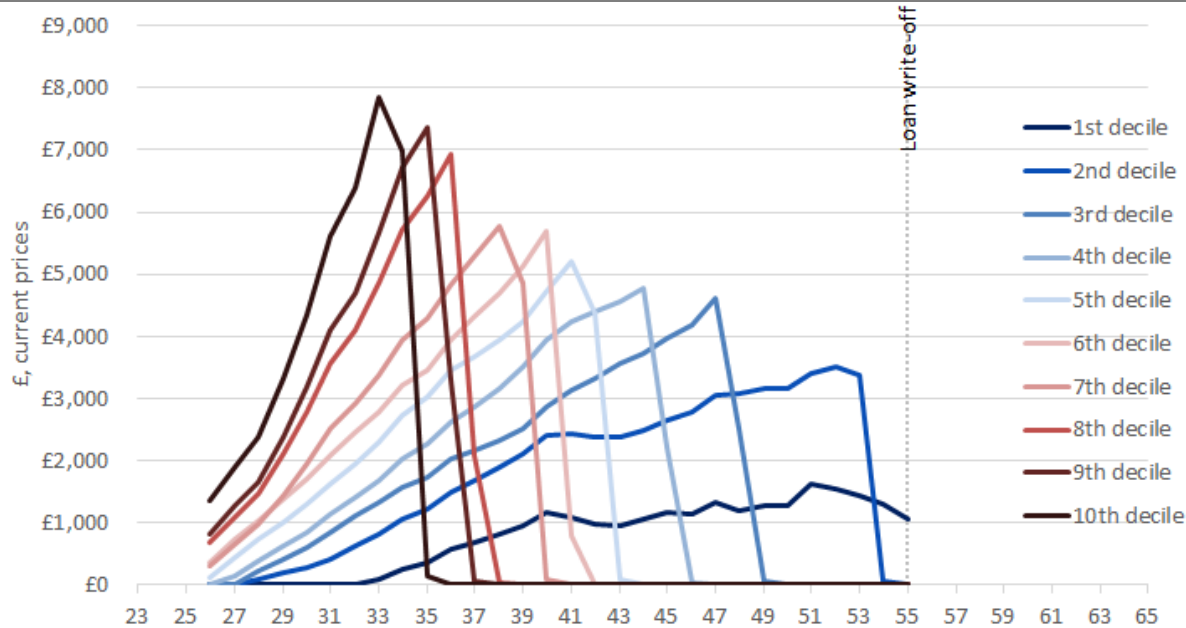
- The current Scottish loan repayment system is locally regressive towards the upper end of the earnings distribution.
- Reflecting lifetime loan repayments, male graduates on the **2nd decile** contribute the highest proportion (**2.4%**) of their post-graduation income in loan repayments (over the 30-year repayment period). For higher deciles, the proportion of earnings contributed as loan repayments is much lower, standing at only **0.6%** for male graduates on the **10th decile**.
- Again, female graduates in the bottom 4 deciles make no or relatively low repayments, while women on the **6th decile** contribute **2.5%** of their post-graduation earnings in repayments. This again decreases for successive earnings deciles, declining to **1.0%** for female graduates on the **10th decile**.

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

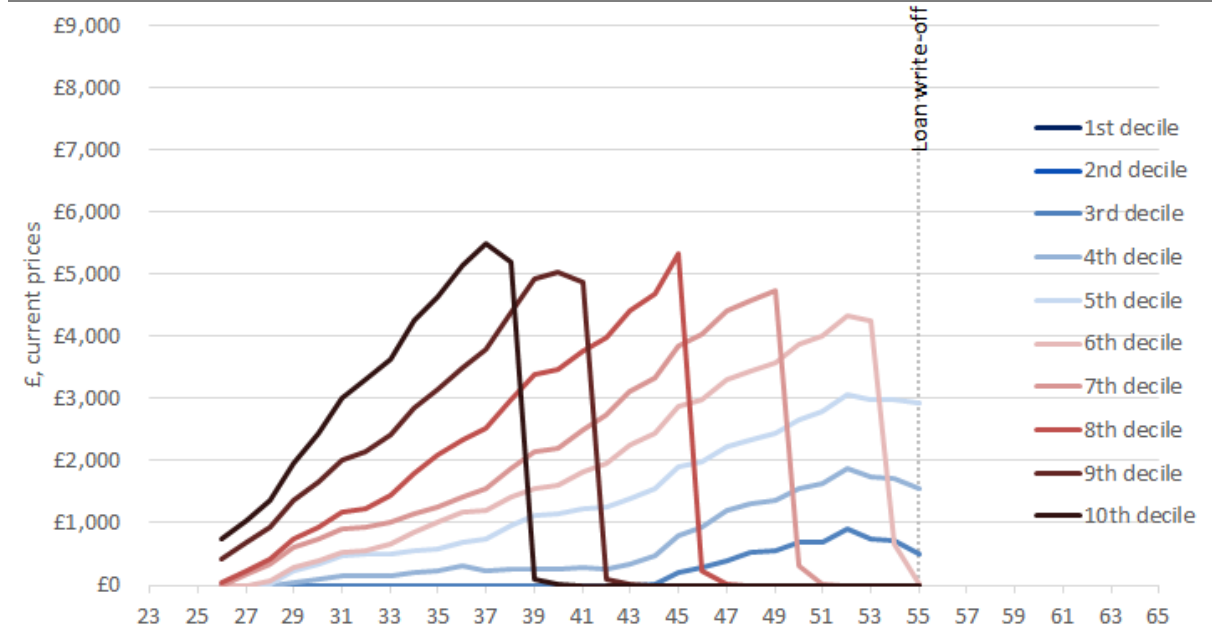
Baseline (current system): Loan repayment profiles

Lifetime loan repayment profiles (by age) for Scottish domiciled students who complete FT first degrees in Scotland (cash terms (not discounted) in current prices), by lifetime earnings decile

Baseline: Male graduates



Baseline: Female graduates



- The system's local regressivity stems from the fact that **high-income graduates** make higher *annual* repayments while they repay, and so are able to fully repay their loan well before the end of the 30-year repayment period (and the higher their income, the earlier they tend to pay off their loan). In contrast, **middle-income graduates** instead make lower *annual* repayments, and therefore repay their loans for longer – so that (in real NPV terms) they end up repaying approximately the same total amount as graduates at the top of the earnings distribution.
- **Low-income graduates** (1st decile for men, and 1st to 5th decile for women) would typically also make repayments for most of the repayment period, but without ever repaying the full loan, as their expected annual repayments would be too low to allow them to fully repay by the end of the 30-year period.

Scenario 1: Higher fees (backed by fee loans) and lower Teaching Grants in Scotland

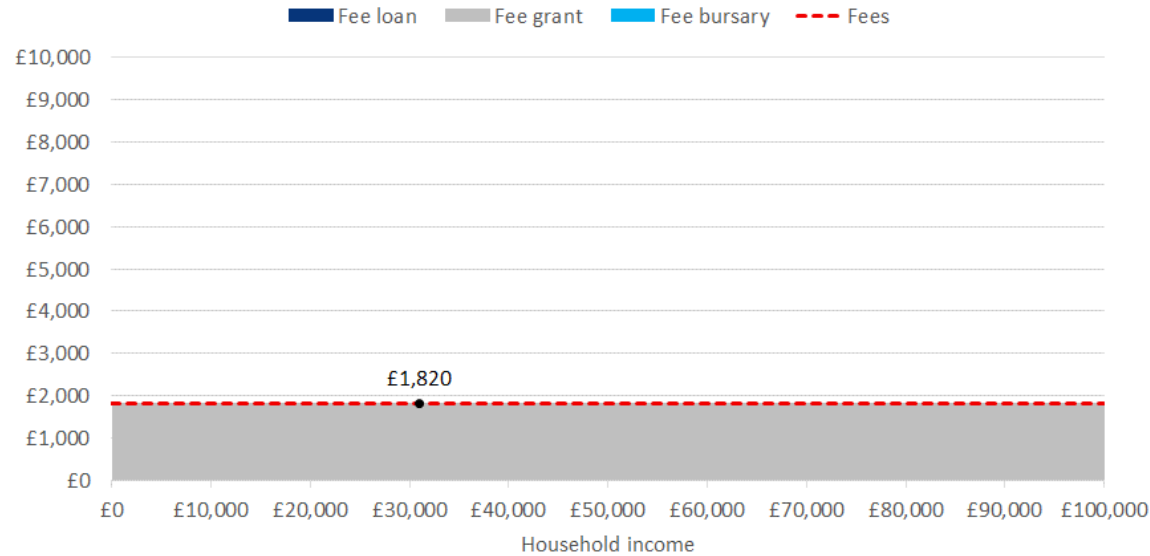


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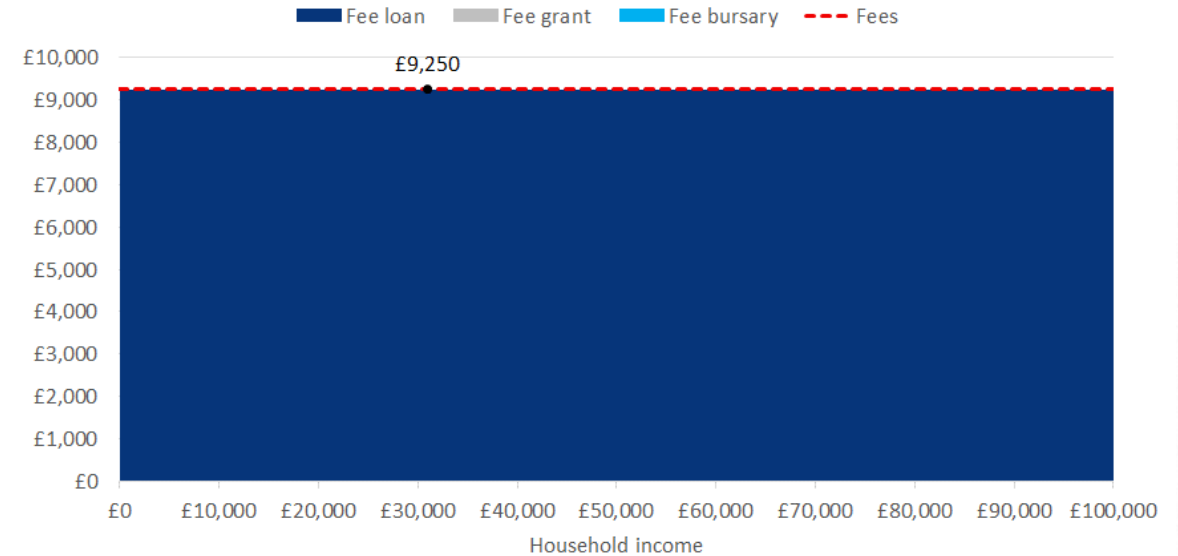
Scenario 1: Fees and fee support

Fees and fee support per year for Scottish domiciled full-time first degree students studying in Scotland, by household income

Baseline



Scenario 1: Higher fees and lower TGs in Scotland



- Scenario 1 illustrates the impact of removing the ‘free fees’ system in Scotland by applying the current *English* fee and funding system for Scottish domiciled students studying Scotland. Specifically, for **full-time students**, this would involve increasing the fees for ‘home’ students undertaking first degrees in Scotland **from £1,820 to £9,250** (i.e. a **£7,430** increase¹), supported by non-means-tested fee loans (and the current fee grants would be abolished).
- Hence, Scottish students studying in Scotland would be subject to the same fees and fee loans as is currently already the case for Scottish students studying in RUK².

Note: The figures relate to fees and fee support in 2023-24. As under the current system (and reflecting the fees charged to Scottish domiciled students studying in RUK under the current system), under Scenario 1, we assume that the fee (and associated fee loan) would remain ‘frozen’ over the cohort’s entire study duration.

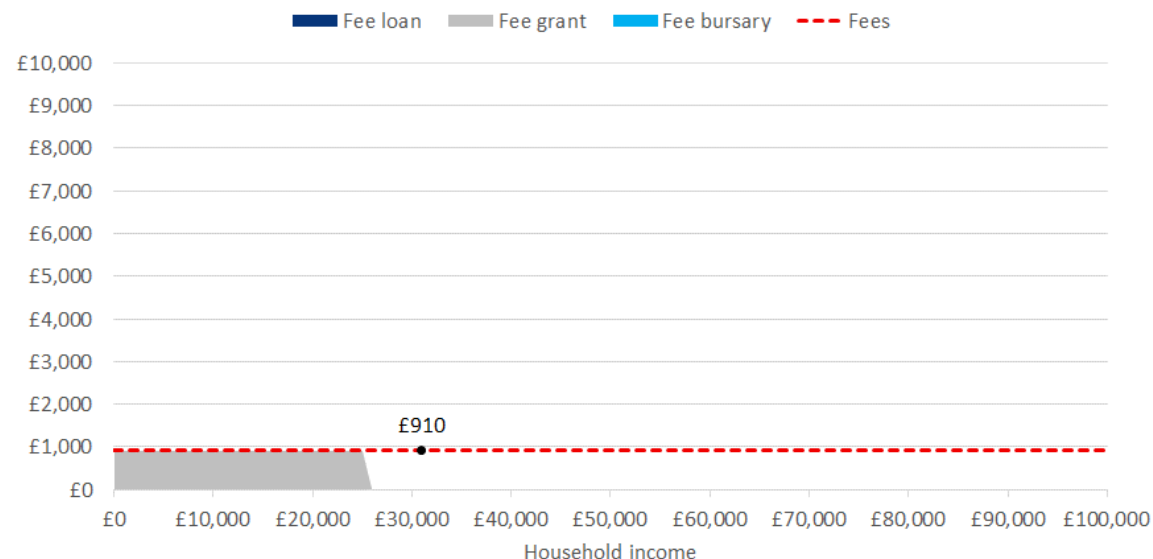
¹ For sub-degree students, the absolute increase would be larger, increasing from the current level of £1,285 to £9,250 (a £7,965 increase).

² Note that we have *not* assumed any introduction of fee waivers or other bursaries by Scottish institutions to widen access under this much higher fee system (whereas institutions in the rest of the UK, where the fees are already higher, do provide bursaries of this type). Again, see the [Annex](#) for more information on our assumptions.

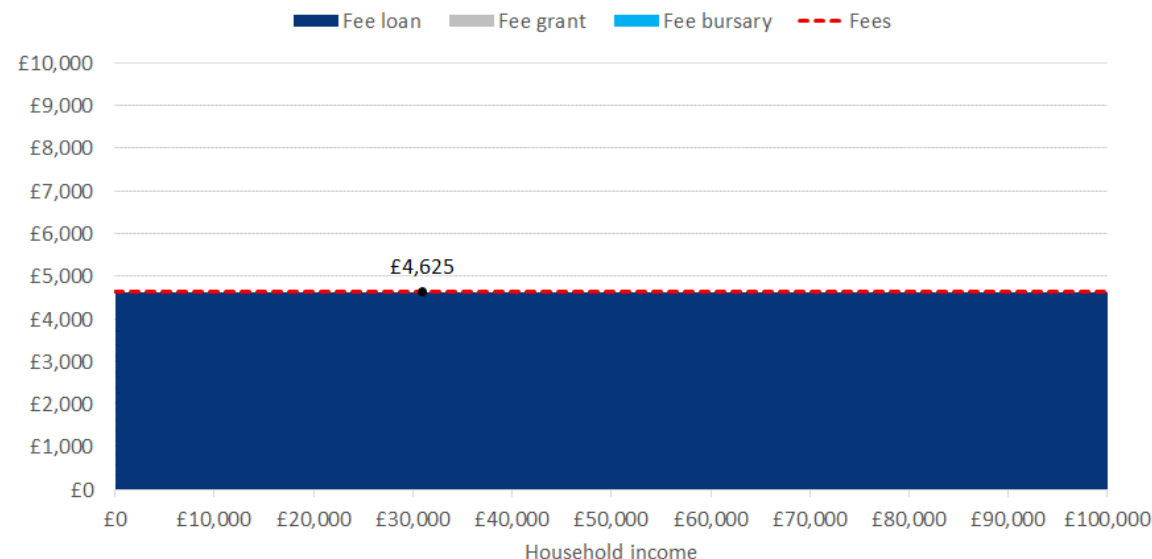
Scenario 1: Fees and fee support

Fees and fee support per year for Scottish domiciled part-time first degree students studying in Scotland, by household income

Baseline



Scenario 1: Higher fees and lower TGs in Scotland



- For **part-time students**, **Scenario 1** would involve increasing the fees for part-time Scottish domiciled students undertaking first degrees in Scotland **from £910 to £4,625** (again assuming a 50% study intensity); i.e. a **£3,715** increase¹. These fees would be supported by non-means-tested fee loans, rather than the current means-tested fee grants².

Note: The figures relate to fees and fee support in 2023-24. As under the current system (and reflecting the fees charged to Scottish domiciled students studying in RUK), under Scenario 1, we assume that the fee (and associated fee loan) would remain 'frozen' over the cohort's entire study duration.

¹ For sub-degree students, the absolute increase would again be larger, increasing from the current level of **£643 to £4,625** (a **£3,983** increase).

² For consistency, under Scenario 1, we have *also* modelled a change in fee support for part-time students studying in RUK. The current means-tested part-time fee grants are available *only* to students studying in Scotland; in contrast, we assume that the part-time fee loans under Scenario 1 would be available to part-time students *studying anywhere in the UK* (i.e. studying in Scotland *or* RUK). Note that this only affects a relatively small number of students (as there are only approximately 300 Scottish domiciled part-time students studying in RUK within the relevant student cohort).

Scenario 1: Teaching Grants

Main Teaching Grant subject price per full-time equivalent (FTE) student¹ studying at Scottish HEIs in 2023-24, by level of study and Price Group

Baseline		
Price Group	Sub-degree	First degree
Price Group 1	£16,475	£15,940
Price Group 2	£8,792	£8,257
Price Group 3	£7,646	£7,111
Price Group 4	£6,490	£5,955
Price Group 5	£5,588	£5,053
Price Group 6	£4,316	£3,781

Scenario 1: Higher fees and lower TGs in Scotland		
Price Group	Sub-degree	First degree
Price Group 1	£8,510	£8,510
Price Group 2	£827	£827
Price Group 3	-	-
Price Group 4	-	-
Price Group 5	-	-
Price Group 6	-	-

- To compensate for the increase in fees and the associated Exchequer cost of providing fee loans, under Scenario 1, we have modelled a significant reduction in SFC Teaching Grant funding paid to Scottish HEIs and FE colleges.
- As this scenario would involve an **increase in fees by £7,430 per student per year for first degrees and £7,965 for sub-degree qualifications²** in Scotland, we have assumed a corresponding **reduction in the Teaching Grant subject prices paid to Scottish HEIs for each Price Group** by these amounts. For Price Groups 3 to 6, the current subject prices are lower than these fee increases (i.e. the deductions would have resulted in negative values), so these prices have instead been set to £0 under Scenario 1³.

Note: All estimates here refer to the SFC's Main Teaching Grant subject price *net of fees*, per student in 2023-24, for students at Scottish HEIs only (and the associated Teaching Grant levels for students at Scottish FE colleges are instead presented in the [Annex](#)). In addition to these Main Teaching Grants, our analysis also includes additional supplementary teaching funding for small specialist institutions; widening access and retention; funding for upskilling; the Disabled Students Premium; and funding contributions for pensions. We assume that none of these supplementary Teaching Grant allocations change under any of the scenarios modelled here.

¹ All subject prices here are *net of fees*, as the SFC's original subject prices *include* the level of tuition fees for 'home fee' students (and, for more information on these subject prices for 2023-24, see [here](#)). In terms of the differences between first degrees vs. sub-degree qualifications, the original subject prices *including* fees are the same across both types of qualifications; however, as the fees for sub-degree qualifications are *lower* than for first degrees, the net subject prices (net of fees) are *higher* for sub-degree qualifications. ² From £1,820 to £9,250 for first degrees, and from £1,285 to £9,250 for sub-degree qualifications. ³ The SFC Teaching Grants paid to Scottish FE colleges are based on much lower subject prices than those paid to Scottish HEIs. The resulting current average Teaching Grants for both sub-degree and degree-level students at Scottish colleges are therefore lower than the assumed fee increases under Scenario 1; hence, Teaching Grants for students taught at Scottish colleges were set to £0 under Scenario 1. For more information, again refer to the [Annex](#).

Scenario 1: Total costs for cohort

Resource flows (£/£m/%)	Baseline	Scenario 1	Difference
Net Exchequer cost (adjusted for RAB)			
Cost of maintenance grants	(£76m)	(£76m)	-
Cost of maintenance loans	(£147m)	(£233m)	(£85m)
Cost of tuition fee grants	(£247m)	-	£247m
Cost of tuition fee loans	(£12m)	(£433m)	(£421m)
Cost of Teaching Grants	(£884m)	(£70m)	£815m
Total	(£1,366m)	(£812m)	£554m

RAB charge (%)	20.6%	31.7%	+11.1 pp
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Net HEP income (UK HEIs and Scottish colleges)			
Gross fee income	£326m	£1,556m	£1,230m
Teaching Grant income	£884m	£70m	(£815m)
Cost of bursary provision	(£1m)	(£1m)	-
Total	£1,210m	£1,625m	£416m

Students/Graduates (FT first degree students from Scotland studying in Scotland)			
Average debt on graduation	£32,600	£69,900	£37,300
Average lifetime repayments (M/F)	£33,200/£22,000	£64,600/£36,800	£31,400/£14,800

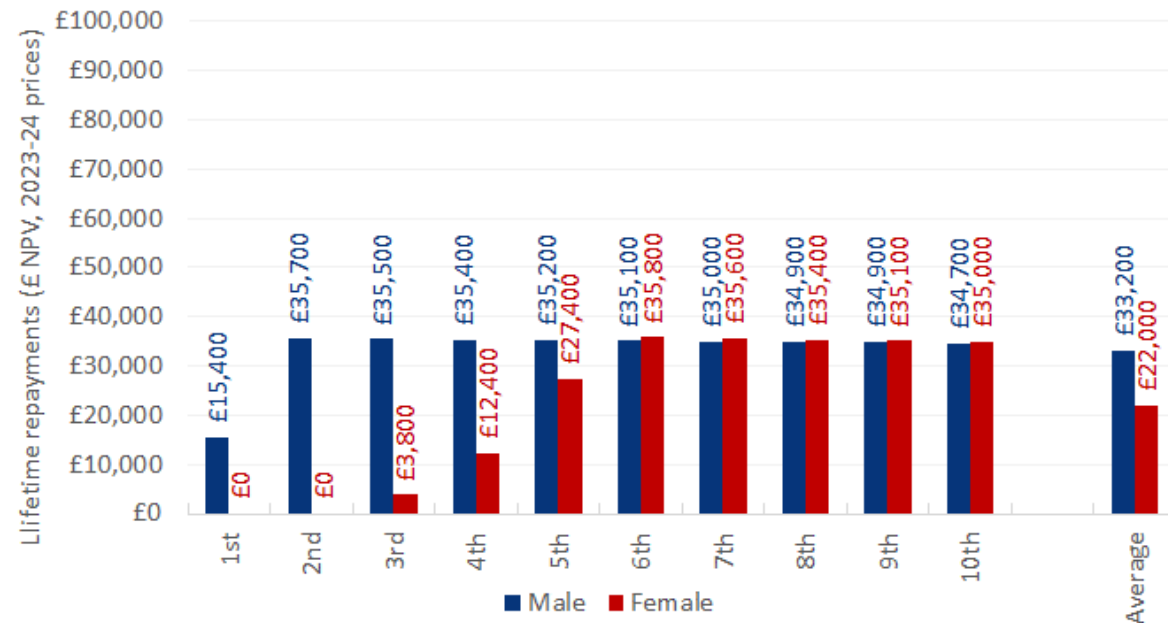
Note: All monetary values have been discounted to net present values and are presented in constant 2023-24 prices. Values per student have been rounded to the nearest £100, and totals have been rounded to the nearest £1m.

- Scenario 1 would significantly *reduce* the total Exchequer cost per cohort, by **£554m (41%)**, driven by cost savings associated with students studying in Scotland (while the costs for students in RUK would remain essentially the same). There would be much higher loan write-offs for both fee loans (**£421m**) and maintenance loans (**£85m**), due to an increase in the RAB charge by **11.1 percentage points**, to **31.7%**. However, these higher costs would be more than offset by the significant cost savings from reduced Teaching Grants (**£815m**) and the abolition of fee grants (**£247m**).
- The average Exchequer cost per full-time Scottish domiciled student studying at a Scottish HEI per year would decline to approximately **£5,000 (-£4,100 compared to the current system)**.
- Scottish HEIs and colleges would receive an additional £416m in net income per cohort**, driven by the much larger fee income accrued (offset in part by lower Teaching Grants). RUK HEIs would be unaffected. The average HEI income per full-time Scottish domiciled student studying in Scotland per year would stand at **£9,800 (+£1,900 compared to the current system)**.
- The average debt on graduation (per full-time first degree student studying in Scotland) would increase by **£37,300 (to £69,900)**. Average lifetime repayments would increase by **£31,400** for male graduates and by **£14,800** for female graduates.

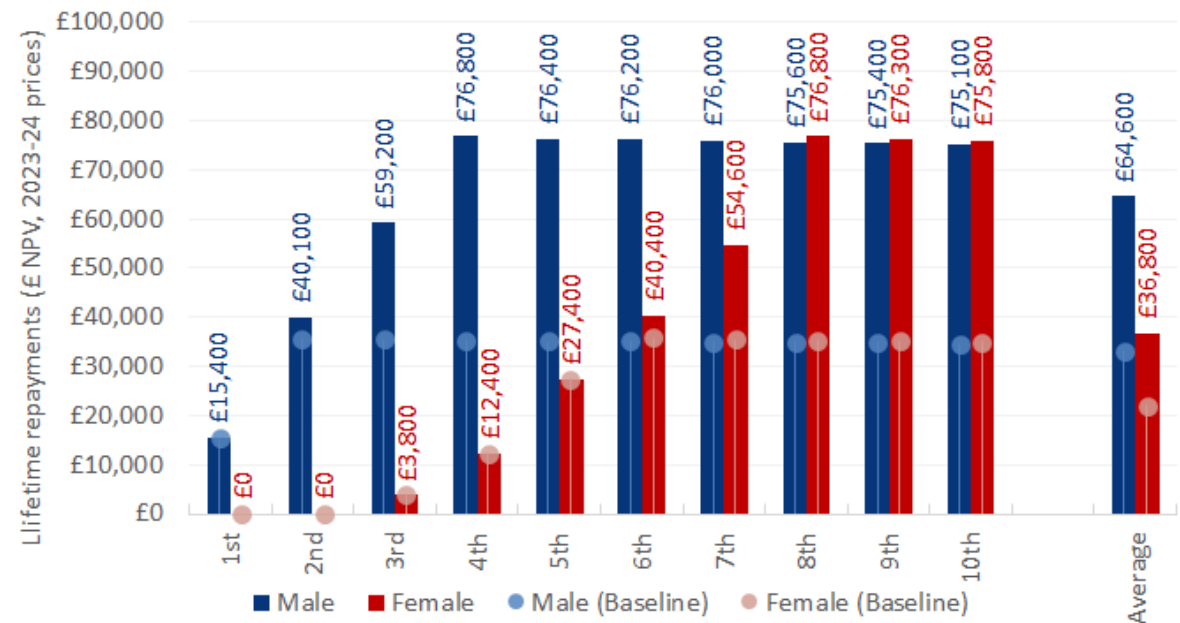
Scenario 1: Graduate loan repayments

Total loan repayments by Scottish domiciled students who complete FT first degrees in Scotland (NPV in 2023-24 prices), by lifetime earnings decile and gender

Baseline



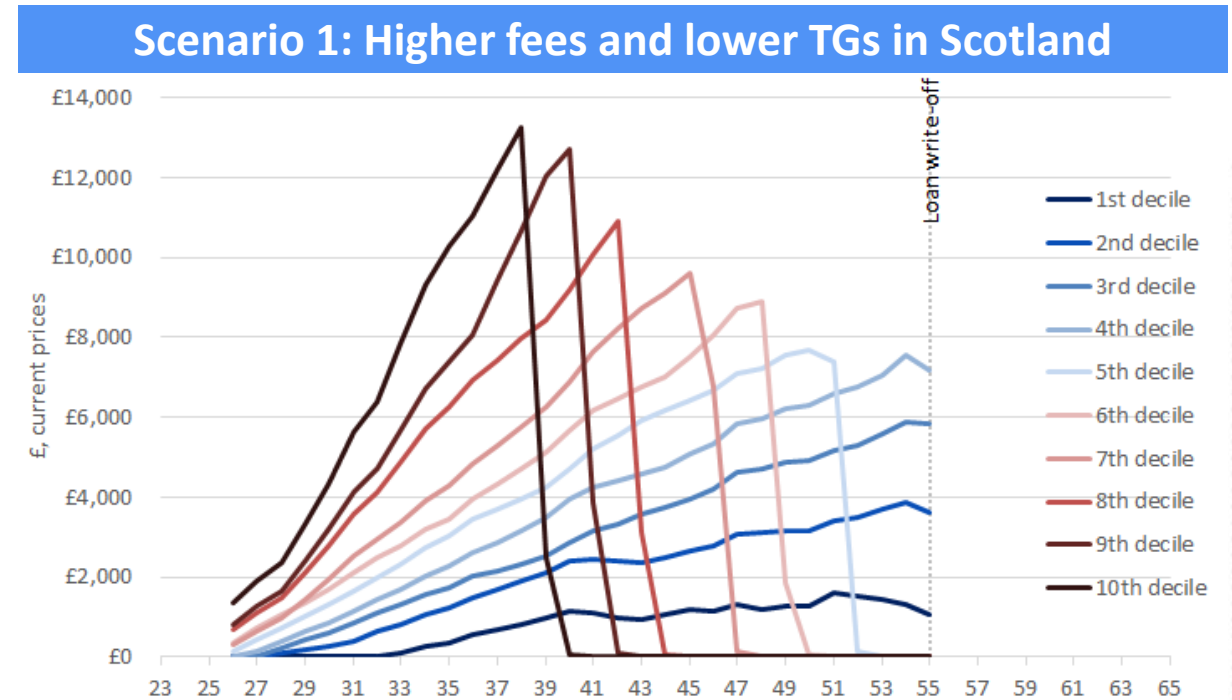
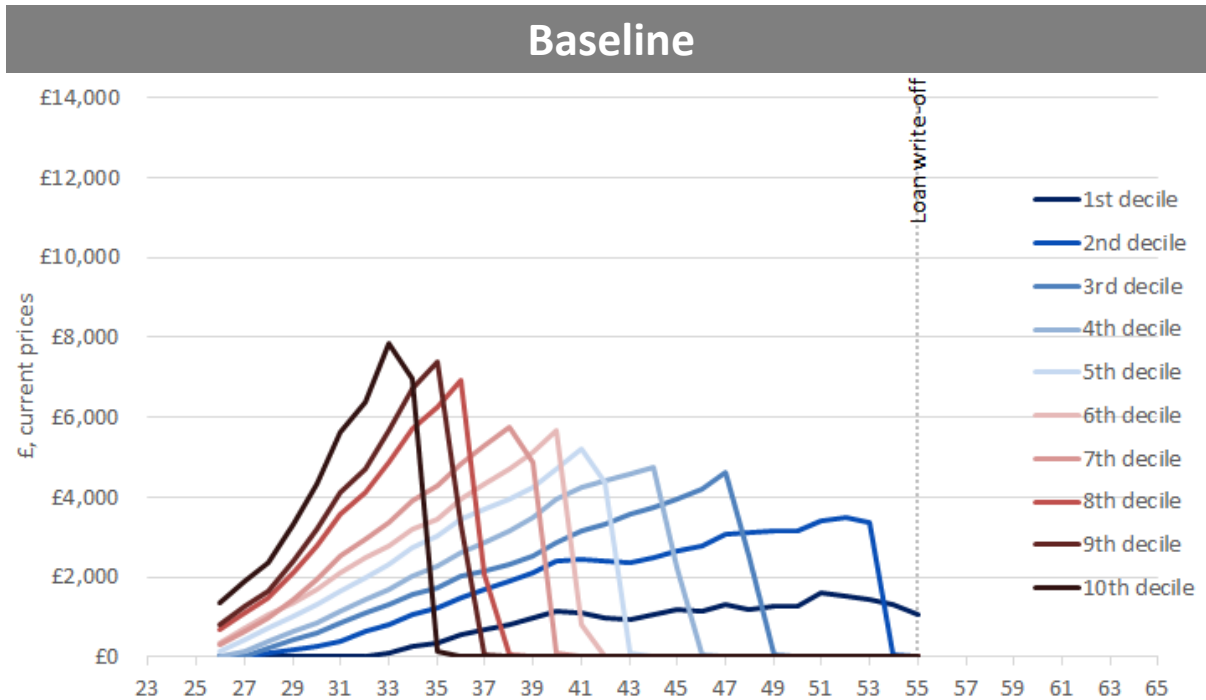
Scenario 1: Higher fees and lower TGs in Scotland



- Under Scenario 1, while middle- and high-income graduates would make higher loan repayments, graduates at the lower end of the income distribution (1st decile for men and 1st to 5th decile for women) would be *unaffected* by the increase in fees and higher student loans in Scotland. This is because these graduates would already be expected to never fully pay off their loan by the end of the repayment period. As a result, their repayments are *not* impacted by the introduction of fee loans.
- The repayment system would continue to be locally regressive, but less so than the current system.

Scenario 1: Loan repayment profiles (men)

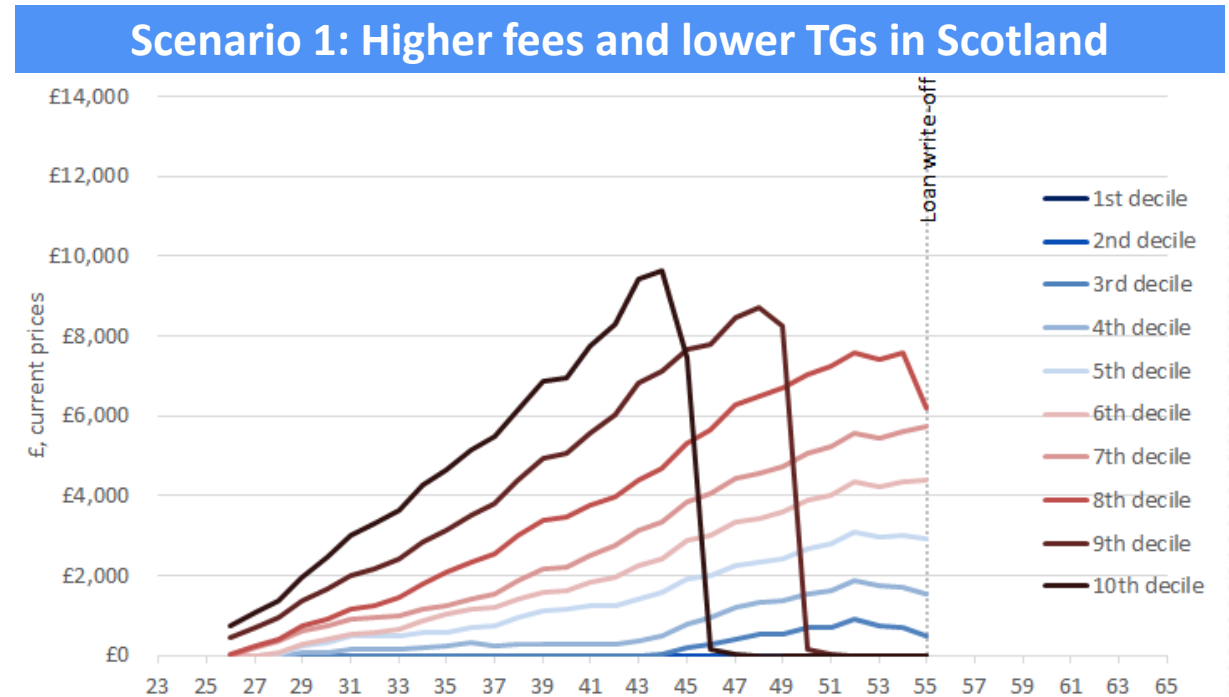
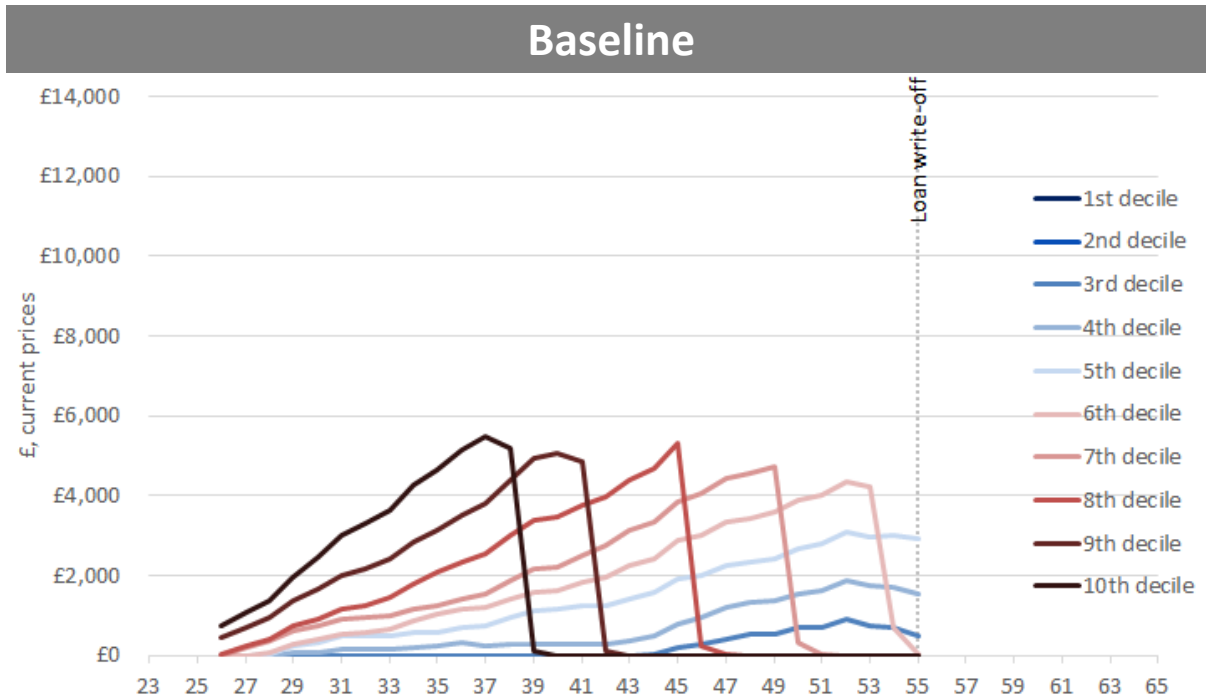
Lifetime loan repayment profiles (by age) for Scottish domiciled **male** students who complete FT first degrees in Scotland (cash terms (not discounted) in current prices), by lifetime earnings decile



- Under Scenario 1, **middle- and high-income graduates would make significantly higher loan repayments**, due to the much higher loan outlay (so they would fully repay their loans later than under the current system).
- In contrast, **graduates at the lower end of the income distribution (1st decile for men) would be unaffected by the increase in fees and higher student loans in Scotland**. This is because these graduates would already be expected to continue making repayments (or make no repayments) for the entire loan repayment period. As a result, their repayments are *not* impacted by the introduction of fee loans, so they would make the same repayments as under the current system.

Scenario 1: Loan repayment profiles (women)

Lifetime loan repayment profiles (by age) for Scottish domiciled **female** students who complete FT first degrees in Scotland (cash terms (not discounted) in current prices), by lifetime earnings decile



- Under Scenario 1, middle- and high-income graduates would make significantly higher loan repayments, due to the much higher loan outlay (so they would fully repay their loans later than under the current system).
- In contrast, graduates at the lower end of the income distribution (1st to 5th decile for women) would be unaffected by the increase in fees and higher student loans in Scotland. This is because these graduates would already be expected to continue making repayments (or make no repayments) for the entire loan repayment period. As a result, their repayments are *not* impacted by the introduction of fee loans, so they would make the same repayments as under the current system.

Scenario 2: Higher maintenance support

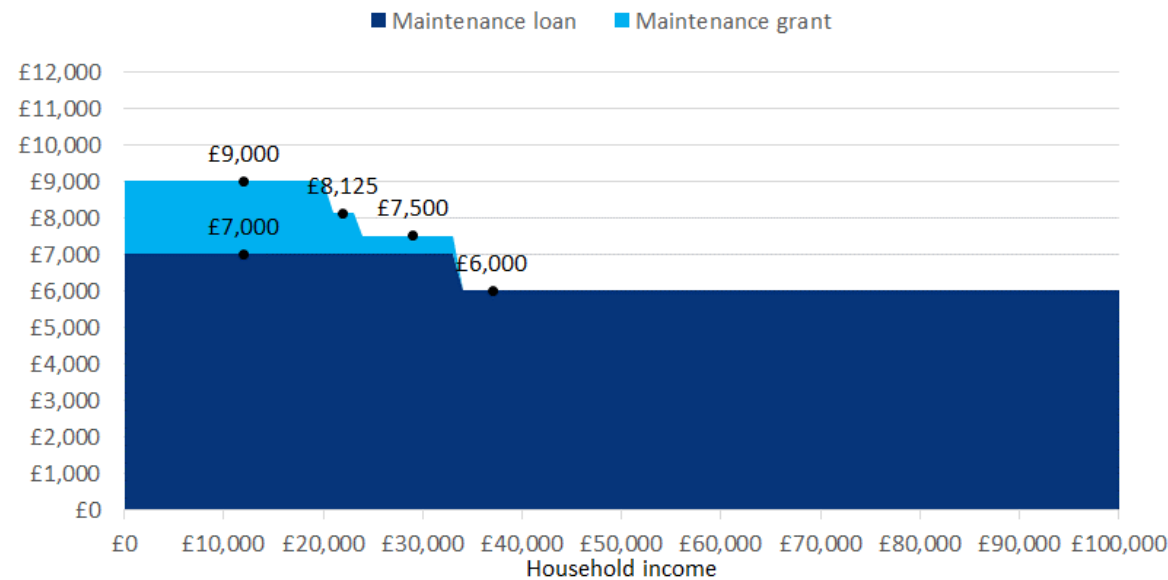


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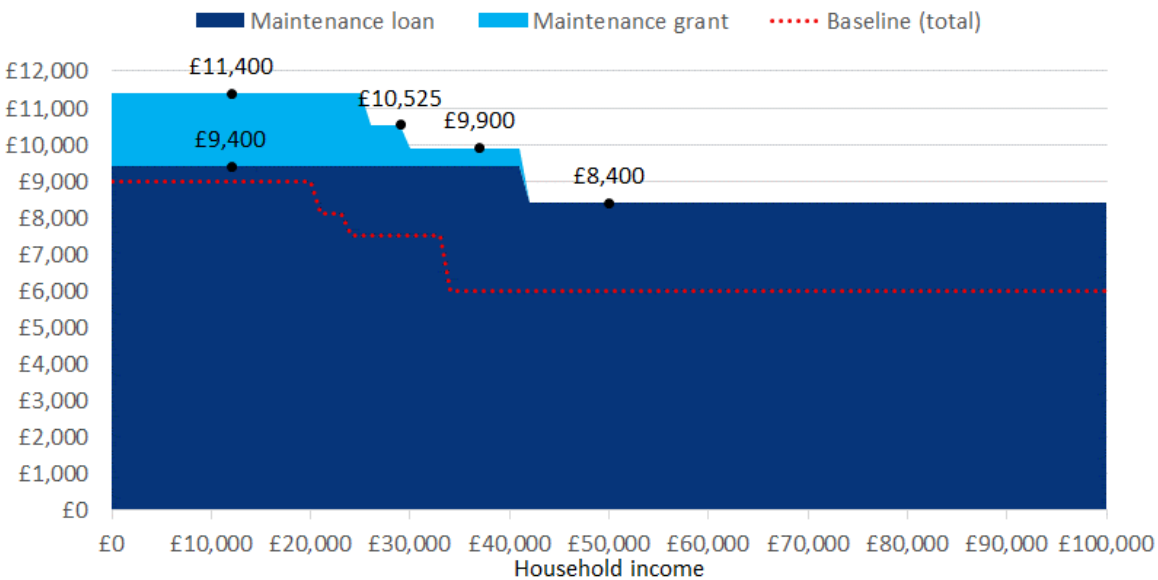
Scenario 2: Maintenance support

Maintenance support per year for Scottish domiciled full-time students studying anywhere in the UK, by household income

Baseline



Scenario 2: Higher maintenance support



- In Scenario 2, we model an increase in maintenance loans in 2023-24 so that the total maximum level of maintenance support increases to £11,400 per full-time student, to bring funding in line with the (Scottish) Living Wage¹. This mirrors the Scottish Government’s recently announced funding increase from 2024-25 onwards ([here](#)), but Scenario 2 effectively brings this increase forward by one year, to 2023-24². In addition, we also model an increase in the relevant household income thresholds for maintenance loan and grant eligibility, since the thresholds have remained entirely unchanged since 2019-20. The thresholds here reflect what the 2019-20 thresholds would be in 2023-24 if they had been uprated with average earnings growth each year³ (i.e. 2019-20 thresholds in 2023-24 values).
- As a result, under Scenario 2, full-time students would be eligible for maximum total maintenance support of £11,400 (for household income of up to £25,580, including a grant of £2,000 and a loan of £9,400), declining to a minimum of £8,400 for household income of £41,416 or more (through a loan only). These changes would apply to Scottish domiciled students studying anywhere in the UK.

Note: The figures relate to maintenance support (for students covered by the Young Students’ Bursary) in 2023-24. Under Scenario 2, we assume that both maintenance loans and grants then remain constant in each subsequent year of study for the cohort of interest. ¹ Note that the Scottish Living Wage ([here](#), calculated annually by The Resolution Foundation) differs from the *National* Living Wage set by the Westminster Government ([here](#)). ² Under the current (Baseline) system, as well as under Scenarios 1 and 3, the analysis instead applies these higher maintenance support levels only from 2024-25 onwards (i.e. the second year of study for the relevant 2023-24 cohort). ³ Based on cumulative growth in average total weekly earnings in Great Britain between April 2019 and April 2023 (approximately 22%), using data published by the Office for National Statistics ([here](#)).

Scenario 2: Maintenance support

Maintenance support per year for Scottish domiciled part-time students studying anywhere in the UK, by household income

Baseline

Not applicable

Scenario 2: Higher maintenance support

Not applicable

- The current Scottish funding system currently typically provides **no maintenance support for part-time students**, and we have assumed that this would continue to be the case under Scenario 2.

Scenario 2: Total costs for cohort

Resource flows (£/£m/%)	Baseline	Scenario 2	Difference
Net Exchequer cost (adjusted for RAB)			
Cost of maintenance grants	(£76m)	(£91m)	(£14m)
Cost of maintenance loans	(£147m)	(£171m)	(£23m)
Cost of tuition fee grants	(£247m)	(£247m)	-
Cost of tuition fee loans	(£12m)	(£12m)	(£0m)
Cost of Teaching Grants	(£884m)	(£884m)	-
Total	(£1,366m)	(£1,404m)	(£38m)

RAB charge (%)	20.6%	21.1%	+0.5 pp
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Net HEP income (UK HEIs and Scottish colleges)			
Gross fee income	£326m	£326m	-
Teaching Grant income	£884m	£884m	-
Cost of bursary provision	(£1m)	(£1m)	-
Total	£1,210m	£1,210m	-

Students/Graduates (FT first degree students from Scotland studying in Scotland)			
Average debt on graduation	£32,600	£35,500	£2,900
Average lifetime repayments (M/F)	£33,200/£22,000	£36,100/£23,700	£2,900/£1,700

- Whereas Scenario 1 would *reduce* the Exchequer cost of the system, **Scenario 2 would result in a small *increase* in the cost per cohort of £38m (3%)**. The cost of fee loans (applicable to students studying in RUK only) would increase only very marginally, due to a small rise in the RAB charge by **0.5 percentage points (to 21.1%)**. The cost of maintenance loan write-offs would increase by **£23m**, given the increase in the maintenance loan outlay due to the higher maximum loan level (in the first year of study¹) and increased eligibility. In addition, the cost of maintenance grants would increase by **£14m**, driven *only* by the assumed increase in the household income thresholds for eligibility (while the maximum level of maintenance grant available would be unchanged compared to the Baseline).
- The average Exchequer cost per full-time Scottish domiciled student studying at a Scottish HEI per year would increase to approximately **£9,500 (+£400 compared to the current system)**.
- HE providers would be unaffected.**
- The average debt on graduation (per full-time first degree student studying in Scotland) would increase by **£2,900 (to £35,500)**, and average lifetime repayments would increase by **£2,900 for male graduates and by £1,700 for female graduates**.

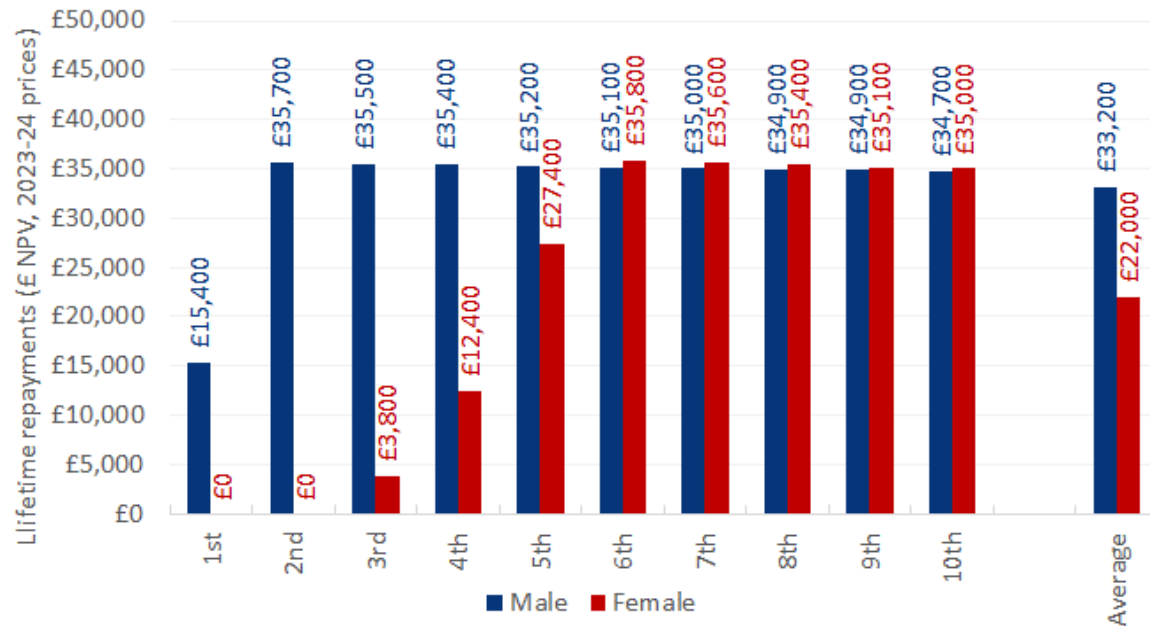
Note: All monetary values have been discounted to net present values and are presented in constant 2023-24 prices. Values per student have been rounded to the nearest £100, and totals have been rounded to the nearest £1m.

¹ Note again that the Baseline (as well as Scenarios 1 and 3) assume that maximum maintenance funding increases to £11,400 *from 2024-25 onwards* (i.e. the second year of study for the 2023-24 cohort). Here, in Scenario 2, we instead 'bring forward' this increase in maintenance funding to 2023-24 (i.e. by 1 year).

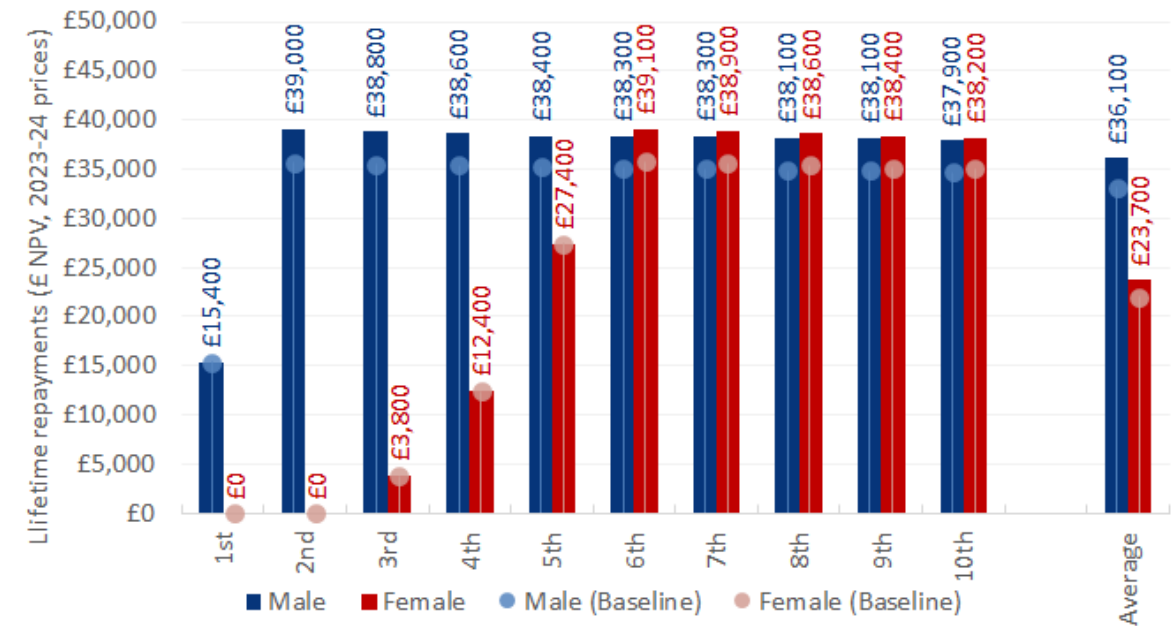
Scenario 2: Graduate loan repayments

Total loan repayments by Scottish domiciled students who complete FT first degrees in Scotland (NPV in 2023-24 prices), by lifetime earnings decile and gender

Baseline



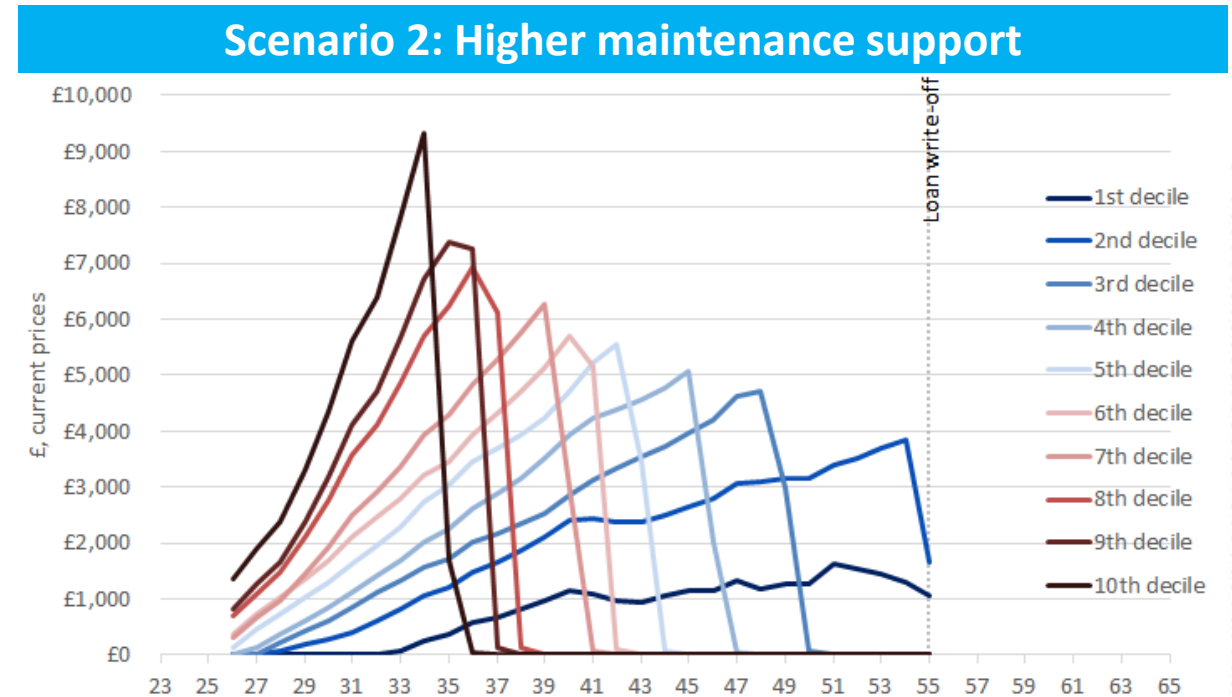
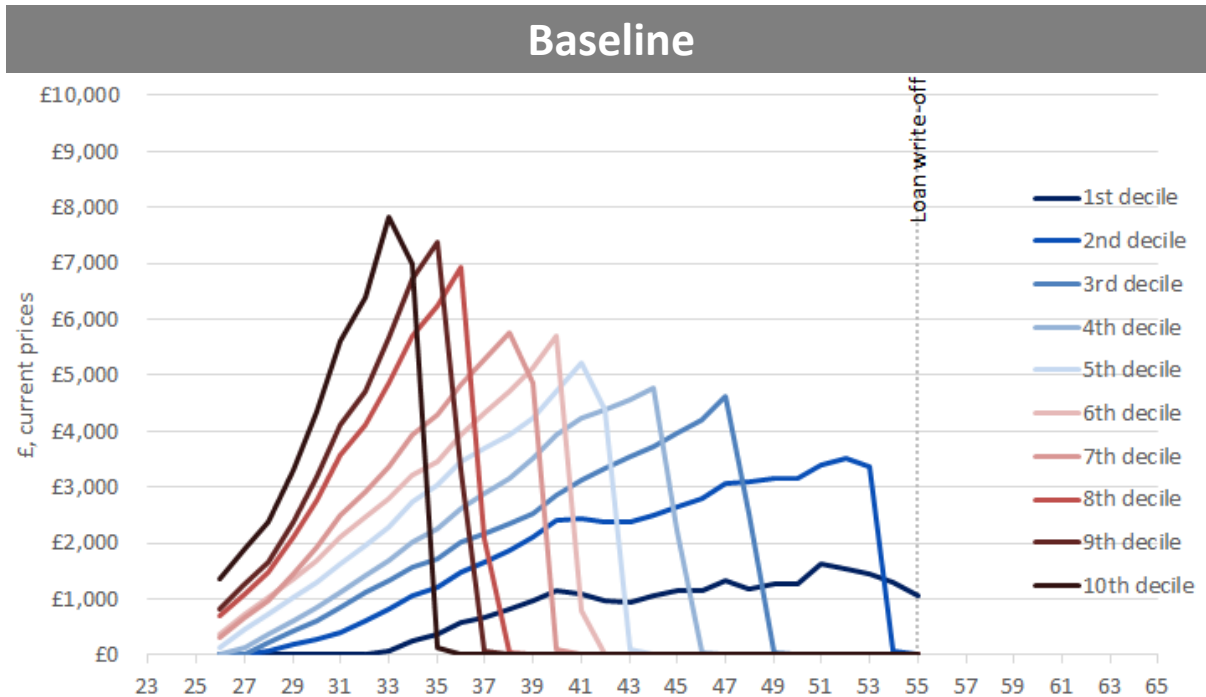
Scenario 2: Higher maintenance support



- Similar to the introduction of fee loans in Scotland under Scenario 1, the increase in maintenance loans under Scenario 2 would result in an **increase in expected loan repayments for middle- and high-income graduates** – though the increases would typically be much smaller than under Scenario 1.
- In contrast, **graduates at the bottom of the income distribution (1st decile for men and 1st to 5th decile for women) would again be unaffected** as they would currently already never fully repay their loans (so their repayments are unaffected by the higher loan balance).
- Again, the repayment system would continue to be locally regressive.

Scenario 2: Loan repayment profiles (men)

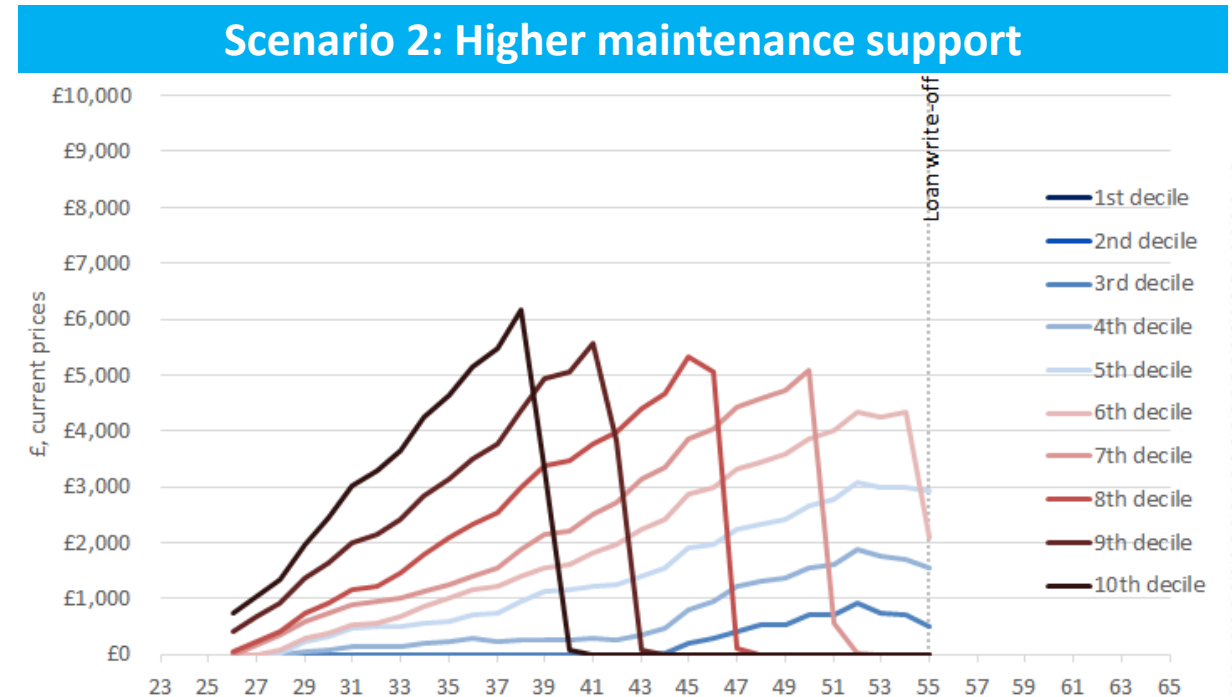
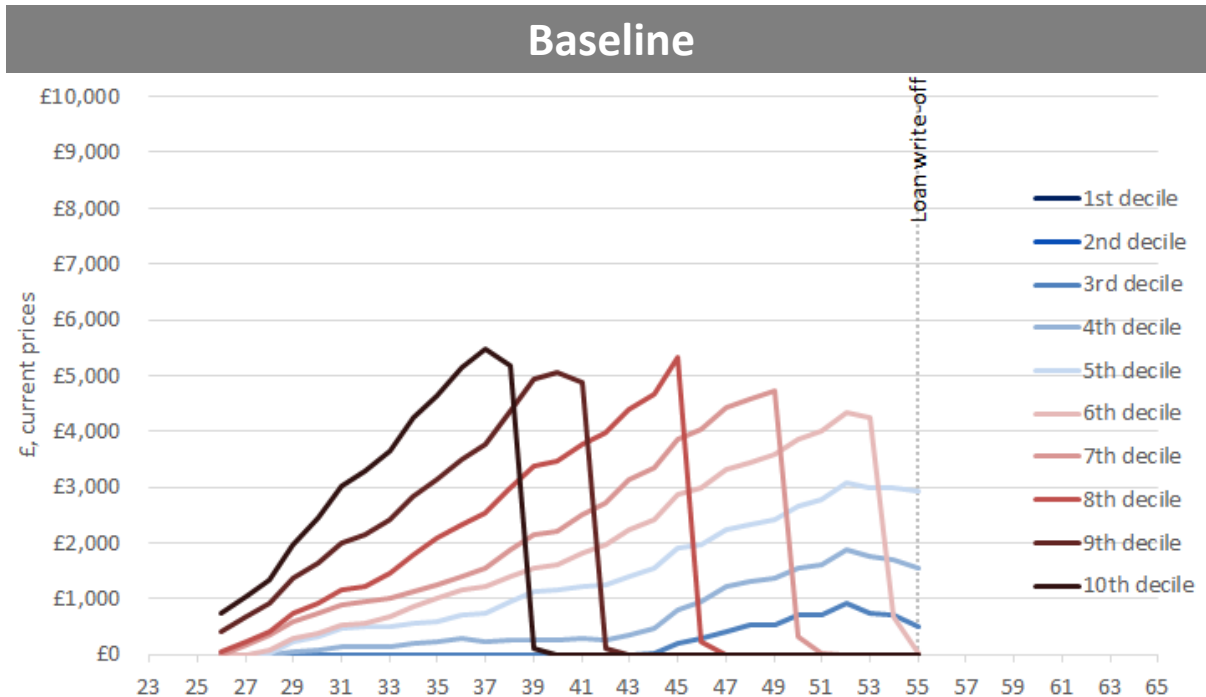
Lifetime loan repayment profiles (by age) for Scottish domiciled **male** students who complete FT first degrees in Scotland (cash terms (not discounted) in current prices), by lifetime earnings decile



- Under Scenario 2, middle- and high-income graduates would make higher loan repayments due to the higher maintenance loan outlay.
- In contrast, graduates at the lower end of the income distribution (1st decile for men) would be unaffected, since, under the current system, these graduates would already be expected to continue making repayments (or make no repayments) for the entire loan repayment period. As a result, their repayments are *not* impacted by the higher loan outlay.

Scenario 2: Loan repayment profiles (women)

Lifetime loan repayment profiles (by age) for Scottish domiciled **female** students who complete FT first degrees in Scotland (cash terms (not discounted) in current prices), by lifetime earnings decile



- Under Scenario 2, middle- and high-income graduates would make higher loan repayments due to the higher maintenance loan outlay.
- In contrast, graduates at the lower end of the income distribution (1st to 5th decile for women) would be unaffected, since, under the current system, these graduates would already be expected to continue making repayments (or make no repayments) for the entire loan repayment period. As a result, their repayments are *not* impacted by the higher loan outlay.

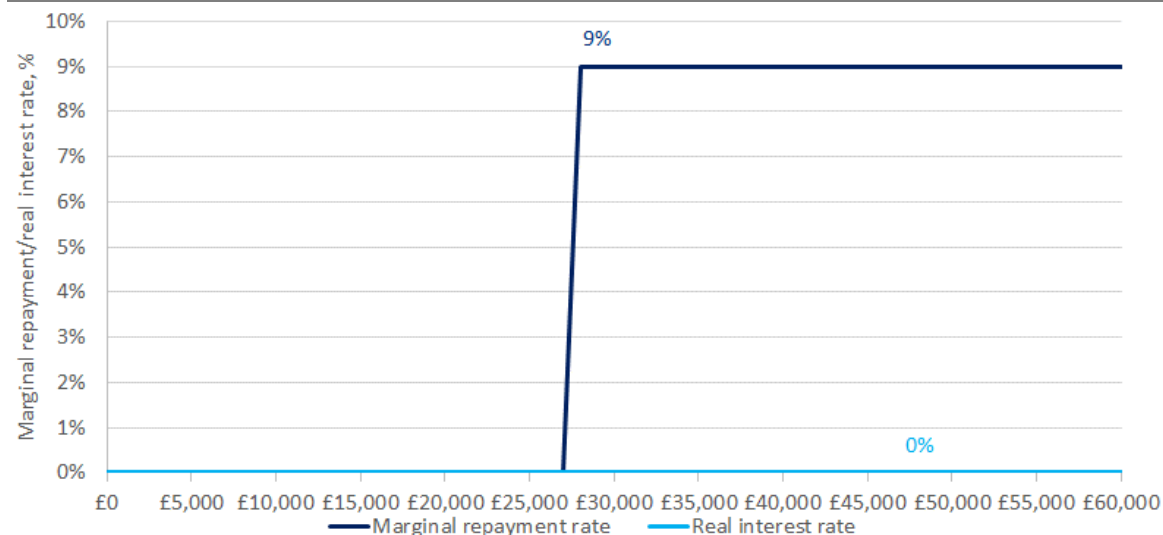
Scenario 3: Introducing real loan interest rates



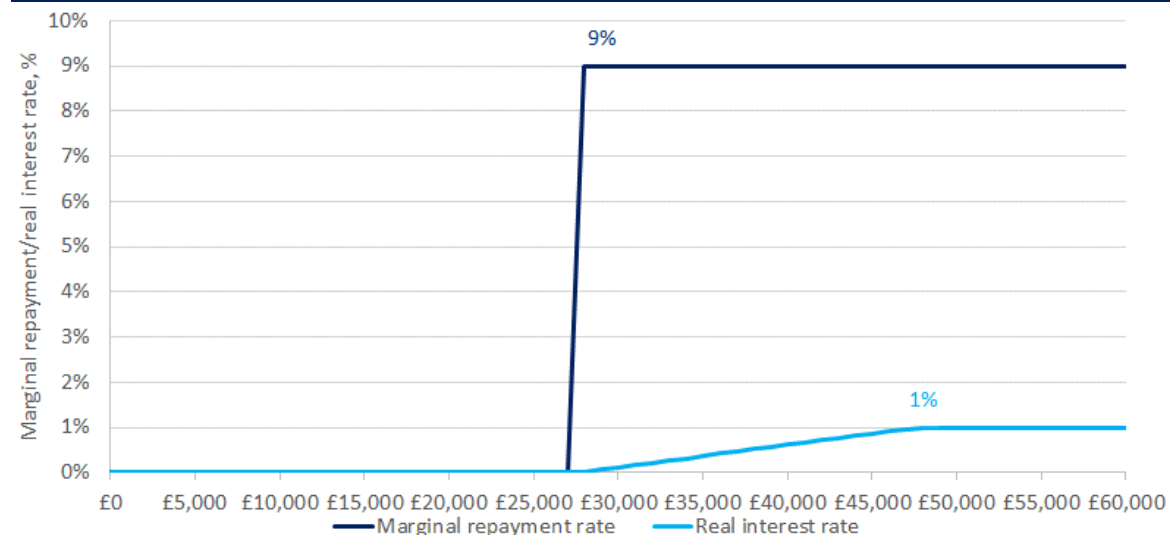
Scenario 3: Repayment and interest rates

Loan repayment and real interest rates by graduate income

Baseline



Scenario 3: Introducing real loan interest rates



- Finally, Scenario 3 assumes the same fees, fee support, and maintenance support as the current system, but instead models a **change in loan repayment conditions** for the cohort of interest.
- Specifically, we model the **introduction of real loan interest rates**, assuming a **1% real interest rate during study¹**; **0%-1% post-study for graduates earning between £27,660 and £47,660²**; and **1% for graduates earning more than £47,660**. Nominal interest rates would again be set at the relevant real interest rate + RPI.

¹ i.e. before each graduate's Statutory Repayment Due Date (SRDD).

² The £27,660 threshold is equivalent to the current loan repayment threshold in 2023-24. As under the current system, both thresholds here are assumed to be updated with RPI inflation in each subsequent year.

Scenario 3: Total costs for cohort

Resource flows (£/£m/%)	Baseline	Scenario 3	Difference
Net Exchequer cost (adjusted for RAB)			
Cost of maintenance grants	(£76m)	(£76m)	-
Cost of maintenance loans	(£147m)	(£104m)	£43m
Cost of tuition fee grants	(£247m)	(£247m)	-
Cost of tuition fee loans	(£12m)	(£9m)	£2m
Cost of Teaching Grants	(£884m)	(£884m)	-
Total	(£1,366m)	(£1,321m)	£45m

RAB charge (%)	20.6%	14.7%	-5.9 pp
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Net HEP income (UK HEIs and Scottish colleges)			
Gross fee income	£326m	£326m	-
Teaching Grant income	£884m	£884m	-
Cost of bursary provision	(£1m)	(£1m)	-
Total	£1,210m	£1,210m	-

Students/Graduates (FT first degree students from Scotland studying in Scotland)			
Average debt on graduation	£32,600	£33,000	£400
Average lifetime repayments (M/F)	£33,200/£22,000	£36,100/£23,800	£2,900/£1,800

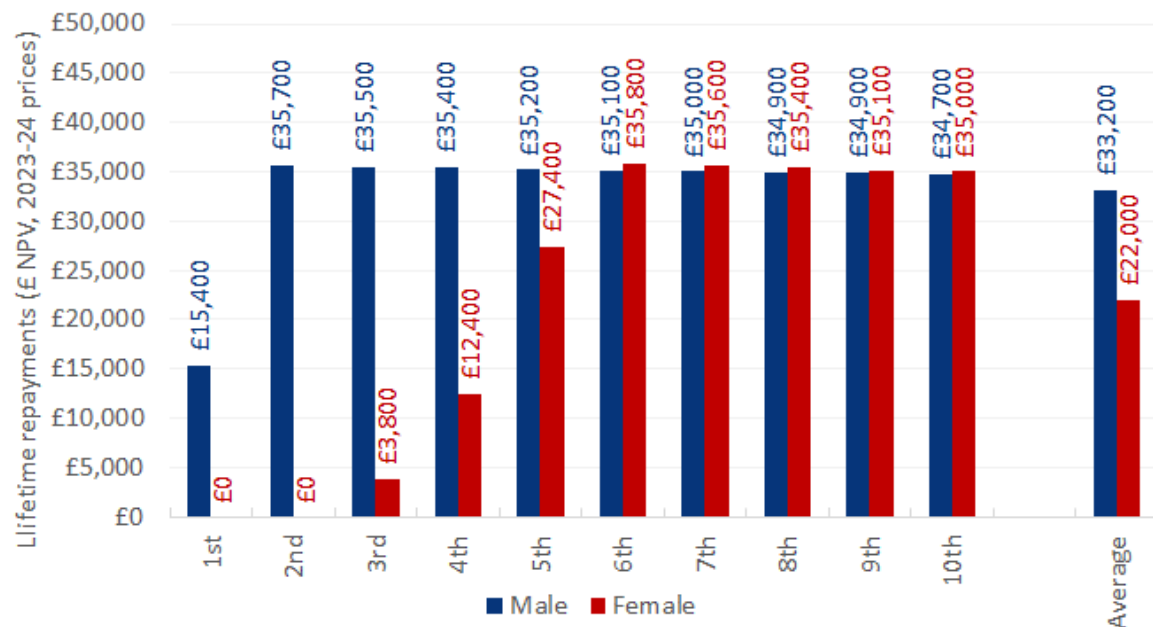
Note: All monetary values have been discounted to net present values and are presented in constant 2023-24 prices. Values per student have been rounded to the nearest £100, and totals have been rounded to the nearest £1m.

- The introduction of real interest rates under Scenario 3 would result in a small *reduction* in the Exchequer cost per cohort, by **£45m (3%)**. These savings would be driven by a decline in the cost of maintenance loan write-offs (**£43m**) and fee loan write-offs (**£2m**) compared to the current system, as the RAB charge would decline by **5.9 percentage points (to 14.7%)**.
- The average Exchequer cost per full-time Scottish domiciled student studying at a Scottish HEI per year would stand at **£8,900 (-£200 compared to the Baseline)**.
- As under Scenario 2, HE providers would again be unaffected.
- Reflecting the introduction of real interest during study, the average debt on graduation (again per full-time first degree student studying in Scotland) would increase slightly (by **£400**, to **£33,000**). Average lifetime repayments would also increase, by **£2,900** for male graduates and by **£1,800** for female graduates.
- Overall, introducing real interest rates of (up to) 1% would thus only have a relatively marginal impact on the cost of the Scottish HE funding system. This is due to the relatively low loan outlay for Scottish students studying in Scotland (since their fees are fully covered by fee grants, so these students only take out maintenance loans). As such, the imposition of real interest rates implies that most graduates fully repay their loan only *slightly* later than under the current system.

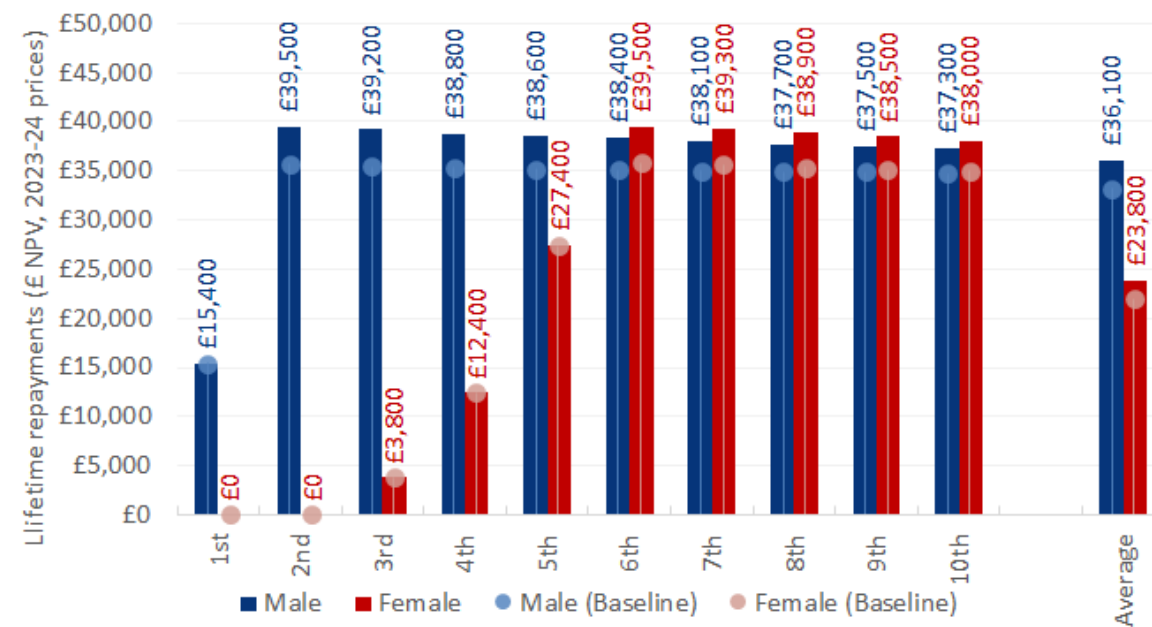
Scenario 3: Graduate loan repayments

Total loan repayments by Scottish domiciled students who complete FT first degrees in Scotland (NPV in 2023-24 prices), by lifetime earnings decile and gender

Baseline



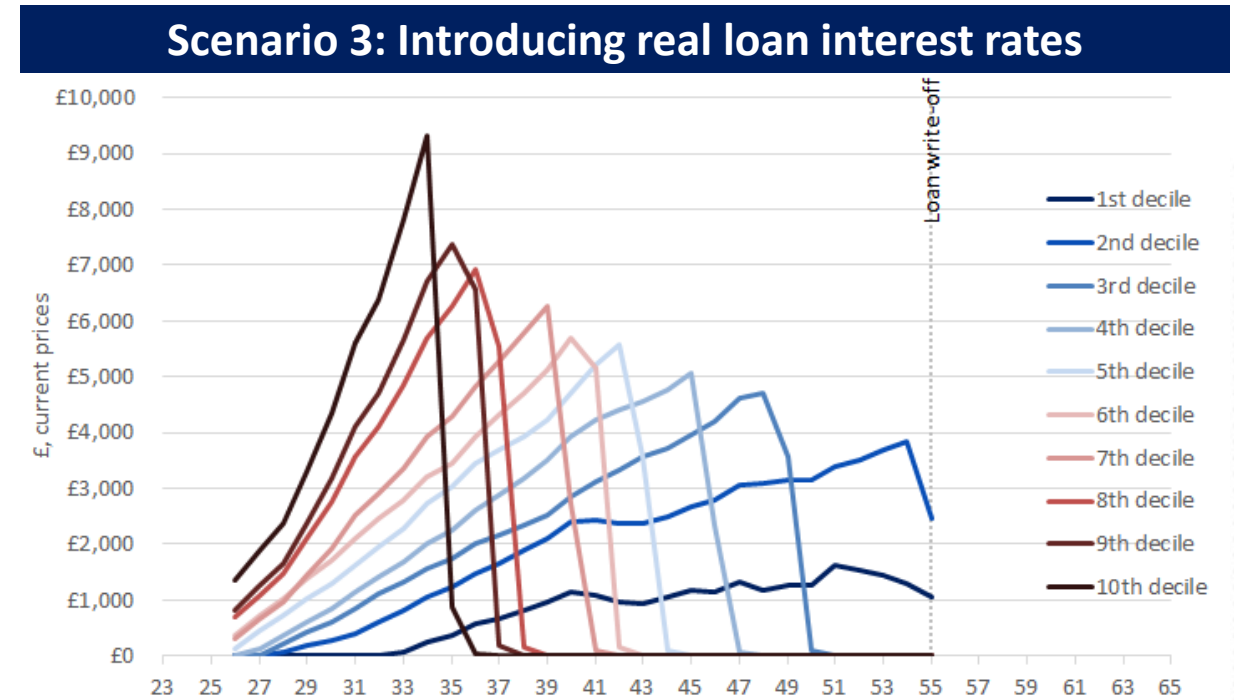
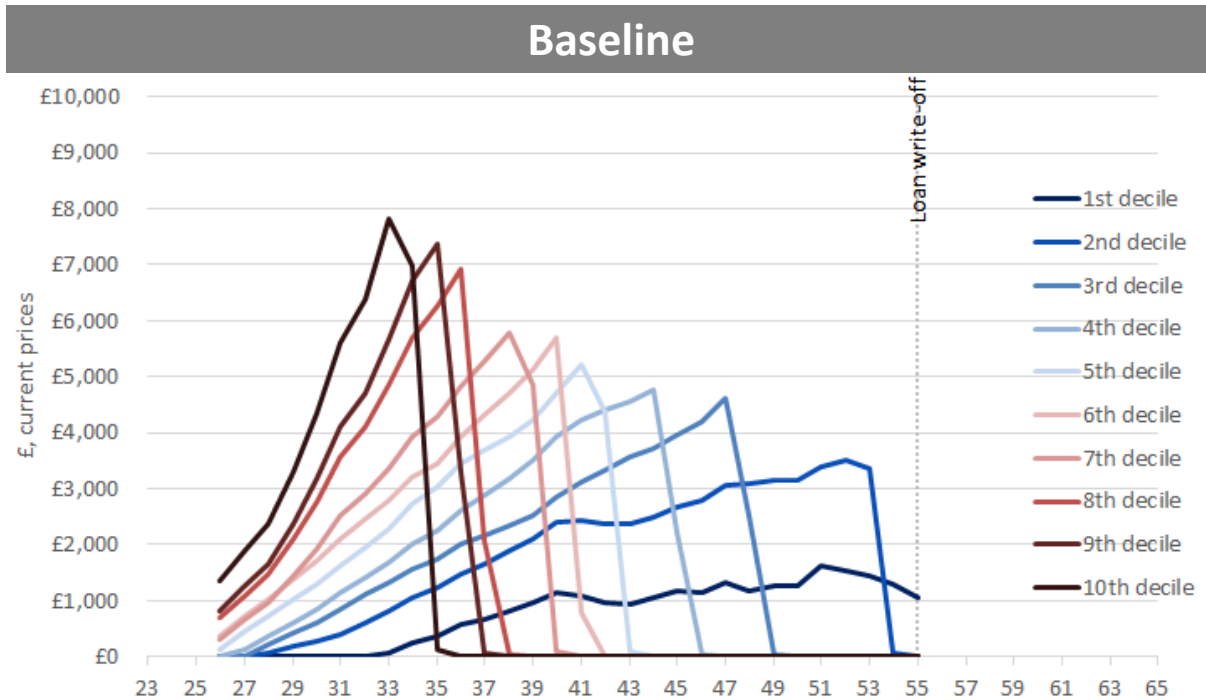
Scenario 3: Introducing real loan interest rates



- Similar to the introduction of fee loans for students in Scotland under Scenario 1 and the increase in maintenance loans under Scenario 2, the introduction of real interest rates under Scenario 3 would imply that **middle- and high-income graduates would repay more** than under the current system. However, the increase in repayments here would be relatively small (and broadly similar to repayment levels under Scenario 2).
- Again, **graduates at the bottom of the income distribution** (1st decile for men and 1st to 5th decile for women) **would be unaffected** by the increase in the loan balance resulting from the higher interest rates.
- Again, the repayment system would continue to be locally regressive.

Scenario 3: Loan repayment profiles (men)

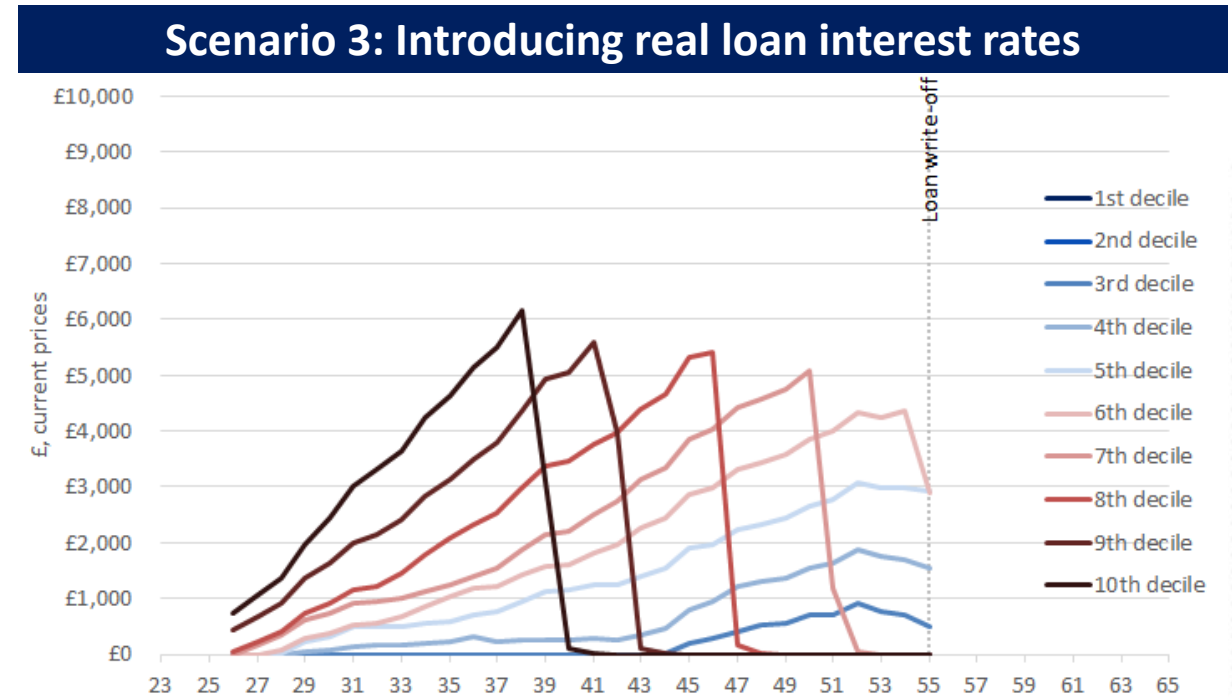
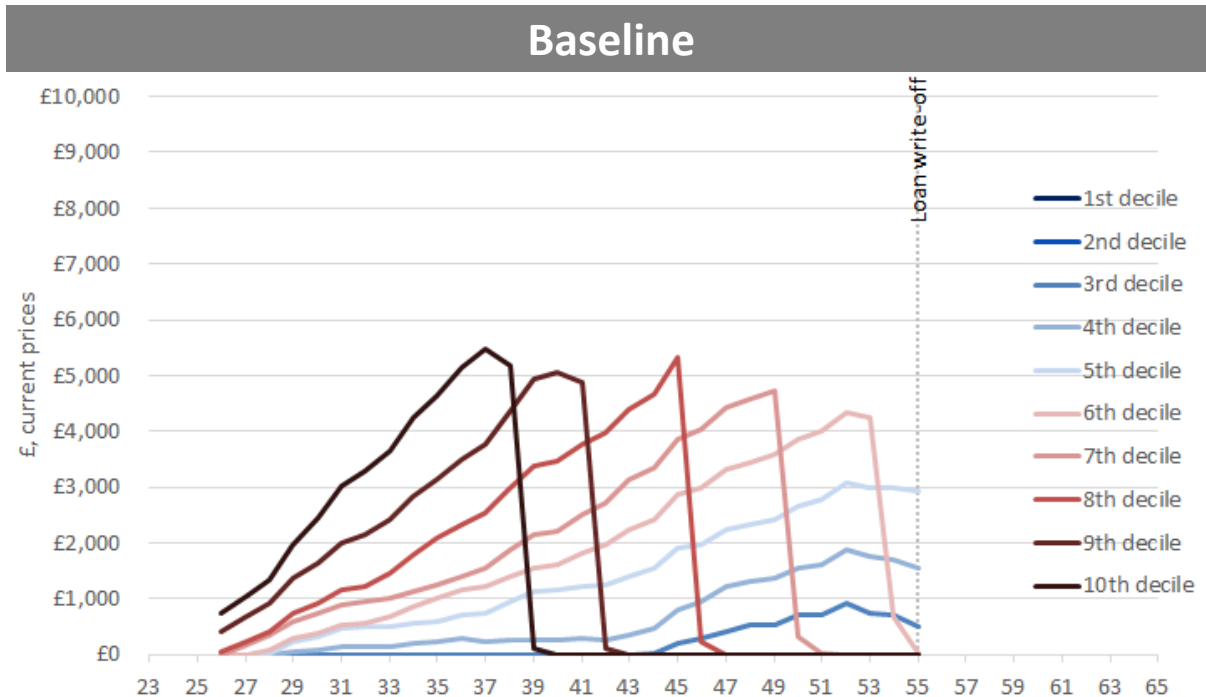
Lifetime loan repayment profiles (by age) for Scottish domiciled **male** students who complete FT first degrees in Scotland (cash terms (not discounted) in current prices), by lifetime earnings decile



- Under Scenario 3, middle- and high-income graduates would again make *slightly* higher loan repayments, as the introduction of real interest rate would keep these graduates in the repayment system for slightly longer.
- As under Scenarios 1 and 2, graduates at the bottom of the income distribution (1st decile for men) would be unaffected (i.e. they would be expected to make the same total lifetime loan repayments as under the current system).

Scenario 3: Loan repayment profiles (women)

Lifetime loan repayment profiles (by age) for Scottish domiciled **female** students who complete FT first degrees in Scotland (cash terms (not discounted) in current prices), by lifetime earnings decile



- Under Scenario 3, middle- and high-income graduates would again make *slightly* higher loan repayments, as the introduction of real interest rate would keep these graduates in the repayment system for slightly longer.
- As under Scenarios 1 and 2, graduates at the bottom of the income distribution (1st to 5th decile for women) would be unaffected (i.e. they would be expected to make the same total lifetime loan repayments as under the current system).

Conclusion and discussion

Comparison across all scenarios

Negative values = “worse off”
Positive values = “better off”

Resource flows (£m/%)	Baseline (Current system)	Scenario 1 (Higher fees + lower TGs in Scotland)		Scenario 2 (Higher maintenance loans)		Scenario 3 (Introducing real interest rates)	
		Total	Diff. to Baseline	Total	Diff. to Baseline	Total	Diff. to Baseline
'Net' Exchequer cost (adjusted for RAB)							
Cost of maintenance grants	(£76m)	(£76m)	-	(£91m)	-£14m	(£76m)	-
Cost of maintenance loans	(£147m)	(£233m)	-£85m	(£171m)	-£23m	(£104m)	+£43m
Cost of tuition fee grants	(£247m)	-	+£247m	(£247m)	-	(£247m)	-
Cost of tuition fee loans	(£12m)	(£433m)	-£421m	(£12m)	-£0m	(£9m)	+£2m
Cost of Teaching Grants	(£884m)	(£70m)	+£815m	(£884m)	-	(£884m)	-
Total	(£1,366m)	(£812m)	+£554m	(£1,404m)	-£38m	(£1,321m)	+£45m
Net HE provider income							
Gross fee income	£326m	£1,556m	+£1,230m	£326m	-	£326m	-
Teaching Grant income	£884m	£70m	-£815m	£884m	-	£884m	-
Cost of bursary provision	(£1m)	(£1m)	-	(£1m)	-	(£1m)	-
Total	£1,210m	£1,625m	+£416m	£1,210m	-	£1,210m	-
'Net' cost to students/graduates (adjusted for RAB)							
Cost of gross fees	(£326m)	(£1,556m)	-£1,230m	(£326m)	-	(£326m)	-
Fee grant income	£247m	-	-£247m	£247m	-	£247m	-
Fee loan income	£12m	£433m	+£421m	£12m	+£0m	£9m	-£2m
Bursary income	£1m	£1m	-	£1m	-	£1m	-
Maintenance grant income	£76m	£76m	-	£91m	+£14m	£76m	-
Maintenance loan income	£147m	£233m	+£85m	£171m	+£23m	£104m	-£43m
Total	£156m	(£814m)	-£970m	£194m	+£38m	£111m	-£45m
% of cost covered by Exchequer vs. students/graduates							
Exchequer	113%	49%		116%		109%	
Students/graduates	-13%	51%		-16%		-9%	
Total	100%	100%		100%		100%	

Note: All values have been discounted to net present values, are presented in constant 2023-24 prices, and have been rounded to the nearest £1m.

Comparison across all scenarios

In summary, compared to the current (2023-24) HE fees and funding system for Scotland:



KEY FINDINGS

Under SCENARIO 1 (higher fees and lower Teaching Grants for students in Scotland):

- The Exchequer cost of the system would *decrease* by £554m per cohort.
- Income for Scottish HE providers would *increase* by £416m per cohort (RUK HEPs would be unaffected).
- The cost to students/graduates would therefore *increase* by £970m. The additional cost would be borne by middle- and high-income graduates, while graduates at the bottom of the earnings distribution would be unaffected. The loan repayment system would thus become slightly less regressive.

Under SCENARIO 2 (higher maintenance support):

- The Exchequer cost of the system would *increase* by £38m per cohort.
- HEPs would be unaffected.
- The cost to students/graduates would *decrease* by £38m. All students would benefit from a more generous maintenance loan package while studying, but graduates at the bottom of the earnings distribution would repay the same amount as under the current system (i.e. would benefit the most). Middle- and high-income graduates would see their repayments increase.

Under SCENARIO 3 (introduction of real interest rates):

- The Exchequer cost of the system would *decrease* by £45m per cohort. The relatively small impact is due to the low loan outlay for Scottish students in Scotland (as their fees are covered through grants rather than loans), so that real interest rates only make a small difference to graduates' repayments.
- HEPs would be unaffected.
- The cost to students/graduates would *increase* by £45m. Graduates at the bottom of the earnings distribution would again be unaffected, while middle- and high-income graduates would repay more.

Conclusion and discussion

- **Higher education funding has resulted in major political divisions across the UK since the 1990s.** This is especially the case in Scotland, where, for some political parties, the issue of higher education fees is a totemic issue.
- Per-student public investment in higher education in Scotland is approximately **5 times as high as in England**. Despite this, higher education institutions in Scotland receive approximately **23%** less funding per student than their counterparts in England¹. The public costs of the system and funding shortfall experienced by institutions has resulted in domestic student number controls, as well as an increasing reliance amongst higher education providers to recruit from the rest of the UK and overseas.
- **With significant funding constraints manifesting themselves across the entire public sector, ahead of the next General Election, a number of potential policy options might need to be considered to reduce the burden on the public purse.** Here, we have presented three scenarios to illustrate the impact of different aspects of the Scottish funding system on students/graduates, the Exchequer, and HE providers. Compared to the current Exchequer cost of the system of **£1.37bn** per cohort, increasing tuition fees for Scottish domiciled students studying in Scotland to £9,250 per annum and reducing Teaching Grants accordingly would save the Exchequer approximately **£554m (41%)**. In comparison, increasing maintenance loans and extending eligibility for these loans would cost the Exchequer an additional **£38m (3%)**. Introducing real interest rates (to a maximum of 1%) would reduce the Exchequer costs by **£45m (3%)**.
- **In terms of the key ‘winners’ and ‘losers’ from these different scenarios, they are not who you may think they are.** For instance, the very lowest earning graduates typically would **not** be adversely affected by the introduction of higher tuition fees and fee loans.
- **The aim of this study is to raise the level of information on and understanding of the different HE funding systems operating in each Home Nation ahead of the next General Election.** We hope that this ensures that any manifesto pledges are properly understood – by politicians and voters alike – for the long-term sustainability of the higher education sector, and for the benefit of the public more generally.

¹ The comparisons here relate to funding per English domiciled student studying in England vs. Scottish domiciled student studying in Scotland (at Scottish HEIs only, but excluding HE students at Scottish FE colleges), in terms of the average Exchequer cost/HEI income per full-time undergraduate student (across first degrees and sub-degree qualifications) in 2023-24 (i.e., the first year of study for the relevant student cohort).

The corresponding differences in funding levels for Scottish FE colleges are even more significant, with Scottish FE colleges receiving approximately **51%** less income per student than English HEIs (and **36%** less than Scottish HEIs).

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ANNEX

Methodology and assumptions



Assumptions and methodology

- The model considers **first-year undergraduate students from Scotland studying at HEIs anywhere in the UK and at FE colleges in Scotland, in the 2023-24 academic year**. For students studying at UK HEIs, we use student data published by HESA ([here](#)) for 2021-22. For students studying at Scottish FE colleges, we use granular data provided to us by the SFC underlying its published student data for HE in FE for 2020-21 ([here](#)). In the absence of more recent information, we assume that the size and characteristics of the student cohort have **remained unchanged** between 2021-22 and 2023-24 (for Scottish students at UK HEIs) and between 2020-21 and 2023-24 (for Scottish students at Scottish FE colleges).
- We **exclude students studying for institutional credits only**, as these students are typically not eligible for public funding.
- We also **exclude Scottish domiciled full-time students studying paramedic, nursing, or midwifery subjects in Scotland**, as these students are covered by different funding arrangements with the Scottish Government’s Health and Social Care Directorate¹:
 - For Scottish domiciled first-year full-time undergraduate students at Scottish HEIs, out of a total of **36,135** students (across all subjects), we exclude **4,250 (12%)** students studying paramedic, nursing, or midwifery subjects (estimated based on the proportion of all Scottish domiciled full-time undergraduate students (studying at HEIs anywhere in the UK) by subject², again based on published HESA data).
 - For Scottish domiciled first-year full-time undergraduate students at Scottish FE colleges, out of a total of **23,320** students (across all subjects), we exclude **1,310 (6%)** students studying paramedic, nursing, or midwifery subjects³.

- After these exclusions, in total, the analysis assumes that there are **74,450 students in the relevant cohort of first-year undergraduate Scottish domiciled students studying at HEIs throughout the UK or at FE colleges in Scotland** (see [next slide](#)).
- Based on the same HESA and SFC data, we assume the following distribution of students in the cohort by **qualification level** (separately by institution type):

Qualification level	Students at UK HEIs		Students at Scottish colleges	
	Full-time	Part-time	Full-time	Part-time
Other UG	1.0%	34.4%	0.7%	58.4%
HNC/HND	5.2%	4.2%	96.6%	39.7%
Foundation Degree	0.1%	0.4%	-	-
First degree	93.8%	61.0%	2.7%	1.9%
Total	100.0%	100.0%	100.0%	100.0%

- Part-time students are assumed to study at **50% full-time equivalence (FTE)**⁴.

¹ These students are funded by the separate PNMSB scheme operated by SAAS. Note that this scheme does not apply to part-time students (who are instead funded by the general student support package provided by SAAS); hence, part-time students in these subjects are *included* in our analysis.

² In other words, we implicitly assume the same subject distribution among Scottish domiciled students studying at Scottish HEIs and RUK HEIs.

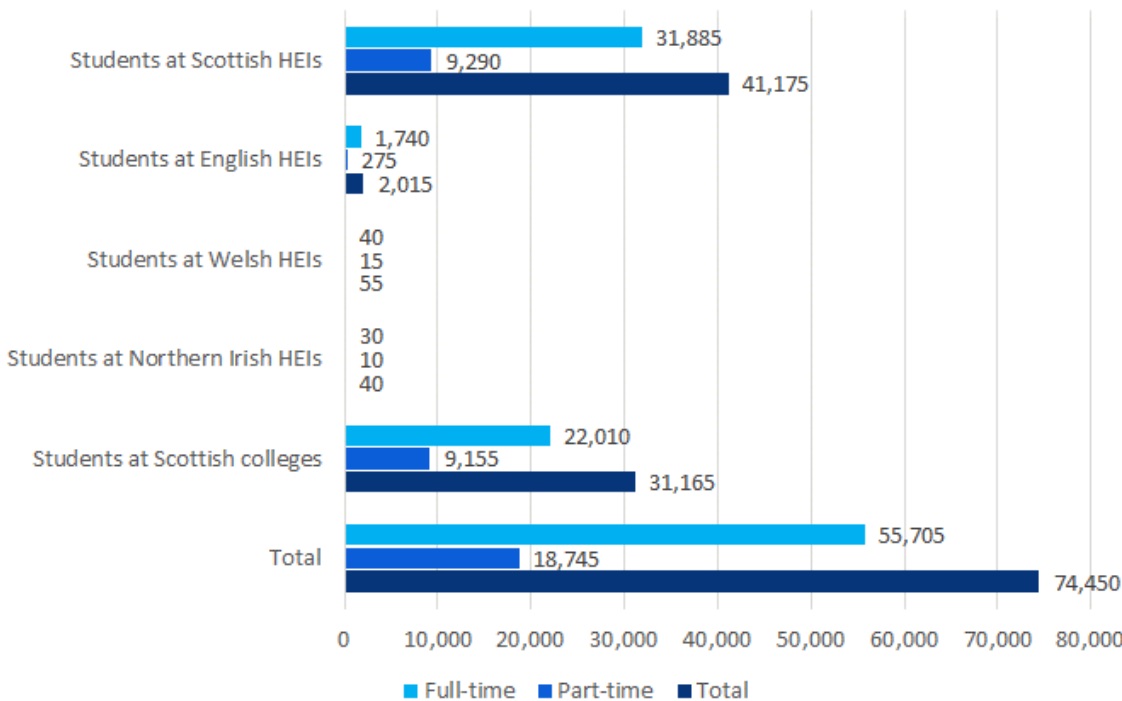
³ This was estimated based on the ratio of the overall proportion of first-year students at Scottish colleges vs. UK HEIs studying subjects allied to medicine (from published SFC data for 2021-22 ([here](#))), multiplied by the above-mentioned proportion of Scottish domiciled first-year full-time undergraduate students at UK HEIs studying paramedic, nursing, or midwifery subjects in 2021-22. In other words, we implicitly assume the same granular subject distribution *within subjects allied to medicine* among Scottish domiciled first-year undergraduate students at Scottish colleges as for Scottish domiciled first-year undergraduate students studying at HEIs anywhere in the UK.

⁴ Based on data provided to us by HESA on the average study intensity among all UK domiciled first-year part-time students in 2021-22 (separately by study level, and again excluding students studying for credit only).

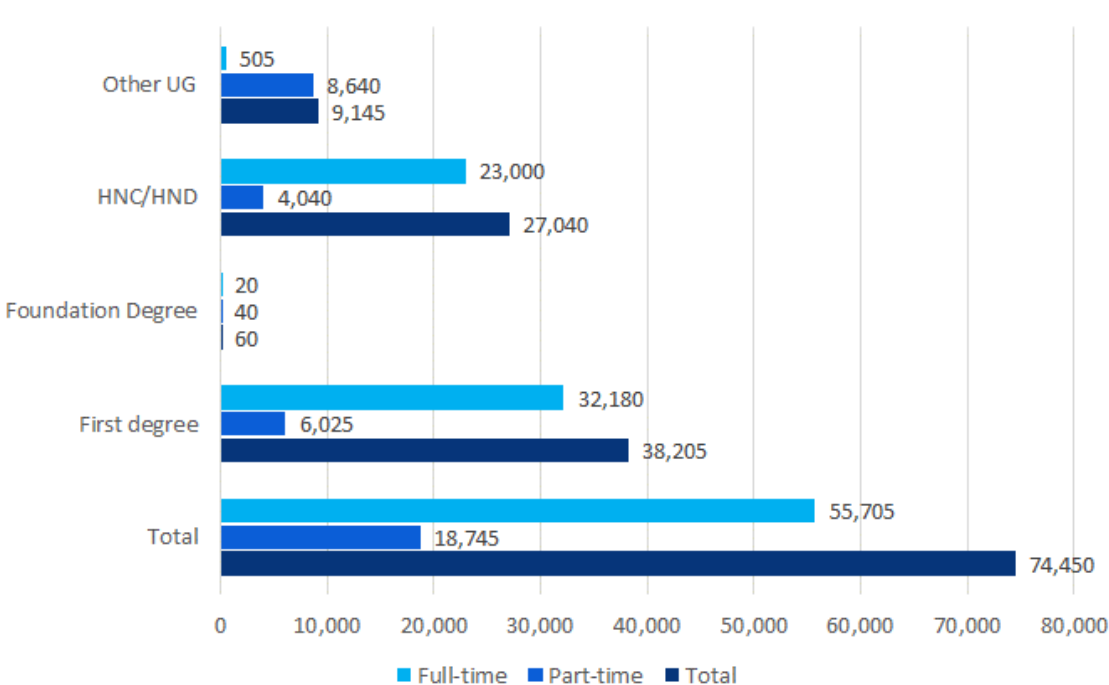
Assumptions and methodology

- The analysis is based on a total of **74,450** first-year undergraduate Scottish domiciled students, including **41,175** students studying at Scottish HEIs, **2,110** students studying at RUK HEIs, and **31,165** students at Scottish colleges:

By location of study and study mode



By study level and mode



Note: All student numbers are rounded to the nearest 5. The information is based on the 2021-22 academic year (for students at HEIs) and the 2020-21 academic year (for students at Scottish colleges), and we assume the same size and characteristics for the 2023-24 cohort. The analysis excludes students studying for institutional undergraduate-level credits (i.e. students who are not studying for a qualification), and full-time Scottish domiciled students studying paramedics, nursing, or midwifery in Scotland.

Source: London Economics' analysis based on data published by HESA ([here](#)) and (unpublished) data provided to us by the SFC.

Assumptions and methodology

- Again based on HESA data ([here](#)) and SFC data ([here](#)), we assume the following **annual continuation rates**:
 - **93.1%** for full-time students and **84.0%** for part-time students studying at **UK HEIs**. This is based on the proportion of students who entered higher education in 2019-20¹ (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 (part-time students) after enrolling. The information is based on all UK domiciled students studying at HEIs anywhere in the UK (as a breakdown by domicile was not available); and
 - **62.5%** for full-time students and **75.8%** for part-time students studying at **Scottish colleges**. This is based on the proportion of HE students enrolled in Scottish FE colleges in 2021-22 who successfully completed their course in 2021-22 or completed the year (i.e. in contrast to the above HESA data for UK HEIs, the information is *not* based on tracking a given cohort of starters in terms of their progression in successive academic years; rather, the SFC data provides a snapshot of ‘success rates’ in a single given academic year).

- The underlying analysis is undertaken separately by gender. Using HESA information on the gender split of Scottish domiciled qualification completers (who graduated from institutions anywhere in the UK in 2021-22 ([here](#))), and SFC data on the gender split of students undertaking HE qualifications at Scottish colleges ([here](#))², we assume the following **gender distribution**:

Qualification level	Full-time		Part-time	
	Male	Female	Male	Female
Other undergraduate	39%	61%	44%	56%
HNC/HND	29%	71%	52%	48%
Foundation Degree	50%	50%	71%	29%
First degree	40%	60%	38%	62%

- We assume the following **average age at enrolment** (again 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	29	34	1	2
HNC/HND	23	28	2	4
Foundation Degree	28	32	2	4
First degree	22	31	4	8

¹ This is the latest academic year for which HESA non-continuation rate information is currently available.

² Note that the gender split here is based on students across all subjects of study, as an exclusion of paramedics, nursing, and midwifery students was not possible due to a lack of granularity in the underlying HESA and SFC data. Further note that, while the gender split from the HESA data was available separately by qualification level, the data for HE students at Scottish colleges was not broken down in this way. The combined gender distribution of students at HEIs and colleges here was calculated as a weighted average (weighted by the number of corresponding students in the cohort of interest studying at UK HEIs vs. Scottish colleges).

³ The assumptions in relation to the age at enrolment are based on data provided to us by HESA on the average age at enrolment among all UK domiciled first-year students starting HE qualifications anywhere in the UK in 2021-22 (separately by study level and mode). In the absence of specific data for HE students at Scottish colleges, we assume that the same averages apply to students undertaking HE qualifications at Scottish colleges.

Assumptions and methodology

- For the **current funding system (Baseline)**, the analysis assumes a (gross) **tuition fee** charged to **full-time students** in 2023-24 of **£9,250** per student per year for Scottish domiciled students studying in RUK, and **£1,820/£1,285** for Scottish domiciled students undertaking first degrees/other undergraduate qualifications in Scotland. The corresponding gross fees charged to part-time students are assumed to be **£4,625** and **£910/£643**, respectively (pro-rata, based on the corresponding full-time fee adjusted for the assumed 50% part-time study intensity).
- In terms of fee growth in subsequent academic years, we assume that all of these fees will continue to **remain frozen** in every subsequent year of study for the cohort (i.e. 2024-25 onwards).
- We assume the following **fee waivers and access bursaries provided by HEIs and colleges**:
 - For **Scottish domiciled students studying in Scotland**, given that these students are currently eligible for full tuition fee grants (and means-tested fee grants in the case of part-time students), we assume that there are no fee waivers or other similar bursaries provided to 'home' students studying in Scotland (neither by Scottish HEIs nor Scottish FE colleges).

- The (relatively small number of) **Scottish domiciled (full-time and part-time) students studying in RUK** pay much higher tuition fees than students studying Scotland. Based on Office for Students data for **England** (from its access and participation plans monitoring exercise, last undertaken in 2020-21, [here](#)), according to institutions' access plans for 2023-24, we assume that approximately **0.3%** of the tuition fee charged in excess of the Basic Fee (of **£6,165** per annum per full-time student (and pro-rata for part-time students)) is handed back to students in the form of fee waivers/bursaries, with an additional **9.6%** provided through maintenance bursaries.

Mirroring the current household income thresholds associated with maintenance loans for *English* domiciled undergraduate students, we assume that these bursaries are only available to students with a household income of **£25,000 or less**. In the absence of corresponding bursary data for Welsh and Northern Irish institutions, we assume that these English bursaries also apply to Scottish domiciled students studying in **Wales** and **Northern Ireland**.

We deduct the resulting estimated fee bursary/waiver from the maximum tuition fee loan available to Scottish domiciled full-time students studying in RUK (though the relatively low tuition fee bursary has a negligible impact on the assumed fee loan here; also note that Scottish domiciled part-time students studying in RUK are not currently eligible for any fee loans).

Assumptions and methodology

- In terms of **public fee support under the current system**:
 - We assume that all **full-time students** in the cohort **studying in Scotland** benefit from a non-means-tested fee grant to cover their entire tuition fee (i.e. **£1,820** for first degree students and **£1,285** for students undertaking other undergraduate qualifications).
 - **Part-time students studying in Scotland** are also eligible for tuition fee grants to cover their fees; however, these fee grants for part-time students are means-tested, and are only available to students with household income of **£25,000** or less (and we assume that this threshold remains constant in all subsequent years of study for the relevant cohort).
 - **Full-time students studying elsewhere in the UK** can instead access (non-means-tested) tuition fee loans of a maximum of **£9,250** to cover the cost of their tuition fees (and, as outlined above, we deduct the (small) estimated fee bursaries from this maximum). Based on SAAS data on student support for Scottish HE students in 2021-22, we assume a **take-up rate of 72%** (i.e. that 72% of all relevant students in the cohort avail of this fee loan)¹. We apply the same assumptions to all scenarios modelled here.
 - **Part-time students studying elsewhere in the UK** are currently typically not eligible for any public fee support from SAAS.
- In **Scenarios 2 and 3**, we assume the same fees, bursaries, and public fee support as under the current system.
- In **Scenario 1**, mirroring the current English fees and funding system:
 - We assume that **Scottish domiciled students studying at Scottish HEIs and colleges would see their fees increase to the same level currently charged to Scottish students studying in RUK** – i.e. **£9,250** (full-time students) and **£4,625** (for part-time students) – and that these fees (and associated fee support) again **remain frozen over time**. The fees for Scottish domiciled students studying in RUK are **unchanged** compared to the Baseline.

- In terms of **bursaries** provided by HEIs and colleges, for simplicity, we have assumed that these would remain the same as under the current system – i.e. we have *not* assumed any introduction of fee waivers or other bursaries by Scottish institutions under this higher fee system (whereas institutions in the rest of the UK, where the fees are already higher, *do* provide bursaries of this type).
- In terms of **fee support**:
 - For **full-time students**, we assume that the current fee grants for Scottish domiciled students studying in Scotland would be replaced by (non-means-tested) fee loans of **£9,250**. We assume a **fee loan take-up rate of 96%**, based on data from the Student Loans Company on fee loan take-up among English domiciled full-time undergraduate students studying anywhere in the UK in 2021-22 ([here](#))².
 - We assume that the same would apply to **part-time students**, so that these students would be eligible for a part-time fee loan of **£4,625** per student per year. Contrary to the current Scottish funding system, and for consistency with the English system, **we assume that this fee loan would apply to both Scottish domiciled students studying in Scotland as well as Scottish domiciled students studying in RUK** (whereas, currently, Scottish part-time students studying in RUK are *not* eligible for public fee support). We assume a **fee loan take-up rate of 44%** for part-time students.

¹ The take-up rate was calculated by dividing the number of Scottish domiciled full-time undergraduate students in receipt of these fee loans in 2021-22 (i.e. *funded* students, from SAAS data, [here](#)) by the *total* number of Scottish domiciled full-time undergraduate students studying at RUK HEIs in 2021-22 (from HESA data, [here](#)). Again, the use of 2021-22 data here is based on the fact that this constitutes the most recent academic year for which the required HESA student data are currently available.

² Specifically, the take-up rate here was calculated by dividing the number of English domiciled full-time undergraduate students in receipt of SLC fee loans in 2021-22 (i.e. *funded* students from SLC data, [here](#)) by the *total* number of English domiciled full-time undergraduate students studying at UK HEIs in 2021-22 (from HESA data, [here](#)). We undertook similar calculations for part-time students to estimate the part-time fee loan take-up rate under Scenario 1 (discussed below).

Assumptions and methodology

- In terms of **maintenance funding**, under the **current (Baseline) funding system**:
 - Based on 2023-24 funding levels for students under the Young Students' Bursary¹, **full-time students** are eligible for a combination of means-tested maintenance loans and grants (the latter are also referred to by SAAS as 'living cost bursaries'). The available **maintenance grant** under the YSB amounts to **£2,000** per student per year for students with household income of **£20,999 or less**; **£1,125** for students with household income of **£21,000-£23,999**; **£500** for students with household income of **£24,000-£33,999**; and **no maintenance grant** for students with household income of **£34,000 or more**. The available **maintenance loan** under the YSB stands at **£7,000** for students with household income of **£33,999 or less**, declining to **£6,000** for students with household income of **£34,000 or more**. Note that, in contrast to funding arrangements in other Home Nations, this maintenance funding for Scottish domiciled students does *not* depend on students' living circumstances (i.e. SAAS does not distinguish between students living away from home outside of London (LAFHOL), living away from home in London (LAFHIL), or living at home with their parents (LAH)).
 - **Part-time students** are currently typically *not* eligible for any maintenance funding from SAAS.
- In terms of maintenance funding **take-up rates** (applicable to **full-time students** only), for **maintenance grants**, we assume that *all* students take out the maximum available maintenance grant to which they are entitled. For **maintenance loans**, based on SAAS data on student support for Scottish HE students in 2021-22, we assume a **take-up rate of 66%** (i.e. that 66% of all relevant students in the cohort avail of a maintenance loan)².
- In terms of students' **household income**:
 - We base eligibility for means-tested maintenance loans and grants (and part-time fee grants) on the current household income eligibility thresholds applied by SAAS in 2023-24.
 - As there is no corresponding information on students' household income levels available for Scotland, we combine this with information from the Student Loans Company (SLC, [here](#)) on the distribution of *Welsh* domiciled students by household income. Specifically, our assumptions are based on the proportion of Welsh domiciled students in receipt of full, partial, or nil maintenance grants from Student Finance Wales in 2021-22 (and the associated household income thresholds applicable to Welsh maintenance grants in that year) – separately for full-time students and part-time students.
 - We adjust the information to 2023-24 values to reflect the fact that average household income is expected to grow over time, by applying OBR estimates of UK annual average earnings growth in 2022-23 and 2023-24 ([here](#)).
 - In addition, as the information is based on Wales, we adjust the assumptions for differences in average household income between Scotland and Wales. Specifically, we adjust the assumptions for the ratio of median gross weekly earnings in Scotland vs. Wales, based on data (for 2022, which is the latest year for which the information was available) from the Annual Survey of Hours and Earnings, published by StatsWales ([here](#)).

¹ Note again that the YSB and the ISB provide the same combined total level of maintenance funding per student, but with a different composition of loan vs. grant funding (where the YSB provides a larger grant but lower loan than the ISB). The YSB is the main and larger maintenance grant scheme (accounting for approximately 73% of maintenance grant funding provided in 2022-23; see [here](#)); therefore, for simplicity, our analysis assumes that *all* students who are eligible for maintenance funding are covered by the YSB. The effect of this assumption is to marginally inflate the Exchequer costs of the system.

² This take-up rate is calculated by dividing the number of Scottish domiciled full-time undergraduate students in receipt of maintenance loans in 2021-22 (i.e. *funded* students, from SAAS data, [here](#)) by the *total* number of Scottish domiciled full-time undergraduate students studying at Scottish HEIs, Scottish colleges, or RUK HEIs in 2021-22 (for students at Scottish or RUK HEIs, from HESA data, [here](#)) or 2020-21 (for students at Scottish colleges, since the required granular SFC data was not available for 2021-22). The estimated take-up rate was adjusted to exclude full-time students studying paramedic, nursing, or midwifery subjects in Scotland from the denominator (as, again, these students are covered by different funding arrangements, and are therefore excluded from the analysis).

Assumptions and methodology

- In terms of **growth in subsequent academic years**, we assume that:
 - **Students' household income** increases with UK-wide nominal average earnings growth in each subsequent year of study for the cohort (based on Office for Budget Responsibility (OBR) forecasts of UK average earnings growth; see further detail below);
 - **Maintenance loans** will increase by approximately **34%** in 2024-25 ([here](#); from a maximum loan of **£7,000** to **£9,400**), but, after this increase, we assume that maintenance loans will remain constant in subsequent academic years. For **maintenance grants**, we assume that these remain constant in all years (as these grants have remained unchanged since 2019-20, and have again been announced to remain the same in 2024-25); and that
 - The **household income thresholds associated with maintenance loans and maintenance grants** (which have also remained unchanged since 2019-20) remain constant in all years.
- **Scenarios 1 and 3** both assume the same maintenance support as the current (i.e. Baseline) funding system.
- **Scenario 2** effectively brings forward the planned increase in maintenance funding for Scottish domiciled students in 2024-25 by one year (i.e. to 2023-24), alongside an increase in the household income thresholds for maintenance grant and loan eligibility to reflect that these thresholds have remained entirely unchanged since 2019-20. Specifically:
 - For **full-time students**, the available **maintenance grant** would stand at **£2,000** per student per year for students with household income of **£25,580 or less¹**; **£1,125** for students with household income of **£25,581-£29,234**; **£500** for students with household income of **£29,235-£41,415**; and **no maintenance grant** for students with household income of **£41,416 or more**.
- The maximum **maintenance loan** would stand at **£9,400** for students with household income of **£41,415** or less, declining to **£8,400** for students with household income of **£41,416** or more.
- In terms of **growth over time**, we assume that these maintenance grants and loans, as well as the associated household income thresholds, would remain constant in subsequent academic years (i.e. in all years of study for the relevant cohort).
- As under the current system, under Scenario 2, there would be no maintenance funding provided to **part-time students**.

¹ The household income thresholds under Scenario 2 here reflect what the 2019-20 thresholds would be in 2023-24 if they had been uprated with average earnings growth each year (i.e. 2019-20 thresholds in 2023-24 values), using cumulative growth in average total weekly earnings in Great Britain between April 2019 and April 2023 (approximately **22%**), using data published by the Office for National Statistics ([here](#)).

Assumptions and methodology

Loan repayment terms

- Under the **current funding system** (where Scottish domiciled students are subject to Repayment Plan 4 ([here](#))):
 - Student loans accumulate **0% real interest**; instead, outstanding loan balances are only indexed against **RPI inflation** (i.e. adjusted with inflation each year), so that all graduates (irrespective of income) are charged the same interest rate¹.
 - Loans are repaid at a rate of **9%** of earnings in excess of **£27,660** per annum (threshold as of 6th April 2023; assumed to be uprated with RPI inflation in each subsequent year).
 - All loans are written off **30 years** from the Statutory Repayment Due Date (SRDD).
- Under **Scenarios 1 and 2**, we assume the same loan repayment terms as under the current system.
- Under **Scenario 3**, we have modelled the **introduction of real interest rates**, where:
 - Student loans would accumulate total (i.e. nominal) interest at **1% + RPI** during the period of study (i.e. before the SRDD).
 - After graduation, loans would accumulate interest depending on earnings, with individuals earning up to **£27,660** (in 2023-24, i.e. equal to the current repayment threshold) incurring interest at **0% + RPI**, increasing to **1% + RPI** for individuals with earnings of **£47,660** per annum or above (with both thresholds uprated with RPI inflation thereafter, as under the current system).
 - The loan repayment rate, threshold, and repayment period would all be the same as under the current system.

Calculating the RAB charge

- We use the following equation to calculate the RAB charge:

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

- The RAB charge is therefore calculated based on the net present value of the aggregate loan outlay provided to students in the 2023-24 cohort 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 these students after they graduate.

¹ Under the currently exceptionally high RPI inflation rates, where the (nominal) student loan interest rate is too high in comparison to the prevailing market rate, the Government will temporarily cap the maximum loan interest rate. Our modelling assumes that an interest cap of **6.25%** (in nominal terms) applies in 2023-24 (based on the interest rate cap for Plan 4 loans as of 1st September 2023, see [here](#) and [here](#)). This cap is applied to all scenarios here.

Assumptions and methodology

- We use the most recent OBR medium- and long-term forecasts in relation to the expected **RPI** per annum as well as expected **nominal average earnings growth** per annum (see [here](#) (for medium-term projections from the OBR's November 2023 Economic and Fiscal Outlook), and [here](#) (for long-term projections from the OBR's March 2023 Economic and Fiscal Outlook, which are the most recent long-term forecasts currently available from the OBR)). Where applicable, we also rely on historical RPI data published by the Office for National Statistics (ONS; [here](#))¹.
- Specifically, the **loan interest rate** is usually set in September each year, based on the RPI of *March in that same year*. Hence, the RPI figure used in calculating the interest rate for academic year 2023-24 is based on March 2023 RPI data from the ONS². For subsequent academic years, the OBR only publishes quarterly medium-term forecasts, and only annual forecasts (for each fiscal year) in the long-term. We therefore use the forecast for the corresponding first quarter (January to March) of each year from the OBR's medium-term projections (e.g. we use forecasts for Q1 2025 for the assumed interest rate in 2025-26), and the annual figure for the corresponding previous financial year from the long-term projections (e.g. we use forecasts for financial year 2030-31 for the assumed interest rate in 2031-32) .
- Under Plan 4 loan repayment terms, the **loan repayment threshold** is uprated in April each year in line with RPI in the year to the *previous March* (e.g. we assume that the repayment threshold will increase by **13.5%** in 2024-25, again based on March 2023 RPI data from the ONS).

- 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.
- In terms of **discount rates used to calculate the RAB charge** (which is based on expected loan repayments and loan outlay in NPV terms in constant prices, see [previous slide](#)), we assume a discount rate of **-1.3% + RPI** up to and including 2029-30, and **-0.2% + RPI** from 2030-31 onwards (based on official HM Treasury discount rates for financial instruments to be applied as of 31st March 2023, see [here](#) and [here](#)). These discount rates match the assumptions used by the Department for Education in its forecasts of the RAB charge and the associated long-run cost of student loans in England ([here](#)). **Importantly, these real discount rates are lower than the current long-term real Government cost of borrowing** (i.e. Government gilt yields), since the official discount rates applied to student loans predominantly reflect *historical* rather than current gilt yields (e.g. see a recent report by the Institute for Fiscal Studies ([here](#))). This results in a significant *underestimation* of the true Exchequer cost of providing student loans, and, therefore, an effective implicit public subsidy for these loans. While our use of the above discount rates reflects the Government's own approach to measuring the cost of student loans, this constitutes one of the key caveats associated with our estimates, as further discussed below (see [this slide](#)).

¹ Note that the Retail Price Index will be effectively abolished from 2030 onwards, after which it will equal the (lower) measure of Consumer Price Index inflation.

² According to the ONS data, March 2023 RPI inflation stood at **13.5%** (i.e. the Retail Price Index was 13.5% higher in March 2023 than in March 2022). As noted above, given this exceptionally high level of inflation, the interest rate is currently capped at **6.25%** (as of 1st September 2023).

Assumptions and methodology

- As outlined above, the analysis focuses on **Scottish domiciled students in the 2023-24 cohort studying at higher education institutions anywhere in the UK or at FE colleges in Scotland**. Therefore, the estimated level of Teaching Grant funding associated with the cohort includes Teaching Grant funding paid to **Scottish HEIs and FE colleges** (by the Scottish Funding Council), **English HEIs** (by the Office for Students), and **Welsh HEIs** (by the Higher Education Funding Council for Wales). Again, note that Scottish domiciled students studying in Northern Ireland typically do not attract any Teaching Grant funding, as these students are charged much higher fees as compared to ‘home’ students studying in Northern Ireland, so that the Teaching Grants paid to Northern Irish HEIs generally apply to ‘home’ domiciled students only.
- The **average SFC Teaching Grant per student studying enrolled at Scottish HEIs under the current system** is derived by combining the SFC Teaching Subject Price (net of fees) paid to HEIs per FTE student by Subject Price Group (in 2023-24) with information on the distribution of funded places at HEIs (again in FTE terms) by Price Group (both published by the SFC, [here](#)), as follows:

Price Group	Funding per FTE, £		% of FTE funded places
	Sub-degree	First degree	
1	£16,475	£15,940	2%
2	£8,792	£8,257	5%
3	£7,646	£7,111	29%
4	£6,490	£5,955	13%
5	£5,588	£5,053	16%
6	£4,316	£3,781	35%
Total/average	£6,243	£5,708	100%

- In addition to this Main Teaching Grant funding for Scottish HEIs, we also include other targeted funding allocations (i.e. funding for small specialist institutions; widening access and retention; upskilling; the Disabled Students Premium; and funding contributions for pensions). Dividing the total funding allocated across these streams in 2023-24 by the number of SFC funded places in that year, we assume that the average funding for these other allocations stands at approximately **£340** per FTE per year¹. Combining this with the Main Teaching Grant per student, the average total Teaching Grant per **full-time student** studying at Scottish HEIs per year was estimated at approximately **£6,050** per first degree student, and **£6,580** per sub-degree student (with the difference being driven by the relatively lower fees for sub-degree students). Based on an average 50% study intensity, the average funding per **part-time student** was estimated to be **£3,020** for first degrees, and **£3,290** for sub-degree qualifications.
- Teaching provision at **Scottish FE colleges** is funded under a different funding formula and using different associated Price Groups and (lower) funding rates as compared to Teaching Grant funding for Scottish HEIs². To derive the average Teaching Grant per student per year at Scottish colleges, we divided the total teaching funding allocated to Scottish FE colleges in 2023-24 by the underlying ‘credit threshold’ (i.e. the number of credits funded), based on information published by the SFC ([here](#)). Assuming an average of 15 credits per HE FTE student per year³, and again deducting the associated fee levels paid by the SFC, the average Teaching Grant per **full-time student** studying at Scottish FE colleges per year was estimated at **£3,220** per first degree student, and **£3,750** per sub-degree student. The average funding per **part-time student** was estimated to be **£1,610** for first degrees, and **£1,880** for sub-degree qualifications.

Note: All values here relate to 2023-24. Average funding per FTE across all Price Groups is calculated as a weighted average (weighted by the distribution of FTE funded places by Price Group).

¹ All numbers here are rounded to the nearest £10.

² For more information on the SFC Teaching Grant allocations for Scottish FE colleges (and associated Subject Price Groups), see the SFC’s credit guidance for colleges for academic years 2023-24 ([here](#)).

³ This reflects the SFC’s credit guidance for colleges for academic year 2023-24 ([here](#)), stating that ‘colleges should not exceed an overall average of 17 credits for FT FE students or 15 credits for FT HE students across the FT cohort’.

Assumptions and methodology

- To estimate the average Teaching Grants for **Scottish domiciled students studying elsewhere in the UK (i.e. England and Wales)**, we use HESA financial data ([here](#)) and student data ([here](#)) for the 2021-22 academic year (in the absence of more recent information). Specifically, we divide the total Teaching Grant income received by institutions in England or Wales by the associated total number of relevant students studying in England or Wales to whom these Teaching Grants typically apply (where we exclude any non-EU domiciled students and higher degree research students, as well as EU first-year students (since, from 2021-22 onwards, these students are typically no longer eligible for Teaching Grant funding due to the significant changes to funding rules for EU students post-Brexit)). We again 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** in other Home Nations (again rounded to the nearest £10):

Study location	Full-time	Part-time
England	£720	£360
Wales	£490	£240
Northern Ireland	-	-

- We assume that these Teaching Grant funding rates (in Scotland or elsewhere in the UK) do *not* increase over time (i.e. we assume the same amount per student per year in every year of interest throughout the analysis here).
- As discussed above (see [this slide](#)), **under Scenario 1**, we have lowered these Teaching Grants per student per year in Scotland to compensate for the assumed increase in tuition fees in this scenario¹. Under Scenarios 2 and 3, we instead assume the same Teaching Grant levels as under the current system.

¹ Note again that, since the current average Teaching Grants for both sub-degree and degree-level students at Scottish colleges are all lower than the assumed fee increases under Scenario 1, the SFC Teaching Grants for students at Scottish FE colleges were set to £0 under Scenario 1.

Assumptions and methodology

- The estimation of student loan outcomes (such as the RAB charge) relies on **forecasting the student cohort's predicted lifetime earnings** by qualification level (again broken down into first degrees, Foundation Degrees, HNCs/HNDs and other undergraduate qualifications), gender, study mode, and lifetime income decile. To estimate these lifetime earnings profiles, we make use of **pooled UK Quarterly Labour Force Survey (LFS) data for the period 2010 Q1 to 2023 Q2**, combined with information from the **1970 British Cohort Study (BCS)** (which follows a cohort of individuals born in a single week of April 1970 (in England, Wales, and Scotland), with the most recent data available for age 46 of the cohort).
- Using the **Labour Force Survey** data, we first assessed the annual salaries (expressed in June 2023 prices, inflated using Consumer Price Index (CPI) data) of individuals in possession of each of the different higher education qualifications¹. For each type of qualification, the earnings were assessed separately by income decile (including the 1st to 9th income deciles and the 95th percentile²), gender, and age (for first degrees) or age band (for qualifications below degree level (due to sample size)). To generate 'smoothed' age-earnings profiles for sub-degree qualifications, the original results by age band were assigned to the mid-point of the given band (e.g. age 28 for age band 26-30), and we then assumed constant annual growth between two given mid-points (e.g. we assumed constant annual growth between age 28 (the mid-point of band 26-30) and 33 (the mid-point for band 31-35)).
- To assess the expected loan repayments for part-time students specifically (who typically start repaying their loans *during study*), we further calculated earnings by decile (and the 95th percentile) for individuals in possession of Level 3 qualifications as their highest level of attainment (used as part-time students' assumed earnings during study), again separately by age and gender.
- The LFS analysis provided us with earnings estimates by decile (and qualification level, mode, and gender), where the earnings deciles are defined *at each individual age* (e.g. the 1st decile at age 30 means that 10% of individuals in the data have earnings smaller than or equal to the given earnings *at that age*). However, to take account of graduates' income mobility over their lifetime (i.e. the extent to which graduates move across the income distribution over time), we then **combined the LFS results with an analysis of data from the BCS** (focusing on data for ages 26 to 46 of the 1970 cohort) to generate **age-earnings profiles by lifetime earnings decile**.
- Specifically, based on weekly earnings information available within the BCS data, we again divided individuals within the distribution into 10 income deciles *at each individual age* observed in the study³. Again, the analysis was undertaken separately by gender and qualification level attained, where we distinguished between individuals in possession of first degrees vs. all other undergraduate qualifications (note that a further disaggregation into different types of sub-degree qualifications was not possible within the BCS data).
- From the LFS analysis, we then imported the estimated annual earnings value (in June 2023 prices) corresponding to each age and income decile (again separately by qualification level⁴).

¹ 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).

² The 95th percentile here was used to approximate the earnings for individuals on the 10th decile (i.e. rather than using the actual value for the 10th (i.e. 100th percentile) within the LFS data, since this captures the maximum earnings value observed in the data in each instance and is likely to include significant outliers).

³ Note that the BCS data is not available for each separate age but is instead based on multiple 'sweeps' of data collections undertaken at specific ages for the cohort (e.g. age 26, 30, 34, 38, 42, and 46; see [here](#) for more information). We assume here that individuals stay in the same decile between two sweeps (and stay in the last recorded decile after the age of 46). In addition, to boost sample size, imputation was undertaken in case of a respondent not being available at a given age (or missing information more generally).

⁴ Again, separately for first degrees, Foundation Degrees, HNCs/HNDs, and other undergraduate qualifications.

Assumptions and methodology

Graduate earnings

- Using the merged LFS/BCS data, we then computed the lifetime earnings for each individual within the data, based on the sum of annual earnings between the assumed first year post-graduation for our relevant cohort of students (i.e. the age at completion for each given qualification (e.g. age 26 for full-time first degrees)¹) and the assumed age of retirement (68). This allowed us to assign each individual to a *lifetime* earnings decile (again by gender and qualification level).
- Finally, for each single year of age, we then computed the **average earnings among all individuals within the specific lifetime earnings decile** (e.g. the average earnings at age 30 among individuals in the 1st lifetime earnings decile), i.e. we generated age-earnings profiles by lifetime decile (for each gender and qualification). We then further 'smoothed' these age-earnings profiles using 3-year rolling averages.

Graduate employment probabilities

- Again using LFS data, we also calculated the **employment rate** (i.e. the proportion of individuals in employment) for individuals in possession of the different qualification levels of interest, by age/age band, and gender.
- To reflect the fact that the age of retirement is planned to be increased to age 68 (compared to 65 for most respondents in the historical LFS data), we assume that the trend in employment rates observed from the age of 55 onwards will reflect the trend currently observed from age 52 onwards (in other words, the analysis 'shifts' the decline in employment rates due to approaching the age of retirement back by 3 years). As a result, the decline in employment rates occurs at a slower rate than what is observed in the historical LFS data², so that our estimated employment rates at age 68 are in line with what is currently observed at age 65.
- Combining the resulting age-earnings and age-employment profiles, we then estimate the **employment-adjusted annual age-earnings profiles** of individuals in possession of each qualification, by study mode, gender, and lifetime earnings decile. We **adjust these age-earnings profiles for expected future growth, i.e. to account for the fact that earnings are expected to increase over time** (using the above-mentioned OBR forecasts of average nominal earnings growth per year (see [this slide](#))).

¹ See [this slide](#) for more information on the assumed age at graduation by qualification level and mode among the 2023-24 student cohort.

² We use a 2-year annualised change to determine these new rates of decline (to provide a smoother evolution).

Assumptions and methodology

- Our modelling is based on a range of key simplifying assumptions to avoid excessive complexity and to keep the analysis flexible and tractable. Therefore, our modelling is subject to **several key limitations and caveats**:
 - The analysis is based on estimated (employment-adjusted) average lifetime earnings profiles across a range of different groups of graduates (estimated separately by gender, age, qualification level, mode of study, and lifetime earnings decile), which are necessary to allow us to estimate graduates' expected lifetime loan repayments under each scenario. These estimates are highly uncertain, and rely on (and are sensitive to) forecasts of average earnings growth and inflation many years into the future.
 - We implicitly assume that there will be no change in HE fees and funding policy for many decades into the future (i.e. apart from any changes to loan repayment conditions modelled under the different scenarios here, we assume that there will be no further change in repayment terms for the relevant cohort going forward).
 - All our estimates are based on the 2023-24 entry cohort and are 'static' in the sense that we do *not* take account of the impact of potential funding changes on the size or characteristics of this cohort. Instead, we assume that there are no changes in the number or characteristics of students in the cohort under each scenario.
 - We also assume that the HE funding system (including loan repayment conditions) does *not* affect graduates' gross lifetime earnings.
 - To avoid excessive complexity, our estimates of graduates' lifetime loan repayments do *not* adjust for potential graduate income from investments; early or voluntary repayments; early loan cancellation (e.g. due to death or disability); or loan repayments by drop-outs.
- **Another important caveat relates to our use of official discount rates to estimate the cost of student loans.** As noted [above](#), the official HM Treasury discount rates applied by the DfE to estimate the RAB charge and the long-run cost of student loans (for England) are substantially lower than the current Government cost of borrowing.
 Specifically, as detailed in a recent report by the Institute for Fiscal Studies (IFS, [here](#)):
"If the government can borrow at a lower rate of interest than the interest it charges on student loans, then borrowing to lend money to a student who goes on to repay the loan in full will be a profitable transaction for the government (because the interest it pays on its extra borrowing is more than offset by the interest it receives from the student). When the opposite is true, the transaction is loss-making: it becomes costly for the government to provide student loans even to those students who go on to repay them in full, because the interest costs on the government's borrowing exceed the interest payments received from the student."
 Hypothetically, in the calculation of the long-run Exchequer cost of student loans, the Government's borrowing costs are accounted for through the discount rate, which determines the effective value of expected future repayments relative to the up-front loan outlay (and a higher discount rate means that future repayments are valued less). However, the HMT discount rates used by the DfE to produce its official student loan statistics are much lower than the current long-term Government cost of borrowing (measured by long-term gilt yields), since the official discount rates reflect *historical* (as opposed to current) gilt yields (see [next slide](#) for further details).

Assumptions and methodology

Specifically, the Government’s borrowing costs have increased significantly over the last two years, with the annual yield on 15-year gilts standing at 4.0% at the end of 2023¹, which is 1.6 percentage points higher than projected RPI (2.4%) over the next 15 years. In other words, the gilt yield equals **RPI+1.6%**. In contrast, the official discount rates for student loans stand at **RPI-1.3%** pre-2030 and **RPI-0.2%** from 2030 onwards, which are substantially lower than the current gilt yield. At the same time, with the student loan interest rate in England now equal to RPI under the post Augar system (rather than up to RPI+3% under the pre Augar system), this means that student loan interest rates in England are now 1.6 percentage points *lower* than the current gilt yield – so that, in addition to the loss of loan write-offs, the Government now *also* makes an expected loss on loans that are fully repaid.

All of this implies that the DfE’s official statistics for England likely understate the true cost of student loans to the Exchequer. Since we use the same HMT discount rates for consistency with the Government’s own official student loan calculations, the same applies to our estimates for Scotland here.

Since expected loan repayments reach far into the future, the results are very sensitive to the discount rate, so the impact of these assumptions on the size of the estimates is substantial. For example, if we instead assumed a discount rate of **RPI+1.6%** to estimate the RAB charge (to mirror the above 15-year gilt yield)², the estimated Exchequer cost of the current Scottish funding system associated with the 2023-24 entry cohort would increase from **£1.37bn to £1.53bn (+£0.16bn)**; see the table on the right-hand side).

Net Exchequer cost associated with the 2023-24 cohort under different discount rates for calculating the RAB charge (NPV in 2023-24 prices)

Net Exchequer cost (adjusted for RAB)	Baseline	Scenario 1	Scenario 2	Scenario 3
Original estimates (discount rate of RPI-1.3%/RPI-0.2%)				
Cost of maintenance grants	(£76m)	(£76m)	(£91m)	(£76m)
Cost of maintenance loans	(£147m)	(£233m)	(£171m)	(£104m)
Cost of tuition fee grants	(£247m)	-	(£247m)	(£247m)
Cost of tuition fee loans	(£12m)	(£433m)	(£12m)	(£9m)
Cost of Teaching Grants	(£884m)	(£70m)	(£884m)	(£884m)
Total	(£1,366m)	(£812m)	(£1,404m)	(£1,321m)
Revised estimates (discount rate of RPI+1.6%)				
Cost of maintenance grants	(£76m)	(£76m)	(£91m)	(£76m)
Cost of maintenance loans	(£308m)	(£388m)	(£356m)	(£280m)
Cost of tuition fee grants	(£247m)	-	(£247m)	(£247m)
Cost of tuition fee loans	(£20m)	(£712m)	(£20m)	(£18m)
Cost of Teaching Grants	(£884m)	(£70m)	(£884m)	(£884m)
Total	(£1,535m)	(£1,245m)	(£1,597m)	(£1,505m)

Note: All values have been discounted to net present values (using the different discount rates indicated), are presented in constant 2023-24 prices, and have been rounded to the nearest £1m.

¹ Up from 1.2% at the end of 2021. All numbers here are based on Bank of England historical 15-year gilt yields and OBR RPI forecasts as reported by the IFS (again, see [here](#)).

² As noted [above](#), the HMT’s official negative real discount rates are *only* used to calculate the RAB charge throughout our analysis, which is then applied to the aggregate loan outlay associated with the cohort to estimate the net (RAB-adjusted) Exchequer cost associated with these loans. The aggregate loan outlay, as well as all other aggregate financial flows associated with the cohort (e.g. Teaching Grants), are discounted using the standard HMT Green Book discount rates of **3.5% + RPI** (Years 1 to 30) and **3.0% + RPI** (Year 31 and onwards). As a result, all Exchequer costs *except* the cost of student loans are *not* impacted by the sensitivity analysis w.r.t. the discount rate here (i.e. the ‘revised’ estimates for these costs are the same as the ‘original’ estimates).