

Assessing the impact of the Augar Review

Estimating the impact on the Exchequer, Higher Education Institutions, students and graduates

A report for Universities UK



LE London Economics

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Executive Summary

Who are the winners and losers of the Augar Review recommendations?





High earning (predominantly male) graduates

- The reduction in the fee level from £9,250 to £7,500 will have an unambiguously positive impact on the highest earning (predominantly male) graduates. With the average debt on graduation reduced by £10,900, the combination of Augar recommendations would result in a reduction in the expected lifetime repayments for men (by £5,700 for the representative male FT undergraduate).
 - The recommendations in particular the **reduction in the repayment threshold** and the **removal of real interest rates** during study results in highest earning graduates repaying the outstanding capital earlier resulting in quicker repayment. This disproportionately benefits higher earning (**predominantly male**) **graduates** (by approximately **£3,200** per graduate).
 - The **extension of the repayment period** has no impact on the highest earning graduates. Instead, this recommendation locks in those (predominantly female) **graduates with moderate earnings** who have not repaid their loan balance at the end of the 30 year period, for a further 10 years.
 - The **introduction of the repayment cap** has a very significant beneficial impact on higher earning male graduates (reducing lifetime repayments by an additional **£2,500**).
 - Overall, the Augar recommendations make the system even less progressive than is currently the case.

Less well-off students entering HE

- The reintroduction of maintenance grants will undoubtedly benefit the recruitment of learners from less well-off backgrounds to enter higher education, as well as potentially improving continuation rates.
- Due to the tuition fee cut, this benefit needs to be set against the potential reduction in widening participation activities delivered by HEIs, as well as the possibility of a reduction in funding to support progression.

STEM focused HEIs (relatively speaking)

One of the most challenging recommendations of the Review relates to the potential reimbursement of HEIs following the loss in tuition fee income. Although there will likely be some additional Teaching Grant for Band A, B and C1 subjects, as well as other high 'priority' or high 'value' subjects, the details are unclear (especially as this resource may be allocated to support participation and/or the government's industrial strategy rather than being allocated in full to HEIs).

Employers

Despite being mentioned in the principles of the Review, there was limited mention of employers in respect of higher education. As employers are one of the primary beneficiaries of more productive graduates (over and above any additional wage income (which the Review mentioned repeatedly)), it was a surprise that there was no more discussion of potential employer contributions.



Low earning (male) graduates and most female graduates

- Many of the proposed recommendations will have an adverse impact on lower earning (predominantly female) graduates.
- Although the average debt on graduation will decline (from £46,800 to £35,900), expected lifetime loan repayments will increase as a result of the reduction in the loan repayment threshold to £23,000 and the extension of the repayment period to 40 years. Excluding the repayment cap, we estimate that the average lifetime repayment made by female graduates with FT undergraduate degrees will increase by £2,800.
- However, the introduction of the repayment cap will reverse some of the negative impact for the highest earning female graduates, reducing average lifetime repayments by £1,300, and resulting in female graduates contributing £1,500 more than currently the case.

Students from non-traditional / disadvantaged backgrounds no longer entering HE

Despite the re-introduction of maintenance grants, the cut in the tuition fee means that institutions will not be obliged to contribute as much for widening participation activities (c. £110 million) as currently the case. This will impact the prospects and opportunities of those from the least well-off backgrounds. Although the Review has identified this issue, it is important that it is not overlooked at implementation stage.

AHSS* focused Higher Education Institutions

- Higher Education Institutions will see a significant decline in tuition fee income approximately £1.79 billion per cohort.
- Although somewhat uncertain, institutions in England with a low incidence of Medicine and Dentistry (Band A), STEM subjects (Band B), and some creative Arts (Band C) will see a more acute reduction in income.
- A number of HEIs will be pushed into deficit as a result of these recommendations. Other things being equal, this will result in a reduction in expenditure – impacting all aspects of current activity (and the services offered to students) and likely leading to job losses.

Higher Education Institutions with high volumes of debt

Some HEIs have issued large volumes of debt with negative covenants. If the core operations of these institutions are not robust (i.e. recruitment), posting ongoing deficits may result in very serious consequences (such as immediate debt repayment).

^{*} Arts, Humanities and Social Sciences.



Higher Education Institutions outside of England

Unless the funding councils in the other Home Nations provide
 corresponding top-up teaching grant funding for English-domiciled
 undergraduate students (studying outside England), institutions in Scotland,
 Wales and Northern Ireland will also see a reduction in income by
 approximately £71 million per cohort.* This does not include the potential
 impact of lost fee income from EU students, if the devolved administrations
 choose to make changes to their own funding systems.

The deficit

- Currently, as a result of Teaching Grant expenditure during study and the expected (43.5%) write-off of maintenance and tuition fee loans 30 years post graduation, the impact of Exchequer expenditure on the deficit associated with the cohort is between £3.1 billion and £4.2 billion during the first three years. Over the 30 year repayment period, a surplus of between £0.1 billion and £0.4 billion is generated (due to the interest accruable on the proportion of loans expected to be repaid).
- Overall, the Augar recommendations increase the deficit during the first three years by approximately £0.3-0.4 billion per annum (predominantly because of the impact of the repayment cap on expected loan write-offs), and up to £0.2 billion per annum thereafter.

The general taxpayer

- Excluding the repayment cap, the various changes to student contributions (the elimination of real interest rates during study, reduction in repayment threshold (and interest rate thresholds), as well as the extension of the loan repayment period) are expected to yield Exchequer savings of £3.22 billion per cohort on the cost of tuition fee and maintenance loans.
- This has been assumed to be offset (in part) by the Teaching Grant top-up (£1.82 billion per cohort (though it is not certain what proportion higher education institutions will actually receive)). The re-introduction of maintenance grants which will cost approximately £1.46 billion per cohort.
- Overall, the increase in Exchequer cost associated with the major recommendations to tuition fees, student support, student repayment and Teaching Grant top-up have been estimated to be £0.07 billion per cohort from £8.43 billion to £8.50 billion (a less than 0.8% increase).
- However, including the introduction of the repayment cap, compared to
 the estimates cover the other major recommendations the total cost to the
 Exchequer per cohort was estimated to be £9.08 billion (an increase of
 £0.58 billion per cohort). In other words, this increase in expenditure (total
 of 8% compared to the Baseline) means the recommendations are no
 longer cost-neutral.
- The write-off associated with maintenance loans has increased by £0.24 billion, with a further £0.35 billion associated with tuition fee loan write-offs. This represents handing back about 18% of the Exchequer savings of £3.22 billion on maintenance and fee loans estimated for the system excluding the repayment cap.

^{*} Under the assumption that any fee reduction applied to English-domiciled students in England results in the same reduction in tuition fees for English-domiciled students in other Home Nations - with no corresponding reimbursement of Teaching Grant funding



The Student Loans Company

- The additional changes that are being proposed to higher education fees and funding will make an already complex system even more complex (with some changes – in particular the repayment cap potentially incredibly difficult to implement in practice).
- Although the Student Loans Company will be able to manage these changes in time, it places significant additional burden on an organisation that is already facing numerous challenges in terms of its existing operations.

Progressivity

- The combined changes to graduate contributions result in the highest earning graduates repaying their loans earlier, reducing their overall contribution.
- The recommendations have resulted in the system becoming less progressive. The extension to the loan repayment period locks in lower earning graduates into repayments for a longer period of time, while the repayment cap releases higher earning graduates from repayment sooner.
- The overall effect is to make the repayment system less progressive, with moderate earning graduates repaying more as a proportion of their lifetime earnings compared to higher earning graduates.

National Health Service

- The proposed reduction in tuition fees **might be** offset by increased Teaching Grant replacement (for high priority subjects in Band C1). However, there is still some uncertainty about this, and as such, the **delivery of training in Subjects Allied to Medicine may remain challenging** (following the existing loss in funding from redesignation from Band B to Band C1). This may impact the **viability** of supply.
- It remains to be seen whether the reduction in tuition fees and increased maintenance grants will sufficiently boost demand (to anywhere near the levels prior to the removal of NHS Bursaries).

Part-time students

- The reduction in the threshold for loan repayment and the extension of the loan repayment period will likely offset any gains as a result of the reduction in the tuition fee and real interest rate charged during the study period, for graduates who studied part-time.
- Although the reduction in fees for part-time students is welcomed, it is unclear if the full range of proposed changes to support mature and part-time learners* will address the continuous decline in mature participation rates over the last 15 years.

^{*} Although the Augar Review does contain language suggesting that maintenance support is made available to part-time students (Page 195 and Recommendation 7.5), given the lack of specific information about levels, household income thresholds, tapers etc, it was not possible to model this with a sufficient degree of certainty.



The year before implementation

The main recommendation in respect to tuition fees is meant to take place in 2021/22. However, in anticipation of this, and unless an alternative approach can be adopted, there is likely to be a significant dip in the numbers entering higher education in 2020/21. Planning for this dip, followed by a demographic surge, will be highly problematic for all higher education institutions.

HEIs because of postgraduate fee pressure

Following the increase in undergraduate fees to £9,000 in 2012/13, there was a corresponding increase in (unregulated) postgraduate fees. With the proposed reduction in undergraduate tuition fees, it is likely that there will be some downward pressure on postgraduate fees, potentially resulting in lower fee income for Higher Education Institutions (though this might be offset by increasing demand).

Section 1: Baseline system

What are the resource flows associated with the current approach to Higher Education fees and funding?

Overview of our modelling



Our model of the Higher Education student support and funding system estimates:

- The impact of the system on the Exchequer, institutions and graduates, for:
 - the 2018/19 cohort* of first-year English-domiciled undergraduate students (studying anywhere in the UK), and EU-domiciled students studying in England;
 - full-time and part-time students, and
 - all undergraduate qualifications (including first degrees and other undergraduate qualifications below first degree level).

- A range of metrics (in NPV in constant 2018/19 prices), including:
 - The RAB charge, student loan debt on graduation, and expected lifetime loan repayments;
 - Total Exchequer costs (including the cost of student support and Teaching Grant funding to institutions across the UK);
 - HEI funding in terms of tuition fee income (net of bursaries) and Teaching Grant funding from the Exchequer;
 - The level of public deficit associated with the system.

Full details of the underpinning methodology and assumptions are presented in the Annex.

^{*} Note that the underlying student data are based on the 2017-18 academic year (since information for 2018-19 is not yet available at the point of writing); hence, we assume the same size and characteristics of the 2018-19 cohort as for the 2017-18 cohort.

Saseline system

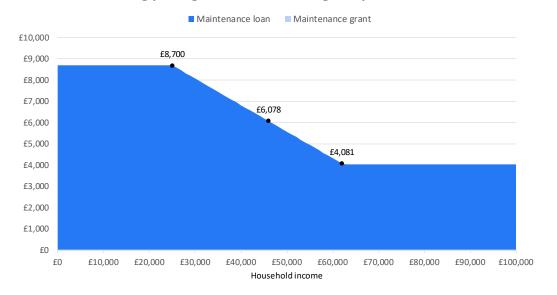
Impact of the current system

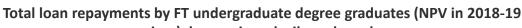


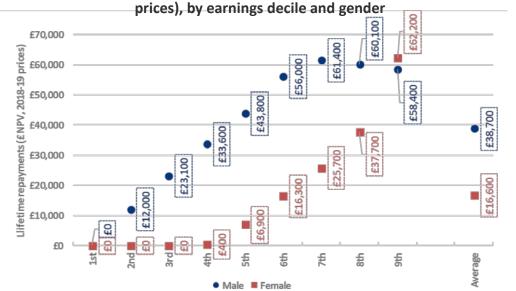
Resource flows	Amount (£/%)
Exchequer	
Cost of maintenance grant	£0m
Cost of maintenance loan	(£2,808m)
Cost of tuition fee loan	(£4,387m)
Cost of Teaching Grants	(£1,236m)
Total Exchequer Cost	(£8,431m)
RAB Charge	43.5%
Higher Education Institutions Gross fee income Teaching Grant income Cost of bursary provision	£10,044m £1,236m (£188m)
Total	£11,093m
Net HEI resource per student p.a.	£9,000
Students/Graduates (FT degrees)	C46 200
Average Lifetime renorments (M)	£46,800 £38,700
Average Lifetime repayments (M)	· · · · · · · · · · · · · · · · · · ·
Average Lifetime repayments (F)	£16,600

- The total cost to the Exchequer per cohort of the current (2018-19) student support system stands at £8.43 billion per cohort.
- Of this total, the write-off associated with maintenance loans stands at £2.81 billion, with a further £4.39 billion associated with tuition fee loan write-offs.
- The Exchequer incurs a further £1.24 billion in costs associated with Teaching Grant funding (for Band A, Band B and Band C1 subjects).
- Higher Education Institutions receive approximately £10.04 billion in gross tuition fee income per cohort (of which £9.64 billion is accrued by English providers, with £0.41 billion accrued by Scottish, Welsh and Northern Irish providers). After the costs of compulsory bursary provision is accounted for (£0.19 billion), net tuition fee income per cohort across the UK stands at £9.86 billion.
- Combining net tuition fee income and Teaching Grant funding, total HEI income is estimated to be £11.09 billion per cohort – corresponding to £9,000 per student per annum.

Maintenance funding package for students living away from home outside London





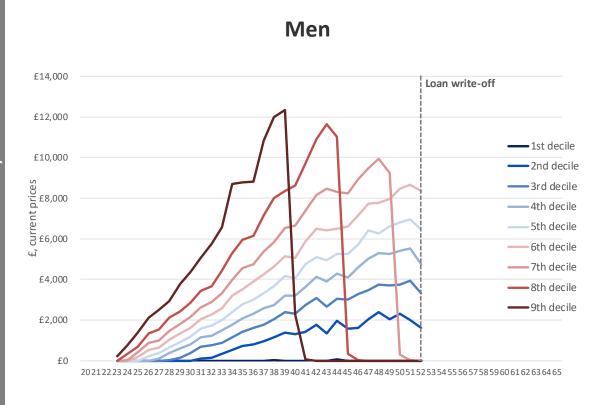


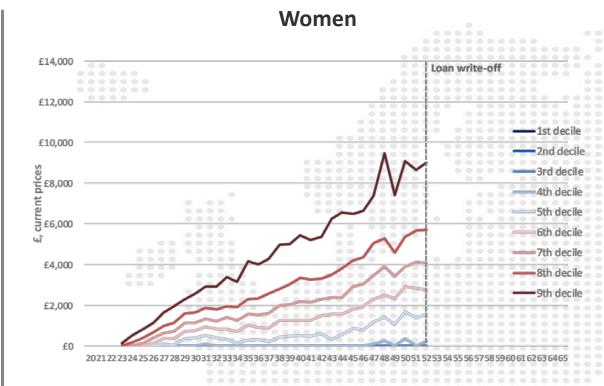


- The current system offers up to £8,700 in student maintenance support per student per annum (for students living away from home in London) – entirely provided through loans.
- The average maintenance loan (across all students) stands at approximately £6,750 p.s.p.a.
- The average debt on graduation (for a full-time undergraduate degree student) stands at £46,800.
- Average lifetime loan repayments (NPV in constant 2018-19 prices) for students undertaking full-time undergraduate degrees are £38,700 for men and £16,600 for women.
- The RAB Charge (proportion of the loan written off) stands at 43.5%.
- Approximately 80% of all graduates (across FT and PT) are not expected to repay the full loan balance within 30 years.
- Approximately 23% of graduates are not expected to make any repayment of their student loan (i.e. never reach the repayment threshold).



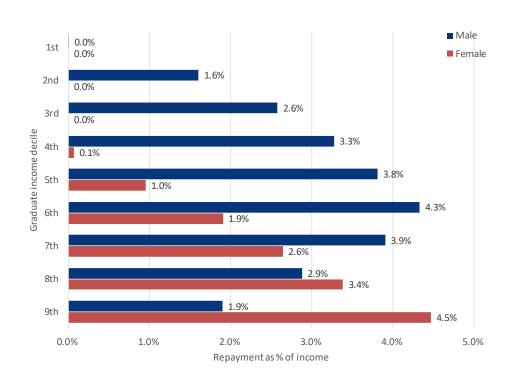
Annual loan repayments by full-time undergraduate degree graduates (£ in current prices, cash terms), by age and decile





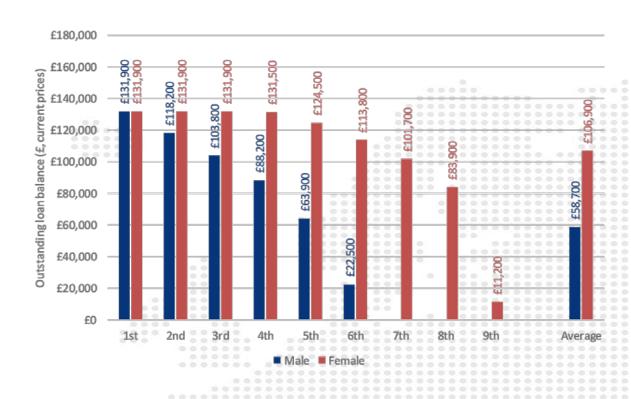


Loan repayments by full-time undergraduate degree graduates, as a % of income, by decile and gender



Note: Proportions are calculated over the entirety of the 30-year loan repayment period, on a cash basis (based on current prices).

Loan balance write-off per full-time undergraduate degree graduate, by decile and gender – (£ in current prices, cash terms)

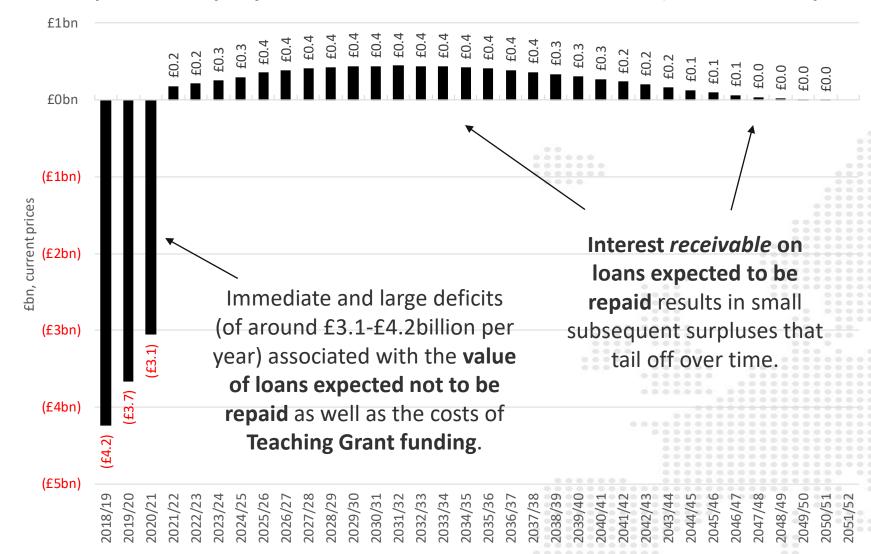


Note: Values are rounded to the nearest £100. Loan balance includes both outstanding principal and interest at the end of the repayment period.

- The current system is **progressive in the lower half of the earnings distribution** (1st to 6th decile), but **regressive in the upper half,** with men on the 7th, 8th and 9th decile contributing a smaller proportion of their income in loan repayments as compared to men on the 6th decile.
- The outstanding loan balance (in cash terms) at the end of the 30 year repayment period for a representative student undertaking a full-time undergraduate degree was estimated to be £58,700 for men and £106,900 for women.



Public surplus/deficit per year associated with the 2018/19 cohort (£bn in current prices)



Section 2: Augar recommendations

What is the impact of the Augar Review recommendations based on the current cohort?



Overview of the Augar Review's recommendations



• We model four scenarios, focusing on eight core Augar recommendations:

Scenario 1: Changes to tuition fees and Teaching Grants

(Recommendations 3.1 and 3.3)

- A reduction in the maxim fee to £7,500 per annum alongside top-up Teaching Grant funding. Although the Augar Review suggests that the reduction in tuition fees should be compensated for, so that the policy is fiscally neutral, there is some uncertainty about how this would evolve in the longer term. This uncertainty relates to whether this resource flows back to institutions directly through enhanced Teaching Grant or provides more general resource for either the government's wider industrial strategy or widening participation activity. If the former does occur (i.e. additional Teaching Grant), there is also some uncertainty in respect of the specific allocation.
- In the first instance, and in the absence of more concrete information, we have notionally allocated the additional Teaching Grant equally and in its entirety to Band A, Band B and Band C1 subjects (with no additional Teaching Grant offered to Band C2 and Band D subjects).

Scenario 2: Scenario 1 PLUS the reintroduction of means tested maintenance grants

(Recommendations 7.1 and 7.3)

The re-introduction of means-tested maintenance grants, acting as a partial replacement to existing maintenance loans
for the least well-off students (rather than being in addition to).

Overview of the Augar Review's recommendations



• We model four scenarios, focusing on eight core Augar recommendations:

Scenario 3: Scenario 2 PLUS changes to graduate contributions

(Recommendations 6.2 to 6.4)

- We focus on the changes to the student loan repayment system including:
 - The removal of real interest rates during study;
 - The reduction in the repayment threshold to £23,000 with corresponding reductions in the interest rate thresholds (to £23,000 and £45,000), and
 - The extension of the loan repayment period to 40 years.

Scenario 4: Scenario 3 PLUS a lifetime repayment cap

(Recommendation 6.6)

There is some uncertainty about the interpretation of the cap applying 'in real terms'. Here, we assume that the cumulative loan repayments per graduate in constant prices are capped at 1.2 times the initial total loan outlay per graduate.



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Scenario 1

Impact of the Augar Review: Scenario 1



Resource flows	Baseline	Scenario 1	Diff.
Exchequer			
Cost of maintenance grant	£0m	£0m	£0m
Cost of maintenance loan	(£2,808m)	(£2,618m)	£189m
Cost of tuition fee loan	(£4,387m)	(£3,327m)	£1,061m
Cost of Teaching Grants	(£1,236m)	(£3,060m)	(£1,823m)
Total Exchequer Cost	(£8,431m)	(£9,005m)	(£573m)
RAB Charge	43.5%	40.8%	-2.7 pp

Higher Education Institutions

Gross fee income	£10,044m	£8,144m	(£1,900m)
Teaching Grant income	£1,236m	£3,060m	£1,823m
Cost of bursary provision	(£188m)	(£78m)	£110m
Total	£11,093m	£11,126m	£33m
Net HEI resource per student p.a.	£9,000	£9,000	£0

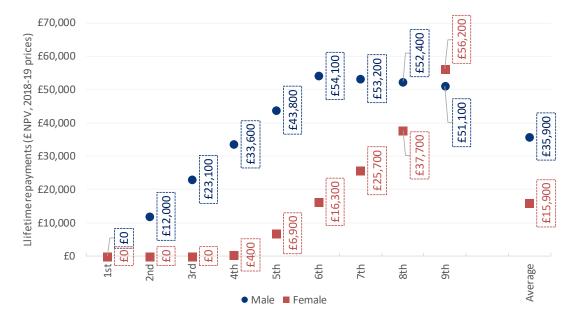
Students/Graduates (FT degrees)

Average debt on graduation	£46,800	£41,700	(£5,100)
Average Lifetime repayments (M)	£38,700	£35,900	(£2,800)
Average Lifetime repayments (F)	£16,600	£15,900	(£700)

- The proposal to reduce the tuition fee, combined with a corresponding increase in targeted Teaching Grant, would result in a £0.57 billion increase in overall costs to the Exchequer.
- The reduced volume of loans (resulting in a lower RAB charge) would save the Exchequer approximately £1.06 billion on the costs associated with tuition fee loans and a further £0.19 billion on maintenance loans.
- However, the cost of replacing the lost tuition fee income for HEIs through Teaching Grants would increase Exchequer costs by £1.82 billion.
- Following the reduction in fee, Higher Education Institutions would see a £1.9 billion reduction in income although some of this (£0.11 billion) would be offset as a result of the reduced bursary payments (calculated as a percentage of the fee charged over the base fee of £6,165).
- Overall, Higher Education Institutions would be marginally better off (by £0.03 billion) but there is a great deal of uncertainty until the final details are pinned down. However, it is likely that there will be a significant increase in the variation of the unit of resource between institutions depending on the subject mix offered.
- Assuming no offsetting Teaching Grant to make up the loss in teaching income, institutions in Scotland, Northern Ireland and Wales will be adversely affected.



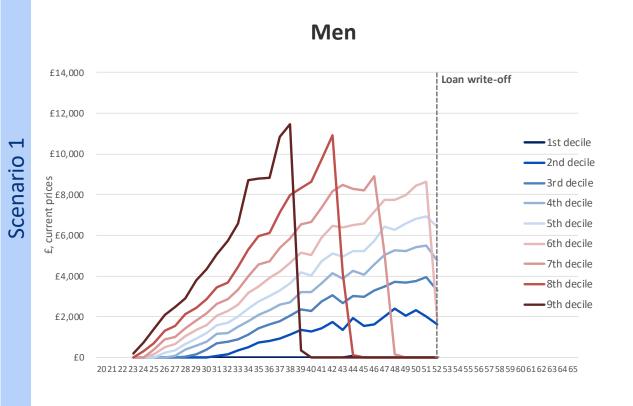
Total loan repayments by FT undergraduate degree graduates (NPV in 2018-19 prices), by earnings decile and gender

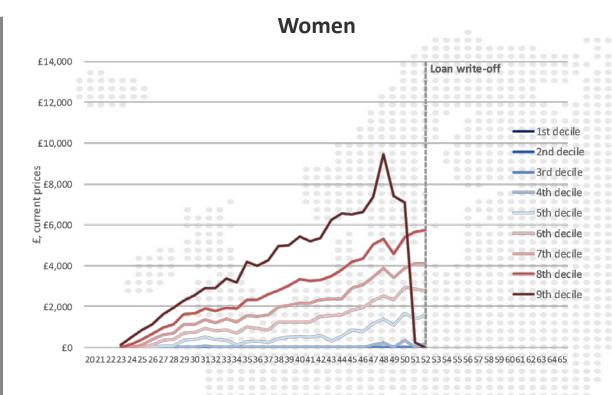


- For students, the reduction in tuition fees reduces the average level of debt on graduation by approximately £5,100.
- The reduction in fee (in isolation) has an unambiguously positive impact on graduate lifetime repayments. A representative male undertaking a full-time undergraduate degree repays approximately £2,800 less than under the current system, while a representative female repays approximately £700 less.
- The RAB charge declines by 2.7 percentage points, to 40.8%.
- The proportion of graduates never making any repayment remains the same (at 23%), while the proportion of graduates not repaying their full loan declines from 80% to 74%.
- In terms of the deficit, the increase in expenditure on additional Teaching Grant exceeds the reduction in expenditure associated with a lower expected loan write-offs. The overall effect is to worsen the deficit by approximately £100 million per annum in the first three years.



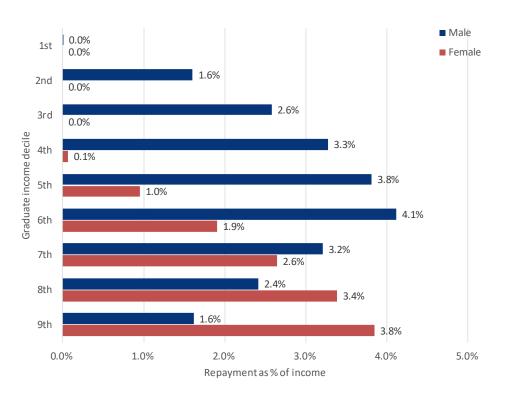
Annual loan repayments by full-time undergraduate degree graduates (£ in current prices, cash terms), by age and decile







Loan repayments by full-time undergraduate degree graduates, as a % of income, by decile and gender



Note: Proportions are calculated over the entirety of the 30-year loan repayment period, on a cash basis (based on current prices).

Loan balance write-off per full-time undergraduate degree graduate, by decile and gender – (£ in current prices, cash terms)

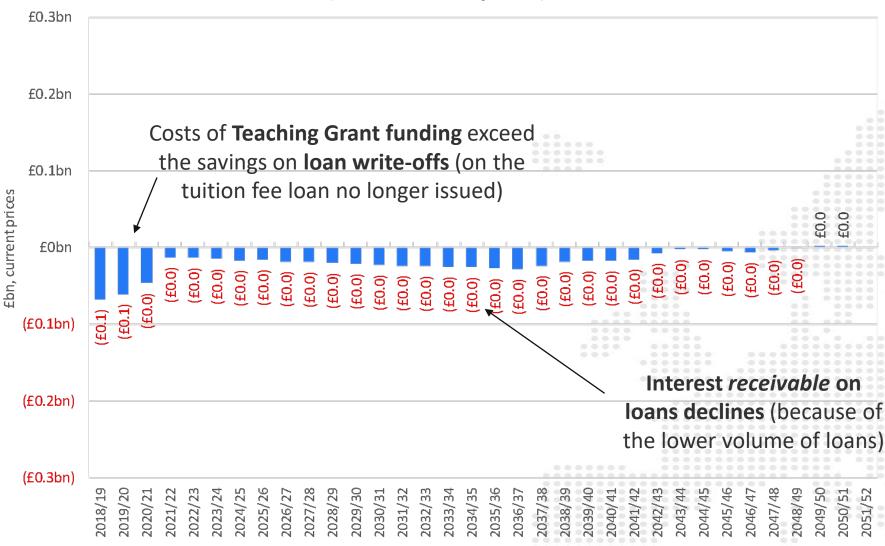


Note: Values are rounded to the nearest £100. Loan balance includes both outstanding principal and interest at the end of the repayment period.

The outstanding loan balance written off (in cash terms) for a representative student undertaking a full-time
undergraduate degree declines to £44,600 for a male and £90,100 for a female student.



Change in public surplus/deficit per year associated with Scenario 1 compared to Baseline (£bn in current prices)







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Scenario 2

Impact of the Augar Review: Scenario 2



Resource flows	Baseline	Scenario 2	Diff.
Exchequer			
Cost of maintenance grant	£0m	(£1,461m)	(£1,461m)
Cost of maintenance loan	(£2,808m)	(£1,975m)	£833m
Cost of tuition fee loan	(£4,387m)	(£3,173m)	£1,215m
Cost of Teaching Grants	(£1,236m)	(£3,060m)	(£1,823m)
Total Exchequer Cost	(£8,431m)	(£9,669m)	(£1,237m)
RAB Charge	43.5%	39.1%	-4.4рр

Higher Education Institutions

m £1,823m
n) £110m
6m £33m
0 £0
0

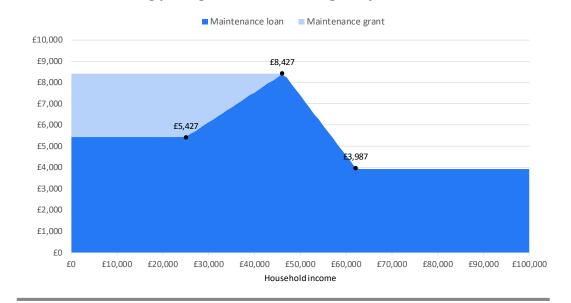
Students/Graduates (FT degrees)

Average debt on graduation	£46,800	£37,600	(£9,200)
Average Lifetime repayments (M)	£38,700	£33,200	(£5,500)
Average Lifetime repayments (F)	£16,600	£15,100	(£1,500)

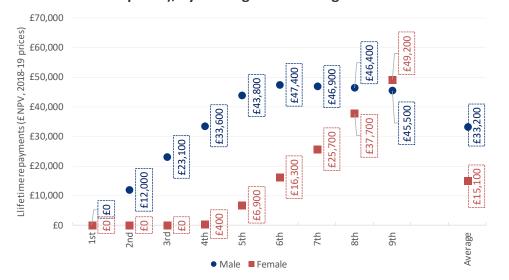
- Building on Scenario 1, Scenario 2 incorporates the changes to maintenance provision, whereby individuals from households with an income of less than £25,000 receive a maintenance grant of £3,000 per annum. The maintenance grant tapers out linearly such that individuals with household incomes in excess of £46,300 receive no grant. Maximum student support, through a combination of maintenance grants and loans, stands at £8,427 (LAFHOL) (see the Annex for more information).
- The average maintenance grant (across all students) stands at £1,540, while the average maintenance loan stands at £5,360.
- The cost of maintenance grants to the Exchequer stands at £1.46 billion. However, against this additional cost, replacement of some of the maintenance loan with grant funding results in a lower RAB charge (by 4.4 percentage points compared to the baseline). As a result, £0.83 billion of savings are achieved on maintenance loans, and £1.22 billion on tuition fee loans.
- Compared to Scenario 1, the savings on maintenance loans stands at £0.64 billion while the additional savings on fee loans stand at £0.15 billion. Hence, the net incremental cost of introducing maintenance grants was estimated at £0.66 billion.



Maintenance funding package for students living away from home outside London



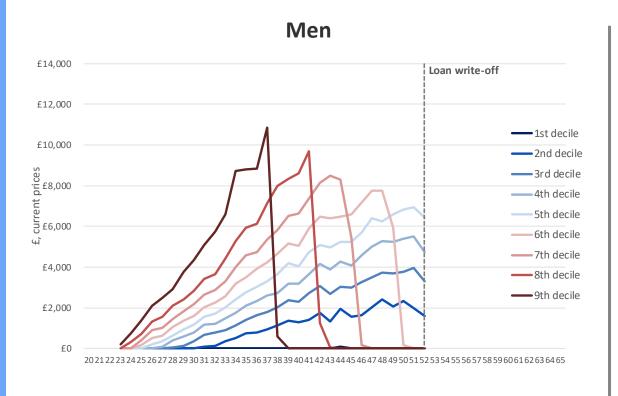
Total loan repayments by FT undergraduate degree graduates (NPV in 2018-19 prices), by earnings decile and gender

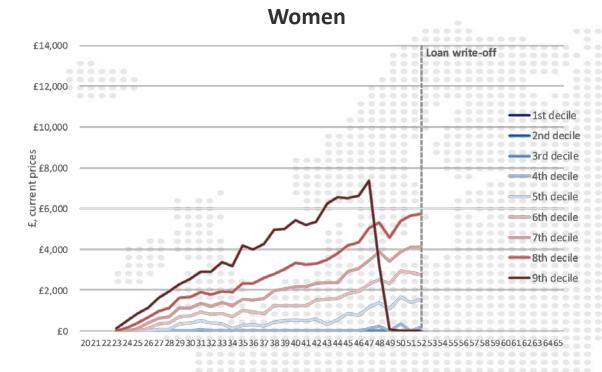


- The reintroduction of maintenance grants for the least well-off students alongside a reduction in maintenance loans results in the average level of debt on graduation declining by approximately £9,200.
- The reintroduction of maintenance grants alongside reduced maintenance loans has a positive impact on graduate lifetime repayments. A representative male undertaking a full-time undergraduate degree repays approximately £5,500 less than under the current system (and £2,700 less than under Scenario 1), while a representative female repays £1,500 less than currently the case (and £800 less than under Scenario 1).
- The RAB charge declines by 4.4 percentage points to 39.1%
- The proportion of graduates never making any loan repayment again remains unchanged (at 23%), while the proportion of graduates not repaying their full loan declines to 70%.
- In relation to the impact on the deficit, the increase in expenditure on additional maintenance grants exceeds the reduction in expenditure associated with the lower loan write-off and the reduced maintenance loans. The overall effect is to worsen the deficit by approximately £200 million per annum in the first three years compared to the Baseline.



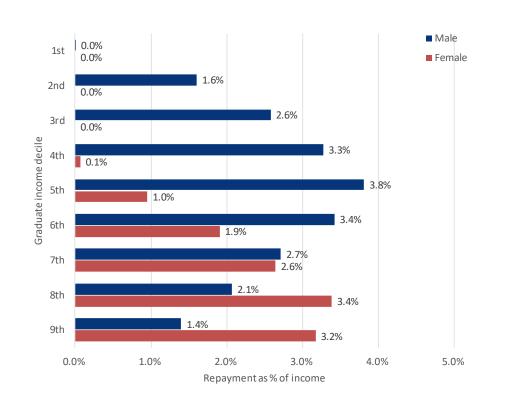
Annual loan repayments by full-time undergraduate degree graduates (£ in current prices, cash terms), by age and decile





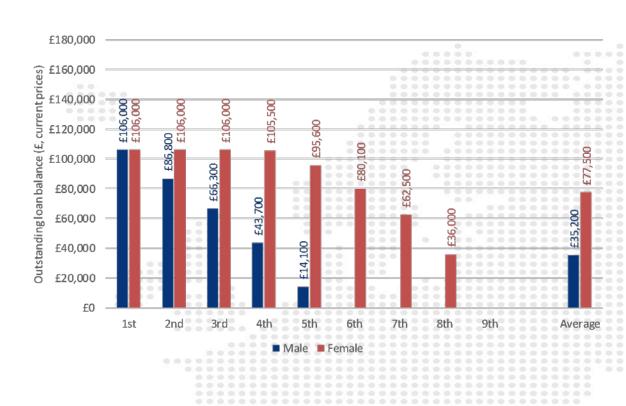


Loan repayments by full-time undergraduate degree graduates, as a % of income, by decile and gender



Note: Proportions are calculated over the entirety of the 30-year loan repayment period, on a cash basis (based on current prices).

Loan balance write-off per full-time undergraduate degree graduate, by decile and gender – (£ in current prices, cash terms)

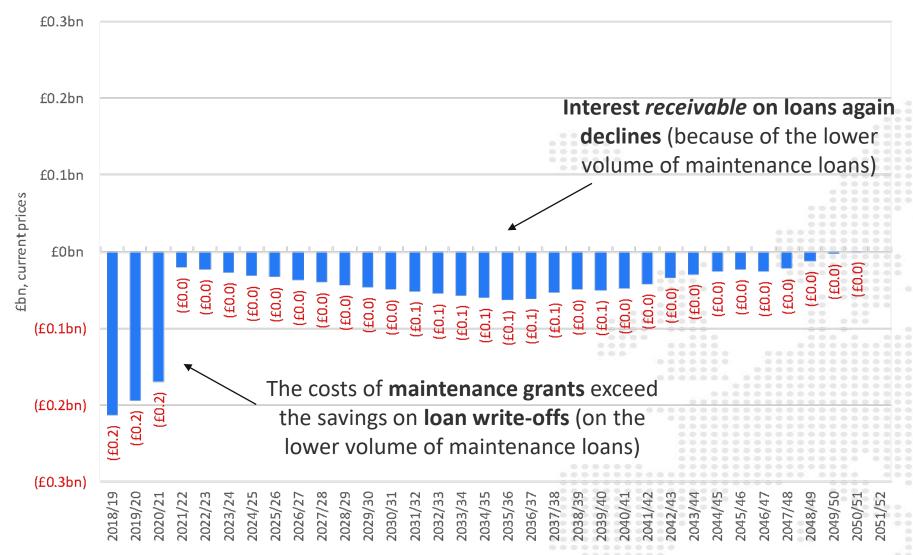


Note: Values are rounded to the nearest £100. Loan balance includes both outstanding principal and interest at the end of the repayment period.

The outstanding loan balance written off (in cash terms) for a representative student undertaking a full-time undergraduate degree declines to £35,200 for a male and £77,500 for a female graduate.



Change in public surplus/deficit per year associated with Scenario 2 compared to Baseline (£bn in current prices)







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Scenario 3

Impact of the Augar Review: Scenario 3



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Resource flows	Baseline	Scenario 3	Diff.
Exchequer			
Cost of maintenance grant	£0m	(£1,461m)	(£1,461m)
Cost of maintenance loan	(£2,808m)	(£1,511m)	£1,297m
Cost of tuition fee loan	(£4,387m)	(£2,467m)	£1,921m
Cost of Teaching Grants	(£1,236m)	(£3,060m)	(£1,823m)
Total Exchequer Cost	(£8,431m)	(£8,499m)	(£67m)
RAB Charge	43.5%	31.0%	-12.5 pp
Higher Education Institutions			
Gross fee income	£10,044m	£8,144m	(£1,900m)
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Gross fee income	£10,044m	£8,144m	(£1,900m)
Teaching Grant income	£1,236m	£3,060m	£1,823m
Cost of bursary provision	(£188m)	(£78m)	£110m
Total	£11,093m	£11,126m	£33m
Net HEI resource per student p.a.	£9,000	£9,000	£0

Students/Graduates (FT degrees)

Average debt on graduation	£46,800	£35,900	(£10,900)
Average Lifetime repayments (M)	£38,700	£35,500	(£3,200)
Average Lifetime repayments (F)	£16,600	£19,400	£2,800

- The changes to graduate contributions namely the removal of real interest rates during study, the reduction in the repayment threshold, and the extension of the loan repayment period to 40 years have some very significant impacts on both the Exchequer and graduates.
- The aggregate impact of these changes is to reduce the RAB charge by **12.5**percentage points compared to the Baseline scenario. As a result, compared to the Baseline, the Exchequer saves approximately £1.30 billion on maintenance loans and £1.92 billion on tuition fee loans. Combined, this represents a £1.17 billion saving compared to Scenario 2.
- In aggregate, the combination of these policies is **essentially cost neural**, with the Exchequer contributing only **£0.07 billion** more to higher education than under the current system of fees and funding. **The additional costs associated** with **Teaching Grant and maintenance grant provision are effectively offset by the additional maintenance and fee loan repayments.**
- However, it is important to note that this does not include the costs associated with the proposed repayment cap (see subsequent slides).
- In relation to the deficit, the significant reduction in the value of loans written off improves the deficit by approximately £100-200 million per annum in the first three years compared to the Baseline. This represents a £1 billion reversal from Scenario 2.



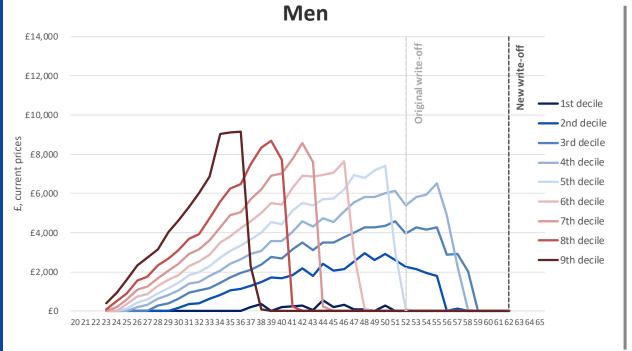
Total loan repayments by FT undergraduate degree graduates (NPV in 2018-19 prices), by earnings decile and gender

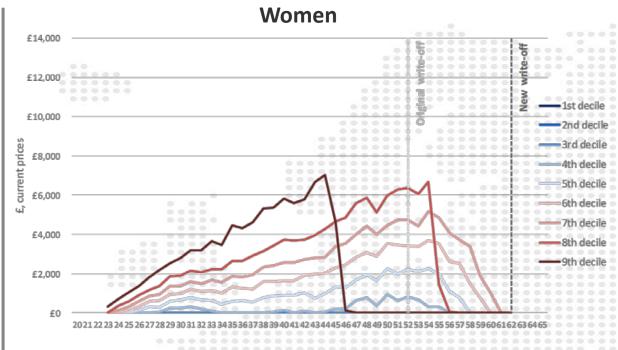


- For students, the **removal of interest rates during study** has the effect of further reducing debt on graduation. Under Scenario 3, the average debt on graduation for a full-time undergraduate degree student is estimated at £35,900.
- However, the impact of the reduction in the repayment threshold, as well as the extension of the loan repayment period have significant impacts on graduate loan repayments. Compared to the Baseline, a representative male undertaking a full-time undergraduate degree will pay £3,200 less than under the Baseline, whereas a representative female will pay £2,800 more.
 - The impact also varies considerably across the earnings distribution. The reduction in the repayment threshold to £23,000, and the extension of the loan repayment period, result in all **men** in the **bottom half** of the graduate earnings distribution contributing **more** than is currently the case by between £5,000 and £10,000 over the repayment period.
- However in the **upper half** of the earnings distribution, the lower volume of loans and the lower interest accrued during study combined with the lower repayment threshold (which means the loan is repaid earlier) results in *less* being contributed by these higher earning graduates compared to the Baseline (by £1,000 to £3,000).
- A similar phenomenon is illustrated for women since the extension of the loan repayment period impacts women to a significantly greater extent than men. Except for the very highest earners (in the 9th decile), most women are expected to make additional contributions under these proposals.



Annual loan repayments by full-time undergraduate degree graduates (£ in current prices, cash terms), by age and decile

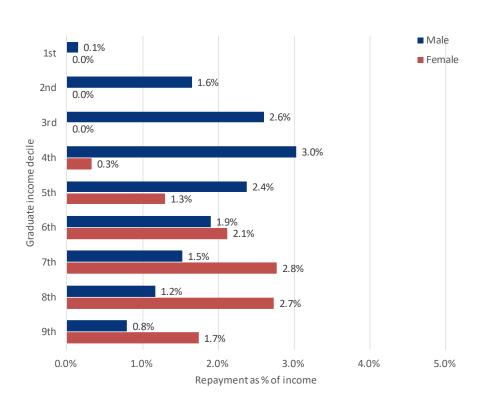




- The RAB charge declines by 12.5 percentage points to 31.0%
- The proportion of graduates never making any repayment declines marginally to 21% (as a result of the reduction in the repayment threshold), while the proportion of graduates not repaying their full loan declines significantly from 80% to 57%.

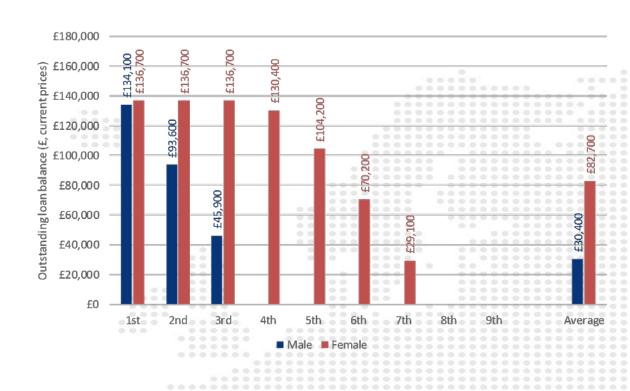


Loan repayments by full-time undergraduate degree graduates, as a % of income, by decile and gender



Note: Proportions are calculated over the entirety of the 30-year loan repayment period, on a cash basis (based on current prices).

Loan balance write-off per full-time undergraduate degree graduate, by decile and gender – (£ in current prices, cash terms)

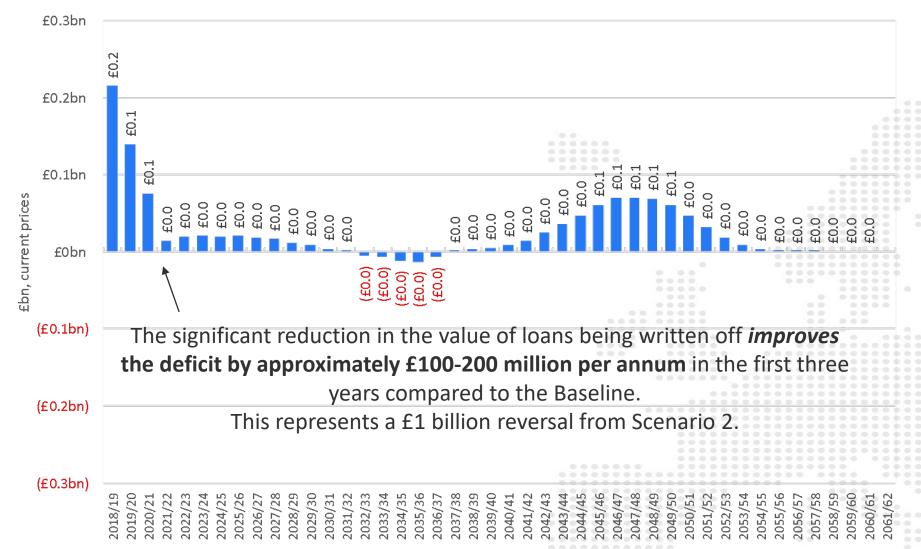


Note: Values are rounded to the nearest £100. Loan balance includes both outstanding principal and interest at the end of the repayment period.

- The removal of real interest during study and the extension of the repayment period make the system even *less* progressive than the current Baseline system. Moderate earning graduates contribute a greater share of their earnings compared to the highest or the lowest earners. Male graduates in the 4th decile and female graduates in the 7th/8th deciles contribute around 3% of their lifetime earnings, compared to only 0.8% for the highest earning males and 1.7% for the highest earning females.
- The **outstanding loan balance written off** (in cash terms) is estimated to be **£30,400** (a decline by **£4,800** from Scenario 2) while for the representative female, the outstanding balance in graduation is estimated to be **£82,700** (an increase by **£5,200** from Scenario 2).



Change in public surplus/deficit per year associated with Scenario 3 compared to Baseline (£bn in current prices)





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Scenario 4

Impact of the Augar Review: Scenario 4



Resource flows	Baseline	Scenario 4	Diff.
Exchequer			
Cost of maintenance grant	£0m	(£1,461m)	(£1,461m)
Cost of maintenance loan	(£2,808m)	(£1,747m)	£1,060m
Cost of tuition fee loan	(£4,387m)	(£2,815m)	£1,573m
Cost of Teaching Grants	(£1,236m)	(£3,060m)	(£1,823m)
Total Exchequer Cost	(£8,431m)	(£9,083m)	(£652m)
RAB Charge	43.5%	34.8%	-8.7 pp

Higher Education Institutions

236m £3,06	60m £1,823m
.88m) (£78	<mark>8m)</mark> £110m
,093m £11,1	£33m
,000 £9,0	000 £0
,	.093m £11,1

Students/Graduates (FT degrees)

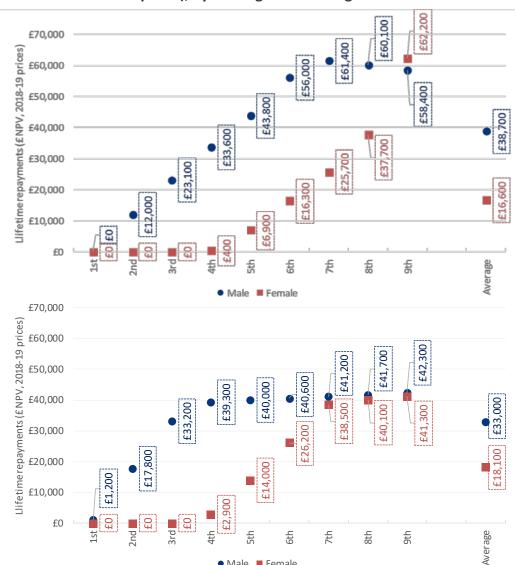
Average debt on graduation	£46,800	£35,900	(£10,900)
Average Lifetime repayments (M)	£38,700	£33,000	(£5,700)
Average Lifetime repayments (F)	£16,600	£18,100	£1,500

- With the introduction of the repayment cap, compared to the previous estimates covering the other major recommendations, the total cost to the Exchequer was estimated to be £9.08 billion per cohort (an increase of £0.58 billion per cohort compared to Scenario 3, and £0.65 billion compared to the Baseline). In other words, the recommendations are no longer cost-neutral.
- Compared to Scenario 3, the write-off associated with maintenance loans has increased by £0.24 billion, with a further £0.35 billion associated with tuition fee loan write-offs. This represents handing back approximately 18% of the loan write-off savings of £3.22 billion previously estimated.
- The RAB charge is estimated to increase by **3.8 percentage points** to **34.8%** resulting in an impact on the **deficit**. In particular, rather than having a positive impact on the deficit, the package of recommendations will **worsen the deficit** by between **£300 million** and **£400 million** per annum over the first three years, and by up to **£200 million** per annum thereafter.
- Although debt on graduation is unchanged compared to Scenario 3, average lifetime loan repayments for students undertaking full-time undergraduate degrees are estimated at £33,000 for men (a decline of £2,500 on average (compared to Scenario 3) as a result of the repayment cap), and £18,100 for women (a decline of £1,300 on average as a result of the repayment cap though still £1,500 more than under the Baseline scenario).

Impact of Scenario 4 (Scenario 3 + repayment cap)



Total loan repayments by FT undergraduate degree graduates (NPV in 2018-19 prices), by earnings decile and gender



- Under the current system (Baseline), positive real interest rates charged during study resulted in a *relatively* progressive repayment system. Men on the 7th, 8th and 9th earnings deciles make lifetime repayments of approximately £60,000, while men on the 5th decile repay £43,800 and women on the 5th decile contributed approximately £6,900. At the lower end of the earnings distribution (for instance 3rd decile), the expected repayments made stand at £23,100 for males, while female graduates are not expected to make any repayments.
- However, following the changes to the graduate contribution system particularly the reduction in the repayment threshold and the introduction of the repayment cap, the lifetime repayments made by the highest earners decline significantly. Men on the 7th, 8th and 9th earnings deciles make lifetime repayments of approximately £41,000 (a reduction of £19,000 £20,000). Men on the 5th decile see a small reduction in repayments to £40,000 but the gap between the median and highest earners has been eliminated. In contrast, men on the 3rd decile see their contributions increase from £23,100 to £33,200.
- While women on the 9th decile of earnings also see a reduction in lifetime repayments, women between the 4th decile and 8th decile see significant increases in expected repayments. Affected by both the **extension of the repayment period** and the **reduction in the repayment threshold**, women on the 5th decile see their expected repayments increase from £6,900 to £14,000, while women on the 7th decile see their repayments increase from £25,700 to £38,500.
- Essentially, the repayment cap exacerbates the regressive nature of the system proposed by the Augar Review.

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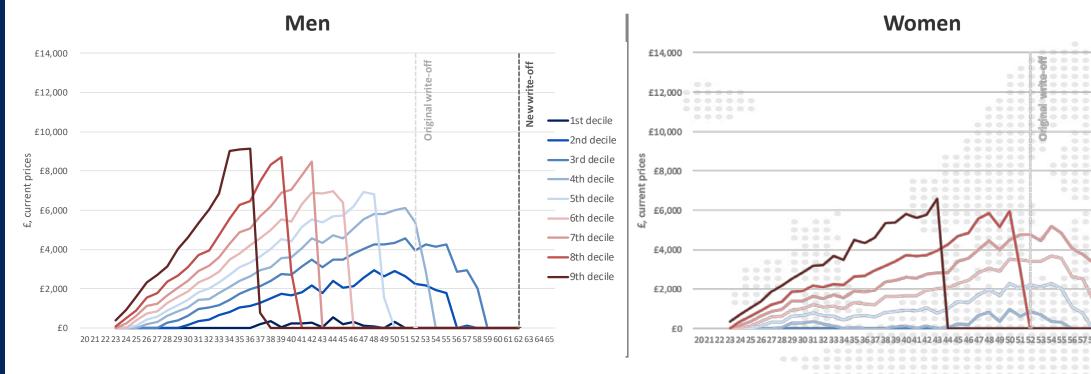
Impact of Scenario 4 (Scenario 3 + repayment cap)



2nd decile

3rd decile

Annual loan repayments by full-time undergraduate degree graduates (£ in current prices, cash terms), by age and decile

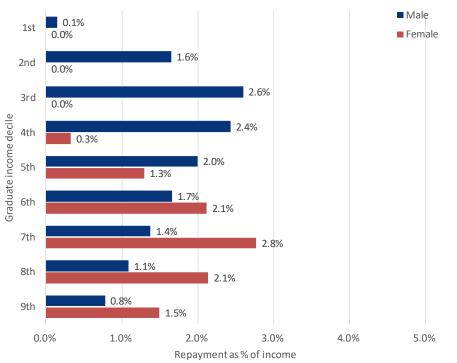


• The **extension of the repayment period** from 30 to 40 years impacts lower earning male graduates (3rd decile and below) and almost all female graduates (7th decile and below). Combined with the reduction in the repayment threshold, compared to the Baseline, these graduates contribute more in each year, but also for a longer period. These graduates are **unambiguously worse off** as a result of the recommendations.

Impact of Scenario 4 (Scenario 3 + repayment cap)

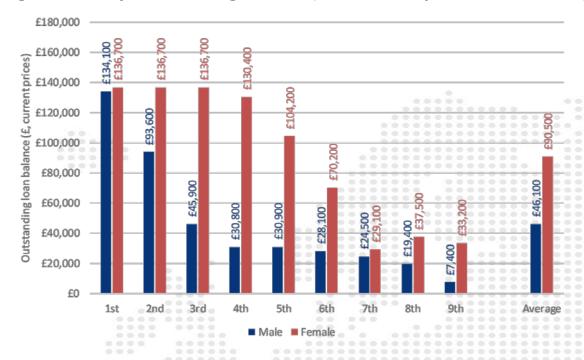


Loan repayments by full-time undergraduate degree graduates, as a % of income, by decile and gender



Note: Proportions are calculated over the entirety of the 30-year loan repayment period, on a cash basis (based on current prices).

Loan balance write-off per full-time undergraduate degree graduate, by decile and gender – (£ in current prices, cash terms)



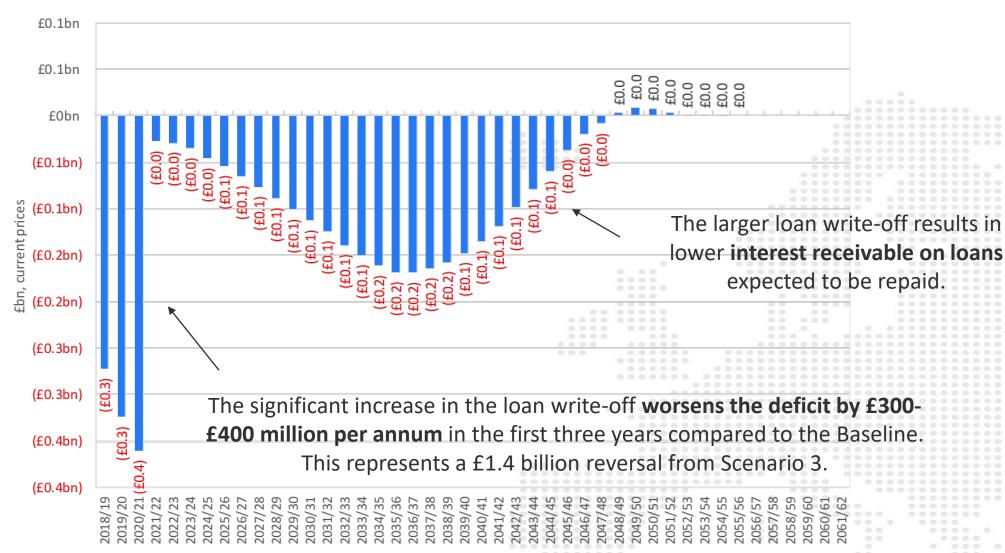
Note: Values are rounded to the nearest £100. Loan balance includes both outstanding principal and interest at the end of the repayment period.

- The introduction of the repayment cap makes the system even less progressive than under Scenario 3. Moderate and low earning graduates will make larger contributions as a proportion of their lifetime earnings compared to higher earning graduates.
- Men on the 3rd decile would contribute the largest share of their lifetime earnings (approximately **2.6%**; unchanged from the Baseline), compared to **0.8%** for the highest earners (**1.9%** under the Baseline). Female graduates on the 7th decile contribute around **2.8%** of their lifetime earnings, compared to only **1.5%** for the highest earning females.
- The outstanding loan balance written off (in cash terms) is estimated at £46,100 for men (an increase by £15,700 from Scenario 3) and £90,500 for women (an increase by £7,800 from Scenario 3).

Impact of Scenario 4 (Scenario 3 + repayment cap)



Change in public surplus/deficit per year associated with Scenario 4 compared to Baseline (£bn in current prices)



Section 3: Demographic upturn

What is the impact of the Augar Review following the expected increase in the cohort by 2030?



Expected demographic changes



• In Scenarios 5 to 8, we repeat the analysis of Scenarios 1 to 4 but following the expected increase in the number of students entering Higher Education over the next decade (based on Office for National Statistics population projections). We analyse what would happen to the above aggregate resource flows if the size of the 2018-19 cohort increased by the demographic upturn expected by 2030:

Scenario 5:	Scenario 1 PLUS Demographic upturn		
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Scenario 6:	Scenario 2 PLUS Demographic upturn		
Scenario 7:	Scenario 3 PLUS Demographic upturn		
Scenario 8:	Scenario 4 PLUS Demographic upturn		

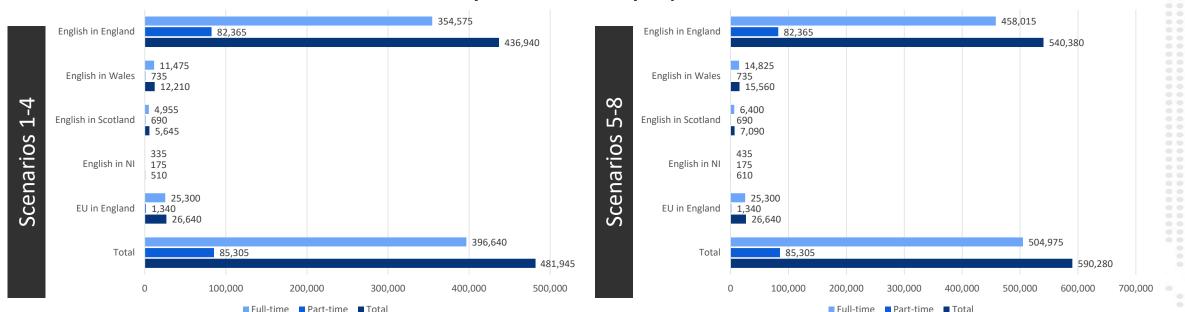
- To estimate the increase in the number of students following the demographic upturn, we have assumed:
 - An increase of 303,022 in the number of 18-20 year olds between 2018 and 2030 (from ONS population predictions), and a decline in the number of 21-29 year olds of 359,248.
 - A Higher Education Initial Participation Rate of 43.1% among 18-20 years olds, and 6.2% for 21-29 among olds.
- Combining this information, we estimate that there will be an additional 130,602 18-20 year olds entering higher education by 2030, alongside a decline of 22,273 in the number of 21-29 year olds. Overall, we have estimated that there will be an increase in the number of first-year students by 108,329 (see Annex for more detailed information).

Expected demographic changes



- We have assumed that there will be no change in EU-domiciled student numbers, and that this increase in student numbers will be reflected in
 full-time undergraduate study only (with no change in part-time student numbers). This represents an increase of 27% in the number of UKdomiciled full-time undergraduates.
- We have assumed that the profile of these students in terms of the qualifications being undertaken is unchanged (94% undergraduate degree, 2% Foundation degree, 1% HNC/HND and 3% Other HE).
- Note that for the various scenarios, many of the per student estimates will be unchanged (for instance lifetime loan repayments for full time undergraduates). However, in some other cases, the addition of full-time students only results in changes to some metrics (such as the RAB charge (which will subsequently impact the cost of student loans over and above the percentage increase in the number of students)). In the following scenarios, we present information on the impact of the Augar recommendations on aggregate Exchequer costs and HEI income, as well as the impact on the deficit, as well as those other metrics that are different to the corresponding Scenario before the increase in student numbers is considered.

Number of starters by domicile, country of provider and mode





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Scenario 5

Scenario 5: Scenario 1 plus demographic upturn



Resource flows	Baseline	Scenario 1	Scenario 5	Diff to Scenario 1
Exchequer				
Cost of maintenance grant	£0m	£0m	£0m	£0m
Cost of maintenance loan	(£2,808m)	(£2,618m)	(£3,382m)	(£764m)
Cost of tuition fee loan	(£4,387m)	(£3,327m)	(£4,164m)	(£837m)
Cost of Teaching Grants	(£1,236m)	(£3,060m)	(£3,828m)	(£768m)
Total Exchequer Cost	(£8,431m)	(£9,005m)	(£11,374m)	(£2,369m)
RAB Charge	43.5%	40.8%	40.8%	-
Higher Education Institutions Gross fee income	£10,044m	£8,144m	£10,192m	£2,048m
Teaching Grant income	£1,236m	£3,060m	£3,828m	£768m
Cost of bursary provision	(£188m)	(£78m)	(£98m)	(£19m)
Total	£11,093m	£11,126m	£13,923m	£2,797m
Net HEI resource per student p.a.	50.000	50.000		
	£9,000	£9,000	£9,200	£200
Students/Graduates (FT degrees)	19,000	£9,000	£9,200	£200
Students/Graduates (FT degrees) Average debt on graduation	£9,000	£9,000 £41,700	£9,200	£200
	,	,	,	£200 - -

£16.600

£15.900

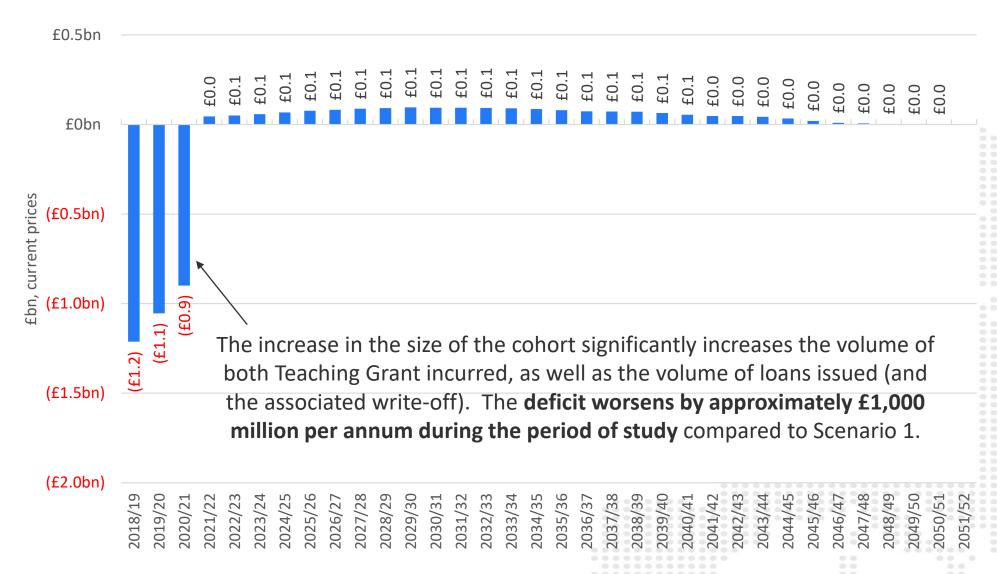
£15.900

- Compared to Scenario 1, we estimate that the level of Exchequer expenditure increases by approximately £2.37 billion, made up of £0.76 billion in maintenance loan write-offs, £0.84 billion in tuition fee loan write-offs and £0.77 billion in additional Teaching Grants.
- The deficit increases to approximately £3.2 billion during the study period – an increase of approximately £3.0 billion compared to Scenario 1.
- Higher Education Institutions receive an additional £2.80
 billion in revenue, made up of £2.05 billion in net fee income and £0.77 billion in Teaching Grants
- Average funding per student increases by £200 p.s.p.a.
- Although the RAB charge remains essentially unchanged (at 40.8%), and because of the change in the composition of the student body, the proportion of learners never repaying their loan increases from 74% to 75%, while the proportion never making any repayment declines by 0.4 percentage points from 22.7% to 22.3%.

Average Lifetime repayments (F)

Scenario 5: Scenario 1 plus demographic upturn







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Scenario 6

Scenario 6: Scenario 2 plus demographic upturn

£15,100

£15,100



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Resource flows	Baseline	Scenario 2	Scenario 6	Diff to Scenario 2	
Exchequer					
Cost of maintenance grant	£0m	(£1,461m)	(£1,887m)	(£426m)	
Cost of maintenance loan	(£2,808m)	(£1,975m)	(£2,551m)	(£576m)	
Cost of tuition fee loan	(£4,387m)	(£3,173m)	(£3,968m)	(£795m)	
Cost of Teaching Grants	(£1,236m)	(£3,060m)	(£3,828m)	(£768m)	
Total Exchequer Cost	(£8,431m)	(£9,669m)	(£12,234m)	(£2,566m)	
RAB Charge	43.5%	39.1%	39.1%	c0.1 pp	
Higher Education Institutions					
Gross fee income	£10,044m	£8,144m	£10,192m	£2,048m	
Teaching Grant income	£1,236m	£3,060m	£3,828m	£768m	
Cost of bursary provision	(£188m)	(£78m)	(£98m)	(£19m)	
Total	£11,093m	£11,126m	£13,923m	£2,797m	
Net HEI resource per student p.a.	£9,000	£9,000	£9,200	£200	
Students/Graduates (FT degrees)					
Average debt on graduation	£46,800	£37,600	£37,600	-	
Average Lifetime repayments (M)	£38,700	£33,200	£33,200	-	

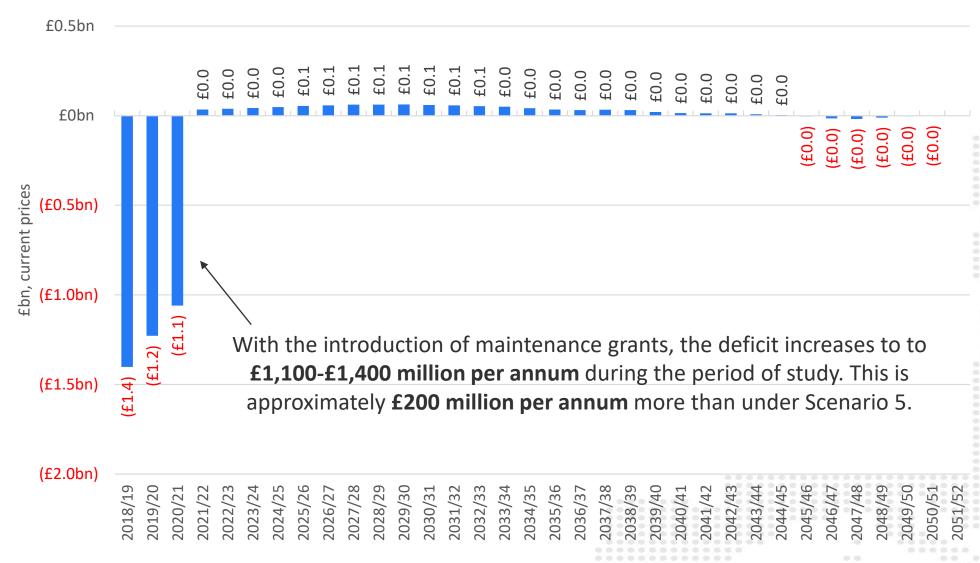
£16.600

- Compared to Scenario 2, we estimate that the level of Exchequer expenditure increases by approximately £2.57 billion, which is made up of £0.43 billion in maintenance grants, £0.58 billion in maintenance loan write-offs, £0.79 billion in tuition fee loan write-offs and £0.77 billion in Teaching Grants.
- The deficit increases to approximately £3.7 billion during the study period – an increase of approximately £0.5 billion compared to Scenario 5.
- As in Scenario 5, Higher Education Institutions receive an additional £2.80 billion in revenue, made up of £2.05 billion in net fee income and £0.77 billion in Teaching Grants
- Average funding per student increases by £200 p.s.p.a.
- The RAB charge declines very marginally (by less than 0.1 percentage points (39.1%)), and because of the change in the composition of the student body, the proportion of learners never repaying their loan increases from 70% to 71%, while the proportion never making any repayment declines by 0.4 percentage points from 22.7% to 22.3%.

Average Lifetime repayments (F)

Scenario 6: Scenario 2 plus demographic upturn







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Scenario 7

Scenario 7: Scenario 3 plus demographic upturn

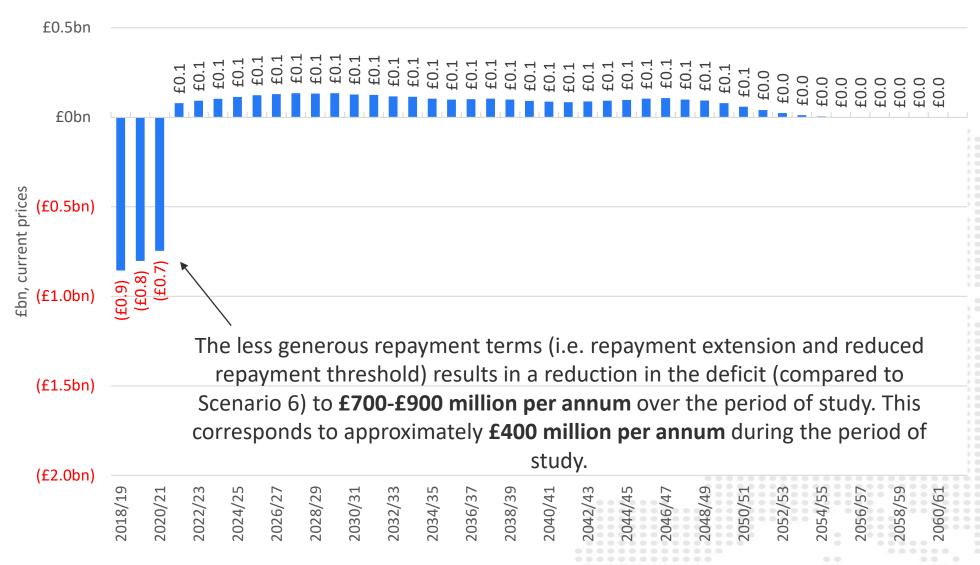


Resource flows	Baseline	Scenario 3	Scenario 7	Diff to Scenario 3
Exchequer				
Cost of maintenance grant	£0m	(£1,461m)	(£1,887m)	(£426m)
Cost of maintenance loan	(£2,808m)	(£1,511m)	(£1,952m)	(£441m)
Cost of tuition fee loan	(£4,387m)	(£2,467m)	(£3,075m)	(£608m)
Cost of Teaching Grants	(£1,236m)	(£3,060m)	(£3,828m)	(£768m)
Total Exchequer Cost	(£8,431m)	(£8,499m)	(£10,742m)	(£2,243m)
RAB Charge	43.5%	31.0%	30.8%	-0.2pp
Gross fee income Teaching Grant income	£10,044m	£8,144m	£10,192m	£2,048m
Teaching Grant income	£1,236m	£3,060m	£3,828m	£768m
Cost of bursary provision	(£188m)	(£78m)	(£98m)	(£19m)
Total	£11,093m	£11,126m	£13,923m	£2,797m
Net HEI resource per student p.a.	£9,000	£9,000	£9,200	£200
Students/Graduates (FT degrees)				
Average debt on graduation	£46,800	£35,900	£35,900	-
Average Lifetime repayments (M)	£38,700	£35,500	£35,500	-

- Compared to Scenario 3, we estimate that the level of Exchequer expenditure increases by approximately £2.24 billion, made up of £0.43 billion in maintenance grants, £0.44 billion in maintenance loan write-offs, £0.61 billion in tuition fee loan write-offs and £0.77 billion in Teaching Grants.
- Rather than generating a surplus as in Scenario 3 (of approximately £0.4 billion over the period of study), the impact of the cohort expansion adds to the deficit by approximately £2.4 billion during the study period.
- As in Scenario 6, Higher Education Institutions receive an additional £2.80 billion in revenue, made up of £2.05 billion in net fee income and £0.77 billion in Teaching Grants
- Average funding per student increases by £200 p.s.p.a.
- The RAB charge declines marginally (by approximately 0.2 percentage points (30.8%)), and because of the change in the composition of the student body, the proportion of learners never repaying their loan increases from 57% to 58%, while the proportion never making any repayment declines by 0.2 percentage points from 21.1% to 20.9%.

Scenario 7: Scenario 3 plus demographic upturn







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Scenario 8

scenario 8

Scenario 8: Scenario 4 plus demographic upturn

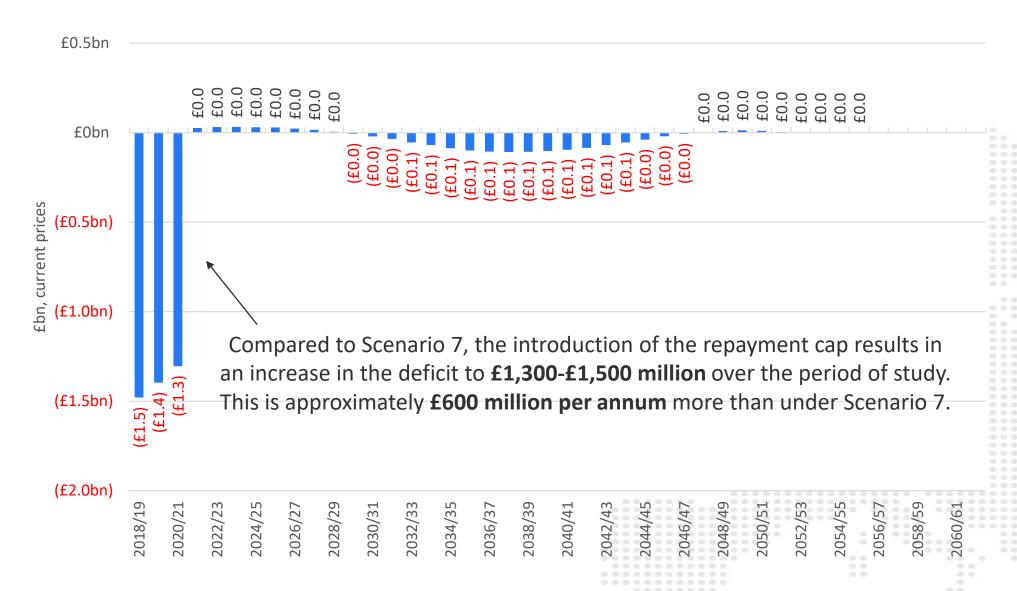


Resource flows	Baseline	Scenario 4	Scenario 8	Diff. to Scenario 4
Exchequer				
Cost of maintenance grant	£0m	(£1,461m)	(£1,887m)	(£426m)
Cost of maintenance loan	(£2,808m)	(£1,747m)	(£2,257m)	(£510m)
Cost of tuition fee loan	(£4,387m)	(£2,815m)	(£3,518m)	(£703m)
Cost of Teaching Grants	(£1,236m)	(£3,060m)	(£3,828m)	(£768m)
Total Exchequer Cost	(£8,431m)	(£9,083m)	(£11,490m)	(£2,407m)
RAB Charge	43.5%	34.8%	34.7%	-0.1 pp
Higher Education Institutions Gross fee income	£10,044m	£8,144m	£10,192m	£2,048m
Teaching Grant income	£1,236m	£3,060m	£3,828m	£768m
Cost of bursary provision	(£188m)	(£78m)	(£98m)	(£19m)
Total	£11,093m	£11,126m	£13,923m	£2,797m
Net HEI resource per student p.a.	£9,000	£9,000	£9,200	£200
Students/Graduates (FT degrees)				
Average debt on graduation	£46,800	£35,900	£35,900	-
Average Lifetime repayments (M)	£38,700	£33,000	£33,000	-
Average Lifetime repayments (F)	£16,600	£18,100	£18,100	_

- Compared to Scenario 4, we estimate that the level of Exchequer expenditure increases by approximately £2.41 billion, made up of £0.43 billion in maintenance grants, £0.51 billion in maintenance loan write-offs, £0.70 billion in tuition fee loan write-offs and £0.77 billion in Teaching Grants.
- Compared to Scenario 7, the impact of the repayment cap adds to the deficit by approximately £1.8 billion during the study period (and approximately £3.2 billion compared to Scenario 4).
- As in Scenario 7, Higher Education Institutions receive an additional £2.80 billion in revenue, made up of £2.05 billion in net fee income and £0.77 billion in Teaching Grants
- Average funding per student increases by £200 p.s.p.a.
- The RAB charge declines marginally (by **0.1 percentage points** (**34.7**%)), while the proportion of learners never repaying their loan increases from **90**% to **91.5**%. The proportion never making any repayment declines by **0.2 percentage points** from **21.1**% to **20.9**%.

Scenario 8: Scenario 4 plus demographic upturn





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Annex

Supplementary information









- The model considers the total number of full-time and part-time English domiciled first-year students undertaking undergraduate qualifications at any institution in the UK, as well as full-time and part-time EU students engaged in undergraduate education studying at English institutions. We use information from the Higher Education Statistics Agency (HESA, here) for 2017-18 (i.e. the most recent academic year for which this data is currently available), and assume that the size and characteristics of the relevant cohort have remained unchanged between 2017-18 and 2018-19. See the 'Overview of the 2018-19 cohort' slide for more information.
- Based on the same HESA data, we assume the following distribution of students by qualification level:

Qualification level	Full-time	Part-time
Other UG	3%	57%
HNC/HND	1%	3%
Foundation Degree	2%	3%
First degree	94%	38%
Total	100%	100%

- Part-time students are estimated to study at 40% full-time equivalence (FTE).
- Again based on HESA data (<u>here</u>), we assume an annual continuation rate of **92.5%** for full-time students and **82.5%** for part-time students.
- The analysis is undertaken separately by gender. Based on HESA information on graduates by gender and qualification level (<u>here</u>), we assume the following **gender** split:

Qualification level	Full-	-time	Part-time		
Qualification level	Male	Female	Male	Female	
Other UG	47%	53%	38%	62%	
HNC/HND	47%	53%	38%	62%	
Foundation Degree	47%	53%	38%	62%	
First degree	42%	58%	43%	57%	



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

Age at enrolment

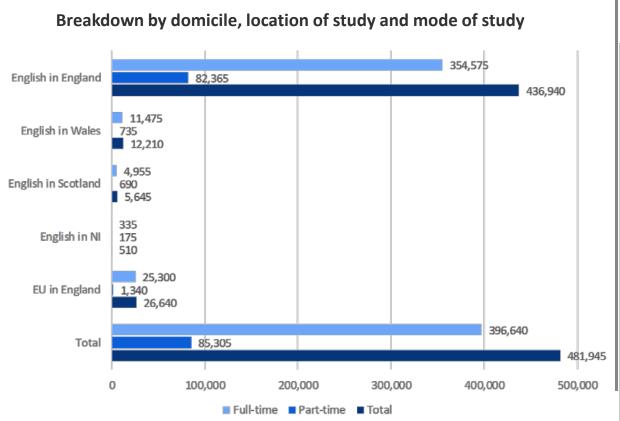
Qualification level	Full-time	Part-time
Other UG	28	36
HNC/HND	21	27
Foundation Degree	25	30
First degree	20	31

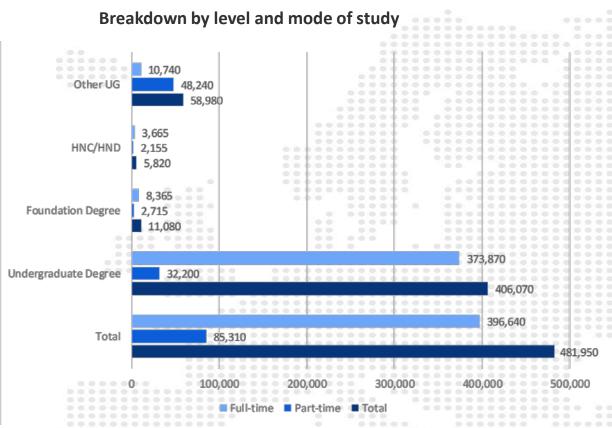
Duration of study

Daration of Study					
Qualification level	Full-time	Part-time			
Other UG	1	2			
HNC/HND	2	5			
Foundation Degree	2	5			
First degree	3	7			



• The analysis is based on a total of **481,945 first-year undergraduate English-domiciled students studying anywhere in the** UK and EU-domiciled students studying in England.





Note: All student numbers are rounded to the nearest 5. The information is based on the 2017-18 academic year (since information for 2018-19 is not yet available at the point of writing); hence, we assume the same size and characteristics of the 2018-19 cohort as for the 2017-18 cohort.

- To analyse the impact of the Augar Review proposals following the expected demographic upturn and increase in the size of the cohort by 2030:
 - We use ONS population forecasts for England (here) to assess the changes in the expected English population aged 18 to 20 and 21 to 29 between 2018 and 2030. The data indicate an expected *increase* in the population aged 18-20, but a *decline* in the population aged 21-29:

Age band	Change in population, 2018 to 2030
18-20	303,022
21-29	-359,248

Using these expected population changes, to assess the resulting change in the number of English first-year students between 2018 and 2030, we apply estimated higher education participation rates provided by the Department for Education (for 2016/17, here) by age group (43.1% for 18-20 year olds and 6.2% for 21-29 year olds):

Age band	ge band Change in population, 2018 to 2030		Change in # of first-year students, 2018 to 2030
18-20	303,022	43.1%	130,602
21-29	-359,248	6.2%	-22,273
Total		108,329	

We thus assume that there will be 108,329 additional English first-year undergraduate students entering HE by 2030. We assume that all of these additional students are full-time students (i.e. assuming no change in the number of EU-domiciled students, or English-domiciled part-time students); and that the characteristics of these additional students are the same as for the respective students in the 2018-19 cohort (e.g. assuming the same distribution of the additional students by undergraduate qualification level as is currently the case).



- In the **baseline** (i.e. the current funding system in 2018-19), the maximum (gross) tuition fee in 2018-19 is £9,250, with an average fee charged of approximately £9,120 (rounded to the nearest £10, based on OFFA data, here). As a result of Access agreements and the provision of bursaries and fee waivers by HEIs, the net tuition fee is lower (approximately £8,960). Based on average study intensity, the average part-time tuition net tuition fee was estimated to be £3,530 per annum.
- Under the Augar Review recommendations, the maximum (gross) tuition fee stands at £7,500, with an estimated average fee of approximately £7,400 (again using OFFA data). Assuming that institutions spend the same proportion of the difference between the fee charged and the baseline fee (£6,165) on bursaries and fee waivers as in the Baseline, the net tuition fee is estimated at £7,330. The average part-time tuition net tuition fee was estimated to be £2,890 per annum.
- We assume that any fee reduction applied to English-domiciled students in England results in the same reduction in tuition fees for English-domiciled students in other Home Nations - with no corresponding reimbursement of Teaching Grant funding
- Based on the current funding system, we have modelled maintenance loan eligibility (applicable to full-time students only) by students' living conditions, for students living at Home (LAH, 21% of full-time students), living away from home outside of London (LAFHOL, 67% of full-time students) and living away from home in London (LAFHIL, 12% of full-time students) using the current household income thresholds applied by Student Finance England.
- To determine the size of maintenance loans received, students in the cohort are categorised by gender, location of study, study intensity and living arrangements whilst in study. We assume that all students take out the maximum available loan to which they are entitled, and we base eligibility for loans using information from the Student Loans Company (SLC, here) on the distribution of students by household income, based on the proportion of students that were previously in receipt of full or partial maintenance grants (in 2015-16). We thus estimate that the average maintenance loan received per full-time undergraduate student in the 2018-19 cohort stands at £6,750 per student per year.
- We assume that fees and maintenance loans do not increase over the duration of students' courses.



- In modelling the impact of the Augar Review recommendations on maintenance, we assume a maximum maintenance grant of £3,000 per student per annum for students with household income of less than £25,000, tapering out to £0 towards a household income of approximately £46,300 (based on the proposed threshold of £42,620 (in 2015/16 prices), adjusted to 2018/19 prices using OBR estimates of RPI inflation).
- Based on the recommendation to lower the maximum maintenance loan to the National Minimum Wage for age 21 to 24, we assume that the maximum maintenance loan (for LAFHOL, LAH and LAFHIL) would decline by approximately 3.1% per student per year, respectively (based on the difference between the current maximum loan of £8,944, and the proposed lower loan of £8,663 (see Figure 7.5 in the Augar Review report)).
- In terms of the interplay between the new maintenance grants and loans, we assume that the new maintenance grant replaces maintenance loans for students from the lowest household incomes. Hence, we assume that the maintenance loan increases while the maintenance grant tapers out between household income of £25,000 and £46,300. We then assume that the minimum maintenance loans are applied for the same household income thresholds as in the current baseline system (again depending on living cost conditions).
- Although the Augar Review does contain language suggesting that maintenance support is made available to part-time students (Page 195 and Recommendation 7.5), given the lack of specific information about levels, household income thresholds, tapers etc, it was not possible to model this with a sufficient degree of certainty.

For the baseline, the average Teaching Grant per student studying in England in 2018-19 is derived by combining assumptions on the rate per FTE student by subject band with information on the distribution of students by subject band (both provided by the Office for Students, here), as follows:

Subject Band	Funding per FTE, £	% of FTE students
Band A	£10,100	2%
Band B	£1,515	22%
Band C1	£253	21%
Band C2	-	20%
Band D	-	35%
Total	-	100%

- Combining this with the average 'other targeted allocations' funding per student (e.g. including premium funding to support retention), the average total Teaching Grant per full-time student studying in England amounts to approximately £1,090. Based on average study intensity, the average funding per part-time student was estimated at £430 per annum.
- For studying in Scotland, we divide the total Teaching Grant funding provided by the Scottish Funding Council in 2018-19 by the number of funded FTE students in that year (here). We thus estimate that the average Teaching Grant per full-time student stands at £5,630 per year, with the assumed part-time rate (again based on study intensity) standing at £2,230.
- For students studying in Wales or Northern Ireland, we make use of HESA financial data (here) and student data (here) for 2017-18 (assuming the same level of Teaching Grant in 2018-19). We divide the total Teaching Grant funding in each of these Home Nations by the total number of UK and EU students undertaking undergraduate or postgraduate taught qualifications (excluding postgraduate research and non-EU students). Adjusting for study intensity, the average Teaching grant per full-time student in Wales and Northern Ireland is estimated to be £300 and £3,030 per student per annum respectively. The corresponding estimates for part-time students stand at £120 and £1,200 per student per annum.



- For modelling the Augar Review recommendations, we assume that institutions in England will be fully compensated for the loss in tuition fee income resulting from the proposed lower maximum fee. In other words, we assume that the average Teaching Grant funding per student across all subject bands will increase by the difference in the average fee charged (rather than the maximum) between the current system and the Augar proposals.
- We assume that the top-up funding applies to students in subject Bands A, B and C1 only. Assuming the top-up per student across each of these bands, based on the distribution of students by band, we estimate that the additional Teaching Grant funding per student in Bands A, B and C1 stands at approximately £3,820 per student (in FTE) per annum.
- We assume that there is no such top-up funding provided to institutions in Wales,
 Scotland or Northern Ireland.

- Under the current funding system, tuition fee and maintenance loans accumulate interest at 3% + RPI during the period of study. After graduation, loans accumulate interest depending on earnings, with individuals earning £25,000 incurring interest at 0% + RPI, increasing to 3% + RPI for individuals with earnings of £45,000 per annum or above. For part-time students, we apply current SLC rules in relation to the accumulation of interest during study.
- We assume that loan repayment is 9% of earnings in excess of £25,000 per annum, that all loans are written off 30 years from the Statutory Repayment Due Date (SRDD).
- We assume that the relevant earnings thresholds for interest accumulation and loan repayment (of £25,000 and £45,000) increase with the rate of average nominal earnings growth per year.
- We use the most recent Office for Budget Responsibility long-term forecasts in relation to the expected Retail Price Index per annum, as well as expected nominal average earnings growth per annum (here).
- In relation to the estimation of the RAB charge and lifetime loan repayments (in NPV), we assume a real discount rate of 0.7% as used in the governmental accounts, with the nominal discount rate amounting to 0.7% + RPI.
- In relation to the estimation of aggregate financial flows across the cohort, 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.



- To model the impact of the Augar Review, in line with the relevant recommendations on student contributions, we assume that tuition fee and maintenance loans accumulate **interest** at **RPI only** during the period of study i.e. that zero real interest is charged during study.
- The Review further recommends lower interest thresholds, with individuals earning £23,000 incurring interest at 0% + RPI, increasing to 3% + RPI for individuals with earnings of £43,000 or above (both in 2018-19 prices). It is recommended that the earnings threshold for loan repayment is also lowered to £23,000 accordingly. We again assume that these new thresholds increase with the rate of average nominal earnings growth per year.
- In line with the recommendations, our modelling further assumes an extension of the repayment period to 40 years.
- To model the impact of the proposed repayment cap, we assume that the cumulative loan repayments per graduate in constant 2018-19 prices (adjusted for inflation using OBR RPI estimates, not discounted to NPV) are capped at 1.2 times the initial total loan outlay per graduate (i.e. excluding interest, and in cash terms).

- To estimate graduates' lifetime loan repayments (by qualification level (i.e. first degrees, Foundation Degrees, HNCs/HNDs and other undergraduate qualifications), gender, study mode and decile), we make use of **pooled UK Quarterly Labour Force Survey data for the period 2004-2017**.
- Using this data, we estimate the **average earnings** (in 2018 prices) among individuals in possession of each of the different qualifications as their highest level of attainment, separately by age (for first degrees) or age band (for qualifications below degree level (due to sample size)), gender, and income decile. To assess loan repayments for part-time students (who typically start repaying their loans *during study*), we further estimate the average earnings of individuals in possession of Level 3 qualifications as their highest level of attainment (used as part-time students' assumed earnings during study), separately by age, decile and gender.
- We also estimate the average probability of being in employment, again by qualification level, age or age band, and gender.
- Based on the above, we then estimate the employment-adjusted annual earnings profiles of graduates associated with each qualification, by study mode, gender and decile. We adjust these age-earnings profiles to account for the fact that earnings are expected to increase over time (again using Office for Budget Responsibility forecasts of average nominal earnings growth per year (here)).





Public deficit accounting

Treatment of student loans in the public accounts

Public deficit accounting: Previous approach vs. new 'Hybrid' approach



The public deficit represents [income] minus [expenditure]:

Approach	Income [+]	Expenditure [-]
Old approach	Interest <i>receivable</i> each year	 Loan write-offs (interest + principal) occurring intermittently over the 30 year repayment period (because of death and disability), as well as at the end of the repayment period Teaching grants paid during study Tuition fee and maintenance grants paid during study (if any)
New approach: 'Hybrid treatment of loan extension'	Interest receivable on loans expected to be repaid each year	 Proportion of loan principal expected to be written off counted as an immediate transfer to students during study (i.e. the value of loan principal expected not to be repaid) Teaching grants paid during study Tuition fee and maintenance grants paid during study (if any)

- The previous treatment of student loans in the deficit counted interest receivable (rather than actually repaid)
 throughout the repayment period, and only counted the costs associated with loan write-offs at the end of the 30
 year repayment period.
- Hence, while the Higher Education Funding system looked expensive to the Exchequer from an economic cost perspective (see above), the old treatment in the national accounts created a fiscal illusion, since the loans appeared to generate surplus throughout almost the entire repayment period.

Public deficit accounting: Previous approach vs. new 'Hybrid' approach



The public deficit represents [income] minus [expenditure]:

Approach	Income [+]	Expenditure [-]
Old approach	Interest <i>receivable</i> each year	 Loan write-offs (interest + principal) occurring intermittently over the 30 year repayment period (because of death and disability), as well as at the end of the repayment period Teaching grants paid during study Tuition fee and maintenance grants paid during study (if any)
New approach: 'Hybrid treatment of loan extension'	Interest receivable on loans expected to be repaid each year	 Proportion of loan principal expected to be written off counted as an immediate transfer to students during study (i.e. the value of loan principal expected not to be repaid) Teaching grants paid during study Tuition fee and maintenance grants paid during study (if any)

- The new Hybrid treatment splits loans into a grant and a loan element (hence the 'hybrid' approach).
- The grant element refers to the proportion of the loan principal expected to be written off, recorded as upfront spending (i.e. during study).
- The remaining loan principal (expected to be fully repaid) is still treated as a loan, with only interest receivable on this loan element recorded as income*. Given that this loan element is expected to be fully repaid, there are no more loan write-offs recorded after 30 years.

^{*} As outlined by the Office for National Statistics (here), 'adjusting the estimates to exclude interest [on loans expected not to be repaid] could be a very difficult task'. Here, we calculate the proportion of the loan expected to be written off by dividing the expected total loan write-offs after 30 years by the total principal and interest accrued during the 30 years (again, separately by qualification level, mode, gender and graduate income decile). We then calculate the interest that is accruable only or the remaining proportion of the principal.



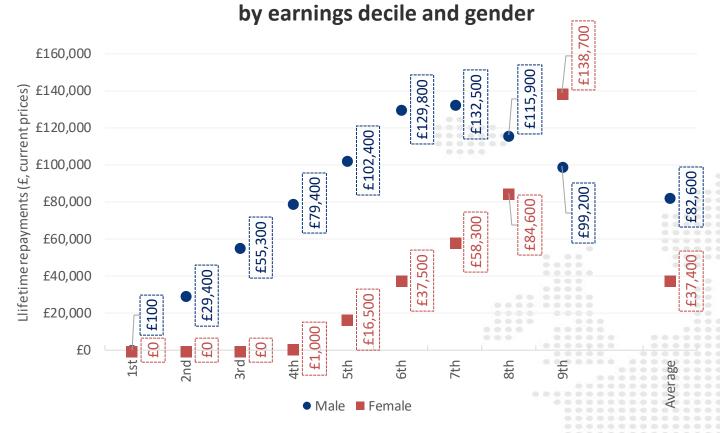
Lifetime loan repayments, cash terms



Impact of the current system



Total loan repayments by full-time undergraduate degree graduates (£ in current prices, cash terms),

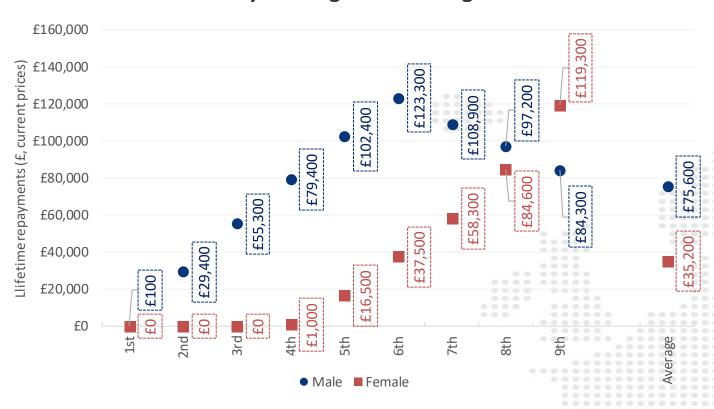


Note: Calculated on a cash basis (i.e. not discounted), and based on current prices

Impact of Scenario 1 (tuition fees and Teaching Grant)



Total loan repayments by full-time undergraduate degree graduates (£ in current prices, cash terms), by earnings decile and gender

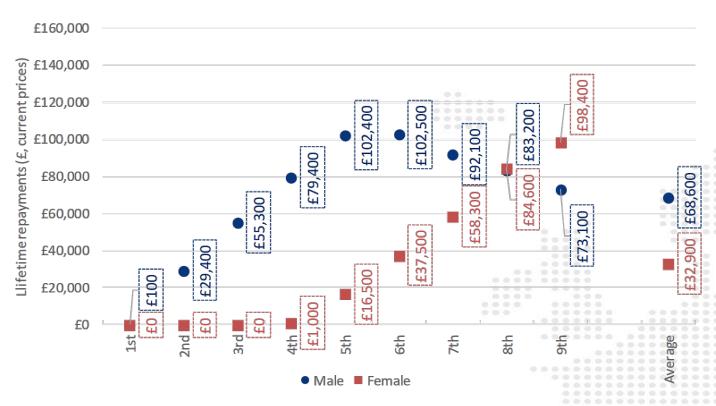


Note: Calculated on a cash basis (i.e. not discounted), and based on current prices

Impact of Scenario 2 (Scenario 1 + maintenance)



Total loan repayments by full-time undergraduate degree graduates (£ in current prices, cash terms), by earnings decile and gender

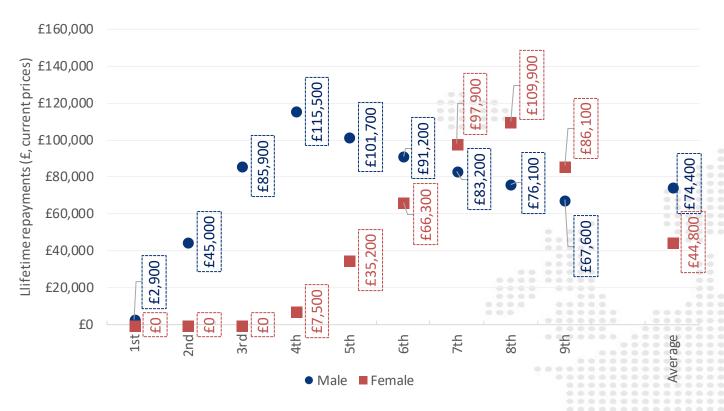


Note: Calculated on a cash basis (i.e. not discounted), and based on current prices

Impact of Scenario 3 (Scenario 2 + graduate contributions)



Total loan repayments by full-time undergraduate degree graduates (£ in current prices, cash terms), by earnings decile and gender

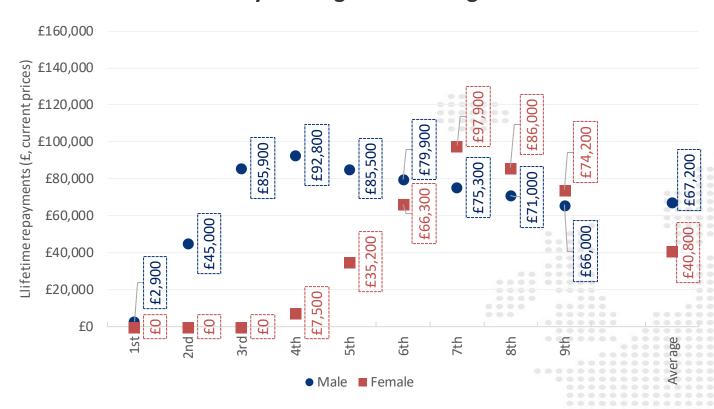


Note: Calculated on a cash basis (i.e. not discounted), and based on current price

Impact of Scenario 4 (Scenario 3 + repayment cap)



Total loan repayments by full-time undergraduate degree graduates (£ in current prices, cash terms), by earnings decile and gender



Note: Calculated on a cash basis (i.e. not discounted), and based on current prices

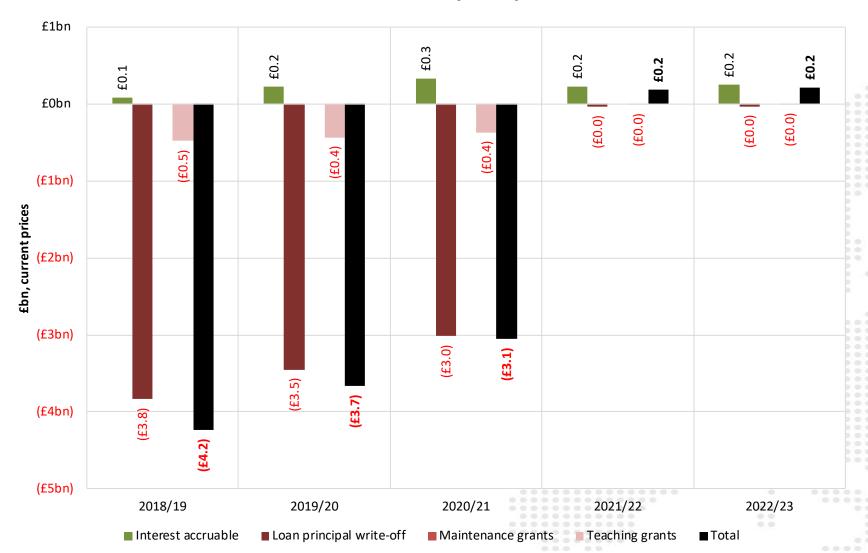


Impact on the deficit



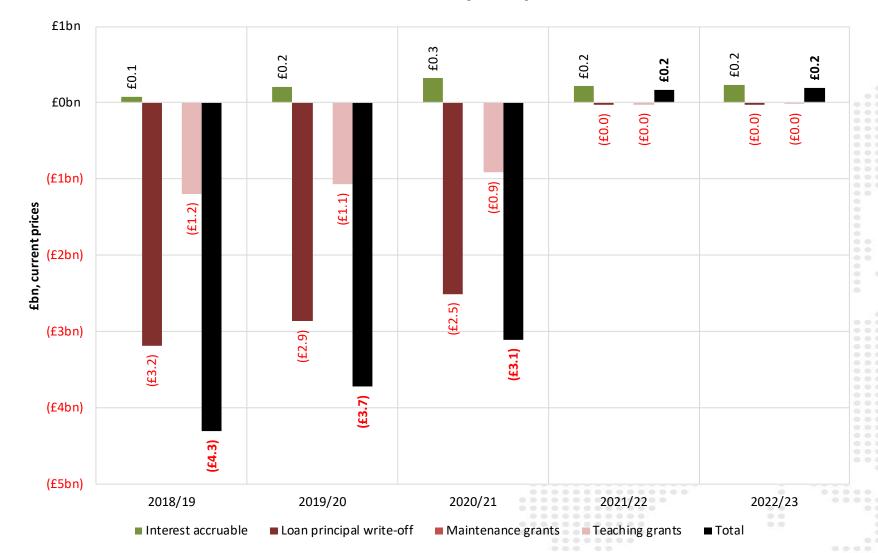
Impact of the current system





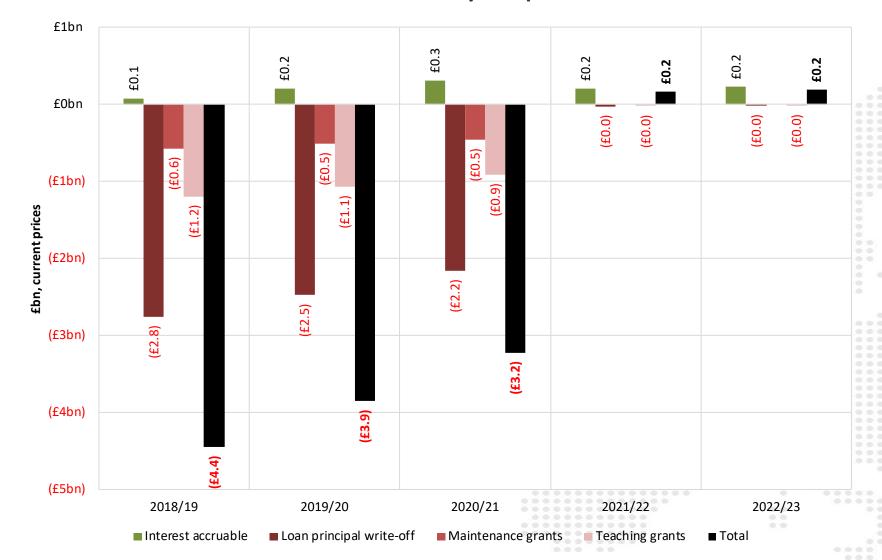
Impact of Scenario 1 (tuition fees and Teaching Grant)





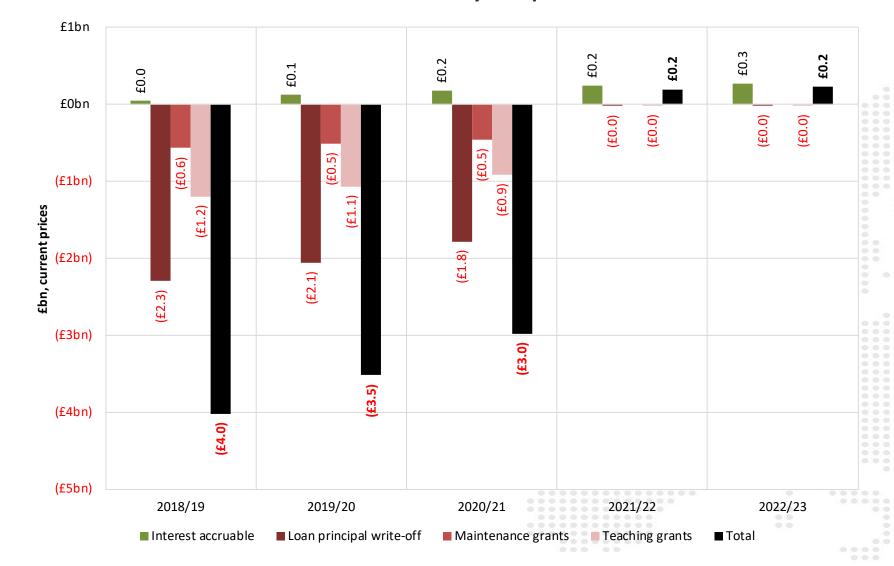
Impact of Scenario 2 (Scenario 1 + maintenance)





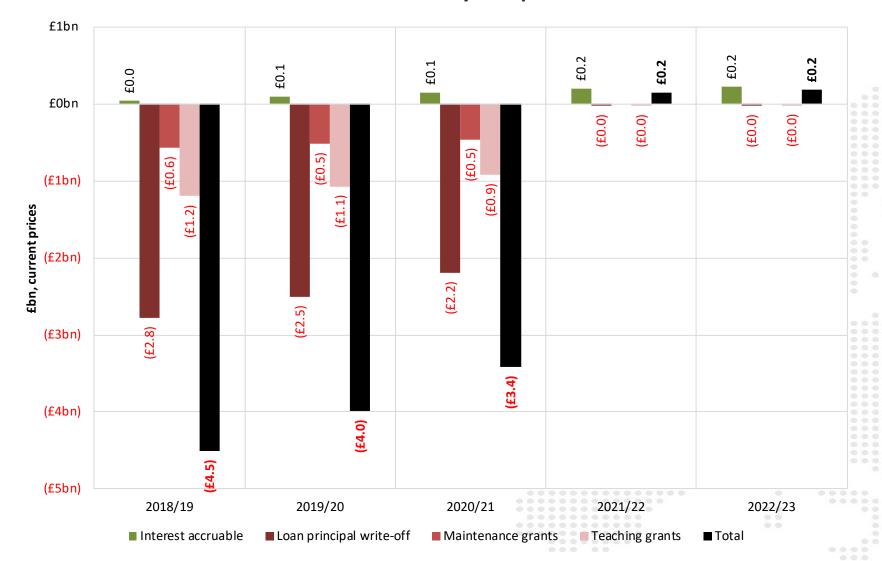
Impact of Scenario 3 (Scenario 2 + graduate contributions)





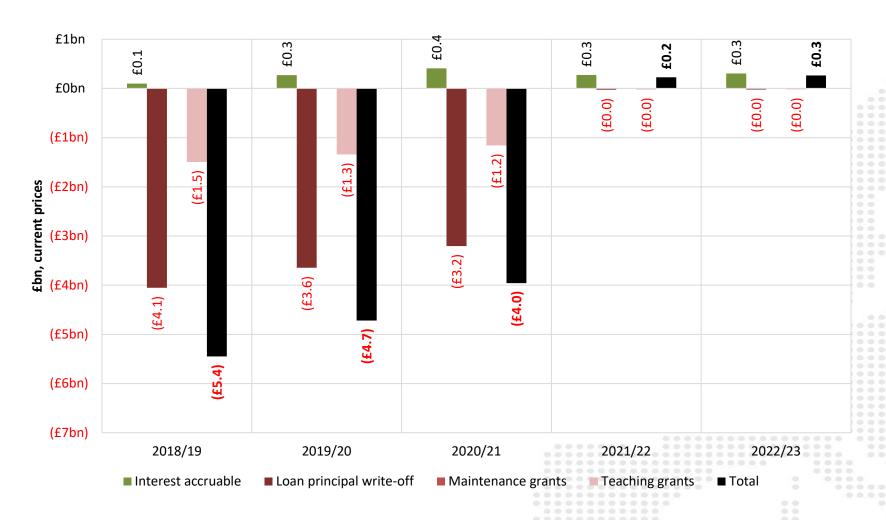
Impact of Scenario 4 (Scenario 3 + repayment cap)





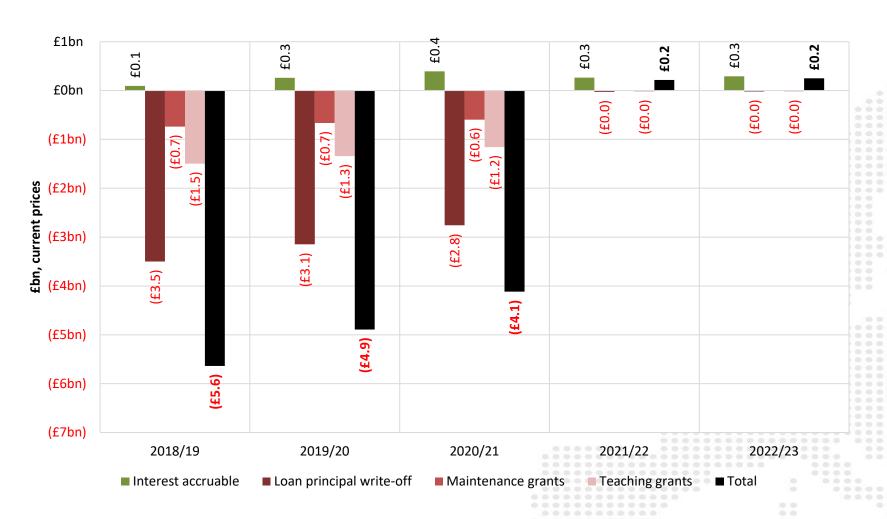
Impact of Scenario 5 (Scenario 1 + demographic upturn)





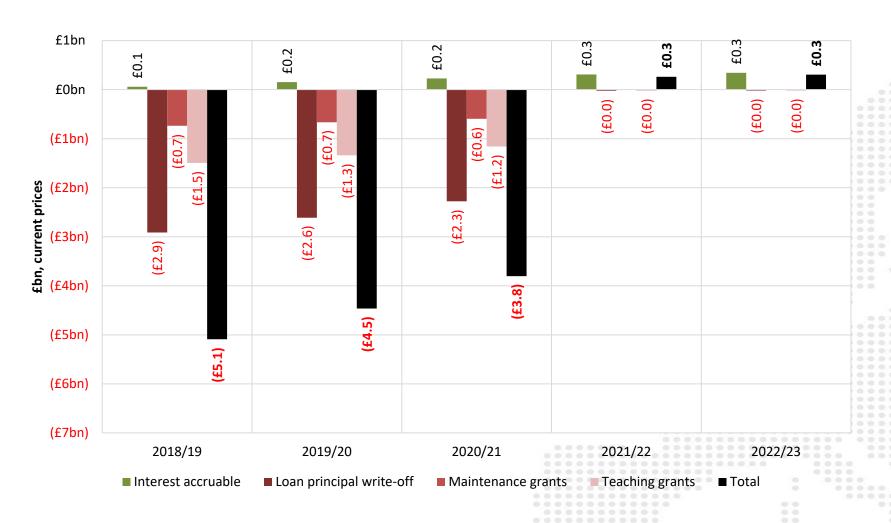
Impact of Scenario 6 (Scenario 2 + demographic upturn)





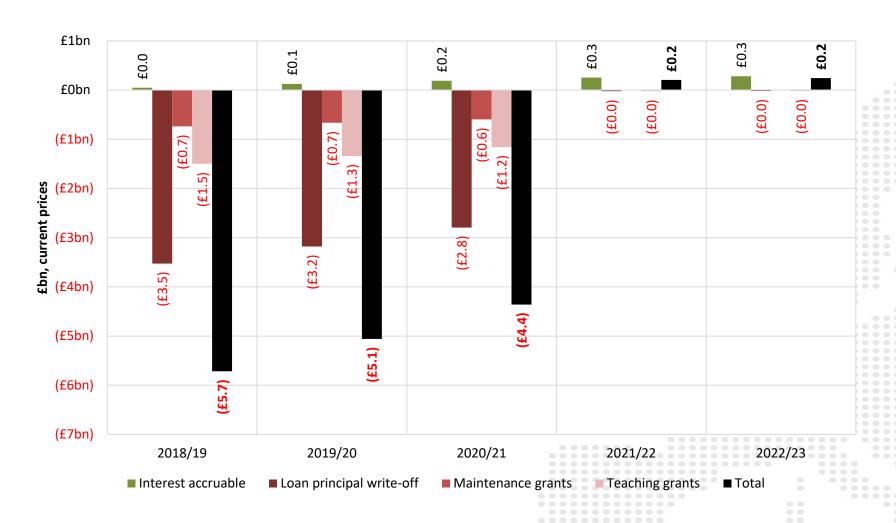
Impact of Scenario 7 (Scenario 3 + demographic upturn)





Impact of Scenario 8 (Scenario 4 + demographic upturn)







Loan written off due to the repayment cap (Scenario 4 only)

Impact of Scenario 4 (Scenario 3 + repayment cap)



Loan repayments written off due to the repayment cap (£ in current prices, cash terms) for full-time undergraduate degree graduates, by earnings decile and gender

