

WHO WILL PAY MORE UNDER A GRADUATE TAX?

Comparison of graduate tax and tuition fee loan repayments

This report compares the cost of repaying a tuition fee loan with the cost of paying a graduate tax. Calculations are based on an undergraduate finishing a three-year full-time course aged 21 in 2010, and starting employment at a salary of £25,000 and beginning tuition fee loan repayments or payment of graduate tax in 2011. The report also assesses the impact of a graduate tax on various professions, varying the amount paid by the rate of interest charged and the period of time for which the tax is paid.

Tuition fee loan repayment

For a graduate earning £25,000 in 2010, and beginning to repay a tuition fee loan in April 2011, having passed the income threshold of £15,000, a loan of £9,440 (the total for three years of fees) would take nearly 12 years to repay, at a total cost of approximately £10,701, assuming an annual inflation rate of 2.0%. The repayments would be based on 9% of income above £15,000 a year, i.e. £900 a year, or £75 a month. Table 7 in this report assesses the length of time to repay a tuition fee loan according to the full-time average pay of various professions, and the average starting salary of a graduate: it should be borne in mind that it would normally take considerably longer to repay the tuition fee loan of £9,440 than the time given in table 7, because most professionals do not start by earning an average amount for the profession, but rather take a number of years to reach the average pay level.

Table 1: Tuition fee loan repayment

	Monthly repayments £	Annual repayments £	Amount borrowed £	Interest to pay at interest/inflation assumption of 2.0% a year £
2010-11			9,440	188.80
2011-12	75.00	900.00	8728.80	174.58
2012-13	75.00	900.00	8003.38	160.07
2013-14	75.00	900.00	7263.44	145.27
2014-15	75.00	900.00	6508.71	130.17
2015-16	75.00	900.00	5738.89	114.78
2016-17	75.00	900.00	4953.66	99.07
2017-18	75.00	900.00	4152.74	83.05
2018-19	75.00	900.00	3335.79	66.72
2019-20	75.00	900.00	2502.51	50.05
2020-21	75.00	900.00	1652.56	33.05
2021-22	75.00	900.00	785.61	15.71
2022-23	75.00	900.00	-98.68	-1.97

Graduate tax payments

For a graduate earning £25,000 in 2010, and beginning to pay a graduate tax in April 2011, having passed the income threshold of £15,000, the amount to be paid would be a percentage of total earnings; however, this report also examines the cost of paying a graduate tax that is only payable on income above £15,000 (see Table 6). ⁱⁱ

Table 2: 3% rate of graduate tax payment

Earnings of graduate	£25,000
Monthly graduate tax rate of payment @ 3.0% of total earnings	£62.50
Annual graduate tax payment @ 3.0% of total earnings	£750
Graduate tax payment @ 3.0% over 20 years	£15,000
Graduate tax payment @ 3.0% over 25 years	£18,750
Graduate tax payment @ 3.0% repayment over lifetime (43 years)	£32,250

Table 3: 5% rate of graduate tax payment

Earnings of graduate	£25,000
Monthly graduate tax rate of payment @ 5.0% of total earnings	£104.17
Annual graduate tax payment @ 5.0% of total earnings	£1,250
Graduate tax payment @ 5.0% over 20 years	£25,000
Graduate tax payment @ 5.0% over 25 years	£31,250
Graduate tax payment @ 5.0% repayment over lifetime (43 years)	£53,750

Table 4: 7% rate of graduate tax payment

Earnings of graduate	£25,000
Monthly graduate tax rate of payment @ 7.0% of total earnings	£145.83
Annual graduate tax payment @ 7.0% of total earnings	£1,750
Graduate tax payment @ 7.0% over 20 years	£35,000
Graduate tax payment @ 7.0% over 25 years	£43,750
Graduate tax payment @ 7.0% repayment over lifetime (43 years)	£75,250

Speech by Vince Cable

Vince Cable, secretary of state at the Department for Business, Innovation and Skills, referred in a speech on 15 July 2010 to the earnings of a 'teacher or care worker or research scientist'. For information on a teacher and a research scientist's earnings and how they would be affected by different levels of a graduate tax see the table below. The full-time gross mean average earnings of a care worker in 2009 were £16,771 and it is unlikely to be a graduate-level job. ⁱⁱⁱ

Table 5: Full-time average pay and cost of graduate tax

April 2009	All employees	Public sector	ICT managers	Police officers#	Medical practitioners	Social workers	Nurses
	£	£	£	£	£	£	£
Full-time average	31,916	30,900	52,540	56,421	84,451	30,040	29,497
Cost of:							
3% G Tax/20 yrs	19,150	18,540	31,524	33,853	50,671	18,024	17,698
3% G Tax/25 yrs	23,937	23,175	39,405	42,316	63,338	22,530	22,123
3% G Tax/43 yrs	41,172	39,861	67,777	72,783	108,942	38,752	38,051
5% G Tax/20 yrs	31,916	30,900	52,540	56,421	84,451	30,040	29,497
5% G Tax/25 yrs	39,895	38,625	65,675	70,526	105,564	37,550	36,871
5% G Tax/43 yrs	68,619	66,435	112,961	121,305	181,570	64,586	63,419
7% G Tax/20 yrs	44,682	43,260	73,556	78,989	118,231	42,056	41,296
7% G Tax/25 yrs	55,853	54,075	91,945	98,737	147,789	52,570	51,620
7% G Tax/43 yrs	96,067	93,009	158,145	169,827	254,198	90,420	88,786

April 2009	* Higher education teaching professionals	Further education teaching professionals	Secondary education teaching professionals	Research scientist	2009 Graduates
	£	£	£	£	£
Full-time average	46,251	34,090	36,837	37,134	25,000
Cost of:					
3% G Tax/20 yrs	27,751	20,454	22,102	22,280	15,000
3% G Tax/25 yrs	34,688	25,568	27,628	27,851	18,750
3% G Tax/43 yrs	59,664	43,976	47,520	47,903	32,250
5% G Tax/20 yrs	46,251	34,090	36,837	37,134	25,000
5% G Tax/25 yrs	57,814	42,613	46,046	46,418	31,250
5% G Tax/43 yrs	99,440	73,294	79,200	79,838	53,750
7% G Tax/20 yrs	64,751	47,726	51,572	51,988	35,000
7% G Tax/25 yrs	80,939	59,658	64,465	64,985	43,750
7% G Tax/43 yrs	139,216	102,611	110,879	111,773	75,250

ICT = Information and communication technology

= inspectors and above

* based on ASHE published data, and likely to include a small percentage of teaching professionals not actually employed in the HE sector

43 years = a career lifetime

Full-time gross mean average annual pay; % calculations UCU

Source of average pay data: ONS ASHE Table 14.7a (except 'public sector' Table 13.7a), with exception of graduate average

Table 6: Full-time average pay and cost of graduate tax above £15,000 threshold

April 2009	All employees	Public sector	ICT managers	Police officers#	Medical practitioners	Social workers	Nurses
	£	£	£	£	£	£	£
Full-time average	31,916	30,900	52,540	56,421	84,451	30,040	29,497
Pay above £15,000	16,916	15,900	37,540	41,421	69,451	15,040	14,497
Cost of:							
3% G Tax/20 yrs	10,150	9,540	22,524	24,853	41,671	9,024	8,698
3% G Tax/25 yrs	12,687	11,925	28,155	31,066	52,088	11,280	10,873
3% G Tax/43 yrs	21,822	20,511	48,427	53,433	89,592	19,402	18,701
5% G Tax/20 yrs	16,916	15,900	37,540	41,421	69,451	15,040	14,497
5% G Tax/25 yrs	21,145	19,875	46,925	51,776	86,814	18,800	18,121
5% G Tax/43 yrs	36,369	34,185	80,711	89,055	149,320	32,336	31,169
7% G Tax/20 yrs	23,682	22,260	52,556	57,989	97,231	21,056	20,296
7% G Tax/25 yrs	29,603	27,825	65,695	72,487	121,539	26,320	25,370
7% G Tax/43 yrs	50,917	47,859	112,995	124,677	209,048	45,270	43,636

April 2009	* Higher education teaching professionals	Further education teaching professionals	Secondary education teaching professionals	Research scientist	2009	Graduates
	£	£	£	£		£
Full-time average	46,251	34,090	36,837	37,134		25,000
Pay above £15,000	31,251	19,090	21,837	22,134		10,000
Cost of:						
3% G Tax/20 yrs	18,751	11,454	13,102	13,280		6,000
3% G Tax/25 yrs	23,438	14,318	16,378	16,601		7,500
3% G Tax/43 yrs	40,314	24,626	28,170	28,553		12,900
5% G Tax/20 yrs	31,251	19,090	21,837	22,134		10,000
5% G Tax/25 yrs	39,064	23,863	27,296	27,668		12,500
5% G Tax/43 yrs	67,190	41,044	46,950	47,588		21,500
7% G Tax/20 yrs	43,751	26,726	30,572	30,988		14,000
7% G Tax/25 yrs	54,689	33,408	38,215	38,735		17,500
7% G Tax/43 yrs	94,066	57,461	65,729	66,623		30,100

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= inspectors and above

* based on ASHE published data, and likely to include a small percentage of teaching professionals not actually employed in the HE sector

43 years = a career lifetime

Full-time gross mean average annual pay; % calculations UCU

Source of average pay data: ONS ASHE Table 14.7a (except 'public sector' Table 13.7a), with exception of graduate average

Table 7: Cost and time for repaying a tuition fee loan of £9,440, according to full-time average pay

April 2009	All employees	Public sector	ICT managers	Police officers#	Medical practitioners	Social workers	Nurses
	£	£	£	£	£	£	£
Full-time average	31,916	30,900	52,540	56,421	84,451	30,040	29,497
Pay above £15,000	16,916	15,900	37,540	41,421	69,451	15,040	14,497
Fee loan repayment cost	10,182	10,226	9,814	9,793	9,696	10,272	10,300
Time to repay loan: years	6.7	7.1	2.9	2.6	1.5	7.6	7.9

April 2009	* Higher education teaching professionals	Further education teaching professionals	Secondary education teaching professionals	Research scientist	2009	Graduates
	£	£	£	£		£
Full-time average	46,251	34,090	36,837	37,134		25,000
Pay above £15,000	31,251	19,090	21,837	22,134		10,000
Fee loan repayment cost	9,876	10,102	10,025	10,017		10,701
Time to repay loan: years	3.5	5.9	5.1	5.0		11.9

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= inspectors and above

* based on ASHE published data, and likely to include a small percentage of teaching professionals not actually employed in the HE sector

Full-time gross mean average annual pay; % calculations UCU

Source of average pay data: ONS ASHE Table 14.7a (except 'public sector' Table 13.7a), with exception of graduate average

Conclusion

It can be seen from these calculations that for a graduate earning £25,000, monthly repayments under the tuition fee loan repayment system would be higher than monthly payments at the rate of 3% graduate tax. But a £9,440 tuition fee loan would take approximately 12 years to repay for someone earning £25,000, compared with a graduate tax payment period of 20 or 25 years. In all, for a graduate earning £25,000, the repayment of a £9,440 loan would cost approximately £10,700, compared with £15,000 for 20 years of 3% graduate tax, or £25,000 for 20 years of 5% graduate tax, or £31,250 for 25 years of 5% graduate tax.

Endnotes

ⁱ Student loan repayments are nine per cent of anything earned over the relevant threshold, ie £15,000.

ⁱⁱ The median average graduate starting salary in 2009 and 2010 was £25,000 (Financial Times, 6 July 2010, p.4)

ⁱⁱⁱ Source: Annual Survey of Hours and Earnings (ASHE), 2009, table 14.7a.