

Economic Evaluation of The Scholars Programme: Methodology Note

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Section 1: Main findings

The main findings are also available in this [document](#) on our website.

The Scholars Programme

Economic Evaluation

The Scholars Programme improves educational and economic outcomes for students from less advantaged backgrounds by increasing access to more competitive universities.

Whilst we have known for a long time that going to university increases earning potential, research published by TASO in 2024 shows that this potential is most pronounced when we factor in how competitive a university is. Graduating from a more competitive university, compared to a less competitive one, has a bigger impact on a graduate's earning potential than the difference between going to a less competitive university versus not going to university at all.

We have conducted an economic evaluation that combines our observed progression rates to more competitive universities with TASO's research to estimate the programme's economic benefits.*

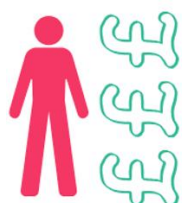


1 in 6 Year 12 Scholars Programme students progress to a more competitive university who may not have otherwise.

Independent UCAS Findings: Since 2016/17, the UCAS [Outreach Evaluator](#) service has shown that Year 12 students who complete The Scholars Programme are statistically significantly more likely to apply and progress to more competitive universities than students from similar backgrounds.

TASO Findings: TASO research [Education Pathways: Equality Gaps in Earnings and Employment](#) (2024) estimates the pre-tax earnings premium associated with attending more competitive versus less competitive universities. We use this research to estimate the lifetime earnings uplift associated with graduating from a more competitive university compared to a less competitive university.

Economic Evaluation Findings: Combining the UCAS findings with TASO's research on the financial benefits of graduating from more competitive universities enables the estimation of the lifetime economic value for Year 12 Scholar Programme students through its estimated impact on progression rates. The more students The Brilliant Club works with, the higher the estimated lifetime economic value of the cohort will be



Graduates from more competitive universities are estimated to earn nearly **£160,000** more, on average, in pre-tax earnings across their lifetime than graduates from less competitive universities.



Increased progression to more competitive universities is estimated to generate over **£30 million** in additional lifetime pre-tax earnings for a cohort of 1,200 Year 12 students.

For more information on the methodology, please visit our website which has a detailed methodology note and all the previous UCAS evaluations. To find out how The Brilliant Club can support your evaluation work, please contact us at collaborate@thebrilliantclub.org.

*More competitive university definitions: TASO research uses "The 52 most competitive higher education providers in the UK (based on the A level UCAS tariff score of entrants)". The independent UCAS evaluations use UCAS High Tariff.



Section 2: Datasets used in TASO research

This section discusses the datasets used in TASO's research to estimate the earnings premium associated with graduating from more versus less competitive universities.

TASO's longitudinal dataset is comprised from several administrative data sources ultimately leading to the linking of student and employment data. They use linked individualised data from the following sources:

- National Pupil Database (NPD)
- Individualised Learner Record (ILR)
- Higher Education Statistics Agency (HESA)
- Longitudinal Education Outcomes (LEO)
 - PAYE UK earnings of full and part-time employees

University categories

- The TASO research defines higher education providers as either:
 - Top third providers: The 52 most competitive higher education providers in the UK (based on the A level UCAS tariff score of entrants)
 - Non-top third providers: institutions outside this group
- For the purposes of this analysis, the 'Top third providers' as used in the TASO research is used here as more competitive universities and non-top third providers are described as less competitive universities.
- Students in the dataset completed KS4 in 2002 and 2003 so the likely higher education entry years of this sample is around 2004-2005.

Earnings are analysed for individuals at:

- 9 years after KS4 using tax years 2010/11 and 2011/12 (~25 years old)
- 16 years after KS4 using tax years 2017/18 and 2018/19 (~32 years old)

Limitations of this dataset

- We assume that the earnings premium found using the tax years in the analysis will be the same for individuals moving forward
- Earnings analysis includes individuals with any PAYE earnings reported in tax years 2017/18 and 2018/19 but does not account for part-time vs full-time employment
- PAYE data only includes employees so does not include self-employed individuals
- The analysis analysed earnings at age 32 (approximately 16 years after KS4) as this was the "latest possible time point to observe the labour market outcomes of the half of the cohort who completed Key Stage 4 in 2003".
- Please see [page 8](#) of TASO's research for more limitations of the dataset.

Section 3: Data from TASO research

This section discusses the data our analysis uses from TASO's research to estimate the earnings premium associated with graduating from more versus less competitive universities.

TASO research [Education Pathways: Equality Gaps in Earnings and Employment](#) (2024) and its additional [analysis report](#) estimates the pre-tax earnings premium associated with going to a more competitive and less competitive university at ages 25 and 32 compared to no qualifications beyond KS4 while controlling for:

- KS4 attainment
- Gender
- Ethnicity
- Disadvantage
- SEND status
- Region

Pre-tax earnings premium by age and competitiveness of university:

	Age 25	Age 32
Average pre-tax earnings premium of graduates from more competitive universities compared to those without qualifications beyond KS4: ⁽¹⁾	£2,959 (£4,082) ⁽²⁾	£13,738 (£16,878)
Average pre-tax earnings premium of graduates from less competitive universities compared to those without qualifications beyond KS4:	£950 (£1,311)	£5,879 (£7,223)
Difference in pre-tax earnings premiums:	£2,009 (£2,772)	£7,859 (£9,655)
Average pre-tax earnings of TASO sample	£14,890 (£20,542)	£24,937 (£30,637)
Percent earnings premium compared to average individual	13%	32%

Notes: (1) The TASO research calculates earnings premiums for competitive and non-competitive university graduates compare to those with "no qualifications beyond KS4". However, due to the Raising Participation Age (RPA) policy in the UK, students are now required to remain in education or training until age 18. While this baseline reflects historical cohorts, the relative earnings premium between competitive and non-competitive university graduates remains valid, as both groups are compared against the same category. (2) 2024 Inflation adjusted earnings using the Consumer Price Index including owner occupiers' housing costs (CPIH) published by the ONS are in parentheses for context.

Thus, the earnings premium associated with graduating from a more competitive university versus a less competitive university is equivalent to 13% of the average pre-tax earnings at age 25 and 32% of the average pre-tax earnings at age 32.

Section 4: Individual pre-tax earnings premium

This section explains how we extrapolate the estimated earnings premiums at ages 25 and 32 for graduates of more competitive universities to calculate the average individual lifetime pre-tax earnings premium.

The analysis uses the Office of National Statistics (ONS) 2024 Annual Survey of Hours and Earnings ([ASHE](#)) Table 6.7a which shows the gross annual pay for employee jobs in 2024 in the UK enabling us to access median gross pay for employees by age bands. This can be used in conjunction with the earnings premium percentage calculated previously to more accurately account for changes in earnings by age. This assumes that 13% earnings premium estimated at age 25 is consistent from 25-31 years old and that the 32% earnings premium is consistent from 32-67 years old (retirement age).

Annual pay – Gross £'s for UK employees in 2024

Age range	Median gross income
25-29	£28,918
30-39	£34,563
40-49	£36,122
50-59	£33,073
60-67	£25,542

Source: Data from ONS ASHE Table 6.7a Provisional 2024

The difference in earnings between the TASO And ASHE samples can be from several factors.

- The TASO analysis is at a specific age (25 and 32) whereas the ASHE data is the median earnings within a given age range (as shown in the table above).
- The TASO sample doesn't include individuals from non-state schools who are likely to experience higher earnings compared to state-school graduates.

1) Apply the earnings premium to median earnings by age:

- Multiply the median gross earnings for each age band from 2024 ASHE data by the % earnings premium compared to average individual (derived from TASO research).
- This calculates the estimated annual earnings premium for each age band.
 - $Earnings\ Premium_{25-29} = £28,918 * 0.13 = £2,963$
 - $Earnings\ Premium_{30-39} = £34,563 * 0.32 = £10,893$
 - $Earnings\ Premium_{40-49} = £36,122 * 0.32 = £11,384$
 - $Earnings\ Premium_{50-59} = £33,073 * 0.32 = £10,423$
 - $Earnings\ Premium_{60-67} = £25,542 * 0.32 = £8,050$



- In the analysis, we assumed the 13% earnings premium up to the age of 31 and then began assuming a 32% earnings premium from age 32 onwards. However, we used the ASHE median gross income for the respective age bands.

2) Distribute the premium across specific ages within age bands:

- Since the ASHE table provides earnings in bands (e.g., ages 30–39), assume the same premium applies to each age within that range for simplicity.
- Use these premiums for specific ages (e.g., 30, 31, 32, etc.) to calculate the benefits for each age.

3) Discount the earnings premium for each age:

For each age, from 25 to 67, the annual premium is discounted to its present value using a discount rate of 3.5% (r_1) for the first 30 years and 3.0% (r_2) thereafter following Green Book [guidance](#). As the Year 12 Scholars Programme are, on average, 17 years old, it is necessary to only discount from that base age. The discount factor for each age is calculated as follows:

$$\text{Discount Factor}_{age} = \begin{cases} (1 + r_1)^{age-17} & \text{if } age - 17 \leq 30 \\ (1 + r_1)^{30} * (1 + r_2)^{age-17-30} & \text{if } age - 17 > 30 \end{cases}$$

4) Sum the discounted earnings premium over the lifetime

For each age, calculate the discounted earnings premium and sum these discounted values across all ages (from 25 to 67) to calculate the total present value of the lifetime earnings premium.

$$\text{Total Present Value} = \sum_{age=25}^{67} \frac{\text{Earnings Premium}_{age}}{\text{Discount Factor}_{age}}$$

This then provides a single monetary value which represents the lifetime pre-tax earnings premium of attending a more competitive university compared to a less competitive university, discounted to 2024 £'s.

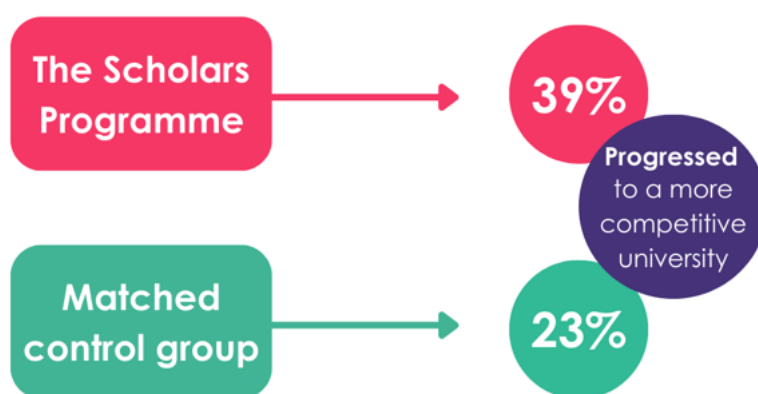
This estimates that the average lifetime individual pre-tax earnings premium associated with graduating from a more competitive university is £162,249.

Section 5: Cohort-level lifetime pre-tax earnings premium

The previous section estimated the average individual lifetime pre-tax earnings premium associated with graduating from a more competitive university. This section demonstrates how we use that figure to calculate the cohort-level lifetime pre-tax earnings premium for The Scholars Programme.

To estimate the cohort-level lifetime pre-tax earnings premium, we combine our annual UCAS Outreach Evaluator analysis estimating the percentage point difference in percentage of a Year 12 Scholars Programme students vs UCAS matched control progressing to more competitive universities with the estimated average earnings premium for graduating from a more competitive university.

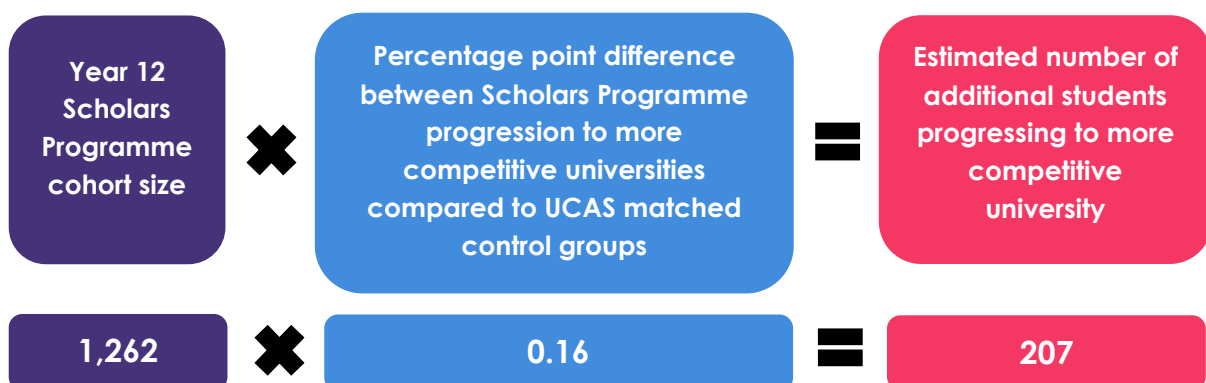
Using the average percentage point difference found from the UCAS evaluations between 2016/17 and 2023/24 evaluations, on average, 39% of Year 12 Scholars Programme students progressed to a more competitive university compared to 23% in the UCAS matched control groups. To see our year on year findings from the UCAS evaluations, please see our [reports](#) published on our website.



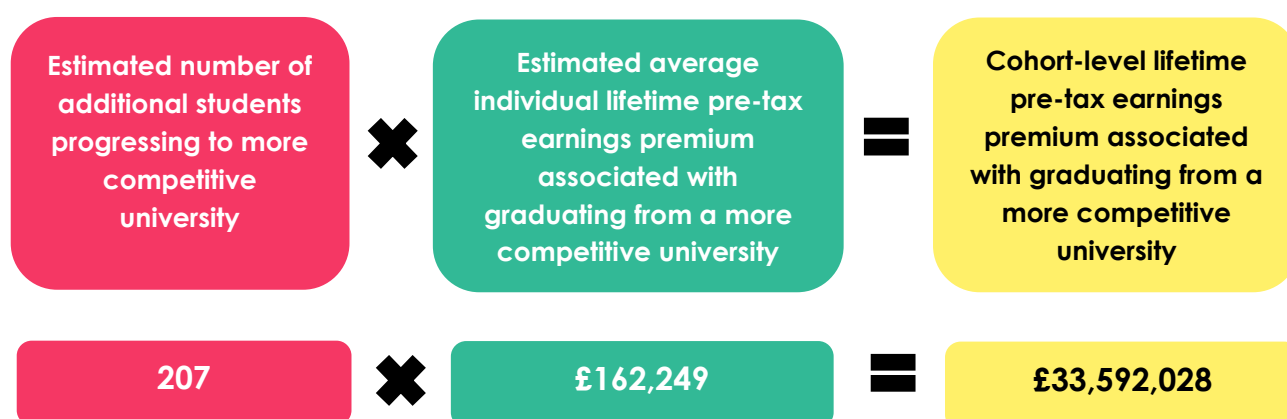
Therefore, there is a 16pp difference (39%-23%) between the acceptance rate of Year 12 Scholars Programme students compared to their matched control group for progressing to more competitive universities.

This is roughly equivalent to 1 in 6 Year 12 Scholars Programme students progressing to a more competitive university who may not have otherwise.

The latest Year 12 Scholars Programme cohort in the UCAS analysis had 1262 students. Based on this cohort, it is estimated that an additional 207 students progressed to a more competitive university who may not have otherwise.



The estimated cohort-level lifetime pre-tax earnings premium associated with increased progression to more competitive universities for Year 12 Scholars Programme students can be calculated by combining the projected number of additional students progressing to more competitive universities, as identified in the UCAS findings, with the estimated average lifetime pre-tax earnings premium for individuals who graduate from these institutions.



This indicates that for the most recent Year 12 Scholars Programme cohort that we have UCAS analysis on, their estimated lifetime pre-tax earnings premium associated with graduating from a more competitive university is over £30 million.

Section 6: Key assumptions

To estimate the lifetime pre-tax economic benefit of Year 12 Scholars Programme participants, the following assumptions were made:

University groupings

- The UCAS evaluation uses the university category 'UCAS High Tariff' university. We assume that this grouping is equivalent to the TASO definition of "The 52 most competitive higher education providers in the UK (based on the A Level UCAS tariff score of entrants)". These groups are likely highly similar but may have slight differences; however, this is the most direct comparison available.
- The exact universities classified as more competitive in the mid-2000s may differ from those considered more competitive in the 2020s. For this analysis, we assume that the earnings premium associated with attending a more competitive university remains consistent, even if the specific universities within this category have changed over time.

Earnings premium

- The analysis assumes a consistent percentage earnings premium of 13% from ages 25–31 and 32% from ages 32–67. This premium is applied to age-specific



median earnings data from ASHE, ensuring that the projected earnings trajectory reflects observed earnings patterns across the working life. While the assumption of consistent premiums simplifies the analysis, this approach avoids speculative assumptions about differential growth rates between university graduates.

- ASHE (Annual Survey of Hours and Earnings) median earnings by age bands represent the best available estimate for lifetime earnings trajectories but may not perfectly reflect earnings trajectories for university graduates.

UCAS evaluation

- The UCAS evaluator findings indicate the percentage point difference between Year 12 Scholars Programme students and a matched control group for acceptance to a more competitive university. We assume that this percentage points difference would be equivalent to the percentage point difference in graduating from a more competitive university.

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