

# Cambridge Bursaries Research Project

## Executive Summary

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## EXECUTIVE SUMMARY

In 2018/19, the Cambridge Admissions Office and the Colleges commissioned a year-long research project to evaluate the effectiveness of the University's flagship financial support package, the Cambridge Bursary Scheme (CBS), and also to explore the first year of implementation of the Pilot Top-Up Bursary Scheme (PTUBS).

This research was undertaken in two stages: a first stage that led to the submission of a report to the Office for Students (OfS), and a second stage that built on the recommendations of that initial report.

The report to the Office for Students (OfS), entitled "Financial support and undergraduate outcomes in the University of Cambridge" was published by the University in June 2019 and is available here: <https://www.cao.cam.ac.uk/admissions-research/financial-support-and-undergraduate-outcomes-2019>.

A second report, including more extensive work on the CBS and all PTUBS-relevant results, has been submitted to the Cambridge Bursaries Research Project Steering Group and is being circulated internally to relevant College and University committees.

This document summarizes the conclusions of the whole research project, as captured in the two reports above.

### Evidence from the literature

To frame the exploration of CBS and PTUBS, the research project included a review of existing national and international evidence in relation to the role of financial support in supporting student outcomes. The evidence from the literature suggests a number of key findings that need to frame the University's strategy for providing financial support for students.

1. Socio-economic disparities in access to higher education remain stark: poorer students are more likely to drop out from HE and have worse academic outcomes from university. Whilst there have been modest improvements in widening participation, these have largely been seen in non-Russell Group universities, with the socio-economic stratification across the sector showing little sign of reducing.
2. By far the most important driver of progression and performance at university is prior attainment on entry to HE.
3. Financial issues are potentially important over and above attainment, however. Though there is little evidence that working-class students are put off from applying to university by the prospect of financial debt, studies have found that fear of debt (risk aversion) does drive the likelihood of low-SES students applying to universities with a low cost of living and those with good opportunities for term-time employment.
4. New undergraduates appear not to be well-informed about the level of financial support available to them, but those who are more aware of the availability of financial support take this into account when deciding about their HE institution. Poorer students, students from certain ethnic minority groups, and those attending post-1992 universities are, on average, less well informed.

5. Evidence for the effectiveness of bursaries as a means of financial support enabling participation is limited and inconsistent: some studies have found that they can increase retention of undergraduates in their first year of study and reduce levels of 'liquid debt' and reliance on parental financial support. Other studies, by contrast, have found that even when a bursary system is in place, students from poorer backgrounds remain more likely to drop out or perform badly in their degrees.
6. Universities in the U.K. are using financial support programmes as part of a strategy of competitive recruitment of students. Far from widening participation, this is compounding and reproducing the existing divisions or inequalities within and across the sector. To combat this, institutions are advised to embed a whole-institution approach to WP, involving staff from across the institution, and to consider students' whole lifecycle – from pre-entry to on-course success, to post-graduate progress.

These issues underpin the analysis of both the Cambridge Bursary Scheme, and of the Pilot Top-Up Bursary Scheme.

## The Cambridge Bursary Scheme

The CBS has been the main mechanism of financial support for undergraduate students at Cambridge since its introduction in 2006/07 (coinciding with the Higher Education Act 2004 that instituted a significant rise in tuition fees). The purpose of the Bursary is to compensate for the financial disadvantage experienced by some students and to afford them the opportunity to participate fully in the student experience at Cambridge. The University and the Colleges jointly contribute financially to the CBS. The Bursary is a non-repayable and means-tested award. It is provided on a sliding scale to eligible Home and EU undergraduates on the basis of verified household income.

Other sources of financial support exist at Cambridge. Colleges can, and do, offer additional financial support to some students. Separate from their contributions to the CBS, Colleges use their discretion as to the form, eligibility criteria, and amounts of support provided to students. These forms of support may be both needs- and merit-based. Additionally, Faculties, departments and other academic institutions may make separate awards, usually merit-based in response to university examination performance.

The evidence from the literature suggests that students from lower income households will tend to have poorer academic outcomes for a variety of reasons, including potential pressures around financial issues. One aim of this research is therefore to explore the extent to which the Cambridge Bursary Scheme is associated with a narrowing of an otherwise-present outcomes gap.

An evaluation of the impact of the CBS on student outcomes is difficult in the absence of a true counterfactual because of the manner in which financial support is provided at Cambridge, whereby all who qualify for it receive it. This eliminates the possibility of comparing outcomes for students with similar socio-economic backgrounds (such as household income) who only differ by receipt of financial support, because these groupings do not exist. Instead, this research compares those who receive a full CBS, a partial CBS and no CBS, allowing for differences in students' other characteristics. The evidence presented is therefore not necessarily causal in nature.

A range of robust statistical techniques were applied to existing financial support and student outcomes data. These analyses include:

1. The statistical analysis component of the Office for Students' Financial Support Evaluation Toolkit, applied to a specific dataset returned to the collegiate University by HESA with the bespoke aim of carrying out this analysis
2. Further regression analyses, and separately a propensity score matching (PSM) approach, applied to a broader sample of students than the OfS/HESA data above and making use of the collegiate University's further records.

The consistency of results, across different methodological approaches, and across all available data gives some confidence that the models used did manage to create sufficiently similar comparison groups against which to compare recipients of the (partial, or full) CBS bursary and that the overarching conclusions are robust to different modelling approaches and specifications.

Specifically, the analysis sought to answer a number of research questions. The first broad question was answered using the HESA/OfS data and was guided by the OfS Financial Evaluation Toolkit. The OfS report reports fully on all these analyses

***RQ1: Controlling for students' background, how do recipients of full CBS bursaries, partial CBS bursaries, and other types of financial support from either Colleges or University sources differ in terms of their continuation into second year, completion rates, degree outcomes, and graduate destinations?***

Across the board, results are positive for Cambridge students, whether they receive financial support or not. For instance, continuation rates exceed 96%, and at least 85% of graduates who had been supported through CBS achieved positive graduate outcomes in the form of graduate-level jobs or further study.

Students from households with the lowest declared incomes, who were therefore in receipt of the full Cambridge Bursary, perform at least as well if not better than peers in receipt of the partial Bursary (and therefore with higher household incomes, but still under the main eligibility threshold). Further analysis comparing students from schools historically underrepresented at Cambridge or those from relatively low-performing schools reveals that recipients of the full CBS perform similarly to recipients of the partial Bursary, even after accounting for the potential confounding influence of other personal background factors. Across the piece, no systematic differences in outcomes between groups defined by their receipt of Bursary support, and therefore of different economic backgrounds were found.

When exploring other types of financial assistance, including merit-based awards, the results suggest that recipients of non-Bursary support gain a higher proportion of Firsts than recipients of Bursary support. Given that non-Bursary financial support is awarded for academic achievement, amongst other reasons, this finding is not surprising.

A further five research questions were then answered using the collegiate University's broader sets of data. These include more cohorts of students, granular information on student outcomes for each year of study, and more information about the number of years, and amount of CBS support received.

**RQ2:** *Do students who receive a CBS bursary differ in any systematic way from non-recipients in terms of their socio-demographic profile and background?*

Recipients of the Cambridge Bursary are more likely to have widening participation-related characteristics than non-recipients, as well as being more likely to belong to socio-demographic groups that are traditionally under-represented in higher education. The results suggest that the CBS targeting mechanism (based on household income alone) does seem to identify students in need of support as identified by a range of other commonly used metrics. The overlap between CBS receipt and WP flags is however, not total, with some students who are “flagged” as being from a WP background during the admissions process yet are not eligible for the bursary. Given that many (though not all) of the WP flags are based on geographic/neighbourhood-level data, the introduction of individual-level WP flags may provide an opportunity to explore this overlap with greater granularity.

**RQ3:** *Controlling for students’ background, is CBS receipt in each respective study year associated with different outcomes in that respective study year?*

In terms of 1<sup>st</sup> and 2<sup>nd</sup> year achievement levels, there are no differences between CBS recipients (of full, or partial bursaries) and non-recipients after accounting for background characteristics.

**RQ4:** *Controlling for students’ background and prior attainment in years 1 and 2, is CBS receipt in the final year associated with different final year outcomes?*

Students who have ever been in receipt of a CBS bursary achieve on average very slightly lower final year (and respectively 3<sup>rd</sup> year) percentage scores; and are slightly less likely to receive a ‘good’ degree classification, compared to students who have never received a bursary. This association holds over and above the influence of students’ background, where they live, the school they went to, and their prior educational attainment.

**RQ5:** *Controlling for students’ background and prior attainment in years 1 and 2, does the number of years of CBS bursary support have an impact on final year outcomes?*

Controlling for background and prior attainment factors, the analysis indicates that receipt of a CBS bursary for 2 or 3+ years is associated with a lower probability of achieving a ‘good’ degree outcome (2:1 or above). The magnitude of the difference is very small.

**RQ6:** *Controlling for students’ background and prior attainment in years 1 and 2, does the amount received through the CBS bursary have an impact on final year outcomes?*

A greater overall level of bursary support corresponds to a slightly decreased likelihood in achieving a 2:1 or above in the final year. The difference in likelihood of achieving a ‘good’ degree outcome associated with every additional £1000 of support is very small (less than 1 percentage point).

#### *Overall statistical analysis conclusions*

These analyses therefore suggest that the Cambridge Bursary scheme works broadly as expected, in effect compensating for an otherwise potentially-present attainment gap between students from

lower and higher income households. Specifically, where gaps do exist, the differences in the academic outcomes of those in receipt of the CBS and those who are not (or those in receipt of different levels of CBS support) are small and often statistically insignificant.

## Student perspectives and experiences of the Cambridge Bursary Scheme

Alongside the statistical component, the OfS Financial Evaluation Toolkit also provided the tools to explore students' perspectives and experiences of the Cambridge Bursary Scheme, through a broad survey, and in-depth interviews. These were both carried out in Autumn 2018. The survey was carried out by the Cambridge Admissions Office, with support from the Bursaries Research Group.

With a good response rate, and drawing on matched local administrative data, the survey found that financial support enables students to undertake their studies at Cambridge, and contributes substantially to their wellbeing, participation in academic and social activities, and overall student experience. The survey also suggested that despite the financial support, nearly all students make use of further personal sources of funds. Almost half of respondents undertook some form of paid work, mostly during vacations. Students rated the income generated through work as substantially less important than the financial support from the University and Colleges in allowing them to continue at university. Approximately 60% of respondents were aware of their eligibility for the CBS during the undergraduate application process; over half of these students knew how much support they were likely to receive.

The interviews added depth to the survey findings. Thirteen students, all recipients of CBS in 2017/18 were interviewed, with questions focusing on the perceived value of the support, its uses and implications for academic and social life, and also broader reflections on financial support, awareness of it, and its role in supporting students. All thirteen students interviewed for this component reported valuing the financial support they received highly. Financial support enables them to focus on their studies and to socialise and exchange ideas with their peers; it significantly mitigates concerns around burdening their families, lowering levels of stress and worry about day-to-day survival. Interviewees listed financial matters as one of several key aspects in their decision to apply to the University of Cambridge initially. They also reported fairly good levels of knowledge of the broad system of financial support once at university, although a third of respondents were unsure during the application process about whether they would qualify for any financial assistance. Students generally saw the system of financial support at Cambridge as operating well and as evidence of the University's commitment to welcome all with the potential to succeed at Cambridge, investing in students and supporting them throughout their studies. They put forward a variety of suggestions for potential improvement of the collegiate University's provision. A majority of these focused on increased clarity and availability of information.

## The Pilot Top-Up Bursary Scheme (PTUBS)

In the academic year 2018/19 a group of 13 Colleges ran a pilot top-up bursary scheme (PTUBS) that provides support over and above the existing Cambridge Bursary Scheme (CBS). This scheme is designed to reduce the sharpness of the reduction in funding for each of the steps in household income applied by the CBS, and to extend the eligibility for financial support to those on a family income of between £42,000 and £62,000. Whilst the CBS provides tapered support for students from

households with income below £42,620, the PTUBS offers modest additional support to all students from households with incomes up to £62,000 per year.

The Pilot Top-Up Bursary Scheme (PTUBS) was evaluated through a combination of qualitative interviews with recipients, discussions with the College leading its implementation, and a small student survey. This collection of evidence, while unable to assess the impact on outcomes (which will be possible in the future) points to successful implementation and positive student attitudes towards the scheme. This is in line with students' perspectives prior to implementation of the scheme, as identified in the qualitative work undertaken for the previously-published OfS report on financial support.

In particular, students in receipt of PTUBS who were interviewed and surveyed for the research felt that the University's financial support provision had been well-managed and generous, on the whole. Surveys and interviews with recipients of the PTUBS support package provided an insight into how the additional support had been used in the first year of the pilot scheme (with spending on rent, and regular daily expenses reported by students). The findings of both of these investigations suggest that PTUBS support made a clear positive contribution to students' academic, social and emotional well-being.

Findings of a survey of PTUBS recipients at one College suggest that students receiving the enhanced financial support package were able to participate more fully in social and academic life at Cambridge than they might otherwise have been able to without such support. Having this additional funding to pay for rent and everyday living expenses meant that students were able to enjoy a more comfortable life while studying, participating in social activities, hobbies and travel. This, in turn, appears to be having a positive impact on their overall well-being, reducing anxieties around finances and enabling them to forego paid employment.

Consistent with the findings of the literature review, the student interviews also suggested that financial considerations were not seen as the overriding factor for applicants and no interviewee's decision to apply to Cambridge was adversely influenced by uncertainty over funding. Nonetheless, participants emphasised the need for an increased visibility and accessibility of information concerning funding eligibility requirements, allocation of funding and application deadlines.

In relation to the implementation of the scheme, key members of the operational team were interviewed and provided a detailed account of the experience of running PTUBS in its first year. Their views suggested that the first year of PTUBS had gone very smoothly. In fact, the main operational lead on PTUBS highlighted that it had gone "smoother than they had anticipated" and that this was largely thanks to coordination with the Office of Intercollegiate Services. The interviewed members of staff reported that participating Colleges had found the process a rather straightforward one and that, in addition to being issued step-by-step guidance as to the calculation of students' top-up bursary amounts, the Tutorial Management team at Trinity College (leading on the PTUBS implementation) were also available to answer any queries and provided ongoing support.

## Recommendations

Overall, the research has found evidence for the positive role that financial support can play in relation to supporting student outcomes, both in relation to CBS and PTUBS. That said, there remain small differences in academic outcomes between lower and higher income students at Cambridge. Such differences should continue to be investigated as more data becomes available. The research has also generated a series of recommendations. These concern both substantial issues in relation to financial support more broadly, as well as practical data-related aspects that will enable future evaluation.

### Financial support

We recommend that:

1. The collegiate University reviews what indicators a new version of CBS might use for targeting purposes. Household income is already an individual-level, verified, and widely accepted direct measure of disadvantage but it may not capture all aspects of deprivation that the University's access and participation strategy seeks to address. WP flags measured at the individual level (e.g. free school meal eligibility during schooling) may provide alternative and longer run indicators of student disadvantage not captured by their household income in the previous tax year.
2. The collegiate University seeks to align as much as possible the indicators used to identify WP students for the purposes of providing financial support with those used in its widening participation activity and its student participation/experience initiatives.
3. The collegiate University provides enhanced, clearer, and more readily accessible information on the financial support available for undergraduate students. This information is likely to have the greatest impact when communicated clearly in a timely manner and through appropriate channels. The information should include College-specific sources of financial support. This is necessary if application decisions are to be made on the basis of as-complete-as-possible information. It is of course vital that the current levels of financial support being advertised remain the same or increase for students currently making decisions about applications. This is to ensure that students do not make decisions based on financial support that is no longer in place.
4. The collegiate University reviews levels of financial support. Since evidence on the impact of PTUBS on student outcomes is not yet available. However, the evidence preliminarily suggests that PTUBS (which provides support to students from higher-income backgrounds than CBS recipients) is viewed positively by students and may reduce demand for hardship funds in participating Colleges.

### Data-related

This research has illuminated the complex data landscape in the University. Student data is held in a variety of departments across the University, as well as in Colleges. We recommend that:

5. The collegiate University engages in a data harmonisation exercise that maps student data relevant to financial support and WP programme evaluation. The technical guide in Appendix 4 of the second report provides a starting point for this work. Such a mapping would ideally be completed prior to the next OfS report on University financial support due in 2021.