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# Graduate Students and Tuition Tax Benefits

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# Introduction

Since President Clinton first enacted tax credits for college tuition in the late 1990s, lawmakers have expanded these policies, which now amount to over \$20 billion in annual aid. While these benefits are commonly described as helping families pay for college, which usually means a two-year or four-year degree, they also apply to graduate and professional education. These students are eligible for two tuition tax benefits that undergraduates may also claim: the \$2,000 Lifetime Learning Credit (the Lifetime Credit) and the \$4,000 Tuition and Fees Deduction (the deduction). In this post we analyze which graduate students can claim these benefits and how much they can claim, revealing some little-known facts. Some of the key findings are:

- A greater share of graduate students are eligible for tax benefits as compared to undergraduates;
- Over half of graduate students earning above \$106,000 were eligible for a tax benefit, which is 3.8 percent of graduate students;
- Students pursuing degrees linked to public service, such as a master's of education or social work, have the highest rates of

eligibility at nearly 90 percent, while those enrolled in research PhD programs have the lowest rate of eligibility at 49 percent;

- Graduate students attending for-profit schools qualify for the largest benefits, compared with students at public and nonprofit schools;
- Undergraduates are eligible for much larger tax benefits than graduate students on average, because they may claim the American Opportunity Tax Credit and graduate students cannot. Should the AOTC expire in 2017 as scheduled, tax benefits for the two groups would move close to parity, although higher income graduate students would qualify for slightly larger benefits than undergraduates in that category;
- Graduate students who work while attending school are more likely to qualify for tax benefits and receive larger-than-average tax benefits because their earnings are high enough that they have more federal tax liability to offset. Students who generally attend full-time, such as law students, have some of the lowest rates of eligibility for tax benefits.

# Methodology

In a report earlier this year, *A New Look at Tuition Tax Benefits*, we used nationally representative survey data, the quadrennial National Postsecondary Student Aid Study (NPSAS), to estimate the optimal tax benefits undergraduates were eligible to claim. In this post we report the results from the same analysis for graduate and professional students (a group we refer to as “graduate students” for simplicity) and compare them with those for undergraduate students. We use the 2011-12 school year NPSAS. A methodology section at the end of our earlier paper explains more.

Besides distinguishing between graduate and undergraduate students, our approach relies on survey data rather than data from income tax returns, in contrast to prior research. We can examine how eligibility for tax benefits is distributed among the entire graduate student population. We can also identify the characteristics of students and families who cannot claim benefits and how eligibility and benefit amounts differ based on the type of school a student attends and the degree program she pursues.

In our analysis, student income information and tax benefit eligibility rules are from the tax year prior to 2011-12, while tuition and financial aid information is from 2011-12. One limitation of this approach is that a graduate student’s income may be different before and after he enrolls, and it is the student’s earnings during the calendar year she is enrolled that will determine her tax benefit eligibility.

Parts of our analysis break out information on different types of graduate degrees and programs as defined in the NPSAS, including Master’s, PhD and post-Bachelor’s and post-Master’s certificates. PhD students include three categories: “PhD – Research” is a traditional doctoral student in an academic discipline; “PhD – Professional” are degrees designed for careers outside of the academe, such as medicine and law. “PhD – Other” is a small category that includes any PhD not in the other two categories. All degree and program groups shown have a sample size of at least 100, unless otherwise noted.

# Background:

## Federal Tuition Tax Benefits

**Lifetime Learning Tax Credit** is available to both undergraduate and graduate students. It allows filers to reduce their federal taxes up to \$2,000. The credit is equal to 20 percent of the first \$10,000 in tuition and fee expenses. Income limits are indexed to inflation, and are set at \$51,000 or (\$102,000 for married filers) for the full benefit; those earning above those amounts but less than \$61,000 (\$122,000) are eligible for a partial credit as the benefit is phased out. As the name implies, it is meant to facilitate “lifetime learning” by providing tax benefits to students in any year of postsecondary education.

**Tuition and Fees Deduction** is available to both undergraduate and graduate students. It allows students or families to deduct up to \$4,000 in tuition and fees from their incomes, reducing taxes by their marginal tax rates (e.g., 25 percent of \$4,000 for those in the 25 percent tax bracket). Students and families do not need to itemize deductions to claim it. Income eligibility is capped at \$65,000 (\$130,000 for married filers). Above these limits a partial deduction of up to \$2,000 is available for those with

incomes less than \$80,000 (\$160,000). The benefit has been available since 2002. It has always been temporarily authorized, but extended multiple times. The last extension made the credit available through 2014; tax filers will not be able to claim the deduction in 2015 unless Congress acts to extend it.

**American Opportunity Tax Credit (AOTC)** is the largest tax benefit but available only to undergraduates in their first four years of school who are enrolled in a degree program at least half time. These students may receive a credit up to \$2,500, or 100 percent of the first \$2,000 in tuition in fees and 25 percent of the next \$2,000. Up to \$1,000 of this credit is refundable, meaning the tax filer can claim it even if she has no tax liability to offset. Eligibility for the full AOTC is capped for single tax filers earning \$80,000 (\$160,000 for married filers). Those earning up to \$90,000 (\$180,000) can claim a partial benefit under a phase-out provision. The AOTC expires after the 2017 tax year, and the Hope Credit becomes available to undergraduates in the first two years of study. It is not refundable and is worth a maximum of \$1,800.

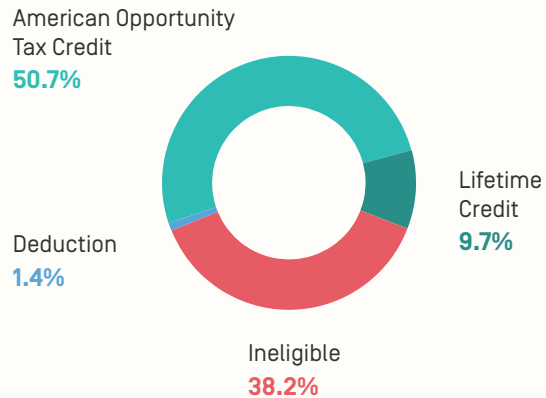
# 1

Comparing Tax Benefit  
Eligibility for Graduate and  
Undergraduate Students

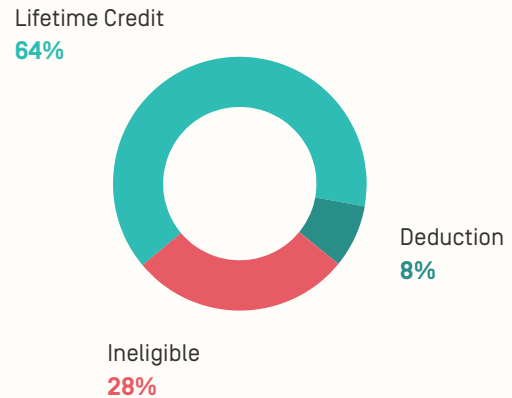
Figure 1

## Comparing Graduate and Undergraduate Tax Benefit Eligibility

**Tax Benefit Eligibility of Undergraduate Students [2011-12]**

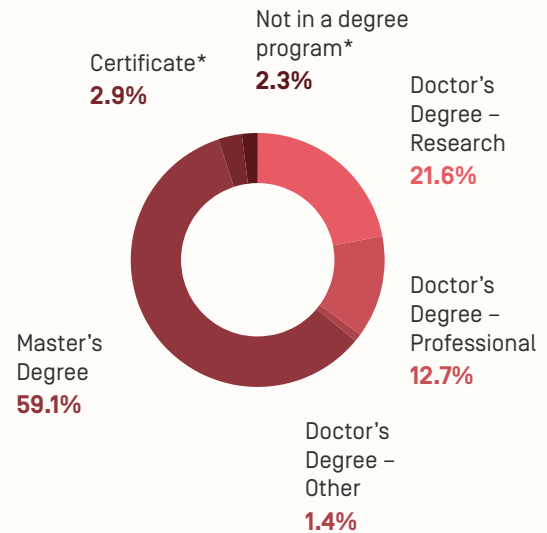


**Tax Benefit Eligibility of Graduate Students [2011-12]**



\*Sample size limits the reliability of this estimate.  
Source: New America, NPSAS 2011-2012

**Ineligible Graduates, by Degree Program**



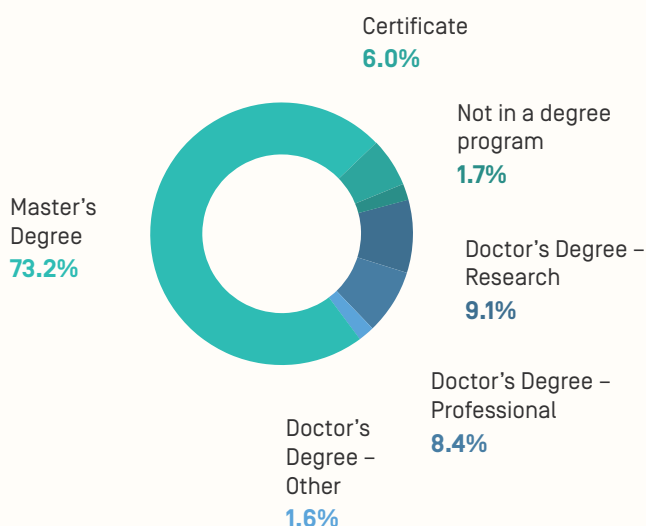
- One of the key findings in our earlier report was that a large share (38 percent) of undergraduates are not eligible for a tax benefit, mainly because grants and other aid eliminate their tuition costs, and tax benefits cannot be claimed for living expenses. Among graduate students, however, the share not eligible for a tax benefit shrinks to 28 percent. A greater share of graduate students than undergraduates are eligible for tax benefits because they are more likely to incur tuition costs: About 88 percent of graduate students pay some tuition costs compared with only 76 percent of undergraduates.
- Most graduate students qualify for the largest benefit by claiming the Lifetime Credit and only 8 percent benefit from claiming the deduction. Undergraduates, however, generally qualify for the largest benefits by claiming the American Opportunity Tax Credit (AOTC), which graduate students cannot claim. The AOTC is more generous than the other benefits on nearly every measure and results in much larger tax reductions, on average.
- The Lifetime Credit tends to be more valuable to graduate students than the deduction, but higher income graduate students cannot claim the Lifetime Credit. They can, however, claim the deduction due to its higher income cutoff (\$160,000 for joint filers).

# 2

## Graduate Student Tax Benefit Eligibility By Degree and Program

Figure 2

### Distribution of Total Tax Benefit Dollars by Graduate Degree of Eligible Students (2011-12)

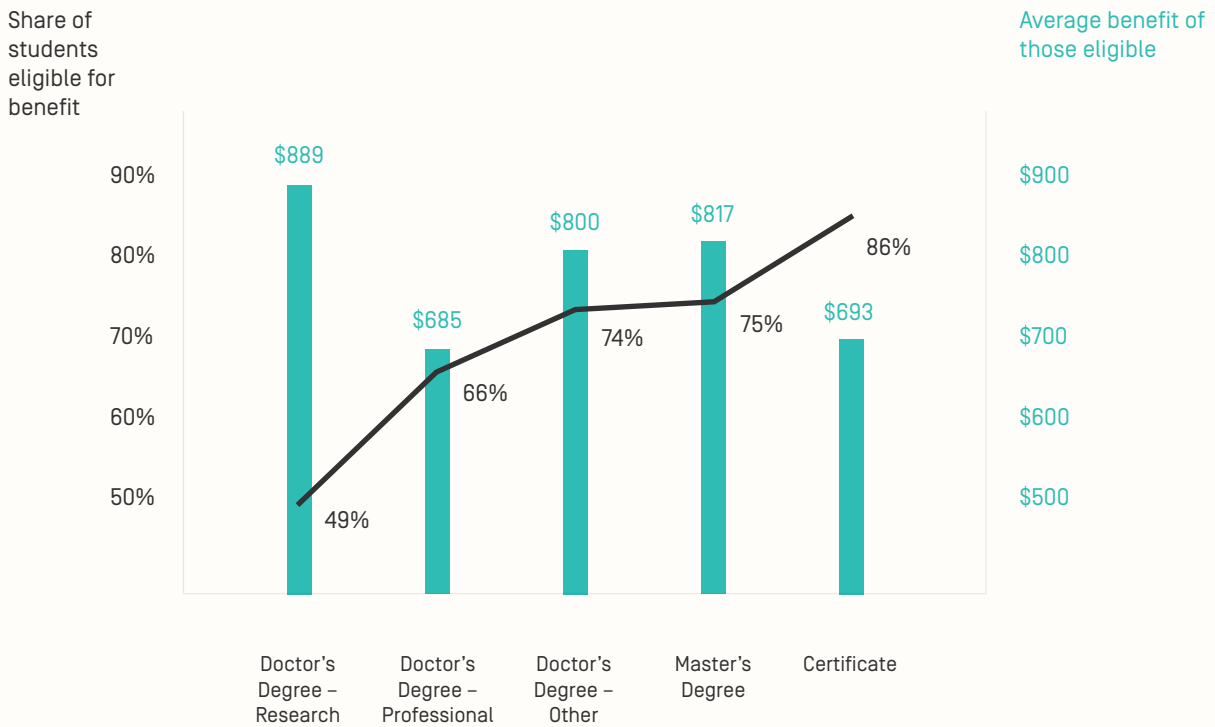


Source: New America, NPSAS 2011-2012

- Of the total dollar value of tax benefits available to graduate students, master's degree students as a group are eligible for the most aid. Nearly three quarters of all of the dollars available through the tax benefits can be claimed by master's degree students. That is because they make up the bulk of graduate students (67.6 percent), but also because they are more likely to pay tuition than PhD students. About 90 percent of master's degree students pay tuition costs compared with 69 percent of research PhD students.

Figure 3

# **Average Tax Benefit of Eligible Graduate Students, by Degree Type (2011-12)**

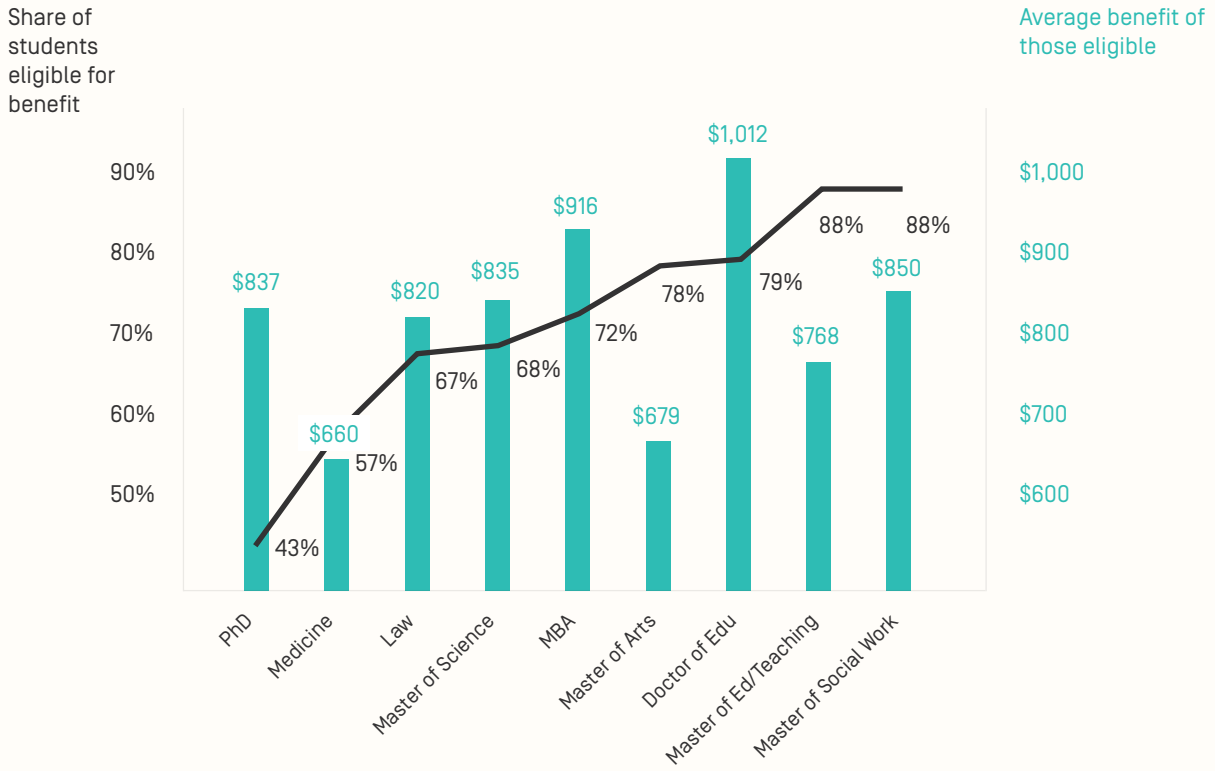


Source: New America, NPSAS 2011-2012

- Across graduate programs, substantial variation exists in the average benefits, as well as the share of students pursuing various degrees who are eligible for a tax benefit.
- PhD candidates, on average, are the least likely to be eligible for a benefit (49 percent), but those who are eligible are able to claim the highest amount of any type of graduate program (\$889).
- On the opposite end of the spectrum, students pursuing a post-bachelor's or post-master's certificate are eligible for the smallest average award (\$693), but are most likely to be eligible for a benefit (86 percent).

Figure 4

## Average Tax Benefit of Eligible Graduate Students, by Program [2011-12]

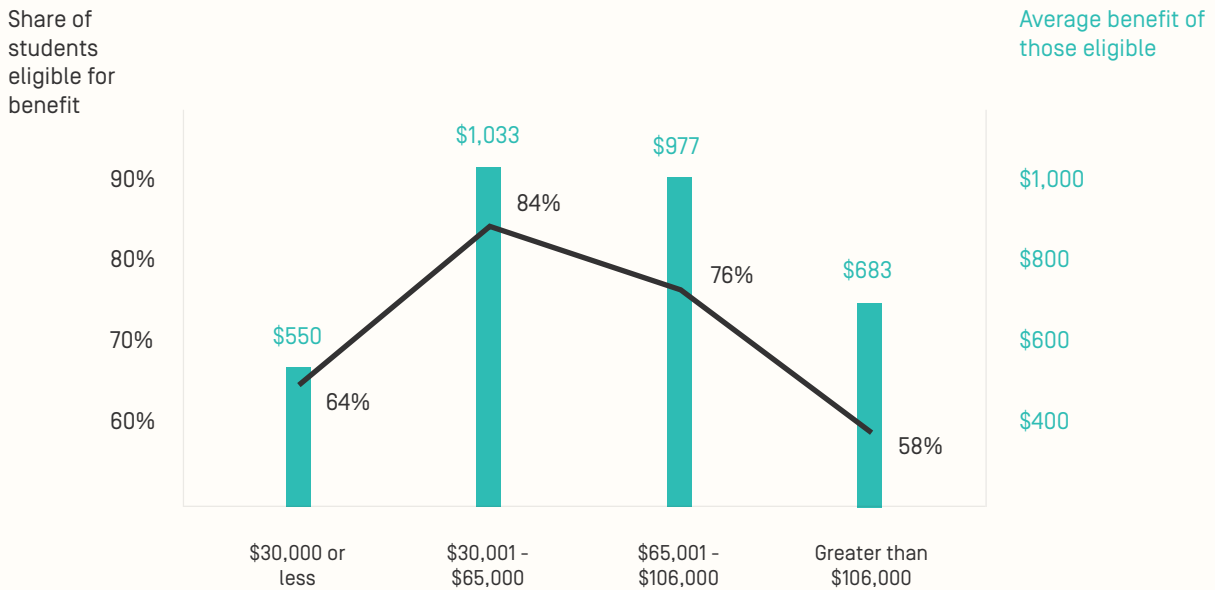


Source: New America, NPSAS 2011-2012

- Graduate students who work while attending school are more likely to qualify for a tax benefit because their earnings are high enough that they have federal income tax liability to offset. Those attending full-time have low in-school earnings and are least likely to qualify for this same reason. However, students pursuing PhD's are an exception.
- Students pursuing PhD's are the least likely to be eligible for a tax benefit because so many of them receive sufficient aid to offset all of their tuition expenses. Their incomes are about average compared with the entire graduate student population.
- Students pursuing medicine and law degrees are less likely to be eligible for a tax benefit because their earnings while enrolled are low and they therefore are less likely to have federal tax liability to offset. Relatedly, these students are much more likely to attend full-time. For example, 18.8 percent of law students have no federal tax liability (before credits). This is true for just 6.5 percent the overall graduate student population.
- Conversely, students pursuing public service degrees, such as Doctor of Education, Master of Education, Master of Social Work, are most likely to be eligible for a benefit because their earnings while enrolled are high enough that they have federal income tax liability to offset.
- Curiously, the Doctor of Education students are eligible for the largest average tax benefits. That is because they have the highest average in-school earnings (\$67,000) of any group, and therefore have the most income tax liability to offset, allowing them to claim larger tax benefits.
- Another surprising finding is that law students are less likely to be eligible for a tax benefit than most other students, despite the relatively high cost of a legal education. The primary reason for this is that these students are less likely to owe federal income taxes due to low in-school earnings and therefore have no taxes to offset.

Figure 5

**Average Tax Benefit of Eligible Graduate Students, by Income [2011-12]**



Source: New America, NPSAS 2011-2012

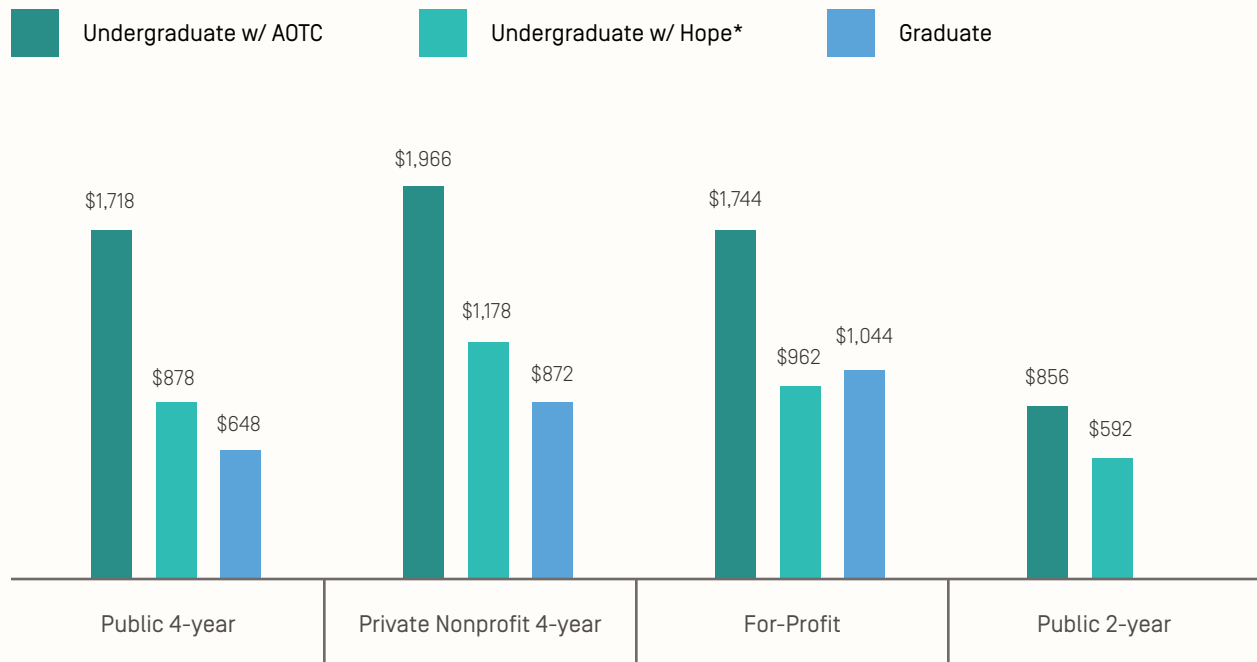
- While graduate students' incomes are a poor measure of what they will go on to earn after school, we analyzed tax benefit eligibility by income because the benefits include income cutoffs for eligibility.
- That analysis shows that some relatively high-income graduate students are still eligible to claim a significant tax benefit. About 58 percent of students earning above \$106,000 were eligible for a tax benefit, which translates to 3.8 percent of graduate students. On average these students could claim nearly \$700, more than those earning low incomes. These statistics highlight an odd feature of federal policy: a relatively well-off set of individuals, those who have obtained college degrees and high incomes, who have gone on to pursue graduate degrees, qualify for federal student aid via tax benefits.

# 3

Comparing Tax Benefits for  
Graduate and Undergraduate  
Students By School and  
Income

Figure 6

**Average Tax Benefit of Eligible Undergraduate & Graduate Students, by School [2011-12]**



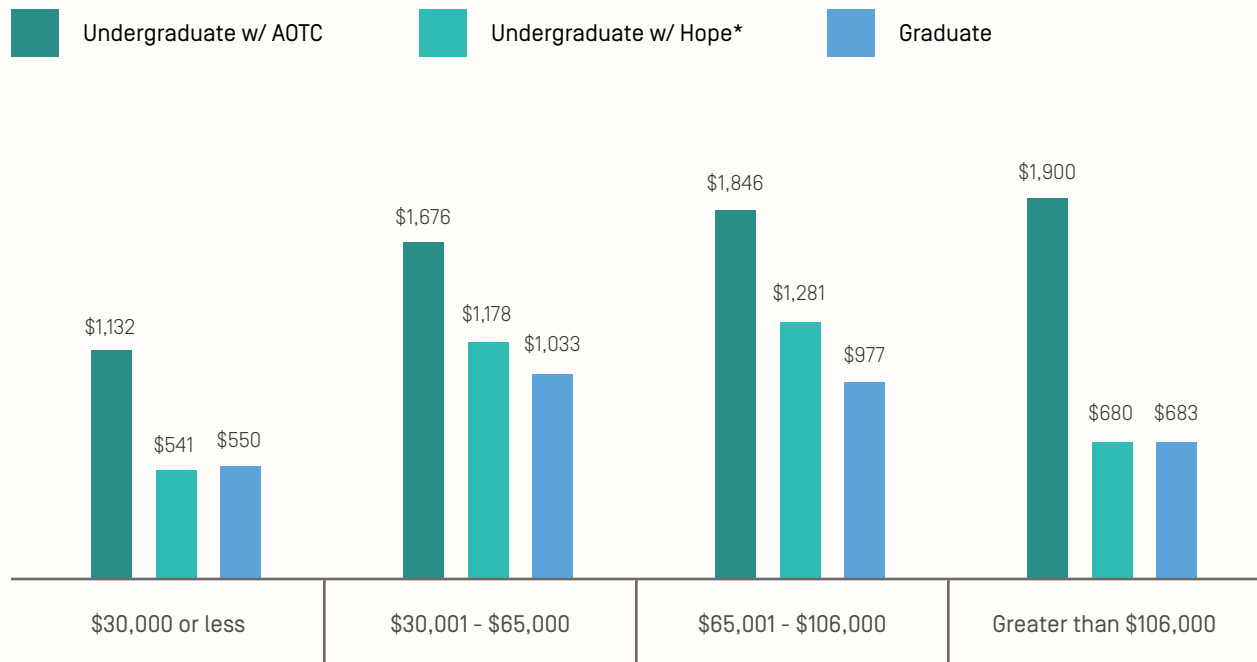
\*The American Opportunity Tax Credit temporarily replaces the Hope Credit through tax year 2017, after which the Hope Credit becomes available again. Both credits are for undergraduates only. These figures show the effect of the AOTC expiring using the 2011-12 data.

Source: New America, NPSAS 2011-2012

- Our analysis allows us to examine tax benefit eligibility by the types of schools undergraduates and graduate students attend, something other studies have not done.
- Among graduate students eligible for a tax benefit, those attending for-profit schools qualify for the largest average benefit, \$1,044. Among undergraduates, those attending private nonprofit four-year schools qualify for the largest average benefit.
- Because AOTC is temporarily authorized, we also analyze tax benefit eligibility if the AOTC expired and the Hope Credit were instead available for undergraduates. Benefits for graduate students would stay the same under that scenario, but would the average benefit for undergraduates would fall. Interestingly, if the AOTC expired, graduate students would qualify for larger benefits than undergraduates among students attending for-profit schools.

Figure 7

**Average Tax Benefit of Eligible Undergraduate & Graduate Students, by Income (2011-12)**



\*The American Opportunity Tax Credit temporarily replaces the Hope Credit through tax year 2017, after which the Hope Credit becomes available again. Both credits are for undergraduates only. These figures show the effect of the AOTC expiring using the 2011-12 data.

Source: New America, NPSAS 2011-2012

- Including undergraduate students in tax benefit eligibility by income groups reveals some interesting points. We also analyzed a hypothetical scenario in which the AOTC expires to compare tax benefits for undergraduate and graduate students.
- Undergraduates are eligible for larger benefits because they may claim the AOTC. The difference is largest for those families earning over \$106,000.
- If that benefit were to expire (as it is scheduled to after 2017), undergraduates would be eligible for the Hope Credit, as well as the Lifetime Credit and the deduction. Because the Hope Credit is less generous than the AOTC in many respects, the expiration of the AOTC would cut average undergraduate benefits by a substantial margin.
- If the AOTC were to expire, tax benefit eligibility between undergraduates and graduate students would move close to parity in terms of average benefits, particularly among low and higher income families. Moreover, graduate students in the lowest and highest income groups would be eligible for slightly larger benefits than their undergraduate peers.

# Conclusion

This study offers the first-ever analysis of the aid graduate and professional students can claim through federal tuition tax benefits. Combined with our earlier study, *A New Look at Tuition Tax Benefits*, which focuses on undergraduate students, it provides a complete picture of this large source of federal student aid. Breaking out undergraduate and graduate students in our analysis has revealed some new and surprising facts about tuition tax benefits, and serves as a reminder that these two groups of students are quite different, but lawmakers and researchers tend to treat them as one when it comes to tax benefit policy.

Notably, we now know that graduate students are more likely to qualify for tax benefits than are undergraduates, and without the American Opportunity Tax Credit, graduate students in the lowest and highest income groups would qualify for larger benefits on average than undergraduates in those groups.

We also discovered that graduate students who work while enrolled are more likely to benefit from the tax benefits and to qualify for larger benefits — what might be called a windfall benefit for part-time attendance. Meanwhile, full-time students have less time to work and therefore do not accrue sufficient earnings to generate the taxes needed to claim tax benefit. It turns out that qualifying for a tuition tax benefit as a graduate student is as dependent on working full-time as it is on paying tuition. That cannot be what policymakers intended.

Put another way, the largest tuition tax benefits for graduate students go to people who are fairly well-off: college graduates with full-time jobs who are pursuing even more postsecondary education. Seen in that light, one could make a good case for redirecting tax benefits for graduate school to those who are still struggling to pay for a 2-year or 4-year degree.



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