

2018 GOP TAX PLAN – PROPOSED TUITION ASSISTANCE TAX AND ITS IMPACT

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## 2018 GOP TAX PLAN – PROPOSED TUITION ASSISTANCE TAX AND ITS IMPACT

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### **Abstract**

In early 2018, Republicans passed what was to be dubbed as the 2018 GOP tax plan. This plan, which is essentially a major tax overhaul, also proposed a variety of educational tax options. While none of the major education-related measures were passed, there was an interesting tuition assistance tax that would have significantly affected how dependents of faculty and staff pay for college. This paper aims at finding the financial “turning point” where a family would elect to use financial aid instead of a tuition assistance plan. I look at a variety of income levels across more than 20 selective private schools and find at what income level a family would elect for financial aid instead of tuition assistance. This plan would have deterred a vast majority families making less than \$100,000 from taking tuition assistance, making college more inaccessible for children of lower-earning faculty and staff.

KEYWORDS: (Financial Aid, Tuition Assistance, Tax Plan, Higher Education, Tax Brackets)

JEL CODES: (H2, I23, I28)

ON MY HONOR, I HAVE NEITHER GIVEN NOR RECEIVED  
UNAUTHORIZED AID ON THIS THESIS

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## Introduction

A prospective college student can receive financial tuition assistance based on either merit or need. Schools award merit based aid to high achieving students regardless of family income; however, only families with low incomes qualify for need-based financial aid. Need-based aid is important in order to keep higher education accessible for the general population. Most students with a relatively low family income use the Free Application for Federal Student Aid (FAFSA), which gives students access to Pell Grants, Work Study programs, and Direct Stafford Loans through the FAFSA application. This application asks families for their income level, marital status, student's GPA, location, prospective schools, etc. Once these factors are entered into the system, it estimates the amount of aid you can receive from the government in the three different categories. Pell Grants are federal funds received by low-income students that do not have to be repaid, while work study programs<sup>1</sup> provide students an opportunity to work for their financial aid while completing school. Finally, Stafford Loans are low-interest loans provided to both qualified undergraduate and graduate students.

States also provide some need based aid, but the financial values are relatively small because this aid would only apply for in-state tuition. These forms of aid, like the HOPE program in Georgia, or Bright Futures in Florida, allow successful students (in terms of GPA) to attend public state colleges and universities for an extremely low cost. The Bright Futures program, for instance, provides full tuition scholarship funding and certain fee waivers when attending school in Florida. This type of aid can make a significant impact if a student from a low-income family wants to attend a higher

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<sup>1</sup> Arranged with the school, but must be eligible through FAFSA

education institution, as even in-state tuition can be relatively expensive<sup>2</sup> for these families.

Additional aid is provided by many colleges and universities in the form of need-based grants. These grants greatly vary in value depending on a variety of factors<sup>3</sup>. Students apply for need based aid through FAFSA and the school itself. Most schools provide a net price calculator in order to determine how much a family is expected to pay for the college education. This value, known as Expected Family Contribution (EFC), is the amount that a family will pay for school after all scholarships, loans, and work study are factored in. Typically, large public schools give lower levels of financial aid than competitive, smaller institutions. This is due to a variety of factors, most notably the inability for large public institutions to efficiently balance need-based and merit-based aid. Small private schools have high endowment/student ratios, which allows these schools to provide high levels of financial aid for both need-based recipients and recipients of other forms of aid.

The final type of aid given to students is tuition assistance. This assistance, which varies from school to school, pays for a given percentage of the student's tuition (not room & board). While there are many types of specific tuition assistance programs, this paper will focus on tuition assistance given to dependents of faculty and staff. Larger schools usually provide a smaller level of aid, considering there are a much more faculty and staff than at a smaller school. Smaller schools have a lower population of faculty and staff, so providing tuition assistance to dependents is not as stressful on the overall

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<sup>2</sup> About half price of out-of-state tuition

<sup>3</sup> Family income, applicant location, first member in family to go to college, school endowment size, etc...

financial state of the school. Public schools receive a majority of their funding through the government, meaning tuition assistance for dependents of faculty and staff would come from taxpayer dollars. Because of the source of funding, tuition assistance is much more popular at private schools since they have the luxury of being in control of a majority of their endowment, allowing more flexibility in terms of efficient distribution of spending. For instance, Colorado College, along with most of the other Associated Colleges of the Midwest (ACM), provides families of faculty or staff with 90% tuition assistance coverage. Without this type of tuition assistance, children of faculty and staff<sup>4</sup> would struggle to pay the high tuition of this school. While certain low-income families would be eligible for need-based financial aid, moderate income earning employees would likely be extremely financially stretched if not for tuition assistance programs. For the purpose of this study any mention of “aid” refers to financial aid given to applicants in the form of either need-based aid, loans, work study, or grants, while “assistance” or “tuition assistance coverage” refers to the tuition assistance funding received by dependents of faculty and staff using a school’s tuition assistance plan.

At the end of the 2017, Republicans pushed through a massive tax overhaul known as the “GOP Tax Plan”. This bill contained massive corporate tax cuts, a redistribution of the income tax brackets, and a reduction of social spending in an attempt to “supercharge” the economy. The tax bracket changes for married couples are highlighted below:

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<sup>4</sup> Staff likely earning a lower income

### Old vs. New Tax Brackets for Married Couples Filing Jointly

Old Brackets (\$)		New Brackets (\$)	
Taxable Income	Tax Rate	Taxable Income	Tax Rate
0-19,050	10%	0-19,050	10%
19,051-77,400	15%	19,051-77,400	12%
77,401-156,150	25%	77,401-165,000	22%
156,151-237,950	28%	165,000-315,000	24%
237,951-424,950	33%	315,001-400,000	32%
424,951-480,050	35%	400,001-600,000	35%
480,051+	39.6%	600,000+	37%

Source: docs.house.gov taxfoundation.org

Originally included in the plan were a variety of educational tax changes, including taxing tuition waivers for graduate students, taxing employee tuition benefits, and taxing tuition assistance used by dependents of faculty and staff. All of these potential educational taxes were cut from the final bill in order for Republicans to ensure certain other aspects of the plan were passed, but these small taxes could have made a major change to the landscape of higher education. The proposed tuition assistance tax mentioned above would have been affected by these new tax brackets, as they significantly change the amount that a family receiving this type of tuition assistance has to pay for school. For this paper, I will focus specifically on the proposed tax for tuition assistance for dependents of faculty and staff and how the value of tuition assistance received will differ with the additional tax and changed income brackets.

Before the plan, dependents of faculty and staff eligible for tuition assistance almost unanimously choose to use tuition assistance over need based/merit based financial aid. Only families with extremely low incomes would refuse tuition assistance, as they would likely receive full financial aid to attend that institution. Other wealthier school employees would choose the tuition assistance plan, as the price of room and

board plus a fraction of tuition is usually lower than the price after financial aid is awarded. When applying for financial aid, you are given an EFC based on a variety of financial circumstances. The EFC for a family is most affected by income level, but is also affected by changes in savings, checking, home value, etc. Before the tax plan, the EFC for families accepting tuition assistance deals was the price of room and board plus any tuition not covered by the assistance. If the tax plan was passed, these families would have had to pay income tax on the full amount of tuition assistance received. This would have drastically increased the EFC for all individuals using tuition assistance plans, but disproportionately affected schools that give high levels of tuition coverage (80% or greater). These schools would be affected more severely because the amount of money that families would be taxed on when receiving tuition assistance under the new tax plan is higher than at a school which gives low levels of tuition assistance coverage. To put it more simply, under the new tax plan any tuition assistance funding is taxable according to a family's income bracket. Larger amounts of tuition assistance coverage mean that a family has to pay taxes on a larger amount of money. While schools that provide a high level of tuition assistance coverage are still cheaper than their counterparts with low levels of tuition assistance coverage, these high-coverage schools are more affected by the tax plan. While very low-income families would still likely choose financial aid because of the large amount of aid they would receive, other families that previously would have chosen the tuition assistance route would have to reconsider their choice. This paper examines the effect that a tuition assistance tax would have had on the distribution of financial aid at a variety of schools. This paper will examine the financial

“turning point” at a variety of institutions where it becomes cheaper to select financial aid over tuition assistance; then, we will look at variance between different institutions.

Next, I will examine trends in the recent history of higher education that may shed light on why lawmakers aimed to impose a tax on tuition assistance programs. As the cost of higher education in the United States has shifted more towards the consumer side, families are looking for additional ways to make college more financially accessible. Colleges have to meet these families somewhere in the middle in order to keep depend for the school high, leading to a variety of different scholarship methods to attract students. Next, assuming the tax plan had passed, I will look at a set of roughly 30 schools in order to determine at what income levels families will look to use financial aid instead of tuition assistance. Finally, I will examine the impacts that this tax plan would have had on the landscape of the US higher education system.

## Literature Review

In order to fully understand why this tax change may have been proposed, it is important to understand trends in regard to school funding, cost sharing, and financial aid. Throughout the development of the higher education landscape in the US, colleges have become more and more competitive. Decades ago, most college students would apply to local and regional schools as their first choice. This had a lot to do with the low price of in-state education, which was just a fraction of current tuition costs today; but, it was also due to lack of resources and awareness of the entire college landscape. This allowed colleges to essentially act as a monopoly, knowing that the demand for education from local and regional students would be enough to successfully operate the institution. As college became more popular due to its accessibility, more information on the variety of colleges became available. Hoxby (1998) states that this shift in information caused an increase in competition, leading to a loss of monopoly power. She continues by saying, “Colleges have responded to this loss of market power by differentiating themselves vertically (by specializing in a certain quality of student and level of admissions selectivity) and horizontally (by finding a market niche for instance, serving local managers who wish to pursue an MBA in the evening) ...”. Because of this change in competition, many schools began to strive towards improving selectivity and quality of education. In order to become more selective, quality changes must come first.

When assessing a schools’ quality, the most prominent factors are endowment/student and level of aid. The two usually go hand in hand, as having a larger endowment/student allows a school to spend more on buildings or staff salary while also providing higher levels of aid. If a school is receiving an insufficient demand for its

education, the school can go about solving this problem in two ways. One option would be to reduce tuition prices, which would in turn decrease overall quality. This option may gain the school more students because of the reduced price leading to higher accessibility: but, the quality of students would likely not be as high as a more selective institution. Schools with sufficient demand do not have to worry about reducing prices, but instead have to worry about the selectivity of the school. These types of schools, typically smaller private schools, tend to increase tuition prices in order to improve the total quality of the school. The increase in funding spurred by a tuition increase would allow the school to improve academic resources, as well as give the school the ability to provide a high level of financial aid. This additional ability to give aid allows the school to be more selective with admission, picking the most qualified candidates regardless of their financial state.

While increasing tuition helps improve overall school quality, providing large amounts of financial aid to individual students has attracted some critics. Hearn et. al (1996) argues that the purpose of financial aid is to promote equity by factoring in certain costs and benefits for both the individual and society as a whole. They say, “the critical cost/benefit assumption is that current approaches to tuition setting overestimate the broad social returns of postsecondary education and therefore provide too generous a subsidy to individuals, who are by far the primary beneficiaries of that level of education,”. They further argue that currently, an individual receiving large amounts of financial aid will receive a future benefit much greater than the value of their financial aid. This mindset, which is much more present in regard to this debate in the public-school sector, has caused certain individuals to be upset at the general tuition increases

that have been occurring over the last few decades. While large amounts of aid make selective schools more accessible to low-income populations, schools with only a moderate amount of aid are faced with a dilemma of how to efficiently distribute the aid. Selective schools tend to give out a majority need-based aid, with some merit aid going to extremely high performing students in order to attract them to the school (Reed & Szymanski, 2004). Less selective schools tend to distribute a bit more of the financial aid to merit-based applicants. These types of schools usually focus on improving quality to become more selective, incentivizing the schools to bring in high quality students. For instance, a student from a wealthy family with a 3.8 GPA and high-test scores applies to Harvard and Tulane. Harvard may accept this student, but the student would likely have to pay full price for tuition as he or she would likely qualify for minimal or no need-based aid. This same student would have a high chance of being admitted to Tulane with a merit-based scholarship. If the family could afford Harvard, then the student would likely select it because of the reputation and quality of the school. If there was any doubt about the family's financial ability to attend Harvard, the student would likely attend Tulane instead. If the student attended Tulane, his or her record as a high performing student would slightly raise the "quality" of the school. If enough of these students select Tulane then the quality of the school will improve over time which, in turn, would in turn increase demand for the school and eventually allow Tulane to raise tuition. This is a cyclical process, and selective schools are constantly competing to provide the highest level of aid for prospective students.

Currently, public schools are the most accessible higher education institutions to attend. Whether it be a two-year community college or a state university, in-state students

have a low cost of tuition with access certain state-restrictive financial resources (i.e. Georgia HOPE, Florida's Bright Futures). Public schools have held the torch for accessibility for a long time, but only relatively recently have private schools gained a large demand in enrollment for students who would have otherwise likely attended public school. Johnstone (2003) states, "This demand pressure is a function of the sheer demographic increase in the traditional college-age cohort, compounded by the increasing secondary school completion rates, which in turn increases the number of those wanting to go on to higher education, further compounded by an expansion of what may be considered a college-going age cohort to include adults formerly by-passed by the system." Since public schools have become more accessible, more individuals who would not likely be considered "college-age cohorts" in the past are now able to attend college. This increase in the supply of students and demand for education allows all types of schools to grow, but the improvements in quality are felt more drastically at the top of the ladder than the bottom. While public schools will always need to worry about educating the masses, small and selective schools have been able to focus on specializations that help separate their school from the pack. Providing large amounts of financial aid can make the school more accessible, while high levels of tuition assistance coverage can be used to help recruit high-performing faculty and staff members.

The tuition assistance tax in the GOP tax plan aimed to prevent families of faculty and staff from receiving tax-free tuition grants. As stated earlier, tuition assistance plans were used instead of financial aid in almost every scenario before the tax plan. If the tuition assistance tax was passed, the amount of people who accept financial aid over tuition assistance would greatly increase. This is because the family would have to pay

the additional income tax on their tuition assistance coverage, thus increasing the family's EFC significantly. While this would likely not drastically change the landscape of higher education, a slight shift in the demand for need-based financial aid could cause some problems for certain schools. Below I look at how the tax plan would have change the financial landscape at a variety of high-priced, selective institutions.

## **Data, Analysis, and Implications**

When selecting schools for this study, it was important to select schools that could provide similar levels of aid to all applicants because this makes it much easier to compare cost differences between institutions<sup>5</sup>. Higher priced schools with low populations tend to offer the most amount of aid per student, as their endowment money doesn't have to be stretched over a wide population base. Although most schools have some sort of net price calculator included in their website, these simulators require specific pieces of tax and personal information to be accurate. When running sample profiles through these net price calculators, my results were greatly varied when adjusting for income. Because of these inconsistencies provided by a variety of net price calculators, I chose to use MyinTuition to run all of my calculations for financial aid. MyinTuition gives the financial aid estimations for roughly 30 schools, all being high priced, relatively low-population schools (under 10,000 undergraduate students). As you can see in Table 1 below, there are no public schools included on the list, as the public schools supported by MyinTuition did not supply tuition assistance for dependents of faculty and staff. This is a general trend with public schools, as they are much more focused on supplying aid to individuals from the state or region of which the school is part. After eliminating schools with little or no tuition assistance coverage, I was left with a list of 23 schools that provided greater than 30% tuition coverage (less than 30% would have insignificant changes from the Tax Plan):

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<sup>5</sup> You can then see the slight differences in aid between schools rather than attempting to compare widely different school types

Table 1: School Information

<b>SCHOOL NAME</b>	<b>SCHOOL TYPE</b>	<b>ENROLLMENT</b>	<b>TUITION (\$)</b>	<b>ROOM AND BOARD (\$)</b>
<b>BABSON COLLEGE</b>	Business	2283	49,664	15,838
<b>YALE UNIVERSITY</b>	Ivy	5472	51,400	15,500
<b>COLUMBIA UNIVERSITY</b>	Ivy	6113	57,208	13,618
<b>COLORADO COLLEGE</b>	Liberal Arts	2114	53,238	12,076
<b>CARLETON COLLEGE</b>	Liberal Arts	2105	52,782	13,632
<b>VASSAR COLLEGE</b>	Liberal Arts	2424	55,210	12,900
<b>SKIDMORE COLLEGE</b>	Liberal Arts	2680	52,446	14,004
<b>GRINNELL COLLEGE</b>	Liberal Arts	1699	50,464	12,400
<b>ST OLAF COLLEGE</b>	Liberal Arts	3040	46,000	10,430
<b>SMITH COLLEGE</b>	Liberal Arts	2514	50,044	16,730
<b>MIDDLEBURY COLLEGE</b>	Liberal Arts	2532	52,496	14,968
<b>COLBY COLLEGE</b>	Liberal Arts	1879	53,120	13,660
<b>HAMILTON COLLEGE</b>	Liberal Arts	1879	52,770	13,400
<b>WASHINGTON AND LEE UNIVERSITY</b>	Liberal Arts	1830	50,170	11,730
<b>WILLIAMS COLLEGE</b>	Liberal Arts	2076	53,550	14,150
<b>WELLESLEY COLLEGE</b>	Liberal Arts	2347	51,148	15,836
<b>WESLEYAN UNIVERSITY</b>	Liberal Arts	2971	52,474	15,456
<b>POMONA</b>	Liberal Arts	1660	51,075	16,150
<b>RICE UNIVERSITY</b>	Research	3893	45,608	13,850
<b>BOSTON COLLEGE</b>	Research	9309	53,346	14,142
<b>JOHNS HOPKINS UNIVERSITY</b>	Research	6117	52,170	15,410
<b>DUKE UNIVERSITY</b>	Research	6609	53,744	15,500
<b>NORTHWESTERN UNIVERSITY</b>	Research	8353	52,678	16,047

All of these schools have similar prices, which helps compare two institutions with different levels of tuition assistance. Certain schools have time-based employment

qualifiers in order to receive additional aid for the dependent. Many of the schools require staff to be employed at that institution for more than 5 years in order to receive tuition benefits, while others have different coverage plans based on date of employment. For the purpose of this study, I assumed that the applicant had married parents, a parent who worked at the school for more than 5 years, and \$50,000 in their parents' checking/savings account with income adjusted for every profile.

Once the list was finalized, the EFC for a family accepting dependent tuition assistance was calculated for each school. In order to properly estimate these costs, the tax bracket for which the family would fall under has to be determined. The income of a family determines their tax bracket and a family's tax bracket influences how much tax a family would pay on tuition assistance. Based on initial calculations with MyinTuition, if a school provided over 80% tuition assistance coverage, the turning point for where the EFC of financial aid becomes less expensive than the EFC of tuition assistance would occur somewhere in the 22% tax bracket. For schools with less than 80% tuition coverage, the turning point would occur in the 24% tax bracket. Once the tax brackets were determined, the EFC through tuition assistance was calculated for each school. This was calculated by taking the tuition not covered by tuition assistance and adding the tuition assistance tax and room and board to that total, as we can see in Table 2 below.

Table 2: Tuition Assistance Coverage and Tax Level

<b>SCHOOL NAME</b>	<b>TUITION ASSISTANCE COVERAGE (%)</b>	<b>INCOME TAX (%)</b>	<b>TUITION ASSISTANCE (PRE-TAX PLAN EFC) (\$)</b>	<b>TUITION ASSISTANCE (POST-TAX PLAN EFC) (\$)</b>
<b>COLORADO COLLEGE</b>	90	22	17399	23788
<b>RICE UNIVERSITY</b>	100	22	13850	23883
<b>CARLETON COLLEGE</b>	90	22	18910	24082
<b>VASSAR COLLEGE</b>	100	22	12900	25046
<b>SKIDMORE COLLEGE</b>	100	22	14004	25542
<b>BOSTON COLLEGE</b>	100	22	14142	25878
<b>BABSON COLLEGE</b>	100	22	15838	26764
<b>JOHNS HOPKINS UNIVERSITY</b>	100	22	15410	26887
<b>YALE UNIVERSITY</b>	100	22	15500	27044
<b>GRINNELL COLLEGE</b>	90	22	17446	27437
<b>COLUMBIA UNIVERSITY</b>	100	22	13618	27700
<b>ST OLAF COLLEGE</b>	80	22	19630	27726
<b>DUKE UNIVERSITY</b>	75*	24	30454	39763
<b>SMITH COLLEGE</b>	60	24	36747	43953
<b>MIDDLEBURY COLLEGE</b>	45**	24	37105	44391
<b>COLBY COLLEGE</b>	50	24	40220	45209
<b>HAMILTON COLLEGE</b>	50	24	39785	46117
<b>WASHINGTON AND LEE UNIVERSITY</b>	50	24	36815	46941
<b>WILLIAMS COLLEGE</b>	50	24	40925	47351
<b>WELLESLEY COLLEGE</b>	50	24	41410	47547
<b>WESLEYAN UNIVERSITY</b>	50	24	41693	47989
<b>POMONA</b>	50	24	41687	48357
<b>NORTHWESTERN UNIVERSITY</b>	50	24	42386	48707

Notes: \*Fixed amount of aid. \*\*Included Room and Board in tuition assistance calculation

The data in Table 2 will be expanded upon in the next table, but the differentiation between high (over 80%) and low (under 80%) levels of tuition assistance is clear.

Schools that provide low levels of tuition assistance coverage have an extremely high

EFC, so high that many of the school's employees would not be able to afford the cost post-assistance. Table 3 will expand upon this sentiment, but the EFC for these low assistance level schools is almost the full price of the institution without any discounts. Once the EFC for tuition assistance recipients was calculated, profiles with varying income were entered into the MyinTuition EFC calculator for each school. For the schools with high assistance levels the initial income used was \$100,000, while schools with lower assistance levels started with an income of \$200,000. Income was gradually increased/decreased from these values until an EFC was produced that was close to the tuition assistance EFC. Since MyinTuition is only a simulator, real EFC values may slightly differ. In order to combat this, I have provided an income range where the tuition assistance "turning point" occurs rather than providing just a single income value. The table below shows these income range results as well as the EFC for each school.

Table 3: Financial Aid vs. Tuition Assistance

SCHOOL NAME	TUITION ASSISTANCE (POST-TAX EFC) (\$)*	INCOME (LOWER END) (\$)*	AID EFC (LOWER END) (\$)*	INCOME (HIGHER END) (\$)*	AID EFC (HIGHER END) (\$)*
COLORADO COLLEGE	23.788	105	23.1	115	25.7
RICE UNIVERSITY	23.883	110	22.0	120	24.6
CARLETON COLLEGE	24.082	140	23.7	150	25.6
VASSAR COLLEGE	25.046	130	24.0	140	26.3
SKIDMORE COLLEGE	25.542	125	24.2	135	26.7
BOSTON COLLEGE	25.878	130	24.7	140	27.0
BABSON COLLEGE	26.764	125	25.2	135	27.8
JOHNS HOPKINS UNIVERSITY	26.887	135	25.8	145	28.3
YALE UNIVERSITY	27.044	150	23.7	160	27.8
GRINNELL COLLEGE	27.437	140	26.5	150	28.9
COLUMBIA UNIVERSITY	27.700	135	25.4	145	27.7
ST OLAF COLLEGE	27.726	125	26.4	135	29.2
DUKE UNIVERSITY	39.763	190	39.0	200	41.6
SMITH COLLEGE	43.953	200	41.7	210	44.2
MIDDLEBURY COLLEGE	44.391	195	42.4	205	45.0
COLBY COLLEGE	45.209	200	43.2	210	45.9
HAMILTON COLLEGE	46.117	180	43.8	190	46.5
WASHINGTON AND LEE UNIVERSITY	46.941	230	46.0	240	48.4
WILLIAMS COLLEGE	47.351	215	45.8	225	48.2
WELLESLEY COLLEGE	47.547	225	46.7	235	49.0
WESLEYAN UNIVERSITY	47.989	215	46.8	225	49.3
POMONA	48.357	240	47.3	250	49.4
NORTHWESTERN UNIVERSITY	48.707	220	47.5	230	50.0

Notes: \*All values in thousands of USD (\$)

Table 3 shows the main section of results, the financial “turning points” for a variety of schools. The first column of data on the table shows the EFC for a family accepting the post-tax tuition assistance plan, while the remaining columns show the financial “turning points”. Columns two and four of the data provide a “lower” and “upper” end of an income range, with the financial “turning point” where the family would elect to use tuition assistance occurring somewhere between the two incomes. Also provided are the MyinTuition EFC estimates for these schools at the designated income levels. The EFC estimate for the lower income is always below the EFC for tuition assistance, while the EFC estimate for the higher income is always greater than the EFC for tuition assistance. Each school has a different income range where the “turning point” occurs. If a family’s estimated EFC is less than the EFC with tuition assistance, that family would elect to choose to use financial aid. If a family’s EFC is above the EFC under tuition assistance, then that family would elect to choose tuition assistance in order to pay for school.

Before diving into the analysis of this table, it is important to make sure that the data used to create the table is accurate in the first place. Because the financial aid data from Tables 2 and 3 are only estimates through MyinTuition, it is important to compare these results to real data. Using masked financial aid data from a selective Northeastern Liberal Arts school, I can compare the impact to financial aid from shifts in income. The two regressions below are from family profiles in two different income ranges: \$100,000-\$165,000 and \$165,000-\$230,000. By regressing the EFC of financial aid recipients against other descriptive variables in the profile, we are able to estimate changes in EFC for financial aid recipients according to changes in other variables:

Table 4

<b>Regressions of Masked Financial Aid Profiles</b>		
	Income Range (\$100k-\$165k)	Income Range (\$165k-\$230k)
	Financial Aid (EFC)	EFC
Family Income	0.257*** (9.55)	0.280*** (5.21)
Checking/Savings	0.0288*** (19.67)	0.00706*** (5.78)
Other Family Contributions	0.387* (2.57)	0.3 (1.48)
Student Income	0.446 (1.30)	-0.045 (-0.40)
Student Assets	0.0936*** (6.74)	0.0493*** (3.71)
Constant	-17545.8*** (-4.92)	-14595.1 (-1.40)
N	737	475

Notes: t statistics in parentheses. \*p<0.05 \*\*p<0.01 \*\*\*p<0.001

The first column on Table 4 is to check our data on schools with high levels of tuition assistance. This income range encompasses all of the resulting financial “turning points” for these high tuition assistance schools, so these coefficients should be relatively accurate. The second income category is for schools that give low amounts of tuition assistance. There are fewer observations in this category because there are less people applying for financial aid in high income brackets, but the coefficients for the two categories being focused on are still statistically significant: family income and checking/savings.

To provide some comparison between the MyinTuition data and these masked financial aid profiles, we will look at a few real-world examples from our school list. According to Table 3, the financial “turning point” for Colorado College occurred

somewhere between \$105,000 and \$115,000. At each of these levels, MyinTuition predicts that a family will receive \$23,100 and \$25,700 of financial aid respectively. When we use our coefficient from the \$100k-\$165k income range, a \$10,000 increase in income should result in an approximately \$2,570 increase in EFC. This is extremely close to the increase predicted by MyinTuition (\$2,600). While this is only one school from the list, all of the schools that give high levels of tuition assistance are within \$500 of the predicted EFC for a \$10,000 income increase using the coefficients. For a school that gives low levels of tuition assistance, like Williams College, the coefficient for income change is also accurate. For Williams specifically, MyinTuition estimated that a \$10,000 income increase would result in a \$2600 increase in EFC. Using the income coefficient for higher earning profiles results in an expected EFC increase of \$2800. Again, all of the MyinTuition predictions for schools that provide low levels of tuition assistance are within \$500 of the EFC values obtained using the regression from the masked financial aid profiles. While my MyinTuition results from changing income are very similar to the values generated through the regression coefficients, it is impossible to accurately predict the exact amount of financial aid a family will receive. Because financial aid amounts are variable, even when comparing families with almost exactly the same financial statistics, I chose to provide an income range rather than just one income value where a financial “turning point” may occur.

The other two statistically significant variables from the regression were checking/savings value and student assets. While the coefficient for student assets is significant, there are no notable changes to financial aid EFC unless an applicant has over \$10,000 in assets. There are very few applicants from married families with a large

amount of assets, so these applicants were not significant when estimating financial aid results. The coefficient for increases in checking/savings accounts is not as accurate as the results for increases in income, but it is still statistically significant. For Colorado College, an increase of \$50,000 in a checking/savings account would result in a \$2500 increase in EFC according to MyinTuition. Using the coefficient for the lower-income data set, the regression predicts an increase in EFC by \$1,440. Other EFC values from schools giving high levels of tuition assistance tend to fall within \$1,000 of the EFC predicted by the coefficients. For schools that give low levels of aid, the coefficient is a bit more accurate. Using Williams as an example again, MyinTuition predicts that a \$50,000 increase in a family's checking/savings account should result in an increase of \$2,000 increase in EFC. The coefficients from the masked data suggest that the actual increase in EFC would be closer to \$1,800. Again, these values are highly variable given the randomness of financial aid, but the results from MyinTuition seem to match up accurately with the regression results.

Now that the results provided by MyinTuition have been confirmed, it is time to return to Table 3 and analyze the results. For schools with low rates of tuition assistance coverage, it is only beneficial to take the tuition assistance deal for a family making roughly \$200,000 or more. For prospective applicants of schools with low coverage rates, the financial situation remains relatively unchanged even with additional income taxes from the tax plan. For these schools, the tax plan increases the EFC with tuition assistance by roughly \$5,000 per school. While this may seem like a large increase, the only families affected by this are wealthy families making roughly \$200,000 a year. Most faculty and staff do not make \$200,000 a year, making tuition assistance packages

inaccessible for most of these families. Since these wealthy families (over \$200,000 income) would also likely not be eligible for high amounts of financial aid, the tuition assistance deal will still be selected by a vast majority of these wealthy families in schools with low tuition assistance levels. Under the new tax plan, families that make less than \$165,000 a year would always select financial aid in low tuition assistance coverage schools.

Schools with higher levels of tuition assistance coverage are much more affected by the new tuition assistance income taxes. Before this new tax plan, many dependents of faculty and staff could attend these schools for virtually just the cost of room and board by taking the tuition assistance plan. The EFC for financial aid includes room and board, while most tuition assistance plans do not. This is important because the inclusion of the cost of room and board while receiving tuition assistance funding increases the EFC for these schools significantly. Before the tax plan, only very low-income families (families provided with full or vast majority aid) would choose financial aid over tuition assistance because the EFC with financial aid would still usually be less than the total cost of room and board. This is evident given the tuition assistance EFC levels provided on Table 2. With the addition of the new tax plan, more and more families will choose the financial aid route over tuition assistance, as the financial “turning point” for choosing aid over tuition assistance would be at a higher income level. Any family making under \$100,000 would almost always choose financial aid over tuition assistance, unless they received a well-below average financial aid package for their income. This plan would make tuition assistance inaccessible for many of the dependents of faculty and staff because very few faculty or staff members make over \$100,000 income, so

many individuals who would previously have taken the tuition assistance deal would now take a financial aid deal instead. For instance, a family making \$95,000 from Colorado College would likely have an EFC of \$20,400 if they accepted a financial aid package. Before the tax plan, this family would have had an EFC of \$17,399 using tuition assistance, which is well below the EFC of financial aid. Under the new tax plan, this same family would have an EFC of \$24,400 using tuition assistance, well above the EFC of a financial aid package for that income. These results are consistent among low incomes in the 22% tax bracket (between \$77,400 and \$100,000), becoming even more significant at the lowest income level for the 22% tax bracket. Once income levels drop below \$77,400 and into the 12% tax bracket, things become much simpler. A family making \$75,000 a year, which is one of the highest possible salaries for the 12% tax bracket, would likely have an EFC of \$15,700 if they select the financial aid package. Pre-tax plan this family would have had an EFC of \$17,399 using tuition assistance, making financial aid the cheaper option. After the plan, the EFC for tuition assistance is \$23,148, making financial aid still the cheaper option. Any families in the 12% or 0% income bracket would always choose financial aid over tuition assistance for this reason.

When comparing these schools by school type, there is really no clear difference in tuition assistance levels. All of these schools are wealthy, so they can provide high levels of financial aid across the board. Ivy Leagues and selective private research universities tend to give higher levels of tuition assistance coverage than liberal arts schools, but that may be because there is a greater selection of expensive liberal arts schools than the more “classic” Ivy or research university. Working at a more traditional

selective school (such as Ivy or research) could give your family a higher chance of receiving efficient tuition assistance funding.

If this tax plan was passed, high performing professors/staff members would be competing for jobs at schools that provide higher levels of tuition assistance. The tax plan would have made schools with low tuition assistance programs very expensive for children of high earning staff members (Over \$100,000 income). In order to recruit these high-performing staff members, schools would likely be encouraged to provide higher levels of tuition assistance for dependents of faculty and staff. While this change would not have greatly affected the market, certain schools would be forced to redistribute funds from their endowments in order to offset the increase in tuition assistance coverage. Again, this change would not significantly affect these schools, but it would slightly decrease the total amount of money that the school could use to pay salary or invest in future projects. For low-earning staff members (under \$100,000 income), this tax plan would not change much. Certain staff members earning on the higher side of this category would likely change from their tuition assistance plan and decide to take financial aid. Most members of this category would have already been receiving financial aid, but families like the example provided earlier about Colorado College<sup>6</sup> would likely switch to financial aid from their tuition assistance plan. Overall, this tax plan would have changed the number of students applying for financial aid and would have altered the landscape for recruiting high-performing staff and faculty members. While the shift in financial aid applicants would not be significant, a group of the families that would have previously selected the tuition assistance plan would be shifted to financial aid. This may

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<sup>6</sup> See example on page 15

not be significant for the overall market of financial aid, but this slight shift could reduce the amount of financial aid given per student depending on the saturation of financial aid funds by additional recipients. As far as recruiting high performing staff members, full tuition coverage for dependents of these faculty or staff members would be a great tool. These schools would also likely increase the salaries for these individuals in order to help offset the cost from the tuition assistance tax. While the tax plan may not have provided a major economic shift for colleges, it would have made it much more expensive for employees to send their children to school if using a tuition assistance plan.

## **Conclusion**

While the 2018 GOP Tax Plan did not have a significant impact to the landscape of higher education, the tuition assistance tax would have changed the way that faculty and staff pay for the school of their children. Before the 2000's, many schools provided 100% tuition coverage for dependents of faculty and staff. That trend began to erode into the early 2000's and now many schools offer limited amounts of tuition assistance with high endowment schools still occasionally providing full coverage. The proposed tax plan would have added an income tax to the sum of tuition assistance funding a family receives, forcing them to pay sometimes up to \$10,000 more for tuition assistance coverage than they would have before the plan (see Table 2). At schools with high levels of tuition assistance coverage, this tax plan would have significantly increased the number of dependents of faculty and staff who apply for financial aid. Any faculty or staff member earning over \$100,000 a year would choose to take financial aid over tuition assistance. In fact, at schools with low levels of coverage, anyone earning under \$200,000 a year would elect to use financial aid over tuition assistance. Because these changes would only leave tuition assistance accessible for a small percentage of the faculty and staff population, it would essentially eliminate tuition assistance as a perk for recruiting high performing faculty and staff. Schools would have been forced to either increase tuition assistance coverage to 100% in order to make tuition assistance more accessible to lower-earning families, or increase the yearly income for faculty and staff in order to offset the additional taxes on tuition assistance. Overall, the proposed tuition assistance tax would have made tuition assistance less accessible for the average college

employee and would have forced many families into taking financial aid rather than tuition assistance.

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Chart: <https://www.investors.com/etfs-and-funds/personal-finance/how-tax-reform-impacts-your-tax-bracket-and-rate/>