

**Tax Benefits for Education:
History and Prospects for Reform**

Susan Dynarski
University of Michigan
& National Bureau of Economic Research

Judith Scott-Clayton
Teachers College Columbia University
& National Bureau of Economic Research

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National efforts to promote college enrollment are increasingly delivered through tax-based assistance, including tax credits and deductions for tuition and fees, tax-advantaged college savings plans, and student loan interest deductions. This paper outlines the main tax-based student aid programs and describes their history and growth over time. We then provide an economic perspective on tax-based student aid, and an assessment of their impact on student behavior. We conclude with a discussion of what the tax system does particularly well and what it does particularly poorly in comparison to traditional Department of Education-based student aid programs, and highlight opportunities for productive reform. At a minimum, a simpler system of education tax benefits would decrease the administrative and time costs of transferring funds to households with postsecondary expenses. At best, simplification would clarify incentives and increase investments in human capital.

1. Introduction

The federal tax code now plays a major role in subsidizing households' education costs. In 2012, households received \$19.7 billion¹ in tax credits for education. The growth has been sharp and rapid: in 1998, the figure was \$4.9 billion (Bulman and Hoxby, 2015a). And the tax credits are just one of fourteen tax subsidies for education.

Almost all of the federal tax subsidies are for postsecondary education. The tax system subsidizes the families of *future* college students through the Coverdell and 529 programs, tax-advantaged savings plans authorized by the federal and state governments, respectively. The federal and state tax systems subsidize *current* college students and their families through tax credits, a deduction for tuition costs and loan interest, an exclusion of scholarships, grants and tuition reductions from taxable income, and a dependent exemption for students aged 19 to 23. Finally, the tax code subsidizes *former* college students with a deduction for interest paid on student loans.

In this paper, we describe the federal tax subsidies for education, their history, and their behavioral effects. The tax subsidies for education are now extensive, complicated, and expensive. Compelling evidence, using rigorous empirical methods, indicates that the tax credits and tuition tax deduction (which account for the bulk of the tax expenditures for education) have precisely zero effect on human capital accumulation. If their intent is to increase schooling, they are a failure.

An alternative goal of the tax benefits for education is a transfer to middle-income families. If so, they are a very leaky bucket, since they impose extensive administrative burdens

¹ All dollar amounts are expressed in 2014 real values.

on households, colleges and government. Reducing the tax rates applied to these families would be a more transparent and less expensive approach to achieving this goal.

Streamlining the tax benefits for education could potentially enhance their efficiency. At a minimum, a simpler system of education tax benefits would decrease the administrative and time costs of transferring funds to households with postsecondary expenses. At best, simplification would clarify incentives and increase investments in human capital.

2. History of Tax Benefits for Education

Tax breaks for private spending on education have been a contentious topic for decades (Moynihan, 1978). Private school associations and parents of children in private schools have long lobbied for a tax deduction for private school tuition (see Samwick, 2013) for an analysis of one such proposal). Opponents viewed such a deduction as a back door to government funding to religious schools. Over the years, tuition deductions and credits were repeatedly proposed and repeatedly defeated. Several of the major changes in postsecondary policy were conceived as political responses to pressure to institute a private school tax break for middle-income constituents. Both the Guaranteed Student Loan (introduced in 1965, as part of the Higher Education Act) and the Middle Income Student Assistance Act (1978), which extended financial aid to middle and upper-income families, emerged as compromise policies during battles over a tuition tax credit (Hearn, 2001).

There are many tax subsidies for education at the state level, including credits for tuition paid at private elementary and secondary schools. We will not provide an survey of these programs, since they are dwarfed in magnitude by the federal subsidies. Historically, states have

subsidized education through revenue expenditures to their schools, and that still remains the case.

2.1 Tax Credits

In 1996 Bill Clinton, then a candidate for the presidency, proposed a tax credit for the first two years of college costs. After Clinton's election, this proposal took shape as the Hope and Lifetime Learning Credits, introduced in 1997. These allowed families of college students to offset their educational costs with tax credits of up to \$1,500 a year.

The new credits remained largely unchanged for 10 years, with minor tweaks to their maximum values and AGI phase-out ranges. But the number of households receiving the credits rose by more than half, from about 4.5 million filers in 1998 to 7.5 million in 2008. The credits totaled \$7.6 billion in the 2008 tax year.

Responding to critiques that the existing programs were of limited benefit to low-income families, presidential candidate Barack Obama proposed a tax credit that would cover a broader range of educational expenses than the Hope Credit, and would be partially refundable for families with zero tax liability. This proposal took form in 2009 as the American Opportunity Tax Credit (AOTC), a renamed and modified version of the Hope credit. AOTC was created as part of the American Recovery and Reinvestment Act of 2009 and temporarily replaced the HOPE Credit for 2009 and 2010. AOTC was extended through 2017 by the American Taxpayer Relief Act of 2012. Spending on the AOTC is estimated to reach nearly \$23 billion in 2014, compared with \$33 billion for the Pell program (Bulman & Hoxby 2015a).

2.2 Savings Incentives

In parallel with the tax credits, a set of tax benefits intended to increase education saving has emerged. In 1997, the same legislation that established the tax credits created the Education IRA, now called the Coverdell Education Savings Account (ESA). The Coverdell is structured much like the Roth IRA, with after-tax dollars growing tax-free. Earnings are never taxed if Coverdell withdrawals are used for education expenses. The Coverdell is the only federal tax benefit for elementary or secondary education.

While the Coverdell is a product of federal legislation, 529 savings plans are an innovation of the states. The 529 savings plans have their roots in prepaid tuition plans, the first of which was introduced by Michigan in 1986. Those who purchased shares in Michigan's plan were guaranteed that their investment would cover the cost of a certain number of semesters at Michigan schools. Michigan exempted investment returns in its prepaid plan from state taxes, and argued to the Internal Revenue Service that returns should also be exempted from federal taxes. The IRS disagreed, but Michigan went forward with the plan and sued the IRS for a refund of taxes paid, winning its case in 1994.

In 1997, Congress codified the federal tax treatment of the tuition plans in Internal Revenue Code Section 529. IRC 529 also contains language that recognized a variant on the prepaid plans that had been introduced by a handful of states: the tax-advantaged college savings plan. Like the Coverdell, these new savings plans allowed after-tax investments to grow free of federal and state taxes; however, withdrawals used for postsecondary costs were not exempt from federal taxation. With the passage of tax reform in 2001, the federal tax on withdrawals from 529 savings plans was eliminated.³ States that did not already have a savings plan quickly

established one. The growth of the 529 savings plans has far outstripped that of the prepaid plans, likely because of their greater fungibility and potentially higher returns.

The Coverdell currently allows for annual, after-tax deposits of up to \$2,000. The far more generous contribution limits for the 529 vary by state: cumulative contribution limits for a beneficiary range from \$250,000 to \$400,000 (Crandall-Hollick, 2015).

2.3 Deductions

The most longstanding tax benefit for households with college students is the dependent deduction. While children are generally considered independent for tax purposes after age eighteen, the age limit is extended through twenty-three if the child is enrolled in school. This tax break allows families to save up to several thousand dollars a year for each child enrolled in college because parents can claim a dependent exemption for the student (thus reducing their taxable income), or qualify for the Earned Income Tax Credit (a refundable credit for low-income families). These provisions save households up to several thousand dollars a year for each child enrolled in college and were estimated to cost about \$5 billion in 2014 (Crandall-Hollick, 2014a).

Since 2002, families not claiming one of the education tax credits have been able to deduct up to \$4,000 in tuition fees from income (even if they do not itemize). The benefit was extended in late 2014 to continue through 2014.² Additionally, up to \$2,500 in interest on student loans is deductible from taxable income, for households with incomes up to \$80,000 (single) or \$160,000 (married) (Crandall-Hollick, 2014a).

²The benefit was originally set to expire in 2005, but in 2006 it was extended to cover 2006 and 2007; in 2008, it was extended to cover 2008 and 2009; and in 2010, it was extended to cover 2010 and 2011. For 2011, the income limit for this benefit was \$80,000 for single filers or \$160,000 for joint returns.

3. Today's Tax Benefits for Education

3.1 Tax Credits

From their inception, the Hope and LLC have primarily benefited middle- and upper-income families. At very low AGIs (below \$10,000), families did not qualify for the credits because they had insufficient tax liability (and the credits were not refundable). Even for those with higher AGIs, the value of the credits could be limited by the definition of allowable expenses, which consisted only of tuition and fees. A typical, low-income student attending a community college with average tuition and fees of \$3,322 in 2012-13 (National Center for Education Statistics, 2013) and receiving the average Pell Grant of \$3,678 (College Board, 2014) would have had no expenses eligible for Hope or LLC. For a middle-income student attending a more expensive private college and not receiving any grant aid, allowable expenses would generate the maximum tax credit.

As of 2015, the maximum benefit for the AOTC is \$2,500, with \$1,000 refundable. All of the first \$2,000 in qualifying expenses is eligible for the credit, and 25% of an additional \$2,000. Eligible expenses include course-related books and supplies. This allows students attending low-tuition public institutions to access more of the credit. Students are allowed to claim the credit for four years of undergraduate education (unlike Hope, which was limited to 2 years). Like the Hope Credit, the AOTC is available for all eligible students in the household; by contrast, only one Lifetime Learning Credit may be claimed per household (Department of the Treasury, Internal Revenue Service, 2011).

With the introduction of the AOTC, spending on the tax credits rose sharply. In 2010, spending on the AOTC was nearly \$19 billion, comparable to annual spending on the Pell just a few years earlier. With the simultaneous increases in Pell generosity (described below), annual

spending on that program in 2010 was \$35 billion in 2010 (Crandall-Hollick, 2014b; College Board, 2011).

The AOTC reaches higher-income families than did the Hope credit, The AGI cap on the AOTC is considerably higher than that on the Hope Credit: \$180,000 for a joint return. Before AOTC, 18% of the dollars devoted to the education tax credits and deductions went to families with incomes over \$100,000; the figure for 20121 was 24% (College Board, 2014). The AGI cap on the AOTC is higher than that on any of the other credits or deductions. High-income households that were once only eligible for the tuition tax deduction are now eligible for the more-generous AOTC. As a result, the share of households claiming the deduction has dropped while the share claiming the credits has risen.

Because the AOTC is partially refundable, expenditures for low-AGI families have also increased: pre-AOTC 5% of the credit and tuition deduction dollars went to filers with incomes under \$25,000; in 2012 the share was 24%.

3.2 Savings Incentives

These savings accounts were estimated to cost \$900 million in tax expenditures in 2014 (Crandall-Hollick, 2014a). The benefits of these savings accounts rise sharply with income, since those with the highest marginal tax rates benefit the most from sheltering capital income from taxation. These additional deductions have little to no value for low-income families, who often take the standard deduction rather than itemize and who face relatively low marginal tax rates. Further, the accounts are risky for families for whom the college attendance of children is uncertain, since account holders are penalized if the accounts are not used for schooling. Finally, the financial aid system reduces aid disproportionately for those families that

hold their assets in the 529 or ESA rather than conventional saving vehicles. Since the highest-income families are unaffected by the aid tax, this further intensifies the positive correlation between income and the advantages of the tax-advantaged college savings accounts.

3.3 Deduction of Student-Loan Interest and Loan Forgiveness

Up to \$2,500 in interest on student loans is deductible from taxable income for households with incomes up to \$80,000 (single) or \$160,000 (married). This deduction is for interest on any student loans, not just federal loans. This deduction was estimated to cost \$1.4 billion in tax revenue in 2014 (Crandall-Hollick, 2014a). With rapid increases in the share of middle-income families carrying student loan debt (Simon and Barry, 2012), we expect that the revenue implications of this deduction will also grow rapidly.

4. The Effects of the Tax Benefits for Education

4.1 Economic Framework

The economic efficiency argument for targeted tax expenditures such as the higher education tax benefits rests upon the belief that individuals, facing market prices for college, will purchase less than the socially optimal level of college. These suboptimal decisions may be due to social externalities: a college-educated population may generate benefits to society above and beyond the benefits reaped by individuals, including improved infant health, reduced reliance on social welfare programs, and increased civic participation (Oreopoulos & Petronijevic, 2013;

Dee, 2004).³ Tax benefits thus encourage families to invest more in college than they would have otherwise, by lowering the effective price.

Of course, in practice, tax expenditures may serve other motivations beyond economic efficiency. Beyond promoting college attendance, policy discussions around the higher education tax benefits have also reflected a desire to provide assistance to middle-class families (Crandall-Hollick, 2014; Lederman, 1997). While targeted tax expenditures may be an economically inefficient means of transferring income to the middle class (as opposed to altering the underlying tax brackets and tax rates directly), they have proved more popular and easier to implement than fundamental tax reforms. Thus, even if these tax benefits do little to promote college enrollment, they may nonetheless serve a transfer purpose.

4.2 Empirical Challenges

Do the tax benefits increase college enrollment, or increase the quality/intensity of college enrollment? A naïve comparison of college enrollments among those that received the tax benefit versus those that did not would be contaminated by reverse causality, because those that do not enroll in college cannot claim the associated tax benefits. In other words, college enrollment may determine whether or not an individual is “treated” by the tax benefit rather than the other way around.

To estimate the causal impact of the tax benefits requires comparing two groups of similar individuals, one that is potentially eligible for the benefit and one that is not, for reasons that are completely unrelated to potential college enrollment. But the eligibility criteria are

³ Price subsidies may also be justified if families underestimate the value of college, or are unable to make optimal investments due to borrowing constraints. Note that these latter two concerns, however, are more commonly cited as justifications for need-based financial aid than as justifications for the tax benefits, which are not particularly targeted by income.

largely income-based, and income may have its own effects on college enrollment regardless of whether someone receives an education tax benefit or not.

The most credible estimates of the impact of the education tax credits utilize quasi-experimental approaches. Several studies take advantage of changes over time in the availability or generosity of benefits for observably similar tax filers, while two studies utilize rich administrative data to compare families just above and just below discontinuities or kinks in the eligibility formula. These quasi-experimental analyses are described in more detail below.

Finally, questions about impact can be more challenging to examine with respect to education savings incentives and student loan interest deductions, due to the long time lag between when benefits are received and when college enrollment is actually observed. For example, families may benefit from education savings incentives for nearly two decades before children reach the age of college enrollment. A difference-in-difference analysis comparing families of, say, 10-year-olds, just before and after the introduction or expansion of savings benefits is unlikely to yield clear findings, since the “treated” group of families is eligible for the benefit for eight years prior to college-age while the “control” group is eligible for only one year less. Attempting to identify a completely unaffected group would require examining families at different points in time, during which other factors may intervene to contaminate the comparison. These challenges may explain why there is far more research on the impact of the tuition tax credits and deductions rather than on the college savings and student loan benefits.

4.3 Evidence on the Effects of the Tuition Tax Credits and Deduction

Long (2004) is the first to provide a quasi-experimental analysis of the impact of education tax credits on college enrollment. Using annual data from the October Current

Population Survey (CPS) from 1990-2000, she identifies families potentially eligible for a education tax credit based on income and tax filing status (single or joint return). She uses a difference-in-difference approach to compare college enrollment rates for potentially eligible versus ineligible households, before and after the introduction of the Hope and Lifetime Learning Credits in 1998.

Long finds no evidence that college enrollments increased faster among eligible groups, and hypothesizes that this could be due to lack of awareness among families on the margin of college enrollment. She notes, however, that the CPS data are not ideally suited to the analysis: income is measured in ranges, making it difficult to precisely determine eligibility and potentially attenuating the effect estimates; moreover, for young adults, the availability of family income depends upon whether they are still part of their parents' household, which is itself potentially determined by college enrollment status.

Two later studies using smaller samples with more accurate information on family income and later years of data found some positive enrollment effects of the introduction of the tax credits. LaLumia (2010) uses an individual fixed-effects approach, comparing eligible individuals' enrollment status before and after the introduction of the tax credits and tuition deduction in 1998, with data from the National Longitudinal Survey of Youth 1979 (NLSY-79). The advantage of this analysis is more detailed data on family income and a window of data extending to 2006, giving the tax benefits more time to have an effect. The disadvantage is that, due to the age of the sample, effects can only be estimated for older individuals (33 to 50), a group for whom college enrollment is relatively rare. LaLumia finds no effect of the benefits on enrollment for the sample overall, though positive effects are found for adults whose educational attainment in 1998 fell below their expectations in 1979.

Turner (2011) applies a difference-in-difference using data from the Survey of Income and Program Participation (SIPP) from 1996-2003. But unlike the prior papers, Turner (2011) focuses not on comparing eligible versus ineligible groups around the introduction of the tax credits, but in changes in the generosity of tax-based aid (including the tuition deduction) for eligible groups over time. In particular, changes to the tuition deduction in 2002 and increases in the generosity of the LLC in 2003 created differential increases in potential aid among eligible groups. Turner (2011) focuses on 18-19 year olds and finds that an extra \$100 of tax-based aid increases college enrollment by 0.4 percentage points – an estimate in line with the magnitudes of enrollment effects found for grant aid (see Dynarski and Scott-Clayton, 2013 for a review of the impacts of financial aid).

The positive findings in Turner (2011) are surprising in light of subsequent work by the same author (Turner 2012a, Turner 2012b) finding that families often fail to optimize their choice of tax benefit and that colleges reduce grant assistance nearly dollar-for-dollar for students eligible for tax-based aid. Turner (2011) notes that these seemingly contradictory findings may be due to differences in the sample examined (Turner 2012a focuses on four-year institutions, which have the most grant aid to crowd out, while the enrollment effects in Turner 2011 may be driven by two-year enrollees, although the SIPP do not allow him to differentiate). An alternative concern, however, is that institutional aid may be increasing differentially for the same income groups affected by the increasing generosity of tax benefits over this time period, generating possibly spurious estimates of the impact of tax-based aid.

Two recent papers by Bulman and Hoxby (2015) and Hoxby and Bulman (2015) provide the most definitive evidence on the enrollment effects of tax-based aid. Both papers utilize rich, individual-level administrative data from the Internal Revenue Service (IRS) on the population

of potential tax return filers. These data include income and tax data from income tax forms as well as W-2 data from non-filers; enrollment information is derived from Form 1098t data, which institutions use to directly report to the IRS information on individuals' enrollment intensity and tuition and fee payments. The precise data on income and extremely large number of observations enables them to utilize regression discontinuity and regression kink analyses around eligibility cutoffs and phase-out regions, in addition to using a difference-in-difference to examine the effect of the introduction of the AOTC in 2009.

Bulman and Hoxby (2015) use a regression kink design to examine the effect of the HTC and LLC for filers at the boundaries of the phase-out regions of each credit. The intuition behind the design is that in the absence of the “kink” in tax credit eligibility, we should expect the relationship between income and college enrollment to change smoothly. In many applications, however, data limitations make it quite challenging to distinguish a true “kink” from an abrupt but nonetheless smooth change in the outcome distribution. Given the vast data at their disposal, this is not a concern in their analysis. They show clear kinks in actual usage of the tax credits in the expected directions over these phase-out regions, but no corresponding kink in enrollment behavior.

In a second analysis, Bulman and Hoxby examine the introduction of the AOTC in 2009, using a difference-in-difference approach that makes use of the fact that the AOTC increased tax-based aid differentially for filers at various points in the income distribution. They find very precisely estimated zero effects on enrollment.

Finally, Hoxby and Bulman (2015) use a regression-discontinuity design to estimate the effects of the tuition tax deduction for families around the maximum income cutoff for eligibility. They find evidence that families manage income to fall just below the cutoff, but

using a “optimal doughnut-hole” design that discards observations in the manipulable range, they find no evidence that the deduction impacts college enrollment decisions (or other margins such as enrollment intensity, enrollment in a four-year college, tuition paid, or student loans taken).

4.4 Evidence on the Effects of the Savings Incentives

Descriptive research has found that family assets and savings are correlated with children’s college enrollment and progress (see review by Elliott & Beverly, 2011). But estimating the causal impact of the college savings plans on college enrollments is extremely challenging for the reasons discussed above. Still, research on other related programs may be at least somewhat informative regarding the likely effects of the program at least on more proximal outcomes such as college savings behavior.

For example, a recent randomized experiment examines the effect of the SEED for Oklahoma Kids (SEED OK) program, which in 2008 automatically opened a 529 account for infants in the treatment group with an initial \$1,000 deposit, and additionally encouraged parents to open a second “participant-owned” 529 account by offering a \$100 account-opening incentive and a savings match for low-income families.⁴ Approximately a year and a half after treatment assignment, only about 2 percent of families in the control group had an individually-owned 529 account, compared with 16 percent in the treatment group, but they did not save significantly more overall (Nam, Kim, Clancy, Zager, & Sherraden, 2012).⁵ Though the children in the study families are very young, and impacts may grow over time, in some ways these results highlight how difficult it is to promote these accounts.

⁴ The match was 1:1 for families with AGI below \$29K and 0.5:1 for families with AGI between \$29K and \$43K.

⁵ Unsurprisingly, nearly 100 percent of the treatment group accepted the automatic account.

4. Policy Discussion

5.1 Increasing Complexity

With dozens of tax and aid programs available, two-thirds of students are now eligible for some sort of discount on their college costs. The increasing scope and diversity of subsidies for education implies increased complexity—both for students trying to estimate their college costs and for policy makers trying to ensure coherence across programs. The proliferation of programs, each well-intentioned, has created a system that makes it difficult for families—especially “first-generation” families in which neither parent has attended college—to know just how affordable college can be. Calculating the net price of college for a given family requires understanding their finances as well as the rules of the Pell Grant, student loans, the tuition tax credits, state grant programs, and aid offered by individual colleges. Evidence suggests that students are quite poor at estimating net prices.

A symptom of the general confusion is that some aid goes unclaimed: the Government Accountability Office recently calculated that 14 percent of families eligible for an education tax benefit failed to claim it. Forty percent of filers who used the tuition tax deduction would have been better off claiming one of the tax credits instead.

The Government Accountability Office has found that many families do not choose the tax advantage that would most benefit them. Families can choose among the AOTC, LLC, tuition tax deduction, or disbursement from a 529 or Coverdell to cover current expenses. Different types of expenditures (tuition, books, living expenses) qualify for some of these but not others. GAO found that about 15% percent of filers made a suboptimal choice, suggesting

substantial confusion among filers and tax preparers (U.S. Government Accountability Office, 2012).

5.2 Suitability of Tax System for Delivering Subsidies to Schooling Costs

In 2011, the Treasury Inspector General for Tax Administration (TIGTA) released a report highly critical of the administration of the AOTC (Treasury Inspector General for Tax Administration, 2011). TIGTA inspected the income tax returns that claimed in AOTC in 2009, the first year of the credit, and found ambiguities in two million returns qualifying for \$3 billion in credits. Most of these flagged returns lacked a Form 1098-T by the IRS that support students' attendance at an eligible college. The same colleges that qualify for federal financial aid qualify for the tax credits, so this reflects a failure of coordination between ED (which has a constantly-updated list of eligible institutions) and IRS (which failed to obtain it). The report pointedly referred IRS to a publicly-available dataset of institutions in the Integrated Postsecondary Education Data System.

The report also noted that institutions inconsistently fill out the 1098-T, the information return that is used to report eligible postsecondary expenses to IRS. The intent of this form is to gather information about a student's costs net of any scholarship aid. The TIGTA concluded that some colleges fail to net out scholarships. TIGTA also identified 350,000 cases in which a household received a credit even though the information on the 1098-T indicated they did not fulfill at least one of the eligibility criteria (at least half-time, undergraduate). The report emphasized that reducing fraud and error in the education credits will require better gathering of information from taxpayers and postsecondary institutions.

IRS defended its performance in its response in the TIGTA report, indicating that fraud was not nearly as rampant as the report implied (Treasury Inspector General for Tax Administration, 2011). In particular, IRS noted that while TIGTA report correctly noted that millions of AOTC recipients had not had their postsecondary institutions confirmed, this was due not to fraudulent filings but to weaknesses in the IRS's databases of eligible institutions, which they pledged to improve.

In response to the TIGTA report, legislation was introduced to the House to tighten administration of the AOTC. The proposed legislation would require that taxpayers list the employer identification number of a student's postsecondary institution. In theory, this should be present on the 1098-T, but apparently some institutions listed incorrectly.

None of these administrative challenges are insurmountable. The TIGTA is holding IRS to a degree of oversight that ED has maintained over colleges for decades. However, while ED has all of the necessary lists and procedures and lines of communication in place, IRS is relatively new to the student aid game. Until the agency gets its procedures into place, the opportunities for error and fraud are widened. The TIGTA report warns, however, that improving these procedures may create additional paperwork burdens for families and colleges.

With the rapid growth of the tax credits, an increasing number of students now complete paperwork for both the IRS and the US Department of Education in order to obtain college funding. And there is more paperwork on the horizon for families and colleges, with the Treasury Inspector General putting pressure on the IRS to obtain more documentation from applicants and colleges regarding their eligibility for the tax credits. If carried through, these

steps will largely duplicate the work that ED already does in administering the traditional aid programs and multiply paperwork burdens on households and colleges.

ED and IRS bring complementary strengths to the administration of aid for college. ED has long experience in delivering aid to students and communicating with colleges. IRS has a well-developed capacity for gathering and verifying income data from households. Conversely, IRS has little experience with verifying student enrollment and delivering aid when it is needed. And while ED has long experience in gathering income data from applicants, it does so by imposing substantial paperwork burdens upon households and colleges. Just one example: colleges are statutorily required to “verify” a minimum of 30% of their aid applications each year, an auditing process that requires applicants to submit extra supporting documentation, including copies of tax returns. Some colleges audit 100% of their aid applications. Were tax data alone used to calculate aid eligibility, the data underlying all applications would automatically be verified, since it would come from the IRS rather than the applicant.

4.3 Prospects for Reform

When choosing a path forward, it is critical to keep this in mind: the tax credits and tuition tax deduction have no effect on human capital accumulation. Until this year, economists strongly suspected that this was the case, but recent evidence based on the universe of household tax records (Bulman and Hoxby 2015, Hoxby and Bulman 2015) is dispositive. The tax credits and tax deduction, which account for most of the tax expenditures for postsecondary education, do not affect schooling decisions.

To achieve the goal of increasing human capital investments, the tax incentives would have to be restructured so that they are targeted at households whose investments are plausibly

sensitive to price, and delivered when schooling expenses are being paid. This could be achieved by consolidating the credits with the Pell program, creating a single grant program that subsidizes, at the time that tuition is due, the postsecondary expenses of low- and middle-income families.

Eligibility for this program could automatically be determined using tax data, with funds delivered by the Department of Education. This consolidation would eliminate the duplicative administrative burdens now placed upon colleges and households by Treasury and ED. Treasury has a comparative advantage in calculating ability to pay, given it already serves this function for the income tax system. ED has a comparative advantage in delivering funds to schools and colleges, given it already serves this function with the Pell and Stafford loan programs.

The goal of the education tax incentives could instead be redefined as redistributive: the transfer of income to households with postsecondary expenses. In this case, the transfer should be achieved at the lowest cost possible to households, government and colleges. A relatively straightforward subsidy to postsecondary education is already embedded in the dependent deduction, which applies to children up to age 24 if they are enrolled in college. This provision also extends eligibility for the EITC. A single, refundable credit could be created to make the subsidy more generous. Currently, the AOTC is calculated as 100 percent of the first \$2,000 in expenses and 25 percent of the next \$2,000, but just 40 percent of this total is refundable. A simplified credit could be equal to 100 percent of eligible expenses (up to a limit) and fully refundable.

The tax benefits for education are a costly way to reduce the tax burden on middle-income families, imposing extensive administrative costs on households, colleges and government. Reducing the tax rates applied to these families would be a more transparent and

less expensive approach to achieving this goal. At a minimum, a simpler system of education tax benefits would decrease the administrative and time costs of transferring funds to households with postsecondary expenses. At best, simplification would clarify incentives and increase investments in human capital.

Table 1
Federal Support for Postsecondary Students by Source, 2013

	(\$billions)
Tax Credits/Deductions/Exclusions	\$31.8
American Opportunity Tax Credit & Lifetime Learning Tax Credit	\$20.1
Dependent exemption for students aged 19-23	\$4.8
Exclusion of scholarship and fellowship income	\$2.5
Deductibility of student-loan interest	\$1.3
Exclusion of asset earnings in 529 plans	\$0.8
Deduction for higher education expenses	\$0.7
Exclusion of employer-provided grants	\$1.1
Grants	\$48.91
Pell	\$33.72
Veterans/Military	\$13.79
Supplemental Educational Opportunity	\$0.73
Other	\$0.67
Loans	\$95.92
Unsubsidized Stafford	\$51.90
Subsidized Stafford	\$25.41
PLUS	\$17.46
Perkins	\$1.01
Other	\$0.14
Work-Study	\$.98
Total Federal Support	\$182.88

Notes: Grants, loans, and work study information for 2013-14; tax benefits information for 2013. Table adapted from College Board (2014) for grants, loans, and work study, and Crandall-Hollick (2014a) for tax benefits. All values in 2013 constant dollars.

Table 2
Description of Federal Programs for Postsecondary Students

Federal Tax Credits and Deductions	
Hope Credit	Provided a maximum credit of \$1,800 for qualifying expenses relating to tuition and fees, only for students in their first two years of college, and only for families with tax liability. The American Opportunity Tax Credit replaced the Hope credit in 2009.
Lifetime Learning Credit (LLC)	Eligible tax filers are able to receive a maximum credit of \$2,000 for tuition and fees expenses.
American Opportunity Tax Credit (AOTC)	AOTC replaced the Hope the credit in 2009 and allows for a credit up to \$2,500 for expenses relating to tuition and fees and course materials. The credit rate is 100 percent for the first \$2,000 of expenses and 25 percent on the next \$2,000. Up to \$1,000 of the credit is refundable for families with limited or no tax liability.
Tuition & Loan Interest Deductions	These deductions offer filers a maximum deduction of \$4,000 for expenses relating to tuition and fees. To date, this deduction only extends through 2014.
Saving Incentives	Interest accumulates tax-free when families save for college using Federal Coverdell accounts and state 529 savings plans. Withdrawals from these accounts are not taxed unless the amount withdrawn is greater than the student's education expenses.
Dependent Exemption	A parent or guardian has the ability to claim an exemption for a dependent who is between the ages 19 and 23 and is a full-time student. The filer is allowed an exemption of \$3,950 per dependent.
Federal Student Aid Programs	
Pell Grant	The largest funded need-based aid program in the United States. Currently, students can receive a grant amount up to \$5,500. The size of the Pell award depends primarily upon family income and enrollment intensity.
Unsubsidized & Subsidized Stafford Loans	Subsidized and unsubsidized loans, also known as Stafford Loans, are administered by the federal government through the Federal Direct Loan Program (FDLP). Unsubsidized loans are available to all students regardless of need. With subsidized loans, eligibility is based on need and the federal government pays the interest on these loans while the student is in college. The maximum amount a dependent student can borrow for an undergraduate degree under the Stafford Loan programs is currently \$31,000.

Sources: U.S. Government Accountability Office (2012) and Crandall-Hollick (2014a)

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