



RESEARCH REPORT

Simplifying Federal Student Aid

How Do the Plans Stack Up?

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Simplifying Federal Student Aid

How Do the Plans Stack Up?

Researchers and advocates have long bemoaned the complexity of the federal student aid application process, the confusing array of programs available, and the bureaucratic barriers involved in managing student loan repayment. There is consensus among policymakers, advocates, and researchers on the importance of making the system as easy as possible for potential students to understand and navigate, but how to achieve this is a subject for debate. This report analyzes the potential cost and distributional impacts of several proposals for simplifying the system. Some proposals focus on making eligibility for the federal Pell grant program easier to apply for and predict. Others focus more broadly on simplifying the federal need analysis system that produces an “expected family contribution” (EFC) that provides the basis for most state and institutional aid, in addition to federal need-based aid.

The system has become simpler in recent years. In addition to a shorter application with skip-logic embedded to eliminate irrelevant questions, the IRS Data Retrieval Tool (DRT) now allows aid applicants to import data into the Free Application for Federal Student Aid (FAFSA). President Obama recently announced a policy change that will allow many more applicants to take advantage of the DRT. Instead of relying on income (and tax) data from the calendar year preceding the student’s enrollment, the system will now use income information from two years before (prior-prior year) filing for aid. Students and families will be able to apply for aid in the fall, rather than waiting until they have filed their taxes in the spring—just months before enrolling in college (White House 2015).

But there is still work to be done. The application process is cumbersome and the complex EFC formula makes it difficult for students to know their aid eligibility in advance. Simplification is a low-cost way of increasing the effectiveness of the federal commitment to broadening educational opportunities. Simplification is especially important for low-income students, who are the least likely individuals to attend college and who could benefit the most from an improved student aid application system.

Although we consider ways of streamlining the entire process of calculating the EFC, this report largely focuses on ways to simplify eligibility for Pell grants. According to the US Department of Education’s *Federal Pell Grant Program 2013–14 End-of-Year Report* tables, 2013–14 Pell grant awards totaled \$31.5 billion for 8.7 million students, an increase from \$18.3 billion for 6.2 million students five years earlier (US Department of Education 2015).¹ Over half of Pell grant recipients are

older, independent students who generally have lower income. Among 2013–14 recipients who were dependent on their parents, about one-third were from families with incomes below \$15,000; three-quarters were from families with incomes below \$40,000. Very few of these families have complicated financial situations that should require in-depth analysis to determine eligibility for federal student aid.

Our analysis leads us to suggest using a mixed approach for determining aid eligibility. A transparent look-up table for Pell grants would allow students to know far in advance how much money they are eligible to receive. A simplified application largely filled in with imported Internal Revenue Service (IRS) data would provide more detailed information on financial capacity which could then augment the information on which Pell eligibility is based. This latter system would generate an EFC that could be used for the awarding of loans and state or institutional aid. For the lowest-income students with simple finances, this contribution would be set automatically to zero and the students would receive the maximum Pell grant award.

Simplification: Evidence and Proposals

Policymakers, advocates, and researchers have made numerous proposals and suggested a variety of potential approaches to simplifying the student aid application process. The major finding of the 2005 report, *The Student Aid Gauntlet: Making Access to College Simple and Certain*, was that “a sweeping and cost effective simplification initiative could significantly improve access and increase the return on the nation’s already sizeable investment in student aid” (Advisory Committee on Student Financial Assistance 2005). In 2007, Dynarski and Scott-Clayton wrote *College Grants on a Postcard: A Proposal for Simple and Predictable Federal Student Aid*, in which they developed a formula that would let students know how much federal aid they could be eligible for based on family income and the number of other children in the family. Bettinger and colleagues (2009) found a dramatic increase in college enrollment among low-income individuals for whom H&R Block personnel completed the FAFSA in addition to their tax returns.

Using tax preparers (either free or paid) to fill out FAFSA forms may be effective, but a better solution would be to replace the FAFSA with information available from tax forms and eliminate the separate process. Dynarski and Scott-Clayton suggest a check-the-box option on the tax return to replace the FAFSA (2007).

A strong body of research, numerous policy and advocacy reports, and several bills recently introduced in Congress are all in agreement—the system is too complicated. Students do not

understand it. Aid policies are less effective than they could be because they are difficult to explain and to access. It is time for real and meaningful progress towards simplifying the way students apply for federal aid, especially Pell grants, making it possible for students to predict well in advance how much aid they are likely to receive from the federal government.

Applying for Federal Student Aid

For students, the simplest aid application process would involve an automatic calculation of eligibility based on IRS data. In cases where independent students or dependent students' parents are not required to file an IRS tax return, students would automatically have a zero EFC and receive the maximum Pell grant. Baum and Scott-Clayton (2013) suggest that the federal government should automatically calculate Pell grant eligibility for high school students. They also suggest using a simpler formula for independent or nontraditional students. In addition to removing the FAFSA barrier, the automatic calculation of eligibility would let students who are on the fence about enrolling in college know financial aid is available. An important insight from behavioral economics is that people tend to weigh losses more heavily than equivalent gains. If students know they have aid money, not using it to go to college will become a loss.

We know many Pell-eligible students do not complete the application process, but we do not know how much of the problem is lack of knowledge of the potential benefits, how much is fear of the complexity of the form or the repercussions of making errors, or how much is failure to follow through on good intentions. Relying on already available tax data would alleviate many of the problems behind FAFSA noncompletion. It would be feasible to develop a formula relying only on data from tax forms that closely mimics the current federal formula. The College Board tested such a formula, modifying some of the definitions on the current FAFSA. For example, the formula imputed assets from interest and dividends to replace assets reported on the FAFSA (Baum et al. 2012). But simplifying Pell eligibility further would be even better.

We can stop asking students and families to report financial information on the FAFSA. In this report we compare the costs and distributional effects of eight proposals with alternative formulas for calculating either Pell eligibility or EFC, laying out the advantages and disadvantages of each. Using data from the 2011–12 National Postsecondary Student Aid Study (NPSAS), we estimate how students with financial aid would fare under these different proposals. We use the same sample and assume a maximum grant of \$5,550 (the maximum Pell grant award for the 2011–12 school year) for full-time

students for all proposals.² We also apply the same rules about minimum grant size and how grants vary with enrollment intensity.³

Before looking at the specific proposals, it is illustrative to examine how individual changes to the current formula would affect costs and eligibility independently (see table 1). In doing so, we can disentangle the change in cost and number of recipients coming from a specific stand-alone adjustment to the Pell calculation before analyzing proposals that incorporate a number of simplifications.

If EFC were not modified by the number of students in a family who are in college, there would be more than 270,000 fewer students eligible for Pell, with students in higher-income households losing eligibility, and leading to cost declines of almost a billion dollars. In contrast, the other modifications we consider to simplify the financial aid calculation all increase the number of potential Pell recipients and the cost of the program. If we exclude contributions to EFC from dependent students (so EFC is solely based on the parents' income and assets) costs of the program would increase over \$0.5 billion. Excluding cost-of-attendance limitations would increase cost by \$0.3 billion, as would limiting additions and subtractions to adjusted gross income (AGI) as reported on tax returns. The current changes to AGI can raise or lower family income for a specific student but raise family income for the majority of students: total income after adjustments averages about \$740 more than AGI. Just excluding child support receipts (one component of untaxed earnings that is added to AGI) from total income increases costs by \$0.16 billion.

The interaction of the various changes under a proposal can lead to changes in cost and number of recipients that are greater than the sum of the effects of each component. Combining two changes (e.g., excluding student contributions in a dependent student's EFC and not adjusting Pell for cost of attendance), as shown in modification 5 in table 1, provides an example of this interaction effect. This interaction is the result of the way Pell awards are calculated and the fact that there is a minimum award size. First, the maximum Pell grant allowed is calculated based on tuition and expected fees and living expenses. If this amount is expected to be less than \$5,550, say for a community college student living at home, the maximum Pell is adjusted down. Then the size of the Pell award is calculated as this adjusted amount minus the expected family contribution (EFC). So if EFC is lower (because of the omission of a contribution from student income) and maximum Pell is higher (without the cost-of-attendance adjustment) then more students will be eligible. Another example would be combining the elimination of assets with the elimination of dependent student income. There would be applicants for whom neither of the adjustments alone would be large enough to generate eligibility, but combining the two would lower income enough to make the applicant eligible for Pell.

Many of these singular changes to the EFC and Pell formulas are components of the eight proposals analyzed in this report. Table 2 summarizes the key elements of these proposals.

TABLE 1

Potential Formula Modifications for Calculating Pell

Modification to baseline	Change in cost	Change in no. of Pell recipients	Average award	
			Cost	
Baseline estimates		\$28.32 billion	8,314,267	\$3,407
				Change in average Pell award
1 Do not divide EFC by number of students in a family in college	-\$0.90 billion	-270,474		\$3
2 Do not include any income information outside of AGI ^a	\$0.31 billion	88,221		\$1
2a Do not include child support received in total income ^b	\$0.16 billion	30,347		\$6
3 Do not include student contribution to EFC for dependent students	\$0.55 billion	152,564		\$4
4 No cost-of-attendance adjustment ^c	\$0.30 billion	45,439		\$17
5 No student contribution for dependent students and no cost of attendance adjustment ^d (3+4 combined)	\$0.94 billion	227,919		\$19

Note: Proposal estimates are for a NPSAS data sample of 64,440 observations representing 12.5 million students who applied for financial aid in 2011–12.

^a Income information other than AGI refers to any additions to income from untaxed income and benefits or deductions from additional financial information.

^b Child support received is a component of untaxed income and benefits, which is fully excluded under modification 2.

^c Do not lower Pell to equal cost of attendance in cases where the Pell award exceeds a student's estimated cost of attendance.

^d The change in cost and number of recipients from the interaction of these two modifications to the baseline is greater than the sum of the changes in cost and recipients from each modification independently.

TABLE 2

Proposal Summaries

Proposal	Outcome	Key elements
Original Pell on a postcard	Pell grant	Based on AGI with extra dollars for additional children in the family; added funds from current education tax credits
Modified Pell on a postcard	Pell grant	Tax credits removed from original version in the calculation of Pell grants, so more aid is focused lower down the income distribution
Two-factor model	Pell grant	Based on AGI relative to the FPL, which varies with family size
Three-factor model	Pell grant	Based on AGI relative to the FPL, which varies with family size, but also includes additional factor based on number in college
Hamilton Project	Pell grant	Based on AGI relative to the FPL, which varies with family size, for dependent students; independent students receive full, half, or no Pell based on AGI
IRS data only	EFC	Computed automatically from IRS data with no consideration of assets
Gates Foundation	EFC	Based on IRS data, with additional information required for filers with additional tax schedules
NASFAA	EFC	Three paths to calculation depending on participation in income support programs and tax filing requirements, with additional information required for filers with additional schedules; also modifies base income used for calculating EFC

Note: FPL = federal poverty level; NASFAA = National Association of Student Financial Aid Administrators.

The first five of the eight proposals rely on look-up tables. These tables can be implemented in a variety of ways, including paper forms, online calculators, and apps on smart phones or tablets. This approach would allow students to calculate their expected Pell grants well before the time to apply to college. We first examine the Pell-on-a-postcard proposal, which gives a Pell grant based on income, with additional grant aid available if there are more children in the family (Dynarski and Scott-Clayton 2007). This proposal, which originally suggested combining both grant funds and money from tax credits, was introduced when tax credits were less generous and more targeted at middle-income families than they currently are. We model the original version of this proposal recognizing the recent increase in Pell grant amounts and a modified version that is less generous to middle-income households since we are only replacing Pell funds and are omitting changes to the higher education tax credits. These proposals provide a specific Pell grant for incomes within specified ranges.

The next two proposals consider grants that vary with family size and income. Our two-factor model is similar in concept to that proposed by Senators Lamar Alexander (R-TN) and Michael Bennet (D-CO)⁴ and ties Pell amounts to how family income compares with the federal poverty level (FPL). Our three-factor model is similar, but it also considers if more than one family member is in college. Comparing our two-factor and three-factor models illustrates the difference in awards based on the

college spacing patterns of siblings that results from giving larger Pell grants to students with a sibling in college than to other students from families with similar incomes. All our look-up tables acknowledge family size or composition, with varying emphasis placed on the number of family members or the number of children in college.

For the fifth look-up table proposal, we model the Hamilton Project proposal of Baum and Scott-Clayton (2013), which has different rules for dependent and independent students. Because independent students are typically in smaller-sized families, the look-up tables based on the FPL are often less generous for these students. Thus independent students receive more benefit under this proposal than under the other look-up table proposals.

The remaining three proposals are more complicated than those using simple look-up tables, but they would simplify the application process by using technology and data already collected and available from the IRS to prefill forms and automate applying for aid. Using tax data from two years earlier will make this process available to more applicants. Using only IRS data follows the formula suggested by Dynarski, Scott-Clayton, and Wiederspan (2013). This approach does not take wealth into account. IRS information on dividends, capital gains, and interest could be used to impute wealth (Baum et al. 2012). But an alternative would be to use the presence of this information to ask for wealth information explicitly, as the final two proposals analyzed do. These recent proposals, one from the Bill & Melinda Gates Foundation and one from the National Association of Student Financial Aid Administrators (NASFAA), keep more information in the formula and rely on technology to simplify the process for students.

The Gates Foundation proposal recognizes that the current form is too complicated and relies more directly on information available from the basic tax return (Bill & Melinda Gates Foundation 2015). Instead of the current practice of ignoring assets for families with incomes below \$50,000, this proposal would eliminate asset questions for students and parents who do not have any additional tax schedules beyond their basic 1040 form. For households that have filed additional schedules, indicating, for example, capital gains or self-employment, the Gates Foundation proposal asks for information about wealth beyond that available on tax forms. It simplifies by focusing only on parental information and excluding student income and assets for dependent students.

The NASFAA proposal sets up three paths toward an award (NASFAA 2015b). The first allows households that receive federal benefits to automatically receive a maximum Pell award. Additional households that do not need to file taxes would receive a Pell award after providing information on earnings and child support received. Our modeling exercise revealed that the number of these nonfiler

students receiving less than the maximum Pell award would be small, and we suggest simply awarding these students a maximum Pell award without requesting additional information. For the second path, the proposal uses a formula similar to the simple Gates Foundation formula for applicants who file a tax return without schedules, adding in a limited amount of additional nontaxed income (e.g., information on child support payments and untaxed pension and retirement payments). The third path uses a different formula for taxpayers with complicated returns.

Other options could be imagined, but these proposals allow us to examine how different approaches would affect the cost and distribution of Pell grants.

These proposals tend to shift Pell grants to students with lower reported incomes by either increasing participation or increasing grant levels. The costs of the proposals vary from being effectively budget neutral to creating an annual increase of \$1.7 billion (about 6 percent). These numbers do not include the costs of expanding the number of students either attending college or applying for aid through an automatic calculation of awards or a simpler application process.

Our estimates are based on the population of students about whom we have enough information to estimate the receipt of Pell grants under the different options, namely those students who completed the FAFSA. Seventy percent of students in the NPSAS data applied for financial aid. Final costs of any changes will depend on how many and which of these students end up applying for aid under a simplified system. Fifty-nine percent of all students from families with AGI above \$80,000 filled out the 2011–12 FAFSA forms compared with 83 percent with income below \$10,000. If all students fill out the FAFSA form and new filers are eligible at the same rate as others with the same incomes, we find the number of recipients could grow by as much as 4.5 million students, or be about 50 percent larger than the current program.

Assuming all students participate is a very strong assumption, and even eliminating the FAFSA, including a check-the-box option on tax returns, and awarding maximum Pell grants for students who do not have to file taxes would likely not lead to this increase in take-up rates. Some students may not apply for federal aid because they have received funding from another source—such as veterans benefits—that is sufficient to cover the cost of education. Others may have reasons for wanting to avoid the federal student aid system. Nevertheless, the conservative approach is to consider an increase in cost per new recipient of about \$3,000 for all our proposals, with higher costs if we bring more low-income potential students into the system.

Although any of the proposals analyzed would be an improvement over the current system, we suggest using a combination of methods. The best option would be using a look-up table for calculation

of Pell grants and generating a more nuanced measure of ability to pay for higher-income families or those in more complicated circumstances to help schools, states, and others calculate complete financial aid packages.

This approach would lead to separating Pell calculations from the rest of the financial aid application process. But for students who are eligible for a maximum Pell grant, having a zero EFC could be carried over for other types of aid. Splitting Pell grant calculations from the rest of the system could limit the cost of the federal Pell grant program without generating higher EFCs that would unduly burden middle- and higher-income families by limiting their eligibility for aid from loan programs, states, and institutions. In contrast, the current system of awarding Pell grants to students whose EFCs are lower than the maximum Pell grant leads to the expansion of eligibility up the income distribution when the Pell grant maximum increases. This means that any effort to reduce or limit Pell expenditures will affect the calculation of EFC for all students—including those who are ineligible for Pell.

For example, we could award Pell grants using a two-factor table that relies only on income and family size and tie this method to the Gates Foundation method for calculating EFC. Almost all students with a zero EFC under the Gates Foundation formula would qualify for the maximum Pell grant under the two-factor model. Institutions and states could use the calculated EFC, with flexibility, to award their own aid. Although Pell grants would be awarded based solely on family income and size without taking account of the number of students in college, the formula for awarding other aid could reduce EFCs for families with more than one child in college.

Virtually all applicants with an adjusted gross income (AGI) under \$25,000 would have a Pell grant under the two-factor look-up table approach equal to or higher than under the Gates Foundation proposal; under the two-factor model, 91 percent of recipients with AGI under or equal to \$25,000 would have grants within \$500 of those under the Gates Foundation proposal. Overall, about three-quarters of Pell awards vary by less than \$500 between the Gates Foundation and two-factor model proposals, with higher-income students receiving less aid under the look-up table approach than under a more complicated formula, primarily because of the removal of the number-in-college adjustment. In other words, the two-tiered approach would simplify the system for low-income students and allow the early prediction of Pell grants. But it would preserve the more detailed information required for the allocation of other types of financial aid and would not significantly alter the distribution of Pell grants.

Overview of Modeling Results

Table 3 shows baseline amounts and how our estimates vary across proposals. The proposals are presented from simplest to most complicated. In general, more costly proposals give grants to more recipients or give larger grants to specific groups. Most proposals, with the exception of the original Pell-on-a-postcard plan, shift awards down to lower-income households. The original Pell-on-a-postcard plan, however, was designed to replace both grants and tax credits. Our modified postcard proposal has many fewer new participants than the original, and it focuses the benefits on lower-income applicants.

All eight proposals remove the cost-of-attendance adjustment from the calculation of Pell awards. This adjustment decreases Pell grants in cases where a student's award exceeds their expected cost of attendance, so excluding it means awards are more generous for these students. By removing this adjustment, students can know their Pell award amounts in advance without the stipulation that their costs of attendance are high enough. Before accounting for further cost increases from the interaction of this change with other changes under the proposals, excluding the cost-of-attendance adjustment increases costs by \$0.3 billion (see table 1). Low-income students benefit the most from this adjustment: 79 percent of costs come from students with income of \$30,000 or less, but overall it does not impact Pell for many students.

TABLE 3

Effect of Estimated Simplification Proposals on Pell Grant Awards for 2011–12 Financial Aid Applicants

Baseline estimates	Cost \$28.32 billion	No. of recipients 8,314,267	Average award \$3,407	Baseline recipients within \$500 of baseline Pell
Proposal	Increase in cost from baseline	Change in No. of Pell recipients from baseline	Increase in average Pell award	
Original Pell on a postcard	\$1.69 billion	2,468,411	-\$624	58%
Modified Pell on a postcard	-\$0.06 billion	1,146,115	-\$419	54%
Two-factor Pell	\$0.14 billion	-201,192	\$102	73%
Three-factor Pell	\$0.91 billion	-11,753	\$114	74%
Hamilton Project	\$1.06 billion	-116,646	\$177	74%
IRS data only	\$0.85 billion	191,719	\$22	91%
Gates Foundation	\$1.62 billion	332,094	\$57	88%
NASFAA	\$0.73 billion	69,090	\$59	91%

Note: Proposal estimates are for a NPSAS data sample of 64,440 observations representing 12.5 million students who applied for financial aid in 2011–12.

Proposal Estimates of Pell Grants

Below, we briefly describe each of the proposals examined, discuss their strengths and weaknesses, and list simplifying assumptions or changes we made to generate our estimates. We present proposals in order of apparent ease of understanding and calculation for families, beginning with the look-up table approaches, which could be programmed as an app on a smart phone, in which the student enters income, family size (or number of children), and possibly number of other family members attending college.

The simulations we report rely on a methodology similar to Dynarski, Scott-Clayton, and Wiederspan (2013) and follow-on work. We examine a sample of students from the 2011–12 NPSAS file who applied for financial aid and estimate their Pell awards using information in our data. We use this sample to calculate as accurately as possible what the students’ Pell grants would be under each of our eight proposals and compare these results with our estimated Pell awards. For each of the proposals, to maintain consistency we adjust the calculated full-time, full-year Pell amount by the enrollment intensity variable generated in the baseline estimates.⁵ We adjust Pell awards under the proposals down to zero if they are under \$277 and up to \$555 if they are between \$277 and \$555, and we round to whole dollar amounts.⁶ In all baseline and proposal estimates, we use information on applications from the 2011–12 academic year and income information from 2010. Information on our data sample, who is excluded, and current estimated Pell amounts is presented in appendix A.

There are trade-offs between the simplicity of a formula and its precision (see table 4). Look-up tables are straightforward, but they could assign aid to households that are income poor but asset rich. However, few of the lowest-income students have measurable wealth, and, in our judgment, the advantages of a knowable grant amount far ahead of enrollment outweigh the disadvantages. Moreover, any formula, including the methodology currently in place, has some anomalous results. For example, the current practice of including only the income of the custodial parent (and his or her spouse if relevant), awards Pell grants to some students who have significant resources as a result of disparate incomes across divorced parents. There is broad consensus that the benefits of this approach outweigh the costs for federal student aid, but many institutions do collect information from noncustodial parents before awarding their own funds.

Although most of the proposals we outline would use income data from two years before enrollment rather than one year before as under the current formula—moving from “prior year” to “prior-prior year” (PPY) income—we did not include this change in our basic estimates. Though we have information on students who applied for aid in the 2012–13 academic year, we do not have information on the actual Pell grants awarded or attendance intensity. In addition, because we are missing information on students who were seniors in 2011–12 or freshmen in 2012–13, this sample is about half the size of our 2011–12 sample. The Gates Foundation, IRS-data-only, and NASFAA proposals all call for this change, and the Hamilton Project proposal calls for using an average of the three years of income before enrollment for student aid calculations. Using PPY information for the look-up table estimates would also be possible. We do present some results about how expected awards may change with the introduction of PPY information later in the report.

TABLE 4

Distribution of Benefits in Simplified Pell Proposals

Proposal	Students receiving maximum Pell awards ^a	Who Benefits the Most?	
		Dependent versus independent	Low income versus high income
Baseline	41.5%	—	—
Original Pell on a postcard ^b	33.8%	Larger increase in dependent recipients, but independent students account for most of cost increase	Larger increase in higher-income recipients but with small grants; higher average Pell for lower-income recipients
Modified Pell on a postcard ^b	40.1%	Decrease in average awards greatest for dependent recipients, driving cost decrease for dependent students Both with higher average awards, but decrease in awards for higher income dependents	Larger increase in number of higher-income recipients but with small awards; higher average Pell for lower-income recipients
Two-factor Pell	48.0%	Both with higher average awards	Higher average awards for lower-income recipients
Three-factor Pell	49.2%	Increase in average awards greatest for independent students	Higher average awards for lower-income recipients Lower-income recipients increase in count and average award size
Hamilton Project	44.8%	Increase in recipients largely from dependent students	Larger increase in higher-income recipients Larger increase in higher-income recipients; higher average awards to lower-income recipients
IRS data only	44.6%	Increase in recipients largely from dependent students	Largest increase in recipients and award amounts for higher-income students
Gates Foundation	46.2%	Higher average awards for independent students	
NASFAA	44.6%		

Notes: Proposal estimates for a NPSAS data sample of 64,440 observations representing 12.5 million students (6.5 million dependent and 6.0 million independent) who applied for financial aid in 2011–12.

^a The maximum Pell award accounted for here, generally \$5,550, is before adjusting for enrollment intensity. The percentage given is out of the full student sample (not limited to recipients under the proposal).

^b These models include any student receiving an award of at least \$5,550. Students from larger families can receive awards up to \$6,550 under these proposals.

Proposals Using Look-Up Tables

The first proposals we consider move away from awarding Pell based on the calculation of an EFC and use a simplified formula to calculate Pell awards. Although we call them look-up tables (as this is how

(they have often been described) the data in the tables could also be made available as an app or online calculator for students to use far in advance of the college application process.

These models would separate Pell eligibility from other calculations that might be needed to determine a broader set of financial aid awards. As mentioned before, separating the two calculations would make information available to low-income applicants earlier and make the process more transparent. If the federal government solely used a Pell look-up table and eliminated the FAFSA, states, colleges, or other scholarship and loan applications would require additional information to calculate some measure of expected contribution and award their aid.

Pell-on-a-Postcard Proposals

DESCRIPTION

The original Pell-on-a-postcard proposal from Dynarski and Scott-Clayton (2007) provides a look-up table to determine award amounts based on parents' (for dependent students) or student's and/or spouse's (independent) income and the number of dependent children in the family. Under the proposal, the grant amounts represent total benefits from Pell, the Hope Credit, and the Lifetime Learning Credit, but, for the purposes of our analysis, we compare the proposal awards and costs with those for only Pell grants and assume a maximum grant equal to \$5,550. We adjust the award amounts outlined in the proposal for the 2006–07 award year upward to reflect a similar percentage of the maximum Pell grant in 2011–12. We use the income groups in the look-up table included in the proposal for our estimates.⁷ Thus students or parents with AGI below \$15,000 receive a maximum Pell grant of \$5,550, with awards decreasing as income levels increase and going to zero for those with an AGI of \$100,000 or more. For families with AGI below \$100,000, an additional \$250 is added to the award for each dependent child in the family (not including the student if he or she is a dependent and not to exceed an additional \$1,000).

We then adjust the original Pell-on-a-postcard proposal to only represent Pell grant benefits, rather than the combination of Pell and education tax credits, to allow for a more fair comparison with other proposals. The look-up table for the modified Pell-on-a-postcard proposal continues to base award amounts on AGI and the number of dependent children in the family. The modified proposal expands maximum grant eligibility to students or parents with AGI below \$20,000, and the look-up table begins phasing down more rapidly at lower AGI levels, going to zero at \$75,000. This steeper phase-out represents the exclusion of the tax credit amounts for higher-income applicants. The additional \$250 for each dependent child in the family (other than the student, if applicable, with a maximum of \$1,000)

remains in place for income levels of under \$75,000. As the minimum Pell award under the Pell-on-a-postcard proposals is \$275, grant awards go to zero under the modified proposal for students with incomes between \$60,000 and \$75,000 if there are no other dependent children in the family. Table 5 shows look-up tables for the original and modified versions of Pell on a postcard.

TABLE 5

Look-Up Table Examples of an Original and Modified Pell on a Postcard

For full-time, full-year students, 2011–12

Original		Modified	
AGI ^a	Grant award ^b	AGI ^a	Grant award ^b
\$0–\$14,999	\$5,550	\$0–\$19,999	\$5,550
\$15,000–\$19,999	\$5,050	\$20,000–\$22,499	\$5,050
\$20,000–\$24,999	\$4,500	\$22,500–\$24,999	\$4,500
\$25,000–\$29,999	\$4,100	\$25,000–\$27,499	\$4,000
\$30,000–\$34,999	\$3,300	\$27,500–\$29,999	\$3,250
\$35,000–\$39,999	\$2,200	\$30,000–\$32,499	\$2,750
\$40,000–\$44,999	\$1,200	\$32,500–\$34,999	\$2,000
\$45,000–\$49,999	\$1,000	\$35,000–\$39,999	\$1,500
\$50,000–\$74,999	\$750	\$40,000–\$44,999	\$1,000
\$75,000–\$99,999	\$550	\$45,000–\$59,999	\$550
\$100,000 and greater	\$0	\$60,000–\$74,999	\$250
		\$75,000 and greater	\$0

^a AGI is parents' AGI for dependent students and student's and/or spouse's AGI for independent students.

^b Grant award is the total benefits from Pell, the Hope Credit (extended as the American Opportunity Tax Credit), and the Lifetime Learning Credit for the original look-up table and the total benefits from Pell only for the modified look-up table. Add \$250 per dependent child other than the student to the award, up to additional \$1,000 (if AGI is less than \$100,000 under the original table or AGI is less than \$75,000 under the modified table).

KEY CHARACTERISTICS

- A straightforward look-up table lets students know their predicted award amounts well in advance of enrollment.
- The original model combines Pell with tax credits to better coordinate all federal student aid. In contrast to the current tax credit system, funds would be available before tuition payments under the original proposal.
- Because they forgo information about wealth and assets, the proposals could result in increased Pell awards for wealthy families with low reported incomes.

- Eliminating the adjustment for the number of students in a family in college limits the Pell grant funding going to students who are in higher-income families.
- Allocating aid other than Pell grants would require a separate formula for developing an EFC, but the simple approach to determining Pell eligibility would protect the EFC formula from being modified to control Pell expenditures.

ESTIMATES

Although under the original Pell-on-a-postcard proposal Pell recipients increase by close to 2.5 million students (30 percent from baseline), much more than under any other proposal, the cost increase is only \$1.69 billion. The majority of the increase in recipients is concentrated in the mid- to higher-income brackets because grants are given higher up the income distribution to account for the tax credits being rolled into the Pell grant program. Although the increase in recipients with incomes below \$20,000 is quite small, the average award for these lower-income recipients increases. This increase is offset by decreasing average awards for those with AGI above \$20,000, driving a \$624 decrease in average award amounts for all recipients. This large decline in average grant size is mostly the result of the large increase in the number of students receiving aid.

The cost increase comes from both the larger average award amounts for those with incomes under \$20,000 and the increased number of recipients in the higher-income groups. (Over half of the new recipients have AGIs of \$60,000 to \$100,000.) Fifty-eight percent of baseline recipients have Pell amounts within \$500 of their estimated Pell grant, a smaller share than under most other of the proposals. Sixteen percent receive a Pell grant that is larger than their baseline by \$500 or more and 26 percent would receive awards smaller than baseline by at least \$500 (table 6). Many low-income students would receive a Pell grant greater than the maximum Pell because extra dollars are added for more children in the family. The phase-out rate and the elimination of higher Pell for students in families with more than one student enrolled in college contribute to some higher-income students losing funding.

TABLE 6

Pell Estimates under the Original Pell-on-a-Postcard Proposal

Adjusted gross income	No. of Pell recipients	Average proposal award	Total cost (in millions)	Change in Pell for Actual Recipients		
				Within \$500	Larger	Smaller
\$0	1,074,170	\$3,829	\$4,113	83%	17%	0%
\$1–5,000	806,955	\$3,954	\$3,190	85%	15%	0%
\$5,001–10,000	913,832	\$4,020	\$3,673	83%	17%	0%
\$10,001–15,000	1,058,409	\$4,136	\$4,378	64%	36%	0%
\$15,001–20,000	997,739	\$3,824	\$3,815	67%	28%	5%
\$20,001–25,000	882,084	\$3,393	\$2,993	48%	14%	39%
\$25,001–30,000	792,656	\$3,142	\$2,490	35%	8%	57%
\$30,001–35,000	607,151	\$2,565	\$1,557	25%	8%	67%
\$35,001–40,000	505,780	\$1,906	\$964	17%	4%	79%
\$40,001–50,000	798,764	\$1,114	\$890	20%	3%	78%
\$50,001–60,000	571,031	\$904	\$516	29%	2%	69%
\$60,001–80,000	1,005,041	\$853	\$857	46%	9%	45%
\$80,001–100,000	769,064	\$746	\$574	57%	12%	31%
>\$100,000	0			0%	0%	100%
Total	10,782,678	\$2,783	\$30,011	58%	16%	26%

Notes: Estimates are for a NPSAS data sample of 64,440 observations representing 12.5 million students who applied for financial aid in 2011–12. Average awards are for those who receive a nonzero award. Change in Pell percentages are for the sample of 47,190 actual Pell recipients (8,314,267 weighted).

Under the modified Pell-on-a-postcard proposal, the number of Pell recipients increases by over 1.1 million students, but costs remain essentially unchanged from the baseline, decreasing just \$0.06 billion. Although over 90 percent of the increase in recipients comes from those with AGIs between \$25,000 and \$75,000, the expenditures on these AGI groups decrease from the baseline because of lower average awards. The cost savings from lower average awards to those further up the income distribution offsets the more generous average awards for those with incomes under \$20,000. For recipients under this proposal, overall average awards decrease \$419.

Pell amounts under the modified Pell on a postcard are within \$500 of the baseline for 54 percent of baseline recipients, the smallest share within \$500 of the baseline out of all the proposals we analyze. Though 28 percent of recipients of Pell would receive a smaller Pell grant, this is concentrated in recipients from families with incomes above \$25,000 (table 7). Just 3 percent of those with AGI under or equal to \$25,000 would receive a Pell award more than \$500 less than the baseline, but the same is true for 80 percent of recipients with income above \$25,000.

TABLE 7

Pell Estimates under the Modified Pell-on-a-Postcard Proposal

Adjusted gross income	No. of Pell recipients	Average proposal award	Total cost (in millions)	Change in Pell for Actual Recipients		
				Within \$500	Larger	Smaller
\$0	1,074,170	\$3,829	\$4,113	83%	17%	0%
\$1–5,000	806,955	\$3,954	\$3,190	85%	15%	0%
\$5,001–10,000	913,832	\$4,020	\$3,673	83%	17%	0%
\$10,001–15,000	1,058,409	\$4,140	\$4,381	64%	36%	0%
\$15,001–20,000	997,821	\$4,181	\$4,172	54%	46%	0%
\$20,001–25,000	882,085	\$3,585	\$3,162	62%	16%	22%
\$25,001–30,000	792,535	\$2,819	\$2,234	20%	7%	74%
\$30,001–35,000	603,304	\$1,931	\$1,165	12%	4%	84%
\$35,001–40,000	502,332	\$1,393	\$700	9%	2%	89%
\$40,001–50,000	756,705	\$920	\$696	15%	1%	85%
\$50,001–60,000	545,277	\$785	\$428	25%	1%	74%
\$60,001–80,000	526,956	\$667	\$351	31%	2%	68%
\$80,001–100,000	0			0%	0%	100%
>\$100,000	0			0%	0%	100%
Total	9,460,382	\$2,988	\$28,266	54%	18%	28%

Notes: Estimates are for a NPSAS data sample of 64,440 observations representing 12.5 million students who applied for financial aid in 2011–12. Average awards are for those who receive a nonzero award. Change in Pell percentages are for the sample of 47,190 actual Pell recipients (8,314,267 weighted).

Two- and Three-Factor Pell Proposals

DESCRIPTION

Using a two-factor look-up table or app would have Pell grants vary by family size and income. Our two-factor table uses the 2010 FPL guidelines by family size to calculate Pell amounts, with family size capped at six people.⁸ Applicants (parents for dependent students and students and/or spouses for independent students) with AGI equal to or below 150 percent of the FPL for the family size would receive the maximum Pell grant of \$5,550. The award amount would phase out evenly between 150 and 250 percent of the FPL, where Pell grants would go to zero.

The two-factor model uses the same criteria of income and family size as the Financial Aid Simplification and Transparency Act (FAST Act) reintroduced in 2015 by Senators Lamar Alexander (R-TN) and Michael Bennet (D-CO) along with several cosponsors.⁹ Our two-factor tables are more

generous for the lower-income groups and phase down award amounts at a higher income threshold across family sizes. The FAST Act tables award higher amounts to those further up the income ladder and have higher income thresholds at the top for receipt of a Pell grant (with the exception of students with a family size of one).

Using a three-factor look-up table or app would add the number of college students in a family to the two-factor calculation. Our three-factor table also uses the 2010 FPL guidelines by family size. By including the number of college students in a family in the calculation, this proposal gives extra support for families with multiple students in college at the same time. Our approach is to count any family members in college, other than the student in question, twice, thus increasing the family size. For example, if a student had an actual family size of four and a sibling was also in college, their Pell grant under our three-factor table would be calculated as though they had a family size of five. Family size, which is capped at seven people, is the only adjustment from our two-factor table; the range of maximum Pell at or below 150 percent of the FPL to phase-out at 250 percent remains the same.

Thus, unlike the Pell-on-a-postcard model, the maximum Pell award does not increase for larger family sizes under the three-factor model. But, as in the current system, the size of a student's Pell grant depends on the number of family members in college.

Comparing our two- and three-factor models illustrates the difference in awards based on the college spacing patterns of siblings that results from giving larger Pell grants to students with a sibling in college than to other students with similar family incomes.

These proposals are easily translated into look-up tables that display Pell awards for select income levels and family sizes (see table 8), but the actual calculation would use a formula for awards between 150 and 250 percent of the poverty level:

$$Pell_{Fulltime} = \$5,550 - (AGI - 150\% \text{ of } pov) * \left(\frac{\$5,550}{250\% \text{ of } pov - 150\% \text{ of } pov} \right)$$

TABLE 8

Look-Up Tables for the Two- and Three-Factor Models*For full-time, full-year students, 2011–12*

Family size of 1			Family size of 2			Family size of 4		
Percent of FPL	AGI	Pell award	Percent of FPL	AGI	Pell award	Percent of FPL	AGI	Pell award
	\$0	\$5,550		\$0	\$5,550		\$0	\$5,550
150%	\$16,245	\$5,550	150%	\$21,855	\$5,550	150%	\$33,075	\$5,550
160%	\$17,328	\$4,995	160%	\$23,312	\$4,995	160%	\$35,280	\$4,995
170%	\$18,411	\$4,440	170%	\$24,769	\$4,440	170%	\$37,485	\$4,440
180%	\$19,494	\$3,885	180%	\$26,226	\$3,885	180%	\$39,690	\$3,885
190%	\$20,577	\$3,330	190%	\$27,683	\$3,330	190%	\$41,895	\$3,330
200%	\$21,660	\$2,775	200%	\$29,140	\$2,775	200%	\$44,100	\$2,775
210%	\$22,743	\$2,220	210%	\$30,597	\$2,220	210%	\$46,305	\$2,220
220%	\$23,826	\$1,665	220%	\$32,054	\$1,665	220%	\$48,510	\$1,665
230%	\$24,909	\$1,110	230%	\$33,511	\$1,110	230%	\$50,715	\$1,110
240%	\$25,992	\$555	240%	\$34,968	\$555	240%	\$52,920	\$555
250%	\$27,075	\$0	250%	\$36,425	\$0	250%	\$55,125	\$0

Notes: Based on 2010 FPL guidelines. The maximum grant is set at \$5,550. AGI is parents' AGI for dependent students and student's and/or spouse's AGI for independent students. Family size denotes actual family size under the two-factor model and adjusted family size, where any additional family members in college other than the student are counted twice, under the three-factor model.

KEY CHARACTERISTICS

- Using a Pell award system based solely on income and family size is transparent, easily calculated, and lets students know what size Pell grant they could be eligible for years in advance of college enrollment.
- These tables can be adjusted in a straightforward manner to allow more or fewer students to be eligible as funding levels change.
- Because these models are solely based on income and family size, they exclude information about wealth or special circumstances, which might increase Pell awards for students in families with low incomes but significant wealth.
- Allocating aid other than Pell grants would require a separate formula for developing an EFC, but the simple approach to determining Pell eligibility would protect the EFC formula from being modified to control Pell expenditures.

ESTIMATES

Under our two-factor model, award amounts average \$102 more than the baseline, but, as 201,192 fewer students are served, the proposal is nearly cost neutral with a cost increase of \$0.14 billion. The decrease in recipients is driven by a decrease in the number of awards to students with AGI above \$60,000, as the number of recipients with parent (dependent) or student (independent) AGI below \$35,000 actually increases. Recipients with incomes above \$80,000 are totally eliminated under this proposal.

Much of the cost increase comes from increased average award amounts to lower-income students, offsetting the decreased costs from fewer awards and lower average grants in the higher AGI brackets (table 9). Comparing who gains and who loses from our baseline estimates, 73 percent of baseline Pell recipients are within \$500 of their baseline award, 12 percent receive larger awards, and 15 percent receive smaller awards. Recipients with incomes of \$40,000 or less have the same or larger awards 94 percent of the time, and most students whose Pell grants decline have higher incomes. Only 5 percent of all baseline recipients no longer receive an award under the proposal, but the majority of baseline recipients in the higher-income groups lose Pell grants (71 percent of those with incomes of \$60,000 or above). These patterns in part reflect the elimination of the adjustment for number of students in the family in college and using the FPL for a family of six to determine income limits for families with six or more members.¹⁰

Under our three-factor model, the number of Pell recipients is almost the same as under the current system, decreasing by 11,753 from the baseline; costs rise by \$0.91 billion (table 10). As with the two-factor model, increases in the number of awards for lower-income recipients (those with AGIs below \$35,000) are offset by fewer awards being given to those with higher AGIs. Likewise, the \$114 increase in average award amounts is driven by increased average awards for those with incomes below \$20,000 and fewer recipients with incomes above \$35,000, as those in highest-income brackets receive smaller average awards. Thirteen percent of baseline recipients see their Pell amounts decrease by \$500 or more under the proposal, but the same is true for only 2 percent of those with incomes below \$30,000. As with the two-factor model, the majority of baseline recipients who lose Pell grants under the proposal are in the higher-income groups, but, because of the adjustment for the number of students in college in a family, the change is less dramatic.

TABLE 9

Pell Estimates under the Two-Factor Proposal

Adjusted gross income	No. of Pell recipients	Average proposal award	Total cost (in millions)	Change in Pell for Actual Recipients		
				Within \$500	Larger	Smaller
\$0	1,074,170	\$3,674	\$3,946	96%	4%	0%
\$1–5,000	806,955	\$3,803	\$3,069	97%	3%	0%
\$5,001–10,000	913,832	\$3,850	\$3,518	96%	4%	0%
\$10,001–15,000	1,058,409	\$3,938	\$4,169	81%	19%	0%
\$15,001–20,000	997,821	\$3,862	\$3,854	73%	26%	0%
\$20,001–25,000	881,216	\$3,487	\$3,073	81%	15%	4%
\$25,001–30,000	675,335	\$3,551	\$2,398	72%	10%	18%
\$30,001–35,000	498,212	\$3,105	\$1,547	56%	15%	29%
\$35,001–40,000	361,914	\$3,149	\$1,140	44%	15%	41%
\$40,001–50,000	510,917	\$2,375	\$1,213	30%	14%	56%
\$50,001–60,000	237,544	\$1,803	\$428	18%	7%	74%
\$60,001–80,000	96,748	\$1,147	\$111	9%	3%	88%
\$80,001–100,000	0			0%	0%	100%
>\$100,000	0			0%	0%	100%
Total	8,113,075	\$3,509	\$28,466	73%	12%	15%

Notes: Estimates are for a NPSAS data sample of 64,440 observations representing 12.5 million students who applied for financial aid in 2011–12. Average awards are for those who receive a nonzero award. Change in Pell percentages are for the sample of 47,190 actual Pell recipients (8,314,267 weighted).

TABLE 10

Pell Estimates under the Three-Factor Proposal

Adjusted gross income	No. of Pell recipients	Average proposal award	Total cost (in millions)	Change in Pell for Actual Recipients		
				Within \$500	Larger	Smaller
\$0	1,074,170	\$3,674	\$3,946	96%	4%	0%
\$1–5,000	806,955	\$3,803	\$3,069	97%	3%	0%
\$5,001–10,000	913,832	\$3,850	\$3,518	96%	4%	0%
\$10,001–15,000	1,058,409	\$3,938	\$4,169	81%	19%	0%
\$15,001–20,000	997,821	\$3,862	\$3,854	73%	26%	0%
\$20,001–25,000	881,216	\$3,492	\$3,077	81%	15%	3%
\$25,001–30,000	675,335	\$3,580	\$2,418	71%	11%	18%
\$30,001–35,000	498,224	\$3,197	\$1,593	55%	18%	26%
\$35,001–40,000	370,658	\$3,289	\$1,219	46%	20%	35%
\$40,001–50,000	543,867	\$2,657	\$1,445	31%	22%	47%
\$50,001–60,000	284,232	\$2,234	\$635	29%	16%	55%
\$60,001–80,000	192,669	\$1,483	\$286	24%	9%	67%
\$80,001–100,000	5,124	\$555	\$3	6%	0%	94%
>\$100,000	0			0%	0%	100%
Total	8,302,514	\$3,521	\$29,231	74%	14%	13%

Notes: Estimates are for a NPSAS data sample of 64,440 observations representing 12.5 million students who applied for financial aid in 2011–12. Average awards are for those who receive a nonzero award. Change in Pell percentages are for the sample of 47,190 actual Pell recipients (8,314,267 weighted).

Hamilton Project Proposal

DESCRIPTION

The Hamilton Project proposal from Baum and Scott-Clayton (2013) separates dependent from independent students, designating all students younger than 24 as dependent students, although those who would be considered independent under current rules could choose to apply as independents. Look-up tables based on family size and average parental income would determine dependent students' awards. Independent students would receive full or half awards if their incomes were below a certain percentage of the FPL. The proposal also calls for awarding maximum Pell grants to orphans, foster children, and wards of the court, and there are bonuses for taking more credits or progressing towards completion.

We use the same look-up table as in our two-factor model for dependent students (see table 8). Under our estimates independent students receive a full award of \$5,550 if their incomes are at or below 200 percent of the FPL (based on family size); half-size awards of \$2,775 are allocated to those between 200 and 250 percent of the poverty level. As parental income information for students who are independent students (according to NPSAS) younger than 24 is not available in the data, we continue to use the dependency status variable of students in the NPSAS for estimations in this proposal. Orphans, foster children, and wards of the court younger than 24 in the NPSAS are automatically awarded the maximum Pell grant of \$5,550. Our estimates do not incorporate costs of the proposed completion incentive bonuses because we do not have information on degree completion. We use the same enrollment intensity adjustment as the baseline and all other proposal estimates rather than adjusting by credit hours as the proposal suggests.

KEY CHARACTERISTICS

- The Hamilton Project proposal uses a flexible model that could adjust both the look-up table for dependents and the award amounts and poverty thresholds for independents based on the desired cost targets.
- The proposal accounts for the different situations of independent and dependent students and uses the definition of *dependent child* that appears on the IRS income tax forms.
- Although we do not model this component, the proposal gives incentives for completion.
- As with the other look-up table proposals, basing awards only on income and family size does not allow for capturing information on wealth that would indicate whether a family is truly in need of the grant.
- The proposal eliminates the adjustment for the number of students in college in a family, targeting Pell grants further down the income distribution and making individual awards easier to predict in advance.
- As with the other look-up table proposals, allocating aid other than Pell grants would require a separate formula for developing an EFC. But the simple approach to determining Pell eligibility would protect the EFC formula from being modified to control Pell expenditures.

ESTIMATES

The Hamilton Project proposal generates a cost increase of \$1.06 billion, despite awarding 116,646 fewer recipients (table 11). This increase is largely a result of more generous average awards to lower-

income students and independent students. The increase in the average award amount of \$177 relative to the baseline is driven by students whose families have AGIs of under \$25,000; average award amounts actually fall in the higher AGI brackets. In addition to receiving more generous awards, lower-income recipients also increase in number under the proposal. Independent students make up a larger share of students who get higher Pell grants.

The number of recipients is lower than the baseline; the make-up of recipients shifts and includes fewer dependent students and more independent students. Almost three-quarters of recipients receive a Pell amount within \$500 of their baseline Pell. An equal percentage of recipients (13 percent) receive higher and lower awards. Only 5 percent of recipients in the baseline group lose their Pell awards under the proposal, but 69 percent of those with family incomes of at least \$60,000 lose eligibility.

TABLE 11
Pell Estimates under the Hamilton Project Proposal

Adjusted gross income	No. of Pell recipients	Average proposal award	Total cost (in millions)	Change in Pell for Actual Recipients		
				Within \$500	Larger	Smaller
\$0	1,074,170	\$3,674	\$3,946	96%	4%	0%
\$1–5,000	806,955	\$3,803	\$3,069	97%	3%	0%
\$5,001–10,000	913,832	\$3,850	\$3,518	96%	4%	0%
\$10,001–15,000	1,058,409	\$3,938	\$4,169	81%	19%	0%
\$15,001–20,000	997,821	\$3,968	\$3,959	73%	27%	0%
\$20,001–25,000	882,203	\$3,675	\$3,242	83%	16%	1%
\$25,001–30,000	710,049	\$3,653	\$2,594	77%	11%	11%
\$30,001–35,000	500,943	\$3,293	\$1,650	61%	18%	22%
\$35,001–40,000	374,630	\$3,269	\$1,225	51%	16%	33%
\$40,001–50,000	523,800	\$2,602	\$1,363	37%	17%	46%
\$50,001–60,000	248,407	\$2,036	\$506	24%	11%	65%
\$60,001–80,000	106,401	\$1,349	\$144	13%	5%	82%
\$80,001–100,000	0			0%	0%	100%
>\$100,000	0			0%	0%	100%
Total	8,197,621	\$3,584	\$29,384	74%	13%	13%

Notes: Estimates are for a NPSAS data sample of 64,440 observations representing 12.5 million students who applied for financial aid in 2011–12. Average awards are for those who receive a nonzero award. Change in Pell percentages are for the sample of 47,190 actual Pell recipients (8,314,267 weighted).

Proposals with Simplified EFC Calculations

The following proposals are more complicated than those that use look-up tables, but they each simplify the current system and include the calculation of an EFC-like measure for all applicants. These proposals rely more on income tax information, reducing the burden of the current system for applicants, but would require expanding the DRT system or automating the process. If automated the US Department of Education and/or the IRS would have to implement and oversee such a system. In any case even if it was up to the student to opt-in, it would likely require additional funds to update the DRT system to provide all necessary information.

IRS-Data-Only Proposal

DESCRIPTION

The IRS-data-only proposal from Dynarski, Scott-Clayton, and Wiederspan (2013) uses only data that is on the current tax form and available from the IRS. It removes all asset information. The IRS variables include AGI, federal income tax paid, parent or student state of residence, family size, and marital status. Untaxed income and benefits and additional financial information in the current total income calculation are excluded because only some of the components of each are available from the IRS. Using IRS data does not provide information on receipt of means-tested benefits or dislocated worker status for the “simplified needs test” or automatic zero EFC calculations, so neither is included under this proposal.

KEY CHARACTERISTICS

- Relying only on data coming from the IRS creates the possibility of eliminating the FAFSA while still generating awards comparable to those under the current system.
- A form of EFC that could be used in determining other aid-package components is maintained.
- The system would require expanding the reach of the data provided from the IRS Data Retrieval Tool, which likely would require additional resources for the IRS.
- Because award amounts are still based on an EFC formula, they are not as transparent or predictable for applicants as they would be with look-up tables, so this model may be less helpful to students trying to understand how much federal aid they will receive early in the process.

- It would be necessary to develop some system for individuals not currently required to file taxes.

ESTIMATES

Under the IRS-data-only proposal, costs would rise by \$0.85 billion and 191,719 more students would receive grants (table 12). Average Pell award amounts remain close to the baseline, with an increase of \$22. The majority of the increase in the number of recipients and costs comes from students in the \$30,000 to \$80,000 AGI range and is related to excluding student contributions and not increasing EFC to reflect household assets.

TABLE 12

Pell Estimates under the IRS-Data-Only Proposal

Adjusted gross income	No. of Pell recipients	Average proposal award	Total cost (in millions)	Change in Pell for Actual Recipients		
				Within \$500	Larger	Smaller
\$0	1,072,397	\$3,660	\$3,925	96%	4%	0%
\$1–5,000	806,955	\$3,801	\$3,067	97%	3%	0%
\$5,001–10,000	913,782	\$3,845	\$3,514	96%	4%	0%
\$10,001–15,000	1,056,386	\$3,719	\$3,929	94%	4%	2%
\$15,001–20,000	992,085	\$3,419	\$3,392	93%	4%	2%
\$20,001–25,000	765,352	\$3,623	\$2,773	90%	5%	6%
\$25,001–30,000	621,018	\$3,783	\$2,349	81%	7%	12% ^a
\$30,001–35,000	473,991	\$3,519	\$1,668	85%	9%	5%
\$35,001–40,000	406,949	\$3,407	\$1,386	87%	12%	1%
\$40,001–50,000	653,959	\$2,703	\$1,768	85%	14%	2%
\$50,001–60,000	401,560	\$2,135	\$857	83%	13%	5%
\$60,001–80,000	300,036	\$1,642	\$493	80%	13%	7%
\$80,001–100,000	37,654	\$1,190	\$45	83%	2%	15%
>\$100,000	3,861	\$972	\$4	71%	6%	23%
Total	8,505,986	\$3,429	\$29,170	91%	6%	3%

Notes: Estimates are for a NPSAS data sample of 64,440 observations representing 12.5 million students who applied for financial aid in 2011–12. Average awards are for those who receive a nonzero award. Change in Pell percentages are for the sample of 47,190 actual Pell recipients (8,314,267 weighted).

^a The comparatively high proportion of actual recipients with smaller Pell grant amounts under the IRS-data-only proposal in the \$25,000 to \$30,000 AGI group is driven by the dependent sample; 20 percent of actual recipients in the dependent sample have smaller Pell awards under the proposal.

Dependent students account for 97 percent of the total increase in number of recipients. Over 90 percent of baseline Pell recipients have IRS-data-only Pell amounts within \$500 of the baseline, 6

percent receive larger Pell grants, and 3 percent receive smaller awards; just 1 percent no longer receive Pell under this proposal.

Gates Foundation Proposal

DESCRIPTION

The Bill & Melinda Gates Foundation (2015) proposes streamlining the FAFSA by using data already provided to the IRS, differentiating the application process according to the complexity of financial situations based on income tax forms. Thus, it is similar to the Dynarski, Scott-Clayton, and Wiederspan (2013) IRS-data-only proposal in being more reliant on income tax information, but it includes some wealth questions for students in families with assets or whose financial situations are not necessarily well captured from basic income tax information.

The Gates Foundation proposal completely eliminates any student income and asset information for dependent students, relying solely on parental information. As in the IRS-data-only proposal, the total income calculation excludes untaxed income and benefits and additional financial information. The parents' employment allowance is automatically set to the maximum of \$3,500, and the Social Security tax allowance is calculated using parents' combined AGI, rather than for each parent using wage earnings.¹¹

For independent students, income is calculated using AGI for the student and spouse; the employment allowance is set to \$3,500 for married students, if both the student and spouse are working, and for single independent parents. There is no employment allowance if only one partner of a married couple is working. The Social Security tax allowance is also calculated using AGI for the student and spouse rather than individual earnings.

Under the Gates Foundation proposal, only dependent students' parents or independent students and/or their spouses who file tax schedules would have to provide asset information. Calculations from the IRS 2008 Statistics of Income dataset show that 23 percent of filers have one or more schedules. This is based on all tax returns, not just those of college applicants or parents of college applicants. In addition, it does not include information on nonfilers. The share of low-income households with complicated tax returns is much lower, with only 14 percent of taxpayers with income below \$75,000 filing one or more schedules. The NPSAS does not provide information on who files schedules, so we use parents or students with a contribution from assets to proxy for this. These applicants make up 10 percent of applicants; as with actual tax returns, the filing of schedules is more prevalent for high-

income households. For these filers, the first \$10,000 in cash assets is exempt from assessment for a contribution. This treatment of assets replaces the exemption of asset information for those who meet the simplified needs test under the current Pell calculation, and the automatic zero EFC calculation is eliminated. Although the Gates Foundation proposal as written excludes all cash savings from wealth calculations, we have included cash assets above \$10,000 in recognition that assets can be moved into cash relatively easily.

KEY CHARACTERISTICS

- This proposal would require information on assets only for those who are expected to have a significant contribution from them.
- Like the IRS-data-only proposal, this proposal maintains a calculation of EFC that could be used in awarding forms of aid other than Pell grants.
- There could be logistical issues with expansion of the IRS Data Retrieval Tool to provide the necessary income and asset information.
- As with the IRS-data-only proposal, the calculations may not serve to make award amounts as predictable or transparent to applicants as they would be under other proposals.

ESTIMATES

Although the cost would rise by \$1.62 billion under the Gates Foundation proposal, 332,094 more students would receive grants, and recipients would have an average Pell grant of \$57 more than the baseline (table 13). Though 90 percent of the increase in recipients comes from those with AGI between \$30,000 and \$80,000, 74 percent of the increase in cost comes from the larger awards to those with incomes below \$50,000. More dependent students would be served, accounting for 96 percent of the increase in recipients and over 80 percent of the increase in cost. Of Pell recipients in the baseline, 88 percent would receive Gates Foundation Pell amounts within \$500 of the baseline amount, with lower-income recipients on average receiving larger Pell grants and high-income students receiving smaller grants. The increase in the number of dependent students eligible for Pell grants has to do with eliminating the dependent student contribution.

TABLE 13

Pell Estimates under the Gates Foundation Proposal

Adjusted gross income	No. of Pell recipients	Average proposal award	Total cost (in millions)	Change in Pell for Actual Recipients		
				Within \$500	Larger	Smaller
\$0	1,071,388	\$3,667	\$3,929	96%	4%	0%
\$1–5,000	806,937	\$3,803	\$3,069	97%	3%	0%
\$5,001–10,000	912,614	\$3,848	\$3,512	96%	4%	0%
\$10,001–15,000	1,057,804	\$3,725	\$3,941	95%	4%	1%
\$15,001–20,000	991,057	\$3,450	\$3,419	93%	6%	1%
\$20,001–25,000	774,517	\$3,663	\$2,837	92%	6%	3%
\$25,001–30,000	633,756	\$3,919	\$2,484	85%	9%	6%
\$30,001–35,000	479,202	\$3,664	\$1,756	77%	18%	5%
\$35,001–40,000	422,490	\$3,526	\$1,490	75%	24%	1%
\$40,001–50,000	678,837	\$2,861	\$1,942	66%	31%	2%
\$50,001–60,000	434,573	\$2,188	\$951	72%	24%	3%
\$60,001–80,000	341,284	\$1,678	\$573	69%	25%	6%
\$80,001–100,000	38,279	\$1,142	\$44	69%	10%	22%
>\$100,000	3,623	\$1,173	\$4	59%	6%	34%
Total	8,646,361	\$3,464	\$29,949	88%	10%	2%

Notes: Estimates are for a NPSAS data sample of 64,440 observations representing 12.5 million students who applied for financial aid in 2011–12. Average awards are for those who receive a nonzero award. Change in Pell percentages are for the sample of 47,190 actual Pell recipients (8,314,267 weighted).

NASFAA Proposal

DESCRIPTION

The NASFAA proposal (NASFAA 2015b) separates students into three pathways. Students are in path 1 if (1) parents (for dependent students) or anyone in the household (for independent students) receive Supplemental Nutrition Assistance Program (SNAP) and/or Supplemental Security Income (SSI) benefits, in which case they are automatically eligible to receive the maximum Pell grant of \$5,550; or if (2) they were not required to file a tax return, in which case they are only asked about income earned from work and child support received. NPSAS only provides SNAP or SSI receipt information for the household as a whole, so students are designated as path-1 students and receive maximum Pell in our estimates if anyone in the household receives SNAP or SSI. Though path 1 is meant to target students with the most need, there are over 28,000 weighted households in the sample with AGI above \$80,000 receiving SNAP or SSI. This likely reflects erroneous reporting to NPSAS about program participation,

which could occur if, for example a dependent student bases his response on having a roommate who receives SNAP. Estimates for these higher-income groups should be interpreted with caution as these path-1 students who are eligible for a maximum Pell grant as a result of their household benefit receipt represent half of NASFAA Pell recipients with income over \$80,000. Among the remaining path-1 cases in our estimates, in which parents or students did not file a tax return, fewer than 20 (unweighted) observations representing 2,350 students would receive a Pell grant below the maximum amount. Therefore, we further simplified the modeling of the proposal to award maximum Pell to any path-1 student rather than just SNAP or SSI recipients. Given the large Pell awards for these households, we suggest the maximum Pell simply be awarded to households not required to file tax returns, eliminating the need to report child support received.

Dependent students not meeting the criteria for path 1 are placed in path 2 if their parents are eligible to file a 1040A, 1040EZ, or 1040 form without any schedules. For these dependent students, the student contribution from cash assets is the only asset information included in the EFC and Pell calculation. As we do not have information on schedules from NPSAS, as a proxy for nonschedule filers, we use dependent students for whom parents have no contribution from assets and whose student contribution from assets, if any, is fully from cash of under \$10,000.

Independent students who do not meet the criteria for path 1 are also placed in path 2 if they are eligible to file a 1040A, 1040EZ, or a 1040 form without any schedules. For path 2 independent students with dependents, no asset information is required; for independent students without dependents, the student contribution from cash assets is the only cash information included in the EFC and Pell calculation. Again, because of data limitations on who files schedules, as with the Gates Foundation proposal we use independent students who have no contribution from assets or a contribution fully from cash of under \$10,000 to serve as a proxy for independent nonschedule filers in our estimates.

All remaining students not meeting the criteria for paths 1 and 2 are placed in path 3, where they must provide full income and asset information. Under both paths 2 and 3, the NASFAA proposal uses a definition of total income different from that of the current FAFSA. The NASFAA income includes AGI, child support received, tax-exempt interest income, pension and IRA payments, and untaxed portions of pensions and IRA distributions; NASFAA income also subtracts education tax credits. Under path 3, the NASFAA formula requires adding back any negative income amounts. Unfortunately, data limitations prevent us from modeling this. Table 14 shows percentages of dependent and independent students in each of the three NASFAA paths.

The NASFAA outcomes that are likely to vary from current Pell in our analysis are for the 65 percent of students in path 2. Students in NASFAA path 3 account for an increasing share of students as incomes rise, going from 10 percent of all students in the sample to almost 40 percent of those with incomes above \$100,000. As noted above, our estimates for path-3 students do not add back negative income amounts because of data limitations. Implementing this provision would cause some students to lose Pell eligibility, and so the actual cost of implementation for these students will differ more from our estimates.

TABLE 14
NASFAA Paths for Dependent and Independent Students

NASFAA path	Dependent students	Independent students
Path 1	14%	38%
Path 2	69%	60%
Path 3	17%	2%

Note: The sample is the NPSAS 2011–12 restricted sample of 12.5 million weighted students who applied for financial aid in 2011–12, 6.5 million of whom are dependent and 6.0 million of whom are independent.

KEY CHARACTERISTICS

- The NASFAA proposal simplifies most for those applicants with the most need.
- It maintains questions to indicate wealth and other resources, but only for applicants with complex financial situations.
- An application would still be required, and the different pathways could cause confusion for applicants and for students and families trying to predict their awards.
- The process is not really simplified for applicants in path 3.

ESTIMATES

Cost would increase by \$0.73 billion under the NASFAA proposal, with 69,090 more students receiving grants and an average Pell grant \$59 higher than under the baseline (table 15). Although average award amounts increase across the income distribution, the number of recipients with incomes below \$30,000 actually decreases from the baseline. The increase in recipients is concentrated in the higher-income brackets, and students or parents with AGIs of \$50,000 and above account for over half of the increase in cost. The NASFAA proposal remains at least as generous across the income distribution for almost all

baseline recipients: only 3 percent of baseline recipients have Pell amounts that are smaller by \$500 or more under the proposal. Under the actual proposal, the cost is likely to be smaller because of both the adding back of losses to income for path 3 students and a finer examination and possible disqualification for some of the path 1 students who appear eligible in our model.

TABLE 15

Pell Estimates under the NASFAA Proposal

Adjusted gross income	No. of Pell recipients	Average proposal award	Total cost (in millions)	Change in Pell for Actual Recipients		
				Within \$500	Larger	Smaller
\$0	1,067,763	\$3,650	\$3,897	96%	4%	0%
\$1–5,000	804,712	\$3,788	\$3,048	97%	3%	0%
\$5,001–10,000	910,488	\$3,830	\$3,487	96%	4%	0%
\$10,001–15,000	1,053,691	\$3,711	\$3,910	92%	5%	2%
\$15,001–20,000	980,911	\$3,442	\$3,376	91%	6%	3%
\$20,001–25,000	759,353	\$3,601	\$2,734	89%	4%	6%
\$25,001–30,000	621,374	\$3,748	\$2,329	84%	4%	12%
\$30,001–35,000	472,081	\$3,482	\$1,644	88%	7%	6%
\$35,001–40,000	397,941	\$3,420	\$1,361	88%	10%	2%
\$40,001–50,000	622,056	\$2,763	\$1,719	87%	11%	2%
\$50,001–60,000	362,213	\$2,314	\$838	85%	12%	3%
\$60,001–80,000	273,828	\$2,036	\$558	80%	14%	6%
\$80,001–100,000	36,149	\$2,154	\$78	77%	5%	18%
>\$100,000	20,797 ^a	\$3,596	\$75	95%	0%	5%
Total	8,383,357	\$3,466	\$29,053	91%	6%	3%

Notes: Estimates are for a NPSAS data sample of 64,440 observations representing 12.5 million students who applied for financial aid in 2011–12. Average awards are for those who receive a nonzero award. Change in Pell percentages are for the sample of 47,190 actual Pell recipients (8,314,267 weighted).

^a Path-1 students who are SNAP or SSI recipients account for 82 percent of NASFAA recipients with AGI >\$100,000.

EFC Estimates for Simplified EFC Calculation Proposals

In addition to calculating Pell awards, we examined how EFC levels under the last three proposals differ from those resulting from the current methodology. Table 16 shows the average EFC estimates for the 2011–12 sample of aid applicants.

Simplified EFC calculations under the IRS-data-only proposal exclude any contribution from wealth. Thus they are on average about \$1,100 lower than under the current formula, with lower EFCs for higher-income taxpayers. Seventy-eight percent of the sample have IRS-data-only EFC amounts within \$500 of their baseline EFC, including 90 percent of those with AGIs below \$50,000. So, excluding wealth information reduces EFCs primarily for higher-income households.

Because the Gates Foundation proposal includes a contribution from assets for those who file tax schedules, the expected EFC is closer under this proposal than under the IRS-data-only proposal. On average, the EFC under the Gates Foundation proposal is \$576 (or 8 percent) lower than baseline EFC, mainly because of the exclusion of a contribution from student's income for dependent students. Limits on the cash savings included in the wealth calculation also lower expected contributions. Seventy percent of the entire sample and 87 percent of those with incomes under \$50,000 would have an EFC under the Gates Foundation proposal within \$500 of their baseline amount.

NASFAA EFC values are set to zero for all students in path 1 because they are all recipients of the maximum Pell. Path-2 EFCs are calculated using limited asset information as outlined in the proposal description above. Because of data limitations (e.g., we cannot add back losses to income for calculating EFC), we cannot fully estimate EFC values for students in NASFAA path 3, as with Pell. On average, NASFAA EFC is \$109 (or 2 percent) less than the baseline EFC for the whole sample. Eighty-nine percent of the sample has NASFAA EFC values within \$500 of their baseline EFC, and this percentage is fairly consistent across income groups. However, these numbers would not be as close if we could estimate EFC for all households. For the 26 percent of the sample in path 1 with automatic zero EFCs under NASFAA, we expect low or zero actual EFC. We would also expect EFC to fall more than what we estimated for the 10 percent of the sample in path 3 as we have not added back any losses to income.

If we focus our attention on the 65 percent of applicants in path 2, EFC amounts under NASFAA are on average 1 percent higher than under the baseline, but this average hides a fair amount of variation. For example, recipients in path 2 with AGIs of below \$20,000 who are not automatically eligible for the maximum Pell have a NASFAA EFC 11 percent higher on average than the baseline EFC.

TABLE 16

EFC Estimates for 2011–12 NPSAS Sample of Financial Aid Applicants

Adjusted gross income	Weighted count	Average EFC			NASFAA ^a
		Baseline	IRS data only	Gates Foundation	
\$0	1,077,901	\$185	\$33	\$100	\$190
\$1–\$5,000	808,288	\$67	\$4	\$4	\$48
\$5,001–\$10,000	916,348	\$80	\$6	\$23	\$104
\$10,001–\$15,000	1,061,343	\$395	\$329	\$314	\$369
\$15,001–\$20,000	998,897	\$950	\$854	\$839	\$952
\$20,001–\$25,000	882,592	\$1,302	\$1,255	\$1,138	\$1,373
\$25,001–\$30,000	796,855	\$1,776	\$1,904	\$1,631	\$2,016
\$30,001–\$35,000	609,511	\$2,742	\$2,499	\$2,321	\$2,706
\$35,001–\$40,000	508,501	\$3,229	\$2,821	\$2,455	\$3,029
\$40,001–\$50,000	828,437	\$4,610	\$3,848	\$3,658	\$4,313
\$50,001–\$60,000	609,018	\$6,035	\$4,988	\$4,752	\$5,699
\$60,001–\$80,000	1,046,743	\$9,813	\$8,047	\$8,157	\$9,410
\$80,001–\$100,000	827,204	\$15,184	\$12,951	\$13,427	\$15,020
\$100,001–\$200,000	1,316,697	\$27,266	\$22,757	\$25,151	\$26,954
>\$200,000	222,760	\$62,323	\$53,256	\$69,671	\$62,002
Total	12,511,096	\$7,008	\$5,916	\$6,432	\$6,899

Notes: The sample of 64,440 students (unweighted) is from financial aid applicants in the NPSAS 2011–12, attending one institution, and with nonmissing actual EFC (and nonmissing information needed to calculate EFC). Students who are Pell eligible but do not receive actual Pell or who are not Pell eligible but do receive actual Pell have been dropped.

^aNASFAA EFC set to zero for those in path 1 with automatic full Pell from SNAP or SSI receipt.

What Is the Effect of Using Earlier Income Data?

The just-announced shift to using income data from two years instead of one year before enrollment—moving from “prior year” to “prior-prior year” (PPY) data beginning in the 2017–18 aid year—represents one route to making applying for aid easier. More students will be able to use the DRT since their PPY data will be in the system when they begin applying to school. FAFSA filing dates will also shift in the 2017–18 aid year to begin in October 2016 rather than January 2017. Because many students, especially new students, are applying to colleges in December but total income information is typically not available until February this change will make it easier for families and students to complete financial aid forms in a timely manner.¹² Although some individual Pell grants will change, the impact on the distribution for funds is likely to be minimal.

Being able to complete FAFSA forms with actual information rather than estimated income data and broadening access to the IRS DRT should facilitate the process for applicants. Older information

has the advantage of being available but might lead to complications for cases in which income varies from year to year. The change in policy will soon provide information about the actual impact of this switch. Our estimates provide a preview.

Using NPSAS data and reviewing other available information about costs, we examine how much estimates would change if we use information from two years earlier in calculating both Pell awards and EFC for the 2012–13 aid year (see tables 17 and 18, respectively).¹³

We find using PPY income and tax form information from 2010 rather than 2011 for the 2012–13 applicants would increase both the number of recipients and the total cost of the Pell program about 2 percent. Any minimal cost increases could be eliminated by adjusting the relevant income levels for a given sized award.

PPY SAMPLE

We have information on financial aid applications for the 2012–13 aid year for just over half of the students who applied for aid in 2011–12. Using information from the applications for both years and the formulas from the 2012–13 FAFSA, we estimate what EFC and Pell awards would be using income and tax information from both 2011 and 2010. For 2012–13, the PPY estimates use income and tax data from the 2010 tax year (from the 2011–12 data file) in place of 2011 tax year data (from the 2012–13 data file). The PPY estimates use the same data (from the 2012–13 file) on family size, family members in college, state of residence, and asset information as in the baseline 2012–13 estimates.

We start with the 2011–12 sample used in our earlier estimates. We retain only those students included in the aid application files for 2011–12 and 2012–13. Understanding that there are complications that will arise with the use of earlier income data, we drop any students whose dependency status, filer status, or marital status (if independent) changed between the two years. These changes left us with 37,090 observations representing a weighted population of 7,383,586, which is approximately half of those applying for aid in 2011–12. In calculating the cost of moving from prior to prior-prior income year income, we double the cost estimate we find in this smaller sample.

ESTIMATES

About 5 million students would be 2012–13 Pell grant recipients under both our baseline and PPY estimates, though about 80,000 more students would receive Pell using PPY income. Of the baseline recipients in 2012–13, three-quarters have a PPY Pell amount within \$500 of their baseline amount. Average Pell award amounts for recipients are similar between the two estimates: \$3,642 for 2012–13 baseline recipients versus \$3,637 for PPY recipients. There is a \$0.3 billion increase in total costs from

\$17.9 billion to \$18.2 billion going from baseline to PPY. We would expect the cost increase for all applicants to be about \$0.6 billion given that our sample represents approximately half of all federal aid applicants.

The cost change is low in part because families, especially low-income families, are almost as likely to have higher as lower incomes in the prior year. These results correspond to calculations done by Dynarski and Wiederspan (2015) and by NASFAA (2015a).

These estimates do not include any increase in cost from students applying for professional judgment or review—asking financial aid officers at the school to reconsider their aid amounts because of changes in family circumstances. We find it unlikely, given current patterns, that the number of students applying for professional judgment would increase to include all affected students.

TABLE 17

Baseline versus PPY 2012–13 Pell Estimates

	2012–13 Baseline Pell (2011 IRS data)	2012–13 PPY Pell (2010 IRS data)
Change in Pell for baseline recipients		
No change	100%	56%
Within \$100	100%	63%
Within \$500	100%	75%
Smaller by \$500 or more		15%
Larger by \$500 or more		10%
Average Pell^a	\$3,642	\$3,637
Total cost of Pell awards	\$17.91 billion	\$18.18 billion
Percentage receiving Pell	67%	68%
Correlation with baseline	1.00	0.903
R²	1.00	0.815

Notes: The sample is from NPSAS financial aid applicants in 2011–12 and 2012–13, attending one institution, and with non-missing actual EFC (and nonmissing information needed to calculate EFC). Students who are Pell eligible but do not receive actual Pell or who are not Pell eligible but do receive actual Pell have been dropped. Students whose dependency status, filer status, or marital status (independent students only) changed between 2011–12 and 2012–13 are likewise not included in the sample. This restricted sample has 37,090 students (7,383,586 weighted).

^a Average Pell amounts are for students who receive Pell; if we examine for all students (including nonrecipients) average awards are \$2,426 using prior year income data and \$2,463 using prior-prior year income data.

The estimates for EFC vary more than those for Pell, in large part because there is more variance for students with higher incomes. (For students with an EFC of zero and maximum Pell awards, variations in income are less likely to affect the size of Pell awards or EFC.) EFCs are within \$500 of the baseline for 80 percent of students with incomes under \$30,000 in 2012–13. For students further up the income distribution, EFCs change more with the move to earlier income data.

TABLE 18
Baseline versus PPY 2012–13 EFC Estimates

	2012–13 Baseline EFC (2011 IRS data)	2012–13 PPY EFC (2010 IRS data)
Change in EFC		
No change	100%	38%
Within \$100	100%	42%
Within \$500	100%	52%
AGI <=\$25,000		82%
AGI \$25,001–\$50,000		51%
AGI >\$50,000		16%
Smaller by \$500 or more		27%
Larger by \$500 or more		21%
Average EFC	\$6,978	\$6,618
Percentage with zero EFC	42%	41%
Correlation with baseline	1.00	0.897
R²	1.00	0.805

Notes: The sample is from NPSAS financial aid applicants in 2011–12 and 2012–13, attending one institution, and with nonmissing actual EFC (and nonmissing information needed to calculate EFC). Students who are Pell eligible but do not receive actual Pell or who are not Pell eligible but do receive actual Pell have been dropped. Students whose dependency status, filer status, or marital status (independent students only) changed between 2011–12 and 2012–13 are likewise not included in the sample. This restricted sample has 37,090 students (7,383,586 weighted).

Conclusions and Policy Implications

Our goal should be to make the federal student aid system as effective, fair, and efficient as possible. Making it simple enough for families and students to understand, predict, and benefit from is a necessary component of reaching this goal. There will always be trade-offs. Making the formula simpler may reduce the precision of its targeting. Encouraging more students to participate will raise the price tag for taxpayers. But by targeting and advertising the amount of aid available, we hope to increase postsecondary participation among qualified students.

Making the timing of the aid application match up with applying to college is important, but it is not enough. Pell grants are designed to make it possible for low-income students to enroll in college. If students have no idea whether they will receive aid or how much they will get until they are applying to college, the grant loses much of its effectiveness; students need more time to plan and to prepare academically. A simple formula for Pell grant eligibility need not significantly alter the distribution of these funds. Using one of the proposals based on look-up tables would allow students to know there is money available. Eliminating the requirement of providing financial information excluded from tax forms would be a big improvement in the financial aid system. But this change would not necessarily enable students to predict well in advance of enrollment how much federal aid they will receive. A complicated formula may be necessary for determining the need-based aid for which recent high school graduates from families in the top half of the income distribution qualify. But that necessity is no excuse for not letting low- and moderate-income students plan on the Pell grants that will make college possible for them. In fact, a simple smart phone app could allow middle school students and their parents to quickly determine what their Pell grants will be if their circumstances do not change much.

However, to inform students about their Pell grants well in advance we have to address the question of how we treat families with multiple children in college at the same time. For example, for a family with twins, we now divide the EFC by two for each child for four years. But for a family with two children four years apart in age, we expect eight full EFCs. We think this approach makes little sense, and it explains why some families with incomes far above \$50,000 qualify for Pell grants.¹⁴ The current practice also makes a student's Pell grant depend on what path his or her sibling takes. Thus in our view, awarding Pell in a way that is not reliant on timing of siblings' school attendance is preferable.

We conclude that a hybrid system is optimal. Pell would be determined with a look-up table, and EFC would be calculated using a simplified FAFSA that includes a check-the-box feature for most applicants but requires additional information for some applicants based on what is included in their or their parents' tax returns. Under this model, we assume the following:

- A look-up table would determine Pell awards based on income and family size.
- Families who do not have to file income taxes would receive an automatic maximum Pell award and have a zero EFC.
- Families could access their income tax return data using the Data Retrieval Tool for calculation of their EFC if they do not file additional tax schedules.
- Families with additional tax schedules would be required to provide asset information for calculation of their EFC.
- Schools and states could chose to modify their awards based on number of children in college, but Pell grants would not be affected.

If there is concern about families with wealth accessing Pell because we are excluding wealth information from the process, we could exclude families who file complex tax returns and have an alternative formula for them. But we should have a system that does not require low-income families to understand a lot of complicated exceptions to determine that those exceptions do not apply to them.

The proposals and solutions suggested here are just one piece of the financial aid puzzle. Most notably, students should know more about aid availability in advance, be able to automatically repay loans (up to a specified borrowing limit) based on income, and have better information about what enrollment in different programs is likely to mean for their futures. But for now, the simplifications proposed here would remove the large stumbling block the FAFSA form creates as students seek financial aid.

Appendix A

Data Sample

Our data come from the 2011–12 National Postsecondary Student Aid Survey (NPSAS), and our sampling method adheres closely to that used by Dynarski and Wiederspan (2015) and Dynarski, Scott-Clayton, and Wiederspan (2013) with the 2007–08 NPSAS. We first limit the full 2011–12 NPSAS sample of 95,100 undergraduate students (23,055,442 weighted) to those students who also have FAFSA data records for that year available from the Central Processing System (CPS 2011–12), yielding a sample of 78,700 students (15,444,428 weighted) who applied for aid. From these students, we drop those attending multiple institutions in the 2011–12 school year and those with missing actual expected family contribution (EFC) data or missing variables necessary to estimate EFC. After calculating the baseline Pell awards for our restricted sample as outlined below, students who are estimated to be Pell eligible but do not receive an actual Pell award and students who are not estimated to be Pell eligible but do receive actual Pell are dropped from the sample, as these are students for whom we are not able to accurately estimate Pell. Applicants who are Pell eligible but do not receive actual award amounts may reflect students who are awarded Pell (which we can calculate) but did not maintain enrollment during the year. These restrictions result in a sample of 64,440 students (12,511,096 weighted). There are 47,190 students who receive an actual Pell grant in the sample (8,314,267 weighted), and about 40 percent of Pell grantees (weighted) receive the maximum amount of \$5,550 before adjusting for enrollment intensity.

Dependent students account for 52 percent of our weighted sample and 41 percent of Pell recipients within the sample. Of these dependents, those who have a parent contribution from assets account for 15 percent of the weighted dependent sample and 3 percent of dependent Pell recipients. Independent students make up the remaining 48 percent of the full sample and 59 percent of all Pell recipients. Students with their own contribution from assets account for 4 percent of the weighted independent sample and 2 percent of independent Pell recipients. Table A.1 shows the 2011–12 CPS sample, and table A.2 shows Pell recipients in that sample.

TABLE A.1

2011–12 NPSAS Sample of Financial Aid Applicants

Adjusted gross income	No. of students	Dependent students	Independent students
\$0	1,077,901	28%	72%
\$1–5,000	808,288	17%	83%
\$5,001–10,000	916,348	26%	74%
\$10,001–15,000	1,061,343	32%	68%
\$15,001–20,000	998,897	36%	64%
\$20,001–25,000	882,592	42%	58%
\$25,001–30,000	796,855	45%	55%
\$30,001–35,000	609,511	48%	52%
\$35,001–40,000	508,501	57%	43%
\$40,001–50,000	828,437	58%	42%
\$50,001–60,000	609,018	67%	33%
\$60,001–80,000	1,046,743	77%	23%
\$80,001–100,000	827,204	83%	17%
>\$100,000	1,539,456	92%	8%
Total	12,511,096	52%	48%

Notes: The sample of 64,440 students (unweighted) is from financial aid applicants in the NPSAS 2011–12, attending one institution, and with nonmissing actual EFC (and nonmissing information needed to calculate EFC). Students who are Pell eligible but do not receive actual Pell or who are not Pell eligible but do receive actual Pell have been dropped.

TABLE A.2

Pell Recipients in 2011–12 NPSAS Sample of Financial Aid Applicants

Adjusted gross income	No. of Pell recipients	Dependent students	Independent students
\$0	1,071,815	27%	73%
\$1–5,000	805,573	17%	83%
\$5,001–10,000	913,109	26%	74%
\$10,001–15,000	1,055,007	32%	68%
\$15,001–20,000	982,481	36%	64%
\$20,001–25,000	769,178	47%	53%
\$25,001–30,000	628,623	56%	44%
\$30,001–35,000	468,403	59%	41%
\$35,001–40,000	390,884	66%	34%
\$40,001–50,000	609,847	64%	36%
\$50,001–60,000	342,438	61%	39%
\$60,001–80,000	247,171	64%	36%
\$80,001–100,000	27,693	51%	49%
>\$100,000	2,046	72%	28%
Total	8,314,267	41%	59%

Notes: The sample of 64,440 students (unweighted) is from financial aid applicants in the NPSAS 2011–12, attending one institution, and with nonmissing actual EFC (and nonmissing information needed to calculate EFC). Students who are Pell eligible but do not receive actual Pell or who are not Pell eligible but do receive actual Pell have been dropped.

Baseline

Baseline estimates of actual EFC and total and average Pell cost by income group are used to compare the proposals. These baseline estimates serve to replicate the full EFC and Pell calculation for 2011–12 from *The EFC Formula, 2011–2012* (IFAP n.d.) and follow the baseline used by Dynarski, Scott-Clayton, and Wiederspan (2013). After applying the formula, EFC is subtracted from a maximum Pell amount of \$5,550 to calculate the full-time estimated Pell award. Full-time estimated Pell amounts are then adjusted for cost of attendance, whereby Pell amounts are replaced by the cost of attendance less EFC if the cost of attendance is below \$5,550. Full-time amounts below \$277 (half of minimum Pell) are adjusted down to zero. As enrollment intensity by which to adjust the estimated full-time Pell award is not available for each academic term in the NPSAS, we again follow Dynarski, Scott-Clayton, and Wiederspan (2013) in their calculation. The enrollment intensity variable is calculated by taking the ratio of the actual Pell amount to the estimated Pell amount. For cases in which both actual and

estimated Pell are zero, enrollment intensity is imputed using regression predictions. Cases in which one of the two Pell amounts (estimated and actual) is equal to zero and the other is a nonzero amount are dropped from the sample as noted above. After adjusting for enrollment, Pell amounts under \$277 are once again adjusted to zero, and amounts between \$277 and \$555 are adjusted to \$555. We include students who have nonzero actual Pell awards but estimated actual awards that round down to zero with this final minimum Pell adjustment (approximately 300 unweighted students) in our count of baseline Pell recipients.

Of the 47,190 actual Pell recipients (8,314,267 weighted) in our sample, 99.82 percent have a baseline estimated Pell amount within \$500 of their actual Pell amount (99.76 percent weighted). In the weighted sample of Pell recipients, average actual Pell awards are \$3,410 and total costs are \$28.35 billion compared with an average of \$3,407 for estimated Pell and \$28.32 billion total estimated costs. Comparing EFC calculations for the whole of our 64,440 unweighted and 12,511,096 weighted sample, 99.44 percent have a baseline estimate EFC amount within \$500 of their actual EFC amount (99.29 percent weighted). In the weighted student sample, average actual EFC amounts from the CPS are \$7,042 versus average estimated EFC amounts of \$7,008. Table A.3 shows the baseline Pell estimates (see table 16 for baseline EFC estimates).

TABLE A.3

Baseline Pell Estimates

Adjusted gross income	No. of Pell recipients	Average estimated award	Total cost (in millions)
\$0	1,071,815	\$3,595	\$3,853
\$1–5,000	805,573	\$3,749	\$3,020
\$5,001–10,000	913,109	\$3,779	\$3,451
\$10,001–15,000	1,055,007	\$3,668	\$3,869
\$15,001–20,000	982,481	\$3,405	\$3,345
\$20,001–25,000	769,178	\$3,593	\$2,764
\$25,001–30,000	628,623	\$3,833	\$2,409
\$30,001–35,000	468,403	\$3,430	\$1,607
\$35,001–40,000	390,884	\$3,282	\$1,283
\$40,001–50,000	609,847	\$2,578	\$1,572
\$50,001–60,000	342,438	\$2,089	\$715
\$60,001–80,000	247,171	\$1,607	\$397
\$80,001–100,000	27,693	\$1,284	\$36
>\$100,000	2,046	\$1,311	\$3
Total	8,314,267	\$3,407	\$28,325

Notes: The sample is the NPSAS 2011–12 restricted sample of 64,440 students (12,511,096 weighted). Average estimated Pell award is based on only recipients of Pell and excludes those not receiving awards.

Notes

1. There were 9.4 million students who received 2011–12 Pell grants and awards totaled \$33.6 billion. In the report, because we restrict our sample as described in appendix A, there are 8.3 million Pell recipients with total awards costing \$28.3 billion. Thus our sample represents 88 percent of recipients and 84 percent of funds.
2. We do allow for grants above \$5,550 for the two Pell-on-a-postcard proposals if there are additional children in the household, so in practice for a student eligible for the maximum Pell award with four or more siblings the maximum Pell would be \$6,550.
3. The exception is the Pell-on-a-postcard proposals, in which we assume the minimum Pell grant is \$550 instead of \$555 to keep with their format of awards, which gives the same Pell grant for students over a range of income and rounds awards to the nearest \$50.
4. Financial Aid Simplification and Transparency Act of 2015. S. 108. 114th Congress (2015).
5. See appendix A for more information about the baseline estimates.
6. For the Pell-on-a-postcard proposals, the minimum Pell amounts after the enrollment intensity adjustment are instead set to \$550 if they fall between \$275 and \$550 and set to zero if below \$275. This adjustment is needed to remain consistent with the proposals' look-up tables, which round values (including minimum Pell) to the nearest \$50.
7. If we inflated the income brackets to reflect price and income changes between 2006–07 and 2011–12, costs would increase as some applicants would be eligible for larger grants. We left the income brackets as originally proposed to both recognize a lack of wage growth at the bottom of the income distribution and also to help highlight how changing income brackets could also be used to help offset any perceived higher costs.
8. "The HHS Poverty Guidelines for the Remainder of 2010 (August 2010)," US Department of Health and Human Services, last modified August 1, 2010, accessed October 8, 2015, <http://aspe.hhs.gov/hhs-poverty-guidelines-remainder-2010>.
9. See note 4.
10. Pell calculations can be based on actual family size, which will increase awards for some larger families. In part, we limited family size due to concern about the specificity of the question asked in the NPSAS file. If the actual formula or app was based on information available from income tax forms (i.e., number of filers plus listed dependents), then this definition could be expanded.
11. This method was used to recognize that income tax forms do not necessarily specify individual spousal earnings. However, FICA withholding and payments needed (for consulting income), which are directly reported, could be used.
12. See Federal Student Aid, 2015.
13. Calculations for 2012–13 Pell and EFC follow *The EFC Formula, 2012-13*. See Federal Student Aid, n.d.
14. Some analysts disagree strongly with us on this point, feeling families are often income constrained and do not want to limit access for lower-income students because of what could be a doubling of expected family contribution in years when multiple children are in school. In the look-up tables, we can allow for higher awards based on numbers of children in college as in our three-factor tables. This question in part depends on whether one thinks of higher education as an investment or an annual expense. If, as we believe, it is the former, then borrowing to handle timing differences seems like an appropriate action.

References

- Advisory Committee on Student Financial Assistance. 2005. *The Student Aid Gauntlet: Making Access to College Simple and Certain*. Final Report of the Special Study of Simplification of Need Analysis and Application for Title IV Aid. Washington, DC: US Department of Education.
<https://www2.ed.gov/about/bdscomm/list/acsfra/sag.pdf>.
- Baum, Sandy, and Judith Scott-Clayton. 2013. *Redesigning the Pell Grant Program for the Twenty-First Century*. Washington, DC: Brookings Institution, Hamilton Project.
http://www.hamiltonproject.org/files/downloads_and_links/THP_BaumDiscPaper_Final.pdf.
- Baum, Sandy, Kathleen Little, Jennifer Ma, and Anne Sturtevant. 2012. *Simplifying Student Aid: What It Would Mean for States*. New York, NY: College Board.
<http://media.collegeboard.com/digitalServices/pdf/advocacy/homeorg/advocacy-state-simplification-report.pdf>.
- Bettinger, Eric P., Bridget Terry Long, Philip Oreopoulos, and Lisa Sanbonmatsu. 2009. "The Role of Simplification and Information in College Decisions: Results from the H&R Block FAFSA Experiment." NBER Working Paper No. 15361. Cambridge, MA: National Bureau of Economic Research.
http://www.postsecondaryresearch.org/i/a/document/11801_fafsapaper.pdf.
- Bill & Melinda Gates Foundation. 2015. *Better for Students: Simplifying the Federal Financial Aid Process*. Seattle, WA: Bill & Melinda Gates Foundation. http://postsecondary.gatesfoundation.org/wp-content/uploads/2015/07/FAFSA-Approach_FINAL_7_7_15.pdf.
- Dynarski, Susan M., and Judith E. Scott-Clayton. 2007. *College Grants on a Postcard: A Proposal for Simple and Predictable Federal Student Aid*. Discussion Paper 2007-01. Washington, DC: Brookings Institution, Hamilton Project.
http://www.hamiltonproject.org/files/downloads_and_links/College_Grants_on_a_Postcard_A_Proposal_for_Simple_and_Predictable_Federal.Student.Aid.pdf.
- Dynarski, Susan, Judith Scott-Clayton, and Mark Wiederspan. 2013. "Simplifying Tax Incentives and Aid for College: Progress and Prospects." NBER Working Paper No. 18707. Cambridge, MA: National Bureau of Economic Research. <http://www.nber.org/about/administration/offices/ira/opr/seminars/paper-archives/SimplifyingTaxIncentives.pdf>.
- Dynarski, Susan, and Mark Wiederspan. 2015. "Revisiting FAFSA Simplification: Expanding Access to the IRS Data Retrieval Tool." EPI Policy Brief No. 1. Ann Arbor, MI: University of Michigan, Gerald R. Ford School of Public Policy, Education Policy Initiative. <http://www.edpolicy.umich.edu/files/brief-1-revisiting-fafsa.pdf>.
- Federal Student Aid. 2015. "FAFSA Changes for 2017–18." Washington, DC: US Department of Education.
<https://studentaid.ed.gov/sa/sites/default/files/fafsa-changes-17-18.pdf>.
- Federal Student Aid. No date. "The EFC Formula, 2012–13." Washington, DC: US Department of Education.
<https://studentaid.ed.gov/sa/sites/default/files/2012-13-efc-formula.pdf>.
- IFAP (Information for Financial Aid Professionals). No date. "The EFC Formula, 2011–2012." Washington, DC: US Department of Education.
<http://ifap.ed.gov/efcformulaguide/attachments/101310EFCFormulaGuide1112.pdf>.
- NASFAA (National Association of Student Financial Aid Administrators). 2015a. *Great Expectations: Implications of Implementing Prior-Prior Year Income Data for the FAFSA*. Washington, DC: National Association of Student Financial Aid Administrators. <http://www.nasfaa.org/uploads/documents/ektron/0af69743-833e-4eb3-b80a-fc1577104dfe/5df180059b0f4c6da9fd903764d16f823.pdf>.
- . 2015b. *FAFSA Simplification: NASFAA FAFSA Working Group Report*. Washington, DC: National Association of Student Financial Aid Administrators.
http://www.nasfaa.org/uploads/documents/fafsa_report_1.pdf.
- US Department of Education. 2015. *2013–2014 Federal Pell Grant Program End-of-Year Report*. Washington, DC: US Department of Education. <http://www2.ed.gov/finaid/prof/resources/data/pell-data.html>.

White House. 2015. Fact Sheet: The President's Plan for Early Financial Aid: Improving College Choice and Helping More Americans Pay for College. Washington, DC: The White House Office of the Press Secretary.
<https://www.whitehouse.gov/the-press-office/2015/09/14/fact-sheet-president%E2%80%99s-plan-early-financial-aid-improving-college-choice>.

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