The idea of simplifying the student aid application process and making the system easier for students and families to understand and navigate has long been high on the agenda of policymakers and advocates for college access. Despite considerable progress, removing unnecessary barriers for students who need financial support requires more change.

Because of a lack of information among low-income and first-generation students about the need-based aid the federal government and other sources provide to make college financially accessible, and because of the length and detail of the Free Application for Federal Student Aid (FAFSA), too many students with financial need are not accessing resources that would allow them to attend college. These circumstances motivate proposals for making the process simpler and more transparent.

Members of Congress have introduced at least 10 bills related to the FAFSA during the current session. Most proposals focus on simplifying the application process, making it easier for the Internal Revenue Service (IRS) to share data with the US Department of Education and easing demonstration of eligibility for qualifying for the maximum Pell grant without providing detailed financial data. These proposed approaches would likely increase the number of students who complete the FAFSA and receive federal student aid but would not have much impact on which filers are eligible for Pell grants. But a few of the bills in Congress—as well as numerous proposals from student aid advocates—would modify the formula in the federal methodology, affecting whether those who complete the FAFSA are eligible for Pell and, if so, the amount of aid for which they qualify.

These efforts are critical, but it is also important that the entire financial aid system—including funds provided by state governments and colleges and universities—be equitable, logical, and straightforward. Applicants now complete the FAFSA almost entirely online. It has fewer questions and more skip logic, and some information can be imported directly from the IRS. In addition, several tax
software programs now include a prompt about applying for college financial aid. But the process remains daunting for many students and families, and the formula for computing expected family contributions (EFCs) on which eligibility for federal aid, as well as much state and institutional aid, is based remains complicated and confusing.

Analyses of potential changes to the determination of aid eligibility lead us to conclude that the best approach would be to radically simplify the determination of eligibility for Pell grants, basing awards on a small amount of financial data available from the IRS—probably just adjusted gross income (AGI), possibly with some simple adjustments that are based on tax return data, in addition to information on family structure. Simple look-up tables or a phone app could communicate award levels to students well before enrollment.

Because this limited information would not be sufficient to evaluate the financial capacity of households with high incomes and more complicated circumstances, a separate formula—which would include some financial information not available from tax forms—would determine ability to pay and financial need for need-based aid beyond Pell grants.

The policy discussion surrounding student aid simplification will be strengthened if participants understand basic elements of the system and the trade-offs involved in modifying them. Of central importance, the Federal Pell Grant Program is the foundation of the student aid system. This targeted aid program provided $28 billion in funding to low- and moderate-income undergraduate students in 2018–19 and provides up to $6,345 per student in 2020–21 to help them pay for college, allowing many students who would otherwise not be able to afford to enroll the opportunity to attend college. It is vital that eligible students, many of whom lack information and social supports, be aware of this aid and be easily able to predict their eligibility and access this aid. These circumstances are at the heart of the need for simplification.

But with average total annual student budgets (including housing and food) running from about $13,000 for community college students to $60,000 for those attending private nonprofit doctoral universities, many students also rely on other sources of financial aid. Pell grants account for less than a quarter of all grant aid. About half of all grant aid comes from colleges and universities, and about 10 percent comes from state governments. The federal government does not control these funds. A large share of these funds—but far from all—are need based, allocated based on students’ financial circumstances. But this does not mean they necessarily go to students whose resources are limited enough for them to qualify for Pell grants. Student budgets at some institutions are high enough that many students with incomes significantly higher than those generating Pell eligibility also often need assistance. Differentiating among more affluent aid applicants requires more information than the allocation of Pell grants does. But this reality need not complicate the Pell system.

Another important distinction is between the application process and the formula that determines how much aid students receive. The process is most important because it can prevent students from even requesting aid. But the formula is also relevant. If students cannot reliably predict or understand their eligibility, they will be less confident that they will receive support, less likely to take the steps to
prepare academically and financially for college, and less likely to complete the application process. These issues are particularly important for low-income and first-generation students and many Black and Latinx students. These issues are less likely to be significant for students who have grown up in families where going to college is the norm.

In this brief, we review issues central to simplifying the Pell grant system and then discuss strategies for strengthening the system for allocating aid from other sources.

A Simpler Pell Grant System

Until 1992, the Pell grant formula was separate from the EFC that determined the allocation of other types of aid. Combining the two should have created a simpler system. But it now appears that the unified system interferes with the most straightforward way of funding low-income students and that the complex formula for allocating both Pell grants and other need-based aid has made it more difficult for students to apply for federal aid and predict their eligibility. The system has become a barrier to access for students with the most need. If the two were separate, Pell grants could be allocated through a simple formula based on information from the IRS, while states and institutions could have a more nuanced formula for distributing aid to students from households with more complicated finances.

The federal methodology is a complicated formula that uses the many data elements provided on the FAFSA to compute an EFC. Subtracting the EFC from a student’s full budget yields the federal concept of need—the amount that students need to supplement the funds they and their families can come up with to cover tuition, fees, books and supplies, and living expenses for a year of college. Critically, the EFC also determines the size of a student’s Pell grant: the maximum grant minus EFC. Because of the complexity of the EFC formula, it is difficult for students to predict how much federal aid they will receive.

But Pell eligibility does not depend on a measure of ability to pay because Pell is a foundation program. Virtually all student budgets are greater than this base level. Distributing the funds requires knowing which students have the fewest resources, not exactly how much help they will need to pay for college. Pell is the first aid packaged for students and is not designed to meet full financial need based on all expenses that students must cover while they are in college. Additional sources of aid layered on top of Pell should serve this purpose and will continue to require more information to determine an equitable distribution.

Numerous studies have demonstrated that a simpler formula would have minimal impact on the distribution of Pell grants while potentially increasing awareness of available aid and participation in the program.

Susan Dynarski and Judith Scott-Clayton pioneered the modeling of the impact of FAFSA simplification, measuring the influence of various data elements on the level and distribution of aid. They found that a limited number of variables explained 90 percent of the variation in Pell grants and that it would be possible to reduce the number of financial questions on the FAFSA by more than 80 percent.
percent while changing the Pell grant by less than $500 for 88 percent of recipients. Even a very simple model, with Pell grant eligibility based solely on parents’ AGI, explained 75 percent of the variation in Pell grants. On average, Pell grants would increase by $53 per student (Dynarski and Scott-Clayton 2006).

Adding to the evidence about the potential impact of simplifying the need analysis formula, a 2012 College Board study used 2007–08 FAFSA data from five states to examine how simplifying the federal methodology would affect EFCs, Pell awards, and state grant eligibility. Simulations indicated that relying only on AGI and family size would have little impact on Pell eligibility but would significantly reduce EFCs for applicants with higher incomes (Baum et al. 2012).

A third set of simulations from an Urban Institute study used data from the 2011–12 National Postsecondary Student Aid Study to model the cost and distributional impacts of several proposals for simplifying the need analysis methodology. The study modeled five simplification proposals for determining Pell grant eligibility based on some combination of income, family composition and size, and number of family members attending college. It also modeled three alternatives for calculating EFC, asking how each would affect the distribution of aid and the cost of the Pell program. The authors concluded that dramatic simplification of the Pell allocation system was feasible and desirable but that eliminating the same financial information for high-income applicants and for the calculation of all EFCs would lead to significant inequities (Rueben, Gault, and Baum 2015).

There are clear takeaways from this body of work. Despite small differences in impact, none of the approaches proposed for simplifying student aid allocation would have a major impact on the Pell grant program. Some changes—such as eliminating the adjustment for number of family members in college—could significantly diminish the number of students from relatively affluent families who receive Pell grants.

Eliminating income not included in AGI or eliminating all assets would increase eligibility for some aid applicants without having the opposite impact on others. But the impact would not be large, and it would not be difficult to modify the eligibility criteria to make the changes revenue neutral. For example, if a simple table or formula in a phone app is implemented, with Pell awards decreasing as the amount of income relative to the federal poverty level increases, lowering the threshold for the maximum grant or increasing the rate at which Pell declines as income increases could make the change revenue neutral.

One explanation for the predicted minimal impact on Pell awards if the formula is dramatically simplified is that many recipients already have $0 EFCs (table 1). Removing some types of income or assets from consideration will not lower their EFCs. Almost two-thirds of 2017–18 Pell recipients were eligible for the maximum grant based on the current federal methodology formula. This included 54 percent of dependent recipients, 64 percent of independent recipients without dependents, and 82 percent of independent recipients with dependents.
These simulations do not incorporate behavioral changes. The models all suggest that excluding assets would not have much impact on federal aid eligibility. But families with substantial assets who do not currently apply for aid might complete the FAFSA if assets are excluded from the aid formula, and some of them might become eligible under a simplified formula. Costs could also go up if more students apply because they are less intimidated by the process and believe that the availability of aid means they could afford college. Some, but not all, increases would be caused by the program expanding to those who may most need the aid, especially first-generation college students and others with limited family experience with the process of applying to college.

The Pell system would be simpler and more equitable if the Pell grant were a function of only income and family size, without regard to the number of siblings in college at the same time. This change would foster predictability because students could estimate their Pell grants without reference to their siblings’ plans. As discussed below, it would improve equity among families with similar financial circumstances because the spacing of their children would no longer have a major impact on how much financial aid they receive. To facilitate the creation of simple look-up tables for Pell, Urban researchers tested the impact of eliminating the practice of dividing the EFC by the number of students in a family who are in college. They found that there would be fewer students from relatively higher-income families eligible for Pell, leading to a decline in program costs of almost a billion dollars (Rueben, Gault, and Baum 2015). Eliminating the current adjustment for number of family members in college would allow for simpler look-up tables and potentially for a phone app that would easily estimate Pell eligibility based on family income and number of family members. It would also be possible for families to receive information when they file federal income taxes about how large a Pell grant their children would be eligible for if they were applying for college in the current year.

Information from the IRS could close another loophole in the federal methodology that reduces EFCs for families with significant resources. Currently, negative AGI does not trigger any adjustments in the federal methodology or for Pell eligibility. In contrast, the College Board’s Institutional Methodology, which some institutions use to calculate EFCs for the distribution of their own funds, adds losses back to income to avoid this problem. Adopting this strategy would more accurately distinguish among families with different levels of resources.¹

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¹ Rueben, Gault, and Baum 2015.
All this evidence and logic points in the same direction. If Congress wants the Pell program to more effectively reach the students facing financial barriers to college, it could radically simplify the formula for Pell eligibility, allowing awards to be determined based on a small amount of financial information from the IRS, combined with information about family size and structure.

For many applicants, IRS information on filing status and number of dependents used to calculate tax credits could provide the necessary information about family size. Nonfilers would have to provide some documentation to support that status, but the fact that this system would not adequately determine ability to pay among more affluent households should not interfere with this important policy change.

A More Nuanced Formula for Aid beyond Pell Grants

The federal methodology, the formula through which the federal government determines students’ eligibility for federal student aid, is the target of criticism because it is complicated and opaque and because it does not accurately account for all the circumstances that households face. But there are trade-offs between simplicity and precision. A simpler system will less accurately account for individual circumstances.

A finding common to all the studies of simplification discussed above is that a dramatically simplified formula for calculating EFCs, which would have minimal impact on low-income aid applicants, would significantly reduce EFCs for some affluent households. This outcome does not interfere with the equitable allocation of federal grant aid because students from the affected families are generally not eligible for federal aid in any case. But it could create problems for institutional grant programs and for some state grant programs.

Pell grants fund almost exclusively low- and moderate-income students, but other forms of grant aid—even need-based grant aid—extend much farther up the income scale. In 2015–16, virtually no dependent students from families with incomes above $100,000 received Pell grants. But about half of students from these families received institutional grant aid, a significant share of which was need based. Almost 90 percent of recipients of dependent Pell grant aid are from families with income below $50,000; in contrast about one-third of dependent institutional grant recipients are from families with income above $100,000 (table 2). Allocating that aid requires more financial information than just AGI.
TABLE 2
Dependent Students’ Grant Aid, by Parents’ Income, 2015–16

*Share of dependent students attending one institution full time for the full year who received grants*

<table>
<thead>
<tr>
<th>Income Range</th>
<th>Pell grant</th>
<th>State grant</th>
<th>Institutional grant</th>
<th>Private grant</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; $50,000</td>
<td>90%</td>
<td>53%</td>
<td>45%</td>
<td>16%</td>
</tr>
<tr>
<td>$50,000–$99,999</td>
<td>25%</td>
<td>32%</td>
<td>52%</td>
<td>20%</td>
</tr>
<tr>
<td>$100,000–$149,999</td>
<td>0%</td>
<td>15%</td>
<td>49%</td>
<td>19%</td>
</tr>
<tr>
<td>$150,000–$199,999</td>
<td>0%</td>
<td>11%</td>
<td>50%</td>
<td>18%</td>
</tr>
<tr>
<td>≥ $200,000</td>
<td>0%</td>
<td>8%</td>
<td>51%</td>
<td>16%</td>
</tr>
</tbody>
</table>

*Distribution of all dependent grant recipients, by parents’ income*

<table>
<thead>
<tr>
<th>Income Range</th>
<th>Pell grant</th>
<th>State grant</th>
<th>Institutional grant</th>
<th>Private grant</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; $50,000</td>
<td>86%</td>
<td>62%</td>
<td>37%</td>
<td>36%</td>
</tr>
<tr>
<td>$50,000–$99,999</td>
<td>14%</td>
<td>25%</td>
<td>29%</td>
<td>29%</td>
</tr>
<tr>
<td>$100,000–$149,999</td>
<td>0%</td>
<td>8%</td>
<td>18%</td>
<td>19%</td>
</tr>
<tr>
<td>$150,000–$199,999</td>
<td>0%</td>
<td>2%</td>
<td>8%</td>
<td>8%</td>
</tr>
<tr>
<td>≥ $200,000</td>
<td>0%</td>
<td>2%</td>
<td>8%</td>
<td>7%</td>
</tr>
</tbody>
</table>

Source: 2016 National Postsecondary Student Aid Study, PowerStats.

**Measuring Ability to Pay**

In reality, the EFC is a financial aid index. It ranks students according to the amounts the education system expects them to finance on their own. This ranking is not perfect. If independent students without dependents are treated too harshly, if geographic differences in cost of living are not adequately accounted for, or if the spacing of children creates inequities between families because of the more generous provisions for families with more than one child in college at the same time, some students with similar EFCs may struggle more than others to pay college bills.

But there has to be a ranking system to decide which students have priority in the distribution of need-based aid. And abandoning the idea of estimating ability to pay would mean abandoning the concepts of meeting need and measuring unmet need.

Distributing Pell grants should involve a simple formula that generates reliable, predictable amounts of aid for students with limited resources. Determining ability to pay for students in a wider range of financial circumstances requires a more nuanced formula that can generate a reliable ranking of households and reasonable approximations of the resources they can be expected to contribute to finance higher education. These estimates form the basis for determining financial need—the amount of supplementary resources students require to be able to cover all college expenses.

Measuring ability to pay is subjective. It is easy to say that households with very limited resources have no ability to contribute to college education. If they cannot pay for basic food and housing, they have no discretionary funds with which to pay for anything that is not a necessity. But even in this most basic case, defining what constitutes necessities is not so easy. Personal circumstances and preferences vary so much that any line drawn will be too high for some and too low for others. Once the issue is priorities, as opposed to sustaining life, the subjectivity becomes even clearer. Should a family save for a
larger home where three children do not have to share a bedroom, or put money aside for college? Should an annual bonus go to paying tuition, providing piano lessons for an aspiring young musician, or replacing an aging car? Is it reasonable for a family to take a vacation abroad and still expect financial aid for college?

Nonetheless, some method for ranking households to allocate financial aid is a prerequisite for an equitable college financing system that provides larger subsidies for those in more constrained financial circumstances. The EFC formula is the result of efforts to develop an exact index of something that is inherently imprecise. It will never be perfect, but it can be improved.

Advocates for low-income students sometimes raise the possibility of a “negative EFC.” The idea is that some of the students with $0 EFCs are struggling more than others. But as long as the calculation yields an “expected contribution,” and meeting need requires fully funding the gap between the EFC and the total budget, a negative EFC would suggest that some students should receive aid that exceeds their total cost of attendance.

Of course, financial aid resources are rarely adequate to meet need, and ranking families who currently have $0 EFCs would help ration those funds in an equitable way. A related issue is that students from the lowest-income families are most likely to run into unexpected expenses they cannot manage. But an emergency aid fund, rather than a standard provision in the need analysis formula, is best for addressing these situations.

### TABLE 3

<table>
<thead>
<tr>
<th>Share with $0 EFCs</th>
<th>Pell recipients</th>
<th>FAFSA filers</th>
<th>Undergraduates</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>64%</td>
<td>43%</td>
<td>39%</td>
</tr>
<tr>
<td>Dependent</td>
<td>54%</td>
<td>28%</td>
<td>24%</td>
</tr>
<tr>
<td>Independent without dependents</td>
<td>64%</td>
<td>46%</td>
<td>42%</td>
</tr>
<tr>
<td>Independent with dependents</td>
<td>82%</td>
<td>75%</td>
<td>67%</td>
</tr>
</tbody>
</table>


**Note:** EFC = expected family contribution; FAFSA = Free Application for Federal Student Aid.

If there were a Pell eligibility index separate from the EFC, it would be possible to rank even the lowest-income households, providing more support for those with the fewest resources. But this would be possible only if we can accept the idea of some very low–income students not receiving the maximum Pell grant. It is easier for people to think about giving a “premium” to students in particularly difficult circumstances, but this really amounts to the same thing as raising the maximum award and reserving it for those circumstances.

Under the current federal methodology, negative available income is an allowance against student income and against any contribution from assets. This feature effectively allows for a negative EFC in
circumstances where the student is working to help support her family. But as long as there is a focus on measuring ability to pay to determine what share of a student’s need is met by a combination of the family’s and student’s resources plus financial aid, the EFC should not go below $0, and households that do not have the resources to contribute to a college education should not have EFCs higher than $0. The problem is that so many households are in such difficult circumstances, not that the need analysis system is incorrectly assessing their ability to pay. Maintaining $0 as the lowest EFC need not prevent the lowest-income students from receiving the largest Pell grants if a simple Pell grant award system is distinct from the EFC calculation.

The need analysis system should be consistent with the following guiding principles:

- foster vertical equity, providing higher levels of support to those with the fewest resources
- foster horizontal equity, treating students in similar financial circumstances similarly
- be as simple and predictable as possible

A comprehensive review of the EFC formula is beyond the scope of this brief, but we address two issues central to improving the system’s capacity to equitably differentiate among households: the focus on financial circumstances at one point in time and the treatment of assets.²

**Snapshot Approach**

Need analysis has always taken students and families as they are, looking at recent annual income and existing assets. It does not ask for an earnings history or question why some families have accumulated assets while others in similar financial circumstances have not. This approach limits the system’s ability to accurately measure households’ financial strength.

Families should expect to pay for college out of past, present, and future income, saving when possible and borrowing when necessary. A long-term measure of income would provide a better indicator of families’ true capacity to pay.

The treatment of families with multiple children in college at the same time is a particularly problematic aspect of the snapshot approach. The current system calculates an EFC and views this as the amount the family can pay for college in a given year. The amount they can pay is the same whether they are supporting one, two, or more children. The system asks a family with two children in college at the same time to contribute half their EFC for one child and half for the other. This approach accommodates short-term liquidity constraints but creates clear horizontal inequities. A family putting two children through college faces the same lifetime expenses whether the children are twins or are four years apart. But the family with twins will be expected to contribute much less than the other family.

In the discussion above about allocating Pell grants, we argued that students’ awards should not depend on whether they have a sibling in college. A similar approach in the EFC formula would increase the equity of other aid allocations, viewing the family’s responsibilities over time, not just in a particular
In a 2015 study, we tested the impact of ending the practice of dividing the EFC by the number of students in a family who are in college to eliminate the need to know about the college enrollment of applicants’ siblings and ease early notification of Pell eligibility. This change would lead to the loss of eligibility for students from higher-income families (Rueben, Gault, and Baum 2015).

**Income Stability**

Understanding household income stability is important both for predicting the impact of discontinuing the requirement for aid recipients to file a new FAFSA every year and for considering the possibility of basing EFCs on multiple years of income.

Evidence from studies of the potential impact of eliminating the requirement that students reapply for aid each year they are in college points to more variation in awards for more affluent families. Even large percentage changes in income for low-income households may be small in dollar terms. Moreover, EFCs for low-income families are more stable because households with a wide range of low incomes have $0 EFCs.

Several studies of year-to-year changes in income among financial aid applicants reveal stability in Pell eligibility but larger changes in income and EFC for families at higher income levels (Campbell 2018; NASFAA 2013; Rueben, Gault, and Baum 2016). These studies provided support for the change from relying on the most recent year of income to basing aid on income a year earlier to facilitate the use of income tax data. These results might suggest that using multiple years of income information would not significantly alter the determination of ability to pay, at least for low-income applicants.

Data from the Survey of Income and Program Participation provide more insight into how household incomes fluctuate from year to year. A 2017 study of income stability found that 57 percent of households remained in the same income quintile between 2009 and 2012. A majority of households in the top quintile (71 percent) and the bottom quintile (69 percent) of the income distribution experienced no movement between quintiles, but there was more movement among households in the middle-income quintiles. Between 45 percent and 50 percent of households in the second, third, and fourth quintiles were in the same quintile in 2009 and 2012. Between 2009 and 2012, 11 percent of US households experienced changes in their annual incomes that resulted in their moving either up or down two or more quintiles in the income distribution. Approximately 10 percent of households that started in the top and fourth quintiles experienced a decline of two or more quintiles (Hisnanick, Giefer, and Williams 2017).

A 2017 Pew Charitable Trusts study based on data from Pew’s Survey of American Family Finances found that between 2014 and 2015, 34 percent of families saw income changes of more than 25 percent. The median household income gain was $20,500, and the median income loss was $25,000. Low-income families were more likely than others to experience large percentage changes in income but less likely to experience large dollar changes (Pew Charitable Trusts 2017).
There is sufficient evidence to know that one year of income data does not adequately represent household financial capacity, but allowing Pell eligibility to continue without annual FAFSA filing would not cause a major disruption. This one-time FAFSA might be based on multiple years of income data. And to reiterate, income fluctuations for applicants who are Pell eligible rarely result in large changes in award levels. Further analysis of these issues using data on household incomes over time would be helpful.

**Assets**

Ignoring significant assets for households far above the federal poverty level diminishes distinctions between families because more affluent families tend to have higher asset levels. Congress removed home equity—the largest asset for many families—from the formula in 1992 amid concerns that rising home prices did not put any extra money into homeowners' pockets. This issue is an example of the tension between ranking families and estimating how much cash they can come up with. The current formula narrows the gap between the eligibility of low-income families and middle-income families who own these assets.

Homeownership rates range from 38 percent in the lowest family income quintile to 84 percent in the highest quintile; 40 percent of Black households and 72 percent of non-Hispanic white households own homes. Excluding home equity from the FAFSA formula narrows the gap in reported financial resources between those closer to the top and those closer to the bottom, concealing significant differences in households’ actual ability to finance a college education.

Comparing middle- and upper-income families is perhaps more relevant for the need analysis system, given the prevalence of $0 EFCs for those at the bottom of the income distribution. 2015 homeownership rates were 64 percent in the middle quintile, 74 percent in the fourth quintile, and 84 percent in the highest quintile. Average equity per household is more than twice as high at the top of the income distribution as in the middle (table 4). These data indicate that ignoring home equity makes it more difficult to differentiate the financial capacities of middle- and upper-income households. These families’ EFCs can make a significant difference in the amount of institutional need-based aid students receive.

Information on home equity is not available from federal income tax forms. But this is also the case for the information on financial assets currently included in the federal methodology. Requiring families in the upper half of the income distribution to provide additional information if they want to be considered for institutional aid would be reasonable. But rigorous modeling of the potential impact of including home equity or changing the treatment of other assets would allow for better decisionmaking.

An important aspect of the treatment of assets in the federal methodology is that some assets are protected for all filers. In other words, assets contribute to the EFC only after they exceed the level of the Education Savings and Asset Protection Allowance (ESAPA). ESAPA, which is based on the age of the older parent and is intended to cover the cost of an annuity that will supplement Social Security retirement benefits to reach the moderate family income level as determined by the Bureau of Labor...
Statistics. But the average Social Security retirement benefit has been increasing while the moderate living standard has remained largely unchanged. As this gap narrows, it causes the allowance to decrease. Because of this, the ESAPA for a 65-year-old parent has decreased from $84,000 in 2009–10 to $9,400 in 2020–21.³

**TABLE 4**
Asset Ownership, by Household Income, 2015

<table>
<thead>
<tr>
<th>Income quintile</th>
<th>Lowest</th>
<th>Second</th>
<th>Third</th>
<th>Fourth</th>
<th>Highest</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Home equity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share with this asset</td>
<td>38%</td>
<td>54%</td>
<td>64%</td>
<td>74%</td>
<td>84%</td>
</tr>
<tr>
<td>Average owned</td>
<td>$74,000</td>
<td>$79,000</td>
<td>$80,000</td>
<td>$88,000</td>
<td>$145,000</td>
</tr>
<tr>
<td>Average per household</td>
<td>$28,416</td>
<td>$42,660</td>
<td>$51,520</td>
<td>$65,032</td>
<td>$121,945</td>
</tr>
<tr>
<td><strong>Retirement accounts</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share with this asset</td>
<td>15%</td>
<td>35%</td>
<td>58%</td>
<td>72%</td>
<td>85%</td>
</tr>
<tr>
<td>Average owned</td>
<td>$19,000</td>
<td>$20,000</td>
<td>$38,000</td>
<td>$60,000</td>
<td>$170,000</td>
</tr>
<tr>
<td>Average per household</td>
<td>$2,755</td>
<td>$7,040</td>
<td>$21,926</td>
<td>$43,380</td>
<td>$144,160</td>
</tr>
<tr>
<td><strong>Assets at financial institutions</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share with this asset</td>
<td>73%</td>
<td>90%</td>
<td>95%</td>
<td>98%</td>
<td>99%</td>
</tr>
<tr>
<td>Average owned</td>
<td>$600</td>
<td>$1,600</td>
<td>$3,600</td>
<td>$6,800</td>
<td>$18,700</td>
</tr>
<tr>
<td>Average per household</td>
<td>$439</td>
<td>$1,432</td>
<td>$3,413</td>
<td>$6,678</td>
<td>$18,438</td>
</tr>
<tr>
<td><strong>Stocks and mutual fund shares</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share with this asset</td>
<td>5%</td>
<td>11%</td>
<td>16%</td>
<td>22%</td>
<td>38%</td>
</tr>
<tr>
<td>Average owned</td>
<td>$15,000</td>
<td>$29,740</td>
<td>$30,000</td>
<td>$25,000</td>
<td>$55,910</td>
</tr>
<tr>
<td>Average per household</td>
<td>$720</td>
<td>$3,212</td>
<td>$4,890</td>
<td>$5,400</td>
<td>$21,246</td>
</tr>
</tbody>
</table>


An alternative would be to shift from a focus on retirement assets to protecting savings as preparation for paying for college. As college prices rise, families need more savings to pay the bills. In the late 1980s and early 1990s, some discussions in the financial aid community centered on the idea that families should save one-third of the amount they would be expected to pay for college, pay for one-third out of earnings during the college years, and borrow the remaining one-third, repaying it out of the postcollege incomes of either the students or the parents. The idea was that families should spread the payments out over 12 years. A concept like this would provide a mechanism for developing an asset protection allowance that increases as college prices rise.

As noted, the current federal methodology does not include a comprehensive measure of assets. It ignores both home equity and retirement assets, the most significant assets held by most households in the age range of most parents of college students.⁴

But even the asset levels currently collected on the FAFSA vary widely among households with similar incomes. The asset information provided on the FAFSA has a measurable impact on the EFCs of many aid applicants beyond the Pell grant range, and the inability to include this information would reduce equity within the system.
An obvious question is whether it is possible to impute assets—or at least financial assets—using only information available on tax forms. This would be true if income and wealth (or at least some reasonable measure of wealth) were highly correlated. If this were the case, the ranking of households by income would be similar to a ranking based on a combination of income and assets. It would also be possible to impute assets if the interest and dividends reported on tax forms were a reliable indicator of financial wealth. But this turns out not to be the case.

Annual income is a poor predictor of wealth. According to US Census Bureau data, there is considerable variation in asset levels among households with similar incomes (figure 1). In 2015, 29 percent of households in the lowest income quintile had zero or negative net worth, but 21 percent had a net worth of $100,000 or more. In the middle-income quintile, 33 percent of households had net worth below $25,000, and 27 percent had net worth of $250,000 or more.\(^5\)

**FIGURE 1**
Median Household Net Worth, 2015

<table>
<thead>
<tr>
<th>Quintile</th>
<th>$0 or negative</th>
<th>$1 to $24,999</th>
<th>$25,000 to $49,999</th>
<th>$50,000 to $99,999</th>
<th>$100,000 to $249,999</th>
<th>$250,000 to $499,999</th>
<th>$500,000 or more</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest quintile</td>
<td>29%</td>
<td>36%</td>
<td>7%</td>
<td>10%</td>
<td>6%</td>
<td>5%</td>
<td></td>
</tr>
<tr>
<td>Second quintile</td>
<td>20%</td>
<td>28%</td>
<td>7%</td>
<td>11%</td>
<td>16%</td>
<td>10%</td>
<td>9%</td>
</tr>
<tr>
<td>Third quintile</td>
<td>14%</td>
<td>19%</td>
<td>9%</td>
<td>12%</td>
<td>20%</td>
<td>14%</td>
<td>13%</td>
</tr>
<tr>
<td>Fourth quintile</td>
<td>11%</td>
<td>11%</td>
<td>7%</td>
<td>12%</td>
<td>22%</td>
<td>17%</td>
<td>20%</td>
</tr>
<tr>
<td>Highest quintile</td>
<td>5%</td>
<td>5%</td>
<td>6%</td>
<td>15%</td>
<td>20%</td>
<td>46%</td>
<td></td>
</tr>
</tbody>
</table>


Another way of thinking about predicting assets from income information is by asking how the two are correlated. An analysis of the relationship between income and net worth based on data from the Survey of Consumer Finances suggests only about one-third of differences in wealth are explained by differences in income.\(^6\)

After removing the top 1 percent, a 2018 study finds a correlation of 0.61 between net worth and total household income and 0.56 between financial assets and total household income. Perhaps most relevant for the question of using information from tax forms to impute assets, this study found a
correlation of just 0.59 between financial assets and dividends. So imputing the value of financial assets from the investment returns reported on tax forms would not yield accurate results.

These realities suggest both that ignoring assets makes it impossible to rank households by financial capacity and that the limited asset-related information on tax forms is unlikely to provide reliable estimates for relatively affluent households with complex financial circumstances. Including assets in the need analysis methodology will continue to require additional information from households with incomes likely to be associated with significant asset levels.

Relying on the Tax System

Using information already available to the IRS to determine eligibility for student aid is a significant component of simplification. The implementation of the Data Retrieval Tool, which allows some information to be transferred directly from income tax forms to financial aid applications, was a significant innovation. Building on this system to determine Pell grant eligibility entirely from tax records would prevent most low-income students and families from having to provide any nontax financial information to qualify for federal student aid. It would also shield these households from the verification process, which requires many financial aid applicants to provide extensive documentation to support the information on their FAFSAs.

As already discussed, many studies have confirmed the feasibility of this approach for Pell grants. The main implication of the 2017 Tax Cuts and Jobs Act for such a policy would be to make it more difficult to rely on claiming a student as a dependent as the determinant of dependency for financial aid purposes. The new law eliminated the exemption for dependents and replaced it with a small credit that taxpayers might sacrifice in order to gain Pell eligibility.

But the studies that confirm the feasibility of simplifying the determination of Pell eligibility and relying on data available from the IRS to allocate this federal grant aid for low- and moderate-income students also point to the greater sensitivity of the determination of ability to pay among applicants with more complicated financial circumstances. AGI is not a sufficient measure of the financial capacity of households with higher incomes, even with the adjustment of negative AGI we propose for Pell grant determination.

For example, for applicants with AGIs over $100,000, relying only on IRS data would lead to EFCs that are on average 15 percent lower than if wealth information were included (table 5).
### TABLE 5
EFC Estimates for the 2011–12 NPSAS Sample of Financial Aid Applicants

<table>
<thead>
<tr>
<th>AGI</th>
<th>Weighted count</th>
<th>Baseline</th>
<th>IRS data only</th>
<th>Gates Foundation</th>
<th>NASFAA</th>
</tr>
</thead>
<tbody>
<tr>
<td>$100,000–$200,000</td>
<td>1,316,697</td>
<td>$27,266</td>
<td>$22,757</td>
<td>$25,151</td>
<td>$26,954</td>
</tr>
<tr>
<td>&gt; $200,000</td>
<td>222,760</td>
<td>$62,323</td>
<td>$53,256</td>
<td>$69,671</td>
<td>$62,002</td>
</tr>
<tr>
<td>All</td>
<td>12,511,096</td>
<td>$7,008</td>
<td>$5,916</td>
<td>$6,432</td>
<td>$6,899</td>
</tr>
</tbody>
</table>


Note: AGI = adjusted gross income; EFC = expected family contribution; IRS = Internal Revenue Service; NASFAA = National Association of Student Financial Aid Administrators; NPSAS = National Postsecondary Student Aid Study.

For students whose families are too affluent to qualify for Pell grants, calculating ability to pay in a way that would facilitate an equitable allocation of institutional and state aid would still require more detailed financial information. These concerns particularly affect dependent students. We would propose requiring more information on the composition and size of assets for applicants whose tax returns indicate significant assets.

As noted in our prior work and as suggested in reform proposals put forth by both the Bill & Melinda Gates Foundation and the National Association of Student Financial Aid Administrators (NASFAA), one option would be to rely on tax return data for most applicants but require additional information from applicants whose tax forms indicate the presence of assets. Specifically, we would suggest collecting additional information from taxpayers who file Schedule B, C, D, E, or F. In our earlier work, we estimated that using a method like this would involve additional information for 10 to 14 percent of applicants, most of whom would be dependent rather than independent students. For example, we estimated that using a system similar to that recommended by NASFAA would involve requiring more asset information from 17 percent of dependent students and 2 percent of independent students.

### Conclusion

The allocation system for need-based financial aid should distinguish between two functions the federal methodology currently serves: (1) ranking low- and moderate-income households to distribute federal Pell grants, which form the foundation of the aid that brings college into reach for many students, and (2) measuring financial capacity as the basis for allocating aid from institutions, states, and other sources to fill in the gaps between what students and families can contribute, federal grants, and the full cost of attendance.

Pell grant recipients have very limited resources, and considerable research indicates that dramatically simplifying the formula would not have much impact on the size of awards students receive. Eliminating some of the information currently considered would allow some students to slip through the cracks. This is already the case. For example, those whose families have considerable wealth in the form of home equity or retirement assets and children of divorced parents in families
where the noncustodial parent has a high income may be eligible for Pell, even though the program is not designed to support students in their financial situations. But the cost of maintaining a system designed to prevent any nondeserving students from receiving awards is that it becomes complex and difficult to navigate for the students who rely on it and may keep students with more need from applying for aid or even deter them from applying to college. The benefits of a simpler Pell grant system have been well documented.

A simple formula for Pell grants based on AGI and household size, with appropriate documentation from households not required to file income taxes, would be strengthened by using tax information such as negative AGI to exclude students whose financial circumstances are not consistent with the appropriate targeting of Pell grants. Calculating award levels for individual students without regard to the timing of their siblings’ enrollment would further simplify the system and eliminate awards to the highest-income families who now qualify. Congress could implement this system in the next reauthorization of the Higher Education Act of 1965, as amended.

Maintaining a financial aid system that makes attendance at all types of institutions a reasonable possibility for a wide range of students demands simplicity and transparency but must maintain the ability to equitably evaluate the need for aid across all students.

The idea of collecting additional financial information from families whose tax forms indicate they may have sizeable assets need not compromise the success of integrating the basic federal financial aid system with the tax system. Families who have assets to report are not likely to be intimidated by the application process or to decide not to send their children to college because of this requirement.

An improved system will

- separate the determination of Pell eligibility from the need analysis formula for other sources of aid,
- move away from the “snapshot” approach to the federal methodology by considering multiple years of income and treating families with the same number of children similarly, and
- address assets more comprehensively.

We know it is possible to develop a simple look-up table for Pell grants without imposing significant costs on either current recipients or taxpayers. And we know which household characteristics should trigger requests for additional financial details to equitably distribute aid. A simple Pell grant allocation system will improve college access for low-income and first-generation students, but some states and institutions that subsidize students from middle- and upper-middle-income households will need more information to ensure the effectiveness of their aid dollars.

Many students from households with more complicated financial circumstances than the typical Pell grant recipient receive need-based aid. If these funds are to effectively increase educational opportunities by reducing the inequality of resources available to students, they must be allocated through a need analysis system that can reasonably assess differences in financial capacity. A strong
system would consider more than one year of household income and put less weight on the spacing of families’ children. It would better serve independent students without dependents and would more carefully measure assets, protecting a reasonable amount of those assets to encourage families to save in advance for their children’s education.

Notes

1 It may desirable to add back losses attributable to, for example, paper losses or the timing of selling assets, while continuing to allow for negative AGI caused by events such as business closings, fires, or natural disasters.

2 For a more detailed discussion of the formula’s strengths and weaknesses, see Baum (2020).


8 See Rueben, Huffer, and Baum (2020) for details on the potential relationship between the tax changes and the financial aid process.

References


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