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No “One Size Fits All” Impact of Doubling Pell Grants

Understanding the Impact of Changing the Maximum Pell Grant on Low- and Middle-Income Students

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Introduction

As policy makers consider revisions to the Higher Education Act (HEA), understanding the impact of increasing the size of Pell grants is important if it is to have the intended impact of improving educational outcomes for lower income students across the various types of colleges and universities.

There are a variety of proposals to significantly increase the size of the Pell grant.[1] The Pell grant (originally known as Basic Educational Opportunity grants) is an income contingent grant to students, introduced in 1965 by the HEA to support lower income students attending college or university. The HEA is periodically reauthorized, and while the size of the Pell grant has increased, these increases have not kept up with the rising costs of higher education. Over time, Pell grants have covered a smaller and smaller share of tuition at both public and private institutions, providing significantly less support for lower income students than originally intended.

Proposals to increase the Pell grant have been put forward by the Education Trust, the American Academy of Arts and Sciences, the Urban Institute, the Biden administration, and many others. House Republicans have recently expressed concerns about doubling Pell, and the current negotiations among Democrats on the Build Back Better plan have reduced the maximum Pell grant increase to $550.[2] While it looks like the Pell grant will only be increased modestly this year, support to continue to increase the grant more significantly in the future will continue. An understanding of the implications of the various proposed changes to the Pell grant for lower income students is vital to deciding the most prudent course of action.

The current proposed increase and proposals for more significant changes are both aimed at increasing the post-secondary educational attainment of low- and middle-income students by addressing affordability. A true understanding of how increasing Pell grants will affect the enrollment of low- and middle-income students requires insight into the decisions that colleges and universities make when admitting students and the decisions that students make when choosing where to apply and attend.

Structuring the increase to take into account the likely responses of institutions and students is important if the resources are to have their intended impact. For example, increasing Pell will not necessarily result in a dollar-for-dollar reduction in the cost of higher education for low- and middle-income students given how institutions make decisions. Neither will it guarantee a significant increase in the numbers of low-income students across all types of colleges and universities.

Understanding how different institutions and students are likely to respond will allow for a better design of the program to meet the program objectives as understood by policy makers.

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[1] Phillip B. Levine, “Republicans are Wrong; Doubling the Pell Grant Is Good Policy,” *Inside Higher Ed*, 16 August 2021, https://www.insidehighered.com/admissions/views/2021/08/16/doubling-pell-grants-would-benefit-low-income-students-opinion.

[2] Alexis Gravely, “Subsidizing Institutions Instead of Students?” *Inside Higher Education*, 30 July 2021, https://www.insidehighered.com/news/2021/07/30/house-republicans-appear-lukewarm-doubling-pell.

Some of the concerns from policy makers about Pell expenditures have resulted from misunderstandings about the relationship between increasing the size of Pell grants and the direct impact on the price students pay versus other benefits, such as improved educational programming. Clarifying the ways in which increasing Pell grants will contribute to improving educational outcomes for lower-income students can contribute to a greater consensus around desired policy changes.

Predicting the Responses of Colleges and Universities and Students to Changes in Pell Grants

Taking into account university decision making, given student preferences, it is possible to examine how a change in Pell would be expected to affect the enrollment of low-income students and the price that students are asked to pay.[3] Most colleges and universities are private non-profit or public institutions and therefore do not maximize profits. Instead they maximize a set of other objectives, taking into account the resources at their disposal. Despite being non-profits, they still face budget constraints.

Many colleges and universities practice open admissions and admit all applicants. Others are selective in the admissions process and make decisions based on the characteristics of the applicants. Many selective schools seek to matriculate the most talented students possible, while at the same time desiring a mix of high- and low-income students, as well as other types of diversity, for both financial and mission reasons. Schools attract students through price, financial aid, and spending on programs, recognizing that students care about both the price they pay (which is impacted by the sticker price and financial aid) and the quality of the educational program offered (which is assumed to depend on spending). Schools are constrained by their available resources, which include net tuition revenue, gifts, earnings on the endowment, revenue from auxiliary sources like dining and residences, and other income sources including state appropriations and other grants.

Using this general model, the impact of increasing Pell grants can be examined. The impact will depend on several characteristics of the college or university, and differing responses can be predicted based on these characteristics. Here, we examine several to demonstrate how the impact of a policy change will differ at different types of institutions.

As a first example, consider a school that meets the full need of its students with grant aid. This would include just a handful of the best endowed, most selective institutions in the country, but ones that receive great attention on the part of the press, families and students, and policy makers. Increased Pell awards will not change the net price that such a school offers individual students with need because the school already meets full need with grant aid. Rather than

[3] The model for university decision making is based on Catharine B. Hill, Hill, “American Higher Education and Income Inequality,” *Education Finance and Policy* 11, no. 3 (Summer 2016): 325-339. Behavior of a generic college is modeled as an optimization calculation, subject to a budget constraint. The college is assumed to maximize a utility function that reflects its mission and includes attracting the most talented high income and lower income students. See the appendix for a brief summary of the model.

further reducing the net price for low-income students, the Pell grant would substitute for institutional grant aid for any Pell grant student that the college currently enrolls, relaxing the college's budget constraint by freeing up those institutional resources, and leading to additional changes in the choices of the institution with regards to all spending. If need blind in the admissions process, then the revenue received from low-income students should not play a role in who is admitted. However, very few schools admit all students without regard to their financial need. With a relaxation of the budget constraint, it is likely that the additional income would lead to a change in the admissions of students with need as well as expenditures on the institution's educational mission. The relaxed budget constraint is likely to lead to decisions to attract more lower-income students on the margin since they now cost the institution less as well as increased spending on a variety of programs that were the institution's next most important spending priorities before the increase in Pell grants.[4] The bottom line at these types of schools is that the increased Pell grant resources will not all be spent on lower income students, either by lowering the net price that they pay or significantly increasing the number of low income students admitted. Therefore, these institutions are unlikely to respond to increased Pell grants as intended by policy makers.

For a school that uses loans to meet need, increased Pell grants would change the net price faced by students. If the increased Pell grant leads to a dollar-for-dollar reduction in borrowing on the part of students, the institution's budget constraint is left unchanged. Students pay the institution with Pell grant dollars, rather than with dollars borrowed from Federal loan programs or other sources. This is preferable for students but has no revenue impact on the college. In comparison to a school that meets all need with grants, increased Pell grants could increase the pool of talented lower income students applying for admission, since the net price would be lower by the increase in the Pell grant.

A school that does not meet full need with grants and subsidized loans (a school that "gaps" students) will have yet a different outcome in response to a Pell grant increase. A student at this school may be working or borrowing more than is optimal to attend. Increased Pell grants would reduce both of these needs by the amount of the increase and could contribute to greater retention and lower debt levels. Some lower-income students who previously would not have matriculated because of the lack of financial aid to cover need will be in a better position to attend, and this could result in the increased enrollment of lower income students.

There are a large number of schools, predominately community colleges, where a Pell grant already covers tuition. Given their missions of serving low-income students, their tuition levels and resulting resources may be constrained by the size of Pell grants, along with their other sources of revenue. If Pell grants were increased, some institutions could determine that they can maximize achieving their goals by increasing tuition and spending the additional resources on the academic program, while still making it possible for students to pay tuition with their increased Pell grants. While this would benefit students, it may frustrate policy makers if their

[4] If the institution were truly need blind and was admitting exactly the students they want, regardless of the financial aid needed to fund them, then an increase in Pell grants will relax the budget constraint, leading to greater spending and perhaps savings for the future, but will not lead to either more lower income students or lower net prices for those attending.

intentions were to reduce the costs facing lower income students, rather than improving the quality of the program that students can afford. When critics of increasing Pell grants comment that "Additional dollars allocated to poor students will end up captured by these institutions" or "Congress wanted to subsidize students but wound up subsidizing institutions,"[5] they are missing the point that the impact on students depends both on the price they pay and the quality of the program to which they have access. When higher tuition, paid for by increased Pell grants, leads to increased spending on higher quality programs, students benefit. It is a means of getting increased resources to under-resourced colleges and universities that are serving large numbers of low-income students.[6]

Many community colleges and other public institutions may not have the ability to raise tuition levels, because they are constrained by state policies which restrict tuition increases. In these cases, institutions may be able to raise other fees that Pell grants can be used to pay, if not tuition, but this could constrain their use of any additional resources. It is possible that some institutions and their low-income students would not be able to benefit from an increase in Pell grants, because of these constraints on raising tuition and fees.

In addition to increasing the size of Pell grants, other proposals to revise the HEA involve either a financial penalty or a financial incentive to change behavior with regard to Pell recipients. As an example, consider imposing a financial penalty on any institution whose student body does not have at least 25 percent of Pell-eligible students. The impact of this would depend on how close to this threshold the school was to begin with, the size of the financial penalty relative to the increased financial aid needed to support the increased number of Pell grant recipients, and the school's tolerance for trading off higher income students and their tuition dollars and other characteristics for lower income students. Some schools could decide to incur the financial penalty rather than achieve the 25 percent threshold, worsening the institution's financial situation. This in turn would require the institution to adjust its spending, which would fall across all areas on the margin. Need-based financial aid could in fact be reduced, working against the intended goal of the change in Pell policy. And, a financial incentive may or may not work, depending on the size of the incentive relative to the additional cost of matriculating additional Pell grant recipients in terms of additional financial aid needed or other expenditures associated with greater numbers of low-income students.[7]

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[5] Alexis Gravely, "Subsidizing Institutions Instead of Students?" *Inside Higher Education*, 30 July 2021, https://www.insidehighered.com/news/2021/07/30/house-republicans-appear-lukewarm-doubling-pell.

[6] We might want to worry about for-profits having access to increased Pell grants on these grounds. In contrast to public and non-profit colleges and universities, they have an incentive to increase profits rather than invest in the quality of the academic program.

[7] Most proposals to increase the maximum Pell grant, given the way the grant is calculated, would increase the number of students eligible. This complicates the impact of both raising the Pell grant and imposing a target share of Pell-eligible students which should also be taken into account.

Conclusions

The impact of changing Pell grant policies will have more complicated effects on colleges and students than might be assumed at first glance.[8] It is important to align policy changes with desired outcomes and avoid unintended consequences. Understanding institutional behavior is a place to start to predict these effects. The ease of implementation, cost and impact on low-income educational attainment of changing Pell grants compared to other interventions will be important in deciding the most effective use of Federal dollars. Some policy makers assume that increasing Pell will lead to a dollar-for-dollar reduction in the net price that students pay for college, but this fails to take into account the responses of both institutions and students to having access to greater grant funding, responses which can improve student outcomes more than a reduction in net price would do.

We know that lower-income students are more heavily represented at community colleges and less well-resourced four-year institutions. Increasing Pell grants does get more resources to these students and these institutions, which is a way to improving educational attainment of low-income students. At the same time, it will also benefit better resourced colleges and universities with significantly lower shares of Pell recipients in a way that is not well targeted to increasing their support of lower income students. Additional policies may be needed to encourage these institutions to increase their socioeconomic diversity.[9] In considering increasing Pell grants compared to other policy proposals, such as Federal block grants to institutions serving large shares of lower-income students,[10] ease of implementation as well as the degree to which the policy can be targeted effectively are important considerations.

[8] Additional complications result from the fact that Pell eligibility can change when the size of Pell grants change, given how access to Pell grants are calculated. Some students not previously eligible for Pell grants, absent changes in existing eligibility methodologies, could become eligible. These students may or may not be the target population on the part of policy makers.

[9] See Elizabeth D. Pisacreta, Emily Schwartz, Catharine B. Hill, and Martin Kurzweil, "Federal Policies for Increasing Socioeconomic Diversity at Selective Colleges and Universities," Ithaka S+R, 15 March 2021, https://doi.org/10.18665/sr.314921.

[10] See Jerome Lucido, Nicholas Hillman, and Donald Hossler, "A College Completion Program for Both Sides of the Aisle," *Inside Higher Ed*, August 30, 2021, https://www.insidehighered.com/admissions/views/2021/08/30/proposal-bridge-partisan-divides-college-completion-opinion.

Appendix: The Model

The discussion in the text is based on a simple model of institutional behavior. The constrained optimization problem facing a representative school becomes:

$$\text{Maximize } D^H(E,T,Y^H) + D^L(E,NP,Y^L) \text{ subject to } T^*Q^H+NP^*Q^L + rA - E=0.$$

Or,

$$\text{Max } L= D^H(E,T,Y^H) + D^L(E,NP,Y^L) + \lambda(T^*Q^H+NP^*Q^L + rA - E)$$

Where $D^{H,}$ D^L is the demand on the part of high (low) income students.

E is the school's expenditure on program, which can be equally accessed by both high-income and low-income students.

T is the full sticker price, paid by the high-income students

NP is the net price paid by the lower-income students

Q^H, Q^L are the fixed numbers of high- and low-income students who the school desires for socioeconomic diversity

Y^L and Y^H are the incomes of low- and high-income families

rA is the return on the endowment

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