

## *A Policy Relevant Issue Brief*

### **New evidence regarding the impact of grant-induced changes in net prices on college-going among lower income youth<sup>1</sup>**

David S. Mundel  
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#### **Grants to students are an important source of support for college-going, but questions regarding the impact of these subsidies remain unanswered**

In the 2009/10 academic year, federal and state governments and America's colleges and universities provided \$83 billion in grants to college students. The largest grant program (the federal Pell program) provided over \$28B in aid to lower income students in 2009/10. Although grants to college students have become an important source of support for college-going, particularly among lower income students, college-going and completion rates of grant-eligible youth have consistently been significantly lower than the rates of equally qualified and prepared, middle and higher income youth.

As a result of these disappointing results, policy makers and researchers have continued to ask important questions regarding the impact of grants on college-going rates and patterns. Many decision makers and researchers have questioned whether increases in grant programs can stimulate the desired increases in college-going and completion among lower income youth and adults. Some observers have questioned whether the growth in grant aid has stimulated rapid increases in college prices that reduce or negate the impact of this aid on targeted populations and make college-going more expensive for others. Even those who believe that grants do encourage increases in college-going have asked whether grant programs should be changed to improve their effectiveness.

Several factors have contributed to these questions remaining unanswered. Historically, changes in the size of grant awards have tended to be small and erratic on a year-to-year basis and thus, the possible effects, if any, of these changes have been difficult to observe. In addition, it has been difficult to separate the potential effects of changes in grant awards from the effects of other factors that also influence college-going. Further barriers to observing the potential impacts of grants have resulted from the structures of available data sources that have made it difficult to accurately assess both changes in net-of-grant prices and changes in college-going rates among potential students.

#### **Two recent experiments provide new evidence regarding the impact of grants on college-going**

The first of these experiments took place during the 1996/97 - 2002/03 academic years, when net-of-grant prices facing low-income youth declined slowly and steadily in lower price, public two-year colleges (i.e., the colleges in which youth who were otherwise unlikely to attend college were most likely to enroll). Changes in the net prices of these colleges are the most likely to stimulate changes in the overall college-going rate of lower income youth. A second, shorter experiment took place during the 2003/04 - 2006/07 academic years, when the net-of-grant prices of two-year public colleges increased. During both of these experiments, changes in Pell awards accounted for a major share of the changes in total grant support received by lower income students.

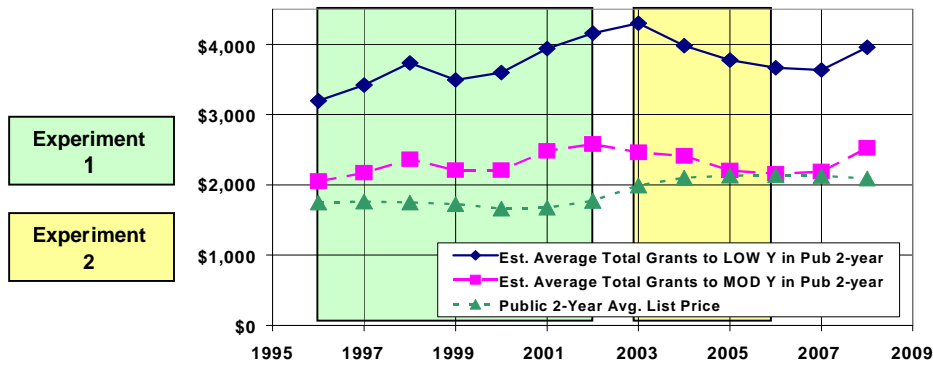
During the first of the two experiments, the real (inflation-adjusted) value of Pell and other grant awards increased and list prices of public two-year colleges remained relatively stable. As a result, the average, net-of-grant prices for these colleges faced by lower income youth declined (see Figure 1, below). During the 1996/97 through 2002/03 years, the net-of-grant prices of these colleges declined by roughly \$800 for low-income, full-time students (students with family incomes below \$30,000 in

constant 2005\$). During this experiment, moderate-income students (students with family incomes between \$30,000 and \$50,000 in constant 2005\$) experienced substantially smaller declines net-of-grant prices.

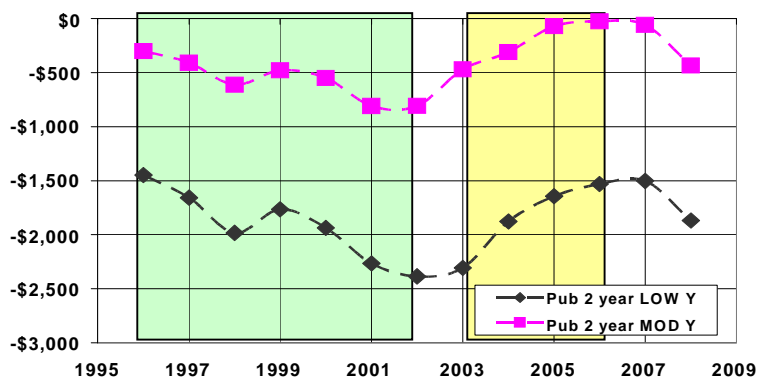
During the second experiment list prices of public, two-year colleges again remained essentially constant, but the average total grant award received by lower income youth declined. The decline in average grant amount occurred, in part, because average Pell awards received by lower income students enrolled in these schools declined. The combination of constant list prices and declining average grants resulted in increasing net-of-grant prices for both low- and moderate-income youth during this second experiment. The increase in net prices experienced by low-income students was somewhat greater than that experienced by their moderate income counterparts.

**Figure 1**  
**The impact of stable prices and changing grant awards**  
**on the net-of-total grant prices facing lower income youth**

**Average list price of public two-year colleges and average total grants received by lower income, immediate post-high school, full-time enrollees in these colleges (2009\$)**



**Average net-of-grant prices for lower income, full-time college-goers attending immediately following their graduation from high school (2009\$)**



The impact of these changes in net-of-grant prices on college-going, if any, probably occurred somewhat after the net price changes occurred. College-going decisions are the result of a multi-year process during which a student's aspirations and expectations develop and beliefs about college prices, price-reducing financial aid, and the affordability of college-going are formed. As a result, it is likely that price changes during pre-college years influence subsequent college-going decisions. In addition,

actual prices at the time of enrollment probably have less impact on college-going decisions, because potential students generally lack specific information about price levels and aid amounts when they make enrollment decisions. Future price and grant levels probably have even less impact on college-going, although these prices and aid amounts determine the actual amount that students and their families actually pay for college-going.

Thus, in exploring the impact of price changes during the two experiments, it is reasonable to assume that there is a lag between the observed changes in net prices and the enrollment impact of these changes. Assuming that there is a two-year lag between actual price changes and potential behavioral effects, i.e., the net price declines during the years of the first experiment are assumed to potentially have affected college-going during the 1998/99–2004/05 years and the net price increases that occurred during the second experiment are assumed to potentially have had impact on during the 2005/06–2008-09 years.

### **The results of both of these experiments indicate that grant-induced changes in the net prices influenced college-going among low-income youth<sup>ii</sup>.**

The significant declines in net-prices that occurred during the first experiment appear to have stimulated increases in college-going among low-income high school graduates (see Figure 2, below). In addition, the gaps between the college-going rate of these youth and the rates of two relevant comparison groups -- middle- and moderate-income high school graduates -- narrowed. Because Pell grants accounted for most of the increases in grant support received by low-income enrollees in public two-year colleges during this first experiment, the observed increases in college-going indicate that Pell awards were an important contributor to the increases in college-going among these youth during this first experiment. The smaller price declines experienced by moderate income youth during the first experiment do not appear to have influenced college-going among these youth.

The results of the second experiment also indicate that the effects of the observed net price changes were concentrated among low-income youth. As indicated in Figure 2, the trend toward increasing college-going among low income youth that had occurred during the first experiment slowed substantially following the beginning of the second experiment's price increases. In addition, during this period of increasing net prices, the gap between the college-going rates of middle- and low-income youth stabilized and turned slightly upward. At the same time, the gap between the college-going rates of moderate- and low-income youth also stabilized. For moderate-income youth, there again appears to have been little, if any, impact of the second experiment price increases, mirroring the observations of the first experiment.

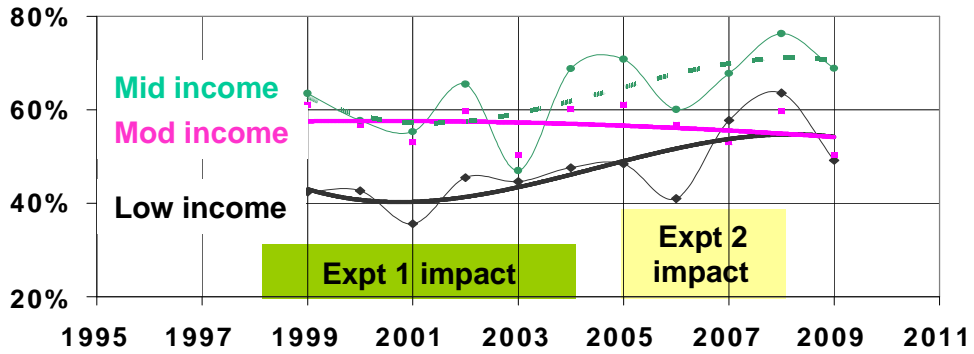
### **Lessons learned from these experiments**

The first experiment indicates that the combination of relatively stable tuition and fee charges in low-price, two-year public colleges and slowly, but steadily increasing grant awards stimulate increases in college-going among low-income youth. This experiment also indicates that small declines in net-of-grant prices have little, if any, impact on college-going among moderate income youth. The results of the second experiment suggest that increases in net prices resulting from declining grant awards at a time of relatively stable list prices in two-year, public colleges have a negative effect on college-going among low-income youth, even when these price increases occur for a relatively brief period.

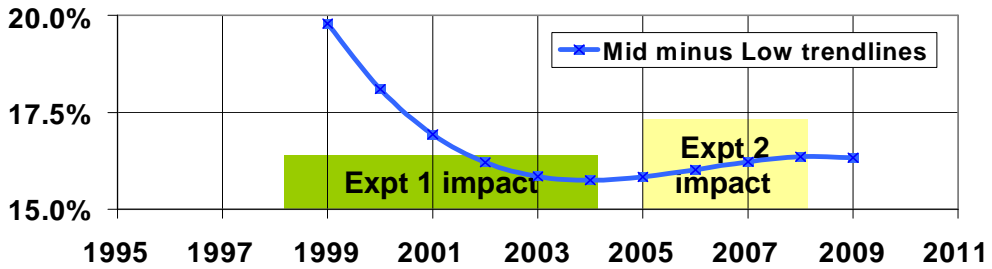
These results also suggest the likely implications of anticipated changes in future federal and state higher education policy. If reductions in state support for colleges (particularly for low-price, two-year colleges) result in increases in tuition and fee charges that exceed increases in total grants received by low-income youth, it is likely that college-going among low-income youth will decline. These reductions in college-going are unlikely to occur immediately (particularly, if high levels of unemployment stimulate counterbalancing increases in college-going). But, over time, it is likely that significant and observable reductions in college-going among low-income youth will occur.

**Figure 2**  
**Immediate post HS college-going rates**  
**during the two experiments**

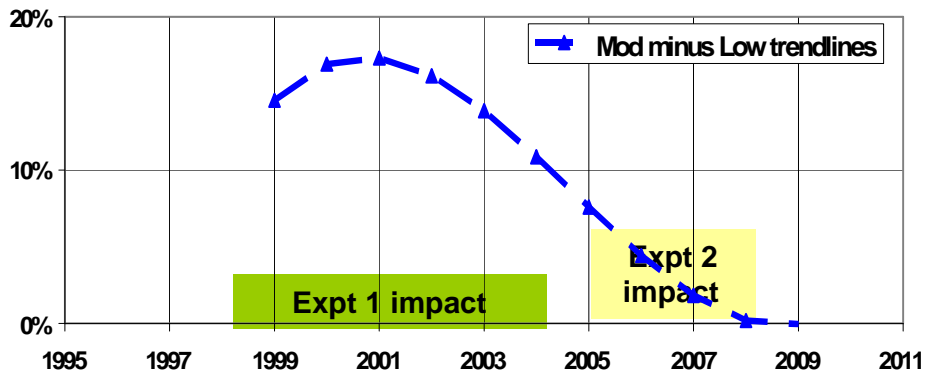
**'Adjusted' immediate post HS college-going rates**  
**of low, moderate, and middle income HS graduates**



**Estimated gap between immediate post HS**  
**college-going rates of middle and low income youth**



**Estimated gap between immediate post HS**  
**college-going rates of moderate and low income youth**



## End Notes

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<sup>i</sup> The preparation of this policy brief and the accompanying background paper (Mundel, David S., “Observing the Impact of Changes in Net-of-Grant Prices on College-Going among Lower Income Youth – Evidence from two ‘Natural Experiments’ 2011) were supported, in part, by grant to Brookings from Lumina Foundation. The research underlying this policy brief was conducted by the author and Lois D. Rice of the Brookings Institution. The views expressed are solely those of the author. The background paper “Observing the Impact of Changes in Net-of-Grant Prices on College-going among Lower Income Youth” is available from the author at [david.mundel@comcast.net](mailto:david.mundel@comcast.net).

<sup>ii</sup> The college-going rates reported in this brief are ‘corrected’ for the youth who are no longer counted as being in their parental families in the Census Current Population Surveys (because they reside on their own, rather than with their parents or in college-provided housing) and ‘adjusted’ to account for the potential impact of changes in unemployment and high school graduation rates that may also have influenced the observed college-going rates.

### Recent Brookings Papers on Aid to College Students

Mundel, David., “Do Increases in Pell and other Grant Awards Increase College-Going among Lower Income High School Graduates?” 2008;

Mundel David with Lois Rice, “The Impact of Increases in Pell Grant Awards on College-going among Lower Income Youth”, Brookings Center on Children and Families Brief #40, 2008;

Maag, Elaine, David Mundel, Lois Rice and Kim Reuben, “Subsidizing Higher Education through Tax and Spending Programs”, Policy Brief No. 18, Urban-Brookings Tax Policy Center, May 2007;

Dynarski, Susan M. and Judith E. Scott-Clayton, “College Grants on a Postcard: A Proposal for Simple and Predictable Federal Student Aid”, Hamilton Project discussion paper, Brookings Institution, 2007; and

Rice, Lois and Arthur Hauptman, “Coordinating Financial Aid with Tuition Tax Benefits”, Policy Brief No. 3, Brookings Institution, 2000.