

Stated Briefly

Changes in financial aid and student enrollment at historically Black colleges and universities after the tightening of PLUS credit standards



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The year after the U.S. Department of Education tightened credit standards for Parent Loans for Undergraduate Students (PLUS), both the share of PLUS participants and the loan dollar amounts declined substantially at historically Black colleges and universities (HBCUs). Other types of federal financial aid did not fully make up for the decline. Enrollment at HBCUs decreased more than enrollment at other institutions, corresponding to the larger decline in PLUS recipients at HBCUs.

Why this study?

The federal Parent Loans for Undergraduate Students (PLUS) program provides loans to parents of dependent undergraduate students to help pay for education expenses that other sources of financial aid do not cover. The PLUS program provides substantial financial aid. Approximately 13 percent of full-time dependent undergraduates have parents who have taken out PLUS loans, with each loan averaging almost \$13,000 a year (Radwin, Wine, Siegel, & Bryan, 2013). In October 2011, to bring the PLUS credit standards in line with those of banks, the U.S. Department of Education tightened the credit history

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standards for PLUS loans. In the first full school year that the new standards were in place (2012/13), the total dollar amount of federal loans approved for parents fell 11 percent (Anderson, 2013).

These changes could have had especially large impacts on historically Black colleges and universities (HBCUs), which enroll large proportions of students from low-income and racial/ethnic minority families. On average, HBCUs have smaller endowments than other institutions (Gasman, 2013) and rely more heavily on tuition (Gasman, 2009). Therefore, a reduction in PLUS loans could lead to decreased enrollment in HBCUs, which might threaten the viability of the institutions. The Regional Educational Laboratory Mid-Atlantic's Historically Black Colleges and Universities College Completion Research Alliance wanted to measure and understand changes in enrollment at HBCUs in the wake of tightened credit standards for PLUS loans. The expectation was that a careful and objective analysis of the data would benefit policymakers engaged in the continuing debate about credit standards for the program. This descriptive study is the first to examine enrollment changes at HBCUs nationwide following the 2011 change in PLUS credit standards.

What the study examined

The study team used institution-level data from the Integrated Postsecondary Education Data System (U.S. Department of Education, National Center for Education Statistics, 2014) and the Title IV Program Volume Reports (U.S. Department of Education, Federal Student Aid Office, 2014) to analyze changes in financial aid and enrollment between 2011/12 and 2012/13. The analysis sample included four-year non-profit institutions that had undergraduate students participating in the PLUS loan program in 2011/12.

This report presents descriptive statistics about changes in financial aid and enrollment for three groups of institutions: HBCUs, non-HBCUs serving students from low-income families, and non-HBCUs serving students from higher income families. Non-HBCUs serving students from low-income families are institutions at which 64 percent or more of undergraduates receive Pell Grants, a level comparable to that of HBCUs. Non-HBCUs serving students from higher income families are all other four-year institutions (87 percent of all four-year institutions in the sample) and provide a broad picture of the changes in financial aid and enrollment in 2012/13.

The report addresses four descriptive research questions:

- How much did PLUS participation and PLUS loan dollar amounts decline at HBCUs and other institutions of higher education following the tightening of credit standards?
- At institutions that experienced a decline in PLUS loan dollar amounts, is there evidence of a shift toward other forms of financial aid, such as federal direct loans, Perkins loans, and work-study programs?
- How much did enrollment at HBCUs and other institutions of higher education change?
- Among all institutions of higher education, did those with a larger decline in PLUS recipients experience a greater enrollment change?

What the study found

The study's findings include:

- During the 2012/13 school year the share of PLUS participants and loan dollar amounts declined substantially at HBCUs. PLUS loans were not fully replaced by other types of federal financial aid.
- In 2012/13 enrollment declined more at HBCUs than at other institutions, corresponding to the larger decline in PLUS recipients at HBCUs.
- The HBCU enrollment decline was especially large for first-year students.
- Nationwide, enrollment decreased more for Black students than for students of other races/ethnicities.

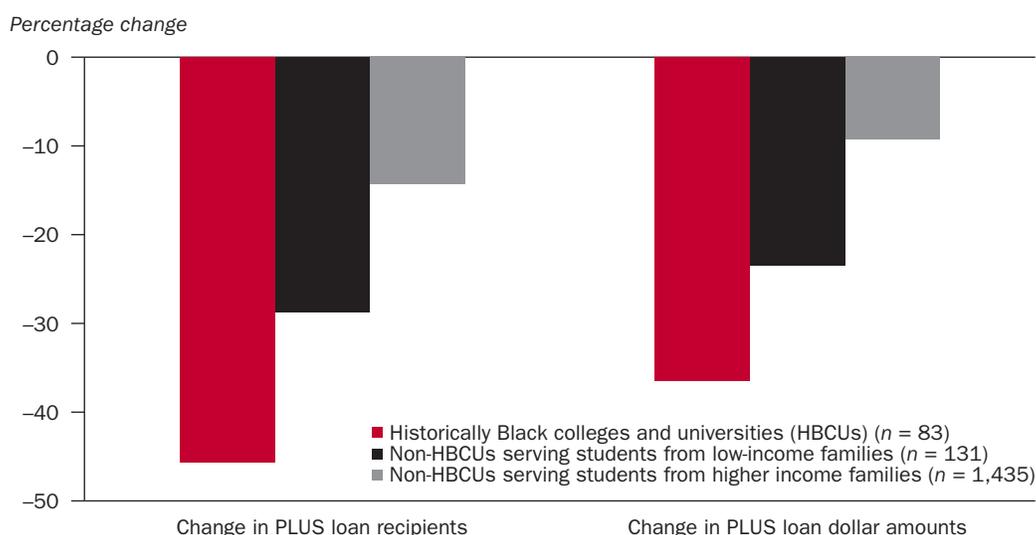
Changes in financial aid

PLUS loans declined at HBCUs between 2011/12 and 2012/13. In 2012/13, the first full school year during which the more restricted credit standards were in place, PLUS loans decreased disproportionately at HBCUs. The number of PLUS loan recipients at HBCUs decreased 45.7 percent in 2012/13, significantly more than the 28.7 percent drop at non-HBCUs serving students from low-income families (figure 1). Coinciding with the drop in the number of recipients, the total dollar amount of PLUS loans received by students at HBCUs fell 36.4 percent in 2012/13, compared with 23.5 percent at non-HBCUs serving students from low-income families (see figure 1). By comparison, the number of PLUS recipients and the dollar amount of PLUS loans also decreased at non-HBCUs serving students from higher income families but by significantly less than at non-HBCUs serving students from low-income families.

The decline in PLUS loan dollar amounts in 2012/13 is a departure from a historical trend of increasing amounts since 2008/09. Growth in PLUS loans at HBCUs was not consistent each year, and there were small decreases in the mid-2000s, but the drop in 2012/13 was substantially larger than in any other year during the preceding decade. Between 1999/2000 and 2011/12 the annual total dollar amount of PLUS loans disbursed at HBCUs nearly tripled from \$152 million to \$450 million; in 2012/13 the amount dipped to \$287 million.

The disproportionate decline in PLUS loans at HBCUs was related to the characteristics of the students served. Using a multivariate regression to further examine PLUS loan changes, the study team found that the demographic characteristics of the student body fully explain (statistically) the disproportionate change in PLUS recipients at HBCUs. This finding suggests that the disproportionate decrease at HBCUs

Figure 1. PLUS loan recipients and PLUS loan dollar amounts declined more at four-year historically Black colleges and universities than at other colleges and universities between 2011/12 and 2012/13



PLUS is the federal Parent Loans for Undergraduate Students program.

Note: Differences between HBCUs and non-HBCUs serving students from low-income families as well as differences between non-HBCUs serving students from higher income families and non-HBCUs serving students from low-income families are statistically significant at the $p < .001$ level.

Source: Authors' calculations based on data from the Integrated Postsecondary Education Data System (U.S. Department of Education, National Center for Education Statistics, 2014) and Title IV Program Volume Reports (U.S. Department of Education, Federal Student Aid Office, 2014).

relative to other institutions serving students from low-income families may be a result of the high percentage of Black students enrolled in HBCUs. This result should be interpreted with caution, because there are very few non-HBCUs with Black student populations comparable to those of HBCUs. This result is consistent with findings from prior research showing that, on average, credit histories are less favorable among Black families than among White families and families of other races/ethnicities, even after accounting for differences in family income (Board of Governors of the Federal Reserve System, 2007). Thus, it is likely that Black families were disproportionately affected by the tightening of credit standards for PLUS loans.

The decrease in PLUS loans at HBCUs was not offset by a comparable increase in other types of federal financial aid. At HBCUs where PLUS loan dollar amounts decreased (95 percent of HBCUs), the use of direct subsidized loans also decreased. The use of direct unsubsidized loans increased only \$15.7 million, or less than 10 percent of the drop in PLUS loan amounts. At non-HBCUs where PLUS loan dollar amounts decreased (83 percent of non-HBCUs), the use of both direct subsidized and direct unsubsidized loans fell in 2012/13. All three groups of institutions saw small increases in campus-based Perkins loans, amounting to no more than 4 percent of PLUS loan losses.

Changes in enrollment

Undergraduate enrollment at HBCUs declined during the 2012/13 school year. During the first year that tightened credit standards for PLUS loans were in place, undergraduate enrollment declined 3.4 percent at four-year HBCUs, approximately equivalent to an average loss of 97 students per institution (table 1). This change in enrollment was significantly different from the change in enrollment at non-HBCUs serving students from low-income families (an increase of 39 students on average) and non-HBCUs serving students from higher income families (an increase of 45 students on average).

Enrollment at HBCUs declined faster among first-year students than among continuing students. Students whose parents are denied PLUS loans may respond differently to the lack of financial aid, depending on their year of enrollment. Continuing students may be more likely than first-year students to seek other sources of financial aid and remain enrolled if they are close to completing a degree. First-year students who would have enrolled in a four-year college might be more likely to switch to a lower cost two-year institution or to postpone enrolling in college because they have not already invested time and money in a four-year college.

Table 1. Changes in undergraduate enrollment at four-year colleges and universities between 2011/12 and 2012/13

Student sample	Historically Black colleges and universities (HBCUs) (n = 83)		Non HBCUs serving students from low income families (n = 131)		Non HBCUs serving students from higher income families (n = 1,435)	
	Percentage change	Change in average number of students per institution	Percentage change	Change in average number of students per institution	Percentage change	Change in average number of students per institution
All undergraduates	-3.4**	-97	0.9	39	0.8	45
First-year undergraduates	-6.4	38	-3.2	-21	-0.2*	-2
Black undergraduates	-4.9*	-120	-1.5	-12	-0.6	-3

* significant at $p < .05$; ** significant at $p < .01$.

Note: Significance levels relate to differences in the average percentage change in enrollment relative to non-HBCUs serving students from low-income families.

Source: Authors' calculations based on data from the Integrated Postsecondary Education Data System (U.S. Department of Education, National Center for Education Statistics, 2014).

At HBCUs, first-time enrollment of degree-seeking students declined 6.4 percent, or almost twice as much as the decline in total undergraduate enrollment (see table 1). At other four-year institutions, first-year enrollment declined as well, by 3.2 percent at non-HBCUs serving students from low-income families and by 0.2 percent at non-HBCUs serving students from higher income families. This general decline in first-year enrollment at four-year institutions is consistent with the enrollment numbers reported in Knapp, Kelly-Reid, and Ginder (2012) and Ginder and Kelly-Reid (2013). A decline in first-year enrollment that is larger than the decline in continuing student enrollment could indicate that future enrollment will be even lower than the 2012/13 enrollment if the size of the entering class of students each year remains smaller than in previous years.

Enrollment declined more among Black undergraduate students than among students of other races/ethnicities. At HBCUs enrollment of Black undergraduate students decreased more than total undergraduate enrollment, both as a percentage change and in the average number of students lost per institution, indicating that enrollment of students of other races/ethnicities increased at HBCUs in 2012/13. At HBCUs the decline in Black undergraduate student enrollment was 4.9 percent, or an average drop of 120 students per institution (see table 1). At non-HBCUs enrollment of Black students declined as well, although the percentage change and average number of students lost per institution were smaller.

How changes in financial aid and changes in undergraduate enrollment were related

The disproportionate decline in enrollment at HBCUs in 2012/13 was associated with the decline in PLUS loan recipients. The study team used a regression model to examine whether the larger decline in enrollment at HBCUs than at other institutions with similar student income levels was related to the decline in the number of PLUS recipients. The results from the basic regression model indicate that enrollment decreased significantly more at HBCUs than at other institutions. When a variable capturing the change in PLUS recipients at each school (as a percentage of 2011/12 enrollment) is added to the regression model, the difference in enrollment changes between HBCUs and non-HBCUs drops to 0.7 percentage point and is no longer statistically significant. This indicates that the disproportionate decrease in enrollment at HBCUs in 2012/13 can be explained largely (statistically) by the decline in PLUS recipients.

The results were not sensitive to accounting for additional factors that could have influenced changes in 2012/13 enrollment. The analyses in this study do not rigorously test whether enrollment changes were the result of PLUS loan changes. Other factors could have caused enrollment to decrease, and these factors may have had larger impacts on the institutions that experienced a greater decline in the number of PLUS loan recipients in 2012/13. For example, the observed decline in enrollment at HBCUs might have resulted from a prior trend that was unrelated to the change in PLUS credit standards. Or shocks to economic conditions or housing prices might have affected enrollment. Because a random experiment testing the effect of changes in PLUS credit standards was not feasible, all the factors that may have influenced enrollment changes in 2012/13 cannot be accounted for. However, the study team estimated a regression model with institution-specific controls for prior trends in enrollment, state-level unemployment rates, and state-level house prices. Accounting for these additional variables did not change the main findings: there was a disproportionate decline in enrollment at HBCUs compared with other institutions, and this decline can be explained largely (statistically) by the decline in the number of PLUS recipients.

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