



The Color of Student Debt:
*Implications of Federal Loan Program Reforms for
Black Students and Historically Black Colleges and Universities*

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EXECUTIVE SUMMARY

Borrowing federal loans in order to finance college expenses is now a common student experience in American higher education. Half of all first-year undergraduates accept federal loans, with median debt among college seniors amounting to about \$20,000 in 2011-12. Total outstanding student loan debt recently reached \$1.11 trillion, up more than ten percent in the last year. More than ten percent of student loans are currently at least 90 days delinquent, a rate that has nearly doubled over the last decade.

As the volume of student debt in the country rises and becomes more visible, policymakers have become more vocal about their concerns with the size of loans, their purposes, and the likelihood of that they will be repaid, along with the potential impact of student loan debt on the economic, psychological, and social well-being of recent generations of young adults. Related discussions focus on rising college costs, rates of non-completion, and the declining purchasing power of grant aid. In upcoming debates over the reauthorization of the Higher Education Act of 1965, several responses are reportedly being considered, including efforts to hold colleges and universities more accountable for reducing student borrowing (through the use of cohort default rates) and/or lowering costs (by introducing college ratings), attempts to reduce borrowing by improving financial education and loan counseling, and changes in eligibility criteria for certain federal loans (particularly Parent PLUS Loans) in order to restrict borrowing.

In this paper we explain why these discussions must take into account a critical issue conspicuously absent from most public debate about reforming higher education financing, and student loans in particular: There is a substantial racial disparity in families' need to borrow for college, such that black students depend much more heavily on access to loans than white families, and leave college with a great deal more in student loan debt than their white counterparts. Research indicates that family wealth has powerful impacts on college opportunities, exhibiting effects even stronger than those played by family income. Moreover, racial disparities in wealth are large, growing, and unlikely to disappear anytime soon. Black students—whose families disproportionately do not own homes or retirement accounts and who cannot rely on intergenerational transfers for support—are far more likely to borrow not only federal subsidized and unsubsidized loans, but also have fewer

alternative sources of credit beyond Parent PLUS loans. Indeed, our analyses indicate that differences in parental net worth and home ownership explain a substantial portion of the black-white gap in student loan debt among young adults.

Therefore, policies that penalize students and/or schools for borrowing, or make it harder to borrow, will likely have unintended consequences for educational opportunities overall, and racial equity in particular. Simply put, restricting borrowing for college without first substantially reducing the cost of attending college has great potential to disproportionately harm the college opportunities of black students. Ironically, while the federal student loan program aims to expand choice, these restrictions will effectively limit black students' college choices by undermining the financial security of colleges and universities where they comprise the majority of undergraduates. Historically black colleges and universities will be disproportionately affected by proposed reforms, primarily due to the lack of family wealth among students they serve and their historical underfunding when compared to predominantly white institutions.

Policymakers will be more effective in the long term if they work proactively to reduce the need for families lacking wealth to borrow for college, rather reactively punish them for doing so. We therefore offer two main policy recommendations:

1. Adjust the federal needs analysis to allow for a negative expected family contribution, so that all struggling families receive more support to facilitate college enrollment, reducing their need to borrow.
2. Increase the transparency of the borrowing process and lower the risks associated with borrowing, thus improving the odds that educational debt will help, rather than hinder, upward mobility. Begin this effort by extending bankruptcy protections to all federal loans, and providing for an income-based repayment option for the PLUS loan.

Extending college opportunities to all Americans is critical to sustaining the national economy and providing hope for future generations. Efforts to deal with current student debt problems must be careful to address the root causes and not punish prospective students, so as to produce solutions that do not inadvertently limit the college prospects of any group.

INTRODUCTION

At the inception of the federal financial aid system, participation in higher education was much less robust than it is today, and the choice of colleges and universities far less plentiful. College was the privilege of the few rather than the domain of the many. Over the next forty years the landscape dramatically shifted. People from all walks of life made their way to college, convinced by economic and political arguments that a postsecondary education was no longer optional—even if it never truly became affordable (Goldrick-Rab, Schudde, & Stampen, 2014). Since 1974, the number of students in postsecondary education has increased from 10 million to over 20 million (U.S. Department of Education, 2013).

A change in college financing accompanied that swing in college attendance (Hearn & Holdsworth, 2004; Lewis, 1989). When college enrollment was confined to students from wealthier families and stronger academic backgrounds, grant aid was viewed as the appropriate way to help a select number of lower-income individuals afford college (Hauptman, 2001; Posselt, 2009). Even so, debates over the best way to achieve that goal kept the focus on college choice front and center, shaping the decision to invest in student-centered grants as vouchers rather than institutional grants (Goldrick-Rab et al., 2014). Over time, as political determination to place college access and affordability first succumbed to economic concerns, the emphasis on grant aid eroded, and loan programs became the most popular way to make it possible for families to send students to the college of their choice (Archibald, 2002; Galloway & Price, 2011).

Borrowing federal loans in order to finance college expenses is now a common student experience in American higher education. Half of all first-year undergraduates accept federal loans, with median debt among college seniors amounting to about \$20,000 in 2011-12 (authors' calculations using the National Postsecondary Student Aid Study). Total outstanding student loan debt recently reached \$1.11 trillion, up more than ten percent in the last year (Federal Reserve Bank of New York, 2014). More than ten percent of student loans are currently at least 90 days delinquent, a rate that has nearly doubled over the last decade (Federal Reserve Bank of New York, 2014).

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purposes, and the likelihood of that they will be repaid, along with the potential impact of student loan debt on the economic, psychological, and social well-being of recent generations of young adults. Related discussions focus on rising college costs, rates of non-completion, and the declining purchasing power of grant aid. In upcoming debates over the reauthorization of the Higher Education Act of 1965, several responses are reportedly being considered, including efforts to hold colleges and universities more accountable for reducing student borrowing (through the use of cohort default rates) and/or lowering costs (by introducing college ratings), attempts to reduce borrowing by improving financial education and loan counseling, and changes in eligibility criteria for certain federal loans (particularly Parent PLUS Loans) in order to restrict borrowing.

A Brief History of Federal Loans

Several trends have shaped the use of student loans since the early 1970s. First, aspirations for higher education expanded. Second, the real purchasing power of the middle class declined, as wages slid relative to inflation. Third, the costs of attending higher education rose far outpacing inflation. The gap between families' desires to purchase college and their ability to afford it was filled by access to student loans (Leicht & Fitzgerald, 2007; Leicht, 2014).

While the original federal student aid programs focused on making college affordable for low-income families, by the end of the 1970s middle-income families also demanded assistance. The Middle Income Student Assistance Act of 1978 expanded federal student loan programs to all students by removing the income cap for unsubsidized loans made to students (Middle Income Student Assistance Act, 1978). Then, during the 1980 reauthorization of the Higher Education Act, the Parent Loans for Undergraduate Students (PLUS) loan program was created to enable parents to more easily borrow to help their children pay for college. Critics describe this policy as a way of shifting the costs of subsidizing loans from government to parents (Mumper, 1996). The PLUS program originally limited borrowing to \$3,000 per year (about \$8,600 in 2014 dollars) with a total lifetime limit of \$15,000 (Education Amendments of 1980). In 1986, those loan limits were increased to \$4,000 per year (about \$8,700 in today's dollars) and a total limit of \$20,000 (Education Amendments of 1986). In 1992, the borrowing limit was increased again to be equivalent to the amount of a student's unmet financial need (as measured by the total cost

of attendance less any other financial aid received) and the lifetime PLUS loan limit was removed entirely (Education Amendments of 1992).

PLUS loans are intended for use after students have already accepted federal subsidized and unsubsidized loans, since they have less generous terms and conditions than other federal loans. In a sense, they are meant as a last resort – some analysts even argue that they are not a form of student aid, despite placing other types of loans in that category (Dynarski, 2014). PLUS loans are ineligible for the federal Income-Based Repayment or Pay As You Earn programs, reducing a family’s protection against adverse life events that are available for other federal loans (Federal Student Aid, 2014a).¹ Interest rates for PLUS loans are higher than subsidized and unsubsidized Stafford loans, while still remaining markedly lower than the rates charged by private lenders. As of July 1, 2014, the PLUS interest rate is 7.21%, compared to 4.66% for both subsidized and unsubsidized loans (Federal Student Aid, 2014b). PLUS loans are also unsubsidized, meaning that interest accrues as soon as the loan is disbursed.

Perhaps even more importantly, while federal subsidized or unsubsidized Stafford loans do not require a credit check, PLUS loans are only available to parents without an “adverse credit history.” Federal statutes offer the following definition, which has not changed in recent years: “Adverse credit is defined in the regulations as the applicant being 90 days or more delinquent on a debt or having been subject in the last five years to a default determination, bankruptcy discharge, foreclosure, repossession, tax lien, wage garnishment or write-off of an FSA debt” (Federal Student Aid, 2009). These restrictions reduce the ability of the neediest families to turn to PLUS loans for support.

While the competition to attend the best (or most expensive) colleges and universities grew, the rankings wars developed, and prestige became determined by how much families spent on college, the popularity of loans ballooned (Bowman & Bastedo, 2009). As the list price of attending college rose at 4-5% above the rate of inflation in the 1980s, with the largest increases (in dollars) in the private sector (Baum & Ma, 2013), more and more families took out loans to cover those costs. The percentage of students borrowing federal subsidized or unsubsidized loans increased from 27% in 1989-1990 to 52% in 2011-2012

¹ Parents can consolidate their PLUS loans and access income-contingent repayment, but the terms are not as favorable as IBR or PAYE.

(Wei & Skomsvold, 2011; authors' calculations using NPSAS data). Similarly, while only 2.5% of students had Parent PLUS loans in 1995-96, with an average value of about \$8,700 (in 2011 dollars), this rose to 4.5% of students in 2011-12, who took an average PLUS loan of nearly \$12,100 (authors' calculations using NPSAS data).

Particularly before the Great Recession, borrowing to send children to college was viewed as a badge of good parenthood, as confidence in the job market and the security of investments including homes led many to believe the returns would be worthwhile and the debt relatively easy to repay (Lewin, 2012). Some researchers even questioned whether students were borrowing enough to finance college (e.g., Avery & Turner, 2012). Middle-income and higher-income families demanded better amenities at state universities, leading to what Jacob, McCall, and Stange (2013) term the “country-clubification” of state universities and creating additional opportunities for socialization among wealthier families (Armstrong & Hamilton, 2013). While this contributed to a rise in borrowing at all income levels, the negative effects were most concentrated among lower-income families.

Loan Programs Under Scrutiny

Positive feelings about student loans and the choices they engendered eroded during the Great Recession. As the cost of attending college remained high, while real family income declined for all but the wealthiest Americans, more families turned towards federal and state grant aid—and found it insufficient. Today, net price (the difference between the cost of attendance minus a family's expected contribution and all grant aid received) is substantial for middle, moderate, and low-income families. Dependent students in the lowest income quartile face an average net price of \$12,300 per year, 59% of their typical family income. Even students in the third quartile face a net price of 25% of their family income (Goldrick-Rab & Kendall, 2014). While the Pell Grant, as an entitlement, is available to every qualified student, its purchasing power has been so severely diminished that it effectively serves as a “gateway” to student loans for most families (Goldrick-Rab, 2013). State aid programs are overtaxed, with long waiting lists of eligible students and high barriers to qualification that eliminate others (this latter issue, the use of merit-based scholarships, is particularly pronounced in states with large fractions of minority students and those scholarships tend to exacerbate disparities since they tend to go to wealthier students) (Heller & Marin, 2004).

Under these circumstances many families feel that they *need* loans and cannot afford to refuse them; in fact, in order to exercise any sort of college choice, loans are effectively a prerequisite. Today, about half of students borrow the maximum annual subsidized loan of \$3,500 for first-year students, \$4,500 for second-year students, and \$5,500 for all other students (authors' calculations using NPSAS data). About 60% of students who take out a loan borrow the maximum subsidized and unsubsidized loans of \$5,500 for first-year dependent students or \$9,500 for first-year independent students, \$6,500 or \$10,500 for second-year students, and \$7,500 or \$12,500 for all other students up to a lifetime limit of \$31,000 for dependent students or \$57,500 for independent students (Wei & Skomsvold, 2011). But students who borrow federal loans are still left with unmet need after taking all grant, loan, and work-study aid into account, having to come up with an average of \$7,900 to pay for college. Even after subtracting the expected family contribution (EFC), an arbitrarily defined value the federal government expects families to pay for college that is loosely correlated with ability to pay, students and their families must come up with an additional \$4,500 to pay for college (authors' calculations using NPSAS data). As a result, some turn to private loans – between 2003-04 and 2008-2009, the fraction of students borrowing private loans grew from 5 to 14%, before falling back to 6% in 2011-12. Low-income students are as likely as high-income students to take on private loans, and rates of borrowing are higher among black students compared to white or Hispanic students (Carey & Dillon, 2009). Private loans are widely considered “one of the riskiest ways to finance a college education” given their variable interest rates and limited protections for borrowers (Project on Student Debt, 2014, p.1).

Policymakers have become concerned about the use of federal loans, and have even begun to talk about restricting access to those loans, for several reasons. Chief among them are high and rising rates of student default, which have increased in spite of the introduction of income-based repayment plans designed to eliminate the need to default in tough economic times. Ten percent of students who left college with loans in 2011 defaulted on those loans within two years, up for the sixth consecutive year and double the average default rate from 2000 to 2006 (Federal Student Aid, 2014c). Seventeen percent of federal loans are at least 31 days delinquent, representing at least two million borrowers (Federal Student Aid, 2014d). These numbers have led to concerns about the ability of

borrowers to repay federal loans. This is particularly the case for PLUS loans, which do not have income-based repayment options.

In addition, some have pointed to the low college graduation rates of students taking federal loans, and raised questions about the types of institutions where borrowing is more common (Rodriguez, 2014). Borrowers often have lower rates of graduation than non-borrowers, and students who take loans are distributed across a wide range of institutions, but are substantially overrepresented at for-profit colleges and universities, and somewhat overrepresented at Historically Black Colleges and Universities (HBCUs) (Rodriguez, 2014). But these descriptive trends can be misleading, and do not lend themselves to clear interpretation. Most importantly, such statistics do not prove that borrowing *harms* students' chances of graduating from college or that attending certain institutions *causes* students to borrow.

In fact, there is very limited empirical evidence to support either of those claims in general, and only some evidence to buttress them for specific schools and populations. Generating a causal estimate of the impact of loan availability on college attainment is difficult in the United States due to the broad scope of the federal student loan programs and the relatively small percentage of low-income students who face significant credit constraints if they take all available loans (e.g., Stinebrickner & Stinebrickner, 2008). It is also difficult to ascertain the causal impacts of loans since borrowing is often conditional on factors that are not observed by researchers, and decisions about loantaking may precede decisions about college attendance or persistence (Dowd, 2008).

The strongest available evidence at the institutional level exists for the for-profit sector, where studies indicate that availability of federal student aid (which includes but is not limited to loans) drives up the cost of attendance, leading students to borrow more (Cellini & Goldin, 2012). No such strong evidence exists for HBCUs or other types of colleges and universities.

At the student level, while a few studies from other countries (namely South Africa and Chile) suggest that student loans increase enrollment rates (e.g. Gurgand, Lorenceau, & Melonio, 2011; Solis, 2012), reviews of research examining the impact of loan programs in the United States show mixed results, with most studies estimating null effects for white and minority students alike (Dynarski & Scott-Clayton, 2014; Hossler, Ziskin, Gross, Kim, &

Cekic, 2009). However, some studies have found that black students who borrow are more likely to graduate or persist than black students who do not borrow (e.g., Chen & DesJardins, 2010; Dwyer, McCloud, & Hodson, 2012; Jackson & Reynolds, 2013), although the estimates in these studies likely suffer from selection bias. The PLUS loan program itself has never been evaluated.

Given a lack of evidence on how loans impact college attainment, the media has instead focused on the evidence that debt—and particularly PLUS loan debt—is detrimental for post-college life. In 2013, policy analyst Kevin Carey called the PLUS loan the “Federal Parent Rip-Off Loan,” asserting that many families will never be able to repay those loans and that the terms are unfavorable to students. This year, two analysts suggested that the federal government should make it more difficult for families to obtain PLUS loans, even going so far as to call for the elimination of the PLUS program in favor of increasing loan limits and/or income-based repayment plans for subsidized loans (Dynarski, 2014; Fishman, 2014).

Federal actions have also been taken to tighten the definition of “adverse credit,” again reducing access to PLUS loans. In October 2011, without public announcement, the Department of Education amended the definition of adverse credit to include accounts in collections or written off in the last five years (Nelson, 2012). This is particularly problematic, given that the number of families defined as having “adverse credit” by definition grew substantially during the Great Recession. Students who had previously been approved for PLUS loans were then denied, leaving some scrambling for additional resources.² Although the Department of Education does not make PLUS denial data by college available (or PLUS default data, for that matter), they did release denial data by broad sector for the first time in early 2014 in response to demands from a rulemaking committee. The percentage of credit checks that resulted in loan denials rose from 22% in 2010-11 to 28% in 2011-12 and 42% in 2012-13. The increase was sharpest at for-profit colleges, which saw their declination rate rise from 23% to 49%.

² Education Secretary Arne Duncan later apologized for poor management of the PLUS changes, while promising to expedite the appeal process for parents who were denied loans; nearly all families who appealed were granted loans in 2013 (Stratford, 2013). This apology was directed only to HBCUs.

On the one hand, these restrictions might be sensible, since “the downside to the growth in PLUS loans is that some families have borrowed more than they can repay” (Rodriguez, 2014, p. 2). The growing fraction of students attending college but not completing a degree and leaving with debt is certainly a cause for concern. On the other hand, the impacts of loans are likely heterogeneous, helping some students attend college and complete degrees, while exerting no effect for others (Dwyer et al., 2012; Dwyer, Hodson & McCloud, 2013). If the group of students helped by loans is smaller than the group that does not benefit (but is not harmed) then the average effect will be null. The same is true for impacts of debt on post-college life. If some students are harmed, while many others are unaffected, again the results might be null. But eliminating loans entirely could thus have two impacts leading in different directions: Post-college outcomes might be improved for one group at the cost of reducing college attainment for another. For this reason, we argue, policymakers need to pay careful attention to the color of student debt.

THE COLOR OF STUDENT DEBT

Given their prevalence in higher education, people from middle-class backgrounds, and non-Hispanic whites in particular, are the primary users of federal loan programs. In 2011-12, white students made up 63% of all PLUS loan recipients, while black students constituted just 15%, Hispanic students 12%, and Asian students were 5%. Four years previously, white students were 71% of PLUS recipients (authors’ calculations using NPSAS data). But despite the fact that most PLUS borrowers are white, black students and their families are *disproportionately* reliant on student loans for college access. This fact is an importance part of the portrait of loantaking and its implications, and must be considered when weighing the consequences of changing student loan programs.

Racial Disparities in Borrowing

In the United States, black students are much more likely to borrow for college than their white, Hispanic, and Asian counterparts (Jackson and Reynolds, 2013). In fact, according to the 2010 Survey of Consumer Finances, black adults are about twice as likely to have student debt as white adults (34 vs. 16%) (Ratcliffe & McKernan, 2013), and an analysis of the National Longitudinal Study of Youth 1997 data reveal that black young adults carry substantially more debt than white young adults (Houle 2014). Table 1 shows the percentage of students using type of federal loan (subsidized, unsubsidized, and PLUS),

private loans, and any loan by student race/ethnicity every four years from 1995-96 through 2011-12 using data from the National Postsecondary Student Aid Study.³ Fully 52% of black students took out a student loan in 2011-12, compared to 42% of white students, 36% of Hispanic students, and 28% of Asian students. Not only have black students always borrowed more than white students, for as long as the federal government has tracked these things, but the growth in take-up rates of federal student loans between 1995-96 and 2011-12 was also greater for black students than white students. This is especially true for unsubsidized loans: over that period, the take-up rate tripled for white students, and quadrupled for black students. (There are similar differences in trends for private loans as well.) Moreover, while the average size of the loan taken by black and white students is nearly the same (~\$8,000), that amount represents a much larger fraction of black students' current family income and their future earnings. Analysts believe that the black/white disparities in federal loantaking would be even larger if more community colleges serving minority students opted to participate in federal student loan programs (Cochrane & Szabo-Kubitz, 2014).

With the dearth of grant aid available today, federal loans are especially important to black students, who are much more likely than white students to leave college without a degree because of financial problems (Gladieux & Perna, 2005). At the same time, blacks are much more likely to worry about paying off their debt (Ratcliffe & McKernan, 2013) and more likely to default on their loans (Gross, Cekic, Hossler, & Hillman, 2009), mainly because they are less likely to be employed (partly due to labor market discrimination) and have lower earnings than whites (again, partly due to wage discrimination) (Price, 2004). They are also discriminated against when it comes to securing credit outside of the federal student loan system, and face higher borrowing costs in the form of subprime and higher interest loans (Weller, 2007).

³ Private loan receipt data were not available in 1995-96.

Table 1: Federal loan takeup rates and amounts borrowed by institutional type and race/ethnicity, 1995-96 to 2011-12.**Panel A: Any federal loan.**

	Percent with any loan					Amount of total loan (\$, among borrowers)				
	2011-12	2007-08	2003-04	1999-2000	1995-96	2011-12	2007-08	2003-04	1999-2000	1995-96
Overall	41.9	39.1	34.1	28.6	25.5	8,397	8,714	7,553	7,333	6,355
Institutional type										
Non-HBCU	41.6	38.7	33.9	28.1	25.0	8,356	8,705	7,528	7,339	6,362
HBCU	65.3	65.9	40.5	62.2	58.0	10,164	9,074	8,435	7,154	6,175
4-year public	50.2	47.8	46.0	40.6	37.9	8,615	8,406	7,308	6,661	6,282
4-year private nonprofit	62.6	61.0	56.7	52.1	47.7	11,292	11,902	9,758	9,394	7,606
2-year public	17.6	13.2	9.4	5.5	4.4	4,731	4,429	4,173	4,466	3,635
For-profit	73.0	85.1	77.4	75.4	56.8	8,430	9,148	7,620	7,427	6,123
Race/ethnicity										
White	41.9	39.0	34.2	28.8	25.5	8,590	9,015	7,817	7,542	6,529
Black	52.3	49.5	41.9	35.6	31.3	8,047	8,091	6,861	6,875	5,894
Hispanic	35.6	34.5	29.5	25.0	22.0	7,970	8,314	6,983	6,720	5,717
Asian	28.4	25.8	24.1	21.8	22.7	8,650	8,546	7,687	7,274	6,510
Native American	43.0	35.9	30.0	23.4	23.5	7,051	6,641	6,539	6,097	5,805

Panel B: Subsidized loan.

	Percent with a subsidized loan					Amount of subsidized loan (\$, among borrowers)				
	2011-12	2007-08	2003-04	1999-2000	1995-96	2011-12	2007-08	2003-04	1999-2000	1995-96
Overall	35.9	29.9	27.5	23.5	22.0	3,468	3,644	3,583	3,945	4,219
Institutional type										
Non-HBCU	35.5	29.6	27.3	23.0	21.6	3,459	3,632	3,573	3,937	4,225
HBCU	59.6	53.1	35.2	53.8	53.0	3,813	4,098	3,923	4,177	4,060
4-year public	41.0	34.6	35.4	32.1	32.3	3,802	3,998	3,906	4,072	4,416
4-year private nonprofit	52.5	47.9	46.5	43.6	42.0	3,905	4,190	4,010	4,485	4,794
2-year public	14.6	8.4	6.7	4.1	3.5	2,794	2,889	2,718	2,946	2,988
For-profit	68.8	76.0	73.8	72.0	52.5	3,143	3,121	2,943	3,197	3,285
Race/ethnicity										
White	34.5	28.6	26.6	22.8	21.7	3,521	3,687	3,658	3,985	4,284
Black	48.0	42.1	37.4	31.3	28.5	3,294	3,510	3,420	3,833	3,929
Hispanic	31.6	27.5	25.2	21.8	19.0	3,436	3,615	3,383	3,802	4,052
Asian	24.9	19.8	18.4	19.1	19.9	3,810	3,822	3,890	4,267	4,494
Native American	37.2	29.9	25.8	20.1	20.4	3,196	3,025	3,585	3,617	4,285

Panel C: Unsubsidized loan.

	Percent with an unsubsidized loan					Amount of unsubsidized loan (\$, among borrowers)				
	2011-12	2007-08	2003-04	1999-2000	1995-96	2011-12	2007-08	2003-04	1999-2000	1995-96
Overall	33.5	22.1	24.3	14.4	10.3	3,922	3,536	3,736	3,884	3,819
Institutional type										
Non-HBCU	33.2	21.9	24.1	14.1	10.2	3,916	3,526	3,723	3,879	3,815
HBCU	58.8	39.7	30.8	33.2	17.4	4,133	3,905	4,173	4,027	3,973
4-year public	39.5	24.3	30.3	20.1	14.9	3,932	3,853	3,951	3,831	3,742
4-year private nonprofit	52.9	29.2	40.8	22.3	16.4	3,866	3,950	3,967	4,233	4,264
2-year public	11.3	5.8	5.6	2.4	1.5	3,309	2,880	3,000	3,215	3,065
For-profit	65.5	68.9	70.2	55.9	34.9	4,244	3,222	3,496	3,831	3,841
Race/ethnicity										
White	33.7	21.7	24.7	14.9	10.9	3,912	3,585	3,787	3,894	3,826
Black	44.2	32.7	30.5	19.0	12.0	4,025	3,386	3,613	3,807	3,644
Hispanic	27.0	17.8	19.9	10.7	7.2	3,888	3,518	3,674	3,870	4,123
Asian	19.3	10.4	14.6	7.4	6.0	3,503	3,647	3,836	4,252	3,703
Native American	31.4	23.0	20.6	12.5	8.2	3,911	3,067	3,594	3,143	3,920

Panel D: Private loan.

	Percent with a private loan					Amount of private loan (\$, among borrowers)				
	2011-12	2007-08	2003-04	1999-2000	1995-96	2011-12	2007-08	2003-04	1999-2000	1995-96
Overall	6.0	14.2	5.0	2.9	NA	5,826	6,998	7,213	6,758	NA
Institutional type										
Non-HBCU	6.0	14.2	5.0	2.9	NA	5,843	7,006	7,235	6,751	NA
HBCU	6.1	18.1	3.4	NA	NA	4,690	6,568	5,870	NA	NA
4-year public	6.5	13.9	5.1	3.3	NA	5,527	6,722	6,563	5,298	NA
4-year private nonprofit	12.1	24.8	11.2	8.1	NA	7,800	10,010	9,610	8,196	NA
2-year public	1.6	4.3	1.3	0.6	NA	2,631	3,751	3,991	5,311	NA
For-profit	11.7	39.4	12.5	5.1	NA	5,842	6,591	6,765	8,174	NA
Race/ethnicity										
White	6.3	14.5	5.3	3.1	NA	6,216	7,404	7,505	7,049	NA
Black	6.0	17.2	4.1	2.6	NA	5,137	6,083	5,774	5,881	NA
Hispanic	5.1	13.0	4.6	2.9	NA	5,135	6,313	6,543	5,442	NA
Asian	4.6	8.3	4.1	1.4	NA	5,074	7,358	7,813	7,633	NA
Native American	4.7	11.5	3.6	NA	NA	NA	4,829	6,377	NA	NA

Panel E: PLUS loan.

	Percent with a PLUS loan					Amount of PLUS loan (\$, among borrowers)				
	2011-12	2007-08	2003-04	1999-2000	1995-96	2011-12	2007-08	2003-04	1999-2000	1995-96
Overall	4.5	3.7	3.5	3.1	2.5	12,089	11,622	10,953	9,522	8,716
Institutional type										
Non-HBCU	4.4	3.6	3.5	3.0	2.4	12,066	11,682	10,924	9,552	8,717
HBCU	12.8	9.9	5.5	6.1	7.5	12,625	10,126	11,742	8,555	8,688
4-year public	7.0	5.8	5.2	3.7	3.6	11,103	10,381	9,450	8,301	7,769
4-year private nonprofit	11.9	8.5	8.2	7.7	6.2	14,861	15,221	13,815	11,727	11,076
2-year public	0.1	0.2	0.2	0.1	0.1	5,656	5,087	6,697	NA	NA
For-profit	4.6	5.2	6.0	7.9	5.2	10,198	9,842	10,634	8,016	6,565
Race/ethnicity										
White	4.9	4.3	4.0	3.4	2.7	12,267	11,811	11,097	9,539	8,875
Black	4.3	2.7	2.6	2.7	2.6	11,438	10,641	10,602	9,305	7,889
Hispanic	3.3	3.0	2.5	2.1	1.5	11,634	11,318	10,301	9,225	7,496
Asian	3.6	2.6	2.6	1.9	2.4	13,497	12,204	11,453	10,579	9,612
Native American	3.3	NA	NA	NA	NA	9,346	NA	NA	NA	NA

Source: National Postsecondary Student Aid Study.

Notes:

(1) All values adjusted for inflation to 2011-12 dollars using the Consumer Price Index.

(2) No private loan receipt data were available in the 1995-96 NPSAS.

The Racial Wealth Gap

Thus, racial disparities in student debt are closely related to the stark racial disparities in wealth characterizing American society. A long history of economic and political disadvantages has generated enormous black/white disparities in wealth, which in turn affect educational attainment and intergenerational mobility (Oliver & Shapiro, 1995). While the federal financial aid system focuses on family income, research shows that

parental net worth is a stronger determinant of postsecondary outcomes than family income (Conley, 2001).

The racial wealth gap is extraordinarily large. Estimates vary, but most suggest that white families hold about eight times as much wealth as black families (one estimate puts the figure at closer to 20) (Kochhar, Fry, & Taylor, 2011). Between 1984 and 2009, the absolute racial gap in wealth increased by \$151,000 (Shapiro, Meschede & Osoro, 2014, p. 99). Moreover, the racial wealth gap increased dramatically during the recessionary period, as minority families lost more wealth (in percentage terms) than their white counterparts (Pfeffer, Danziger, and Schoeni 2013). Today, the median wealth of white families is \$124,000 compared to \$16,000 for black families (McKernan, Ratcliffe, Steuerle, & Zhang, 2013). The racial wealth gap is three times larger than the racial income gap and more unequal than ever before (McKernan et al., 2013), and it exists among families of all income levels (Shapiro et al. 2014). Income does not translate into wealth the same way for black and white families: Shapiro and colleagues find that “each dollar increase in income translates into about five dollars of wealth for white families (at the median) and only about 70 cents for African Americans” (2014, p. 107).

Consider Zhan and Lanesskog’s analysis of students in the National Longitudinal Survey of Youth young adult sample that enrolled in college for the first time between 2000 and 2004. While the annual family income of white students outstripped that of black students by \$23,000, their wealth advantage was almost \$134,000. The debt-to-assets ratio for black families was nearly 50% higher than that for white families. The authors note, “Debt looms larger for black families, so they are less able to pay it off” – yet at the same time, their lack of assets makes it more likely that they will need to go further into debt in order to obtain a college education (2014, p. 72).

Racial disparities in wealth are largely due to disparities in rates of employment, years of home ownership, levels of education, and differences in inheritances, as well as variation in income (Shapiro, Meschede, & Osoro, 2013). The Great Recession not only destroyed the wealth of some white families, but it also virtually “hammered out” the wealth of the majority of black middle-class families (Wolff, 2012, p.7). The wealth of white families declined by 11%, while the wealth of black families declined by 31% (McKernan et al., 2013). Compared to whites, black families were 38% more likely to have fallen into debt

during the Great Recession, and 74% more likely to have lost at least \$250,000 (Pfeffer et al., 2013).

What Oliver and Shapiro (1990) call “asset poverty,” the lack of economic resources to support one’s household in the absence of income, can make it extraordinarily difficult not only to begin college but also persist and complete. With income volatility on the rise and fewer social support programs than ever (Dyner, 2010; Shafer & Edin, 2014), family wealth helps ensure the continuity and momentum of educational trajectories, which are often critical to ensuring their positive conclusions. Some evidence indicates that if black and white families had similar levels of wealth, blacks would attend college at higher rates (Conley, 2001), and black and whites would graduate from college at the same rate (Conley, 1999; Zhan & Sherraden, 2011).

Financial Aid Eligibility and Family Wealth

The way that eligibility for federal student financial aid is calculated may exacerbate racial disparities in borrowing. Despite a paradigmatic shift in focus from income to wealth in most other areas of social policy, higher education policy continues to emphasize family income as the way to understand a family’s available resources for college. The Free Application for Federal Student Aid (FAFSA), which determines federal financial aid eligibility, does not take into account many assets, including:

- Money invested in qualified retirement accounts, such as Individual Retirement Accounts, 401(k) plans, 403(b)’s, SEP-IRA’s and pension plans
- Equity in the primary home
- Small businesses that a family owns and controls
- Family farms, if the family lives on the farm and materially participates in the operation
- Cash value life insurance policies (Federal Student Aid, 2014e)

These assets do not reduce a family’s eligibility for financial aid despite demonstrable evidence that families secure educational advantages using this wealth. For example, Lovenheim (2011) found that for lower-income families each \$10,000 in home equity raises the prospect of college enrollment by about 5.7 percentage points. Families can further enhance their ability to qualify for financial aid (and grants in particular, if they lower their EFC) by putting savings in the names of other relatives, delaying gifts to

students, reducing or repositioning assessable assets (for example by paying down debt, or making large purchases before the child begins college), and timing income correctly (e.g. avoiding capital gains, maximizing retirement plan contributions and minimizing withdrawals). To the extent that wealthier families more often in possess non-assessable assets and better equipped to know about and take advantage of these strategies that are often discussed in the media (e.g., Weston, 2012), they secure more federal grant support and depend less heavily on loans, more readily obtaining a college education for their children.

The omission of most family assets in the calculation of federal student aid is the result of policy changes that began in the early 1990s. The 1992 amendments to the Higher Education Act excluded home equity from taxable assets, although about 400 highly selective colleges use a form called the CSS/PROFILE to gather this information separately from the FAFSA. More recently, Congress has continued towards disregarding assets, coming close to eliminating the remaining six asset questions in 2009. These changes would have simplified the application for financial aid, likely improving access to aid for students for low-income families, but they may also have reserved somewhat more funding for low-income families without assets.⁴

Perhaps even more importantly, the federal student aid application overlooks debt. Without accounting for the families' debt: asset ratio, black students are disproportionately likely to receive less financial aid than they need. Not only are white families more likely than black families to have positive net worth but they are also far less likely to have negative net worth, and thus be living "in the red" (Conley, 1999). In fact, nearly one-third of all black families reported having zero or negative wealth in 2009 (Taylor et al., 2011).

Students whose families have negative wealth are likely to need more help than those whose families have low incomes but have at least some assets. Students whose families have more moderate incomes may also have no or even negative wealth, and yet be expected to pay an EFC similar to that calculated for a moderate-income family owning a \$2 million small business. But the federal needs analysis does not allow these students to receive any additional financial assistance beyond the stated cost of attendance, even when

⁴ While Dynarski & Scott-Clayton (2007) find that few changes in Pell eligibility would occur under FAFSA simplification, this is primarily because students with negative EFCs are unable to receive larger grants.

it is needed not only to pay for that EFC, but also to help ensure the family stays afloat while the child is in college (McSwain, 2008).

Taken together, the evidence suggests that a portion of the racial disparity in student loan debt can be traced back to family background, and particularly family wealth. To more directly test this claim, we used data from a nationally representative, longitudinal dataset of young adults (the National Longitudinal Study of Youth 1997 cohort) and examined racial disparities in outstanding student loan debt at age 25. Table 2 illustrates the black-white gap in student debt, adjusted for postsecondary attendance characteristics, including the number of years attended, current enrollment status, and degree attained and pursued. Corroborating prior research, we find that black young adults report 130% more debt than their white counterparts in young adulthood (see Model 1). Moreover, regression analyses indicate that racial disparities in socioeconomic status and wealth account for over one-third (35%) of the black-white student loan debt in young adulthood.⁵

Clearly, many black students face a catch-22. Given their lack of wealth, which stems from the “sedimentation of racial inequality” passed from generation to generation, they are far more likely to need loans in order to attend and complete college (Oliver & Shapiro, 1997). Indeed as Jackson and Reynolds (2013) note, loans could help to ameliorate inequality if they equally benefit black and white students’ persistence in college. With the current constraints on black families, it is unsurprising that between 2007-08 and 2011-12, the composition of PLUS borrowers shifted from 10.3% black to 15.2% black.⁶

Unfortunately, racial disparities in college completion along with different prospects of default greatly reduce the potential benefits of borrowing. Among students who began college for the first time in 1995-1996, fully 13.2% of black students borrowed a federal loan, did not complete a bachelor’s degree, and defaulted on that loan by 2001, compared to just 2.4% of white students (Jackson & Reynolds, 2013). In a higher education financing system reliant on student loans, the opportunity to pursue a college degree comes at a far

⁵Specifically, we find that taking into account racial differences in parental income and education explained 20% of the racial debt gap (Model 2). Furthering netting out differences in parental wealth, as measured by a dichotomous measure of negative net worth (debt exceeds assets), a continuous term for positive net worth (assets-debts), and home ownership, further explained an additional 20% of the remaining racial debt gap (Model 3).

⁶ This rate of growth was higher for PLUS than other types of loans primarily since federal loan limits make it difficult to increase take-up of those loans.

higher cost for black students when compared to white students. And yet research suggests that the black-white gap in college completion might be even larger if loans were restricted and not replaced by grant aid (Jackson & Reynolds, 2013).

Table 2: Parental Socioeconomic Status and Racial Disparities in Outstanding (Logged) Student Loan Debt in Young Adulthood

	Model 1	Model 2	Model 3
<i>Race (Referent = NH White)</i>			
Black	1.304*** (0.195)	1.048*** (0.198)	0.845*** (0.198)
R ²	0.248	0.278	0.294
<u>Covariates Included in Model</u>			
Parents' Income and Education	No	Yes	Yes
Parents' Wealth	No	No	Yes

* p<.05, ** p<.01, *** p<.001; N=3008; All models adjust for postsecondary educational attendance (years enrolled, % years enrolled full time, % years enrolled in a private institution; degree pursued and attained; current enrollment status), region, and age at debt measurement.

Source: NLSY-97 Respondents who ever attended a postsecondary institution.

INSTITUTIONAL DISPARITIES IN STUDENT DEBT

As Table 1 indicates, while the overall percentage of students borrowing for college rose from 26% to 42% between 1995-96 and 2011-12, there was significant variation by institutional type. In that most recent year of data, fully 73% of students at for-profit colleges took federal loans, compared to 65% of students attending HBCUs, 63% of students at non-HBCU four-year private nonprofit colleges, 50% of students at four-year public colleges, and 17% of students at community colleges. The fastest growth in borrowing occurred in the for-profit sector where it went up 16 percentage points, compared to 13 to 14 percentage point increases at four-year public and private nonprofit colleges and community colleges, and an eight percentage point uptick at HBCUs. The vast majority of the growth was concentrated in unsubsidized loans, where usage swelled from 35 to 66% in the for-profit sector, 17 to 59% at HBCUs, and 1.5 to 11% in community colleges. Private loan receipt fluctuated, driven mainly by for-profit colleges (where 39% of students took out private loans) and private nonprofit colleges (where 25% took out loans). About 5% of students took out PLUS loans in 2011-12, double the rate of 1995-96,

with the highest rates at HBCUs (13%) and non-HBCU private nonprofit colleges (12%). Notably, just one HBCU (Howard University) was among the top 30 colleges in PLUS dollars received in 2012-13 (Rodriguez, 2014),

Private nonprofit four-year colleges and for-profit colleges receive more loan revenues per student than public colleges, mainly because of their higher costs of attendance. But the proposed changes in student loans will have a disproportionate impact on smaller colleges and universities serving a larger number of black students (specifically, HBCUs and some for-profit colleges). The data indicate that the average non-PLUS loan and the average PLUS loan (among borrowers) amount have risen faster for black students and students at HBCUs than for white students and students at non-HBCUs. The average non-PLUS loan at HBCUs rose from \$5,078 in 1995-96 to \$7,767 in 2011-12 after adjusting for inflation, while the average PLUS loan rose from \$8,688 to \$12,625 during this period (Rodriguez, 2014).

HBCUs have long been a central component of African-American cultures of social mobility, providing a distinctly useful pathway into the middle class (Bennett, 2014). As places where blacks could “achieve *while* overcoming” they became critical institutions in a social context that overtly excluded blacks from such institutional opportunities, and continue to be essential today, in a “post-racial” period of history when moments of exclusion may be less conspicuous but no less effective (Cottom, 2014). It is therefore unsurprising that recent efforts curtailing access to Parent PLUS loans have sparked great controversy in the black community and created a moment of significant crisis for HBCUs. As Cross and Slater note, “In the past, many black families eased the financial burden by sending their children to the relatively inexpensive HBCUs. These institutions continue to be a cost-effective alternative for black families. However, tuition and fees have risen at these schools at an even higher rate than at the elite private universities or at the large state universities” (1997, p. 85). This is primarily because HBCUs have far smaller endowments and benefit from less alumni giving (due to the far lower rates of wealth among their students), while exhibiting no differences in financial management practices compared to other institutions (Drezner & Gupta, 2012). Moreover, they serve students who are both less likely to graduate and less likely to be able to hold on to their financial aid during college (Gasman, 2013).

Despite the outsized attention paid to them in debates over PLUS loans, HBCUs are a tiny but critical fraction of the higher education landscape. With just 99 institutions nationwide, they serve just 2% of all undergraduates and their students comprise less than 4% of all PLUS borrowers (Fishman 2014). But they differ from other colleges and universities in several critical ways. These differences are an integral part of the mission of HBCUs, which aim to offer a more intimate and racially diverse setting than their counterparts. On average, a public HBCU enrolls about 4,000 students, of whom 80% are black; a public non-HBCU enrolls about 10,000 students, only about 10% of whom are black. Private HBCUs are about half the size of their non-HBCU counterparts and representation of black students at private non-HBCUs ranges from 9-14%.

Tables 3 through 5 display some additional characteristics of HBCUs and nonprofit non-HBCUs that offer bachelor's degrees and participate in the federal student loan programs as independent entities.⁷ Private colleges are divided based on their endowment levels, and a college is classified as a higher-endowment institution if its endowment was at least \$10,000 per full-time equivalent student in each year from 2010 to 2012; the remainder are termed lower-endowment colleges. There are 99 HBCUs in the United States. These include:

- 39 public HBCUs (average endowment of \$3,466 per full-time equivalent student) and 439 public non-HBCUs (average endowment of \$8,252 per student)
- 22 private lower-endowment HBCUs (average endowment of \$6,160 per student) and 318 private lower-endowment non-HBCUs (average endowment of \$5,580 per student).
- 21 private higher-endowment HBCUs (average endowment \$31,470 per student) and 523 private higher-endowment non-HBCUs (average endowment \$101,697 per student)

⁷ Data on PLUS loan receipt are from Federal Student Aid (FSA) records instead of the Department of Education's Integrated Postsecondary Education Data System (IPEDS). FSA data aggregate some colleges to the system level for reporting purposes (such as the Rutgers and Penn State systems), but not others (such as the University of Wisconsin and University of California systems). To get accurate comparisons of loan volume by campus, we limit our analyses to colleges not aggregated to the system level; four-year HBCUs are not aggregated to the system level. For more details about limitations of FSA data, see Jaquette & Parra (forthcoming).

Table 3: Descriptive statistics by HBCU type.

Characteristic	Public		Private, higher endowment		Private, lower endowment	
	HBCU	Non-HBCU	HBCU	Non-HBCU	HBCU	Non-HBCU
DEMOGRAPHICS						
Pct of students admitted	50.6 (18.4)	67.5 (16.7)	59.6 (19.2)	59.5 (18.9)	49.3 (21.3)	68.2 (15.6)
Pct full-time students	84.3 (10.4)	78.9 (15.4)	93.7 (3.4)	90.1 (12.0)	94.5 (4.7)	77.5 (17.7)
Pct black students	80.3 (20.7)	9.5 (10.0)	90.1 (7.9)	7.5 (7.2)	93.3 (5.0)	14.3 (14.4)
Pct minority students	83.0 (20.6)	22.6 (15.7)	92.8 (5.7)	17.4 (11.0)	95.2 (4.3)	25.8 (18.8)
Pct male students	39.6 (5.8)	45.1 (9.4)	38.6 (20.0)	41.8 (14.2)	45.7 (7.7)	39.5 (10.8)
Pct parents w/no college (NPSAS)	40.9 (1.9)	30.1 (0.5)	NA	18.2 (1.5)	33.2 (8.3)	31.1 (1.1)
Pct zero EFC (NPSAS)	52.5 (2.9)	29.1 (0.4)	NA	17.6 (1.3)	44.4 (5.4)	28.6 (0.9)
ACT composite score	17.8 (1.1)	22.5 (2.5)	19.2 (2.6)	24.8 (3.7)	16.7 (1.7)	21.4 (2.0)
Undergraduate fall enrollment	4,420 (2,152)	10,967 (8,566)	1,774 (1,603)	2,703 (2,988)	1,346 (859)	2,600 (3,829)
Undergraduate 12-month FTE	4,121 (2,082)	9,852 (7,980)	1,761 (1,601)	2,692 (3,091)	1,298 (872)	2,340 (3,457)
ACT composite score	17.8 (1.1)	22.5 (2.5)	19.2 (2.6)	24.8 (3.7)	16.7 (1.7)	21.4 (2.0)
FINANCIAL AID						
Pct Pell recipients	69.9 (9.9)	37.0 (11.2)	69.3 (14.1)	30.7 (13.5)	82.8 (9.2)	44.1 (14.9)
Pct receiving federal loan	74.2 (17.6)	53.4 (12.7)	81.8 (7.7)	61.0 (17.7)	83.6 (13.8)	68.8 (15.2)
Pct receiving any grant	81.5 (9.7)	60.1 (12.8)	86.8 (10.4)	83.0 (15.2)	94.3 (4.8)	81.0 (14.9)
Cost of attendance (\$)	18,067 (2,791)	20,303 (3,601)	28,566 (7,241)	43,127 (9,606)	22,474 (4,469)	35,372 (6,801)
Tuition/fees (\$)	5,891 (1,352)	7,416 (2,371)	16,044 (4,073)	30,027 (8,482)	11,629 (2,654)	21,613 (6,167)
Net price of attendance (\$)						
All students receiving aid	10,660 (3,166)	12,284 (3,038)	18,791 (5,583)	22,875 (6,021)	14,051 (3,836)	20,164 (4,720)
\$0-\$30,000 income	10,539 (3,527)	9,495 (2,959)	18,490 (5,914)	16,461 (5,432)	14,073 (3,791)	17,659 (4,683)
\$30,001-\$48,000 income	11,444 (3,768)	10,970 (2,921)	19,875 (6,001)	17,511 (5,500)	14,168 (3,567)	18,107 (4,485)
\$48,001-\$75,000 income	13,517 (3,510)	14,272 (3,054)	21,696 (6,043)	20,484 (5,476)	16,782 (3,336)	20,420 (4,658)
\$75,001-\$110,000 income	14,847 (3,289)	16,645 (3,405)	21,847 (6,564)	23,773 (5,550)	17,636 (3,385)	22,635 (4,954)
\$110,001+ income	14,220 (4,756)	17,279 (4,185)	22,383 (6,539)	28,750 (7,588)	18,034 (3,972)	24,120 (5,574)

Table 3: Descriptive statistics by HBCU type (continued).

Characteristic	Public		Private, higher		Private, lower	
	HBCU	Non-HBCU	HBCU	Non-HBCU	HBCU	Non-HBCU
Percent of FAFSA filers by income						
\$0-\$30,000 income	62.3 (13.3)	34.4 (16.5)	61.0 (18.2)	22.3 (13.1)	66.9 (14.3)	32.9 (17.9)
\$30,001-\$48,000 income	17.0 (4.8)	15.6 (4.0)	15.9 (5.7)	13.4 (5.7)	15.6 (5.6)	15.5 (5.5)
\$48,001-\$75,000 income	11.1 (4.3)	18.1 (4.9)	11.2 (5.9)	18.4 (5.1)	10.6 (5.7)	18.0 (6.4)
\$75,001-\$110,000 income	6.3 (3.5)	16.6 (6.7)	5.9 (5.0)	19.5 (5.7)	4.6 (3.5)	17.2 (7.7)
\$110,001+ income	3.4 (3.4)	15.2 (9.6)	6.0 (6.2)	26.5 (12.9)	2.3 (3.0)	16.4 (10.1)
Average grant received (\$)	7,562 (2,148)	6,531 (2,299)	10,858 (4,947)	18,682 (7,116)	8,972 (4,176)	11,901 (5,294)
Sample size	39	439	21	523	22	318

Source: NPSAS (zero EFC and first-generation), IPEDS (all others).

Notes:

- (1) All data are for the 2011-12 academic year.
- (2) "Higher endowment" HBCUs are those private HBCUs with endowments of at least \$10,000 per FTE student in each year from 2010 to 2012. All other private HBCUs are "lower endowment."
- (3) Only four-year HBCUs are shown; this excludes eight historically black community colleges.
- (4) The "percent minority" measure does not count Asian students as minorities.
- (5) SAT scores were converted to ACT equivalents using the ACT-SAT concordance guide (ACT, Inc., 2009).
- (6) Standard deviations (in parentheses) are listed below means. NPSAS variables have weighted standard errors.
- (7) This only includes colleges that participated in federal student loan programs as independent entities.
- (8) NPSAS measures are calculated using "very selective" as a proxy for higher-endowment colleges and all other categories as a proxy for lower-endowment colleges. Not enough HBCUs are very selective to allow for point estimates or standard errors.

The finances of smaller institutions are very susceptible to small enrollment changes. Nearly all HBCU students attend full-time (particularly at private colleges), while about one-fifth of students at public and lesser-endowed private HBCUs attend part-time (Table 3). Admit rates for HBCUs are typically lower than at non-HBCUs in spite of lower average ACT composite scores at HBCUs.

One of the most important differences between HBCUs and non-HBCUs is the fraction of their students depending on federal Pell Grant to support college attendance. Pell recipients comprise 70% of students attending public HBCUs, 69% of students attending private HBCUs with large endowments, and 83% of students attending private HBCUs with

smaller endowments. In contrast, among non-HBCU schools the corresponding fractions are 37% at publics, 31% at well-endowed private schools, and 44% at private schools with smaller endowments. In part because their students have fewer family resources, HBCUs have historically tried to charge less as well. While the differences among publics are not substantial, non-HBCU private schools charge about \$12-13,000 more than HBCUs (see Figure 1), despite having more resources from endowments and bigger enrollments. But because non-HBCUs have less than half as many impoverished students (from families earning less than \$30,000 a year), they are able to discount the cost of attendance more for those students, offering them a lower net price compared to HBCUs (Figure 2). At HBCUs, between 61 to 67% of FAFSA filers have a family income below \$30,000 per year; that percentage ranges from 23 to 36% at non-HBCUs.⁸

As Table 4 indicates, HBCUs receive substantially less revenue per student than non-HBCUs. Net tuition revenue at public HBCUs is just \$4,081 per student, \$6,160 at private lower-endowment HBCUs, and \$10,304 at private higher-endowment HBCUs; each of these values is about two-thirds of what similar non-HBCUs collect in revenue. Public and private lower-endowment HBCUs have slightly higher expenditures per student (excluding auxiliary enterprises) than non-HBCUs, while higher-endowment HBCUs spend about \$4,000 less per student.⁹ HBCUs spend a higher percentage of their resources on institutional support, which includes administrative services, technical support for student services, and some facilities maintenance, than non-HBCUs; this is likely a reflection of the greater need for student services and deferred maintenance costs at their facilities.

Public institutions and private institutions with small endowments are substantially dependent on tuition paid by students and families, which is increasingly covered by loans. Only about one in five HBCUs appear capable of devoting significant resources to students without leaning heavily on tuition. Since their families more often qualify for financial aid, HBCUs often have to depend on the federal government to cover students' cost of attendance (see Figure 3 and Table 5). Public HBCUs received \$3,563 per FTE student in

⁸ This measure likely understates the difference in financial need between HBCU and non-HBCU students because not all high-income students file the FAFSA. But given that very few HBCU students who filed the FAFSA come from households making more than \$110,000 per year, it is unlikely that many students at HBCUs are not filing the FAFSA because they have high incomes.

⁹ Educational expenditures per students have been higher at HBCUs than at other institutions dating back to at least the early 1970s (Fryer and Greenstone, 2010).

federal grant aid in the 2011-12 academic year, while private higher-endowment HBCUs got \$3,909 and lower-endowment HBCUs got \$4,466. Federal loans covered \$7,869 of the cost of attendance at public HBCUs, \$8,639 at lower-endowment HBCUs, and \$10,924 at higher-endowment colleges. Most of this difference was driven by PLUS loans. Public and private lower-endowment HBCUs had PLUS revenues of about \$1,300 per FTE, but higher-endowment private colleges got nearly \$3,900 per FTE in PLUS revenue. *This meant that federal aid contributed 56 to 66% of the total cost of attendance across HBCUs, compared to 37% at non-HBCU public comprehensive colleges and just 19% at private higher-endowment non-HBCUs.*¹⁰ While the percent of costs covered by financial aid at HBCUs does not approach the level of the for-profit sector (which often cluster around the maximum of 90% allowed by the federal government), the data clearly indicate the importance of federal funds for the survival of HBCUs. Much of this reliance on federal funds at public HBCUs is due to historic and current inadequacies of state funding compared to other public colleges and universities (Boland & Gasman, 2014). For example, a court ruled in 2002 that Mississippi public HBCUs were owed \$503 million due to inadequate funding in the past; however, that money has been slow to reach colleges (Stewart, 2012).

¹⁰ This may be a lower fraction than in previous years. Fryer and Greenstone (2010) report that between 1977 and 2001, 61-73% of public HBCU's revenues came from public funds (today it is just under 66%).

Table 4: Revenues and expenditures by HBCU type.

Characteristic	Public		Private, higher endowment		Private, lower endowment	
	HBCU	Non-HBCU	HBCU	Non-HBCU	HBCU	Non-HBCU
Endowment	3,466 (3,828)	8,252 (18,296)	31,470 (26,743)	101,697 (216,739)	6,160 (3,538)	5,580 (3,389)
Revenues						
Tuition	4,081 (2,054)	6,293 (2,766)	10,304 (2,703)	15,998 (5,911)	8,683 (2,758)	12,548 (4,032)
Investment	242 (300)	632 (2,536)	4,530 (4,168)	16,804 (36,444)	679 (618)	974 (1,064)
Expenditures (\$)						
Instruction	7,581 (2,187)	8,227 (3,336)	8,046 (3,718)	12,666 (11,127)	5,326 (1,761)	6,395 (2,606)
Research	1,634 (1,353)	2,334 (5,243)	1,368 (2,268)	2,547 (10,875)	251 (659)	48 (257)
Public service	966 (911)	1,046 (1,711)	840 (1,273)	382 (1,085)	731 (1,452)	102 (346)
Academic support	2,172 (951)	2,104 (1,301)	2,567 (2,105)	3,338 (4,489)	1,441 (959)	1,496 (947)
Student services	1,877 (992)	1,689 (796)	3,226 (1,113)	4,496 (2,340)	2,722 (1,713)	3,005 (1,549)
Institutional support	3,782 (1,599)	2,321 (1,140)	8,878 (4,898)	5,930 (3,929)	5,290 (1,930)	3,913 (2,342)
Other	2,626 (1,645)	1,708 (1,291)	797 (1,475)	540 (2,068)	1,856 (5,448)	660 (1,804)
Total	20,639 (4,620)	19,430 (10,454)	25,722 (10,111)	29,899 (2,769)	17,618 (5,550)	15,618 (5,921)
Expenditures (pct of total)						
Instruction	37.0 (7.7)	44.6 (8.4)	32.1 (8.0)	43.2 (7.8)	32.4 (11.3)	41.2 (9.5)
Research	7.7 (6.0)	7.3 (11.0)	4.3 (6.3)	3.1 (7.6)	1.3 (3.3)	0.2 (0.9)
Public service	4.6 (4.2)	4.5 (4.8)	3.1 (4.3)	1.1 (2.2)	4.0 (7.7)	0.6 (1.8)
Academic support	10.6 (3.9)	11.0 (3.8)	9.5 (5.3)	10.6 (4.9)	8.9 (5.7)	9.9 (5.8)
Student services	8.9 (3.8)	9.8 (4.4)	13.8 (5.6)	18.2 (7.0)	15.5 (7.9)	19.5 (7.4)
Institutional support	18.4 (6.1)	12.9 (5.2)	33.9 (8.1)	22.0 (6.5)	31.0 (9.8)	24.8 (7.5)
Other	12.8 (7.9)	9.9 (7.0)	3.2 (4.7)	1.8 (5.5)	6.9 (17.8)	3.7 (8.5)
Sample size	39	439	21	523	22	318

Source: IPEDS.

Notes:

- (1) All data are for the 2011-12 academic year.
- (2) "Higher endowment" HBCUs are those private HBCUs with endowments of at least \$10,000 per FTE student in each year from 2010 to 2012. All other private HBCUs are "lower endowment."
- (3) Only four-year HBCUs are shown; this excludes eight historically black community colleges.
- (4) All per-FTE federal aid measures are for undergraduate students only.
- (5) Standard deviations (in parentheses) are listed below means.
- (6) This only includes colleges that participated in federal student loan programs as independent entities.

Table 5: Federal aid and cost of attendance by HBCU type.

Characteristic	Public		Private, higher endowment		Private, lower endowment	
	HBCU	Non-HBCU	HBCU	Non-HBCU	HBCU	Non-HBCU
Cost of attendance (\$)	18,067 (2,791)	20,303 (3,601)	28,566 (7,241)	43,127 (9,606)	22,474 (4,469)	35,372 (6,801)
Total federal aid	11,559 (2,440)	6,975 (1,622)	15,319 (3,811)	7,738 (2,441)	13,424 (2,470)	9,999 (2,673)
Federal grants	3,563 (571)	1,827 (673)	3,909 (1,519)	1,409 (668)	4,466 (812)	2,195 (964)
Pell Grant	3,448 (539)	1,786 (669)	3,514 (1,256)	1,306 (665)	4,225 (796)	2,100 (953)
Federal work-study	128 (71)	56 (44)	486 (539)	121 (60)	318 (224)	89 (79)
Federal loans	7,869 (2,119)	5,092 (1,346)	10,924 (3,098)	6,208 (2,062)	8,639 (2,181)	7,715 (2,222)
PLUS	1,265 (1,068)	765 (681)	3,882 (2,708)	1,848 (988)	1,309 (911)	1,397 (1,065)
Unsubsidized loans	3,424 (886)	2,196 (687)	3,572 (1,116)	2,103 (947)	3,687 (1,190)	3,288 (1,339)
Subsidized loans	3,181 (495)	2,131 (540)	3,470 (815)	2,256 (815)	3,643 (677)	3,030 (885)
Pct of COA covered by...						
Federal grants	20.3 (4.3)	9.2 (4.1)	15.4 (8.6)	3.8 (3.1)	20.9 (6.3)	6.4 (3.4)
All federal aid	65.6 (10.6)	34.9 (9.3)	56.1 (17.2)	19.4 (8.6)	61.1 (12.9)	29.0 (10.1)
Sample size	39	439	21	523	22	318

Sources: Federal Student Aid (per-FTE federal aid measures), IPEDS (all others)

Notes:

(1) All data are for the 2011-12 academic year.

(2) "Higher endowment" HBCUs are those private HBCUs with endowments of at least \$10,000 per FTE student in each year from 2010 to 2012. All other private HBCUs are "lower endowment."

(3) Only four-year HBCUs are shown; this excludes eight historically black community colleges.

(4) All per-FTE federal aid measures are for undergraduate students only.

(5) Standard deviations (in parentheses) are listed below means.

(6) Other small federal grant programs (such as the SEOG) are omitted for brevity.

(7) This only includes colleges that participated in federal student loan programs as independent entities.

Figure 1: Cost of Attendance for HBCUs and Non-HBCUs, By Institutional Control

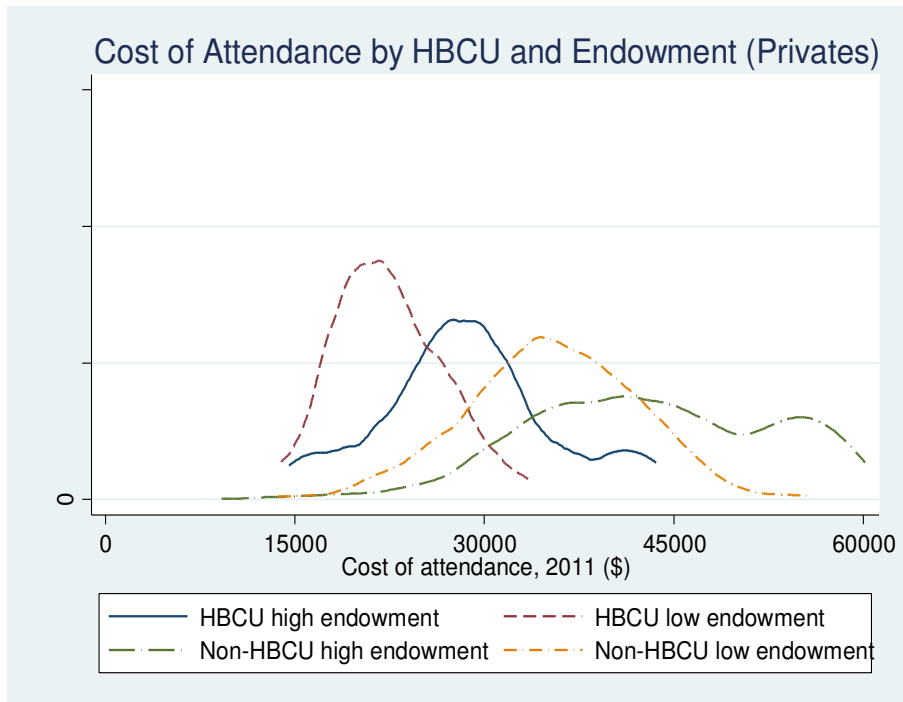
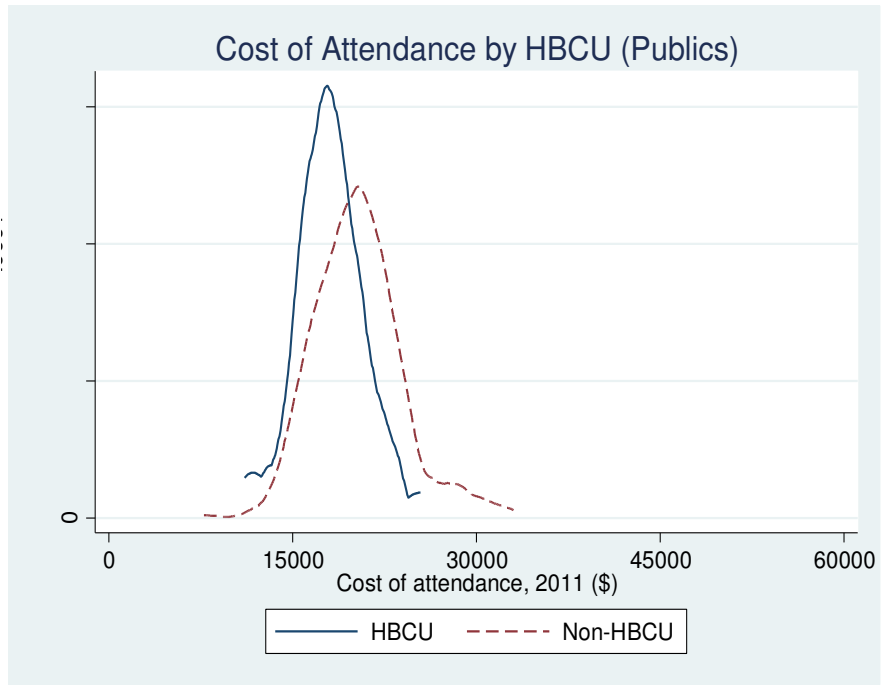


Figure 2: Net Price for HBCUs and Non-HBCUs, By Institutional Control

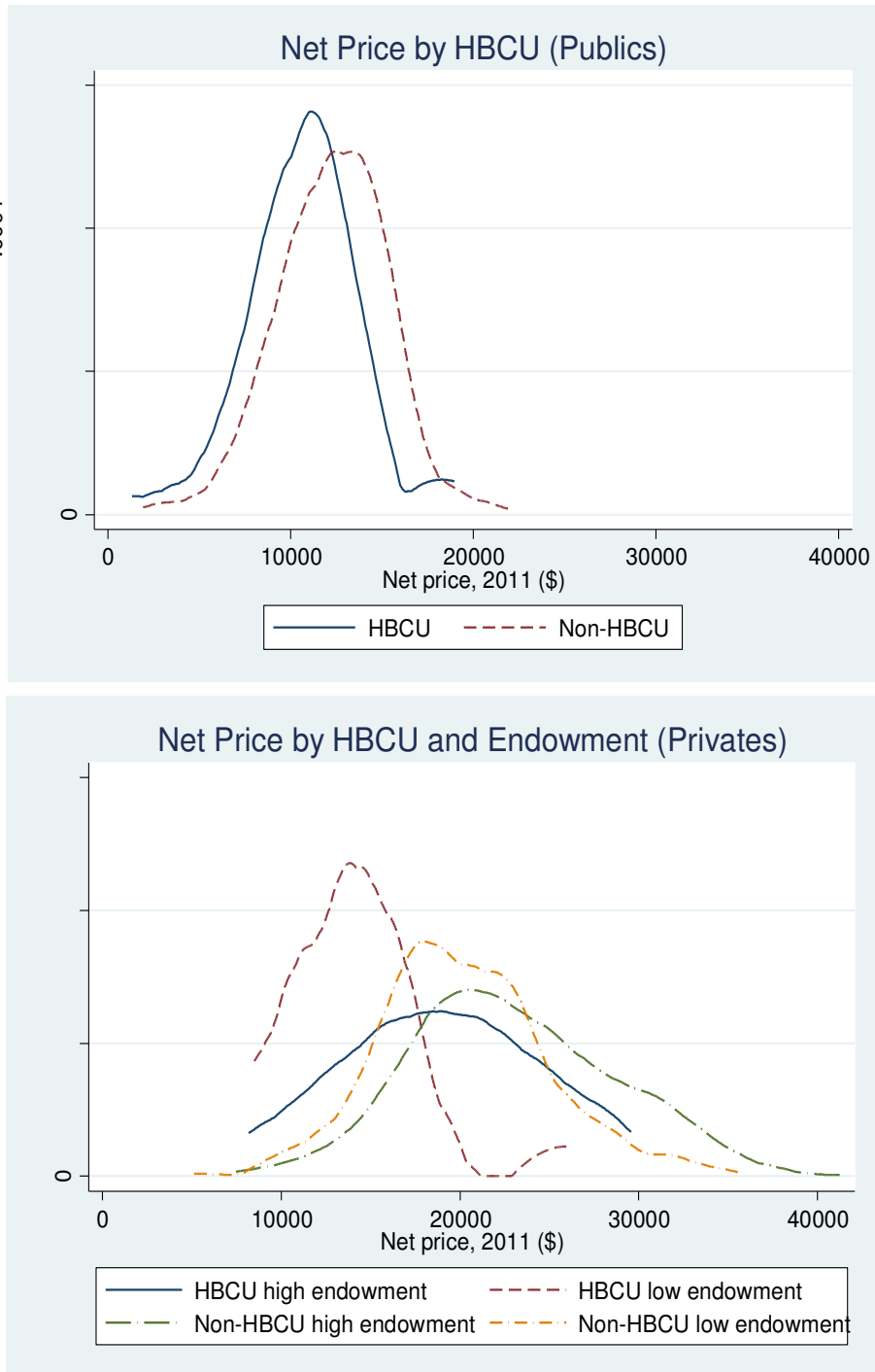
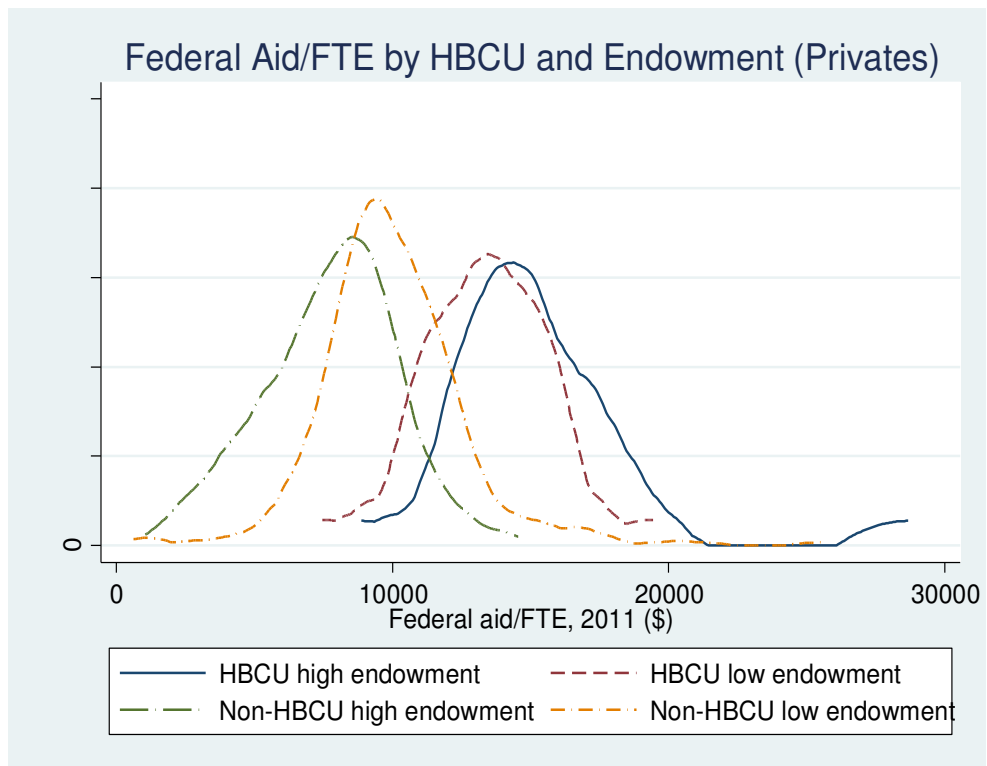
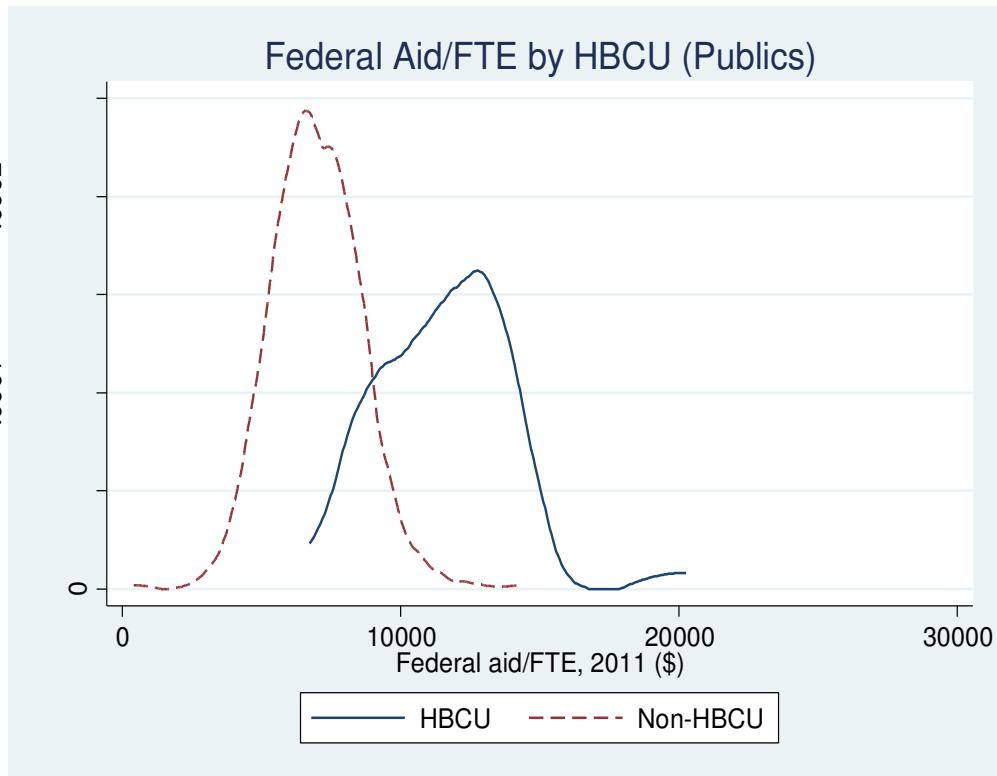


Figure 3: Federal Aid per FTE for HBCUs and Non-HBCUs, by Institutional Control



UNINTENDED CONSEQUENCES OF LOAN REFORM

It is easy to write about the reform of federal student loan programs in technocratic terms, raising questions about their costs and implications while ignoring the political economy of the discussion. But such an approach skirts a critical issue that shapes policy effectiveness and efficiency: while federal student aid programs have long claimed to be about addressing a shortfall in family income, loans in particular address a shortfall in family wealth. And in turn, given the extensive ways in which black families in the United States have been kept from effectively accruing wealth (Conley, 1999; Oliver & Shapiro 1995), discussions about student loans are fundamentally about race as well.

It is remarkable that HBCUs have attracted so much attention in debates over student loans, despite receiving only about 4% of all PLUS loan funds. Recently, an analyst questioned the value of allowing students to choose where they use PLUS loans, suggesting that parents are mistaken in their “implicit assumption” that with a PLUS loan in hand, “the extra debt will help their child earn a degree.” She arrived at this analysis by examining the unadjusted graduation rates of institutions where PLUS loans are often used and discovering that most PLUS recipients attending four-year institutions are attending “middle or low performing” schools with graduation rates under 75% over six years (Rodriguez, 2014). Notably, her report does not mention race, and her analysis does not consider what could happen to students’ college choices if PLUS loans were unavailable.

This is an important omission given that loan programs have long been intended to facilitate college access and choice. Indeed, the proclivity of contemporary higher education policymakers to prioritize choice above all other possible goals (including equity) is part of why it is difficult to exert additional accountability on institutions making loans without doing real and significant damage to the college prospects of minority students. It is clear that student loans contribute to the financial stability of many colleges and universities, facilitating a broader range of college choices for all undergraduates. While research over many decades has concluded that *where* a student attends college makes a relatively small difference in the odds of college completion, those college choices appear to matter far more for minority students. Attending a well resourced, selective institution—which for the most part in today’s system means a private school with a large endowment or an elite flagship public university—seems to generate sizable returns for minorities, both in terms

of post-graduation earnings (Dale & Krueger, 2002; 2011) and graduation rates (e.g. Alon & Tienda, 2005; Bowen & Bok, 1998; Melguizo, 2008; Small & Winship, 2007). There are about 550 such institutions in the country, and they are overwhelmingly white. At those that are not Historically Black-serving institutions, just under 10% of the student body on average is black (at HCBUs, it is 90%).

Of course, black students are also more likely than white students to attend for-profit colleges, and there the labor market returns are mixed compared to attending community colleges. While Cellini and Chaudhary (2012) and Lang and Weinstein (2013) both found similar earnings gains (or a lack thereof in some cases) between for-profit and community colleges, Deming, Goldin, and Katz (2011) showed that for-profit students had lower earnings, higher unemployment rates, and worse debt and default outcomes than community college students even though completion rates were somewhat better in the for-profit sector. The cost differential of attending a for-profit college (often in the tens of thousands of dollars for an associate's degree) makes similar earnings after graduation decidedly dissimilar.

There are several ways to think about the returns to college choices for black students. The positive return they receive from attending elite private schools may mean that they benefit more from these environments, but it could also mean that their alternative options are worse than those enjoyed by white students. In other words, a white student who is unable to borrow to attend a better-resourced, more selective institution is still likely to attend a reasonably well-resourced, fairly selective school and face good graduation prospects. But a black student faced with the same challenge may well encounter extremely limited choices, given the lower density of quality postsecondary options in minority communities, and the continued prevalence of racial discrimination in public and private institutions. The only remaining option is likely to provide far fewer advantages when it comes to graduation prospects. Thus, while choice of colleges is not the margin that matters for non-Hispanic white students, it is a very important margin for black students, and college choice is impacted by the availability of loans.¹¹

¹¹ Fryer and Greenstone (2010) note similar difficulties in identifying appropriate counterfactuals and making sense of shifts in the wage returns associated with attending HCBUs. Their longitudinal analysis suggests that while in the 1970s, students who attended HCBUs appeared to gain from higher probabilities of

What this also suggests is that black students face a number of disadvantages when they set out for college, which in turn has a profound impact on the amount of student loan debt they need to take out in pursuit of a college degree. First, as noted above, black students face a legacy of disadvantage, whereby the black-white wealth gap mirrors and produces large racial disparities in student loan debt (see Table 2). Second, black students face limitations in the colleges that they enroll in, and are often funneled into for-profit institutions and institutions that are underfunded, which in turn leads them to take on more debt.

Our analysis of NLSY-97 data supports such a narrative, and suggests that these factors account for over half of the black-white disparity in student loan debt. Table 6 extends the analysis in Table 2 in order to examine the contributors to the racial debt gap. The analysis suggests five key findings.

1. Young adults who attend for-profit colleges and universities enter adulthood with far more debt compared those who attended non-profit institutions, adjusted for confounders.
2. However, attending an HBCU does not appear to increase debt among young adults.
3. The disproportionate enrollment of black students in for-profit colleges and universities contributes to the racial debt gap, but the disproportionate enrollment of black students in HBCUs does not.
4. The disproportionate enrollment of black students in colleges and universities with less generous financial support (as proxied by the proportion of the total cost that is covered by state, federal, and institutional aid), also contributes to the racial debt gap.
5. The racial debt gap exists within schools, as well as between schools, and is largest at colleges and universities with less financial support.

Still, the issues presented above cannot be remedied through the proposed federal loan reform. If federal loan reforms restrict college access for black students, it may reduce the debt held by these students in the short-term (or it may not, if they simply turn to private

graduation and higher wages, by the 1990s that advantage appeared to have disappeared—and may have even become a disadvantage. They report great difficulty assessing the precise channels through which the shift occurred, but point to the growing academic disadvantages among students attending HBCUs, and declining resources. Moreover, Prince, Spriggs, and Swington (2011) do not reproduce evidence of a declining premium and in fact find continued advantage in long-term labor market outcomes.

loans), but over the longer term it could make it harder for them to use education as a way out of the racial wealth gap. Of course, if grants are substituted for loans, college enrollment and choices for minority students are unlikely to suffer. But in the far more likely scenario that current federal loan reforms reduce the ability of minority students to afford college, history suggests that enrollment and graduation rates among these students will drop. This has happened before. In the 1970s black college-going rates declined as need-based grant aid became less available (Davis, Green-Derry, & Jones, 2013). As loans became the dominant form of college-financing in the 1980s (never making up for the diminished support from grant aid) enrollment among black further declined—even as enrollment for all other groups of students remained stable or increased (Carter, 1991).

Table 6: Institutional Characteristics and Racial Disparities in Outstanding (Logged) Student Loan Debt in Young Adulthood

	Model 3	Model 4	Model 5
<i>Race (Referent = NH White)</i>			
Black	0.845*** (0.198)	0.638** (0.213)	0.597** (0.212)
<i>Institutional Characteristics</i>			
Attended HBCU		0.559 (0.347)	0.582 (0.346)
Attended For Profit		0.977*** (0.232)	0.905*** (0.232)
Total Aid / Total Cost			-0.096*** (0.025)
R ²	0.294	0.299	0.302

* p<.05, ** p<.01, *** p<.001; N=3008; All models adjust for family background (parents' wealth, education, income), postsecondary educational attendance (years enrolled, % years enrolled full time, % years enrolled in a private institution; degree pursued and attained; current enrollment status), region, and age at debt measurement. Source: NLSY-97 Respondents who ever attended a postsecondary institution.

Of course, restrictions on loans will not affect all black students, or all HBCUs, in the same manner. It is likely that students currently enrolled in smaller private HCBUs, where declining enrollment is creating financial struggles, will be the most affected (Anderson, 2013; Doubleday, 2013). The financial stability of these institutions is difficult to separate from the needs of their students, given that many students attend these schools because of

a lack of other options that are as welcoming, accessible, and affordable. The implications are perhaps even more significant because as Bennett (2014) writes, “The role of HBCUs in the social mobility of African Americans remains strong even though other options for postsecondary education are available to them...[they have accomplished this] even while maintaining a long history of educating students from disadvantaged backgrounds...[including those] predicted to be at risk for downward mobility.” The benefits offered by HBCUs, Bennett contends, may well accrue to non-black immigrants as well, who find them central in their routes to upward mobility and wealth accumulation.

RECOMMENDATIONS

Current discussions about reforming federal loan programs are conspicuously silent on the issue of race. But as we have demonstrated student debt, like family wealth, has a color. Compared to white students, black, Hispanic, and Native American undergraduates enjoy much less security from family assets, and far more often have to turn to the federal government and private loans to finance college enrollment. This issue has been neglected, even in recent reports describing problems with PLUS loans at HBCUs (Fishman 2014; Rodriguez 2014). On the one hand, HBCUs are said to constitute a tiny fraction of the loan issue, and yet have received disproportionate attention for the borrowing practices of their students, their low unadjusted graduation rates, and their financial aid practices—even though such problems also exist at public and private colleges across the country (Fishman, 2014). HBCUs are so reliant on federal loans because of the lack of wealth of their students and historical funding inequities—factors that are often omitted in policy discussions.

Policymakers seeking to improve the national economy by extending opportunities to all Americans need to proceed cautiously when it comes to reforming student financial aid programs, so as to avoid doing untold harm to the college prospects of black students. First, and most importantly, policymakers should act proactively to reduce the need for families to borrow by adjusting the federal needs analysis to allow for a negative EFC (Center for Law and Social Policy, 2013; Goldrick-Rab, 2014). The EFC formula often produces a negative number, and yet the rules for needs analysis prohibit the EFC from being less than zero. Fixing this problem will help to ensure that poorer families receive more Pell grant

aid, reducing their need for loans, and it is far less expensive than increasing the overall maximum Pell Grant (McSwain, 2008).

In addition, instead of further restricting access to loans,¹² policymakers should increase transparency and consumer protections to maintain access to credit while reducing risk. Most importantly, fair and transparent access to bankruptcy protections should be extended to all loans, including PLUS loans. Another option is to increase unsubsidized loan limits, reducing the need for PLUS loans and providing income-based repayment options for more students. While this could have adverse consequences, perhaps by instigating some increase in the sticker price at some institutions, those consequences would have to be weighed against the potential benefit for students who remain credit-constrained under the current system.

Finally, income-based repayment should be provided for undergraduate PLUS loans. It makes very little sense to apply separate rules for loans made to students and parents, who often part of the same family economic unit and pursuing a common goal—the child’s education. All families should be supported in their choice to continue to support their children into adulthood, and current policies regarding PLUS loans fall short of that goal.

REFERENCES

- Alon, S., & Tienda, M. (2005). Assessing the “mismatch” hypothesis: Differences in college graduation rates by institutional selectivity. *Sociology of Education*, 78(4), 294-315.
- Anderson, N. (2013, June 22). Tighter federal lending standards yield turmoil for historically black colleges. *The Washington Post*.
- Archibald, R. B. (2002). *Redesigning the financial aid system: Why colleges and universities should switch roles with the federal government*. Baltimore, MD: Johns Hopkins University Press.
- Armstrong, E., & Hamilton, L. (2013). *Paying for the party: How college maintains inequality*. Cambridge, MA: Harvard University Press.
- Avery, C., & Turner, S. (2012). Student loans: Do college students borrow too much—or not enough? *The Journal of Economic Perspectives*, 26(1), 165-192.
- Baum, S., & Ma, J. (2013). *Trends in college pricing*. Washington, DC: The College Board.

¹² The Department of Education (2014) recently released a set of proposed rules that would reduce the number of parents who fail credit checks. A rulemaking panel set a new definition of adverse credit that would allow families with less than \$2,085 in debt 90 or more days delinquent to qualify for PLUS loans; the dollar value was set based on the median debt value among applicants whose credit checks were rejected in 2012-13. Additionally, the five-year window for many debts placed in collection and charged off would become two years once the rules are finalized. The Department of Education has set November 1 as the target date to finalize the rules.

- Bennett, P. (2014). *Black immigrant's use of an African-American Strategy for Mobility: Implications for Segmented Assimilation Theory*. Working Paper, Queens College, NY.
- Boland, W. C., & Gasman, M. (2014). *America's public HBCUs: A four state comparison of institutional capacity and state funding priorities*. Philadelphia, PA: University of Pennsylvania Graduate School of Education Center for MSIs.
- Bowman, N. A., & Bastedo, M. N. (2009). Getting on the front page: Organizational reputation, status signals, and the impact of U.S. News and World Report rankings on student decisions. *Research in Higher Education*, 50(5), 415-436.
- Bowen, W. G., & Bok, D. C. (1998). *The shape of the river: Long-term consequences of considering race in college and university admissions*. Princeton, NJ: Princeton University Press.
- Carey, K. (2013, June 3). The federal parent rip-off loan. *The Chronicle of Higher Education*.
- Carey, K., & Dillon, E. (2009). *Drowning in debt: The emerging student loan crisis*. Washington DC: Education Sector.
- Carter, G., 1991. Financial aid and tuition: factors contributing to the decline of black student enrollment in higher education. In: J.N. Niba and R. Norman (Eds.), *Recruitment and retention of black students in higher education*. (pp. 89-129). Lanham, MD: University Press of America/National Association for Equal Opportunity in Higher Education.
- Cellini, S. R., & Chaudhary, L. (2012). *The labor market returns to a for-profit college education*. Cambridge, MA: National Bureau of Economic Research Working Paper No. 18343.
- Cellini, S. R., & Goldin, C. (2012). *Does federal student aid raise tuition? New evidence on for-profit colleges*. Cambridge, MA: National Bureau of Economic Research Working Paper No. 17827.
- Center for Law and Social Policy (2013, August 2). *Comments regarding the reauthorization of the Higher Education Act*. Author: Washington, DC.
- Chen, R., & DesJardins, S. L. (2010). Investigating the impact of financial aid on student dropout risks: Racial and ethnic differences. *The Journal of Higher Education*, 81(2), 179-208.
- Cochrane, D., & Szabo-Kubitz, L. (2014). *At what cost? How community colleges that do not offer federal loans put students at risk*. Oakland, CA: The Institute for College Access and Success.
- Conley, D. (1999). *Being black, living in the red*. Berkeley, CA: University of California Press.
- Conley, D. (2001). Capital for college: Parental assets and postsecondary schooling. *Sociology of Education*, 74(1), 59-72.
- Cotton, T. M. (2014). *I Was Born for This: Breaking My Silence on Black Colleges*. <http://tressiemc.com/2014/02/27/i-was-born-for-this-breaking-my-silence-on-black-colleges/>
- Cross, T., & Slater, R. (1997). The commanding wealth advantage of college-bound white students. *The Journal of Blacks in Higher Education*, 15, 80-90.
- Dale, S. B., & Krueger, A. B. (2002). Estimating the payoff to attending a more selective college: An application of selection on observables and unobservables. *Quarterly Journal of Economics*, 117(4), 1491-1528.

- Dale, S. B., & Krueger, A. B. (2011). *Estimating the return to college selectivity over the career using administrative earnings data*. Cambridge, MA: National Bureau of Economic Research Working Paper No. 17159.
- Davis, D. J., Green-Derry, L. C., & Jones, B. (2013). The impact of federal financial aid policy upon higher education access. *Journal of Educational Administration and History*, 45(1), 49-57.
- Deficit Reduction Act of 2005, 20 U.S.C. (2006). Public Law 109-171.
- Delisle, J., & Holt, A. (2013, August 8). Georgetown law is giving away a free education, and you're paying for it. *New America Foundation Higher Ed Watch*.
- Deming, D. J., Goldin, C., & Katz, L. F. (2011). *The for-profit postsecondary school sector: Nimble critters or agile predators?* Cambridge, MA: National Bureau of Economic Research Working Paper No. 17710.
- Doubleday, J. (2013, October 7). With parents denied loans, students scramble at HBCUs. *The Chronicle of Higher Education*.
- Dowd, A. (2008). Dynamic interactions and intersubjectivity: Challenges to causal modeling in studies of college student debt. *Review of Educational Research*, 78(2), 232-259.
- Drezner, N. & Gupta, A. (2012). Busting the myth: Understanding endowment management at public historically black colleges and universities. *The Journal of Negro Education*, 81(2): 107-120.
- Dwyer, R.E., Hodson, R. & McCloud, L. (2013). Gender, Debt, and Dropping Out of College. *Gender & Society* 27:30-55.
- Dwyer, R.E., McCloud, L. & Hodson, R. (2012). Debt and Graduation from American Universities. *Social Forces* 90:1133-1155.
- Dynan, K. (2010). *The income rollercoaster: Rising income inequality and its implications*. Washington DC: Brookings Institution.
- Dynarski, S. (2014). "PLUS loans are not student aid." Blog post. <http://susandynarski.blogspot.com/2014/04/plus-loans-are-not-student-aid.html>
- Dynarski, S. & Scott-Clayton, J. (2007). *College grants on a postcard*. Washington DC: Brookings Institution.
- Education Amendments of 1980, 20 U.S.C. (1980). Public Law 96-374.
- Education Amendments of 1986, 20 U.S.C. (1986). Public Law 99-498.
- Education Amendments of 1992, 20 U.S.C. (1992). Public Law 102-325.
- Federal Reserve Bank of New York (2014, May). *Quarterly report on household debt and credit*. New York, NY: Author.
- Federal Student Aid (2009). *2009-2010 federal student aid handbook*. Washington, DC: Author.
- Federal Student Aid (2014a). *Income-driven plans*.
- Federal Student Aid (2014b). *What are the interest rates for federal student loans?*
- Federal Student Aid (2014c). *FY 2011 2-year national student loan default rates*.
- Federal Student Aid (2014d). *Federal student loan portfolio*.
- Federal Student Aid (2014e). *Free application for federal student aid*.
- Fishman, R. (2013). *Parent PLUS loans: A no-strings-attached revenue source*. Washington, DC: New America Foundation.
- Fishman, R. (2014a). *The parent trap: Parent PLUS loans and intergenerational borrowing*. Washington, DC: New America Foundation.

- Fishman, R. (2014b). *PLUS loans are not grants*. Blog post. <http://www.edcentral.org/plus-loans-grants/>
- Fryer, R. & Greenstone, M. (2010). The Changing Consequences of Attending Historically Black Colleges and Universities. *American Economic Journal: Applied Economics*, 2(1): 116–48
- Galloway, F. and Price, D. (2011) Student Loans. In *Governing America: Major Decisions of Federal, State and Local Governments from 1789 to the Present*. Eds. Paul J. Quirk and William Cunio. New York: Facts on File.
- Gasman, M. (2013). *The changing face of historically black colleges and universities*. Philadelphia, PA: University of Pennsylvania Graduate School of Education Center for MSIs.
- Gladieux, L., & Perna, L. (2005). *Borrowers who drop out: A neglected aspect of the college student loan trend*. San Jose, CA: National Center for Public Policy and Higher Education.
- Goldrick-Rab, S. (2013, April 16). Testimony to U.S. Senate Committee on Health, Education, Labor and Pensions hearing on “The Challenge of College Affordability: The Student Lens.”
- Goldrick-Rab, S. (2014). Conditional Pell dollars miss students who need them most. *Education Next*, 14(2), 59-64.
- Goldrick-Rab, S., & Kendall, N. (2014). *Redefining college affordability: Securing America's future with a free two year college option*. Madison, WI: The Education Optimists.
- Gross, J. P. K., Cekic, O., Hossler, D., & Hillman, N. (2009). What matters in student loan default: A review of the research literature. *Journal of Student Financial Aid*, 39(1), 19-29.
- Gurgand, M., Lorenceau, A., & Melonio, T. (2011). *Student loans: Liquidity constraint and higher education in South Africa*. Working paper.
- Hauptman, A. (2001). Reforming the ways in which states finance higher education. In D. E. Heller (Ed.), *The states and public higher education policy: Affordability, access, and accountability* (pp. 64-80). Baltimore, MD: Johns Hopkins University Press.
- Hearn, J. C., & Holdsworth, J. M. (2004). Federal student aid: The shift from grants to loans. In E. P. St. John & M. D. Parsons (Eds.), *Public funding of higher education: Changing contexts and new rationales* (pp. 40-59). Baltimore, MD: Johns Hopkins University Press.
- Heller, D. & Marin, P. (2004). *State Merit Scholarship Programs and Racial Inequality*. Cambridge, MA: Harvard Civil Rights Project.
- Hossler, D., Ziskin, M., Gross, J. P. K., Kim, S., & Cekic, O. (2009). Student aid and its role in encouraging persistence. In J. C. Smart (Ed.), *Higher education: Handbook of theory and practice* (Vol. 24) (pp. 389-425). Dordrecht, Netherlands: Springer.
- Houle, JN. (2014). “Disparities in debt: Parents’ socioeconomic resources and young adult student loan debt.” *Sociology of Education*. 87(1): 53-69.
- Jackson, B., & Reynolds, J. (2013). The price of opportunity: Race, student loan debt, and college achievement. *Sociological Inquiry*, 83(3), 335-368.
- Jacob, B., McCall, B., & Stange, K. M. (2013). *College as country club: Do colleges cater to students’ preferences for consumption?* Cambridge, MA: National Bureau of Economic Research Working Paper No. 18745.
- Jaquette, O., Parra, E. (forthcoming). Using IPEDS for panel analyses: Core concepts, data challenges, and empirical applications. In M. B. Paulsen (Ed.), *Higher education: Handbook of theory and research* (Vol. 29). Dordrecht, Netherlands: Springer.

- Kantrowitz, M. (2009, August 31). *Parent PLUS loan denial rates in the FFEL and Direct Loan programs*.
- Kochhar, R., Fry, R., & Taylor, P. (2013). Wealth gaps rise to record highs between whites, blacks, and Hispanics. *Pew Research of Social and Demographic Trends*
- Lang, K., & Weinstein, R. (2013). The wage effects of not-for-profit and for-profit certifications: Better data, somewhat different results. *Labour Economics*, 24, 230-243.
- Leicht, K. T., & Fitzgerald, S. T. (2007). *Post-industrial peasants: The illusion of middle class prosperity*. New York: Worth Publishers
- Leicht, K. T. (2014, June 30). Has borrowing replaced earning? *The Society Pages*.
- Lewin, T. (2012). Child's Education But Parents' Crushing Loans. *New York Times*. November 11, p. A1
- Lewis, G. L. (1989). Trends in student aid: 1963-64 to 1988-89. *Research in Higher Education*, 30(6), 547-561.
- Lovenheim, M. (2011). The effect of liquid housing wealth on college enrollment. *Journal of Labor Economics*, 29(4), 741-771.
- McKernan, S., Ratcliffe, C., Steuerle, E., & Zhang, S. (2013). *Less than equal: Racial disparities in wealth accumulation*. Washington, DC: Urban Institute.
- McSwain, C. (2008). *Window of opportunity: Targeting federal grant aid to students with the lowest incomes*. Washington DC: Institute for Higher Education Policy.
- Melguizo, T. (2008). Quality matters: Assessing the impact of attending more selective institutions on college completion rates of minorities. *Research in Higher Education*, 49(3), 214-236.
- Middle Income Student Assistance Act, 20 U.S.C. (1978). Public Law 95-566.
- Mumper, M., 1996. *Removing college price barriers: what government has done and why it hasn't worked*. New York: State University of New York Press.
- Nelson, L. A. (2012, October 12). Cracking down on PLUS loans. *Inside Higher Ed*.
- Oliver, M. L., & Shapiro, T. M. (1995). *Black wealth, white wealth: A new perspective on racial inequality*. New York, NY: Routledge.
- Oliver, M. L., & Shapiro, T. M. (1990). Wealth of a nation: A reassessment of asset inequality in America shows at least one third of households are asset poor. *American Journal of Economics and Sociology*, 49(2), 129-151.
- Pfeffer, F. T., Danziger, S., & Schoeni, R. F. (2013). Wealth disparities before and after the Great Recession. *The Annals of the American Academy of Political and Social Science*, 650, 98-123.
- Posselt, J. R. (2009). The rise and fall of need-based grants: A critical review of presidential discourses on higher education, 1964-1984. In J. C. Smart (Ed.), *Higher education: Handbook of theory and practice* (Vol. 24) (pp. 389-425). Dordrecht, Netherlands: Springer.
- Price, D.V. (2004). *Borrowing Inequality: Race, Class and Student Loans*. Boulder, Colorado: Lynne Rienner.
- Price, G., Spriggs, W., & Swinton, O. (2011). The Relative Returns to Graduating from a Historically Black College/University: Propensity Score Matching Estimates from the National Survey of Black Americans. *Review of Black Political Economy*. 38: 103-130.
- Project on Student Debt. (2014). *Private loans: Facts and trends*. The Institute for College Access and Success.

- Ratcliffe, C. & S. McKernan. 2013. *Forever in your debt: Who has student loan debt, and who's worried?* Washington DC: Urban Institute.
- Rodriguez, A. 2014. *Access to what and for whom? A closer look at federal parent PLUS loans.* Washington DC: American Enterprise Institute.
- Shapiro, T., Maschede, T., & Osoro, S. (2013). *The roots of the widening racial wealth gap: Explaining the black-white economic divide.* Waltham, MA: Institute on Assets and Social Policy.
- Shaefer, L., & Edin, K. (2014). The rise of extreme poverty in the United States." *Pathways.*
- Shapiro, T.M, Maschede, T., & Osoro, S. (2014). "The widening racial wealth gap: Why wealth is not color blind." In R. Cramer & T. Williams (Eds.), *The Assets Perspective.* NY: Palgrave McMillian.
- Small, M. L., & Winship, C. (2007). Black students' graduation from elite colleges: Institutional characteristics and between-institution differences. *Social Science Research, 36*(3), 1257-1275.
- Solis, A. (2012). *Credit access and college enrollment.* Working paper.
- Stewart, P. (2012, October 18). Three Mississippi HBCUs finding diversity fuels their mission. *Diverse Education.*
- Stinebrickner, R., & Stinebrickner, T. (2008). The effect of credit constraints on the college drop-out decision: A direct approach using a new panel study. *American Economic Review, 98*(5), 2163-2184.
- Stratford, M. (2013, September 27). Duncan apologizes on PLUS loans. *Inside Higher Ed.*
- Taylor, P., Kochhar, R., Fry, R., Velasco, G., & Motel, S. (2011). *Twenty-to-one: Wealth gaps rise to record highs between blacks, whites, and Hispanics.* Washington, DC: Pew Social and Demographic Trends.
- UNCF (2014). *The parent PLUS loan crisis: An urgent crisis facing students at the nation's HBCUs.* Washington, DC: Author.
- U.S. Department of Education (2013). *Digest of education statistics.* Washington, DC: National Center for Education Statistics.
- U.S. Department of Education (2014). *Notice of proposed rulemaking.*
- Wei, C. C., & Skomsvold, P. (2011). *Borrowing at the maximum: Undergraduate Stafford loan borrowers in 2007-08.* Washington, DC: NCES Report 2012-161.
- Weller, C. (2007). *Access denied: Low-income and minority families face more borrowing constraints and higher borrowing costs.* Washington DC: Center for American Progress.
- Weston, L. (2012, September 26). 10 ways to boost financial aid. *MSN Money.*
- Wolff, E. (2012). *The asset price meltdown and the wealth of the middle class.* Cambridge, MA: National Bureau of Economic Research Working Paper No. 18559.
- Zhan, M. & Lanesskog, D. (2014). The impact of family assets and debt on college graduation. *Children and Youth Services Review, 43,* 67-74.
- Zhan, M. & Sherraden, M. (2011). Assets and liabilities, race/ethnicity, and children's college education. *Children and Youth Services Review, 33*(11), 2168–2175.
- Zhang, L. (2008). Gender and racial gaps in earnings among recent college graduates. *The Review of Higher Education, 32*(1), 51-72.