



# Project on Academic Success

engaging in practice- and policy-oriented research on student success in higher education



## A Review of the Literature

### What Matters to Student Loan Default

Federal higher education policy began to shift its emphasis from grants to loans as a means of providing financial assistance to low- and moderate-income students as early as the mid-1970s. The reauthorization of the Higher Education Act (HEA) in 1980 with the budget policies of the Reagan administration introduced the PLUS loans that resulted in a significant shift in the emphasis of the federal government from grants to loans as the primary policy vehicle for providing access to postsecondary education for low- and moderate-income families. This shift made it inevitable that policy makers would track student default rates on loans as one indicator of the efficacy of student loan programs.

Leading up to the 1986 HEA reauthorization, policy makers had intense discussions about student loan default and both institutional and federal loan practices, and in 1989 Congress first passed legislation imposing penalties on institutions with high default rates. Then, the reauthorization of 1992 broadened eligibility for subsidized loans, increased loan limits, and opened the unsubsidized loan program to all students.

Concerns about student loan default, however, remained and a possible link between default and the quality of higher education institutions was discussed during the 1998 reauthorization process. Some community colleges and Historically Black Colleges and Universities, proprietary institutions, and urban four-year colleges and universities had high student loan default rates. That year, Congress altered the cohort default rate calculation by extending—from 180 to 270 days—the amount of time before the federal government deems a delinquent borrower to be in default. The changes in student loan default policies in the 1998 HEA reauthorization are widely regarded as having affected the financial aid practices of many nonprofit and for-profit postsecondary institutions.

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In its current session, Congress is once again in the process of reauthorizing the HEA, and in anticipation of this, a recent federal study has been conducted of default rates—again focusing the attention of policy makers on the formula for calculating cohort default rates. Using four years rather than the more common 12-to-24 months as the time frame, Choy (2006) found as much as a six-percent increase in default rate for some groups of students. Across longer periods of time, default rates for some types of institutions could rise by as much as 60 percent (Lederman, 2008).

With such seemingly high rates of default it is not surprising that federal policy makers are again asking about what an acceptable default rate is and what factors contribute to students' defaulting. Is default more a function of the characteristics of students or of the institutions they attend? Do the types of loans influence the probabilities of default? Do life circumstances such as the types of jobs and income levels of students after they graduate have an impact on default rates? These questions complicate questions regarding definitions of default and whether rates of default should be used as indicators of institutional quality or loan program efficacy.

In this policy brief we examine the relevant research on the predictors of student loan default. We reviewed 41 studies of student loan default and included 32 of them. We excluded some studies that simply reported the results from other studies or were of low quality. The studies were conducted between 1978 and 2007, with the preponderance of studies done after 1991. We place greater emphasis in our discussion on empirical research that employed multivariate statistical techniques that enabled the researchers to control for as many complicating factors as possible. While descriptive studies often make for simple and interesting trend analyses, they do not reveal underlying interactions between student characteristics and other factors such as choice of major, type of institution attended, types of student loans received, graduation, subsequent employment and income, and student loan default. Only multivariate studies that simultaneously control for a range of variables can identify the predictors of student loan default. In addition, we relied more heavily on studies employing national databases and including larger samples of students.

One limitation of this brief is that the most robust research—in terms of scope and methodology—was conducted during the late 1980s and, especially, in the mid- to late 1990s. Few multivariate studies using national databases have been undertaken in the last seven years. As a result, some of the best research on this topic was conducted a decade or more ago in a different historical context. Some

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patterns or trends may have changed since the late 1990s. For example, Baum and O'Malley (2003b) reported that between 1997 and 2002 the debt level of African American students had fallen. It is possible that smaller debt levels might have reduced the odds of defaulting for African American students. We lack sufficient research, however, to know whether recent policy changes such as the 1998 HEA reauthorization might have had an impact on the predictors of student default.

### **Findings from the Literature: What Matters**

Prior research on loan default has considered (a) the characteristics with which students begin college (e.g., family income, race/ethnicity); (b) students' college experiences (e.g., the type of institution they attend, their field of study, their educational outcomes); (c) financial aid and the amount of debt incurred; (d) and students' employment and income after leaving or graduating from schools as well as their overall debt (including loans and other forms of consumer debt). Throughout this brief we summarize the research evidence vis-à-vis these factors and loan default with an eye toward this question: What matters? We begin by summarizing the findings related to factors where the literature is inconclusive or points to no relationship regarding predictors of default. Then we discuss in more detail the set of factors that have been found to influence student default rates. In the interest of brevity we do not present a full set of citations for these results; however, a complete bibliography follows our conclusions.

### ***Factors That Do Not Appear to be Strongly Related to Default***

Simple descriptive studies done over the past 30 years have suggested patterns of default involving gender, simple measures of total debt, choice of major or academic program, or the types of institutions in which students enroll. These descriptive studies often create erroneous impressions of *what matters* when considering student default.

When we examine rigorous, multivariate studies using national or multi-institutional data sets, it is clear that gender and simple measures of total debt are not good predictors of student loan default. In addition, the types of institutions students attend do not increase the probability that students will default. Students who attend proprietary or less-than-four-year institutions tend to borrow more, to come from lower income families, and to belong to a racial or ethnic minority group—characteristics that are all associated with increased likelihood of default. However, one high-quality study found that institutions that devote larger percentages of their total budget to instruction had lower

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default rates. While policy should not be made on the basis of one study, this finding raises the possibility that the extent to which institutions focus their resources on instruction may influence student success and reduce default rates. Choice of major or program of study does not exert a direct influence on probability of default but can indirectly affect likelihood of loan repayment through subsequent income levels. Finally, some single- and multi-institutional studies have suggested that student loan counseling while students are still enrolled in postsecondary education reduces the likelihood of defaulting. These studies do not control for student self-selection, however, and it is possible that the students who voluntarily attend loan counseling sessions are less likely to default regardless of their attendance.

### ***What Matters?***

Findings from high-quality studies—those that use multivariate techniques to disentangle the complex web of factors affecting default—suggest that academic success, income and debt, age, underrepresented status, academic preparation, and family context are all related to whether a student successfully repays a student loan.

***Academic success.*** Borrowers who earn a postsecondary credential are less likely to default than those who do not complete their program of study. In addition, students' academic trajectories throughout postsecondary education—credits attempted, credits completed, grades earned, transferring, enrolling continuously, time to degree/certificate, and failing credit hours—also emerge as strong predictors of loan default. It is this constellation of student academic success variables that consistently represents the strongest set of predictors of loan default.

***Income and debt.*** Postgraduation earnings and total debt burden are significantly related to default. As postgraduation earnings increase, the likelihood of default declines. Although debt burdens vary by the type of institution attended, generally the more a borrower owes the more likely the borrower is to default. A borrower who earns less and owes more, not surprisingly, is at greater risk of default than a borrower with a smaller debt-to-income ratio. This relationship is not true, however, for borrowers who attend graduate school. In this case, more debt is associated with greater likelihood of repayment because the borrower is more likely to have a higher income. Like degree completion, the earnings-to-debt ratio is a strong predictor of student loan default.

**We found no evidence that the type of institution attended is a good predictor of the loan repayment behavior of students.**

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**Age and competing obligations.** Age influences the odds of defaulting, as older students are more likely to default. Age alone, however, is unlikely to be a primary factor; rather, older students are more likely to have accumulated more overall debt (credit card, home mortgage, etc.) and are more likely to have more dependents. All of these factors together increase the odds that older students will default.

**Underrepresented students.** Students from low-income families, first-generation students, African American students, and students with dependents are most likely to default. This appears to be the result of a complex web of social, cultural, and economic factors that affect everything from the likelihood of owning a home to the likelihood of being unemployed to the likelihood of earning a degree or certificate.

**Academic preparation.** Students who had higher grades in high school, higher SAT scores, and who earned better grades in postsecondary education are less likely to default. These characteristics are intertwined with the likelihood of earning a postsecondary credential.

**Family contexts.** Family income level and parental education also appear to influence the probability of default. Students from families with greater affluence and higher levels of parental education are less likely to default. This is unsurprising, as affluent students are more likely to have a safety net in families that are more likely to assist them in any financial difficulty.

**Summary of findings.** Looking across the chief findings of the literature review undertaken for this policy brief the following major conclusions are warranted. Measures of academic momentum and degree completion and the combination of debt load, number of dependents, and income—factors that influence one's ability to repay a loan—exert the greatest influence on the likelihood of default. Other factors that influence the odds that students may default include students' family income, parental education, academic ability, ethnicity, and age. We found no evidence that the type of institution attended is a good predictor of the loan repayment behavior of students. Nor did we find studies suggesting that the types or numbers of students' loans influence loan default; thus, neither of these is a good indicator of the efficacy of loan programs. We did review one intriguing study suggesting that higher amounts of an institution's resources going to instruction does decrease the odds of students' defaulting, but more research would be needed before making policy based on that finding.

## Conclusions

In sum, the empirical evidence suggests that default rate is not a good vehicle for assessing the quality of institutions or of various types of loans. Nor is it a simple matter to identify which students are likely to default so that they could simply be declared ineligible for student loans. Rather, the causes of loan default are deeply rooted in ever-present tensions around federal financial aid policy.

Since 1965 the federal government has made access to postsecondary education for all students regardless of income a cornerstone of federal higher education policy. Over the years, because of fiscal constraints, Congress has moved from grants to loans as the primary vehicle for ensuring access. It is axiomatic that providing loans to low- and moderate-income students—who are often from families with weak credit histories and may be at greater risk of not graduating or of ending up in jobs with lower incomes—entails greater risk of default.

Absent a federal policy shift toward greater emphasis on grants, it is hard to imagine a scenario where a commitment to access via loans will not also result in default rates among some populations of students that are higher than policy makers might like. The alternative is to stop admitting or providing loans to students who are at greater risk of defaulting. This of course would ignore the tens of thousands of students who despite economic, social, and historical barriers repay their loans and go on to contribute to the public good and improve their own lives—and it would undercut the very purpose of the student loan program.

Researching the effects of financial aid policy has always meant tracking a moving target. As federal, state, and institutional policies have changed over time around both pricing and financial aid, the impact of financial assistance, including student loans, has also changed. After reviewing the literature on the predictors of student loan default, we are struck by the relative dearth of recent studies that used large national data sets and employed rigorous statistical methods. More than a decade has passed since researchers have undertaken systematic studies on student loan default. Indeed, unlike other areas of financial aid policy such as student debt or the impact of financial aid on persistence, there are relatively few studies from any time period on student loan default. In light of this gap and because of changes in financial aid policies since the mid-1990s, an initiative for a new series of studies on this topic would be timely.

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