MESSENGERS OF BAD NEWS OR BAD APPLES? STUDENT DEBT AND COLLEGE ACCOUNTABILITY

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Abstract

Student loan debt and defaults have been steadily rising, igniting public worry about the associated public and private risks. This has led to controversial regulatory attempts to curb defaults by holding colleges, particularly those in the for-profit sector, increasingly accountable for the student loan repayment behavior of their students. Such efforts endeavor to protect taxpayers against the misuse of public money used to encourage college enrollment and to safeguard students against potentially risky human capital investments. Recent policy proposals penalize colleges for students' poor repayment performance, raising questions about institutions' power to influence this behavior. Many of the schools at risk of not meeting student loan default measures also disproportionately enroll low-income, nontraditional, and financially independent students. Policy makers therefore face the challenge of promoting the efficient use of public funds and protecting students while also encouraging access to higher education.

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INTRODUCTION

In recent years, student loan borrowing and default rates have risen notably, leading to concern about the associated public financial risk as well as the challenges faced by many students. These trends occur during a period of sizable and increasing public investment in postsecondary education. Of late, the U.S. government has disbursed over $170 billion annually of financial aid in an effort to encourage students to attend college. Such funding is supported by research that consistently finds positive and growing average economic benefits of college, including higher wages and lower unemployment rates (Kane and Rouse 1995; Avery and Turner 2012). Higher education can also benefit society more broadly; college graduates are associated with higher levels of civic participation and charitable giving, less criminal activity, and more productive communities (Wolfe and Haveman 2003; Moretti 2004).

The rationale for promoting college completion remains strong, but there is increasing awareness that where students attend and how they pay matters. The often-asked question of whether college is "worth it"[1] has recently taken on tacit subtexts: are *particular colleges* worth it for *certain students*? This more nuanced question is driven, at least in part, by the rise of the proprietary college sector. This sector has experienced remarkable enrollment growth over the past decade and now accounts for a substantial proportion of postsecondary enrollment, especially at the sub-baccalaureate level. For-profit colleges accounted for 11 percent of total fall postsecondary enrollment while awarding 21 percent of associate's degrees and over 50 percent of certificates below the associate's degree level in 2010 (NCES 2013).[2]

Part of the explanation for proprietary colleges' growing role in the higher education market is the sector's ability to supply vocationally relevant educational programs with attractive scheduling and delivery that draw students into higher education who might otherwise not be able to attend (e.g., Turner 2006). For-profits are also poised to absorb students from capacity-constrained public colleges during difficult economic conditions (e.g., Turner 2006; Keller 2011). Critics, however, have questioned the quality of educational program offerings at some for-profit schools and have requested reconsideration of the use of public funds to encourage enrollment in the sector (e.g., U.S. Committee on Senate Health, Education, Labor, and Pensions 2012). Some of this concern stems from documented cases of misleading or even fraudulent recruiting practices, leading some public officials to want to eliminate the "bad apples" among for-profit colleges (Fuller 2010; GAO 2010). Wider-ranging worries, however, originate from observing student loan default rates that,

1. Archetypal headlines in the media include "Is College Worth It?" (*Time*), "The Tuition is Too Damn High" (*Washington Post*), and "Is College Still Worth What It Costs?" (*USA Today*).
2. These figures include only institutions that participate in federal financial aid programs.

although increasing in every sector in recent years, have consistently been highest among students in the for-profit college sector.[3]

The government has policy levers at its disposal that can determine which students receive financial aid and at which schools. Students' access to federal financial aid depends, in part, on their own financial resources and family socioeconomic characteristics. For example, some federal financial aid programs, such as Pell Grants and subsidized student loans, are means tested, such that only students demonstrating financial need have access to the aid. Perhaps less well known is that students' access to federal aid also depends on the program eligibility of the institution they attend. In fact, it is the colleges and universities that serve as the conduit for most federal financial aid. Students attending ineligible institutions cannot benefit from the largest federal financial aid programs even if they are otherwise individually eligible, and research demonstrates the institution-level financial aid disbursement ability is important to enrollment decisions (Darolia 2013).

In this paper, I consider policies that regulate which institutions can disburse federal financial aid, with a particular focus on the use of student loan debt and repayment rates as measures to hold institutions accountable for their use of federal aid programs. The discussion has relevance to the recently proposed "Gainful Employment" rules but also to other provisions in existing regulations. Policies of this type attempt to safeguard taxpayers against the misuse of public funds and to protect students from potentially risky human capital investments. Although aimed at institutions, the policies have important implications for individual access to college, particularly for students in some demographic groups. This is because penalized institutions cannot disburse federal aid to students, limiting some students' available financial resources and possibly students' ability to attend certain schools. The challenge faced by policy makers is to create policies that both support access to higher education through financial aid and promote the efficient use of public funds.

The Higher Education Act of 1965 and its subsequent amendments dictate that institutions that provide a "program of training to prepare students for gainful employment in a recognized occupation" can be eligible to disburse federal aid if they meet a myriad of requirements.[4] Recent rulemaking has invoked this clause to motivate the addition of criteria to narrow which institutions and programs of study are eligible to disburse aid, and policy makers have taken advantage of the ambiguous interpretation of "gainful employment" in these efforts. In particular, recently debated rules do not directly assess employment but instead evaluate institutions based on students' loan repayment

3. Author's calculations based on cohort default rate data from the U.S. Department of Education (see http://ifap.ed.gov/DefaultManagement/press/).
4. See Legal Information Institute (2011).

activity. Proposed measures have included standards related to the proportion of former students who are actively paying loans, the ratio of loan payments to income, and program level loan default rates.

These policies raise questions about the ability of institutions to affect students' loan repayment and default behavior. Student loan repayment can be connected to employment and income (Dynarski 1994). Research indicates students who start at for-profit colleges are less likely to have jobs in the short term and average returns to college might be lower at for-profit colleges than other sectors (Cellini and Chaudhary 2012; Deming, Goldin, and Katz 2012; Lang and Weinstein 2013). Pre-college socioeconomic status, however, can be positively related to post-college earnings (Perna 2003), and a number of factors beyond employment can affect loan repayment, such as student backgrounds, family endowments, available financial resources, and borrowers' costs and benefits of default (Gross et al. 2009). Divorce and house price declines are examples of income and asset shocks that may impair borrowers' ability to repay loans. In times of financial distress, instead of paying student loan debt, some borrowers may choose to service debt that preserves liquidity, such as credit card debt (Ionescu and Ionescu 2012), or that has more severe default penalties, such as having a house or car repossessed. Individuals' costs and benefits of default can also affect repayment decisions, and concerns about strategic default on student loan obligations have manifested themselves in policy that inhibits borrowers from expunging or reducing student loans through bankruptcy.

Using student loan repayment as a basis for holding institutions accountable is further complicated because students at greater risk for default are not distributed evenly across education sectors. Students likely to default, such as those who come from low-income backgrounds or are financially independent, are disproportionately represented in particular types of schools. This has led some to claim that institutions are being inappropriately punished for being "messengers who bring the bad news" about the loan repayment behavior of students they serve (Wilms, Moore, and Bolus 1987).

STUDENT AID, BORROWING, AND LOAN DEFAULT TRENDS

There are a number of well-publicized trends contributing to the growing concern about which institutions should be eligible to disburse student loans. The first is the large and growing amount of awarded federal student aid, including grants, loans, and other aid, used to encourage college enrollment. Table 1 displays the change in federal student financial aid disbursements over the past ten academic years, based on data from Baum and Payea (2013). In the most recent academic year, the amount of federal financial aid distributed

Table 1. Federal Student Aid Disbursements by Academic Year (in $ millions), 2003 and 2012

	2003–04	2012–13	10-year Change (%)
Grants			
Pell Grants	15,832	32,269	104
Veterans & military grants	4,436	13,321	200
Other federal grants	1,496	1,416	−5
Total federal grants	21,764	47,006	116
Loans			
Perkins	2,041	856	–58
Subsidized Stafford	27,457	27,703	1
Unsubsidized Stafford	24,417	55,441	127
PLUS	7,765	17,247	122
Other loans	156	223	43
Total federal loans	61,836	101,469	64
Federal work-study	1,246	978	–22
Education tax benefits	7,210	20,280	181
Total federal aid	92,055	169,732	84

Source: Baum and Payea (2013). Constant 2012 dollars.

totaled about $170 billion, with student loans accounting for approximately 60 percent of disbursements and grant aid accounting for about 28 percent. The remaining aid was disbursed through federal work-study programs and educational tax benefits. As displayed in the last column, Pell Grants, veterans and military grants, and Stafford unsubsidized and subsidized loan programs all at least doubled in total disbursement magnitude over the last ten years (in inflation-adjusted dollars).

Figure 1 displays a longer trend of federal student aid disbursements over time in total (solid line with square markers plotted on the primary vertical axis) and per full-time equivalent student (dotted line with square markers plotted on the secondary vertical axis). Since 1990, federal financial aid investment has increased, both because more students are obtaining aid and because the amount of aid per student is increasing. Given the magnitude of this public investment, there has been increased scrutiny on whether these funds are used efficiently and appropriately. The availability of student financial aid can improve access to educational opportunities by lowering the direct cost of postsecondary education for students. Research consistently demonstrates that lower costs result in increased postsecondary education enrollment, though the effects and magnitudes vary across types of students and institutions (e.g.,

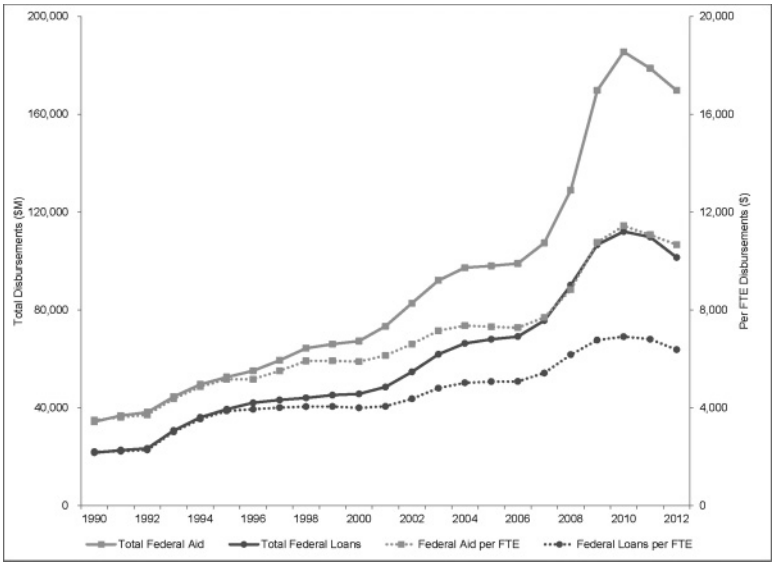

Figure 1. Federal Financial Aid and Loan Disbursements, 1990–2012
Source: Baum and Payea (2013). Constant 2012 dollars.

Leslie and Brinkman 1987; Dynarski 2002; Seftor and Turner 2002; Curs, Singell, and Waddell 2007; Cellini 2010).

Student borrowing trends, in particular, have garnered a great deal of attention. Government estimates indicate that outstanding student loan debt in the United States exceeded $1 trillion by the end of 2013, making it the second largest sector of debt in the country behind housing (Federal Reserve Bank of New York 2014). Figure 1 also displays increasing total (solid line with circle markers plotted on the primary vertical axis) and per student (dotted line with circle markers plotted on the secondary vertical axis) federal loan funds distributed to students over the past 20 years. Current estimates indicate that more than one third of undergraduate students borrow federal student loan money, with more than half of public four-year college students graduating with debt (Avery and Turner 2012; Baum and Payea 2013). Students are relying more on loans for a variety of reasons, including limits to the amount of grant aid available, the rising sticker price of college, and difficult economic conditions that have constrained many students' available financial resources.

Students with high debt burdens might delay asset-building purchases, such as a home, and have limited access to the credit market (Brown and Caldwell 2013). Researchers have found that debt can alter students' post-completion career choices and affect social decisions such as marriage (Field 2009; Gicheva 2011; Rothstein and Rouse 2011). There are also macroeconomic implications to increasing debt burdens, as high debt can reduce consumption.

Some have raised the specter of a higher education debt "bubble" (e.g., Wasik 2013), although a more thorough analysis should assuage some of this concern. Average per-student borrowing has not grown at the rates of overall borrowing (suggesting a growth in the number of low-income students entering college) and cases of extreme debt highlighted in some media reports account for only a small portion of college entrants (Avery and Turner 2012; Dynarski and Scott-Clayton 2013). And, rather than considering student borrowing in isolation, policy makers should consider that higher education remains a sound investment for most students. Over the past three decades, the average earnings premium associated with attaining a college degree has grown, as has the return to college even when taking into account increasing college costs (Avery and Turner 2012). Akers and Chingos (2014) calculate the monthly payment burden faced by student loan borrowers over the past two decades and find the growth in incomes among the college-educated has more than kept pace with increases in average debt. Therefore, while the heterogeneity of expected benefits of postsecondary education is an important consideration for each student, attending college and borrowing at average levels remains a good investment for the typical student.

The use of student loans to encourage college access might be considered attractive to policy makers because of the low public cost compared with grant aid, which is not repaid. A robust student loan market can potentially improve economic efficiency by increasing the supply of highly skilled workers (Avery and Turner 2012). Without public supports, however, many students would likely find it difficult to borrow uncollateralized loan money because human capital investments are not as easily financed as physical capital investments. Credit constraints can also be a reason why students from high- and low-income backgrounds matriculate at different rates (Ellwood and Kane 2000). Compared with high-income students, students from low-income families often have fewer private resources to defray college expenses. Access to educational credit, therefore, allows students to borrow against post-college incomes when earnings are expected to be higher. It should be noted, however, that researchers provide less conclusive evidence that student loans improve college enrollment and persistence to the extent that grants do, especially among low-income students (Campaigne and Hossler 1998; Carneiro and Heckman 2002; Heller 2008).

Student loan default trends should be more troubling for policy makers, as the costs of loan default can be substantial for both borrowers and taxpayers. Default damages credit profiles, which can limit students' future access to the credit market and impair their ability to finance future purchases. Taxpayers absorb costs when borrowers default on federal loan obligations because even though in some cases the government can garnish borrowers' wages and tax

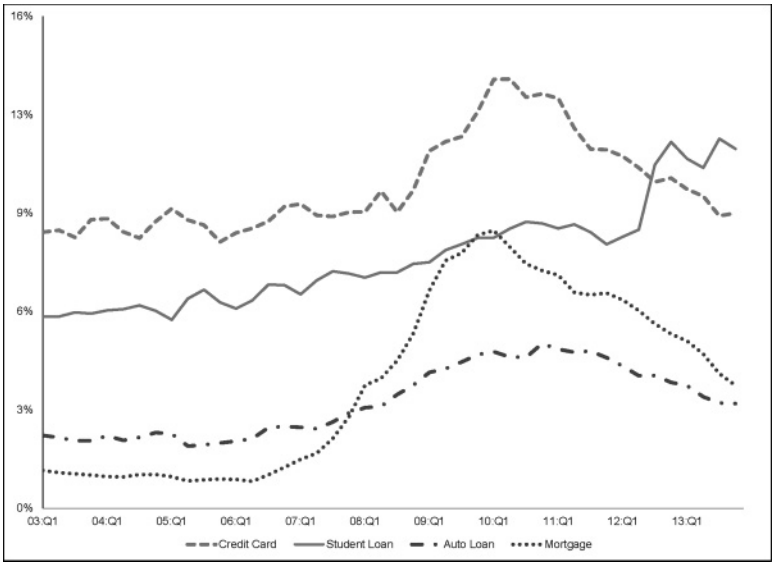

Figure 2. Percent of Balance 90+ Days Delinquent by Loan Type
Source: Federal Reserve Bank of New York (2014).

returns, the government typically will not recover the full costs associated with money lent.

Figure 2 displays student loan delinquency rates over a ten-year period, based on data from the Federal Reserve Bank of New York (2014), as compared with the delinquency rates of other types of consumer credit, mortgages, auto loans, and credit cards. Whereas delinquency rates for the other credit types have leveled off or decreased since 2010, student loan delinquency rates are still rising. There are many differences that complicate comparisons across sectors of credit, such as varying origination requirements, loan terms and characteristics, and the typical borrowing age. Nonetheless, the differences are notable.

When considering federal aid, student borrowing, and student loan default, scrutiny focuses on the for-profit college education sector. In recent years, for-profit colleges accrued about one fifth to one quarter of annually disbursed Pell Grant and federal loan funds, well exceeding the proportion of enrollment (Baum and Payea 2013). The relatively poor average financial backgrounds of for-profit students can explain at least some of the disproportionate aid use. Some argue, however, that certain for-profit colleges are accruing inordinate amounts of federal money without providing sufficient benefits to students (U.S. Committee on Senate Health, Education, Labor, and Pensions 2012) and there have been reports of deception and fraud. For example, the U.S. Government Accountability Office (2010) reported that all fifteen colleges they

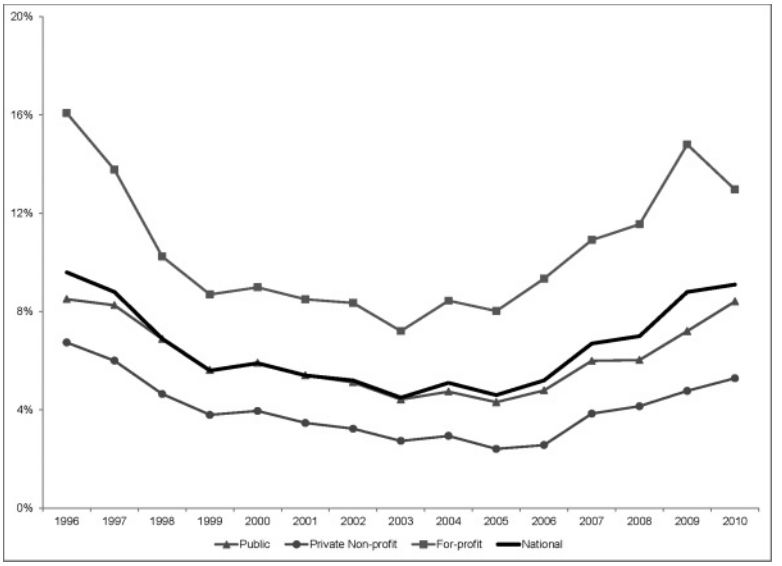

Figure 3. Two-Year Cohort Default Rates
Source: Author's calculations based on data from the U.S. Department of Education (see http://ifap.ed.gov/DefaultManagement/press/).

tested provided questionable information to applicants and four encouraged fraudulent practices such as falsifying financial aid forms to increase the amount of aid students could obtain. A number of state officials have either filed lawsuits or started investigations into the practices of for-profit colleges, and the Consumer Financial Protection Bureau recently filed a lawsuit against a large for-profit college based on claims of predatory lending (New York Times 2012; CFPB 2014).

Figure 3 displays annual federal loan programs cohort default rates (CDRs), which measure the proportion of former students who default on student loan obligations after starting repayment. CDRs have increased since the beginning of the decade nationally and across school types. Particularly notable is that for-profit sector default rates are highest in all years and, when comparing the default rate from the lowest point in the past decade (2003) to the most recent period (2010), the for-profit sector has the largest percentage point increase in CDRs.

EXTANT POLICIES AND PROPOSALS

High default rates, particularly in the for-profit sector, have motivated policy initiatives relying on student loan debt measures to limit which institutions are allowed to disburse federal aid. These policies relate to Title IV of the Higher Education Act of 1965 and subsequent amendments (Title IV), which

authorize the largest postsecondary federal financial aid programs. Examples of Title IV programs include Pell Grants, federal student aid work-study, and subsidized loans. In order for their students to be eligible to receive Title IV resources, each institution must satisfy three broad groups of requirements: attain licensing from the state in which it is located, gain accreditation by an agency authorized by the U.S. Department of Education (ED), and prove compliance with a number of provisions "protecting the administrative capacity and fiscal integrity of its funding programs" (Congressional Research Service 2007, pp. 1–2). Institutional administrative requirements include having adequate staff to support financial aid programs, providing students financial aid counseling, and monitoring the academic progress of Title IV program recipients. Financial responsibilities dictate that institutions must maintain sufficient cash reserves to repay Title IV funds and prove solvency. Other requirements cover diverse topics such as alcohol use and campus security policies.

If institutions fail to meet these administrative and fiscal requirements or have a significant change in status, such as an ownership change or merger, they can lose Title IV disbursement eligibility. Because financial aid can foster student matriculation, Title IV eligibility can lead to higher enrollments and therefore increased revenue for institutions. Schools are allowed to receive up to 90 percent of revenue from Title IV funds, and some for-profit institutions obtain a large portion of revenues from these sources (Cellini and Goldin 2012).

Other Title IV rules relate to the appropriateness of educational programs, and federal policy makers have a record of cautiously regarding programs that differ from higher educational norms. For example, in 1992 Congress enacted the "50% rule," which rendered a school ineligible if it offered more than 50 percent of its courses by correspondence or if more than 50 percent of its students participated in correspondence courses. The 50% rule was enacted largely in response to concerns about "diploma mills" that appropriated financial aid funds to indiscriminately send diplomas to students without providing real educational programs (Glass 1995).[5] In 1994, the ED also implemented the "One Day Rule," which mandated that Title IV eligible institutions have an academic year consisting of at least 30 weeks with a minimum of one day of organized academic activity.[6]

5. In response to concerns about the rule limiting access to postsecondary education, the ED initiated the Distance Education Demonstration Program (DEDP) in 1999 that temporarily allowed a few participants to disburse federal Title IV funds to students even if they crossed the 50 percent correspondence course threshold. Due in part to the success of the DEDP, the 50% rule was rescinded in 2006 as part of the Higher Education Reconciliation Act of 2005.
6. The ED initially allowed alternatively structured institutions to follow a "12 Hour Rule," where 12 hours of scheduled educational activities signified an academic week. The ED, however, revised

Particularly relevant to recent regulatory efforts are policies that use student loan debt repayment behavior to determine whether an institution should be allowed to disburse Title IV funds. An existing regulation can render institutions ineligible to disburse Title IV federal loan and/or Pell Grant funds if their CDRs rise above certain thresholds. Specifically, CDRs that exceed 25 percent for three consecutive years or 40 percent for one year can lead to sanctions.[7]

Newly proposed regulations attempt to tighten eligibility even more based on debt repayment, with a focus on for-profit programs. In 2010 and 2011, the ED proposed program-level "Gainful Employment" rules that would add new debt measure requirements for institutions. One proposed rule set a standard for the proportion of former students in repayment. Other measures specified allowable debt-to-income ratios—one for annual loan payments as a fraction of discretionary income and the other for loan payments as a proportion of total earnings. Under the proposal, if programs fail these requirements for three out of four fiscal years, they lose Title IV disbursement eligibility.

The Gainful Employment rule garnered more than 90,000 comments during the solicited response period (Program Integrity 2011). After a legal challenge, a federal judge vacated key measures of the rule, citing the lack of a "reasoned basis" for some of the proposed measures, and subsequent negotiated rulemaking did not yield consensus from interested parties. The ED released a new final Gainful Employment regulation in October 2014. Compared with earlier versions, the repayment rate and program student loan default rate standards were removed, but debt-to-earnings measures remained. Within weeks of its release, for-profit college trade groups filed lawsuits to block the new version of the regulation, suggesting that related policy making is likely to continue for some time.

Though the future of Gainful Employment regulations is not entirely clear, some effects of the proposal may already be in the process of being realized. One explanation for recent indications of for-profit enrollment declines (Blumenstyk 2012; Hechinger 2013) is that expected compliance with Gainful Employment requirements have caused institutions to be more careful about the programs they offer and which students they admit. Intensified public scrutiny may also make prospective students wary of enrollment in this sector as information about default rates and post-college outcomes becomes increasingly available.

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regulations in 2003 such that all schools must comply with the "One Day Rule" rather than the "12 Hour Rule."

7. This is relevant for the "two-year" CDR calculation, which includes loan default behavior of students within two years of starting repayment ("two-year CDR"). Starting with the 2009 federal fiscal year, a new "three-year CDR" calculation includes loan default behavior of students within three years of starting repayment. The multi-year threshold under this calculation is 30 percent

IS STUDENT LOAN DEFAULT A PRE-EXISTING CONDITION?

An important feature of federal student loan programs is that the government does not price-ration student loans and instead sets a common interest rate for all borrowers. As long as students attend an eligible program, they can borrow federal student loan money without an assessment of their individual creditworthiness. In this way, decisions to approve and price loans are not based on individual risk of default. Without this system, many students would likely face an impaired ability to obtain credit, because they typically do not place collateral against debt obligations and often have thin credit profiles. Nevertheless, this can lead to an extension of educational credit beyond what would be dictated by market prices, and some students can obtain credit at a rate that does not reflect the true cost of their default risk. Costs associated with student loan programs can be difficult to evaluate, and some research suggests budget estimates understate the true costs associated with default in federal student loan programs (GAO 2005; Lucas and Moore 2007). If interest rates are not set high enough to adequately capture default risk, the lack of price rationing can transfer default costs to the public.

The substantial costs of loan default to both taxpayers and students motivate policies such as Gainful Employment that attempt to hold schools accountable for the repayment behavior of their students. A key question, therefore, is whether students who default at for-profit colleges would default wherever they enroll, due to factors beyond institutions' control. It is not possible, of course, to observe this hypothetical scenario. A number of researchers have attempted to identify the role of institutions in default behavior by testing for a relationship between institution type and default after controlling for available demographic and socioeconomic characteristics (see Gross et al. 2009 for a literature review). Some researchers provide findings that indicate an association after accounting for observable factors (Podgursky et al. 2002; Woo 2002; Hillman 2014). There is a contrasting body of evidence that finds no relationship after controlling for institutional resources, student backgrounds, and borrowing behavior, leading some researchers to the conclusion that institutions have high default rates because they enroll students who are most likely to default (Greene 1989; Knapp and Seaks 1992; Volkwein and Szelest 1995; Volkwein et al. 1998). Monteverde (2000) calls the proclivity to default on student loans a "pre-existing condition," where high default rates at certain institutions are a function of students' characteristics established outside of the institution, not an indictment of the educational offerings of schools.

An empirical problem faced by researchers is that unobserved factors can be correlated with post-college outcomes, college choice, and other educational decisions, making it difficult to isolate the effects of postsecondary education on student loan default. This underlies Guryan and Thompson's (2010)

conclusion that extant research does not definitively prove whether differences in student loan default rates across sectors are due to the failure of for-profit schools or because of the types of students that choose the sector. Findings from research consistently indicate student socioeconomic and demographic characteristics are associated with default. For example, research points to generally consistent evidence that loan default increases with age (Podgursky et al. 2002; Woo 2002) and borrowers with increasing numbers of dependents are more likely to default because of greater financial responsibilities (Dynarski 1994; Volkwein and Szelest 1995; Woo 2002). Moreover, researchers find that borrowers who come from lower income and lower wealth backgrounds or who are less likely to receive help from family are more likely to struggle with debt obligations (Knapp and Seaks 1992; Volkwein et al. 1998; Baum and O'Malley 2003). These relationships pose empirical challenges because the for-profit sector serves student bodies with higher proportions of students who have characteristics associated with default, including older students, financially independent students, students with dependents, and students from less-advantaged socioeconomic backgrounds who expect little financial help from family members (Deming, Goldin, and Katz 2012; Cellini and Darolia 2014).

Emerging evidence on the labor market outcomes of for-profit college students may help inform the debate, because research supports a connection between lack of employment and student loan default (e.g., Dynarski 1994). Using student fixed-effects to examine earnings changes after attending college, Cellini and Chaudhary (2012) find that students at for-profit colleges who obtained an associate's degree experienced wage gains, but non-completers experienced null to negative effects on earnings, hours, and full-time employment. Deming, Goldin, and Katz (2012) match for-profit college students to public community college students with similar observable characteristics and determine that students who started at a for-profit college have larger debt burdens, higher unemployment rates, lower reported satisfaction, and lower earnings after six years than their matched peers. Lang and Weinstein (2013) generally find null or relatively disadvantageous labor market returns to for-profit certificates and associate's degrees relative to the public community colleges. Darolia et al. (2014) and Deming et al. (2014) use experimental resume audit study designs to gauge employers' preferences for college type and find that listing a for-profit college credential on a resume does not lead to higher callbacks from employers relative to public community college credentials, even though for-profits have higher average direct costs. Therefore, while it should be noted that the aforementioned methodological issues also complicate the ability to identify a causal relationship between institution sector and labor market outcomes, the labor market challenges and high debt burdens faced

by many for-profit students, especially non-completers, indicate high student loan default rates in the sector are likely to continue to be a concern.

Policy makers need not adopt an either-or stance as to whether students or institutions are to blame for high default rates. Student backgrounds and structural disadvantages should be taken into account when designing accountability metrics, in particular the financial and employment challenges of resource-constrained students. Moreover, schools that receive public funding should bear the responsibility to provide educational programs and institutional supports that promote student success.

DISCUSSION

Student loan defaults present risks to students and the economy at large. It is therefore appropriate for the government to make efforts to limit these risks, to ensure that the public's large investments in postsecondary education are used efficiently, and to safeguard students and taxpayers. The regulatory challenge is to pursue these goals without limiting student choice and access, especially for students who face considerable barriers to education. Student loans can be a tool used to promote access to education, and the government furthers loan availability by not price-rationing higher-risk students out of federal student loan programs. This approach keeps credit prices relatively low for all borrowers regardless of individual default risk. This also complicates student loan regulation, however. Some borrowers borrow at prices that do not adequately capture their risk of default, and these students appear to be concentrated at certain institutions.

Current and proposed federal policies generally attempt to avoid limiting individual students' access to financial aid and instead seek to restrict institutions' disbursement eligibility based on the repayment behavior of their students. Consider that violation of the CDR thresholds and proposed Gainful Employment rules does not necessarily only limit borrowing; it can render students in these programs ineligible for Title IV financial aid programs not directly related to loan programs, such as Pell Grants. By doing this, the federal government is using debt repayment outcomes as a sufficient basis to determine whether educational programs warrant federal public investment. Policy makers should therefore scrutinize whether limited measures are independently adequate to assess educational quality and, if so, whether debt repayment is the appropriate standard.

If institutions have limited ability to affect default, then encouraging students who are likely to default to attend other institutions may not actually benefit students or taxpayers. Such students may still default on their loans, but their negative outcome will be diluted among a better performing student

pool. Financial aid will shift away from schools that predominantly serve low-resource students toward those serving students with more advantaged socioeconomic statuses. Other students may not attend college altogether. Another product of holding schools accountable for students' loan repayment behavior is that some schools might strategically attempt to achieve compliance by not admitting or discouraging attendance from students who are at higher risk of default. There is some evidence that colleges are choosing to deny "risky" students because of anxiety brought on by regulatory measured outcomes associated with federal ratings plans (Stratford 2014). These actions may lead to fewer loan defaults, but also to more students who miss opportunities to enhance their economic prospects through postsecondary education and training.

Because student loan default can be costly to students and the public, policy makers may view comprehensive federal aid ineligibility as an acceptable penalty for poor loan repayment outcomes. The difficulty of identifying the causal determinants of default gives reason for caution with this assessment. Students with characteristics related to default are concentrated in for-profit schools, leading opponents of regulations that penalize schools with high default rates to argue that it is not fair to hold institutions accountable for student behavior that has not been proven to be in the schools' control (e.g., Guryan and Thompson 2010). Difficulties associated with the measurement of default, however, should not preclude efforts to promote socially beneficial behavior by students and institutions nor absolve colleges from the responsibility of promoting student success or demonstrating a return to student and taxpayer investment. This responsibility should be shared by all institutions receiving public support regardless of institutional control, and care should be taken to not vilify schools that display positive student outcomes just because of their for-profit status.

Policy makers need to assess the potential intended and unintended consequences of regulatory initiatives that determine which institutions can disburse federal financial aid, as decisions have important implications for colleges and students. Darolia (2013) finds that loss of institution-level financial aid availability leads to enrollment declines of approximately 12–16 percent at two-year institutions because CDR threshold violations nullified their ability to disburse federal aid. In the absence of aid, some deterred students may simply transfer to other educational programs. Capacity constraints of lower-cost public institutions may hinder some of this transfer, especially in high-demand fields and in states with budget shortfalls. For example, budget cuts in California have led to declines in course offerings, instructors, and staff, as well as lower community college participation rates, especially among first-time college students (Bohn, Reyes, and Johnson 2013). Survey evidence indicates almost 40 percent

of a national sample of community college students were unable to enroll in a wanted but full class and approximately 20 percent were not able to take a course required for completing their degree or certificate (Pearson Foundation 2011).

Other students may be constrained by their ability to only attend certain schools because of geographic proximity or program structure. Part of the increased enrollment at for-profit colleges has been attributed to streamlined and targeted programs. Deil-Amen and Rosenbaum (2003) report survey evidence that 45 percent of community college students believe they take classes not applicable to their career goals, as opposed to only 16 percent of for-profit college students. Also, course scheduling and the prevalence of online program delivery may make it easier to avoid conflicts among school, work, and family obligations, lowering the opportunity costs of attending for-profit colleges.

In other words, institution-level eligibility policies should be recognized as not only influencing in which schools students enroll, but also higher education access in general. Because nontraditional and low-resource students are concentrated in for-profit schools that are at risk of failing student loan debt outcome measures, policies that punish schools on these metrics are likely to disproportionately affect the very students many financial aid programs are designed to serve. Some of these students, however, may be better off attending schools where they can accrue less debt and have enhanced employment prospects. It may also be that students will want to choose schools that have the appropriate supports for their academic needs. Therefore, resources for schools performing well should be strengthened and colleges of all sectors should continue to evaluate program structures and delivery mechanisms that resource-constrained students can access.

Furthermore, although not a panacea, policy makers should back programs that enhance the availability of information on program-level costs, labor market outcomes, and student loan default rates so students can make educated decisions about whether and where to attend college and how much to borrow. Information can play a critical role in student decision making, as students' borrowing choices are connected to the decision of whether and where to attend college. Before deciding if and where to attend college, students should compare the present value of expected benefits, including college earnings premiums, against the present value of costs, including tuition, fees, and forgone earnings. The calculation of costs and benefits is not simple, however. Future benefits are difficult to forecast because the ability of a student to obtain a job is uncertain and research indicates heterogeneous returns to education across college types, college majors, careers, and student abilities (Brewer, Eide, and Ehrenberg 1999; Arcidiacono 2004). Projecting costs such as forgone earnings can also be challenging, and when deciding to borrow, students must be able

to understand relatively complicated financial concepts, such as amortization, interest, and deferment.

Researchers using experimental designs demonstrate that providing information to prospective and current students can be relatively inexpensive and effective. Students may be likely to err when trying to estimate gains from schooling and seek information about future earnings in limited ways (Betts 1996). Wiswall and Zafar (2013), however, offer evidence that providing students with data about returns to different fields of study leads to long-lasting knowledge. Bettinger et al. (2012) establish that assistance with financial aid forms and information about the net costs of college leads to increased attendance and persistence in college. Research has also proven that increasing the availability of information can affect school choice. Hoxby and Turner (2013) demonstrate that notifying students about the attributes of college options, along with application fee waivers, results in low-income, high-achieving students attending colleges with higher graduation rates. At a high school level, Hastings and Weinstein (2008) show that the availability of schools' academic achievement data caused families to choose higher-performing schools (it's worth noting that these authors also found proximity to the school was also important to school choice).

High student loan default rates at institutions should serve as a powerful signaling mechanism about expected returns for prospective students, but even though the ED publicly posts cohort default rates on its Web site, it is not clear whether students are actually aware of and use this information. Policy makers should also not assume all students will understand complicated calculations of expected costs and benefits, or that standardized measures of average net benefits will adequately represent each individual's preferences and constraints. Even if students are able to understand and process the range of possible benefits of higher education, they still may not be likely to believe they will earn less than average. And, as with other complex decisions, those who are the least financially literate will be most likely to be confused or misled.

Therefore, public investment would be well spent in an effort to not only improve the information made available to students about aid and college options, but to find clearer and more effective ways to present the data. Policy makers should also consider who is empowered to provide this information and the source of funding. For example, Cellini and Darolia (2014) find for-profit students are most likely to talk with college financial aid officers but less likely than students in other sectors to talk with family and friends about financial aid. College financial aid officers may have competing incentives to both serve their employer and help students. Hoxby and Turner (2013) credit part of the success of the aforementioned college information program to the perceived trustworthiness of the information provider. Empowered high

school counselors may be able to serve a relatively impartial role, as could independent advisors who are not affiliated with specific colleges. Or, following recommendations from Hoxby and Turner (2013), an established third-party institution might be able to provide large-scale oversight and management of an information campaign while still maintaining neutrality.

Finally, although not unique in policy making, significant decisions about how to curb student loan defaults and evaluate school performance are being made without sufficient evidence to guide such determinations. Therefore, there is great need for researchers to continue efforts to analyze the causes of student loan default and the contribution of schools to this behavior. Also needed is a better understanding of the private and social returns to for-profit and vocational college programs, and if and to where students transfer when their preferred college is not eligible to disburse federal financial aid. With improved answers to these questions, researchers will be able to better inform policy making on inevitable reforms related to the use of student loan debt measures in financial aid regulation.

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REFERENCES

Akers, Beth, and Matthew M. Chingos. 2014. *Is a student loan crisis on the horizon?* Washington, DC: Brown Center on Education Policy, Brookings Institution.

Arcidiacono, Peter. 2004. Ability sorting and the returns to college major. *Journal of Econometrics* 121(1):343–375. doi:10.1016/j.jeconom.2003.10.010

Avery, Christopher, and Sarah Turner. 2012. Student loans: Do college students borrow too much—or not enough? *Journal of Economic Perspectives* 26(1):165–192. doi:10.1257/jep.26.1.165

Baum, Sandy, and Marie O'Malley. 2003. College on credit: How borrowers perceive their education debt. *Journal of Student Financial Aid* 33(3):7–19.

Baum, Sandy, and Kathleen Payea. 2013. *Trends in student aid 2013*. New York: College Board.

Bettinger, Eric P., Bridget T. Long, Philip Oreopoulos, and Lisa Sanbonmatsu. 2012. The role of application assistance and information in college decisions: Results from the H&R Block FAFSA experiment. *Quarterly Journal of Economics* 127(3):1205–1242. doi:10.1093/qje/qjs017

Betts, Julian R. 1996. What do students know about wages? Evidence from a survey of undergraduates. *Journal of Human Resources* 31(1):27–56. doi:10.2307/146042

Blumenstyk, Goldie. 2012. Nation's biggest for-profit colleges suffer enrollment declines. *Chronicle of Higher Education*, 11 March. Available http://chronicle.com/article/Big-For-Profit-Colleges-Suffer/131120. Accessed 20 January 2015.

Bohn, Sarah, Belinda Reyes, and Hans Johnson. 2013. *The impact of budget cuts on California's community colleges.* San Francisco, CA: Public Policy Institute of California.

Brewer, Dominic J., Eric R. Eide, and Ronald G. Ehrenberg. 1999. Does it pay to attend an elite private college? Cross cohort evidence on the effect of college quality on earnings. *Journal of Human Resources* 34(1):104–123. doi:10.2307/146304

Brown, Meta, and Sydnee Caldwell. 2013. Young student loan borrowers retreat from housing and auto markets. *Liberty Street Economics*, 17 April. Available http://libertystreeteconomics.newyorkfed.org/2013/04/young-student-loan-borrowers-retreat-from-housing-and-auto-markets.html#.VlktvXvmCVo. Accessed 20 January 2015.

Campaigne, David A., and Don Hossler. 1998. How do loans affect the educational decisions of students? Access, aspiration, college choice, and persistence. In *Condemning students to debt: College loans and public policy*, edited by Richard Fossey and Mark Bateman, pp. 85–104. New York: Columbia University Press.

Carneiro, Pedro, and James J. Heckman. 2002. The evidence on credit constraints in post-secondary schooling. *Economic Journal* 112(482):705–734. doi:10.1111/1468-0297.00075

Cellini, Stephanie Riegg. 2010. Financial aid and for-profit colleges: Does aid encourage entry? *Journal of Policy Analysis and Management* 29(3):526–552. doi:10.1002/pam.20508

Cellini, Stephanie Riegg, and Latika Chaudhary. 2012. The labor market returns to a for-profit college education. NBER Working Paper No. 18343.

Cellini, Stephanie Riegg, and Rajeev Darolia. 2014. College costs and financial constraints: Student borrowing at for-profit institutions. In *Student loans and the dynamics of debt*, edited by Brad J. Hershbein and Kevin Hollenbeck, pp. 173–216. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.

Cellini, Stephanie Riegg, and Claudia Goldin. 2012. Does federal student aid raise tuition? New evidence on for-profit colleges. NBER Working Paper No. 17827.

Congressional Research Service. 2007. *Institutional eligibility for participation in Title IV student aid programs under the Higher Education Act: Background and reauthorization issues. (Order Code RL33909)*. Washington, DC: Congressional Research Service.

Consumer Financial Protection Bureau (CFPB). 2014. *CFPB sues for-profit college chain ITT for predatory lending.* Available www.consumerfinance.gov/newsroom/cfpb-sues-for-profit-college-chain-itt-for-predatory-lending/. Accessed 18 August 2014.

Curs, Bradley R., Larry D. Singell Jr., and Glen R. Waddell. 2007. Money for nothing? The impact of changes in the Pell Grant program on institutional revenues

and the placement of needy students. *Education Finance and Policy* 2(3):228–261. doi:10.1162/edfp.2007.2.3.228

Darolia, Rajeev. 2013. Integrity versus access? The effect of federal financial aid availability on postsecondary enrollment. *Journal of Public Economics* 106:101–114. doi:10.1016/j.jpubeco.2013.08.001

Darolia, Rajeev, Cory Koedel, Paco Martorell, Katie Wilson, and Francisco Perez-Arce. 2014. Do employers prefer workers who attend for-profit colleges? Evidence from a field experiment. CALDER Working Paper No. 116, American Institutes for Research.

Deil-Amen, Regina, and James E. Rosenbaum. 2003. The social prerequisites of success: Can college structure reduce the need for social know-how? *Annals of the American Academy of Political and Social Science* 586(1):120–143. doi:10.1177/0002716202250216

Deming, David J., Claudia Goldin, and Lawrence F. Katz. 2012. The for-profit postsecondary school sector: Nimble critters or agile predators? *Journal of Economic Perspectives* 26(1):139–164. doi:10.1257/jep.26.1.139

Deming, David J., Noam Yuchtman, Amira Abulafi, Claudia Goldin, and Lawrence F. Katz. 2014. The value of postsecondary credentials in the labor market: An experimental study. NBER Working Paper No. 20528.

Dynarski, Mark. 1994. Who defaults on student loans? Findings from the National Postsecondary Student Aid Study. *Economics of Education Review* 13(1):55–68. doi:10.1016/0272-7757(94)90023-X

Dynarski, Susan. 2002. The behavioral and distributional implications of aid for college. *American Economic Review* 92(2):279–285. doi:10.1257/000282802320189401

Dynarski, Susan, and Judith Scott-Clayton. 2013. Financial aid policy: Lessons from research. *Future of Children* 23(1):67–91. doi:10.1353/foc.2013.0002

Ellwood, David, and Thomas K. Kane. 2000. Who is getting a college education: Family background and the growing gaps in enrollment. In *Securing the future*, edited by Sheldon Danzinger and Jane Waldfogel, pp. 283–324. New York: Russell Sage.

Federal Reserve Bank of New York. 2014. *Quarterly report on household debt and credit*. Available www.newyorkfed.org/regional/householdcredit.html. Accessed 13 August 2014.

Field, Erica. 2009. Educational debt burden and career choice: Evidence from a financial aid experiment at NYU Law School. *American Economic Journal: Applied Economics* 1(1):1–21.

Fuller, Andrea. 2010. Duncan says for-profit colleges are important to Obama's 2020 goal. *Chronicle of Higher Education*, 11 May. Available http://chronicle.com/article/Duncan-Says-For-Profit/65477/. Accessed 20 January 2015.

Gicheva, Dora. 2011. Does the student-loan burden weigh into the decision to start a family? Unpublished paper, University of North Carolina at Greensboro.

Glass, Stephen. 1995. *Hire education*. Accessed www.hoover.org/research/hire-education. Accessed 13 August 2014.

Greene, Laura L. 1989. An economic analysis of student loan default. *Educational Evaluation and Policy Analysis* 11(1):61–68. doi:10.3102/01623737011001061

Gross, Jacob P., Osman Cekic, Don Hossler, and Nick Hillman. 2009. What matters in student loan default: A review of the research literature. *Journal of Student Financial Aid* 39(1):19–29.

Guryan, Jonathan, and Matthew Thompson. 2010. *Report on gainful employment*. Tallahassee, FL: Charles River Associates.

Hastings, Justine S., and Jeffrey M. Weinstein. 2008. Information, school choice, and academic achievement: Evidence from two experiments. *Quarterly Journal of Economics* 123(4):1373–1414. doi:10.1162/qjec.2008.123.4.1373

Hechinger, John. 2013. Apollo profit tops analysts' estimates even as enrollment slides. *Bloomberg Businessweek*, 22 October. Available www.bloomberg.com/news/2013-10-22/apollo-profit-tops-analysts-estimates-even-as-enrollment-slides.html. Accessed 20 January 2015.

Heller, Donald E. 2008. The impact of student loans on college access. In *The effectiveness of student aid policies: What the research tells us*, edited by Sandy Baum, Michael McPherson, and Patricia Steele, pp. 39–67. New York: The College Board.

Hillman, Nick. 2014. College on credit: A multi-level analysis of student loan default rates. *Review of Higher Education* 37(2):169–195. doi:10.1353/rhe.2014.0011

Hoxby, Caroline M., and Sarah Turner. 2013. Informing students about their college options: A proposal for broadening the expanding college opportunities project. Hamilton Project Discussion Paper 2013–03. Washington, DC: Brookings Institution.

Ionescu, Felicia, and Marius Ionescu. 2012. The interplay between student loans and credit card debt: Implications for default in the Great Recession. Human Capital and Economic Opportunity FEDS Working Paper No. 2014–14.Washington, DC: Board of Governors of the Federal Reserve System.

Kane, Thomas J., and Cecilia E. Rouse. 1995. Labor market returns to two- and four-year college. *American Economic Review* 85(3):600–614.

Keller, Josh. 2011. Facing new cuts, California's colleges are shrinking their enrollments. *Chronicle of Higher Education*, 13 January. Available http://chronicle.com/article/Facing-New-Cuts-Californias/125945/. Accessed 20 January 2015.

Knapp, Laura G., and Terry G. Seaks. 1992. An analysis of the probability of default on federally guaranteed student loans. *Review of Economics and Statistics* 74(3):404–411. doi:10.2307/2109484

Lang, Kevin, and Russell Weinstein. 2013. The wage effects of not-for-profit and for-profit certifications: Better data, somewhat different results. NBER Working Paper No. 19135.

Legal Information Institute. 2011. *20 U.S. Code Sec. 1001-General definition of institution of higher education*. Available www.law.cornell.edu/uscode/text/20/1001. Accessed 18 August 2014.

Leslie, Larry L., and Paul T. Brinkman. 1987. Student price response in higher education. *Journal of Higher Education* 58(2):181–204. doi:10.2307/1981241

Lucas, Deborah, and Damien Moore. 2007. Guaranteed versus direct lending: The case of student loans. In *Measuring and managing federal financial risk*, edited by Deborah Lucas, pp. 163–205. Chicago: University of Chicago Press.

Monteverde, Kirk. 2000. Managing student loan default risk: Evidence from a privately guaranteed portfolio. *Research in Higher Education* 41(3):331–352. doi:10.1023/A:1007090811011

Moretti, Enrico. 2004. Estimating the social return to higher education: Evidence from longitudinal and repeated cross-sectional data. *Journal of Econometrics* 121(1):175–212. doi:10.1016/j.jeconom.2003.10.015

National Center for Education Statistics (NCES). 2013. *Digest of education statistics: 2012*. Washington, DC: U.S. Department of Education, Institute of Education Sciences.

The New York Times. 2012. For-profit education scams [editorial]. 23 March. Available www.nytimes.com/2012/03/24/opinion/for-profit-education-scams.html. Accessed 20 January 2015.

Pearson Foundation. 2011. *Second annual Pearson Foundation community college student survey*. Available www.pearsonfoundation.org/downloads/PF_CC_Survey_2011_Summary.pdf. Accessed 13 August 2014.

Perna, Laura W. 2003. The private benefits of higher education: An examination of the earnings premium. *Research in Higher Education* 44(4):451–472. doi:10.1023/A:1024237016779

Podgursky, Michael, Mark Ehlert, Ryan Monroe, Donald Watson, and John Wittstruck. 2002. Student loan defaults and enrollment persistence. *Journal of Student Financial Aid* 32(3):27–42.

Program Integrity. 2011. Gainful employment-debt measures. *Federal Register* 76 (113):34,386–34,539.

Rothstein, Jesse, and Cecilia E. Rouse. 2011. Constrained after college: Student loans and early-career occupational choices. *Journal of Public Economics* 95(1):149–163.

Seftor, Neil S., and Sarah Turner. 2002. Back to school: Federal student aid policy and adult college enrollment. *Journal of Human Resources* 37(2):337–352. doi:10.2307/3069650

Stratford, Michael. 2014. Ratings strategy with a cost? *Insider Higher Ed*, 3 March. Available www.insidehighered.com/news/2014/03/03/college-ratings-proposal-already-leading-one-university-change-admissions-standards. Accessed 20 January 2015.

Turner, Sarah E. 2006. For-profit colleges in the context of the market for higher education. In *Earnings from learning: The rise of for-profit universities*, edited by David W. Breneman, Brian Pusser, and Sarah E. Turner, pp. 51–70. Albany, NY: State University of New York Press.

U.S. Committee on Senate Health, Education, Labor, and Pension. 2012. *For profit higher education: The failure to safeguard the federal investment and ensure student success.* Washington, DC: Government Printing Office.

U.S. Government Accountability Office (GAO). 2005. *Federal student loans: Challenges in estimating federal subsidy costs (Publication No. GAO-05–874).* Washington, DC: U.S. Government Accountability Office.

U.S. Government Accountability Office (GAO). 2010. *For-profit colleges: Undercover testing finds colleges encouraged fraud and engaged in deceptive and questionable marketing practices (Publication No. GAO-10–948T).* Washington, DC: U.S. Government Accountability Office.

Volkwein, J. Fredericks, and Bruce P. Szelest. 1995. Individual and campus characteristics associated with student loan default. *Research in Higher Education* 36(1):41–72. doi:10.1007/BF02207766

Volkwein, J. Fredericks, Bruce P. Szelest, Alberto F. Cabrera, and Michelle R. Napierski-Prancl. 1998. Factors associated with student loan default among different racial and ethnic groups. *Journal of Higher Education* 69(2):206–237. doi:10.2307/2649206

Wasik, John. 2013. Three reasons why college bubble will burst. *Forbes,* 4 September. Available www.forbes.com/sites/johnwasik/2013/09/04/three-reasons-why-college-bubble-will-burst/. Accessed 20 January 2015.

Wilms, Wellford W., Richard W. Moore, and Roger E. Bolus. 1987. Whose fault is default? A study of the impact of student characteristics and institutional practices on guaranteed student loan default rates in California. *Educational Evaluation and Policy Analysis* 9(1):41–54. doi:10.3102/01623737009001041

Wiswall, Matthew, and Basit Zafar. 2013. How do college students respond to public information about earnings? New York: Federal Reserve Bank of New York Staff Report No. 516.

Wolfe, Barbara, and Robert Haveman. 2003. Social and nonmarket benefits from education in an advanced economy. In *Education in the 21st century: Meeting the challenges of a changing world* (conference proceedings), edited by Yolanda Kodrzycki, pp. 97–142. Boston, MA: Federal Reserve Bank of Boston.

Woo, Jennie H. 2002. Factors affecting the probability of default: Student loans in California. *Journal of Student Financial Aid* 32(2):5–23.