

# Journal of Student Financial Aid

---

Volume 45 | Issue 1

Article 2

---

4-1-2015

## Paying for Default: Change Over Time in the Share of Federal Financial Aid Sent to Institutions with High Student Loan Default Rates

Ozan Jaquette

*University of Arizona*, [ozanj@email.arizona.edu](mailto:ozanj@email.arizona.edu)

Nicholas W, Hillman

*University of Wisconsin - Madison*, [nwhillman@wisc.edu](mailto:nwhillman@wisc.edu)

Follow this and additional works at: <https://ir.library.louisville.edu/jsfa>

Part of the [Higher Education Commons](#)

---

### Recommended Citation

Jaquette, Ozan and Hillman, Nicholas W, (2015) "Paying for Default: Change Over Time in the Share of Federal Financial Aid Sent to Institutions with High Student Loan Default Rates," *Journal of Student Financial Aid*: Vol. 45 : Iss. 1 , Article 2.

Available at: <https://ir.library.louisville.edu/jsfa/vol45/iss1/2>

This Research Article is brought to you for free and open access by ThinkIR: The University of Louisville's Institutional Repository. It has been accepted for inclusion in *Journal of Student Financial Aid* by an authorized administrator of ThinkIR: The University of Louisville's Institutional Repository. For more information, please contact [thinkir@louisville.edu](mailto:thinkir@louisville.edu).

---

# Paying for Default: Change Over Time in the Share of Federal Financial Aid Sent to Institutions with High Student Loan Default Rates

## **Cover Page Footnote**

We thank Association of Institutional Research for providing dissertation funding to create the original analysis dataset this manuscript is based on and to the Spencer Foundation for providing funding to improve this analysis dataset. We thank four reviewers for extremely thoughtful reviews, which helped us strengthen the manuscript.

# Paying for Default: Change over Time in the Share of Federal Financial Aid Sent to Institutions with High Student Loan Default Rates

By Ozan Jaquette and Nicholas W. Hillman

*Both federal spending on financial aid and student loan default rates have increased over the past decade. These trends have intensified policymakers' concerns that some postsecondary institutions—particularly in the for-profit sector—maximize revenue derived from federal financial aid without helping students to graduate or find employment. Prior studies have analyzed federal financial aid disbursements and student loan default rates in isolation from one another. Therefore, little is known about how much federal aid flows through colleges with high student loan default rates. The present study examines change over time and across sectors in the share of federal financial aid disbursed to institutions with “low,” “medium,” and “high” student loan default rates. We found that the share of federal student aid flowing through colleges with medium and high student loan default rates increased substantially from 2007-08 to 2012-13, but declined in 2013-14 as the national job market improved. However, the reduction in federal financial aid disbursed to for-profit institutions with high student loan default rates occurred prior to the national job-market recovery, suggesting that federal regulations helped to divert federal financial aid from poor-performing institutions.*

**Keywords:** *Student loan default, federal financial aid, proprietary institutions, federal policy*

Over the past decade, the total volume of outstanding student loan debt has tripled and is now over \$1 trillion (Federal Reserve Bank of NY, 2014). Federal expenditure on financial aid has also increased dramatically, particularly expenditure on the Federal Pell Grant program, which has doubled since the Great Recession (Congressional Budget Office, 2013). At the same time, student loan default rates have been on the rise. Today, approximately one in seven borrowers (13.7%) defaults within three years of entering repayment (Federal Student Aid, 2013b). Federal policymakers are concerned about these trends because financial aid programs are costly to the federal government and because debt and default have long-term negative consequences for students. They are also concerned that some colleges, particularly in the for-profit sector, maximize the revenue derived from federal aid programs without helping students graduate or find employment (U.S. Department of Education, 2010).

As colleges increasingly rely on students and their associated financial aid dollars as a source of revenue, it becomes more important to document how federal aid flows through various sectors of higher education (Hossler, 2006; Sridharam, 2012). One way the federal government monitors and regulates this flow of funds is through the Cohort Default Rate (CDR) policy. CDR policy rewards and penalizes colleges according to the percentage of borrowers who default. If rates are too high, colleges can lose access to all federal financial aid, which consequently affects their revenue streams. The purpose of this study is to examine how much federal aid flows through colleges with different levels of CDRs.

---

*Ozan Jaquette is assistant professor in the Department of Educational Policy Studies and Practice, University of Arizona. Nicholas W. Hillman is assistant professor in the Department of Educational Leadership and Policy Analysis, University of Wisconsin - Madison.*

This study is important because CDR policy is one of the few regulatory tools the federal government has to ensure that colleges are accountable for the aid they disburse. Therefore, the analyses presented here provide an assessment of how well this accountability system is working, and these analyses may even inform debates about how CDR policy could be revised in the future. This study is also important because default is costly to students. Borrowers cannot discharge their federal student loans in bankruptcy and there is no statute of limitations on collecting them. When borrowers default, they face a wide range of additional penalties, including lower credit scores, garnishing of wages and tax refunds, and the payment of collection agency fees (Cunningham & Kienzl, 2011; Loonin, 2006). Because defaulting on federal student loans has such high costs for students, it is important to examine the extent to which institutions with high rates of student loan default are receiving a large share of federal financial aid disbursements.

Despite the recent increase in CDRs, particularly in the for-profit sector (Sridharam, 2012), little is known about how much federal aid flows through colleges with high student loan default rates because prior studies have analyzed federal financial aid disbursements and CDRs in isolation from one another. Therefore, the present study offers a new perspective on how well the federal financial aid system is working by asking: To what extent is federal student aid disbursed among colleges with “low,” “medium” and “high” CDRs? Furthermore, has this changed over time and how do these trends differ across sectors?

## Policy Background and Conceptual Framework

Title IV of the 1965 Higher Education Act created the modern federal financial aid system (Heller, 2011). Therefore, federal financial aid is often called Title IV financial aid and institutions eligible to enroll students receiving Title IV financial aid are Title IV institutions. Aside from research funding, Title IV financial aid is the primary source of federal funding for higher education, with total annual expenditures (excluding tax benefits) increasing from \$76 billion in 2002-03 to \$158 billion in 2011-12 (2012 CPI; College Board, 2013). Title IV financial aid also represents the primary policy lever by which the federal government compels Title IV institutions to focus on federal policy goals.

### *Principal Agent Theory and Federal Financial Aid*

The federal financial aid system can be usefully analyzed through the lens of principal agent theory (PAT). According to PAT, a goal-oriented principal enters into contractual agreements with agents charged with delivering these goals (Hansmann, 1996; Lane & Kivisto, 2008). However, self-interest may drive an agent's goals, which as a result can run contrary to those of the principal. To mitigate this risk, principals may engage in several strategies to reduce agent behaviors that run contrary to the goals of the principal. For example, principals develop rules designed to control an agent's behavior, and then the two parties negotiate contracts specifying these rules. After an agent signs the contract, principals monitor agent behavior to ensure the agent does not shirk on its responsibility. Monitoring can be costly and regulations are often difficult to enforce, so there are significant transaction costs embedded within principal-agent agreements (Waterman & Meier, 1998). Therefore, principals often develop “incentive-based contracts” where payment depends on performance, thereby creating incentives for agents to pursue goals valued by the principal.

PAT is useful for developing insights about federal financial aid policy because the relationship between the federal government and postsecondary institutions is a principal-agent relationship. The federal government is the principal that pursues policy goals related to student outcomes (e.g., college access, degree completion, gainful employment) and enters into contractual agreements with postsecondary institutions (agents) to achieve these goals. Specifically, the program participation agreement (PPA) is a contract created by the federal government that specifies the regulatory requirements for gaining and maintaining Title IV eligibility (Congressional Research Service, 2007). After signing the PPA, a postsecondary institution becomes a Title

IV institution that is eligible to enroll students receiving Title IV financial aid. This arrangement creates a national voucher system in that non-campus based federal financial aid flows to whatever Title IV institution students choose to attend (Alexander, 1998; Kane, 1996). Institutions receive a portion of federal financial aid disbursed to students to pay for tuition, fees, etc., representing a significant revenue source for many Title IV institutions.

### *Policy Debates about Title IV Eligibility*

There is considerable debate about the extent to which the federal government should hold Title IV institutions accountable for the outcomes of students they enroll. On one side of the debate, proponents of strong federal policy and performance accountability are concerned that some Title IV institutions may focus on maximizing revenue from Title IV financial aid instead of focusing on student outcomes valued by the federal government, such as degree completion and gainful employment. For example, Senator Harkin's investigation of for-profit schools (Lewin, 2012) and the Department of Education's gainful employment rulemaking have become focal points of reform efforts (U.S. Department of Education, 2010, 2014). Given these concerns, PAT suggests that the federal government should create incentives for Title IV institutions to focus on student outcomes by developing regulations that hold institutions accountable for meeting certain standards on student outcomes.

Critics of policies that tie institutional Title IV eligibility to student outcomes argue that differences in student outcomes across institutions are primarily due to differences in student inputs rather than differences in institutional behavior (e.g., Guryan & Thompson, 2014; Shapiro & Pham, 2010). For example, Princeton University students would likely have strong employment outcomes regardless of the quality of education provided simply because Princeton selects students who are likely to succeed in the labor market. By contrast, an open-admissions college that provides all students with a high-quality education could have weak employment outcomes because of the characteristics of the students they serve. In addition, critics argue student employment outcomes are sensitive to economic trends that are beyond the control of institutions (Guryan & Thompson, 2014). For example, during the Great Recession the national unemployment rate increased from 4.7% in Nov. 2007 to 10% in Oct. 2009, and remained above 8% until Sept. 2012, making it difficult for degree completers to find jobs. Also, critics argue that holding institutions accountable for student outcomes (without adjusting for students inputs) creates an incentive for institutions to decrease access for underprepared students (Cunha & Miller, 2014).

Regardless of which side of the debate one is on, CDR policy is currently the only Title IV regulation that conditions institutional Title IV eligibility on student outcomes (Federal Student Aid, 2013a). CDRs measure the proportion of an institution's borrowers who default on federal student loans within a specified period. In 1990, Congress passed legislation whereby institutions lost Title IV eligibility if two-year CDRs—which defined default as defaulting within two fiscal years of entering repayment—exceeded 40% for one year or exceeded 25% for three consecutive years (Two Year Cohort Default Rates, 2013). Federal policy recently transitioned to three-year CDRs, whereby institutions lose Title IV eligibility if three-year CDRs exceed 40% for one year or exceed 30% for three consecutive years; alternatively, colleges with three-year CDRs below 15% are given greater flexibility for disbursing aid (Cohort Default Rates, 2013).

In addition to these changes to CDR policy, the Obama Administration initiated other important changes to federal financial aid. The American Recovery and Reinvestment Act of 2009 dramatically increased Pell Grant funding and represented a policy shift from an emphasis on loans to an emphasis on grants. Additionally, starting on July 1, 2010, the Health Care and Education Reconciliation Act eliminated the federally guaranteed Federal Family Education Loan Program (FFELP), with all new loans being made through the Direct Loan program. However, as political debate about the federal deficit intensified, Congress eliminated the year-round Pell Grant, effective July 1, 2011, (New America Foundation, 2014). Further, effective July 1,

2012, the Budget Control Act of 2011 made students without a high school diploma or a GED ineligible for Pell Grants, reduced the number of semesters a full-time student is allowed to receive Pell from 18 to 12, and eliminated subsidized federal student loans for graduate students.

The Obama Administration has been unsuccessful in passing major regulations that more closely tie Title IV funding to institutional performance on student outcomes. First, the proposed “gainful employment rule” would condition the Title IV eligibility of career and vocational programs on the employment outcomes of program graduates (e.g., “debt to earnings ratios”). However, lawsuits from the for-profit sector have blocked its implementation and future prospects for the rule remain unclear (Fain, 2013; Field, 2014b). Second, the Obama Administration proposed the creation of a postsecondary institution rating system (PIRS) that eventually would be tied to Title IV funding (The White House, 2013). In recognition that differences in student inputs affect institution-level student outcomes, the system would rate institutions on student outcomes after controlling for differences in student inputs. However, future prospects for the rating system also remain unclear (Field, 2014c).

## Literature Review

### *Literature on Student Loan Default*

Because this paper focuses on the intersection between student loan default and the allocation of Title IV financial aid to institutions, we review research on student loan default and on federal student aid. Student loan default became a policy concern in the 1980s (Sommer, 1995), leading to the collection of data on CDRs and the emergence of empirical literature on the determinants of default. CDRs declined throughout the 1990s but began to increase again in the 2000s, leading to a resurgence in empirical research on default.

Early studies tended to focus on student characteristics associated with default. Studies found that default rates were relatively higher for African American students (e.g., Greene, 1989; Woo, 2002), for students with dependent children (e.g., Volkwein & Szelest, 1995), for students from households with low income or low parental education (e.g., Knapp & Seaks, 1992; Volkwein & Cabrera, 1998), for students with low levels of pre-collegiate academic achievement (e.g., Dynarski, 1994), and for students who did not complete their postsecondary program of study or who were unemployed (e.g., Hillman, 2014b). Summarizing this empirical literature, Monteverde (2000, p. 337) stated that:

[T]he determinants of student loan default are primarily borrower-based rather than linked, in any causal manner, to the borrowers’ school-of-attendance. Where there is a relationship detected between a category of school and high default rates, it is not because “offending” schools are causing defaults. High default schools are those who attract students with a high likelihood to default. Default proclivity is a pre-existing condition.

However, more recent studies have found a systematic relationship between institutional characteristics and the probability of default, even after controlling for student characteristics associated with default (Gross, Cekic, Hossler, & Hillman, 2009; Webber & Rogers, 2014). This research suggests that default is not simply due to students’ backgrounds or the economic conditions of the day. Rather, the type of college a student attends explains substantial variation in default. One consistent finding is that the probability of default is highest for students attending for-profit colleges (Deming, Goldin, & Katz, 2012; Hillman, 2014b). Similarly, Belfield (2013), who analyzed institutional repayment rate (i.e., the proportion of outstanding debt paid by the cohort), rather than default rates, found that repayment rates were lowest at for-profit colleges. This new line of research suggests “supply-side” factors (e.g., institutional characteristics and behaviors) are

often more important predictors of default than “demand-side” factors (e.g., student characteristics and behaviors).

### ***Literature on the Supply of Federal Aid***

The majority of supply-side studies on federal financial aid analyze the relationship between the availability of aid and changes in tuition. These studies are primarily concerned with testing the Bennett Hypothesis, which argues that colleges are rent-seekers; they respond to expansions of federal and state financial aid by raising tuition price in order to capture the government subsidy (Bennett, 1987). Singell and Stone (2007) found that private nonprofit institutions raised tuition price nearly one dollar for each dollar increase in Pell Grant per recipient. Public universities did not raise in-state tuition in response to increases in Pell Grant awards but did increase out-of-state tuition price. Similarly, Cellini and Goldin (2014) found that for-profit colleges eligible for federal financial aid charged higher tuition than for-profit colleges that were ineligible for aid, suggesting that the Bennett Hypothesis may be true for the for-profit sector. Additionally, the supply of federal aid may not only affect tuition price, but also institutional financial aid offers. Turner (2014) found that increases in Pell Grants induce colleges to spend less on institutional aid, with the greatest reductions occurring in private nonprofit colleges.

A second supply-side literature offers a descriptive overview of changes in federal financial aid over time. The College Board’s annual *Trends in Student Aid* report shows the long-term trends in federal financial aid expenditure, and it also shows how federal aid is disbursed across various sectors over time. For example, in the 2012-13 academic year, public two-year institutions enrolled 30% of total FTE undergraduate students and disbursed 33% of all Pell Grant aid, 15% of all Direct Subsidized Loans, and 7% of all Direct Unsubsidized Loans (College Board, 2013). Public four-year institutions enrolled 41% of all FTE undergraduate students and disbursed 32% of all Pell Grant aid, 41% of all Direct Subsidized Loan aid, and 39% of all Direct Unsubsidized Loan aid. For-profit institutions enrolled 12% of all FTE undergraduate students and disbursed 21% of all Pell Grant aid, 21% of all Direct Subsidized Loan Aid, and 21% of all Direct Unsubsidized Loan Aid.

Our review of research on student loan default and supply-side studies of federal financial aid reveals that few studies have analyzed the intersection between these two literatures. Despite growth over the past decade in student loan default rates and the amount of Title IV aid flowing to institutions, scholars have not examined change over time in the amount of Title IV grants and loans flowing to institutions with high rates of student loan default. The present study addresses this research gap by conducting analyses that integrate institution-level data on Title IV aid disbursement with institution-level data on CDRs.

## **Data, Variables, and Methods**

### ***Data and Sample***

*Data.* We created a panel analysis dataset that merged institution-level data from three sources: (1) the Integrated Postsecondary Education Data System (IPEDS); (2) data from the Office of Federal Student Aid (FSA) on Title IV financial aid disbursements; and (3) FSA data on three-year CDRs. All financial data was inflation-adjusted to 2012 dollars using the Consumer Price Index.

*Analysis sample.* The analysis sample was the universe of Title IV institutions. A Title IV institution may be a single-campus institution or a multi-campus institution with a main campus and one or more branch campuses. The analysis dataset consisted of one observation per academic year for each Title IV institution, regardless of whether the Title IV institution was a stand-alone campus or a multi-campus institution. As an

example, Rutgers University is a multi-campus Title IV institution, with the main campus at New Brunswick and branch campuses at Camden and Newark. The analysis dataset contained one observation per academic year for Rutgers University and each of these observations contained data from all three Rutgers campuses.

*Analysis period.* The analysis period was 2007-08 to 2013-14 due to the availability of three-year CDR data. When possible, we utilized a longer analysis period for descriptive statistics that did not require three-year CDR data.

## **Variables**

*IPEDS variables.* The IPEDS variable “sector” is collected through the Institutional Characteristics survey component; this is a nine-category variable that combines ownership control (public, private nonprofit, and for-profit) and highest degree awarded (baccalaureate or above, associate’s degree, and less-than-associate’s degree.). The “FTE enrollment” variable is based on total instructional activity from the 12-Month Enrollment component of IPEDS. Academic programs typically measure instructional activity in credit hours, while vocational programs often measure instructional activity in contact hours. We converted credit hours and contact hours to FTE enrollments using the standard formula described by the National Center for Education Statistics (2013). This conversion enabled us to compare different institutions on the basis of total instructional activity, measured in terms of FTE enrollment.

*Title IV financial aid disbursement variables.* We created two measures of Title IV disbursements. First, the measure of total Title IV grants disbursed represented the annual sum of Title IV financial aid disbursed from the following grant programs: Pell, TEACH, National Smart, Academic Competitiveness, and the Iraq/Afghanistan Service (for children of deceased veterans). This measure excludes Reserve Officers’ Training Corps (ROTC) and Montgomery GI Bill scholarships.

Second, the measure of total Title IV loans represented the annual sum of loans disbursed under the Federal Family Education Loan (FFEL) program, discontinued in 2010-11, and the Direct Loan (DL) program. The specific loan types included within both the FFEL and DL programs were subsidized, unsubsidized, Parent PLUS, and Grad PLUS. Note that we measured loans disbursed rather than loans awarded (students may elect a disbursement amount lower than the award amount).

Campus-based programs, specifically Federal Perkins Loan, Federal Work Study, and Federal Supplemental Educational Opportunity Grant, were not included in the measures of Title IV grants and loans because data on campus-based programs were not publicly available for all years of the analysis period. However, campus-based programs represent a small proportion of Title IV financial aid disbursements. For example, in 2011-12, the sum of all campus-based disbursements was \$3.0 billion and the sum of total Title IV loans was \$104.4 billion (authors’ calculation, 2012 CPI).

*Cohort Default Rate (CDR) variables.* The federal government recently transitioned from two-year CDRs to three-year CDRs (Federal Student Aid, 2014b). We created measures of both two-year and three-year CDRs, but only report results for three-year CDRs here. Results for two-year CDRs are available upon request.

CDRs are calculated as the number of borrowers who entered repayment and defaulted (numerator) divided by a measure of the number of borrowers who entered repayment (denominator) during a given fiscal year. For example, the 2010 federal fiscal year ran from Oct. 1, 2009, to Sept. 30, 2010, so the denominator for 2010 three-year CDRs was the number of borrowers who entered repayment at some point from Oct. 1, 2009, to Sept. 30, 2010. The numerator for 2010 three-year CDRs was the number of borrowers who entered repayment during the Oct. 1, 2009, to Sept. 30, 2010, period and who defaulted at some point during the Oct. 1, 2009, to Sept. 30, 2012 period.



Additional CDR policy details describe which loans are included in CDR calculations, the definition of default, and the CDR formula for institutions with less than 30 borrowers entering repayment (Federal Student Aid, 2014b). The CDR calculation includes Subsidized and Unsubsidized Stafford Loans disbursed under the FFEL program and DL program and excludes loans from the following programs: Parent PLUS (DL and FFEL), Grad PLUS (DL and FFEL), Federal Insured Student Loans, and Federal Perkins Loans. If a Title IV institution has fewer than 30 borrowers entering repayment during a fiscal year, the official CDR reflects the average of the CDRs from the prior three fiscal years.

We established cut-points for low, medium, and high three-year CDRs based on CDR policy rules (Federal Student Aid, 2014b). We defined low CDRs as below 15% because institutions with CDRs below 15% benefit from more favorable loan terms. For example, if a Title IV institution's three most recent three-year CDRs are below 15%, it may disburse loans for an entire semester/trimester/quarter in a single installment and is exempt from the 30-day delayed disbursement rule for first-time borrowers. We defined CDRs between 15% and 30% as medium CDRs, and CDRs greater than 30% as high CDRs because institutions with three-year CDRs in excess of 30% for three consecutive years lose their Title IV eligibility.

### *Types of Methods*

Since the purpose of the paper is to examine descriptive trends, rather than make causal statements, we conducted descriptive analyses rather than regression analyses. Because the analysis sample consisted of the population of Title IV institutions, rather than a sample of Title IV institutions, we conducted non-inferential descriptive analyses rather than inferential descriptive analyses.

### **Limitations**

This paper has two important limitations. First, the analyses presented here provide a “forest-level” view of changes over time and differences across sector; they do not examine trends for specific institutions. For example, while the for-profit, four-year sector consists of institutions that vary dramatically in size and in curricular focus, our analyses do not show how trends in Title IV disbursement and CDRs differ across individual institutions within this sector.

Second, the purpose of the paper is to show descriptive trends rather than the identification of causal factors affecting these trends. Our descriptive analyses cannot determine the extent to which changes in the economy, changes in federal policy that affected the behavior of Title IV institutions, or changes in the quality of loan servicing by the federal government drove time trends in CDRs. As an example, starting in 2009 the U.S. Department of Education transitioned from a single loan servicer that serviced all Direct Loans to four loan-servicing organizations. Several high-profile lawsuits have documented inappropriate practices by these new loan servicers that may contribute to higher CDRs (NCLC & SLBA, 2014). However, our analyses do not show the extent to which changes in CDRs were due to the behavior of loan servicers.

### **Results**

To contextualize our results, we begin by showing trends over time and across sectors in enrollment, aid disbursement, and CDRs. These trends provide helpful context for our key research question: How does the amount of federal financial aid disbursed at Title IV institutions with low, medium, and high CDRs change over time and differ across sectors?

*Trends in FTE Enrollment by Sector*

Table 1 shows change over time in total FTE enrollment by sector at Title IV-eligible institutions. Total FTE enrollment increased from about 12.1 million in 1999-00 to about 14.6 million in 2006-7. Consistent with research on college enrollment and labor market conditions (e.g., Dellas & Sakellaris, 2003; Hillman & Orians, 2013), total enrollment increased to 18.4 million in 2010-11 following the Great Recession, but declined to 17.0 million in 2012-13 as economic conditions improved. Total enrollment at for-profit institutions increased dramatically from 835,000 in 1999-00 (6.9% of total FTE enrollment) to 2.7 million in 2010-11 (14.7% of total FTE enrollment), but declined to 2.2 million by 2012-13 (12.9% of total FTE enrollment).

**Table 1. Total FTE Enrollment, Based on 12-Month Instructional Activity, by Sector for Title IV-Eligible Institutions**

	Four-year institutions			Two-year institutions			Less than two-year institutions			Total
	Public	Non-profit	For-profit	Public	Non-profit	For-profit	Public	Non-profit	For-profit	
1999-00	5,003,217	2,415,941	234,635	3,702,385	78,021	362,033	39,305	7,192	238,061	12,080,790
2000-01	5,017,126	2,489,191	369,283	3,646,773	67,042	394,713	38,841	15,573	186,781	12,225,323
2001-02	5,337,238	2,733,086	366,369	3,916,501	61,270	407,835	58,928	15,165	324,419	13,220,811
2002-03	5,491,396	2,806,485	417,650	4,157,748	68,650	478,723	58,246	24,968	448,080	13,951,946
2003-04	5,652,590	2,898,245	532,823	4,072,880	56,166	498,287	52,815	23,727	368,743	14,156,276
2004-05	5,705,099	2,920,710	651,099	4,103,163	56,673	552,673	53,759	19,674	500,322	14,563,172
2005-06	5,801,537	2,951,509	728,394	4,035,516	55,564	455,178	39,862	17,309	308,929	14,393,798
2006-07	5,941,135	2,986,095	802,534	4,075,830	49,637	433,207	47,552	16,792	300,172	14,652,954
2007-08	6,139,596	3,108,191	963,121	4,266,232	42,263	472,678	69,062	17,569	419,368	15,498,080
2008-09	6,339,884	3,245,005	1,237,465	4,535,967	46,480	467,303	61,082	16,903	360,267	16,310,356
2009-10	6,762,250	3,482,352	1,519,317	4,942,046	49,736	615,034	61,578	18,175	420,032	17,870,520
2010-11	6,967,028	3,590,015	1,623,789	4,980,570	47,752	680,449	59,154	16,119	392,415	18,357,291
2011-12	6,816,176	3,366,303	1,523,202	4,680,342	59,346	561,587	48,461	15,550	383,533	17,454,500
2012-13	6,787,689	3,363,270	1,366,989	4,567,728	54,257	478,244	46,697	12,128	344,456	17,021,458
<b>Number of Title IV Institutions</b>										
1999-00	575	1,442	123	1,104	253	635	237	59	1,097	5,525
2012-13	618	1,490	240	1,006	153	649	239	56	1,202	5,653

### *Trends in Title IV Disbursements*

*Student loan volume.* To conserve space, the remaining tables aggregate two-year and less-than-two year institutions (hereafter two-year-or-less institutions). Table 2 shows Title IV loan disbursement by consolidated sector. The top panel of Table 2 shows total Title IV loan disbursement (\$billions, 2012 CPI) and the bottom panel shows median Title IV loans disbursed per FTE student. Trends in total loan disbursement largely mirror enrollment trends; total loan disbursement reached a peak of \$105.8 billion in 2010-11 when national unemployment was high, and then declined to \$91.3 billion by 2012-13 as the job-market improved. Looking at specific sectors, total loan disbursement at community colleges increased substantially, from \$1.9 billion in 1999-00 (5% of all loans) to \$8.6 billion in 2011-12 (8% of all loans). Total loan disbursements at for-profits increased dramatically from \$4.6 billion in 1999-00 (11% of all loans) to \$26.0 billion in 2009-10 (25% of all loans) but, mirroring the enrollment decline in the for-profit sector, declined to \$15.4 billion by 2012-13 (17% of all loans).

*Grant volume.* Table 3 shows that total Title IV grant disbursements increased from \$9.0 billion in 1999-00 to \$15.4 billion in 2007-08. The American Recovery and Reinvestment Act of 2009 dramatically increased total Title IV grant funding—from \$19.3 billion in 2008-09 to \$31.3 billion in 2009-10 to \$36.3 billion in 2010-11—and increased the median grant amount received per student. However, total grant funding decreased to \$32.5 billion in 2011-12, following elimination of the year-round Pell Grant, and further decreased to \$30.4 billion in 2012-13, following restrictions in Pell eligibility mandated by the Budget Control Act of 2011. Note that in each year, Pell Grants represent more than 99.5% of federal grant expenditures in student aid.

Public universities and community colleges collectively accounted for the majority of federal grant aid disbursed (71% of all grant aid in 1999-00 and 67% of all grant aid in 2013-14). Grant disbursements at for-profits increased sharply from \$1.1 billion in 1999-00 (12.4% of all grant aid) to \$8.8 billion in 2010-11 (24.4% of all grant aid), with the majority of this growth occurring in the for-profit four-year sector. However, grant aid to for-profits declined to \$5.7 billion in 2013-14.

### *Trends in Three-Year Cohort Default Rates (CDRs)*

Table 4 shows median three-year CDRs over time by sector.<sup>1</sup> It also shows the average national unemployment rate during the three-year default window associated with each CDR. (See Appendix for additional context showing change over time in the number of students entering repayment and the number of students who defaulted.) Across all sectors, the median CDR for the 2005 fiscal year (i.e., students who entered repayment from Oct. 1, 2004, to Sept. 30, 2005, and had a three-year default window of Oct. 1, 2004, to Sept. 30, 2007) was 8.0%. The median CDR for the 2007 fiscal year was 11.2%. One explanation for this increase may be that the average unemployment rate was 6.1% during the default window for 2007 fiscal year CDRs (Oct. 1, 2006, to Sept. 30, 2009) compared to an unemployment rate of 4.8% during the default window for 2005 fiscal year CDRs (Oct. 1, 2004, to Sept. 30, 2007). For 2010 fiscal year CDRs, the median CDR was 11.6% and the average unemployment rate was 9.1%. For 2011 fiscal year CDRs, the median CDR declined to 9.6% and the average unemployment rate was 8.3%

**Table 2. Title IV Loan Disbursement by Sector (2012 CPI)**

	Total Title IV loans disbursed (\$billions)						
	Four-year institutions			Two-year-or-less institutions			Total
	Public	Nonprofit	For-profit	Public	Nonprofit	For-profit	
1999-00	18.6	16.2	2.0	1.9	0.3	2.5	41.5
2000-01	18.5	16.5	2.5	1.9	0.3	2.7	42.4
2001-02	19.8	17.4	3.2	2.2	0.3	3.0	45.8
2002-03	21.9	19.1	4.3	2.7	0.3	3.3	51.6
2003-04	24.2	20.6	5.5	3.2	0.3	3.8	57.6
2004-05	25.4	21.6	6.8	3.5	0.3	4.0	61.7
2005-06	26.1	22.0	7.6	3.6	0.3	3.8	63.4
2006-07	26.2	23.3	8.5	3.7	0.3	3.8	65.8
2007-08	27.4	25.0	10.8	4.4	0.3	4.4	72.2
2008-09	32.7	29.2	15.6	6.0	0.3	6.2	90.0
2009-10	37.0	32.5	18.8	7.8	0.3	7.1	103.6
2010-11	38.9	33.7	17.9	8.4	0.3	6.6	105.8
2011-12	40.0	34.2	15.6	8.6	0.4	5.7	104.4
2012-13	37.3	30.4	11.5	7.9	0.3	3.9	91.3
2013-14	37.5	31.9	12.2	7.2	0.2	4.3	93.2

	Median Title IV loans disbursed per FTE (\$) <sup>a, b</sup>						
	Four-year institutions			Two-year-or-less institutions			All
	Public	Nonprofit	For-profit	Public	Nonprofit	For-profit	
1999-00	3,488	5,292	8,397	634	4,904	4,971	3,985
2000-01	3,472	5,240	8,819	625	4,270	4,344	3,810
2001-02	3,550	5,317	8,591	690	3,515	3,817	3,678
2002-03	3,767	5,617	8,778	764	3,567	3,784	3,832
2003-04	4,106	6,118	9,987	967	4,156	4,305	4,303
2004-05	4,264	6,295	10,137	1,085	3,893	4,173	4,346
2005-06	4,305	6,415	9,409	1,167	4,448	4,185	4,413
2006-07	4,179	6,334	9,173	1,237	3,879	4,103	4,322
2007-08	4,205	6,383	9,846	1,224	4,165	4,587	4,523
2008-09	4,969	7,539	12,233	1,644	5,083	5,700	5,515
2009-10	5,337	7,971	11,423	1,916	5,320	5,488	5,609
2010-11	5,408	7,967	9,679	2,061	5,346	5,268	5,495
2011-12	5,646	8,086	9,308	2,100	5,558	5,341	5,656
2012-13	5,407	7,474	7,420	2,094	4,764	4,037	4,781

<sup>a</sup> Title IV loans disbursed per FTE was defined as total Title IV loans disbursed at the institution divided by total FTE at the institution.

<sup>b</sup> 12-month instructional activity unavailable for 2013-14 academic year at the time of this writing.

**Table 3. Title IV Grant Disbursement by Consolidated Sector (2012 CPI)**

	Total Title IV grants disbursed (\$billions)						Total
	Four-year institutions			Two-year or less institutions			
	Public	Nonprofit	For-profit	Public	Nonprofit	For-profit	
1999-00	3.6	1.4	0.2	2.9	0.1	0.9	9.0
2000-01	3.8	1.5	0.3	3.1	0.1	1.0	9.7
2001-02	4.4	1.8	0.4	4.0	0.1	1.2	12.0
2002-03	4.9	2.0	0.6	4.7	0.1	1.4	13.7
2003-04	5.2	2.0	0.7	4.9	0.2	1.6	14.7
2004-05	5.1	2.0	0.9	4.9	0.1	1.6	14.7
2005-06	4.8	1.8	1.0	4.4	0.1	1.5	13.7
2006-07	4.9	1.9	1.1	4.4	0.1	1.4	13.9
2007-08	5.3	2.1	1.5	4.8	0.1	1.6	15.4
2008-09	6.2	2.4	2.3	6.2	0.1	2.1	19.3
2009-10	9.7	3.7	4.3	10.2	0.2	3.3	31.3
2010-11	11.3	4.2	5.2	11.8	0.2	3.7	36.3
2011-12	10.4	3.9	4.0	11.2	0.2	2.8	32.5
2012-13	10.1	3.8	3.6	10.3	0.2	2.5	30.4
2013-14	10.1	3.9	3.4	9.9	0.1	2.3	29.7

	Median Title IV grants disbursed per FTE (\$) <sup>a, b</sup>						All
	Four-year institutions			Two-year or less institutions			
	Public	Nonprofit	For-profit	Public	Nonprofit	For-profit	
1999-00	694	672	994	978	1,552	2,216	1,015
2000-01	755	696	1,094	1,013	1,466	1,805	1,043
2001-02	867	799	1,111	1,188	1,419	1,869	1,190
2002-03	910	878	1,281	1,302	1,392	1,915	1,278
2003-04	934	877	1,529	1,341	1,489	2,073	1,326
2004-05	905	846	1,660	1,326	1,354	2,014	1,287
2005-06	837	746	1,510	1,203	1,335	1,859	1,184
2006-07	842	758	1,586	1,190	1,228	1,807	1,176
2007-08	913	797	1,707	1,228	1,235	1,944	1,249
2008-09	1,041	897	1,845	1,458	1,436	2,217	1,455
2009-10	1,549	1,295	2,836	2,168	1,884	2,918	2,104
2010-11	1,747	1,447	3,078	2,460	2,242	3,220	2,404
2011-12	1,628	1,377	2,680	2,419	2,036	2,887	2,242
2012-13	1,598	1,310	2,589	2,348	2,118	2,817	2,204

<sup>a</sup> Title IV grants disbursed per FTE was defined as total Title IV grants disbursed at the institution divided by total FTE at the institution.

<sup>b</sup> 12-month instructional activity unavailable for 2013-14 academic year at the time of this writing.

**Table 4. Median Three-year Cohort Default Rate (CDR) by Sector and Three-year Average Unemployment Rate during Default Window**

	CDR fiscal year		3-yr average Unemploy- ment <sup>b</sup> (%)	Median three-year CDRs <sup>a</sup> by sector							
				Entered repayment	Default window	Four-year institutions			Two-year-or-less institutions		
						All	Public	Non- profit	For- profit	Public	Non- profit
2005	10/1/04 to 9/30/05	10/1/04 to 9/30/07	4.8	8.0	4.3	2.9	13.4	12.3	6.2	15.5	
2006	10/1/05 to 9/30/06	10/1/05 to 9/30/08	4.9	9.0	4.9	3.0	14.5	13.5	6.9	17.2	
2007	10/1/06 to 9/30/07	10/1/06 to 9/30/09	6.1	11.2	6.4	4.4	16.6	15.5	8.8	19.1	
2008	10/1/07 to 9/30/08	10/1/07 to 9/30/10	7.8	10.6	6.5	4.8	18.1	14.3	6.7	18.2	
2009	10/1/08 to 9/30/09	10/1/08 to 9/30/11	9.1	10.3	7.3	5.4	15.6	15.9	7.3	15.3	
2010	10/1/09 to 9/30/10	10/1/09 to 9/30/12	9.1	11.6	8.8	6.2	15.9	17.6	8.3	15.9	
2011	10/1/10 to 9/30/11	10/1/10 to 9/30/13	8.3	9.6	8.2	5.2	13.5	15.8	5.9	13.4	

<sup>a</sup> Trial three-year CDRs were calculated for the 2005, 2006, 2007, and 2008 fiscal years and official three-year CDRs were calculated for the 2009, 2010, and 2011 fiscal years.

<sup>b</sup> Three-year average unemployment percent is the average monthly unemployment rate during the three-year default window, based on national monthly unemployment rates from the Bureau of Labor Statistics.

Median CDRs were highest at for-profits and community colleges. However, 75% of for-profit students borrow federal loans compared to about 17% of community college students (U.S. Department of Education, 2013). CDR trends for community colleges roughly followed economic trends; median CDRs reached a peak of 17.6% in the 2010 fiscal year when the average unemployment rate peaked, and declined to 15.8% in the 2011 fiscal year when average unemployment rate declined. By contrast, median CDRs at for-profits peaked prior to the peak in average unemployment rates, suggesting that CDR declines at for-profits may be partially due to changes in institutional behavior and/or federal policy.

### *Integrating Title IV Disbursement and Cohort Default Rate Data*

The primary purpose of this paper is to examine how the amount of federal financial aid disbursed at Title IV institutions with low, medium, and high CDRs change over time and differ across sectors. These analyses require integrating Title IV disbursement and CDR data.

Because Title IV disbursements are associated with a particular academic year but CDRs are not, we had to assign an academic year to each three-year CDR. Several choices exist, each with strengths and drawbacks. We assigned three-year CDRs to the academic year associated with the end date of the three-year

default window. We made this decision because we wanted to link CDRs to the academic year preceding Title IV sanctions (for institutions with unacceptably high CDRs) or privileges (for institutions with low CDRs). As an example, three-year CDRs for the 2011 fiscal year were associated with a default window of Oct. 1, 2010, to Sept. 30, 2013. This end-date of Sept. 30, 2013, was associated with the 2013-14 academic year. Therefore, we assigned three-year CDRs for the 2011 fiscal year to the 2013-14 academic year.

Figure 1 shows the amount of Title IV loans disbursed to institutions with low (0 to 15%), medium (15 to 30%), and high (30% or greater) three-year CDRs, by sector.<sup>2</sup> The top left panel of Figure 1 shows results for all sectors combined. In 2007-08, 89% of the \$72 billion in total federal loan aid was awarded to low-CDR institutions (below 15%). By 2012-13, only 75% of the \$91 billion in federal loan aid was disbursed to low-CDR institutions. In other words, in 2012-13, Title IV institutions with medium or high CDRs (above 15%) disbursed one in every four student loan dollars. However, in 2013-14 the share of student loans disbursed by institutions with medium or high CDRs decreased moderately as the job-market recovered.

The top right panel of Figure 1 shows that from 2007-08 through 2013-14 the vast majority of loans to the nonprofit four-year sector flowed through colleges with CDRs less than 15%. A different pattern emerges for community colleges (middle left panel). The share of federal loans disbursed to community colleges with CDRs of 15% or higher increased dramatically during and immediately after the recession (from 30% in 2007-08 to 86% in 2012-13), but decreased to 77% in 2013-14. By contrast, the share of federal loans disbursed to public four-year institutions with CDRs of 15% or higher increased only moderately, from 2% in 2007-08 to 9% in 2012-13.

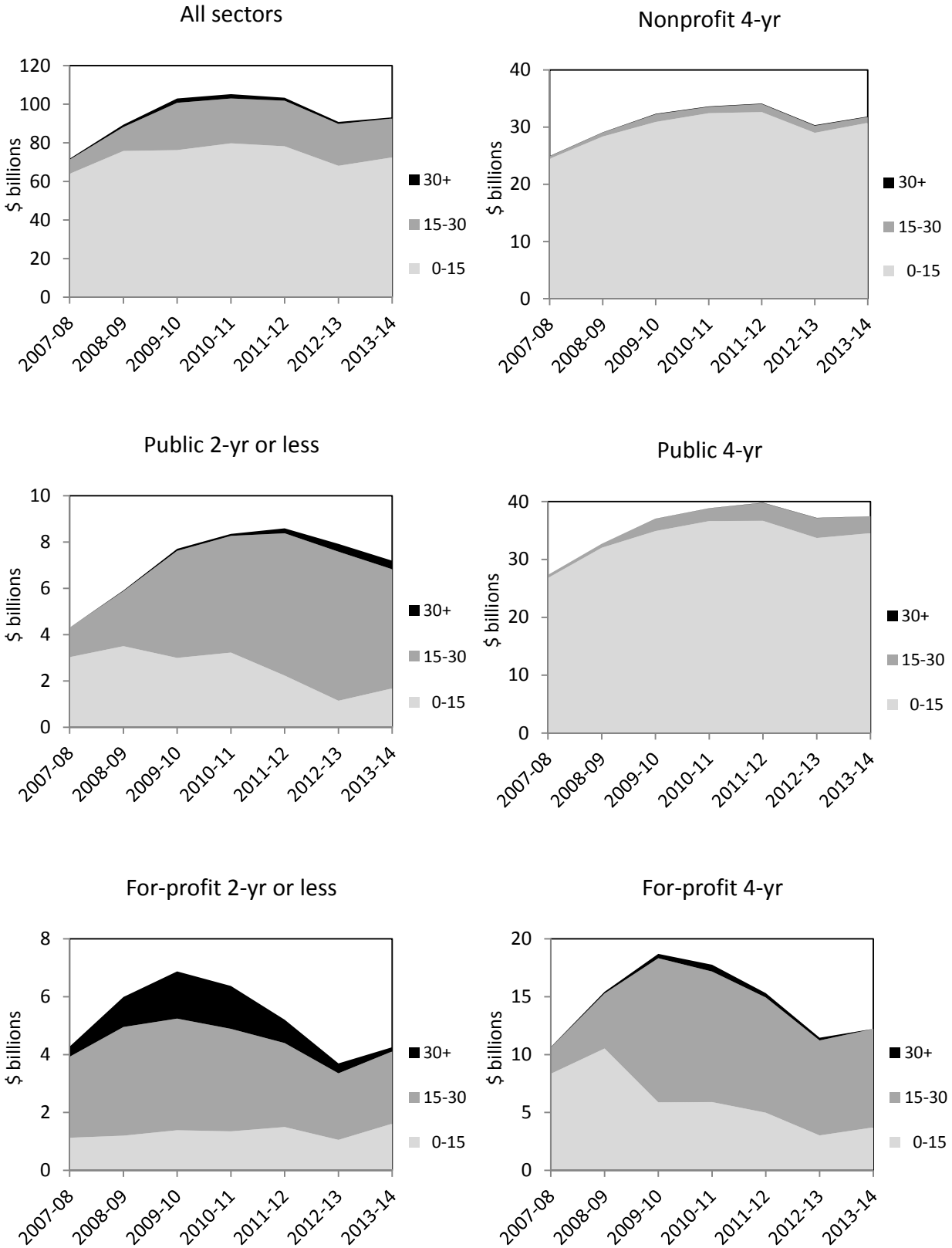
The bottom left panel shows the for-profit two-year-or-less sector. From 2007-08 to 2009-10 the share of federal loans disbursed to institutions with medium and high CDRs increased dramatically. Of the \$6.9 billion in federal loans disbursed to these institutions in 2009-10, 20% was disbursed to low-CDR institutions, 56% was disbursed to medium-CDR institutions, and 24% was disbursed to high-CDR (above 30%) institutions. However, in subsequent years the share of federal loans disbursed to high-CDR institutions declined dramatically.

In the four-year for-profit sector, the share of federal loans disbursed to institutions with CDRs greater than 15% increased from 22% in 2007-08 to 69% by 2009-10. This dramatic change was largely due to very large for-profits (e.g., University of Phoenix) changing from the 0-15% CDR band to the 15-30% CDR band. Note that, in contrast to two-year for-profits, a much smaller share of loans was disbursed to four-year for-profits with CDRs greater than 30%. By 2012-13, 74% of the \$11.5 billion in federal loans was disbursed to institutions with CDRs greater 15%. However, performance of the sector improved somewhat in 2013-14.

Figure 2 shows the amount of Title IV grants disbursed to institutions with low, medium, and high three-year CDRs. In 2007-08, 24% of the \$14.7 billion in grant aid was disbursed to institutions with CDRs greater than 15%. By 2012-13, over 50% of the \$30 billion in grant aid was disbursed to institutions with CDRs greater than 15%. However, this trend reversed somewhat by 2013-14.

Trends over time for specific sectors were similar to the loan aid trends shown in Figure 1. For example, at community colleges, the share of grant aid disbursed at institutions with CDRs of 15% or higher increased from 32% in 2007-08 to 77% in 2012-13, but decreased somewhat in 2013-14. In the for-profit two-year-or-less sector, the share of grant aid disbursed at institutions with CDRs of 15% or higher increased from 78% in 2007-08 to 84% in 2009-10, but decreased to 62% by 2013-14. This decrease was driven largely by a sharp decline in the share of grants going to institutions with CDR rates of 30% or higher.

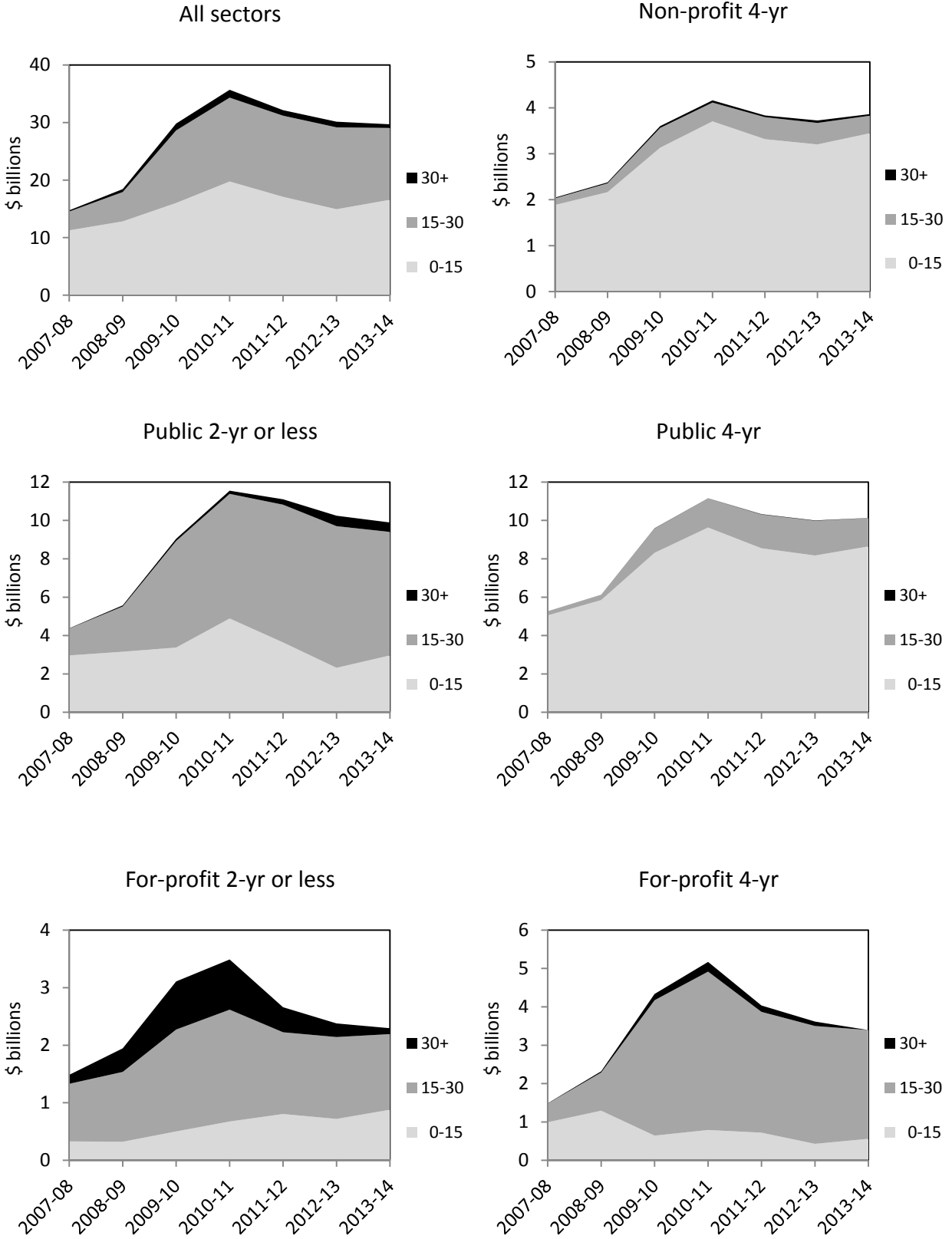
**Figure 1. Distribution of Title IV Loan Aid by 3-year CDR Band and Sector<sup>a</sup>**



<sup>a</sup> Total loan amounts are slightly less than total loan amounts from Table 2 because this figure excludes institutions with missing three-year CDRs.



**Figure 2. Distribution of Title IV Grant Aid by 3-year CDR Band and Sector<sup>a</sup>**



<sup>a</sup>Total grant amounts are slightly less than total grant amounts from Table 3 because this figure excludes institutions with missing three-year CDRs.

To summarize the results for Figures 1 and 2, at private nonprofit and public four-year institutions, institutions with low CDRs received the vast majority of federal grants and loans disbursed. In the community college and for-profit four-year sectors, the share of federal grants and loans disbursed at institutions with CDRs greater than 15% increased substantially from 2007-08 to 2012-13, but declined somewhat in 2013-14. These trends seem to mirror trends in national unemployment rates. In the for-profit two-year-or-less sector, the share of federal loans disbursed to institutions with medium (15-30%) and high ( $\geq 30\%$ ) CDRs reached an apex around 2009-10 but began to decline by 2010-11. This decline predated the job-market recovery and was driven primarily by a decline in the share of federal aid being disbursed to institutions with CDRs of 30% or higher. Since institutions with CDRs in excess of 30% are subject to sanctions, these trends suggest that federal policy may have been a factor in shifting federal financial aid away from poor performing institutions in the for-profit two-year-or-less sector.

## Discussion

As more students rely on federal financial aid to finance their education, policymakers have become interested in the share of federal aid being disbursed at institutions with high student loan default rates. Recent research on student loan default finds that institutional behavior affects default and that attending a for-profit institution increases the probability of default (e.g., Hillman, 2014b; Sridharam, 2012). Recent supply-side studies on the allocation of federal financial aid to institutions show that the for-profit sector receives a disproportionate share of federal financial aid relative to enrollment (College Board, 2013; Deming, et al., 2012). Taken together, the findings from these two literatures suggest the idea—raised by federal policymakers (e.g., U.S. Department of Education, 2010)—that a significant share of federal aid is being allocated to institutions that do not serve students well. However, prior research has not tested this idea because extant studies analyzed CDRs and federal aid disbursement in isolation from one another.

The present study contributes to this gap in the literature by analyzing change over time and across sectors in the amount of federal financial aid disbursed at institutions with low, medium, and high CDRs. We show that the share of federal student aid flowing through colleges with medium and high CDRs increased from 2007-08 to 2012-13. By 2012-13, 50% of federal grant dollars and 25% of federal loan dollars flowed to institutions with three-year CDRs greater than 15%. However, these discouraging trends reversed somewhat in 2013-14, when 44% of federal grant dollars and 22% of federal loan dollars were allocated to institutions with three-year CDRs greater than 15%.

Overall, the prolonged rise and recent decline in the share of aid going to institutions with problematic CDRs follow trends in national unemployment rates. Yet trends for for-profits do not seem to mirror national economic trends. From 2010-11 to 2012-13, total FTE enrollment at for-profits declined by 19% while federal grant and loan aid declined by 31% and 37% respectively. These declines in FTE enrollment and federal grants and loans were much larger than those experienced by the public and private nonprofit sectors. Additionally, prior to recovery in national unemployment rates, there was a dramatic decline in the share of federal grants and loans disbursed to two-year-or-less for-profits with CDRs greater than 30%. These trends suggest that federal regulatory policies may have contributed to the declining share of federal aid to for-profits with high CDRs.

The results of this study raise important questions for future research. This study does not identify the extent to which fluctuations in the economy or revised federal policy rules caused changes over time in the flow of federal aid to institutions with problematic CDRs. Future research could shed light on this question by identifying which institutions stopped participating in specific federal aid programs over the past decade and by analyzing whether these institutions opted out voluntarily or whether they lost eligibility due to violations of particular Title IV eligibility policies.

## *Implications for Federal Policy*

Evidence from this study can frame future policy debates about CDR rules, with an emphasis on how principal agent theory (PAT) should be applied to develop federal policies. Drawing on PAT, the federal government (principal) enters into contracts with postsecondary institutions (agents) to promote policy goals related to college access and success. PAT assumes that principals will create incentives that induce agents to behave in ways that align with their policy goals. By developing appropriate regulations and monitoring agents' behaviors, agents will perform according to the principal's interests. Federal CDR policy is one regulatory instrument that encourages colleges to lower student loan default rates. Ultimately, if a college does not meet the federal performance goals (i.e., if the institution's CDRs exceed 30% for three years or 40% in any given year) then it will lose eligibility for Title IV student aid programs. CDR policy is also a monitoring mechanism that helps policymakers assess whether federal student aid dollars are being allocated to institutions with high student loan default rates.

However, the application of PAT to actual policies can be problematic (Moynihan et al., 2011; Waterman & Meier, 1998). One critique of CDR policy is that student characteristics, rather than institutional behavior, largely determine CDRs. For example, a college can have a low CDR by simply enrolling students who have the financial capacity to repay their loans (e.g., have high family income, employment networks, etc.). Current CDR policy rewards these colleges with more favorable grant and loan conditions, not necessarily because of their efforts to reduce default but due to the students they admit (Gross, et al., 2009; Hillman, 2013). Is this truly a measure of institutional performance? We suspect not. Furthermore, our analyses suggest that CDRs are sensitive to economic conditions, which institutions cannot control.

Nevertheless, we maintain that a strong argument exists for holding Title IV institutions accountable for student loan default rates. First, research shows that institutional behaviors do affect the probability of student loan default (Belfield, 2013; Hillman, 2014b). Therefore, holding institutions accountable for student success provides institutions with an incentive to engage in behaviors that lower the probability of default. Second, regardless of the reasons for default, allowing colleges with high CDRs to participate in the federal financial aid system does not serve federal policy goals or the interests of students.

However, the federal government could consider alternative strategies to induce colleges to behave in line with federal policy goals. First, the current thresholds for Title IV sanctions (i.e., having three-year CDRs in excess 40% for one year or 30% for three consecutive years) may not provide a strong enough incentive for colleges to actually reduce student default rates. For example, current policy treats a college with a CDR of 16% the same as a college with a CDR of 29%. Our findings show that federal funds were increasingly flowing through institutions with CDRs above 15% but below 30%. Having more gradient thresholds for benefits and sanctions (i.e., 15% to 20%, 25% to 25%, etc.) could help federal policymakers monitor colleges more closely and offer incentives for moving to the next-lowest CDR band. We acknowledge that the creation of finer CDR thresholds could have unintended consequences and could create additional gaming of the system. Nevertheless, our point is that more gradient thresholds for CDR benefits and sanctions may help regulators hold a larger proportion of institutions accountable for their performance.

Second, when considering new CDR thresholds, it is also important to consider weighting CDRs according to the percentage of students who borrow at a given institution. For example, in the fall of 2013, the federal government reported that San Bernardino Valley College had a three-year CDR of 27%, which was close to the CDR threshold associated with Title IV sanctions. However, the CDR denominator contained only 193 students who entered repayment and the numerator included only 52 defaulters. By comparison, in 2012-13, the college disbursed \$18.5 million in Pell Grants to 5,839 recipients. It seems draconian to threaten that access to Pell Grants for thousands of low-income students because of the outcome of 52 borrowers.

Current CDR policy offers little nuance or precision for identifying and sanctioning truly poor performing institutions, since they do not account for the proportion of students who borrow.

Furthermore, the example of San Bernardino Valley College suggests that current CDR policy may create an incentive for community colleges that rely heavily on Pell Grant funding to opt out of the Direct Loan program to avoid Title IV sanctions. Therefore, future research should examine whether community colleges opt out of Federal Direct Loan programs because they are concerned that Title IV sanctions from high CDRs would threaten their Pell Grant funding.

### *Implications for Institutional Practitioners*

While federal policymakers set broad regulatory and monitoring parameters, aid administrators are the ones implementing federal policy. We offer two recommendations for aid administrators. First, in order to avoid the penalties associated with CDR policy, financial aid offices should have someone on staff (likely the director) with a strong understanding of federal CDR policy rules. The *Cohort Default Rate Guide*, published by the Office of Federal Student Aid (2014a), describes how CDRs are calculated, what loan programs are included in the calculation of CDRs, what sanctions are associated with different CDR levels, and how to appeal potential sanctions.

For example, for colleges that have a large number of Pell recipients and a small number of federal loan borrowers (like the San Bernardino Valley College example), it is possible for campus officials to make a “participation rate index appeal” to the U.S. Department of Education (Federal Student Aid, 2014a). A successful appeal allows colleges to recalculate their CDR with an alternative measure, specified by the Department, which accounts for the proportion of students who borrow. This appeal is built into the system to help colleges with few borrowers to avoid Title IV sanctions.

Of course, the surest way to avoid CDR sanctions is to help students finance college without loans and to implement default management plans that reduce the number of students who default on federal loans. Although a review of such practices is beyond the scope of this paper, many articles—including several previously published in this journal—analyze and discuss the implementation best practices (e.g., financial literacy programs) designed to reduce student loan default (e.g., Andruska, Hogarth, Fletcher, Forbes, & Wohlgemuth, 2014; Herr & Burt, 2005; Kesterman, 2005; Loonin, 2012).

Second, as we move closer to reauthorization of the Higher Education Act, institutional practitioners should become versed in current debates about Title IV regulatory policy<sup>3</sup> and seek opportunities to contribute productively to these debates. Recent policy debates have focused on the proposed gainful employment rule and the creation of a postsecondary institution rating system (PIRS). The federal government recently released a “final” version of the gainful employment rule (Field, 2014a) and an updated plan for the rating system (Field, 2014c). However, prospects for the passage of these proposals have dimmed since the 2014 midterm elections when Republicans took control of Congress and the Senate Committee on Health, Education, Labor, and Pensions (HELP). The Republican-led HELP Committee has initiated policy efforts to simplify federal financial aid applications for students and to reduce Title IV regulations for institutions (Stratford, 2014).

### **Nexus: Connecting Research to Practice**

- Financial aid administrators should familiarize themselves with CDR rules and know how to make Participation Rate Index appeals.
- Institutions should be proactive about developing and implementing effective default management plans.
- Institutional practitioners should remain abreast of current debates about Title IV legislation and regulations, and should seek opportunities to contribute to these debates.
- When establishing new CDR thresholds, federal policymakers and officials should consider weighting CDRs according to the percentage of students who borrow at a given institution.

### ***Acknowledgements***

We thank the Association of Institutional Research for providing dissertation funding to create the original analysis dataset this manuscript is based on and to the Spencer Foundation for providing funding to improve this analysis dataset. We thank four reviewers for their extremely thoughtful reviews, which helped us strengthen the manuscript.

### ***Endnotes***

<sup>1</sup> Note that trial three-year CDRs were calculated for the 2005, 2006, 2007, and 2008 fiscal years, and official three-year CDRs were calculated for the 2009, 2010, and 2011 fiscal years.

<sup>2</sup> Results for the private non-profit two-year-or-less sector are omitted, but are available upon request.

<sup>3</sup> The NASFAA website provides information designed to introduce practitioners to policy proposals developed for the reauthorization of the Higher Education Act at <http://www.nasfaa.org/reauth/>

**Appendix. Number of Students Entering Loan Repayment and Defaulting within Three Years<sup>a</sup>**

		Number of students entering repayment							
CDR fiscal year		Four-year institutions			Two-year-or-less institutions			Total	
	Enter repayment	Default window	Public	Non-profit	For-profit	Public	Non-profit	For-profit	
2005	10/1/04 to 9/30/05	10/1/04 to 9/30/07	1,310,408	896,180	307,450	474,841	27,105	377,967	3,393,951
2006	10/1/05 to 9/30/06	10/1/05 to 9/30/08	1,429,425	995,989	412,562	542,051	29,331	397,420	3,806,778
2007	10/1/06 to 9/30/07	10/1/06 to 9/30/09	1,206,203	730,163	412,698	504,899	23,970	393,856	3,271,789
2008	10/1/07 to 9/30/08	10/1/07 to 9/30/10	1,212,098	713,818	451,732	501,763	19,542	402,568	3,301,521
2009	10/1/08 to 9/30/09	10/1/08 to 9/30/11	1,234,738	781,164	544,581	549,062	20,274	396,410	3,526,229
2010	10/1/09 to 9/30/10	10/1/09 to 9/30/12	1,305,170	813,704	748,095	636,577	21,939	510,029	4,035,514
2011	10/1/10 to 9/30/11	10/1/10 to 9/30/13	1,467,542	897,932	904,957	824,671	22,881	574,252	4,692,235

		Number of defaults within three years							
CDR fiscal year		Four-year institutions			Two-year-or-less institutions			Total	
	Enter repayment	Default window	Public	Non-profit	For-profit	Public	Non-profit	For-profit	
2005	10/1/04 to 9/30/05	10/1/04 to 9/30/07	63,385	34,480	43,135	63,369	3,772	74,855	282,996
2006	10/1/05 to 9/30/06	10/1/05 to 9/30/08	76,541	40,757	63,312	75,564	4,306	88,464	348,944
2007	10/1/06 to 9/30/07	10/1/06 to 9/30/09	84,920	43,662	74,623	81,625	3,997	95,950	384,777
2008	10/1/07 to 9/30/08	10/1/07 to 9/30/10	84,899	44,138	91,311	81,350	2,935	99,584	404,217
2009	10/1/08 to 9/30/09	10/1/08 to 9/30/11	96,375	52,723	122,149	100,668	3,080	87,126	462,121
2010	10/1/09 to 9/30/10	10/1/09 to 9/30/12	120,772	60,456	167,728	132,500	3,280	104,392	589,128
2011	10/1/10 to 9/30/11	10/1/10 to 9/30/13	129,711	59,011	169,063	167,609	3,177	109,128	637,699

<sup>a</sup> “Trial” three-year CDRs were calculated for the 2005, 2006, 2007, and 2008 fiscal years and “official” three-year CDRs were calculated for the 2009, 2010, and 2011 fiscal years.

## References

- Alexander, F. K. (1998). Vouchers in American education: Hard legal and policy lessons from higher education. *Journal of Education Finance*, 24(2), 153-178.
- Andruska, E. A., Hogarth, J. M., Fletcher, C. N., Forbes, G. R., & Wohlgemuth, D. R. (2014). Do you know what you owe? Students' understanding of their student loans. *Journal of Student Financial Aid*, 44(2), 125-148.
- Belfield, C. R. (2013). Student loans and repayment rates: The role of for-profit colleges. *Research in Higher Education*, 54(1), 1-29.
- Bennett, W. J. (1987, February 18). Our greedy colleges. *New York Times*, p. A31.
- Cellini, S. R., & Goldin, C. (2014). Does federal student aid raise tuition? New evidence on for-profit colleges. *American Economic Journal-Economic Policy*, 6(4), 174-206.
- Cohort Default Rates. (2013). *Title 34 C.F.R. Volume 3, Part 668 Subpart N*.
- College Board. (2013). *Trends in student aid, 2013*. New York: College Board.
- Congressional Budget Office. (2013). *The Federal Pell Grant program: Recent growth and policy options*. Washington, DC: Congressional Budget Office.
- Congressional Research Service. (2007). *Institutional eligibility for participation in Title IV student aid programs under the Higher Education Act: Background and reauthorization issues* (No. Order Code RL33909). Washington DC: Congressional Research Service.
- Cunha, J. M., & Miller, T. (2014). Measuring value-added in higher education: Possibilities and limitations in the use of administrative data. *Economics of Education Review*, 42, 64-77.
- Cunningham, A. F., & Kienzl, G. S. (2011). *Delinquency: The untold story of student loan borrowing*. Washington, DC: Institute for Higher Education Policy.
- Dellas, H., & Sakellaris, P. (2003). On the cyclical of schooling: Theory and evidence. *Oxford Economic Papers-New Series*, 55(1), 148-172.
- Deming, D. J., Goldin, C., & Katz, L. F. (2012). The for-profit postsecondary school sector: Nimble critters or agile predators? *The Journal of Economic Perspectives*, 26(1), 139-164.
- Dynarski, M. (1994). Who defaults on student loans? Findings from the National Postsecondary Student Aid Study. *Economics of Education Review*, 13(1), 55-68.
- Fain, P. (2013). Now what? Gainful employment's future uncertain after court ruling. *Inside Higher Ed*. Retrieved from <http://www.insidehighered.com/news/2013/03/21/gainful-employments-future-uncertain-after-court-ruling#sthash.aTA2xlHT.dpbs>
- Federal Reserve Bank of NY. (2014). *Quarterly report on household debt and credit, August 2014*. New York, NY: Federal Reserve Bank of New York.

- Federal Student Aid. (2013a). *Cohort default rate guide*. Washington, DC: Federal Student Aid, U.S. Department of Education.
- Federal Student Aid. (2013b). National student loan two-year default rates. Retrieved January 5, 2015, from <https://www2.ed.gov/offices/OSFAP/defaultmanagement/defaultrates.html>
- Federal Student Aid. (2014a). *Cohort default rate guide*. Washington, DC: Federal Student Aid, U.S. Department of Education.
- Federal Student Aid. (2014b). Three-year official cohort default rates for schools. Retrieved April 24, 2014, from <http://www2.ed.gov/offices/OSFAP/defaultmanagement/cdr.html>
- Field, K. (2014a, October 30). In the final 'gainful employment' rule, a key measure vanishes. *Chronicle of Higher Education*. Retrieved from <http://chronicle.com/article/In-the-Final-Gainful/149711/>
- Field, K. (2014b, November 6). For-profit colleges sue again over federal gainful-employment rule. *Chronicle of Higher Education*. Retrieved from <http://chronicle.com/article/For-Profit-Colleges-Sue-Again/149871/>
- Field, K. (2014c, December 19). Obama's college-ratings plan arrives, but most specifics stay behind. *Chronicle of Higher Education*. Retrieved from <http://chronicle.com/article/Obama-s-College-Ratings-Plan/150939/>
- Greene, L. L. (1989). An economic analysis of student loan default. *Educational Evaluation and Policy Analysis*, 11(1), 61-68.
- 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.
- Guryan, J., & Thompson, M. (2014). *Report on the proposed gainful employment regulation*. Tallahassee, FL: Charles River Associates.
- Hansmann, H. B. (1996). *The ownership of enterprise*. Cambridge, Mass.: The Belknap Press of Harvard University Press.
- Heller, D. E. (2011). The financial aid picture: realism, surrealism, or cubism. In J. C. Smart & M. B. Paulsen (Eds.), *Higher education: Handbook of theory and research volume XXVI* (pp. 125-160). New York: Agathon Press.
- Herr, E., & Burt, L. (2005). Predicting student loan default for University of Texas at Austin. *Journal of Student Financial Aid*, 35(2), 27-49.
- Hillman, N. (2013, December 18). Cohort default rates: predicting the probability of federal sanctions. *Educational Policy*.
- Hillman, N. W. (2014). College on credit: A multilevel analysis of student loan default. *Review of Higher Education*, 37(2).
- Hillman, N. W., & Orians, E. (2013). Community colleges and labor market conditions: how does enrollment demand change relative to local unemployment rates. *Research in Higher Education*, 54(7), 765-780.



- Hossler, D. (2006). Students and families as revenue: The impact on institutional behaviors. In D. M. Priest & E. P. St. John (Eds.), *Privatization and public universities* (pp. 109-128). Bloomington: Indiana University Press.
- Kane, T. J. (1996). Lessons from the largest school voucher program ever: Two decades of experience with Pell Grants. In B. Fuller, R. Elmore & G. Orfield (Eds.), *Who chooses? Who loses? Culture, institutions, and the unequal effects of school choice*. New York: Teachers College Press.
- Kesterman, F. (2005). Student loan borrowing in America: Metrics, demographics and loan default aversion strategies. *Journal of Student Financial Aid*, 36(1), 34-52.
- Knapp, L. G., & Seaks, T. G. (1992). An analysis of the probability of default on federally guaranteed student loans. *Review of Economics and Statistics*, 74(3), 404-411.
- Lane, J. E., & Kivisto, J. A. (2008). Interests, information, and incentives in higher education: principal-agent theory and its potential applications to the study of higher education governance. In J. C. Smart (Ed.), *Higher education: Handbook of theory and research volume XXIII*. New York: Agathon Press.
- Lewin, T. (2012, July 29). Senate committee report on for-profit colleges condemns costs and practices. *New York Times*. Retrieved from [http://www.nytimes.com/2012/07/30/education/harkin-report-condemns-for-profit-colleges.html?\\_r=1&](http://www.nytimes.com/2012/07/30/education/harkin-report-condemns-for-profit-colleges.html?_r=1&)
- Loonin, D. (2006). *No way out: Student loans, financial distress, and the need for policy reform*. Boston, MA: National Consumer Law Center.
- Loonin, D. (2012). *The student loan default trap: Why borrowers default and what can be done*. Boston, MA: National Consumer Law Center.
- Monteverde, K. (2000). Managing student loan default risk: Evidence from a privately guaranteed portfolio. *Research in Higher Education*, 41(3), 331-352.
- Moynihan, D. P., Fernandez, S., Kim, S., LeRoux, K. M., Piotrowski, S. J., Wright, B. E., & Yang, K. (2011). Performance regimes amidst governance complexity. *Journal of Public Administration Research and Theory*, 21, 141-155.
- National Center for Education Statistics. (2013). IPEDS glossary. Retrieved June 22, 2013, from <http://nces.ed.gov/ipeds/glossary/>
- NCLC, & SLBA. (2014). *Making student loan servicing work for borrowers*. Boston, MA; Washington, DC: National Consumer Law Center, Student Loan Borrower Assistance.
- New America Foundation. (2014). Background & analysis, Federal Pell Grant program. Retrieved from <http://febp.newamerica.net/background-analysis/federal-pell-grant-program>
- Shapiro, R. J., & Pham, N. D. (2010). *Taxpayers' costs to support higher education: A comparison of public, private not-for-profit, and private for-profit institutions*. Washington, DC: Sonecon.
- Singell, L. D., & Stone, J. A. (2007). For whom the Pell tolls: The response of university tuition to federal grants-in-aid. *Economics of Education Review*, 26(3), 285-295.

Sommer, J. W. (1995). *The academy in crisis: The political economy of higher education*. New Brunswick, N.J.: Transaction Publishers.

Sridharam, V. (2012). The debt crisis in for-profit education: How the industry has used federal dollars to send thousands of students into default. *Georgetown Journal on Poverty Law & Policy*, 19, 331-350.

Stratford, M. (2014, November 5). What a Republican-led Congress means for higher education policy. *Inside Higher Ed*. Retrieved from <https://www.insidehighered.com/news/2014/11/05/what-republican-led-congress-means-higher-education-policy>

The White House. (2013). Fact sheet on the president's plan to make college more affordable: A better bargain for the middle class [Press release]. from <http://www.whitehouse.gov/the-press-office/2013/08/22/fact-sheet-president-s-plan-make-college-more-affordable-better-bargain>

Turner, L. (2014). *The road to Pell is paved with good intentions: The economic incidence of federal student aid*. Unpublished manuscript.

Two Year Cohort Default Rates. (2013). *Title 34 C.F.R. Volume 3, Part 668 Subpart M*.

U.S. Department of Education. (2010). Department of Education establishes new student aid rules to protect borrowers and taxpayers. Retrieved January 3, 2012, from <http://www.ed.gov/news/press-releases/department-education-establishes-new-student-aid-rules-protect-borrowers-and-tax>

U.S. Department of Education. (2013). *2011-12 National Postsecondary Student Aid Study (NPSAS:12) student financial aid estimates*. Washington, DC: National Center for Education Statistics.

U.S. Department of Education. (2014). Obama Administration takes action to protect Americans from predatory, poor-performing career colleges. Retrieved from <http://www.ed.gov/news/press-releases/obama-administration-takes-action-protect-americans-predatory-poor-performing-ca>

Volkwein, J. F., & Cabrera, A. F. (1998). Who defaults on student loans? The effects of race, class and gender on borrower behavior. In R. F. M. Bateman (Ed.), *Condemning students to debt college loans and public policy*. New York: Teachers College Press.

Volkwein, J. F., & Szelest, B. P. (1995). Individual and campus characteristics associated with student loan default. *Research in Higher Education*, 36(1), 41-72.

Waterman, R. W., & Meier, K. J. (1998). Principal agent models: An expansion? *Journal of Public Administration Research and Theory*, 8(2), 173-202.

Webber, K. L., & Rogers, S. L. (2014). Student loan default: Do characteristics of four-year institutions contribute to the puzzle? *Journal of Student Financial Aid*, 44(2), 99-124.

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