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Student-Loan Debt, Delinquency, and Default: A New England Perspective

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I. Introduction

In 2009, student-loan debt became the largest non-housing-related consumer debt in the United States. By 2013, outstanding student debt balances had grown to exceed \$1 trillion, and by the end of 2015, had reached \$1.23 trillion.¹ These milestones coincided with increasing rates of delinquency and default among borrowers, raising concerns about the affordability of this debt.

In addition, researchers have recently found an array of adverse effects from such debt, including the impact on homeownership and vehicle purchases, small-business formation, and retirement preparedness.² These factors have led many to call the extent of student-loan debt a "crisis."

For New England, with its highly educated population and large highereducation industry, student-loan debt is a salient economic and policy issue. All six New England states have formed subcommittees, fielded commissions, contracted studies, and proposed or passed legislation targeting student-loan debt.³ These actions have yielded diverse policy responses, including initiatives aimed at improving financial literacy, boosting child college savings accounts, increasing state aid to state colleges and universities, refinancing student loans, and offering tax credits or loan forgiveness to graduates. Borrowers from disadvantaged backgrounds are more likely than other borrowers to be delinquent and default on their student loans

Unfortunately, such policy discussions often lack detailed information on trends in state and regional student-loan debt. The most-quoted statistics show that the average student-loan debt of bachelor's degree recipients in each of the six New England states exceeds the national average of \$28,950.⁴ However, these statistics exclude students attending for-profit programs; public and private non-profit certificate, associate, and graduate programs; and borrowers who do not complete a degree. More-inclusive figures on federal student-loan debt, showing the borrowers in repayment by state of residence, place the average student-loan balance of borrowers in New England below the national average.⁵ But neither measure offers insight into whether payments on such debt are sustainable or which populations are most likely to struggle with student debt—information that is important for crafting effective policy solutions.

This report analyzes trends in student-loan debt, delinquency, and defaults in New England relative to the nation. Analyzing data at both the institutional level, where student-loan debt is originated,

¹ Federal Reserve Bank of New York (2016).

² Cooper and Wang (2014); Brown and Caldwell (2013); Ambrose, Cordell, and Ma (2015); and Munnell, Hou, and Webb (2016).

³ For examples, see Massachusetts General Court (2015), Gottlob (2013), and Connecticut House Bill No 6195, "An Act Concerning the Duties and Authority of the Connecticut Higher Education Supplemental Authority."

⁴ The Institute of College Access & Success (2015). The average debt of New England bachelor's degree recipients of the class of 2014 upon graduation ranged from \$29,060 in Vermont to \$33,410 in New Hampshire.

⁵ U.S. Department of Education (2015). This report provides total federal student-loan amounts and number of borrowers per state of residency for recipients of Direct and Federal Family Education Loans, as of January 1, 2015. The average balance per borrower nationally was \$26,303, while the average balance per borrower in repayment residing in New England was \$25,001, ranging from \$23,005 in Rhode Island to \$27,637 in Vermont.

and the individual level, where borrowers make payments, we identify and discuss factors that may influence students' ability to sustain payments on their student-loan debt. Key findings relevant to policymakers at the state and national level include the following:

- Students attending New England institutions face higher costs to obtain a postsecondary education than students in other regions, partly as a result of higher tuition and fees across all types of institutions, but mostly as a result of a high concentration of students in New England attending costlier, private, four-year institutions.
- Student-loan borrowers attending institutions of higher education in New England generally have lower rates of default on these loans than borrowers attending such institutions elsewhere in the nation, possibly reflecting a combination of institutional quality and better regional labor markets for graduates.
- Residents of New England also have persistently lower rates of delinquency on student loans, despite having levels of debt markedly similar to those of borrowers nationwide.
- We find suggestive evidence at both the institutional and the individual level that borrowers from disadvantaged backgrounds are more likely than other borrowers to be delinquent and to default on their student loans, perhaps because they disproportionately enroll in institutions with weak educational outcomes and poor labor market outcomes for their graduates.

II. Enrollment and Cost Trends in Higher Education

Out-of-pocket tuition and fees of students enrolled in postsecondary education institutions in New England are nearly twice as high as their peers' education costs nationwide. This is largely due to the high concentration of enrollment at costlier, private, four-year institutions, but also reflects moderately higher tuition and fees at nearly all types of institutions. As a result, students from New England institutions of higher education are likely to have debt balances above the national average.

In 2014, the New England region had over 400 postsecondary institutions with an aggregate enrollment of over 1 million students. A majority of these institutions are "four-year" institutions, many of which are colleges and universities that offer graduate, professional, and doctoral programs in addi-

While it is more expensive to attend New England's postsecondary institutions, borrowers attending these schools have lower default rates than peers tion to bachelor's degrees. In fact, over 150 of New England's institutions are private, non-profit, four-year institutions. Not surprisingly, this large concentration of private, non-profit, four-year institutions results in New England having the largest share of the enrollment in private, non-profit, four-year institutions among all census divisions (Figure 1).

Both nationally and regionally, the supply of seats at institutions of higher education is significantly concentrated among highly selective institutions including many of the aforementioned four-year, public and private, non-profit institutions—that have historically accounted for a majority of postsecondary students in the nation. These institutions have traditionally operated as brick and mortar schools, and their opportunity to expand capacity rapidly is constrained by their ability to rapidly increase classroom size, add faculty, build new

facilities, or expand quickly into alternative media such as online degree or credential program offerings. When the demand for higher education outpaces capacity at these institutions, one would expect to see, at least in the short term, increasing enrollment at open-enrollment community college and non-traditional institutions, such as for-profits, which have historically accounted for a small share of students, as individuals seek alternative routes to obtaining postsecondary credentials.



Share of Enrollment by Type of Institution New England States vs. the U.S., 2013–2014



Source: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Educationa Data System (IPEDS), 2013–2014 Enrollment Survey.

Note: Enrollments include full-time and part-time undergraduate and graduate students.

This has, in fact, proved to be the case. As demand for workers with postsecondary credentials has grown over time, so has demand for enrollment in postsecondary education (Figure 2). While enrollment at all types of institutions has risen since 2000, the fastest growth in enrollment has occurred at non-traditional institutions. At the outset of the millennium, enrollment at such institutions, largely at for-profits, was already growing faster, at 9.0 percent annually between 1999–2000 and 2006–2007, than enrollment at the traditional institutions, which was growing by 2.5 percent annually. With the onset of the Great Recession in late 2007, enrollment at non-traditional institutions surged, as a weak labor market led to an increase in the number of individuals seeking postsecondary credentials. Nationally, this was driven largely by a surge in undergraduate and graduate enrollment at for-profit, four-year schools, although regionally it was greatest among undergraduates at for-profit institutions that primarily grant certificates. This trend in enrollment peaked in the 2009–2010 academic year and has been falling since, as labor markets have continued to improve moderately.

Along with the demand for postsecondary education, the cost of attending postsecondary institutions has continued to rise. Between 2004–2005 and 2013–2014, the real (inflation-adjusted) average annual cost of tuition and fees for full-time undergraduates increased by 2.0 percent annually at four-year institutions and by 1.6 percent annually at two-year institutions.⁶ This put the average

⁶ Snyder, de Brey, and Dillow (2016) Table 330.10. These data exclude institutions primarily offering programs of fewer than two years. All students at public institutions are assumed to pay in-state or in-district tuition and fees, an assumption that understates the average cost of tuition at four-year institutions. For readers interested in tuition and fees in New England, see New England Board of Higher Education (2015).



2013–2014 "sticker price" of tuition and fees above \$14,500 at four-year institutions and at \$3,370 at two-year institutions. But whereas most press coverage regarding the cost of higher education focuses on the sticker price charged by an institution, very few enrollees, if any, pay full price. The difference between the sticker price and what students or their parents or guardians actually pay, known as net tuition and fees, comes from grants and scholarships, totaling \$123.8 billion in 2014–2015, provided by federal and state governments as well as institutions and private organizations.⁷ These subsidies include need-based grants, such as Pell Grants for low-income students, and merit-based grants and scholarships.

Over the past decade, the average net tuition and fees paid by students has been growing at a faster pace nationally than in the region. Figure 3 shows that the real average tuition and fees paid by students attending New England institutions increased by 1.6 percent annually between 2002–2003 and 2012–2013, compared with an increase of 2.5 percent nationally. In both the nation and the region, real average net tuition increased the most at public, four-year institutions. This growth occurred during a recessionary period that resulted in falling state and local government appropriations to public institutions, with appropriations recovering slowly coming out of the Great Recession.⁸

⁷ College Board (2015a).

⁸ Desrochers and Hurlburt (2016).



While community colleges faced similar challenges with state and local appropriations, a large portion of their students were eligible for Pell Grants and were able to offset rising tuition costs, as the maximum amount of the grant increased from \$4,050 to \$5,550 between 2006–2007 and 2010–2011.⁹ Students at non-traditional institutions, largely for-profits, also benefited from the increased Pell Grant amounts and paid lower real net tuition and fees on average in 2012–2013 than they had a decade earlier.

Although the costs students incur for higher education have grown faster in the nation than in the region, attending New England institutions is still generally more expensive (Figure 4). In 2012–2013, the average annual net tuition and fees to attend higher education institutions in New England were almost \$15,000, nearly double the \$8,000 students paid nationwide.¹⁰ While this sizable difference in net tuition and fees is largely the result of the relatively high concentration in New England of enrollment at private, non-profit, four-year institutions, which have the highest net tuition costs, a contributing factor is the relatively high cost of postsecondary education across all types of institutions in the region. Four-year public institutions and community colleges provide the most affordable options

⁹ Congressional Budget Office (2013).

¹⁰ The average annual net tuition and fees paid by students is the total net revenue collected divided by full-time-equivalent (FTE) enrollment. The FTE enrollment at an institution is estimated by multiplying part-time enrollment by factors based on the type of institution and level of student, and adding this adjusted part-time-enrollment figure to the number of full-time students enrolled at the institution.



for obtaining undergraduate postsecondary education in the nation and in the region, although community colleges in the region have higher net tuition and fees than peer institutions nationwide.

The net tuition amount, in addition to room and board expenses, is what the average student will generally pay annually to obtain a postsecondary credential.¹¹ While it may be possible to finance some of these costs out of pocket or through assistance from parents or relatives, a majority of students need to take out loans to finance their education.¹² In 2011–2012, over half of full-time students used loans to finance some portion of their education.¹³ However, the percentage of all students with loans varies considerably by type of institution, ranging from 84.1 percent of full-time undergraduates at for-profit institutions to 27.5 percent of full-time undergraduates at community colleges. Given the composition of enrollment and the higher net tuition costs faced by students in the region, student-loan borrowers who attend New England institutions will probably carry higher debt balances than

¹¹ Room and board costs are estimated in a number of different ways and rely on broad assumptions that make it difficult to compare across different types of institutions. Some types of institutions may have more students living with parents, working full-time, or living with employed spouses. Applying room and board costs to these students would overstate the costs they face. The College Board (2015b) estimated 2015–2016 average room and board cost in New England to be \$8,280 at community colleges, \$11,337 at public, four-year institutions, and \$13,565 at private, non-profit, four-year institutions. No room and board estimates are provided for the other types of institutions.

¹² Greenstone and Looney (2013) attempt to identify the portion of net tuition paid for with loans. They estimate that, in 2010–2011, 50 percent of net tuition costs were covered by loans, with the other 50 percent coming out of pocket. This was up from 38 percent of net tuition financed by loans in 1999–2000.

¹³ Snyder, de Brey, and Dillow (2016) Tables 331.6, 331.8, 332.3, and 332.4. In 2011–2012, 56.7 percent of full-time undergraduates and 61.6 percent of full-time graduate students had loans. Only 32.7 percent of undergraduate part-time enrollees had student loans, while 35.0 percent of part-time graduate students had student loans. Estimates are not available below the national level.

borrowers attending institutions in other regions of the nation. This is reflected in the larger average debt balances of bachelor's degree recipients in New England often quoted in policy debates.

III. Student Loans and Defaults: Where and Why?

Ideally, measures of student-loan debt would be as readily available as information on enrollment and tuition and fees. Unfortunately, there is limited publicly available information on the actual debt held by individual borrowers attending postsecondary institutions. On the other hand, fortunately, an abundance of information is available on the default rate of such borrowers, by the institution they attended.¹⁴ Analysis of student-loan default rates shows that borrowers at community colleges and non-traditional institutions default at high rates and account for a majority of defaulting borrowers.

Student-Loan "Default" and Consequences

For most federal student loans, default occurs when a payment has been missed by 270 days and remains outstanding. At this stage, the entire unpaid balance of the loan and any interest accrued is due immediately. However, unlike other forms of debt, federal student-loan debt generally cannot be discharged in bankruptcy. As a result, federal student loans in default persist in this state of severe delinquency and have the following collateral consequences:^a

- The loan is ineligible for deferment, forbearance, and repayment plans, and the student is ineligible for any additional federal student aid.
- Loans go into collection and wage garnishments may occur.
- Federal and state tax refunds may be withheld.
- Credit files will reflect delinquency, impacting the borrower's credit. This may affect the borrower's ability to purchase a car or home, rent an apartment, and obtain a job.
- a For a full list visit StudentAid.org at https://studentaid.ed.gov/sa/repay-loans/default#consequences.

To understand student-loan debt, it is important to understand the purpose of financing education through loans. Unlike other forms of household debt, borrowing used to attend a postsecondary educational institution is an investment in human capital, with the expectation that the resulting gains in

future earnings will help cover the liability incurred. This makes student loans distinctly different from traditional forms of commercial debt, as no collateral is pledged against the loan and no underwriting criteria are used to approve the loan beyond a student's academic ability and potential as determined by an institution.

This form of debt is originated almost entirely by the federal government; it serves a variety of public policy objectives, including encouraging the development of an educated workforce that can increase the nation's economic prosperity and an educated electorate, as well as helping individuals create a Default rates are consistently highest at for-profits and community colleges

better life for themselves and their families. In total, the federal government originated nearly 20 million student loans valued at \$101 billion in Fiscal Year (FY) 2014, of which over 1 million loans valued at more than \$5.9 billion went to students attending New England institutions.¹⁵ This made the federal government the creditor for 90 percent of the value of all student loans made in FY 2014.¹⁶ While an

¹⁴ After 270 days of missed payments, federal student loans go into default. However, default is actually a form of severe delinquency, as borrowers are generally unable to discharge this type of debt.

¹⁵ Based on the author's analysis of the U.S. Department of Education Title IV Program Volume Reports.

¹⁶ College Board (2015a). State and institution-sponsored entities accounted for 1.0 percent of loans, and private sector loans accounted for 7.6 percent.

abundance of information is available on the number and value of loans made to institutions through these programs, no information is publicly available on the average amount of federal student-loan debt held by borrowers at the institutional level. This is because a single borrower can have loans from multiple federal programs, and publicly available information is not aggregated across loan programs to provide, by institution, an average student-loan debt balance of borrowers. However, the rate at which borrowers default on their student loans is dutifully tracked and reported by the institutions themselves.

Federal Student-Loan Programs

There are four major federal student-loan programs available to applicants considering borrowing for postsecondary education:

- 1. The **Direct Subsidized Loan Program** makes loans to undergraduate students who demonstrate financial need. Interest payments are covered while students are enrolled at least half-time. Loans are subject to annual and lifetime limits.^a
- 2. The **Direct Unsubsidized Loan Program** makes loans to undergraduate and graduate students, and does not require a demonstration of financial need. Interest accrues while students are enrolled in school. Loans are subject to annual and lifetime limits.
- 3. The **Federal Perkins Loan Program** offers low-interest federal loans to undergraduates and graduate students with exceptional financial need enrolled at least half-time. The school is the lender for these loans, and not all schools participate. Loans are subject to annual and lifetime limits.
- 4. The **Direct PLUS Loan Program** makes loans to graduate students and parents of dependent undergraduate students to help pay education expenses not covered by other financial aid. Interest accrues on loans during deferment. Annual loan limits are the cost of attendance not covered by financial aid, and there is no lifetime limit. Parents include biological, adoptive, or in some cases, step-parents. Legal guardians are not eligible to borrow from PLUS loan programs, nor are other relatives such as aunts, uncles, or grandparents who have not legally adopted the student.

The majority of federal student loans come through the Direct Subsidized Loan Program and the Direct Unsubsidized Loan Program.^b

Default rates are tracked at the institutional level to see where borrowers are defaulting on the most common federal student loans: direct subsidized loans and unsubsidized loans. Schools with high default rates are barred from participating in federal loan programs.¹⁷ This is determined by the default rate for a cohort of borrowers who enter repayment in a federal fiscal year (for example, the FY 2012 cohort comprises those borrowers who began to repay their debt between October 1, 2011 and September 30, 2012)¹⁸ and who default on their loans by the end of the second subsequent fiscal

a Limits change over time. Current annual limits for subsidized loans are set at \$3,500-\$5,500, depending on year of attendance. Unsubsidized loan limits range from \$5,500 to \$20,500, depending on the borrower's grade level and dependency status. Federal Perkins loans are capped at \$5,500 for undergraduates and at \$8,000 for graduate students. For more information on annual limits, lifetime limits, and interest rates, visit StudentAid.gov.

b Subsidized and unsubsidized loans combined accounted for over 18 million loans nationally (90.8 percent of all student loans) and over \$82 billion in FY 2014. In New England, there were roughly 960,000 such loans (86.8 percent of all loans), totaling nearly \$4.4 billion.

¹⁷ Schools are subject to loss of eligibility to participate in a Direct Loan Program and the Pell Grant Program if official cohort default rates equaled or exceeded 30 percent or greater in FY 2010, FY 2011, and FY 2012, or 40 percent in FY 2012. Nationwide, 19 schools met these criteria, based on the FY 2012 cohort default rates released on September 28, 2015. None of these schools were located in New England.

¹⁸ At this point, the official status of the borrower with respect to the specific loan being repaid becomes "entered repayment."

year (for example, September 30, 2014). This type of default is referred to as the three-year-cohort default, and the rate of default is termed the three-year-cohort default rate. Default here is defined as 360 days of delinquency (as opposed to the default rate for most federal loans, which is 270 days). This measure is available for all schools with borrowers beginning repayment on federal loans and enables analysis by location and type of institution.

Comparing the distribution across postsecondary institution types of the dollar value of federal loans, which is a proxy for debt owed by borrowers entering repayment, with the distribution of borrowers across these institution types and with the corresponding distribution of defaulting borrowers in the FY 2012 cohort, we see a large concentration of defaults at non-traditional institutions (Figure 5).¹⁹ As noted earlier, non-traditional institutions make up a small share of enrollments, with most

Note: Federal loan dollars are the total of direct subsidized and unsubsidized loans disbursed in FY 2011 from the Title IV Volume Program Reports. These values do not correspond directly with the amounts borrowed by those in the FY 2012 cohort, but they are a reasonable proxy for the distribution of their loan values. This proxy is reasonable, as the distribution of loan dollars is fairly consistent in the years that overlap with the likely enrollment period of the FY 2012 cohort, and the majority of borrowers entering repayment are likely to be those who were enrolled in school in the previous academic year (2010–2011). After completing or withdrawing from their programs in the Spring of 2011 and exhausting their six-month grace period, a majority of borrowers likely entered repayment in November of 2011. Borrowers in the FY 2012 cohort entered repayment between October 1, 2011 and September 30, 2012. Defaults are for borrowers 360 days delinquent on loan payments.

19 The distribution of value of federal loans across types of institutions in FY 2011 is a good proxy for the distribution of dollar value of student-loan debt held by the FY 2012 cohort, as the students comprising the largest portion of this cohort are likely to have separated from their respective institutions in that fiscal year. Following the completion of the spring semester, those who complete a degree or withdraw from an institution have a six-month grace period before they are expected to begin repayment on their student loans. This most often occurs in November, which, for those enrolled in spring 2011, would be November 2012 and would therefore fall within the FY 2012 repayment cohort. As the distribution of debt was relatively similar in prior fiscal years, it is reasonable to assume that the distribution of debt carried by borrowers at each type of institution would be roughly equivalent to the distribution of the loans distributed to such institutions in the year preceding these borrowers' entrance into repayment.

enrollments concentrated at traditional institutions. Similarly, the dollar value of federal loans and the number of borrowers are largely concentrated in traditional institutions, with larger shares in New England going to private, non-profit, four-year institutions. But sizable shares of federal dollars nationally, and of borrowers regionally and nationally, are originated from non-traditional institutions. This is somewhat expected, as the share of students at for-profit institutions taking on student loans for their education is higher than at all other types of institutions. Students from these institutions make up a disproportionate share of defaulting borrowers, accounting for 46 percent of defaults nationally and nearly 40 percent of defaults in New England.²⁰ Borrowers studying at community colleges, although the smallest share of borrowers, make up the second largest portion of defaulters, accounting for more than a quarter of defaults nationally and nearly a quarter regionally.

The New England region has the lowest default rate among all regions of the nation, at 7.4 percent, well below the national rate of 11.7 percent (Figure 6). Although a portion of the region's lower default rate can be explained by the higher concentration of borrowers in private, non-profit, four-year institutions, which have the lowest defaults rates, the region's relatively low default rate also reflects the persistently lower default rates at almost every type of institution in all the New England states. This may reflect many factors, such as a better regional labor market for those with postsecondary credentials, larger concentrations of borrowers in high-demand fields at regional institutions, or even-

20 For-profit institutions account for 84 percent of the defaults at non-traditional institutions in New England and the United States.

higher-quality educational institutions that yield more degree completions or better training. Even with lower default rates, New England still faces the same challenge as the nation: default rates for borrowers at community colleges and non-traditional institutions are higher than 10 percent.

The default rates on federal loans have declined from the recent peak rates of the 2010 cohort, when default rates for student-loan borrowers from for-profit institutions and community colleges both peaked, following the surge of enrollments and borrowers at such institutions during the Great Recession.²¹ The high rates of default at community colleges and non-traditional institutions are particularly intriguing, as the average balance of loans at these institutions is lower than at the traditional four-year institutions. One explanation for the high rates of default at these institutions is the low rates of degree completion, particularly at community colleges.²² Low rates of completion lead to the undesirable combination of student debt without the anticipated education and postsecondary credentials' compensating wage gains. Even borrowers who earn a credential may face challenges in the labor market, since degrees from for-profits and community colleges tend to yield lower wages than traditional, four-year institutions. In-depth analysis using individual-level student-loan data by Looney and Yannelis (2015) finds that "these non-traditional borrowers were drawn from lower-income families, attended institutions with relatively weak educational outcomes, and experienced poor labor market outcomes after leaving school." So, in addition to observable qualities, such as the type of institution or ability of students to maintain debt payments after graduation, it is important to understand the borrowers' background and family characteristics that underlie these trends—information that is often missing in student-loan data.

Institutional Outcomes and Student Characteristics Associated with Default

Empirically exploring the relationship of institutional outcomes and student characteristics with borrower default rates on student loans by institution yields a narrative similar to the one above. Completion rates are an important factor inversely associated with institutional default rates, indicating that as an institution's enrollees' rate of degree completions increases, the institution's student-loan default rates fall. Moreover, an institution's share of students from disadvantaged backgrounds is positively associated with default rates, meaning that as an institution enrolls a higher share of first-generation students or students from low-income families, it is likely to see higher student-loan default rates. These results are found by using a linear regression model of loan default rates by institution.²³

²¹ See Looney and Yannelis (2015) and College Board (2015a) for a comparison of historical trends in cohort default rates. The total default rate of the FY 2010 cohort was 13.2 percent for the United States and 9.4 percent for New England. Comparable, three-year-cohort default rates are available only for four cohorts: those that entered repayment in FY 2009, FY 2010, FY 2011, and FY 2012. Prior to FY 2009, two-year-cohort default rates were used, and trailing, three-year-cohort default rates were estimated.

²² Community colleges have historically had the lowest completion rate of all types of institutions. This is due in large part to the way completion rates are calculated for first-time, full-time students who earn their degree within 150 percent of normal degree completion time. Open enrollment institutions like community colleges deal with a large number of part-time enrollees and non-traditional students who are not captured in these measures. Even among students at community colleges who fall into this first-time, full-time group, a large portion transfer to different institutions, thereby lowering completion rates. However, even when these factors are taken into account, fewer than half of those starting at a community colleges end up completing a degree within eight years, similar to the rate at four-year for-profits (Shapiro et al. 2014).

²³ The default regression model is $CDR_n = \beta_0 + \beta_1 C_{150_{n-1}} + \beta_2 LInc_{n-1} + \beta_3 FirstGen_{n-1} + \beta_2 Debt_{n-1} + \beta_5 STEM_{n-1} + \alpha_1 + \alpha_{2i} + \alpha_{3i} + \alpha_{4i} + \varepsilon_n$. The dependent variable (*CDR*) represents cohort default rates at institution *i* for a cohort that enters repayment in year *t*. The independent variables of interest are the percentage of students from low-income families (*LInc*), the percentage of students who are first-generation college enrollees (*FirstGen*), the percentage of students completing their degree or certificate program within 150 percent of the normal time (*C150*), the log of median debt held by students (*Debt*), and the share of degrees granted by the institution in STEM fields (*STEM*). These variables are from the year prior to the entry of borrowers into the repayment cohort (year *t*-1) to proxy for characteristics of the students entering repayment at time *t*, and could be reasonably representative of the characteristics of the students at the enrolled institutions at time *t*-1. Additional controls for the share of students by race, parttime status, and dependency status were included (*S*). All variables are shares, ranging from 0 to 1. We include fixed effects for year (α_{γ_1}), state (α_{2j}), type of institution (α_{3j}), and Carnegie classification (α_{4j}) to control for variation over time, variation across state labor markets, and type and quality of institution.

characteristics, which are share of students by race, part-time enrollment, and dependency status. Fixed effects are included for state, year, type of institution, and Carnegie classification. Standard errors are clustered by institution. Confidence intervals are at the 99 percent level.

Figure 7 shows the partial correlations of certain institutional outcomes and student characteristics with institutional default rates, controlling for observable institutional characteristics that may be associated with default rates. Confidence intervals extending above and below the point estimates indicate the precision of each estimate and the range of possible values associated with a very high degree of certainty (99 percent). When the confidence intervals intersect with zero, we cannot be completely confident that the result differs from zero. This approach controls for the type and quality of institution, so the findings can be interpreted as indicating that a 1 percentage point increase in the share of students with certain characteristics or educational outcomes is correlated with a certain percentage point change in the average institution's default rate, all other factors being held constant.²⁴

Specifically, a 1 percentage point increase in completion rates is associated with a decrease in the default rate of borrowers of nearly 0.1 percentage points at institutions in both New England and the United States. To put it another way, with around 1,035 borrowers coming from the average postsecondary institution, 115 of whom default on their loans, a 1 percentage point increase in the completion rate would equate to one fewer default.²⁵ This result is relatively intuitive, as higher completion rates should result in more borrowers obtaining postsecondary degrees or certificates, giving them a chance

²⁴ The results in this section focus on regressions where the type of institution is controlled for through fixed effects. Of note, the fixed effect for for-profit institutions is positively and significantly correlated with the default rate, while for all other institution types, the correlation of institution type with the default rate is not statistically different from zero.

²⁵ This is based on the FY 2012 cohort, for which the average institution had 1,035 borrowers and an average default rate of 11.2 percent.

to find jobs with higher pay with which, among other benefits, they could sustain student-loan debt payments.

The less-intuitive result is that an increase in the concentration of students who are from lowincome families or are first-generation postsecondary students is associated with a higher rate of defaults.²⁶ This is consistent with other research that finds that students from disadvantaged backgrounds are generally at a higher risk of default than other students.²⁷ As this result controls for common explanations of default, such as low completion rates and high rates of enrollment at lowerquality institutions, this finding is likely the result of two factors. First, such students often come from disadvantaged neighborhoods and may return to those neighborhoods after college and consequently face diminished labor prospects, even with postsecondary credentials. Such students may also be less mobile than individuals from higher-income families, due to resource constraints, or may suffer from limited access to well-connected individuals and networks in labor markets that typically require higher

levels of education. Second, families with relatively constrained resources may have limited financial capacity to help their adult children repay their loans in the event of a delinquency resulting from unemployment, underemployment, or initial post-college employment in a low-wage position.

This institutional-level analysis does not support popular assumptions that default rates are linked with the level of debt owed by students or with the types of majors pursued by graduates. In other words, as an institution experiences increases in student-loan debt balances or share of graduates in high-demand fields, there is little-to-no change in the institution's student-loan default rate. For instance, larger student-loan balances appear to be slightly correlated with borrower default rates nationally, but the effect is extremely small (0.02 percentage points). There is no relationship between debt levels Institutions with low completion rates and hosting a large share of disadvantaged students are associated with higher institutional default rates

and default rates at New England institutions. This result is not necessarily surprising, as debt itself has not been found to be the cause of default: earnings also play a large role in determining default rates.²⁸

Since high-demand science, technology, engineering, and mathematics (STEM) fields generally yield higher earning potential; it is likely that institutions with higher concentrations of such graduates would see lower rates of default on student loans. Yet there appears to be no relationship between the share of STEM graduates and student-loan default rates either nationally or regionally. While it is well established that STEM graduates earn more than their peers, it may be that non-STEM graduates earning degrees from the same type and quality of institution also achieve sufficient earnings to sustain student-loan payments. However, the interpretation of institutional-level data and analysis is only suggestive and is limited by variation in the outcomes of individual borrowers from any given institution.

IV. Beyond College: Debt and Delinquency of New England Residents

The characteristics of student-loan debt owed by residents of New England are markedly similar to student-loan debt characteristics nationwide. A majority of the region's borrowers have balances below \$25,000, and the highest rates of delinquency among borrowers are among those with the

²⁶ Low-income students are defined as students from families with incomes below \$30,000. First-generation students are those from families where neither a parent nor a guardian had any form of postsecondary education. Both variables are derived from responses to the Free Application for Federal Student Aid (FASFA). Therefore, the variables are the share of Title IV borrowers who are from low-income families and the share of borrowers who are first-generation postsecondary students.

²⁷ See Knapp and Seaks (1992) and Dynarski (1994).

²⁸ Looney and Yannelis (2015) find that students with a higher debt burden relative to earnings are substantially more likely to default.

lowest student-loan debt balances. However, like the average student-loan default rate of borrowers from institutions, the rate of delinquency on student loans of New England residents is consistently lower than the national rate.

A majority of the information on student loans is tracked and analyzed at the institutional level. While such information is useful, student-loan debt is ultimately an issue that individuals grapple with after withdrawing or graduating from an institution. The Federal Reserve Bank of New York/ Equifax Consumer Credit Panel provides data that support analysis of the trends among individual student-loan borrowers, including detailed information such as loan balances, delinquency status, and neighborhood of residence.²⁹

Trends revealed by data on loans of individual borrowers, including loans taken out by students and parents, show how student-loan debt has rapidly become the largest non-housing-related form of consumer debt. Nationwide, the number of individuals with student-loan debt has risen from 23.5 million or about 10 percent of individuals with credit profiles in 2005 to over 43.5 million borrowers, representing nearly 17 percent of individuals with a credit file at the end of 2015. In New England, the increase in the prevalence of student-loan debt has been similar, rising from 1.4 million borrowers in 2005 to 2.3 million in 2015, with nearly 19 percent of individuals with credit files having a student loan in 2015.

Along with the sharp rise in the number and share of individuals with student loans over the last decade, the student-loan balance owed by the average borrower has increased at a steady rate (Figure 8). In fact, this was the only form of household debt to rise throughout the Great Recession, as households deleveraged all other forms of debt.³⁰ Between 2005 and 2015, the student-loan balance carried by the average borrower grew at an annual rate of 3.6 percent nationally and 3.1 percent regionally. Faster growth in average student-loan debt nationally than regionally is consistent with the trends in net tuition costs faced by students discussed earlier. However, the growth rates of these average debt balances in both the United States and New England have outstripped the growth rates of net tuition costs. This may indicate that as students have faced higher out-of-pocket costs to attend institutions of higher education, they have had to shift toward financing more of their education with student loans because they have been unable to increase their reliance on other sources, such as parental assistance or part-time work, at a sufficiently rapid pace.

By 2015, the average student-loan debt of U.S. borrowers was over \$27,500, and for borrowers in New England, it was close to \$27,400. The similarity of the average student-loan debt balances may seem surprising, given the higher cost of tuition and the concentration of enrollment in New England. But New England is a net importer of college students and a net exporter of recent college graduates.³¹ As a result, many residents of the New England states have lower student-loan debt balances than the national average; only residents of Connecticut and Massachusetts have average student-loan balances above the national average, due to concentrations of high-debt borrowers in places like Boston and Bridgeport.³²

Because individuals who take out student loans are borrowing against anticipated future earnings derived from the education they finance, rising student-loan debt is not necessarily an issue if borrowers are obtaining postsecondary degrees and certificates that yield higher earnings. Although researchers consistently find clear evidence that individuals with postsecondary credentials earn

²⁹ The Consumer Credit Panel is a 5 percent sample of all U.S. households with a credit profile and a social security number (Lee and Van der Klaauw 2010).

³⁰ Brown et al. (2014).

³¹ Modestino (2013).

³² Among New England metropolitan areas, Bridgeport-Stamford-Norwalk, CT, and Boston-Cambridge-Newton, MA-NH, had the highest average debts, of \$30,280 and \$29,130, respectively, in 2015.

considerably more than those without,³³ real wages of recent college graduates have declined in recent years. In the last decade, real wages earned by recent college graduates fell by 0.9 percent annually and have remained essentially unchanged since 2011.³⁴ This may reflect a cyclical trend resulting from the Great Recession, as overall wage growth has been slow despite continuing improvement in the labor market.³⁵ Still, this combination of rising student-loan debt and falling wages has squeezed the budgets of many college graduates.

How tight is the squeeze? The average borrower's student-loan balance equates to a monthly payment of close to \$320, amortized over 10 years.³⁶ Assuming the average borrower earned close to the average earnings of recent college graduates, this monthly payment would account for over 8

³³ For example, see Autor, Katz, and Kearney (2008).

³⁴ The real earnings of recent college graduates are calculated using the U.S. Census Bureau's American Community Survey (Ruggles et al. 2015). Recent college graduates are defined as those 20 to 35 years of age, employed, and not currently enrolled in school, with at least an associate's degree. Those 20 to 35 years old are the prime age group with student-loan debt.

³⁵ See Daly and Hobjin (2015) for a discussion of slow wage growth in emerging from the Great Recession.

³⁶ This is based on the assumption that the average student carries primarily federal student loans, with only a small portion of debt financed by private loans. Applying an above-average 7 percent interest rate on the loan balance and assuming a standard, 10-year amortization schedule, the monthly payment on the average balance would be \$320, and the average payment in New England would be \$318. The 7 percent interest rate assumption likely overestimates the size of the payment, as federal loans account for over 90 percent of all student loans and would likely have an effective interest rate of 5.4 percent if all loans taken out between 2011 and 2014 were borrowed through the Direct Unsubsidized Loan Program.

percent of the student's pre-tax earnings in the United States, and close to 8 percent in New England. Under this scenario, the average borrower earning the average income of a recent college graduate in both New England and the United States would qualify for federal student-loan payment reduction, as his or her monthly payments would exceed 10 percent of his or her discretionary income (disposable income less 150 percent of the federal poverty level).³⁷ Such federal student-loan repayment plans cap monthly payments as a share of one's discretionary income but also extend the length of the borrower's repayment schedule. Only after 20 to 25 years of payments will borrowers have outstanding loan balances forgiven. Although this scenario relies on broad assumptions about the earnings of borrowers, it indicates that a large share of borrowers are potentially eligible for federal repayment plans. While this would help reduce the burden that student-loan debt places on recent college graduates, it would also increase the duration of repayment from 10 years to 20–25 years for eligible borrowers who take advantage of the programs, potentially resulting in more borrowers in their 30s and 40s still making regular student-loan payments.

The share of borrowers in delinquency has also been increasing over time (Figure 9). Of all U.S. borrowers with student loans in 2015, 14.0 percent were severely delinquent—meaning, over 120

delinquency rate calculation. Severe delinquency is defined as being over 120 days late on any student loan payment.

³⁷ Discretionary income is defined as the difference between an individual's income and 150 percent of the poverty guideline for the individual's family size and state of residence. The 150 percent poverty guideline was \$17,655 for a single individual in the 48 contiguous states in 2015. This left a discretionary income for the average recent college graduate of \$35,108 in the United States, and \$37,935 in New England. Under the income-driven Revised Pay as Your Earn (REPAYE) program, the hypothetical average U.S. borrower would be eligible to reduce his or her monthly payment to \$243, and the average New England borrower could reduce his or her monthly payment to \$247.

days late with a payment—on their student loans. In New England, slightly more than 10 percent of residents were severely delinquent on their student loans that year. However, nearly one-third of all New England student-loan borrowers were in deferment, most often as a result of still being actively enrolled in school. Measuring delinquent borrowers as a share of all borrowers understates this issue, as borrowers in deferment cannot be delinquent and therefore would never appear in the numerator.³⁸ Removing borrowers in deferment from the denominator of the equation yields a severe delinquency rate in 2015 of nearly one in five student-loan borrowers nationally, and one in seven regionally.

These rates are near the highest student-loan delinquency rates experienced in the past decade. Delinquency rates rose continually through the course of the recession and subsequent recovery and have yet to moderate through the end of 2015, despite improvements in the labor market. The elevated rates of delinquency may reflect the fact that most student loans cannot be discharged in bankruptcy and therefore remain in a state of default for prolonged periods of time.

The combination of rising delinquencies and rising debt levels might lead one to the spurious conclusion that higher debt levels lead to more delinquencies. But in actuality the majority of borrowers and delinquencies are among those with low loan balances. Figure 10 shows the shares of all student-

38 In the Consumer Credit Panel, 29.1 percent of individuals with student loans had a loan in principal deferment or payment deferment status in 2015. The U.S. Department of Education listed 3.27 million direct loans as in deferment in Q3: 2015, 78.9 percent of which were in school deferments.

loan debt, student-loan borrowers, and delinquent borrowers by student-loan balance in New England and the United States. Each bar represents the share of debt or borrowers in the category of borrowers with a student-loan balance in a certain range. For example, nearly 30 percent of borrowers and 30

Delinquency rates are highest among borrowers with the lowest loan balances percent of severely delinquent borrowers owed a balance between \$10,000 and \$24,999. The high concentration of borrowers in this group is consistent with the significant role played by federal loans in the student-loan market, as students borrowing up to the annual maximum and completing degrees on time would graduate with debt of \$12,000 at two-year institutions, and \$27,000 at four-year institutions.³⁹ In total, about 70 percent of borrowers and 75 percent of severely delinquent borrowers in the United States and New England had student-loan balances under \$25,000. However, the majority of student-loan debt is owed by the fewer than one-third of borrowers with balances exceed-

ing \$25,000. In fact, nearly one-quarter of all student-loan debt is owed by the fewer than 4 percent of borrowers with \$100,000 or more in student-loan debt. The disproportionate concentration of debt among a small number of borrowers pushes up average student-loan debt balances but has little influence on delinquency rates.

Considering delinquency rates by the amount of debt owed by individuals, we see higher rates of delinquency for those with smaller debt balances (Figure 11). Although we cannot link the borrowers underlying these delinquency rates to their type of degree or their earnings, this tells a story similar

and Rockingham and Strafford counties in New Hampshire.

³⁹ This is based on the current federal loan limits on direct subsidized and unsubsidized loans. The totals are likely lower, as these limits have risen over time and borrowers take out loans incrementally over the course of their education.

to the one told by the institutional default rates. The borrowers who default on the lowest studentloan balances probably include a large number of borrowers who took out student loans and did not complete their degrees, leaving them carrying debt but having no resulting wage gains with which to make student-loan payments. The longer the length of attendance, the higher the student-loan debt balance, with most borrowers who owe debt in excess of \$25,000 likely to have attended a bachelor's degree program or a bachelor's degree program plus a postgraduate program. Thus, since such substantial borrowing would likely go mostly to financing education that yields higher wages, one would expect, on average, to see lower rates of delinquency among such borrowers. The highest debt levels are mostly carried by individuals who attended graduate school and will probably see the largest wage premium for their education.⁴⁰

Even when examined by ranges of debt amount, student-loan borrowers in New England exhibit consistently lower rates of severe delinquency than student-loan borrowers in other regions of the nation. The lower rates of delinquency at the high end of the debt balance distribution could plausibly reflect higher wages and better labor market prospects for those with degrees working in New England's highly skilled labor market. This conjecture is supported by the substantially lower rates of delinquency in the Boston metropolitan area, which has a large concentration of highly skilled workers. But lower rates of delinquency across all debt balances may also indicate higher wages or better labor market prospects overall in the region, helping those who borrowed to finance higher education but did not complete a degree, as well. It may also reflect ways in which the characteristics of New England borrowers differ from the characteristics of student-loan borrowers in the United States as a whole.⁴¹

Neighborhood Characteristics of Borrowers Prior to Taking out a Loan

A better understanding of the characteristics of borrowers and the challenges they face should support better policy. Looking at student debt by the characteristics of the neighborhoods where borrowers have come from, we find that those from low-income localities, neighborhoods with a higher share of minority residents, and areas with low levels of educational attainment have lower levels of debt but higher rates of delinquency. In fact, over one in four individuals from a disadvantaged background or from a population underrepresented in higher education becomes severely delinquent on his or her student loans.

In addition to documenting student-loan debt held by individual residents, the Consumer Credit Panel follows the sample of borrowers over time to see when borrowers take out a student loan, enter repayment, and move in and out of delinquency. Ideally, a researcher would also have information on individual borrowers' demographic characteristics, degree type, field of study, employment, and earnings to fully understand the issues related to student loans. However, even knowing where borrowers lived when they took out their first student loans allows us to better understand the characteristics of borrowers and the challenges certain borrowers may face.

When individuals attend postsecondary institutions, any loans they are using to finance their education are disbursed at the beginning of the semester. As most students begin enrollment at postsecondary educational institutions in the fall, this is when most student loans first appear on a borrower's credit file. Assuming that when they took out their student loans, most borrowers resided in the communities and neighborhoods where they were raised and educated prior to attending

⁴⁰ Using the National Postsecondary Student Aid Study (NPSAS), Kantrowitz (2012) finds that 0.2 percent of undergraduate students graduated with six-figure student-loan debt in 2007–2008. Almost 40 percent of those with professional degrees in fields such as law or medicine graduated with over \$100,000 in debt.

⁴¹ Another plausible explanation could be the composition of the distribution of borrowers by age and stage in the repayment cycle. However, the United States and New England have extremely similar distributions of borrowers across debt balances, stages of repayment, and age groups.

Table 1

Student-Loan Debt and Delinquency Trends by Neighborhood Characteristics Prior to Disbursement of Borrower's First Loan

		Average Debt (2015 Dollars)			Severe Delinquency Rate (%)		
		2005	2010	2015	2005	2010	2015
	Below \$30,000	\$16,108	\$17,355	\$22,695	21.5	26.9	32.9
ome nge	\$30,000-\$49,999	\$15,427	\$17,782	\$23,080	16.2	20.7	24.4
Inco Rai	\$50,000-\$74,999	\$17,406	\$19,940	\$24,835	10.7	14.2	16.3
	Above \$75,000	\$21,008	\$23,398	\$28,453	6.3	8.8	10.2
	Above Average	\$16,604	\$18,769	\$24,547	18.7	23.9	26.9
Share linorit	Average	\$18,926	\$21,271	\$26,19 7	10.6	14.3	17.2
2	Below Average	\$16,400	\$19,025	\$23,560	8.2	10.9	14.1
elor's e	Below Average	\$12,718	\$15,186	\$20,666	19.8	24.6	28.8
e Bach Degree	Average Share	\$15,518	\$18,197	\$23,359	12.8	16.5	19.5
Share	Above Average	\$21,349	\$23,882	\$29,073	8.2	10.8	12.4

Source: Author's calculation using, Federal Reserve Bank of New York/Equifax Consumer Credit Panel and the U.S. Census Bureau's 2000 and 2010 Decennial Census Summary Files.

Note: Borrowers are split into income categories based on the median real household income of their census tracts. The groupings of the share of population who are minority and share of population with at least a bachelor's degree by tract result from splitting student loan borrowers into equal thirds based on the racial and educational composition of their census tracts. The population covered includes only those loans originated in 1999 or later, as the Consumer Credit Panel starts in 1999. Community characteristics are assigned to the nearest decennial census estimate for the census tract, and loans originated in 2005 or earlier are assigned to tracts with 2000 census tract characteristics, while those originated later are assigned to tracts.

college, one can observe trends of borrowers by community characteristics, such as income, racial composition, or education level.⁴² This information can provide valuable insight into the student-loan debt held by individuals who come from disadvantaged neighborhoods or communities that are traditionally underrepresented in higher education.

Trends in student-loan debt and delinquency of borrowers by community characteristics yield a similar finding to what we observed by examining individuals' characteristics: those with lower debt balances become delinquent at higher rates (Table 1). Whether borrowers are from the lowest-income

⁴² Neighborhoods here are defined as census tracts. A census tract is a small subdivision of a county or equivalent area, whose boundary and population is updated prior to each decennial census but is relatively permanent over time. Tracts range in population from 1,200 to 8,000 people and have an optimal size of 4,000 people (U.S. Census Bureau 2012). The assumption that borrowers resided in the community where they were raised prior to enrollment may be problematic for some borrowers, as they may have just moved into the neighborhood prior to enrollment or be outliers for the observed characteristics. However, given the use of detailed geographic location, such as a census tract, and given that the Consumer Credit Panel consists of borrowers from a random 5 percent national sample, such borrowers are unlikely to distort national trends. Older borrowers taking out loans for the first time may be another problematic group under this assumption, although many of these borrowers would likely be borrowing for continuing education or would continue to live at home while enrolled, and so would likely still be representative of the community where they currently reside.

communities, from neighborhoods with higher shares of minority populations, or from places with lower shares of residents having at least a bachelor's degree, they tend to carry lower levels of student-

loan debt but experience higher rates of severe delinquency than borrowers from other neighborhoods. In fact, the rate of severe delinquency among borrowers from these disadvantaged or underrepresented neighborhoods exceeded 25 percent in every one of these neighborhood types observed in 2015. These high rates of default among disadvantaged populations may also help to explain the lower rates of delinquency and default in New England, as a lower share of borrowers residing in the region come from disadvantaged or underrepresented neighborhoods.

Although our approach does not enable us to clearly identify the cause of the high rates of delinquency among borrowers from disadvantaged backgrounds, the results suggest a number of plausible explanations for this finding in a narrative similar to the one that may explain the observed institutional default rates: borrowers from disadvantaged or underrepresented More than one in four from a disadvantaged background or from a population underrepresented in higher education becomes severely delinquent on student loans

backgrounds enroll at lower-cost institutions with relatively weak outcomes, face relatively poor labor market prospects and outcomes that lead to high rates of delinquency on student-loan debt, and come from families with limited resources to assist with student loan debt. Further research connecting individual borrowers with educational institutions and labor market outcomes is needed to identify more definitively the causes of such high rates of delinquency and to identify actionable policy solutions.

V. Conclusions

Students attending New England institutions face higher costs to obtain a postsecondary education than students attending such institutions in other U.S. regions, due to a combination of higher tuition costs across all types of institutions and a high concentration of students in costlier private, non-profit, four-year institutions. These factors explain the relatively high debt of graduates from the region's institutions. But among New England residents, the average balance and distribution of borrowers' student-loan debt are markedly similar to those of borrowers nationwide, with the exception of select labor markets in Connecticut and Massachusetts.

Yet, in terms of both institutional default rates and individual delinquency rates, the New England region tends to fare better than the nation. While this outcome may be attributable to higher institutional quality and better regional labor markets for those with postsecondary degrees, it may also reflect the characteristics of borrowers attending the region's institutions and living in the region. Because New England is a high-income region that is less diverse than other parts of the nation, borrowers attending New England institutions and New England residents owing student-loan debt here are less likely to come from such disadvantaged backgrounds, and this may partly explain New England's lower rates of student-loan delinquency and default. At both the institutional and the individual level, we find evidence, consistent with other research, suggesting that borrowers from disadvantaged or underrepresented backgrounds experience relatively high rates of default and delinquency. Further exploration of this result is warranted, to better guide both national and regional policy.

Given the importance of the higher-education industry to the region and the large, highly educated workforce in New England, policies addressing student-loan debt could have sizable implications for the region. States have considerable room to address student-loan debt, particularly in publicly controlled state college systems. Slowing the growth of tuition costs paid by students at public institutions,

particularly four-year institutions, is a clear policy lever to slow the growth of average student debt. Moreover, many of the issues underlying defaults and delinquencies on student loans reflect areas that have historically been the focus of education policy, such as improving preparedness for higher education and increasing completion rates. However, as this analysis shows, the challenge is as much about outcomes and earnings as it is about debt.

In this regard, making potential borrowers aware of these outcomes at an early stage may help guide better enrollment and borrowing decisions. It would be helpful to include in students' financial aid offers a simple and easily understood document explaining the terms of their loans and their expected monthly payments after graduation, under reasonable assumptions.⁴³ This information should be updated and sent to students annually to reinforce understanding of their debt obligations.

Educating student borrowers and strengthening the state's consumer protection role are policies that could support student borrowers, making them less likely to default Such policies have been implemented at public institutions in Indiana and Nebraska, with anecdotal evidence of a decline in student-loan debt in Indiana since the policy was implemented.⁴⁴ Institutions should also provide comparable information on the average earnings of graduates from the institution and the prospective borrower's resulting debt-to-earnings ratio with such earnings. This process could also be used to identify first-generation, low-income, and non-traditional students and offer them counseling and guidance opportunities to help them understand financing options, navigate selection of major field of study, and work toward degree completion.⁴⁵

To provide such information, considerable improvements are needed in the information made publicly available on loan performance and borrowers' labor market outcomes. The College Scorecard was a strong first step in making available to the public data on earnings, repayment rates, and defaults. But further information is needed on the employment, earnings, debt-to-earnings

ratio, and loan performance of borrowers. However, restrictions placed on the development and maintenance of a federal database of personally identifiable information on individuals receiving federal educational assistance limit the extent to which such data can be collected.⁴⁶ Fortunately, states are not covered by these restrictions, and they could develop such metrics and collaborate with a consortium of other states to provide robust information in order to better guide policy and inform borrower decisions.

Lastly, states have the authority, through boards or departments of higher education, to approve and renew the operations of higher-education institutions within their state's borders or enroll state residents through online programs. For enrollees to be eligible to receive federal financial aid to attend institutions in a state (or to receive federal funds to pay for courses offered online to residents of a state) the programs must be approved to enroll residents by the state's board or department of higher education.⁴⁷ The current process for approval and renewal generally focuses on the financial status of

⁴³ This could include assumptions about annual cost of attendance, amount of debt if completed on time and amount of debt if the program is completed within 150 percent of the normal time.

⁴⁴ Sophie Quinton. "What Happens When You Warn Students About Their Loan Debt?" Stateline, the Pew Charitable Trust, May 19, 2016.

⁴⁵ Schmeiser, Stoddard, and Urban (2015, 2016) have examined the use of Montana State University's "Know Your Debt" letters, which offer financial counseling when debt hits a certain threshold. Their findings indicate that those who received letters borrowed an average of \$1,360 less in the subsequent semester. Students who received information suggesting they may be unlikely to be able to repay their loans were more likely to switch to higher-earning majors.

⁴⁶ See the database of student information prohibited from being collected. 20 U.S.C. 1015c (2008). Retrieved from www.law.cornell. edu/uscode/text/20/1015c

⁴⁷ Institutions that are not in compliance with the state authorization regulations under 34 CFR 600.9(a) and (b) may lose their eligibility to participate in Title IV programs.

the institution, tuition and fees charged, curriculum offered, and faculty and administration. However, some state entities reserve the right to deny approval or renewal to operate within their state if they determine that predatory enrollment practices are being used. States could strengthen the consumer protection role of these entities by incorporating metrics on labor market outcomes and loan performance into the process of reviewing institutions. This would entail developing relevant outcome metrics, such as a standard for underachievement in labor market outcomes and/or loan repayments (for example, threshold values for job placements, debt-to-earnings ratios, and loan delinquency and default rates). Persistent underachievement would lead to denial to operate in the state, although threshold criteria would likely need to vary by type of institution and take into consideration changes that result from economic downturns.

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About the Author

At the time this report was written, **Robert Clifford** was a Senior Policy Analyst & Advisor with the New England Public Policy Center. His work focused on housing affordability and homelessness in New England, as well as immigration policy and labor market trends in the Commonwealth. Robert was also the editor of the Federal Reserve Bank of Boston's regional data resource, *New England Economic Indicators*. He presented on the regional

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