

EXPLORING KEY QUESTIONS: PROGRAM-LEVEL REPAYMENT FOR HIGHER EDUCATION ACCOUNTABILITY

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Commissioned by Higher Learning Advocates

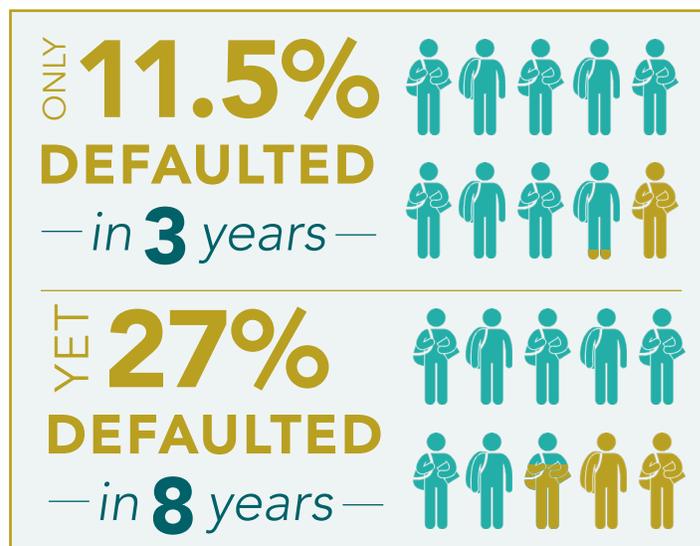
As outstanding student loan debt in the United States approaches \$1.5 trillion, whether students are able to repay their loans has become a key federal policy issue. There is broad dissatisfaction among policymakers and much of the higher education community with the current way that colleges are evaluated on their former students' ability to manage their debt. The main federal accountability measure used today, the cohort default rate (CDR), tracks the percentage of students at a college or university who default by failing to make a payment on their loans during a 360-day period within the first three years of leaving college and entering repayment.

However, there is broad frustration with the CDR due to how only one adverse outcome is reflected and colleges' ability to artificially reduce default rates. There are also concerns with using institution-level metrics due to the likelihood of large variations in outcomes across different fields of study. Using student loan repayment rates instead of CDRs as accountability metrics has a number of advantages, but there are trade-offs in using program-level versus institution-level repayment rates.

This paper provides information about the current CDR policy, details different ways to calculate student loan repayment rates, some strengths and weaknesses of program-level repayment rates, and policy recommendations to make repayment rates a valuable tool for students and taxpayers alike.

CURRENT POLICY: COHORT DEFAULT RATES

On their face, CDRs suggest that students have relatively few problems managing their student loan burdens. Only 11.5% of students defaulted on their loans during the three-year period as of the most recent data available from the U.S. Department of Education.¹ However, this official rate does not accurately reflect students' ability to avoid default over the long term, in part due to colleges' efforts to help students defer their loans until after the three-year accountability window has passed.² As a result, only 11 small colleges lost federal financial aid eligibility due to high CDRs over a 15-year period.³ Yet 27% of undergraduate students who began college in the 2003-04 academic year had defaulted on a federal loan by 2015, and research by Judith Scott-



¹ Office of Federal Student Aid (2017). Official cohort default rates for schools. <https://www2.ed.gov/offices/OSFAP/defaultmanagement/cdr.html>.

² Emrey-Arras, M. (2018). Actions needed to improve oversight of schools' default rates. Washington, DC: United States

Government Accountability Office GAO-18-163.

³ U.S. Senate Committee on Health, Education, Labor & Pensions (2015). Risk-sharing/skin-in-the-game concepts and proposals. Washington, DC: Author.

Clayton of Teachers College suggests that default rates for that cohort may rise to 40% by 2023.⁴

Another limitation of CDRs is that they fail to capture the large group of students who avoid default, but make little or no progress repaying the principal on their loans. Compared to the CDR over the same measurement period, non-repayment rates are much higher. Research conducted with Amy Li of the University of Northern Colorado found that while CDRs within one year of entering repayment were between six and eight percent, between 40% and 52% of students entering repayment from 2006-07 through 2008-09 failed to repay at least \$1 in principal during the same period.⁵ Just 38.3% of students who entered repayment in 2012 or 2013 had paid down at least \$1 in principal on their loans three years later, compared to 63.5% who had done so among those entering repayment in 2006 or 2007.⁶

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Much of this decline in repayment rates is likely due to the growth of income-driven repayment (IDR) plans, as the amount of federal Direct Loans enrolled in IDR plans (\$388.6 billion) exceeded the amount in standard payment plans (\$380.3 billion) in early 2018.⁷ Students who typically started repaying their loans quickly in the past (bachelor's degree recipients and graduate borrowers with large loan balances) now take years to start paying down principal, leading to growing costs for taxpayers.⁸ The Government Accountability Office recently estimated that \$108 billion of loans made in IDR plans between 1995 and 2017 will be forgiven—about one-third of all loans made during that period.⁹

There is growing interest in looking beyond institution-level performance measures to examine performance of individual fields of study, especially as research shows large differences in the financial benefits of a college education by major.¹⁰ The early 2017 release of program-level earnings and debt data for certain vocationally-oriented fields under the Obama administration's gainful employment regulations showed the federal government's ability to produce program-level data. Although the Trump administration has reversed efforts to tie federal funding to gainful employment outcomes, the House Republican bill to reauthorize the Higher Education Act would link federal financial aid eligibility with program-level student loan repayment rates.¹¹

⁴ Scott-Clayton, J. (2018). The looming student loan default crisis is worse than we thought. Washington, DC: Brookings Institution. Woo, J. H., Bentz, A. H., Lew, S., Velez, E. D., & Smith, N. (2017). Repayment of student loans as of 2015 among 1995-96 and 2003-04 first-time beginning students. Washington, DC: National Center for Education Statistics Report NCES 2018-410.

⁵ The old two-year CDR (which is now a three-year measure) covers the same time period after entering repayment as the Scorecard one-year repayment rate. Kelchen, R., & Li, A. Y. (2017). Institutional accountability: A comparison of the predictors of student loan repayment and default rates. The ANNALS of the American Academy of Political and Social Science, 671, 202-223.

⁶ Kelchen, R. (2017, September 28). Examining trends in student loan repayment rates. <https://robertkelchen.com/2017/09/28/examining-trends-in-student-loan-repayment-rates/>.

⁷ Office of Federal Student Aid (2018). Federal student loan portfolio. <https://studentaid.ed.gov/sa/about/data-center/student/portfolio>.

⁸ Lacy, T. A., Conzelmann, J. G., & Smith, N. D. (2018). Federal income-driven repayment plans and short-term student outcomes. Educational Researcher, 47(4), 255-258. Looney, A., & Yannelis, C. (2018). Borrowers with large balances: Rising student debt and falling repayment rates. Washington, DC: The Brookings Institution.

⁹ Emrey-Arras, M. (2017). Education needs to improve its income-driven repayment plan budget estimates. Washington, DC: United States Government Accountability Office.

¹⁰ Webber, D. A. (2016). Are college costs worth it? How ability, major, and debt affect the returns to schooling. Economics of Education Review, 53, 296-310.

¹¹ Hackman, M., & Mitchell, J. (2018, July 26). DeVos plans to repeal Obama rule targeting underperforming for-profit colleges. The Wall Street Journal. <https://www.wsj.com/articles/devos-plans-to-repeal-obama-rule-targeting-underperforming-training-colleges-1532641977>. HR 4508: The Promoting Real Opportunity, Success, and Prosperity through Education Reform (PROSPER) Act.

CALCULATING REPAYMENT RATES

Although there is a great deal of interest in using student loan repayment rates for accountability purposes, there is no agreed-upon definition of repayment rates at this time. This section discusses existing repayment rate definitions and definitions that have been proposed in pieces of legislation. The only repayment rate metric that is currently reported is from the College Scorecard, which is based on the percentage of borrowers whose loan balances decreased by at least \$1 among all borrowers who entered repayment (excluding those in in-school or military deferment or those who died or became permanently disabled). This rate, which is based on data from the National Student Loan Data System, is calculated for one, three, five, and seven

years following when a student left college and entered repayment.¹² A bipartisan bill co-sponsored by Senators Hatch and Shaheen proposed using one-year repayment rates similar to the Scorecard definition to determine eligibility for federal financial aid (but including PLUS loans), with colleges with repayment rates below 15% in three consecutive years losing eligibility.¹³

The U.S. Department of Education developed an additional repayment rate as a part of the Obama administration's initial effort to create gainful employment regulations. Released in 2012, these rates were calculated at the program level for nearly all degree and certificate programs at for-profit colleges and certificate programs at public and nonprofit colleges. Unlike the Scorecard,

REPAYMENT RATE

	DEFINITION	HOW IS IT MEASURED OR CALCULATED?
College Scorecard	Based on the percentage of borrowers whose loan balances decreased by at least \$1 among all borrowers who entered repayment.	The repayment rate is calculated for one, three, five, and seven years following when a student left college and entered repayment.
Sen. Hatch and Sen. Shaheen proposal	Uses one-year repayment rates similar to the College Scorecard definition to determine eligibility for federal financial aid.	Colleges with repayment rates below 15% in three consecutive years loses eligibility.
Gainful Employment Rate	Based on the percentage of dollars repaid instead of the percentage of students who repaid any principal.	Programs that had repayment rates above 35% between three and four years after entering repayment automatically passed the gainful employment test.
PROSPER Act	Based on the percentage of students in repayment including both dropouts and graduates. This measure includes loans to graduate students, but not parents, and also provides an exemption to programs with a small percentage of borrowers.	End program's access to federal financial aid if a program's repayment rate is below 45% for three successive cohorts.

¹² Council of Economic Advisers (2017). Using federal data to measure and improve the performance of U.S. institutions of higher education. Washington, DC: Executive Office of the

President of the United States.

¹³ S 2231: Student Protection and Success Act.

the gainful employment repayment rates were based on the percentage of dollars repaid instead of the percentage of students who repaid any principal, meaning that high-balance borrowers were more influential in this version than in the Scorecard.¹⁴ Programs that had repayment rates above 35% between three and four years after entering repayment automatically passed the gainful employment test, although this was never implemented after a federal judge sided with for-profit colleges' claim that the Department of Education did not provide sufficient justification for the repayment rate threshold.¹⁵

The House Republican bill to reauthorize the Higher Education Act proposed a program-level repayment measure that is based on the percentage of students in repayment (including both dropouts and graduates) instead of the percentage of dollars in repayment. The PROSPER Act would end programs' access to federal financial aid if a program's repayment rate (as defined as the percentage of loans less than 90 days delinquent or in an appropriate deferment or forbearance plan) is below 45% for three successive cohorts.¹⁶ Unlike the current CDR or Scorecard repayment rate measures, the PROSPER measure would include loans to graduate students (but not parents), and it would also provide an exemption to programs with a small percentage of borrowers.

PROGRAM-LEVEL REPAYMENT RATE QUESTIONS TO CONSIDER

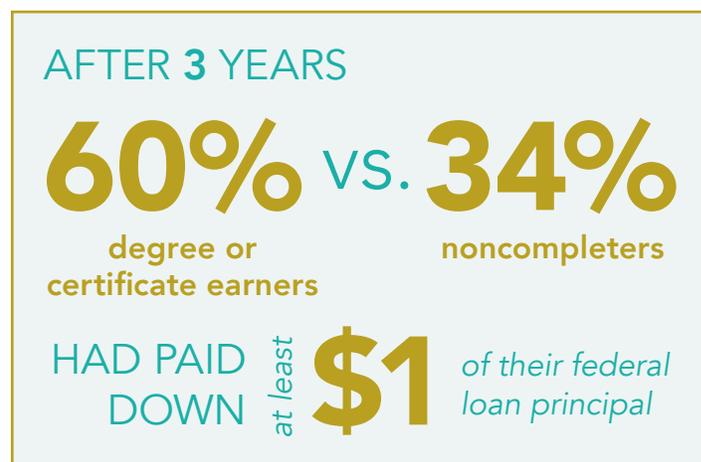
Since program-level repayment rates are a relatively new concept, there are a number of important questions about the design of the measure to be as useful as possible for students, their families, and taxpayers. This section addresses three crucial questions with a focus on developing a program-level repayment rate measure that is difficult for colleges to manipulate without actually improving their outcomes.

Question 1: How should the repayment rate be defined?

As shown above, there are a number of potential options for creating a definition of repayment rates. But these options tend to fall into two groups, either based on the percentage of students repaying their loans or the number of dollars repaid. From the view of prospective students and their families, a measure based on the percentage of students repaying their loans makes more sense as it better represents a student's likelihood of repayment. However, taxpayers and budget-minding policymakers are likely to prefer a measure based on the percentage of dollars repaid to account for the risk to the federal budget. This measure gives colleges a particularly strong incentive to focus their efforts on students with the largest balances (often graduate and professional students), which can raise equity concerns given the strong association between outstanding student loan debt and future earnings.¹⁷

Sixty percent of federal student loan borrowers who entered repayment in 2010-2011 and 2011-2012 after earning a degree or certificate had paid down at least \$1 of their loan principal after three years.

Only 34 percent of noncompleters had paid down at least \$1 of their loan principal after three years.



¹⁴ Office of Federal Student Aid (2012). Gainful employment operations manual. Washington, DC: U.S. Department of Education.

¹⁵ Fain, P. (2013, March 21). Now what? Inside Higher Ed. <https://www.insidehighered.com/news/2013/03/21/gainful-employments-future-uncertain-after-court-ruling>.

¹⁶ HR 4508: The Promoting Real Opportunity, Success, and Prosperity through Education Reform (PROSPER) Act.

¹⁷ Looney, A., & Yannelis, C. (2018). Borrowers with large balances: Rising student debt and falling repayment rates.

Regardless of whether the repayment rate is based on the number of borrowers or the number of dollars in the repayment cohort, the next issue is how to define what counts as repayment, with a number of potential options ranging from more stringent to more lenient. On the more stringent end, one possibility is to count a student as successfully repaying only if he or she has made all payments under the standard ten-year repayment plan. On the more lenient end is the repayment rate definition in the PROSPER Act, which is much more of a delinquency rate measure. A measure based on delinquency rates is particularly open to gaming by colleges since students who place their loans in deferment or forbearance see their balances increase even as it is considered a success from the college's perspective. A measure that goes beyond delinquency status to include some active repayment reduces colleges' ability to game the performance metric.

Further complicating the creation of a definition is the presence of income-driven repayment plans and graduated repayment plans, both of which extend beyond the standard repayment period of ten years. Students enrolled in either of these types of plans have relatively small monthly payments in the first few years after entering repayment, and thus the relationship between early and later repayment rates may be relatively weak for students in these programs.¹⁸ The definition of a program-level repayment rate needs to be a careful balance between not penalizing all students who enroll in IDR plans (particularly in public service-oriented programs) and protecting the interests of taxpayers who do not want to forgive a large proportion of loans under a more lenient repayment rate threshold. A repayment rate definition that unnecessarily penalizes students who enroll in IDR plans runs the risk of encouraging colleges to push students away from IDR in order to improve their measured repayment rates even as IDR benefits students.

¹⁸ Public Service Loan Forgiveness further complicates this relationship, since the required repayment period is as short as ten years and there is no reliable way to separate students who intend to seek PSLF from those enrolled in other IDR plans.

¹⁹ See <https://nces.ed.gov/ipeds/cipcode/Default.aspx?y=55> for the full classification scheme.

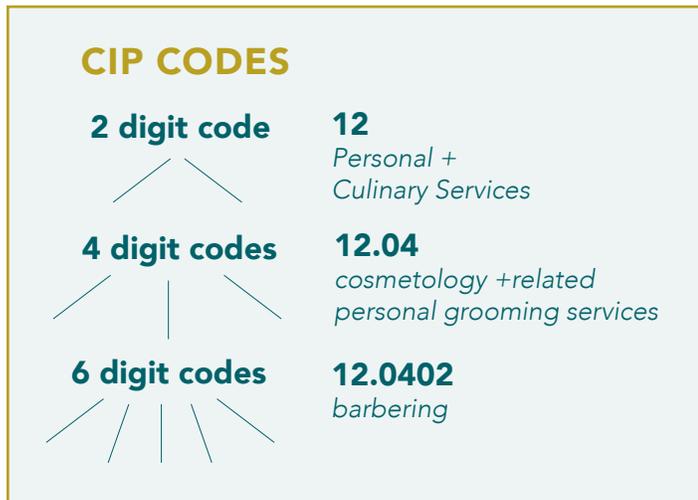
Question 2: How can as many students as possible be included in program-level repayment rates?

The first issue to address is what constitutes a "program" at an institution of higher education. The federal government classifies programs based on the Classification of Instructional Programs (CIP) taxonomy, which includes 47 broad classifications for fields of study (two examples are a CIP code which groups foreign languages, literatures, and linguistics and another that groups homeland security, law enforcement, firefighting, and related protective services).¹⁹ Within each of these broad classifications (known as two-digit CIP codes), there are a number of subcategories (four-digit CIP codes) and sub-subcategories (six-digit CIP codes). For example, within personal and culinary services (CIP code 12) and cosmetology and related personal grooming services (12.04) are 13 different six-digit CIP codes including barbering (12.0402) and make-up artist (12.0406).

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The federal government used the six-digit CIP code to classify programs for gainful employment purposes, with programs evaluated separately by their credential level (such as certificates and associate degrees).²⁰ In order to report debt-to-earnings ratios under gainful employment, there was a required minimum of 30 students graduating from a given program with debt during a four-year period (with a two-year period being used if enough

students graduated with debt).²¹ Since about 70% of students graduating with bachelor’s degrees take on debt (with lower rates for associate degree programs and certain graduate/professional programs), this means that a program must graduate at least ten students per year in order to have a large enough sample size over the course of four years.²²



One possibility to increase the share of borrowers captured by program-level loan repayment measures would be to use a less-nuanced definition of program than the six-digit CIP code used in the gainful employment regulations. Four-digit CIP codes could be used that combine programs that may share certain classes (such as elementary and secondary education), or even two-digit CIP codes if necessary for small colleges. But since some two-digit CIP codes are quite broad and may contain programs across different academic departments, it would be wise for a technical review panel to consider which programs can be reasonably combined for repayment rate purposes. Having procedures in place to evaluate programs at the four-digit or two-digit CIP level could also help prevent colleges from splitting up programs into smaller, more specialized programs in order to fall below the sample size requirement for data reporting purposes.

The next key issue to address is whether program-level repayment rates can include more than students who graduated from a particular program. Ideally, repayment rates would track students beginning the

moment they entered a program of study, and this is feasible for most vocationally-oriented programs at the undergraduate level that admit students directly into particular courses of study as well as nearly all graduate and professional programs.

But this excludes a sizable share of students who attend community colleges and four-year public and private nonprofit colleges, where students switch majors frequently. Thirty percent of first-time college students in these sectors who had declared a major at one point in college had changed their major at least once within three years, with higher rates of change in STEM fields than non-STEM fields.²³ Another concern is that a sizable proportion of students enter college without having officially declared a major. Although just nine percent of students entering four-year colleges reported “undecided” as their intended major in a national survey, many colleges require students to be successful in entry-level courses before being officially accepted to that program.²⁴ If program-level repayment rates were used across all of higher education, two-year and four-year public and private nonprofit colleges would have an incentive to officially accept students to their program of study as late as possible in order to narrow the cohort down to students who are extremely likely to graduate. Undecided students could still be tracked and a repayment rate could still be calculated, but

²⁰ For colleges with multiple branches operating programs with the same CIP codes under the same OPEID identifier from the Office of Federal Student Aid, the gainful employment data reported aggregate data by CIP code. The same is likely to happen with program-level student loan repayment rates due to how loan data are tracked in the National Student Loan Data System.

²¹ Office of Federal Student Aid (2018, March 2016). Gainful employment electronic announcement #112. <https://ifap.ed.gov/>

²² Author’s calculation using data from the National Postsecondary Student Aid Study.

²³ Leu, K. (2017). Beginning college students who change their major within 3 years of enrollment. Washington, DC: National Center for Education Statistics Report 2018-434.

²⁴ Eagan, K., Stolzenberg, E. B., Zimmerman, H. B., Aragon, M. C., Sayson, H. W., & Rios-Aguilar, C. (2017). The American freshman: National norms fall 2016. Los Angeles, CA: Cooperative Institutional Research Program, UCLA.

it is unlikely that actions would be taken against a college with low repayment rates for undeclared students since that would essentially require shutting down general education courses. Similarly, community college students who wish to transfer to four-year colleges often get degrees in liberal arts or general studies; shutting down these programs would close the transfer pathway and be very difficult to actually do.

In summary, figuring out how to include as many students as possible in program-level repayment rates while being aware of potential efforts to game repayment rates is likely to be the most challenging

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issue that policymakers face in implementing program-level repayment rates. It may be worth starting to use program-level repayment rates at the graduate and professional level while continuing to wrestle with these issues at the undergraduate level.

Question 3: What should the time period be for measuring program-level repayment rates, and should it vary by credential level or field of study?

Compared to the other two questions raised earlier in this section, relatively little attention has been paid to the time period over which repayment rates should be tracked. As in tracking other outcomes (such as completion rates, debt, and earnings), there is a trade-off between long-term measurements that more fully capture students' trajectories and short-term measurements that represent more recent cohorts. The percentage of students who failed to repay any principal within two years of entering

repayment rose from 34% in the 2004 cohort to 57% in the 2012 cohort, with IDR plans and economic conditions likely playing a role.²⁵ College Scorecard data show that a larger percentage of students are able to repay at least some principal going from one to seven years after entering repayment, suggesting that most students will end up making at least some progress relaying their loans.²⁶

The available data on student loan repayment trends strongly suggest that the expected threshold for satisfactory repayment rates should vary based on the number of years students have been in repayment, with lower repayment rates being acceptable soon after entering repayment and higher rates being required as students get closer to the standard ten-year repayment period ending. Another useful measure would be to examine how correlated program-level repayment rates are at different time periods after entering repayment to see if the relationship between short-term and long-term repayment rates differs. In the College

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²⁵ Looney, A., & Yannelis, C. (2015). A crisis in student loans? How changes in the characteristics of borrowers and in the institutions they attended contributed to rising loan defaults. Washington, DC: Brookings Institution.

²⁶ Kelchen, R. (2017, September 28). Examining trends in student loan repayment rates. <https://robertkelchen.com/2017/09/28/examining-trends-in-student-loan-repayment-rates/>.

Scorecard, the correlation between one-year and seven-year institutional repayment rates is quite high (0.953 for the most recent cohort), suggesting that there is a strong relationship among repayment rates over time.²⁷

There is some precedent for using different repayment periods in federal accountability systems. In the gainful employment regulations, the Department of Education amortized student loan payments over a ten-year period for certificate and associate degree programs, 15 years for bachelor's and master's degree programs, and 20 years for doctoral and other professional degrees when calculating debt-to-earnings ratios.²⁸ To recognize that students in longer programs are likely to take on more debt in their studies and that early payments are likely to cover more interest than principal, using either longer time horizons or lower repayment rates over the same time period for longer programs is an idea worth considering.

Finally, it is worth discussing whether different fields of study should have different repayment rate periods due to differences in both debt burdens and initial earnings across majors. For example, health care and nursing majors graduated with about \$6,000 more in debt at the baccalaureate level than business majors and \$7,500 more than other STEM majors.²⁹ Additionally, the percentage of first-year income that bachelor's degree recipients needed to make their loan payments (under the standard ten-year plan) ranged from 6% to 26% of income across majors, while the spread across majors shrank to between 4% and 11% five years later.³⁰ While it is not clear whether policymakers should set different standards for students who choose programs with different debt and earnings profiles, a longer repayment period is likely to reduce the variation in observed repayment rates across programs.

CONCLUSION: REPAYMENT IS A BETTER WAY TO HOLD COLLEGES ACCOUNTABLE, BUT GO IT SLOW

Amid rising student debt burdens and concerns about the implications for students and taxpayers alike, there is bipartisan support for the idea of holding colleges accountable for their former students' ability to repay their loans. This paper sketched out some of the key questions that policymakers should consider when designing repayment rate measures—with a focus on program-level repayment rates.

The overarching question at this point is whether federal financial aid dollars should be tied to program-level repayment rates, institution-level repayment rates, or a combination of the two. While students and their families will arguably find program-level repayment rates more useful as they choose which college and program to attend, there are a number of difficulties in measuring repayment rates beyond a potentially small percentage of students who actually graduate. This is less of a concern for vocationally-oriented undergraduate programs and nearly all graduate and professional programs, but it would be politically difficult to exempt liberal arts- focused undergraduate programs from program-level accountability provisions after a similar argument regarding gainful employment regulations.

The most straightforward solution at this point is to use institution-level repayment rates for federal financial aid eligibility purposes while making program-level repayment rates for graduates available to the public as an informational measure. This would sidestep many of the data concerns detailed in this paper, while still allowing students, families, institutions, and accrediting bodies to

²⁷ Author's calculation using data from the College Scorecard.

²⁸ Office of Federal Student Aid (2018). 2015 gainful employment (GE) rates: Downloadable spreadsheet column field names glossary. <https://studentaid.ed.gov/sa/about/data-center/school/ge>.

²⁹ Velez, E. D., & Woo, J. H. (2017). The debt burden of bachelor's degree recipients. Washington, DC: National Center for Education Statistics Report 2017-436.

³⁰ Hershbein, B., Harris, B., & Kearney, M. (2014). Major decisions: Graduates' earnings growth and debt repayment. Washington, DC: The Hamilton Project.



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make their own judgments about the quality of the program based on available data. In the future, program-level outcomes are likely to be used more frequently for high-stakes accountability purposes, but an informational measure would still have a great deal of value in the short term.

In the next several years, either through the long-overdue reauthorization of the Higher Education Act or in a piece of standalone legislation, there is likely to be a law that ties at least a portion of federal financial aid funding to repayment rates instead of, or in addition to, the current CDR measure. While repayment rates are clearly a better measure than CDRs in evaluating colleges, institutional repayment rates are preferable for accountability purposes at this time. But in the future, once some of the above data concerns are addressed, program-level repayment rates may end up being the way forward.