Assessing the Impact of Alternative Repayment Rate Policies on Educational Institutions and Students

Nam Pham, Ph.D. and Mary Donovan

January 2019

ndp analytics
turning data into action

Highlights of the Report

Current policy debates are moving towards replacing the cohort default rate (CDR) with the repayment rate to determine Title IV eligibility for postsecondary institutions. The cohort default rate measures the share of borrowers who enter into repayment for federal student loans after leaving an educational institution and default on their loan payment at least one time during the default period. Critics believe that the current rule is insufficient because the CDR threshold for eligibility is too lenient and student loans in deferment and forbearance distort the numbers. As a result, a number of proposed polices have been introduced to replace the CDR with a less lenient measure such as the repayment rate. Unlike the CDR, the repayment rate measures the share of students who have paid down at least $1 of the principal of their federal student loan.

This report used Department of Education's College Scorecard 2016 data to analyze the impacts of three alternative policy scenarios on educational institutions and their students. While all three policies use repayment rates to determine eligibility, a baseline scenario uses one threshold for all institutions and the other two scenarios use multiple thresholds based on the characteristics of individual institutions to determine the cutoff for Title IV eligibility. A one-threshold system produces an unfavorably bias on educational institutions with open admissions and a high share of low-income financial aid recipients. Consequently, the system creates numerous unintended consequences on students, especially economically and socially-disadvantaged groups. To minimize the bias and unintended consequences, a multiple-threshold system adjusted for institutions with a high share of low-income financial recipients is preferred.

Below are highlights of our policy simulations.

1. A baseline scenario uses a 35% repayment rate threshold, which is 10 percentage points below the weighted average 3-year repayment rate of all institutions in 2016, as the cutoff for all institutions. This baseline affects the postsecondary education system severely and is unfavorably biased against institutions with open admissions and a high share of low-income financial aid recipients.
    a. 35% of all institutions (1,902 out of 5,436) in 2016 are below the repayment rate cutoff. These institutions accounted for nearly 24% of all enrolled undergraduate students in 2016 (3.6 million out of 15.2 million).
    b. Over 78% of affected institutions are institutions with open admissions and over 93% have a high share of low-income financial recipients.
    c. The institutions affected most are 2-year (746 institutions) and private for-profit (1,275 institutions). Students affected most are enrolled in 2-year public institutions (2.1 million students).
    d. Nearly 45% of black students across institutions and 90% of students enroll in HBCUs are affected.
2. An alternative two-threshold scenario adjusts for institutions with open admissions. It uses a 23% repayment rate threshold for open admissions institutions and a 35% repayment rate threshold for selective institutions. This alternative policy removes the unfavorable bias against institutions with open admissions but is still unfavorably biased against institutions with a high share of low-income financial aid recipients.
    a. The number of affected institutions is cut in half from 1,902 in the baseline scenario to 947 and from 35.0% to 17.4%. The number of affected students is cut from 3.6 million in the baseline scenario to 944,451 and from 23.5% to 6.2%.

   b. Among the affected institutions, 535 institutions offer open admissions and 877 institutions have a high share of low-income financial aid recipients, accounting for 56.5% and 92.6% of total affected institutions, respectively.
   c. The institutions affected most are 4-year (434 institutions) and private for-profit (654 institutions). The students affected most are enrolled in 4-year institutions (578,833 students) and public institutions (423,622 students).
   d. 403,660 black students are affected and 76% of students enrolled in HBCUs are affected.
3. An alternative three-threshold scenario adjusts for institutions with a high share of low-income financial aid recipients. It uses a 16% repayment threshold for the quartile of institutions with the most low-income financial aid recipients, a 25% threshold for the quartile of institutions with the second highest low-income financial aid recipients, and 35% repayment rate threshold for two quartiles of institutions with the fewest low-income financial recipients. This system removes unfavorable bias against both institutions with open admissions and institutions with a high share of low-income financial aid recipients.
   a. 272 institutions and 5% of all institutions are affected. 544,733 students enrolled in these institutions are affected, accounting for 3.6% of all enrollments in 2016.
   b. Among them, 177 institutions offer open admissions and 178 institutions have a high share of low-income financial aid recipients, accounting for 65% of total affected institutions.
   c. This alternative policy affects institutions proportionally, between 4% and 5% of 4-year, 2-year, and less-than-two-year institutions and around 5% of public, private non-profit, and private for-profit institutions.
   d. The students affected most are enrolled in private for-profit institutions (9.4% of private for-profit students), and, more specifically, 4-year private for-profit institutions (13.1% of 4-year private for-profit students). However, the shares drop down substantially from 71% and 82%, respectively, in the baseline scenario.
   e. 11% of black students are affected, dropping from 45% in the baseline scenario.

Our simulations suggest that a one-size-fits-all approach would not be suitable for higher education policy. Instead, policymakers must implement a system to adjust for institutions with different student characteristics in order to avoid negative unintended consequences. Our policy scenarios show the three-threshold repayment rate system is preferred to the one-size-fits-all repayment rate system and the alternative two-threshold repayment rate system. The three-threshold repayment rate system removes the unfavorable bias against institutions with open admissions and a high share of low-income financial aid recipients. Unlike the one-size-fits-all approach where 35% of all institutions and nearly a quarter of enrollments are affected immediately, the three-threshold system has a lesser impact on institutions and students because it accounts for factors that impact repayment rates such as the share of low-income aid recipients. In addition, the three-threshold repayment rate system has smaller unintended consequences on students who do not have federal student loans.

Assessing the Impact of Alternative Repayment Rate Policies on Educational Institutions and Students

Nam D. Pham and Mary Donovan[1]

I. BACKGROUND

In 2017, the Federal Government delivered $122.5 billion in student aid to 12.9 million post-secondary students and their parents, expanding the entire federal student loan portfolio to 43 million borrowers with $1.4 trillion in outstanding loans.[2] As student loan debt climbs, concerns have been raised over student loan repayment, educational quality, and institutional accountability. Under the Higher Education Act (HEA), the federal government uses accountability measures to determine the eligibility of institutions for Title IV federal student aid.

Currently, educational institutions are eligible for Title IV funds if their cohort default rate (CDR) remains under 30%.[3] The cohort default rate measures the share of borrowers who enter into repayment for federal student loans after leaving an educational institution and default on their loan payment at least one time during the default period. The CDR is calculated at 2- and 3-year marks after entering the repayment period. The calculation includes Federal Stafford and Direct Stafford/Ford loans. The calculation does not include Federal PLUS, Perkins, and FISL loans.[4] Many policymakers and thought leaders believe that the current rule is insufficient because student loans in deferment and forbearance distort the rates. As a result, many of the recently proposed polices replace CDR with the repayment rate, a less lenient measure. Unlike the CDR, the repayment rate captures federal loan recipients' actual progress in paying down loans.

The repayment rate measures the share of borrowers who have paid down at least $1 in principal of their loan during the repayment period. The repayment rate is calculated at the 3-, 5-, and 7-year marks after borrowers enter the repayment period. Similar to the CDR, the repayment rate only includes Federal Stafford and Direct Stafford/Ford loans. The measure does not include students with loans in deferral or forbearance. It includes students who are on income-based repayment plans but does not include students who make their monthly payments and do not pay down any of the principal.[5]

Seven major proposals have been introduced recently by Members of Congress and recommended by third-party organizations. Four out of the seven proposals suggest replacing the current CDR with the repayment

[1] Nam D. Pham is Managing Partner and Mary Donovan is Principal at ndp | analytics. Career Education Colleges and Universities (CECU) provided financial support to conduct this study. The opinions and views expressed in this report are solely those of the authors.
[2] Department of Education Office of Federal Student Aid. 2017. "FY2017 Annual Report."
[3] Institutions are at risk of losing eligibility if their CDR is higher than 40% in a single year, or higher than 30% for 3 consecutive years.
[4] Department of Education Office of Federal Student Aid. 2018. "Cohort Default Rate Guide."
[5] Department of Education. 2018. "Data Documentation for College Scorecard." September 28.

rate while two other proposals recommend modifying the CDR and one proposal considers a combination of both cohort default and repayment rates. With an exception of the Senate bill S.1939, all proposals by Members of Congress suggest a single rate of either cohort default or repayment for all educational institutions. For example, the HR 4508 PROSPER Act suggests a threshold of 45% be used for Title IV eligibility. The Senate bill S.1339, however, proposes a single repayment rate threshold for all educational institutions only in the first year but different repayment rates based on the level of institution starting the second year of the policy implementation. In contrast, all three proposals recommended by non-Members of Congress incorporate student factors into the equation to adjust the cohort and repayment rates for Title IV eligibility. (Table 1)

Table 1.

Summary of Selected Recent Policy Proposals and Recommendations

	Measure	Eligibility Threshold		Penalty/Reward
		Rate System	Factors	
Higher Education Act (Current Policy)	CDR	Single	None	Eligibility Loss
Selected Current or Previously Proposed Bills				
HR.6543 AIM Higher Act (115th Congress)	CDR	Single	None	Eligibility Loss
HR.4508 PROSPER Act (115th Congress)	Repayment Rate (redefined)	Single	None	Eligibility Loss
S.2231 Student Success and Protection Act (115th Congress)	Repayment Rate	Single	None	Eligibility Loss
S.1939 Student Success and Protection Act (114th Congress)	Repayment Rate	Single and Tiered (10 percentage points below the national average by level of institution)	Institution	Eligibility Loss Risk-sharing
Selected Third Party Proposals & Recommendations				
The Hamilton Project: A Risk Sharing Proposal for Student Loans (2017)	Repayment Rate (redefined)	Single	Student	Risk-sharing Rewards
NEXUS Higher Education Accountability Through Risk-Sharing (2017)	CDR	Tiered	Student	Risk-sharing
The Institute for College Access & Success: A New Approach to College Accountability (2016)	SDRI or SNRI	Single	Student	Eligibility Loss Risk-sharing Rewards

II. CURRENT LANDSCAPE OF REPAYMENT RATES AMONG STUDENTS ACROSS INSTITUTIONS

We used Department of Education's College Scorecard data to analyze repayment rates of students in different groups of postsecondary educational institutions. In 2016, over 15.2 million undergraduate students enrolled in 5,436 postsecondary educational institutions. Among those students, nearly 9.8 million students and over 64% of total enrolled students had borrowed Federal student loans at least once. According to the National Center for Education Statistics (NCES), 85% of first-time, full-time undergraduate students attending 4-year institutions and 78% of those attending 2-year institutions received federal aid for the 2015-16 academic year.[6] The weighted average of 3-year repayment rate of all institutions was 45.0% in 2016. (Table 2)

Repayment rates vary substantially across institutions. Nearly 57% of institutions (3,090 out of 5,436) offer open admissions and enroll nearly 6.9 million students. About 44% of students enrolled in open admissions institutions borrowed Federal student loans, compared to 64% of all students in all institutions. However, the weighted average 3-year repayment rate of open admissions institutions was only 33.3% compared to 45.0% of all institutions. (Table 2)

The Department of Education defines low-income financial aid recipients are students who live in households with annual incomes under $30,000. On average, 57.0% of financial aid recipients at an institution were low-income in 2016. We defined "high share of low-income financial aid recipients" institutions are those where more than 57.0% of financial aid recipients are low-income. The weighted average 3-year repayment rate for institutions with high share of low-income financial aid recipients was 29.9% compared to 45.0% of all institutions. (Table 2)

The repayment rates in Historically Black Colleges and Universities (HBCUs) and Predominantly Black Institutions (PBIs) are lower than other institutions. The weighted average 3-year repayment rates were 25.9% and 25.5% for HBCUs and PBIs, respectively, compared to 45.0% of all institutions in 2016. The repayment rates also vary substantially by control of institution and by level of institution. The weighted average 3-year repayment rates in 2016 were 55.9% for private non-profit institutions, 48.5% for public institutions, and 29.2% for private for-profit institutions. The weighted average 3-year repayment rates were 50.1% for 4-year institutions, but only 35.2% for 2-year institutions and 33.5% for less-than-2-year institutions. (Table 2)

Table 2.
Number of Institutions, Students, Title IV Borrowers, and Repayment Rates of All Institutions

	Institutions (#)	Enrolled Students (#)	Enrolled Title IV Borrowers (#)	3-yr Repayment Rate
All	5,436	15,211,666	9,770,517	45.0%
Open admissions	3,090	6,883,041	3,011,050	33.3%
High share of low-income financial aid recipients	3,038	6,117,190	2,487,574	29.9%
Historically Black Colleges & Universities (HBCUs)	89	234,417	196,148	25.9%
Predominantly Black Institutions (PBIs; non-HBCUs)	76	313,835	162,826	25.5%
Control of institution				
Public	1,707	11,333,600	6,485,134	48.5%
Private non-profit	1,436	2,700,455	2,308,064	55.9%
Private for-profit	2,293	1,177,611	977,319	29.2%
Level of institution				
4-year	2,508	9,885,058	7,784,794	50.1%
2-year	1,680	5,119,854	1,822,220	35.2%
Less-than-2-year	1,248	206,754	163,503	33.5%

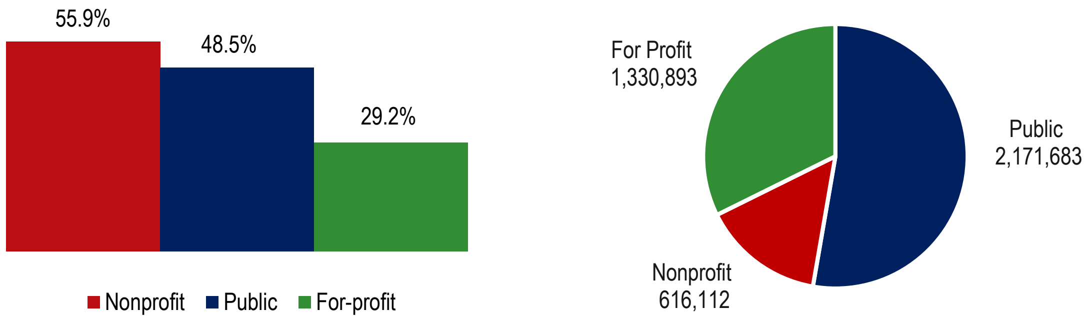
[6] National Center for Education Statistics. 2018. "The Condition of Education: Sources of Financial Aid." Letter from the Commissioner. May 2018.

Private non-profit institutions had a 56% repayment rate in 2016 and had 616,122 borrowers included in the 3-yr repayment rate cohort that did not repay at least $1 on their student loan principal. Public institutions had a 49% repayment rate but had nearly 2.2 million past borrowers who did not repay. In contrast, private for-profit institutions had the lowest repayment rate, 29%, and over 1.3 million borrowers included in the 3-yr repayment rate cohort that did not repay. (Figure 1)

Figure 1.
3-Yr Repayment Rates and Borrowers Who Did Not Repay by Control

Panel A.
Average 3-Year Repayment Rates

Panel B.
Past Borrowers Who Did Not Repay

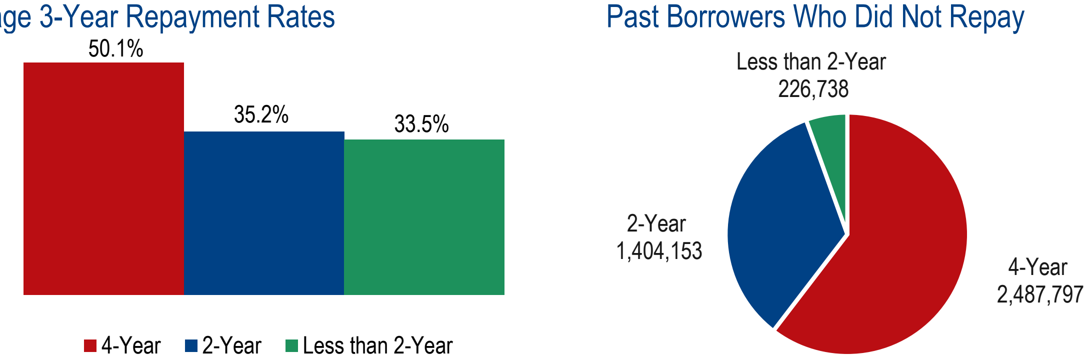


When examining repayment rates by level, 4-year institutions have the highest repayment rate across institutions (50%), followed by 2-year institutions (35%), and less-than-2-year institutions (33%). In 2016, more than 4.1 million borrowers who entered repayment did not repay at least $1 on the principal. Over 60% of them and nearly 2.5 million of past borrowers did not pay down the principal attended 4-year institutions. (Figure 2)

Figure 2.
3-Yr Repayment Rates and Borrowers Who Did Not Repay by Level

Panel A.
Average 3-Year Repayment Rates

Panel B.
Past Borrowers Who Did Not Repay



Studies have evaluated factors that affect repayment rates and demonstrated the relationship between student and institutional characteristics. Ishitani and McKitrick found that institutions with selective admissions policies perform better than their counterparts with open admissions policies. They also found the most academically prepared students are likely to go to 4-year private or high-ranking public universities; in contrast, the least academically prepared students are more likely to apply and enroll in programs at 2-year or less-than-2-year institutions with open admissions policies.[7] Woo found that students attending community colleges and private for-profit colleges (which are mostly 2-year and less-than-2-year institutions) are more likely to default. Further research has validated those findings and showed that 2-year colleges and private for-profit colleges had higher default rates than private non-profit or public 4-year colleges.[8]

Other studies show that student characteristics are more strongly associated with default and repayment rate performance than institution characteristics. For example, Hillman found that Pell Grant recipients and black students are more likely to default.[9] Ishitani and McKitrick found that student academic preparation and race are strongly related to cohort default rates. Similarly, Kelchen and Lee showed that institutions with higher percentages of students receiving federal grants, independent students, black, and first-generation students have higher nonrepayment rates. They also found that institutions with larger shares of students who were Asian, female, or come from higher incomes families for both independent and dependent students have lower nonrepayment rates.[10] In an analysis of underserved minorities and higher education, Flores, Park and Baker highlighted the gaps in pre-college education, contributing to lower post-secondary completion rates among black and Hispanic students.[11]

Repayment Rates of Open Admissions Institutions

Institutions with open admissions policies, such as community colleges, accept all applicants. Students who attend these institutions may not have the same educational preparation as their counterparts who attend institutions with selective admissions. Furthermore; these students may have competing priorities such as full-time jobs or family obligations which require the flexibility that many open admissions institutions offer. Of the 15.2 million undergraduate students enrolled in higher education, 6.9 million attended open admissions institutions and 8.3 million attended selective institutions. Overall, the weighted average 3-year repayment rate was 33.3% at open admissions institutions compared to 57.5% at selective admissions institutions. (Table 3)

[7] Ishitani, Terry and Sean McKitrick. 2016. "Are Student Loan Default Rates Linked to Institutional Capacity?". Journal of Student Financial Aid, 46.1
[8] Hillman, Nicholas. 2014. "College on Credit: A Multi-level Analysis of Student Loan Default."
[9] Hillman. Hillman, Nicholas. 2014. "College on Credit: A Multi-level Analysis of Student Loan Default."
[10] Kelchen, Robert and Amy Y Lee. 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, 671.1. pp. 202 – 223. April 27.
[11] Flores, Stella, et al. 2018. "Accountability Across the Education Pipeline. The contribution of Unequal High Schools on College Completion." Accountability and Opportunity in Higher Education, the Civil Rights Dimension. Harvard Education Press.

Table 3.

Number of Institutions, Students, Borrowers, and Repayment Rates of Institutions with Open Admissions

	Institutions (#)	Enrolled Students (#)	Enrolled Title IV Borrowers (#)	3-yr Repayment Rate
Open admissions	3,090	6,883,041	3,011,050	33.3%
High share of low-income financial aid recipients	2,432	5,327,595	2,049,738	29.2%
Historically Black Colleges & Universities (HBCUs)	25	55,832	38,022	23.5%
Predominantly Black Institutions (PBIs; non-HBCUs)	50	220,207	103,353	22.0%
Control of institution				
Public	990	5,590,887	1,970,468	37.5%
Private non-profit	227	342,357	255,176	32.2%
Private for-profit	1,873	949,797	785,406	28.1%
Level of institution				
4-year	555	1,695,309	1,109,916	30.8%
2-year	1,410	4,989,782	1,743,474	35.2%
Less-than-2-year	1,125	197,950	157,659	33.0%

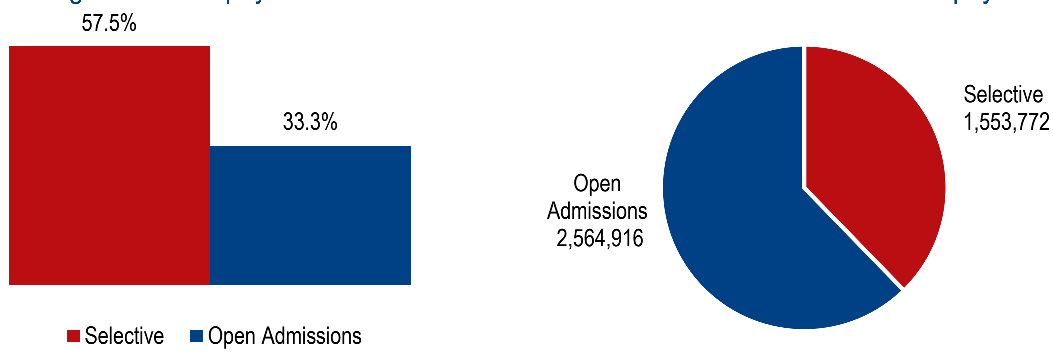
Of the 3.8 million borrowers who were included in the 2016 3-yr repayment rate cohort and attended open admissions institutions, nearly 2.6 million did not pay down at least $1 of the principal on their loans. In contrast, approximately 1.6 million of the 3.6 million past borrowers who attended selective institutions did not pay down any of the principal. (Figure 3)

Figure 3.

3-Yr Repayment Rates and Borrowers Who Did Not Repay by Admissions Policy

Panel A.
Average 3-Year Repayment Rates

Panel B.
Past Borrowers Who Did Not Repay



Repayment Rates at Institutions with a High Share of Low-Income Financial Aid Recipients

Low-income borrowers are more at risk of having trouble with loan payments than their high-income counterparts who often rely on other family members for financial needs.[12] While College Scorecard does not publish data on the income demographics of all students enrolled in institutions, it provides financial data for students who receive federal aid (federal loans and Pell Grants). The Department of Education calculates repayment rates by household income level for individual institutions. The Department classified three household income brackets: low-income (under $30,000 per year per household), middle-income (between $30,000 and $75,000 per year per household), and high-income (above $75,000 per year per household). The repayment rate of students in high-income households were 70% while the repayment rates of students in middle-income and low-income households were 53% and 32%, respectively. The positive correlation of household incomes and repayment rates held across level of institution and control of institution. (Table 4)

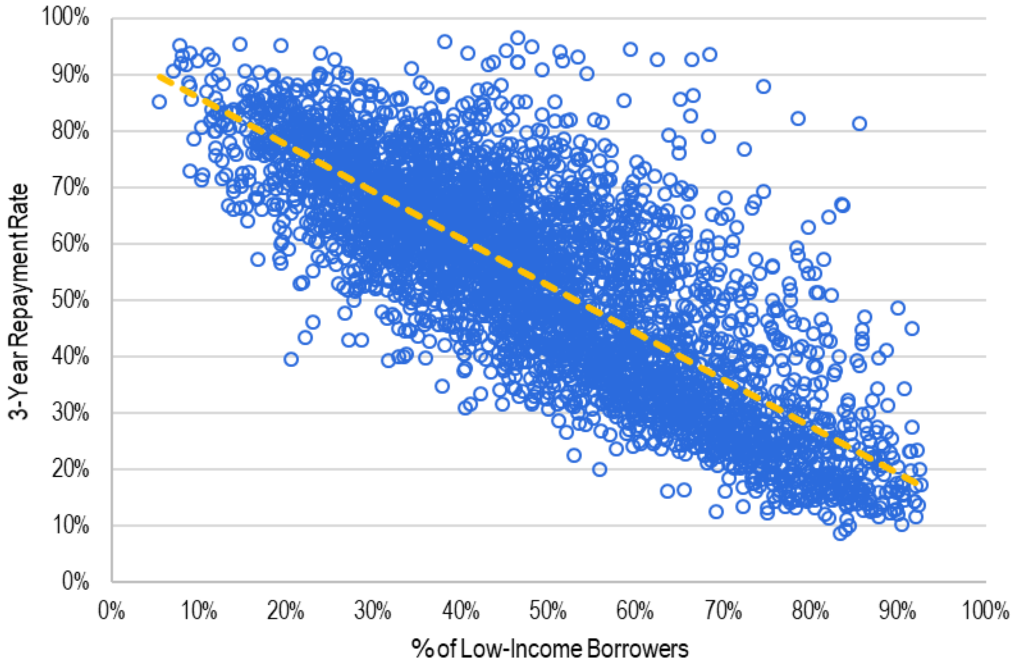
Table 4.
3-Yr Repayment Rates of Students by Student Household Income Level

	All Borrowers	Low-Income Borrowers	Middle-Income Borrowers	High-Income Borrowers
All	**45.0%**	**31.8%**	**53.5%**	**69.5%**
Public	48.5%	35.7%	55.9%	68.0%
Private non-profit	55.9%	38.1%	60.7%	77.2%
Private for-profit	29.2%	22.7%	38.5%	57.3%
4-Year	**50.1%**	**35.5%**	**56.1%**	**72.1%**
Public	57.0%	44.8%	60.5%	71.5%
Private non-profit	57.4%	39.5%	61.4%	77.4%
Private for-profit	27.8%	21.0%	37.0%	55.6%
2-Year	**35.2%**	**26.3%**	**47.0%**	**57.6%**
Public	36.2%	26.8%	47.9%	57.1%
Private non-profit	35.2%	27.1%	44.1%	62.7%
Private for-profit	30.6%	24.5%	42.0%	61.4%
Less-than-2-year	**33.5%**	**27.2%**	**43.7%**	**62.3%**
Public	46.7%	37.8%	57.2%	68.0%
Private non-profit	26.9%	22.6%	38.5%	58.8%
Private for-profit	33.0%	26.9%	43.3%	62.0%

Figure 4 below shows a strong negative correlation (-0.80) between the 3-year repayment rate and the share of federal aid recipients at the institution level.

[12] Hillman, Nicholas. 2014. "College on Credit: A Multi-level Analysis of Student Loan Default."

Figure 4.
Correlation Between the Share of Low-Income Financial Aid Recipients and 3-Year Repayment Rates



We identified 3,038 institutions that have a higher share of low-income financial aid recipients than the national average. Among the 6.1 million students enrolled in these institutions, nearly 2.5 million borrowed Federal loans at least once. The weighted average 3-year repayment rate of these institutions was 29.9% in 2016. More than 80% and 2,432 institutions with a high share of low-income financial aid recipients offer open admissions for more than 5.3 million students. The weighted average 3-year repayment rate of open admissions institutions with a high share of low-income federal aid recipients was 29.2% in 2016. (Table 5)

The 3-year repayment rates of institutions with high share of low-income financial aid recipients are much lower than the national average across level of institution and control of institution. Furthermore, the repayment rate differentials across level of institution and control of institution are narrower. While the weighted average 3-year repayment rate of 810 public institutions was 33.1% (the highest rate among public and private institutions), the weighted average 3-year repayment rate of 286 private non-profit institutions with high share of low-income financial aid recipients was only 27.1% (the lowest rate among public and private institutions). Similarly, the weighted average 3-year repayment rate of 1,054 less-than-2--year institutions was 31.7% (the highest rate among 4-year, 2-year, and less-than-2-year), the weighted average 3-year repayment rate of 775 4-year institutions with high share of low-income financial aid recipients was only 28.8% (the lowest rate among 4-year, 2-year, and less-than-2-year). Note that statistics by control of institution include all levels of institutions; and statistics by level of institutions include all controls of institutions. (Table 5)

Table 5.

Number of Institutions, Students, Borrowers, and Repayment Rates of Institutions with High Share of Low-Income Financial Aid Recipients

	Institutions (#)	Enrolled Students (#)	Enrolled Title IV Borrowers (#)	3-yr Repayment Rate
High share of low-income financial aid recipients	3,038	6,117,190	2,487,574	29.9%
Open admissions	2,432	5,327,595	2,049,738	29.2%
Historically Black Colleges & Universities (HBCUs)	65	147,010	117,892	23.8%
Predominantly Black Institutions (PBIs; non-HBCUs)	68	276,385	137,561	23.5%
Control of institution				
Public	810	4,861,519	1,483,933	33.1%
Private non-profit	286	276,977	194,963	27.1%
Private for-profit	1,942	978,694	808,677	27.5%
Level of institution				
4-year	775	1,880,034	1,106,059	28.8%
2-year	1,209	4,053,033	1,234,058	30.8%
Less-than-2-year	1,054	184,123	147,457	31.7%

III. POLICY EVALUATION

Based on the current proposals, we simulated three policy scenarios to evaluate the impacts of using different repayment rates to determine Title IV eligibility and estimated the impact on institutions and their students. The three policy scenarios are: (1) the baseline scenario of a single repayment rate for all institutions; (2) an adjustment for institutions with open admissions; and (3) an adjustment for institutions with a high share of low-income financial aid recipients. In each scenario, we used 2016 College Scorecard data to calculate the threshold(s) to identify the affected educational institutions and to aggregate total enrolled students in those affected institutions.

We first started with a baseline scenario that applies one repayment rate threshold to all institutions. Since repayment rates are found to vary substantially across student groups, our baseline simulation is unfavorably biased against institutions with open admissions and a high share of low-income financial aid recipients. We next simulated a policy with two repayment rate thresholds to adjust for institutions with open admissions. Our second simulation removed the bias against open admissions institutions but still has an unfavorable bias against institutions with a high share of low-income financial aid recipients. The third policy scenario has three repayment rate thresholds to adjust for institutions with different shares of low-income financial aid recipients. Our third simulation removed the bias against institutions with open admissions and those with a high share of low-income financial aid recipients. Our simulations suggest that a one-size-fit-all approach would not be suitable for higher education policy. Policymakers would need to implement a system to adjust for institutions with different student characteristics in order to avoid negative unintended consequences.

Baseline Policy Scenario 1: Single Repayment Rate

This scenario has a 35% repayment rate threshold for all institutions, which is 10 percentage points below the national weighted average repayment rate. Using the most recent College Scorecard data, we calculated the repayment rate threshold and simulated the impacts on the affected institutions and students.

In 2016, the weighted average 3-year repayment rate of all 5,436 educational institutions was 45% in 2016. About 57% of all educational institutions (3,090 out of 5,436 institutions) have an open admissions policy. The average share of low-income financial aid recipients ($30,000 annual household income) of all 5,436 educational institutions was 57%. About 56% of all educational institutions (3,038 out of 5,436 institutions) have higher share of low-income borrowers than the national average. (Table 6)

We simulated a policy scenario that has a 35% repayment rate threshold for all institutions (10 percentage points below the weighted average). We identified 1,902 educational institutions (35.0% of all Title IV institutions) whose repayment rates were below 35% in 2016. The impacts of this policy are unfavorably biased against institutions with open admissions policy and institutions with higher share of low-income financial aid recipients. Among these 1,902 affected institutions, 1,490 (78.3%) are open admissions and 1,777 (93.4%) have a high share of low-income financial aid recipients. In other words, if policymakers use the repayment rate of 35% as a cutoff for Title IV eligibility, 78.3% of institutions with open admissions and 93.4% of institutions with a high share of low-income borrowers will no longer be eligible for federal student aid. (Table 6)

Table 6.
Impacts of Single Repayment Rate Threshold on Institutions and Enrollments

	All Institutions		Affected Institutions	
	Institutions (#)	As % of All Institutions	Institutions (#)	As % of Affected Institutions
Number of institutions	**5,436**	**100.0%**	**1,902**	**100.0%**
Open enrollment	3,090	56.8%	1,490	78.3%
High share of low-income borrowers	3,038	55.9%	1,777	93.4%

If these 1,902 educational institutions were no longer eligible for Title IV funds and are forced to close because of low enrollments and revenues, nearly 3.6 million students enrolled in these 1,902 educational institutions will be affected, accounting for 23.5% of students enrolled in all institutions.

Key estimates of affected institutions and students are (Table 7):

- 90% of students enrolled in HBCUs.
- 71% of students enrolled in private for-profit institutions compared to 7% enrolled in private non-profit and 22% enrolled in public institutions.
- 54% of students enrolled in institutions with a high share of low-income financial aid recipients.
- 49% of students enrolled in less-than-2-year and 44% of students enrolled in 2-year institutions compared to 12% of students enrolled in 4-year institutions.
- 46% of students enrolled in open admissions institutions.
- 45% of black students and 26% of Hispanic students compared to 15% of Asian students and 18% of white students.

Table 7.
Affected institutions and students under the baseline scenario

	Students in all institutions (#)	Students in affected institutions (#)	As % of all students
Enrolled students	**15,211,666**	**3,573,248**	**23.5%**
Borrowers	9,770,517	1,868,551	19.1%
Open admissions	6,883,041	3,159,271	45.9%
High share of low-income aid recipients	6,117,190	3,292,926	53.8%
Historically Black Colleges & Universities (HBCUs)	234,417	210,080	89.6%
Predominantly Black Institutions (non-HBCUs)	313,835	234,620	74.8%
Race			
White	7,793,451	1,411,724	18.1%
Black	1,997,375	893,266	44.7%
Hispanic	2,755,165	724,511	26.3%
Asian	907,890	134,102	14.8%
Other	1,757,746	409,612	23.3%
	Students in all institutions (#)	**Students in affected institutions (#)**	**As % of all students**
All Institutions	**15,211,666**	**3,573,248**	**23.5%**
4-year	9,885,058	1,223,622	12.4%
2-year	5,119,854	2,248,713	43.9%
Less-than-2-year	206,754	100,913	48.8%
Public	**11,333,600**	**2,540,649**	**22.4%**
4-year	6,482,293	429,797	6.6%
2-year	4,833,174	2,108,851	43.6%
Less-than-2-year	18,133	2,001	11.0%
Private non-profit	**2,700,455**	**195,831**	**7.3%**
4-year	2,656,055	179,157	6.7%
2-year	34,315	9,826	28.6%
Less-than-2-year	10,085	6,848	67.9%
Private for-profit	**1,177,611**	**836,768**	**71.1%**
4-year	746,710	614,668	82.3%
2-year	252,365	130,036	51.5%
Less-than-2-year	178,536	92,064	51.6%
	Institutions (#)	**Affected institutions (#)**	**As % of all institutions**
All Institutions	**5,436**	**1,902**	**35.0%**
4-year	2,508	619	24.7%
2-year	1,680	746	44.4%
Less-than-2-year	1,248	537	43.0%
Public	**1,707**	**420**	**24.6%**
4-year	716	79	11.0%
2-year	858	325	37.9%
Less-than-2-year	133	16	12.0%
Private non-profit	**1,436**	**207**	**14.4%**
4-year	1,269	149	11.7%
2-year	119	33	27.7%
Less-than-2-year	48	25	52.1%
Private for-profit	**2,293**	**1,275**	**55.6%**
4-year	523	391	74.8%
2-year	703	388	55.2%
Less-than-2-year	1,067	496	46.5%

This baseline policy with one repayment rate has two major negative consequences. The policy is designed to address repayment issues. However, less than 1.9 million enrolled students in the affected institutions and 52% of affected students borrow federal loans. The policy potentially affects negatively 1.7 million students enrolled in these affected institutions but do not borrow federal loans. In other words, nearly 48% of affected students are unrelated to the policy since they do not borrow federal loans. Furthermore, the impacts will be unfavorably biased on certain groups of students. This baseline policy disproportionally affects black students and students enrolled in private for-profits institutions, institutions with a high share of low-income financial aid recipients, and institutions with open admissions policies. (Table 7)

Studies have shown open admissions students have lower repayment rates and low-income borrowers also have lower repayment rates. Therefore, the repayment rate of open admissions institutions is expected to be lower than selective admissions institutions. Similarly, repayment rates of institutions that have higher shares of low-income financial aid recipients are expected to be lower than their counterparts. Thus, an unbiased policy for all institutions would need to have adjustment factors for institutions with open admissions and institutions with a high share of low-income financial aid recipients.

Alternative Policy Scenario 2: A Two-threshold Repayment Rate System Adjusted for Open Admissions Institutions

This alternative policy scenario adjusts the repayment rate for open admissions students. Instead of using of one single rate such as 35% for all institutions in the baseline scenario, we used two thresholds for open admissions institutions and selective admissions institutions. Using the College Scorecard data, we calculated the repayment rate thresholds and simulated the impacts on the affected institutions and their students.

The weighted average 3-year repayment rate for 3,090 open admissions institutions was 33% and for 2,346 selective institutions was 58% in 2016. We simulated a policy scenario using a 23% repayment rate threshold for open admissions institutions (10 percentage points below its repayment rate) and a 35% repayment rate threshold for selective admissions institutions (10 percentage points below the national weighted average of all institutions).

We identified 947 educational institutions (17.4% of all Title IV institutions) whose repayment rates were below the two thresholds in 2016. By adjusting for open admissions, 535 open admissions institutions (56.5% of affected institutions) are affected compared to 1,490 open admissions institutions in the baseline scenario. However, 877 institutions with a high share of low-income financial recipients are still affected compared to 1,777 institutions in the baseline scenario. (Table 8)

This alternative policy removes the unfavorably biased against open admissions institutions. Approximately 56.8% of institutions offered open admissions in 2016 and 56.5% of affected institutions were open admissions institutions. However, the policy is still unfavorable biased against institutions with Ia high share of low-income financial aid recipients. While 56.8% of educational institutions had a high share of low-income students, 92.6% of affected institutions have a high share of low-income financial aid recipients. (Table 8)

Table 8.
Impacts of Two Thresholds for Open Admissions and Selective Admissions Institutions

	All Institutions		Affected Institutions	
	Institutions (#)	As % of All Institutions	Institutions (#)	As % of Affected Institutions
Number of institutions	**5,436**	**100.0%**	**947**	**100.0%**
Open admissions	3,090	56.8%	535	56.5%
High share of low-income borrowers	3,038	55.9%	877	92.6%

If these 947 educational institutions were no longer eligible for Title IV funds and are forced to close because of low enrollments and revenues, nearly 945,000 students enrolled in these 947 educational institutions would be affected, accounting for over 6% of all students.

This two-threshold policy reduces the number of affected institutions from 1,902 to 947. It cuts the number of affected students in half, from 3.6 million students to 944,451 students. Importantly, it cuts the number of unrelated affected students (i.e., non-borrowers of federal loans) from 1.7 million to less than 270,000 students. Except in several cases, the two-threshold system removes many biases on economic and demographic groups. (Table 9)

Key estimates of affected institutions and students are:

- 76% of students who enrolled in HBCUs.
- 31% of students enrolled in private for-profit institutions compared to less than 6% enrolling private non-profit and less than 4% enrolled in public institutions.
- 20% of black students.

Table 9.

Affected institutions and students under the two-threshold system adjusted for open admissions

	Students in all institutions (#)	Students in affected institutions (#)	As % of all students
Enrolled students	**15,211,666**	**944,451**	**6.2%**
Borrowers	9,770,517	676,354	6.9%
Open admissions	6,883,041	530,474	7.7%
High share of low-income aid recipients	6,117,190	773,343	12.6%
Historically Black Colleges & Universities (HBCUs)	234,417	177,957	75.9%
Predominantly Black Institutions (non-HBCUs)	313,835	106,410	33.9%
Race			
White	7,793,451	287,560	3.7%
Black	1,997,375	403,660	20.2%
Hispanic	2,755,165	144,570	5.2%
Asian	907,890	18,098	2.0%
Other	1,757,746	90,551	5.2%
	Students in all institutions (#)	**Students in affected institutions (#)**	**As % of all students**
All Institutions	**15,211,666**	**944,451**	**6.2%**
4-year	9,885,058	578,833	5.9%
2-year	5,119,854	329,837	6.4%
Less-than-2-year	206,754	35,781	17.3%
Public	**11,333,600**	**423,622**	**3.7%**
4-year	6,482,293	173,307	2.7%
2-year	4,833,174	250,027	5.2%
Less-than-2-year	18,133	288	1.6%
Private non-profit	**2,700,455**	**152,199**	**5.6%**
4-year	2,656,055	140,472	5.3%
2-year	34,315	7,878	23.0%
Less-than-2-year	10,085	3,849	38.2%
Private for-profit	**1,177,611**	**368,630**	**31.3%**
4-year	746,710	265,054	35.5%
2-year	252,365	71,932	28.5%
Less-than-2-year	178,536	31,644	17.7%
	Institutions (#)	**Affected institutions (#)**	**As % of all institutions**
All Institutions	**5,436**	**947**	**17.4%**
4-year	2,508	434	17.3%
2-year	1,680	324	19.3%
Less-than-2-year	1,248	189	15.1%
Public	**1,707**	**125**	**7.3%**
4-year	716	52	7.3%
2-year	858	67	7.8%
Less-than-2-year	133	6	4.5%
Private non-profit	**1,436**	**168**	**11.7%**
4-year	1,269	133	10.5%
2-year	119	25	21.0%
Less-than-2-year	48	10	20.8%
Private for-profit	**2,293**	**654**	**28.5%**
4-year	523	249	47.6%
2-year	703	232	33.0%
Less-than-2-year	1,067	173	16.2%

Alternative Policy Scenario 3: A Three-threshold Repayment Rate System Adjusted for Institutions with a High Share of Low-Income Financial Aid Recipients

This alternative policy scenario adjusts the repayment rate based on the share of low-income federal aid recipients. Instead of using one single rate such as 35% for all institutions in the baseline scenario, we created three thresholds – 35%, 25%, and 16%. Using the College Scorecard data, we calculated the repayment rate thresholds and simulated the impacts on the affected institutions and their students.

We simulated an alternative policy scenario to adjust the baseline repayment rate for institutions with a high share of low-income financial aid recipients. We divided 5,436 institutions in four quartiles based on their shares of low-income financial aid recipients. We followed the definition of the Department of Education to define low-income financial aid recipients as those with less than $30,000 household income per year. The weighted average 3-year repayment rates of four quartiles are: 68% (first quartile and the lowest share of low-income financial aid recipients), 50% (second quartile), 35% (third quartile), and 26% (fourth quartile and the highest shares of low-income financial aid recipients).

Our policy scenario has three repayment rates -- 35% for the first and second quartiles, 25% for the third quartile, and 16% for the fourth quartile. Since the 3-year repayment rates of the first and second quartiles were higher than the national average, we used 35% (10 percentage points below the national average) as the cutoff threshold for the first and second quartiles. The 25% and 16% repayment rates for the third quartile and fourth quartile, respectively, are 10 percentage below their respective 3-year repayment rates.

Using 2016 College Scorecard data, we identified 272 educational institutions (5% of all Title IV institutions) across all four quartiles with repayment rates below these three thresholds. By adjusting for the share of low-income financial aid recipient institutions, 177 open admissions institutions are affected and 178 institutions with a high share of low-income financial aid recipients are affected. Institutions with open admissions and a high share of low-income financial recipients accounted for 57% and 56% of all institutions, respectively. Under this policy, 65% of affected institutions offer open admissions and 65% of affected institutions have a high share of low-income financial aid recipients. Thus, the adjustments in this policy removes the biasness against institutions with open admissions policy and a high share of low-income students. (Table 10)

Table 10.
Impacts of a Three-threshold System for Institutions based on their Share of Financial Aid Recipients

	All Institutions		Affected Institutions	
	Institutions (#)	As % of All Institutions	Institutions (#)	As % of Affected Institutions
Number of institutions	**5,436**	**100.0%**	**272**	**100.0%**
Open admissions	3,090	56.8%	177	65.1%
High share of low-income borrowers	3,038	55.9%	178	65.4%

If these 272 educational institutions were no longer eligible for Title IV funds and are forced to close because of low enrollments and revenues, approximately 545,000 students who enrolled in these 272 educational institutions are affected, accounting for 3.6% of all students. Compared to the single rate system and two-threshold system adjusted for open admissions, this alternative policy is the least biased against economically and socially disadvantaged groups. (Table 11)

Several highlights of this alternative policy are (Table 11):

- The number of affected students drops from 3.6 million students to 545,000 students which has a smaller shock to the U.S. postsecondary educational system. As percentage of enrolled students, 3.6% of enrolled students are affected under this scenario compared to 23.5% in the baseline scenario.
- Nearly 72% of affected students (389,847 students) under this policy borrowed federal student loans, compared to only 52% off affected students in the baseline scenario borrowed federal student loans.
- About 5% of students who enrolled in institutions with open admissions and a high share of low-income students are affected in this policy simulation, compared to 46% in the baseline scenario.
- Although being larger than public and private non-profit, the share of affected students in private for-profit schools drops from over 71% in the baseline scenario to 9.4% under this scenario.
- The share of affected institutions is 5% of all institutions, dropping from 35% of institutions in the baseline scenario.

Our baseline scenario and two alternative scenarios demonstrate the benefits of multiple-threshold systems. It reduces the unintended consequences that a one threshold cutoff on educational institutions and their students.

Table 11.

Affected institutions and students under the three-threshold system adjusted for a high share of low-income financial aid recipients

	Students in all institutions (#)	Students in affected institutions (#)	As % of all students
Enrolled students	**15,211,666**	**544,733**	**3.6%**
Borrowers	9,770,517	389,847	4.0%
Open admissions	6,883,041	342,471	5.0%
High share of low-income aid recipients	6,117,190	280,829	4.6%
Historically Black Colleges & Universities (HBCUs)	234,417	130,170	55.5%
Predominantly Black Institutions (non-HBCUs)	313,835	41,762	13.3%
Race			
White	7,793,451	225,295	2.9%
Black	1,997,375	213,655	10.7%
Hispanic	2,755,165	44,299	1.6%
Asian	907,890	9,367	1.0%
Other	1,757,746	52,119	3.0%
	Students in all institutions (#)	**Students in affected institutions (#)**	**As % of all students**
All Institutions	**15,211,666**	**544,733**	**3.6%**
4-year	9,885,058	304,784	3.1%
2-year	5,119,854	233,575	4.6%
Less-than-2-year	206,754	6,374	3.1%
Public	**11,333,600**	**360,131**	**3.2%**
4-year	6,482,293	134,402	2.1%
2-year	4,833,174	225,729	4.7%
Less-than-2-year	18,133	0	0.0%
Private non-profit	**2,700,455**	**73,696**	**2.7%**
4-year	2,656,055	72,555	2.7%
2-year	34,315	1,141	3.3%
Less-than-2-year	10,085	0	0.0%
Private for-profit	**1,177,611**	**110,906**	**9.4%**
4-year	746,710	97,827	13.1%
2-year	252,365	6,705	2.7%
Less-than-2-year	178,536	6,374	3.6%
	Institutions (#)	**Affected institutions (#)**	**As % of all institutions**
All Institutions	**5,436**	**272**	**5.0%**
4-year	2,508	131	5.2%
2-year	1,680	92	5.5%
Less-than-2-year	1,248	49	3.9%
Public	**1,707**	**96**	**5.6%**
4-year	716	36	5.0%
2-year	858	58	6.8%
Less-than-2-year	133	2	1.5%
Private non-profit	**1,436**	**68**	**4.7%**
4-year	1,269	64	5.0%
2-year	119	4	3.4%
Less-than-2-year	48	0	0.0%
Private for-profit	**2,293**	**108**	**4.7%**
4-year	523	31	5.9%
2-year	703	30	4.3%
Less-than-2-year	1,067	47	4.4%

IV. FINAL REMARKS

Policymakers are seeking an alternative measurement to replace the cohort default rate because the default rate is too lenient and is not enforced. Policymakers and industry leaders are considering the repayment rate as the alternative measurement. To date, these discussions mostly revolve around applying one single repayment rate threshold to all institutions to determine Title IV eligibility.

Our simulations show that one-size-fits-all system creates unfavorable biasness against institutions with open admissions and institutions with a high share of low-income financial aid recipients. Furthermore, a one-size-fits-all system has unintended consequences by affecting a large number of students who do not borrow federal loans as well as a large number of minority students. A three-threshold system, adjusted for institutions with a high share of low-income financial aid recipients, removes biases and affects all institutions and students proportionally.

Policymakers must take caution when considering alternative accountability measures and the impacts of enforcing a strict or ambitious policy immediately. Instead of strengthening the higher education system, it would make it less accessible for underserved students who have the most to gain economically from higher education attainment. When considering and implementing policy changes that impact Title IV eligibility, institutions should be given adequate time to adjust before the new requirements are enforced. The goal of these policies is not the close institutions, but to better serve students. In addition to stricter policies the Department of Education can also work with institutions with low repayment rates by helping to implement programs to protect students and ensure that they have adequate tools to make decisions about student loans. A holistic approach that works with institutions and students on improving repayment rates is important to affecting change in student loan repayment rates.

REFERENCES

Alexander, Lamar. 2018. Higher Education Accountability White Paper. Senate Committee on Health Education, Labor and Pensions.

Department of Education Office of Federal Student Aid. 2017. "FY2017 Annual Report."

Department of Education. College Scorecard Data.

Flores, Stella, et al. 2018. "Accountability Across the Education Pipeline. The contribution of Unequal High Schools on College Completion." Accountability and Opportunity in Higher Education, the Civil Rights Dimension. Harvard Education Press.

Hillman, Nicholas. 2014. "College on Credit: A Multi-level Analysis of Student Loan Default."

Janice, Amanda and M. Voight. 2016. "Making Sense of Student Loan Outcomes: How Using Repayment Rates Can Improve Student Success." Institute for Higher Education Policy.

Itzkowitz, Michael. 2017. "Why the Cohort Default Rate is Insufficient," Third Way.

Ma, Jennifer and S. Baum. 2016. "Trends in Community Colleges: Enrollment, Prices, Student Debt, and Completion." College Board Research.

PROSPER Act. HR.7508. 115th Congress.

Student Success and Protection Act. S.1939. 114th Congress.

National Center for Education Statistics. 2018. "The Condition of Education: Sources of Financial Aid." Letter from the Commissioner. May 2018.

APPENDIX 1: ADDITIONAL POLICY SCENARIOS

Additional Policy Scenario 1: 45% Single Repayment Rate Threshold
Additional Policy Scenario 2: Repayment Rates Adjusted by Institution Level
Additional Policy Scenario 3: Repayment Rates Adjusted by Share of Pell Grant Recipients

Additional Policy Scenario 1: 45% Single Repayment Rate

This policy establishes a threshold that is equal to the weighted average repayment rate across institutions. The threshold calculated for 2016 is 45%.

Table A.1.
Number of Undergraduates Enrolled in Institutions Impacted by 45% Single Rate

	Students in all institutions (#)	Students in affected institutions (#)	As % of all students
Enrolled students	**15,211,666**	**6,240,889**	**41.0%**
Borrowers	9,770,517	2,978,660	30.5%
Open admissions	6,883,041	5,356,386	77.8%
High share of low-income borrowers	6,117,190	5,093,496	83.3%
Historically Black Colleges & Universities (HBCUs)	234,417	229,789	98.0%
Predominantly Black Institutions (Non-HBCUs)	313,835	302,381	96.4%
Control of institution			
Public	11,333,600	4,804,972	42.4%
Private non-profit	2,700,455	433,293	16.1%
Private for-profit	1,177,611	1,002,624	85.1%
Level of institution			
4-year	9,885,058	2,060,057	20.8%
2-year	5,119,854	4,026,823	78.7%
Less-than-2-year	206,754	154,009	74.5%
Race			
White	7,793,451	2,556,108	32.8%
Black	1,997,375	1,271,675	63.7%
Hispanic	2,755,165	1,442,230	52.4%
Asian	907,890	287,600	31.7%
Other	1,757,746	683,247	38.8%

Additional Policy Scenario 2: Repayment Rates Adjusted by Institution Level

This policy establishes a threshold that is 10 percentage points below the weighted average 3-year repayment rates for 4-year, 2-year, and less-than-2-year institutions. The thresholds calculated for 2016 are 40% for 4-year institutions, 25% for 2-year institutions, and 23% for less-than-2-year institutions.

Table A.2.
Number of Undergraduates Enrolled in Institutions Impacted by Policy Adjusted by Institution Level

	Students in all institutions (#)	Students in affected institutions (#)	As % of all students
Enrolled students	**15,211,666**	**2,297,945**	**15.1%**
Borrowers	9,770,517	1,499,280	15.3%
Open admissions	6,883,041	1,719,245	25.0%
High share of low-income borrowers	6,117,190	1,885,186	30.8%
Historically Black Colleges & Universities (HBCUs)	234,417	207,663	88.6%
Predominantly Black Institutions (Non-HBCUs)	313,835	144,160	45.9%
Control of institution			
Public	11,333,600	1,221,834	10.8%
Private non-profit	2,700,455	321,173	11.9%
Private for-profit	1,177,611	754,938	64.1%
Level of institution			
4-year	9,885,058	1,656,319	16.7%
2-year	5,119,854	605,796	11.8%
Less-than-2-year	206,754	35,830	17.3%
Race			
White	7,793,451	856,979	11.0%
Black	1,997,375	696,621	34.9%
Hispanic	2,755,165	369,954	13.4%
Asian	907,890	62,356	6.9%
Other	1,757,746	312,019	17.8%

Additional Policy Scenario 3: Repayment Rates Adjusted by Share of Pell Grant Recipients

This policy establishes thresholds that are 10 percentage points below the weighted average 3-year repayment rates of four quartiles. The thresholds calculated for 2016 are: 53% (first quartile and the lowest shares of Pell Grant recipients), 36% (second quartile), 30% (third quartile), and 20% (fourth quartile and the highest shares of Pell Grant recipients).

Table A.3.

Number of Undergraduates Enrolled in Institutions Impacted by Policy Adjusted by Share of Pell Grant Recipients

	Students in all institutions (#)	Students in affected institutions (#)	As % of all students
Enrolled students	**15,211,666**	**4,016,031**	**26.4%**
Borrowers	9,770,517	1,631,333	16.7%
Open admissions	6,883,041	3,771,285	54.8%
High share of low-income borrowers	6,117,190	3,282,770	53.7%
Historically Black Colleges & Universities (HBCUs)	234,417	63,676	27.2%
Predominantly Black Institutions (Non-HBCUs)	313,835	136,978	43.7%
Control of institution			
Public	11,333,600	3,477,003	30.7%
Private non-profit	2,700,455	92,330	3.4%
Private for-profit	1,177,611	446,698	37.9%
Level of institution			
4-year	9,885,058	918,765	9.3%
2-year	5,119,854	3,058,813	59.7%
Less-than-2-year	206,754	38,453	18.6%
Race			
White	7,793,451	1,709,865	21.9%
Black	1,997,375	644,611	32.3%
Hispanic	2,755,165	938,156	34.1%
Asian	907,890	241,832	26.6%
Other	1,757,746	481,536	27.4%