# A Risk-Sharing Model to Align Incentives and Improve Student Performance



Jorge Klor de Alva President, Nexus Research and Policy Center www.nexusresearch.org

*Mark Schneider* Vice President, AIR President, College Measures

**December 2016** 



### **About the Authors**

*Jorge Klor de Alva* (jorge.klordealva@nexusresearch.org) is president of Nexus Research and Policy Center. He was previously a professor at Princeton University and the Class of 1940 Professor at University of California-Berkeley. He also served as chairman and CEO of Apollo International, senior vice president of Apollo Group, and president of University of Phoenix.



Exploring the Frontiers of Higher Education

3701 Sacramento Street, Unit 297 San Francisco, CA 94118 Mobile: 602.684.5401 www.nexusresearch.org

*Mark Schneider* (mschneider@air.org) is a senior research fellow at Nexus Research and Policy Center, president of College Measures, a vice president and institute fellow at the American Institutes for Research, and a visiting scholar at the American Enterprise Institute. He served as the U.S. Commissioner of Education Statistics from 2005 to 2008 and is a Distinguished Professor Emeritus at the State University of New York, Stony Brook.

### Acknowledgments

The authors want to thank the participants at the convening on risk sharing held in Washington, DC, on October 4, 2016, for their constructive comments and suggestions on an earlier version of this policy brief.

This report is part of a series of papers on higher education risk sharing commissioned by the Center for American Progress, with support from the Bill & Melinda Gates Foundation and the Lumina Foundation. The views expressed in this report are those of its authors and do not represent the views of the Center for American Progress, the foundations, their officers, or employees.

The authors greatly appreciate the research and technical assistance provided by:

*Jenn Myers,* Research Associate, Nexus Research and Policy Center

### Contents

What Problems Does This Risk-Sharing Proposal Solve?         1
Alignment of the Interests of the Multiple Stakeholders of Higher Education
Proposed Policy
Requirements for Inclusion and Risk-Sharing Payment Liability
Determination of Risk-Sharing Payments
Breakdown of Risk-Sharing Payments According to the Two Proposed Metrics
Reduction for Certain Institutions Serving Large Numbers of Low-Income Students
Use of Risk-Sharing Payments
Needed Modifications of Current Policies5
Impact Assessment
Appendix
Methods, Data Sources, and Tables
CDR Calculations
Pell Calculations
Appendix Tables

# **List of Tables**

### Tables

Table 1.	Payment Control	Breakdown of 3-Year CDR Liability—By Percentage of Schools Affected, Sector, Type of Institution, and Level of Liability
Table 2.	Payment Granted of Liabili	Breakdown by 3 Year CDR Rate Liability—By Predominant Level of Awards/Degrees , Percentage of Schools Affected, Control Sector, Type of Institution, and Level ty
Table 3.	Payment Affected	Breakdown by Pell 3- or 6-Year Graduation Rate Liability—By Percentage of Schools , Control Sector, Type of Institution, and Level of Liability
Table 4.	Payment Degrees of Liabili	Breakdown by Pell 3- or 6-Year Graduation Rates—By Predominant Level of Awards/ Granted, Percentage of Schools Affected, Control Sector, Type of Institution, and Level ty
Appendix Ta	bles	
Appendix	Table 1.	Payment Breakdown by 3-Year CDR—By Number of Schools Affected
Appendix	Table 2.	Payment Breakdown by 3-Year CDR—By Number of Full-Time Equivalent Students in Affected Schools
Appendix	Table 3.	Payment Breakdown by 3 Year CDR Rate—By Percentage of Full-Time Equivalent Students in Affected Schools by Institution Type
Appendix <sup>•</sup>	Table 4.	Payment Breakdown by 3-Year CDR—By Percentage of Full-Time Equivalent Students in Affected Schools by Payment Due
Appendix	Table 5.	Payment Breakdown by 3-Year CDR—By Total Payments Due (in \$000s) 15
Appendix	Table 6.	Payment Breakdown by Pell 3- or 6-Year Graduation Rates—By Number of Schools Affected
Appendix	Table 7.	Payment Breakdown by Pell 3- or 6-Year Graduation Rates—By Number of Full-Time Equivalent Students in Affected Schools
Appendix	Table 8.	Payment Breakdown by Pell 3- or 6-Year Graduation Rates—By Percentage of Full-Time Equivalent Students in Affected Schools by School Type
Appendix <sup>•</sup>	Table 9.	Payment Breakdown by Pell 3- or 6-Year Graduation Rates—By Percentage of Full-Time Equivalent Students in Affected Schools by Payment Due
Appendix	Table 10.	Payment Breakdown by Pell 3- or 6-Year Graduation Rates—By Total Payments Due (in \$000s)

### What Problems Does This Risk-Sharing Proposal Solve?

### Alignment of the Interests of the Multiple Stakeholders of Higher Education

Higher education has multiple stakeholders whose interests are not adequately aligned to ensure student success. Many institutions of higher education (IHEs) lack the resources and incentives necessary to successfully educate their often ill-prepared students.<sup>1</sup> Millions of students confronting increasing tuition bills are being badly served by colleges and universities that fail to help them reduce unnecessary borrowing.<sup>2</sup> And too many students, lacking financial literacy and adequate counsel, are taking on far too much debt, dropping out, and defaulting on their federally guaranteed loans.<sup>3</sup> Focusing on access, the federal government is dispensing billions of dollars in financial aid<sup>4</sup> while penning regulations that are often arbitrary, onerous, and punitive.<sup>5</sup>

To help ameliorate this situation, which taxpayers ultimately subsidize, members of Congress have introduced several bills aimed at aligning the often conflicting interests of stakeholders by making all

<sup>1</sup> A study of the educational careers of 96% of the nation's students found that the national 6-year completion rate of those enrolled in 2009 was less than 53%—a decline of over 2% from the cohort in 2008. Shapiro, D., Dundar, A., Wakhungu, P.K., Yuan, X., Nathan, A., & Hwang, Y. (2015, November). Completing college: A national view of student attainment rates—fall 2009 cohort. (Signature Report No. 10). Herndon, VA: National Student Clearinghouse Research Center. Retrieved from https:// nscresearchcenter.org/wp-content/uploads/SignatureReport10.pdf.

<sup>2 &</sup>quot;In 2011-12, about a quarter of student borrowers took out loans that exceeded their tuition, after grants, by \$2,500" and "68% of all undergraduate borrowers hit the annual loan ceiling permitted by the Department of Education." Mitchell, J. (2014, March 2). Student loans entice borrowers more for cash than a degree. *Wall Street Journal*. Retrieved from http://www.wsj.com/articles/SB100014240527023045850045794 15022664472930.

<sup>3</sup> McCann, C., & Deslisle, J. (2014, Oct. 23). Student loan defaulters aren't who you think they are. Retrieved from http://www.edcentral.org/ defaulters/.

<sup>4</sup> U.S. Department of Education. (n.d.). Student aid overview: FY2016 budget request, O-7. Retrieved from http://www2.ed.gov/about/overview/ budget/budget16/justifications/o-sao.pdf.

<sup>5</sup> See American Council on Education letter to the U.S. Department of Education about the Notice of Proposed Rulemaking (NPRM) regarding borrower defenses to repayment that was published in the Federal Register on June 16, 2016 (Docket ID ED-2015-OPE- 0103) at http://www.acenet.edu/news-room/Documents/Comments-ED-Borrower-Defenses-General-Provisions.pdf; also Moran, M. (2015, Oct. 19). Study estimates cost of regulatory compliance at 13 colleges and universities. Vanderbilt News. Retrieved from http://news.vanderbilt.edu/2015/10/ regulatory-compliance/; and, for example, Career Education Colleges and Universities. (n.d.). Defense to repayment. Retrieved from http://www. career.org/defense-to-repayment.html.

parties have "skin in the game" through risk-sharing regulations.<sup>6</sup> Additionally, Senator Lamar Alexander (R-TN)—chair of the Senate's Committee on Health, Education, Labor and Pensions—has outlined a series of problems that risk sharing should address. Included among them is the need to realign and improve federal incentives to make colleges more responsible for "reducing excessive student borrowing and prioritizing higher levels of student success and completion."<sup>7</sup>

To improve student performance, align incentives in a bipartisan manner, and resolve the frequently conflicting interests of the multiple stakeholders of higher education, we believe that a risk-sharing policy should strive for three major goals:

- Incentivize states and IHEs to dedicate more resources aimed at improving student success in retention, progression, completion, and employment;
- Incentivize IHE's to become more affordable and more responsible for the reduction of unnecessary student borrowing; and
- Incentivize the federal government to more closely monitor student success with simpler, more logical, and less onerous regulations that are both fair and applicable to all IHEs.

<sup>6</sup> See S1102: Protect Student Borrowers Act of 2015 (https://www. congress.gov/bill/114th-congress/senate-bill/1102); HR2364: Protect Student Borrowers Act of 2015 (https://www.congress.gov/bill/114thcongress/house-bill/2364/related-bills); and S1939: Student Protection and Success Act (https://www.congress.gov/bill/114th-congress/senatebill/1939/text).

<sup>7</sup> Alexander, L. (2015, March 23). Risk-sharing/skin-in-the-game concepts and proposals. Washington, DC: Senate Committee on Health, Education, Labor & Pensions. Retrieved from http://www.help.senate.gov/imo/media/ Risk\_Sharing.pdf.

### **Proposed Policy**

Our proposed policy seeks to address these three goals. It also mirrors some aspects of Senate bill 1102, the "Protect Student Borrowers Act of 2015," including its relative simplicity, its use of cohort default rates (CDRs),<sup>8</sup> its focus on appropriate incentives, its use of a sliding scale, and its commitment to a maximum institutional liability of 30% of the amount of student loan dollars that are in default.

### Requirements for Inclusion and Risk-Sharing Payment Liability

Every IHE—whether public, private nonprofit, or private for-profit and whether less than 2-year, 2-year, or 4-year, that has a rate of participation in the direct student loan program of 25% or higher—will be liable annually for a risk-sharing payment based on a maximum of 30% of the amount of student loans that are in default during the most recent fiscal year for which data are available. To be clear, the liability is based on the percentage of loans in default, not on the original amount of loan given to a student.

### **Determination of Risk-Sharing Payments**

Risk-sharing payments are to be based on a combined total of the following two metrics using a sliding scale:<sup>9</sup>

- To incentivize responsible borrowing, up to two thirds of the payment due (i.e., 20% of the maximum 30% liability) is to be based on 3-year CDRs.
- To incentivize a focus on student success, up to one third of the payment due (10% of the maximum 30%) is to be based on Pell 3-year graduation rates for 2-year schools and Pell 6-year graduation rates for 4-year schools.<sup>10</sup>

The rationale for adding the Pell graduation metric is based on the need to incentivize IHEs to help lowincome students complete their studies. Pell grants also

<sup>8</sup> We recognize that CDR may be supplanted by repayment rate metrics; however, we see the latter as a less useful metric given the effects on it of income-based repayment plans.

<sup>9</sup> A specific advantage of the use of two metrics, rather than only one, such as CDR—as is the case with S1102—is that CDRs can be manipulated by schools that guide their students into deferment and forbearance repayment plans.

<sup>10</sup> We recognize there is a significant discrepancy between the Pell graduation rates that IHEs report to the government and those that they report to inquiring applicants. But until this is fixed, we use the Pell graduation rates, as reported in the U.S. Department of Education's National Student Loan Database System. See Butrymowicz, S. (2015). Obama's college scorecard shows Pell Grant data problem: There's finally federal data on low-income college graduation rates—but it's wrong. Retrieved from http://www.usnews.com/news/articles/2015/10/08/ obamas-college-scorecard-shows-pell-grant-data-problem.

represent a substantial investment in students by the federal government, and this metric helps to ensure that IHEs are paying attention to the government's investment in student access and success.

However, because IHEs often serve radically different student populations, it is critical that Pell graduation rates used in any risk-sharing plan be adjusted in light of individual risk factors recognized by the U.S. Department of Education (ED).<sup>11</sup> After all, it is easy to have a 95% graduation rate if an IHE admits only high school valedictorians with perfect SAT scores. However, our risk-sharing proposal seeks to reward IHEs for the value they *add* to the students they serve rather than the value that students already bring to the school. Fortunately, considerable work has already been done on "risk-adjusted metrics" to help identify schools that are over- or underperforming relative to the students they serve.<sup>12</sup>

### Breakdown of Risk-Sharing Payments According to the Two Proposed Metrics

As is evident in Tables 1–4, we propose using sliding scales to set payment liabilities. This avoids problems raised by binary ("yes/no") triggers that punish IHEs for being just over a threshold while leaving unpunished and with no incentive to improve those barely below that threshold.

All amounts are based on the percentage of the total amount (including interest and collection fees) of loans made to students who are in default in the most recent fiscal year for which data are available.

Sliding Scale based on 3-year CDR:

- 20% for CDRs 30% or higher
- 17% for CDRs lower than 30% but not lower than 26%

- 12% for CDRs lower than 26% but not lower than 23%
- 8% for CDRs lower than 23% but not lower than 21%
- 5% for CDRs lower than 21% but not lower than 19%
- 3% for CDRs lower than 19% but not lower than 17%
- 2% for CDRs lower than 17% but not lower than 15%
- No payment due for CDRs lower than 15%

Sliding Scale based on Pell 3- or 6-year graduation rates:

- 10% for graduation rate 10% or lower
- 9% for graduation rate higher than 10% but not higher than 15%
- 8% for graduation rate higher than 15% but not higher than 20%
- 7% for graduation rate higher than 20% but not higher than 25%
- 6% for graduation rate higher than 25% but not higher than 30%
- 5% for graduation rate higher than 30% but not higher than 35%
- 4% for graduation rate higher than 35% but not higher than 40%
- No payment due for graduation rate higher than 40%

The following examples, using the sliding scales just described, can help to clarify the determination of risk-sharing payments:

An IHE that failed both metrics would be liable for 30% of the volume of student loans that are in default. If 30% of the loans in default totaled \$1,000,000, then the 20% portion due to its CDR would equal \$667,000 (~66.7% of \$1,000,000), and the 10% portion due to its Pell graduation rate would equal \$333,000 (33.3% of \$1,000,000). Alternatively, if an IHE has a CDR over 30%, but its Pell graduation rate is lower than 10%, then its risk-sharing payment liability would be 10% of the total amount (including interest and collection

<sup>11</sup> On official risk factors, see Horn, L. J., Premo, M. D., & Malizio, A. G. (n.d.). Profile of undergraduates in U.S. postsecondary education institutions: 1992-93. Retrieved from http://nces.ed.gov/pubs/web/96237.asp.

<sup>12</sup> Blumenstyk, G. (2014, April 28). "Risk adjusted" metrics for colleges get another look. Retrieved from http://www.chronicle.com/article/Risk-Adjusted-Metrics/146193/.

fees) of loans made to students who are in default in the most recent fiscal year. Likewise, if an IHE's CDR is 24% and its Pell graduation rate is 33%, then its risksharing payment liability would be 17% (12% + 5%).

### Reduction for Certain Institutions Serving Large Numbers of Low-Income Students

To incentivize IHEs to enroll as many promising lowincome students as possible, we propose that ED will reduce an IHE's risk-sharing payment liability up to 50% *if all three of the following criteria are in place*:

- At least 50% of its degree students are receiving need-based assistance under Title IV;
- It has high educational, student retention, and career services expenditures as a percentage of total expenditures (excluding research and budgets related to their health centers); and
- It is making satisfactory progress<sup>13</sup> in carrying out a student loan management plan that includes (a) an analysis of the risk factors correlated with higher student loan defaults that are present at the institution and (b) the actions that the institution will take to address such factors.<sup>14</sup>

We recognize that this proposed risk-sharing plan could have the unintended consequence of forcing IHEs to be more selective, thereby diminishing access. However, the allowance of a potential reduction of up to 50% of the maximum 30% liability will help to ensure that IHEs enrolling large numbers of at-risk students are not penalized for doing so, if they are making every effort to help their students succeed.

#### **Use of Risk-Sharing Payments**

A separate account is to be established in the U.S. Treasury for the deposit of the collected risk-sharing payments. ED is to set up a competitive grant process allowing IHEs to apply for these funds if at least 50% of their degree students are receiving need-based assistance under Title IV. ED would also establish a panel of experts with responsibility for judging the applications and making awards based on the conformance of the application to the established criteria.

In particular, the call for proposals would specify that activities would qualify for financial support only if evidence suggests they are associated with student success—as measured by such indicators as increased student retention, progression, completion, or job placement.

### Needed Modifications of Current Policies

Access will be maintained or increased, even if this risksharing proposal is implemented, by reducing CDRs through two important policy changes:

- First, IHEs must be permitted to limit student borrowing by being allowed to restrict direct student loans to the cost of tuition, fees, and books/ supplies. But, because some students cannot afford to attend an IHE without support for living expenses (e.g., room and board, personal expenses, and transportation), IHEs should have the authority to make exceptions to this restriction on a programby-program<sup>15</sup> and case-by-case basis, as long as published nondiscriminatory criteria are applied.
- Second, IHEs must be permitted to award "postcompletion scholarships" and "post-participation incentive grants" that will cover all or part of outstanding student loans and be paid directly to the student loan servicer to ensure debt reduction.<sup>16</sup>

The first policy change, necessary to limit overborrowing, requires a change to the regulation that prohibits

<sup>13</sup> Rather than specify what either a "high educational expenditure" is or what "satisfactory progress" is, we suggest that technical review panels at ED be charged with determining the proper cut-off ratios.

<sup>14</sup> A slightly more restrictive version of these guidelines can be found in S1102, Protect Student Borrowers Act of 2015 (https://www.congress.gov/bill/114th-congress/senate-bill/1102).

<sup>15</sup> This is required to maintain programs that prepare students for lowpaying but necessary careers, such as social welfare, teacher education, and jobs in some allied health fields.

<sup>16</sup> These scholarships could be limited to a percentage of the tuition for the time a student was enrolled (e.g., x dollars per semester).

schools from limiting the amount of loans a student takes to attend an IHE. The regulation means that schools can be punished for factors outside their control when current student debt formulas are applied to them.<sup>17</sup> The modification would help to rationalize the arbitrary manner in how schools today set their Cost of Attendance figures.<sup>18</sup>

The second suggested policy change entails modifying 34 CFR 668.183(c) (iii), which currently ends up treating a borrower whose loan is fully or partially repaid by an IHE as a defaulter in CDR calculations. By eliminating this provision—and by granting IHEs the authority to cancel a student's enrollment and allowing him or her to return all financial aid funds that were unused<sup>19</sup>—IHEs can be incentivized to offer (a) "post-completion scholarships" to students who have completed their studies and want to start out with no student loan debt and (b) "post-participation incentive grants" that leave students free to start school anew with a clean slate after having failed on a previous try.

### Impact Assessment

Using the most recent data available, Tables 1-4 summarize the impact that the two proposed risksharing payment categories would have on IHEs that are currently participating in Title IV need-based programs and are liable to risk-sharing payments under the present proposal.

Table 1 shows that due to their large numbers, forprofit IHEs<sup>20</sup> make up the majority of schools at all levels of liability under the 3-year CDR criterion. But when represented by control sector, the percentage of schools in each level of liability is distributed in a more comparable manner. Table 2 shows that the overwhelming majority of the affected for-profit schools award predominantly certificates; that is, they are less than two-year institutions.

<sup>17</sup> See 454(a)(1)(C) of the HEA, 20 U.S.C. 1087d(a)(1)(C). See also Federal Student Aid. (2014, May). 2014–15 federal student aid handbook (p. 3-125). Retrieved from https://ifap.ed.gov/fsahandbook/1415FSAHa ndbookCompleteActiveIndex.html.

<sup>18</sup> Sharpe, R. (2016, August 5). How much does living off-campus cost? Who knows? *New York Times*. Retrieved from http://www.nytimes. com/2016/08/07/education/edlife/how-much-does-living-off-campus-cost-who-knows.html?\_r=0.

<sup>19</sup> See Federal Student Aid. (2011, June 7). [Dear colleagues letter about trials periods of enrollment] (DCL ID GEN-11-12). Retrieved from https://ifap.ed.gov/dpcletters/GEN1112.html.

<sup>20</sup> See Appendix Table 1 for the number of schools affected by the 3-year CDR category and Appendix Table 2 for the distribution by number of full-time equivalent students in affected schools.

### Table 1. Payment Breakdown of 3-Year CDR Liability-By Percentage of Schools Affected, Control Sector, Type ofInstitution, and Level of Liability21

		Ρ	ercentage of	Payment Due	(by 3-Year C	DR)			
	>30% (20%)	26–30% (17%)	23–26% (12%)	21–23% (8%)	19–21% (5%)	17–19% (3%)	15–17% (2%)	<15% (No Penalty)	Total
By Type of Institution									
Public	1%	3%	4%	7%	2%	10%	14%	58%	100%
Private Not For-Profit	4%	9%	5%	5%	5%	7%	9%	56%	100%
Private For-Profit	9%	7%	8%	7%	6%	7%	7%	48%	100%
By Level of Liability									
Public	1%	4%	4%	7%	3%	10%	13%	8%	
Private Not For-Profit	6%	14%	8%	8%	9%	10%	12%	12%	
Private For-Profit	93%	82%	88%	85%	88%	80%	75%	80%	
Potential Payment (in \$000s) by Level of Liability	\$10,500	\$13,300	\$18,600	\$15,900	\$20,200	\$1,800	\$900		\$81,200

21 All percentages have been rounded up; therefore, percentages may not add up to 100%. See Appendix for the data sources used, the calculations made to arrive at the estimates, and detailed tables on payment liabilities.

### Table 2. Payment Breakdown by 3 Year CDR Rate Liability—By Predominant Level of Awards/Degrees Granted, Percentage of Schools Affected, Control Sector, Type of Institution, and Level of Liability

		Perc	entage of Pa	yment Due (b	oy 3-Year CDF	R Rate)			
	>30% (20%)	26–30% (17%)	23–26% (12%)	21–23% (8%)	19–21% (5%)	17–19% (3%)	15–17% (2%)	<15% (No Penalty)	Total
By Type of Institution									
Predominantly Certificate	9%	7%	8%	7%	6%	7%	8%	49%	100%
Predominantly Associate	2%	9%	7%	11%	7%	8%	12%	44%	100%
Predominantly Bachelor	4%	6%	4%	4%	6%	6%	5%	66%	100%
By Level of Liability									
Predominantly Certificate	95%	81%	87%	81%	82%	84%	81%	83%	
Predominantly Associate	2%	13%	10%	15%	11%	11%	15%	8%	
Predominantly Bachelor	3%	6%	3%	4%	7%	5%	4%	9%	
Potential Payment (in \$000s) by Level of Liability	\$10,500	\$13,300	\$18,600	\$15,900	\$20,200	\$1,800	\$900		\$81,200

The calculations behind the estimates in Tables 3 and 4 are based on official databases that are publicly available. Therefore, the calculations rely on ED's official graduation rates, which account for only first-time, full-time students.

However, many students not enrolled in highly selective IHEs-especially those in 2-year schools, regional

comprehensive universities, and for-profit institutions are often transfers from other institutions and/or part-time learners. Consequently, the estimates in these two tables will need to be updated once the proper Pell graduation payment liability levels are constructed on the basis of risk-adjusted metrics that can help identify which schools are graduating more Pell students than would be expected and which are underperforming.

 Table 3. Payment Breakdown by Pell 3- or 6-Year Graduation Rate Liability—By Percentage of Schools Affected,

 Control Sector, Type of Institution, and Level of Liability

		Percer	ntage of Payn	nent Due (by	Pell Graduati	on Rate)			
	<10% (10%)	10–15% (9%)	15–20% (8%)	20–25% (7%)	25–30% (6%)	30–35% (5%)	35–40% (4%)	>40% (No Penalty)	Total
By Type of Institution									
Public	14%	5%	9%	9%	9%	9%	0%	45%	100%
Private Not For-Profit	0%	1%	7%	7%	11%	7%	9%	57%	100%
Private For-Profit	0%	1%	0%	2%	2%	2%	5%	88%	100%
By Level of Liability									
Public	100%	20%	22%	17%	11%	14%	0%	3%	
Private Not For-Profit	0%	20%	67%	50%	56%	43%	40%	17%	
Private For-Profit	0%	60%	11%	33%	33%	43%	60%	79%	
Potential Payment (in \$000s) by Level of Liability	\$400	\$300	\$2,800	\$34,200	\$4,700	\$1,600	\$2,500		\$46,500

 Table 4. Payment Breakdown by Pell 3- or 6-Year Graduation Rates—By Predominant Level of Awards/Degrees

 Granted, Percentage of Schools Affected, Control Sector, Type of Institution, and Level of Liability

		Perce	entage of Pay	ment Due (by	Pell Graduat	ion Rates)			
	<10% (10%)	10–15% (9%)	15–20% (8%)	20–25% (7%)	25–30% (6%)	30–35% (5%)	35–40% (4%)	>40% (No Penalty)	Total
By Type of Institution									
Predominantly Certificate	0%	1%	0%	1%	1%	2%	3%	93%	100%
Predominantly Associate	3%	4%	5%	5%	13%	8%	11%	51%	100%
Predominantly Bachelor	0%	0%	8%	9%	9%	6%	9%	58%	100%
By Level of Liability									
Predominantly Certificate	33%	40%	0%	17%	11%	29%	30%	74%	
Predominantly Associate	67%	60%	44%	33%	56%	43%	40%	13%	
Predominantly Bachelor	0%	0%	56%	50%	33%	29%	30%	13%	
Potential Payment (in \$000s) by Level of Liability	\$400	\$300	\$2,800	\$34,200	\$4,700	\$1,600	\$2,500		\$46,500

Lastly, as is evident from Tables 1-4, the potential gross dollar amount that could have been collected under the proposed risk-sharing model, using the most recent year forwhich data are available, is approximately \$128 million. However, that amount is subject to (a) the reduction in liability payments permitted for certain institutions serving large numbers of low-income students and (b) increases or decreases resulting from the risk-adjusted metrics applied to Pell graduation rates.

## Appendix

### Methods, Data Sources, and Tables

Because the most recent Scorecard dataset (2014–15) is incomplete, we used the Scorecard dataset from the previous year (2013–14) for the majority of the data.<sup>22</sup> From these datasets, we used the following variables with their associated descriptions:

- UNITID: Unit ID for institution
- INSTNM: Institution name
- STABBR: State postcode
- PREDDEG: Predominant undergraduate degree awarded
- CONTROL: Control of institution
- CDR3: 3-year cohort default rate
- **PELL\_COMP\_ORIG\_YR3\_RT:** Percent of students who received a Pell Grant at the institution and who completed in 3 years at original institution
- **PELL\_COMP\_ORIG\_YR6\_RT:** Percent of students who received a Pell Grant at the institution and who completed in 6 years at original institution
- **DEBT\_MDN:** The median original amount of the loan principal upon entering repayment

 $\label{eq:22} U.S. Department of Education. (n.d.). College Scorecard data. Retrieved from https://collegescorecard.ed.gov/data/.$ 

- PELL\_DEBT\_MDN: The median debt for Pell students
- DEBT\_N: The number of students in the median debt cohort
- PELL\_DEBT\_N: The number of students in the median debt Pell students' cohort
- UGDS: Enrollment of undergraduate certificate/ degree-seeking students
- NUM4\_PUB: Number of Title IV students (public institutions)
- NUM4\_PRIV: Number of Title IV students (private for-profit and nonprofit institutions)
- CDR3\_DENOM: Number of students in the cohort for the 3-year cohort default rate

In keeping with the proposed *Requirements for Inclusion* and Risk-Sharing Payment Liability, the first step was to identify those institutions with 25% or more of their students receiving Title IV funds. We divided the number of Title IV students by the enrollment of undergraduate certificate/degree seeking students, and eliminated all institutions either below 25% or that did not provide sufficient information to calculate the percentage. Many institutions have multiple campuses and choose to aggregate their data, releasing the same numbers for each campus. We eliminated all duplicates and used the resulting consolidated institution list for each of the calculations below.

### **CDR Calculations**

We applied a 15% payment liability to any school with a CDR above 30%, an 11% payment liability to schools with a 25-30% CDR, 7% payment liability for a 20-25% CDR, 3% payment liability for a 15-20% CDR, and no payment liability for anything below a 15% CDR. The Council of Economic Advisers estimates that two thirds of defaulted loans are \$10,000 or less.<sup>23</sup> Hence, even the reported median debt likely overstates an institution's level of debt. We calculated a weighted average of one third (1/3) of the total median debt (DEBT\_MDN) and two thirds (2/3) of the median debt of withdrawn students (WDRAW DEBT MDN) to estimate the revised student debt. For example, the DEBT\_MDN at the California Healing Arts College was \$9,500. The withdrawn student debt amount was lower at \$4,750. Using the 1/3:2/3 formula, the revised student debt amount was \$6,333. Once again, we estimated the number of students in default (as described previously) and multiplied that number by the calculated weighted average loan amount. The sliding scale of penalties based on CDRs was applied. The sum of all CDR penalties for the 631 liable schools was approximately \$81,200,000. Again, there are a handful of institutions with missing debt information, so the actual figure may be slightly higher.

### **Pell Calculations**

For predominantly certificate and associate schools, we used the 3-year Pell graduation rate (PELL\_COMP\_ ORIG\_YR3\_RT). For predominantly bachelor and graduate schools, we used the 6-year Pell graduation rate (PELL\_COMP\_ORIG\_YR6\_RT). For those schools that did not specify a predominant award, we used whichever rate they provided, or the higher of the two if both were provided. We considered all IHEs with a Pell graduation rate above 40% to be free from payment liability. Any school with less than a 10% Pell graduation rate was assessed a 10% payment liability and those with 10-15%, a 9% payment liability; with 15-20%, an 8% payment liability; with 20-25%, a 7% payment liability; with 25-30%, a 6% payment liability; with 30-35%, a 5% payment liability; and with 35-40%, a 4% payment liability.

In keeping with the Requirements for Inclusion and Risk-Sharing Payment Liability, the appropriate dollar amount to be considered in risk sharing is not the total loan volume but the volume of defaulted loans. Because the Scorecard data do not report this, we estimated it by first estimating the number of students in default by multiplying the number of students in the CDR cohort (CDR3\_DENOM) by the 3-year CDR (CDR3). We then multiplied this estimate of the number of students by the median Pell student debt amount. We applied the sliding scale of penalties against this estimate of defaulted loans. The sum of all Pell payment liabilities for the 81 schools affected was more than \$46,500,000. A handful of institutions are missing median Pell debt information, so the actual figure may be slightly higher.

Finally, to find the number of full-time equivalent (FTE) students affected, we used the FTE fall enrollment (DRVEF2014) for each institution from the Integrated Postsecondary Education Data System (IPEDS) for fiscal year 2014–15. Using the same institutions in each category, we summed the FTE rather than the number of institutions.

<sup>23 &</sup>quot;Defaults are concentrated among borrowers with small-volume loans, in large part because these borrowers are less likely to have completed their degrees. Loans of less than \$10,000 accounted for nearly two-thirds of all defaults for the 2011 cohort three years after entering repayment. Loans of less than \$5,000 accounted for 35 percent of all defaults. Thus while there is significant public attention on high debt burdens among traditional students attending four-year institutions, default is concentrated among a different group of borrowers." Council of Economic Advisers. (2016, July). *Investing in higher education: Benefits, challenges, and the state of student debt* (p. 5). Retrieved from https://www.whitehouse.gov/sites/default/files/ page/files/20160718\_cea\_student\_debt.pdf.

### **Appendix Tables**

Appendix Table 1. Payment Breakdown by 3-Year CDR-By Number of Schools Affected

	Nur	nber of Schoo	ls Affected, b	y Percentage	of Payment I	Due (by 3-Yea	r CDR)		
Type of Institution	>30% (20%)	26–30% (17%)	23–26% (12%)	21–23% (8%)	19–21% (5%)	17–19% (3%)	15–17% (2%)	<15% (No Penalty)	Total
Public	1	3	4	6	2	9	13	52	90
Private Not For-Profit	6	12	7	7	7	9	12	77	137
Private For-Profit	95	70	81	72	65	73	76	500	1,034
Total	102	85	92	85	74	91	101	629	1,259
Predominantly Certificate	97	69	80	69	61	76	82	521	1,055
Predominantly Associate	2	11	9	13	8	10	15	53	121
Predominantly Bachelor	3	5	3	3	5	5	4	55	83
Total	102	85	92	85	74	91	101	629	1,259

### Appendix Table 2. Payment Breakdown by 3-Year CDR—By Number of Full-Time Equivalent Students in Affected Schools<sup>24</sup>

Number of Full-time Equivalent Students, by Percentage of Payment Due (by 3-Year CDR)											
Type of Institution	>30% (20%)	26–30% (17%)	23–26% (12%)	21–23% (8%)	19–21% (5%)	17–19% (3%)	15–17% (2%)	<15% (No Penalty)	Total		
Public	53	767	2,294	5,599	81	6,432	4,828	19,759	39,813		
Private, Not For-Profit	4,391	10,448	2,568	4,263	5,471	6,113	10,725	82,256	126,235		
Private, For-Profit	12,359	14,151	17,467	13,297	272,904	12,555	15,594	80,923	439,250		
Total	16,803	25,366	22,329	23,159	278,456	25,100	31,147	182,938	605,298		
Predominantly Certificate	12,498	12,848	15,478	11,588	15,081	12,338	14,610	77,997	172,438		
Predominantly Associate	386	8,535	3,609	8,290	4,731	9,082	13,384	30,126	78,143		
Predominantly Bachelor	3,919	3,983	3,242	3,281	258,644	3,680	3,075	74,753	354,577		
Total	16,803	25,366	22,329	23,159	278,456	25,100	31,069	182,876	605,158		

24 Totals are not similar, because some schools are not categorized except by control.

### Appendix Table 3. Payment Breakdown by 3 Year CDR Rate—By Percentage of Full-Time Equivalent Students in Affected Schools by Institution Type

	Percentage o	f Full-time Equiv	alent Students,	by Percentage	of Payment Du	e (by 3-Year CE	PR)	
Type of Institution	>30% (20%)	26–30% (17%)	23–26% (12%)	21–23% (8%)	19–21% (5%)	17–19% (3%)	15–17% (2%)	<15% (No Penalty)
Public	0%	3%	10%	24%	0%	26%	16%	11%
Private Not For-Profit	26%	41%	12%	18%	2%	24%	34%	45%
Private For-Profit	74%	56%	78%	57%	98%	50%	50%	44%
Total	100%	100%	100%	100%	100%	100%	100%	100%
Predominantly Certificate	74%	51%	69%	50%	5%	49%	47%	43%
Predominantly Associate	2%	34%	16%	36%	2%	36%	43%	16%
Predominantly Bachelor	23%	16%	15%	14%	93%	15%	10%	41%
Total	100%	100%	100%	100%	100%	100%	100%	100%

### Appendix Table 4. Payment Breakdown by 3-Year CDR—By Percentage of Full-Time Equivalent Students in Affected Schools by Payment Due

	Percentage	of Full-Time E	quivalent Stu	dents, by Per	centage of Pa	yment Due (ł	oy 3-Year CD	R)	
Type of Institution	>30% (20%)	26–30% (17%)	23–26% (12%)	21–23% (8%)	19–21% (5%)	17–19% (3%)	15–17% (2%)	<15% (No Penalty)	Total
Public	0%	2%	6%	14%	0%	16%	12%	50%	100%
Private Not For-Profit	3%	8%	2%	3%	4%	5%	8%	65%	100%
Private For-Profit	3%	3%	4%	3%	62%	3%	4%	18%	100%
Predominantly Certificate	7%	7%	9%	7%	9%	7%	8%	45%	100%
Predominantly Associate	0%	11%	5%	11%	6%	12%	17%	39%	100%
Predominantly Bachelor	1%	1%	1%	1%	73%	1%	1%	21%	100%

	٦	Fotal Payments	Due (\$), by Pe	rcentage of Payı	ment Due (by 3	-Year CDR)		
Type of Institution	>30% (20%)	26–30% (17%)	23–26% (12)%	21–23% (8%)	19–21% (5%)	17–19% (3%)	15–17% (2%)	Total
Public	\$0	\$100	\$100	\$200	\$0	\$200	\$100	\$700
Private Not For-Profit	\$1,600	\$2,400	\$1,000	\$500	\$100	\$200	\$100	\$5,900
Private For-Profit	\$8,900	\$10,800	\$17,500	\$15,200	\$20,100	\$1,400	\$700	\$74,600
Total	\$10,500	\$13,300	\$18,600	\$15,900	\$20,200	\$1,800	\$900	\$81,200
Predominantly Certificate	\$9,000	\$9,700	\$9,600	\$4,800	\$2,000	\$1,400	\$700	\$37,200
Predominantly Associate	\$100	\$2,600	\$6,000	\$10,800	\$500	\$300	\$200	\$20,500
Predominantly Bachelor	\$1,400	\$1,000	\$3,000	\$300	\$17,700	\$100	\$0	\$23,500
Total	\$10,500	\$13,300	\$18,600	\$15,900	\$20,200	\$1,800	\$900	\$81,200

#### Appendix Table 5. Payment Breakdown by 3-Year CDR-By Total Payments Due (in \$000s)

### Appendix Table 6. Payment Breakdown by Pell 3- or 6-Year Graduation Rates-By Number of Schools Affected

Number of Schools Affected, by Percentage of Payment Due (by Pell Graduation Rate)										
Type of Institution	<10% (10)%	10–15% (9%)	15–20% (8%)	20–25% (7%)	25–30% (6%)	30–35% (5%)	35–40% (4%)	>40% (No Penalty)	Total	
Public	3	1	2	2	2	2	0	10	22	
Private Not For-Profit	0	1	6	6	10	6	8	50	87	
Private For-Profit	0	3	1	4	6	6	12	225	257	
Total	3	5	9	12	18	14	20	285	366	
Predominantly Certificate	1	2	0	2	2	4	6	210	227	
Predominantly Associate	2	3	4	4	10	6	8	38	75	
Predominantly Bachelor	0	0	5	6	6	4	6	37	64	
Total	3	5	9	12	18	14	20	285	366	

#### Appendix Table 7. Payment Breakdown by Pell 3- or 6-Year Graduation Rates—By Number of Full-Time Equivalent Students in Affected Schools<sup>25</sup>

Number of Full-Time Equivalent Students, by Percentage of Payment Due (by Pell Graduation Rate)										
Type of Institution	<10% (10%)	10–15% (9%)	15–20% (8%)	20–25% (7%)	25–30% (6%)	30–35% (5%)	35–40% (4%)	>40% (No Penalty)	Total	
Public	5,257	721	3,603	2,998	3,263	3,637	0	9,925	29,404	
Private Not For-Profit	0	696	7,015	6,121	13,871	7,710	5,452	70,281	111,146	
Private For-Profit	0	1,496	1,016	255,058	2,042	5,887	3,081	83,867	352,447	
Total	5,257	2,913	11,634	264,177	19,176	17,234	8,533	164,073	492,997	
Predominantly Certificate	611	1,165	0	417	413	1,087	1,197	77,673	82,563	
Predominantly Associate	4,646	1,748	5,218	4,179	11,386	9,680	2,573	25,046	64,476	
Predominantly Bachelor	0	0	6,416	259,581	7,377	6,467	4,763	61,276	354,880	
Total	5,257	2,913	11,634	264,177	19,176	17,234	8,533	163,995	492,919	

### Appendix Table 8. Payment Breakdown by Pell 3- or 6-Year Graduation Rates—By Percentage of Full-Time Equivalent Students in Affected Schools by School Type

Percentage of Full-Time Equivalent Students, by Percentage of Payment Due (by Pell Graduation Rate)										
Type of Institution	<10% (10%)	10–15% (9%)	15–20% (8%)	20–25% (7%)	25–30% (6%)	30–35% (5%)	35–40% (4%)	>40% (No Penalty)		
Public	100%	25%	31%	1%	17%	21%	0%	6%		
Private Not For-Profit	0%	24%	60%	2%	72%	45%	64%	43%		
Private For-Profit	0%	51%	9%	97%	11%	34%	36%	51%		
Total	100%	100%	100%	100%	100%	100%	100%	100%		
Predominantly Certificate	12%	40%	0%	0%	2%	6%	14%	47%		
Predominantly Associate	88%	60%	45%	2%	59%	56%	30%	15%		
Predominantly Bachelor	0%	0%	55%	98%	38%	38%	56%	37%		
Total	100%	100%	100%	100%	100%	100%	100%	100%		

25 Totals are not similar, because some schools are not categorized except by control.

#### Appendix Table 9. Payment Breakdown by Pell 3- or 6-Year Graduation Rates—By Percentage of Full-Time Equivalent Students in Affected Schools by Payment Due

Percentage of Full-Time Equivalent Students , by Percentage of Payment Due (by Pell Graduation Rate)										
Type of Institution	<10% (10%)	10–15% (9%)	15–20% (8%)	20–25% (7%)	25–30% (6%)	30–35% (5%)	35–40% (4%)	>40% (No Penalty)	Total	
Public	18%	2%	12%	10%	11%	12%	0%	34%	100%	
Private Not For-Profit	0%	1%	6%	6%	12%	7%	5%	63%	100%	
Private For-Profit	0%	0%	0%	72%	1%	2%	1%	24%	100%	
Predominantly Certificate	1%	1%	0%	1%	1%	1%	1%	94%	100%	
Predominantly Associa	ate 7%	3%	8%	6%	18%	15%	4%	39%	100%	
Predominantly Bachel	or 0%	0%	2%	75%	2%	2%	1%	18%	100%	

### Appendix Table 10. Payment Breakdown by Pell 3- or 6-Year Graduation Rates-By Total Payments Due (in \$000s)

Total Payments Due (\$), by Percentage of Payment Due (by Pell Graduation Rate)										
Type of Institution	<10% (10%)	10–15% (9%)	15–20% (8%)	20–25% (7%)	25–30% (6%)	30–35% (5%)	35–40% (4%)	Total		
Public	\$400	\$ —	\$200	\$200	\$600	\$800	\$ —	\$2,200		
Private Not For-Profit	\$ —	\$100	\$400	\$300	\$1,800	\$300	\$200	\$3,100		
Private For-Profit	\$ —	\$200	\$2,200	\$33,700	\$2,300	\$500	\$2,300	\$41,200		
Total	\$400	\$300	\$2,800	\$34,200	\$4,700	\$1,600	\$2,500	\$46,500		
Predominantly Certificate	\$100	\$100	\$ —	\$ —	\$ —	\$100	\$300	\$600		
Predominantly Associate	\$300	\$200	\$400	\$700	\$4,000	\$1,300	\$2,000	\$8,900		
Predominantly Bachelor	\$ —	\$ —	\$2,400	\$33,500	\$700	\$200	\$200	\$37,000		
Total	\$400	\$300	\$2,800	\$34,200	\$4,700	\$1,600	\$2,500	\$46,500		

Nexus Research and Policy Center is an independent, not-for-profit, nonpartisan institution organized to conduct educational research and prepare action-oriented analyses of pressing policy issues facing states and the nation regarding the improvement of educational efficiency, effectiveness, affordability, and student success. Nexus research is especially dedicated to studying and supporting underserved student populations and the institutions that provide them access to higher education. In particular, Nexus seeks to do research and promote policies that improve all education sectors and that contribute to a better understanding between traditional and non-traditional sectors of higher education. For more information visit www.nexusresearch.org.



3701 Sacramento Street, Unit 297 San Francisco, CA 94118 www.nexusresearch.org