

A Flexible Risk Retention Model for Federal Student Loans

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Proposal: The authors propose a new federal student loan risk retention model. They caution that a punitive risk retention framework only works as a fail-safe mechanism against extreme institutional subpar performance, and argue for pairing any risk retention policy with a positive incentive for enhancing quality such as an institutional bonus system for better-than-expected outcomes. Their model distributes progressively larger financial liabilities to institutions that produce increasingly poorer borrower repayment patterns. The authors call for identifying and separating the social policy costs of student lending—like promoting access and opportunity—from costs that are reasonably attributable to program quality. They advocate for allocating policy costs to the federal government, while assigning a portion of quality costs—as measured by repayment patterns—to the institutions themselves. Their proposal would provide an allowance for institutions that enroll large proportions of low-income students. They also suggest that institutions only face risk related to spending for non-instructional purposes, helping institutions that devote larger portions of their budgets on instruction.

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Introduction

There have been bipartisan calls for institutions that participate in federal student loans to assume some of the financial risk associated with the loans their students receive (Field, 2015; Kreighbaum, 2016; Stratford, 2015). Lawmakers are inclined to allocate some of the credit risk in student lending to institutions (“skin in the game”). This is because the latter play a role in pre-qualifying potential loan recipients through student recruitment and admissions, providing the education and skills financed by loan proceeds, and in originating the loans and delivering the proceeds to students. At a volume of nearly \$95 billion in 2015-16, federal student loans clearly are a dominant force in financing higher education. As much of the volume flows directly to participating schools, safeguards are needed to prevent unscrupulous institutions from maximizing revenues through high tuition fees and minimal expenditures on students’ education.

Participating institutions have numerous opportunities to take advantage of the student loan system. They can promote borrowing through heavy-handed or deceptive recruitment practices, by lowering admissions standards below the threshold that provides a reasonable assurance of postsecondary success for individuals admitted, and by counseling interventions designed to encourage students to borrow. They can reduce expenditures by cutting non-recruitment-related costs, primarily instructional expenses that fund the least visible—but most important—of the institutional activities that influence and arguably determine students’ wage enhancement. While these strategies maximize institutional revenue, they harm students and the taxpayers who finance the loans and bear the costs of poor outcomes.

Recent history suggests that concerns about unscrupulous institutions participating in the federal student loan are justified. The collapse of several publicly traded, high-profile, for-profit college chains, such as Corinthian Colleges and ITT Technical Institutes, has captured much of the limelight in this regard; however, there are many other examples of small- and mid-sized for-profit schools that have closed in recent years. In addition, many other institutions—both for- and non-profit—remain overly dependent on debt and display worrisome indications of questionable educational quality, such as low borrower repayment rates, and high advertising, recruitment, and administrative expenses paired with minimal per-student spending on faculty and instruction.

The tendency in policies that address unscrupulous actors in the federal loan system has focused historically on admonitions to gatekeepers to do a better job. However, in general, these pleas have proven inadequate, as indicated by the sheer volume of lawsuits, investigations, and scandals involving vetted institutions that have become eligible to participate in federal programs. Further, regardless of how robust the gatekeeping process may become someday, the absence of recourse against providers who breach the system simply is not a viable strategy in a multibillion-dollar public financing activity. Risk retention would protect students and taxpayers by serving as a *post facto* mechanism of program integrity that would recover some funds from the worst institutions.

This paper reviews current federal student loan accountability policies, and proposes a flexible framework for risk retention in federal student lending. The goal of this effort is not so much to advocate for risk retention, as it is to offer observations on the way in which it might improve current practice, and anticipate potential unintended consequences.

Shortcomings of Current Federal Student Loan Accountability Policies

Two sets of program integrity policies currently are in place as lagging instruments of accountability for institutions participating in the federal student loans system: Cohort Default Rates (CDRs) and the “Gainful Employment” metrics enacted recently.¹ Neither of these, however, involves monetary penalties, disgorgement of funds, or clawbacks. Both provisions operate as exclusionary measures that render violators ineligible for participation in the federal aid programs, but they do not attempt to recover funds on behalf of the students or the federal government.

Increasingly meaningless Cohort Default Rates. CDRs measure the percentage of each institution’s annual cohort of student loans in repayment on which no payments were received for nine consecutive months within three years of entry into repayment. CDRs are linked to the institutions that originated the loan. According to federal law, institutions with three successive years of CDRs greater than 30 percent, or with a CDR of 40 percent in any year, lose their eligibility to participate in the federal student aid system.² Historically, only a small number of institutions has incurred this ultimate penalty.

The introduction of penalties pegged to institutional CDRs some three decades ago was intended to create consequences for institutions and make their incentives more consistent with the interests of students and federal policy goals. However, such penalties suffer a number of significant shortcomings. These include institutional gaming, circumvention of defaults through the advent of flexible repayment options, misleading counting of loan defaults regardless of their volume, the absence of intermediate sanctions, and the significant lag between the origination of the debt and recording the defaults.

First, CDRs have become increasingly more susceptible to gaming and institutional manipulation. Even before the advent of flexible repayment options, institutions could deploy techniques that pushed defaults outside the temporal window when they count against their CDRs. These gaming strategies include the use of temporary placements, strategic deployment of certain repayment options, and intensive outreach and assistance to borrowers only while their loans are within the three-year CDR window. Ironically, most of these techniques actually result in increased federal costs and greater harm to borrowers, as they inflate final balances on loans on which students ultimately default.

Second, flexible student loan repayment options, such as income-based repayment, also have undermined CDRs’ utility as a metric for accountability. Flexible student loan repayment options were implemented to provide relief to borrowers with higher loan balances relative to their incomes. As a result, a number of repayment scenarios—specifically those that result in significant portions of principal and unpaid interest that are discharged after a pre-determined repayment term—are no longer captured in institutional CDRs. Indeed, the federal costs of many of these scenarios actually exceed the cost of defaults. While these costlier options were created with great intentionality as a way to achieve social policy goals, institutions with consistently large cohorts of borrowers

deploying them are certainly producing external costs that could be offset in part with some measure of cost allocation to the schools.

Third, CDRs are inadequate for federal loan accountability because they count the number of defaulted loans, not the volume of federal funds at risk. Therefore, CDRs misreport the effect of institutional loan portfolio performance on the federal budget significantly. Further, the binary nature of categorizing loans as either in default or not, regardless of their full life-cycle cash flows, distorts actual financial consequences (for both the federal government and students) associated with different institutions. Particularly in light of the harsh post-default collection powers of the federal government, defaulted loans may in the future prove far less costly than a large volume of non-defaulted loans that may remain in negative amortization for much of their term, only to be discharged at great cost to the federal government.

Fourth, the array of sanctions available under the CDR framework rarely results in institutions losing Title IV eligibility and excess revenues from student loans are never extracted from institutions that perform poorly. The intermediate sanctions that lead to loss of eligibility under the CDR framework are administrative (e.g., production of a “default management plan”) and provide few incentives other than fear of the ultimate penalty (expulsion from Title IV programs) to improve institutional performance. None of the current CDR sanctions, even the extreme penalty of loss of eligibility, are therefore designed to extract any of the producer surplus—the windfall profits—acquired by institutions that generate the highest external costs and transfer them to the taxpayers. This design flaw allows schools to keep all of the loan proceeds they manage to collect, regardless of how poorly the loans in question perform. The absence of a clawback mechanism for extreme underperformance is a significant shortcoming of the CDR framework.

Finally, CDRs are lagging indicators, the findings of which register only a number of years after enrollment periods financed with the loans in question. The time lag between actual service delivery and the evidence of outcomes is a problem that plagues every attempt at accountability with a service transaction like education—including risk-retention and clawbacks. The proper remedy to address this challenge would be to devise upfront, experience-based institutional financial eligibility requirements tied to predicted outcomes³. Because such an approach would require participating institutions to set aside resources to cover future liabilities, it simultaneously would provide an assurance that schools can cover their liabilities for adverse outcomes, while also providing them with a strong incentive to limit such future adverse outcomes for the sake of present-day relief.

Gainful Employment (“GE”): Complex and inadequate. The second and more recent attempt at greater institutional accountability for the outcomes of educational borrowing is the 2014 GE regulation issued by the Department of Education⁴. This rule imposes certain maximum ratios on the percentage of graduates’ earnings required for debt-service. The GE regulation, however, only applies to loans that cover certain statutorily defined programs. Nonetheless, the GE regulations are superior in design to CDRs in several respects: they operate at the programmatic rather than institutional level, use actual earnings figures, and tie borrowing for each credential level to returns on loans used to pay applicable costs.

However, GE regulations suffer from additional significant shortcomings, in that: 1) they apply only to a subset of all programs; 2) require data-matching with an external agency (the Social Security Administration); 3) have inaccuracies that the Department has chosen to address by always erring in favor of schools; 4) use ratios for debt-service to income and debt-service to discretionary income, and amortization terms to calculate debt-service amounts that are inflated grossly (because of intense lobbying by the institutions affected), and 5) have overly complex safe harbors and time-delay epicycles intended to provide additional institutional relief⁵. Worst of all, the GE framework only tracks program graduates—not the drop-outs who generally are vastly worse off—and provides no relief to victims of excessive debt and outright fraud.

Despite these shortcomings, the enormity of GE's importance in the development of risk retention cannot be overlooked. Our proposed model also relies on tracking individual borrowers within each program offered at each institution, and generates institutional co-payments (penalties)—or potentially, bonuses (rewards)—based on periodic reconciliation of total programmatic portfolios. In addition, our proposed model eliminates much of the institutional burdens and inter-agency data-matching challenges and complexities of GE by relying on existing data that the Department's Federal Student Aid unit already possesses, supplemented by the collection of only one additional data element—a program identifier for each borrower. In addition, we propose to track all borrowers' repayments, and do not limit the scope of our proposed model to graduates alone.

Risk Retention: Non-intuitive and Complex

Configuring a workable student loan risk-retention policy is a complex endeavor. The multilateral nature of the transaction—involving the federal government, institutions, and students—makes allocation of responsibility for adverse outcomes both challenging and, to a large extent, subjective. Formulas that make intuitive sense in financial transactions, such as a flat, first-dollar loss-sharing algorithm, are unworkable in the educational context. This is because federal policy attempts to promote participation with a realistic understanding that some students either may not finish or finish in fields that, while socially beneficial, may not be economically lucrative. In addition, expanding access and opportunity inevitably increase credit risk at the institutional and federal levels, as they not only allow, but also encourage, more at-risk students to participate in postsecondary education by virtually unavoidable borrowing. Attempting to hold institutions accountable from the first dollar of potential losses would work at cross-purposes to that goal, and ultimately would punish institutions for doing what federal policy actually urges them to do.

Nevertheless, access should not become the fig leaf behind which profiteering or incompetence hides at the expense of the taxpayers and the students who are intended to benefit from the policies in question. In other words, the federal educational financing regime should anticipate and accommodate a certain level of loss as an intentional social policy. Doing so, however, should not become a blank check to providers, particularly if they engage in practices that contribute to poor outcomes. As mentioned earlier, these practices include, but are not limited to, misleading advertising, lax admissions standards, low-quality instructional services, and high tuition fees.

As adverse outcomes accumulate, we can and should identify a tipping point for attribution of significant responsibility to providers, rather than students or external circumstances. Risk retention in student loans should begin to apply only at that tipping point, and even then, only moderately, if for no other reason than to leave room for escalation if already poor outcomes worsen.

In examining multiple variants of devising risk retention in student loans, a number of observations are worth noting explicitly. These include complexity, policy mischief, possible effect on access, and an acceptance of its fundamentally punitive character.

Complexity. A measured federal student loan risk-retention policy, while vastly simpler than the current GE metrics, will still be far more complicated than the CDR system currently in place. Balancing broad access to higher education with institutional accountability is challenging because these policy goals can conflict with each other. In the current policy environment, the government prioritizes access above other considerations. The simplest variations of risk retention—for example, a flat percentage co-pay requirement for any losses—would swing the pendulum to the other extreme, in which educational loans would be treated as a standard consumer credit transaction, an outcome that would have a predictably negative effect on college access. A prudent risk retention plan must embrace the complexity of balancing access and accountability. Policymakers need to scrutinize simplistic risk-sharing schemes to identify whether they have a high probability of unintended consequences for access and accountability.

Sophisticated risk retention can invite policy manipulation. While schools are much less able to manipulate a solid risk-retention algorithm operationally in the ways that CDRs can be gamed, the inherent complexity of the algorithm lends itself to gaming and manipulation on the part of policymakers. The complexity of a risk-retention proposal—a necessary policy feature—would articulate a mathematical polynomial equation with multiple constants and variables, each of which could be shaped by policy actors to neutralize the intended effect or even produce contrary outcomes. Such an outcome would turn risk retention into yet another procedurally complex, but intentionally ineffective, compliance mandate like much of the current Title IV regulatory corpus.

Access and opportunity could decline. The fundamental tension between access and accountability applies to risk retention, as it does to every other effort to hold providers responsible for adverse outcomes. Inevitably, any policy that seeks to promote better outcomes—higher graduation rates, lower delinquency and default rates, higher earnings, etc.—will affect access and opportunity. Their lack of adequate resources and often insufficient academic preparation for postsecondary work leads to greater rates of adverse outcomes for at-risk populations regardless of institutional efforts. However, the greatest harm to access inevitably will derive from institutional risk aversion and organizations' tendency to be conservative in assuming liabilities that they view as only indirectly under their control. It is critical that any risk-retention scheme provide adequate offsets in the form of input adjustments to account for the added risk institutions assume in enrolling at-risk students.

Risk retention is a punitive approach to accountability. Risk retention is a punitive policy, not a tool for continuous improvement. Institutions that struggle with resource challenges in serving needy students would

not improve through the imposition of additional penalties in the form of risk retention. The primary function of risk retention is to create a mechanism for disgorgement of windfall producer revenues generated by short-changing students and the taxpayers. A subsidiary purpose of our proposed model is to promote greater internal allocation of resources to instruction, which serves as a safe harbor against recover of fund from institutions. The fundamentally punitive character of risk retention—what Beth Akers has characterized aptly as a Pigovian tax on producers—could, however, just as easily be complemented by a Pigovian subsidy—a bonus for producers who generate better-than-expected social outcomes—to add a continuous improvement component to risk retention⁶.

Some Principles for Risk Retention

Our proposal for risk retention is designed to address the issues discussed above and accomplish several goals: relying on actual data, counting all borrowers, accommodating maximum institutional freedom, providing a safe harbor for institutional efficiency, and making input adjustments for student demographics.

Create a risk-retention plan based on actual, not projected, data. A number of proposed versions of risk retention attempt to forecast future losses to collect offsetting fees upfront. The main strength of such approaches is the upfront collection mechanism, which prevents outcomes like those at Corinthian, ITT, and others, which faced penalties only when the companies were defunct and in bankruptcy. Their greatest shortcoming, however, is that even the best evidence-based analytical forecasts can be wrong, particularly during periods of radical change when significant shifts in institutional behavior render past data unable to predict future trends. For example, the explosive growth in distance education that occurred after the elimination of the 50 percent rules in 2006 led to a cycle of waste, fraud, and abuse in the ensuing decade that no forecast managed to capture—including the Congressional Budget Office’s cost estimate for the Deficit Reduction Act of 2005.

In view of this critical shortcoming, real outcome data, rather than projections and estimates, should drive risk retention. Any penalties or bonuses—should that be an option for rewarding superior portfolio performance—should be based on actual repayment outcomes, preferably as they occur in real time.

Risk retention should count all borrowers, not graduates alone. While more nuanced than CDRs in its configuration, the GE framework contains an unfortunate loophole in its limited application to borrowers who graduate. By every measure, borrowers who drop out tend to face greater difficulties in repaying their loans, and thus are more likely to default, face costly income-based repayment options, or otherwise be eligible for loan discharge⁷. Effective risk retention should track all debt, whether borrowers finish their programs or not. As will be seen below, our proposal relies on prorating the amortization term used to define optimal outcomes based on the portion of the program such borrowers financed with each loan.

Institutional autonomy and federal non-interference. The ideal risk retention policy would avoid micro-management of institutional conduct and allow colleges and universities to allocate resources in whatever way they see fit, as long as the outcomes are as good as or better than expected. Our proposal’s internal workings would matter only to institutions that fail their applicable repayment expectations. Indeed, should our bonus concept ever be integrated into a future risk retention policy, institutions would receive over-performance re-

wards without any additional compliance requirements or mandates.

Necessity of a safe harbor. Due deference to the paramount importance of institutional autonomy requires that risk retention come into play only in cases of adverse outcomes. Institutions that outperform expected goals should be left to their own devices to continue to operate as they wish. Even in the event of poor outcomes, however, reasonable accommodations should be made to ensure that institutions are not penalized for consequences beyond their control. A workable risk retention policy should provide a safe harbor for institutions that clearly are devoting resources to promote student success, even if the outcomes fall short of ideal. Our proposal would reduce potential institutional penalties by the ratio of their instructional expenses as a percentage of total relevant expenditures.

Serving at-risk populations deserves additional consideration. Any risk-retention mechanism should be appropriately cognizant of the socioeconomic characteristics of the student population each institution serves. Institutions that serve large numbers of low-income, first-generation, or otherwise at-risk populations should receive greater protection from adverse outcomes that tend to occur more frequently within those populations. We propose flexible input adjustments to hold institutions harmless from consequences related to their enrollment of high proportions of low-income students.

Disaggregating the Concept of Risk in Student Loans

Student loans, like all credit transactions, carry two distinct categories of risk: interest-rate risk and credit risk. The former, also labeled “market risk” in bond transactions, is a function of the movement of market rates, which cause fluctuations in the spread between the transaction’s applicable rate of interest and the lender’s cost of capital. The latter is the risk of non-repayment of all or part of the outstanding balances due.

Interest-rate risk in student loans. Between 1993 and 2006, the bilateral rate risk—which in non-governmental transactions involves only the lender and the borrower—was distributed in Stafford and PLUS loans (in both the direct, and the Federal Family Education Loan Program, FFELP) through the deployment of variable interest rates with an annual borrower rate reset⁸.

With direct federal loans, the transaction was strictly bilateral—involving the government as the lender, and the borrowers—and the annual reset captured rate movements. FFELP loans, however, have a second rate-reset mechanism—the Special Allowance Payment (SAP)—which requires quarterly adjustments to provide lenders with the statutorily prescribed rate of return on loan assets. This feature of FFELP, therefore, has allocated the interest-rate risk among three parties: the federal government, lenders, and borrowers. With the July 2010 conversion of all prospective student lending to direct federal loans, rate-spread fluctuations once again became a strictly bilateral concern, with a high probability of misallocation of risk because of the fixed borrower rates then in place. These rates were significantly higher than the variable rates on loans originated in the 1993-2006 period, primarily because the recession and quantitative easing had driven market rates down. In 2013, Congress enacted legislation to lower rates based on a snapshot of prevailing market rates, in this instance choosing the bond-equivalent rate on 10-year Treasury notes. But instead of restoring variable rates based on the new index,

Congress opted to fix the rate calculated at the time of loan-origination for the duration of borrowers' repayment terms. This use of a fixed rate on loans will inevitably distribute a disproportionate risk of rate fluctuations to either the government or the borrowers, based largely on the way in which market rates change after the loans are originated. While the risk attributable to rate-spread changes is significant for borrowers and the government, attempting to allocate any of it to institutions would make little sense.

Credit risk. An institutional linkage exists in the second component of risk—that of non-repayment of principal and interest due—where federal losses can be mitigated through institutional risk retention. In private, market-based transactions driven solely by financial criteria, credit risk is relatively simple to define: the failure of borrowers to repay in full the principal and interest that is due on their loans. This risk is the adverse outcome that market participants seek to minimize or eliminate. They do so through financial mechanisms that attempt to quantify the probability and magnitude of the adverse outcomes that constitute credit risk.

However, it is more complicated to define credit risk for the purposes of federal educational lending. There are several readily identifiable subcategories of plausible explanation for credit risk in student loans. The simplest of these—a borrower's unwillingness to repay—has long been dispensed with the imposition of harsh collection techniques, such as wage garnishment, tax refund and social security intercepts, and non-dischargeability in bankruptcy.

The main driver of credit risk in student loans is borrowers' inability to repay the loan in accordance with its terms. There can be multiple plausible reasons for such adverse outcomes. These include student characteristics or choices—under-preparation, choices related to academic program or post-enrollment career, etc.—as well as institutionally related factors—heavy-handed recruitment tactics, poor admissions practices, low-quality programs, outright fraud—or external forces, such as recessions, regional or industry-related economic dynamics, military deployments, sickness or disability, disasters, or other events.

The purpose of the federal student loan system is to promote greater participation in higher education, but extending credit to more students intrinsically carries increased credit risk. The added risk stems from inclusion of students who might be at higher risk of dropping out because of under-preparation or poverty, those who choose to major in less lucrative fields, or those who, for various other reasons, may be more likely to face economic difficulties. Federal policy, nevertheless, acknowledges, accepts, and absorbs these risks, and among all actors in federal student loan transactions, remains in the best position to do so.

A prudent credit risk-retention policy should attempt to impose liabilities only on that subset of adverse outcomes that can be attributed with high statistical probability to underlying causalities over which institutions exert significant control. While it would be difficult to blame institutions for individual cases of poor outcomes, patterns of poor outcomes, as in institutions that leave large numbers of their students with debt that they are unable to repay, clearly implicate such institutions and suggest some measure of responsibility on their part.

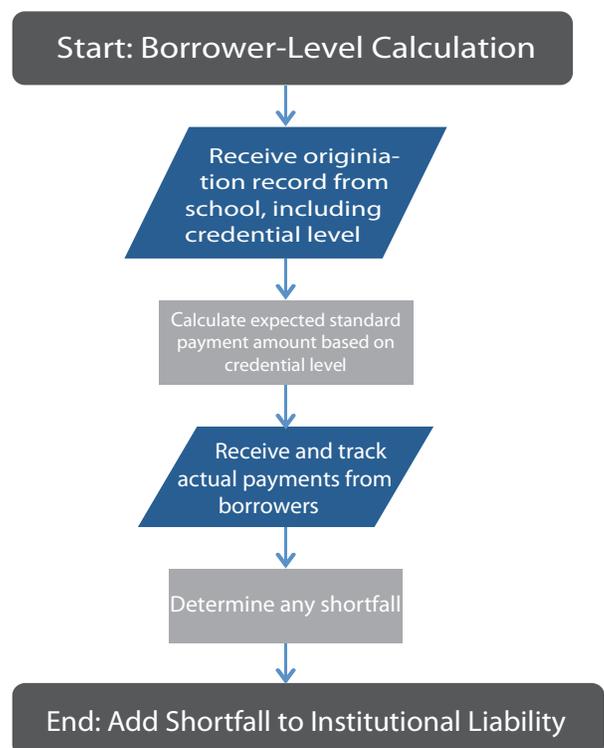
Proposed Definition of Adverse Outcomes

Our proposed model adopts full, on-time repayment as the ideal outcome for federal student loans. This includes standard amortization terms adjusted by credential level. In this model, the ideal repayment outcome would consist of full repayment of loans taken out for various postsecondary credentials. A predetermined policy decision, based on empirical assessments of each credential level's labor market wage enhancements, would define the applicable length of repayment. Certificate programs, for example, could be assigned five-year repayment terms, while graduate or professional degrees would carry substantially longer terms. Clearly, the longer the expected repayment term selected, the lower the expected monthly payment. To address the challenge of factoring in the risk associated with dropouts, the terms selected by credential level should be prorated in proportion to the length of the programs that they financed with the loans in question. This reduction is conveniently non-linear, and produces somewhat higher proportional expected monthly payment amounts for non-completers than the same amount of principal would produce for graduates. We believe this would compensate for the significantly lower market value of unfinished postsecondary work, and be offset in part by the lower borrowing limits in the first two years.

Based on this definition of ideal repayment outcomes, we can compare the actual borrower repayment amounts to the ideal and determine shortfalls. Any such shortfalls would constitute the adverse outcome related to the transactional credit risk in student loans. The cumulative amount of all borrowers' shortfalls at each institution represents the magnitude of the adverse outcome associated with that institution's portfolio. To eliminate forecasting errors and discrepancies, cohorts of borrowers entering repayment from each institution would be tracked annually and aggregated in an institutional portfolio in order to extract penalties or provide bonuses. Because the model relies on actual portfolio performance, it is critical to establish commensurate standards of financial responsibility to ensure that poor-performing institutions have financial means to cover any potential liabilities.

In this model, institutions would report the credential level corresponding to each loan origination to the Department's Federal Student Aid (FSA) unit, which would then track the shortfall, if any, for each borrower upon termination of their in school and grace periods, and aggregate such shortfalls by institution. Actual payment amounts that fall short of ideal would constitute adverse outcomes even if the borrower is in good standing under the terms of his/her promissory note. Below-amortization payment amounts attributable to income-based repayment (IBR), for example, would generate adverse outcomes for institutions, but not borrowers.

Chart 1



Other student repayment options, as well as borrower benefits such as deferment and forbearance definitions, would need to be reviewed and rationalized under this risk retention plan. Certain non-repayment events, such as declarations of natural disasters, military mobilizations, and extraordinary secretarily-designated reductions or cessations of repayment—would be exempt from this calculation. Otherwise, unless borrowers are still in school during their grace periods, repayment shortfalls would be calculated and aggregated by institution.

Tracking payment for several million borrowers and several thousand institutions is operationally feasible. As we have pointed out, the U.S. Secretary of Education has for decades tracked—and continues to track—every borrower in FFELP on a quarterly basis to reconcile Special Allowance Payments with several thousand lenders and holders of government-guaranteed student loans. Within the simpler framework of direct federal lending, the Department already tracks every borrower’s account qua lender. Reconciling on an annual basis with schools already in the system qua loan originators is not a particularly difficult transaction, especially in view of the automated systems already in place. Further, we would examine an additional simplification option, such as that envisioned in the multi-agency federal risk retention rule under Dodd-Frank, to limit the risk-retention window to five years, but only for institutions that generate reasonably small losses during that period.⁹ The proper threshold in defining that bright line can only be determined empirically based on actual repayment data to which we presently do not have access. However, the analytical tables included in our discussion of the data do shed some light on the matter.

A Formula for Calculating Institutional Liability

Institutions should not be held financially responsible for their entire portfolio shortfall. Educational services remain a unique transaction that requires preparation and significant effort on the part of students to realize the promised benefits of the services. In addition, external factors beyond the control of schools or students also contribute to non-repayment outcomes. Therefore, the size of each institution’s portfolio shortfall should be modified by two additional factors.

Input adjustment for low-income enrollments. It is critical to accommodate the higher risk that institutions face when they enroll low-income students. Imposing financial penalties on institutions without accounting for higher-risk students would have significant unintended consequences on access and opportunity. Unless institutions are assured that they will be held harmless from liability for the additional credit risk associated with their enrollment of low-income students, they will have a financial incentive to reduce such students’ access. Therefore, the model includes an input adjustment to reduce the portfolio shortfall amount based on the proportion of each institution’s share of low-income recipients—perhaps using Pell as a proxy for undergraduates—relative to its total enrollments. The magnitude of the downward adjustment cannot be specified without access to repayment data, but Table 1 below provides an overview of the distribution of Pell recipients per sector as a percentage of sector enrollments:

Table 1: Average Percentage of Students Receiving Pell Grants by Type of Institution

Type of Institution	Number of Schools	Average Percentage of Students Receiving Pell Grants	Standard Deviation	Range of Values
Public 2-Year	1,230	0.432	0.178	.000-1.000
Public 4-Year	618	0.362	0.13	.000-.910
Private	1,706	0.344	0.228	.000-1.000
Proprietary	2,860	0.625	0.21	.000-1.000
TOTAL	6,512	0.491	0.239	.000-1.000

Input adjustment for instructional expenditures. The model includes a second modification to hold institutions harmless from actual liability for portfolio shortfalls based on the proportion of their adjusted expenditures that they devote to direct instructional functions. Table 2 presents our adjusted sector data derived from the Integrated Postsecondary Education Data System (IPEDS).

There are data challenges in this modification, because IPEDS numbers are collected from institutions that use different methodologies to report expenditures. For example, some large public universities report all expenditures through the main campus and report student attendance at each of the branch campuses individually. While reconciliation of these issues is beyond the scope of this paper, implementation of this risk retention model would necessitate significant changes in accounting, and IPEDS data validation and reporting. The model accounts for instructional expenses as a percentage of total education and general expenditures. This figure is derived by subtracting from total expenses those for research, auxiliary enterprise, net grants to students, hospital services, independent operations, and other expenses. In addition, total revenues and investment returns—primarily the profits that go to investors in the case of for-profit institutions—were added back into the total expense figures:

$$\begin{aligned} &\underline{\text{Total education and general expenses}} = \\ &\text{Total expenses} \\ &(\text{research expenses}) \\ &(\text{auxiliary enterprise expenses}) \\ &(\text{net grants to students}) \\ &(\text{hospital services expenses}) \\ &(\text{independent operations expenses}) \\ &(\text{other expenses}) \\ &+ \text{total revenues and investment returns} \end{aligned}$$

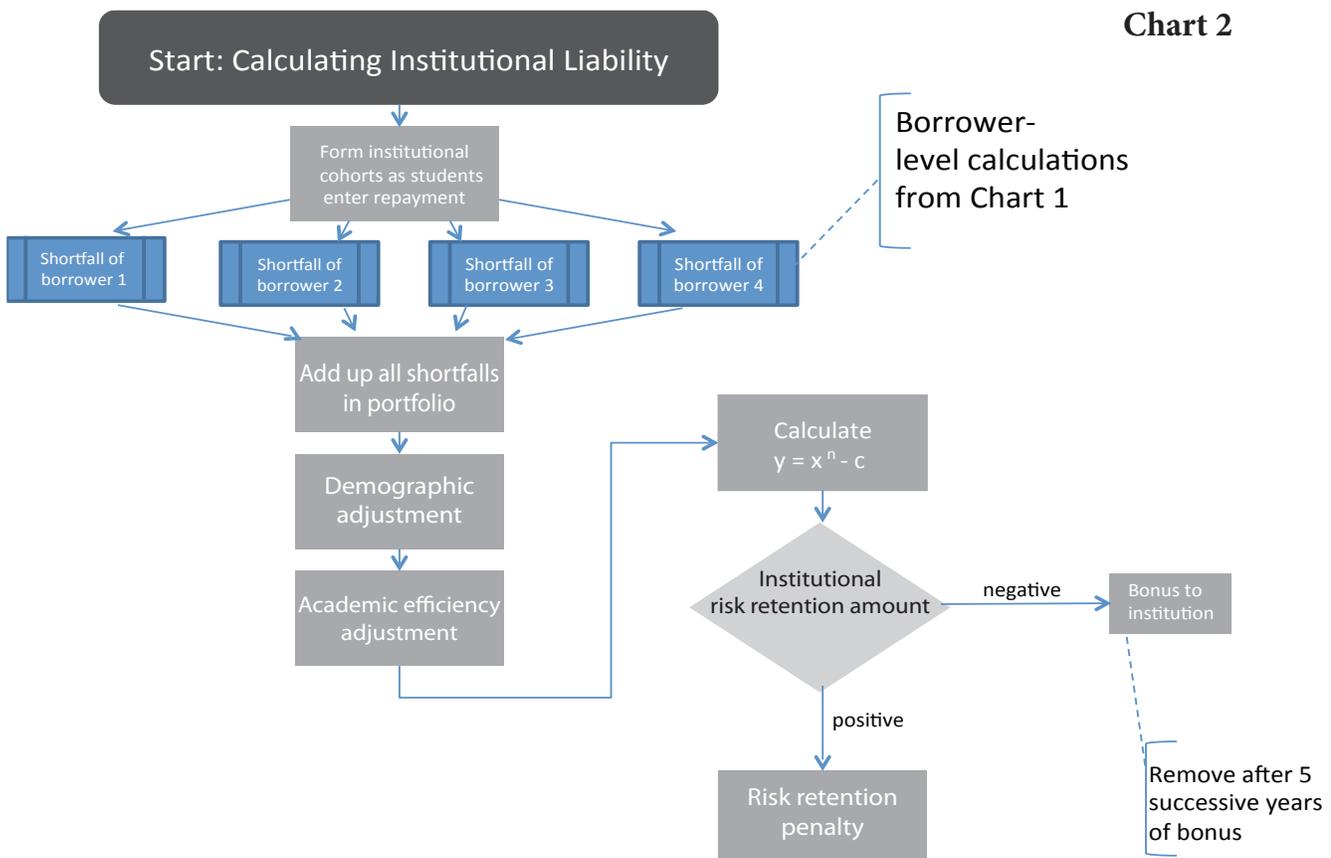
Table 2 provides sector-specific statistics on this input adjustment, the scale of which in the final risk-retention formula would need to be determined empirically through examination of repayment data.

Table 2: Average Percentage of Education and General Expenses Going to Instruction

Type of Institution	Number of Schools	Average Percentage of E&G Expenses Going to Instruction	Standard Deviation	Range of Values
Public 2-Year	1,247	0.573	0.141	.004-1.000
Public 4-Year	635	0.523	0.108	.003-.855
Private	1,707	0.453	0.148	.027-1.000
Proprietary	2,863	0.192	0.098	.000-.754
TOTAL	6,550	0.368	0.202	.000-1.000

Determining Actual Institutional Liability

Once modified downward with the two input adjustments discussed above, the total institutional portfolio shortfall would then constitute the aggregate adverse outcome for risk retention purposes. Even here, the proper policy would entail setting an acceptable loss threshold. This could be the price of intentional social policy to promote access and choice expressed as a percentage of the volume of annual or cumulative institutional loans. Shortfalls less than 10 percent of annual loan volume, for example, could generate no actual penalties.



Institutional co-payments would thus be required only for losses exceeding that threshold. The size of these co-payments should increase significantly as the ratio of adjusted shortfalls to total or cumulative loan volume increases, presumably through a parabolic formula ($y = x^n - c$). As with other data-dependent parameters in our proposal, the exact formula cannot be determined in the absence of actual repayment data.

Two Critical Positive Features

Having articulated a framework for risk retention, two additional features are necessary to prevent unintended consequences and promote better outcomes.

Bonus system. This model includes a bonus system for institutions that deliver results better than expected. As mentioned above, penalties would only accrue above a threshold for expected losses. That hold-harmless threshold would provide an opportunity for a bonus system—using a simple linear formula—that would reward institutions based on how far they are below the highest acceptable shortfall. The lower the losses generated by institutional portfolios, the higher the bonus. Some thought should be given to the exact size of any bonus system, not only because of its effect on the federal savings generated under risk retention, but also to prevent gaming of the system by unscrupulous schools. The bonuses should be a relatively small component of the overall risk retention plan.

HBCUs and TCUs deserve special consideration. There has been some trepidation regarding the application of risk retention to Historically Black Colleges and Universities (HBCUs) and to Tribal Colleges and Universities (TCUs). These institutions have enormously important historical missions, serve large numbers of underserved students, and historically, and have not been provided with adequate resources.¹⁰ Because of this, they should be exempt from risk retention for a period of ten years, and that part of the savings generated by any risk retention policy should be devoted to a federal institutional grant program to provide them with much needed funds to improve outcomes for the populations they serve.

A Note on Data

The repayment data needed to configure our proposal properly are not publicly available. In their absence, the model uses “loan repayment data” from the College Scorecard as a proxy, merely to provide some insights about the possible effects of our model. The Scorecard’s definition of repayment rate, however, differs markedly from the definition used in this proposal. The model, as has been noted, represents the gap between actual receipts and amounts due on an amortization term that varies with credential level. The Scorecard, in contrast, defines repayment using a one-dollar reduction in outstanding principal. The inconsistency between these definitions makes it difficult to anticipate the actual relationship between the Scorecard data available and the data needed to drive our model.

In addition, because some 1,384 institutions with reported instructional expenditures did not have Scorecard data, we correlated Scorecard data with official Cohort Default Rates (CDR) from the U.S. Office of Postsecondary Education (OPE). This added to our dataset approximately 527 missing institutions for which we could obtain CDR data to produce statistics on average negative amortization rates by sector (See Table 3). As expected,

there was a strong negative correlation between the Scorecard 3-year repayment rate and OPE default rates for 2013, 2012, and 2011 ($r = -0.733, -0.775, \text{ and } -0.734$, respectively). All correlations were significant at $p < 0.001$. We thus estimated the percentage of borrowers in negative amortization. Table 3 displays these negative amortization rates by type and control of institution. We have provided our dataset as an appendix to this report.

Table 3: Average Negative Amortization Rate by Type of Institution

Type of Institution	Number of Schools	Average Negative Amortization Rate	Standard Deviation	Range of Values
Public 2-Year	958	0.395	0.134	.000-.777
Public 4-Year	606	0.202	0.123	.000-.634
Private	1,482	0.166	0.153	.000-.887
Proprietary	2,519	0.464	0.186	.000-.827
TOTAL	5,655	0.348	0.211	.000-.935

It is worth noting that should a risk retention policy ever be implemented, the data elements derived from IPEDS would need to be carefully validated and audited to ensure their accuracy.

Allocation of Loss Among Multiple Institutions

The allocation of responsibility for outcomes in cases where students have attended multiple institutions is a significant challenge for any risk-retention model. While loans from different institutions are clearly delineated, heavy debt service for repayment of loans at one school will have consequences for the borrowers' ability to repay loans from other institutions. Students may have attended a first institution without generating payment shortfalls, but begin to do so after enrolling and borrowing at a second institution. It is also a familiar pattern for students who have been victimized by unscrupulous providers to seek remedies through enrollment at less expensive colleges where they would still need to borrow. Both of these scenarios are fairly common, and particularly when enrollment periods are not broken up by periods of repayment, it would be difficult to allocate responsibility for financial outcomes—whether positive or negative—among the institutions involved. The best empirical basis for dividing individual shortfalls in such cases would be to apportion liability (or provide bonuses) on the basis of the relative performance of the institutions in question.

Conclusion

The growth of the federal educational financing system and the increased ubiquity of student debt make it imperative to create a workable accountability framework to safeguard the interest of students and taxpayers. Any attempts to promote greater accountability, as we have pointed out, should recognize the possibility of unintended consequences such as reduction of access or loss of institutional autonomy. The effects of a poorly devised risk retention scheme would be most detrimental to institutions that serve large numbers of at-risk students, and critical consideration should be extended to avoid inflicting harm on them.

A student loan risk-retention policy can provide a strong institutional accountability mechanism in the student loan marketplace. It would create an instrument for clawbacks and recovery of funds in cases of institutional misconduct. Not only would this offset losses to the Treasury and could cover the federal costs of potential

borrower relief, it would also serve as a powerful signal to providers that poor outcomes have consequences for them in ways that they do not at present. In addition, the proposed model would be less complicated than current statutory and regulatory requirements under CDR and GE.

Our proposed model also would operate more accurately and in a more timely fashion than the lagging program integrity measures in current law, including audits and program reviews. Further, it can create powerful incentives for continuous improvement and generate much-needed resources for important national purposes. Most of the unintended consequences of our proposal could be addressed through careful modification of inputs once actual data become available.

End Notes

1. 34 CFR § 668.217 (2009); Gainful Employment, 79 FR § 647889 (2014).
2. U.S. Department of Education, Federal Student Aid. (2014). 2.4 Cohort default rate effects: sanctions and benefits (pp. 2.4-1-2.4-7). Washington, DC: U.S. Dept. of Education, Student Financial Assistance, Default Management
3. Beth Akers' proposed risk-sharing model provides an excellent solution to this problem by imposing an up-front assessment on institutions.
4. Gainful Employment, 79 FR § 64889 (2014).
5. Ibid.
6. Kaplow, L. (2008). *The theory of taxation and public economics*. Princeton, NJ: Princeton University Press.
7. Nguyen, M. (2012). *Degreeless in Debt: What Happens to Borrowers Who Drop Out*. Education Sector. Retrieved from http://educationpolicy.air.org/sites/default/files/publications/DegreelessDebt_CYCT_RELEASE.pdf
8. Consolidation loans under both financing mechanisms, however, carried fixed rates.
9. 79 FR § 77602 (2014).
10. Cunningham, A., Engle, J., Park, E. (2014). *Minority-serving Institutions: Doing More with Less*. Washington, DC: The Institute for Higher Education Policy.

Additional Resources

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