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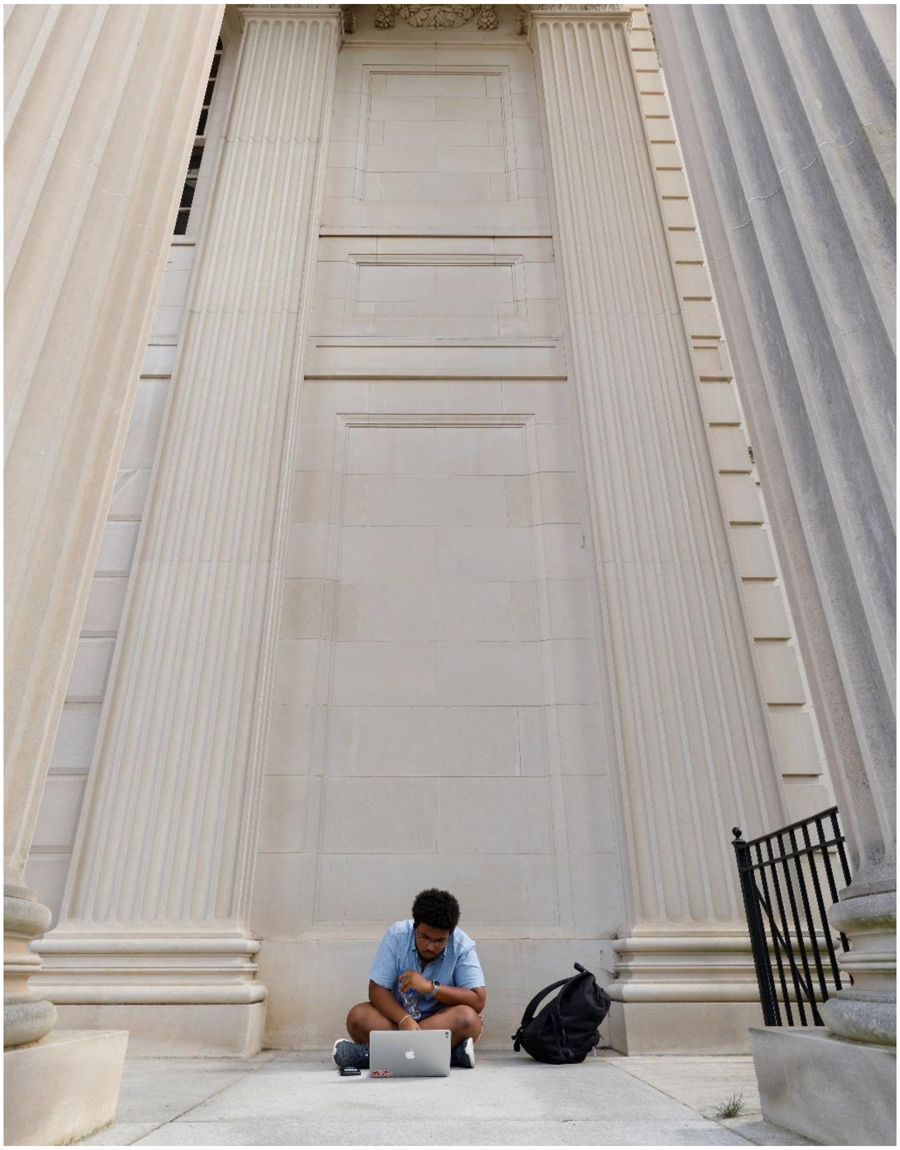

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Understanding the 90/10 Rule:
How reliant are public, private, and for-profit institutions on federal aid?

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Contents

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Executive Summary

In 1992, Congress enacted a series of rules, including the "85/15" rule, to combat waste, fraud, and abuse of federal financial aid programs for higher education. The 85/15 rule limited the share of revenues that a for-profit institution could receive from federal aid programs to 85 percent. The rule was intended as a validation of the quality of the education provided and the tuition price: if an institution is providing a valuable education, someone other than the federal government should be willing to pay for students to attend. The accountability rules instituted in the early 1990s limited federal aid to low-quality institutions, driving down the default rate on student loans from its all-time-high of 37 percent in 1990 to 12 percent by 1999 (Looney and Yannelis 2015).

Since then several of those safeguards have been weakened or repealed, including the 85/15 rule, which was changed to 90/10 in 1998. And policymakers are considering further revisions. Some propose to increase the role of the 90/10 rule in our accountability system by reversing the 1998 change, or going further to an 80/20 standard, as New York Governor Andrew Cuomo recently proposed, or by expanding the scope of federal aid subject to the rule to include military and veterans' benefits, which currently do not count as federal aid subject to the 90 percent limit.

In contrast, critics of the 90/10 rule have called for its repeal. The Promoting Real Opportunity, Success, and Prosperity through Education Reform (PROSPER) Act repeals the 90/10 rule, and a Senate staff whitepaper describes the rule as "problematic for accountability purposes." Critics of the rule have called it unfair because it applies to for-profits but not public or private nonprofit institutions and allege that it discriminates against institutions that disproportionately enroll disadvantaged students who are eligible for more federal aid.

This paper provides new data and evidence on the 90/10 rule to inform policymakers in their deliberations. To assess whether the 90/10 rule unfairly targets for-profit institutions or institutions serving disadvantaged students, we examine the implications of extending the rule to public and private nonprofit institutions. We ask whether institutions more likely to serve lower-income students are more likely to fail the rule, and whether institutions that are more likely to fail have worse student outcomes. We estimate the likely effects of alternative scenarios, including policies that would incorporate military and veterans benefits, or state and local appropriations, into the 90/10 formula. And we examine how the change from 85/15 to 90/10 in 1998 affected school enrollment.

Using public data from the Department of Education's Federal Student Aid (FSA) database and the National Center for Education Statistic's Integrated Postsecondary Education Data System (IPEDS), we show:

1. Almost all public and private nonprofit institutions would easily pass the 90/10 rule were it applied to them, including those institutions serving disadvantaged students. In the 2015-2016 academic year, more than 97 percent of public and private nonprofit institutions appear to comply with the 90/10 rule based on Department of Education data. In contrast, federal aid is less than 90 percent of total revenues at only 82 percent of for-profit institutions, suggesting compliance is substantially worse.

Public and private nonprofit institutions would easily comply with the 90/10 rule because they derive only a minority of their funding from tuition and fees (which includes federal aid). Two-year public institutions, for instance, finance 46 percent of their educational services with state appropriations. At such institutions, state legislators, charitable organizations, or individual students are the predominant sponsors of students, and the federal government's investment is modest. At for-profit institutions, more than 90 percent of revenue is from tuition and fees—and most of that is from Title IV aid.

2. Veterans and military benefits are currently not counted as federal aid in the 90/10 rule. If they were, institutions serving 24 percent of all for-profit students would have failed the 90/10 rule in 2015. Institutions serving more than 30 percent of students at four-year for-profits would fail the rule. In contrast, including veterans benefits in the 90/10 rule would appear to have little effect on public and private nonprofit institutions.

3. Were the 90/10 rule revised to 85/15, 13 percent of for-profit institutions serving 13 percent of for-profit students would have failed in 2015. Using an 80/20 rule, 27 percent of for-profit schools serving 30 percent of for-profit students would have failed.

4. Overall, schools with a large share of disadvantaged students – measured by the share of students receiving Pell Grants — are not more likely to fail the 90/10 rule. In fact, most Pell Grant recipients in the public and private nonprofit sector attend institutions where federal aid is a small share of institutional revenues. The pattern is the opposite in the for-profit sector. A higher share of students receiving Pell Grants is a strong predictor of noncompliance with 90/10 only in the for-profit sector.

5. Default rates and repayment rates are worse at institutions with high 90/10 ratios. In 2015, the average three-year cohort default rate among for-profit institutions with official 90/10 ratios of 80 percent or more was 16.9 percent, compared to 12.8 percent at for-profits below 80 percent, 10.2 percent at all public institutions, and 7.2 percent at all private nonprofits. The relatively lower default rate at public institutions is not driven by elite schools; community colleges have a three-year cohort default rate of 12.3 percent.

6. Eliminating the 90/10 rule would increase enrollment at lower-quality institutions and increase defaults. Following the revision of the rule from 85/15 to 90/10 in 1998, enrollment at institutions with 90/10 ratios above 80 percent surged. If enrollment at those institutions had instead increased at the same rate as schools with 90/10 ratios below 80 percent, then there would have been about 1.2 million fewer first time borrowers at those institutions over the period from 1998 to 2010.

Our findings suggest that the 90/10 rule does not arbitrarily target for-profit institutions—were it applied universally, its effects would still apply almost exclusively to for-profit schools, because those institutions are more reliant on federal aid. Indeed, the largest consequence of universal application would be an expansion in regulatory and paperwork burden at public and private nonprofit universities. The application of the 90/10 rule within the for-profit sector, however, places clear constraints on the ability of low quality schools to expand using taxpayer dollars; it was a key element in the accountability rules imposed in the HEA reauthorization in 1992, which significantly reduced the three-year cohort default rate on federal student loans. It remains a vital form of shared oversight between federal, state, and private educational authorities.

The 90/10 rule

In 1992, Congress enacted strict rules to combat waste, fraud, and abuse of federal financial aid programs for higher education. It limited the share of revenues an institution could receive from federal aid programs to 85 percent (the "85/15" rule), banned incentive compensation for recruiting students, and limited eligibility to institutions that enrolled fewer than 50 percent of students in distance-learning programs (the "50 percent rule"). These actions were in response to extensive evidence of fraud uncovered independently by the General Accounting Office (GAO), the Department of Education's Inspector General, the House Committee on Government Reform and Oversight, and the Senate Permanent Subcommittee on Investigations. As President Reagan's secretary of education, William Bennett, summarized, "The pattern of abuses revealed … is an outrage perpetrated not only on the American taxpayer but, most tragically, upon some of the most disadvantaged, and most vulnerable members of society."

The 85/15 rule, in particular, was intended as a validation of the quality of the education provided and the tuition price: if an institution is indeed providing a valuable education, someone other than the federal government should be willing to pay that price for students to attend. Hence, the rule requires students supported by federal aid to select from institutions where private parties or state or local governments are also willing to pay students' tuition out of their own pockets. The standard builds on a long-standing market mechanism applied by Veterans Affairs wherein GI Bill Benefits only can be used at programs where veterans make up no more than 85 percent of students—a rule intended to "minimize the risk that veterans' benefits would be wasted on educational programs of little value" (Cleland v. National College of Business, 1978). By requiring participation from non-federal parties, the rule makes the federal government a co-investor in institutions and students rather than the only investor, thereby sharing oversight and benefiting from market discipline. Indeed, the GAO found the rule to be a good proxy for quality: "proprietary schools that relied more heavily on title IV funds tended to have poorer student outcomes" (GAO 1997).

In 1998, Congress changed the 85/15 rule to 90/10, raising the share of revenues a for-profit institution could receive from federal aid to 90 percent. And overturning the 90/10 rule has remained a high priority of for-profit institutions. One motivation is financial. The Congressional Budget Office (CBO) estimates that the repeal of the 90/10 rule would allow for-profit institutions to enroll more students and boost their bottom lines, costing taxpayers $2 billion in Pell Grants and loan subsidies over the next 10 years (CBO 2018).

Beyond financial interests, critics of the rule have called it unfair because it applies to for-profits but not public or private nonprofit institutions, and allege it discriminates against institutions that disproportionately enroll disadvantaged students eligible for more federal aid. Moreover, they argue, it requires schools to raise tuition when legislators increase financial aid in order to maintain the ratio of federal aid to total revenues. And even if the existing 90/10 rule applied broadly, some skeptics are concerned that is a flawed accountability tool because it does not measure "skin in the game" or provide a market test, especially in the public sector where a large share of institutional revenue is provided by state funding. These concerns were raised at hearings held by the Senate Committee on Health, Education, Labor, and Pensions (HELP) last winter and in a whitepaper released by HELP Committee staff.

On the other hand, supporters of the 90/10 rule argue that is an effective element of the federal financial aid accountability system, and that it should be strengthened rather than eliminated. One approach is to tighten the standard back to 85/15 or 80/20 as Governor Cuomo proposed. Another approach focuses on military and veterans benefits, which are not counted as federal aid for purposes of the 90/10 rule—indeed, they are counted in the "10", and thus facilitate compliance with the 90/10 rule. The original 1992 legislation predated the new, more generous Post-9/11 GI Bill enacted in 2008. Since 2009, the Department of Veterans Affairs has paid almost $35 billion in benefits, of which 39 percent was used at for-profit institutions. These benefits facilitate compliance with the 90/10 rule and their exclusion is derided by some as a "loophole." Legislation introduced in the 113th Congress proposed to include GI Bill and DOD educational benefits in the rule.

Most revenue at public and private nonprofits is not from Title IV Federal Student Aid

The 90/10 rule requires that an institution "will derive not less than ten percent of such institution's revenues from sources other than provided under this title [title IV]" (Pub. L. 89–329, title IV, §487). While the rule applies narrowly to for-profit institutions—it was, after all, enacted specifically to curtail abuses in that sector—it would be largely irrelevant if applied to public and private nonprofit sectors because they do not rely on Title IV Federal aid for their revenues.

The Department of Education reports that in the 2015-2016 academic year tuition and fees (including federal grants) represented only 27 percent of total revenues at public institutions, 39 percent of revenues at degree-granting private nonprofit institutions, but 90 percent of total revenues at private for-profit institutions (NCES 2017).[1] At public institutions, government appropriations comprise 22 percent of total revenues. At two-year public institutions—institutions most likely to enroll low-income students—federal, state, and local appropriations account for almost half of all revenues (46 percent). It is difficult for 80 percent of two-year public institutions to fail the rule when, in the aggregate, 46 percent of their revenues are from appropriations.

Non-tuition revenues make up the majority of revenues at public and private nonprofit institutions. Other revenues at public institutions are largely composed of federal, state,

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1. NCES Table 333.10 (Digest 2017), Table 333.40 (Digest 2017), and Table 333.55 (Digest 2017). To facilitate comparison across groups, we add tuition and fees to federal non-operating grants at public institutions "because Pell Grants are included in the federal grant revenues at public institutions but tend to be included in tuition and fees and auxiliary enterprise revenues at private nonprofit and private for-profit institutions" (NCES 2017).

and local grants, contracts or appropriations. At private nonprofit institutions, grants, investments, and private gifts play an important role. In the aggregate, federal Title IV funds make up a minority of revenues at public and private nonprofit institutions. In the four-year sector, room and board (auxiliary revenues) can be significant revenue sources.

Estimated institutional compliance with the 90/10 rule by sector

Using publically available data from the Department of Education's Integrated Postsecondary Education Data System (IPEDS) and Federal Student Aid's (FSA) Title IV Program Volume reports, we estimate compliance rates for public, private nonprofit, and for-profit institutions if the 90/10 rule were to be applied broadly. The IPEDS finance survey is the only publically available source of data on U.S. postsecondary institutions, represents the only source that allows for comparisons across institutions, and are the primary data source for previous analysis of the 90/10 rule (e.g. Kantrowitz 2013).

The data have limitations. IPEDS data provides information on the revenues of educational institutions and is used to form the denominator of the 90/10 ratio. Institutions respond to this survey using the existing cost-accounting frameworks that apply to their institutions (e.g. Governmental Accounting Standards Board accounting for public institutions). These discrepancies, along with other reporting and data quality issues, impair the comparability of the data across institutions and sectors that use different standards (see, e.g., Kolbe and Kelchen 2017). To assess the robustness of our results, we present alternative simulations of the 90/10 ratios using alternative definitions of applicable revenues, for alternative reporting years, and for subsamples of the data.

Finally, it is not possible to implement the exact procedure that for-profit institutions follow for calculating the 90/10 ratio. In practice, the 90/10 ratio is calculated on a per-student basis and non-federal aid resources are "stacked first" when determining whether revenues are used to finance tuition and fees versus living expenses. As a result of this procedure, Title IV federal aid is more likely to be assumed to finance living expenses rather than tuition, reducing the 90/10 ratio. Because we are unable to replicate this process in IPEDS our analysis that takes Title IV federal aid and revenues from IPEDS will understate compliance with the 90/10 rule in all sectors. (Indeed, at many for-profit institutions in compliance with the official 90/10 rule, total Title IV disbursements exceed the institution's total revenues.) In our preferred specification, we propose a correction that assumes that the same fraction of Title IV funds is excluded from the 90/10 calculation at all institutions.

We calculate institutions' 90/10 ratios using Pell Grant and loan disbursements from FSA, and revenue information from IPEDS. The FSA data include quarterly disbursements of Pell Grants, and undergraduate, graduate, and PLUS loans. For each institution we match the financial reporting period (the financial year) with the corresponding four quarters of FSA disbursements.

Our primary estimate of each institution's 90/10 ratio compares the annual disbursement of Title IV aid—Pell and loan disbursements—divided by total non-auxiliary revenues.

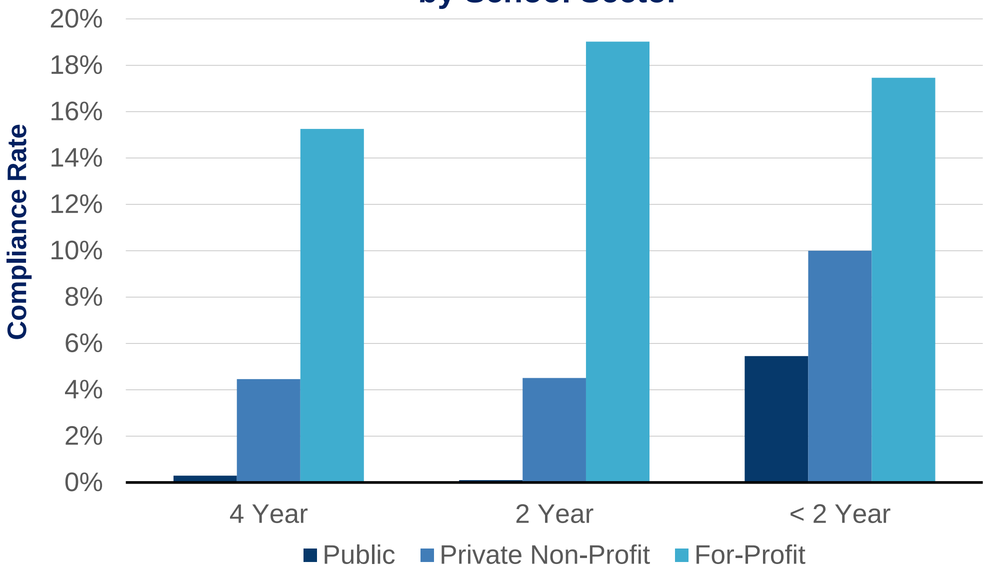
In practice, only about 84 percent of Title IV Pell Grants and loans are included in the numerator of the official 90/10 data based on a comparison of the official numerator to total FSA-reported disbursements. The remainder are effectively counted as accruing to students for living expenses. Hence, when constructing our preferred estimate of the 90/10 ratio we scale-down FSA-reported disbursements across the board proportionately.

We define total institutional revenues (the denominator) by summing gross tuition; federal, state, and local appropriations, grants, and contracts, gifts, and non-negative investment income.

To be concrete, consider the following example. In fiscal year 2016 students at the City University of New York's Borough of Manhattan Community College received $80.8 million in Pell Grants and $12.2 million in federal loans. Assuming that 84 percent of FSA disbursements are used for tuition (the average ratio in the official data at for-profit institutions), the numerator of the 90/10 calculation is $78.2 million. For the denominator, CUNY's total non-auxiliary revenues were $288 million, including $40.7 million in net tuition and fees (after $90.4 million in discounts and scholarships), $52.6 million in operating grants, $80.8 million in non-operating grants (Pell Grants), $114 million of state and local appropriations, and smaller amounts of gifts and investment income. Comparing $78.2 million to $288 million that results in a 90/10 ratio of 27.1 percent—suggesting compliance with the rule.

We make these calculations for all institutions in IPEDS to which FSA distributed Pell Grants or student loans. The resulting compliance rates are shown in Figure 1 and Table 1.

Figure 1: Estimated Non-Compliance with 90/10 Rule, by School Sector



Source: Authors' calculations from IPEDS and FSA.

The estimates in Figure 1 and Table 1 show that essentially all public and private nonprofit institutions would comply with the 90/10 rule. Based on our primary measure (Table 1, column 1), we estimate that 92.2 percent of institutions complied with the 90/10 rule in the 2015-2016 academic year. When we disaggregate by institution type, 99.2 percent of public institutions and 95.4 percent of private nonprofit institutions receive more than 10 percent of their institutional revenues from "sources other than funds provided" under Title IV, as the Higher Education Act stipulates, and thus appear to be compliant with the 90/10 rule. Private nonprofit institutions that appear to fail the 90/10 test are predominantly institutions offering online or distance learning programs, or are graduate institutions like those training students for medical, chiropractic, or osteopathic careers (and where a larger share of financial aid is likely to be used for living expenses rather than tuition). The estimated compliance rate at for-profit institutions, using the same methods, is 82.4 percent.2

We also disaggregate our estimates by sector in the bottom panel of Table 1. Our estimates show that almost all four-year and two-year public institutions appear to be in compliance (99.7 and 99.9 percent respectively). Seventy-four percent of undergraduate students attend two- and four-year institutions. The estimated compliance rate at both private nonprofit four-year institutions and two-year institutions is 95.5 percent. Sixteen percent of undergrads attend four-year private nonprofits, and only 0.4 percent attend two-year private nonprofits. Estimated compliance rates are uniformly lower in the for-profit sector: 84.7 percent at four-year institutions and 81.0 percent at two-year institutions.

In the second column of Table 1, we weight institutions by their total number of undergraduate students (to assess the share of students within each sector attending compliant institutions) and the results are largely similar. Compliance rates increase because compliant institutions serve more students.

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2. Accounting methods used in IPEDS differ slightly from those used for calculation of 90/10, and the official 90/10 measures are constructed on a student-by-student basis and using a method that stacks non-Title IV aid first in the calculation. As a result, we underestimate compliance.

Table 1: Estimated Compliance with the 90/10 Rule		
Institutional Characteristics	**Compliance Rate**	**Compliance Rate, weighted by enrollment[3]**
Overall	92.2%	97.9%
By Control		
Public	99.2%	99.9%
Private Nonprofit	95.4%	95.7%
For-Profit	82.4%	86.3%
By Control and Level		
Public		
4 Year	99.7%	99.9%
2 Year	99.9%	100.0%
< 2 Year	94.5%	98.2%
Private Nonprofit		
4 Year	95.5%	95.6%
2 Year	95.5%	97.8%
< 2 Year	90.0%	91.3%
For-Profit		
4 Year	84.7%	84.5%
2 Year	81.0%	90.6%
< 2 Year	82.5%	86.5%

Source: IPEDS and FSA 2016. Table shows the fraction of institutions in each category for which the sum of total Pell Grant aid and loans calculated from quarterly FSA data is less than 90 percent of total institutional revenues recorded in IPEDS.

Sensitivity analysis

To assess whether these findings are sensitive to the assumptions we make, we calculate the 90/10 ratios in alternative ways and present the results in Table 2. First, we define the ratio as total (unscaled) Title IV aid divided by total institutional revenues reported by IPEDS (column 3). This expands the numerator to include any Title IV funds that might be used for non-tuition purposes and expands the denominator to include all sources of revenue, including some auxiliary sources that may not be counted in the official 90/10 ratio denominator. These measures are more consistently reported and may be more comparable across institutions. On balance, estimated compliance rates are estimated to be slightly lower (because the increase in the numerator more than offsets the increase in the denominator). At public institutions, these changes have little effect on estimated compliance

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3. Note: all enrollment weighted measures and figures are from the IPEDS variable for total number of undergraduates as reported on the student financial aid component.

rates. At private nonprofit institutions, the compliance rate declines from 95 to 91 percent. But at for-profit institutions, the compliance rate declines to 80 percent (and 74 percent for four-year for-profits).

Next, we report the compliance rates again using total unscaled Title IV aid divided by total revenues excluding auxiliary revenues column 3. This scenario again envisions that all aid is used for tuition and fees (and none for living expenses) across all institutions. However, the denominator excludes auxiliary revenues. Hence, relative to column 3, the denominator is smaller and the pass rate lower. In this scenario, compliance rates are 98 percent at public institutions, 92 percent at private nonprofits, and only 65 percent at for-profits.

Table 2: Estimated Compliance with the 90/10 Rule, Various Methods

Institutional Characteristics	Table 1: Scaled FSA Aid / IPEDS Non-auxiliary Revenues	Total FSA Aid / Total IPEDS Revenues	Total FSA Aid / Non-auxiliary Revenues
Overall	92.2%	89.8%	84.5%
By Type			
Public	99.2%	98.3%	97.9%
Private Nonprofit	95.4%	91.2%	91.6%
For-Profit	82.4%	80.1%	65.1%
By Sector			
Public			
4 Year	99.7%	99.6%	99.1%
2 Year	99.9%	99.8%	99.8%
< 2 Year	94.5%	87.8%	85.5%
Private Nonprofit			
4 Year	95.5%	92.0%	92.3%
2 Year	95.5%	86.5%	85.7%
< 2 Year	90.0%	78.0%	86.0%
For-Profit			
4 Year	84.7%	74.0%	71.9%
2 Year	81.0%	81.4%	63.1%
< 2 Year	82.5%	80.8%	64.7%

Across all our estimates, nearly all public and private nonprofit institutions continue to be in compliance. However, estimated compliance rates in the for-profit sector decline, particularly when all Title IV aid is counted in the numerator and when the denominator is limited to non-auxiliary revenues. In that scenario, only 65 percent of institutions appear to be in compliance.

In the appendix, we replicate these exercises for years 2013-2014 and 2014-2015, and provide additional sensitivity analyses for alternative ways to construct the ratio. The results from these replications are essentially the same.

In earlier work cited in the Senate staff whitepaper, Kantrowitz (2013) suggests that were the 90/10 rule applied to all colleges, 80 percent of public two-year colleges and 40 percent of public four-year colleges would fail the rule. While it is not clear why our results differ, one possibility is that that analysis uses data on tuition revenue that is not comparable across sectors due to different reporting requirements between types of institutions. For instance, public institutions tend to report Pell Grants as non-operational federal grant revenues rather than tuition revenues, whereas they are included in tuition and fees at private nonprofit and private for-profit institutions (NCES 2016).[4] This means that at public institutions, Pell Grants are included in the numerator but may not have been included in the denominator, biasing the 90/10 ratio upward.

A second potential difference is that the cited research may exclude institutional revenue used to defray students' costs of tuition and fees other than those amounts actually reported as tuition. For instance, if the denominator used to form the 90/10 ratio excluded any state or local grants or appropriations, private grants or scholarships, institutional aid financed by charitable donations or the investment return on such donations, or other sources of income used to pay for educational services on behalf of the student, that would bias the 90/10 ratio upward.

Returning to the example of CUNY described above, total gross tuition was $131 million in 2016, of which $81 million was Pell Grant aid, $10 million was other state, local, or institutional discounts or scholarships offered to students, and $41 million was paid out of pocket. Comparison of the $78 million in FSA disbursements attributed to tuition and fees to gross tuition and fees would then result in an erroneously high estimate of the 90/10 ratio of 60 percent, because it excluded other grants and appropriations used to finance educational services. Furthermore, if the $78 million in FSA disbursements were compared to net tuition ($41 million), the resulting ratio would be 192 percent. That comparison would be clearly biased, because it includes Pell Grants and other aid used for tuition and fees in the numerator but not the denominator because of the reporting conventions of public institutions. Indeed, a comparison of FSA disbursements to net tuition results in estimated compliance rates in the public sector that are dramatically lower than at nonprofit and for-profit institutions.

Under current law, most non-tuition revenue is included in the denominator of the 90/10 calculation because of the statutory language of the HEA and the regulations that implement the 90/10 rule. Indeed, the current practice used by for-profits subject to the rule is to include not just private tuition and federal aid, but also any state or local grants or appropriations. Hence, most non-federal revenue sources should be counted in the denominator under current law. Nevertheless, an alternative assessment of how much "skin in the game" is provided by private, non-governmental funders can be constructed using a ratio that includes state and local revenue sources in the numerator. We offer an assessment of compliance rates under that alternative, assuming state and local appropriations and grants are treated the same as Title IV financial aid in the appendix. In this scenario, we estimate that 83 percent of public institutions, 95 percent of private non-profits, and 82 percent of for-profit institutions would remain compliant. Hence, even in this scenario

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4. For instance, according to NCES "Revenue data are not directly comparable across institutional control categories because Pell Grants are included in the federal grant revenues at public institutions but tend to be included in tuition and fees and auxiliary enterprise revenues at private nonprofit and private for-profit institutions." https://nces.ed.gov/programs/coe/indicator_cud.asp

the vast majority of public and private non-profit institutions exhibit substantial 'skin in the game' from private sources.

How would the results change if GI Bill Benefits factored into the 90/10 rule?

One criticism of the existing 90/10 rule is that it excludes federal aid provided from non-Title IV sources—notably amounts provided to members of the military and veterans through the Post-9/11 GI Bill and through Department of Defense (DOD) tuition assistance. Since the program's inception in 2008, veterans have claimed $34.7 billion in Post 9/11 GI Bill benefits (VA Transparency Project 2018). In 2015, veterans received about $4.9 billion in benefits, plus about 500 million in DOD assistance. Over the course of the program, 39 percent of Post 9/11 GI Bill benefits were used at for-profit schools, 35 percent at public institutions, and 26 percent at private nonprofits. To put into context, the schools in our sample received about $125 billion in Title IV aid in 2015. For this year, 17 percent of Title IV aid went for-profit schools, 52 percent to public schools, and 31 percent to private nonprofits.

The first column of Table 3 shows the compliance rates using the official 90/10 ratios provided by FSA. Almost all schools comply with the rule. The second column shows the compliance rates after adding GI and DOD benefits to the official federal revenue amount, weighting by enrollment. There is a drastic decrease in compliance after incorporating these benefits, suggesting that these for-profit schools derive a sizable share of aid from defense benefits.

Table 3: Compliance with GI Bill and DOD Benefits, Schools with Official 90/10

Institutional Characteristics	Official 90/10 Ratio	Including GI and DOD Benefits, Weighted by Enrollment
Overall	100.0%	76.1%
By Sector:		
4 year	100.0%	69.3%
2 year	99.9%	82.1%
<2 year	99.9%	86.6%

The same is not true for public and private nonprofit institutions because they receive a much smaller share from federal aid and defense benefits. Because official 90/10 data is not available for the public and private nonprofit sector, we again use IPEDS data to assess the impact of including veterans benefits in the formula at those institutions. The first column of Table 4 shows the original compliance estimates provided in Table 1. Column 2 shows the effect on compliance from incorporating GI Bill and DOD tuition assistance into the numerator of the 90/10 ratio. On average the estimated compliance rate changes little at public and private nonprofit institutions. We see that the largest reduction in compliance due to adding DOD benefits is in the for-profit sector, where compliance declines from 82.4 percent to 79.2 percent.

However, this change in compliance rates likely understates the impact of the incorporation of these benefits into the 90/10 rule. Because many large for-profit institutions are already above the 90 percent threshold in our analysis, the compliance rate fails to illustrate the potential magnitude of the change. To illustrate the potential impact, the third column shows the average percentage-point increase in the ratio by control and from adding in these benefits. Specifically, column 3 represents total GI Bill benefits plus DOD tuition assistance divided by total non-auxiliary revenue. The data show, for instance, that on average for-profit institutions receive about 5.4 percent of their total, non-auxiliary revenues from military benefits, a much larger share than at public and private nonprofits. Hence, incorporating military benefits into the numerator would tend to boost the average ratio by 5.4 percentage points on average.5 However, the distribution of GI Bill benefits is highly skewed—the median institution receives only 1.2 percent of its revenues from GI Bill benefits, but at the 10 percent of for-profit institutions that receive the largest share of revenues from those benefits they represent 11 percent of total revenues.

Table 4: Estimated Compliance with GI Bill and DOD Benefits

Institutional Characteristics	Scaled FSA Aid / IPEDS Non-auxiliary Revenues	Scaled FSA Aid + GI Bill / IPEDS Non-auxiliary Revenues	GI Bill Benefits /Non-auxiliary Revenues
Overall	92.2%	90.8%	2.7%
By Control			
Public	99.2%	99.0%	1.0%
Private Nonprofit	95.4%	94.8%	1.4%
For-Profit	82.4%	79.2%	5.4%
By Control and Level			
Public			
4 Year	99.7%	99.6%	1.0%
2 Year	99.9%	99.8%	1.0%
< 2 Year	94.5%	93.6%	1.1%
Private Nonprofit			
4 Year	95.5%	95.2%	1.3%
2 Year	95.5%	93.2%	2.4%
< 2 Year	90.0%	86.0%	2.5%
For-Profit			
4 Year	84.7%	80.5%	5.6%
2 Year	81.0%	77.8%	4.5%
< 2 Year	82.5%	79.6%	5.9%

Source: IPEDS and FSA 2016. Table shows the fraction of institutions in each category for which the sum of total Pell Grant aid and loans (from FSA) plus GI Bill Benefits plus DOD tuition assistance (from IPEDS) is less than 90 percent of total non-auxiliary revenues recorded in IPEDS.

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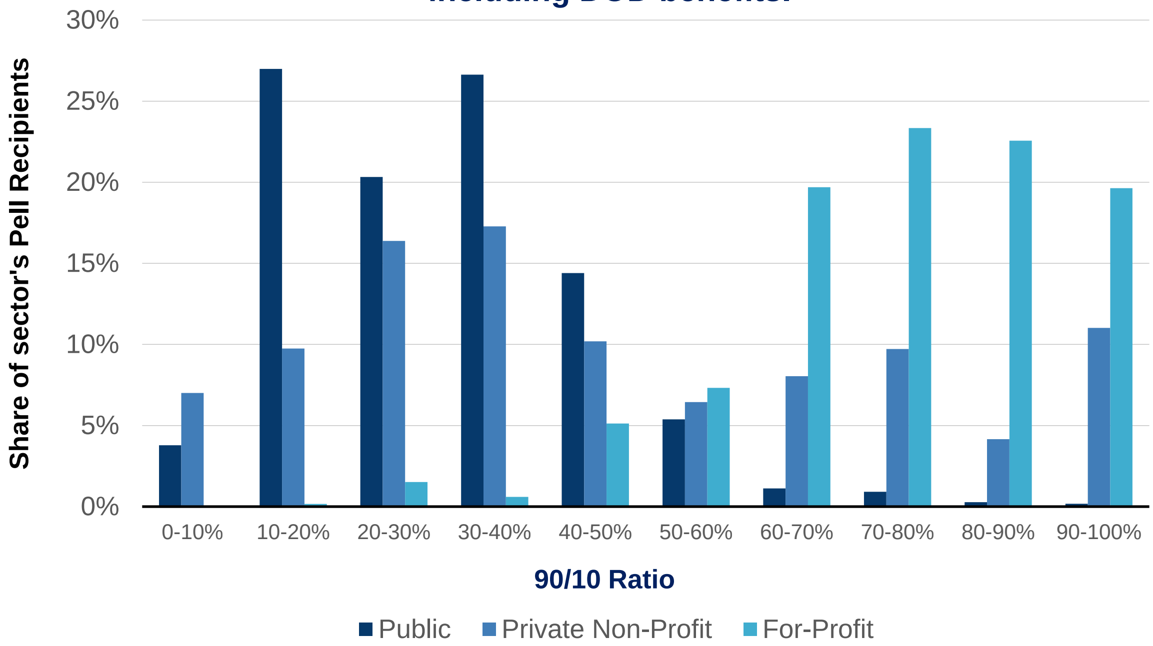
5. Note GI Bill benefits represented here are paid directly to the institution for tuition and fees; living expense stipends are paid directly to beneficiaries. Hence, all institutional benefits should be included in the numerator.

Outside of the for-profit sector, most low-income or disadvantaged students attend institutions with low 90/10 ratios

An expressed concern with the 90/10 ratio was that lower-income students often do not contribute more than 10 percent of the cost of their education from their own pockets, so the 90/10 rule must disproportionately impair institutions that enroll low-income students.

However, within the public and private nonprofit sector, most low-income students do not attend institutions with high 90/10 ratios. The figure below classifies each institution by its estimated 90/10 ratio (including GI Bill Benefits and DOD tuition assistance) using our preferred method and illustrates the share of all Pell Grant recipients at public, private nonprofit, and for-profits that attend institutions with 90/10 ratios in each range. For instance, the chart shows that 4 percent of all Pell Grant recipients who attend public institutions attend institutions with an estimated 90/10 ratio of between 0 and 10 percent, and 27 percent attend institutions whose 90/10 ratio is between 10 and 20 percent.

Figure 2. Which Schools do Pell Grant Recipients Attend? Share of each sector's Pell Grant recipients by 90/10 ratio, including DOD benefits.



Source: IPEDS 2016.

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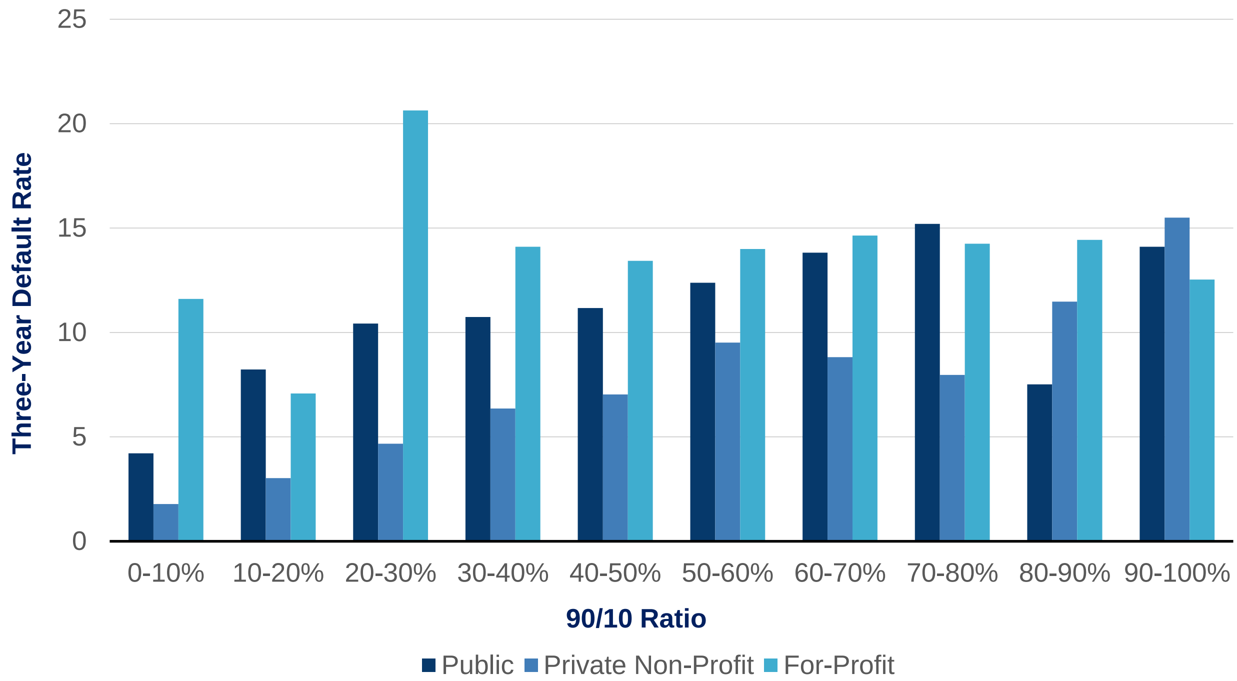
The chart shows that most Pell Grant recipients in the public and private nonprofit sectors attend institutions with low 90/10 ratios. Indeed, about 92 percent of all Pell Grant recipients in the public sector attend institutions with 90/10 ratios below 50 percent, as do 61 percent of Pell students at private nonprofits. Taking these estimates at face value, this implies that were the 90/10 rule applied in those sectors it would affect less than 0.2 percent of Pell Grant recipients at public institutions and about 11 percent at private nonprofit institutions. In contrast, only 7 percent of students at for-profits attend schools with 90/10 ratios of less than 50 percent, and 20 percent attend institutions that appear to have ratios in excess of 90 percent.

Beyond economic disadvantage, the estimates above also suggest that minority-serving institutions already comply with the rule. Based on our primary estimate, 97 percent of historically black colleges and universities appear to comply with the 90/10 rule in 2016—similar to public and private nonprofits.

Student loan outcomes are poor at institutions with high 90/10 ratios

Institutions with high 90/10 ratios tend to have higher cohort default rates. The chart below shows the average enrollment-weighted three-year cohort default rate by the estimated 90/10 ratio calculated above (in column 1 of table 1). For-profit institutions with higher 90/10 ratios have higher default rates. For instance, in 2015, the average three-year cohort default rate among for-profit institutions with official 90/10 ratios in 2016 of 80 percent or more was 16.9 percent, compared to 12.8 percent at for-profits below 80 percent, 10.2 percent at all public institutions, and 7.2 percent at all private nonprofits.

Figure 3: Default rate in 2015 by 90/10 ratio



Source: Defaults from FSA's Cohort Default Rates for Schools, FY2015.
90/10 Ratios based-on authors' calculations of IPEDS and FSA.

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Similarly, repayment rates at institutions with high 90/10 ratios are low. In 2014, the average five-year repayment rate among for-profit institutions with estimated 2016 ratios of 80 percent or more was 12.2 percent, compared to 14.6 percent at for-profits below 80 percent, 23.2 percent at all public institutions, and 29.8 percent at all private nonprofits.

While higher 90/10 ratios predict worse default and repayment outcomes within all sectors, there are very few public or private nonprofits with high ratios. Hence, the 90/10 rule does constrain the ability of high-default, low-repayment-rate institutions from increasing the amount of revenue they receive from federal aid sources.

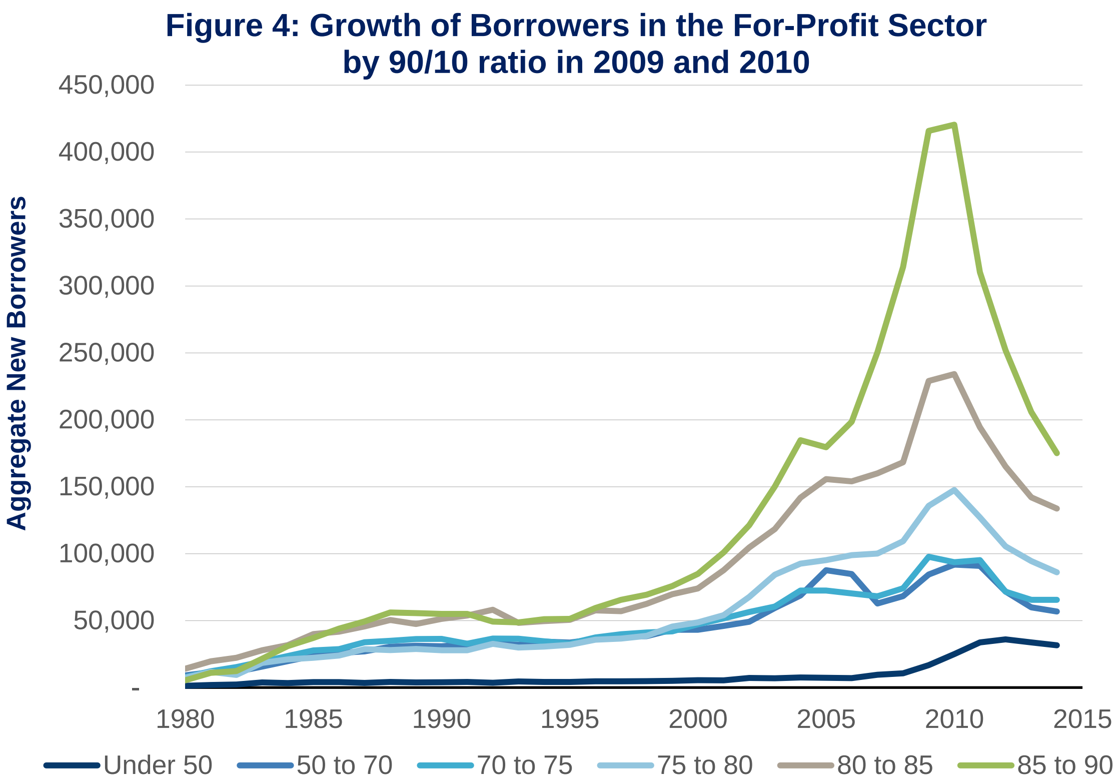
Repealing the 90/10 rule will increase enrollment at low-quality institutions and increase default rates

Legislation in 1998 revised the prior 85/15 rule and allowed schools to receive 90 percent of their revenue from title IV programs. This allowed institutions to increase the share of their revenue that came exclusively from federal aid policies.[6] The resulting increase in enrollment in response to the rule change suggests enrollment among institutions with high 90/10 ratios would increase.

The figure below examines how annual enrollment of new federal loan borrowers increased each year before and after the 1998 change in which Congress revised from 85 percent to 90 percent the amount of revenue for-profit institutions were allowed to derive from Title IV student aid (the 90/10 rule). The figure shows the total number of new borrowers each year at for-profit schools by the maximum 90/10 ratio that applied in 2009 or 2010 (the earliest data publically available online). The graph shows that new borrowing increased most at institutions which would have been limited by the prior 85 percent limit after 1998. In addition, enrollment increased quickly at institutions just under the initial 85 percent limit, whose eligibility was at risk of tripping the threshold.

. . .

6. The PROSPER Act also eliminates a remaining constraint on distance education that requires that online programs provide students with regular, substantive interaction with faculty. The CBO estimates that eliminating this provision would cost taxpayers $1.9 billion. https://www.cbo.gov/publication/53547



Source: NSLDS, IPEDS, and FSA Proprietary School 90/10 Revenue Percentages.

Specifically, average enrollment at programs whose 90/10 ratio was between 85 and 90 percent in 2009 or 2010 tripled between 1998 and the peak of enrollment in 2010. If enrollment at those institutions had instead increased at the same rate as schools with 90/10 ratios below 80 percent, then there would have been about 1.2 million fewer first time borrowers over the period from 1998 to 2010 at these institutions.

Conclusion

The evidence above suggests that the 90/10 rule does not arbitrarily apply for-profit institutions—were it applied universally its effects would still apply almost exclusively to for-profit schools, because those institutions are more reliant on federal aid. Indeed, the largest consequence of universal application would be an expansion in regulatory oversight and paperwork burden at already compliant public and private universities. However, the application of the 90/10 rule within the for-profit section places clear constraints on the ability of high default rate for-profit schools to expand using federal taxpayer dollars.

As a tool for accountability, the 90/10 rule was a key element in the new accountability rules imposed in the HEA reauthorization in 1992 and which reduced the three-year cohort default rate on federal student loans from 36 percent in 1990 to 10 percent by 1999 (Looney 2016). It remains a key form of shared oversight between federal, state, and private educational authorities.

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