Student Aid Policy Analysis

The Impact of Loan Repayment Rates on Pell Grant Recipients

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Affordable debt restrictions, such as those proposed by the U.S. Department of Education in the Gainful Employment NPRM,[1] have the potential to improve college graduation rates and to reduce excessive debt by shifting enrollments toward better-performing colleges. However, the extent to which these proposals will actually yield an improvement in outcomes is still unclear, especially for Pell Grant recipients.

As noted in a previous report,[2] the loan repayment rate data published by the U.S. Department of Education on August 13, 2010[3] demonstrates that colleges that serve more at-risk students have lower loan repayment rates. For example, the average loan repayment rate is 66% at colleges where less than a tenth of the students receive Pell Grants, compared with 26% at colleges where more than two-thirds of the students receive Pell Grants. The results are similar even when the analysis is restricted to public, non-profit or for-profit colleges, as illustrated in the following table, suggesting that a low loan repayment rate may be caused, at least in part, by the demographics of the students enrolled in a college and not just due to differences in educational quality. (A few anomalies are highlighted in yellow.)

College Type	Average Loan Repayment Rate	
	< 10% Pell Grant Recipients	> 66% Pell Grant Recipients
Public	**58.0%**	**18.4%**
4-year	68.4%	12.7%
2-year	43.9%	21.0%
< 2-year	53.9%	50.4%
Non-Profit	**68.6%**	**29.2%**
4-year	68.6%	29.0%
2-year	75.8%	30.7%
< 2-year	49.4%	36.5%
For-Profit	**53.3%**	**25.9%**
4-year	61.4%	22.9%
2-year	62.2%	26.1%
< 2-year	33.5%	29.4%
Overall Totals	**66.3%**	**26.3%**

The following table of the variation in loan repayment rates according to the detailed percentages of Pell Grant recipients originally appeared in the August 15, 2010 report but has been expanded to include data

[1] *Program Integrity: Gainful Employment*, Federal Register 75(142):43616-43708, July 26, 2010.

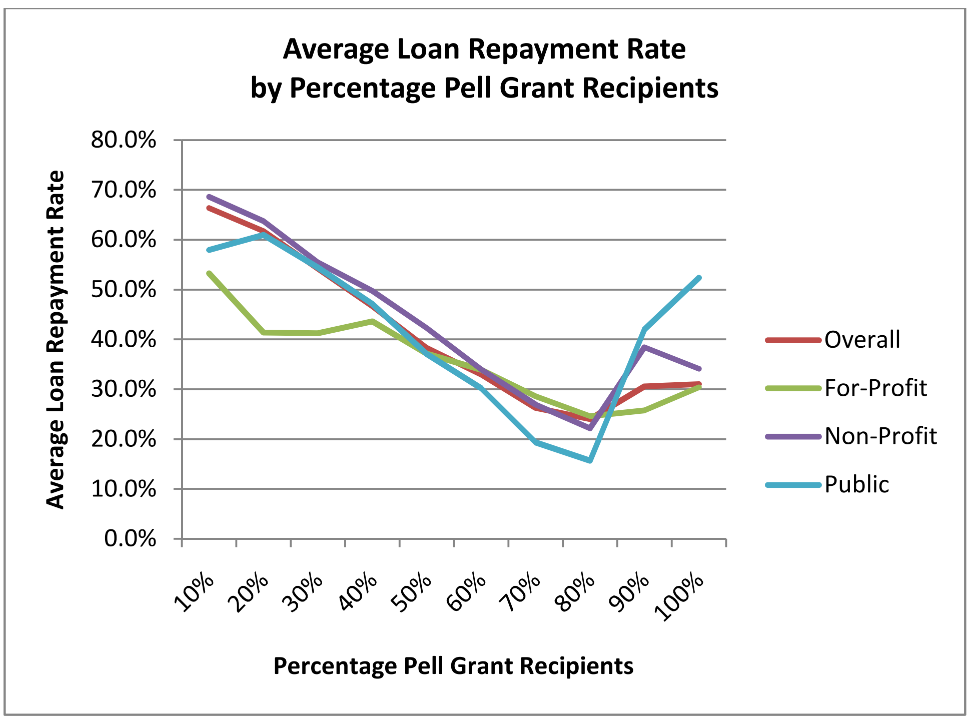
[2] Mark Kantrowitz, *Summary and Analysis of Gainful Employment NPRM*, August 15, 2010, www.finaid.org/educators/20100815gainfulemploymentanalysis.pdf.

[3] ifap.ed.gov/eannouncements/081310ReleaseGainfulDataTechDocNPRM.html and www2.ed.gov/policy/highered/reg/hearulemaking/2009/integrity-analysis.html

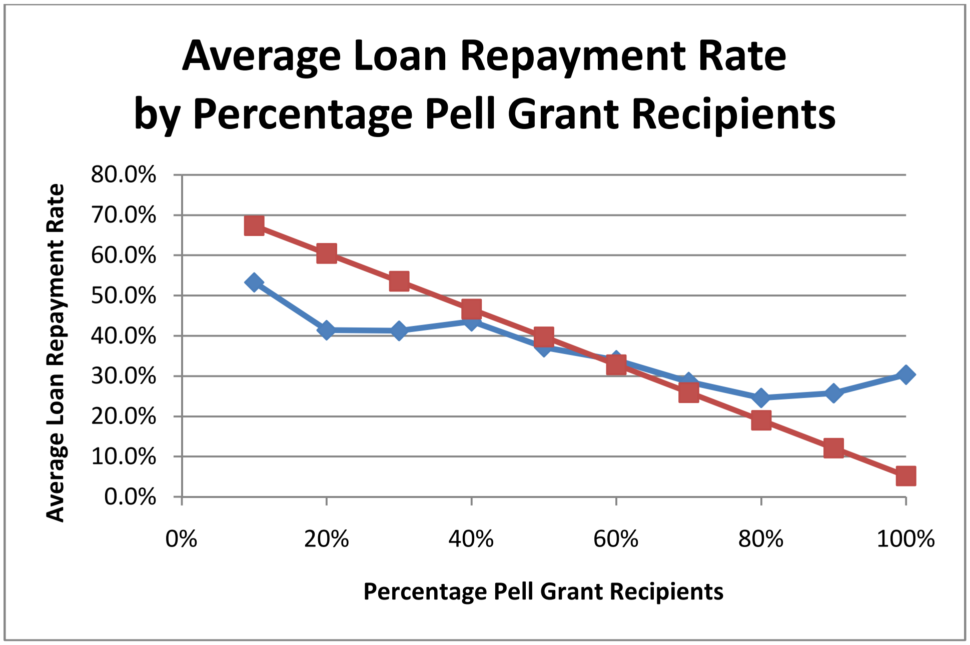
restricted to each type of college. It demonstrates generally that institutions with 40% or more Pell Grant recipients are unlikely to satisfy the 45% loan repayment rate threshold. (There are anomalies with schools at 80% or more Pell Grant recipients, probably due to sparse data. Colleges with 80% or more Pell Grant recipients represent about 4.3% of overall enrollments.)

% Pell Grant Recipients	Loan Repayment Rate			
	Overall	Public	Non-Profit	For-Profit
0.0% - 9.9%	66.3%	58.0%	68.6%	53.3%
10.0% - 19.9%	61.7%	61.0%	63.8%	41.4%
20.0% - 29.9%	54.1%	54.4%	55.4%	41.2%
30.0% - 39.9%	46.6%	47.1%	49.7%	43.6%
40.0% - 49.9%	38.3%	37.1%	42.3%	37.1%
50.0% - 59.9%	33.0%	30.2%	34.0%	33.9%
60.0% - 69.9%	26.3%	19.4%	26.9%	28.6%
70.0% - 79.9%	24.0%	15.7%	22.2%	24.6%
80.0% - 89.9%	30.6%	42.0%	38.4%	25.7%
90.0% - 100%	31.0%	52.4%	34.1%	30.4%
Overall	51.3%	53.7%	56.0%	36.4%

Graphing this data demonstrates an almost linear relationship between the percentage Pell Grant recipients and the average loan repayment rates, when the data is restricted to colleges with 70% or fewer Pell Grant recipients. The major exception is for 10% to 40% Pell Grant recipients at for-profit colleges, where the loan repayment rates are lower than what would be expected from a linear relationship.



In fact, the linear relationship in this region of the graph for the overall data can be fit almost perfectly with $R^2 = 99.6\%$, as shown in the following chart, by a line that assumes that Pell Grant recipients contribute 5.2% to the loan repayment rate and non-recipients contribute 74.3% to the loan repayment rate.



The best fit lines yield the following figures when the data is disaggregated by type of college.

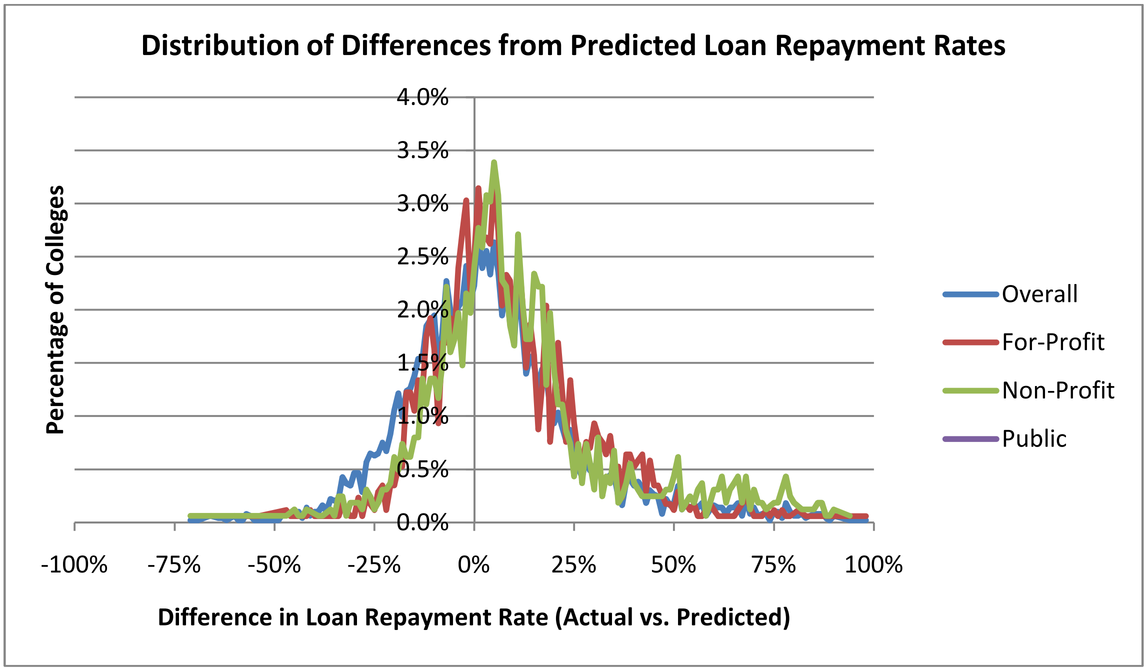
Institution Type	R^2	Contribution to Loan Repayment Rates	
		Pell Grant Recipients	Non-Recipients
Public	93.6%	2.2%	71.7%
Non-Profit	99.7%	6.3%	76.9%
For-Profit	84.1%	19.9%	53.2%
Overall	99.6%	5.2%	74.3%

Thus Pell Grant recipients contribute to a low loan repayment rate at all colleges. A college that enrolls primarily at-risk students who qualify for the Pell Grant is extremely unlikely to have a loan repayment rate in the eligible or restricted zones. This illustrates a tension between the dueling public policy goals of safeguarding taxpayer money from waste and providing educational opportunity to low and moderate income students.

Recommendation: The US Department of Education should consider disaggregating loan repayment rates by Pell Grant recipient status, to see how loan repayment rates vary when Pell Grant recipients are excluded. That might permit better differentiation of colleges according to educational quality.

The best fit lines represent overall averages across all colleges. Graphing the distribution of individual college loan repayment rates relative to the loan repayment rates predicted by the best fit line provides additional insights. In the following graph the comparison is based on the 5.2% and 74.3% overall figures for Pell Grant recipients and non-recipients. As is evident from the graph, the distribution forms a Bell curve, an indication that the variances are randomly distributed. It is still possible for the variances to be due to other variables, such as educational quality, but those variables would appear to be distributed randomly after accounting for the percentage of Pell Grant recipients at the institution.

The Bell curves are also not centered at zero, but are offset slightly. The overall average difference in actual loan repayment rates from the predicted loan repayment rates is 4.3%. A positive difference means that the loan repayment rates tend to be higher, on average, than the rates predicted by a model that assumes that Pell Grant recipients contribute 5.2% to the loan repayment rate and non-recipients 74.3%. At for-profit colleges the average difference is 8.3%, at public colleges the average difference is -7.0% and at non-profit colleges the average difference is 11.2%. Thus public colleges perform worse than the model while for-profit and non-profit colleges perform better than the model.



The following table shows the distribution of Pell Grant recipients among the three categories of loan repayment rates – eligible over 45%, restricted between 35% and 45%, and ineligible under 35% – within the public, non-profit and for-profit colleges and overall. The figures for public and non-profit colleges are among all colleges, not just those subject to the gainful employment rules.

Impact on Pell Grant Recipients College Type	Loan Repayment Rate Thresholds		
	< 35%	35% to 45%	≥ 45%
Public	**20.4%**	**18.3%**	**61.7%**
4-year	6.8%	7.3%	51.6%
2-year	13.6%	10.9%	9.8%
< 2-year	0.0%	0.1%	0.3%
Non-Profit	**13.1%**	**17.0%**	**70.1%**
4-year	11.7%	16.5%	68.7%
2-year	0.8%	0.4%	0.8%
< 2-year	0.6%	0.1%	0.5%
For-Profit	**52.3%**	**34.2%**	**13.7%**
4-year	17.1%	21.8%	3.3%
2-year	19.0%	5.8%	5.1%
< 2-year	16.2%	6.5%	5.3%
Overall Totals	**26.5%**	**21.8%**	**52.0%**

Clearly, the loan repayment rates have a disproportionate impact on Pell Grant recipients who are enrolled at for-profit colleges. More than half of Pell Grant recipients (52.3%) who are enrolled at for-profit colleges are enrolled at colleges with ineligible loan repayment rates under 35%. More than a third of Pell Grant recipients (34.2%) who are enrolled at for-profit colleges are enrolled at colleges with restricted loan repayment rates between 35% and 45%. Accordingly, the gainful employment proposal is likely to have a significant impact on the enrollments of Pell Grant recipients at for-profit colleges. The Pell Grant recipients might shift to other programs at the same colleges, to other colleges within the sector, to colleges in different sectors, or be lost entirely to postsecondary education. But it is clear that there will be a significant shift in the enrollments of Pell Grant recipients.

From a public policy perspective, the hope is that this shift in the enrollment of Pell Grant recipients will improve graduation and job placement rates by moving the students to better-performing schools. Whether the shift in enrollments will lead to improvements depends on the extent to which low loan repayment rates are caused by the percentage Pell Grant recipients and the extent to which the low loan repayment rates are due to other factors, such as educational quality. It is probably a mixture of both factors. But as this paper has demonstrated, low loan repayment rates are caused to a great extent by the percentage of Pell Grant recipients. This raises the possibility that the shift in the enrollment of Pell Grant recipients may have a much smaller impact on outcomes than is hoped.

Shifting the enrollments to community colleges will not necessarily yield an improvement in graduation rates or job placement rates. The average graduation rate is 20% at community colleges, compared with 57% at 2-year for-profit colleges, and the average loan repayment rate is 40% at community colleges, barely better than the 34% loan repayment rate at for-profit colleges. These metrics are also not measurements of educational quality, so it is unknown whether community colleges provide a better quality education than for-profit colleges.

Moreover, for-profit colleges might start selecting against low-income and at-risk students in order to improve their loan repayment rates. (Non-profit colleges have high loan repayment rates in part because they enroll very few students from at-risk populations. The selectivity of their admission criteria indirectly selects against the enrollment of low-income and at-risk students.) Already several for-profit colleges have announced that they will require a high school diploma or GED for admission because students who have passed ability-to-benefit tests are more likely to default.

Thus the impact of the gainful employment proposals on access to postsecondary education by low and moderate income students is unclear and deserves further study. Will the increased selectivity of for-profit colleges and the shifts in enrollments of Pell Grant recipients cause more Pell Grant recipients to graduate with degrees of genuine value in the marketplace? Or will it ultimately reduce access to higher education by low and moderate income students, causing some college-capable students to be lost to postsecondary education?

What is clear, however, is the need to improve the performance of traditional colleges in addition to for-profit colleges. Due to statutory restrictions, the gainful employment proposals will apply to all degree and non-degree programs at for-profit colleges (except liberal arts programs) but only to non-degree vocational programs at public and non-profit colleges. But why should a traditional college be permitted to graduate students with excessive debt just because it lacks an overt profit motive? For-profit colleges may have an average loan repayment rate of 36%, but the 54% average rate at public colleges and the 56% average rate at non-profit colleges are hardly passing grades.