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THE EFFECTS OF PERFORMANCE-BASED FUNDING POLICIES ON STUDENT DEBT AND REPAYMENT

Robert Kelchen, Justin Ortagus, Kelly Rosinger, Alex Cassell

November 2021

Over the last two decades, student loan debt has become one of the most prominent concerns in American society. Outstanding student debt has more than quadrupled in inflation-adjusted dollars, approaching \$1.6 trillion by mid-2021.¹ This has led to concerns about the value of higher education as students and taxpayers alike bear the risk of unpaid student loans. States have led the way in higher education accountability by tying a share of funding for public higher education to student outcomes. This approach, called performance-based funding (PBF), has been used in 41 states over the last 25 years.²

A large body of literature has examined the effects of PBF policies on student enrollment and completion outcomes, generally finding null or modest effects.³ In a previous paper in this series, we found small

We find that performance funding policies increased student loan debt in both the two-year and four-year sectors. This effect was driven by students who did not complete college, who saw their debt increase by two to three percentage points. There were no effects of PBF on student loan repayment rates.

¹ Federal Reserve Bank of New York (2021). *Quarterly report on household debt and credit*.

² Ortagus, J., Rosinger, K. O., & Kelchen, R. (2021a). *InformEd States performance-based funding policies dataset*. InformEd States. Retrieved from <https://informedstates.org/data>.

³ Ortagus, J. C., Kelchen, R., Rosinger, K. O., & Voorhees, N. (2020). Performance-based funding in American higher education: A systematic synthesis of the intended and unintended consequences. *Educational Evaluation and Policy Analysis*, 42(4), 520-550.

positive effects of PBF on earnings of former students at four-year universities.⁴ This suggests that PBF could potentially improve repayment outcomes, but not necessarily if student debt also increases. Student debt could also increase if colleges invest in student success initiatives and pass the costs on to students or improve persistence without similar improvements in completion. But debt could also decrease if colleges instead focus on affordability as a path to degree completion.

In this brief, we summarize our research findings on whether the presence of PBF policies or particular design features of PBF affect student debt and repayment outcomes, with a focus on students from historically underrepresented groups. We answered these questions using the InformEd States PBF dataset, which is the first comprehensive longitudinal dataset with details on funding policies from Fiscal Years 1997 through 2020.⁵

We began with a binary indicator for whether a state had a funded PBF policy in a sector within a given year before examining the percentage of state general fund appropriations tied to student outcomes. We then considered whether a college was subject to a funded workforce metric that allocated money based on the earnings, employment outcomes, or field of study of former students. We also examined the presence of funded equity metrics for students from low-income families, underrepresented minority groups, adults, and academically underprepared students.

There are two primary sets of outcomes in this analysis, which come from the U.S. Department of Education's College Scorecard. The first set of outcomes is median federal undergraduate student debt burdens (excluding Parent PLUS loans) among those who borrowed. The College Scorecard provides two-year pooled cohorts for students entering repayment from Fiscal Years 1997 and 1998 to Fiscal Years 2018 and 2019. Each cohort except for 1997 and 2019 show up in two different data files. For example, the FY2015 cohort is pooled with 2014 in one file and 2016 in another file. To estimate the 2015 cohort, we averaged the two files that contained that cohort. We then adjusted all of these debt burdens into 2020 dollars using the Consumer Price Index.

Our primary measure of student debt is the median federal student debt of all students at a given college who entered repayment (defined as six months after leaving college) in a fiscal year. There are separate measures for non-completers and completers, which we considered due to potential effects on retention or completion rates at particular colleges that could affect the composition of the non-completer and completer pools. We

⁴ Kelchen, R., Ortagus, J. C., Rosinger, K., & Cassell, A. (2021). *Investing in the workforce: The impact of performance-based funding on student earnings outcomes*. InformEd States. Retrieved from https://policy-lab.squarespace.com/s/InformEdStates_WorkingPaper_InvestingintheWorkforce.pdf.

⁵ Ortagus, J., Rosinger, K. O., & Kelchen, R. (2021a). *InformEd States performance-based funding policies dataset*. InformEd States. Retrieved from <https://informedstates.org/data>.

also examined several other measures that reflect historically underrepresented student groups. These include family income tercile (less than \$30,000 per year, \$30,001 to \$75,000 per year, and \$75,001 per year), Pell receipt at any point in college, dependency status on the Free Application for Federal Student Aid (as a proxy for older versus younger students), and first-generation status.

The second set of outcomes is the student loan repayment rate, which is defined as the percentage of students at an institution repaying at least \$1 in principal on their federal student loans one year or three years after entering repayment. This reflects whether students are doing well enough in the labor market to make progress repaying their loans. We used the same subgroup measures for loan repayment rates as for median student debt, with the exception of data not being available by student completion status (non-completer versus completer). Unfortunately, there are no data available on debt or repayment by race/ethnicity because the FAFSA currently does not ask students about how they self-identify.

We used a generalized difference-in-differences framework with two-way fixed effects that allowed for the treatment to take place in different time periods in different states. We included controls for measures of institutional pricing, financial resources, and size and clustered standard errors at the Federal Student Aid OPEID level to match how College Scorecard earnings data were reported. We also estimated event study analyses as a robustness check to our main analyses.

We find that performance funding policies increased student loan debt in both the two-year and four-year sectors. This effect was driven by students who did not complete college, who saw their debt increase by two to three percentage points. There were no effects of PBF on student loan repayment rates. Equity provisions in PBF policies appear to have increased the student debt of non-completers at public universities relative to PBF policies without equity provisions.

Our research raises important questions about the intended and unintended consequences of performance funding policies. Taken with our previous work on earnings, it appears that PBF policies modestly increase both debt and earnings in the four-year sector and primarily increase debt at community colleges. This has implications for equity, as students who do not complete college tend to see smaller returns on their investment than those who graduate.⁶ There is also a need for earnings data separated by completion status to examine whether the earnings effects of PBF mainly accrue to graduates or if all students benefit.

⁶ Belfield, C., & Bailey, T. (2017). *The labor market returns to sub-baccalaureate college: A review*. Center for Analysis of Postsecondary Education and Employment. Jepsen, C., Troske, K., & Coomes, P. (2014). The labor-market returns to community college degrees, diplomas, and certificates. *Journal of Labor Economics*, 32(1), 95-121.

The research reported here was supported by Arnold Ventures and the Joyce Foundation. We are grateful for the excellent research assistance of Lynneah Brown, Karly Caples, Nick Voorhees, Garam Chu, and Junghee Choi. Any errors or omissions are our own, and the views expressed in this report are solely those of the authors. If you have any questions or comments related to this brief or the InformEd States project, please contact us at info@informedstates.org.