A Framework for Reforming Federal Graduate Student Aid Policy

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Executive Summary

Driven by increases in graduate enrollment and the availability of uncapped loans, graduate debt has become a growing share of federal student lending. Most of the growth in the average and overall levels of student indebtedness in the past fifteen years has been driven by graduate student debt. Despite being just 21 percent of all enrolled higher education students during the 2021–22 academic year, graduate and professional students accounted for 47 percent of the federal student loans disbursed. Outstanding Direct PLUS loans for graduate and professional students (hereinafter “Grad PLUS loans”) have nearly tripled in the last seven years (from $37 billion to $90 billion). Median Grad PLUS loan balances are nearly triple what they were just ten years ago (increasing from $21,800 to $57,800). This increase in graduate borrowing coincides with the proliferation of new graduate programs, raising questions about whether these programs are worth the federal aid dollars they're receiving, and if they are being created to chase those federal dollars.

A key distinguishing feature of federal graduate and professional lending is that, unlike other federal student loans, there are currently no statutory or regulatory limits for Grad PLUS loans. The only limit is that these loans cannot exceed a student's “cost of attendance,” which includes both direct costs of enrollment, such as tuition, and living expenses, such as housing, food, transportation, and childcare. This cost of attendance figure is left up to the enrolling institution alone to determine. In addition to a lack of loan limits, Grad PLUS loans also have effectively no repercussions for programs that consistently result in low earnings and unpaid debt. Until very recently, graduate student loans generated revenue for the government. But a combination of factors—increasing prices, expansion of repayment options with shorter payment duration before forgiveness, and an expansion of graduate programs that do not provide sufficient earnings to fully repay this increasing debt—means that graduate loans now cost the government money, rather than generating revenue. Since it is politically more feasible to cut federal programs that cost money as opposed to those that generate revenue, this change in revenue status could open an important policy window to redesign the federal approach to financing graduate education.

The combination of effectively unlimited federal student lending, no federal grant funding, and no outcomes expectations for eligible programs has created a system with both costs and benefits. Ideally, federal aid for graduate students would facilitate the investment in worthwhile educational experiences that are either individually enriching, socially valuable, or both. But because of a lack of sensible borrowing limits, grant aid for students pursuing socially valuable credentials with lower earnings returns, or any evaluation of economic value in federal graduate financing policy, there are also significant downsides to the current system.

Driven by net prices that have grown faster at graduate programs than for undergraduate degrees, the average graduate student with loans now borrows $70,000, and 21 percent of students who take out loans borrow more than $100,000. At 15 percent of graduate programs, the median graduate is earning less than an average undergraduate degree holder that never attended graduate school ($50,000). And 39 percent of nonprofit and 44 percent of for-profit professional programs such as law and medicine leave their graduates with debt that exceeds one fifth of their discretionary income—the level research shows is unaffordable. Federal policy is not currently designed to maximize positive outcomes or minimize harms to borrowers.

Misaligned federal policy design and increasing graduate debt do not impact all students equally. The average Black graduate student holds $10,000 more in debt than the average white student, and the average Latino student holds $6,000 more in debt than their white counterpart. This is in part due to Black and Latino students seeking postgraduate credentials to gain income parity with their white bachelor's degree-holding counterparts: white bachelor's degree recipients earn nearly $2,000 per year more than Black master's degree recipients: $88,640 per year compared to $86,920.

Given all these considerations, it is past time to explore the impact of graduate student debt and whether federal policy mechanisms are working effectively for students and taxpayers. The American Enterprise Institute, EducationCounsel, and The Century Foundation undertook a joint process to examine—across ideological lines—the nature of the existing system that finances graduate education, including its benefits and downsides, and to design a framework that should guide the improvement of federal policy regarding graduate student financing. This report aims to outline policy options that address the burden on students, particularly the disproportionate burden facing students of color, and the growing cost of the graduate loan programs for taxpayers.

The shared goal of this process was improved outcomes for students and better value for taxpayers. Analysis and discussion of different policy options led to the conclusion that any politically viable and effective approach must address five different dimensions of the problem through the following set of policy levers.

1. Set reasonable loan limits

Under current law, the only constraint on federal graduate lending is the cost of attendance (the combination of program price and living expenses) set by the institution. As a result, in practice, there are no annual or lifetime limits or ability-to-repay considerations for graduate student lending, and no per-student, program-level, or institutional-level limits on aggregate debt disbursed or tuition that can be covered by federal student loans. This allows institutions to charge, and students to borrow, effectively unlimited amounts, regardless of whether these amounts are commensurate with what it costs the college to deliver a program, the value of the degree granted, or what graduate borrowers can afford to repay. Some reasonable annual and aggregate limit for graduate borrowing is needed to mitigate the risk of student borrowers facing unaffordable debt and to limit the incentives for institutions to increase prices in ways that fail to yield a return on investment to taxpayers.

2. Award grant aid to students and institutions to address equity and social good considerations

A potential consequence of loan limits is constraining access to graduate programs that enable students to increase their earnings and employment prospects. To the extent that these limits will prevent students from taking on debt that would have been unaffordable to repay, this is an unmitigated good. However, such limits may unintentionally prevent students from attending programs that could leave them better off, particularly low-income students and students of color who may lack alternative options to access graduate education financing. For institutions with fewer resources, like HBCUs and other MSIs, that maintain high-quality programs, loan limits may also restrict these institutions' ability to serve students, since a lack of resources makes them more reliant on a debt-financed graduate program model. And for degrees across institutions that are socially valuable but where the economic return is insufficient, value metrics might not sufficiently account for the social good provided by these programs. A more economically and administratively efficient approach than debt financing would be to subsidize those students and programs with grant aid and direct institutional funding, since grant funding is more direct, transparent, targeted, and unburdened by administrative costs of subsequent forgiveness. Constraining loan eligibility would likely save the federal government money that could be spent on grant aid. This offsetting change in policy would more efficiently address economic disparities and support institutions that offer social value that less frequently translates to individual economic return.

3. Ensure sufficient value and return on investment for students and taxpayers

Student loans should only be available for programs where students are generally getting a good return on their investment and there isn't a consistent pattern of taxpayers being on the hook to cover unpaid balances. Students deserve to know that the debt they are taking on for their education will be affordable to repay. And taxpayers deserve to know that federal dollars are spent in ways that are delivering benefits to society and that there will be a reasonable expectation that loan dollars will generally be repaid. To achieve that, the federal student loan system should not subsidize and effectively endorse programs that consistently leave students with earnings insufficient to reasonably repay their loans. Consequently, any comprehensive system of federal graduate education policy must address the problem of institutions and programs charging prices and originating debts for degrees that aren't worth the cost.

4. Enhance the regulatory structure and consumer protections for private lending

In response to federal borrowing restrictions, more loans and new products could emerge from private student loan providers, necessitating an updated regulatory regime to ensure sufficient protections for consumers. For example, private student loans are not currently dischargeable in bankruptcy. If private loan volume were to become a larger part of financing graduate and professional school, that risk to borrowers may be untenable, particularly for low-income borrowers. Without sufficient guardrails in the private lending market, borrowers at high-cost programs could be driven to take out unaffordable loans. At the same time, clarity on requirements for private financing could improve market certainty so that private lenders could provide additional liquidity to borrowers and programs when needed.

5. Improve data disclosure and transparency

Though recent updates to federal data systems like IPEDS and College Scorecard have improved the public's ability to access additional information on fields of study, earnings, and student debt, there is still a significant lack of basic information for students about comparable program costs and outcomes, and a lack of information for institutions, accreditors, researchers, and policymakers to drive understanding about program outcomes and inform policies related to graduate programs. Policy must, at a minimum, ensure data are reported on a student-level basis to calculate how programs are providing value to students and taxpayers, to ensure students are fully informed of their options before enrollment, and to equip providers with sufficient data to determine which programs are not best serving students.

Making policy changes through just one of these levers is unlikely to provide an effective solution to the challenges facing graduate student aid policy. Instead, a multipronged approach is needed, to address multiple shortcomings of the policy status quo simultaneously. For example, imposing new limits on borrowing for graduate students (lever 1) will mean that some students will no longer be able to afford to enroll. While in some instances, those changes in enrollment patterns may be desirable (for instance, enrollment declines at low-quality programs), it may also be a blow to equal opportunity, given the racial and socioeconomic distribution of those effects. Grant aid could be used (lever 2) to offset some of these undesirable consequences without harming individual borrowers. If federal aid is made available to graduate students to enroll in programs without regard for the value those programs provide to students and taxpayers (lever 3), students can often be left worse off financially and at significant cost to taxpayers. Without reconsidering the regulation of private financial instruments (lever 4), some students could end up facing worse outcomes than the status quo. And without robust and transparent data about how these policies are impacting borrowers and graduate programs (lever 5), institutions, students, and policymakers will not be able to make needed adjustments in response to market signals or make informed choices about which programs will leave them better or worse off. Each of these levers could vary in its specifics and design, but the key to this framework is a holistic approach that draws from each lever in a balanced manner to create an effective and politically viable policy approach.

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What does graduate financing policy look like today?

Before 2005, students borrowing to pay for graduate school could use federal Stafford loans up to a prescribed limit, after which many used private student loans to cover any remaining expenses. An important shift occurred with the adoption of legislation in 2005 that extended the federal parent loan program, known as PLUS, to graduate students. This move expanded financial aid options for individuals pursuing graduate degrees by allowing them to access additional federal funds beyond the standard loan limits. Following the introduction of Grad PLUS in 2005, and the discontinuation of Federal Family Education Loan (FFEL) in 2010, the federal government now exclusively issues two types of loans to graduate and professional students at Title-IV-eligible institutions: Direct Unsubsidized Loans (known as Stafford) and Direct PLUS Loans (more commonly known as Grad PLUS). Neither Stafford nor Grad PLUS loans require borrowers to demonstrate a certain level of financial need, making it more accessible to a wider range of students than private loans.

Direct Unsubsidized Loans and Grad PLUS loans offered to graduate students differ in a variety of ways; for example, the PLUS program has higher origination fees and higher interest rates. Perhaps the most notable difference between the two programs is the loan limits—unsubsidized loans have an annual limit of $20,500 and a lifetime limit of $138,500, whereas Grad PLUS is limited only by the cost of attendance, which consists of tuition and fees payable to the institution, plus an estimate of the student's anticipated expenditures for nontuition costs such as books, supplies, housing and other living expenses, transportation, dependent care, a personal computer, or fees to obtain licensure. The cost of attendance is set individually by each institution, which means that the annual limit on Grad PLUS loans is set individually by each institution. Typically, tuition and fees are the largest component, greater than all of the other costs combined. (See Table 1.)

To be considered eligible for an unsubsidized loan, individuals must be (1) a graduate or professional student enrolled at least half-time at an eligible school in a program leading to a graduate or professional degree or certificate and (2) meeting the general eligibility requirements for federal student aid.[1] Eligibility for Grad PLUS programs is much the same, with the added provision that borrowers must not have an adverse credit history (unless they meet certain additional eligibility requirements).[2] Unlike undergraduate students, graduate students are generally not eligible for student aid based on demonstrated financial need (they cannot receive Pell grants or Direct Subsidized Loans) and special subsidized loan programs directed toward particular fields and professions have been discontinued.[3]

TABLE 1: DIRECT UNSUBSIDIZED LOANS VERSUS GRAD PLUS LOANS

	Direct Unsubsidized Loans	Grad PLUS loans
Financial need	No requirement to demonstrate need	No requirement to demonstrate need
Ability to repay	No requirement to demonstrate ability to repay	Required to not have an “adverse credit history” (with some exceptions)
2023 interest rate	7.05%	8.05%
Origination fee	1.057%	4.228%
Annual loan limit	$20,500	Capped at the “cost of attendance,” an amount set by the institution
Lifetime loan limit	$138,500, includes all federal loans received for undergraduate study	None
Eligible for Income Driven Repayment and Public Service Loan Forgiveness?	Yes	Yes

Source: Compiled by the report’s authors from information provided by the Office of Federal Student Aid at www.studentaid.gov.

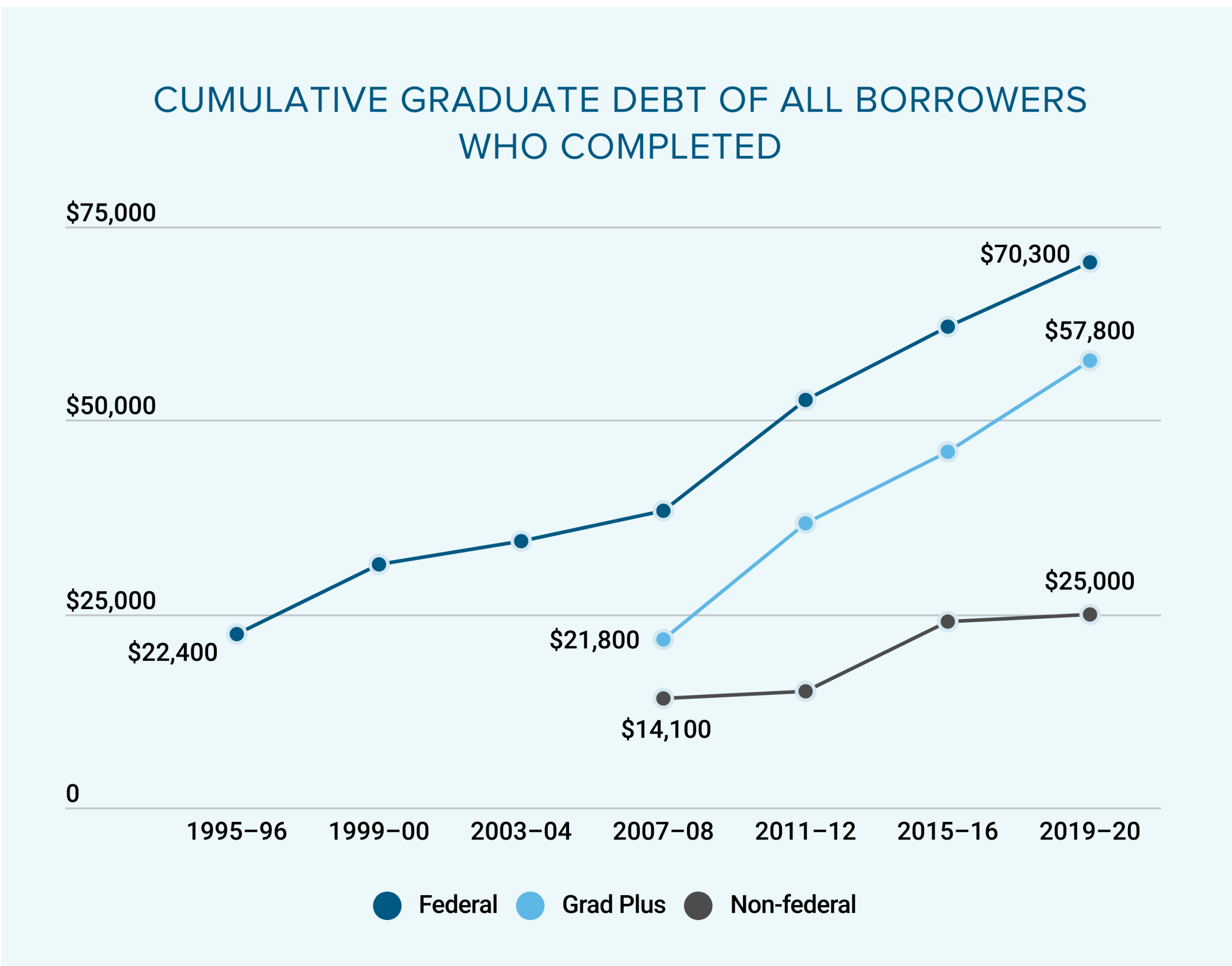
The characteristics of students who borrow and the graduate lending portfolio

Graduate program enrollment has grown significantly in the past twenty years, from 2.2 million students in 2000 to 3.2 million students in 2021, and the percentage of the population with a graduate degree jumped from about 6 percent in 2000 to around 12 percent in 2020.[4] The enrollment of historically underrepresented racial groups in postbaccalaureate programs has increased substantially; enrollment of Black students jumped by 111 percent from 2000 to 2021, while Latino enrollment increased 222 percent in the same time period.[5] This trend is particularly significant given the contemporaneous phenomenon in undergraduate education of decreases in Black enrollment: a 27 percent overall drop from 2010 to 2021.[6]

Several factors have driven this significant increase in graduate program enrollment, particularly labor market forces that have incentivized and rewarded increased credentialization and professional licensing requirements that require postbaccalaureate study. Having easy access to collateral-free debt certainly removes a potentially significant financial barrier to enrollment and completion of a graduate degree. And the policy design of the federal graduate loan programs clearly intends to increase access for students who would not otherwise be able to attend.

For the past thirty years, the overall and per-student amount of student borrowing for graduate pro grams has risen, but the rate of change increased after the introduction of the Grad PLUS loan program in 2005. As shown in Figure 1, the median debt for graduate program completers who borrow has increased from about $20,000 in 1995 to more than $70,000 in 2020, while private and institutional lending has been relatively flat. This increase is even more pronounced in high-debt professional credentials, where the median graduate who borrows now holds more than $150,000 in debt versus less than $45,000 in 1995 (see Figure 3).[7] On average, the net price (a student's tuition after grant aid) at master's degree programs has also increased faster than net price at bachelor's degree programs. Over the past twenty-five years, the annual net price of master's degree programs have increased from $8,600 in 1995 to $14,200 in 2020, while bachelor's degree programs increased from $6,400 to $10,100 during the same period (in constant dollars, see Figure 3).[8] Over the past fifteen years, the annual median net price at graduate programs has increased from $18,500 in 1995 to $33,500 in 2020, an increase of 81 percent.[9]

FIGURE 1

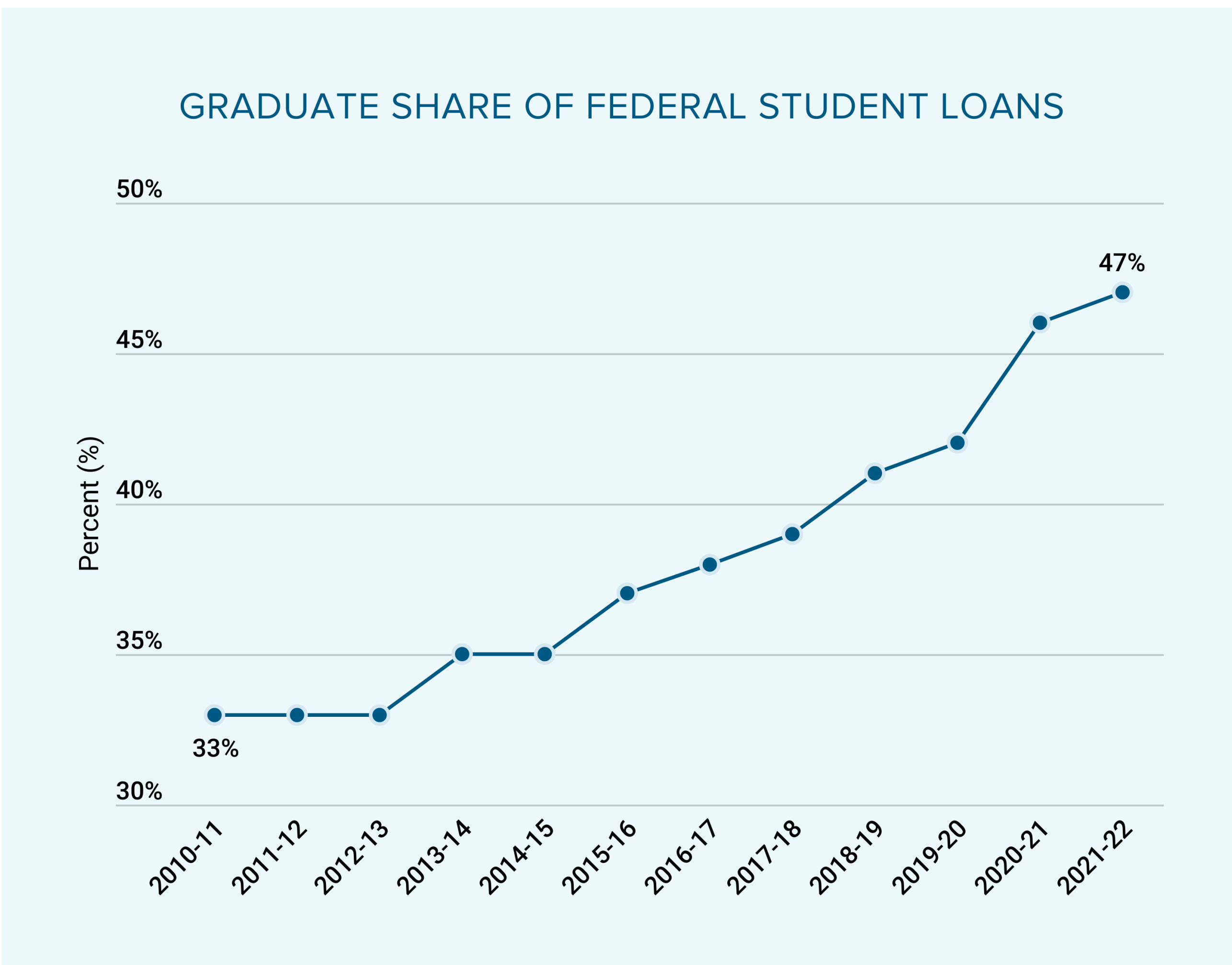


Source: Calculations by the report's authors using data from NPSAS.

Graduate student loan debt is no longer a footnote. It now makes up about half of all outstanding student loan debt, up from less than a third of all dollars twenty years ago, as shown in Figure 2.[10] In award year 2021–22 (the most recent year for which data are available), students borrowed a combined $36 billion in graduate debt, $25 billion of which was unsubsidized Stafford loans and $11 billion of which was Grad PLUS loans. Most graduate dollars go to public ($13.5 billion) and nonprofit institutions ($20 billion), with about 10 percent going to for-profit institutions ($3 billion).[11]

Borrowing patterns and amounts also differ significantly by program levels. For example, the median cumulative debt for master's degree holders is $47,900 and $153,800 for professional degree holders (median debt for graduates of doctoral programs fall between the two, at $80,500, likely attributable to the stipends and tuition assistance provided to some students at well-funded doctoral programs).[12]

FIGURE 2

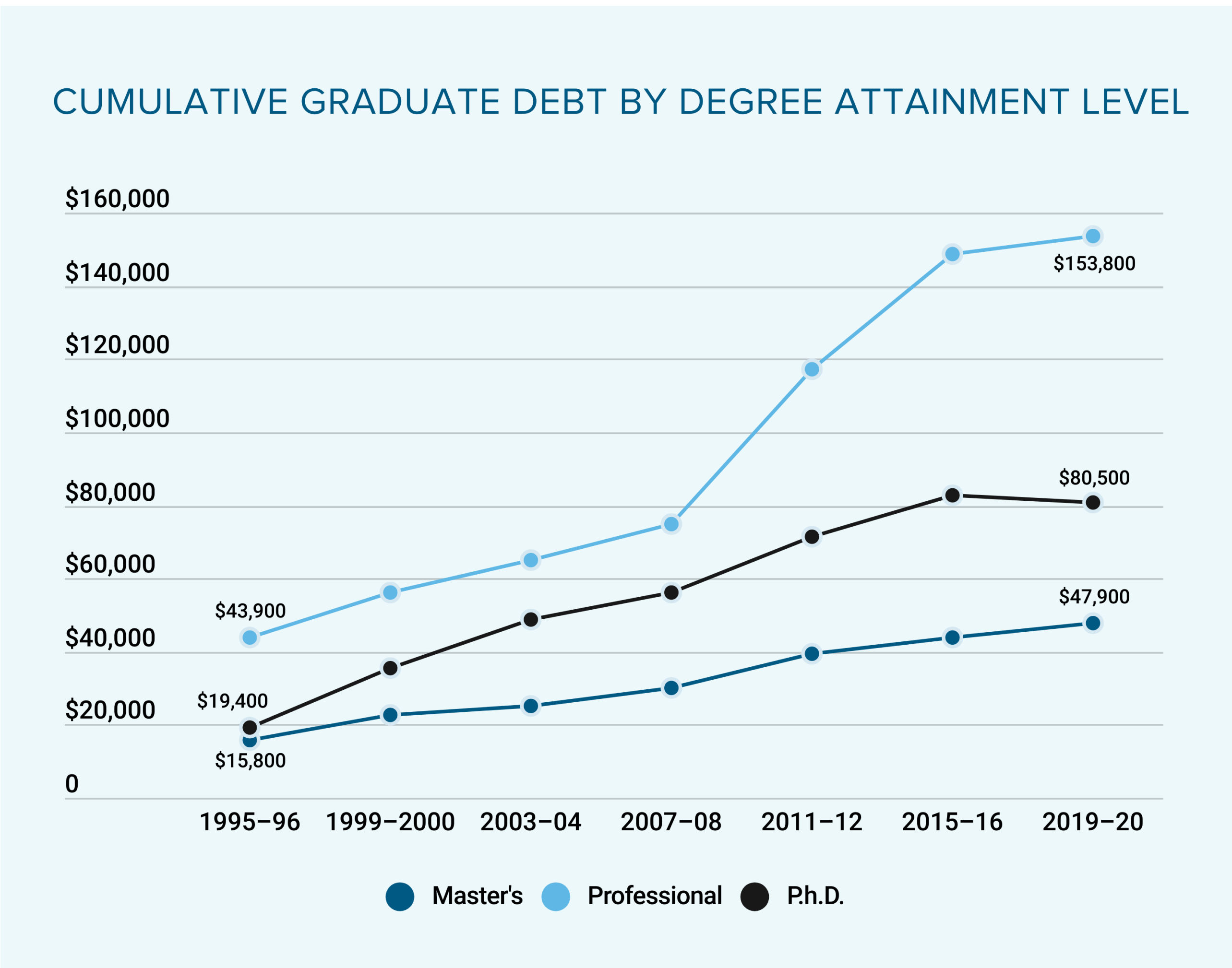


Source: Calculations by the report's authors using data from the Office of Federal Student Aid at https://studentaid.gov/data-center

As explored in more detail in the following section, there is also significant divergence in student outcomes, particularly with respect to minimum levels of earnings and whether earnings are sufficient to repay students' debt incurred to earn a graduate credential.

The burden of graduate school debt is not equally distributed by race. On the surface, borrowing amounts across races appears relatively equal: white, Latino, and Black students who borrow to attend graduate school all borrow similar amounts: between $60,000 and $65,000; the outlier is Asian American, Native Hawaiian, and Pacific Islander (AANHPI) borrowers, who borrow roughly $125,000 when they attend graduate school because they are much more likely to attend higher-cost programs when they borrow. Students of different races are not all equally likely to borrow, however. For example, half

FIGURE 3



Source: Calculations by the report's authors using data from NPSAS.

TABLE 2: GRADUATE SCHOOL BORROWING TRENDS, BY RACE AND ETHNICITY

	Average borrowed, all students	Percent who borrow	Average borrowed, all borrowers
Total	$33,741	48	$70,294
White	$32,233	50	$64,466
Black or African American	$43,509	66	$65,923
Hispanic or Latino	$38,546	62	$62,171
Asian	$26,093	21	$124,256

Source: Calculations by the report's authors using data from NPSAS.

of white graduate students do not borrow at all, while only 34 percent of Black students do not borrow to attend graduate school, whereas 79 percent AANHPI graduate students do not take out graduate student loans.[13] (See Table 2.)

Debt levels are typically shown only for students with loans, which can obscure large differences in the proportion of a population who borrow. After adjusting the amount borrowed for the percentage of students that borrow, which accounts for those who have zero dollars in loans, the differential debt burden by race becomes more pronounced. On average, Black students have the most pronounced debt burden, with the average Black student borrowing $10,000 more than the average white student, and the average Latino student borrowing $6,000 more than their white counterpart.[14] These data make clear that there is potential for differential racial impacts when making policy changes to the existing system of graduate finance.

The amount of debt is not the only factor that differs by race in the graduate education context. Across all levels of education, a significant wage gap remains between Black graduates and their white counterparts. Wages for people of color are systematically lower than for similarly qualified white graduates with bachelor's degrees due to labor market discrimination, lower wages paid to professions disproportionately made up of women of color, and several other unexplained factors. Given these systemic inequities, Black and Latino students sometimes need to seek postbaccalaureate credentials just to gain income parity with their white bachelor's-degree-holding counterparts; unfortunately, these students cannot simply educate themselves into income parity. Even Black workers with an advanced degree continue to experience a racial wage gap. For example, white *bachelor's* degree recipients earn nearly $2,000 per year more than Black *master's degree* recipients, $88,640 per year compared to $86,920.[15] Significant amounts of research have also shown the disparate impact of graduate loan debt on borrowers of color, particularly Black borrowers.[16] These undergraduate degree holders often find themselves driven to pursue higher levels of education as a strategy to mitigate prevailing pay inequities.

The value proposition and shortcomings of federal graduate financing policy

The design of federal graduate student aid policy—effectively unlimited federal lending with no grant funding and few constraints on eligible programs—has created a system with both costs and benefits. In ideal circumstances, ample availability of federal student aid would enable any American to increase their knowledge and earning ability through graduate education, regardless of their wealth or income. But with loans not limited and graduate program prices extremely high, graduate students have been borrowing in increasing numbers and at increased rates.

The average graduate student borrower borrows $70,000 for their program (and 21 percent borrow more than $100,000).[17] Unfortunately, at more than one in seven programs, graduates earn less than the average bachelor's degree graduate,[18] leaving thousands of graduate borrowers—even those who successfully completed their programs—worse off financially than if they had never pursued a graduate education. Federal policy is not currently designed to incentivize positive outcomes or discourage harms to borrowers.

The value proposition of the federal graduate student loan programs

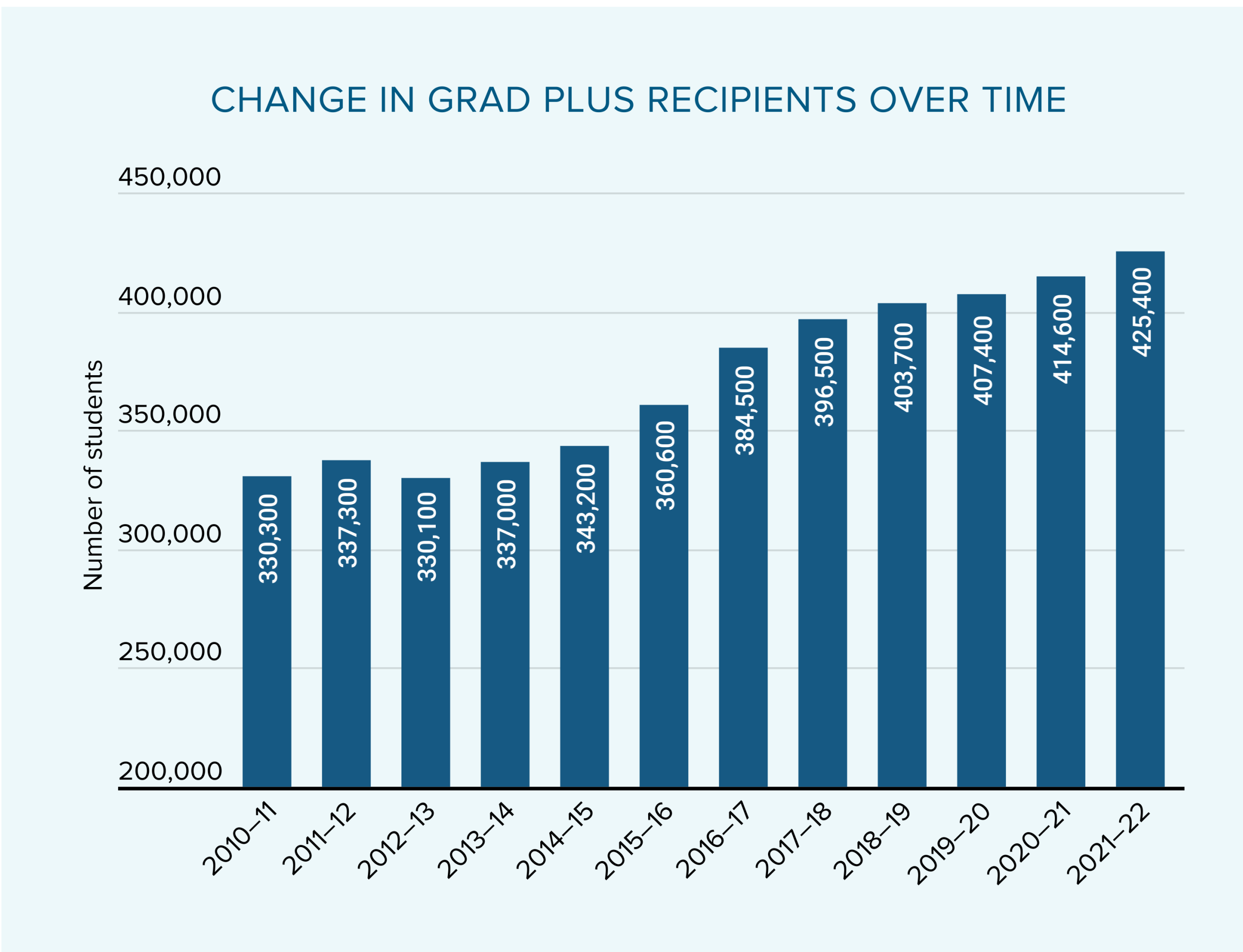
The value proposition of federal student lending for graduate students is twofold. First, the existence of these programs can address the market failures—historically acknowledged by classical fiscal conservatives and fiscal liberals alike—that result in a suboptimal level of national investment in education after high school. And second, on the individual level, the existence of these programs can enable individuals to pursue professional pathways that are financially or otherwise rewarding but would have been out of reach in the absence of government provision of credit.

The financial returns to graduate education are difficult to measure precisely, but it is well documented and widely believed that higher levels of education are associated with higher levels of earnings and perhaps also lower levels of unemployment. Based on earnings in recent history, estimates indicate that individuals with a master's degree will earn, on average, approximately $3.2 million over their working lives, while those with a doctoral degree will earn $4 million, on average.[19] Professional degree holders fare even better. They earn, on average, $4.7 million over their careers. That is compared to lifetime earnings of $2.8 million for the average worker with a bachelor's degree or $1.6 million for someone with just a high school diploma.[20]

While some conservatives may question the reason for federal involvement in what could otherwise be handled by a private marketplace, even the quintessential example of a conservative economist, Milton Freidman, acknowledged in early writings that the private market is insufficient to provide the amount of credit that would allow Americans to invest in education after high school at a rate that is socially optimal.[21] In other words, the amount of investment that the private market would support would leave many lucrative learning opportunities out of reach and so the general welfare of society would be improved by a modest intervention.

In practice, the federal lending programs for graduate students have also facilitated investments in educational programs that prepare students for careers that provide societal benefit but generally result in lower wages, such as in social work and education. Students pursuing needed degrees that offer

FIGURE 4



Source: Calculations by the report's authors using data from the Office of Federal Student Aid at https://studentaid.gov/data-center

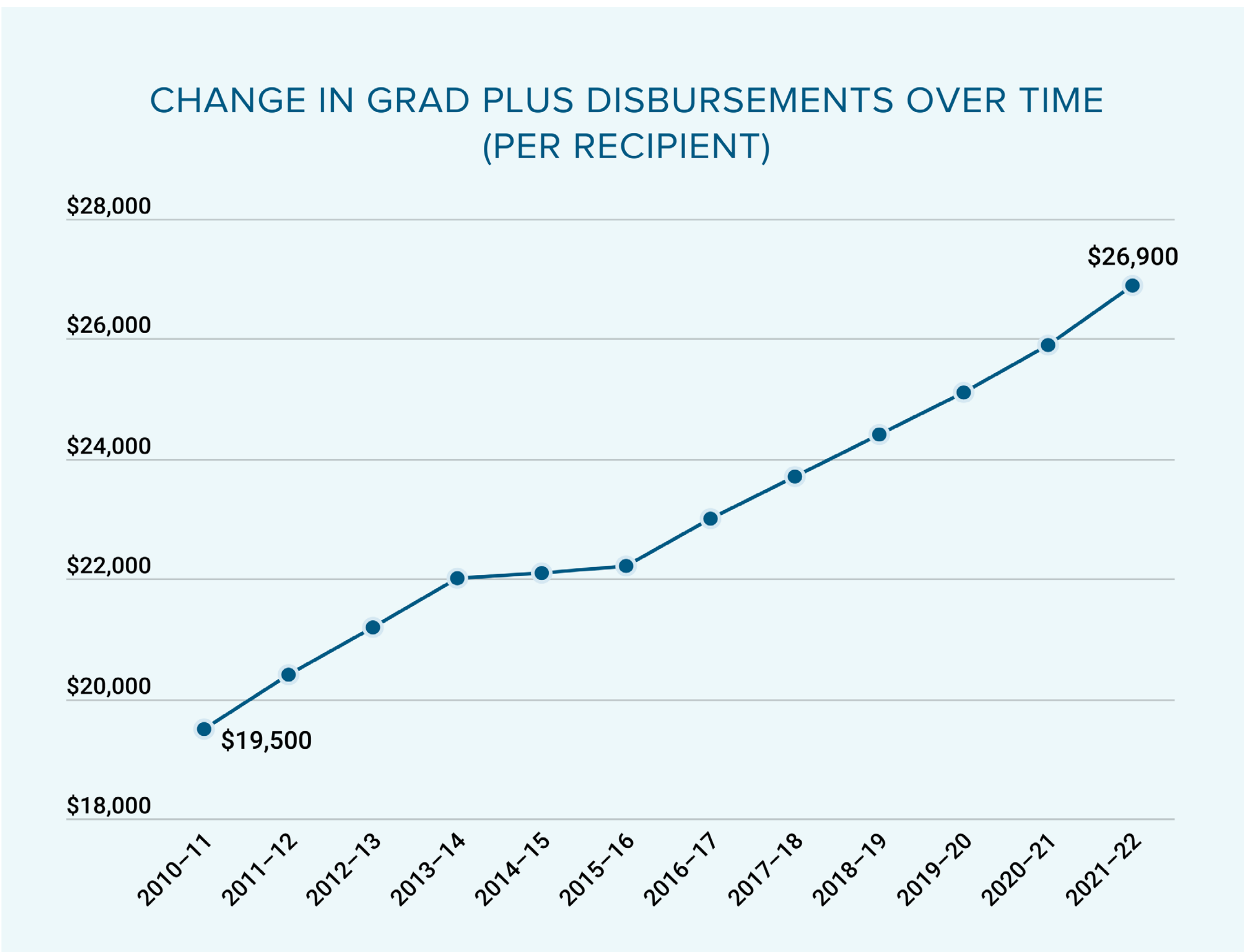
lower economic return on investment but high social value may not be well served by the private market. These graduates provide value to society beyond what is reflected in their wages, and the existing graduate lending programs have effectively supported these sorts of societal benefits (as shown in Figure 4, an increasing number of borrowers are receiving Grad PLUS loans). A more educated populace enabled by federal graduate lending has certainly led to additional innovations, such as medical discoveries, productivity gains, agglomeration effects, and technical advances that increase the collective standard of living. This is not to say that federal student lending is the only mechanism that can achieve these ends, but rather that the programs in place have likely created this value historically. To the extent that efforts to curtail the availability of graduate financing are poorly thought out, there is a high risk of cutting off access to programs of significant social value and reducing the education level of the populace.

Shortcomings of the current design of federal graduate financing policy

Though existing federal graduate financing policy supports positive outcomes in certain circumstances, it is not without its challenges. The most significant deficiency is when the system leaves borrowers in debt they cannot reasonably afford to repay. Over the past several years borrowing has grown markedly: in 2004, the typical graduate student cumulatively borrowed an average of approximately $34,500 in federal loans, which grew to $70,300 by 2020.[22] The number of borrowers with large debts has also increased—currently 21 percent of federal graduate loan borrowers hold more than $100,000 in student debt, up from 9 percent in 2004, when many fewer students were attending graduate school.[23] Recent data from the U.S. Department of Education underscores the effect these changes have had on the federal student loan portfolio. In 2021, the federal government disbursed $39 billion dollars to graduate students, which was 47 percent of the overall student loan portfolio and the largest share for graduate students to date, though graduate students only accounted for 21 percent of borrowers. The Department foresees, if current trends persist, a plausible scenario wherein "graduate loan disbursements may exceed undergraduate disbursements in the next few years."[24] Across all these different measures, graduate borrowing levels have increased—per-student, per-year, and overall across the portfolio. This increase in borrowing is particularly concerning because, at many programs, these larger loan balances do not come with higher earnings.

Increasing costs associated with graduate degrees is especially harmful when higher costs are not reflective of anticipated earnings. Research has shown that though the percentage of borrowers with high loan balances has increased, the labor market outcomes of these borrowers has remained relatively stagnant over the years. For example, the earnings premium of a master's degree, expressed as a percent above average high school earnings, has decreased slightly from 60 percent in 2005 to around 55 percent in 2020.[25] And there is a segment of graduate programs that actually leaves students worse off: federal data show that roughly 10 percent of graduate students, or about 72,000 students each year, attend programs that typically leave students earning less than if they had never attended.[26] Enrollment of students in low-earnings programs is particularly concentrated in master's degrees programs (roughly 69,000 of 72,000 students attend low-earnings programs), and spans a variety of disciplines: around 30 percent of psychology programs and 79 percent of visual and performing arts programs at the masters level leave their graduates earning less than an average bachelor of the arts degree holder, even four years after graduation.[27] A separate problem also exists for professional programs where earnings after graduation aren't below that of a bachelor's degree holder, but the marginal additional earnings are swamped by the overwhelming debt taken out to finance the

FIGURE 5



Source: Calculations by the report's authors using data from the Office of Federal Student Aid at https://studentaid.gov/data-center

degree. As shown in Table 3, around 39 percent of nonprofit and 44 percent of for-profit professional degree programs have unaffordable debt burdens, defined as exceeding 20 percent of median discretionary earnings.[28]

Even programs of the same type can have widely different earnings outcomes. For example, recently released federal data showed that the "difference in the earnings of the median graduate of programs with earnings in the top 10% is more than $50,000 higher than that of the median graduate of programs with earnings in the bottom 10% of the bottom quartile."[29] That report also found that "no sector exhibits a strong connection between the debt and earnings outcomes of program graduates." In other words, there is little connectivity between the tuition charged by a program and the likely earning potential of graduates, demonstrating a lack of market responsiveness among programs, with the unfortunate consequence of many programs leaving their graduates with low earnings financed by debt that has little hope of being repaid.

Federal higher education policy generally lacks cost and quality controls to combat the proliferation of degrees that lead to poor outcomes. Although Stafford loans have annual and aggregate limits—$20,500 and $138,500, respectively—Grad PLUS lending is largely determined by institutions, who individually calculate the tuition and overall cost of attendance for their own programs (unsurprisingly, average Grad PLUS loan amounts have markedly increased, as shown in Figure 5). Recent academic research using data from Texas found that, following the introduction of Grad PLUS, graduate program prices "increased by $0.75 per $1 increase in average per-student Grad PLUS loans and more than dollar for dollar with increases in total federal student loans." This finding provides evidence that the Bennett hypothesis—unconstrained federal lending leads to price increases—may exist for graduate financing: the availability of federal loans allows institutions to raise their tuition beyond market-clearing prices absent federal subsidy (as shown in Figure 6, the average net price at Master's

TABLE 3: PERCENT OF PROGRAMS WITH HIGH DEBT-TO-EARNINGS RATIOS, BY SECTOR

	Public	Private Nonprofit	Private For-Profit	All Sectors
Master's	2	12	24	8
Doctoral	5	31	29	20
Professional	9	39	44	24

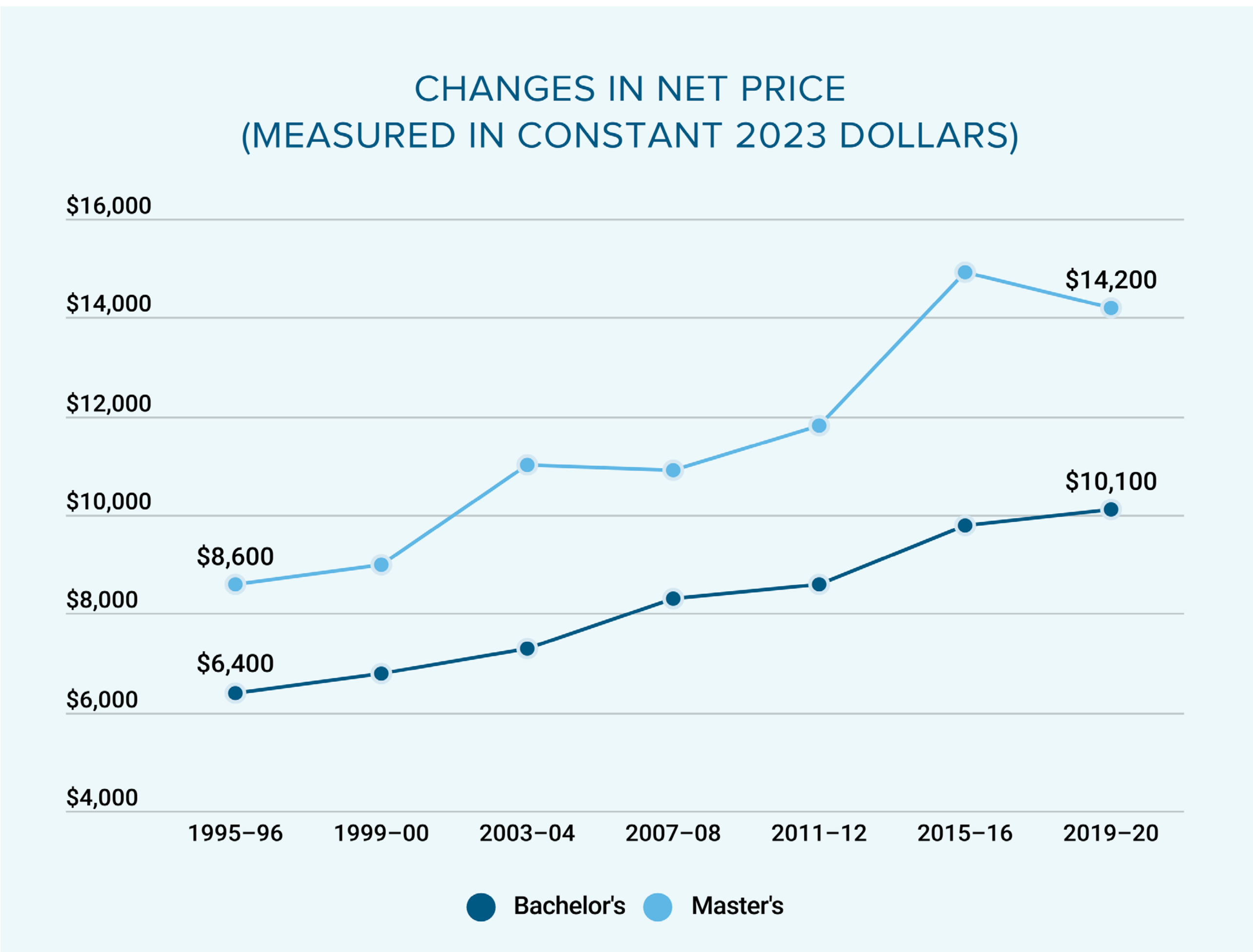
Note: A high debt-to-earnings ratio is defined as a program having annual service payments on typical borrowing levels in excess of 8% of median earnings or 20 percent of median discretionary earnings (defined as earnings above 150 percent of the federal poverty line).

Source: Monarrez and Matsudaira, "Trends in Federal Student Loans for Graduate School," https://sites.ed.gov/ous/files/2023/08/OCE_GraduateDebtReport202308.pdf.

degree programs have increased at a faster rate than Bachelor's degree programs).[30] This is not the first academic research to find some evidence of the Bennett hypothesis in the context of graduate education.[31] Graduates facing disproportionately high debt relative to their expected income may encounter difficulties in meeting monthly payments, managing living expenses, and saving for other life goals such as purchasing a house or a car. It is difficult, however, to estimate the extent to which these loans are truly unaffordable. In the past, repayment rates on loans offered an indication of a borrower's ability to repay, but repayment rates have become a less clear metric given evolving repayment policy.

Students of color often face compounded challenges when pursuing a graduate degree due to ongoing systemic discrimination and disparities in income and wealth. According to a 2019 Survey of Consumer Finances, "the typical white family has eight times the wealth of the typical Black family and five times the wealth of the typical Latino family."[32] The escalating expenses associated with graduate

FIGURE 6



Source: Calculations by the report's authors using data from NPSAS.

programs, combined with limited access to family resources and intergenerational wealth, causes students of color to rely more heavily on loans to fund their education. As mentioned earlier, approximately 66 percent of Black and 62 percent of Latino graduate degree recipients turn to borrowing for their degrees, while only around 50 percent of white recipients use borrowing to help finance their degree.[33] Borrowers of color are not only more likely to borrow, they also borrow higher balances: the average loan amount for Black graduate students was $43,800 as opposed to $32,400 for white students.[34] As a result, many students of color graduate with higher levels of debt, which may prove more difficult to repay due to labor market discrimination that suppresses earnings for many people of color.[35]

Data and research clearly demonstrate both the value, and the shortcomings, of the federal graduate lending programs as they currently exist and provide a solid foundation and frame for potential improvements to the system. While the shortcomings of the federal lending programs examined in this report can be measured among those who attended graduate school, the increasing costs of graduate school and subsequent debt could have broader consequences. Individuals and families lacking financial resources might find it challenging to rationalize taking on substantial debt, which could ultimately dissuade them from pursuing graduate education.

The increasing costs of the graduate loan programs

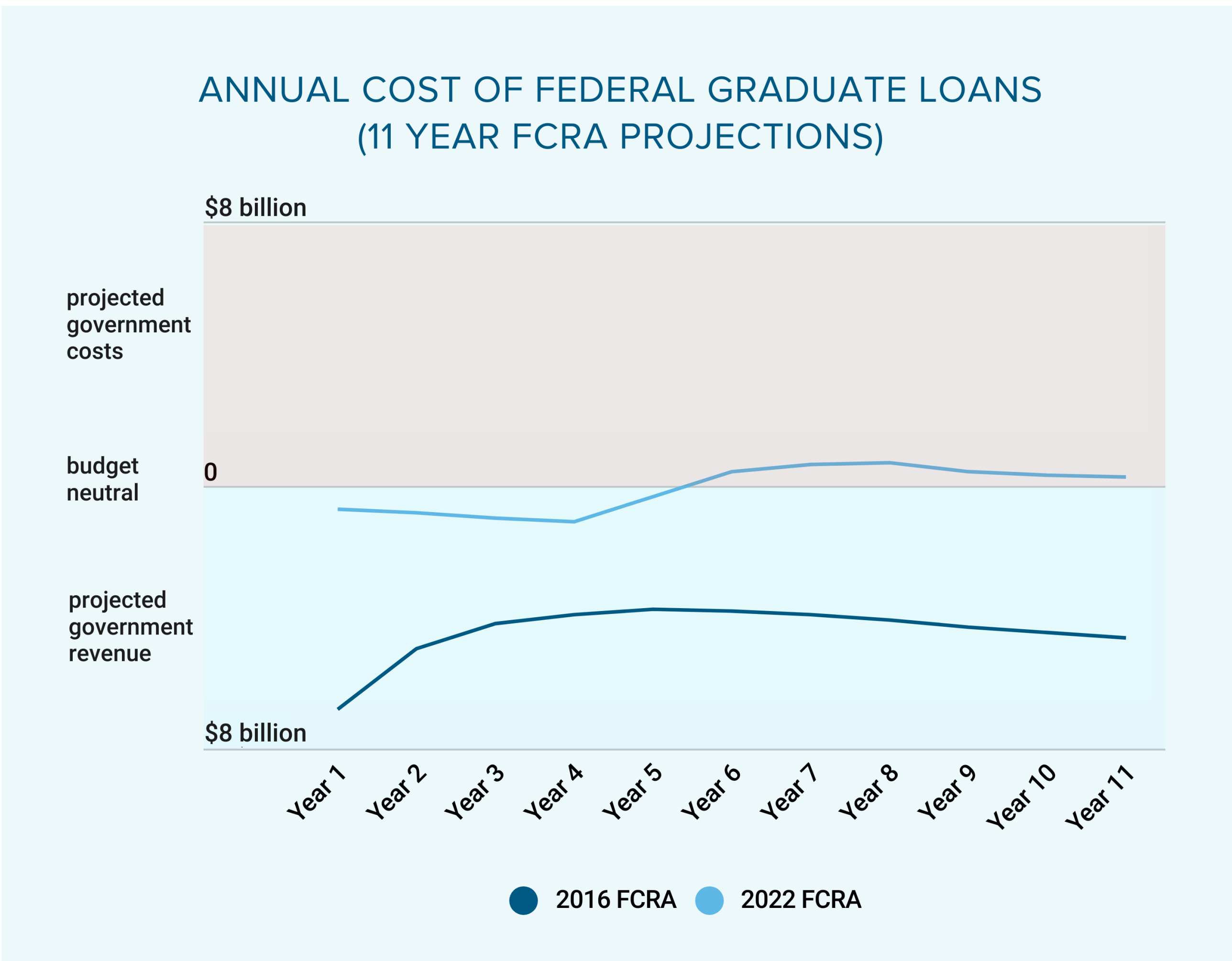
As the cost of graduate programs and the volume of graduate loans has continued to rise over time, the federal loan programs have come under increased scrutiny. The Office of Management and Budget and the Congressional Budget Office (CBO), which are responsible for measuring the cost of federal student loans, as well as all other federal initiatives, use two different accounting frameworks for assessing budgetary costs: Federal Credit Reform Act (FCRA) and Fair Value Accounting (FVA).[36] Although the way in which the models are calculated differ, both attempt to estimate what the cost of federal graduate programs will be each year in the coming years.

Since its initial use by CBO in 2016, FVA has projected the program will cost the federal government money. Under FCRA, graduate federal student loans have long been estimated to produce revenue for the government (as shown by the negative costs in Figure 7). However, in 2022, for the first time, graduate loan programs were projected to incur a cost for the government on using both methods. With respect to Grad PLUS loans, the story is similar but magnified: Grad PLUS loans account for the lion's share of the cost drivers associated with graduate-level borrowing, when compared to unsubsidized loans made to graduate students.

These adjustments in estimated costs have the potential to significantly impact the graduate lending programs. In a higher interest rate environment where deficits are costlier to the government, finding sources of revenue to reduce deficits becomes critical to Congressional appropriators. During high-stakes budget negotiations, Congress will be eager to find sources of revenue (or costs to cut), and the increasing costs and share of borrowing made up by graduate loans will be an attractive target for savings. Taking a budget hacksaw to the graduate lending programs would be shortsighted: while it would save money in the short-term, a lack of thoughtful design could result in racially and socio-economically disparate impacts on borrowers of color, low-income borrowers, and the institutions that disproportionately serve them.

Instead, what is needed is a bipartisan plan for durable reform that would minimize the origination of new, unaffordable student loan debt; ensure that racially and economically disadvantaged students

FIGURE 7



Source: Calculations by the report's authors using data from the Congressional Budget Office have access to valuable graduate and professional programs; and enable policymakers to effectively and appropriately subsidize investments in education that yield more public than private return. Without a comprehensive approach to reform that addresses unintended effects and tradeoffs that account for impacts on access, policymakers run the risk of making cuts with a hatchet instead of a scalpel, and leaving students worse off than the already-problematic status quo.

How to improve federal graduate financing policy

The current system of graduate student aid works best when it provides significant value to graduates, enabling them to achieve upward mobility in their preferred career and improving their lives and contributing positively to society, including in fields of critical need. But too often this is not occurring. The existing graduate financing structure leaves an increasing number of students owing increasing amounts of debt, and those debt burdens are not always justified by the earning opportunities that come with the credential. This system is certainly not a failure, but it has clear deficits and misaligned incentives that need to be addressed. That way, it can both effectively serve students from all racial and economic backgrounds and also provide clear benefits for students given the cost to taxpayers.

For these reasons, any viable and comprehensive policy approach to graduate financing should include a balanced framework to rein in debt while maintaining access to high-quality programs and encouraging institutions to offer programs of value. Achieving that balance in a manner that addresses a diverse set of concerns from those across the political spectrum would require addressing all five of these policy levers: (1) setting reasonable loan limits, (2) awarding grant aid to students and institutions to address equity and social good considerations, (3) ensuring sufficient value and return on investment for students and taxpayers, (4) enhancing the regulatory structure and consumer protections for private lending, and (5) improving data disclosure and transparency. No single policy lever is likely to sufficiently account for potential downsides (such as limiting access or driving students to private borrowing that is less affordable than federal options), which necessitates a combined approach that addresses multiple shortcomings of the policy status quo simultaneously. Each of these levers could vary in its specifics, but the key is to create a holistic approach that draws from each lever to create an effective and politically viable policy design.

Below is a description of each lever and an explanation of why it is needed—not only to address the shortcomings of the existing graduate student aid system but also to help offset potential downsides of the other four levers. Also included are examples of potential policy approaches that would fall under each lever. They are included for illustrative purposes and are not an endorsement of specific policy approaches.

1. Set reasonable loan limits

Description: Reasonable loan limits refers to any limits imposed by the federal government on the amount of loans that a borrower can receive in a year or over their lifetime or that an institution can disburse to its students.

Why this lever is needed: Under current law, the only constraints on graduate lending are the annual and aggregate loan limits for Direct Unsubsidized Loans ($20,500 and $138,500, including undergraduate loans outstanding) and the cost of attendance set by the institution for Grad PLUS loans. In practice, there are therefore no lifetime limits or likelihood of strong post-completion earnings considerations for graduate students, and no per-student, program-level, or institutional-level limits on aggregate debt disbursed or tuition that can be covered by federal student loans. This allows students to borrow effectively unlimited amounts, regardless of the feasibility of repaying such loans.

Both overall graduate loan disbursements and per-student borrowing for graduate programs have increased significantly since 2005, when Grad PLUS loans were created. The number of borrowers owing more than $100,000 in graduate loan debt has also increased significantly since 2004, from 9 percent to 21 percent.[37] There is also mounting evidence that the Bennett hypothesis exists in the existing system of graduate financing.[38] These findings, when combined with research and other evidence showing that graduate programs may be more likely to cross subsidize other institutional costs, provides significant incentives for institutions to expand the size and scope of graduate programs, and to increase their costs.[39]

For these reasons, creating a maximum limit that a graduate student can borrow in a single year and over the course of their education would help protect borrowers from racking up unaffordable debt and reduce the incentive for institutions to continually increase prices borne by students. The imposed limit would need to be based on strong research and data that would allow policy makers to achieve their overall goal of limiting overpriced programs that leave students with unaffordable debt.

However, borrowing constraints alone could also cause negative effects, particularly decreasing access to some low-income borrowers who would not have access to the financing necessary to enroll in high-cost but beneficial graduate programs. And given the racially disparate wealth amounts and the racial wage gap described in the previous section, limitations on access would fall disproportionately on low-income students and students of color, along with the institutions that serve them. It is also likely that constraints on borrowing would lead to increases in private lending, where programs that result in high earnings (such as law or medicine) could continue to command high prices and nongovernment lenders would step in to provide liquidity. The composition of the private loan portfolio differs significantly from federal student loans: it has lower default rates (due in part to selection effects), and has historically come with higher interest rates and fewer borrower protections such as income-driven repayment or disability discharges. That's why inclusion of this policy lever must be combined with the others listed in this report, particularly awarding grant aid to address equity and social good considerations and a regulatory structure and consumer protections for private lending.

Examples of possible borrowing constraints include:

- Fixed annual and/or aggregate limits for Grad PLUS debt: Congress could set an overall amount that graduate loan borrowers could receive each year and over their lifetimes. For example, Senate Republicans, led by Senator Bill Cassidy (R–LA), have introduced the Lowering Education Costs and Debt Act, which would cap overall graduate lending at $130,000 in Stafford loans (the proposal eliminates Grad PLUS).
- Limiting allowable tuition charges based on the college's educational expenses if the institution chooses to use Grad PLUS loans for a program.
- Conditioning debt amount on expected repayment outcomes or another underwriting standard: instead of having overall loan limits that apply equivalently to all programs, different types of programs could have different borrowing limits. For example, the Senate Republicans' bill would also limit graduate borrowing to $20,500 annually and $65,000 in total for graduate studies, while limits for professional students such as law or medical students would be $40,500 annually and $138,000 in aggregate.
- Disbursing aggregate amounts of loan capital to institutions based on past performance, and allowing the institutions to disburse loans to students, in amounts they consider appropriate, to address gaps in other financing.

2. Award grant aid to students and institutions to address equity and social good considerations

Description: Aid to address equity considerations refers to any grant aid, including research fellowships, made available directly to graduate students and to any federal grant aid made directly to institutions to further support their delivery of quality education to historically marginalized students.

Why this lever is needed: This lever is particularly important as part of any comprehensive approach to reforming federal graduate financing policy. Any limitations to borrowing are likely to have an impact on access, particularly for those students who have lower incomes or less family wealth (including, disproportionately, students of color). Black students are significantly more likely to borrow student loans for graduate school, as are those who received Pell grants as undergraduates. Furthermore, structural discrimination in the labor market (both with respect to individuals and the prevailing wages of jobs made up disproportionately of Black and Latino workers, particularly women) means that value metrics, particularly those that account for earnings, may have disparate impacts on schools that enroll far more borrowers of color. The more restrictive that new limits on lending are, the higher the risk of cutting off access to student populations that benefit from a higher or terminal credential.

Targeted aid can help to mitigate the risks that come with limiting borrowing or increasing accountability for institutions and programs. By providing grant aid to students who would be likely to take out significant debt, lower debt caps become less relevant, because less overall borrowing per student would be needed. By providing funding directly to institutions, federal policy can offset some of the historical funding disadvantages that drive institutions to rely on revenue from graduate programs. Yet this lever, without the others, risks sending good money after bad, investing in programs that provide poor payoffs or cannot justify the price charged to students.

Examples of targeted aid include:

- Establishing grant aid for graduate students who demonstrate financial need.
- Need-based scholarships directed at programs with specific characteristics (jobs in high-needs fields, historically marginalized students).
- Increased funding directly to institutions (for example, as Title III and V aid) producing disproportionate numbers of graduates from historically marginalized communities (such as HBCUs that produce a significant percentage of Black PhD graduates).

3. Ensure sufficient value and return on investment for students and taxpayers

Description: Ensuring value for taxpayers and students refers to establishing minimum standards of institutional or programmatic value and student return on investment, so that students who receive federal aid for graduate school are not being left with unpayable debt and taxpayers are not spending money to prop up programs that leave students worse off.

Why this lever is needed: Recent research provides strong evidence that there is little relationship between the price of a program and its positive impacts on students' human capital.[40] About 15 percent of graduate programs (1,459 of 9,877) leave students earning less than the $50,000 per year, the average annual earnings of bachelor's degree holders four years after graduation.[41] Some institutions and programs simply do not leave students as well off as other, equivalent programs at other graduate schools; for example, just 7 percent of master's programs in health professions at public graduate schools leave their graduates earning less than $50,000 per year, while 31 percent of master's programs in health professions at for-profit graduate schools do so. And some institutions in particular leave students owing debt that most research agrees is unaffordable (more than 20 percent of discretionary income), including 39 percent of nonprofit and 44 percent of for-profit professional degree programs.[42]

Even if all four of the other levers were implemented, the federal student loan system would still provide significant funding to programs that leave students worse off than before they attended, at times saddled with six-figure debts they are unable to repay. Any comprehensive system of federal graduate education policy must address the problem of institutions and programs that consistently fail to deliver good outcomes to students and taxpayers without improvement. While focusing on provision of minimum value or return on investment presents some risk that certain programs that train graduates for socially valuable but lower-earnings occupations (for example, social work) could be negatively impacted, that risk would be mitigated by direct funding of such programs. The direct funding provisions described in the second lever would be critical in ensuring that socially valuable programs are not saddling students with unpayable debt but were maintaining their contributions to society.

Examples of policies that could help improve outcomes for students and value for taxpayers:

- Conditioning continued participation in the graduate loan programs on programmatic-level and/or institutional-level outcomes such as default, return on investment, or earnings.
- Creating pricing constraints based on the debt-to-earnings or price-to-earnings ratio of program participants.
- Requiring institutions to repay a certain percentage of borrowers' unpaid balances, while including incentives to prevent reductions in the number of low income students and students of color that they serve.

4. Enhance the regulatory structure and consumer protections for private lending

Description: Enhancing the regulatory structure and consumer protections for private lending refers to changes in federal law to ensure that private market products, including but not limited to private student loans, have sufficient protections for students so that they are not left with unaffordable debt and sufficient market certainty so that private markets can effectively provide additional liquidity to borrowers and programs when needed.

Why this lever is needed: Historically, private student loans have made up a small share of the overall student loan portfolio. The most recent reports about the private marketplace, which are provided by a third-party analytics firm, indicate that the outstanding balance for private student loan participants (excluding consolidation, refinance, and parent loans) was $58.48 billion in the first quarter of 2023.[43] That represents a small share (3.6 percent) of overall outstanding student loan debt, which the Federal Reserve Bank of New York calculates is $1.604 trillion in the same quarter.[44] Private student loans to graduate students represent an even smaller share of this sum. Only 11 percent of the $58.48 billion in private student loans were made to borrowers paying for graduate or professional programs.

The private student loan industry is constrained by the fact that it must compete with the products available to students in the federal student loan programs, which are more generous to borrowers when the loan terms and repayment options are taken into account. Most borrowers are best served by taking as much debt from the federal student aid program as they are allowed before using private student loan products. Private loans made for undergraduate enrollment are more common than private student loans for graduate school because the limits for undergraduate borrowing are more constraining, in practice, than the limits in the current programs for graduate student borrowing.

Imposing constraints on federal graduate student borrowing (as described in the first policy lever) could increase demand for private student loans among students whose tuition and living expenses exceeded any new borrowing constraints, which could potentially lead to rapid growth in the private sector, especially if sufficient additional grant aid is not included in any reform effort. To avoid funneling students into financial products worse than the current status quo, additional regulatory structures and consumer protections may be warranted.

The regulatory issue that would be most likely to demand immediate attention from policymakers is the treatment of private student loans in bankruptcy. At present, private student loans are generally not readily dischargeable in bankruptcy, requiring a higher burden of proof of hardship than other types of consumer credit to be considered for discharge. While this condition was originally put in place to support liquidity in the private student loan market, many policymakers on both sides of the aisle agree that it may no longer be necessary. While it didn't include private student loans, bipartisan legislation has been introduced in recent years that would make federal student loans dischargeable in bankruptcy under certain terms.[45]

Lawmakers might also put guardrails on innovative products that could emerge alongside this sector. These sorts of products, when constructed in a way that protect students from unfair terms or usurious interest rates, may be desirable for students who lose access to funds through the federal student loan programs and the associated safety nets that operate through the repayment programs available for them.

Examples of policies that could establish an effective regulatory structure and consumer protections for the private student loan sector could include:

- Prevent institutions from steering their students to particular loan products, and prohibit them from receiving fees to market specific financial products.
- Ensure students can discharge private student loans in bankruptcy.
- Limit the maximum interest rate that can be charged on private student loans.
- Require disclosures specifying loan terms and repayment options in plain language.
- Establish regulatory standards for financial products offering novel standards, terms, or protections.

5. Improve data disclosure and transparency

Description: Improved data disclosure and transparency refers to any widely accessible data collection in addition to the limited data currently available, to allow for better understanding of program-level and institutional-level outcomes and empower students, educators, and policymakers to make informed decisions based on accurate information.

Why this lever is needed: Though recent efforts (through IPEDS and the College Scorecard) have somewhat increased the level of transparency analysis that researchers can perform with respect to graduate programs, there are still significant gaps in publicly available data, particularly around program outcomes. While it is now possible to make broad statements and assessments about the amount of per-capita borrowing, median earnings, and in some instances, repayment outcomes, policymakers' and institutions' ability to make fine-grained evaluations of differences between program outcomes is still severely limited. For example, current data collection does not allow for the evaluation of program outcomes for those who receive no federal student aid, and limited price data mean that it is impossible to broadly calculate which programs are differentially priced for different students. Most data with borrower characteristics come from sample surveys with long lags and without the utility of institution-specific and program-specific data. Together, this makes it much more difficult to build effective policy.

Institutional decisions to make voluntary improvements also rely on better outcomes data, which can help inform decisions regarding program closure and expansion, economic need, and graduates' outcomes. The vast majority of institutions have no interest in leaving their students worse off, but program changes are difficult without easily comparable data available to make such decisions.

Finally, some of the most well-educated students in the nation—those who have successfully completed a baccalaureate degree and are motivated to pursue postgraduate study—can only make effective enrollment decisions that improve their own outcomes and send powerful market signals to providers if they have sufficiently clear and comparable data.

Efforts to increase transparency in graduate programs could include:

- Allowing for reporting on a student-level basis to better track outcomes among Title IV versus non-Title IV students, transfers and stop outs, and postgraduate outcomes, as required through legislation such as the College Transparency Act.
- More stringent reporting requirements to both students and the public, such as:
    - requiring every program to report detailed cost data to the Department of Education, so that it can produce comparative pricing information for students;
    - providing all enrolled graduate students with standardized financial aid offers that clearly delineate between grants and loans, as required in legislation such as the Understanding the True Cost of College Act; and
    - requiring all institutions and programs to report to the Department, and disclose to the public through the College Scorecard, rates of noncompletion, licensure passage rates, and repayment-related metrics.
- Requiring reporting of all these data through a publicly accessible site such as the College Scorecard.

Conclusion

The existing system of graduate education provides significant benefits to students—through increased earnings and improved career prospects—and society. The current federal system of graduate student aid provides students access to that system through loans to ensure that individuals can secure a post-baccalaureate education regardless of their income, wealth, race, or personal circumstances.

However, the current federal system that finances graduate education also opens up students and taxpayers to many potential harms. The average graduate student borrows triple what they did thirty years ago, and 20 percent of graduate students borrow six figures in debt. Nearly half of nonprofit and for-profit professional degree program graduates hold unaffordable debt, defined as exceeding 20 percent of median discretionary earnings. Graduate and professional students are a fifth of all enrolled students but account for almost half of the student loan dollars disbursed. Every year, thousands of graduate students find themselves burdened by substantial debt they struggle to reasonably repay.

These financial hardships can have far-reaching consequences in their lives, such as financial instability, slower wealth accumulation, and higher stress. These challenges are even more pronounced for borrowers of color, who tend to borrow more due to historical and ongoing wealth and income disparities. This creates an imperative for policy to ensure students are better off for having enrolled and that taxpayers are not spending money to leave students with unaffordable debt.

To enhance federal graduate student aid, it is critical that federal policymakers design a comprehensive solution that incorporates all five identified policy levers: setting reasonable loan limits; awarding grant aid to students and institutions to address equity and social good considerations; ensuring sufficient value and return on investment for students and taxpayers; enhancing the regulatory structure and consumer protections for private lending; and improved data disclosure and transparency.

Each of these levers plays a vital role in addressing different facets of the system's challenges and helps to balance potential downsides of addressing only a single policy problem with a single solution. Policy makers must carefully consider elements from each lever while crafting a solution to avoid unintended consequences. For instance, while exploring options like annual versus aggregate loan limits for Grad PLUS, it is essential to strike a balance that prevents over-borrowing without unnecessarily hindering access to important areas of national need. This is particularly true for students who would otherwise be unable to access truly valuable programs that will greatly enhance their job market outcomes. Failing to adopt a well-rounded approach could lead to adverse outcomes, including the potential for the private market to exploit vulnerable students. By combining these five levers, policymakers can create a robust framework that safeguards students' interests, protects students regardless of their backgrounds, and establishes a more sustainable and effective federal graduate student aid system.

Notes

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11 Calculations by the report's authors using data from the Office of Federal Student Aid, U.S. Department of Education.
12 Calculations by the report's authors using data from NPSAS.
13 Federal borrowing data disaggregated by race does not include explanations for why borrowers of different races borrow at different amounts, but explanations can include factors such as family income and wealth, other existing debts, scholarships and stipends more commonly available for STEM fields or for particular degree levels (such as doctoral rather than masters), the percentage of students who are not U.S. citizens, or eligible noncitizens and are therefore ineligible for federal student aid.
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