Appendix A

Federal Efforts to Prevent Student Aid Dollars from Eroding Value and Driving Inflation: An Historical Compendium

By Robert Shireman

Whenever the state intervenes in a marketplace with subsidies, market forces that might otherwise keep prices in line with value can cause prices to rise, value to fall, or both. In the case of higher education, that translates to a concern that student aid, such as grants and the provision of student loans, has contributed to the rapid tuition inflation and influx of low-quality programs that at least some elements of the industry have experienced. Experts and researchers disagree about the extent of this problem, but nonetheless policymakers have paid significant attention to this challenge, proposing and adopting various approaches to restraining aid-induced tuition hikes. Frequently, price-related policy efforts have been repealed or weakened after being adopted.

The first federal attempt to protect against institutions raising tuition in response to the availability of aid came with the original GI Bill, which essentially tried to peg aid to the market-set price, the "customary" charges that a non-veteran student would pay. As detailed in the chronology below, this market-price concept was carried through to some later reforms but was never fully implemented.

Congress eschewed the GI Bill's voucher approach in adopting the 1958 National Defense Education Act. In creating the campus-based loan, grant, and work-study programs, the act instituted the restriction that colleges would be provided with lump sums and could distribute the aid, along with their matching contribution, only until it ran out: charging students more or getting more of them to borrow did not increase the aid the institution received.

The Higher Education Act (HEA) of 1965 brought banks and guaranty agencies into the federal student aid system, with the idea that private underwriting would include consideration of appropriate pricing and value. Multiple factors undermined that concept. Reforms in the 1990s used student loan default rates to restrict or curtail institutions' eligibility for federal aid, a crude form of contraining aid based on return on investment/outcomes. Later, such efforts have included outcome measures such as earnings, debt, and loan repayment to determine eligibility for federal aid.

Information strategies have been a recurring theme for the past twenty-five years, starting with the 1998 HEA reauthorization, which required the U.S. Department of Education to collect data on tuition and cost of attendance, and to publicize the information in a form that "allows parents and students to make informed decisions based on the costs for typical full-time undergraduate students." Congress later required a "net price calculator," tuition hike "watch lists," and the College Scorecard, detailing student debt and earnings data by program.

A chronology of major federal higher education policy efforts follows, with a description of provisions related to tuition levels or college value.[1]

Morrill Land Grant Act of 1862. Lacking tax revenue but having plenty of land taken from native peoples, Congress offered grants of land to states to support higher education: the states would sell or lease the land to produce revenue to launch at least one college.[2] Each college was to have a major focus on agriculture and the mechanical arts, in contrast to what was seen at the time as elitist and impractical liberal arts education. While literature about the debates that led to the act indicated no concern about tuition charges, the purpose of the legislation was access for the masses, for "farmers and mechanics," and for "agriculturalists and artisans." At one point, Representative Morrill referred to the bill as providing "cheap scientific education," perhaps based on the assumption that the endowments created would help to cover the cost of operating the colleges.[3]

National Youth Administration (NYA) Work-Study Program. Starting in 1935, the New Deal–era NYA launched a major program to support college students in need and to boost flagging enrollment at the nation's colleges. Nearly every public and nonprofit college in the country participated in the program, which provided aid to allow colleges to employ students on campus. The funds were intended for nontuition expenses, but the aid clearly made it possible for the students to attend and pay tuition. Colleges, especially private institutions, were concerned about the potential for federal meddling and bureaucracy that could come with the program, but the flexibility mollified those concerns. The (minimal) historical literature about the program does not indicate any particular concerns about the amount of tuition charged. There were efforts to make sure the aid went to those truly in need, and the private colleges did argue that their aid should be larger since their institutions did not receive other public support, implying that they did see the program as helping to cover tuition.[4]

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[1] Prior to the Civil War, most higher education policy was enacted at the state level. Probably the most robust state oversight was (and is) in New York, where the Regents of the University of the State of New York are responsible for issuing the corporate charter of every college—public, nonprofit, and for-profit—and the agency engages in oversight that includes visitation akin to accreditation. While New York's law included reference to a college having adequate funding to operate, it did not include any explicit mention of tuition charges. *University Law: Laws of New York,* 1892, ch. 378. (An Act to revise and consolidate the laws relating to the University of the State of New York).

[2] The land was frequently not in the state that was granted it. See the Morrill Act (1862), https://www.archives.gov/milestone-documents/morrill-act.

[3] John H. Florer, "Major Issues in the Congressional Debate of the Morrill Act of 1862," *History of Education Quarterly* 8, no. 4 (1968): 459–78, https://doi.org/10.2307/367539.

[4] Kevin P. Bower, "'A Favored Child of the State': Federal Student Aid at Ohio Colleges and Universities, 1934–1943," *History of Education Quarterly* 44, no. 3 (2004): 364–87, http://www.jstor.org/stable/3218027.

The Post–World War II GI Bill. The original GI Bill was to cover the "customary" costs of tuition and other fees for one year, up to $500 (about $7,500 today, based on a [Consumer Price Index adjustment](#)).[5] The idea was that the government would pay on behalf of veterans "the same fees, tuition, and other charges which were required of a non-veteran student enrolled in the same course."[6] The availability of the GI Bill funds prompted thousands of new institutions to be established, mostly for-profit (many of them were providing pre-college level training). Since the colleges were startups that enrolled veterans on the GI Bill, there were no non-veteran "customary" charges upon which to base the federal aid. The institutions, according to a Congressional investigation known as the *Teague Report,* were able "to virtually write their own charges against the Treasurer of the United States without regard to the amount, type, and quality of service rendered."

The *Bradley Report,* by a panel commissioned by President Eisenhower, found that under the first GI Bill:

> The Government was overcharged for much of the training in schools below college level, particularly in for-profit schools. There were also problems in the reimbursement of colleges and universities, although it seems clear that none was paid more than the cost of educating the veterans. Any appraisal of the education and training program for World War II veterans must recognize these problems, most of which were inherent in the basic law.[7]

In an attempt to address the problem, Congress gave the Veterans Administration (VA) the authority to determine "fair and reasonable tuition rates." The agency implemented the requirement with a cost-plus approach: institutions would submit evidence of actual operating expenditures for the program and would be allowed an additional one-ninth profit. While better than nothing, the cost-plus approach, investigators found, "created an incentive on the part of the schools to pad their cost figures" and to fabricate expenses.

Korean War–era GI Bill. The 1952 legislation that established educational support for veterans of the emerging conflict in Korea included two key recommendations from the *Teague Report:*

1. Instead of making direct tuition payments to institutions, the VA provided a fixed amount to students, from which they would pay tuition, keeping the remainder for other expenses.

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[5] An amendment allowed higher rates of tuition if the veteran chose to have those amounts subtracted from their subsistence allowance.

[6] "Investigating Education and Training Programs Under GI Bill," House Select Committee to Investigate Educational Programs Under the GI Bill, House of Representatives, 82nd Cong., 2nd sess. February 1952 (*Teague Report*), https://drive.google.com/file/d/0B7aqIo3eYEUtZzJYWnpRbVkwZE0/view?usp=sharing.

[7] "Veterans Benefits in the United States," President's Commission on Veterans' Pensions, April 1956, 291 (*Bradley Report*), https://www.va.gov/vetdata/docs/Bradley_Report.pdf.

2. Require that programs have a critical mass of non-veteran students. (Congress established that level at 15 percent; the *Teague Report* had recommended 25 percent).

The legislation also more formally established the use of accrediting agencies as a screening tool.[8]

In 2022 the VA reiterated this history in making a proposal to clarify its regulations with regard to tuition prices: "After investigating the abuses of the original GI Bill, Congress, when designing the successor Korean War GI Bill, took steps to eliminate such abuses by making payments directly to students and by instituting the 85/15 rule."[9]

Four years later, the Bradley Commission declared the tuition reform a success:

> The elimination of the separate tuition payment in the Korean program was done in order to curtail overcharging on the part of proprietary schools and to avoid problems in reimbursing low-tuition public colleges on a "cost" basis. This appears to have been a sound decision and the present arrangement is working well. For any future program of educational benefits, the decision as to the method of reimbursement should be made in the light of experience under Public Law 346 and Public Law 550 as well as the conditions prevailing at such future time.[10]

National Defense Education Act (NDEA). The 1957 Russian launch of a craft into space caused Cold War–spooked Americans to worry that the United States was behind in science and technology education. In response, Congress enacted a broad bill to strengthen K–12 and higher education. President Eisenhower described it as an emergency, temporary measure, ending after four years.[11] (Many of the programs still exist, seventy years later).

One part of the NDEA was aimed at graduate education, specifically for the purpose of increasing the supply of teachers at the college level. Living stipends were paid to students for up to three years, and the institutions received up to $2,500 per student per year (about $22,000 today),

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[8] David Whitman, "Truman, Eisenhower, and the First GI Bill Scandal," The Century Foundation, January 24, 2017, https://tcf.org/content/report/truman-eisenhower-first-gi-bill-scandal/.

[9] Proposed Rule, 85/15 Rule Calculations, Waiver Criteria, and Reports, Posted by the Department of Veterans Affairs on October 11, 2022, https://www.regulations.gov/document/VA-2022-VBA-0022-0001.

[10] "Veterans Benefits in the United States," President's Commission on Veterans' Pensions, 300.

[11] He also expressed disappointment that Congress established a student loan program rather than providing scholarships as he had recommended. NDEA Signing statement. "Statement by the President Upon Signing the National Defense Education Act," September 2, 1958, https://www.presidency.ucsb.edu/documents/statement-the-president-upon-signing-the-national-defense-education-act.

based on the institution's accounting of the per-student cost of establishing or expanding the particular program.[12] Many institutions charged the program less than the maximum.[13]

The program was designed in a way that made it difficult for colleges to charge high tuition: the institutions were allowed to charge tuition but their cost-of-education funding would be cut by the amount of tuition charge.[14] The policy appears to have essentially been an incentive for the colleges to accept the $2,500 subsidy as full payment of tuition. The issue of tuition was an ongoing topic of discussion in the program's implementation. An advisory committee established to guide the implementation of the graduate funding program was concerned about institutions taking the federal funds and also charging students tuition. They issued the following (nonbinding) guidance:

> Institutions are expected to make suitable arrangements to assure a net stipend to the holder of a Title IV Fellowship which is adequate to enable him to pursue a full time course of study without outside employment. For example: If an institution charges tuition it might award an additional scholarship to the Fellow or pay his tuition from the institutional payment which accompanies the fellowship. Another alternative is to waive tuition in whole or in part. Some institutions will find it important to note that the amount of tuition collected from a student is deducted from the attributable cost in arriving at the payment to be made by the Office of Education to the institution.[15]

In addition to limiting tuition charges, the program limited the amount of teaching that a student could be required to do during the fellowship, and prohibited any additional aid from other federal programs.

The NDEA also included a student loan program, now known as Perkins Loans, available for both undergraduate and graduate education. The federal government appropriated funds to colleges, which added some of their own funds. By making loans and collecting on those loans, institutions established revolving funds that would be made available to later students. The college's participation was a form of risk-sharing, since any defaults would reduce the funds available for later use.

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[12] "Institutions were asked to determine, as best they could, the cost reasonably attributable to each fellow in the estab-lishing of a new program or the expanding of an existing one. In making applications, institutions were to figure this amount in the fashion that seemed right to them. Sometime later . . . more precise regulations were to be issued on how to determine this amount." Clarence B. Lindquist, "NDEA Fellowships for College Teaching, 1958-1968; Title IV, National Defense Education Act of 1958," Department of Health, Education, and Welfare, Office of Education, 1971,
https://files.eric.ed.gov/fulltext/ED054739.pdf.

[13] The program was eventually changed to a flat payment, mostly because institutions claimed that they found it too onerous to estimate the per-student cost for expansion.

[14] Lindquist, "NDEA Fellowships for College Teaching," https://files.eric.ed.gov/fulltext/ED054739.pdf.

[15] Lindquist, "NDEA Fellowships for College Teaching," https://files.eric.ed.gov/fulltext/ED054739.pdf.

Higher Education Act of 1965 (HEA). The NDEA provided formula grants for its loan and work-study programs, and distributed the graduate education fellowships competitively. The HEA included voucher aid like the GI Bill, where the funds followed students. But instead of grants, the major component of the HEA was a loan program different from what was created under the NDEA.

The new loan program—guaranteeing bank loans to students—would take advantage of the private underwriting that, at least theoretically, would prevent low-quality or excessively costly programs from being funded. At the same time, student access would be expanded and costs lowered through modest subsidies (such as protection against default) administered by private nonprofit organizations and states. The model Congress tried to emulate was a private nonprofit loan guarantor that worked with banks and institutions. The guarantor actually opposed the legislation because they were concerned that federal involvement would undermine the private underwriting necessary for the program to work.[16]

The guaranteed student loan program's risk-sharing approach would place third parties—lenders and guarantors—in the role of deciding whether an institution or student was worthy of the support, and at what price. The federal government did not stick to this plan, however. Lobbyists successfully had Congress eliminate the risk-sharing approach. By 1976, according to the Government Accountability Office (GAO), the federal government took on "100 percent of program costs, while still requiring a network of guaranty agencies to help administer the program."[17]

Education Amendments of 1972. Debates about college affordability in the early 1970s focused on the question of whether federal aid should be tuition-focused or institution-focused. In this "bitter debate," private institutions generally fell into the former camp with public institutions in the latter.[18] The private colleges won, with the new Basic Educational Opportunity Grant (BEOG, later the Pell Grant) capped at 50 percent of the cost of attendance, meaning that the higher the tuition, the larger the grant could be.

Vietnam-era GI Bill. In extending the GI Bill to Vietnam veterans in 1976, Congress included a provision capping the proportion of students in a program who can be receiving any type of federal grant aid at 85 percent, regardless if students were receiving aid from the GI Bill, Pell, or Supplemental Educational Opportunity Grants (SEOG). Under this proposal, if 15 percent of the students could not pay the tuition price without federal aid, then the program would lose

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[16] The guarantor, USA Funds, ended up becoming one of the federally-designated agencies in the FFEL program.
[17] "Financial Audit: Guaranteed Student Loan Program's Internal Controls and Structure Need Improvement," U.S. Government Accountability Office, March 1993, https://www.gao.gov/products/afmd-93-20; Robert Shireman and Tariq Habash, "Have Student Loan Guaranty Agencies Lost Their Way?," The Century Foundation, September 29, 2016, https://tcf.org/content/report/student-loan-guaranty-agencies-lost-way/.
[18] See Lyman A. Glenny, "Financing Postsecondary Education in the United States The National Commission on the Financing of Postsecondary Education," *Higher Education* 5, no. 1 (February 1976): 103–07, https://www.jstor.org/stable/3445555.

eligibility for federal aid. This meant the price had to be reasonable given the quality of the program.

The provision was requested by President Ford's VA administrator: "It is our position that, if an institution of higher learning cannot attract sufficient nonveteran and nonsubsidized students to its programs it presents a great potential for abuse of our GI educational programs."[19] The Senate Veterans' Affairs Committee report stated that the provision was "intended to allow the free market mechanism to prove the worth of the course offered by requiring that it respond to the general dictates of an open market."

Unlike prior versions of the 85–15 rule, this one applied to *all* postsecondary courses, not just vocational certificate courses offered by for-profit and private nonprofit institutions.[20] The Supreme Court upheld the law as "a way of protecting veterans by allowing the free market mechanism to operate . . . minimiz[ing] the risk that veterans' benefits would be wasted on educational programs of little value."[21]

The provision was never fully implemented. Shortly after passage, key supporters of the provision in Congress had second thoughts, probably based on concerns expressed by institutions' lobbyists. One policymaker said, "we have learned that in many instances in our zeal to prevent abuse we have fashioned rules that are too rigid or are overinclusive in their operation."[22] Amendments in 1977 created loopholes that essentially gutted the provision.

The Ford administration also took steps to prevent institutions from becoming too reliant on loans provided under the nascent federal student loan program. Terrel Bell, the education commissioner (and later President Reagan's education secretary), explained, "I personally question the soundness of an institution whose existence is totally derived from signing up students who qualify for Federal aid."[23] The agency adopted a new regulation mandating a

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[19] VA Administrator Donald Johnson, quoted in S. REP. 94-1243, S. Rep. No. 1243, 94TH Cong., 2ND Sess. 1976.

[20] David Whitman, *The Profits of Failure: For-Profit Colleges and the Closing of the Conservative Mind* (Fort Bragg, Calif,: Cypress House, 2021).

[21] 435 U.S. 213 (*Max Cleland, Administrator of the Veterans Administration, et al.* v. *National College of Business,* March 20, 1978).

[22] 435 U.S. 213 (*Max Cleland, Administrator of the Veterans Administration, et al.* v. *National College of Business,* March 20, 1978). "Traditional colleges . . . complained bitterly that they lacked the administrative capacity to calculate the use of Pell Grants and SEOG grants for each of their individual programs. The American Association of State Colleges and Universities testified that calculating Pell Grant and SEOG grant usage by program would require 'far more paperwork and staff-time, since no college keeps a record of [Pell Grant] and SEOG enrollment by course. It also further discriminates against veterans, since there is no limit on the percentage of Pell Grant-SEOG students who can enroll in any course, but an 85 percent limit on veterans.'"

[23] "It's Time to Protect Education Consumers Too," remarks of U.S. Commissioner of Education Terrel H. Bell to the Statewide Higher Education Executive Officers, April 24, 1975, 5, http://files.eric.ed.gov/fulltext/ED108554.pdf. Bell noted that "when there is rapid growth in any sector, there is a danger of malpractice. And, as much as we would like to attribute beneficence to the world of education, it, too, has its charlatans—the seekers of the fast buck."

review of any institution where 60 percent or more of the enrolled students were using federal loans.[24]

MISAA and PLUS. In the late 1970s, the focus of the post-Watergate Democratic Congress and the Carter administration was on making more college aid available to the middle class. The 1978 Middle Class Student Assistance Act (MISAA), which made subsidized loans available to families at higher income levels than previously, led to an explosion of borrowing by students.[25] The student borrowing elevated concerns that middle-class parents who *could* pay had become less willing and able to pay. The Parent PLUS program was established in 1980 to address that concern; parents could borrow through the bank-based guaranteed student loan program "instead of having to mortgage your house," according to a Carter official.[26]

Some commentators at the time did worry about the way that colleges' responses to the aid would increase costs and reduce quality. While praising the tremendous gains in college affordability and diversity, a writer at *The Atlantic* worried that:

> The system of financial aid that made these improvements possible is increasing college dependency on the federal government and thereby weakening educational institutions and making them more expensive and less efficient. Federal subsidy of college expenses is also encouraging irresponsible consumer practices and promoting unethical conduct and a decline in the value we place on education. We are, in short, paying less for education today, but we are getting less from it as well.[27]

The Reagan administration scaled back financial aid, eliminating in 1981 the MISAA program and changing PLUS to the Auxiliary Loan to Assist Students (ALAS) program for graduate and professional students,[28] with some parental borrowing apparently continuing.[29] The 1986 HEA Reauthorization changed the ALAS program to SLS (Supplemental Loans for graduate and independent Students), and brought back the PLUS program for parents.

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[24] The school could be placed into a status known as "limitation, suspension or termination" if more than 60 percent of students were using federal loans, the school had more than a ten percent default rate on the loans, or had an in-term withdrawal rate of more than 20 percent. "Chapter I—Office of Education, Department of Health, Education, and Welfare; Part 177—Federal, State and Private Programs of Low-Interest Loans to Students in Institutions," *Federal Register* 40, no. 32 (February 20, 1975): 7596, https://www.govinfo.gov/content/pkg/FR-1975-02-20/pdf/FR-1975-02-20.pdf.

[25] The proposals to expand student aid, which came from the Carter Administration, were responses to the congressional tax committees' interest in enacting tuition tax credits. See Jim Stedman, "Federal Student Assistance: Legislative History, 95th Congress 2nd Session. Report No. 79-6 EPW," Congressional Research Service, https://eric.ed.gov/?q=Loan&ff1=lawMiddle+Income+Student+Assistance+Act&id=ED167057.

[26] September 2022 interview with Thomas Butts, who served as deputy assistant secretary for student aid in the Carter administration.

[27] Alston Chase, "Financing a College Education," *The Atlantic,* April 1980, https://www.theatlantic.com/magazine/archive/1980/04/financing-a-college-education/667659/.

[28] "Timeline: The Growth of Federal Loans," The Lumina Foundation, https://www.luminafoundation.org/history-of-federal-student-aid/chapter-one/#.

[29] It appears that some parent borrowing continued to be authorized. "Summary, Omnibus Budget Reconciliation Act of 1981," https://www.congress.gov/bill/97th-congress/house-bill/3982.

"The Bennett Hypothesis." In 1987, President Reagan's new secretary of education, William J. Bennett, took aim at higher education, accusing colleges and universities of raising tuition excessively because they knew the federal government would provide the grants and loans to cover the costs.[30] He did not propose any specific tuition limitation, though. (The Reagan administration proposed reducing federal loan subsidies by establishing an income-contingent loan program). "It is simply not fair to ask taxpayers, many of whom do not go to college, to pay more than their fair share of the tuition burden." High student loan default rates, particularly at for-profit institutions, caused Bennett's focus to shift to criticizing that sector, and advocating cutting off aid to institutions with high default rates.[31]

1992 HEA Reauthorization. The 1992 amendments included at least three provisions aimed at tuition prices.[32] The first was an extension of the price-check concept in the GI Bill—the 85 percent cap—to Title IV aid for proprietary schools (this is now the "90–10 rule"). The translation was sloppy, though, capping revenue rather than students, and applying the rule schoolwide rather than by program. As a result, the reform's utility as a price-check mechanism was weakened.[33] A second provision also targeted excessive reliance on federal aid, triggering a state review of any institution (in any sector) where two-thirds of its students were using Title IV aid or two-thirds of the school's expenditures came from Title IV. The state review provisions were repealed before they were implemented.[34]

A third provision required federally recognized accrediting agencies to assess the appropriateness of tuition prices.[35] This provision was repealed in 1998 after the Federal Trade Commission, in response to a request for an advisory opinion, said that the provision could run afoul of antitrust laws.[36]

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[30] See his op-ed, "Our Greedy Colleges," *New York Times*, February 18, 1987, https://timesmachine.nytimes.com/timesmachine/1987/02/18/623887.html?pageNumber=31.

[31] David Whitman, "When George H.W. Bush 'Cracked Down' on Abuses by For-Profit Colleges," The Century Foundation, March 9, 2017, https://tcf.org/content/report/president-george-h-w-bush-cracked-abuses-profit-colleges/.

[32] "Higher Education Amendments of 1992," PL 102–325, July 23, 1992, 106 Stat 448, https://www.congress.gov/bill/102nd-congress/senate-bill/1150.

[33] Prior to recent reforms that exclude GI Bill funds from the 15 percent, some argued that the design actually encouraged institutions to increase tuition above aid availability in order to meet the 15 percent non-Title-IV revenue requirement. According to CRS, opponents of the 90/10 rule say colleges "adjust their prices upward to remain below the 90% threshold and ensure they do not fail the rule's requirements." Alexandra Hegji, "The 90/10 Rule Under HEA Title IV: Background and Issues," Congressional Research Service, April 26, 2021, https://www.everycrsreport.com/reports/R46773.html.

[34] Therese Rainwater, "The Rise and Fall of SPRE: A Look At Failed Efforts to Regulate Postsecondary Education in the 1990s," *American Academic* 2 (March 2006), 110, https://co.aft.org/files/article_assets/462D6042-CAA9-E7BB-509EA8C793E87C8D.pdf.

[35] The law added, to the list of required areas for standards, "assess the institution's . . . program length and tuition and fees in relation to the subject matters taught and the objectives of the degrees or credentials offered."

[36] Since accrediting agencies are associations of colleges, the colleges would potentially be agreeing on prices. 119 F.T.C. 977, *Accrediting Commission on Career Schools and Colleges of Technology, P944015*, January 19, 1995, https://www.ftc.gov/system/files/documents/advisory_opinions/advisory-opinion-concluding-proposal-adopt-enfo

1998 HEA Reauthorization. In 1997, the Republican Congress established the National Commission on the Cost of Higher Education.[37] The commission's proceedings involved dueling studies on the question of whether federal aid contributed to price increases. Ultimately, the commission called for further study, while expressing "unanimous[] concern about sharp increases in student borrowing," adding:

> What is unclear is whether these increases have occurred because (1) higher loan limits and the new "un-subsidized" program permit more borrowing; (2) more families are choosing to finance college expenses through loans rather than from savings or current income; or (3) the price of attending higher education has increased. The Commission's judgment is that all three factors are probably involved.

The commission's solutions included encouraging colleges and philanthropy to make cost control and "efficiency" a higher priority, and developing better consumer information about costs and prices and to improve accountability. The commission determined that tuition price controls will not work and would be destructive of academic quality in higher education. The report included some alternatives to price controls.

Congress took a consumer-information approach in reauthorizing the HEA. The legislation required the Department of Education to collect data on tuition and cost of attendance, and to publicize the information in a form that "allows parents and students to make informed decisions based on the costs for typical full-time undergraduate students."[38]

Capping Tuition Prices. In 2003, the chairs of the relevant House committee and subcommittee, Representative Boehner and Representative McKeon, issued a report declaring a college cost "crisis," citing rising tuition and public concerns about wasteful spending by colleges.[39] Representative McKeon floated draft legislation that would have cut off some aid to colleges

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rce-certain-accrediting-standards-tuition-fees-would/letter_to_accrediting_commission_on_career_schools_and_colleges_of_technology_-_decisions_volume_119.pdf.

[37] James Harvey et al., "Straight Talk about College Costs and Prices. Report of The National Commission on the Cost of Higher Education," 1998, https://files.eric.ed.gov/fulltext/ED416762.pdf.

[38] 1998 HEA Reauthorization bill, as enacted, https://www.congress.gov/bill/105th-congress/house-bill/6. The reauthorization also directed NCES to undertake a study of changes in tuition over time, and the factors behind the changes (with a particular interest in the impact of institutional financial aid). NCES published a two-volume report in December 2001: "Study of College Costs and Prices, 1988–9 to 1997–8," National Center for Education Statistics, U.S. Department of Education, https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2002157.

[39] A Congressional Analysis of College Costs and Implications for America's Higher Education System by: Rep. John A. Boehner (R-OH), Chairman, U.S. House Committee on Education and the Workforce Rep. Howard P. "Buck" McKeon (R-CA), Chairman, U.S. House Subcommittee on 21st Century Competitiveness, https://eric.ed.gov/?id=ED479752.

where tuition had increased steeply several years in a row.[40] At a House hearing, college leaders and Democratic lawmakers stated that the price-control proposal was too crude and would harm educational quality.[41] Representative McKeon dropped his proposal in 2004, declaring that his efforts had successfully prompted institutions to adopt voluntary measures to curb tuition increases.[42]

The Spellings Commission. In 2005, Secretary of Education Margaret Spellings established the National Commission on the Future of Higher Education to develop a "comprehensive national strategy for postsecondary education." Its chairman, Texas businessman Charles Miller, was convinced that spending in higher education was wasteful and that greater accountability was needed.[43] Miller's advocacy of a national test for higher education spurred intense opposition.

The commission's 2006 report called for institutions to be more transparent about costs, and should measure student achievement on a value-added basis.[44] Ultimately, Secretary Spellings backed away from the idea of some federal measurement of educational outcomes, satisfied that accrediting agencies agreed to do more to monitor so-called "student learning outcomes."[45]

Grad PLUS, Income-Based Repayment (IBR), and Public Service Loan Forgiveness (PSLF) 2005–10. Provisions in three budget reconciliation bills had major effects on the dynamics of the federal loan programs, potentially inviting higher tuition prices particularly in graduate programs. A 2005 law made graduate students eligible for Grad PLUS loans capped at whatever tuition and other expenses a school has set. A 2007 law created Public Service Loan Forgiveness after ten years of payments in certain programs, and an income-based repayment program with payments capped at 15 percent of income with any remainder forgiven after twenty-five years. (Grad PLUS was excluded from IBR forgiveness, but the 2008 implementing regulations granted forgiveness

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[40] Stephen Burd, "Rep. McKeon's Plan to Penalize Colleges for Steep Tuition Increases Is Criticized in Hearing," *Chronicle of Higher Education,* September 24, 2003, https://www.chronicle.com/article/rep-mckeons-plan-to-penalize-colleges-for-steep-tuition-increases-is-criticized-in-house-hearing/.

[41] "The College Cost Crisis Report: Are Institutions Accountable Enough to Students and Parents," Hearing before the Subcommittee on 21st Century Competitiveness of the Committee on Education and the Workforce, U.S. House of Representatives, September 23, 2003, https://www.govinfo.gov/content/pkg/CHRG-108hhrg90138/html/CHRG-108hhrg90138.htm.

[42] Greg Winter, "House GOP to Drop Idea of Penalty for Steep Rises in Tuition," *The New York Times*, March 3, 2004, https://www.nytimes.com/2004/03/03/us/house-gop-to-drop-idea-of-penalty-for-steep-rises-in-tuition.html.

[43] R. M. Zemsky, "The Rise and Fall of the Spellings Commission," *Chronicle of Higher Education* 53, no. 21 (January 2007): B6, retrieved from https://repository.upenn.edu/gse_pubs/47.

[44] "A Test of Leadership: Charting the Future of U.S. Higher Education," U.S. Department of Education, September 2006, https://files.eric.ed.gov/fulltext/ED493504.pdf

[45] Unfortunately, those measurement efforts turned out to be wasteful, at least as implemented. See Molly Worthen, "The Misguided Drive to Measure 'Learning Outcomes,'" *New York Times*, February 23, 2018, https://www.nytimes.com/2018/02/23/opinion/sunday/colleges-measure-learning-outcomes.html.

to Grad PLUS loans.) Then the 2010 health care legislation reduced the IBR maximum to 10 percent and twenty years.[46]

Higher Education Opportunity Act. The 2008 reauthorization of the HEA included several provisions aimed at providing more information to consumers about tuition levels and changes in tuition.[47] They included:

- Additional data items to be included on College Navigator, including net price by family income levels, and the average changes in tuition for the most recent three years.
- Requiring each institution to have:
  - A "net price calculator" that would provide prospective students with individualized estimates.
  - A "multi-year tuition calculator" that would estimate costs for the full duration of the intended degree.
- The establishment of a "watch list" of institutions with large increases in tuition,[48] and authorization for a Pell Grant bonus for students at institutions with low tuition or lower increases in tuition.[49]

The tuition watch lists, first published by the Department of Education in 2011, were found in a 2020 study to have had no impact on college affordability.[50] (The bonus payments were never funded by Congress.)

Gainful Employment Debt–Earnings Ratios. In 2009 the Department of Education proposed to make federal aid unavailable to nearly all for-profit college programs, and nondegree public and nonprofit programs, if past graduates had high debt burdens relative to their post-college earnings. The Gainful Employment (GE) rule, adopted in 2011 and revised in 2014, was aimed at encouraging colleges to reduce tuition and/or improve quality and advising. The rule was rescinded by the next administration, in 2019.[51] Among other explanations, Secretary of Education DeVos said her goal was, instead making low-value programs ineligible for aid, to "end information asymmetry between institutions

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[46] Robert Shireman, "Learn Now, Pay Later: A History of Income-Contingent Student Loans in the United States," *The Annals of the American Academy of Political and Social Science* 671, no. 1 (2017): 184–201, https://doi.org/10.1177/0002716217701673.
[47] Higher Education Opportunity Act, 110th Congress, Public Law 315, https://www.govinfo.gov/content/pkg/PLAW-110publ315/html/PLAW-110publ315.htm.
[48] "College Affordability and Transparency Lists," NAICU, https://www.naicu.edu/research-resources/federal-tool-guide/college-affordability-and-transparency-lists.
[49] "Incentives and rewards for low tuition," 2020, 20 U.S. Code § 1161m.
[50] D. J. Baker, "Name and Shame: An Effective Strategy for College Tuition Accountability?" *Educational Evaluation and Policy Analysis* 42, no. 3 (Juy 2020): 393–416, https://doi.org/10.3102/0162373720937672.
[51] Robert Shireman, "Profits Put Students at Risk. A Gainful Employment Rule Will Protect Them," The Century Foundation, May 15, 2023, https://tcf.org/content/report/profits-put-students-at-risk-a-gainful-employment-rule-will-protect-them/#c3

and students" by providing them with data that enable them "to evaluate program value and make informed enrollment and investment decisions."[52] The Biden administration has proposed a revised GE rule that includes additional information about programs at all institutions.[53]

College Scorecard. In 2013, President Obama announced a plan to "develop a new ratings system to help students compare the value offered by colleges and encourage colleges to improve" based on cost/affordability data and other factors.[54] The ratings plan was seen as an attempt to "rein in college costs."[55] Opposition from colleges led the administration to drop the idea of ratings in favor of a new web site that would provide data on student debts and earnings by college and by program.[56] The data available on the College Scorecard continued to be enhanced during the Trump and now Biden administrations.

Other recent proposals:

- **Risk Sharing.** In 2015, Senator Alexander, as chair of the Senate Committee on Health, Education, Labor, and Pensions, floated the idea of reducing college costs by requiring "risk-sharing" by schools, arguing that "If colleges and universities have this incentive, it may not only help students make wiser decisions about borrowing, it could help reduce the cost of college—thereby reducing debt."[57] (Senator Alexander also raised concerns about regulatory costs as a contributor to high tuition).[58] While various risk-sharing

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[52] "Program Integrity: Gainful Employment," *Federal Register* 84, no. 126 (July 1, 2019), /https://www.federalregister.gov/documents/2019/07/01/2019-13703/program-integrity-gainful-employment.

[53] Press release, U.S. Department of Education, May 17, 2023, https://www.ed.gov/news/press-releases/department-education-releases-proposed-rules-accountability-certificate-and-profit-programs-and-transparency-unaffordable-student-debt.

[54] Dylan Matthews, "Everything you need to know about Obama's higher ed plan," *Washington Post,* August 22, 2013, https://www.washingtonpost.com/news/wonk/wp/2013/08/22/everything-you-need-to-know-about-obamas-higher-ed-plan/.

[55] Mike Konczal, "Can Obama Really Rein In College Costs?" *Salon*, September 6, 2013. https://www.salon.com/2013/09/06/can_obama_really_reign_in_college_costs/.

[56] "College Scorecard," U.S. Department of Education, https://collegescorecard.ed.gov/.

[57] Senate HELP announcement, "Alexander: If Colleges Share in the Risk of Student Loan Defaults, They Can Help Reduce Overborrowing—and the Cost of College," U.S. Senate Committe on Health, Education, Labor, and Pensions, May 20, 2015, https://www.help.senate.gov/chair/newsroom/press/alexander-if-colleges-share-in-the-risk-of-student-loan-defaults-they-can-help-reduce-overborrowingand-the-cost-of-college.

[58] Kellie Woodhouse, "Does Compliance Cost $15,000 Per Student?" *Inside Higher Ed*, August 2, 2015, https://www.insidehighered.com/news/2015/08/03/vanderbilt-university-weighs-its-controversial-compliance-costs-report#.

proposals were developed,[59] no legislative changes have so far resulted from the discussions.

Education spending compared to tuition. Starting in 2017, various Democratic proposals in Congress have included restrictions on institutions that report spending a low proportion of their tuition revenue on educating students. Some proposals proposed restrictions on the use of federal funds for advertising and marketing.[60]

[59] See for example this plan from Adam Looney and Tara Watson of the Brookings Institution, "A risk-sharing proposal to hold higher ed institutions accountable to their students," February 22, 2018, https://www.brookings.edu/research/a-risk-sharing-proposal-to-hold-higher-ed-institutions-accountable-to-their-students/

[60] For example, see the proposed Jobs to Compete Act, H.R. 1655 (2023).

Appendix B

Recent Legislative Proposals to Modify the Graduate Loan Programs

By Jasmine Jett

Several legislative proposals from House and Senate Education Committee chairs have emerged in response to increasing concerns about the rising cost of student loans. Representative Bobby Scott (D–VA) released two bills as chair: the Aim Higher Act and College Affordability Act in 2018 and again in 2019, respectively. The two bills share many elements, like the expansion of the PSLF program, the elimination of origination fees, and the consolidation of all income-driven repayment plans into one new plan. However, the College Affordability Act also proposes shortening the maximum repayment period under a new income-based repayment plan from twenty-five to twenty years and allowing private student loan borrowers to refinance their loans into federal student loans at lower interest rates where available. Representative Virginia Foxx (R–NC) also released two bills, the Prosper Act in 2017 and more recently the REAL Reforms Act in 2022. The bills are similar in that PSLF, origination fees, and graduate student eligibility for Federal Work Study would all be eliminated and a new Federal ONE Loan Program with an annual limit of $28,500 and an aggregate loan limit of $150,000 would be created for undergraduates, graduates, and parents. The bills also give institutions the authority to limit loan amounts and require institutions to repay any outstanding loan amounts when a student withdraws. The COLLEGE Act, introduced by Senator Rick Scott (R–FL) in 2022, also focuses on institutional accountability by making institutions responsible for 1 percent of student loan balances that are in default within the first three fiscal years after borrowers' loans enter repayment, with an increasing responsibility as the years progress. Most recently, Ranking Member Cassidy (R–LA) and Senator Tuberville (R–LA) introduced the Graduate Opportunity and Affordable Loans (GOAL) Act as part of a recent set of bills aimed at lowering education costs and student debt. The GOAL act would end Grad PLUS, allow institutions to set loan limits, and lower aggregate Sttafford limits for graduate students. All combined, the bills represent a widespread recognition of a larger problem with the federal graduate student loan programs as they are currently constructed, but a divergence in the way policymakers and others feel it should be addressed.

Appendix C

Additional Earnings Information, Disaggregated by Profession

Compiled by J. Oliver Schak

When looking more closely at earnings, there is significant divergence across different graduate credential levels and areas of study; Table C1 shows how different sectors can often result in tens of thousands of dollars earnings difference.

Table C1: Earnings by graduate degree level and program type

Credential Level	Field of Study (two-digit CIP)	Public	Private, Nonprofit	Private, For-profit	Total Average
First-degree professional	Health professions	$116,456	$103,118	$79,033	$111,554
	Legal professions	$80,538	$84,901	$67,566	$83,319
	Education	$73,642	$78,794	$50,108	$73,642
	All other	$99,139	$73,664	$66,401	$94,734
	Total	$100,150	$90,669	$67,940	$96,359
Ph.D.	Health professions	$84,004	$88,002	$100,453	$86,829
	Legal professions	$82,989	$78,229	Insufficient n size	$79,154
	Education	$84,295	$92,519	$79,050	$85,818
	Engineering	$116,385	$136,727	Insufficient n size	$125,061
	All other	$77,815	$85,740	$81,314	$81,645
	Total	$83,124	$87,787	$83,717	$84,945
Master's	Health professions	$72,141	$83,607	$59,283	$75,998
	Legal professions	$71,603	$84,372	$59,402	$75,201
	Education	$54,415	$58,604	$53,301	$55,759
	Engineering	$99,730	$105,705	Insufficient n size	$100,897

Table C1: Earnings by graduate degree level and program type

Credential Level	Field of Study (two-digit CIP)	Public	Private, Nonprofit	Private, For-profit	Total Average
	All other	$65,559	$69,835	$58,867	$66,721
	Total	$62,450	$67,957	$57,939	$64,342
Total Average		$67,182	$71,943	$62,180	$69,168

Source: Authors' calculations from College Scorecard data.

Appendix D

Academic Literature Review

By Tiara Moultrie

The existing literature on borrowing among graduate and professional students offers important insight into the debt burdens they face, repayment options they employ, and the role sector and academic program play in these outcomes. More recently several scholars have turned their attention to Grad PLUS loans and the impact their creation has had on post baccalaureate education. Since 2021, a large number of news articles have also appeared exploring how students go into debt pursuing master's degrees at elite institutions. Degree type and program level play a key role in the amount of debt accumulated by advanced degree students and shapes their earning potential and how they perceive their debt.

In addition to concerns about how much graduate debt students accrue, the literature explores the disparate impact of this debt on different groups. Since at least 2010, several professional associations have also begun exploring how debt and debt burden affects diversity and recruitment within various fields and sectors.

This annotated bibliography is intended to serve as a brief introduction to and overview of the scholarly articles on debt and graduate education in the United States. The bibliography is divided into sections for academic articles, think tank policy papers, and other articles of interest.

Academic Articles

S. Ryan Greysen, Candice Chen, and Fitzhugh Mullan, "A History of Medical Student Debt: Observations and Implications for the Future of Medical Education" ***Academic Medicine*** **86, no. 7 (2011): 840–45, https://ucsfhealthhospitalmedicine.ucsf.edu/sites/ucsfhealthhospitalmedicine.ucsf.edu/files/downloads/history_of_med_student_debt_greysen.pdf.**

A more nationally standardized, university-based model to medical school education resulted in the rise of the professional student, which has, in turn, affected student debt in the field. Whereas previously students could work and attend school at the same time, the proportion of students who do so has decreased dramatically. Increased duties and research responsibilities have made it more difficult for students to "moonlight" to pay down costs while enrolled in school. Though the proportion of students graduating medical school with debt has remained fairly consistent since 1985, the amount students are borrowing has increased. The authors point out that many students would exceed borrowing caps, as nearly 35 percent of medical student borrowers owed over $200,000, and wonder whether that may result in lenders leaving the student loan business. Variability in financial aid awards at schools and the lack of standardization in nontuition costs can result in dramatically different aid awards (ranging from $16,000 to more than $50,000) for students, even those attending institutions in the same city or state. Proposed solutions to address the outsized borrowing of medical students include reducing time to completion and reducing overall costs by increasing the role of nonacademic ambulatory clinical and nonphysician clinical educators. Rising debt among medical school students has real-world consequences, including unsustainable financing mechanisms for students and barriers to diversifying the workforce.

Robert A. Dugger et al., "The Color of Debt: Racial Disparities in Anticipated Medical Student Debt in the United States" *PLOS ONE* 8, no. 9 (2013:) 1–7, https://journals.plos.org/plosone/article/file?id=10.1371/journal.pone.0074693&type=printable.

In the twelve years from 1998 to 2010, many medical schools doubled their tuition rates. During the same period, median debt and cost of attendance outpaced the rate of inflation. While the mean medical student debt rose, schools also became more diverse, with 40 percent of enrolled students in U.S. medical schools identifying as underrepresented students. Using a survey instrument, the authors sought data on the financial burden of medical school on groups with limited financial resources. The findings suggest that the burden of medical student debt is significant and minority students carry a disproportionate amount of that debt. While the majority of medical students (62.1 percent) anticipate education debt greater than $150,000 at graduation, Black respondents had the highest likelihood of carrying debt totaling more than $150,000. The potential for huge debt balances may also have implications on the diversity of the physician workforce. While race/ethnicity was strongly correlated with debt burden, Hispanic students were an exception to the general relationship. Hispanic medical students (similarly to Asian medical students) are more likely to be from immigrant families. The authors theorize whether children of immigrants in particular are less likely to utilize the U.S. federal student loan system.

Andrew Belasco, Michael Trivette and Karen Webber, "Advanced Degrees of Debt: Analyzing the Patterns and Determinants of Graduate Student Borrowing," *Review of Higher Education* 37, no. 4 (2014): 469–97, https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.724.3293&rep=rep1&type=pdf.

This study seeks to understand what drives graduate borrowing by identifying and analyzing the patterns and predictors of borrowing. The authors find that age, race, marriage status, and full-time enrollment status all influence graduate debt. Married students and those attending graduate school part-time incur less debt than their unmarried, full-time student counterparts. Those with dependents are slightly more likely to borrow and have increased borrowing when compared to others. Female students with dependents carry a larger debt burden, as they generally earn less and therefore may have fewer savings to apply to their repayments. The model used by the authors also finds that, on average, female students borrowed 25 percent more for their graduate education than male students. They likewise find there is a significant positive relationship between undergraduate borrowing and borrowing for graduate education. Increasing tuition rates and fees also show a strong influence on graduate borrowing, including an increased probability of non-borrowers borrowing. Students pursuing JDs, MDs, and professional doctorates incurred more debt than those in master's or PhD programs and were 60 percent more likely to borrow if they hadn't previously (though there are significant differences in debt between those in STEM and non-STEM fields). Rising costs and decreased public support have created economic conditions that compelled higher education institutions to seek new revenue-generating programs and expand current offerings. The research findings support evidence of the rising demand for graduate education and the willingness of students to borrow loans to self-finance this advanced education. Unfortunately, the counseling students receive about cost and debt reduction options is insufficient, and many prospective graduate students lack knowledge about the true costs and future career outcomes of graduate education. The authors posit that improving financial and career-related awareness, as well as general knowledge of financial aid, loan forgiveness, and debt reduction, may enable more graduate students to successfully navigate the higher education system. The social consequences of increasingly high debt burdens include decisions not to pursue careers in public interest.

Jennifer M. Doran et al., "Graduate Debt in Psychology: A Quantitative Analysis," *Training and Education in Professional Psychology* 10, no. 1 (2016): 3–13, https://pages.charlotte.edu/richard-mcanulty/wp-content/uploads/sites/268/2013/01/Doran_Graduate-Debt-in-Psychology_TEPP-2016.pdf.

The author's quantitative analysis uses survey responses from the American Psychological Association's members, including current graduate students and early career professionals, to understand their debt burden, financial literacy, and the impact of debt on their lives. Responses indicate that students use a number of sources to finance their education and living expenses, with most relying on loans. The authors also point to the rising cost of clinical and counseling psychology graduate degree programs as a social justice issue, as student debt and the fear of incurring substantial debt has the potential to hinder diversity in the field. There are also discrepancies in the amount of institutional support offered to PhD and PsyD students/degree completers. PsyD respondents indicated they had less funding available and therefore turned to other sources, including loans, to finance their education. Despite a perceived difference in debt burden between these two groups, starting and current salaries for those employed showed no substantial difference. Despite the impact of debt and financial stress on their everyday lives, a majority of current students and early career professionals indicated they would still choose a psychology career. The authors argue that large debt burdens, coupled with salary stagnation, may result in PhD and PsyD students using a large share of their salaries for debt repayment.

Robert Kelchen, "Does the Bennett Hypothesis Hold in Professional Education? An Empirical Analysis," January 2018, https://www.airweb.org/docs/default-source/default-document-library/kelchenscholarlypaper2.pdf?sfvrsn=f81f2f72_0.

The Bennett Hypothesis assumes colleges are attempting to take advantage of increases in federal aid availability to garner additional institutional resources by increasing tuition. In general, limits on in-state tuition at public institutions for undergraduate students meant institutions have come to rely on revenue from graduate students. Using data on business and medical programs, Kelchen seeks to understand whether the Bennett Hypothesis rings true in graduate education. A combination of high sticker prices and limited grant aid has resulted in many graduate and professional students taking on large amounts of debt to finance their education. Before 2006, tuition and fees for graduate education hovered around the maximum annual loan limit in the federal program. When Grad PLUS loans were introduced, graduate students could enhance their ability to borrow because federal loan limits were increased to cover the full cost of attendance including living expenses. Grad PLUS loans require the borrower not to have adverse credit but generally offer more favorable terms than the private market which focuses on credit worthiness and thus the growth in Grad PLUS borrowing generally outstripped the decline in private loans.

To investigate how graduate school fees responded to the introduction of PLUS Loans, Kelchen looked at both tuition and fee increases and living allowance estimates. The author doesn't find consistent evidence that public and private, nonprofit business, or medical schools systematically increased tuition and fees or living allowances following the introduction of Grad PLUS loans, though he posits two alternate casualties for this: it would have been a poor decision to increase tuition immediately following an increase in borrowing limits (especially in a post-Bennet world) and because not all institutions would raise tuition at the same time, the first institution to do so may have lost a share of its prospective students to equally competitive, less costly programs. While the article does not directly address diversity and access, Kelchen says in the case of medical students who carry the highest borrowing rates, Grad PLUS may have increased access for those who would have been denied private loans. Kelchen also highlights a then growing concern about how uncapped graduate borrowing under PLUS combined with income-driven repayment plans and Public Service Loan Forgiveness (PSLF) could make the program less profitable in the future.

"Trends in Student Loan Debt for Graduate School Completers," National Center for Education Statistics, May 2018, https://nces.ed.gov/programs/coe/pdf/coe_tub.pdf.

Using National Postsecondary Student Aid Study (NPSAS) data, the National Center for Education Statistics (NCES) seeks to understand the average debt burden of a graduate student entering the workforce. From 1999 to 2016, loan balances grew for all graduate students across degree types. In 2015–16, a higher percentage of people with professional doctorates had student loans than people who completed master's degrees or a research doctorate. Of all graduate students with undergraduate loans, those completing professional doctorates had the highest average loan balance, totaling on average $186,000. Among those who completed master's degrees, the percentage with loans was higher among those completing a MEd than an MBA. While those with MBAs were less likely to have loans, their loan balances are higher than for those completing a MEd. The average loan balance for MBA completers was 40 percent higher in 2015–16 than 1999–2000. Those completing doctorates in medicine and health sciences professional practice doctorates are the most likely to hold student loans. Among students who completed a master's degree, research doctorate, or post-baccalaureate certificate program, the percentage of people with student loans was higher for those who attended for-profit institutions than private, nonprofit, or public institutions. Among master's degree completers with student loans, the average balance was higher among those who attended private, for-profit institutions.

Rachel Burns and Karen L. Webber, "Achieving the Promise of Education Opportunity: Graduate Student Debt for STEM vs. Non-STEM Students, 2012," *Journal of Student Financial Aid* 48, no. 3 (2019): 20–39, https://ir.library.louisville.edu/cgi/viewcontent.cgi?article=1659&context=jsfa.

Using NPSAS 2012 data, the study examines student debt for STEM and non-STEM students. The authors look to fill a gap in the relevant literature by addressing borrowing by discipline and degree type, which is intended to offer insight about how cost of attendance and availability of funding impacts student persistence and diversity in various fields. The study also finds racialized differences in STEM versus non-STEM enrollment. Just one quarter of Black and Latino master's and doctoral students are enrolled in STEM programs. Among Asian students, however, the number is much higher, with 48 percent of Asian master's and doctoral students studying STEM disciplines.

Doctoral students in STEM programs borrow significantly less for graduate education, and hold significantly less in cumulative debt than students in master's degree programs. Doctoral students in non-STEM fields incur on average $20,000 more in debt than their peers in STEM fields. Master's and doctoral students who held a graduate assistantship incurred significantly less debt.

Doctoral students receive as much as ten times more in graduate assistantships than master's students, and significant differences exist for STEM and non-STEM students, with those in STEM receiving assistantships twice as large as their counterparts.

James Pyne and Eric Grodsky, "Inequality and Opportunity a Perfect Storm of Graduate Debt," *Sociology of Education* 23, no. 1 (2020), https://wcer.wisc.edu/docs/working-papers/Working_Paper_No_2018_9V2.pdf.

The authors argue that the high cost of graduate education and the related debt that low-income, low-wealth borrowers need to take on to enroll contribute to social stratification by deterring people concerned about personal finances from pursuing graduate degrees. Research suggests the least advantaged and most underserved graduate students (first-generation college students, students of color, and women) carry a disproportionate debt burden. Enrollment and aggregate debt increases are most pronounced among those borrowing to fund a master's degree. For example, by 2016, master's degree students carried 64 percent of education debt among graduate students.

Aggregate borrowing has increased across the board in the past twenty years. All graduate students borrowed 75 percent more in real dollars in 2016 than they did in 1996. During the same period, graduate education became increasingly diverse. While real expected earnings are higher for white borrowers with advanced degrees, Black and Latino borrowers may enjoy better return on investment on advanced degrees than bachelor's degrees, explaining why they may be willing to incur substantial debt for graduate education. Institutional explanations for the increased debt burdens among graduate students follow two assertions: first, that public higher education administrators want to maximize revenue and may turn to increasing enrollment in revenue-generating courses or create new revenue-generating courses; second, that federal and local governments don't invest in graduate education, since it is a private, rather than a public, good, and is therefore not subsidized in the same way. The individual explanation for increased graduate borrowing is more simply that student borrowing for advanced degrees is a good investment because the return on graduate and professional education is, on average, particularly high. Unfortunately, the degree of debt that Black borrowers amass to gain an advanced degree often limits their economic and social mobility.

Karen L. Webber and Rachel Anne Burns, "Increases in Graduate Student Debt in the US: 2000 to 2016," *Research in Higher Education* 62 (2021): 709–32.

Using NPSAS data from 2000 and 2016, as well as 2016 IPEDS data, the authors chart changes in how students finance their post-secondary education. Federal and private loans for graduate education reached a record high $40 billion in 2017. There are several reasons for the increase in borrowing, ranging from rising tuition to decreases in the number of teaching and research assistant positions available. A higher percentage of students borrowed for graduate education at a higher mean in the year 2016 than 2000. During this same period, the share of state appropriations for total institutional expenditures decreased. Being Black or Latino was more significantly associated with borrowing in 2016 than 2000. Black students borrow $15,227 more than their white peers and Latino students borrow $4,950 more than their white counterparts. Institutional reliance on tuition is more significantly associated with borrowing in 2016 than 2000. The authors calculate tuition reliance by measuring how much the institution relies on tuition and fee revenue for operating expenditures.

While advanced degree completion can correlate to better career prospects and higher salary, which, in turn, increase the likelihood of repayment without default, this is only true when graduates can find relevant employment and are not inclined to take jobs with lower salaries or for which their credential is not necessary. The authors suggest areas of future research that explore practical decision-making in graduate education, borrowing, and repayment options, including PSLF.

Danielle N. Bostick et al., "Exploring Black Graduate Women's Perceptions of Student Loan Debt," *Journal of Diversity in Higher Education* 15, no. 1 (2022): 73–85.

In 2016, 80.6 percent of Black doctoral recipients, 91.6 percent of Black professional degree recipients, and 81 percent of Black master's degree recipients reported borrowing for their education. While Black graduate degree recipients reported higher borrowing than their counterparts, the fact that women made up a majority of Black graduate enrollment in 2016 speaks to their unique challenges. Black graduate students receive less institutional aid in the form of assistantships than their white and Latino counterparts. Only 25.4 percent of Black doctoral students received institutional and grant aid, compared to 45 percent of all doctoral students across racial groups. The lack of institutional support leads to increased borrowing, and while graduate education does offer financial returns, the earning potential may be impeded by the fact that Black graduate degree recipients are also more likely to have undergraduate debt. Black women are more likely to finance their education through a number of sources, including part-time or full-time employment, credit cards, and student loans. While many struggle to pay off their loans in full, Black women report the lowest student loan paid off rate (for all educational debt held) in three years when compared to other women. They also report the highest level of stress about loan repayment.

Through interviews and qualitative analysis, the authors found several key themes. Around funding, the authors found that participants reported the need to secure funding, whether through a scholarship, fellowship, or assistantship, in order to enroll in a PhD program. Respondents who had terminal master's degrees reported their concerns about the borrowing for their first degree and feeling as though they received inadequate guidance. Respondents also reported being totally financially independent and the inability to rely on family for support. Despite the difficulty, participants viewed the student loans as an investment in themselves that they felt comfortable making, and they anticipated some debt relief through PSLF (though some said they understood there were no guarantees and a new or different administration could get rid of the program). While Black women found student loans to be necessary in helping them obtain a graduate degree, they also represent a tremendous weight.

Louisa W. Holaday et al., "Differences in Debt Among Postgraduate Medical Residents by Self-Designated Race And Ethnicity, 2014–19," *Health Affairs* 42, no. 1 (2023): 63–73, https://doi.org/10.1377/hlthaff.2022.00446.

The authors seek to explore the association between debt and the race and ethnicity of medical resident trainees. Debt burden is evaluated by looking at loans for premedical education, loans for medical education, and non-educational consumer debt. Over 80 percent of survey respondents had some debt with loans for medical education being the most commonly held debt. Black, Hispanic, and multiracial, Hispanic trainees consistently had significantly higher odds of having every type of debt compared with White and Asian trainees. Black trainees were the most likely to have debt and the majority held loans for premedical and medical education as well as non-educational consumer debt. Likewise, they were least likely to be debt-free residents despite the total number of debt-free residences increasing over time. The authors found debt may undermine diversity and inclusion among medical trainees because those from underrepresented populations experience more financial stress than those who are not underrepresented in medicine. High rates of debt may also contribute to higher attrition among trainees and faculty members from underrepresented populations. Because the debt accrued during medical training perpetuates the racial wealth gaps in the United States, even among high income earners the author proposes ways to address disparities through scholarships and expanded loan forgiveness.

Jeffrey Denning and Lesley Turner, "The Effects of Higher Student Loan Limits on Access to High-Earnings Graduate Programs," May 2023
https://lesleyjturner.com/Denning_Turner_GradPLUS_PP_manuscript.pdf.

In this paper, Turner and Denning investigate whether the introduction of Grad PLUS increased access to high earning graduate degree programs for underrepresented minority students. High earnings programs are those with above median program offerings and students who enter high-earnings programs have annual earnings nearly 70 percent higher than those who enter low-earnings programs. High-earnings programs have smaller entering cohorts than lower-earnings programs and enroll fewer Black and Hispanic students. The authors find that the increased loan limits provided by Grad PLUS had no effect on the racial/ethnic composition of entering cohorts of students.

Sandra Black, Lesley Turner, and Jeffrey Denning, "PLUS or Minus? The Effect of Graduate Loans on Access, Attainment, and Prices," National Bureau of Economic Research, May 2023, https://www.nber.org/system/files/working_papers/w31291/w31291.pdf.

Before the introduction of Grad PLUS in 2006, most graduate students' federal borrowing was capped at $18,500, with those seeking professional degrees such as MDs able to borrow more. The authors compare programs where most students borrowed close to the $18,500 maximum federal limit before 2006 to programs where most students borrowed less. By increasing the amount that students were able to borrow, Grad PLUS should have also increased access for cash-strapped students who could not finance their education with the capped federal loan amount and were unable to qualify for loans in the private market. When looking at programs with more constrained students before the introduction of Grad PLUS, the authors find that borrowing and pricing increased with the estimated sticker price increasing dollar for dollar with increases in federal loans and net rising 64 cents on the dollar. Overall student borrowing increased after the creation of Grad PLUS.

The authors find the increase in federal loan limits did not increase access to graduate programs overall or for underrepresented students. They likewise find that income constrained students borrowed more when given access to unlimited borrowing under the Grad PLUS program though this had no effect on their educational attainment and likewise no meaningful increases in their human capital.

Think Tank Policy Papers

Jason Delisle, Owen Phillips, and Ross van der Linde, "The Graduate Student Debt Review: The State of Graduate Student Borrowing," New America, March 2014, https://static.newamerica.org/attachments/750-the-graduate-student-debt-review/GradStudentDebtReview-Delisle-Final.pdf.

The largest changes in student borrowing patterns from 2008 to 2012 occurred in graduate education. Debt levels for master's degree programs, in particular, saw considerable growth during the period. Master's of science made up the largest share of graduate degrees completed in 2012 and the typical borrower in these programs carries a combined $50,400 in student loans. Those in medicine/health science professional degree programs have the highest typical debt of graduates who borrow, at $161,772, and have a typical monthly payment of $1,365. Previous scholarship failed to separate undergraduate and graduate borrowing, creating difficulties in examining issues like cost and debt burden. The authors highlight several distinctions between undergraduate and graduate students, as well as the way we ascribe value and publicly finance the two. For example, students pursuing graduate and professional degrees are assumed to be more informed consumers because they've already attained bachelor's degrees.

Elizabeth Baylor, "The Unlikely Area in Which For-Profit Colleges Are Doing Just Fine," Center for American Progress, December 1, 2016, https://www.americanprogress.org/article/the-unlikely-area-in-which-for-profit-colleges-are-doing-just-fine/.

Even as the total sum of federal student aid dollars decreased among for-profit undergraduate students, graduate borrowing continues to increase. For-profit college enrollment peaked during the 2010–11 school year, when 4 million students attended schools in the sector. By 2014–15, enrollment fell 40 percent. During this same period, graduate enrollment fell just 6 percent in 2014–15 from its 2010 peak of 460,000 students. Unlike other sectors, graduate for-profit education enrollment is primarily composed of students of color. Black women in particular, are over-represented among graduate students at for-profit colleges. They accounted for just 8 percent of all graduate students in 2014, but made up 22 percent of for-profit graduate students. The for-profit sector is also unique in that the majority of graduate students, who tend to be over age 35, are enrolled exclusively online. The author notes that there is nothing inherently wrong with for-profit colleges maintaining high enrollment, but that little was known about the outcomes of these students who are largely underrepresented in higher education. In 2016, there was limited data collection about student graduation and retention rates.

Sandy Baum and Patricia Steele, "Who Goes to Graduate School and Who Succeeds?" Urban Institute, January 2017, https://www.urban.org/sites/default/files/publication/86981/who_goes_to_graduate_school_and_who_succeeds_0.pdf.

Participation in graduate programs has continued to rise and was particularly high during the Great Recession, when concerns about employment prompted many to forgo the labor market in favor of continued education. Over time the vast majority of graduate degrees awarded were master's degrees. Graduate degree holders generally have higher earnings in their late twenties and early thirties, with those holding doctorates and professional degrees reporting particularly high mean earnings compared to those with only a bachelor's degree. College graduates from middle-and-high income families are more likely to have enrolled in a graduate program within four years of completing their bachelor's degree. Likewise, students who complete their degrees at younger ages are more likely to continue onto graduate school. Surprisingly, 45 percent of Black students who completed their bachelor's degree in the 2007–08 academic year enrolled in graduate school by 2012, the largest of any racial/ethnic group. Despite this, Black students with bachelor's degrees in a position to pursue graduate education are a smaller share of their age group than other races. Race, ethnicity, gender, and economic status all play a role in differentiating students who enroll in master's degree programs versus doctoral and professional degree programs. Graduate students from high-income families and those who were age 22 or younger when they completed their bachelor's were more likely to enroll in professional degree programs. In addition to differences in the program students enroll in, there is great variation in the sector students enroll in, with nearly a quarter of Black bachelor's degree recipients from 2007–08 enrolling in master's degree programs at for-profit institutions. Among graduate programs, master's degree programs report lower completion rates than post-master's certificate programs, doctoral and professional degree programs. Completion rates are also lower among those who were independent (for financial aid purposes) in college, who also tend to be older.

Sandy Baum and Patricia Steele, "Graduate and Professional School Debt: How Much Students Borrow," Urban Institute and AccessLex Institute, 2018, https://www.urban.org/sites/default/files/publication/95626/graduate-and-professional-school-debt.pdf.

Over time, the rate of borrowing for graduate education has outpaced that of undergraduates. There are numerous causes for this rise in borrowing, including that the growth of grant aid was more significant for undergraduate students than graduate students. While most research doctoral degree students attending nonprofit and public institutions cover their tuition and other expenses with generous support from the institution itself, master's degree candidates across all sectors cover their expenses through earnings and student loans. In 2012–13 the federal government made advanced degree students eligible for subsidized loans, resulting in a rise in unsubsidized loans (with unsubsidized loans accounting for 75 percent of the graduate portfolio in 2015).

Degree type plays a key role in the amount of debt accumulated by advanced degree students. Those in professional degree programs are the most indebted with more than half of these students accumulating $100,000 or more in student loan debt. Additional disparities exist among certain demographic groups. For example, Black master's degree candidates were more likely to borrow than their counterparts. Black doctoral students are also more likely to be enrolled in fields (such as social/behavioral sciences and education) with less institutional aid. Additionally, Pell recipients were more likely to borrow to pay for the first year of their master's than those who didn't receive Pell grants.

A larger share of research doctoral students than master's or professional degree students attend public institutions, which report the lowest tuition rates. Graduates of for-profit institutions take on more debt than people who graduate from public or private, nonprofit institutions. Master's students at for-profits are also the least likely to graduate without debt, and they accumulate more debt than their counterparts. Nearly 60 percent of research doctoral students at for-profit institutions borrowed $100,000 or more in loans, which is substantially higher than any other sector. There are also discipline-specific borrower differences with EdD graduates borrowing more than those earning PhDs.

Adam Looney and Constantine Yannelis, "Borrowers with Large Balances: Rising Student Debt and Falling Repayment Rates," Brookings Institution, February 2018, https://www.brookings.edu/wp-content/uploads/2018/02/es_20180216_looneylargebalances.pdf.

Problems in the federal student loan program cannot only be attributed to high default rates among low balance borrowers, and indeed, the share of large balance borrowers has steadily increased, thanks to the removal of caps on the PLUS program and the expansion of aid eligibility to only graduate programs. The number of borrowers who accumulated balances of $50,000 or more reached over 15 percent by 2014 and the vast majority of these borrowers were graduate students and parents. High-balance borrowers also account for the majority of outstanding student loan dollars. A growing share of large balance borrowers are attending for-profit institutions which offer students poor labor market and loan repayment outcomes. Beginning in the early 2010s, borrowers with large-dollar balances for the first time owed more than their initial repayment in the first years of repayment, no doubt linked to longer amortization periods which take up a disproportionate amount of the borrower's income. Borrowers who hold even larger balances, like those with $250,000 or more in student loan debt, represent the largest federal investment, and thus the largest economic risk for the government.

The authors draw a direct line from the increase in Stafford loan limits and creation of uncapped Grad PLUS loans to increased borrowing amounts. Historically, borrowers with large balances tend to be independent (for financial aid purposes) undergraduate borrowers and those who attended public or private nonprofit institutions, though it's worth noting that while the portion of borrowers with more than $50,000 in student loan debt declined at most institutions in the period following the Great Recession, this isn't true in the case of for-profit colleges. While most large-balance borrowers (particularly those with debt from the pursuit/completion of advanced degrees) have high earnings and strong labor market outcomes, a growing number do not, which impacts their ability to repay. Nonpayment rates are explained by changes in student demographics and increased participation in programs like income based repayment and economic forbearance. The authors posit that screening/risk assessment for large balance borrowers likely to avoid repayment (seemingly those attending certain institutions or programs with poor return on investment) would have fiscal and welfare implications. Policies that reduce risk to student borrowers and taxpayers, including loan limits, elimination of high cost loans, and increased accountability, should all be explored to improve economic outcomes.

Vivien Lee and Adam Looney, "Headwinds for Graduate Student Borrowers: Rising Balances and Slowing Repayment Rates," Brookings Institution, October 18, 2018, https://www.brookings.edu/research/headwinds-for-graduate-student-borrowers-rising-balances-and-slowing-repayment-rates/.

Prior to the creation of Direct Grad PLUS loans, graduate borrowers were considered safer than undergraduates, and attended high-quality public or private nonprofit programs. Graduate students were able to borrow a finite amount, and once they'd exhausted their federal aid the private market would determine loan eligibility based on whether they anticipated the borrower would repay. The authors argue that expanded government lending for graduate education has caused borrowing levels to rapidly increase. Additionally, they argue that expanded eligibility helped change education offerings, opening up space for for-profit graduate programs to grow and set high tuition rates for these programs. The amount graduate students borrow is particularly high because they are able to qualify for loans up to the full cost of attendance, minus other aid, meaning that borrowers with large balances are making up a larger share of all borrowers. More graduate borrowers are attending for-profit institutions, which offer worse outcomes but still come with high sticker prices. The share of for-profit graduate borrowers who owe large balances (more than $50,000) increased from 3 percent to 21 percent in the years between 1990 and 2014. Borrowers with balances above $100,000, who make-up only 5.5 percent of all borrowers, owe a third of all student loan debt. For-profit institutions, which offer an increasing share of graduate programs, are producing graduate borrowers who are unable to make progress repaying their loans. Default rates are relatively higher among for-profit graduate borrowers, and have been increasing across the board, but especially among borrowers at for-profit schools. The five-year default rate among those who had borrowed to attend a for-profit graduate school was 8 percent and, after five years, the aggregate loan balance had actually increased by 0.5 percent. In addition to defaulted borrowers hurting return on investment, income-driven repayment uptake among those with high balances prevents the government from recouping loans made to graduate students. The authors argue a better government-funded financial aid system would limit the credit available to graduate and parent borrowers (while acknowledging the harm this could cause low-income students), and ask higher-income borrowers to repay more of their loan balance.

Keinan Thompson and Raymond AlQaisi, "Examining Graduate Lending: Access vs. Private Lending," AccessLex Institute, June 2019, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3424021.

Federal investment in higher education is intended to give all students access to educational opportunity and that must remain its goal. Amid growing concern about student loan debt, many have pointed to graduate education and the accessibility of "limitless" loans as the cause for large higher education debt. To address the problem of graduate debt some have called for the elimination of Grad PLUS loans or the introduction of borrowing limits, however this move would have a negative impact on students, and particularly on students of color. The private sector is unequipped to meet the needs of an expanding and diversifying graduate student population due in large part to the fact borrowers of color would have difficulty obtaining credit through traditional underwriting requirements. Grad PLUS borrowers are the most likely to repay their loans, meaning less risk for the government, though there are clear differences in repayment rate and debt burden by race and sector. Black graduate students with professional and research doctoral degrees hold more cumulative debt than their white and Asian student counterparts. Black graduates of MBA, PhD and JD programs also held more cumulative debt than their peers. Any changes to federal lending cannot come at the expense of students, and students of color in particular.

Ben Miller, "Graduate School Debt: Ideas for Reducing the $37 Billion in Annual Student Loans That No One Is Talking About," Center for American Progress, January 13, 2020, https://www.americanprogress.org/wp-content/uploads/2020/01/CollegeAffordabilityGap-report5.pdf.

Since 2010, graduate debt balances have increased, and these loans have unfavorable terms that can exacerbate inequality. While graduate loans don't have the high default rates we see with undergraduate loans, unlimited borrowing means debt levels can become particularly unmanageable. More than 40 percent of student loan balances over $60,000 are paid for through income driven repayment (IDR) and high interest rates ensure some balances negatively amortize, causing borrower balances to grow. Black graduate students are more likely to have debt than their white peers and nearly 25 percent of graduate borrowers took out more than the lifetime loan limit for dependent undergraduates in just a single year of graduate school. The median debt for a Black student borrower finishing graduate school is 50 percent higher than that of a white borrower. This may be due, in part, to the fact many institutions appear to use some graduate degrees as profit centers for the institution. An alternate causality may be that Black students in research doctorates are half as likely to receive fellowships or assistantships. Miller points to expensive online degrees in particular, because they don't have the enrollment caps that in-person courses do, so they can recruit more students and in turn generate more profit. Additionally, Institutions are able to turn much of the work needed to oversee online degree programs to online program managers (OPMs).

Policy proposals by the author for addressing graduate borrowing include tuition price caps, capping graduate borrowing, a debt-to-earnings threshold, and decreasing some credential-specific requirements, particularly for those in teaching and social work. Miller proposes different ways a federal price cap could be applied including a cap on the rate of growth annually or a maximum dollar amount of loans for specific program types, which might include the removal of lender protections for debt above the amount the government is willing to pay. Annual and aggregate dollar caps on graduate borrowing sidestep concerns about the relationship between undergraduate and graduate debt for borrowers who took out loans for both. Miller argues it's sensible to apply the gainful employment rule to graduate education, because they are by their very nature professional degree programs that should result in increased earnings for the borrower. He proposes tailored loan limits for loan programs to make the rules application less punitive for institutions. Tailored loan limits would be set at some portion of discretionary income for the typical graduate who has been in the workforce for a few years. The limit could be based on outcomes for graduates of that program or for everyone who finished a given program type.

The author highlights that:

- Graduate debt has steadily increased even as undergraduate borrowing is on the decline.
- More than 40 percent of loan balances over $60,000 are now being repaid using income-driven repayment (IDR).

Stephanie Riegg Cellini, Rajeev Darolia, and Dubravka Ritter, "Credit Standards in the PLUS Student Loan Program: Examining Access and Equity," Brookings, October 13, 2020, https://www.brookings.edu/wp-content/uploads/2020/10/ES-10.13.20-Cellini-et-al.pdf.

Graduate students are only able to borrow through select government programs, including unsubsidized Stafford and Grad PLUS loans. Unlike other federal student loan borrowers, PLUS borrowers must undergo an adverse credit check. Most federal student loan programs do not consider credit worthiness of students if they attend a Title IV–eligible institution and enroll in an appropriate course of study. While borrowers denied because of their credit history may appeal the decision by submitting documentation of extenuating circumstances or getting an endorser, the regulations are fairly strict, particularly the requirement borrowers be denied if they had loans which were in collection or charged off. PLUS loans could be originated through two different programs. Due to differences in eligibility the Department of Education likely approved PLUS

Loans for borrowers who would have failed the credit check required of borrowers receiving PLUS loans through the Federal Family Education Loan (FFEL) program. In November of 2011, the Department of Education discovered the discrepancy and clarified the adverse credit standard. Then in 2014, the adverse credit standards were revised, thanks in part to lobbying by HBCUs to exempt low balance collections and charge offs. Specifically, borrowers with accounts ninety days or more past due, or that were placed in collections or charged off within the past two years—but with combined balances below (or equal to) a threshold of $2,085—would no longer be ineligible PLUS loans.

The stringency of credit standards could greatly impact who has access to the PLUS program. Those living in communities with high levels of Black residents and other residents of color who would be more likely to fail an adverse credit check. The authors propose policy adjustments to address concerns about the decreased eligibility of high poverty borrowers (and those with low credit scores) by raising the limit on the exemption for people in collections, charge offs or serious delinquency. Unfortunately, this change could result in people borrowing more than they can realistically pay back. Another commonly proposed policy solution to outsized graduate borrowing is the introduction of caps on PLUS loans to decrease the likelihood of very large balances but this too may result in an unintended consequence, such as preventing credit-constrained people from investing in high-return but expensive graduate programs.

While much of the information in this economic study is valuable, it does focus heavily on Parent PLUS borrowers with an emphasis on the impact of PLUS reforms on people over age 45.

Leonardo Restrepo and Lesley J. Turner, "Higher Education Performance and Accountability: Insights from A New Visualization Tool," Brookings Institution, June 9, 2021, https://www.brookings.edu/wp-content/uploads/2021/06/Restrepo-Turner-higher-ed-accountability.pdf.

The authors set out to identify alternative accountability metrics as a means of reforming the current higher education system, which saw the federal government continue to fund institutions and programs that didn't offer students access to financial or social mobility. This piece is in conversation with Turner's earlier work that proposed a new framework for accountability wherein a program's eligibility for aid would be linked to specific earnings and repayment outcome measures. Restrepo and Turner developed a visualization tool for higher education stakeholders to explore different options.

Insights from the visualization tool:

- Undergraduate certificate program outcomes vary across field and credential level with science and allied health programs reporting better net earnings and repayment than other programs. The data also highlights substantial differences by sector in terms of number of programs that would fail a loan repayment rate and net earning premium (few of these programs exist in the private, nonprofit sector and a larger portion of for-profit schools fail when compared to public institutions).

- Many programs that provide students with positive outcomes are in schools with poor overall loan repayment: programs that pass a loan repayment rate and net earning premium accountability metric may be at institutions that would not as a whole meet the benchmark.
- While public, minority serving institutions (MSIs) have similar loan repayment and earnings outcomes as other public institutions, private MSIs are twice as likely to have negative loan repayment and earnings outcomes. In general MSIs are underrepresented among schools with the highest loan repayment and net earnings. Despite this, enrollment at nonprofit MSIs with negative loan repayment and net earnings is substantially higher than the enrollment in failing nonprofits as a whole. Casualties may include MSIs costing more than for-profit institutions since the net earning premium takes into account out of pocket costs, so an expensive school would need to result in higher earnings gain in order to have a positive earnings premium.
- Students who attend institutions with high instructional spending have better repayment and earnings outcomes (though this spending on instruction is typically a lower share of tuition revenue than schools that fail the net earning threshold).
- Borrowers in many institutions with high IDR uptake are making progress on loan repayment. There is a negative correlation between IDR participation and loan repayment. The loan repayment metric is intended to measure whether the debt a student borrows to attend a certain program is in alignment with that student's anticipated earnings, not just how many low-income students participate in programs that reduce their balances.

Jason D. Delisle and Jason Cohn, "High-Debt, Low-Earning Master's Degrees Are Widespread at Private Nonprofit Universities," Urban Institute, June 30, 2022, https://www.urban.org/urban-wire/high-debt-low-earning-masters-degrees-are-widespread-private-nonprofit-universities.

An analysis of median earnings for master's degree programs two years after graduating and the average loan disbursement among completers reveals private nonprofit institutions are overrepresented among graduate programs with high debt-to-earnings ratios, and degree types within the helping professions make up half this number. The report cites heightened media attention to the debt to earning outcomes for people attending private institutions. The same degrees from public institutions cost less and therefore carry a lower debt burden. Degree holders in the high debt to earning group have average debt of about $77,000 and average earnings of $43,200. As a result of their high debt and low wages, a large portion of their discretionary income is earmarked for loan repayment. The authors find that private nonprofit institutions provide 75 percent of programs with high debt to earning ratios compared to 12 percent from for-profit institutions and 14 percent at public institutions. And private nonprofit institutions provide 44 percent of all master's degree programs compared to 41 percent at public institutions. Many borrowers will enroll in IDR, significantly decreasing their monthly payments.

Policymakers looking to protect students from high cost, low earning programs and combat rising IDR program costs may consider sanctioning institutions with low debt to earnings outcomes including limiting their lending or thinking about how public universities could (better) serve additional students in certain fields.

Other Articles of Interest

Monica Bhole, "Why Do Federal Loans Crowd Out the Private Market? Evidence from Graduate PLUS Loans," June 24, 2017, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3080691.

Using NPSAS and credit bureau data provided by Equinox, the author provides evidence that federal involvement in the student loan market, and in particular, the introduction of the Grad PLUS loan, crowded out the private student loan market. Previously, graduate students who needed to borrow above the annual and cumulative Stafford limit had to turn to the private market for support. Following the 2006 introduction of Grad PLUS, which only limits students to the full cost of attendance minus other aid, borrowing above the annual loan limit did not increase, suggesting the loans did not address a market based issue like students being denied access to loans in the private sector. She contends it's unlikely that graduate borrowers, especially those with long credit histories because they borrowed as undergraduates or worked before returning to school, would be considered risky and face high interest rates with private lenders. Per her analysis, students replaced private loans with PLUS loans one-for-one. The move away from private loans cannot be solely attributed to a market that charges interest above the federal level (7.9 percent at the time of writing). In fact, many students would receive more favorable interest rates in the private market.

The one area the federal government has been able to offer guardrails against is the one for which the private market has no counter—the ability to offer protection from low wages. Private loans have limited repayment options, but the introduction of IBR offered students access to low cost repayment and the opportunity for debt cancellation after a finite period of repayment. In addition to IBR, the federal government offers access to PSLF, an option that may be especially attractive to medical students who face higher tuition and thus may borrow more and face challenges in repayment. The government is also able to provide students with certain benefits and insurances while they are still enrolled in school, including access to forbearance.

“Trends in Federal Student Loans for Graduate School,” U.S. Department of Education, Office of the Chief Economist, August 2023, https://sites.ed.gov/ous/files/2023/08/OCE_GraduateDebtReport202308.pdf.

Graduate students receive the highest share of student loan disbursements despite representing just one-fifth of all borrowers. While undergraduate disbursements have declined significantly over the last decade, graduate disbursements have hovered around $40 billion during the same time frame. This increase in graduate borrowing coincides with a rise in graduate attainment driven primarily by masters degrees. Black graduate enrollment increased significantly between 2004 and 2012, however ,over half of this increase resulted from enrollment in the for-profit sector where students tend to have lower earnings. While most programs with high borrowing tend to have high earnings, this isn’t true of the for-profit sector. The median debt to discretionary earnings ratio is lowest at public institutions and highest at for-profit institutions. In summer 2023, The Department of Education released proposed regulations focused on transparency into unaffordable student debt which will have implications on both graduate and professional programs which see many students graduate with six-figure debt. Among programs that are the same credential level, the median debt to discretionary earnings ratio is lowest at public colleges and highest at for-profit institutions. In analyzing the relationship between median program debt and median earnings, the authors find nearly 25 percent of programs at for profit institutions have high debt burdens. The Department of Education has already taken steps to address the needs of students overly burdened by debt including reforms to the Public Service Loan Forgiveness program and proposed regulations that would render certain programs eligible for federal student aid if students are left with unaffordable debt.

“Higher Education: Characteristics of Graduate PLUS Borrowers,” U.S. Government Accountability Office, April 17, 2018, https://www.gao.gov/assets/gao-18-392r.pdf.

Key findings of this report are:

- As of June 30, 2017, the median Grad PLUS borrower had $140,000 in federal loans, of which around $27,000 was Grad PLUS debt.
- Of the total federal student loan disbursements from 2007 to 2017, Grad PLUS represented 32 percent ($71 billion) and other graduate loans were 52 percent ($117 billion).
- As of June 30, 2017, 36 percent of Grad PLUS borrowers were in an income-driven repayment program and 11 percent of borrowers in repayment were PSLF eligible. As of March 2017, 2 percent of borrowers had defaulted.
- A “lifetime” limit on borrowing would have the biggest impact on doctoral students and those in law and health related fields. (Over 50 percent of PLUS borrowers are in one of these fields.)

“Income-Driven Repayment Plans for Student Loans: Budgetary Costs and Policy Options,” Congressional Budget Office, February 12, 2020, https://www.cbo.gov/publication/56277.

Interest rates have been higher for loans to graduate students than loans to undergraduate students since the 2013–14 academic year. Compared with Stafford loans to undergraduate students, Stafford loans to graduate students have higher interest rates and PLUS loans to graduate students have interest rates that are even higher than those seen with the Stafford loan. Those higher interest rates cause unpaid interest to accrue at faster rates for graduate students’ loans. Low-income direct PLUS student borrowers seeking access to debt relief are able to apply for a range of income-based repayment plants.

The Pay as You Earn (PAYE) plan was introduced in December 2012 sets the repayment term at twenty years and the loan servicer sets your monthly payment at 10 percent of your discretionary income, but the payment cannot exceed what it would be under a standard repayment plan. Established in 2015, the Revised Pay as You Earn (REPAYE) limits your monthly payment to 10 percent of your discretionary income, but there is no payment cap and your payments may be higher than they’d be in a standard plan. Those who borrowed for graduate school have an extended repayment term of twenty-five years.Combined with the fact payments under these income based programs may not cover the accruing interest Congressional Budget Office (CBO) anticipated these borrowers were more likely to have larger balances than the amount they originally borrowed but were also more likely to have their debt forgiven. Relatedly, CBO estimates that changes to income-driven plans for graduate students would have a larger effect on the budget than those for undergraduate students.

Unlike PAYE and IBR, a borrower does not have to be low-income or demonstrate financial need to qualify for the earliest income based repayment program, income-contingent repayment (ICR). Introduced in 1994 as a repayment plan that offers monthly payments that are the lesser of what you would pay on a repayment plan with a fixed monthly payment over twelve years, adjusted based on your income or 20 percent of your discretionary income, divided by 12.

CBO anticipated that the share of borrowers receiving forgiveness through PSLF in the 2030s (for loans disbursed over the 2020–2029 period) would be considerably larger than the 2020s. Using data on past borrowers, CBO also estimated that graduate borrowers with large balances would be more likely to enroll in income-driven repayment plans, based partially on the fact that a small number of recent borrowers utilize ICR (which has a larger discretionary income threshold).

CBO also runs several models to anticipate how policy options might change subsidy costs for example, making the REPAYE plan the only repayment plan would increase the subsidy cost of loans disbursed over the 2020–2029 period by $17.6 billion for loans to graduate students. Likewise, eliminating all IDR plans would, in theory, create savings, though estimated costs are uncertain because people will borrow even if they don’t have access to IDR.

Key findings of the report:

- The number of borrowers in IDR grew rapidly between 2010 and 2017 with graduate income-driven plans loans growing from 6 percent to 39 percent.
- More than $200 billion in student loans will be forgiven between 2020 and 2029 ($40.3 billion for undergraduate students and $167.1 billion for graduate students).
- Forgiven amounts are equal to 21 percent of the disbursed amount for undergraduate borrowers and 56 percent of the disbursed amount for graduate borrowers.
- For every dollar disbursed, the government is projected to lose about 17 cents for loans repaid through income-driven plans.

Melissa Korn and Andrea Fuller, "'Financially Hobbled for Life': The Elite Master's Degrees That Don't Pay Off," *Wall Street Journal*, July 8, 2021, https://www.wsj.com/articles/financially-hobbled-for-life-the-elite-masters-degrees-that-dont-pay-off-11625752773.

Graduate students at elite institutions lured by name and legacy often borrow more than those from other major institutions, despite reaping little benefit. The article highlights master's degree programs at institutions including Columbia, NYU, and USC, where the median income two years post grad was particularly low. Columbia, in particular, had more high-debt master's degree programs in low-paying fields than any other Ivy League university, with students in 44 percent of the master's degree program's surveys holding loans that exceeded annual earnings. The authors argue that institutions have expanded their graduate offerings since the establishment of the Grad PLUS which offers high interest, no-limit loans. While undergraduate students at elite private institutions receive a great deal of need-based support, the same cannot be said for graduate students. Students interviewed in the piece expressed concern about the limited financial support and advice they received, with one student expressing that she was unaware she could borrow less than the maximum amount.

Josh Mitchell, "Is the U.S. Student Loan Program Facing a $500 Billion Hole? One Banker Thinks So," *Wall Street Journal*, April 29, 2021, https://www.wsj.com/articles/is-the-u-s-student-loan-program-in-a-deep-hole-one-banker-thinks-so-11619707091.

Budget modeling underwent a massive reform when a law allowed the federal government to incorporate expected future repayments. Previously, any money lent by the government increased the federal deficit by that amount, but this change allowed loans to become a potential source of profits by assuming that most borrowers would repay with interest. The federal budget assumes the government will recover 96 cents of every dollar borrowers default on, which is far above projections in the private loan sector. The government is more likely to recover just 51 percent to 63 percent of defaulted loan amounts. Grad PLUS was approved as part of a law designed to reduce the federal budget deficit, and the "unlimited" borrowing under the loan program was used to project profits from federal deficits. Under the Direct PLUS loan program, graduate students incurred high dollar balances and parents increased their borrowing. This increase in borrowing has not resulted in profit for the federal government, however, especially as repayment rates decline. The projected profits from student lending, particularly high interest Direct PLUS Loans discourage making changes that would help borrowers, such as lowering interest rates.