FEDERAL STUDENT LOANS

Impact of Loan Limit Increases on College Prices Is Difficult to Discern
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For more than a decade, college prices have been rising consistently and have continued to rise at a gradual pace after the Stafford loan limit increases were enacted in 2008 and 2009. However, it is difficult to determine if a direct relationship exists between increases in college prices and the Stafford loan limit increases because of the confluence of many other factors that occurred around the time the loan limit increases took effect. Specifically, when the loan limit increases took effect, the nation was in a recession, which created one of the most tumultuous and complex economic environments in recent history. GAO’s analysis found that the economic effects of the recession, which affected families’ employment, income, and net worth make it difficult to isolate the impact the recession had on students’ decisions to borrow money to finance college expenses versus the impact of the loan limit increases. Further, federal, state, and institutional aid available to students also increased significantly around the same time the loan limit increases went into effect. It is difficult to determine the extent to which the increased availability of this financial aid influenced the decisions of students on whether and how much money they should borrow versus the availability of increased loan limits. Conversely, GAO’s analysis shows that even though college prices continued to increase at a gradual pace over the last decade as well as after the loan limits increased, enrollment, which can be sensitive to price increases, also generally continued to grow across both public and private institutions and in all regions of the country.

Around the time that the loan limit increases took effect, the number of students taking out private education loans decreased across all types of institutions; lenders were making fewer loans and students borrowed less. Specifically, before the loan limit increases, the number of students borrowing private loans for academic year 2007-08 was about 2.8 million; after the limits went into effect the number decreased by over 50 percent to about 1.3 million for academic year 2011-12. Similarly, the average amount of money that students borrowed from private student loans decreased by about 17 percent after the loan limits went into effect. For example, for academic year 2007-08 students’ private student loans averaged about $7,048 and for academic year 2011-12 this had dropped to about $5,870. According to the federal and institutional officials as well as financial lending experts that GAO spoke with, many factors may explain the changed private loan landscape. For example, these officials and experts noted that:

- lenders tightened lending criteria—such as requiring higher credit scores and co-signers—making it more difficult to obtain these loans;
- Congress enacted new protections to raise students’ awareness about private loans, including disclosures of loan rates and terms; and
- colleges took steps to help students find alternatives to private borrowing and reduce reliance on private loans, such as increasing institutional aid and providing financial literacy counseling to help inform students about their federal assistance options.
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Abbreviations

CFPB  Consumer Financial Protection Bureau
Education  Department of Education
EFC  Expected Family Contribution
FFEL  Federal Family Education Loan Program
FICO  Fair Isaac Corporation credit score
FRED  Federal Reserve Economic Data
HEOA  Higher Education Opportunity Act
IPEDS  Integrated Postsecondary Education Data System
NPSAS  National Postsecondary Student Aid Study
PLUS  Federal Parent Loans for Undergraduate Students
TILA  Truth in Lending Act

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February 18, 2014

The Honorable Tom Harkin
Chairman
The Honorable Lamar Alexander
Ranking Member
Committee on Health, Education, Labor and Pensions
United States Senate

The Honorable John Kline
Chairman
The Honorable George Miller
Ranking Member
Committee on Education and the Workforce
House of Representatives

A college education can increase the choices and opportunities available to individuals, but rising costs have prompted concerns that a college education may be an unattainable goal for some. To help students afford the rising cost of college, Congress passed a law that raised the ceiling on the amount individual students can borrow (referred to in the law as “loan limits”) under the federal Stafford Loan Program. Although increasing federal loan limits would give students more resources to pay for college, there is also concern that the availability of this additional resource might present an incentive for colleges to charge students more. At the same time, this opportunity to borrow more federal loan money might affect students’ private loan borrowing, which sometimes may have significantly higher interest rates and default rates than federal student loans. The Ensuring Continued Access to Student Loans Act of 2008\(^1\) mandated GAO to conduct a series of reports over 5 years assessing the impact of loan limit increases on tuition and other expenses and on

\(^1\) Pub. L. No. 110-227, § 9, 122 Stat. 740, 748.
private loan borrowing.² This is our final study in response to this mandate. For this study, we addressed (1) to what extent, if any, did the Stafford loan limit increases affect tuition, fees and room and board prices at institutions of higher education; and (2) what have been the trends in private student loan borrowing since the loan limits took effect?

To determine the extent, if any, to which Stafford loan limit increases affected college prices, we developed a panel regression model—a statistical method where we collected data over time for the same colleges to estimate possible relationships among certain variables, controlling for the effects of other variables—to examine the impact of Stafford loan limit increases on tuition, fees, and room and board prices at institutions of higher education.³ In order to isolate the effect of loan limits from other factors that may influence tuition and other college prices, we controlled for factors such as college revenue from state appropriations or endowments, and economic variables such as the state-level unemployment rate. To determine if there were actual changes in the amounts students borrowed in federal Stafford loans before and after the loan limits took effect, we supplemented the findings of our panel regression model with the most recent data available from the National Postsecondary Student Aid Study (NPSAS) database (academic years 2003-04, 2007-08 and 2011-12), and trend data (academic years 1999-

² Because data were not yet available to respond to the mandate, GAO first reported in 2009 with a briefing to Congress. The second report, Federal Student Loans: Patterns in Tuition, Enrollment, and Federal Stafford Loan Borrowing Up to the 2007-08 Loan Limit Increase, GAO 11-470R (Washington, D.C.: May 25, 2011), provided descriptive information on the first of the two loan limit increases, including that there was a decline in the proportion of eligible Stafford loan borrowers who borrowed their maximum under the new loan limit increase. The first loan limit increase covered fewer students, and data were not available on the second loan limit increase at the time of that report.

³ For our panel regression model, we compared the same cohort or group of institutions over multiple years. Our panel consisted of all Title IV-eligible colleges in the United States over an 8-year time span that covered years before and after the change in loan limits, which occurred in academic years 2007-08 and 2008-09. The dataset is divided by the type of institution and the control variables used in the regression include college fixed effects, economic variables and college characteristics. For more information about our panel regression model, see Appendix II.
2000 through 2011-12) for all Title IV-eligible,\(^4\) degree-granting institutions of higher education from the Department of Education’s (Education) Integrated Postsecondary Education Data System (IPEDS). Using these data, we examined differences in tuition trends among four education institutional sectors—nonprofit,\(^5\) for-profit, public 2-year, and public 4-year colleges—and geographic regions.\(^6\) For public 2-year and public 4-year colleges, we also reviewed the annual tuition for both in-state and out-of-state students. For both the IPEDS trend data and panel regression model data, we analyzed data for undergraduate students—the majority of college students—to measure the effect of the two separate loan limit increases.\(^7\) To provide examples of the role, if any, the loan limit increases played in how colleges set prices, we supplemented these data with interviews from college officials at eight institutions. We selected a nonprobability sample of institutions to obtain a mix of each major sector of higher education, regions, amount of federal aid received, enrollment sizes, admission selectivity levels, and prices of tuition and related fees. Although we cannot generalize information from these interviews to the broader higher education landscape, we believe that the information from these eight institutions provides insight into colleges’ perspectives about

\(^4\) Programs authorized under Title IV of the Higher Education Act of 1965, as amended, provide grants, loans and work-study funds from the federal government to eligible students. To receive Title IV assistance students must be enrolled in institutions of higher education that are authorized to operate in the state in which they are located, accredited by an agency recognized by the Department of Education and certified by the Department as eligible to participate in Title IV programs. An institution that enters into a program participation agreement with the Department is allowed to participate in any of the Title IV federal student financial assistance programs (other than the Leveraging Educational Assistance Partnership (LEAP) and the National Early Intervention Scholarship and Partnership (NEISP) programs).

\(^5\) The term “nonprofit” refers to not-for-profit private colleges. Private colleges can also be for-profit, so we are making the distinction between the two by using the terms “nonprofit” and “for-profit” in this report.

\(^6\) Our scope includes institutions of higher education in all 50 states and the District of Columbia. We grouped 2- and 4-year for-profit institutions together because about half of the institutions that classify themselves as 4-year institutions award mainly 2-year degrees. Because we defined our population of institutions of higher education as degree-granting, our analysis excludes less-than-2-year for-profit institutions that award certificates.

\(^7\) Congress first passed a law that raised Stafford loan limits for first-and second-year undergraduate students as well as for graduate and professional students in academic year 2007-08, and subsequently for all qualified undergraduate students receiving unsubsidized Stafford loans in academic year 2008-09.
the role of loan limit increases on college prices and federal and private student loan borrowing trends. In addition, we interviewed federal officials and subject matter specialists, including academic researchers.

With respect to our second objective, we analyzed the trends in private student borrowing because comprehensive data from private lenders were not available to assess the impact of loan limit increases on private student borrowing, and data from individual lenders are proprietary. To determine trends in private student loan borrowing since the loan limit increases took effect, we reviewed aggregate trend data from calendar years 2005 through 2011 for nine major private student lenders reported in a 2012 study by the Consumer Financial Protection Bureau (CFPB) and Education.8 To obtain additional information about trends after the loan limit increases, we supplemented the CFPB study data with analyses of Education’s IPEDS data (academic years 1999-2000 through 2011-12) and NPSAS data (academic years 2003-04, 2007-08, and 2011-12) about private student loan usage and undergraduate borrowing. We also reviewed federal laws and regulations that have affected the private lending market. We interviewed officials from the same eight institutions we selected for research objective 1 and asked about private student loan borrowing. We also interviewed three of the largest private student lenders who participated in the CFPB study about the private student loan industry, borrowing trends, and the extent to which the increased Stafford loan limits affected private student loan borrowing. Finally, we interviewed representatives from relevant professional associations, federal officials, and subject matter specialists, including academic researchers. See appendix I for our detailed scope and methodology and appendix II for details on our panel regression model.

We determined that the IPEDS and NPSAS data are sufficiently reliable for the purposes of this report by testing them for accuracy and completeness, and by reviewing documentation about the systems used to produce the data. Unless otherwise noted, all percentage estimates from NPSAS have 95 percent confidence intervals that are within 8 percent of the estimate itself. Further, all NPSAS dollar estimates have 95 percent confidence intervals that are within 8 percentage points of the

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8 Consumer Financial Protection Bureau and Department of Education, Private Student Loans (Washington, D.C.: August 29, 2012). For the purposes of this report, when we refer to the ‘CFPB study’ we mean this report that was conducted by CFPB and Education.
estimate itself. We conducted this performance audit from December 2012 to February 2014 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence we obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

To help students pay for college, several forms of financial aid are available through federal, state, institutional, and private sources, as shown in table 1.

### Table 1: Major Aid Programs for Undergraduate Students (Aggregate Spending), Academic Years 2006-07, 2008-09, and 2011-12

<table>
<thead>
<tr>
<th></th>
<th>2006-07</th>
<th>2008-09</th>
<th>2011-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal Stafford Loans</td>
<td>55,573</td>
<td>76,505</td>
<td>89,607</td>
</tr>
<tr>
<td>Federal Pell Grants</td>
<td>14,430</td>
<td>19,051</td>
<td>34,048</td>
</tr>
<tr>
<td>Federal Parent Loans for Undergraduate Students (PLUS)</td>
<td>11,507</td>
<td>12,514</td>
<td>18,931</td>
</tr>
<tr>
<td>Federal tax benefits&lt;sup&gt;a&lt;/sup&gt;</td>
<td>7,410</td>
<td>11,160</td>
<td>20,280</td>
</tr>
<tr>
<td>Federal veterans grants&lt;sup&gt;b&lt;/sup&gt;</td>
<td>3,710</td>
<td>4,358</td>
<td>11,007</td>
</tr>
<tr>
<td>State grants</td>
<td>8,535</td>
<td>8,749</td>
<td>9,532</td>
</tr>
<tr>
<td>Institutional grants</td>
<td>29,510</td>
<td>32,310</td>
<td>42,650</td>
</tr>
<tr>
<td>State and Institution loans</td>
<td>2,360</td>
<td>1,660</td>
<td>1,690</td>
</tr>
<tr>
<td>Private student loans</td>
<td>21,390</td>
<td>10,730</td>
<td>6,440</td>
</tr>
</tbody>
</table>

Source: College Board, Trends in Student Aid 2013.

<sup>a</sup>The latest available data for federal education tax benefits are for calendar year 2011. Estimates for 2011-2012 are based on these data, and only include the Hope, Lifetime Learning, and American Opportunity tax credits.

<sup>b</sup>Federal veterans grants include payments for postsecondary education and training to veterans and their dependents, including the Post-9/11 Veterans Educational Assistance program effective for academic year 2009-10 (38 U.S.C. §§ 3301-3324) and all programs established earlier. Some of these funds also cover living expenses and other education-related costs. The Iraq and Afghanistan Service Grants program was effective in academic year 2010-11. This program provides non-need-based grants for students whose parent or guardian was a member of the Armed Forces who died in Iraq or Afghanistan as a result of performing military service after Sept. 11, 2001. 20 U.S.C. § 1070h.

In academic year 2011-12, about 70 percent of the undergraduate students attending college borrowed money from federal or private lenders. Before 2010, federal Stafford Loans and PLUS Loans were part
of the Federal Family Education Loan (FFEL) Program as well as the William D. Ford Federal Direct Loan (Direct Loan) Program. Under the FFEL Program, private lenders made federally-guaranteed student loans to parents and students. The Student Aid and Fiscal Responsibility Act of 2009, enacted as a part of the Health Care and Education Reconciliation Act of 2010, terminated the authority to make or insure new FFEL loans after June 30, 2010. At the time, there was concern that paying banks to act as middlemen for student lending was adding to the cost of student borrowing. A Congressional Budget Office study estimated that the government would save over $85 billion over 10 years if it did the direct lending itself. Starting July 1, 2010 all Stafford and PLUS loans are originated and disbursed directly from the Department of Education under the Federal Direct Loan Program. FFEL Program loans disbursed before July 1, 2010 continue to be serviced according to the terms and conditions of the FFEL Program master promissory note the borrowers signed when they obtained the loan.

The Stafford Loan program is the largest source of federal financial aid available to postsecondary students. In academic year 2011-12, 35 percent of undergraduate students participated in the program, which provided an estimated $89.6 billion to eligible students through subsidized and unsubsidized loans. The federal government pays the interest on subsidized loans while students are in school, and students must have a financial need as determined under federal law to qualify for this type of loan. Each student’s financial aid need is determined by subtracting the student’s expected family contribution (EFC) and certain other estimated financial assistance from the total price of attendance. Regardless of

11 Postsecondary students include both graduate and undergraduate students.
12 Regardless of loan type, borrowers must be either U.S. citizens or eligible noncitizens, and be enrolled at least half time in a degree or certificate program, among other requirements. 20 U.S.C. § 1091.
13 20 U.S.C. § 1087kk. The EFC represents the amount the applicant and the applicant’s family can reasonably be expected to contribute toward the applicant’s postsecondary education. 20 U.S.C. § 1087mm. When we use the phrase “total price of attendance” in the context of the legal requirements for the Stafford Loan program, we use it to refer to “cost of attendance” as that phrase is defined in 20 U.S.C. § 1087ll.
their financial need, students can borrow unsubsidized loans to pay for educational expenses and are responsible for paying back any interest that accrues on the loan. A student may be eligible to receive both subsidized and unsubsidized loans, which are generally referred to as a combined loan.

To help students and their families pay for the rising cost of college, Congress first passed a law that raised Stafford loan limits for first-and second-year undergraduate students as well as for graduate and professional students in academic year 2007-08,¹⁴ and subsequently for all qualified undergraduate students receiving unsubsidized or combined Stafford loans in academic year 2008-09 (see table 2).¹⁵

¹⁴ Pub. L. No. 109-171, § 8005, 120 Stat. 4, 158 (2006). As we reported in 2011, these increases were the first changes to the Stafford loan limits since academic year 1993-94. For undergraduate students, these reflect an increase of $875 or $1,000, with the limits after the increase ranging from $3,500 to $8,500 depending on a student’s class level, dependency status, and whether the student was receiving a subsidized or an unsubsidized loan.

### Table 2: Statutory Stafford Loan Limits before and after the Increases: Comparison of Academic Years 2006-07, 2007-08, and 2008-09

<table>
<thead>
<tr>
<th>Class level</th>
<th>Academic year</th>
<th>Subsidized loan</th>
<th>Unsubsidized loan</th>
<th>Combined total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Year</td>
<td>2006-07</td>
<td>$2,625</td>
<td>$2,625</td>
<td>$2,625</td>
</tr>
<tr>
<td></td>
<td>2007-08</td>
<td>3,500</td>
<td>3,500</td>
<td>3,500</td>
</tr>
<tr>
<td></td>
<td>2008-09</td>
<td>3,500</td>
<td>5,500</td>
<td>5,500</td>
</tr>
<tr>
<td>2nd Year</td>
<td>2006-07</td>
<td>3,500</td>
<td>3,500</td>
<td>3,500</td>
</tr>
<tr>
<td></td>
<td>2007-08</td>
<td>4,500</td>
<td>4,500</td>
<td>4,500</td>
</tr>
<tr>
<td></td>
<td>2008-09</td>
<td>4,500</td>
<td>6,500</td>
<td>6,500</td>
</tr>
<tr>
<td>1st Year</td>
<td>2006-07</td>
<td>2,625</td>
<td>6,625</td>
<td>6,625</td>
</tr>
<tr>
<td></td>
<td>2007-08</td>
<td>3,500</td>
<td>7,500</td>
<td>7,500</td>
</tr>
<tr>
<td></td>
<td>2008-09</td>
<td>3,500</td>
<td>9,500</td>
<td>9,500</td>
</tr>
<tr>
<td>2nd Year</td>
<td>2006-07</td>
<td>3,500</td>
<td>7,500</td>
<td>7,500</td>
</tr>
<tr>
<td></td>
<td>2007-08</td>
<td>4,500</td>
<td>8,500</td>
<td>8,500</td>
</tr>
<tr>
<td></td>
<td>2008-09</td>
<td>4,500</td>
<td>10,500</td>
<td>10,500</td>
</tr>
</tbody>
</table>

Source: GAO analysis of relevant federal laws.

*Students who are 24 years of age or older are considered independent. Younger students can also be classified as independent under certain circumstances, such as if they are married or are on active military duty.*

Students whose financial need is not fully met by federal assistance and the school’s own resources (school grants and loans, called institutional aid) may turn to private lenders for college funding. While the private student loan market is dominated by traditional financial institutions such as banks, a variety of other private student lenders exist. Specifically, in addition to the traditional banks, nonprofit lenders, many of which are affiliated with states and certain schools, have elected to fund or effectively guarantee loans.
For more than a decade, college prices have been rising consistently across most types of institutions of higher education and continued to rise after the Stafford loan limits increased, but it is difficult to establish if a direct relationship exists.\textsuperscript{16} Numerous events that affected the economy likely influenced rising prices, which generally followed a consistent upward pattern across three commonly-used measures of college prices (see fig. 1).\textsuperscript{17}

\textsuperscript{16} For more information about our panel regression model and analysis of the relationship between Stafford loan limit increases and tuition, fees, and room and board, see Appendix II.

\textsuperscript{17} We used three descriptors to study postsecondary prices: tuition and required fees, total price of attendance, and net price after grants. Total price of attendance is what a typical student would pay for tuition and required fees, books and supplies, room and board, and other personal expenses, and net price after grants is the total price of attendance minus all grant aid received by a typical student.
As figure 2 shows, the tuition and required fees that a typical student would incur rose at an average annual rate of about 2 to 5 percent from academic years 2007-08 through 2011-12, following a decade-long trend of steady, consistent increases. The one exception to this pattern was at for-profit 2-and 4-year institutions, where prices decreased across all three measures during that time (see fig. 1). That is, for academic years 2007-08 through 2011-12, the tuition and required fees decreased at an annual average rate of 3 percent (see fig. 2).18

18 While it is unclear why there was a decrease in for-profit institution tuition and fees, officials at all three of the for-profit institutions we interviewed told us that over the past few years they had decided not to raise their tuition and fees, and that they based these decisions on how their prices compared to other institutions and general affordability for students.
This pattern of gradual increases in tuition and fees has generally persisted across different regions of the United States, with higher overall annual rate increases from academic years 2007-08 through 2011-12 in the Far West region (average annual rate increase of 14 percent), and lower increases in the Great Lakes and Plains regions at 1 and 2 percent.

19 This high percentage change in the Far West region was largely driven by changes in tuition and fees at California’s institutions of higher education; California had an 18 percent increase in tuition and fees from academic years 2007-08 through 2011-12. According to a report by California’s Legislative Analyst’s Office, volatility in California state funding support led institutions of higher education to tap into funding reserves and take actions to reduce per student costs, such as increasing class size, furloughing employees, and reducing various campus services and overhead. See California Legislative Analyst’s Office, The 2011-12 Budget: Higher Education Budget in Context (January 19, 2011).
respectively. Enrollment, which can be sensitive to college prices, was unaffected by increases in college prices, and continued an upward trend as shown in figure 3, rising to about 18 million students in academic year 2011-12, with variations by region, student characteristics, and higher education sector. Further, over the last decade, the cohort of college students who are 18-24 has grown substantially, with this population comprising about 42 percent of all college students in 2011. See Appendix III for additional data on college prices and enrollment.

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20 IPEDS includes these states in the following regions: the New England region includes Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont; the Mid East region includes Delaware, the District of Columbia, Maryland, New Jersey, New York, and Pennsylvania; the Great Lakes region includes Illinois, Indiana, Michigan, Ohio, and Wisconsin; the Plains region includes Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota; the Southeast region includes Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, and West Virginia; the Southwest region includes Arizona, New Mexico, Oklahoma, and Texas; the Rocky Mountains region includes Colorado, Idaho, Montana, Utah, and Wyoming; and the Far West region includes Alaska, California, Hawaii, Nevada, Oregon, and Washington.

Although college prices went up, we were unable to determine whether or not these increases resulted from the loan limit increases because of the interference of various economic factors occurring around the same time these loan limit increases went into effect. Specifically, when the loan limit increases went into effect, the nation was in a recession which created one of the most tumultuous and complex economic environments in recent history, affecting families’ employment, income, and net worth (see fig. 4). As shown earlier, the availability and types of federal and institutional financial aid available to students increased around the time the new loan limits went into effect (see table 1), also making it difficult to discern any effect those loan limits may have had. For example, the dollar amounts of Federal PLUS loans, federal tax benefits, Pell grants, and federal veterans grants all increased. Further, the amounts of state and institutional grants and loans also increased, while the amounts of state appropriations for colleges and college endowments decreased.
Further, colleges appear to have responded to the economic crisis in ways that are difficult to capture in a model. We found some evidence of this in our discussion with selected college officials, who responded to the economic crisis in different ways. For example, officials at a private nonprofit 4-year institution said that despite declines in their endowments, they used their general operating and annual giving funds to provide more aid to students. In contrast, officials at one public 4-year college said that they set their tuition so that their students, the majority of whom qualified for federal Pell grants, could cover the price of tuition with their grant aid. In addition, officials at one public 2-year college described how their state
board of education would not allow them to increase their tuition more than 5 percent each year, while officials at a public 4-year college said that any public school in their state that increased their designated tuition by a certain percentage had to set aside more money for financial aid to their students. Finally, Stafford student loan borrowing that occurred after the loan limit increases presented a mixed picture. The proportion of students taking out the maximum in Stafford student loans continued to decline between academic years 2007-08 and 2011-12 for unsubsidized (24 to 20 percent) and combined loans (61 to 58 percent) but not for subsidized loans, which increased from 54 to 57 percent in the number of students borrowing the maximum loan amount (see figure 5).

Figure 5: Proportion of Eligible Students Who Borrowed at Their Maximum, Academic Years 2003-04, 2007-08, and 2011-12, by Stafford Loan Type

The landscape of private education borrowing has changed since the loan limit increases took effect. Before the loan limit increases, the total number of students borrowing private student loans had been increasing, rising by 188 percent from 961,356 to 2,764,469 students between academic years 2003-04 and 2007-08 (see fig. 6). After the loan limit increases went into effect, the number of students taking out private student loans dropped overall by 52 percent, down to 1,325,997 students.
between academic years 2007-08 and 2011-12. This pattern persisted across all types of institutions of higher education, with the steepest declines at public 2-year (61 percent) and for-profit 2-and 4-year institutions (58 percent) over this time period, according to Education data. While it is unclear why there were steeper declines among these types of institutions, increases in the availability of other types of aid may have been a contributing factor. For example, officials at one for-profit 4-year institution participating in our study told us they increased the amount of scholarship assistance available to students. Similarly, the financial aid administrator at a public 2-year school told us the school was able to increase institutional aid to students because its foundation aggressively sought grants to fund scholarships.

Students also borrowed less private student loan money after the loan limit increases, on average about $1,179 less in academic year 2011-12.
than in academic year 2007-08–approximately a 17 percent decrease (see table 3). While the decline in the amount students borrowed occurred across all higher education institution types, amounts borrowed by students attending public 2-year schools (28 percent) and private nonprofit 4-year schools (22 percent) dropped the most. In terms of average amounts borrowed in dollars, student borrowing at private nonprofit 4-year schools showed the largest dollar decline: about $2,178. The decrease in the average private loan amount borrowed by students at public 2-year schools may have resulted in part from the effort by school officials to rein in student borrowing and the increased availability of other aid. For example, the financial aid administrator at a public 2-year school said they encourage students to pursue federal loans first and private loans as a last resort. Officials at a private nonprofit 4-year institution said they adopted an "interventionist" approach toward students who were considering private student loans. These officials said they reached out to students who were considering private student loans and, in some instances, increased the amount of institutional aid to students so that they would not need to take out private loans. Private lenders we interviewed also said that they had to rein in student borrowing to reduce the risk of loan defaults. One lender said that some lenders decreased loans to students at for-profit schools because of low graduation rates and high default rates.22

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22 A CFPB and Education report also showed that students at for-profit colleges have lower completion and graduation rates and higher rates of default on private student loans than students attending other types of institutions. For more information, see Consumer Financial Protection Bureau and Department of Education, Private Student Loans (Washington, D.C.: August 29, 2012).
# Table 3: Changes in Average Private Loan Amount Borrowed by Students and Their Families by Sector, Academic Years 2003-04, 2007-08, and 2011-12

<table>
<thead>
<tr>
<th>Sector</th>
<th>Academic year 2003-04</th>
<th>Academic year 2007-08</th>
<th>Dollar difference between academic years 2003-04 and 2007-08</th>
<th>Percent change between academic years 2003-04 and 2007-08</th>
<th>Academic year 2007-08</th>
<th>Academic year 2011-12</th>
<th>Dollar difference between academic years 2007-08 and 2011-12</th>
<th>Percent change between academic years 2007-08 and 2011-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public 4-year</td>
<td>$6,453</td>
<td>$6,620</td>
<td>$167</td>
<td>3%</td>
<td>$6,620</td>
<td>$5,455</td>
<td>$1,165</td>
<td>-18%</td>
</tr>
<tr>
<td>Public 2-year</td>
<td>4,191</td>
<td>3,942</td>
<td>-248</td>
<td>-6</td>
<td>3,942</td>
<td>2,828</td>
<td>-1,115</td>
<td>-28</td>
</tr>
<tr>
<td>Private nonprofit 4-year</td>
<td>9,303</td>
<td>9,899</td>
<td>596</td>
<td>6</td>
<td>9,899</td>
<td>7,721</td>
<td>-2,178</td>
<td>-22</td>
</tr>
<tr>
<td>For-profit 2- and 4-year</td>
<td>7,020</td>
<td>6,713</td>
<td>-307</td>
<td>-4</td>
<td>6,713</td>
<td>6,006</td>
<td>-707</td>
<td>-11</td>
</tr>
<tr>
<td>Total</td>
<td>7,169</td>
<td>7,048</td>
<td>-121</td>
<td>-2</td>
<td>7,048</td>
<td>5,870</td>
<td>-1,179</td>
<td>-17</td>
</tr>
</tbody>
</table>

Source: GAO analysis of National Postsecondary Student Aid Study data.

Note: Dollar difference between academic years may not be exact due to rounding.

The decline in the number of students borrowing private student loans paralleled other declines in the private education market. According to a study by the CFPB—the agency that supervises large banks and nonbanks that make private student loans—new loans for nine major lenders steadily increased from 2005, peaking in 2008 at $10.1 billion. However, in 2009, the calendar year the second loan limit increase took effect, new loans decreased 31 percent (dropping from $10.1 billion in 2008 to $7 billion in 2009). From 2009 to 2010, new loans dropped another 20 percent to $5.6 billion (See fig. 7).

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23 The CFPB study collected information about all loan originations between calendar years 2005 and 2011 from a sample of nine major lenders who were active in the industry in 2012. The estimated 2011 market size when including other lenders not included in the sample was $7 billion (origination volume) and $150 billion (outstanding volume) (compared to $140.2 billion outstanding for sample lenders). See Consumer Financial Protection Bureau and Department of Education, Private Student Loans (Washington, D.C.: 2012).
As the average amount of private student loans borrowed by students dropped, the average amount of federal education loans at all institutions increased (see fig. 8). For example, between academic years 2007-08 and 2011-12, the average amount of private loans borrowed by students at public 2-year institutions dropped by 28 percent while the average amount of federal loans increased by 16 percent. At for-profit 2- and 4-year institutions, there was about an 11 percent decrease in the average amount of private student loans borrowed and a 22 percent increase in the amount of federal student loans. The trend of less reliance on private student loans and more on federal student loans to fund education persisted across all types of institutions.
Factors Contributing to Private Loan Declines

Overall, the turmoil in the nation’s financial markets and the resulting recession set the stage for the declines in private loan borrowing and lending, but there were other contributing factors, too.

- **Lender exit.** In response to the turmoil in the financial markets, some lenders exited the student loan industry altogether, according to a study by CFPB. These actions changed the market from one with many lenders to a smaller market dominated by a few large lenders.

- **More stringent lending criteria.** Lenders responded to the crisis by tightening their lending criteria, making it more difficult for some students to obtain these loans, according to a study by the CFPB which was echoed by lenders and subject matter specialists we interviewed. The CFPB study found that in the years leading up to the 2007-2009 recession when private student lending was increasing, lenders were making a higher percentage of loans to borrowers with
weaker credit qualifications. This trend reversed during the recession. In the aftermath of the credit crisis and recession, private lenders changed their criteria for making student loans. For example, the CFPB study found that lenders began to rely more heavily on criteria that had been traditionally used to determine a borrower’s creditworthiness, such as the borrower’s ability to repay the loan and individual repayment history as reflected by a borrower’s Fair Isaac Corporation credit score (FICO). Many lenders also required or strongly encouraged students to have a co-signer for their private student loans. While students could still obtain loans without a co-signer, lenders said student borrowers with a co-signer are more likely to secure a lower interest rate and more favorable loan terms.

- **New consumer protections.** In addition, the fallout from the turmoil in the national financial markets in 2008 increased scrutiny of the private student loan market, and subsequent statutory changes increased consumer protections (see table 4). Enacted in 2008, the Higher Education Opportunity Act (HEOA) amended the Truth in Lending Act (TILA) and the Higher Education Act of 1965 to add new disclosure requirements related to private student loan rates, terms, and the availability of federal student loans. For example, it provided for a 3-day period after consummation of the loan during which a borrower may cancel a loan without penalty and also provided that a borrower has 30 days after a loan is approved to accept the loan, during which time the lender generally cannot change the loan rates or terms. The new disclosures were accompanied by new borrower responsibilities. In an effort to prevent over-borrowing, applicants for private student loans must now complete a self-certification form that includes a calculation of how much the student needs to borrow, and attest that they are aware of the federal loan options available to

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24 See CFPB and Education, *Private Student Loans*.

25 The Fair Isaac Corporation credit score, generally referred to as a FICO score, is a score that many lenders use to determine the creditworthiness of loan applicants. The score is calculated from a borrower’s payment history, including late and missed payments, length of credit history, type of credit used by the borrower, such as installment loans, and other factors.

26 See CFPB and Education, *Private Student Loans*.


them.\textsuperscript{30} See Appendix IV for a sample self-certification template. Several of the officials we interviewed noted that the self-certification forms helped to keep students from borrowing more funds than they actually need for educational costs. Furthermore, the HEOA amended the TILA to prohibit certain practices by private lenders, including revenue sharing between creditors and educational institutions.\textsuperscript{31} (See table 4 for more information).

| Table 4: Selected Laws and Provisions that Increased Consumer Protections |
|-----------------------------|-----------------------------|
| **Name of law** | **Selected provisions** |
| Title X of the Higher Education Opportunity Act (HEOA) (Private Student Loan Transparency and Improvement Act of 2008) | • Extends coverage of Truth in Lending Act provisions to private student loans over $25,000.\textsuperscript{a}  
• Amends Truth in Lending Act (TILA) by requiring disclosures to borrower by private student lenders in loan applications, solicitations, approvals, and consummations, including information related to such topics as:  
  o interest rates and type of rate, such as fixed or variable  
  o interest rate adjustments, such as frequency and amount  
  o finance charges, fees, and penalties associated with default or late payment  
  o payment deferral options  
  o federal financial aid availability and applicable interest rates.  
• Borrower guaranteed 30 days after loan approval to accept rates and terms of loan as offered with no changes (except for changes based on adjustments to the index used for a loan).  
• Borrower granted 3-day right-to-cancel period.  
• Includes measures to prevent unfair and deceptive practices in private student lending:  
  o private student lenders may not:  
    - offer or provide gifts to educational institutions in exchange for any advantage related to private loan activities.  
    - engage in revenue sharing with educational institutions.  
    - use the name, emblem, mascot or logo of educational institution.  
    - impose a fee or penalty on borrower for early repayment of private student loan. |

\textsuperscript{30} Id... at § 1021(a), 122 Stat. 3483, codified at 15 U.S.C. § 1638(e)(3).

### Name of law

<table>
<thead>
<tr>
<th>Name of law</th>
<th>Selected provisions</th>
</tr>
</thead>
</table>
| Title I, Part E of Higher Education Act of 1965, as added by section 120 of Higher Education Opportunity Act | • Among other things, requires institutions and institution-affiliated organizations that provide information regarding private student loans to:  
  o provide borrowers the private student loan disclosures required under the Truth in Lending Act.  
  o inform borrowers that they may qualify for federal student aid under Title IV and that terms and conditions of federal student loans may be more favorable than the provisions of private student loans.  
  o ensure that the information regarding private student loans is presented in a way so as to be distinct from information regarding Title IV loans. |
| Dodd-Frank Wall Street Reform and Consumer Protection Act[a] | Created a new federal agency—the Consumer Financial Protection Bureau (CFPB)—as an independent bureau within the Federal Reserve with the authority to supervise large banks and nonbanks that make private student loans for compliance with the federal consumer financial laws and other purposes. CFPB has authority to take enforcement action against these entities for violation of federal consumer financial laws and to take action to prevent unfair, deceptive, or abusive acts or practices in connection with a consumer financial product or service. CFPB recently issued final regulations—effective March 1, 2014—that establish its supervisory authority over any nonbank student loan servicer that handles more than one million borrower accounts.b |

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#### Source:

GAO analysis of relevant federal laws and regulations.

Note: For purposes of these provisions, a private student loan is defined as a loan provided by a private student lender that is made expressly for postsecondary educational expenses, excluding open-end credit, real estate, secured loans, and federal loans made under Title IV of the HEA. 15 U.S.C. § 1650(a)(7).

[a] The Truth in Lending Act provides consumer protections for credit and borrowing. These protections include requirements lenders must meet when offering credit and loans to borrowers, such as disclosures about loan rates and loan terms. See 15 U.S.C. § 1601 et seq. Section 1022 of the HEOA amended TILA section 104(3), codified at 15 U.S.C. § 1603(3), to expressly cover private student loans even when the amount financed was over $25,000. At the time HEOA was enacted, certain credit transactions in which the financed amount exceeded $25,000 were exempt from TILA cost disclosure requirements. The exemption amount was raised to $50,000 in 2010 by the Dodd-Frank Wall Street Reform and Consumer Protection Act. Pub. L. No. 111-203, § 1100E(a)(1), 124 Stat. 1376, 2111 (2010).


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#### Proactive school initiatives.

Officials at all of the schools in our study described a wide range of activities they implemented to raise student awareness and understanding of the various types of financial aid available to them. Some school officials also described efforts aimed at providing students with alternatives to private student loans. While most of the schools provided personal counseling to help students understand the obligations that come with borrowing private student loans, financial literacy training, and a wide range of online tools to help students calculate their college costs and financial need, they also told us about efforts that were unique to their own institutions. For example, officials at one public 4-year university described how 80 to 90 percent of their students are eligible for Pell...
grants, which cover much of their costs, and that many students do not have the credit scores to qualify for private student loans. Officials told us that they kept tuition at a level that would enable students' Pell grants to cover the full cost of tuition. Rather than raise tuition, school officials said the school made modest increases to room and board prices for students who chose to live on campus.

Officials at another public 4-year university said that they were able to hold tuition steady by increasing enrollment. They said that they have a multi-year plan to increase enrollment, especially for students served through their online education programs. These officials also described how they now offer a $10,000 degree to students who pursue a Bachelor's degree in the specific field of organizational leadership. The program is competency-based rather than semester credit-hour based, and features a combination of traditional classroom instruction and credit for life learning. The $10,000 cost of the degree covers tuition and fees but not room and board, transit, or other miscellaneous costs. In addition, officials at both public 4-year institutions said that their state boards of education require them to keep college prices below a certain designated threshold, and if they go above it, they must then increase the amount of institutional aid to students. Their states put this policy in place, they said, to make college more affordable and reduce the need for students to seek private student loans to finance their education.

Officials at a private nonprofit 4-year institution described an aggressive strategy for helping students pay for their education without private or federal student loans. According to these financial aid administrators, the university has adopted a policy of fully meeting each student's financial aid need and that for all students in general, they have a no loan policy. To carry out this policy, the administrators said the university does not include loans when determining a student's financial aid award and has increased institutional funding for students through grants and scholarships. According to university officials, during the recession they tapped into the university's operating funds to ensure sufficient levels of grant aid for students. In addition, they said the university has changed the way it calculates a student's financial need for purposes of institutional aid by eliminating home equity as a factor when considering a student's eligibility for institutional aid. The elimination of home equity as an asset, school officials said, resulted in more students from middle income families qualifying for financial aid.
Officials at all three for-profit institutions we interviewed said that keeping costs down is a significant part of their effort to reduce students’ reliance on loans, similar to the efforts that public institutions reported. Officials at one of the for-profit institutions participating in our study said they are focusing on reducing costs for academically gifted students by increasing merit-based financial aid. Students with higher admission test scores and GPAs receive more aid than other students. The same institution also recently announced that it is offering students in its honors program full tuition for their fourth year of school. Officials at another for-profit institution told us that the number of its students using private student loans had decreased to 11 percent in 2009 and has remained at that level. School officials saw this as particularly notable because students’ private loan usage had been as high as 30 percent in some years preceding 2009. School officials told us that students who are considering private student loans must participate in an interview at the school so that they fully understand the terms and conditions of their private loan. During the interview, the student is given information about private loan interest rates, and information about federal loans. School officials told us they encourage students considering loans to exhaust their federal loans before they take out private loans.

Agency Comments and our Evaluation

We provided a draft of this report to the Department of Education and Consumer Financial Protection Bureau for review and comment. The Department of Education and the Consumer Financial Protection Bureau had no comments.

We are sending copies of this report to appropriate congressional committees, the Secretary of Education, the Director of the Consumer Financial Protection Bureau, and other interested parties. In addition, this report will be available at no charge on GAO’s website at http://www.gao.gov.
If you or your staff members have any questions about this report, please contact me at (617) 788-0580 or nowickij@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made key contributions to this report are listed in appendix V.

Jacqueline M. Nowicki
Acting Director
Education, Workforce, and Income Security Issues
This appendix discusses our methodology for the study, which was framed around two objectives: (1) the extent, if any, that Stafford loan limit increases affected tuition, fees, and room and board prices at institutions of higher education; and (2) the trends in private student loan borrowing since the loan limits took effect.

For our first objective, we developed a panel regression model—a statistical method where data are collected over time from the same panel to explore possible relationships among events—to examine the impact of Stafford loan limit increases on tuition, fees, and room and board prices at higher education institutions. This model is described in Appendix II.1 We conducted supplemental analyses of Department of Education (Education) data to determine patterns in college prices, enrollment, and students' use of federal student loans before and after the loan limits took effect. For this objective, we also interviewed college officials to better understand the extent to which, if any, loan limit increases influenced how they set prices, such as tuition, fees, and room and board.

For our second objective, we analyzed Education data on private student loans, reviewed results of a private student lenders survey conducted in a study by the Consumer Financial Protection Bureau (CFPB), the agency that supervises large banks and nonbanks that make private student loans.2 We also interviewed college officials about private student loan borrowing. For both objectives, we reviewed relevant federal laws, reports, and other information relevant to these issues.

We assessed the reliability of the Education data we used by testing it for accuracy and completeness and reviewing documentation about systems

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1 For our panel regression model, we compared the same group of institutions over multiple years. Our panel consisted of all Title IV-eligible colleges in the United States over an 8-year time span that covered years before and after the change in loan limits, which occurred in academic years 2007-08 and 2008-09. The dataset is divided by the type of institution, and the control variables used in the regression include college fixed effects, economic variables and college characteristics.

used to produce the data. We found the data we reviewed reliable for the purposes of our analyses. Similarly, we assessed the reliability of the CFPB study’s private student lender survey data by reviewing documentation about systems used to produce the data and reviewing the survey methodology. We conducted this performance audit from December 2012 to February 2014 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence we obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Analysis of Education Data on Trends in College Prices, Enrollment, and Federal Student Loan Borrowing Patterns

To determine trends in college prices since the loan limits took effect, we examined 13 years of trend data (academic years 1999-2000 through 2011-12) for all Title IV-eligible, degree-granting institutions of higher education from Education’s Integrated Postsecondary Education Data System (IPEDS), and from the three most recent National Postsecondary Student Aid Study (NPSAS) results (academic years 2003-04, 2007-08, and 2011-12). We examined this data for undergraduate students—the majority of college students—across four institutional sectors (nonprofit, for-profit, public 2-year, and public 4-year colleges) and geographic regions. For public 2-year and public 4-year colleges, we also reviewed the annual tuition for both in-state and out-of-state students. We analyzed three descriptors of price:

1. Tuition and fees: the amount of tuition and required fees covering a full academic year charged to students. These values represent what a typical student would be charged and may not be the same for all students at an institution. Tuition and fees data are weighted by

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3 Our scope includes all 50 states and the District of Columbia. We grouped 2- and 4-year for-profit institutions together because about half of the institutions that classify themselves as 4-year institutions award mainly 2-year degrees. Given that we defined our population of institutions of higher education as degree-granting, our analysis excludes less-than-2-year for-profit institutions that award certificates.

4 We did not break down in-district and out-of-district tuition data for public 2-year institutions. Most schools that offer programs for 2 years likely do not enroll many out-of-district commuters, so the population is expected to be too small to yield reliable results.
undergraduate enrollment. We analyzed these data by sector and by region.

Source: IPEDS and NPSAS data.

2. Total price of attendance: what a typical student would pay for tuition and required fees, books and supplies, room and board, and other personal expenses. We analyzed these data by sector.\(^5\)

Source: NPSAS data.

3. Net price after grants: the total price of attendance minus all grant aid received by a typical student. We analyzed these data by sector.\(^6\)

Source: NPSAS data.

To determine patterns in undergraduate student enrollment, we used IPEDS to analyze enrollment trends from academic years 1999-2000 through 2011-12. To determine the characteristics of enrolled students, we also analyzed IPEDS data on institutional characteristics (geographic region and sector) and student characteristics (attendance status and race and ethnicity).

To determine the extent to which students borrowed Stafford loans at their maximum levels in academic year 2011-12, we used NPSAS data. For each loan type, we analyzed and compared the proportion of eligible borrowers who received their maximum Stafford loan amount in academic years 2003-04, 2007-08, and 2011-12.

Because NPSAS data are based on probability samples, estimates are formed using the appropriate estimation weights provided with each survey’s data. Because each of these samples follows a probability procedure based on random selection, they represent only one of a large number of samples that could have been drawn. Since each sample could have provided different estimates, we express our confidence in the precision of our particular sample’s results as a 95 percent confidence interval (e.g., plus or minus 2.5 percentage points). This is the interval that would contain the actual population value for 95 percent of the samples we could have drawn. Unless otherwise noted, all percentage

\(^5\) We did not analyze NPSAS data by region.

\(^6\) We did not analyze NPSAS data by region.
estimates from NPSAS have 95 percent confidence intervals that are within 8 percent of the estimate itself. All NPSAS dollar estimates have 95 percent confidence intervals that are within 8 percentage points of the estimate itself.

Analysis of Data on Private Student Loan Borrowing

To determine trends in private student loan borrowing since the loan limits took effect, we reviewed aggregate trend data from nine major private student lenders\(^7\) compiled in a CFPB study from calendar years 2005-11. CFPB officials told us that the portfolios of these nine major lenders represent about 90 percent of the private student loan market. The lenders’ participation in the data collection was voluntary, and the information was provided to CFPB and Education under a non-disclosure agreement and is protected under various federal laws as proprietary and confidential business information.

These private lender data consists of:

1. Sample loan-level data: records from all private student loans originated from calendar years 2005 to 2011 of nine major lenders were pooled and analyzed in the CFPB study. The data do not identify the specific lender for each loan.

2. Lender portfolio-level data: quarterly performance data on private student loans originated and/or purchased by the nine major student loan lenders who provided the loan-level data, aggregated across lenders.

In addition, the CFPB study queried the nine lenders about current loan terms and conditions. We reviewed the CFPB study, including data appendices that described these data sources and methodology. To obtain additional information about trends after the loan limit increases, we supplemented the CFPB study data with analyses of Education’s IPEDS data (academic years 1999-2000 through 2011-12) and NPSAS data (academic years 1999-2000, 2007-08, and 2011-12) about private

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loan usage and undergraduate borrowing. We also examined these data by institutional sector and for undergraduate students only.

**Interviews with College Officials, Private Student Lenders and Other Experts**

To provide the schools' perspectives about the role of loan limit increases on college prices and federal and private borrowing trends, we supplemented our data analysis with interviews with college officials at eight institutions. We selected a nonprobability sample of institutions to represent each major sector of higher education and different regions, amounts of federal aid received, enrollment sizes, admission selectivity levels, and prices of tuition and related fees (see table 5). During these interviews, we spoke with the financial aid directors and other school officials with knowledge of how tuition, fees, and other prices are set, asking a series of questions related to the setting of tuition and other prices and the role of loan limit increases in setting tuition and other prices. We also asked them a series of questions about private student loans, including trends in private student borrowing among their students and the type of information they provide students to help inform their decision about whether to borrow private student loans.

We also interviewed officials for three of the largest private student lenders, who also participated in the CFPB study's lender survey. We asked them a series of questions, including questions about the trends in private student lending, how they disclose the terms of their loans and the loan certification process, how private student lending has changed over time, and whether they expected to see resurgence in the private student loan market.

In addition, we interviewed representatives from relevant professional associations, federal officials, and subject matter specialists, including academic researchers.
### Table 5: Characteristics of Institutions of Higher Education Included in Our Interviews, Academic Year 2012-13

<table>
<thead>
<tr>
<th>Sector</th>
<th>Region</th>
<th>Percent of Stafford loans distributed to this school's sector</th>
<th>Undergraduate enrollment</th>
<th>Total price of attendance (living on campus)</th>
<th>Percent of students admitted</th>
<th>Student demographics</th>
<th>Percent of beginning undergraduate students with federal loans</th>
<th>Percent of beginning undergraduate students receiving institutional aid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public 4-year</td>
<td>South West</td>
<td>39-41%</td>
<td>6,868</td>
<td>In-state: $20,883  Out-of-state: $31,413</td>
<td>39%</td>
<td>58% White, 19% Black/African American, 18% Hispanic/Latino, 2% Asian, 1% American Indian or Alaska Native</td>
<td>59%</td>
<td>49%</td>
</tr>
<tr>
<td>Public 4-year</td>
<td>Great Lakes</td>
<td>39-41%</td>
<td>2,116</td>
<td>In-state: $17,352 Out-of-state: $24,572</td>
<td>37%</td>
<td>95% Black/African American, 2% White, 1% Hispanic/Latino, 1% Unknown</td>
<td>89%</td>
<td>86%</td>
</tr>
<tr>
<td>Public 2-year</td>
<td>Rocky Mountains</td>
<td>7-15%</td>
<td>9,266</td>
<td>In-state: $13,658 Out-of-state: $16,738</td>
<td>Open admissions/all students accepted</td>
<td>76% White, 16% Hispanic/Latino, 2% Native Hawaiian or other Pacific Islander, 2% Unknown, 1% Asian, 1% Black/African American, 1% American Indian or Alaska Native</td>
<td>32%</td>
<td>42%</td>
</tr>
</tbody>
</table>
### Appendix I: Objectives, Scope, and Methodology

<table>
<thead>
<tr>
<th>Sector</th>
<th>Region</th>
<th>Percent of Stafford loans distributed to this school’s sector</th>
<th>Undergraduate enrollment</th>
<th>Total price of attendance (living on campus)</th>
<th>Percent of students admitted</th>
<th>Student demographics</th>
<th>Percent of beginning undergraduate students with federal loans&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Percent of beginning undergraduate students receiving institutional aid&lt;sup&gt;a&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>For-profit 2- and 4-year</td>
<td>New England</td>
<td>21%</td>
<td>6,546</td>
<td>$43,630</td>
<td>58%</td>
<td>36% White</td>
<td>28% Unknown</td>
<td>48%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>24% Black/African American</td>
<td>8% Hispanic/Latino</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1% Asian</td>
<td>1% American Indian or Alaska Native</td>
<td></td>
</tr>
<tr>
<td>For-profit 2- and 4-year</td>
<td>Multiple</td>
<td>21%</td>
<td>59,484 overall</td>
<td>Varies</td>
<td>Varies</td>
<td>38% White</td>
<td>21% Black/African American</td>
<td>Varies</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>17% Unknown</td>
<td>16% Unknown</td>
<td>Varies</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Hispanic/Latino</td>
<td>4% Asian</td>
<td>Varies</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Unknown</td>
<td>.6% Native Hawaiian or other Pacific Islander</td>
<td>Varies</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Unknown</td>
<td>.6% American Indian or Alaska Native</td>
<td>Varies</td>
</tr>
<tr>
<td>For-profit 2- and 4-year</td>
<td>Multiple</td>
<td>21%</td>
<td>125,560 overall&lt;sup&gt;b&lt;/sup&gt;</td>
<td>Varies</td>
<td>Varies</td>
<td>Varies</td>
<td>Varies</td>
<td>Varies</td>
</tr>
</tbody>
</table>

<sup>a</sup> Data are not available for 125,560 overall.  
<sup>b</sup> For-profit 2- and 4-year institutions located in multiple regions.
### Sector | Region | Percent of Stafford loans distributed to this school's sector | Undergraduate enrollment | Total price of attendance (living on campus) | Percent of students admitted | Student demographics | Percent of beginning undergraduate students with federal loans | Percent of beginning undergraduate students receiving institutional aid |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Private nonprofit 4-year</td>
<td>Southeast</td>
<td>23-33%</td>
<td>10,590</td>
<td>$58,782</td>
<td>40%</td>
<td>43% White 23% Hispanic/Latino 7% Black/African American 6% Unknown 5% Asian</td>
<td>34%</td>
<td>69%</td>
</tr>
<tr>
<td>Private nonprofit 4-year</td>
<td>Mid-East</td>
<td>23%-33%</td>
<td>5,327</td>
<td>$54,780</td>
<td>8%</td>
<td>48% White 19% Asian 7% Hispanic/Latino 7% Black/African American 3% Unknown</td>
<td>3%</td>
<td>60%</td>
</tr>
</tbody>
</table>

Source: GAO analysis of the Integrated Postsecondary Education Data System and college reports.

*Data for beginning undergraduate students receiving federal loans or institutional aid is from academic year 2011-2012.*

*Enrollment data for this higher education institution is as of October 2013.*
Appendix II: Analysis of the Relationship between Student Loan Limit Increases and Tuition

This appendix provides the methodology we used to develop a panel regression model to analyze the relationship between Stafford student loan limit increases and college prices, and the results of that analysis. Our panel regression model is a statistical method where data are collected over a series of years for the same colleges to estimate possible relationships among certain variables, controlling for the effects of other variables; in this study, the relationship was between increases in loan limits and increases in college prices.

Methodology

Our analysis of the relationship between loan limit increases and college prices used a panel regression model, which allows one to compare the same group of institutions over multiple years. Our panel dataset consists of all Title IV-eligible colleges in the United States over an 8-year time span that covers years before and after the change in loan limits, which occurred in academic years 2007-08 and 2008-09. The dataset is divided by the type of institution and the control variables used in the regression include college fixed effects, economic variables, and college characteristics. We examined the following sectors: public 4-year colleges; private nonprofit 4-year colleges; private for-profit 4-year colleges; public 2-year colleges; private for-profit 2-year colleges; and private for-profit less-than-2-year colleges. The main source of data is IPEDS, an annual survey of colleges conducted by the Department of Education (Education) that collects financial characteristics of the institutions and is maintained by Education.

Model

The base specification of our model is given by the equation:

1. \[
\text{CollegePrices}(i,t) = B0(i) + B1*\text{LoanLimit}(t) + B2*\text{CollegeVars}(i,t) \\
+ B3*\text{EconVars}(t) + B4*\text{Pre-LoanLimitTrend}(t) \\
+ B5*\text{Post-LoanLimitTrend}(t) + e(i,t)
\]

where the notation means the following:

- The subscript \( i \) represents college "i"
- The subscript \( t \) represents year "t"
- CollegePrices are the prices for a college in a certain year. We used undergraduate tuition and fees and price of attendance (i.e., tuition plus fees, room and board, books and supplies, and other expenses). We used in-state tuition for public institutions, out-of-state tuition for private 2- and 4-year colleges, and trade tuition for private, less-than-2-year colleges.
Appendix II: Analysis of the Relationship between Student Loan Limit Increases and Tuition

• LoanLimit identifies the period following the increase in the Stafford student loan limit. The starting period for the increase in limits for both the subsidized and unsubsidized loans was academic year 2007-08 (when the limit was increased from $2,625 to $3,500 for dependent students), and academic year 2008-09 (when the loan limit was increased from $3,500 to $5,500) for unsubsidized or combined loans. We used dummy variables that are zero in the years before the change in loan limit and one in the years thereafter. The dummy variables for the loan limits in academic years 2007-08 and 2008-09 are used, respectively, in separate equations because the dummy variables overlap. The loan limit increases are one-time events. In addition to the loan limit increases, these variables also capture the effects on college prices of other events that occurred at the same time, such as the onset of the 2007-2009 financial crises and recession.

• B0 is a college fixed effect. The fixed effect allows us to control for characteristics of the college, which do not vary over time and may affect the college prices, but are not observed in our data. For example, the college may be located in an expensive region of the country.

• CollegeVars are variables that describe characteristics of a college in a certain year. The key variables we used involve revenue, and include state appropriations and endowment income. We also included the number of undergraduates (in full-time equivalents).

• EconVars are control variables that vary by year, but not by college. These variables reflect general economic conditions and include state-level unemployment, housing prices, and a stock market index.

• Pre-LoanLimitTrend and Post-LoanLimitTrend: To capture trends in college prices during the periods before and after the loan limit increases, two different time trends were used. For regressions analyzing the effect of the academic year 2007-08 loan limit increase on college prices:

2. Pre-LoanLimitTrend = (t – 2008)*(1 – LoanLimit), and

In Equations (2) and (3), 2008 will be replaced with 2009 for regressions analyzing the effect of the academic year 2008-09 loan limit increase on college prices. The post-loan limit trend is implicitly an interaction term between the loan limit variable and a time trend.
These variables control for trends in college prices that are common to all colleges in our sample. Including both variables in our regressions allows trends in college prices after the loan limit increase to differ from trends in college prices before the loan limit increase. However, these variables also reflect changes in other unobservable factors, such as economic or political conditions, that may cause trends in college prices to differ before and after the loan limit increases.

- $e$ is the error term, which captures potential model misspecification, measurement errors, and unobserved variables.

We divided the sample into sectors based on the control (e.g. public, private, and nonprofit, for profit) and level (e.g. 2-year, 4-year) of the institution. Specifically, we examined the six sectors where there were sufficient observations for meaningful analysis and excluded the remaining three sectors because there were too few observations. Thus we included public 4-year colleges; private nonprofit 4-year colleges; private for-profit 4-year colleges; public 2-year colleges; private for-profit 2-year colleges; and private for-profit less-than-2-year colleges and excluded private nonprofit less than two-year colleges.

The analysis was done separately by institutional sector for two reasons. First, different institution types may not necessarily compete for the same types of students. For example, students with lower household incomes are less likely to attend private colleges than public colleges. Thus, different sectors may use different strategies for the college prices they charge. Second, different institution types are likely to be affected by different variables. For example, state appropriations are likely to be more important to public colleges than for-profit private colleges. This implies that the model specification could be different for different sectors.

The main source of data is the IPEDS dataset, maintained by Education. IPEDS is an annual survey of colleges conducted by Education which focuses on financial characteristics of the institutions. We merged the academic year data across years and colleges to form a panel that runs from the 2003-04 to the 2010-11 academic year. For certain income variables, we used definitions based on work by the Delta Cost Project. Now part of the American Institutes for Research, the Delta Cost Project published a data map with the goal of standardizing and simplifying some of the variables within IPEDS. Both IPEDS and the Delta Cost Project definitions have been used in prior GAO work and deemed reliable for our purposes.
Appendix II: Analysis of the Relationship between Student Loan Limit Increases and Tuition

We further refined our IPEDS data by excluding certain colleges for various reasons. The major exclusion was institutions that did not have complete data for all 8 years that we examined. Further, responding to the IPEDS survey is required only for colleges that participate in the Title IV aid programs. We also excluded colleges that were outside the 50 states and the District of Columbia, did not participate in Title IV, were not open to the public, or were not predominantly postsecondary. We also excluded colleges that were not active, were primarily administrative units, or did not have undergraduate programs. This resulted in approximately 600 public 4-year colleges; 1200 private nonprofit 4-year colleges; 400 private for-profit 4-year colleges; 1000 public 2-year colleges; 400 private for-profit 2-year colleges; and 900 private for-profit less-than-2-year colleges.¹

We also added data from outside IPEDS to control for the potential impact of household wealth on college prices. Specifically, we added a state-level unemployment rate from the Bureau of Labor Statistics. In some versions, we added the Case-Schiller composite housing price index, which came from Standard and Poor’s (S&P), and the S&P 500 stock index, which we got from Federal Reserve Economic Data (FRED) of the Federal Reserve Bank of St. Louis.

Results

We ran several versions of our model, the results of which are presented in tables 6 and 7. Table 6 shows results for the first loan limit increase in academic year 2007-08, and table 7 shows results for the second loan limit increase in academic year 2008-09—both best represent the various models we estimated. Overall, the estimated models are statistically significant as indicated by the models' statistics (p-values).

Table 6 shows the results for the academic year 2007-08 Stafford loan limit increase for both subsidized and unsubsidized loans on tuition and fees (college prices). In each estimated model, the average academic year change in college prices for years prior to the loan limit increase is given by B4 (the coefficient on Pre-LoanLimitTrend); the average academic year change in college prices in the year in which the loan limits increased relative to the prior year is given by the sum of B1 (the

¹ The exact number of observations used per sector varies by year depending on exactly which variables are used in the model. If a college has a missing value for a particular variable in a particular year, then the number of observations used in that year decreases.
Appendix II: Analysis of the Relationship between Student Loan Limit Increases and Tuition

Table 7 presents the average academic year changes in college prices by different institutions in the periods before the academic year 2007-08 Stafford loan limit increase, the changes in college prices between the loan limit year and the prior year, the change college prices in the years after the loan limit increase, and the change in college prices in the loan limit year attributable to only the events that occurred in that academic year. The results show that average academic year college prices generally increased across all types of colleges before the increase in the Stafford loan limits. In the academic year of the 2007-08 Stafford loan limit increase, college prices increased for some colleges and decreased for others. The decrease in college prices by some colleges is consistent with the opinion that the rapid change in economic conditions may have led state legislatures to put political pressure on colleges in their states to keep tuition low, a sentiment that was echoed in some of our interviews with college officials. Furthermore, some of the college officials we spoke with said that they held down tuition increases because of the economic downturn and financial crises. In the years following the academic year 2007-08 loan limit increase, college prices generally increased. Although

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2 Our analysis of college prices based on cost of attendance, for the limited number of colleges that had enough data, are similar to the reported results for tuition and fees.
the results appear to suggest that the loan limit increase tended to weaken the rising trend in college prices, we cannot determine which portion of the change in college prices in the academic year of the 2007-08 loan limit increase is attributable to the loan limit alone because it is confounded by other events in that year as well as the ongoing rising prices.

The results in table 9 show the average academic year changes in college prices before, during, and after the academic year 2008-09 Stafford loan limit increases. There were generally increases in college prices in the academic year of the 2008-09 loan limit increase, before and afterwards (although there were few cases of decreases). Similar to the academic year 2007-08 loan limit increase, while the results seem to suggest that the loan limit increase in academic year 2008-09 tended to boost the rising trend in college prices we could not determine the portion of the increase due solely to the loan limit increase because of other confounding effects. Also, we could not separate out the effects of the academic year 2007-08 and 2008-09 Stafford loan limit increases from each other after they occurred since the two events overlapped.

Our results suggest that average academic year college prices generally increased across all types of colleges prior to the increases in the Stafford loan limits in academic years 2007-08 and 2008-09, and after the loan limit increases. In the academic year of the 2007-08 Stafford loan limit increase college prices increased for some colleges while they decreased for others. And in the academic year of the 2008-09 Stafford loan limit increase, college prices generally increased. But, in the effective years of the loan limit increases we could not identify the changes in college prices that were due solely to the increases in the Stafford loan limit increases because of other events that happened during that time, including the financial crisis and the economic recession, as well as the upward trend in college prices.

We took multiple steps to verify our methodology. First, we consulted with GAO experts on statistics, econometric modeling, and higher education issues. Based on their comments, we made modifications to our model where appropriate. Second, we consulted academic literature on student financial aid and tuition. Third, we consulted academic experts who reviewed our methodology and offered feedback. Fourth, we recognize that our analysis has some limitations, including the difficulty in isolating the effects of the Stafford loan limits themselves, the relatively small number of years used, and our inability to include other types of colleges. The results should therefore be interpreted with caution.
### Table 6: Regression Estimates of the Academic Year 2007-08 Stafford Loan Limit Increases and College Tuition and Fees

<table>
<thead>
<tr>
<th>Sector</th>
<th>In-state tuition</th>
<th>Out-state tuition</th>
<th>Out-of-state tuition</th>
<th>In-state tuition</th>
<th>Out-of-state tuition</th>
<th>Trade tuition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loan limit dummy</td>
<td>-95.80 [0.19]</td>
<td>-698.44 [0.00]</td>
<td>-415.42 [0.32]</td>
<td>-288.63 [0.00]</td>
<td>-1,174.65 [0.03]</td>
<td>-318.78 [0.07]</td>
</tr>
<tr>
<td>Pre-loan limit trend(^a)</td>
<td>119.53 [0.00]</td>
<td>660.53 [0.00]</td>
<td>446.75 [0.00]</td>
<td>81.37 [0.00]</td>
<td>566.53 [0.00]</td>
<td>325.79 [0.00]</td>
</tr>
<tr>
<td>Post-loan limit trend(^b)</td>
<td>278.99 [0.00]</td>
<td>682.73 [0.00]</td>
<td>-49.77 [0.72]</td>
<td>178.74 [0.00]</td>
<td>30.84 [0.86]</td>
<td>548.98 [0.00]</td>
</tr>
<tr>
<td>State appropriations</td>
<td>-0.008 [0.021]</td>
<td>NA</td>
<td>NA</td>
<td>0.000 [0.234]</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>College fixed-effects</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>No. of observations</td>
<td>4,564</td>
<td>9,261</td>
<td>2,679</td>
<td>7,264</td>
<td>2,155</td>
<td>6,333</td>
</tr>
<tr>
<td>No. of colleges</td>
<td>601</td>
<td>1,191</td>
<td>398</td>
<td>946</td>
<td>385</td>
<td>906</td>
</tr>
<tr>
<td>Prob &gt; F</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Adjusted R-square</td>
<td>0.94</td>
<td>0.98</td>
<td>0.72</td>
<td>0.93</td>
<td>0.71</td>
<td>0.86</td>
</tr>
</tbody>
</table>

Source: GAO analysis of Integrated Postsecondary Education Data System data.

Notes:
- The values in square brackets are the p-values of the estimates.
- NA means not applicable.
- \(^a\) The pre-loan limit time trend is equal to 0 in 2007-08 and later, equal to -1 in 2006-07, equal to -2 in 2005-06, and so forth.
- \(^b\) The post-loan limit time trend is equal to 0 in 2006-07 and earlier, equal to 1 in 2007-08, equal to 2 in 2008-09, and so forth.
### Table 7: Estimated Average Academic Year Changes in Tuition and Fees: Academic Year 2007-08 Stafford Loan Limit Increase

<table>
<thead>
<tr>
<th>Sector</th>
<th>Average academic year change in tuition &amp; fees, pre-loan limit years (2003-04 to 2006-07)(^b)</th>
<th>Average academic year change in tuition &amp; fees, loan limit year (2007-08)(^c)</th>
<th>Average academic year change in tuition &amp; fees, loan limit year (2008-09 to 2010-11)(^d)</th>
<th>Average academic year change in tuition &amp; fees from loan limit loan limit year (2007-08)(^e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public, 4-year</td>
<td>$120</td>
<td>$303</td>
<td>$279</td>
<td>$183</td>
</tr>
<tr>
<td>Private, nonprofit, 4-year</td>
<td>661</td>
<td>646</td>
<td>683</td>
<td>-15</td>
</tr>
<tr>
<td>Private, for-profit, 4-year</td>
<td>447</td>
<td>-18</td>
<td>-50</td>
<td>-465</td>
</tr>
<tr>
<td>Public, 2-year</td>
<td>81</td>
<td>-29</td>
<td>179</td>
<td>-110</td>
</tr>
<tr>
<td>Private, for-profit, 2-year</td>
<td>567</td>
<td>-577</td>
<td>31</td>
<td>-1,144</td>
</tr>
<tr>
<td>Private, for-profit, &lt;2-year</td>
<td>326</td>
<td>556</td>
<td>549</td>
<td>230</td>
</tr>
</tbody>
</table>

Source: GAO analysis of Integrated Postsecondary Education Data System data.

\(^a\) The estimates are based on the coefficient estimates in Table 1.

\(^b\) The value equals the pre-loan-trend in Table 1.

\(^c\) The value equals the sum of loan limit dummy, pre-loan trend, and post-loan limit trend in Table 1.

\(^d\) The value equals the post-loan limit trend in Table 1.

\(^e\) The value equals the sum of loan limit dummy and post-loan limit trend in Table 1.
### Table 8: Regression Estimates of the Academic Year 2008-09 Stafford Loan Limit Increases and College Tuition and Fees

<table>
<thead>
<tr>
<th>Sector</th>
<th>Public, 4-year</th>
<th>Private, nonprofit, 4-year</th>
<th>Private, for-profit, 4-year</th>
<th>Public, 2-year</th>
<th>Private, for-profit, 2-year</th>
<th>Private, for-profit, &lt;2-yr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dependent variable</td>
<td>In-state tuition</td>
<td>Out-of-state tuition</td>
<td>Out-of-state tuition</td>
<td>In-state tuition</td>
<td>Out-of-state tuition</td>
<td>Trade tuition</td>
</tr>
<tr>
<td>Loan limit dummy</td>
<td>-403.37 [0.00]</td>
<td>-575.75 [0.00]</td>
<td>9.84 [0.98]</td>
<td>92.29 [0.07]</td>
<td>761.33 [0.19]</td>
<td>-590.72 [0.00]</td>
</tr>
<tr>
<td>Pre-loan limit trend&lt;sup&gt;a&lt;/sup&gt;</td>
<td>183.62 [0.00]</td>
<td>653.03 [0.00]</td>
<td>293.63 [0.98]</td>
<td>42.91 [0.10]</td>
<td>183.90 [0.01]</td>
<td>402.69 [0.00]</td>
</tr>
<tr>
<td>Post-loan limit trend&lt;sup&gt;b&lt;/sup&gt;</td>
<td>342.14 [0.00]</td>
<td>658.57 [0.00]</td>
<td>-125.43 [0.53]</td>
<td>139.80 [0.00]</td>
<td>-224.95 [0.36]</td>
<td>599.64 [0.00]</td>
</tr>
<tr>
<td>State appropriations</td>
<td>-0.008 [0.02]</td>
<td>NA</td>
<td>NA</td>
<td>0.000 [0.24]</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Endowment income</td>
<td>NA</td>
<td>-0.0005 [0.11]</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>State unemployment rate</td>
<td>84.90 [0.00]</td>
<td>17.72 [0.30]</td>
<td>-42.84 [0.48]</td>
<td>-51.94 [0.00]</td>
<td>20.92 [0.82]</td>
<td>96.15 [0.00]</td>
</tr>
<tr>
<td>Stock market price index</td>
<td>-0.116 [0.50]</td>
<td>-0.043 [0.86]</td>
<td>-0.813 [0.43]</td>
<td>-0.123 [0.25]</td>
<td>-0.258 [0.83]</td>
<td>-0.085 [0.83]</td>
</tr>
<tr>
<td>House price index</td>
<td>4.51 [0.00]</td>
<td>-5.84 [0.00]</td>
<td>2.02 [0.78]</td>
<td>0.97 [0.20]</td>
<td>2.34 [0.78]</td>
<td>1.96 [0.50]</td>
</tr>
<tr>
<td>Full-time undergraduates</td>
<td>-0.004 [0.69]</td>
<td>-0.046 [0.12]</td>
<td>-0.027 [0.00]</td>
<td>0.000 [0.96]</td>
<td>-0.306 [0.11]</td>
<td>-0.000 [0.99]</td>
</tr>
<tr>
<td>Constant</td>
<td>4,943 [0.00]</td>
<td>22,429 [0.00]</td>
<td>16,512 [0.00]</td>
<td>3,222 [0.00]</td>
<td>13,205 [0.00]</td>
<td>11,144 [0.00]</td>
</tr>
<tr>
<td>College fixed effects</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>No. of observations</td>
<td>4,564</td>
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<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Adjusted R-square</td>
<td>0.94</td>
<td>0.98</td>
<td>0.72</td>
<td>0.93</td>
<td>0.71</td>
<td>0.86</td>
</tr>
</tbody>
</table>

Source: GAO analysis of Integrated Postsecondary Education Data System data.

Notes:
The values in square brackets are the p-values of the estimates.
NA means not applicable.
<sup>a</sup>The pre-loan limit time trend is equal to 0 in 2008-09 and later, equal to -1 in 2007-08, equal to -2 in 2006-07, and so forth.
<sup>b</sup>The post-loan limit time trend is equal to 0 in 2007-08 and earlier, equal to 1 in 2008-09, equal to 2 in 2009-10, and so forth.
### Table 9: Estimated Average Academic Year Changes in Tuition and Fees: Academic Year 2008-09 Stafford Loan Limit Increases

<table>
<thead>
<tr>
<th>Sector</th>
<th>Average academic year change in tuition &amp; fees, pre-loan limit years (2003-04 to 2007-08)</th>
<th>Academic year 2008-09 Stafford Loan limit increase&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Average academic year change in tuition &amp; fees, loan limit year (2008-09)&lt;sup&gt;b&lt;/sup&gt;</th>
<th>Average academic year change in tuition &amp; fees, loan-limit year (2009-10 to 2010-11)&lt;sup&gt;c&lt;/sup&gt;</th>
<th>Average academic year change in tuition &amp; fees from loan limit, loan limit year (2008-09)&lt;sup&gt;d&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public 4-year</td>
<td>$184</td>
<td>$123</td>
<td>$342</td>
<td>-61</td>
<td></td>
</tr>
<tr>
<td>Private nonprofit 4 year</td>
<td>653</td>
<td>736</td>
<td>659</td>
<td>83</td>
<td></td>
</tr>
<tr>
<td>Private for-profit 4-year</td>
<td>294</td>
<td>179</td>
<td>-125</td>
<td>-115</td>
<td></td>
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<tr>
<td>Public 2 year</td>
<td>43</td>
<td>275</td>
<td>140</td>
<td>232</td>
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<td>Private for-profit 2-year</td>
<td>184</td>
<td>720</td>
<td>-225</td>
<td>536</td>
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<tr>
<td>Private for-profit &lt;2-year</td>
<td>403</td>
<td>412</td>
<td>600</td>
<td>9</td>
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</tr>
</tbody>
</table>

Source: GAO analysis of Integrated Postsecondary Education Data System data.

<sup>a</sup> The estimates are based on the coefficient estimates in Table 8.

<sup>b</sup> The value equals the pre-loan-trend in Table 8.

<sup>c</sup> The value equals the sum of loan limit dummy, pre-loan trend, and post-loan limit trend in Table 8.

<sup>d</sup> The value equals the post-loan limit trend in Table 8.

<sup>e</sup> The value equals the sum of loan limit dummy and post-loan limit trend in Table 8.
Appendix III: Additional Data on College Prices and Student Enrollment

Figure 9: In-state Tuition and Required Fees by Region for Full-time Undergraduate Students, Academic Years 1999-2000 to 2011-12

Out of state tuition and fees by region (in Academic Year 2011-12 constant dollars)

<table>
<thead>
<tr>
<th>Academic Year</th>
<th>Average annual rate increase (Academic Year 2007-08 through Academic Year 2011-12)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>New England 3%</td>
</tr>
<tr>
<td></td>
<td>Middle East 4%</td>
</tr>
<tr>
<td></td>
<td>Great Lakes 1%</td>
</tr>
<tr>
<td></td>
<td>Plains 2%</td>
</tr>
<tr>
<td></td>
<td>Southeast 2%</td>
</tr>
<tr>
<td></td>
<td>Southwest 3%</td>
</tr>
<tr>
<td></td>
<td>Rocky Mountains 4%</td>
</tr>
<tr>
<td></td>
<td>Far West 5%</td>
</tr>
</tbody>
</table>

Source: GAO analysis of Integrated Postsecondary Education Data System data.
Figure 10: Out-of-state Tuition and Required Fees by Region for Full-time Undergraduate Students, Academic Years 1999-2000 to 2011-12

Out of state tuition and fees by region (in Academic Year 2011-12 constant dollars)

Academic year

<table>
<thead>
<tr>
<th>Region</th>
<th>Average annual rate increase</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Academic Year 2007-08 through Academic Year 2011-12)</td>
</tr>
<tr>
<td>New England</td>
<td>3%</td>
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<tr>
<td>Middle East</td>
<td>4%</td>
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<tr>
<td>Great Lakes</td>
<td>1%</td>
</tr>
<tr>
<td>Plains</td>
<td>2%</td>
</tr>
<tr>
<td>Southeast</td>
<td>2%</td>
</tr>
<tr>
<td>Southwest</td>
<td>3%</td>
</tr>
<tr>
<td>Rocky Mountains</td>
<td>4%</td>
</tr>
<tr>
<td>Far West</td>
<td>5%</td>
</tr>
</tbody>
</table>

Source: GAO analysis of Integrated Postsecondary Education Data System data.
Figure 11: Enrollment in Degree-granting Institutions of Higher Education by Region and Share of Students, Academic Years 1999-2000 to 2011-12

Students (in millions)

Source: GAO analysis of Integrated Postsecondary Education Data System data.
Figure 12: Enrollment in Degree-granting Institutions of Higher Education by Attendance Status, Academic Years 1999-2000 to 2011-12

Total undergraduate enrollment (in millions)

Source: GAO analysis of Integrated Postsecondary Education Data System data.
Figure 13: Enrollment in Degree-granting Institutions of Higher Education by Ethnicity, Academic Years 1999-2000 to 2011-12

Total undergraduate enrollment by ethnicity (in millions)

Source: GAO analysis of Integrated Postsecondary Education Data System data.
Figure 14: Enrollment in Degree-granting Institutions of Higher Education by Sector and Ethnicity, Academic Years 1999-2000 to 2011-12

Source: GAO analysis of Integrated Postsecondary Education Data System data.
Appendix IV: Sample Self-Certification Form for Private Loan Applicant

Private Education Loan Applicant Self-Certification

Important: Pursuant to Section 105 of the Higher Education Act of 1965, as amended, (HEA) and to satisfy the requirements of Section 128(e)(5) of the Truth in Lending Act, a lender must obtain a self-certification signed by the applicant before disbursing a private education loan. The school is required on request to provide this form or the required information only for students admitted or enrolled at the school. Throughout this Applicant Self-Certification, you and your refer to the applicant who is applying for the loan. The applicant and the student may be the same person.

Instructions: Before signing, carefully read the entire form, including the definitions and other information on the following page. Submit the signed form to your lender.

SECTION 1: NOTICES TO APPLICANT

- Free or lower-cost Title IV federal, state, or school student financial aid may be available in place of, or in addition to, a private education loan. To apply for Title IV federal grants, loans and work-study, submit a Free Application for Federal Student Aid (FAFSA) available at www.fafsa.ed.gov or by calling 1-800-4-FED-AID, or from the school's financial aid office.
- A private education loan may reduce eligibility for free or lower-cost federal, state, or school student financial aid.
- You are strongly encouraged to pursue the availability of free or lower-cost financial aid with the school's financial aid office.
- The financial information required to complete this form can be obtained from the school's financial aid office. If the lender has provided this information, you should contact your school's financial aid office to verify this information and to discuss your financing options.

SECTION 2: COST OF ATTENDANCE AND ESTIMATED FINANCIAL ASSISTANCE

If information is not already entered below, obtain the needed information from the school's financial aid office and enter it on the appropriate line. Sign and date where indicated. See Section 5 for definitions of financial aid terms.

A. Student's cost of attendance for the period of enrollment covered by the loan $ \\
B. Estimated financial assistance for the period of enrollment covered by the loan $ \\
C. Difference between amounts A and B $ \\

WARNING: If you borrow more than the amount on line C, you risk reducing your eligibility for free or lower-cost federal, state, or school financial aid.

SECTION 3: APPLICANT INFORMATION

Enter or correct the information below.

Full Name and Address of School

Applicant Name (last, first, MI) Date of Birth (mm/dd/yyyy) \\
Permanent Street Address

City, State, Zip Code

Area Code / Telephone Number Home ( ) Other ( )

E-mail Address

Period of enrollment covered by the loan (mm/dd/yyyy) from / / from / / \\

If the student is not the applicant, provide the student's name and date of birth.

Student Name (last, first, MI) Student Date of Birth (mm/dd/yyyy) \\

SECTION 4: APPLICANT SIGNATURE

I certify that I have read and understood the notices in Section 1 and, to the best of my knowledge, the information provided on this form is true and correct.

Signature of Applicant Date (mm/dd/yyyy) 

Source: Department of Education
Appendix V: GAO Contact and Staff
Acknowledgements

<table>
<thead>
<tr>
<th>GAO Contact</th>
<th>Jacqueline M. Nowicki, (617) 788-0580 or <a href="mailto:nowickij@gao.gov">nowickij@gao.gov</a>.</th>
</tr>
</thead>
</table>

**Staff Acknowledgements**

In addition to the contact named above, Sherri Doughty, Assistant Director, Kristy Kennedy, Sandra Baxter, Patrick Dudley, John Karikari, and John W. Mingus made significant contributions to this report. Also contributing to this report were Jessica Botsford, Melissa H. Emrey Arras, Lorraine Ettaro, Mimi Nguyen, and Kathleen L. Van Gelder.
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