This study was conducted to determine how often federal financial aid recipients received aid that was greater than their federally defined need and what cost or other implications might result from changing the Higher Education Act (HEA) to limit such aid. Data came from the 1999-2000 National Postsecondary Student Aid Study for full-time, full-year undergraduates. Researchers developed a multiple regression model to identify student, school, and financial aid package characteristics associated with receiving aid greater than student need. Federal laws and regulations were reviewed, and interviews were held with officials at the U.S. Department of Education. Findings show that in school year 1999-2000, of the 3.4 million full-time/full-year federal aid recipients, 22% (732,000) received a total of $2.96 billion in financial aid that was greater than their federally defined financial aid. Of these, 628,000 received an estimated $2.72 billion in such aid by obtaining nonneed-based loans, identified as substitutable loans, that families borrow to meet their expected family contribution. Another 104,000 federal aid recipients received an estimated $238 million in such aid as a result of receiving aid from federal and nonfederal sources. Changing the HEA to limit aid greater than students' federally defined financial need is not likely to achieve significant savings, although the use of nonsubstitutable loans may increase overall student indebtedness. The General Accounting Office (GAO) recommends that the U.S. Department of Education monitor the impact of such loans on student loan debt burden and if debt burden rises substantially, the Department should develop alternatives to help students manage student loan debt burden. Four appendices discuss the objectives, scope, and methodology, describe logistic regression, present comments from the Department of Education, and list GAO contacts and staff members. (SLD)
STUDENT FINANCIAL AID

Monitoring Aid Greater Than Federally Defined Need Could Help Address Student Loan Indebtedness
STUDENT FINANCIAL AID

Monitoring Aid Greater Than Federally Defined Need Could Help Address Student Loan Indebtedness

What GAO Found

We found that in school year 1999-2000, of the 3.4 million full-time/full-year federal aid recipients, 22 percent (732,000) received a total of $2.96 billion in financial aid that was greater than their federally defined financial need. Of these, 628,000 received an estimated $2.72 billion in such aid by obtaining non-need-based loans—which we identify as substitutable loans—that families borrow to meet their expected family contribution (i.e., what the federal government determines the family can afford to pay for college). Title IV allows for students and families to obtain these non-need-based loans to meet their expected family contribution. Another 104,000 federal aid recipients received an estimated $238 million in such aid as a result of receiving a combination of aid from federal and nonfederal sources.

Changing the HEA to limit the receipt of aid that is greater than students' federally defined financial need is not likely to achieve significant federal savings, although, the use of substitutable loans may increase overall student indebtedness. In terms of cost implications, limiting those instances where federal aid recipients receive substitutable loans—which is the main reason why students received aid greater than their federally defined need—will not likely result in significant savings. While the government will not have to pay default claims or special allowance payments on loans it guarantees, it would forego any interest earnings on loans it makes directly. Any savings from limiting these loans would be substantially less than the total amount of the loans made—the $2.72 billion. However, the widespread use of substitutable loans may increase the average debt of borrowers and may affect Education's ability to help students and their families maintain their loan debt at manageable levels.
Contents

Letter

Results in Brief
Background
An Estimated 22 Percent of Federal Aid Recipients Received Aid above Their Federally Defined Need
Recipients of Aid Greater Than Their Federally Defined Need Are More Likely to Have Higher Family Incomes, Be Dependent, and Attend Public Universities
Savings from Limiting Aid Greater Than Federally Defined Need Would Likely Be Modest, but Substitutable Loans to Students Could Affect Their Indebtedness

Appendix I

Objectives, Scope, and Methodology

Appendix II

Logistic Regressions

Appendix III

Comments from the Department of Education

Appendix IV

GAO Contact and Staff Acknowledgments

Tables

Table 1: Sources of Financial Aid for Students Receiving Aid Greater Than Their Federally Defined Need Due to Combined federal and Nonfederal Aid, 1999-2000 School Year
Table 2: Selected Student and School Characteristics Associated with Increased Likelihood of Receiving Financial Aid That Was Greater Than Federally Defined Need
Table 3: Selected Financial Aid Package Characteristics That Were Associated with Increased Likelihood of Receiving Financial Aid That Was Greater Than Federally Defined Need

Table 4: Odds Ratios for All Students Receiving Aid Greater Than Federally Defined Need

Table 5: Odds Ratios for Students Receiving Aid Greater Than Federally Defined Need That Cannot Be Entirely Attributed to Substitutable Loans

Table 6. Means of Variables

Figures

Figure 1: Growth in Student Financial Aid Funding, 1991-92 to 2001-02

Figure 2: Proportion of Federal Aid Recipients Receiving Aid Greater Than Federally Defined Need in Relation to All Aid Recipients, Including Federal Aid Recipients, Full-time/Full-year Undergraduates, 1999-2000

Figure 3: Proportion of Financial Aid Greater Than Federally Defined Need in Relation to Total Financial Aid Awarded and Total Financial Aid Awarded to Federal Aid Recipients, Full-time/Full-year Undergraduates, 1999-2000

This is a work of the U.S. Government and is not subject to copyright protection in the United States. It may be reproduced and distributed in its entirety without further permission from GAO. It may contain copyrighted graphics, images or other materials. Permission from the copyright holder may be necessary should you wish to reproduce copyrighted materials separately from GAO's product.
April 30, 2003

The Honorable Rod Paige
Secretary of Education

Dear Mr. Secretary:

In the 2000-01 school year, $80.4 billion in financial aid was provided to college students to help them finance their postsecondary education. Depending on their financial situation, students and their families had a range of options for paying for a college education, including funding from the federal government, state governments, private entities such as religious organizations, and schools themselves. While students and their families had multiple options for paying for college, during the 2000-01 school year, over half of the financial aid awarded came from the federal government, in the form of grants to low-income students and loans to students and their families, under Title IV of the Higher Education Act of 1965.²

Most Title IV aid is based on a student's federally defined need, which is the difference between the student's cost of attendance and the family's federally determined ability to pay these costs—the latter is known as the expected family contribution (EFC). Under Title IV, families are presumed to have the resources in the form of savings and income to meet their EFC. However, instead of relying on family resources to finance their EFC, Title IV allows for students and families to obtain non-need-based loans to meet their EFC. In some instances, the federal government makes these non-need-based loans directly to students and families (direct loans) or guarantees the repayment of loans made by private lenders (guaranteed loans). Other non-need-based loans are available from state governments or borrowed from private lenders without a federal repayment guarantee. In this report, we refer to non-need-based loans that are used to replace EFC as “substitutable loans.”

1The College Board, Trends in Student Aid 2002, Washington, D.C.

2Other federal agencies, such as the Department of Veterans Affairs, provided an estimated $2.7 billion in additional non-Title IV student financial aid.
Aside from the federal government, the remaining aid that students receive, both need-based and non-need-based, comes from sources, such as schools, state government programs, and private entities such as religious or fraternal organizations. This aid comes primarily in the form of direct grants, including, for example, state or school need-based grants, and/or academic or athletic merit scholarships.

We initiated this review to determine (1) the extent to which students received aid that was greater than their federally defined financial need, (2) the student, school, and financial aid package characteristics associated with receiving such aid, and (3) what cost or other implications might result from changing the Higher Education Act to limit the receipt of aid that is greater than a student’s federally defined need.

To do our work, we analyzed data from the 1999-2000 National Postsecondary Student Aid Study (NPSAS) for cases pertaining to full-time/full-year undergraduates and developed a multiple regression model to identify which student, school, and financial aid package characteristics were associated with receiving aid that was greater than students’ federally defined need. We also reviewed federal laws and regulations governing the awarding of federal financial aid, and we obtained information from 12 schools on their financial aid packaging policies and practices. We also interviewed officials at the Department of Education (Education) and several academic researchers and financial aid officers.

We conducted our work between January 2002 and March 2003 in accordance with generally accepted government auditing standards. For details on our scope and methodology, see appendix I.

Results in Brief

Of the 3.4 million full-time/full-year federal aid recipients for school year 1999-2000, 22 percent (732,000) received a total of $2.96 billion in financial aid that was greater than their federally defined financial need. They received this aid either because they borrowed substitutable loans or because they received nonfederal financial aid, such as scholarships, in addition to federal aid. According to our analysis, of the 3.4 million full-time/full-year federal aid recipients, 19 percent (628,000) received an

3NPSAS is a comprehensive nationwide survey designed to determine how students and families pay for postsecondary education. Within Education, the National Center for Education Statistics is responsible for conducting the survey. The most recent survey collected data for the 1999-2000 academic year.
estimated $2.72 billion in aid greater than their federally defined need through substitutable loans and an additional 3 percent of such aid recipients (104,000) received an estimated $238 million in aid greater than their federally defined need as a result of receiving a combination of federal and nonfederal aid. For the latter group, several possible reasons, related to how nonfederal aid is treated in determining students' need for Title IV assistance or how need is adjusted, may explain why these students received aid greater than their federally defined need.

Higher grade point averages, higher income, being dependent, as well as attending public institutions or institutions located in the Southwest or Plains states were characteristics associated with students receiving aid greater than their federally defined need, regardless of whether that aid was due to substitutable loans or a combination of federal and nonfederal financial aid. Compared to those students who did not receive aid greater than their need, those who did were more likely to have higher family incomes, be dependent, or attend schools in rural areas. Also, students whose aid packages were composed mostly of non-need-based federal aid or nonfederal aid were more likely to receive aid that was greater than their federally defined need.

Changing the Higher Education Act to limit the receipt of aid that is greater than students' federally defined financial need is not likely to achieve significant federal savings. However, the use of substitutable loans could increase overall student indebtedness. In terms of cost implications, limiting those instances where students receive substitutable loans—which is the main reason why students received aid greater than their federally defined need—will not likely result in significant savings. While the government will not have to pay default claims or special allowance payments on guaranteed loans, it would forego any interest earnings on direct loans. Any savings from limiting these loans would be substantially less than the total amount of the loans made—the $2.72 billion. However, the widespread use of substitutable loans could increase the average debt of borrowers and may affect Education's ability to help students maintain their loan debt at manageable levels.

In this report, we are recommending that the Secretary of Education, over time, monitor the impact of substitutable loans on student loan debt burden and, if debt burden associated with substitutable loans rises substantially, develop and propose alternatives to help students manage student loan debt burden for the administration or Congress to consider.
In responding to a draft of this report, Education agreed that student indebtedness is of concern, however, Education disagreed with what we included in our analysis. Education stated that by including loans to students' families—usually the parents—we were mischaracterizing student debt and that loans to families should be excluded from our analysis. We modified the report to more clearly detail when nonstudents were responsible for the loans. Education also had technical comments, which were incorporated when appropriate.

### Background

The following programs are authorized under Title IV of the Higher Education Act, as amended:

- **Pell grants**—grants to undergraduate students who are enrolled in a degree or certificate program and have federally defined financial need.

- **Stafford and PLUS loans**—these loans may be made by private lenders and guaranteed by the federal government (guaranteed loans) or made directly by the federal government through a student’s school (direct loans).

- **Subsidized Stafford loans**—loans made to students enrolled at least half-time in an eligible program of study and have federally defined financial need. The federal government pays the interest costs on the loan while the student is in school.

- **Unsubsidized Stafford loans**—non-need-based loans made to students enrolled at least half-time in an eligible program of study. Although the terms and conditions of the loan (i.e., interest rates, etc.) are the same as those for subsidized loans, students are responsible for paying all interest costs on the loan.

- **PLUS loans**—non-need-based loans made to credit worthy parents of dependent undergraduate students enrolled at least half-time in an eligible program of study. Borrowers are responsible for paying all interest on the loan.

Dependent students may borrow combined subsidized and unsubsidized Stafford loans up to $2,625 in their first year of college, $3,500 in their second year, and $5,500 in their third year and beyond. Independent students and dependent students without access to PLUS loans can borrow combined subsidized and unsubsidized Stafford loans up to $6,625 in their first year, $7,500 in their second year, and $10,500 in their third year and beyond. There are aggregate limits for an entire undergraduate
education of $23,000 for dependent students and $46,000 for independent students or dependent students without access to PLUS loans.

- **Campus-based aid**—participating institutions receive separate allocations for three programs from Education. The institutions then award the following aid to students:
  
  - **Supplemental Educational Opportunity Grants (SEOG)**—grants for undergraduate students with federally defined financial need. Priority for this aid is given to Pell grant recipients.
  
  - **Perkins loans**—low-interest (5 percent) loans to undergraduate and graduate students. Interest does not accrue while the student is enrolled at least half-time in an eligible program. Priority is given to students who have exceptional federally defined financial need. Students can borrow up to $4,000 for any year of undergraduate education with an aggregate limit of $20,000.
  
  - **Work-study**—on- or off-campus jobs in which students who have federally defined need earn at least the current federal minimum wage. The institution or off-campus employer pays a portion of their wages.

The amount of nonfederal financial aid has been increasing faster than the amount of federal grants for financial aid while the amount of federal loans for financial aid has increased the most. As figure 1 shows, from 1991-92 to 2001-02, the total financial aid awarded from nonfederal grants more than doubled, while the amounts from federal grant programs increased much more slightly. During this time, the amount of aid borrowed through federal loan programs nearly doubled. Growth in the amount borrowed through nonfederal loans from 1995-96 to 2001-02 also rose, but it remains the smallest source of the four categories.
As a result of increasing reliance on loans to pay college costs, there is growing concern about the level of loan debt students are accumulating. The median cumulative amount borrowed from all loan sources for graduating seniors increased (in constant 2001 dollars) from $9,800 in 1992-93 to $18,000 in 1999-2000. Even though income of graduates may have increased over the same period, some analysts have expressed concern about the increased reliance on the use of loans in lieu of other options for financing a college education, such as resources the student and family already have.

Education is responsible for, among other things, formulating the federal postsecondary education policy, overseeing federal investments in support

---

of students enrolled in postsecondary education, and managing the
distribution of Title IV funds. Part of its role in fulfilling these
responsibilities is to ensure that Title IV funds are used effectively.
Education has established a performance indicator of maintaining
borrower indebtedness and average borrower payments for federal
student loans at less than 10 percent of borrower income in the first year
of repayment. This indicator was established based on the belief that an
educational debt burden of 10 percent of income or higher will negatively
affect a borrower's ability to repay his or her student loans.

Schools are responsible for determining individual students' eligibility for
specific sources of financial aid and compiling these sources to meet each
student's need—a process known as packaging. Part of this process
involves deciding which types or sources of aid should be awarded first—
for example, grants or loans, federal or nonfederal aid, need-based or non-
need-based aid. Another factor to consider in packaging aid is whether to
reduce aid from any source in a student's package to offset an aid award
from another source. Such a reduction might be done, for example, when a
student who has been awarded a significant amount of need-based aid
subsequently obtains a substantial non-need-based aid award from a
source outside of their school's financial aid office.

An Estimated 22
Percent of Federal
Aid Recipients
Received Aid above
Their Federally
Defined Need

In school year 1999-2000, an estimated 732,000 out of 3.4 million full-
time/full-year federal aid recipients (22 percent) received $2.96 billion in
financial aid greater than their federally defined financial need, either
because they or their parents received substitutable loans or because they
received nonfederal financial aid, such as scholarships, in addition to
federal aid. Figure 2 shows how the number of aid recipients receiving aid
greater than their federally defined need compares to the total number of
financial aid recipients. Figure 3 shows how the amount of aid greater than
federally defined need compares to total aid received.
Figure 2: Proportion of Federal Aid Recipients Receiving Aid Greater Than Federally Defined Need in Relation to All Aid Recipients, Including Federal Aid Recipients, Full-time/Full-year Undergraduates, 1999-2000

732,000 received aid greater than their federally define need

628,000 due to substitutable loans

104,000 due to combinations of federal and nonfederal aid

B 3.4 Million received any federal aid

C 4.3 Million received aid from any source

$2.72 Billion due to substitutable loans

$2.96 Billion in aid received that was greater than the federally defined need

$238 Million due to combinations of federal and nonfederal aid

$32 Billion in aid (from all sources received) by the 3.4 million federal aid recipients

$36.4 Billion in aid (from all sources received) by the 4.3 million aid recipients

### Most Cases of Aid Greater Than Federally Defined Need Can be Attributed to Substitutable Loans

Of all federal aid recipients, about 19 percent (628,000) received total financial aid that was greater than their federally defined need solely as a result of receiving substitutable loans. We estimate this to be $2.72 billion with an average amount of about $4,300. These students received aid that was greater than their federally defined need because, under the Higher Education Act, students and their families can borrow substitutable loans—unsubsidized Stafford and PLUS loans—to offset the amount of their expected family contribution (provided they do not exceed the annual and cumulative borrowing limits established for these programs).

The way that schools package student financial aid could contribute to students receiving substitutable loans that increase their aid beyond their federally defined need. For example, of the 12 schools that provided information on their aid packaging practices, 7 automatically package substitutable loans for students that are greater than their federally defined need while 5 require that a student or family who wishes to obtain such a loan apply for it.\(^5\)

### Some Cases of Aid Greater Than Federally Defined Need are Due to Combinations of Federal and Nonfederal Aid

Another 3 percent of federal aid recipients (104,000) received aid that was greater than their federally defined need as a result of receiving nonfederal aid in addition to their federal aid. We estimate this to be a total of $238 million with an average of about $2,300. This group of students continued to have aid greater than their federally defined need even after any substitutable loans they received were accounted for. Further, there was no pattern among these students in terms of the sources from which they received their financial aid, except that the majority received unsubsidized Stafford loans. (See table 1.) In addition, there was no pattern in terms of the types of schools they attended.\(^6\) The lack of any such pattern may be due to factors not captured in NPSAS data, such as the sequence in which financial aid was packaged.

---

\(^5\)One of the 7 schools automatically awards substitutable loans when need falls below a $200 threshold.

\(^6\)Other characteristics we examined included whether the institution was rural or urban, its regional location, or whether it awarded only undergraduate degrees or masters or doctoral degrees as well.
Table 1: Sources of Financial Aid for Students Receiving Aid Greater Than Their Federally Defined Need Due to Combined Federal and Nonfederal Aid, 1999-2000 School Year

<table>
<thead>
<tr>
<th>Aid category</th>
<th>Source of financial aid</th>
<th>Percent of the 104,000 students who received aid from this source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal aid</td>
<td>Pell grants</td>
<td>17 %</td>
</tr>
<tr>
<td></td>
<td>Supplemental Educational Opportunity grants (SEOG)</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Other federal grants</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Perkins loans</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Subsidized Stafford loans</td>
<td>39</td>
</tr>
<tr>
<td></td>
<td>Unsubsidized Stafford loans</td>
<td>66</td>
</tr>
<tr>
<td></td>
<td>PLUS loans</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Other federal loans</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Federal work study</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Veterans and Department of Defense (DOD) benefits</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Vocational Rehabilitation and Job Training</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Partnership Act assistance</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other federal aid</td>
<td></td>
</tr>
<tr>
<td>State aid</td>
<td>State need-based grants</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>State merit grants or scholarships</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>State loans</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>State nonneed, nonmerit grants</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other state aid</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>State work study</td>
<td>5</td>
</tr>
<tr>
<td>College or university aid</td>
<td>College or university athletic scholarships or grants</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>College or university merit grants or scholarships</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td>College or university need-based grants</td>
<td>36</td>
</tr>
<tr>
<td></td>
<td>College or university nonneed, non-merit grants</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>College or university loans</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>College or university work study</td>
<td>29</td>
</tr>
<tr>
<td></td>
<td>Other college or university aid</td>
<td></td>
</tr>
<tr>
<td>Private aid</td>
<td>Private source grants or scholarships</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>Private loans</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Tuition waivers for students whose parents are college or university employees</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Employer assistance</td>
<td>3</td>
</tr>
</tbody>
</table>


*Less than 1 percent of students received this form of aid.
While we did not identify any common patterns or characteristics associated with students receiving aid greater than their federally defined need as a result of combinations of federal and nonfederal aid, there are a number of possible reasons why this may occur:

- In limited circumstances, students who receive Title IV assistance are allowed to receive aid that is greater than their federally defined need. In the first situation, schools cannot reduce the amount of a Pell grant even if it results in a student receiving aid greater than federally defined need. We found, however, that only 17 percent of the students in this group received Pell grants. Also, if aid greater than federally defined need is $300 or less, campus-based assistance does not need to be reduced and subsidized Stafford loans do not need to be reduced if the student is also receiving federal work study. Finally, after any Stafford loan funds have been delivered to the student, the student is allowed to receive aid from a non-Title IV source, even if that aid results in aid greater than federally defined need. This could, for example, explain some of the 39 percent of students in this group who received subsidized Stafford loans.

- In some cases, rules for nonfederal assistance can increase the likelihood of students receiving aid greater than their federally defined need from sources such as private scholarships. Benefactors of private scholarships may sometimes prohibit schools from reducing the amount of the scholarship even if a student's total aid package will be greater than their federally defined need. Also, several of the schools that provided information to us specifically cited students who receive both Pell grants and state, merit, or athletic scholarships that are greater than their federally defined need as cases in which they would not reduce total aid in order to stay within their federally defined need. We found that, among the students whose aid was greater than federal need due to combinations of federal and nonfederal aid, less than 5 percent received both Pell grants and state or institutional merit scholarships or athletic scholarships.

- Some schools—primarily private 4-year institutions—use different factors than those used by the federal government to determine eligibility for institutional need-based aid. These need formulas, known as institutional methodologies, may identify a higher level of need for a student than the federal government would. However, schools that use institutional methodologies must still use the federal definition of need to award aid.

7Schools may still need to adjust packages with both campus-based aid and Stafford loans to prevent aid greater than federally defined need.
By filling this higher level of need from aid sources that are not counted towards federally defined need, the student could receive more aid than his/her federally defined need would dictate. NPSAS does not capture whether any nonfederal need-based aid was distributed using these institutional methodologies.

- Under Title IV, financial aid officers have discretion to recalculate a student’s need if the family’s financial circumstances change dramatically, such as a parent’s loss of employment. This discretion, known as professional judgment, could result in an increase to a student’s financial need. NPSAS does not capture whether a student’s aid package was adjusted due to professional judgment. However, the 12 schools that provided information to us generally said they changed aid awards as a result of professional judgment for 5 percent or fewer of federal aid recipients.8

These cases describe situations under which federal aid recipients may legitimately receive more financial aid than their federally defined need. While each of the situations described provides a plausible explanation of how a combination of federal and nonfederal aid can raise overall aid above federally defined need, we cannot determine with certainty, without looking in detail at each case, why these aid recipients received more aid than their federally defined need.

Recipient of Aid Greater Than Their Federally Defined Need Are More Likely to Have Higher Family Incomes, Be Dependent, and Attend Public Universities

Compared to those federal aid recipients who did not receive aid greater than their federally defined need, the 732,000 who did were more likely to have higher family incomes, be dependent, or attend public universities. They are also more likely to have higher grade point averages or attend schools in the Southwest or Plains states. Among those variables that proved statistically significant, table 2 shows selected student and school characteristics that were associated with receiving aid greater than federally defined need. Appendix II more fully describes all of the variables used in our analysis and more completely discusses their levels of statistical significance. These patterns generally held regardless of whether the aid greater than federally defined need could be attributed to substitutable loans or a combination of federal and nonfederal aid. The one exception we found was that students who received aid greater than

---

8Two schools said they did so for 10 percent of federal aid recipients.
their need as a result of a combination of federal and nonfederal aid were more likely to be white.

Table 2: Selected Student and School Characteristics Associated with Increased Likelihood of Receiving Financial Aid That Was Greater Than Federally Defined Need

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Likelihood of receiving aid greater than federally defined need</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Students</strong></td>
<td></td>
</tr>
<tr>
<td>Dependent</td>
<td>More than twice as likely as independent students</td>
</tr>
<tr>
<td>Family income</td>
<td>Increased 24 percent for every $5,000 increase in income</td>
</tr>
<tr>
<td>Grade point average</td>
<td>Increased 16 percent for every half-point increase in grade point average</td>
</tr>
<tr>
<td><strong>Schools</strong></td>
<td></td>
</tr>
<tr>
<td>Located in Plains or Southwestern states</td>
<td>Almost twice as likely as students attending schools in other regions</td>
</tr>
<tr>
<td>Public institution</td>
<td>Almost 3 times as likely as students at private not-for-profit institutions</td>
</tr>
<tr>
<td>Located in rural area</td>
<td>One and a half times as likely as students at schools located in urban areas</td>
</tr>
</tbody>
</table>


In addition, these 732,000 students were more likely to have financial aid packages consisting mostly of non-need-based federal aid or nonfederal aid. Among those variables that proved statistically significant, table 3 shows selected financial aid package characteristics that were associated with receiving aid greater than federally defined need. (See app. II for a more complete description of variables and their significance levels.)
Table 3: Selected Financial Aid Package Characteristics That Were Associated with Increased Likelihood of Receiving Financial Aid That Was Greater Than Federally Defined Need

<table>
<thead>
<tr>
<th>Characteristic of aid package</th>
<th>Likelihood of receiving aid greater than federally defined need</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of different aid sources in student's package</td>
<td>Increased by about a third for every additional source in the student's aid package</td>
</tr>
<tr>
<td>Majority of aid is from federal non-need-based loans to students</td>
<td>Almost 5 times as likely as students receiving the majority of their aid from federal grants</td>
</tr>
<tr>
<td>Majority of aid is from federal work study and PLUS loans to parents</td>
<td>Six times as likely as students receiving the majority of their aid from federal grants</td>
</tr>
<tr>
<td>Majority of aid is from nonfederal grants, scholarships and work study (also veterans and DOD benefits and vocational rehabilitation assistance)</td>
<td>Just over 6 times as likely as students receiving the majority of their aid from federal grants</td>
</tr>
<tr>
<td>Majority of aid from nonfederal loan sources</td>
<td>Nearly 8 times as likely as students receiving the majority of their aid from federal grants</td>
</tr>
</tbody>
</table>


Based on NPSAS data alone, we cannot say why the characteristics listed in tables 2 and 3 are associated with a greater likelihood of receiving aid greater than federally defined need.

Savings from Limiting Aid Greater Than Federally Defined Need Would Likely Be Modest, but Substitutable Loans to Students Could Affect Their Indebtedness

Changing the Higher Education Act to limit the receipt of aid that is greater than students’ federally defined financial need is not likely to achieve significant federal savings. However, the use of substitutable loans could increase overall student indebtedness. Any cost savings from changing the Higher Education Act to limit the receipt of aid that is greater than students' federally defined financial need would likely be very modest, much less than the dollar amount of such aid—the $2.96 billion. In the case of the larger group of students and their families whose aid greater than federally defined need is attributable to substitutable loans, the actual cost to the government is not the face value of the loans. For guaranteed loans, the government incurs costs—primarily insurance claims payments to lenders for defaulted loans and special allowance payments made to lenders to ensure a guaranteed return on the loans they make. For direct loans, interest from loan repayments offsets costs the government incurs for defaults and interest payments to the treasury on funds Education borrows to make loans. These interest earnings produce savings for the government. Determining the net cost of federal substitutable loans would require comparing savings generated by direct
loans with the net costs associated with guaranteed loans. We could not estimate these costs given the data available in NPSAS.9

For the smaller group of cases involving combinations of federal and nonfederal aid, any savings would depend on how aid is packaged. Assuming that most schools package loans and work study last—8 of the 12 schools that provided us with information said this was the typical practice at their institutions—loans and work study would most likely be eliminated first to keep aid packages within federally defined need limits. Any savings on loans would be derived using the same basic calculation we described above for substitutable loans. In addition, the government would also save the interest it pays on subsidized loans while students are still in school. Thus, these savings would be considerably smaller than the face value of the loan. With regard to work study, it is likely that schools rather than the federal government would obtain most of the savings. According to our analysis of the NPSAS data, this would occur because a larger percentage of these students received institution-funded work study rather than federally funded work study (29 percent versus 12 percent).

Although changing the Higher Education Act to limit receiving aid greater than federally defined need is not likely to result in any substantial cost savings, continuing this practice may affect some students' loan indebtedness. The one fifth of federal aid recipients who received substitutable loans may face higher monthly loan repayments that might constrain their other financial choices. In addition, as student loan indebtedness rises, borrowers could experience difficulty in meeting their monthly payments, particularly under weak economic conditions.

The widespread use of substitutable loans might also affect Education's ability to help students and their families maintain their loan indebtedness at manageable levels. Officials at Education told us that the agency is committed to tracking overall student debt burden. However, the 19 percent of students and their families who borrowed substitutable loans may have higher monthly repayments and spend a larger share of their income on loan repayments than other students. This could increase the average debt burden of these students above that of other students.

9NPSAS does not identify whether loans are direct or guaranteed. The final cost of these loans will also depend on which of several repayment options the borrowers select after graduating and whether or not they consolidate their loans. Neither of these is captured in the NPSAS data.
Conclusions

While students and their families have a range of options for paying for college, the money students borrow could influence their later debt burden. Given Education's performance indicator of maintaining borrower indebtedness at less than 10 percent of income in the first year of repayment, this relationship should be of interest to the agency. Education may find it more difficult to meet this standard if indebtedness continues to grow through the use of substitutable loans. Such information might prove useful to help inform federal policymakers on how best to minimize student indebtedness.

Recommendation

To ensure that the use of substitutable loans will not lead to unmanageable student loan indebtedness, we recommend that the Secretary of Education, over time, monitor the impact of substitutable loans on student debt burden and, if debt burden associated with substitutable loans rises substantially, develop and propose alternatives for the administration or Congress to consider to help students manage student loan debt burden. Such alternatives could range from shifting students into repayment plans that would lower their debt burden to limiting the use or amount of substitutable loans.

Agency Comments

In written comments on a draft of this report, Education agreed that student indebtedness is of concern, however, Education disagreed with what we included in our analysis. Specifically, we included PLUS loans to a student's family—usually to the parents—as part of our analysis. Education stated that by including these loans we were mischaracterizing student debt and that loans to families should be excluded from our analysis. Education also stated that we should distinguish between students and their families as the recipients of federal financial aid. We modified the report to more clearly detail when non-students were responsible for the loans. However, based on the 1999-2000 NPSAS data, 1.3 million federal aid recipients received unsubsidized Stafford loans while 323,000 federal aid recipients received PLUS loans, indicating to us that far more substitutable loans are likely to be made to students. Education also had technical comments, which were incorporated when appropriate. See appendix III for a printed copy of Education's comments.

We are sending copies of this report to the Chairmen and Ranking Members of the Senate Committee on Health, Education, Labor and Pensions and the House Committee on Education and the Workforce; and the Director of the Office of Management and Budget. We will also make copies available to others on request. This report is also available at no charge on GAO's Web site at http://www.gao.gov.
If you or your staff have any questions about this report, please call me at (202) 512-8403. Major contributors are listed in appendix IV.

Sincerely yours,

Cornelia M. Ashby
Director, Education, Workforce and Income Security Issues
Appendix I: Objectives, Scope, and Methodology

The objectives of this study were to determine how often students who were federal financial aid recipients received aid that was greater than their federally defined financial need, identify the student, school, and financial aid package characteristics associated with receiving such aid, and determine what the implications might be, if any, of changing the Higher Education Act to limit the receipt of aid that is greater than a student's federally defined need. When students receive financial aid from multiple sources or some aid that is not need-based, the potential exists for some students to receive aid that is greater than their federally defined need. Most Title IV aid is based on a student's federally defined financial need, which is the difference between the student's cost of attendance and the family's federally determined ability to pay these costs—known as the expected family contribution (EFC). To meet their EFC under Title IV, families can obtain non-need-based loans, which we refer to as substitutable loans.

To carry out our objectives, we used the National Postsecondary Student Aid Study (NPSAS) data collected by the Department of Education's National Center for Education Statistics. We also contacted 19 college and university financial aid officers to obtain information on their schools' financial aid packaging policies and practices. We received responses from 12 of these officials.

To determine the extent to which students received financial aid greater than their federally defined need, we analyzed the NPSAS data to identify the amount and source of financial aid received by full-time, full-year undergraduates who received aid from any federal source whether or not it was a Title IV program. We identified two distinct groups of students who received aid greater than their federally defined need. We first identified all students who received aid greater than the federally defined need, regardless of the source of that aid (see block A in fig. 2). The first group of students were those whose aid greater than federally defined need was accounted for by the substitutable loans they received (see block A-1 in fig. 2). The second group of students were those whose aid still remained greater than their federally defined need, after accounting for any substitutable loans in their aid packages (see block A-2 in fig. 2).

To determine what student and school characteristics were associated with receiving aid greater than federally defined need, we again used NPSAS data for our analysis. For all of the students receiving aid greater than federally defined need and the second group of these students, we employed logistic regression models to estimate the association between student and school characteristics and the likelihood of receiving aid.
greater than federally defined need. We chose logistic models due to the dichotomous nature of the phenomenon of interest—whether or not students received aid greater than their federally defined need. We did not perform a similar analysis on the first group because, since it was such a large portion of the students receiving aid greater than their federally defined need and since the aid that was greater than need could be attributed entirely to receiving substitutable loans, it was not likely the results would show this group to be different in any other ways.

The variables that we used are listed and defined in appendix II. In general, we included student characteristics such as race, marital status, and dependency status. We included such school characteristics as graduation rate, geographical location, and whether or not a school was public. We also included some characteristics of the aid packages the students received. To report the results of the regressions, we use odds ratio tables. (See app. II.) Some variables proved not to have a statistically significant association with receiving aid greater than federally defined need. For all of the students receiving aid greater than their federally defined need, these included whether the student was white, the graduation rate of the school, and if the majority of a student's aid package was composed from federal need-based loans. For the second group, whether the student was a veteran, was a U.S. citizen, and whether the majority of aid was received from federal need-based loans or nonfederal loans were statistically insignificant.

In analyzing the results for the second group of students, we sought to determine if a large proportion of these students had characteristics in common, such as receiving aid from specific programs or attending schools with a certain common characteristic (e.g., public versus private, regional location). We did not undertake any further analysis to identify how these students received aid that was greater than their federally defined need. This would have entailed individually analyzing each of the over 400 cases and obtaining additional information directly from the school. This analysis would have been beyond the scope of our review.
Appendix II: Logistic Regressions

To analyze the student and school characteristics that are associated with receiving aid greater than federally defined need, we ran logistic regressions from variables in the 1999-2000 NPSAS. We sought to determine which student, school, and aid package characteristics were significantly associated with the receipt of aid greater than the federally defined need. We included variables representing dependency status, grade point average (GPA), region of the country, race, veteran status, income, a private college indicator, the source of the majority of the student's aid, and the number of different aid source in the aid package.

The results for the models we used are odds ratios that estimate the relative likelihood of receiving aid greater than federally defined need for each factor. Table 4 shows these odds ratios for all students receiving aid greater than their federally defined need (see blocks A-1 and A-2 in fig. 2). Table 5 shows the results for the students whose aid greater than their need could not be attributed entirely to receiving substitutable loans (see block A-2 in fig. 2). If there were no significant differences between those who received aid greater than federal need and those who did not with regard to a particular characteristic then the odds ratio would be 1.00. The more the odds ratio differs from 1.00 in either direction, the larger the effect.

The odds ratios were generally computed in relation to a reference group; for example, if the odds ratio refers to being a dependent student, then the reference group would be independent students. Some variables, such as GPA and income, are continuous in nature. In these cases, the odds ratio can be interpreted as representing the increase in the likelihood of receiving aid greater than federally defined need given a 1 unit increase in the continuous variable.

An odds ratio greater than 1.00 indicates an increase in the likelihood of receiving aid greater than the federally defined need relative to the reference group, whereas an odds ratio less than 1.00 indicates a decrease in the likelihood of receiving aid greater than the federally defined need relative to the reference group. Both tables also include the 95 percent confidence intervals around the odds ratios. If these intervals contain 1.00, then the difference is not statistically significant.

Table 6 shows the means for all the variables considered.
# Appendix II: Logistic Regressions

## Table 4: Odds Ratios for All Students Receiving Aid Greater Than Federally Defined Need

<table>
<thead>
<tr>
<th>Independent variables and effects</th>
<th>Odds ratio</th>
<th>95% lower limit</th>
<th>95% upper limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dependent</td>
<td>2.62</td>
<td>1.89</td>
<td>3.64</td>
</tr>
<tr>
<td>GPA (0-40)</td>
<td>1.03</td>
<td>1.01</td>
<td>1.04</td>
</tr>
<tr>
<td>Currently married</td>
<td>1.63</td>
<td>1.17</td>
<td>2.27</td>
</tr>
<tr>
<td>Household size</td>
<td>0.72</td>
<td>0.67</td>
<td>0.78</td>
</tr>
<tr>
<td>Institution in Plains or Southwest</td>
<td>1.70</td>
<td>1.33</td>
<td>2.17</td>
</tr>
<tr>
<td>White</td>
<td>1.08</td>
<td>0.87</td>
<td>1.35</td>
</tr>
<tr>
<td>Veteran</td>
<td>1.83</td>
<td>1.09</td>
<td>3.06</td>
</tr>
<tr>
<td>Income/$5,000</td>
<td>1.24</td>
<td>1.20</td>
<td>1.28</td>
</tr>
<tr>
<td>Substitutable loan (y/n)</td>
<td>69.21</td>
<td>47.59</td>
<td>100.64</td>
</tr>
<tr>
<td>Private university</td>
<td>0.35</td>
<td>0.28</td>
<td>0.43</td>
</tr>
<tr>
<td>4-year university</td>
<td>1.54</td>
<td>1.14</td>
<td>2.07</td>
</tr>
<tr>
<td>Urban institution</td>
<td>0.68</td>
<td>0.54</td>
<td>0.83</td>
</tr>
<tr>
<td>Graduation rate of institution</td>
<td>1.00</td>
<td>0.99</td>
<td>1.00</td>
</tr>
<tr>
<td># Aid Components</td>
<td>1.33</td>
<td>1.24</td>
<td>1.43</td>
</tr>
</tbody>
</table>

For the remaining variables, the reference group is “Majority from Federal Grants.”

<table>
<thead>
<tr>
<th>Aid package variables’</th>
<th>Odds ratio</th>
<th>95% lower limit</th>
<th>95% upper limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal need-based loans to students</td>
<td>1.72</td>
<td>0.73</td>
<td>4.07</td>
</tr>
<tr>
<td>Federal non-need-based loans to students</td>
<td>4.77</td>
<td>1.97</td>
<td>11.54</td>
</tr>
<tr>
<td>Federal work study and PLUS loans to parents</td>
<td>6.02</td>
<td>2.41</td>
<td>15.03</td>
</tr>
<tr>
<td>Nonfederal grants, scholarships, and work study (includes Veterans/DOD benefits and Vocational Rehabilitation assistance)</td>
<td>6.12</td>
<td>2.57</td>
<td>14.53</td>
</tr>
<tr>
<td>Nonfederal loans</td>
<td>7.8</td>
<td>2.89</td>
<td>21.08</td>
</tr>
<tr>
<td>No majority</td>
<td>2.33</td>
<td>1.0</td>
<td>5.43</td>
</tr>
</tbody>
</table>


*The classifications used are consistent with the categories of aid package variables used in the NPSAS data. However, we did separate need-based and non-need-based loans.*

*The variables indicate whether or not the majority of a student's aid came from the particular source described by the variable. The omitted reference group is those students who had the majority of their aid coming from federal grants.*

We found statistically significant differences between those students who received aid greater than their federally defined need and those who did not for the following characteristics:
Appendix II: Logistic Regressions

Student Characteristics

**Dependent.** All else equal, dependents are more than twice (2.62) as likely to receive aid greater than federally defined need.

**Currently Married.** All else equal, being currently married (as opposed to single or separated, divorced or widowed) increased the likelihood of receiving aid greater than federally defined need by a factor of 1.63.

**Veteran.** Veterans were almost twice as likely (1.83) than nonveterans to receive aid greater than the federally defined need.

**Household Size.** As the size of a household increases, the likelihood of receiving aid greater than the federally defined need decreases. For example, a student from a two-member household is 1.4 times more likely to receive aid greater than federally defined need than a person from a three-member household.

**GPA.** GPA is usually calculated on a 4-point scale. In the NPSAS data set, GPA is multiplied by 100 or reported on a 400-point scale. In our analysis, we have GPA ranging from 0 to 40, such that a unit increase in our GPA variable (say from 37 to 38) represents a 0.1 change in grade point average as it is usually calculated (3.7 to 3.8). An odds ratio of 1.03 should thus be interpreted as follows: On a 4-point GPA scale, increasing GPA by one-tenth of one point (2.53 to 2.63) increases the likelihood of receiving aid greater than federally defined need by 3 percent. Thus, a change of one grade point (2.5 to 3.5) increases the likelihood of receiving aid greater than federally defined need by 35 percent \((1.03^{10} = 1.35)\).

**Income.** For every $5,000 change in income, the probability of receiving aid greater than federally defined need increases by 24 percent. A person earning $50,000 more than another, all else equal, is 8.6 \((1.24^{10} = 8.59)\) times more likely to receive aid greater than federally defined need.

School Characteristics

**Private Not-for-profit University.** Attending a private university decreases the likelihood of receiving aid greater than federally defined need. Someone who attends a public university increases his/her chances of receiving aid greater than federally defined need by a factor of 2.86 \((1/0.35)\).

**Four-year School.** All else equal, attending a 4-year institution increases the likelihood of receiving aid greater than federally defined need by a factor of 1.5.
Appendix II: Logistic Regressions

Urban. All else equal, attending a rural (rather than urban) institution increases the likelihood of receiving aid greater than federally defined need by a factor of 1.5 (1/0.68).

Plains-Southwest. A student attending school in the Plains states or the Southwest is 1.7 times more likely to receive aid greater than federally defined need than a similar student attending school in other regions of the country.

Aid Packages

The aid package variables represent the source of the “majority” of the student’s aid, if there was a majority source. The omitted reference group is the category of people whose majority of aid comes from federal grants such as Pell and Supplemental Educational Opportunity Grants (SEOG). About 17 percent of the sample falls into the reference group. In general, the people who had a majority of their aid coming from federal grants were less likely to receive aid greater than the federally defined need than any other group (as defined by majority of aid source).

Majority from Non-Need-Based Federal Loans. Holding all else equal, a student who receives a majority of aid from federal, non-need-based loans was almost 5 times more likely to receive aid greater than federally defined need than a student who receives the majority of aid from federal grants.

Majority from Federal Work Study and PLUS Loans to Parents. Holding all else equal, a student who receives a majority of aid from federal work study and PLUS loans is about 6 (6.02) times more likely to receive aid greater than federally defined need than a student who receives the majority of aid from federal grants.

Majority from Nonfederal Grants, Scholarships and Work Study. Holding all else equal, a student who has a majority of aid coming from nonfederal grants or scholarships, work study, Veterans/Department of Defense benefits, Vocational Rehabilitation assistance or other non-loan sources is about 6.12 times more likely to receive aid greater than federally defined need than a student who receives the majority of aid from federal grants.

Majority from Nonfederal Loans. Holding all else equal, a student who receives a majority of aid from nonfederal loan sources is about 7.8 times more likely to receive aid greater than federally defined need than a student who receives the majority of aid from federal grants.
Appendix II: Logistic Regressions

No Majority. A student who has no distinct majority source of aid is 2.33 times more likely to receive aid greater than federally defined need than a student who the majority of aid from federal grants.

Number of Aid Components in Aid Packages. Having more aid sources in a student's aid package results in a higher probability of receiving aid greater than the federally defined need. Having an additional aid component increases the likelihood of receiving aid greater than federally defined need by a factor of 1.33. This means that having five sources of aid, rather than one source of aid, can cause a three-fold increase in the likelihood of receiving aid greater than federally defined need (2.994 = 1.314).

Substitutable Loans. Receiving loans that can be substituted for EFC is associated with a great increase in the likelihood of receiving aid greater than federally defined need. This can be attributed to the fact that aid greater than federally defined need can be accounted for by substitutable loans for over 85 percent of the students who received such aid (628,000 out of 732,000).
Table 5: Odds Ratios for Students Receiving Aid Greater Than Federally Defined Need That Cannot Be Entirely Attributed to Substitutable Loans

<table>
<thead>
<tr>
<th>Independent variables and effects</th>
<th>Odds ratio</th>
<th>Lower 95% limit</th>
<th>Upper 95% limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dependent</td>
<td>3.00</td>
<td>1.53</td>
<td>5.89</td>
</tr>
<tr>
<td>Citizen</td>
<td>3.23</td>
<td>0.76</td>
<td>13.63</td>
</tr>
<tr>
<td>GPA (0-40)</td>
<td>1.05</td>
<td>1.02</td>
<td>1.08</td>
</tr>
<tr>
<td>Institution in Plains or Southwest</td>
<td>1.77</td>
<td>1.24</td>
<td>2.51</td>
</tr>
<tr>
<td>White</td>
<td>1.75</td>
<td>1.15</td>
<td>2.68</td>
</tr>
<tr>
<td>Veteran status</td>
<td>2.26</td>
<td>0.60</td>
<td>8.51</td>
</tr>
<tr>
<td>Income/$5,000</td>
<td>1.06</td>
<td>1.04</td>
<td>1.08</td>
</tr>
<tr>
<td>Private institution</td>
<td>0.74</td>
<td>0.52</td>
<td>1.04</td>
</tr>
<tr>
<td>Number of aid components</td>
<td>1.21</td>
<td>1.09</td>
<td>1.34</td>
</tr>
</tbody>
</table>

The variables below indicate whether or not the majority of a student's aid came from the particular source described by the variable. The reference group is "Majority from Federal Grants."

<table>
<thead>
<tr>
<th>Aid package variables*</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal need-based loans to students</td>
<td>1.79</td>
<td>0.78</td>
<td>4.10</td>
</tr>
<tr>
<td>Federal non-need-based loans to students</td>
<td>6.61</td>
<td>3.00</td>
<td>14.6</td>
</tr>
<tr>
<td>Federal work study and PLUS loans to parents</td>
<td>3.00</td>
<td>1.16</td>
<td>7.79</td>
</tr>
<tr>
<td>Nonfederal grants, scholarships and work study (includes Veterans/DOD benefits and Vocational Rehabilitation assistance)</td>
<td>19.92</td>
<td>10.14</td>
<td>39.15</td>
</tr>
<tr>
<td>Nonfederal loans</td>
<td>3.14</td>
<td>0.57</td>
<td>17.40</td>
</tr>
<tr>
<td>No majority</td>
<td>6.96</td>
<td>3.48</td>
<td>13.92</td>
</tr>
</tbody>
</table>


*See table 4 for a detailed explanation of the aid package variables.

We found statistically significant differences between those students who received aid greater than their federally defined need and those who did not for the following characteristics:

**Student Characteristics**

**Dependent.** All else equal, being a dependent increases the probability of receiving aid greater than federally defined need three-fold.

**White.** Being white as opposed to nonwhite almost doubles the chances of getting aid greater than federally defined need (1.75).
Appendix II: Logistic Regressions

GPA. GPA is usually calculated on a 4-point scale. In the NPSAS data set, GPA is multiplied by 100 or reported on a 400-point scale. In our analysis, we have GPA ranging from 0 to 40, such that a unit increase in our GPA variable (say from 37 to 38) represents a 0.1 change in grade point average as it is usually calculated (3.7 to 3.8). An odds ratio of 1.05 should thus be interpreted as follows: On a 4-point GPA scale, increasing GPA by one-tenth of one point (2.53 to 2.63) increases the likelihood of receiving aid greater than federally defined need by 5 percent. Thus, a change of one grade point (2.5 to 3.5) increases the likelihood of receiving aid greater than federally defined need by 63 percent (1.0510).

Income. For every $5,000 change in income, the probability of receiving aid greater than federally defined need increases by 6 percent. Thus, a $50,000 increase in income (say between someone earning $25,000 and someone earning $75,000) results in a 79 percent (1.0610 = 1.79) increase in the likelihood of receiving aid greater than federally defined need.

School Characteristics

Plains-Southwest. A student attending school in the Plains states or the Southwest is 1.77 times more likely to receive aid greater than federally defined need than a similar student attending school in other regions of the country.

Private University. Attending a private university decreases the likelihood of receiving aid greater than federally defined need. Someone who attends a public university increases his or her chances of receiving aid greater than the federally defined need by a factor of 1.35 (1/0.74).

Aid Packages

The aid package variables represent the source of the “majority” of the student’s aid, if there was a majority source. The omitted reference group is the category of people whose majority of aid comes from federal grants such as Pell and SEOG. About 17 percent of the sample falls into the reference group. In general, the students who had a majority of their aid coming from federal grants were less likely to receive aid greater than federally defined need than any other group (as defined by majority of aid source).

Majority from Non-Need-Based Federal Loans. A student who receives a majority of aid from federal non-need-based loans is 6.6 times more likely to receive aid greater than federally defined need than a student who receives the majority of aid from federal grants.
Appendix II: Logistic Regressions

Majority from Federal Work Study and PLUS Loans to Parents. A student who receives a majority of aid from federal work study and PLUS loans is 3 times more likely to receive aid greater than federally defined need than a student who receives the majority of his aid in the form of federal grants.

Majority from Nonfederal Grants, Scholarships and Work Study. Holding all else equal, a student who receives a majority of aid from nonfederal grants or scholarships, work study, Veterans/Department of Defense benefits, Vocational Rehabilitation assistance or other nonloan sources is about 20 times more likely to receive aid greater than federally defined need than a student who receives the majority of aid from federal grants.

No Majority. A student who has no distinct majority source of aid is about 7 times more likely to receive aid greater than federally defined need than a student who receives the majority of aid from federal grants.

Number of Aid Components in Aid Packages. Having more aid sources in a student’s aid package results in a higher probability of receiving aid greater than federally defined need. Having an additional aid component increases the likelihood of receiving aid greater than federally defined need by a factor of 1.2. This means that having seven sources of aid rather than one source of aid can double the likelihood of receiving aid greater than federally defined need \( (2.14 = 1.214) \).
## Table 6. Means of Variables

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Means for all federal student aid recipients</th>
<th>Means for those who receive aid greater than federally defined need</th>
<th>Means for those who receive aid greater than federally defined need after accounting for substitutable loans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Citizen</td>
<td>0.940</td>
<td>0.978</td>
<td>0.989</td>
</tr>
<tr>
<td>Dependent</td>
<td>0.687</td>
<td>0.794</td>
<td>0.915</td>
</tr>
<tr>
<td>GPA</td>
<td>28.858</td>
<td>29.651</td>
<td>31.667</td>
</tr>
<tr>
<td>Currently married</td>
<td>0.098</td>
<td>0.095</td>
<td>0.066</td>
</tr>
<tr>
<td>Separated, divorced, or widowed</td>
<td>0.036</td>
<td>0.016</td>
<td></td>
</tr>
<tr>
<td>Missing marriage</td>
<td>0.279</td>
<td>0.249</td>
<td>0.209</td>
</tr>
<tr>
<td>Household size</td>
<td>3.650</td>
<td>3.776</td>
<td>4.08</td>
</tr>
<tr>
<td>Plains State and Southwest</td>
<td>0.185</td>
<td>0.216</td>
<td>0.249</td>
</tr>
<tr>
<td>White</td>
<td>0.641</td>
<td>0.772</td>
<td>0.853</td>
</tr>
<tr>
<td>Substitutable loans</td>
<td>0.490</td>
<td>0.961</td>
<td>0.725</td>
</tr>
<tr>
<td>Veteran status</td>
<td>0.023</td>
<td>0.029</td>
<td>0.017</td>
</tr>
<tr>
<td>Missing vet</td>
<td>0.009</td>
<td>0.008</td>
<td>0.004</td>
</tr>
<tr>
<td>Income/$5,000</td>
<td>8.171(*$5,000 = 40,855)</td>
<td>11.380(*$5,000 = 56,900)</td>
<td>13.213(*$5,000 = 66,065)</td>
</tr>
<tr>
<td>Private not-for-profit university</td>
<td>0.362</td>
<td>0.425</td>
<td>0.524</td>
</tr>
<tr>
<td>Level of university</td>
<td>0.777</td>
<td>0.894</td>
<td>0.876</td>
</tr>
<tr>
<td>Urban</td>
<td>0.756</td>
<td>0.752</td>
<td>0.702</td>
</tr>
<tr>
<td>Graduation rate</td>
<td>47.122</td>
<td>52.395</td>
<td>53.251</td>
</tr>
<tr>
<td>Majority of aid from federal grants</td>
<td>0.170</td>
<td>0.0005</td>
<td>0.002</td>
</tr>
<tr>
<td>Majority of aid from federal need-based loans to students</td>
<td>0.182</td>
<td>0.110</td>
<td>0.038</td>
</tr>
<tr>
<td>Majority of aid from federal non-need-based loans to students</td>
<td>0.123</td>
<td>0.168</td>
<td>0.122</td>
</tr>
<tr>
<td>Majority of aid from federal work study and PLUS loans to parents</td>
<td>0.055</td>
<td>0.129</td>
<td>0.028</td>
</tr>
<tr>
<td>Majority of aid from nonfederal grants, scholarships, and work study (includes Veterans/DOD benefits and Vocational Rehabilitation assistance)</td>
<td>0.188</td>
<td>0.200</td>
<td>0.565</td>
</tr>
<tr>
<td>Majority of aid from nonfederal loans</td>
<td>0.019</td>
<td>0.059</td>
<td>0.022</td>
</tr>
<tr>
<td>Number of Aid components</td>
<td>3.225</td>
<td>3.841</td>
<td>4.082</td>
</tr>
</tbody>
</table>

Appendix III: Comments from the Department of Education

Dr. Cornelia M. Ashby, Director
Education, Workforce and Income Security Issues
General Accounting Office
Washington, DC 20548

Dear Dr. Ashby:

The Department of Education appreciates the opportunity to review the General Accounting Office’s (GAO’s) draft report (GAO-03-508) on “Monitoring Aid Greater Than Federally Defined Need Could Help Address Student Indebtedness.” This report addresses the important issue of student indebtedness that the Department monitors on an ongoing basis. The Department is concerned, however, that the way in which GAO presents its findings may mislead the Congress and the public about the way in which federal aid for postsecondary education is awarded and who receives that aid. We suggest revising the report in a way that we believe will more accurately portray how the postsecondary financial aid process works.

Our basic concern is that the report does not distinguish between students and their parents as recipients of financial aid. Student aid comes in the form of federal Pell Grants, Stafford (subsidized and unsubsidized) and Perkins Loans, and Work-study aid, along with other federal and nonfederal aid (including Veteran/Department of Defense benefits). Parental aid comes primarily in the form of federal PLUS loans and private loans. While students are the beneficiaries of these latter loans in meeting their costs of attendance at postsecondary education institutions, parents are the recipients and bear the repayment responsibility.

Although the report does not focus explicitly on PLUS loans (combining this form of parental aid with student work-study aid in the statistical analyses on pages 21 and 25), it does strongly suggest that PLUS loans are a primary reason students “receive” federal aid greater than their calculated financial need. Since parents are the recipients of PLUS loans and not students, and since PLUS loans are to help parents meet their “expected” (not estimated) family contribution, the title of the GAO report is misleading when it suggests that monitoring this form of aid (to parents) will help students with their indebtedness.

Among the 732,000 “recipients” of federal aid that GAO identifies as receiving aid greater than their federally defined financial need, only 104,000 are estimated to have exceeded that need not due to loans (including PLUS loans), but due to a combination of aid from federal and nonfederal sources. Although unsubsidized Stafford loans available to students to help meet their costs of attendance (and hence permissibly greater than their calculated financial need based on expected family contribution) are a major reason

Our mission is to ensure equal access to education and to promote educational excellence throughout the Nation.
many students receive aid greater than their calculated financial need, merit-based grant aid and private loans and scholarships are also important contributing factors (as shown on page 11).

In this context, GAO's finding that independent students are more than twice as likely as dependent students to receive aid greater than need is not surprising. Such students are automatically eligible for unsubsidized Stafford loans (what GAO calls "substitutable loans") without regard to federally defined need. The Department also doubts GAO's explanation (on page 12) for why students at public institutions are more likely to get aid greater than need may be that private 4-year institutions use so-called institutional methodologies for calculating financial need. GAO suggests these methodologies "may identify a higher level of need for a student than the federal government would."

Institutional methodologies generally used by private institutions are, however, more stringent in identifying financial need than the federal methodology.

The report itself and its recommendations to the Secretary are focused on student indebtedness. For example, the report notes on page six that in real terms the median debt for a loan recipient completing a baccalaureate degree nearly doubled between 1993 and 2000. However, there is no mention of any corresponding change in income for recent college graduates, so the reader cannot assess if the increased debt has resulted in increased debt service. Debt burden--debt payments relative to income--is the important policy concern because it measures college graduates' difficulty in repaying their federal student loans. Hence in its strategic plan performance objective, the Department tracks debt burden, not debt level.

The Department also notes that GAO is not suggesting in this report that waste, fraud, or abuse are concerns in the patterns of aid awards found. The report could, however, make this point more forcefully so that the possibility of perceiving those as concerns is reduced.

In conclusion, the Department suggests that GAO distinguish between students and parents as recipients of federal financial aid in its analyses and reporting. Doing so will address what may be very misleading statements in the report (including the first sentence in the conclusion section on page 16, which does not note that many of the loans attributed to students in the report go to their parents and thus do not affect the students' level of debt) and allow it to focus on the issue of most concern--the level of indebtedness of students themselves. Additional technical comments are attached to this letter.

Sincerely,

Sally L. Stroup

Attachment: 1
Appendix IV: GAO Contact and Staff

Acknowledgments

In addition to the name above, Mary Crenshaw, Patrick diBattista, Nagla’a El-Hodiri, Kathy Hurley, Joel Marus, John Mingus, Doug Sloane, and Wendy Turenne made important contributions to this report.
### GAO’s Mission
The General Accounting Office, the audit, evaluation and investigative arm of Congress, exists to support Congress in meeting its constitutional responsibilities and to help improve the performance and accountability of the federal government for the American people. GAO examines the use of public funds; evaluates federal programs and policies; and provides analyses, recommendations, and other assistance to help Congress make informed oversight, policy, and funding decisions. GAO’s commitment to good government is reflected in its core values of accountability, integrity, and reliability.

### Obtaining Copies of GAO Reports and Testimony
The fastest and easiest way to obtain copies of GAO documents at no cost is through the Internet. GAO’s Web site (www.gao.gov) contains abstracts and full-text files of current reports and testimony and an expanding archive of older products. The Web site features a search engine to help you locate documents using key words and phrases. You can print these documents in their entirety, including charts and other graphics.

Each day, GAO issues a list of newly released reports, testimony, and correspondence. GAO posts this list, known as “Today’s Reports,” on its Web site daily. The list contains links to the full-text document files. To have GAO e-mail this list to you every afternoon, go to www.gao.gov and select “Subscribe to daily E-mail alert for newly released products” under the GAO Reports heading.

### Order by Mail or Phone
The first copy of each printed report is free. Additional copies are $2 each. A check or money order should be made out to the Superintendent of Documents. GAO also accepts VISA and Mastercard. Orders for 100 or more copies mailed to a single address are discounted 25 percent. Orders should be sent to:

U.S. General Accounting Office  
441 G Street NW, Room LM  
Washington, D.C. 20548

To order by Phone:  
Voice: (202) 512-6000  
TDD: (202) 512-2537  
Fax: (202) 512-6061

### To Report Fraud, Waste, and Abuse in Federal Programs
Contact:

E-mail: fraudnet@gao.gov  
Automated answering system: (800) 424-5454 or (202) 512-7470

### Public Affairs
Jeff Nelligan, managing director, NelliganJ@gao.gov (202) 512-4800  
U.S. General Accounting Office, 441 G Street NW, Room 7149  
Washington, D.C. 20548
NOTICE

Reproduction Basis

☐ This document is covered by a signed "Reproduction Release (Blanket)" form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.

☑ This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").

EFF-089 (3/2000)