

CBO PAPERS

**THE EXPERIENCE OF THE
STAFFORD LOAN PROGRAM
AND OPTIONS FOR CHANGE**

December 1991



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In this paper, all years are fiscal years unless otherwise noted.

Data presented in real (that is, inflation-adjusted) terms have been converted to 1990 dollars using the GNP fixed-weighted deflator.

Numbers in tables may not add to totals because of rounding.

PREFACE

Widespread attention has focused on the Stafford Loan program as its costs have grown rapidly. In response to a request by Senator Pete V. Domenici, Ranking Minority Member of the Senate Committee on the Budget, this paper examines issues pertaining to the reauthorization of the Stafford Loan program. In particular, it analyzes recent trends in the program and examines possible incremental options for reform. In accordance with the Congressional Budget Office's (CBO's) mandate to provide objective and impartial analysis, the paper contains no recommendations.

Constance Rhind of the Human Resources and Community Development Division and Deborah Kalcevic of the Budget Analysis Division prepared the paper under the direction of Nancy Gordon and Bruce Vavrichek. The authors gratefully acknowledge the contributions of Harish Chand, Jerry Davis, Cathy Ellman, Arthur Hauptman, Jamie Merisotis, Michelle Mrdeza, and Jay Noell. Computer assistance was provided by Tahirih Senne and Jacquelyn Vander Brug.

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Robert D. Reischauer
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SUMMARY

In the 25 years since the inception of the first of the programs that now constitute the guaranteed student loan (GSL) programs, the federal government has become an important source of financial aid for students attending postsecondary schools. In 1990, it provided guarantees of over \$12 billion on about 4.5 million loans and awarded more than \$5 billion in grants to about 4 million students. GSLs include Stafford Loans, Supplemental Loans for Students, and PLUS loans (Parent Loans to Undergraduate Students).

Most GSLs are now made through the Stafford Loan program. In addition to insuring loans against default, the program provides substantial interest subsidies to borrowers and lenders because the federal government pays the interest costs on the loans while borrowers attend school, plus a portion of the interest costs after they leave school.

Growing pressures on the GSL programs have raised fears that they may not continue to be a viable form of student aid. Concerns have been voiced in three main areas. One concern is that costs are growing too rapidly. Total expenditures have more than tripled since 1979 in real (adjusted for inflation) dollars, rising to \$4.2 billion in 1990. Another concern is that the default rate is too high. The annual default rate was about 7 percent in 1990, and is expected to rise significantly in 1991. At some institutions, the default rate is much higher than the average. Some observers argue that a high default rate demonstrates that the programs lack integrity--possibly indicating that some borrowers are receiving educations that provide them with little economic benefit while burdening them with loans that are difficult to repay. The resulting financial stress or lack of satisfaction with the programs may lead many of these borrowers to default on their loans.

A third concern is that the maximum loan in the Stafford Loan program has declined relative to the growing cost of postsecondary education. At \$2,625 for first- and second-year students and \$4,000 for other undergraduates (compared with an average cost of public education of \$4,500), these loan limits may restrict the ability of some students to attend postsecondary schools or limit their choices to less expensive schools.

These concerns, plus the opportunity to reexamine federal student aid policy provided by the reauthorization of the Higher Education Act, have prompted some in the Congress to focus on the Stafford Loan program. Questions have been raised about how it could be modified to improve the outcomes for students and to reduce federal costs. This paper describes the operation of the Stafford Loan program and analyzes trends in its use and costs. It also considers a variety of specific options to help students or to reduce costs.

OPERATION OF THE STAFFORD LOAN PROGRAM

The Stafford Loan program is a decentralized system of lending in which banks lend to students attending postsecondary schools. State and private nonprofit guaranty agencies insure lenders against losses from default. In turn, these agencies are reinsured by the federal government. Borrowers pay no interest while they attend school, during a six-month grace period after they leave school, and during the time, if any, when they receive a deferment (that is, when they postpone loan repayment for reasons such as continuing education or unemployment). At other times, borrowers pay a fixed rate of interest on the loans. The rate of interest received by the lenders varies over time with market conditions and is 3.25 percentage points above the 91-day Treasury bill rate. The federal government pays the difference between the rate that borrowers pay and the rate that lenders receive.

The schools determine and verify the students' eligibility for the loans based on their families' resources and the costs of their educations. In disbursing the loans, the banks contact federally chartered guaranty agencies to have the loans certified as guaranteed. While borrowers attend school, the banks receive interest payments from the government and have few administrative responsibilities. After students graduate, the banks must be diligent in collecting payments on the loans.

Banks typically sell the loans in a secondary market, thereby increasing their ability to make additional loans. Some purchasers of student loans--including Sallie Mae (the Student Loan Marketing Association, a federally chartered, for-profit organization) and several large commercial banks--choose the loans according to the profit that they expect to make on them. State-level agencies also purchase loans to ensure that banks in their areas have sufficient funds to continue to lend to students.

Guaranty agencies insure the holders of student loans against default. The federal government, in turn, reimburses the guaranty agencies for most default losses, pays them a fee to cover part of their operational costs, and collects a reinsurance fee from them based on their default rates.

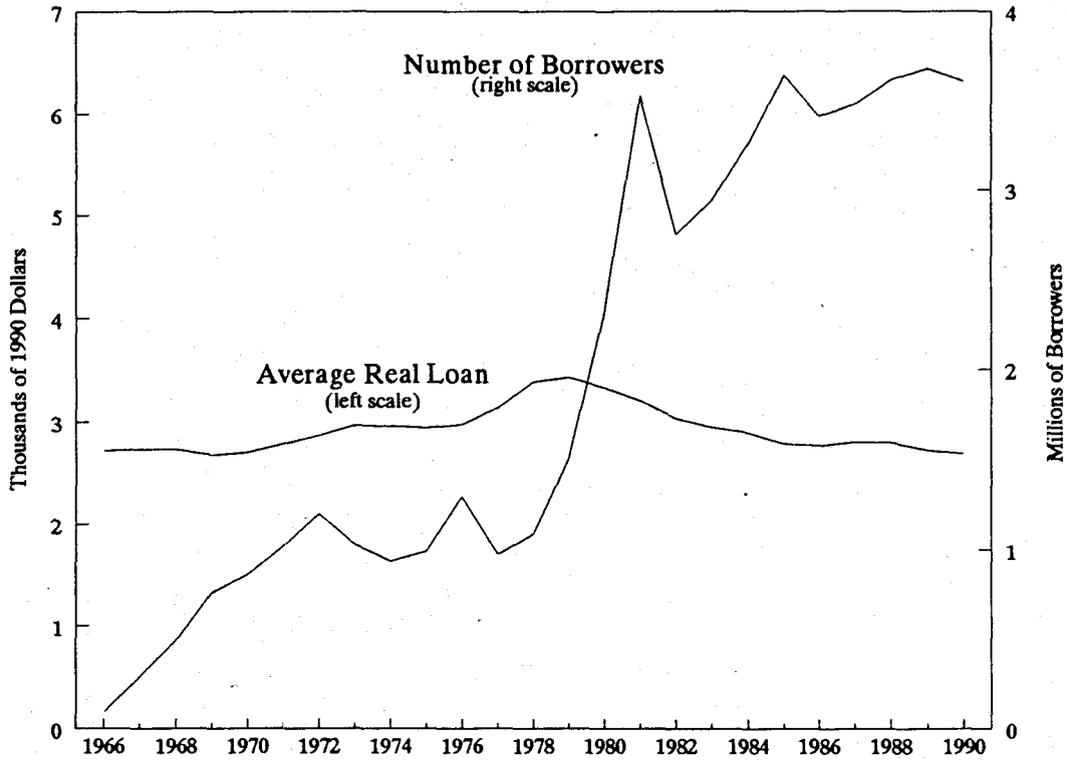
PROGRAM TRENDS

An increase in the number of borrowers--not an increase in the real average loan--has driven the growth in the Stafford Loan program. The number of borrowers has risen from an average of about 750,000 as the program became established to roughly 3.5 million annually since 1984 (see Summary Figure 1). Relaxing the eligibility standards between 1978 and 1981 to include students regardless of their family resources led to a large increase in the number of recipients. These patterns applied to borrowers attending all types of schools--public, private, and proprietary (that is, private for-profit schools that typically provide job training)--as shown in Summary Figure 2. In 1982, applicants again had to show financial need, leading to a drop in the number of new borrowers at public and private colleges. In contrast, the number of borrowers at proprietary schools has continued to increase.

Currently, 16 percent of all students attending postsecondary schools receive Stafford Loans. Students attending proprietary schools and private four-year colleges are the most likely to borrow, with 55 percent of all students at proprietary schools and about 25 percent of all students at private four-year colleges receiving Stafford Loans. Students from low-income families are considerably more likely to receive a Stafford Loan than are those from higher-income families, reflecting both their greater financial need and the income restrictions of the program.

Federal payments for net real interest costs, currently about \$2.6 billion, have fluctuated considerably since 1979 as a result of changes in the Treasury bill rate and in the numbers of borrowers in school and repaying their loans (see Summary Figure 3). Net default costs, roughly \$1.6 billion in 1990, have risen substantially since 1982, both because the number of borrowers repaying their loans has soared and because annual default rates have increased over parts of this period.

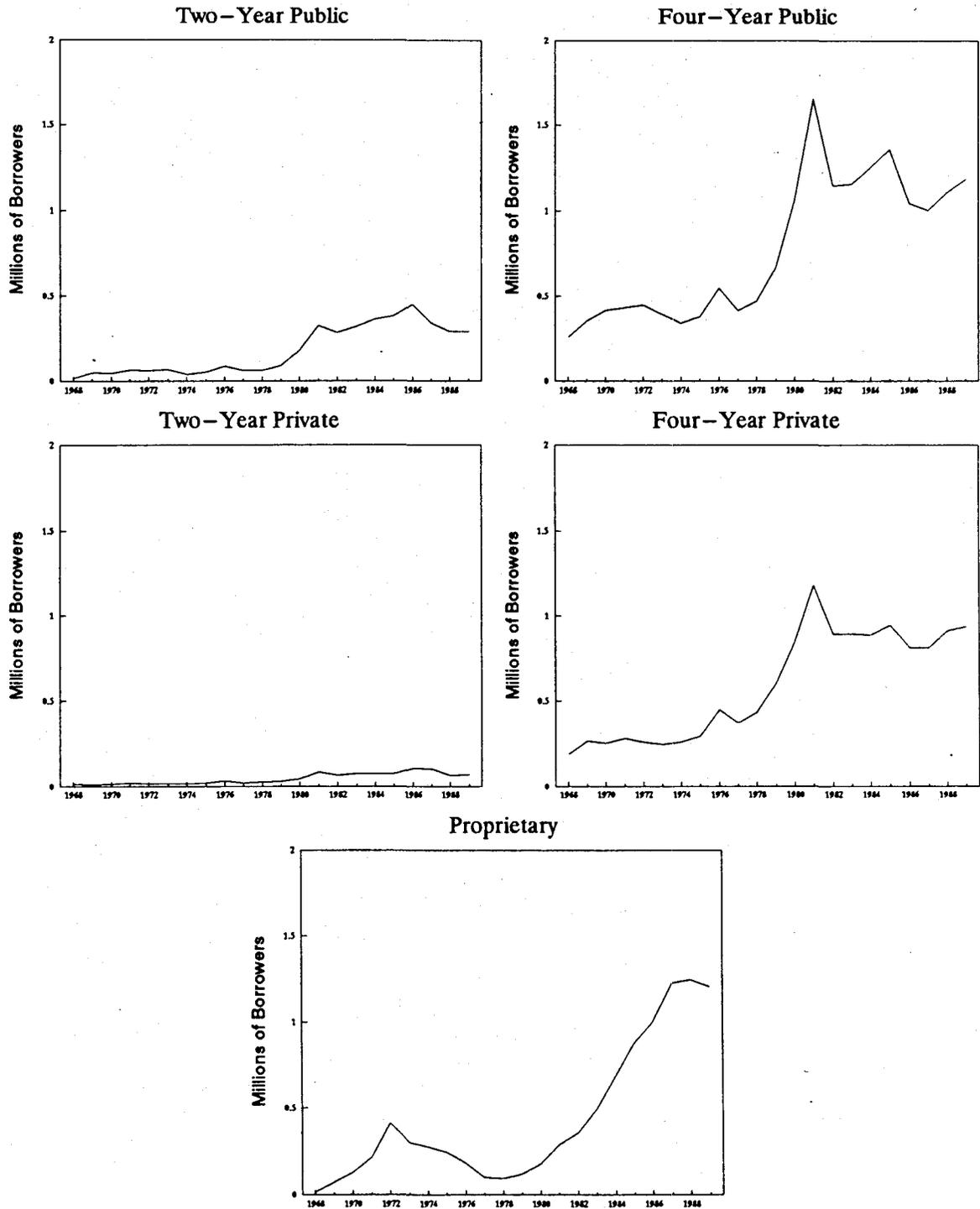
Summary Figure 1.
 Number of Stafford Loan Borrowers and Average Real Stafford Loan, 1966–1990



SOURCE: Congressional Budget Office calculations based on data from Department of Education, "FY 1990 Guaranteed Student Loan Programs Data Book."

NOTE: Data refer to loans made in both the Stafford and the Federally Insured Student Loan (FISL) programs, although no new FISL loans have been made since 1984.

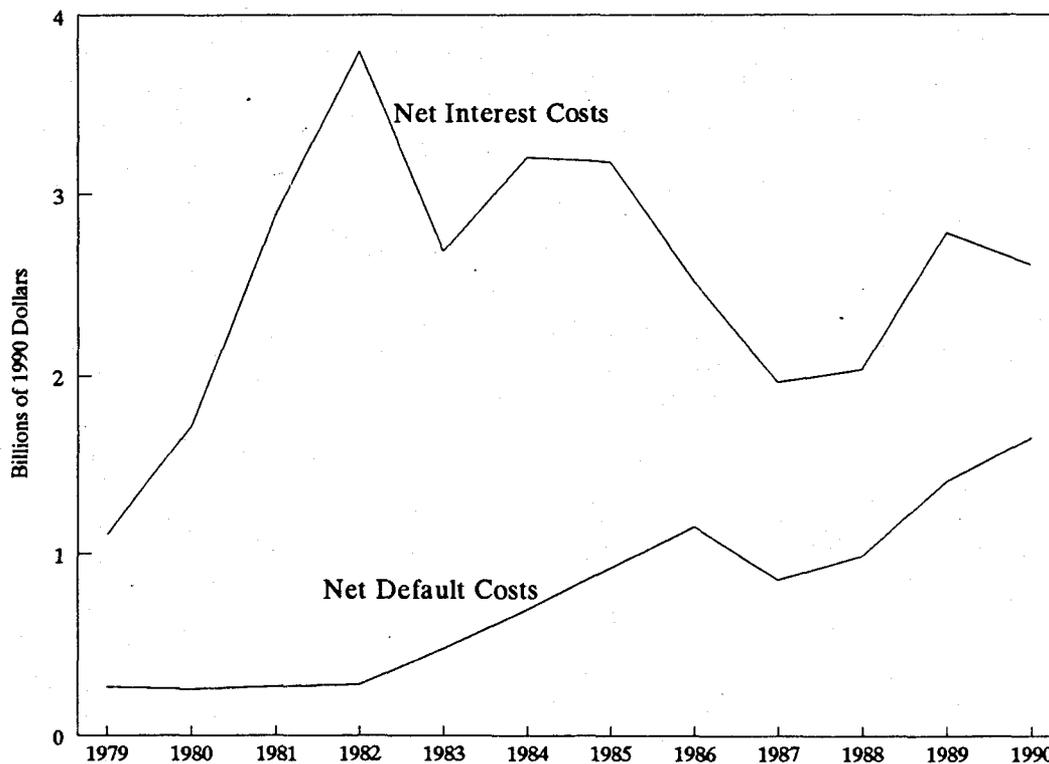
Summary Figure 2.
 Number of Stafford Loan Borrowers, by Type of School, 1968–1989



SOURCE: Congressional Budget Office calculations based on data from Department of Education, "FY 1990 Guaranteed Student Loan Programs Data Book."

NOTE: Data refer to loans made in both the Stafford and the Federally Insured Student Loan (FISL) programs, although no new FISL loans have been made since 1984.

Summary Figure 3.
Net Interest Costs and Net Default Costs in the Guaranteed Student Loan Programs, 1979–1990 a/



SOURCE: Congressional Budget Office calculations based on data from Department of Education, "FY 1990 Guaranteed Student Loan Programs Data Book" and "Budget of the U.S. Government," fiscal years 1991 and 1992.

NOTE: Federally Insured Student Loans and Stafford Loans were known as "regular" guaranteed student loans (GSLs) until recently. Currently, the term GSL refers to those loans as well as PLUS loans (Parent Loans to Undergraduate Students) and Supplemental Loans for Students.

a/ See the text of the paper for a complete definition of these costs.

Students who borrow more, borrow for longer periods of time, borrow when interest rates are higher, or default on their loans account for larger shares of federal spending than do other borrowers. For example, the average recipient who completes four years of college or who attends graduate school borrows more than other recipients. In contrast to college graduates, the average borrower who does not complete a four-year college degree is more likely to default on a student loan. In general, students who borrowed during the early 1980s received greater subsidies than borrowers at other times because interest rates were higher then.

RECENT POLICY ACTIONS

The Omnibus Budget Reconciliation Act of 1990 made several changes in the budgetary context and operation of the GSL programs. These modifications will affect the ease with which future legislative changes can be made. The Budget Enforcement Act, a part of the Reconciliation Act of 1990, set new rules for federal spending through 1995 that potentially limit future changes in the Stafford Loan program. As an entitlement, the Stafford Loan program can now be expanded only if other entitlements are cut or if taxes or fees are increased. In addition, the trade-off between spending in entitlement programs and discretionary programs has been eliminated, because domestic discretionary programs now have a separate spending cap set forth in the new budget law. In other words, increases in spending on entitlements cannot be offset by reductions in spending for discretionary programs and vice versa. This feature is relevant for higher education programs because GSLs are entitlements while Pell Grants are part of discretionary spending.

The Budget Enforcement Act also changes the way that federal credit programs are reflected in the budget. Federal loan guarantees, such as those of the Stafford Loan program, were previously included in the budget on a cash-flow basis. Henceforth, the government's long-run cost, or subsidy, for a loan guarantee will be recorded as a budget outlay when the loan is disbursed. This change in accounting, which is part of broader changes under the rubric of credit reform, places loan guarantees and other federal spending on an equal footing.

The Reconciliation Act of 1990 also made several changes in the GSL programs, primarily to reduce their cost. These changes included eliminating schools whose former students have high rates of default, delaying the disbursement of loans to all first-time, first-year undergraduate borrowers, and requiring independent testing of federal student aid recipients without high school diplomas or General Education Development (GED) diplomas to see if they would benefit from further education. More recently, the Emergency

Unemployment Compensation Act of 1991 added wage garnishment as a tool that can be used in all states for collecting defaulted loans.

POLICY OPTIONS

Some observers assert that further modifications in the GSL programs should await the effects of recent changes. But many others argue that the programs continue to have serious problems that need to be addressed during this reauthorization.

This paper considers two categories of changes that the Congress could make in the Stafford Loan program--improving the outcomes for students and reducing the costs of the program. While broader suggestions have been made to change the mix of aid between grants and loans or to fundamentally restructure the GSL programs, they are beyond the scope of this paper.

Options to Improve the Outcomes for Students

Critics assert that the Stafford Loan program could better serve the needs of borrowers in a number of ways. Some people argue that the receipt of a Stafford Loan no longer allows borrowers the freedom of choice that was originally intended, since the costs of higher education outpaced the increases in the maximum loan during the 1980s. To correct this situation, they would increase the maximum loan available to students. Opponents of this option worry that many students are already burdened with large debts when they leave school, and that some of them will not have higher future earnings as a result of their educations.

Others suggest that some schools now encourage students to borrow by overstating the economic benefits of the education. When the borrowers are unable to find the jobs they expected, many default on their loans. Several options are available to address these concerns. Requiring all loan applicants to obtain counseling from independent centers could improve their understanding of their choices and help them to select institutions and programs that would be well suited to their talents and goals. Doing so would add to the bureaucracy of the program, however, and accomplish nothing for students who are well informed now. Strengthening the accreditation of postsecondary institutions has also been suggested by some who think that this could help reduce the incidence of fraud and abuse. Others argue, however, that the program needs better enforcement of existing rules and not additional regulations. Finally, requiring schools to share in the default costs of their former students might improve the outcomes for students because schools

would then have a financial incentive to admit only those who can benefit from their education. Some schools might respond, however, by increasing tuition to all their students, rather than by improving the quality of their education.

Options for Decreasing the Costs of the Program

Other options would reduce the federal cost of the Stafford Loan program. Such changes could respond to the desire for additional spending on other high-priority programs (including more targeted spending on student aid) or for reducing the federal budget deficit. The federal government could, for example, further restrict the allowable cohort default rates of schools participating in the program. (A cohort default rate is the proportion of borrowers entering repayment who default.) Doing so could eliminate from the program schools that provide poor educations, but it could also eliminate some schools that provide high-quality educations but serve a large proportion of disadvantaged students.

Another group of options would reduce the federal subsidies that go to borrowers, lenders, and guaranty agencies. Currently many borrowers, particularly those attending graduate schools or four-year colleges, receive large interest subsidies. These subsidies could be reduced by requiring students to pay a larger share of their interest costs. Some students, particularly those not completing a four-year college degree, might be unable to repay the increased debt, however, and would either default on their loans or not take out the loans (and perhaps, therefore, not attend postsecondary school).

Subsidies to lenders could also be cut by reducing their 3.25 percentage-point premium above the 91-day Treasury bill rate. This rate is often much greater than their costs. Some smaller banks with higher costs would probably cease lending through the program if their premium were cut substantially, perhaps making borrowing difficult for students in some areas.

Finally, the administrative cost allowance provided to guaranty agencies could be eliminated, thereby reducing federal costs. A few financially insecure guaranty agencies might become bankrupt if this were done, however, thus potentially raising federal costs and leading to further questions about the integrity of the system.



CHAPTER I

INTRODUCTION

Mounting financial and operational pressures on the guaranteed student loan (GSL) programs have brought with them a growing sense of concern about this source of federal aid for students attending postsecondary institutions. Among analysts and the public alike, this concern has been generated by widely different perceived problems.

RISING COSTS

Some observers feel that costs are growing too rapidly. Total expenditures on interest subsidies and default payments more than tripled between 1979 and 1990 in real (adjusted for inflation) dollars--increasing from about \$1.4 billion to \$4.3 billion. This cost not only contributes to the overall federal budget deficit but, in the current budgetary environment, it precludes spending on other federal activities--including spending on education that is targeted to a greater degree on those with the lowest incomes.

RISING DEFAULT RATES

Some people are also worried about the default rate on GSLs. This annual default rate was about 7 percent nationwide in 1990 and is expected to climb in 1991. Moreover, it was much higher at many institutions, particularly proprietary schools (that is, private for-profit schools that typically provide job training) and two-year institutions. The high default rates at some schools may reflect a lack of program integrity. In other words, they may be a sign that some borrowers are receiving educations for which they are ill-suited or that provide little economic benefit, burdening them with loans to repay even though their earnings have not increased. The resulting financial stress or lack of satisfaction with their programs may lead many of these borrowers to default on their loans. Some critics charge that part of the problem is that the standards that schools must meet to participate in the GSL programs are too low and that the Department of Education is lax in its oversight of the accreditation of schools.

FALLING RELATIVE LOAN SIZES

A different type of concern is that the maximum available loan in the Stafford Loan program--by far the largest and most heavily subsidized of the GSL programs--has not kept pace with the rising costs of postsecondary education. At \$2,625 each year for first- and second-year students and \$4,000 each year for other undergraduates, these loan limits may restrict the ability of some students to attend postsecondary schools or limit their choices to less expensive schools. In 1973 (when there was a single maximum loan amount for all undergraduates), the maximum loan exceeded 100 percent of the average cost of public education and was about 80 percent of the average cost of private education for undergraduates.¹ By 1989, the maximum Stafford Loan had fallen to 60 percent of the average cost for first- and second-year students attending public schools and 90 percent of the cost for other undergraduates at these schools. For students attending private schools, the percentage of costs covered by the maximum loan fell to 20 percent for first- and second-year undergraduates and 35 percent for other undergraduates.

This paper examines these concerns about the Stafford Loan program and analyzes options for dealing with them.² The options described are all incremental ones, and do not include proposals to fundamentally restructure the program. The remainder of this chapter discusses Stafford Loans in the more general context of federal student aid.

FEDERAL LOANS IN THE CONTEXT OF FEDERAL STUDENT AID

Since the creation of the first GSL program in the mid-1960s, the federal government has played a substantial role in furthering the goal of equal educational opportunity. By providing student aid, the federal government has helped to increase access to postsecondary education for recipients with few financial resources and to expand the choices of other recipients in deciding among schools with different costs. The student aid that the federal government provides to achieve these goals consists of grants, work-study jobs, and loans.³ These types of aid differ in the degree to which they subsidize

-
1. The maximum amount that a particular student may borrow, however, cannot exceed the cost of education for that student.
 2. Wherever possible, data are for the Stafford Loan program. Where information for the Stafford Loan program is lacking, however, data are presented for the GSL programs together.
 3. For an analysis of student aid packaging, see Congressional Budget Office, *Student Aid and the Cost of Postsecondary Education* (January 1991).

students. Grants are pure subsidies because they do not have to be repaid or earned. Work-study aid must be earned by its recipients. Loans subsidize borrowers to some degree because federal guarantees lower the interest rates on the loans and because the federal government pays part of the interest costs on most loans.⁴

Grants and Work-Study Aid

In 1990, the federal government provided grants totaling \$5.3 billion to about 4 million recipients, and work-study aid of \$600 million to about 850,000 students attending institutions of higher education. The largest federal source of grant aid is the Pell Grant program, through which about 90 percent of federal grant dollars are disbursed. Pell awards are based on financial need, and are targeted toward students from low-income families. Work-study aid is distributed largely at the discretion of schools' financial aid officers, subject to general federal guidelines.

Loans

Assistance in the form of loan guarantees and interest payments is another major form of federal aid to postsecondary students. The GSL programs provided guarantees of \$12.3 billion on 4.5 million new loans in 1990.

In this paper, GSLs include three distinct groups of loans made primarily by banks:⁵

- o Stafford Loans are heavily subsidized loans made to undergraduate and graduate students. These loans are awarded on the basis of financial need.
- o Supplemental Loans for Students (SLS) are less subsidized loans made primarily to graduate students and independent undergraduates.

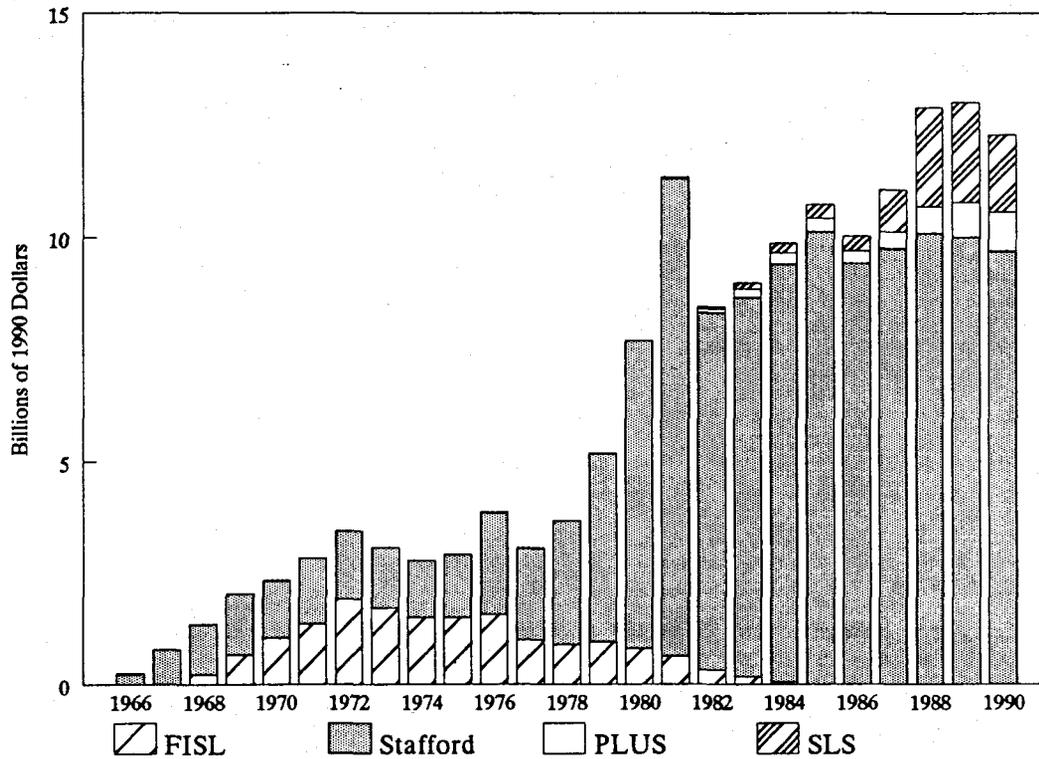
4. The federal government provides few direct student loans. Rather it provides loan guarantees and interest benefits. In this paper, loan guarantees are often referred to as loans for ease of exposition. When the distinction matters, it is made explicit.

5. Federally Insured Student Loans were formerly an important category of heavily subsidized loans. While no new loans are currently made in this program, some borrowers are still repaying these loans.

- o PLUS (Parent Loans to Undergraduate Students) loans are similar to SLS loans in that they are also less subsidized. They are made to the parents of dependent undergraduates.

The relative importance of these loans has changed considerably since the inception of what are now known as Stafford Loans in 1966 and Federally Insured Student Loans in 1968 (see Figure 1). During the early and mid-1970s, these two programs each provided the guarantees on about one-half of federally insured borrowing that was based on the financial needs of the students. Legislative changes then led to expansion in the Stafford Loan program. Loan volume grew dramatically between 1978 and 1981 as eligibility was extended to all students irrespective of their families' financial resources. In 1981, growth in the Stafford Loan program halted temporarily when needs testing was reintroduced. The government created SLS and PLUS in the early 1980s, giving students and their families additional borrowing availability regardless of their resources.

Figure 1.
The Real Value of Loans Newly Guaranteed Through the Guaranteed Student Loan Programs, by Program, 1966–1990



SOURCE: Congressional Budget Office calculations based on data from Department of Education, "FY 1990 Guaranteed Student Loan Programs Data Book."

NOTE: Federally Insured Student Loans (FISL) and Stafford Loans were known as "regular" guaranteed student loans (GSLs) until recently. Currently, the term GSL refers to those loans as well as PLUS loans (Parent Loans to Undergraduate Students) and Supplemental Loans for Students (SLS).



CHAPTER II

THE OPERATION AND OUTCOMES OF

THE STAFFORD LOAN PROGRAM

The Stafford Loan program helps to ensure that funds are available for students to pay their expenses to attend postsecondary institutions. About 9,300 commercial banks, savings and loan institutions, and credit unions currently participate in the program, lending to about 3.6 million students each year.

HOW THE PROGRAM WORKS

Current law mandates that the federal government pay the interest costs on Stafford Loans while students are in school and that it pay a portion of those costs as students repay their loans after leaving school. The federal government also reinsures agencies that have been established to guarantee these loans against default.

The Student's Role

Students first apply for need-based aid with financial aid offices at postsecondary schools they plan to attend. Once their eligibility is determined, they borrow from local lenders. Visits to the lenders are often unnecessary, as students can receive their loans directly from the schools, which act as intermediaries.

Students in their first two years of school may borrow up to \$2,625 per year to attend approved postsecondary institutions (those that are accredited and that have cohort default rates of less than 35 percent), while other undergraduates may borrow up to \$4,000 in each year (see Box 1 for a discussion of default rates). Students may now borrow up to \$17,250 in Stafford Loans during their undergraduate years--an amount equal to two years at \$2,625 and three years at \$4,000. Graduate and professional students may borrow up to \$7,500 annually with a maximum allowable total borrowing of \$54,750 for all postsecondary education. This means that students who received the maximum Stafford Loans for five years as undergraduates can obtain \$7,500 a year for five more years.

BOX 1
Definitions of Default Rates

Different needs in the analysis of federal student loan programs have led to the development of at least three measures of default rates on student loans. The three rates used most frequently in the education policy community are defined as follows:

Cumulative default rate =

$$\frac{\text{value of loans that have ever defaulted}}{\text{value of loans that have ever been in repayment}}$$

Annual default rate =

$$\frac{\text{value of new defaults in a given year}}{\text{value of all loans in repayment during that year}}$$

Cohort default rate =

$$\frac{\text{number of borrowers entering repayment who default}}{\text{number of borrowers who enter repayment}}$$

By convention, the first two rates compare the dollar values of defaults and loans in repayment, while the third rate compares the number of borrowers defaulting on loans with the total number of borrowers entering repayment. The first two rates are also frequently calculated net of default collections by removing any collections of previously defaulted loans from the numerators of the ratios. See Appendix A for a numerical example showing the relationship between these rates.

The Department of Education commonly reports the cumulative rate, which represents the experience of the program since its inception. In 1990, this rate was 15.3 percent for the GSL programs, or 10.4 percent when collections of previously defaulted loans are removed. This rate is an inappropriate measure of the current program outcomes because it includes all past loan and default amounts. The longer the program is in existence, the smaller is the influence of the last few years' activity on this rate.

The annual default rate shows the experience of the program in a given year and can be lower or higher than the cumulative rate. In 1990, the annual default rate in the GSL programs was 7.1 percent. Taking account of collections during 1990 on previously defaulted loans, the net annual default rate was 4.9 percent. The annual default rate is comparable to the default rate generally used by financial institutions and is argued by some to be the most appropriate rate for determining the current financial direction of the program.

The cohort default rate is used to determine the eligibility of postsecondary schools for the GSL programs. It compares the number of students entering repayment in a given year who default on their loans within one year to the total number of borrowers entering repayment in that year. Under current law, if a school has a cohort default rate of 35 percent or more during each of the last three years, students attending that institution are not eligible for student loans. In 1986, the cohort default rate for the nation as a whole was 24.7 percent. Since many defaults on student loans are thought to occur shortly after students enter the repayment period, this measure is argued to be an appropriate one for determining a school's eligibility because it reflects the experiences of students who recently attended the school.

The federal government pays the interest while the borrowers attend school and during a six-month grace period after the borrowers leave school. Some borrowers are also eligible to defer repaying their loans either just after the grace period or later in the repayment period. During this time the federal government pays all of the interest costs. Deferments are available to borrowers if, for example, they return to school, they are medical residents, they are on active duty in the armed forces, they serve in the Peace Corps, they or their spouses have a temporary total disability, they are on parental leave, or they are unemployed. Borrowers who are permanently and totally disabled can have their loans forgiven.

After the grace period and any deferments, borrowers who initiated their loans after 1988 pay 8 percent interest per year for the first four years they are repaying their loans and 10 percent per year thereafter. The federal government establishes these rates in legislation. Borrowers have paid interest rates of between 7 percent and 10 percent since 1968, depending on when the loans were obtained.

The School's Role

The schools determine students' eligibility for Stafford Loans based on their families' financial resources and the estimated cost of education. The Department of Education relies on schools to assure that their students are eligible for loans--for example, by verifying their reported incomes--and that they borrow no more than the loan limits.

Schools are required to notify lenders when their students graduate or drop out of the programs. Schools are also required to counsel borrowers when they disburse the loans and again when they leave the school. At both times, the schools must inform students of their obligation to repay the loans.

The Lender's Role

In approving Stafford Loans, the lenders contact guaranty agencies to have the loans certified as guaranteed. When students receive their loans, the lenders deduct 5 percent from the face value as an "origination fee" for the federal government. Banks can choose not to lend to some students, even if the students are eligible for loans. For example, banks may refuse to lend to all students attending specific institutions.

The rate of interest received by the lenders varies with market conditions and equals the bond equivalent of the rate of interest on 91-day

Treasury bills plus 3.25 percentage points (or 3.50 percentage points if tax-exempt funds are used). The rate paid to lenders, which changes every three months, varied between 8.76 percent and 12.12 percent over the last five years and was 8.78 percent between July and September 1991.

The lenders disburse and administer the loans (or they commonly pay servicing companies to administer the loans). While borrowers attend school, the banks receive interest payments from the government and have few administrative responsibilities. After students graduate, the lenders or their servicing agents are responsible for being diligent in collecting the payments on the loans.

Servicing costs for lenders are about 0.5 percentage points on the average value of loans while borrowers are in school.¹ Servicing costs rise to about 1.25 percentage points after borrowers leave school because of the costs of collecting payments from a highly mobile group of borrowers. The lenders receive interest payments of 3.25 percentage points over the bond equivalent of the 91-day Treasury bill rate, providing the typical lender with at least a 1 percentage point premium on the average value of loans after accounting for their costs of funds.²

Lenders often sell the loans in the secondary market, which provides them with liquidity by exchanging the assets for cash, thereby allowing them to make additional loans. Loans are most profitable to the holders during the period that borrowers are in school since the costs of administering the loans are lowest then. This fact and the desire to develop relationships with the borrowers while they are in school, together with the difficulty of servicing the loans if the borrowers move out of the area, often lead banks to sell the loans just before the borrowers graduate.

Purchasers of student loans include Sallie Mae (the Student Loan Marketing Association), several large banks, and state-level agencies that have been established for this purpose. Sallie Mae is a federally chartered stockholder-owned corporation that owns about one-third of all student loans.³

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1. Many loans are serviced by servicing agencies whose fees are paid by the lenders. The servicing business is highly competitive.
 2. See U.S. Department of Education, "Lender Profitability in the Student Loan Program" (April 1991).
 3. The recent Congressional Budget Office study, *Controlling the Risks of Government-Sponsored Enterprises* (April 1991), contains a chapter discussing the role of Sallie Mae and considering the financial risks it poses to the federal government.

The price paid in the secondary market for student loans depends on when the loans are sold and on the source of funds used in their purchase. Because of the increased costs of servicing the loans after borrowers leave school, Sallie Mae and banks often pay less for loans when borrowers leave school than they would have when the loan was first made. State-level agencies purchase loans to ensure that the banks in their areas have sufficient funds to continue to lend to students and are generally not allowed to compete much on the price that they pay. If they use tax-exempt financing, they may only pay between 99 percent and 101 percent of the face value when they purchase the loans, with the result that they are unable to pay less for loans that they believe have a higher likelihood of default.

Net rates of return on the loans are determined by the rate of interest, the likelihood of default (which affects the administrative costs that the lenders expect to incur), and the price paid for the loans. Reflecting differences in their goals, their restrictions, and their costs of capital, Sallie Mae earns about a 1 percent return on its loan volume, large banks have slightly lower returns, and state-level agencies have both positive and negative returns over time.

The Guaranty Agency's Role

Guaranty agencies are state or private nonprofit organizations that insure lenders against losses that arise if students default on their loans.⁴ Defaults are defined to occur when borrowers become 180 days late in repaying their loans. When borrowers default, the lenders collect the face value of the loans from the guaranty agencies plus any accrued interest (if they have been diligent in attempting to collect loan payments). The responsibility for collecting on the defaulted loans then shifts to the guaranty agencies. The guaranty agencies collect most of their default payments from the federal government.

The guaranty agencies repay the federal government 70 percent of any collections of previously defaulted loans for which they were previously reimbursed and keep the remaining 30 percent (or 65 percent if the state has a wage garnishment law) to help pay for the costs of collection. Defaulters who ultimately repay are charged for the agency's collection costs, an additional way of recouping these costs. Approximately 35 percent of defaults are eventually repaid by borrowers.

4. Guaranty agencies also insure the loans against the death, disability, or bankruptcy of the borrower, although these types of claims are relatively small. Moreover, it has become increasingly difficult to discharge a student loan in bankruptcy court.

Guaranty agencies are required to pay the federal government an annual reinsurance fee equal to 0.25 percent of the value of loans newly guaranteed during that fiscal year. Agencies whose default rate rises above 5 percent pay a fee of 0.50 percent. In 1990, the federal government received \$42 million in reinsurance fees.

Although more than one guaranty agency can operate in a state, each state has one guarantor designated by the Department of Education and required by federal law to guarantee student loans made by banks in that state and to act as the "lender of last resort" if students cannot find banks to make the loans. Guaranty agencies may guarantee loans in any state, and if they are not the "designated guarantor" in a state, they may choose which loans to guarantee.

The guaranty agencies have four main sources of revenue. First, the federal government provides repayable advances in the form of interest-free loans when the agencies are created. The federal government also advances funds to agencies to maintain adequate reserves. These funds can be used only to pay claims by lenders, and can be recalled by the Department of Education whenever it deems that the agencies have adequate reserves. Most older agencies have repaid the advances, while several new agencies have outstanding advances that total about \$50 million.

Second, as stated above, the federal government reinsures the guaranty agencies, generally reimbursing them for 100 percent of the amounts of defaulted loans. In any fiscal year, however, if the default claims on loans guaranteed by an agency climb above 5 percent of the amount of loans in repayment at the end of the preceding fiscal year, the federal reimbursement rate falls to 90 percent on all of their default claims for the remainder of that year. Furthermore, if the agency's default rate rises above 9 percent, the federal reinsurance rate falls to 80 percent on all subsequent claims in that year. In 1990, seven guaranty agencies ended the year with a 90 percent reimbursement rate and three agencies ended the year with an 80 percent reimbursement rate.

Third, the federal government pays guaranty agencies an allowance for administrative costs equal to 1 percent of the value of new loans in each year. These payments totaled about \$135 million in 1990.

Finally, guaranty agencies can charge an insurance fee of up to 3 percent of the loan when the loans are made, leading to a total charge of up to 8 percent--the insurance fee plus the 5 percent loan origination fee mentioned earlier. Guaranty agencies may charge different students different insurance fees. In practice, guarantors that choose to differentiate generally

charge different fees to students at public, private, and proprietary schools, as well as to undergraduate and graduate borrowers.

Some guaranty agencies also run auxiliary enterprises that are tied to the student aid programs in their states, such as tuition prepayment plans and loans to parents. These programs are generally designed to broaden the options for families living in their states and for students attending schools there. As such, they do not always have a positive rate of return.

One multistate guaranty agency, the Higher Education Assistance Foundation (HEAF), recently collapsed. To save the system, an agreement was reached whereby the guarantee on the loans made by HEAF will be transferred to other agencies by December 1993. In the meantime, Sallie Mae is managing the HEAF portfolio. New arrangements would need to be negotiated if another agency were to face financial ruin, however, because there are no established procedures in this event.

The Federal Government's Role

The federal government pays lenders the interest due on Stafford Loans while the students attend school, during the six-month grace period immediately following postsecondary schooling, and during the period, if any, when the students defer repaying their loans. While the students are repaying the loans, the federal government pays the lenders a "special allowance"--the difference, if any, between the rate of interest guaranteed the lenders and the rate paid by the students. The federal government has made special allowance payments on Stafford Loans in every quarter since 1969. The bond equivalent of the Treasury bill rate would have to drop below 4.75 percent to have no special allowance payments on most Stafford Loans.

The federal government also oversees the operation of the program. The Department of Education is responsible for checking that schools are eligible to participate in the program and that the guaranty agencies administer the program correctly. The federal government also implicitly backs the integrity of the system.

THE GROWTH IN STAFFORD LOANS

The value of loans made through the Stafford Loan program has grown substantially since its inception.⁵ This growth has been driven by an increase in the number of borrowers--from an annual average of about 750,000 between 1966 and 1974 while the programs were becoming established to roughly 3.5 million annually since 1984 (see Figure 2). The average real loan changed little during this period, increasing slightly during the 1970s and falling back to just below its original level in 1990.

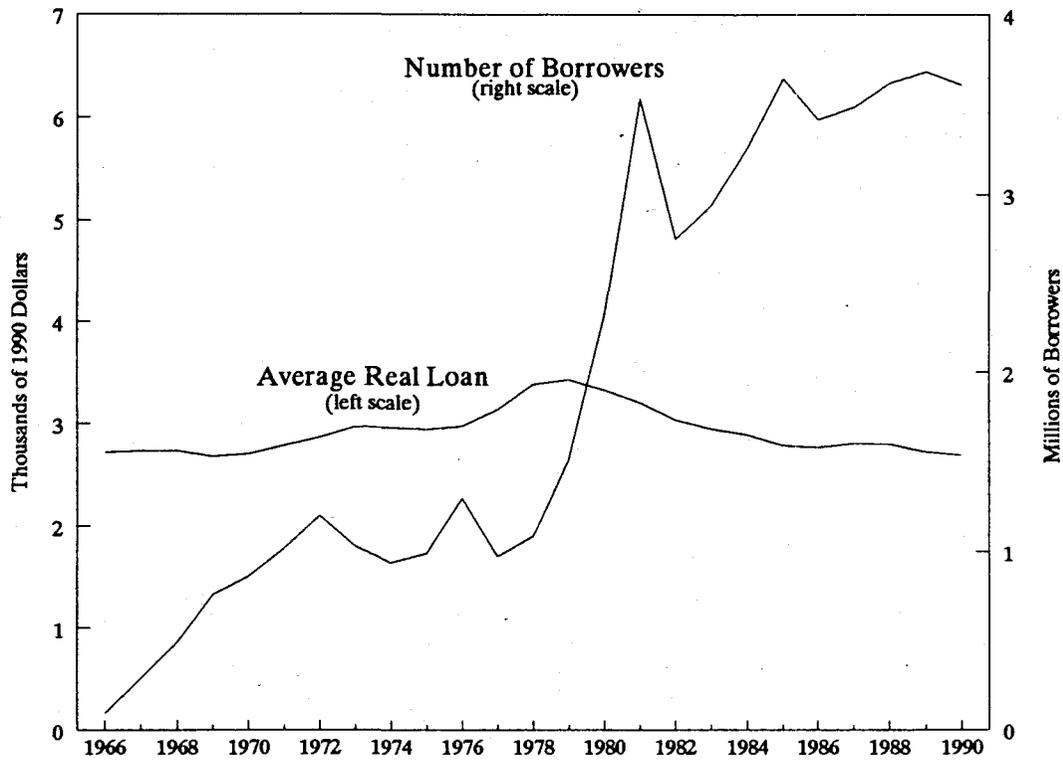
The patterns of change in the number of borrowers has been similar at public and private colleges (see Figure 3).⁶ The number of recipients grew dramatically between 1978 and 1981 as eligibility was extended to all students irrespective of their families' financial resources. In 1982, the number of borrowers at public and private colleges fell when applicants again had to demonstrate financial need. The number of borrowers at proprietary schools continued to increase dramatically.

The importance to students of Stafford Loans has changed as the portion of the costs of the average college education paid for by the average loan first increased during the 1970s and then fell during the 1980s, reflecting changes in the maximum loan amount, eligibility requirements, and the costs of attending college (see Figure 4). (Information on the costs of proprietary schools over time is not available.) In 1968, the average loan borrowed by students at public colleges paid for just under 80 percent of their average costs, while the average loan for students at private colleges paid for slightly more than 40 percent of their costs. These fractions rose to a high of about 90 percent for students at public colleges and about 50 percent for students at private colleges by 1980 as the average real cost of a college education remained relatively constant. By 1989, the average loan had fallen to about 60 percent of the costs at public colleges and about 30 percent of the costs at private colleges because the average real cost of attending college increased substantially and the average real Stafford Loan remained fairly constant during this period.

5. This section includes data from both the Stafford Loan program and the Federally Insured Student Loan program. These programs have served the same purpose and have also been the same from the perspective of students.

6. The pattern of change in dollars borrowed by type of school is the same as the pattern of the number of borrowers.

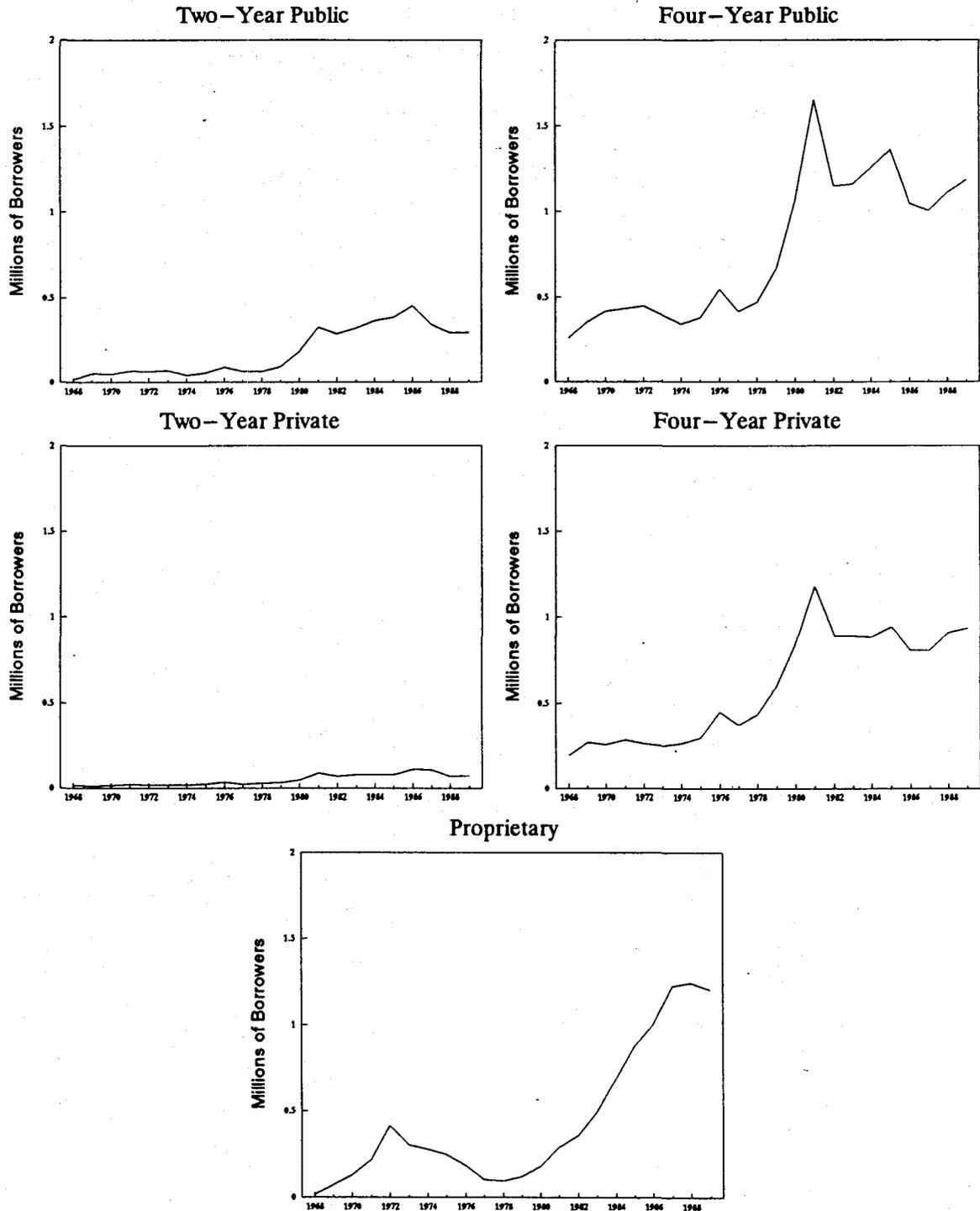
Figure 2.
Number of Stafford Loan Borrowers and Average Real Stafford Loan, 1966–1990



SOURCE: Congressional Budget Office calculations based on data from Department of Education, "FY 1990 Guaranteed Student Loan Programs Data Book."

NOTE: Data refer to loans made in both the Stafford and the Federally Insured Student Loan (FISL) programs, although no new FISL loans have been made since 1984.

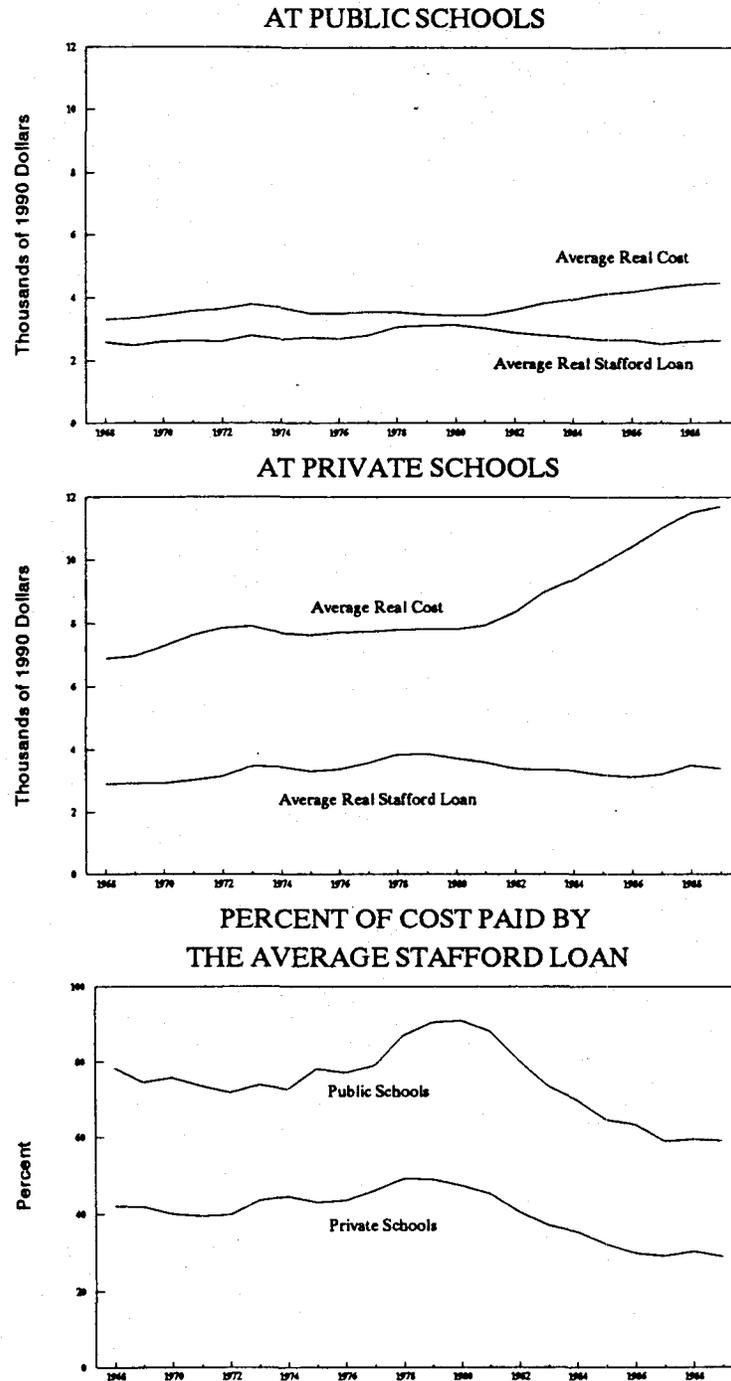
Figure 3.
 Number of Stafford Loan Borrowers, by Type of School, 1968–1989



SOURCE: Congressional Budget Office calculations based on data from Department of Education, "FY 1990 Guaranteed Student Loan Programs Data Book."

NOTE: Data refer to loans made in both the Stafford and the Federally Insured Student Loan (FISL) programs, although no new FISL loans have been made since 1984.

Figure 4.
Average Real Cost of Postsecondary Education and Real Stafford
Loan, by Type of School, 1966–1989



SOURCE: Congressional Budget Office calculations based on data from Department of Education, "FY 1990 Guaranteed Student Loan Programs Data Book" and "Digest of Education Statistics," 1990.

NOTE: Data refer to loans made in both the Stafford and the Federally Insured Student Loan (FISL) programs, although no new FISL loans have been made since 1984. No information is available on the cost of proprietary schools over time.

CHARACTERISTICS OF STAFFORD LOAN BORROWERS

In the 1989-1990 school year, 16 percent of all students attending postsecondary schools received Stafford Loans (see Table 1). Some students are much more likely to borrow than others, however, depending on the type of school they attend, whether they attend full time, their employment status while attending school, and their personal characteristics.

Students attending proprietary schools and private four-year colleges are the most likely to borrow. About 55 percent of all students at proprietary schools and 26 percent of all students at private four-year colleges received Stafford Loans during the 1989-1990 school year. Students attending public two-year colleges are the least likely to borrow--only 4 percent of them took out Stafford Loans that year.

The likelihood that undergraduates borrow does not vary dramatically with their year in school. Most borrowers, like most students, are in their first year. Students who attend school part time are unlikely to borrow, in large part because of a requirement in the Stafford Loan program that borrowers must attend school at least half time. In addition, students who are not employed during the school year are more likely to borrow than those who are employed, perhaps indicating that some students choose to borrow instead of work.

Students' personal characteristics are also correlated with whether or not they borrow. Students from low-income families are considerably more likely to receive a Stafford Loan than are those from higher-income families, reflecting both their greater financial need and the income restrictions of the program. Black students are more likely and Asian students less likely to borrow than are other students. Finally, students who had not completed high school or received General Education Development (GED) diplomas were more likely to borrow in the 1989-1990 school year, although they are generally not eligible to receive federal student aid now without taking an independently administered test.

TABLE 1. ATTRIBUTES OF STUDENTS AND BORROWERS ATTENDING POSTSECONDARY SCHOOLS, AND SHARES OF STUDENTS WITH GIVEN ATTRIBUTES WHO BORROW, 1989-1990 (In percent)

Attribute	All Students ^a	Borrowers ^b	Share of Students With Attribute Who Borrow ^c
All Students	100	100	16
Type of School			
Public			
Four-year	36	35	15
Two-year	38	10	4
Private			
Four-year	17	28	26
Two-year	1	2	19
Proprietary	8	26	55
Year in School			
First Year	44	42	15
Second Year	21	18	14
Third Year	10	12	19
Other Undergraduates	12	15	19
Graduate School	9	6	11
Professional School ^d	4	7	28
Attendance Status			
Full-time	54	86	26
Part-time	46	14	5
Independent	57	57	16
Dependent	42	42	16

(Continued)

TABLE 1. (Continued)

Attribute	All Students ^a	Borrowers ^b	Share of Students With Attribute Who Borrow ^c
Employment During School			
Employed	72	63	14
Not Employed	28	37	21
Personal Characteristics			
Female	56	56	16
Male	44	44	16
Unmarried	67	78	18
Married	27	19	11
Separated	2	2	22
Other	3	1	3
White	77	73	15
Black	10	15	25
Hispanic	8	8	16
Asian	5	3	11
Other	1	1	13
High School Diploma	98	96	15
No High School Diploma or GED ^c	2	4	31
Family Income, Dependents			
\$0 - \$10,999	13	21	26
\$11,000 - \$16,999	6	10	25
\$17,000 - \$22,999	8	11	22
\$23,000 - \$29,999	10	14	22
\$30,000 - \$49,999	29	30	16
\$50,000 or more	34	14	7

(Continued)

TABLE 1. (Continued)

Attribute	All Students ^a	Borrowers ^b	Share of Students With Attribute Who Borrow ^c
Personal Characteristics (cont'd.)			
Family Income, Independents			
\$0 - \$10,999	35	60	27
\$11,000 - \$16,999	15	15	16
\$17,000 - \$22,999	12	9	11
\$23,000 - \$29,999	11	7	10
\$30,000 - \$49,999	19	7	6
\$50,000 or more	8	2	3

SOURCE: Congressional Budget Office estimates based on data from the Department of Education's National Postsecondary Student Aid Study.

NOTE: 18.6 million students were enrolled in postsecondary schools at some time during 1989-1990, 16 percent of whom received a Stafford Loan.

- a. The percentage of all students with the indicated attribute.
- b. The percentage of all Stafford Loan borrowers with the indicated attribute.
- c. The percentage of all students with the indicated attribute who have at least one Stafford Loan taken out in this year of school.
- d. Professional schools are medical, law, and business schools.
- e. Students without high school or General Education Development (GED) diplomas can no longer borrow under the GSL programs without passing a test designed to indicate whether they could benefit from further education.

CHAPTER III

FACTORS DETERMINING THE FEDERAL COST

Federal costs for the guaranteed student loan programs are mostly attributable to interest and default payments. This chapter discusses these components and analyzes how costs vary among different types of borrowers.

COMPONENTS OF FEDERAL COST

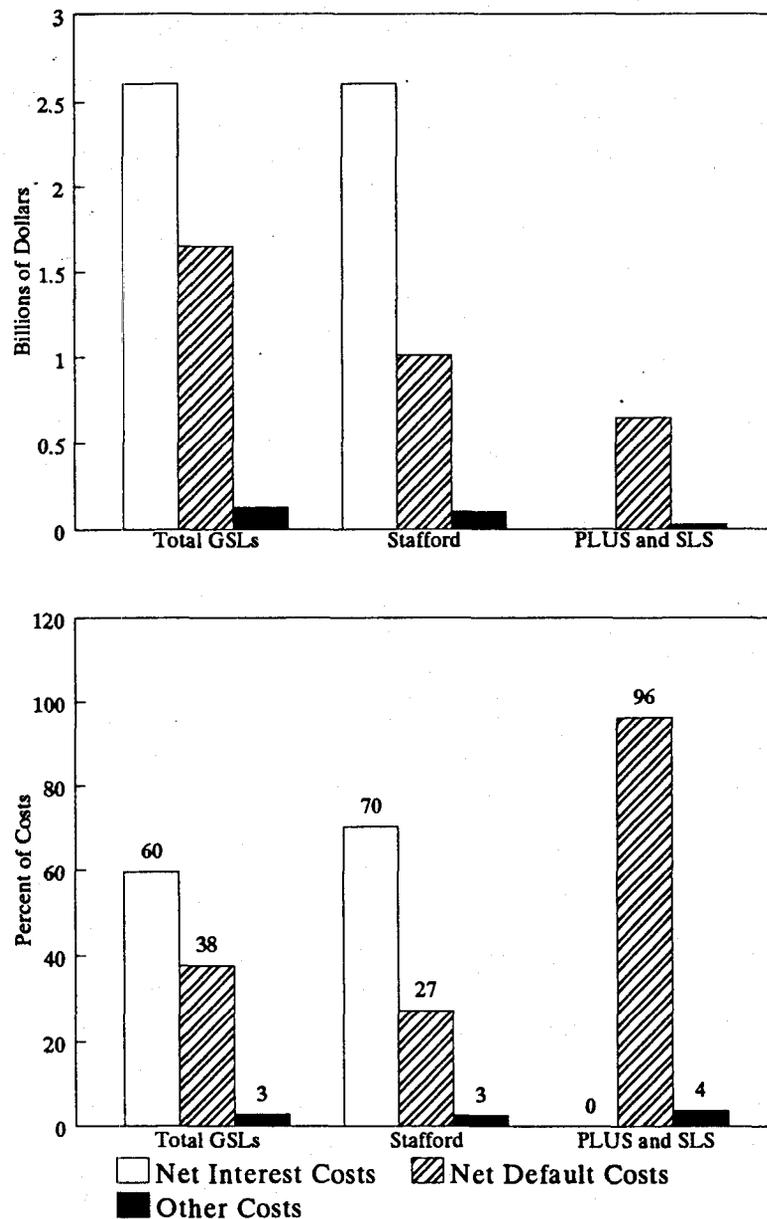
The cost of the GSL programs to the federal government includes both interest payments net of the origination fee and default payments net of repayments. Separate records for the different GSL programs are unavailable for all the years since the programs started, so the data presented here are for the programs combined. Stafford Loans are the only GSLs that provide substantial interest subsidies, however, so the interest payments can be attributed mostly to the Stafford Loan program. The costs for defaults reflect the experience of the GSL programs combined. For example, in 1990, net interest payments in the Stafford Loan program totaled \$2.6 billion, or 70 percent of its costs (see Figure 5). Because the PLUS (Parent Loans to Undergraduate Students) and Supplemental Loans for Students programs incurred no interest costs, but did incur substantial default costs, interest payments were only 60 percent of the total GSL costs. Similarly, net default payments were 27 percent of the cost of the Stafford Loan program but 38 percent of total GSL costs.

Factors Determining Interest Costs

Breaking the cost of interest payments into its components helps to clarify its fluctuations. The annual federal expenditure on interest in the Stafford Loan program may be approximately expressed in the following formula:

$$\begin{array}{rcll} \text{interest} & & \text{the value of} & \text{the bond equivalent of the} \\ \text{cost} & = & \text{loans for} & \text{91-day Treasury bill rate} \\ & & \text{borrowers in} & \text{plus 3.25 percentage points} \\ & & \text{school} & \\ & + & \text{the value} & \text{the average} \\ & & \text{of loans in} & \text{special} \\ & & \text{repayment} & \text{allowance rate} \end{array}$$

Figure 5.
Net Interest Costs, Net Default Costs, and Other Costs in the Guaranteed Student Loan Programs in 1990



SOURCE: Congressional Budget Office calculations based on data from Department of Education, "FY 1990 Guaranteed Student Loan Programs Data Book" and "Digest of Education Statistics," 1990.

NOTE: Federally Insured Student Loans and Stafford Loans were known as "regular" guaranteed student loans (GSLs) until recently. Currently, the term GSL refers to those loans as well as PLUS loans (Parent Loans to Undergraduate Students) and Supplemental Loans for Students (SLS).

Other things being constant, the interest cost falls as the value of loans outstanding--that is, loans to borrowers in school and loans in repayment--decreases, the 91-day Treasury bill rate declines (affecting interest payments both while borrowers are in school and, through the special allowance, while they are repaying loans), or if the 3.25 percentage point premium is lowered in the law. The federal government also collects 5 percent of the value of all new loans as an origination fee. This amount is intended partially to offset federal interest payments.

As the 91-day Treasury rate rose from 10 percent in 1979 to 14 percent in 1981 and the real value of outstanding loans rose from \$15.7 billion to \$26.9 billion, the real net interest costs increased from \$1.1 billion to \$2.9 billion (see Figure 6). Although the real value of outstanding loans doubled to \$52.7 billion by 1990, real net interest costs actually fell slightly to \$2.6 billion, because the origination fee began in 1981 and because the interest rate declined to 7.5 percent.

With the current value of outstanding loans, a permanent one-percentage-point increase in the Treasury bill rate (or in the 3.25 percentage point premium that lenders receive) increases federal spending by about \$350 million in the Stafford Loan program. Likewise, for a 100,000 increase in the number of borrowers, interest costs rise by about \$80 million.

Determinants of Default Costs

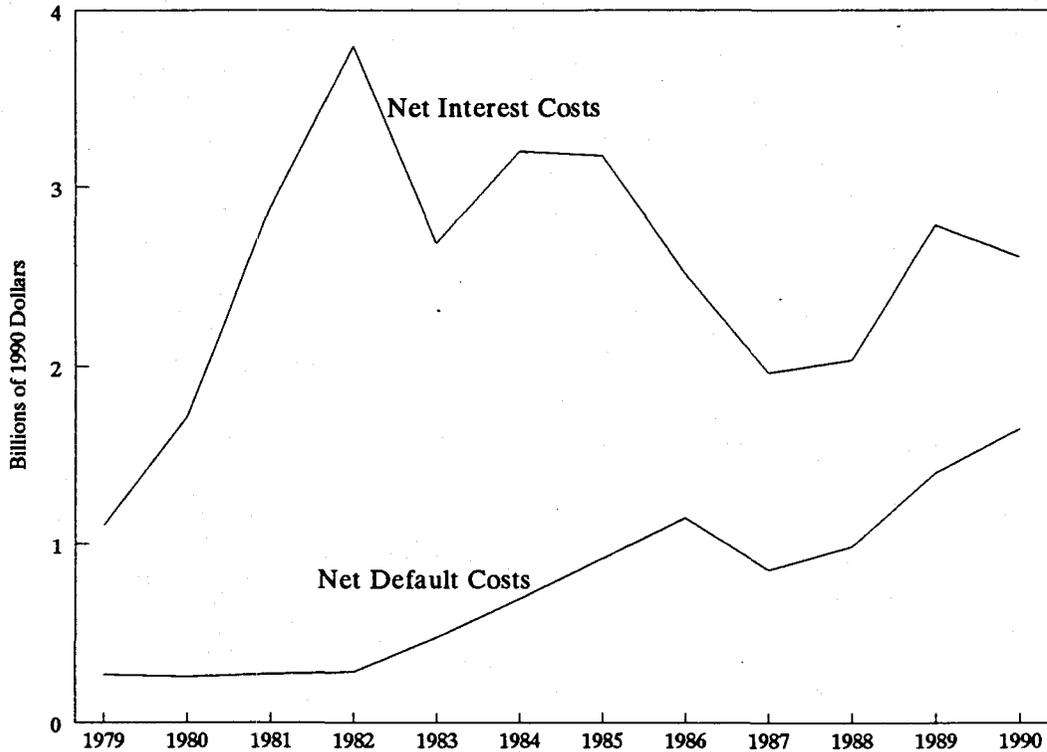
Similarly, breaking the cost of defaults into its components, the net default cost to the federal government in a particular year is:

$$\begin{array}{rcccc} \text{net} & & \text{the value} & & \text{the annual} & & \text{collected funds} \\ \text{default} & = & \text{of loans in} & \times & \text{default} & - & \text{that were previously} \\ \text{cost} & & \text{repayment} & & \text{rate} & & \text{counted as defaults} \end{array}$$

Other things being equal, the net default cost rises if the value of loans in repayment increases, the annual default rate rises, or collections on previously defaulted loans fall.

Between 1979 and 1982, the real value of loans in repayment grew roughly 70 percent, but federal spending on defaults grew only slightly because the annual default rate fell by almost one-third (see Figure 7). Federal expenditures on defaults then climbed as the real value of loans in repayment soared from \$9.3 billion to \$24.1 billion in 1986 and the annual default rate

Figure 6.
Net Interest Costs and Net Default Costs in the Guaranteed Student Loan Programs, 1979–1990 a/

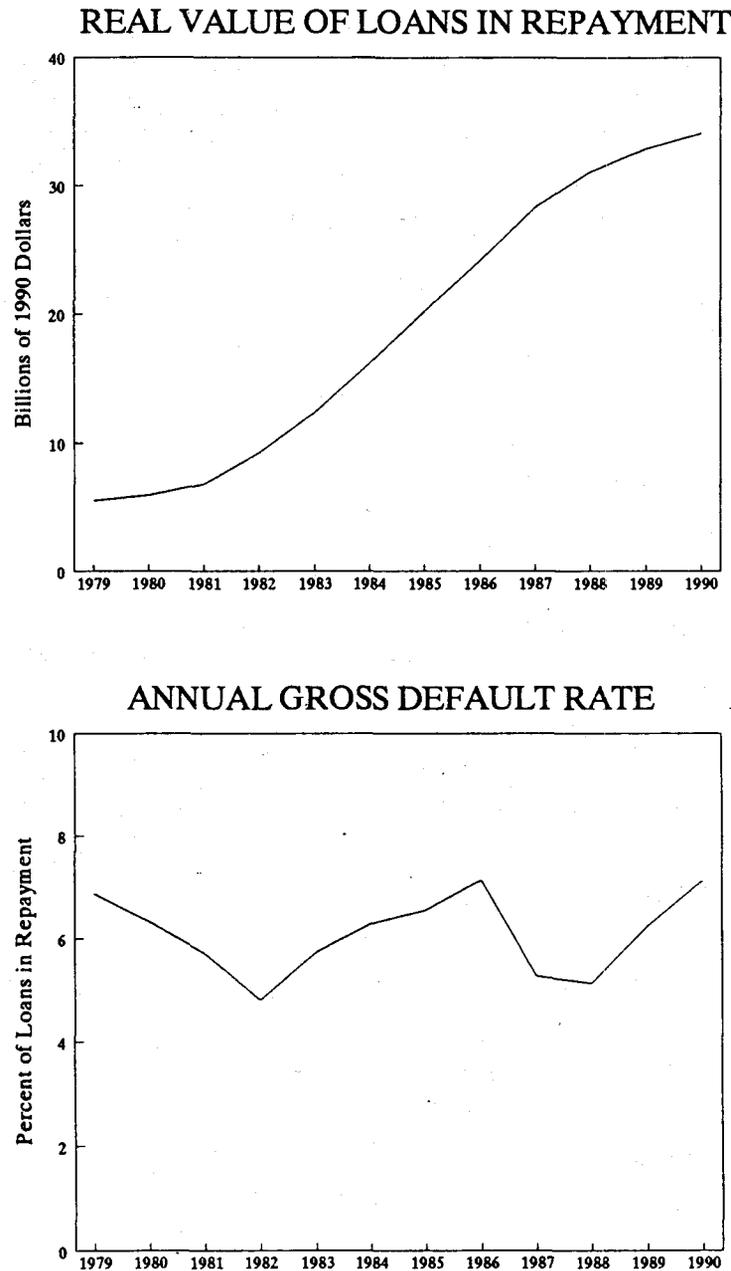


SOURCE: Congressional Budget Office calculations based on data from Department of Education, "FY 1990 Guaranteed Student Loan Programs Data Book" and "Budget of the U.S. Government," fiscal years 1991 and 1992.

NOTE: Federally Insured Student Loans and Stafford Loans were known as "regular" guaranteed student loans (GSLs) until recently. Currently, the term GSL refers to those loans as well as PLUS loans (Parent Loans to Undergraduate Students) and Supplemental Loans for Students.

a/ See the text of the paper for a complete definition of these costs.

Figure 7.
The Real Value of Loans in Repayment and the Annual Gross Default Rate in the Guaranteed Student Loan Programs, 1979–1990



SOURCE: Congressional Budget Office calculations based on data from Department of Education, "FY 1990 Guaranteed Student Loan Programs Data Book" and "Budget of the U.S. Government," fiscal years 1991 and 1992.

NOTE: The annual gross default rate is defined as the value of new defaults in a given year expressed as a percentage of the value of loans then in repayment.

rose from 4.8 percent to 7.1 percent. In 1987, costs fell temporarily as the annual default rate decreased. Since then, federal expenditures have grown considerably as the real value of loans in repayment has continued to grow and as the annual default rate has increased. This default rate is expected to climb further in 1991, leading to even larger expected default costs.

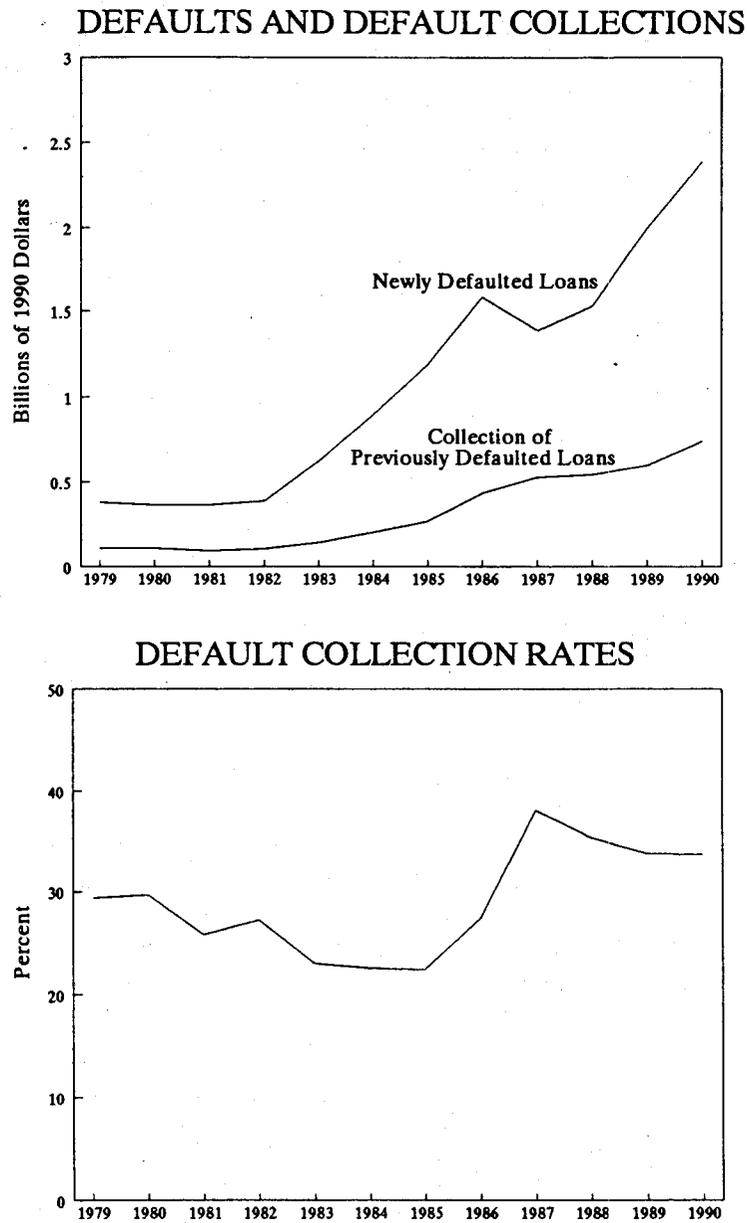
The growth in collections on previously defaulted loans has helped temper the increase in the cost of the program. The 1990 expenditure on defaults of \$1.6 billion was the net result of \$2.4 billion in new default costs less \$740 million in collections from previously defaulted loans (see Figure 8). This trend toward collecting an increasing percentage of previously defaulted loans may abate, however, if the collections to date have been for those defaulters with the ability to repay, while the debts that remain uncollected are from defaulters with relatively few financial resources.

Default costs also depend on the likelihood that borrowers default.¹ On an individual basis, the likelihood that particular borrowers default depends on their ability to repay and their willingness to do so. Their ability to repay in turn depends on factors such as their current and future income and assets, the variability of their income, their parents' financial resources and willingness to help repay the loans, their expenses (particularly unexpected expenses), and the amount they owe. Their willingness to repay depends on factors such as their knowledge that loans should be repaid, their satisfaction with the education they received, their personal integrity, their concern about the financial consequences of defaulting, and their attitudes about both the government and banks.

To investigate the impacts of these attributes, CBO analyzed data from a 1987 survey of individuals who borrowed through the Stafford or FISL programs and who left postsecondary school between 1976 and 1985.² The overall likelihood of default for this sample of borrowers is 13 percent. The results presented here are estimates of the importance of each attribute after taking into account the effects of the other attributes that can be measured. Most of the variables measure the borrowers' abilities to repay. Whether they received loan information may change their willingness to repay. A few other variables may be related to both ability and willingness to repay.

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1. For a summary of previous research, see General Accounting Office, "Student Loans: Characteristics of Defaulted Borrowers in the Stafford Student Loan Program" (April 1991).
 2. The data are from the 1987 Student Loan Recipient Survey of the National Postsecondary Student Aid Study (NPSAS). Appendix B includes a more thorough discussion of the findings of this analysis and of the statistical techniques used.

Figure 8.
Defaults, Collections, and Collection Rates in the Guaranteed Student Loan Programs, 1979–1990



SOURCE: Congressional Budget Office calculations based on data from Department of Education, "FY 1990 Guaranteed Student Loan Programs Data Book" and "Budget of the U.S. Government," fiscal years 1991 and 1992.

NOTE: The annual collection rate is defined as the value of new collections in the current year expressed as a percentage of the value of new defaults in the current year.

As expected, those with higher incomes are less likely to default than are those with lower incomes (see Table 2 on page 32).³ For example, individuals with incomes of \$10,000 are 5 percentage points more likely to default than the average borrower, while those with incomes of \$50,000 are 4 percentage points less likely to default than the average borrower.

Perhaps also indicating a greater ability to repay their loans, borrowers whose parents had higher incomes at the times they began their postsecondary educations are generally less likely to default than are those whose parents had lower incomes.⁴ Borrowers who anticipated receiving or had received financial help from their parents in repaying their loans are likewise an estimated 5 percentage points less likely to default. These characteristics indicate a greater access to financial resources, and may be particularly important when unexpected financial difficulties arise.

The total amount of borrowing did not affect the likelihood of default in this model. This result may occur because the amount of borrowing was related to other traits, such as the highest degree obtained, that capture the relationship. The result was somewhat sensitive to the exact specifications of the model used in this analysis, however.

Recipients who received deferments on their loan repayments were slightly more likely to default than were those who did not receive them. This result could indicate that some deferment periods are too short or do not cover all periods of financial hardship for borrowers, such as the unemployment of a spouse. Alternatively, perhaps the greater passage of time for borrowers receiving deferments reduces their commitment to repay their loans.

The chance that borrowers default is an estimated 13 percentage points higher for those without either a high school or a General Education Development diploma than for those with one of these, after taking into account the effects of further educational attainment and other factors.⁵ This result may indicate that students with little academic success in high school

3. The incomes reported are those in the year before the survey. Some borrowers in the sample had repaid their loans by then. The results do not change greatly, however, if individuals who had repaid their loans are excluded from the sample used for the analysis.

4. It may also be that borrowers from higher-income families have a greater knowledge about and experience with credit, leading them to have a greater willingness to repay their loans.

5. Students without high school or GED diplomas are no longer allowed to borrow in the GSL programs without passing a test designed to measure their ability to benefit from postsecondary education.

benefit less from any future education than do those who successfully complete high school, or that they have more erratic earnings and are thus more prone to default.

The types of schools that borrowers attended and the degrees that they received also affect whether or not they default, again after accounting for the effects of other traits. Recipients who attended proprietary schools are more likely to default than those who did not, while the chance of default is unaffected by whether or not borrowers attended public or private colleges.⁶ The types of schools attended by borrowers may also affect their willingness to repay student loans if borrowers attending proprietary schools are systematically less satisfied with their educations.

Borrowers who completed more postsecondary education are less likely to default than are those who completed less education, presumably at least partly because of increased earnings many years into the future (see Table 3 on page 34). In addition, those who were younger when they left school, given their educational attainment, are less likely to default, perhaps indicating that these individuals have greater abilities or motivation that will translate into higher future earnings. For example, the probability that borrowers who were 24 to 27 years old when they left school will default is 18 percentage points higher than the average borrower if they left postsecondary school with no degree, and it is 8 percentage points lower than the average if they received a graduate degree. Similarly, for borrowers whose highest degree is a college degree, the chance of defaulting is 6 percentage points lower than the average if they graduated before age 24, while it is 4 percentage points higher than the average if they were older than 27 when they graduated.

The likelihood of default is also affected by the willingness of borrowers to repay their loans, although little information about their willingness to repay is contained in the data. Notably, borrowers who have received information about repaying their loans from their postsecondary institutions or their banks are much less likely to default--9 percentage points less likely--than are those who have received no information.⁷ This result highlights the importance of borrowers understanding they are obliged to repay.

6. The data used here were collected before the explosion in the number of proprietary schools. If more current data were available, the effect of attending a proprietary school on the chance of default might be greater.

7. All borrowers now receive information from lenders when they receive their loans and again before their repayment period begins. This includes information on when the repayment is to begin, the length of time for repayment, and the consequences of default.

TABLE 2. ESTIMATED EFFECTS OF SELECTED ATTRIBUTES
ON THE LIKELIHOOD OF DEFAULTING ON
STAFFORD LOANS (In percentage points) *

Attribute	Change in Likelihood of Default
Income of Borrower (1990 dollars)	
\$10,000	5
\$20,000	2
\$30,000	0
\$40,000	-3
\$50,000	-4
Range of Parental Income When Borrower Started Postsecondary School (1990 dollars)	
\$0 - \$10,999	5
\$11,000 - \$16,999	7
\$17,000 - \$22,999	2
\$23,000 - \$29,999	-2
\$30,000 - \$49,999	1
\$50,000 or more	1
Income not reported	-6
Borrower's Parents Are Willing to Help Repay the Loan	-5
Loan Amount (1990 dollars)	b
Borrower Ever Received a Deferment	4
Borrower Has No High School or GED Diploma	13

(Continued)

TABLE 2. (Continued)

Attribute	Change in Likelihood of Default
Types of Schools Borrower Attended ^c	
Proprietary	3
Public	d
Private, nonprofit	d
Borrower Received Information About Loans	-9

SOURCE: Congressional Budget Office estimates based on data from the National Postsecondary Student Aid Study.

NOTES: Entries in this table indicate the change in the likelihood of default for specific attributes after removing the effects of many other factors. In addition to the factors listed above, other variables taken into account in calculating the impact of each attribute include marital status, children, sex, race, ethnicity, years out of school, level of parents' education, and amount borrowed by the spouse (if any).

The total effect of several attributes together may not equal the sum of the individual effects because of nonlinearities in the model used to estimate the effects.

See Appendix B for a more thorough discussion of the findings of this analysis and of the statistical techniques used.

- a. The overall likelihood of loan default is 13 percent.
- b. No significant change is associated with different loan amounts.
- c. Borrower may have attended more than one type of school.
- d. No significant change is associated with attending public or private schools.

TABLE 3. ESTIMATED CHANGES IN THE LIKELIHOOD OF DEFAULTING ON STAFFORD LOANS, BY THE HIGHEST LEVEL OF POSTSECONDARY SCHOOLING COMPLETED AND AGE WHEN THE BORROWER LEFT SCHOOL (In percentage points) ^a

Age Borrower Left School	Highest Level of Postsecondary Schooling Completed			
	None	Non-College Degree ^b	College Degree	Graduate Degree
Younger Than 22	7	-4	-6 ^c	
22 or 23 Years Old	8	1		-8 ^c
24 to 27 Years Old	18	4	-2	
28 Years Old or Older	23	13	4	-2

SOURCE: Congressional Budget Office estimates based on data from the National Postsecondary Student Aid Study.

NOTES: Entries in this table indicate the change in the likelihood of default, after taking many other factors into account. In addition to the factors in Table 2, other variables taken into account include marital status, children, sex, race, ethnicity, years out of school, level of parents' education, and amount borrowed by spouse (if any).

- a. The overall likelihood of loan default is 13 percent.
- b. Non-college degrees include two-year associate degrees and proprietary degrees.
- c. Because of small sample sizes, all borrowers age 23 or younger were grouped together in estimating the joint effect of age and obtaining a college degree. Similarly, all borrowers 27 or younger were grouped together in estimating the joint effect of age and obtaining a graduate degree.

VARIATION IN FEDERAL COSTS BY TYPE OF STUDENT

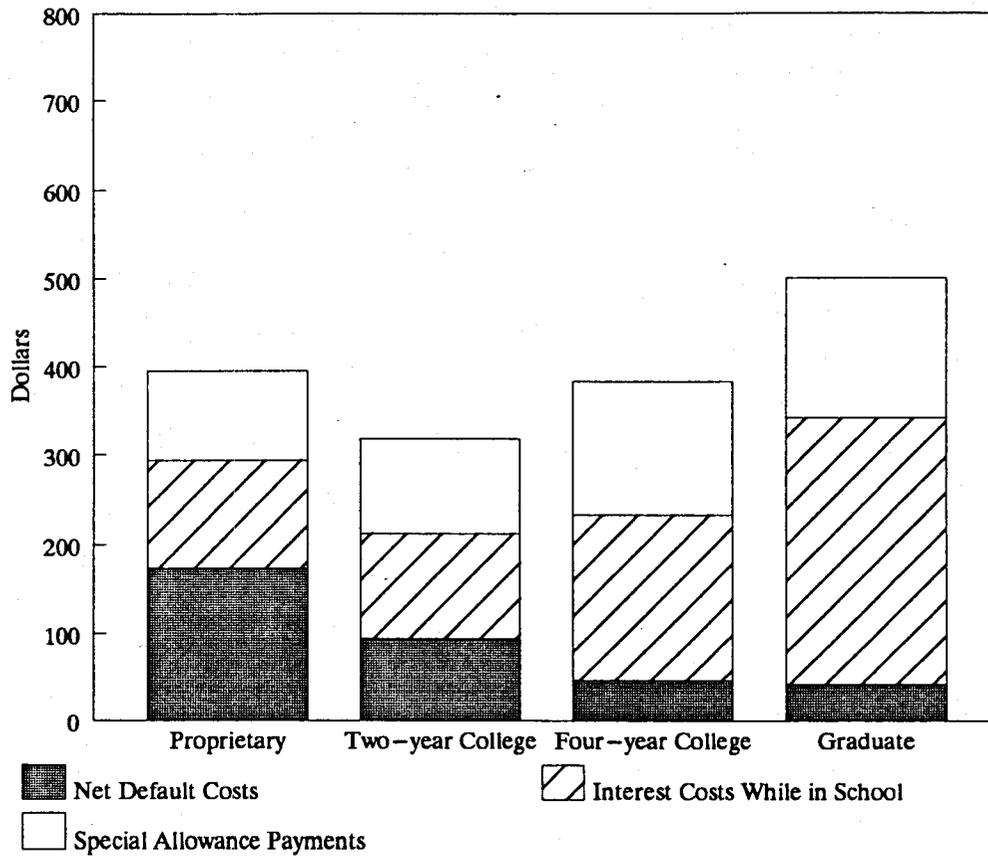
Students who borrow more, borrow for a longer period of time, default on their loans, or borrow when interest rates are higher cost the federal government more in loan subsidies than do other borrowers. For example, the average recipient who completes four years of college or who attends graduate school borrows more than other recipients. In contrast, the average borrower who attends a proprietary school or a two-year college is more likely to default. Other things being equal, students who had loans in the early 1980s cost the federal government more than did those who had loans at other times because interest rates were higher then.

Evidence from a study of borrowers in Pennsylvania whose loans became due for repayment in 1989 quantified these differences.⁸ This study considered both the federal cost per \$1,000 borrowed and the total federal cost of these Stafford Loans. (These loans could have originated in any previous year.)

When the federal costs of loan subsidies were calculated per \$1,000 borrowed, students who attended graduate school, on average, had the largest average costs at \$500 per student, or 50 percent of the amount borrowed by these students (see Figure 9). The larger part of this subsidy consisted of interest payments made while the students attended school. At an average subsidy of about \$400, students attending proprietary schools and four-year colleges received the next largest benefits per \$1,000 borrowed. Default payments were a large portion of the cost for students at proprietary schools, while interest payments were more important for students at four-year colleges. Students at two-year colleges received the lowest average overall federal payment per \$1,000 borrowed--about \$300. In all cases, the specific amounts of federal spending depended on the level of the interest rate when the students were in school. In a different year, the interest payments, and therefore the percentages of federal costs attributable to interest payments and defaults, could be quite different. For example, reflecting differences in the importance of interest payments for total costs, a one-percentage-point reduction in the interest rate would lower the total cost of these loans by about 20 percent for borrowers at graduate schools and four-year colleges, and by about 15 percent for borrowers at two-year colleges and proprietary schools.

8. Jerry S. Davis and Laura L. Greene, "How Federal Subsidies to the Stafford Loan Program are Distributed among Pennsylvania Borrowers," Pennsylvania Higher Education Assistance Agency (April 1990).

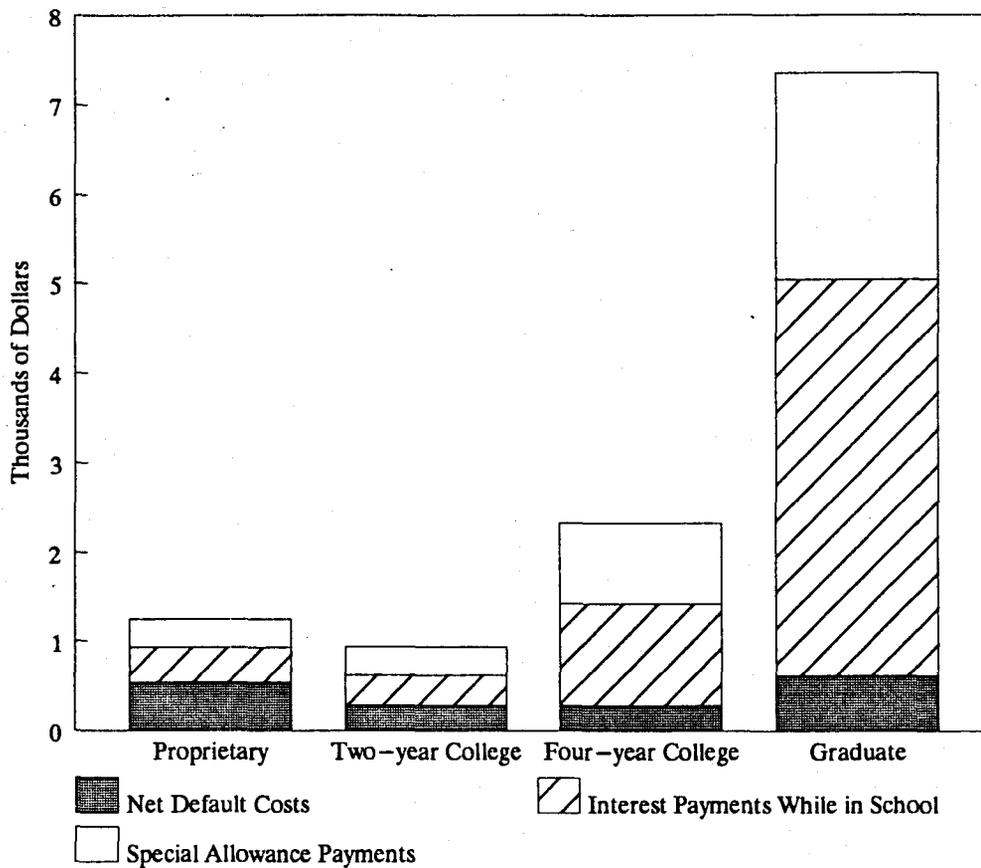
Figure 9.
Federal Costs per \$1,000 Borrowed in the Guaranteed Student Loan Programs,
by Costs and Type of School, 1989



SOURCE: Congressional Budget Office calculations based on data from Jerry S. Davis and Laura L. Greene, "How Federal Subsidies to the Stafford Loan Program are Distributed Among Pennsylvania Borrowers," Pennsylvania Higher Education Assistance Agency, April 1990.

When costs were calculated per borrower, differences in federal spending were much larger than per \$1,000 borrowed because they also reflected the different amounts borrowed by different types of borrowers. Again, the largest payments were on behalf of graduate students at about \$7,360 per borrower (see Figure 10). Borrowers at four-year colleges cost about twice as much as borrowers at proprietary schools--about \$2,330 compared with \$1,240--because the average borrower attending a four-year school had loans that totaled about twice those of the average borrower at a proprietary school. Loan recipients at two-year colleges had the lowest average federal cost, about \$930, because they borrowed the least.

Figure 10.
Total Federal Costs per Borrower in the Guaranteed Student Loan Programs,
by Costs and Type of School Attended, 1989



SOURCE: Congressional Budget Office calculations based on data from Jerry S. Davis and Laura L. Greene, "How Federal Subsidies to the Stafford Loan Program are Distributed Among Pennsylvania Borrowers," Pennsylvania Higher Education Assistance Agency, April 1990.

CHAPTER IV

RECENT POLICY ACTIONS AND

ALTERNATIVES FOR THE FUTURE

Possible ways to improve the Stafford Loan program have become a focus of discussion as a result of concerns about the direction of federal student loan programs and the opportunity to reevaluate student aid policies provided by the pending reauthorization of the Higher Education Act.

RECENT LEGISLATIVE CHANGES

The Omnibus Budget Reconciliation Act of 1990 made several changes in the budgetary context and operation of the guaranteed student loan programs. These modifications will affect the ease with which future legislative changes can be made.

Changes in Budgetary Rules and Procedures

The Budget Enforcement Act, a part of the Reconciliation Act of 1990, sets new rules for federal spending through 1995 that could have a major impact on future changes in the Stafford Loan program.¹ Legislative expansions in entitlements, such as the Stafford Loan program, are potentially limited by features of the new law that are termed "pay-as-you-go." Specifically, one entitlement program can be expanded only if others are cut or if taxes or fees are increased. In addition, the trade-off between spending in entitlement programs and spending in discretionary programs has been eliminated since domestic discretionary programs have a separate spending cap set forth in the new budget law. Generally, increases in spending on entitlements cannot be offset by reductions in spending for discretionary programs and vice versa. This feature is particularly relevant for higher education programs because Stafford Loans are an entitlement and Pell Grants are discretionary spending.

1. For a thorough discussion of the new budget process, see Congressional Budget Office, *The Economic and Budget Outlook: Fiscal Years 1992-1996* (January 1991), Chapter II.

The Budget Enforcement Act also changes the way that federal credit programs are reflected in the budget (see Box 2). Federal loan guarantees, such as those of the Stafford Loan program, were previously included in the budget on a cash-flow basis. Henceforth, the government's long-run cost, or subsidy, for a loan guarantee will be recorded as a budget outlay when the loan is disbursed. This change in accounting, which is part of broader changes together termed credit reform, places loan guarantees and other federal spending on an equal footing.

Modifications in the GSL Programs

Legislative changes in the GSL programs under the Reconciliation Act included eliminating schools with high cohort default rates from the GSL programs, delaying the disbursement of loans to all first-time, full-year undergraduate borrowers, and requiring the independent testing of federal student aid recipients without high school diplomas or General Education Development diplomas. The Emergency Unemployment Compensation Act of 1991 added wage garnishment as a tool that can be used in all states for collecting defaulted loans.

Eliminating Schools With High Default Rates. Federal law now requires that schools with very high cohort default rates be excluded from participating in the GSL programs. Specifically, in 1992, students at schools with cohort default rates of 35 percent or more in each of the three previous years will be unable to receive GSLs. Beginning in 1993, schools with cohort default rates of 30 percent or more in each of the previous three years will be ineligible for the program. Historically black colleges and universities and tribally controlled community colleges are exempt from the requirements until July 1994.

Delaying Disbursement of Loans. GSLs cannot now be disbursed to new borrowers until 30 days after classes begin. In 1990, this provision applied only to borrowers attending schools with high cohort default rates. As a result, loans will not be disbursed to early dropouts--borrowers who have been found to be especially likely to default.

Requiring Independent Tests of Certain Applicants. Federal law now requires that applicants without high school or GED diplomas pass a test designed to measure their likelihood of success in acquiring further education. The test must be administered by an agency that is independent of the schools that the students plan to attend. Previously, the schools themselves determined whether the applicants would benefit from the education, leading to charges that some schools admitted students who had little prospect of success.

BOX 2
The Budgetary Impact of Credit Reform
on the Stafford Loan Program

Federal loan guarantees were previously included in the budget on a cash-flow basis; that is, federal payments in support of the guarantees were included as outlays in the years in which they occurred. Using this method of accounting, the costs of the Stafford Loan program for the anticipated \$8.7 billion in new loan guarantees for 1992 would have been recorded as an estimated \$30 million in 1992, nearly \$700 million in 1993, and over \$1.2 billion in 1994, reflecting estimates of the pattern of interest and default payments on these loans (see below). Payments on the loans originating in 1992 would total about \$2.95 billion.

Under credit reform, the government's expected long-run cost, or subsidy, is recorded when the loan is disbursed rather than when the payments actually occur. Based on previous experience and expected patterns of behavior, the subsidy rate for the Stafford Loan program is estimated to be 28 percent. That is, the federal government is expected to spend 28 cents for each dollar in loans it guarantees (11 cents for interest payments while students attend school, 10 cents for net default payments, 6 cents for interest copayments after borrowers leave school, and 1 cent for other costs). This subsidy rate leads to recorded costs of \$2.45 billion--28 percent of the \$8.7 billion borrowed. This amount, together with the interest it will earn, will be enough to make the estimated \$2.95 billion in payments expected to be required in 1992 and future years.

**BOX TABLE PROGRAM OBLIGATIONS AND OUTLAYS
 UNDER CASH FLOW ACCOUNTING AND
 CREDIT REFORM IN THE STAFFORD
 LOAN PROGRAM (In millions of dollars)**

	1992	1993	1994	1995	1996 and Beyond	Total
Cash Flow Accounting						
Program Obligation	92	801	1,184	445	428	2,950
Outlays	30	691	1,254	490	485	2,950
Credit Reform						
Program Obligation	2,453	0	0	0	0	2,453
Outlays	1,695	758	0	0	0	2,453

Wage Garnishment. Recently enacted federal law now allows up to 10 percent of the earnings of any borrower who is in default to be garnished. In states with cumbersome garnishment procedures, this will facilitate the collection of defaults.

THE NEED FOR FURTHER CHANGE

In light of the concerns about the financial stability and overall integrity of the GSL programs, and given recent modifications in these programs, what further changes, if any, should be made in the Stafford Loan program?

The Case Against Change

A case against further modification can be made both on the basis of program outcomes and costs. Millions of students have borrowed through the Stafford Loan program, helping them to attend postsecondary schools. In addition, annual default rates and current costs are in line with what many would expect for a program that lends to large numbers of students. At about 7 percent a year, the annual default rate in the GSL programs is not unlike the annual default rates in some other federal loan programs. Lending to people with no collateral and little credit history entails risk. For example, one would expect default rates to be higher for student loans than for secured mortgages. Without the government guarantees, however, many students would be unable to finance their educations.

Defenders of the current program also argue that sizable costs should be expected in a program that provides substantial interest subsidies to large numbers of borrowers. It is primarily the growth in borrowers, rather than an increase in the default rate, that has fueled the growth in costs.

The Case for Change

Even if the arguments against further change are persuasive, the federal government might still require guaranty agencies and banks to provide more information about applicants and recipients, so that the impact and desirability of future changes in policy could be better assessed. Specifically, banks and guaranty agencies could be required to provide information on the financial condition and dependency status of each applicant and on the size of loans and the amount of the borrower's indebtedness. This information would make gauging the direction of the program easier and more accurate. For example, one could then determine the extent to which low-income

families depend on loans to finance postsecondary educations. Information on changes in the patterns of borrowers would also be available more quickly, allowing policy to be more responsive to any problems that might arise.

It can also be argued that further changes should be made in the Stafford Loan program. Some critics charge that its costs have grown too rapidly and that its default rates are excessive. At over \$3.7 billion per year, its cost represents a sizable allocation of federal resources. Given the present budgetary tightness, some people argue that this form of relatively untargeted federal spending should be curtailed. They believe that federal funds should be used more to assist those in greatest need--through the Pell Grant program, for example, or through other highly targeted federal aid programs.

While recent legislation has attacked the symptom of high default rates, it probably has not affected their underlying causes. High default rates may indicate a lack of integrity in the program. Students borrowing to attend schools that provide little education are worse off than if they had not attended school because they have loans to repay while receiving little in return.

Other observers worry that because the maximum loan has not kept pace with the rapidly rising costs of postsecondary education, the ability of many students to attend postsecondary schools or to choose to attend higher-priced ones has been limited.

A number of broad proposals have been made that would change the mix of federal aid between grants and loans or would fundamentally restructure the GSL programs. While these options are beyond the scope of the paper, the remainder of this section briefly outlines them. The next sections consider the incremental options that are the focus of this study.

Some proponents of changing the mix of federal aid would target grants more toward the poorest students. This outcome could be achieved either by only raising the level of grants provided to these students or by raising them in combination with lowering the grants provided to higher-income students. Other advocates of changing the mix of aid would modify the rules for federal grant and loan programs so that students in their first two years of postsecondary school would be eligible for larger federal grants. Students in their third year and beyond would no longer be eligible for federal grants but could potentially borrow more than they can now.

Other proposals would restructure the GSL programs. One approach would be to centralize them. Under this plan the federal government would administer the program and pursue collections on defaulted loans. Guaranty

agencies would no longer be needed. Otherwise, the structure of the program would not change, so that students and lenders would notice little difference.

Another approach would be to create a direct loan program, whereby postsecondary schools would dispense federal loans. Under this option, schools would act as administrative offices with the federal government supplying the capital. Banks would no longer be involved with student loans. Before the recently enacted credit reform a direct loan program would have been prohibitively expensive because all the lending would have been counted as a federal expense when the loans were disbursed. With credit reform, only the subsidy value of the loans is recorded as a cost to the federal government, making the reorganization possible.

A third approach to restructuring the GSL programs would tie loan repayments to the incomes of borrowers after they leave school. The federal government would lend directly to students and the Internal Revenue Service would collect loan repayments. The annual repayments would vary with the size of the loans and with the incomes of the borrowers.

IMPROVING THE OUTCOMES FOR STUDENTS

This section explores a number of specific alternatives in the Stafford Loan program that have been suggested as better serving the needs of students. They include increasing the maximum loan, requiring independent counseling for prospective borrowers, tightening accreditation standards, and requiring schools to share in the costs of their defaults.

Increasing the Maximum Loan

As discussed in Chapter I, the maximum Stafford Loan has not kept pace with the rising costs of postsecondary education. In particular, the maximum loan for first- and second-year undergraduates has fallen to 60 percent of the average cost of a public education and 20 percent of the average cost of a private education, and the maximum loan for more advanced undergraduates now pays for 90 percent of the average public cost and 30 percent of the average private cost. In contrast, it used to pay for more than 100 percent of the average public cost and 80 percent of the average private cost for all undergraduates. To remedy this decline, some analysts suggest increasing the maximum loan for undergraduates to reflect the rising costs of education.

Raising the limits to \$4,500 for all undergraduates (from \$2,625 for first- and second-year undergraduates and \$4,000 for other undergraduates)

would allow them to borrow enough to finance the current average cost of education at a public four-year college. The change would raise federal outlays by \$255 million in 1992 and by \$2.2 billion over the 1992-1996 period.

Proponents of this option argue that allowing students to borrow more would encourage some potential students to enter postsecondary schools and would allow others to attend more expensive schools, benefiting themselves and the economy if they found better jobs. In addition, for current borrowers who do not choose to attend more expensive schools, raising the maximum loan would help ease their difficulties in paying for school. As a result, some might reduce the number of hours that they were employed, allowing them more time for their studies.

Opponents of raising the maximum loan contend that many students already have too much debt when they leave school, particularly those who do not graduate from a four-year college. Further, increasing the maximum loan might encourage some schools to raise their tuitions to capture additional federal funds available, thus adversely affecting all their students rather than giving students receiving Stafford Loans more flexibility in financing their education. Schools whose students now receive substantial amounts of federal and state aid might be particularly successful at raising tuitions because higher costs would allow their students to receive more aid. Finally, some think that if there were to be additional spending on postsecondary education, it should be targeted on those with the greatest need--through the Pell Grant program or through reductions in the expected family contribution of low-income families--rather than given to the relatively better-off students who borrow through the Stafford Loan program.

Requiring Independent Counseling of Prospective Borrowers

Another option to improve the outcomes for students is to require independent counseling for prospective borrowers or for borrowers wanting to attend schools that have high default rates. It appears that some schools encourage students to borrow by overstating the prospective economic benefits of the programs they offer. When the borrowers are unable to find the jobs they expected, some of them default on their loans. As discussed in Chapter III, those who do not complete their programs as well as those with lower incomes--both potential indications of little benefit from schooling--are more likely to default than is the average borrower. Many of the prospective students who do not benefit greatly from their postsecondary educations may be unaware of, or have little access to, counseling services that could help them to choose their best options. Counseling centers could be funded from several sources--the federal government, the students when they met with

counselors, or proceeds from borrowers' loans (in which case the charge would need to be sufficiently large to cover the costs of students who chose not to borrow).

Requiring prospective borrowers to obtain counseling from independent centers established and run by the federal government or by the guaranty agencies could provide them with a better understanding of their choices and help them to select institutions and programs that are well suited to their talents and goals. The counselors could inform prospective students of the graduation rates and future job opportunities of the students currently attending different schools, for instance, and provide other information relevant to the future success of the borrowers. As a result, the "match" between students and schools might be improved.

Requiring the use of independent counseling services would add to the bureaucracy of applying for Stafford Loans, however. This time-consuming process would not be of much value to students already receiving good advice about postsecondary education. In fact, if some schools could unduly influence the counselors, the "independent" services might work poorly, encouraging students to pursue educations unsuited to their abilities or goals. In such cases, some students could make poorer choices than they would have made without counseling.

Strengthening the Accreditation Procedure for Schools

To be eligible to participate in the GSL programs, schools must be licensed and accredited. Generally, states award licenses and the U.S. Department of Education recognizes accrediting agencies that determine whether schools provide quality educations. Serious questions about the integrity of the program have been raised, for example, in testimony at recent Congressional hearings that charged that both becoming an accrediting agency and becoming accredited are too easy.² The Department of Education conducts few independent audits, leading to schools being accredited that would not be if the Department were more careful.³ Some observers also argue that the current system appears to give schools a false "seal of approval" from the federal government.

2. U.S. Senate, Permanent Subcommittee on Investigations, *Abuses in Federal Student Aid Programs*, Report 102-58 (May 17, 1991).

3. Department of Education, Office of Inspector General, Semiannual Report to Congress (April 1-September 30, 1990).

In response to questions of program integrity, minimum standards to be used by independent agencies in accrediting postsecondary institutions have been suggested. For example, the Department of Education has proposed using indicators of school quality such as retention rates, success rates on licensing examinations, or job-placement rates in assessing whether or not schools should be accredited. Different standards might be used for different types of schools. For example, graduation standards might be less stringent at two-year than at four-year schools because many students attending community colleges do not intend to receive degrees. Alternatively, it takes less time to receive a community college degree, suggesting an adjustment in the opposite direction.

In contrast, some opponents of strengthening accreditation practices counter that the Stafford Loan program needs enforcement of current rules, not additional regulation. Others contend that the primary responsibility of accrediting agencies is to ensure quality educations, not to reduce loan defaults. In fact, although accreditation standards also vary greatly among accrediting agencies, and average default rates on student loans differ among schools accredited by different agencies, it is unclear whether the schools approved by agencies with tougher standards have lower default rates. Finally, stronger accreditation standards would create more work for all schools, not just those with low standards. In particular, many colleges and universities argue that their academic standards are high and that additional government interference might impinge on their academic freedom.

Requiring Postsecondary Institutions to Pay a Loan Default Fee

Incentives in the Stafford Loan program could also be modified to encourage institutions to provide better educations. Under current law, schools do not pay any of the costs of the defaults of their former students, providing at least some schools with a financial incentive to fill their classes without offering quality educations. Charging postsecondary institutions an annual fee related to their cohort default rates would reduce the incentive of schools to encourage students to borrow who are unlikely to gain from the programs. These borrowers, many of whom do not complete programs or have low incomes after leaving school, are more likely to default than the average borrower, as seen in Chapter III.

This approach would increase the motivation of institutions to ensure that their students repaid their loans. It might induce schools both to emphasize to students their obligation to repay loans and to state more honestly the economic benefits that students could expect to derive from the education. Many specific plans to do this could be enacted. For example,

schools with cohort default rates greater than 10 percent could be required to pay a fee of 25 percent of the value of the defaults of their former students in excess of the first 10 percent of defaults. Enacting this option would provide an estimated \$155 million in payments to the federal government in 1992 and \$890 million over the 1992-1996 period.

Postsecondary institutions might, however, pass these costs on to students through higher charges rather than improving the quality of their programs. Enacting this option could also create financial stress for institutions with high cohort default rates that are unable to raise tuitions, even though some of them may be offering high-quality programs to disadvantaged groups. Finally, some students from low-income families--who, as discussed earlier, are more likely to default--might be denied admission or denied access to a loan by a school's financial aid officers for fear that they would increase the school's cohort default rate. This outcome would be counter to the goal of increasing access to postsecondary education.

REDUCING FEDERAL COSTS

Although the Reconciliation Act of 1990 modified the GSL programs in ways that will lower federal costs, additional changes to further reduce the allowable cohort default rate, or to cut subsidies to students, lenders, and guaranty agencies, could reduce federal spending on the Stafford Loan program and improve its efficiency. Some of the approaches examined here could reduce the usefulness of the program, however, if they made it more difficult for students to pursue their educations. To protect against this, funds that derive from these options could be used at least in part to expand other federal spending on postsecondary education, such as broadening the availability of Stafford Loans or increasing the maximum loan.

Further Restricting Allowable Cohort Default Rates at Schools

Some analysts propose further restricting the allowable cohort default rates of schools participating in the Stafford Loan program. As discussed earlier, in 1990 the federal government eliminated most schools with cohort default rates above 35 percent during each of three consecutive years. This cutoff will become somewhat more stringent, 30 percent, beginning in 1993.

One approach to tightening these standards further would be to define the default threshold as only the previous year's cohort default rate, as is done in the Supplemental Loans for Students program, rather than using the cohort default rates from the previous three years. Doing so would save an

estimated \$185 million in 1992. A second approach would be to decrease the threshold--to 20 percent, for example--without changing its calculation. This option would save an estimated \$250 million in 1992. Combining these options would save about \$385 million in 1992. The savings over the 1992-1996 period would be considerably greater--\$885 million, \$1.1 billion, and \$1.8 billion, respectively. (These estimates are contingent on preventing operators of disqualified schools from regaining eligibility by a name change or similar device. If such a prohibition were weak, savings from this option would be reduced significantly.)

Proponents of these approaches argue that the current restrictions still allow schools with excessive default rates to remain in the program, leading to higher federal costs and poor educations for their students. Opponents argue that schools with high cohort default rates are often those that serve a disproportionate number of low-income students--students who are more likely to default, even when the program is of high quality--and that the cohort default rate is a poor measure of which schools are providing inferior programs. They suggest that eliminating these schools would unfairly penalize some that offer useful programs. As a result, some needy students would have less access to postsecondary education from which they might benefit.

Reducing the Subsidies to Students, Lenders, and Guaranty Agencies

Students, lenders, and guaranty agencies all receive considerable subsidies in the Stafford Loan program. Requiring borrowers to pay a larger portion of the interest costs, reducing interest payments to lenders, and eliminating the administrative cost allowance to guaranty agencies would all reduce the subsidies and hence federal costs.

Increasing Interest Costs Paid by Borrowers. Requiring borrowers to pay a higher portion of the interest costs of their Stafford Loans than they do now could be accomplished in several ways. New borrowers could be charged interest on their loans while they attend school, for example, with payments beginning after they leave school. This approach would be similar to the interest assessments in the Supplemental Loans for Students and PLUS programs. Alternatively, or in addition, the interest rates charged to new borrowers could be raised after these borrowers leave school. A variation of this approach would also require new borrowers to begin accruing interest on their loans immediately after leaving school rather than after six months, as under current law, but would allow a grace period of six months before the first payment was due.

If enacted, charging borrowers a fixed interest rate of 8 percent while they attend school (and simultaneously eliminating the origination fee) would reduce federal outlays by an estimated \$575 million in 1992 and \$4.1 billion over the 1992-1996 period. Charging new borrowers the full interest cost on new loans after they leave school would save an estimated \$325 million in 1992 and \$2.1 billion in the 1992-1996 period if borrowers were charged interest during the grace period, and \$105 million in 1992 and \$725 million during the 1992-1996 period if they were not.

These measures would not cause cash-flow problems for borrowers while they attended school because they would be allowed to defer interest payments during that period. With the added costs generally occurring only after leaving school--when borrowers would be better able to afford them--most students would still be able to continue their educations. In addition, because graduate students and four-year college graduates now receive the largest interest subsidies, as discussed in Chapter III, this change would make the payments on behalf of students more even. The larger repayments that would result from these changes might, however, cause some students to forgo school or to limit their choices to lower-priced institutions, thus in part defeating the goals of access and choice.

Reducing Subsidies to Lenders. The federal government guarantees lenders a rate of return on Stafford Loans that is 3.25 percentage points above the 91-day Treasury bill rate. As discussed in Chapter II, this is much greater than their average costs. Reducing the guaranteed yield to 1.5 percentage points over the 91-day Treasury bill rate while students are in school and in the grace period (when lenders' servicing costs are about 0.5 percentage points), while simultaneously cutting the lenders' interest rate to 2.25 percentage points over the Treasury bill rate after students leave school, including any time they have a deferment (when lenders' servicing costs average about 1.25 percentage points), would decrease federal outlays by \$290 million in 1992 and \$1.7 billion over the 1992-1996 period.

Alternatively, banks could bid for the right to make Stafford Loans. One option would be for banks to bid to lend specific dollar amounts at a particular interest rate above the 91-day Treasury bill rate. This rate could be allowed to vary with the type of school that the borrowers attend. The savings would depend on the interest rates that the banks agreed to receive.

Reducing the interest rate paid to lenders would lower federal expenditures without increasing students' costs. Moreover, this change might lead to little negative response by lenders because most of them would still make profits. During 1989, the 100 largest lenders--making up fewer than 1 percent of all lenders--disbursed about 75 percent of all loans. If the banks

bid on the right to lend, profits could be reduced to the minimum level acceptable to them.

These options might, however, make lending to students from certain schools unprofitable for all the lenders in a geographic region, causing some students to have more difficulty financing their education unless they attended other schools.⁴ In particular, requiring banks to bid for the right to lend might concentrate the program even more in a few large banks, making it more difficult for students in other areas to borrow. In fact, it might lead Sallie Mae to become an even more dominant force in the secondary market.

Eliminating the Administrative Cost Allowance. Each year, the federal government pays the guaranty agencies an administrative cost allowance equal to 1 percent of the value of new loans they guarantee. Eliminating this allowance would save the federal government an estimated \$80 million in 1992 and \$535 million over the 1992-1996 period.

Proponents of this change argue that many guaranty agencies have larger reserves than are necessary to protect them from their expected defaults, indicating that the federal government provides excessively generous terms for the agencies. Eliminating this source of revenue would also encourage many agencies to further minimize their costs.

Some opponents of this option contend that some guaranty agencies are already financially unsound, and that reducing their revenues could push them into insolvency. Other critics, using a different line of reasoning, believe that many guaranty agencies would respond to any reduction in revenue from the federal government by raising the insurance premiums, perhaps up to the limit of 3 percent of the face value of the loans, thus raising the cost of the program to borrowers.

4. Although there is a provision in the law whereby guaranty agencies must act as lenders if students cannot find a bank to lend to them, this provision has not been widely used to date.

APPENDIX A

THE CALCULATION OF AND THE

RELATIONSHIPS BETWEEN DEFAULT RATES

This appendix provides a numerical example showing the relationships between the cumulative default rate, the annual default rate, and the cohort default rate used in the guaranteed student loan programs. These default rates are defined as follows:

Annual default rate =

$$\frac{\text{value of new defaults in a given year}}{\text{value of all loans in repayment during that year}}$$

Cumulative default rate =

$$\frac{\text{value of loans that have ever defaulted}}{\text{value of loans that have ever been in repayment}}$$

Cohort default rate =

$$\frac{\text{number of borrowers entering repayment who default}}{\text{number of borrowers who enter repayment}}$$

By convention, the first two rates compare the dollar values of defaults and loans in repayment, while the third rate compares the number of borrowers defaulting on loans with the total number of borrowers entering repayment.

A numerical example helps to explain the similarities and differences between these rates. For simplicity, the cohort default rate and the average size of loans are constant over the five years of the example at 15 percent and \$2,300, loans are repaid in four years, one-quarter of the loans are repaid at the end of each year, borrowers default only at the end of the first year, and those who default never repay (see Table A-1).

TABLE A-1. A SAMPLE CALCULATION OF THE ANNUAL, CUMULATIVE, AND COHORT DEFAULT RATES

	Year 1	Year 2	Year 3	Year 4	Year 5
Number of Borrowers Entering Repayment Each Year	100	110	120	130	140
Number of Borrowers Entering Repayment Who Default Each Year	15	17	18	20	21
Loan Values (Thousands of Dollars)					
Value of Loans Entering Repayment Each Year	230	253	276	299	322
Value of New Defaults Each Year	35	39	41	46	48
Value of Loans That Have Ever Defaulted	35	74	115	161	209
Value of Loans That Have Ever Been in Repayment	230	483	759	1,058	1,380
Value of Loans Currently in Repayment	230	399	534	631	683
Default Rates (Percent)					
Annual	15.2	9.8	7.7	7.3	7.0
Cumulative	15.2	15.3	15.2	15.2	15.1
Cohort	15.0	15.0	15.0	15.0	15.0

SOURCE: Congressional Budget Office.

NOTE: See the text for an explanation of the table.



APPENDIXES

Several definitions are needed to calculate the default rates:

Number of Borrowers Entering Repayment Who Default Each Year	=	Cohort Default Rate	x	Number of Borrowers Entering Repayment Each Year
Value of Loans Entering Repayment Each Year	=	Average Loan	x	Number of Borrowers Entering Repayment Each Year
Value of New Defaults Each Year	=	Average Loan	x	Number of Borrowers Defaulting Each Year
Value of Loans That Have Ever Defaulted	=	Value of New Defaults This Year	+	Value of Loans That Defaulted in the Previous Years of the Program
Value of Loans That Have Ever Been in Repayment	=	Value of Loans That Entered Repayment This Year	+	Value of Loans That Entered Repayment in the Previous Years of the Program
Value of Loans Currently in Repayment	=	Value of Loans That Entered Repayment This Year and the Previous Three Years ¹	-	Value of Defaults in the Previous Three Years
	-	Portion of Loans Entering Repayment in the Previous Three Years That Have Been Paid		

To illustrate these definitions, the calculations for students in the third year are presented (with all dollar amounts rounded to the nearest thousand):

- o The number of borrowers defaulting is 18--that is, the 15 percent cohort default rate multiplied by the 120 students entering repayment.
- o The value of loans entering repayment is \$276,000--the average loan of \$2,300 multiplied by the 120 students entering repayment.

1. This is because loans are assumed to be repaid in four years.

- o The value of new defaults is \$41,400--\$2,300 for the 18 students defaulting.
- o The value of loans that have ever defaulted is \$115,000--\$35,000 from the first year plus \$39,000 from the second year plus \$41,000 from the third year.
- o The value of loans that have ever been in repayment is \$759,000--\$230,000 from the first year plus \$253,000 from the second year plus \$276,000 from the third year.
- o The value of loans currently in repayment is \$534,000--\$759,000 that have ever been in repayment minus \$74,000 in defaults from the previous two years (\$35,000 and \$39,000) minus \$151,000 already repaid from loans made in the first two years and not defaulted ($.5 * ($230,000 - $35,000) + .25 * ($253,000 - $39,000)$).

The annual default rate and cumulative default rate can be calculated from these intermediate steps. For example, in the third year:

- o The annual default rate is 7.7 percent--\$41,000 in new defaults divided by \$534,000 currently in repayment.
- o The cumulative default rate is 15.2 percent--\$115,000 that was ever in default divided by \$759,000 that has ever been in repayment.

By definition, the annual and cumulative rates are equal in the first year. The annual default rate declines sharply in the first four years as the program becomes established because the value of loans in repayment increases rapidly while the value of new defaults is relatively constant. In the fifth year, the annual rate levels off because the value of loans currently in repayment is relatively fixed (based on the assumption that it takes four years to repay a loan).

APPENDIX B

AN ANALYSIS OF THE PROBABILITY OF

DEFAULT IN THE STAFFORD LOAN PROGRAM

The analyses of loan defaults presented here and in Chapter III are based on data from the 1987 Student Loan Recipient Survey of the National Postsecondary Student Aid Study (NPSAS). The population from which the NPSAS sample was drawn was the approximately 8 million people who borrowed through the Stafford or Federally Insured Student Loan programs and who left postsecondary schools between 1976 and 1985. A total of 8,223 borrowers were included in the sample.

THE SAMPLE DESIGN

The survey design is a stratified random sample. Schools were selected first and then borrowers at these schools were sampled. The chance of borrowers being selected varied with the number of years they had been out of postsecondary school and with their payment status. The three payment statuses are in default, in repayment, and fully repaid. Disproportionately large samples of borrowers who were in default or who had repaid their loans were chosen to assure sufficiently large samples for these groups to be analyzed separately. About 22 percent of the borrowers in the sample were in default and 20 percent had completely repaid their loans. In the population these fractions were each about 13 percent.

Borrowers who reported neither their income nor the amount that they borrowed were excluded from the analysis because they provided no information on two variables generally found to be of critical importance. In addition, borrowers who were in grace periods (during which time they do not repay their loans) were excluded from the analysis because they could not default while in a grace period. In addition, only individuals who reported their race as black or white were included because too few individuals of other races were sampled. After these exclusions, 6,359 borrowers were in the sample used for the analysis.

THE STATISTICAL TECHNIQUE AND RESULTS

A logistic probability (logit) model was used to estimate the effect that specific attributes have on the likelihood of defaulting on Stafford or FISL loans. In the logit model, the estimated likelihood of default always lies between zero and one. The estimate of the effect of one attribute on the chance of default depends on the values of the other characteristics--the estimate of a particular characteristic's effect is calculated at a specific value of each other characteristic. Here, the values of the other attributes are set at their average values in the sample. The chi-square value for goodness of fit is well above the .01 level critical value.

The likelihood that borrowers will default depends on their ability to repay and on their willingness to do so. Their ability to repay depends on factors such as their current and future income and assets, the variability of their income, their parents' financial resources and willingness to help repay the loans, the borrowers' expenses (particularly unexpected expenses), and the amount they borrow. Their willingness to repay a federally guaranteed Stafford Loan depends on factors such as their knowledge that loans should be repaid, their satisfaction with the education they received, their personal integrity, their concern about the financial consequences of defaulting, and their attitudes about both the government and banks.

The incomes reported are those in the year previous to the survey and so are not necessarily the ones most relevant to gauging the ability to repay the loans. The results do not change greatly if the individuals who had repaid their loans by the time of the survey are excluded from the analysis.

While data on income are available from the NPSAS survey, information on assets is not. To the degree to which assets and incomes are correlated, the estimated effect of income on the likelihood of default will also include the effect of assets. Because the correlation between assets and income differs for blacks and whites, these relationships were estimated separately for the two groups. Doing so will not capture any differences in asset levels between blacks and whites, however. Those disparities will be captured by the variable indicating the race of the borrower.

As expected, after taking into account the impact of other characteristics, whites with higher incomes are estimated to be less likely to default than are whites with lower incomes, although the effect is quite small (see Table B-1). There is no statistically significant relationship between the level of income and the likelihood of default for blacks. The 5 percent of the sample who have not held a job since leaving school were no more likely to default than others with their characteristics.

TABLE B-1. ESTIMATED EFFECTS OF ATTRIBUTES ON THE LIKELIHOOD OF DEFAULTING ON STAFFORD LOANS (In percentage points) ^a

Attribute	Average Value ^b	Change in Probability of Default ^c	Significance ^d
Race: White			
Income at time of survey ^e	28.8	-0	***
Income squared ^e	831	0	***
Race: Black			
Income at time of survey ^e	16.8	0	
Income squared ^e	283	-0	
Has Not Worked Since Leaving Postsecondary School	0.05	-0	
Range of Parental Income When Borrower Started Postsecondary School			
\$0 - \$10,999	0.06	5	
\$11,000 - \$16,999	0.03	7	
\$17,000 - \$22,999	0.04	2	
\$23,000 - \$29,999	0.05	-2	***
\$30,000 - \$49,999	0.17	1	**
\$50,000 and over	0.28	1	**
Missing or don't know	0.37	-6	***
Parents Are Willing to Help Repay the Loan	0.10	-5	***
Others Are Willing to Help Repay the Loan	0.04	2	
Received a Grant in Postsecondary School	0.30	2	*

(Continued)

TABLE B-1. (Continued)

Attribute	Average Value ^b	Change in Probability of Default ^c	Significance ^d
Father's Educational Attainment			
No high school diploma	0.17	1	
High school diploma	0.30	1	
Vocational	0.08	-4	***
Some college	0.11	-2	**
College degree	0.16	0	
Postsecondary degree	0.12	-1	
Missing or don't know	0.05	5	
Mother's Educational Attainment			
No high school diploma	0.13	-1	
High school diploma	0.43	1	
Vocational	0.09	-3	
Some college	0.15	-2	
College degree	0.12	4	**
Postsecondary degree	0.06	4	*
Missing or don't know	0.03	-3	
Borrower Worked While in Postsecondary School	0.53	1	
Parents Helped Pay for Postsecondary School	0.41	-1	
Loan Amount ^e	7.0	0	
Spouse's Loan Amount ^e	0.8	-0	
Received a Deferment	0.23	4	***
No High School or GED Diploma	0.06	13	***

(Continued)

TABLE B1. (Continued)

Attribute	Average Value ^b	Change in Probability of Default ^c	Significance ^d
Type of School Borrower Attended ^f			
Private	0.38	1	
Proprietary	0.19	3	**
Public	0.68	2	
Age Borrower Left School and Highest Level of Postsecondary Education Completed ^g			
Younger than 22, no degree	0.07	7	
22 or 23, no degree	0.04	8	
24 to 27, no degree	0.04	18	***
Older than 27, no degree	0.05	23	***
Younger than 22, non-college degree	0.09	-4	***
22 or 23, non-college degree	0.04	1	**
24 to 27, non-college degree	0.07	4	
Older than 27, non-college degree	0.08	13	**
Younger than 24, college degree	0.19	-6	***
24 to 27, college degree	0.10	-2	***
Older than 27, college degree	0.08	4	
Younger than 28, graduate degree	0.08	-8	***
Older than 27, graduate degree	0.09	-2	***
Received Information About Loans			
	0.83	-9	***
Have Children			
Married	0.19	-0	
Single Parent	0.52	-0	
Male	0.05	5	**
Black	0.49	2	**
Hispanic	0.12	17	***
	0.02	11	***

(Continued)

TABLE B1. (Continued)

Attribute	Average Value ^b	Change in Probability of Default ^c	Significance ^d
Years Out of School	4.3	3	***
Years Out of School Squared	27	-0	***
Loan Amount Is Fully Imputed	0.05	-7	***
Missing Information on High School Completion	0.01	-3	
Constant	1		***

SOURCE: Congressional Budget Office estimates based on data from the National Postsecondary Student Aid Study.

NOTES: The total effect of several attributes is not equal to the sum of the individual effects because of nonlinearities in the model used to estimate the effects.

- a. The overall likelihood of loan default is 13 percent.
- b. The average value of a variable for categorical variables (those that can take on only a limited number of specific values) shows the percentage of the sample that has the given characteristic.
- c. The change in the probability of default is the derivative for continuous variables and the estimated change in probability for categorical variables. For those categorical variables with only two possible values, this change is the probability of having the attribute minus the probability of not having the attribute. These estimates are computed at the average values of the other variables. The estimates are rounded to the nearest percent, so any values within 0.5 percent of 0 are recorded as a plus or minus zero.
- d. *** significant at the .01 level
 ** significant at the .05 level
 * significant at the .10 level
- e. All income and loan values are expressed in thousands of 1990 dollars.
- f. Borrowers may have attended more than one type of school.
- g. Non-college degrees include two-year associate degrees and degrees from proprietary schools.

Access to other financial resources, which may be particularly important when unexpected difficulties arise, is also associated with a lower probability of default, all else being equal. Borrowers whose parents had higher incomes at the times they began their postsecondary educations are generally less likely to default than those whose parents had lower incomes.¹ Those who anticipated receiving or had received financial help from their parents in repaying their loans are likewise somewhat less likely to default. Perhaps surprisingly, however, receiving this type of help from others is not associated with a decline in the likelihood of default. Borrowers who received grants (given a particular level of income, those with fewer assets were more likely to qualify for grants) are likewise slightly more likely to default than are other borrowers. No consistent relationship is found between parents' educational attainment and the borrower's chance of defaulting.

The total amount of borrowing does not affect the estimated likelihood of default in this model.² This result may occur because the amount of borrowing was related to other traits included in this model, such as the highest degree obtained.

Recipients who received deferments on their loan repayments are slightly more likely to default than are those who did not receive them, all else being equal. This result could indicate that some deferment periods are too short or do not cover all periods of financial hardship for borrowers, such as the unemployment of a spouse. Alternatively, perhaps the greater passage of time for borrowers receiving deferments reduces their commitment to repaying their loans.

The chance that borrowers default is much higher for those without either a high school diploma or a General Education Development (GED) degree than for those with one of them, holding further educational attainment and other factors constant. This result may indicate that students with little academic success in high school benefit less from any future education than do those who successfully complete high school, or that they have more erratic earnings and are thus more prone to default.

The types of schools that borrowers attended--many attended more than one type--and the degrees that they received also are related to whether or not they default, again after accounting for the influences of other traits.

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1. It may also be that borrowers from higher-income families have a greater knowledge about and experience with credit, leading them to have a greater willingness to repay their loans.
 2. This result was somewhat sensitive to the exact specifications of the model in this analysis, however.

Recipients who attended proprietary schools are more likely to default than those who did not, while the chance of default is unaffected by whether or not borrowers attended public or private colleges.³ The types of schools attended by borrowers may also affect their willingness to repay student loans. For example, if borrowers attending proprietary schools are systematically less satisfied with their educations, they may be more likely to default.

Borrowers who completed more postsecondary education are less likely to default than are those who completed less education, presumably at least partly because of increased earnings many years into the future. In addition, those who were younger when they left school, given their educational attainment, are less likely to default, perhaps indicating that these individuals have greater abilities or motivation that translate into higher future earnings.

The chance of default is also affected by the willingness of borrowers to repay their loans, although little information about their willingness to repay is contained in the available data. Notably, borrowers who received information about repaying their loans from their postsecondary institutions or their banks are much less likely to default than are those who received no information.⁴ This result highlights the importance of borrowers understanding they are obliged to repay their loans.

Other attributes are included as controls because they may be correlated with important traits that are not available in the data. Whether or not borrowers have children or are married; their sex, race, and ethnicity; the number of years they have been out of school; if the loan amounts were fully imputed; and if information on high school degrees was unavailable are all included to control for missing information.

3. The data used here were collected before the rapid growth in the number of proprietary schools. If more current data were available, the effect of attending a proprietary school on the chance of default might be greater.

4. All borrowers now receive information from lenders when they receive their loans and again before their repayment periods begin. This includes information on when the repayment begins, the length of repayment, and the consequences of default.