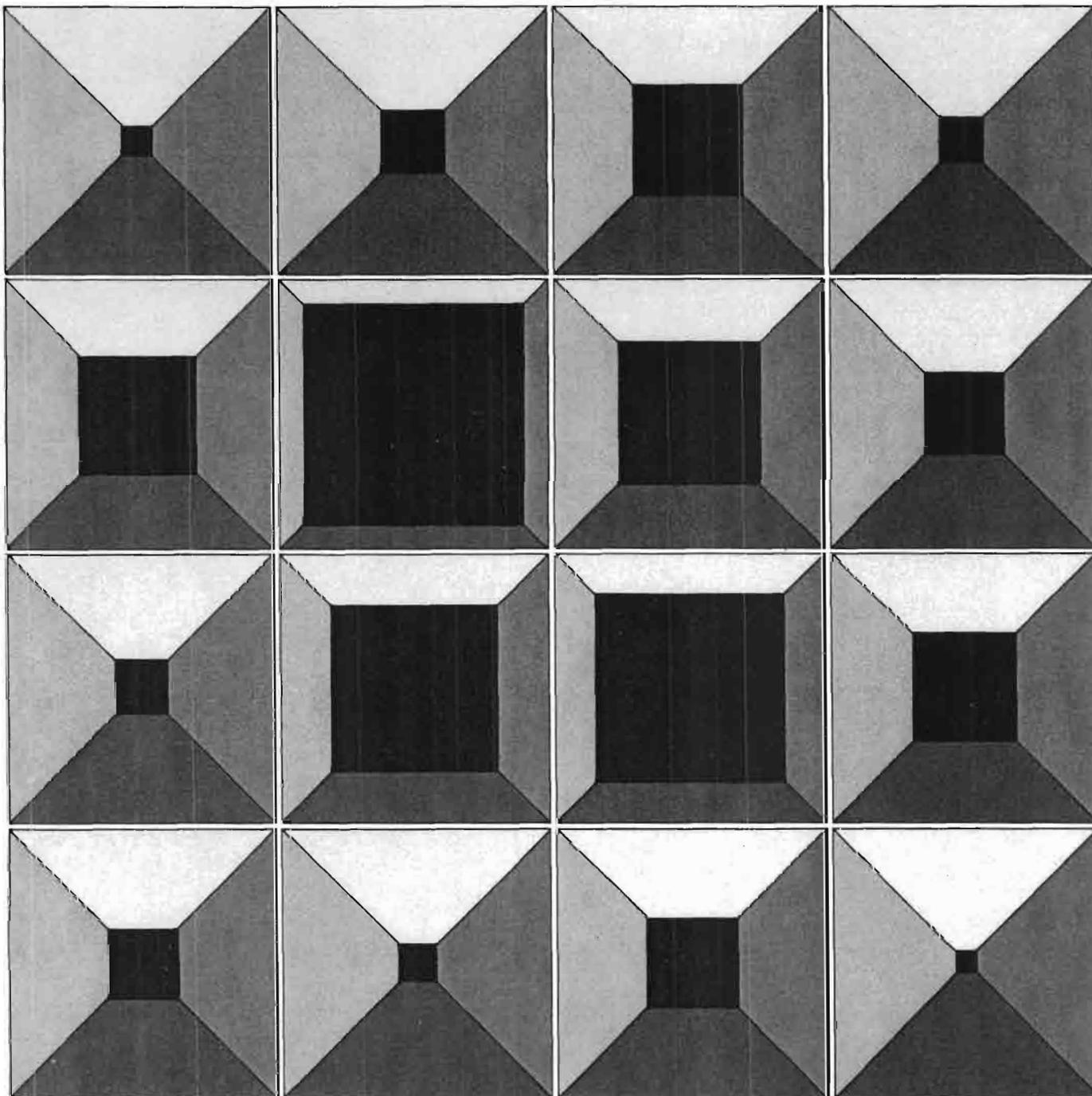
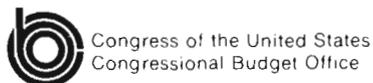


State Profits on Tax-Exempt Student Loan Bonds: Analysis and Options



STATE PROFITS ON TAX-EXEMPT STUDENT LOAN BONDS:
ANALYSIS AND OPTIONS

The Congress of the United States
Congressional Budget Office

PREFACE

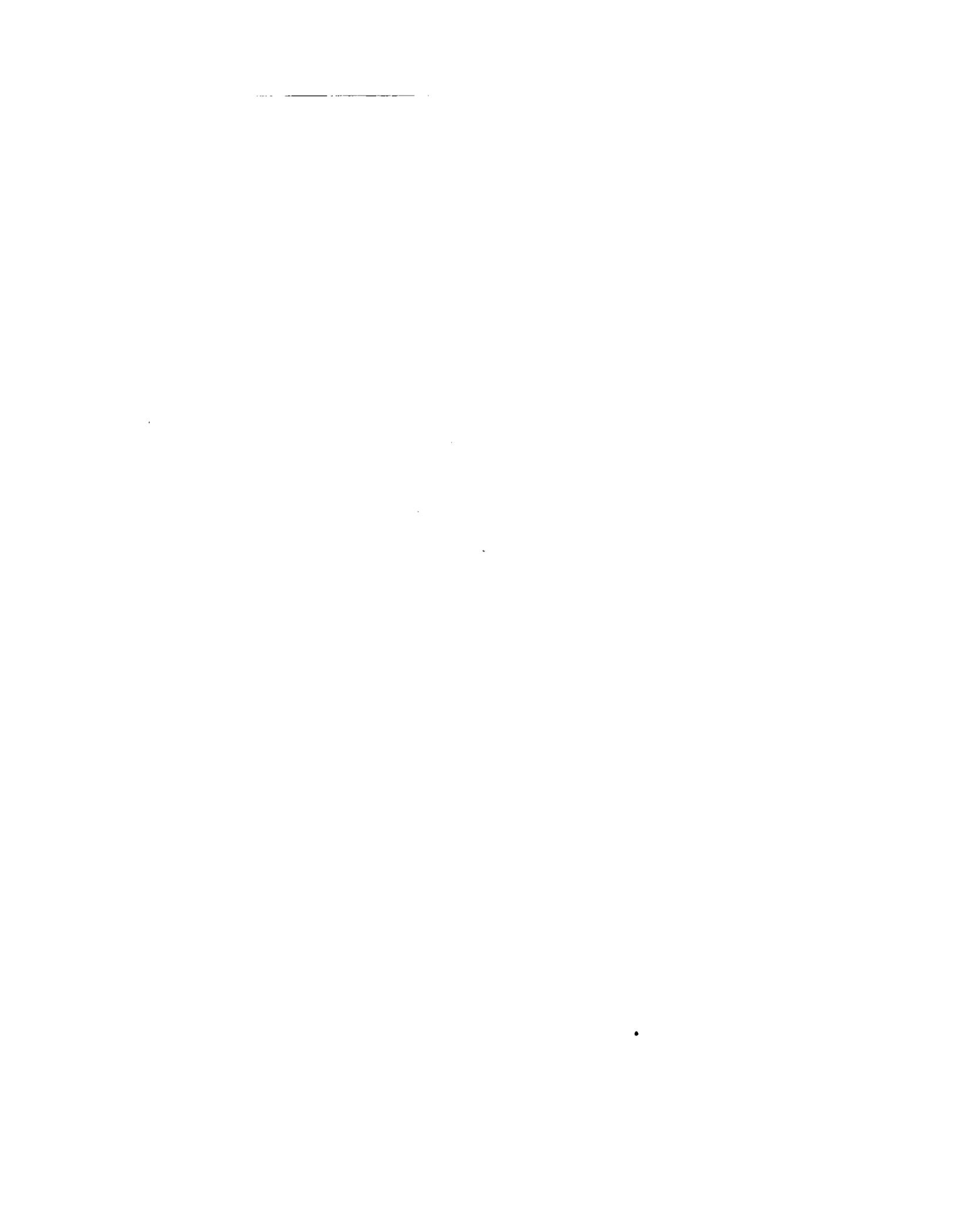
In 1979 states began earning unexpected profits from tax-exempt bonds that they had issued to raise funds for loans to college students. This paper, prepared at the request of Chairman Al Ullman of the House Committee on Ways and Means, analyzes the source of these profits and provides a background for analyzing various proposals to reduce them. In accordance with CBO's mandate to provide objective analysis, the report offers no recommendations.

Cynthia Francis Gensheimer of the Tax Analysis Division prepared the report under the direction of James M. Verdier. David Longanecker, Alfred Fitt, Robert Reischauer, Janice Grassmuck, and others in the Congressional Budget Office provided valuable suggestions and comments. Donna Richard prepared the tables in the appendix. Patricia H. Johnston edited the manuscript, and Linda Brockman and Shirley Hornbuckle typed it.

Many people outside of the Congressional Budget Office gave generously of their time and assistance. Those who carefully reviewed and provided valuable comments on drafts include Bruce F. Davie, Benjamin Cohen, John deClue, David Reicher, and Loren Carlson. Several people at the Office of Education and the Student Loan Marketing Association provided statistical data. The directors of student loan bond programs across the country were extremely helpful in providing information on their programs.

Alice M. Rivlin
Director

March 1980



CONTENTS

	<u>Page</u>
PREFACE	iii
SUMMARY	ix
CHAPTER I. INTRODUCTION	1
CHAPTER II. PROGRAM OPERATIONS	3
Participants in Student Loan Bond Process . . .	3
Issuers of Student Loan Bonds	3
Student Eligibility	4
Sallie Mae	5
Administration	5
Acquisition of Student Loans	5
Servicing	6
Federal Insurance and Reinsurance of Student Loans	7
Profitability	7
Yield on Loans	7
Profits Accruing to State and Local Governments	9
Volume of Student Loan Bonds	14
Volume to Date	14
Potential Volume	15
Federal Costs of Student Loan Bonds	18
CHAPTER III. LEGISLATION AFFECTING STUDENT LOAN BONDS . . .	21
Tax Treatment of Student Loan Bonds for Arbitrage Purposes	21
Education Legislation Affecting Student Loan Bond Profits	22
Pending Proposals to Restructure Student Loan Programs	24

Continued

CONTENTS (Continued)

	<u>Page</u>
CHAPTER IV. OPTIONS	27
Take No Action	28
Lower Special Allowance for Student Loans Financed by Tax-Exempt Bonds	30
Fixing the Special Allowance At Bond Issuance	33
Recalculating the Special Allowance for All Loans Each Quarter	35
Federal Cost Reduction	37
Impose Usual Arbitrage Restrictions on Student Loan Bonds	40
Tax Interest on Student Loan Bonds	44
Withdraw Federal Insurance from Loans Financed with Tax-Exempt Bonds	46
Specify Permissible Uses of Surplus Funds	49
Conclusion	50
APPENDIX. CASH FLOW ANALYSIS OF EXPECTED PROFITS FROM TWO STUDENT LOAN BOND ISSUES	55

TABLES

	<u>Page</u>
SUMMARY	
TABLE. FEDERAL SAVINGS FROM PROPOSALS TO LIMIT PROFITS ON STUDENT LOAN BONDS	xiv
TABLE 1. SPECIAL ALLOWANCE RATES, 1969-1979	10
TABLE 2. YIELD ON STUDENT LOANS COMPARED TO THE NET INTEREST COST OF STUDENT LOAN BONDS, 1970-1979. . .	13
TABLE 3. STUDENT LOAN BOND ISSUES BY STATES, 1966-1980 . . .	16
TABLE 4. PROJECTIONS OF VOLUMES OF ANNUAL ISSUES OF STUDENT LOAN BONDS	19
TABLE 5. CURRENT LAW PROJECTIONS OF FEDERAL COSTS OF STUDENT LOAN BONDS	20
TABLE 6. FEDERAL SAVINGS FROM PROPOSALS TO CUT SPECIAL ALLOWANCE	38
TABLE 7. FEDERAL SAVINGS FROM PROPOSALS TO LIMIT PROFITS ON STUDENT LOAN BONDS	42
TABLE 8. RANKING OF OPTIONS BY THEIR EFFECTS ON FEDERAL COST AND AVAILABILITY OF STUDENT LOANS	51

APPENDIX TABLES

TABLE A-1. NORTH DAKOTA CASH FLOW PROJECTIONS, 1979 SERIES A STUDENT LOAN REVENUE BONDS	58
TABLE A-2. WISCONSIN CASH FLOW PROJECTIONS, 1979 SERIES A STUDENT LOAN REVENUE BONDS	59

SUMMARY

Through the interaction of rising interest rates and recent tax and education legislation, a growing number of state and local governments are accumulating millions of dollars in unanticipated profits through the federally subsidized guaranteed student loan program. In the aggregate, states could accumulate between \$300 million and \$450 million in profits over fiscal years 1980-1985.

Student loan bonds are issued to provide students better access to loans. For a number of years, the federal government has induced commercial lenders to make student loans voluntarily, by offering them interest subsidies (a "special allowance") and insurance against student default. Even with these inducements, however, commercial lenders have been unwilling to lend to all student applicants because of the high cost of servicing student loans. As a result, some students have had trouble finding banks willing to lend to them, and an increasing number of states has responded by issuing student loan bonds and then relending the proceeds to students.

States and localities raise money by issuing bonds at low, tax-exempt interest rates and use the proceeds to buy or make federally guaranteed student loans at significantly higher interest rates, paid in large part by the federal government. Although the interest costs of nearly all student loan bond authorities were under 7 percent in 1979, for example, the yield they received on student loans fluctuated between 11 and 16 percent. The profits accruing to the bond issuers is the difference between the yield on student loans and the level of associated expenses--interest on the bonds and administrative costs. Lenders receive 7 percent interest paid by the federal government until students leave school and by students thereafter. In addition, lenders receive special allowance payments from the federal government. The special allowance rate is recalculated each quarter and averaged 6.5 percent in 1979.

Volume and Cost of Student Loan Bonds

Eighteen states and the District of Columbia have issued the bonds to date, and ten others may do so for the first time in 1980. The volume of student loan bonds issued each year has been increasing rapidly and will probably continue to do so, unless the Congress enacts legislation affecting the bonds. About \$1.4 billion in student loan bonds has been issued to date, including about \$100 million issued in 1977, \$300 million in 1978, and \$600 million in 1979. It is likely that between \$900 million and \$2.3 billion of student loan bonds will be issued in 1985.

The federal revenue loss from the tax exemption of interest on these bonds will amount to approximately \$90 million in fiscal year 1981 and between \$160 and \$290 million in 1985. In addition, the federal government makes special allowance payments on student loans financed by the bonds. These payments will cost between \$80 million and \$100 million in 1981 and between \$115 million and \$220 million in 1985.

Tax and Education Legislation Affecting Student Loan Bonds

Federal law generally prohibits states from issuing tax-exempt bonds at low interest rates and investing the proceeds at much higher yields. Profits that arise in this way are called "arbitrage." In the Tax Reform Act of 1976, the Congress made an exception to this rule for issuers of student loan bonds. For arbitrage purposes, the special allowance part of the return on student loans is not counted in determining the yield on the investments made with bond proceeds. The Tax Reform Act of 1976 imposed no restrictions on state and local government use of profits derived from student loan programs.

It is this tax legislation that has allowed state and local governments to make profits from student loan bonds. At the time the Tax Reform Act of 1976 was enacted, the portion of the return on student loans that was excluded from arbitrage yield calculations (the special allowance) was capped under the education laws at 3 percent. Subsequent higher education legislation changed the way the special allowance is calculated and removed its ceiling. The state profits come directly out of the special allowance, and the special allowance has increased dramatically over the past few years. In the fourth quarter of 1979, for example, the special allowance rate was 9 percent. Since the special allowance is paid directly by the federal government to the lenders, the state pro-

fits from student loan bonds come directly from the federal government.

The large increase in the popularity of student loan bonds has been spurred by the large increase in student demand for loans in the last two years. The interest rate students are charged on their loans has been held steady at 7 percent. Although 7 percent loans were not a bargain when that interest rate was initially set, soaring interest rates have made them an excellent borrowing opportunity, and loan demand has increased correspondingly. More importantly, perhaps, the Middle Income Student Assistance Act, enacted in 1978, made all students, regardless of family income, eligible for in-school interest subsidies on their loans. This increased the demand for the loans by students from upper-income families.

Drafters of the 1976 Tax Reform Act had no reason to envision these changes in higher education legislation. Likewise, it is unlikely that drafters of the higher education legislation realized the effects their actions would have on the profitability of what were then relatively small-scale student loan bond programs.

All student loan programs must be reauthorized before October 1, 1980 and several proposals under consideration would affect student loan bonds. Under one approach, a two-tier student loan structure would be established. First, students would be eligible for federally financed basic loans, in amounts based on need. Second, independent students and parents of dependent students would be eligible for supplemental loans which would be financed by commercial lenders, schools, and nonprofit state authorities. These supplemental loans would be similar to the loans now made by student loan bond authorities. If the Congress takes this restructuring approach, student loan authorities would be able to issue bonds for supplemental loans, but they would probably not issue as large a volume of bonds as under an extension of current law.

Options

There are a number of alternatives open to the Congress concerning student loan bonds, including cutting back one or another of the federal subsidies now received by student loan bond authorities and thereby reducing their federally supported profits. The available options include:

- o Taking no action.
- o Reducing the federal interest subsidy (special allowance) on loans financed with tax-exempt bonds.
- o Imposing usual arbitrage rules on student loan bonds.
- o Taxing interest on student loan bonds.
- o Withdrawing federal insurance from bond-financed loans.
- o Requiring that surpluses be invested in student loans.

Taking No Action. There are two arguments for taking no action on student loan bonds at this time. First, since interest rates are now at unusually high levels, the profits states are now earning may be only temporary. The special allowance payments are tied to the 91-day Treasury bill rate, and if this rate declines sharply, state profits will dry up.

Second, the profits states are allowed to make from student loan bonds can be viewed as an inducement from the federal government to encourage the states to issue bonds and thereby make student loans more broadly available. The surpluses would then represent the cost of using this method to increase loan availability. The question then would be whether there are other, less costly ways of providing the same expanded loan availability.

Reducing the Federal Interest Subsidy on Loans Financed With Tax-Exempt Bonds. Currently, tax-exempt authorities receive the same federal interest subsidies (special allowances) and guarantees on student loans that commercial lenders receive. In addition, they receive a federal subsidy because they raise funds at tax-exempt rates much lower than the interest rates private lenders must pay. The two kinds of lenders get the same gross yield on their loans, but the costs of private lenders exceed the costs of tax-exempt bond authorities. By reducing the federal interest subsidy on student loans held by bond authorities, the Congress could equalize the net return on student loans held by tax-exempt authorities and private lenders. In this way, most surpluses would be eliminated, but states could continue to issue student loan bonds. This option would save the federal government a cumulative total of between \$200 million and \$350 million in special allowance payments from fiscal year 1981 to 1985 (see Summary Table).

Imposing Usual Arbitrage Rules on Student Loan Bonds.

Another way of reducing the yield on the student loans held by tax-exempt bond authorities would be to require the authorities to rebate to the federal government part of the federal interest subsidy on the loans. This could be done by amending the Internal Revenue Code's arbitrage rules on student loan bonds to make these bonds subject to the same rules as other tax-exempt bonds. In this way, nearly all profits of student loan bonds could be eliminated, and federal costs could be reduced a total of between \$170 million and \$300 million from fiscal years 1981 to 1985 (see Summary Table).

Taxing Interest on Student Loan Bonds. Instead of reducing the profitability of student loan bonds by lowering the yield on the loans, the Congress could do so by raising their costs. It could do this by taxing interest on the bonds, or, as will be discussed in the next section, by withdrawing federal insurance from the loans.

Depending on the extent to which taxing interest on student loan bonds would push up the costs of these programs, this option could cause a cutback in bond issuance and hence in student loan availability. There would almost certainly be a cutback in bond issuance during the transition period in which states restructured their bonds and found new markets for them.

Not only would this option reduce federal costs the most, but it would also have the advantage of bringing the student loan program entirely under the jurisdiction of the Department of Education, where it can be reviewed in conjunction with other education programs. The Summary Table shows total savings of between \$480 million and \$830 million from 1981 to 1985. It would, however, be a departure from past policy for the Congress to tax interest on bonds which serve a public purpose. In general, the Congress allows these bonds to be tax-exempt, but restricts their profitability by limiting the yield on investments made with bond proceeds.

Withdrawing Federal Insurance from Bond-Financed Loans.

If student loans financed with tax-exempt bonds were not federally insured, the costs to states of student loan bond programs would increase for two reasons: (1) because states would no longer be reimbursed for losses on defaulted loans, and (2) because the interest rate on student loan bonds would be pushed up by investors demanding higher returns as compensation for the

SUMMARY TABLE. FEDERAL SAVINGS FROM PROPOSALS TO LIMIT PROFITS ON STUDENT LOAN BONDS^a (By fiscal year, in millions of dollars)

	1981	1982	1983	1984	1985	Cumulative Five-Year Total ^b
If annual bond issues remain 20 percent of annual loan originations						
Give states a special allowance equal to half the special allowance of commercial lenders, with no floor	23	38	44	49	53	208
Impose usual arbitrage rules on student loan bonds	19	32	35	40	45	171
Tax interest on student loan bonds	49	74	99	119	138	479
Withdraw federal insurance from loans financed with tax-exempt bonds	8	17	23	29	35	112

a. The estimates are based on CBO's projections of interest rates and are made on the assumption that no changes would affect bonds issued before 1980 or loans made from the proceeds of those bonds. The estimates are based also on the assumption that none of the options would cause a reduction in bond

SUMMARY TABLE (Continued)

	1981	1982	1983	1984	1985	Cumulative Five-Year Total ^b
If annual bond issues as a percent of annual loan originations increase 5 percentage points each year						
Give states a special allowance equal to half the special allowance of commercial lenders, with no floor	32	56	72	88	104	352
Impose usual arbitrage rules on student loan bonds	27	49	59	75	94	303
Tax interest on student loan bonds	67	112	163	214	269	826
Withdraw federal insurance from loans financed with tax-exempt bonds	10	24	36	49	64	182

issuance. To the extent that reductions do occur, federal costs would be further reduced.

b. Details may not add to totals because of rounding.

increased risk of bond default. In order to reduce the riskiness of student loan bonds, states could pledge their full faith and credit to the bonds. Some states might, however, be hesitant to lend their support to the programs in this way.

Removing federal insurance from student loans held by tax-exempt bond authorities could raise the costs of some states' student loan bonds so high that they would no longer be willing to issue the bonds. This could be true, for instance, for states that currently do the best job of lending to high-risk students who have trouble obtaining loans from commercial banks. The states that continued to issue student loan bonds would have an incentive to lend to students who were good credit risks. Since these students should have the best access to loans from commercial banks, the broadened loan availability provided by student loan bonds would be diminished under this option. As shown in the Summary Table, this option would save the federal government a total of between \$110 million and \$180 million in the five-year period 1981-1985.

Requiring That Surpluses Be Invested in Student Loans. There are currently no restrictions on state use of surplus funds. Student loan bond issuers could be required to invest their surpluses in student loans. This requirement, however, would not necessarily ensure that those funds would not ultimately be deposited in state general purpose accounts. The new student loans would be income-producing assets owned by the states. Unless the Congress drafted a comprehensive set of regulations, states could deposit that income in their general purpose accounts, along with the proceeds of sales to the Student Loan Marketing Association.

CHAPTER I. INTRODUCTION

The Congress established the guaranteed student loan program in the Higher Education Act of 1965. Initially, the federal role was limited to laying ground rules for the program, insuring lenders against student default, and providing in-school interest subsidies to students from families with annual incomes below \$15,000. All students attending college at least half-time were eligible for the loans. Virtually all guaranteed student loans (GSLs) were made by commercial lending institutions, mostly by banks.

The interest rate charged students was originally set very close to the prime commercial lending rate--the rate banks charge their best customers. When inflation began to push up interest rates in 1969, the Congress instituted a system of special allowances, quarterly payments from the federal government to lenders designed to bring the total yield (student plus federal government share) on student loans up to the yield on other investments banks could make. The Congress realized that very few student loans would be made unless lenders received a competitive yield on them, since the GSL program relied on the voluntary participation of commercial lenders.

The incentives offered by the GSL program--interest subsidies and loan guarantees--may or may not be sufficient to induce private lenders to accommodate all students seeking assistance. Private lenders in some states have met the demand for loans better than those in others. In every state, some groups of students can obtain loans more easily than others. First-year students, minorities, students living in rural areas, and students without established banking relationships are among those who often have difficulty getting loans from banks. Moreover, during periods of high interest rates, all students may have less access to loans, as banks prefer to use their diminished deposits to lend to long-standing commercial customers.

Despite the relatively high gross yield on student loans (now about 16 percent), many banks do not like to make them. Compared to other loans, collections on student loans are costly. The average size of a student loan, \$2,000, is much smaller than the

average size of other loans, and it is often difficult to keep track of the whereabouts of students during the ten years or so of their indebtedness. Even though the federal guarantee on student loans makes them less risky than most commercial loans, it may still be costly for banks to apply and wait for reimbursement in the case of default.

In the past few years, a growing number of states have issued tax-exempt bonds to finance federally guaranteed student loans, because they felt that commercial banking institutions were not meeting the needs of all deserving students. By issuing tax-exempt bonds, states can tap national capital markets and bring additional money for student loans within their borders. About \$270 million in student loan bonds was issued in 1978 and \$600 million in 1979. Combined, these amounts represent about 60 percent of the total \$1.4 billion of student loan bonds issued since 1966, the year in which they first appeared.

States will receive millions of dollars in unanticipated profits from the bonds as a result of rising interest rates coupled with recently enacted tax and education legislation. State authorities that issue tax-exempt bonds to finance student loans are entitled to exactly the same federal interest subsidies and guarantees that private lenders get. As explained above, the rationale behind the special allowance is to keep the return on student loans competitive with the return on other banking investments. When state authorities, which can raise funds by issuing bonds at low, tax-exempt interest rates and which do not have to pay income taxes, receive this same gross yield on student loans, they earn substantial profits. Normally, states are prohibited from borrowing at low, tax-exempt interest rates and investing the proceeds at significantly higher yields, but the Congress made an exception to these so-called "arbitrage" rules for student loan bonds.

Chapter II presents background information about both student loan bond programs and student loans themselves, explains how issuers of student loan bonds are able to accumulate surpluses, and estimates the magnitudes of those surpluses. Chapter III gives the legislative history of the provisions making the profits possible and discusses pending proposals to restructure the federal student loan program and the effect these proposals would have on student loan bonds. Chapter IV presents several options for Congressional consideration that would reduce the profitability of student loan bonds.

CHAPTER II. PROGRAM OPERATIONS

When states¹ issue student loan bonds, they borrow money from bond purchasers and relend that money to students. The states receive a stream of interest and principal payments from the students and from the federal government as the students pay off their loans, and use that money to pay the interest and principal they owe the bondholders. In essence, the students borrow from the bondholders, and the states act as middlemen, just as banks in general act as middlemen matching depositors (lenders) and borrowers.

PARTICIPANTS IN STUDENT LOAN BOND PROCESS

The participants in student loan bond programs are the agencies that issue the bonds and administer the programs; the students who receive loans from the agencies; the Student Loan Marketing Association (Sallie Mae), which buys some student loans from the agencies; the investors who purchase the bonds; and the federal government, which subsidizes the programs. The federal government's role is developed later in this paper. The bondholders are primarily commercial banks, life insurance companies, and individual investors in high-income tax brackets. The other participants--bond issuers, students, and Sallie Mae--are described briefly in this section.

Issuers of Student Loan Bonds

States, state authorities, and nonprofit corporations have issued student loan bonds. State authorities are established by state legislatures or governors, and are usually restricted by state law in the volume of bonds they may have outstanding. Federal law requires that private, nonprofit corporations that

-
1. For brevity, the terms states or state authorities and agencies will be used throughout the paper to mean state authorities and state and local nonprofit corporations that issue student loan bonds.

issue tax-exempt student loan bonds be established by a state or local government exclusively to acquire federally guaranteed student loans. Nothing in federal law precludes a local government from issuing student loan bonds directly, but none have done so to date.

Student Eligibility

Student loan authorities buy and make only guaranteed student loans (GSLs), so students receiving loans from the authorities must meet both the eligibility criteria of the national guaranteed student loan program and the criteria established by the individual states.

Nationally, any student attending college or graduate school at least half time is eligible to receive a guaranteed student loan. The Middle Income Student Assistance Act (MISAA), enacted in the fall of 1978, effectively opened up the guaranteed student loan program to all students, regardless of family income. Before MISAA was enacted, students from families with incomes exceeding \$25,000 a year were eligible to receive guaranteed student loans, but their loans bore 7 percent interest from the day they were made, instead of starting 9 to 12 months after the student left school as they did for lower-income students and as they now do for all students. All undergraduate students are now eligible for GSLs of up to \$2,500 per year, as long as the total amount of their indebtedness is under \$7,500. Graduate students may borrow up to \$5,000 per year, up to a total of \$15,000 (including indebtedness from undergraduate school).

In addition to the federal eligibility criteria, state higher education loan authorities impose residency requirements. All state agencies will make loans to state residents attending schools in their state. Some will also lend to state residents attending out-of-state schools or to out-of-state residents attending in-state schools or to both.

Some student loan authorities aim for total accessibility--that is, they would like to be able to sell enough tax-exempt bonds to finance all guaranteed student loans made in their respective states. Those states generally impose no eligibility requirements other than residency.

Other student loan authorities view their role as "lenders of last resort." They gear their lending to students who cannot

obtain loans from commercial lenders or to areas in the state where private lenders are reluctant to make student loans. Authorities operating under this principle sometimes require students to submit certificates of loan denial from private lenders. In at least one state (Texas), students must meet a needs test based on family income in order to receive loans from the state.

Sallie Mae

Most states that issue student loan bonds intend to hold the student loans until the students pay them off. A few loan authorities pay Sallie Mae fees out of their bond proceeds for Sallie Mae's promise to buy student loans from the authorities at the authorities' option at specified prices and dates.² In some cases, states issue short-term bonds, usually of three-year maturity, and plan to sell their complete portfolio to Sallie Mae at the end of the three-year period. In most cases, however, states make these arrangements with Sallie Mae to guard against future problems. For instance, if loan repayments were slower than anticipated, an authority could find itself short of cash when its bonds became due. In that case, the authority might want to be able to sell loans to Sallie Mae and use the proceeds of the sale to redeem the bonds. As another example, a state might want to sell loans to Sallie Mae if it wanted to make new student loans at a time when it would be undesirable to enter the bond market because tax-exempt interest rates were high. In that case, the state might want the option of selling the loans in its portfolio to Sallie Mae and using the proceeds of the sale to make new student loans.

ADMINISTRATION

Acquisition of Student Loans

States that issue student loan bonds use the proceeds not only to finance new student loans, but also to purchase outstanding loans from commercial banks.

2. Sallie Mae is a U.S.-chartered, private corporation, whose purpose is to increase the liquidity and availability of student loans through secondary market and warehousing operations.

Financing New Student Loans. Even when states use the proceeds of their bonds to make only new student loans, they usually contract with private lending institutions to process the loan applications and make the loans to students; the private institutions then sell the loans to the states. Students who get loans in this way apply for them in much the same way they would apply for student loans financed by commercial banks. The financial aid office at their school usually informs them of their eligibility for the loans and tells them at which banks they may place applications.

Several states have in-house loan application processing offices and do not work through private lenders. In these states, although students must apply directly to the state lending agency, they can usually pick up the application forms from the financial aid office at their school.

Purchasing Old Student Loans. Many states set aside all or a portion of their loanable funds to buy student loans from the portfolios of banks, credit unions, and savings and loan associations. These loans may have been made several years previously. In most cases, the states buy existing student loans only if the commercial lenders agree at least informally to make new student loans.³

Servicing

As soon as a state has acquired student loans, it begins to receive interest payments on the loans. Collecting the payments is called servicing a loan. Just as most of the states work through private lenders to acquire their student loans, most of them hire private lenders or servicing companies to service their loans. As noted earlier, servicing student loans is expensive compared to servicing other loans. Since the cost of servicing a loan doesn't vary much with the size of the loan, the small value of student loans (\$2,000 on average) makes them costly to service for that reason alone. In addition, they are of long duration (usually about ten years) compared to other small loans, and it is often difficult, and expensive, to keep track of mobile students

-
3. Federal law and regulations do not require commercial lenders to use the proceeds of sales to bond authorities to make additional student loans.

and recent graduates for that length of time. The annual cost of servicing student loans usually ranges between 1.5 percent and 2 percent of loan principal, compared to usual costs of between 1/4 percent and 3/8 percent of loan principal for servicing home mortgages, for instance.

Federal Insurance and Reinsurance of Student Loans

Student loans held by state authorities are all insured directly or indirectly by the federal government against student default, death, bankruptcy, and disability. In response to federal financial incentives and pressure from private lenders, about 40 states have established guarantee agencies to insure student loans for lenders for 100 percent of principal and interest. The guarantee agencies are in turn reimbursed by the federal government, at rates varying between 80 and 100 percent, depending on the state's claims rate.

In states that have not yet set up guarantee agencies, student loans held by state authorities are federally insured for 100 percent of principal and interest. These loans are called Federally Insured Student Loans (FISLs). Loans guaranteed first by a state guarantee agency are called guarantee agency loans. FISL and guarantee agency loans make up the broad category of guaranteed student loans.

PROFITABILITY

The profitability of student loan bonds depends on the difference between the yield on the loans and the level of associated expenses--interest on the bonds and administrative costs. Major factors affecting profit levels are the method by which the yield on student loans is determined and the profits allowed by federal law. This section explains how the yield on student loans is determined and what restrictions federal law imposes on profitability. It also shows the historical relationship between the yield on student loans and the interest rate on student loan bonds, and gives examples of profits expected by two 1979 issuers of student loan bonds.

Yield on Loans

Students' Interest Payments. Terms on the loans are essentially the same under both the FISL and guarantee agency loan pro-

grams. Students do not have to pay interest or begin repaying their loans until 9 to 12 months after they leave school. Until that time, the federal government pays the lender the 7 percent student's share of interest on the loan--called interest subsidy payments.⁴ Lenders are not allowed to charge students more than 7 percent interest on the loans.

Special Allowance Payments. Because a 7 percent return would not be sufficient to induce commercial lenders to make student loans, the federal government makes supplemental interest payments, called special allowance payments, to institutions that make student loans. State and local authorities that finance student loans by selling tax-exempt bonds qualify for special allowance payments just as other lenders do.

Special allowance payments are calculated each quarter by a formula intended to reflect market interest rates. The rate of the special allowance is 3.5 percentage points less than the prevailing bond-equivalent rate on 91-day Treasury bills, rounded up to the nearest one-eighth of 1 percent.⁵ When the special allowance is added to the 7 percent interest paid by the student (or the federal government), the gross return to the lender comes to 3.5 percentage points above the bond-equivalent rate on 91-day Treasury bills.⁶

-
4. The federal government pays interest also for up to three years after graduation if the student is in the Armed Forces, Peace Corps, or Vista, and for up to one year if the student is unemployed.
 5. The bond-equivalent rate is calculated using slightly different conventions than those used to calculate the Treasury bill rate. One of the differences is that the bond-equivalent rate is based on a 365-day year, instead of a 360-day year. If an investor bought a \$100, 91-day Treasury bill for \$99.50, for example, the Treasury bill rate would be 1.978 percent, and the bond equivalent rate would be 2.016 percent. The bond-equivalent rate always works out to be slightly higher than the Treasury bill rate.
 6. Student's 7 percent interest rate + special allowance rate = 7 + [T bill rate - 3.5] = T bill rate + 3.5.

Table 1 shows the special allowance rates paid from 1969 to 1979. The procedure for calculating the rate has changed since special allowance payments were first instituted in the Federal Emergency Insured Student Loan Act of 1969. The rationale for changing the rate has always been to keep the return on student loans competitive with the return on other investments available to banks.

Until December 1976, the rate of the special allowance was determined by a committee consisting of officials from the Department of Health, Education, and Welfare, the Treasury Department, and the Office of Management and Budget. The formula relating the special allowance to the Treasury bill rate was established in the Education Amendments of 1976 (P.L. 94482). The formula itself has remained unchanged since then, but initially the annual average rate of the special allowance was limited to 3 percent. The 3 percent ceiling was increased to 5 percent effective October 1, 1977, and the ceiling was removed effective September 30, 1979.

Profits Accruing to State and Local Governments

Federal Tax Law. In general, state and local governments are prohibited by federal law from investing the proceeds of tax-exempt bonds in securities with "materially higher" yield than the interest rate on the bonds. If these governments do earn materially higher yields on these investments, the profits are called arbitrage, and the bonds are called arbitrage bonds. Section 103(c) of the Internal Revenue Code defines and generally prohibits arbitrage bonds. The Tax Reform Act of 1976 amended this section, however, so that special allowance payments "are not to be taken into account . . . in determining yields on student loan notes" for arbitrage purposes.

The arbitrage rules and regulations affect nearly all issuers of tax-exempt bonds. For instance, there are rules exempting "reasonably required" reserve accounts and temporary investments from arbitrage restrictions. The Internal Revenue Service and private bond attorneys spend a great deal of time and effort interpreting the arbitrage rules and dealing with alleged abuses.

With minor exceptions, there are no federal restrictions on the purposes for which states may use surplus funds. Since one of this paper's options is to specify permissible uses of surplus funds, this issue is discussed in Chapter IV.

TABLE 1. SPECIAL ALLOWANCE RATES, 1969-1979 (In percents)

Quarter Ending	Special Allowance Rate
September 30, 1969	2.000
December 31, 1969	2.250
March 31, 1970	2.000
June 30, 1970	2.250
September 30, 1970	2.000
December 31, 1970	1.500
March 31, 1971	1.000
June 30, 1971	1.250
September 30, 1971	1.250
December 31, 1971	0.750
March 31, 1972	0.750
June 30, 1972	0.750
September 30, 1972	0.750
December 31, 1972	0.750
March 31, 1973	1.000
June 30, 1973	1.750
September 30, 1973	2.500
December 31, 1973	2.500
March 31, 1974	2.250
June 30, 1974	3.000
September 30, 1974	3.000
December 31, 1974	3.000
March 31, 1975	2.250
June 30, 1975	1.500

 continued

Size of Profits. The difference between the yield on student loans and the interest rate on student loan bonds is now generally large enough to generate millions of dollars of profits--revenues in excess of costs--for a bond issuer over the course of the fifteen years or so of a bond issue. In the aggregate states could accumulate between \$300 million and \$450 million in profits from student loan bonds over the six-year period 1980-1985. The magnitude of the profits depends mostly on the size of the bond

TABLE 1. (Continued)

Quarter Ending	Special Allowance Rate
September 30, 1975	2.250
December 31, 1975	1.875
March 31, 1976	1.250
June 30, 1976	1.500
September 30, 1976	1.875
December 31, 1976	1.500
March 31, 1977	1.250
June 30, 1977	1.500
September 30, 1977	2.250
December 31, 1977	2.875
March 31, 1978	3.125
June 30, 1978	3.250
September 30, 1978	4.125
December 31, 1978	5.625
March 31, 1979	6.250
June 30, 1979	4.000
September 30, 1979	6.625
December 31, 1979	9.000

SOURCES: State of North Dakota, Official Statement for Student Loan Revenue Bonds of 1979 (July, 1979), p. I-4; and Virginia Education Loan Authority, Official Statement for Guaranteed Student Loan Program Revenue Bonds Series of 1980A (January 1980), p. 14.

issue, but also on the interest rate on the bonds, the level of special allowance payments, and the administrative efficiency of the authority. Other things being equal, profits will be larger the lower the interest rate on the bonds, the higher the level of special allowance payments, and the lower the costs of running the authority.

The level of profits for a bond issue of any given size and administrative cost depends then on the difference between the return on student loans and the net interest cost of the bonds. Since this difference changes each quarter when the special allow-

ance is recalculated, it is difficult to predict the level of profits that any one bond issue will generate. The return on student loans can never fall below 7 percent (the return corresponding to a zero percent special allowance), and it can range upward from 7 percent to whatever level is generated by adding 3.5 percentage points to the bond-equivalent rate on 91-day Treasury bills. By contrast, the net interest cost of the bonds is customarily fixed at the time the bonds are issued. The difference between the return on the loans and the net interest cost of the bonds, therefore, fluctuates with the Treasury bill rate.

States that sold student loan bonds several years ago, when interest rates were low compared to current rates, have been paying low, fixed interest rates on their bonds but have been enjoying increasingly higher yields on their student loans. Their programs are generating surpluses that the issuers never expected.

On the other hand, if states were to issue long-term, fixed interest rate bonds when interest rates were above 7 percent, there would always be a possibility that they would run into difficulty making their scheduled payments of interest and principal on the bonds. This could happen if interest rates dropped dramatically so that the yield on the loans fell short of the interest rate of the bonds. States can take steps to protect themselves against that event, however. These measures are described in Chapter IV.

Table 2 indicates the approximate spreads between yields on student loans and interest rates on student loan bonds since 1970. Column 4 shows the spread that existed at the time the bonds were issued. Column 5 shows the average spread that states are now working with. The numbers in Column 5 are the differences between the current yield on student loans (16 percent) and the fixed interest rates on bonds issued between 1970 and 1979. States that issued student loan bonds in 1975, for instance, are now working with a spread of 10 percentage points, compared to a spread of 11 percentage points for bonds issued in 1972. These spreads should not be equated to surpluses. The rates at which surpluses are accumulated are the spreads minus administrative expenses.

Examples. An analysis of the cash flow projections prepared by two 1979 issuers of student loan bonds, North Dakota and Wisconsin, appears in the Appendix. The results of the analysis,

TABLE 2. YIELD ON STUDENT LOANS COMPARED TO THE NET INTEREST COST OF STUDENT LOAN BONDS, 1970-1979 (In percents)

Year (1)	Yield on Student Loans ^a (2)	Average Net Interest Cost of Student Loan Bonds ^b (3)	Annual Spread Between Yield On Student Loans and Average Net Interest Cost of Student Loan Bonds [(2) - (3)] (4)	Spread Between Current 16% Yield on Student Loans and Average Net Interest Cost of Student Loan Bonds Issued in the Indicated Year ^d (5)
1970	8.9	6.0	2.9	10.0
1971	8.1	5.2	2.9	10.8
1972	7.7	5.0	2.7	11.0
1973	8.9	4.9	4.0	11.1
1974	9.8	5.6	4.2	10.4
1975	9.0	6.0	3.0	10.0
1976	8.5	5.3	3.2	10.7
1977	9.0	4.8	4.2	11.2
1978	11.1	6.0	5.1	10.0
1979	13.5	6.4	7.1	9.6

SOURCE: State of North Dakota, Official Statement for Student Loan Revenue Bonds of 1979 (July 1979), p. I-4; and Virginia Education Loan Authority, Official Statement for Guaranteed Student Loan Program Revenue Bonds Series of 1980A (January 1980), p. 14; Blyth Eastman Paine Webber and state higher education officials.

- a. The yield on student loans is the sum of the 7 percent paid by the student or the federal government and the special allowance payment made by the federal government, calculated as an annual average.
- b. In any given year, the average net interest cost (NIC) of student loan bonds is the average of the NICs of bonds issued in that year, weighted by issue size.
- c. Current yield on student loans is the rate (16 percent) that applied from October 1 to December 31, 1979.
- d. States' interest costs are generally fixed as of the year their bonds were issued, but the return on their investments fluctuates from quarter to quarter. This column shows the difference between the current return on student loans (16 percent), and the interest costs corresponding to bonds issued between 1970 and 1979. States that issued student loan bonds in 1975, for instance, are now working with a spread of 10 percent, whereas states that issued bonds in 1972 are working with a spread of 11 percent.

which serves as an illustration of the basic concepts explained in the previous section, are summarized briefly below.

North Dakota, for instance, expects to realize profits of \$16 million--\$5 million in present-value terms⁷--by 1996 from \$79 million of bonds issued in the summer of 1979. Over a 17-year period, Wisconsin expects profits totaling \$8.5 million--\$4 million in present-value terms--from its \$40 million bond issue in the summer of 1979.

These estimates may be low, because the state authorities base their cash flow projections on what seem to be conservative estimates of future special allowance rates, and the profit figures reported above are based on the states' assumptions.⁸ Assuming instead that the special allowance rate remains an even 5 percent, North Dakota would receive profits of \$25 million--\$8 million in present-value terms, and Wisconsin would receive profits of \$15 million--\$8 million in present-value terms.

VOLUME OF STUDENT LOAN BONDS

Volume to Date

Eighteen states, four local authorities in Texas, and the District of Columbia have sold bonds to finance guaranteed student

-
7. Present-value discounting is a procedure used to assign a value to funds that will be received at specific future dates. It is designed to take into account the fact that the promise of funds in the future is less valuable than having the money presently in hand, both because of the risk that the money will not actually be received in the future, and because it is possible to earn interest on money presently in hand.
 8. Both Wisconsin and North Dakota, for example, project special allowance rates of only 2.8 percent after 1983. Under the current formula for calculating the special allowance, that corresponds to a 91-day Treasury bill rate of 6.3 percent. If instead, the 91-day Treasury bill rate is 8.5 percent, the current formula will produce a special allowance rate of 5 percent.

loans.⁹ Ten other states--California, Colorado, Georgia, Indiana, Iowa, Mississippi, Ohio, Vermont, Tennessee, and West Virginia--are considering issuing revenue bonds for student loans.

Table 3 lists the annual dollar volume of student loan bond issues of each state from 1966 to 1979. About \$1.4 billion in student loan bonds has been issued to date, with \$270 million issued in 1978 and \$600 million issued in 1979.

Potential Volume

The potential volume of annual student loan bond issues is associated closely with the annual volume of guaranteed student loan originations (newly made loans). In fact, if states chose to use bond proceeds only to make new student loans and not to purchase existing loans from banks, then the absolute limit of annual bond issues would about equal the annual volume of loan originations.¹⁰

Projections of student loan originations, then, serve as a useful guide in making projections of the level of future bond issuance. The volume of student loan bond issues has been increasing as a percentage of student loan originations, from 10

-
9. Two of those states, Florida and New Mexico, are no longer issuing student loan bonds. Florida has sold all of its loans to Sallie Mae and has no firm plans to issue additional student loan bonds, although there is some interest there in establishing a nonprofit corporation to issue bonds and purchase student loans from banks. New Mexico restructured its student loan program when it created a state guarantee agency and now uses the proceeds of state severance taxes to make student loans. If the state decides to sell revenue bonds in the future, its legislature would first have to enact new authorizing legislation.
 10. To reach this limit, of course, student loan bonds would have to preempt all other sources of guaranteed student loans. Total bond issues would be somewhat greater than total loan originations, since, on average, only about 85 percent of the bond proceeds are used to make student loans. The remaining 15 percent is invested in reserve accounts or used to pay the costs of issuing the bonds.

TABLE 3. STUDENT LOAN BOND ISSUES BY STATES, CALENDAR YEARS 1966-1980 (In millions of dollars)

State	1966-1970	1971	1972	1973	1974	1975
Arkansas	--	--	--	--	--	--
California ^b	--	--	--	--	--	--
Colorado ^b	--	--	--	--	--	--
District of Columbia	--	--	--	--	--	--
Florida	--	--	--	8.0	--	10.0
Georgia ^b	--	--	--	--	--	--
Illinois	--	--	--	--	--	--
Indiana ^b	--	--	--	--	--	--
Iowa ^b	--	--	--	--	--	--
Kansas	--	--	--	--	--	--
Kentucky	--	--	--	--	--	--
Michigan	--	--	--	--	--	--
Minnesota	--	--	--	--	29.4	18.0
Mississippi ^b	--	--	--	--	--	--
Nebraska	--	--	--	--	--	--
New Mexico	--	4.9	7.7	4.6	5.3	4.3
North Carolina	--	--	16.7	3.0	--	--
North Dakota	--	--	--	--	--	--
Ohio ^b	--	--	--	--	--	--
Oklahoma	--	--	--	0.7	2.9	3.0
South Carolina	--	--	--	--	5.0	--
South Dakota	--	--	--	--	--	--
Tennessee ^b	--	--	--	--	--	--
Texas	103.0	12.5	20.0	10.0	15.0	11.0
Texas Local Authorities ^c	--	--	--	--	--	--
Utah	--	--	--	--	--	--
Vermont ^b	--	--	--	--	--	--
Virginia	--	--	--	--	--	--
West Virginia ^b	--	--	--	--	--	--
Wisconsin	--	--	--	--	--	--
Total	103.0	17.4	44.4	26.3	57.6	46.3
Cumulative Total ^d	103.0	120.4	164.8	191.1	248.7	295.0

SOURCE: Compiled by the Congressional Budget Office from Student Loan Marketing Association data and data supplied by individual states.

a. These are very rough, informal Sallie Mae estimates.

TABLE 3. (Continued)

	1976	1977	1978	1979	Estimates 1980 ^a
Arkansas	--	--	7.5	--	10.0
California ^b	--	--	--	--	100.0
Colorado ^b	--	--	--	--	30.0
District of Columbia	--	--	--	--	30.5
Florida	22.0	12.5	--	--	--
Georgia ^b	--	--	--	--	30.0
Illinois	--	--	25.9	--	20.0
Indiana ^b	--	--	--	--	50.0
Iowa ^b	--	--	--	--	30.0
Kansas	--	--	21.0	40.0	--
Kentucky	--	--	--	30.0	75.0
Michigan	--	27.0	22.0	42.0	50.0
Minnesota	37.2	37.0	38.3	100.0	55.0
Mississippi ^b	--	--	--	--	10.0
Nebraska	--	--	--	47.9	40.0
New Mexico	6.1	--	21.6	--	--
North Carolina	17.0	4.3	19.0	20.0	25.0
North Dakota	--	--	--	78.5	--
Ohio ^b	--	--	--	--	80.0
Oklahoma	3.0	2.0	2.5	10.0	15.0
South Carolina	--	--	10.0	23.9	--
South Dakota	--	--	--	52.1	50.0
Tennessee ^b	--	--	--	--	20.0
Texas	18.0	16.0	--	--	--
Texas Local Authorities ^c	--	20.0	10.0	35.0	--
Utah	--	--	--	47.4	75.0
Vermont ^b	--	--	--	--	35.0
Virginia	--	--	16.5	35.0	60.0
West Virginia ^b	--	--	--	--	10.0
Wisconsin	--	--	75.0	40.0	--
Total	103.3	118.8	269.3	601.8	900.5
Cumulative Total ^d	398.3	517.1	786.4	1388.2	2288.7

b. May issue student loan bonds for the first time in 1980.

c. Texas local authorities include the higher education authorities of Abilene, Central Texas, North Texas, and South Texas.

d. The cumulative total is larger than the volume of bonds outstanding because some of the bonds have been retired.

percent in 1977 to 20 percent in 1979. The volume of guaranteed student loan originations has itself also been increasing rapidly, from a total of about \$2 billion in fiscal year 1978 to about \$3 billion in fiscal year 1979.

Table 4 shows two estimates of growth paths for annual issues of student loan bonds. Although the paths can be only educated guesses, the evidence at hand suggests that the realized path will lie somewhere between these two. The lower path assumes that bond issues will remain at 20 percent of loan originations, and the upper path assumes that bond issues will continue to increase as a percentage of loan originations by five percentage points a year, leveling off at 50 percent of loan originations in 1984.¹¹ Growth along the upper path would displace at least some private lending to students.

Student loan bond issues, thus, are likely to total between \$770 million and \$960 million in fiscal year 1980 and between \$900 million and \$2.3 billion in fiscal year 1985. The state-by-state estimates of 1980 volume listed in the last column of Table 3 total \$900 million, midway between these 1980 volume projections.

FEDERAL COSTS OF STUDENT LOAN BONDS

The major federal costs of student loan bonds stem from direct outlays for the special allowance and revenue foregone because interest on the bonds is not subject to federal income taxation. Five-year projections of these costs are shown in Table 5 for both low- and high-path bond volume. The cost of the special allowance on bond-financed loans will be between \$80 million and \$100 million in 1981 and will grow to between \$120 million and \$220 million in 1985. The revenue loss caused by tax-exemption of interest on the bonds will be between \$80 million and \$100 million in 1981 and between \$160 million and \$290 million in 1985. These revenue loss calculations are based on the assumption that each billion dollars of outstanding tax-exempt

11. The projections of loan originations are the Congressional Budget Office's projections based on current law. If the Congress enacts legislation changing the guaranteed student loan program, these estimates would have to be revised.

TABLE 4. PROJECTIONS OF VOLUMES OF ANNUAL ISSUES OF STUDENT LOAN BONDS (By fiscal year, in millions of dollars)

Bond Volume	1980	1981	1982	1983	1984	1985
If annual bond issues remain 20 percent of annual loan originations	770	860	880	890	900	900
If annual bond issues as percent of annual loan originations increase 5 percentage points each year	960	1,290	1,540	1,790	2,030	2,260

student loan bonds costs the federal government \$30 million annually in foregone tax revenue.¹²

In addition to the above-mentioned costs, the federal government pays principal and accrued interest on defaulted student loans and 7 percent interest on loans while students are in school. The special allowance, in-school interest subsidy, and payment on defaulted loans would be incurred whether loans were made by commercial lenders or tax-exempt bond authorities. To the extent that bond programs increase the total number of student loans, however, they increase federal costs for these subsidies. The largest extra cost associated with student loan bonds results from the tax-exemption of interest on the bonds.

12. The exact amount of federal revenue loss stemming from the tax-exemption of interest on state and local bonds is a controversial issue. See Congressional Budget Office, Tax-Exempt Bonds for Single-Family Housing (April 1979), pp. 47-51; and Roger Kormendi and Thomas Nagle, "The Interest Rate and Tax Revenue Effects of Mortgage Revenue Bonds" (unpublished manuscript, University of Chicago Graduate School of Business, July 26, 1979), pp. 11-21.

TABLE 5. CURRENT LAW PROJECTIONS OF FEDERAL COSTS OF STUDENT LOAN BONDS^a (By fiscal year, in millions of dollars)

	1981	1982	1983	1984	1985
If annual bond issues remain 20 percent of annual loan originations					
Revenue loss from tax exemption of interest on bonds	80	102	123	141	159
Cost of special allowance ^b	<u>81</u>	<u>101</u>	<u>105</u>	<u>111</u>	<u>116</u>
Total	161	203	228	252	275
If annual bond issues as percent of annual loan originations increase 5 percentage points each year					
Revenue loss from tax exemption of interest on bonds	98	140	187	237	290
Cost of special allowance ^b	<u>98</u>	<u>138</u>	<u>160</u>	<u>189</u>	<u>218</u>
Total	196	278	347	426	508

a. In addition to the costs listed here--special allowance payments and revenue foregone because interest on the bonds is exempt from federal income taxation--the federal government pays principal and accrued interest on defaulted loans and 7 percent interest on the loans while loan recipients are in school.

b. These projections are based on CBO's projections of interest rates on 91-day Treasury bills: 8.9 percent for 1981; 8.7 percent for 1982; 8.0 percent for 1983; 7.7 percent for 1984; and 7.5 percent for 1985. If actual interest rates exceed these projections, the special allowance costs will be correspondingly greater than those projected in this table.

CHAPTER III. LEGISLATION AFFECTING STUDENT LOAN BONDS

The profits that issuers of student loan bonds may now earn are the combined result of 1976 tax legislation and subsequent, significant expansion of the guaranteed student loan program in higher education legislation. Drafters of the tax legislation had no reason to anticipate this expansion, and drafters of the student loan legislation probably did not foresee the effect their actions would have on what were, at that time, small-scale student loan bond programs.¹

TAX TREATMENT OF STUDENT LOAN BONDS FOR ARBITRAGE PURPOSES

Section 1305 of the Tax Reform Act of 1976 granted certain private nonprofit corporations authority to issue tax-exempt student loan bonds and excluded the special allowance from arbitrage yield restrictions on all student loan bonds. Section 1305 was not included in the House version of the bill but was added as an amendment in the Senate Finance Committee and subsequently agreed to in conference. The Senate Finance Committee Report on the Tax Reform Act of 1976 suggests that the section was intended primarily to allow nonprofit corporations in Texas to issue student loan bonds and that the arbitrage provision was included to ensure that these nonprofit corporations would be able to cover the costs of their programs.²

-
1. The difficulties that may arise from separate consideration of tax and direct outlay programs prompted the Congress to give the House and Senate Committees on the Budget the duty to "devise methods of coordinating tax expenditures, policies, and programs with direct budget outlays." Congressional Budget Act of 1974, P.L. 93-344 (July 12, 1974), secs. 101 and 102.
 2. There may have been concern that the administrative costs of student loan programs would exceed the 1.5 percentage point spread generally allowed by the arbitrage regulations.

The forerunner of Section 1305 was S.3272, introduced by Senator Lloyd Bentsen (D-Texas) in April, 1976. In a floor statement on the bill, the Senator said only that he wanted nonprofit corporations in Texas to be able to issue tax-exempt bonds for student loans.³

The Senate Finance Committee's report on the Tax Reform Act of 1976 briefly describes what was by then called the "Bentsen Amendment." As the following quotation from the committee report suggests, the committee realized that what it was doing would apply to bonds issued outside Texas as well:

The interest to be paid by students, together with the incentive payments received by the institution making the loan from the Commissioner of Education, will constitute a yield that could be higher than the maximum yield the corporations believe they will be able to pay on their bonds . . . only one State, Texas, has been called to the committee's attention in which this situation exists. However, similar problems, which may exist in other States, could benefit from the committee amendment.⁴

The committee apparently did not envision that large volumes of student loan bonds would be issued in Texas or elsewhere. Only 7 states had issued student loan bonds prior to 1976. Moreover, based on previous levels of special allowance payments, the committee would not have had any reason to expect that it was opening the door for substantial profits. Until 1976, special allowance payments had been low by today's standards and had a statutory ceiling of 3 percent. The special allowance rate averaged 1.7 percent between 1969 and June 1976, compared to an average of 5.2 percent in 1978 and 1979.

EDUCATION LEGISLATION AFFECTING STUDENT LOAN BOND PROFITS

Education legislation enacted since 1976 has affected student loan bond programs in two ways. First, all adjustments to the

3. Congressional Record, April 8, 1976, p. 10029.

4. Report on H.R. 10612, the Tax Reform Act of 1976, Senate Committee on Finance, 94:2 (1976), p. 406.

return on student loans have been added to the special allowance. This is the portion of the return that was excluded from arbitrage yield calculations by the Tax Reform Act of 1976, and thus allows bond issuers to accumulate profits. Education legislation has held the student's interest share fixed at 7 percent since 1968, while it has repeatedly increased the special allowance to account for higher interest rates caused by inflation.⁵ Had the education legislation held the special allowance fixed and incorporated yield increases in the student's interest share, arbitrage regulations would probably have caused bond issuers to reduce the interest rate charged to students or to rebate part or all of the special allowance to the federal government. In that case, bond issuers would have been able to accumulate only small surpluses, if any.

Second, the Middle Income Student Assistance Act (P.L. 9556), enacted in the fall of 1978, greatly expanded the guaranteed student loan program. This legislation was a reaction to forces far removed from student loan bonds. Partly an attempt to head off pressure for a tuition tax credit, for which all parents would be eligible, the act extended the in-school interest subsidy on guaranteed student loans to all students, regardless of family income. This subsidy extension, coupled with the increasing attractiveness of 7 percent loans, has greatly increased student demand for loans. Annual guaranteed student loan originations, for example, have increased from \$1.5 billion in fiscal year 1977 to about \$3.0 billion in fiscal year 1979. This surge in the demand for loans has correspondingly increased the popularity of student loan bonds, so that current projections of student loan bond volumes for 1981 and future years are much greater than projections that would have been made in 1976.

5. Education legislation has made 2 major adjustments to the special allowance: (1) in late 1976, by establishing a formula that tied the special allowance to the Treasury bill interest rate, which rises and falls with anticipated inflation rates, and (2) by setting higher and higher ceilings and eventually removing the ceiling on the special allowance.

PENDING PROPOSALS TO RESTRUCTURE STUDENT LOAN PROGRAMS

All higher education programs, including student loan programs, must be reauthorized before October 1, 1980.⁶ Partly because of the rapid increase in the demand for student loans, the student loan program in general and student loan bonds in particular have become far more costly to the federal government than anticipated. Even in fiscal year 1980, interest subsidies, special allowances, and payments on defaulted loans will probably cost the federal government about \$500 million more than estimated in the budget in January 1979.⁷ In grappling with this rapid increase in cost, the Congress may decide to restructure the student loan program or change the way it treats student loan bonds.

In November 1979, the House passed a bill (H.R. 5192) that would make some changes in the student loan program but would basically maintain its existing structure. The bill authorizes a commission to study many aspects of the student loan program, including "the cost to the Federal government of the arbitrage derived from revenue bonds . . . and the appropriate role of such bonds as a mechanism for raising student loan capital."

H.R. 5192 initially contained another section dealing with tax-exempt student loan bonds, but this was deleted by the full Committee. This section would have denied special allowance payments to authorities that: are not the sole student loan authority in the state, make loans to students who are not either state residents or attending in-state schools, contract loan servicing with anyone who has financial ties to an employee or office holder of the authority, do not issue bonds through a competitive bidding process, use revenues from the student loans for anything other than administrative costs or to make more student loans, or do not remit remaining assets at the end of the program to the federal government for the student loan insurance fund.

-
6. For a more complete discussion of pending reauthorization proposals, see CBO, Fiscal Year 1981 Options for Federal Post-secondary Student Assistance Programs (forthcoming).
 7. For a comparison of estimates made in 1979 and 1980, see The Budget of the U.S. Government, Fiscal Year 1980, p. 423 and The Budget of the U.S. Government, Fiscal Year 1981, p. 432.

The Senate Subcommittee on Education, Arts, and Humanities is likely to draft its reauthorization legislation in March. Three reauthorization bills have been introduced in the Senate. S.1870 is similar to the House-passed bill, in that it would modify and expand the guaranteed student loan program without changing its basic structure. S.1840 and S.1600 would both revamp the federal student loan program in ways that would significantly affect student loan bonds.

Both S. 1840 and S. 1600 would divide student loans into two categories: direct/basic loans and guaranteed/supplemental loans. In both bills, direct/basic loans would be federally financed from the repayment of outstanding student loans and borrowing from the Treasury. These loans would be made to students on the basis of need. Independent students and parents of dependent students would be eligible under both bills for guaranteed/supplemental loans. These loans would be originated and owned by commercial lending institutions, schools, state authorities, and nonprofit state and local corporations.

If the final legislation uses the approach of S.1600 or S.1840, state authorities would be able to issue bonds only for guaranteed/supplemental loans. CBO projects that the volume of these loans would be much lower than the volume of guaranteed student loans that would be made if there were no change in the law. For fiscal year 1981, for instance, CBO estimates that, under current law, about \$4 billion in guaranteed student loans would be originated. Under S.1840, about \$3 billion in guaranteed/supplemental loans would be originated, and under S.1600, about \$2 billion in guaranteed/supplemental loans would be originated. Moreover, depending on how the special allowances were calculated in the final legislation, issuers of tax-exempt bonds might not receive as large surpluses as are now permitted.

The Congress could take a variety of approaches with respect to the profits accruing from student loan bonds. It could take no action or could simply restrict the permissible uses of surplus funds. Alternatively, it could reduce or remove one of the federal subsidies now received by states that issue these bonds, and thus reduce the profits.

The Congressional options discussed in this chapter are:

- o Take no action.
- o Reduce the direct interest subsidy received in the form of the special allowance on student loans held by tax-exempt bond authorities.
- o Impose usual arbitrage rules on student loan bonds.
- o Tax interest on student loan bonds and thus remove the indirect subsidy received through the low interest rates on tax-exempt bonds.
- o Withdraw federal insurance from loans financed with tax-exempt bonds and thus remove the subsidy inherent in the insurance.
- o Require that surpluses be used to make additional student loans.

The options in this chapter are evaluated by a comparison of costs and benefits. Because most of the options would reduce one of the federal subsidies now provided to student loan bond issuers, they would reduce federal costs at the possible expense of losing some of the benefits provided by student loan bonds. Student loan bonds produce benefits to the extent that they increase the availability of student loans. If a reduction in a subsidy resulted in a cutback in the volume of bonds issued, then that subsidy reduction would indirectly be responsible for a decline in the total volume of lending to students.

Calculating the precise amount by which student loan bonds have increased loan availability would entail subtracting from the actual level of lending the level that would have been attained had states not issued student loan bonds. Unfortunately, there is no way of knowing the volume of student loans that would have been made by commercial lenders without the state bond programs. To some extent, lending supported by student loan bonds has probably simply displaced private lending. Isolating the effect of student loan bonds on loan availability is now infeasible, both because concentrated state issuance of student loan bonds is such a recent phenomenon and because there are too many other important factors influencing the demand and supply of student loans.

In at least one state, Utah, such a surge in loan originations followed the issuance of student loan bonds that it would be hard not to credit the bond program with greatly increasing loan availability. Utah issued its first student loan bonds in January 1979, and the dollar volume of loans insured by Utah's guarantee agency in the following three quarters was triple the volume for the preceding three quarters.¹

Although it may be impossible to estimate numerically the effect of each option on loan availability, the options can be ranked relative to one another. An analysis of relative impact on loan availability is included in the following discussion of each option. The options are also evaluated on the basis of administrative ease and federal cost reduction.

TAKE NO ACTION

Several arguments can be made for taking no action on student loan bonds. The prospect of earning surpluses may give states added incentive to issue student loan bonds, thereby increasing the availability of student loans. These surpluses would then

-
1. From January through September 1979, \$19.7 million of loans were guaranteed, compared to \$6.5 million from March through December 1978. The \$47 million bond issue provided \$22 million for the purchase of existing student loans and \$17 million for new student loans. (Figures were supplied by the Utah Higher Education Assistance Authority.)

represent the cost to the federal government of increasing the availability of student loans in this way.

This justification of student loan bond surpluses raises several questions. Does the Congress in fact wish to extend the availability of student loans beyond what private lending institutions and Sallie Mae would provide? If so, by how much do anticipated surpluses actually increase the total volume of bonds issued and loans made? Are there less costly ways of accomplishing the same objective?²

Another argument for taking no action now centers around the uncertainty of future levels of surplus. The special allowance is now at the highest level in its eleven-year history; consequently, the return on student loans is also at an all-time high. Interest rates and, correspondingly, the return on student loans may drop in the future. If so, states may then have to draw on surpluses that they accumulated during earlier periods to meet their expenses.

According to CBO's projections, however, the yield on student loans will average 12 percent over the next six years--considerably below the current 16 percent yield, but high enough to cover the projected costs of student loan bonds now outstanding and those that will be issued over the next six years. Therefore, states probably have little need to accumulate surpluses now in anticipation of insolvency in the near future.

More importantly, states should not need to accumulate surpluses, because they can take other steps to protect themselves against insolvency. States would have occasion to draw on accumulated surpluses only if the yield on their student loans dropped below the level necessary to cover costs. Because, under current law, the yield on student loans cannot drop below the 7 percent student share, the threat of insolvency is not serious as long as interest rates on tax-exempt bonds are below 7 percent.³ Only

2. A discussion of the costs of student loan program proposals is contained in CBO, Fiscal Year 1981 Options for Federal Post-secondary Student Assistance Programs (forthcoming).

3. Although all lenders are allowed by law to charge students less than 7 percent interest, only the state of Texas has done

recently, when interest rates on these bonds rose above 7 percent did issuers of student loan bonds begin to worry about insolvency, but most have adapted and taken measures to protect themselves.

Some states, for example, are borrowing from banks to meet their current need for loanable funds, with the intention of paying back the banks with the proceeds of bonds they will issue when interest rates drop. Others are issuing short-term, fixed interest rate bonds at interest rates below 7 percent, with plans to sell their portfolios to Sallie Mae in 3 years and use the proceeds to retire their bonds. Others are experimenting with a new type of tax-exempt bond: long-term bonds with floating interest rates. In contrast to fixed interest rate tax-exempt bonds, these bonds bear interest at a different rate each quarter or each six months. The interest rate is recalculated periodically by a formula that pegs it to the 91-day Treasury bill rate, so that it "floats" up and down. By issuing floating interest rate bonds, student loan authorities can tie their borrowing costs to the fluctuating yield on their investments, thus insuring a positive spread to cover administrative expenses. Floating interest rate bonds may encounter investor resistance initially, but once the technique is refined, investors may find them appealing since they offer better protection against unanticipated inflation than do fixed interest rate bonds whose prices drop when the inflation rate proves to be higher than anticipated.

By issuing floating rate bonds in the future, states can practically guarantee that their programs will remain solvent, thus obviating the need for the protection offered by accumulated surpluses. And since interest rates on nearly all outstanding student loan bonds are below 7 percent, there should be no need to accumulate surpluses to cover this past debt.

LOWER SPECIAL ALLOWANCE FOR STUDENT LOANS FINANCED BY TAX-EXEMPT BONDS

The Congress could reduce the profits now generated by student loan bonds but still maintain their viability if it

so. All lenders are guaranteed to receive interest they have charged students, so in fact all but the state of Texas are guaranteed at least a 7 percent yield on their loans.

lowered the yield on student loans held by tax-exempt bond authorities.⁴ This approach would involve setting up a two-tier yield structure, so that the yield on loans held by private lenders would exceed the yield on loans held by tax-exempt bond authorities. If the yield on student loans were set at a level just high enough to make the loans a sound investment for bond authorities, the yield reduction would produce almost no cutback in loan availability. Student loan bond issuers are state agencies and nonprofit corporations, whose motivation should not be to make a profit, but rather to provide a service, in this case making loans available to students. As long as they can cover their costs in providing this service, the prospect of earning no profits should not affect their decisions about bond issuance.

Naturally, some states would be better able than others to adjust to a yield cutback, but the differential impact of such a change would not be as great as might be expected. The claim made is that large states or states with long-established student loan authorities might be better able to adjust than other states. Although large states may have lower administrative costs because of the efficiency of servicing a large loan portfolio, nearly all states can (and most do) take advantage of the economies of scale by contracting out their loan servicing to large national servicing organizations. The per-loan administrative expenses of running a student loan program, therefore, do not vary much with the size of the program. Moreover, it should not be necessary to give all bond issuers yields large enough to cover the initial costs of establishing new agencies. For other programs supported by tax-exempt bonds, states customarily help offset start-up costs either with direct state appropriations or interest-free loans.

The Congress could decrease the yield on student loans by cutting either the student's share (now a flat 7 percent) or the federal government's share (now a fluctuating special allowance). Cutting the interest rate charged students would create some problems, however. Most people would judge that students are already getting a bargain at a 7 percent interest rate. Because

4. In this chapter, as in Chapter II, the term yield represents the total return on student loans--the sum of the special allowance and interest paid by students or the federal government. Because it does not take costs into account, it is not the same thing as rate of return.

the inflation rate is well above 7 percent, students are now paying no interest (negative interest, in fact) on their loans in real terms. Moreover, if students paid less than 7 percent interest on loans held by bond authorities, Sallie Mae would probably be unwilling to buy loans from the authorities, since it could buy higher-yield loans from commercial lenders. In addition, if bond authorities lent at interest rates below 7 percent, students would prefer their loans, and there would probably be a large shift from commercial lending to lending financed by tax-exempt bonds.

Cutting the federal government's share of the yield could be accomplished by giving bond authorities a lower special allowance than that given to private lenders. When the Congress initially authorized the special allowance in 1969, it felt that one special allowance might not be appropriate for all lenders. Section 2(a)(2) of the Emergency Insured Student Loan Act of 1969 (P.L. 91-95) states: "The Secretary of Health, Education, and Welfare . . . [may] set differing allowance rates for different regions or other areas or classifications of lenders, within the limit of the maximum." The Secretary never exercised the option to set differing special allowances, however, and in 1976 a single special allowance was established by law.

The federal cost savings resulting from a lower special allowance on loans financed through tax-exempt borrowing would offset much of the federal revenue loss from the tax exemption of the bonds. Depending on the specifications of the proposal for a separate special allowance, this option would save a cumulative total of between \$200 million and \$400 million over the next five years.

The special allowance on loans held by bond authorities could be a percentage of the commercial special allowance or it could be calculated by a separate formula.⁵ The Congress could establish a formula analagous to the current formula for the special allowance, with some index of interest rates for long-term, tax-exempt bonds substituted in place of the 91-day Treasury bill rate in the current formula. It could then apply the special allowance de-

5. Throughout this discussion, the assumption is made that the special allowance will continue to be calculated in the present manner for all loans held by commercial lending institutions and Sallie Mae.

rived from that formula quarterly to all outstanding loans held by bond authorities, or it could apply the special allowance permanently to all loans financed from bonds issued in each quarter. Under the first approach, the yield on a student loan would fluctuate quarterly and the special allowance would be recalculated each quarter for all loans. Under the second approach, the yield on a student loan would be constant during the life of the loan with the special allowance calculated at the time of bond issuance and fixed at that rate for all loans financed with that bond issue.

If calculated at today's interest rates, the special allowance produced by a formula tied to tax-exempt interest rates would be just half the special allowance produced by the present formula. In fact, this 1:2 ratio holds under most projections of tax-exempt and taxable interest rates. Only if there were a major tax code change or a huge rise or fall in the 91-day Treasury bill rate would the 1:2 ratio be significantly out of line. Thus, if the Congress wanted to achieve basically the same result as establishing a separate special allowance formula for bond-financed loans, it could set the special allowance on these loans at half the special allowance given to commercial lenders.⁶ Because this approach is nearly equivalent to the separate formula option, an independent analysis would be redundant; therefore, only the separate formula approach is discussed below. (See Table 6 on page 38 for a comparison of the federal cost savings from the two approaches.)

Fixing the Special Allowance at Bond Issuance

If states continue to issue long-term, fixed interest rate bonds, the Congress can both guarantee the solvency of student loan bond programs and remove the possibility of their making profits by assigning one lifetime special allowance to bond-financed student loans. This would set and hold the yield on

6. This is the approach endorsed by the National Council of Higher Education Loan Programs, which represents state guarantee agencies and student loan bond agencies. The National Council also favors a floor of 2.5 percent on the tax-exempt special allowance. (Letter from National Council of Higher Education Loan Programs to Senate Subcommittee on Education, Arts and Humanities, February 1, 1980.)

student loans above the interest rate on student loan bonds--high enough above to cover administrative costs and yet not high enough to create surpluses.

Under this option, the yield on student loans could be permanently set at the time of bond issuance at a rate 3.5 percentage points above the average interest rate of comparable tax-exempt bonds issued during the previous quarter. The total yield on bond-financed student loans would be the sum of the student's 7 percent interest payment and the federal government's tax-exempt special allowance payment. The tax-exempt special allowance formula would work in much the same way as the present formula. The special allowance rate would be set 3.5 percentage points below the value of the chosen index of tax-exempt interest rates.⁷ The special allowance would be set each quarter for all loans financed from bonds issued in that quarter, so the yield on any given loan would not change as long as it was held by the bond authority.

For example, if a state issued student loan bonds at an interest rate of 8 percent at a time when the chosen tax-exempt bond interest rate index was 8 percent, the state's borrowing costs would be 8 percent annually, and it would receive a yield of 11.5 percent annually on its student loans.⁸ Thus, it would always have precisely 3.5 percent to cover administrative expenses.⁹ If the state could borrow at a rate below the interest

-
7. When the student's 7 percent payment is added to this special allowance, it results in a total yield 3.5 percentage points above the tax-exempt rate [7 percent + (TER - 3.5 percent) = TER + 3.5 percent]. TER stands for the value of the chosen index of tax-exempt interest rates.
 8. The yield on the loans (11.5 percent) would be the sum of the student's 7 percent interest rate and the special allowance rate, which would be 4.5 percent. The special allowance (4.5 percent) is the value of the chosen index of tax-exempt bond interest rates (8 percent) minus 3.5 percent (8 percent - 3.5 percent = 4.5 percent).
 9. The state would have the difference between the yield on the loans (11.5 percent) and the interest rate on its bonds (8 percent) to cover administrative expenses. In this case, this difference works out to be 3.5 percent (3.5 percent = 11.5 percent - 8 percent).

rate index, it would have slightly more than 3.5 percent to cover administrative expenses; if it had to borrow at a rate above the interest rate index, it would have slightly less than 3.5 percent to cover administrative expenses. This option thus preserves the incentive for states to get the best interest rate possible on their bonds.¹⁰

Because loans financed from bonds issued at different times would carry different special allowances, this option would require the federal government to keep track of the loans from each bond issue in order to determine the appropriate special allowance. This would be a burdensome administrative task under certain circumstances. It would be difficult, for instance, to trace the proceeds of any one bond issue if a state issued several bond series and established a revolving fund into which it deposited payments on outstanding student loans and from which it made new student loans.

As mentioned above, the approach of fixing the special allowance at the time of bond issuance is geared to a bond market like the present one, in which states issue long-term, fixed interest rate bonds. There is no assurance that the bond market will continue to operate in this way, and establishing a fixed special allowance would discourage movement toward possibly more efficient floating rate tax-exempt bonds.

Recalculating Special Allowance for All Loans Each Quarter

If the tax-exempt special allowance were recalculated every quarter for all student loans held by tax-exempt bond authorities, the federal administrative burden would be kept relatively light.¹¹ Under this approach, the yield on bond-financed loans

-
10. By contrast, it does not preserve the incentive states now have to refrain from issuing bonds during periods of generally high interest rates. Since a federal policy goal may be to facilitate a stable source of funds for student loans, however, it may be desirable for states to be somewhat insulated from the rising and falling costs of borrowing to finance student loans.
 11. The special allowance is now recalculated every quarter for all outstanding student loans and it will probably continue to be recalculated every quarter for all outstanding privately financed loans.

would fluctuate from quarter to quarter at 3.5 percentage points above the prevailing average interest rate on tax-exempt bonds. The total yield on bond-financed loans would again be the sum of the student's 7 percent and the federal government's tax-exempt special allowance. Under this option, however, the tax-exempt formula would reset the special allowance rate every quarter for all outstanding loans held by bond authorities; the rate would be 3.5 percentage points below the prevailing value of the chosen index of tax-exempt interest rates.

If states continue to borrow for long terms at fixed interest rates, a fluctuating special allowance would give them good years and bad years, although the good years would not be as good as if the special allowance continued to be calculated using the present formula. The majority of a bond program's costs would be fixed at the interest rate prevailing when the bonds were issued, but revenues would fluctuate with market interest rates, sometimes rising above and sometimes falling below their initial level. If interest rates consistently rose, the authorities could reap unexpected profits, while if interest rates consistently fell, the authorities could suffer losses. As discussed earlier, the threat of insolvency is serious only when states have to borrow at rates exceeding 7 percent, the minimum guaranteed yield on their student loans. When interest rates on long-term, tax-exempt bonds were above 7 percent, states would have to find ways of reducing the threat of insolvency, just as they are now doing.

By issuing student loan bonds with floating interest rates, states could cope quite well with a special allowance that was recalculated quarterly. They could offer bondholders interest rates that would be recalculated each quarter at the value of the index of tax-exempt interest rates used in the special allowance formula. In this way, states could make their interest costs move in tandem with the special allowance (and hence with the yield on their loans), and they could guarantee themselves about 3.5 percent to cover administrative expenses.¹²

12. The yield on the loans in time period i would be $TER_i + 3.5$ percent. Under this floating rate technique, if states could make their interest costs in time period i equal to TER_i , the difference between the yield on the loans and the interest rate on the bonds would be a constant 3.5 percentage points.

Even if states continued to issue fixed interest rate bonds, they could protect themselves somewhat against insolvency under a fluctuating tax-exempt special allowance. They could structure their bonds with call options, which would allow states to pay off their bonds before maturity and then to refinance at the prevailing lower interest rate.¹³

Floor on Special Allowance. Even though states could probably protect themselves against losses under a fluctuating special allowance system, they could still run some risk. For instance, investors might consider floating interest rates to be less desirable than fixed rates and demand relatively high interest rates on floating rate bonds. If investors demanded interest rates in excess of the difference between the yield on student loans and the associated administrative expenses, states could not issue floating rate student loan bonds.

A floor on the special allowance would provide additional protection. If the floor were set at 2.5 percent, for instance, states and bond purchasers would be assured that the total return on student loans would never fall below 9.5 percent.¹⁴ Since the net interest cost of student loan bonds has not yet exceeded 9.5 percent, a special allowance floor of 2.5 percent would currently offer excellent protection against losses.

Federal Cost Reduction

The federal government would save between \$20 and \$30 million in fiscal year 1981 and between \$40 and \$120 million in fiscal year 1985 if it cut the special allowance on student loans held by tax-exempt bond authorities.¹⁵ Table 6 shows the savings that

-
13. This procedure is not costless. In addition to the costs of transacting the operation, a state that called its bonds would have to pay a premium to the bondholders for doing so.
 14. States would then be guaranteed a 2.5 percent special allowance in addition to the guaranteed 7 percent student's interest payment, bringing the guaranteed minimum yield up to 9.5 percent.
 15. All estimates in this section are based on the assumption that loans made from the proceeds of bonds issued before 1980 would continue to receive the present-law special allowance.

TABLE 6. FEDERAL SAVINGS FROM PROPOSALS TO CUT SPECIAL ALLOWANCE^a
(By fiscal year, in millions of dollars)

	1981	1982	1983	1984	1985	Cumulative Five-Year Total ^b
If annual bond issues remain 20 percent of annual loan originations						
Establish a separate, fixed special allowance based on an index of tax-exempt bond rates	19	32	35	40	45	171
Establish a separate, fluctuating special allowance based on an index of tax-exempt bond rates	23	38	47	54	60	223
Give states a special allowance equal to half the special allowance of commercial lenders, with no floor	23	38	44	49	53	208
Give states a special allowance equal to half the special allowance of commercial lenders, with a 2.5 percent floor	23	38	39	40	40	180

a. These estimates are based on CBO's projections of interest rates on 91-day Treasury bills: 8.9 percent for 1981; 8.7 percent for 1982; 8.0 percent for 1983; 7.7 percent for 1984; and 7.5 percent for 1985. If the actual interest rates exceed these projections, federal cost savings from these proposals will be greater than estimates in this table. The estimates

TABLE 6. (Continued)

	1981	1982	1983	1984	1985	Cumulative Five-Year Total ^b
If annual bond issues as a percent of annual loan originations increase 5 percentage points each year						
Establish a separate fixed special allowance based on an index of tax-exempt bond rates	27	49	59	75	94	303
Establish a separate fluctuating special allowance based on an index of tax-exempt bond rates	32	56	77	97	118	379
Give states a special allowance equal to half the special allowance of commercial lenders, with no floor	32	56	72	88	104	352
Give states a special allowance equal to half the special allowance of commercial lenders, with a 2.5 percent floor	32	56	64	71	78	302

are based on the assumption that student loans made from the proceeds of bonds issued before 1980 would continue to receive the commercial special allowance.

b. Details may not add to totals because of rounding.

would be achieved by four alternative changes in the special allowance. Because the magnitude of the budgetary impact depends in each case on the volume of student loan bonds that will be issued, the budgetary effects are shown for each option under both the lower- and upper-path bond volume projections made in Chapter II.

The difference in savings between a fixed and fluctuating special allowance for bond-financed loans is shown in Table 6. With a fixed allowance, the cumulative five-year savings would range between \$171 million and \$303 million while the fluctuating allowance savings would range between \$223 million and \$379 million. A fixed special allowance would save less than a fluctuating special allowance mainly because CBO projects that interest rates will consistently drop over the next five years.

For comparative purposes Table 6 also shows the similarity between the federal cost savings produced by a separate formula for the fluctuating tax-exempt special allowance and by a special allowance for tax-exempt bond authorities equal to half that for commercial lenders, with no floor. The similarity of the cost savings shows that the two proposals are nearly equivalent under CBO's interest rate projections. In addition Table 6 gives the cost of a 2.5 percent floor on the tax-exempt special allowance. By 1985 the 2.5 percent floor would erode about a quarter of the cost saving from a tax-exempt special allowance equal to half that for commercial lenders.¹⁶

IMPOSE USUAL ARBITRAGE RESTRICTIONS ON STUDENT LOAN BONDS

Instead of cutting the special allowance directly, as discussed in the previous section, the Congress could cut it indirectly by imposing on student loan bonds the same arbitrage restrictions that apply on other tax-exempt bonds. This would nearly eliminate the profitability of student loan bonds but would probably not cause a cutback in bond issuance.

16. These estimates are again highly dependent on CBO's interest rate projections. If interest rates are higher than projected, the cost of the 2.5 percent floor would be lower.

The usual arbitrage rules limit the difference between the yield on tax-exempt bonds and the yield on investments made with bond proceeds. These rules could be adjusted to accommodate a fluctuating student loan yield. The Internal Revenue Code could be amended, for example, to include in student loan yield calculations the gross yield on the loans less any portion of the special allowance that was rebated to the federal government. Under this approach, if the arbitrage restrictions prohibited a yield on student loans above a certain level, the bond issuer would be required each quarter to rebate as much of the special allowance as necessary to bring the yield on the loans down to that level. Suppose, for example, the arbitrage rules prohibited investments from a given bond issue from yielding more than 10 percent. As long as the special allowance remained below 3 percent, the total yield on student loans would be below 10 percent, and there would be no problem in complying with the arbitrage rules. If the special allowance were 5 percent in one quarter, however, the bond issuer would be able to keep 3 percent but would have to rebate 2 percent to the federal government.

The ordinary arbitrage rules would permit a difference between the yield on student loans and the yield on student loan bonds of 1.5 percentage points, or a higher amount if the bond issuer demonstrated that a higher amount was necessary. In order to get a higher amount, a state would have to get a private letter ruling from the Internal Revenue Service (IRS) in advance of bond issuance. If student loan bonds were subject to the ordinary arbitrage rules, all states wanting to issue them would probably have to apply for private letter rulings, because the costs of servicing student loans drives the costs of these programs above the 1.5 percent limit.

This approach would thus impose an administrative burden both on the IRS and on issuers of student loan bonds. If the Congress thought this case-by-case approach was too burdensome, it could change the arbitrage rules to allow these bonds a spread of more than 1.5 percentage points.

Under this option, states would rebate to the federal government part of the special allowance they received on their loans. The amount rebated would reduce federal expenditures by between \$20 and \$25 million in fiscal year 1981 and between \$45 and \$95 million in fiscal year 1985, as shown in Table 7.

TABLE 7. FEDERAL SAVINGS FROM PROPOSALS TO LIMIT PROFITS ON STUDENT LOAN BONDS^a (By fiscal year, in millions of dollars)

	1981	1982	1983	1984	1985	Cumulative Five-Year Total ^b
If annual bond issues remain 20 percent of annual loan originations						
Give states a special allowance equal to half the special allowance of commercial lenders, with no floor	23	38	44	49	53	208
Impose usual arbitrage rules on student loan bonds	19	32	35	40	45	171
Tax interest on student loan bonds	49	74	99	119	138	479
Withdraw federal insurance from loans financed with tax-exempt bonds	8	17	23	29	35	112

a. The estimates are based on CBO's projections of interest rates and are made on the assumption that no changes would affect bonds issued before 1980 or loans made from the proceeds of those bonds. The estimates are based also on the assumption that none of the options would cause a reduction in bond

TABLE 7. (Continued)

	1981	1982	1983	1984	1985	Cumulative Five-Year Total ^b
If annual bond issues as a percent of annual loan originations increase 5 percentage points each year						
Give states a special allowance equal to half the special allowance of commercial lenders, with no floor	32	56	72	88	104	352
Impose usual arbitrage rules on student loan bonds	27	49	59	75	94	303
Tax interest on student loan bonds	67	112	163	214	269	826
Withdraw federal insurance from loans financed with tax-exempt bonds	10	24	36	49	64	182

issuance. To the extent that reductions do occur, federal costs would be further reduced.

b. Details may not add to totals because of rounding.

TAX INTEREST ON STUDENT LOAN BONDS

As explained above, student loan bond issuers accumulate profits because they receive the same yield on student loans as commercial lenders do, even though their costs are lower since they can raise funds by issuing tax-exempt bonds at low interest rates. The previous sections outlined proposals that would remove the profits by cutting the yield on the loans. This section and the next present proposals that would remove the profits by increasing the cost of the bond programs to the states. The option discussed in this section would take away the subsidy states receive through the tax exemption of interest on their bonds.

If states were required to issue taxable, instead of tax-exempt, student loan bonds, they would face a potentially difficult transition period during which they would have to find a new market for their bonds and possibly restructure them as well. Even after the transition period, states would probably find it difficult to issue long-term, fixed interest rate, taxable bonds for student loans, for the same reasons that they now find it difficult to issue fixed interest rate, tax-exempt bonds for student loans. The interest rate investors would demand on fixed interest rate, taxable student loan bonds would be determined by the interest rate they could get on other taxable bonds. Currently that interest rate is about 14 percent. Because of the fluctuating and uncertain yield on student loans, bond authorities could not issue long-term bonds at 14 percent and have any assurance that they would be able to cover their costs over the fifteen years or so of their programs. Consequently, the fluctuating yield on the student loans would probably induce states to borrow short term or to issue floating rate taxable bonds, just as under the fluctuating special allowance option it would induce them to issue floating rate tax-exempt bonds.

In order for the floating rate taxable bond approach to work, states would have to be able to market bonds with interest rates that would be set close to the rate on 91-day Treasury bills, which serves as the basis for the special allowance payments. Because rates on long-term bonds have historically been above rates on short-term bonds and because student loan bonds are not as safe an investment as securities of the federal government, investors would probably demand that long-term taxable student loan bonds with floating interest rates offer rates higher than the rate on 91-day Treasury bills. Investors might accept a yield

on their bonds only a percentage point above the yield on 91-day Treasury bills, in which case states would probably be able to issue floating rate bonds for student loans and still cover their expenses. By putting a floor on the special allowance or by fixing the special allowance at the time of bond issuance, the federal government could offer bondholders and states added protection against losses.¹⁷

Depending on the difficulty states would have in issuing taxable student loan bonds, this option could cause some cutback in student loan availability. The severity of that cutback would depend on the degree to which student loan bond issues were curtailed and on the degree to which bonds increase loan availability.

As shown in Table 7, the federal government could save between \$50 and \$70 million in fiscal year 1981 and between \$140 and \$270 million in fiscal year 1985 by taxing interest on student loan bonds issued in 1980 and thereafter. These estimates are made on the assumption that there would be no cutback in the volume of bonds issued. Any cutback would, of course, reduce federal costs further.

If the Congress wanted to reduce profits of student loan bonds by removing one of their federal subsidies, cutting back the special allowance or imposing the usual arbitrage rules on the bonds would be more consistent with past Congressional actions than would taxing interest on the bonds. The Congress has generally sought to preserve tax exemption on bonds that serve public or at least partly public purposes. It would be a departure from this practice to deny tax exemption on student loan bonds. In general, though, the Congress has restricted the yield on assets purchased with the proceeds of tax-exempt bonds through the arbitrage rules, even for bonds that serve a wholly public purpose, so it would not be a departure for it to reduce the yield on student loans financed by tax-exempt bonds.

17. These proposals were discussed in the section on lowering the special allowance. Their pros and cons are explained there for tax-exempt student loan bonds; the same arguments apply for taxable student loan bonds.

The argument for eliminating tax exemption rather than reducing the special allowance is essentially a budget process argument: subsidies for special purposes should come out of the budget of the agency that has special expertise in the area and that handles other comparable programs, in this case the Department of Education. The costs and benefits of alternative ways of subsidizing higher education can be better evaluated, it is argued, if the necessary trade-offs can take place within one agency.

WITHDRAW FEDERAL INSURANCE FROM LOANS FINANCED WITH TAX-EXEMPT BONDS

Withdrawing the federal insurance from student loans held by tax-exempt bond authorities is yet another way of reducing the federal subsidy those authorities now receive. This option would reduce the surpluses authorities may now accumulate by raising the cost of the programs to the states.

Over the past decade, the Congress has repeatedly rejected the concept of coupling tax-exempt bonds with federal guarantees of the assets backing the bonds.¹⁸ Some people object to this combination on the grounds that it is "double-dipping."

In the absence of federal insurance on the loans backing student loan bonds, investors would demand much higher interest rates than they now receive on student loan bonds. At present these bonds are a relatively safe investment in that there is little risk that bondholders will not receive scheduled debt payments. If the federal insurance on the loans were removed, however, investors, knowing of the high default rate on student loans, would require much higher interest rates on the bonds to

18. Since 1970, the Congress has passed nineteen bills which preclude federal guarantees of tax-exempt obligations (Department of Treasury, "Statutes Which Preclude Federal Guarantees of Tax-Exempt Obligations," 1979). One of the more recent examples of this was legislation providing New York City with loan guarantees for taxable bonds (P.L. 95-339, August 8, 1978, 31 U.S.C. 1522).

compensate for the increased chance of bond default.¹⁹ This option would push up both the direct expenses of running a student loan bond program (because loan defaults would then be unreimbursed expenses) and the interest rates bond authorities would have to pay.

States would be better able to market bonds for uninsured student loans if the bonds were backed not only by the student loans but also by the states' full faith and credit. In other words, states would have to stand ready to make up any shortfall if payments on the student loans were insufficient to meet debt payments on the bonds. The state of Texas is the only state to have issued student loan bonds backed by the state's full faith and credit, but it would certainly be possible for other states to back their student loan bonds in this way.

From 1966 to 1971, Texas used the proceeds of tax-exempt bonds to make student loans that were not federally insured against default. It is difficult, however, to use the Texas experience to predict how easily other states could adapt to issuing bonds for uninsured student loans. Not only were Texas' student loans uninsured, but--because they were made outside of the federal guaranteed student loan program--they did not qualify for special allowance payments. The yield on the loans made by Texas between 1966 and 1971, therefore, has been only 6 or 7 percent--much lower than the yield on guaranteed student loans. Texas has had to rely on surpluses generated from student loan bonds issued since 1971 to cover the expenses of bonds it issued for uninsured student loans prior to 1971. If the Texas loans had qualified for the special allowance, however, the bonds for uninsured student loans might have been self-supporting.

If the Congress decided to withdraw the federal insurance from student loans held by tax-exempt bond authorities, it would have to decide whether the insurance should be reinstated when loans are sold to Sallie Mae. If the insurance were reinstated upon sale to Sallie Mae, most bond authorities would probably sell their loans to Sallie Mae just before the loan recipients entered the risky repayment period. The lack of federal insurance would

19. According to the Office of Education, the default rate on guaranteed student loans was about 10 percent in 1979.

not make student loans a bad risk prior to the repayment period, because the federal government is contractually obligated to pay all interest on the loans until students enter repayment. Since students cannot default on their loans until they are in repayment, bond authorities would in effect be insured against default if they could sell in-repayment loans to Sallie Mae. If federal insurance were reinstated upon sale to Sallie Mae, therefore, the Congress would not be eliminating the profitability of student loan bonds by withdrawing the insurance on loans held by bond authorities.²⁰ If the insurance were not reinstated upon sale to Sallie Mae, authorities would probably not be able to earn large profits from student loan bonds. Because Sallie Mae would almost certainly be reluctant to purchase uninsured loans from bond authorities, the difficulties states would have in marketing bonds for uninsured student loans would be compounded.

The states that would have the most difficulty marketing bonds for uninsured student loans would be those that currently do the best job lending to high-risk students who are unable to get loans from commercial banks. This is because states that lent to high-risk student would have higher default rates on their loans and correspondingly higher expenses than other states. Withdrawing federal insurance from student loans held by bond authorities could, therefore, encourage states to lend to low-risk students in an effort to keep program expenses to a minimum.

Table 7 shows that the reduction in federal costs from the withdrawal of federal insurance would be small--less than \$10 million in fiscal year 1981 and between \$35 million and \$65 million in fiscal year 1985--compared to that of other options. One reason for the small savings in this period is that there would be few defaults on newly made loans financed with bonds issued after 1980, because the majority of those loans would not enter repayment until after 1985. Even ten or fifteen years after the federal insurance was withdrawn, however, this option would still save the federal government much less than the other options listed in Table 7.

20. If bond authorities had no option but to hold student loans until they were paid off, the authorities would be able to accumulate some surpluses during the time the federal government was paying the entire yield on the loans, but they would have to draw on some of the accumulated surpluses to cover defaults on loans during the risky repayment periods.

SPECIFY PERMISSIBLE USES OF SURPLUS FUNDS

Coupled with or instead of reducing the federal subsidies for student loan bonds, the Congress could specify the purposes for which states could use surplus funds. Advocates of this approach most often suggest that Congress require surplus funds to be invested in more student loans.

Section 103(e) of the Internal Revenue Code states that residual income earned by private nonprofit student loan corporations must either be used to purchase additional student loans or be paid to the state or one of its political subdivisions.²¹ The Code imposes no restrictions on state use of surplus funds. This is the same rule that applies to the profits of other tax-exempt bond authorities, but the yield restrictions that apply to other tax-exempt bonds do not in general allow issuers to amass large surpluses.²²

When asked informally by CBO about use of surplus funds, many directors of student loan authorities replied that they did not expect any residual after their operating costs had been paid. In some cases, the directors indicated that surplus funds would be used to make additional student loans. Surplus funds accruing from the programs of local authorities in Texas, however, revert to the sponsoring localities, and in Wisconsin surplus funds help pay administrative costs of the state's entire higher education grant and loan department.

By requiring surplus funds to be invested in additional student loans, the Congress could address itself to the charge that the surpluses student loan bond programs now generate are equivalent to no-strings-attached federal grants to the states. This requirement alone would not necessarily prohibit states from earning general revenue from student loan bonds, however. States could sell the newly made loans to Sallie Mae, and then use the proceeds for general purposes. Even if states were required to

-
21. There are no restrictions on use of surpluses earned by other student loan bond issuers.
 22. The Mortgage Subsidy Bond Tax Act of 1979 (H.R. 5741) does, however, require investment gains from tax-exempt, single-family housing bonds to be rebated to home purchasers.

hold the student loans until they were paid off, in the interim they would receive a stream of revenue from the interest and special allowance on the loans, and ultimately, when the principal had been paid back, the states would have the proceeds for general state purposes. In order to be sure that surplus funds were not used for general state purposes, very comprehensive limits on the use of these funds would have to be established.

CONCLUSION

Except for the option of taking no action, each option discussed in this paper would restrict either the profitability of student loan bonds or the uses to which states could put profits. The profits could be reduced by cutting the yield on the student loans or by raising the costs of the programs. The yield on the student loans could be cut by reducing the special allowance on these loans (either directly or by imposing the usual arbitrage rules on the bonds), and the costs of the programs could be increased by taxing interest on the bonds or by withdrawing federal insurance from the student loans. Because each option would reduce one of the federal subsidies of student loan bonds, each would cut federal costs. Table 8 ranks the options in order of federal cost reduction. The other main consideration in weighing the options is the degree to which each would decrease student loan availability. The options also are ranked in Table 8 by this standard.

TABLE 8. RANKING OF OPTIONS BY THEIR EFFECTS ON FEDERAL COSTS AND AVAILABILITY OF STUDENT LOANS

Reduction in Federal Costs ^a (Big reduction to small reduction)	Reduction in Student Loan Availability (Small reduction to big reduction)
Taxing interest on student loan bonds	Taking no action
Cutting special allowance ^b	Requiring profits be used for additional student loans
Imposing usual arbitrage rules on student loan bonds	Removing federal insurance on student loans
Removing federal insurance on student loans	Imposing usual arbitrage rules on student loan bonds
Requiring profits be used for additional student loans	Cutting special allowance ^b
Taking no action	Taxing interest on student loan bonds

a. These cost reductions are based on the assumption that the proposals would cause no reduction in bond issuance. To the extent the options reduce bond volume, they would further cut federal cost. Considering these second-order effects would probably change the rankings in this column.

b. This special allowance option would make the special allowance on tax-exempt bond-financed loans half the special allowance of commercial lenders.

APPENDIX



APPENDIX. CASH FLOW ANALYSIS OF EXPECTED PROFITS FROM TWO
STUDENT LOAN BOND ISSUES

Tables A-1 and A-2 are consolidated versions of the cash flow tables in the official statements of the most recent student loan revenue bond issues of North Dakota and Wisconsin.¹ Reading across any row shows the expected revenues from the program in a given year, less the expected uses of the revenues for that year. The excess funds flow first into a program assets fund (one of several reserve accounts) and then into a surplus fund.

The total profit that each state expects to receive from its bond issue is the sum of all of the entries in the program assets and surplus fund columns. Since the promise of a dollar to be received in the future is less valuable than a dollar received today, a discount factor should be applied to future profits to indicate their present value. In this case, the appropriate discount rate is seven percent, since in the prospectuses the assumption is made that the states can invest surplus funds in accounts yielding 7 percent annually.²

-
1. These issues were chosen for analysis because the cash flow tables in their official statements are especially lucid and complete.
 2. Expected future profits should be discounted back from the time they are expected to be realized. In both North Dakota and Wisconsin, amounts on deposit in the program assets fund must be left on deposit until all bonds are retired, so those profits will be realized in the last year of each program and should be discounted back from then. (In the event of unanticipated cash flow problems, the authorities may have to withdraw funds from the program assets funds in order to make scheduled debt service payments.)

In both North Dakota and Wisconsin, money in the surplus funds, by contrast, may be withdrawn before the end of the programs, but may be used only for purposes specified in the bond resolutions. In North Dakota, although surplus funds may

Because these cash flow tables extend into future years, the future values of some of the entries in the tables are not known for certain today. The uncertain components include future administrative expenses, the timing of student loan debt repayment, and the level of future special allowances. CBO has accepted the bond issuers' assumptions about all uncertain entries except those for future special allowances.

There are two columns under the heading "Special Allowance" in Tables A-1 and A-2. The first column shows the level of revenues from special allowance payments as calculated under the assumptions made in the prospectuses; the second column shows the level of revenues from special allowance payments of 5 percent annually. Other things being equal, larger special allowance payments create larger surpluses, so there are two columns under the heading "Excess Funds," one column for each assumption about the level of future special allowance payments.

The present value of the surplus North Dakota expects to receive from its \$79 million bond issue is about \$5 million.

be withdrawn prior to 1996, interest from the surplus fund is included in the cash flow table under sources of revenue each year, and from the prospectus it does not appear that the state intends to use those funds before the end of the program. Therefore, profits in the North Dakota surplus fund are discounted from the last year of the program, 1996. Permissible uses of the surplus fund in North Dakota include financing the creation and operation of a state guarantee agency, making additional student loans, and calling bonds.

Wisconsin, on the other hand, intends to make annual withdrawals from its surplus account, which it calls the "Additional Purpose General Account." This money may be used for the expenses of any other higher education aid program run by the state, including a state student grant program, a loan servicing program for commercial lenders, and a program of grants to Wisconsin's dental schools. The Wisconsin prospectus also does not include interest from this account in sources of funds for the program, providing evidence that Wisconsin expects to make these annual withdrawals. Payments to the Additional Purpose General Account should, therefore, be discounted from the date they are made.

Using the CBO assumptions about future special allowances, North Dakota would get about \$8 million in present-value terms. The present value of Wisconsin's expected surplus from its \$40 million bond issue is about \$4 million; CBO's special allowance assumptions project a surplus of \$8 million in present-value terms.

TABLE A-1. NORTH DAKOTA CASH FLOW PROJECTIONS, 1979 SERIES A STUDENT LOAN REVENUE BONDS (\$78 MILLION BOND ISSUE), 1980-1996 (In thousands of dollars)

Year	Revenue Sources				(LESS)		Uses			(EQUALS) Excess Funds		Excess Funds Deposited to		
	Program Income ^a	Investment Income ^b	Special Allowance (1) ^c	(2) ^d	Total Sources of Funds (1) ^c	(2) ^d	Debt Service Payments	Program Operating Expenses	Total Uses of Funds	(1) ^c	(2) ^d	Program Assets Fund ^e	Surplus Fund ^f (1) ^c	(2) ^d
1980	5,176	5,085	1,084	1,936	11,345	12,197	10,043	644	10,687	658	1,510	218	440	1,292
1981	7,114	1,895	1,275	2,277	10,284	11,286	8,748	785	9,533	751	1,753	234	517	1,519
1982	8,755	1,175	1,546	2,761	11,476	12,691	9,618	908	10,526	950	2,165	248	702	1,917
1983	9,458	1,288	1,394	2,490	12,140	13,236	10,369	822	11,191	949	2,045	264	685	1,781
1984	9,917	1,371	1,215	2,170	12,503	13,458	10,841	720	11,561	942	1,897	286	656	1,611
1985	7,938	1,342	1,045	1,866	10,325	11,146	8,771	622	9,393	932	1,753	303	629	1,450
1986	7,458	1,388	898	1,604	9,744	10,450	8,271	537	8,808	936	1,642	325	611	1,317
1987	6,815	1,425	757	1,352	8,997	9,592	7,595	457	8,052	945	1,540	352	593	1,188
1988	5,950	1,451	627	1,120	8,028	8,521	6,693	382	7,075	953	1,446	373	580	1,073
1989	5,898	1,518	501	895	7,917	8,311	6,640	312	6,952	965	1,359	401	564	958
1990	4,437	1,487	388	693	6,312	6,617	5,109	246	5,355	957	1,262	0	957	1,262
1991	3,959	1,502	294	525	5,755	5,986	4,605	193	4,798	957	1,188	0	957	1,188
1992	3,481	1,520	208	371	5,209	5,372	4,111	143	4,254	955	1,118	0	955	1,118
1993	3,004	1,533	130	232	4,667	4,769	3,604	98	3,702	965	1,067	0	965	1,067
1994	2,048	1,527	66	118	3,641	3,693	2,606	62	2,668	973	1,025	0	973	1,025
1995	1,091	5,417	25	45	6,533	6,553	5,499	39	5,538	995	1,015	0	995	1,015
1996	410	5,104	5	9	5,519	5,523	4,457	28	4,485	1,034	1,038	0	1,034	1,038
TOTAL	92,909	36,028	11,458	20,464	140,395	149,401	117,580	6,998	124,578	15,817	24,823	3,004	12,813	21,819

SOURCE: Compiled by Congressional Budget Office from Preliminary Official Statement dated June 14, 1979 (State of North Dakota - \$78,530,000 1979 Series A Student Loan Revenue Bonds).

- a. Principal and interest (7 percent annually) payments made by students, plus claims payments made on defaulted loans.
- b. Interest earned on balances in reserve accounts, including the earnings on balances in the Surplus Fund, and including retirement of the reserve accounts in the last two years.
- c. Assumed federal special allowance payment rate of 2.8 percent annually (as reported in prospectus).
- d. Assumed federal special allowance payment rate of 5 percent annually (not reported in prospectus).
- e. The Program Assets Fund is to be used first to make up any deficiencies in the Bond Funds. Once the Program Assets Fund is fully funded, excess funds flow into the Surplus Fund.
- f. The Surplus Fund is used first to make up deficiencies in reserve funds and then for new student loans, market purchase, call of bonds, or to fund a guarantee agency's guarantee program. The additional excess funds created by the larger special allowance assumption are assumed to go directly into the Surplus Fund. As a simplification, the interest that would be earned on this addition to the Surplus Fund is not included in Investment Income.

TABLE A-2. WISCONSIN CASH FLOW PROJECTIONS, 1979 SERIES A STUDENT LOAN REVENUE BONDS (\$40 MILLION BOND ISSUE), 1980-1997 (In thousands of dollars)

Year	Revenue Sources				(LESS)		Uses			(EQUALS)		Excess Funds Deposited to		
	Program Income ^a	Investment Income ^b	Special Allowance (1) ^c	(2) ^d	Total Sources of Funds (1) ^c	(2) ^d	Debt Service Payments	Program Operating Expenses	Total Uses of Funds	Excess Funds (1) ^c	(2) ^d	Assets and Operating Reserve Funds ^e	Additional General Account (1) ^c	Purpose Account (2) ^d
1980	0	3,425	260	325	3,685	3,750	3,300	252	3,552	133	198	133	0	65
1981	910	1,804	455	650	3,169	3,364	2,578	245	2,823	346	541	346	0	195
1982	2,126	652	900	1,500	3,678	4,278	2,620	366	2,986	692	1,292	267	425	1,025
1983	2,599	489	912	1,629	4,000	4,717	2,914	389	3,303	697	1,414	157	540	1,257
1984	3,229	541	894	1,597	4,664	5,367	3,581	326	3,907	757	1,460	160	597	1,300
1985	3,835	587	856	1,529	5,278	5,951	4,218	357	4,575	703	1,376	175	528	1,201
1986	4,148	618	803	1,434	5,569	6,200	4,553	383	4,936	633	1,264	184	449	1,080
1987	4,298	639	740	1,322	5,677	6,259	4,710	303	5,013	664	1,246	199	465	1,047
1988	4,378	661	668	1,193	5,707	6,232	4,799	322	5,121	586	1,111	207	379	904
1989	4,412	681	589	1,052	5,682	6,145	4,837	333	5,170	512	975	223	289	752
1990	4,477	704	504	900	5,685	6,081	4,910	252	5,162	523	919	236	287	683
1991	4,481	724	411	734	5,616	5,939	4,919	246	5,165	451	774	252	199	522
1992	4,396	743	312	557	5,451	5,696	4,833	154	4,987	464	709	266	198	443
1993	4,004	742	213	380	4,959	5,126	4,423	157	4,580	379	546	284	95	262
1994	3,118	715	125	223	3,958	4,056	3,491	181	3,672	286	384	286	0	98
1995	2,144	684	59	105	2,887	2,933	2,468	155	2,623	264	310	264	0	46
1996	1,013	2,640	17	30	3,670	3,683	3,277	167	3,444	226	239	226	0	13
1997	132	2,432	2	4	2,566	2,568	2,180	170	2,350	216	218	216	0	2
TOTAL	53,700	19,481	8,720	15,164	81,901	88,345	68,611	4,758	73,369	8,532	14,976	4,081	4,451	10,895

SOURCE: Compiled by Congressional Budget Office from Preliminary Official Statement dated August 7, 1979 (State of Wisconsin - \$40,000,000 1979 Series A Student Loan Revenue Obligation Bonds).

- a. Principal and interest (7% annually) payments made by students, plus payments by the state education corporation on defaulted loans.
- b. Interest earned on balances in reserve accounts, including the capitalized interest on the Student Loan Trust Fund due in 1980.
- c. Assumed federal special allowance payment rate of 4 percent for 1980, 3.5 percent for 1981, 3 percent for 1982, and 2.8 percent each year thereafter (as reported in prospectus).
- d. Assumed federal special allowance payment rate of 5 percent each year (not reported in prospectus).
- e. The Program Assets Fund is to be used first to make up any deficiencies in certain Bond Funds. Once the Program Assets Fund is fully funded, excess funds will flow to the Additional Purpose General Account, which operates like a Surplus Fund, i.e., funds are to be used first to make up deficiencies in certain Bond Funds. Then excess funds can be used to purchase bonds, finance new loans, or finance any higher education program allowed by law. The Operating Reserve Fund is the depository for special allowance payments in excess of administration expenses; withdrawals from the fund may be made whenever special allowance payments are not sufficient to cover administration expenses.
- f. The Additional Purpose General Account is set up with excess funds to redeem or purchase bonds, to finance additional loans, or to fund any other higher education program which is authorized and appropriated by state law. The additional excess funds that are generated by the larger special allowance assumption are assumed to be deposited in the Additional Purpose General Account.

