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Credit Reform: Comparable Budget Costs for Cash and Credit

A CBO STUDY

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CBO STUDY ON CREDIT REFORM

This Congressional Budget Office report, *Credit Reform: Comparable Budget Costs for Cash and Credit*, describes the shortcomings of the current budgetary treatment of federal credit programs and recommends reform of the accounting system. Credit reform proposes to measure and to report the subsidy costs of credit more accurately and to make these costs the basis for budgeting.

Under existing practice, the budget reports net outlays--that is, cash payments minus receipts--for each credit account for a fiscal year. This budgetary treatment, however, does not reflect the long-term costs to taxpayers from federal credit transactions. Current year payments differ from multi-year costs because credit creates an obligation to pay later: for federal loans, the borrower promises to repay the government; for federally guaranteed private loans, government--on behalf of taxpayers--promises to pay if the borrower defaults.

The current reform proposals presented in this report have emerged from attempts over many years to improve the budgetary treatment of federal credit. A proposal was first advanced for reform of direct loans in 1967 by the President's Commission on Budget Concepts. It has since been expanded to include loan guarantees. Credit reform, in principle, has been endorsed by Presidents, including Reagan and Bush, the United States Senate, individual Members of Congress, the General Accounting Office, and the Congressional Budget Office. This CBO report describes the common and differing features of recent, as well as earlier, credit reform proposals.

If adopted, credit reform would make it possible to compare accurately the cost of cash and credit programs without changing any credit programs or the benefits that are provided. Credit reform would also facilitate cost comparisons of high-cost and low-cost federal loans and guarantees. Credit reform would succeed in recognizing subsidy costs when these costs can still be controlled through the appropriation process. The CBO report details a method for measuring the subsidy costs of credit.

In terms of the unified budget deficit, credit reform could be adopted in such a form as to have no effect. Other versions of credit reform would change the reported deficit. Credit reform is a pure accounting change, however. To the extent that credit reform affects the deficit, this effect would be merely to recognize costs that are already being incurred but not recognized.

The CBO report on credit reform is mandated by the Balanced Budget and Emergency Deficit Control Reaffirmation Act of 1987 and was prepared by the Budget Process Unit of CBO in consultation with the General Accounting Office and the House and Senate Budget Committees.

Questions about the study should be directed to the Budget Process Unit of CBO's Budget Analysis Division at 226-2835. The Office of Intergovernmental Relations is CBO's Congressional liaison office and can be reached at 226-2600. For additional copies of the report, please call the Publications Office at 226-2809.

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CREDIT REFORM: COMPARABLE BUDGET COSTS FOR CASH AND CREDIT

The Congress of the United States
Congressional Budget Office

NOTES

All years are fiscal years, unless otherwise noted.

Details in the text and tables of this report may not add to totals because of rounding.

The Balanced Budget and Emergency Deficit Control Act of 1985 (commonly known as Gramm-Rudman-Hollings) is also referred to in this volume more briefly as the Balanced Budget Act.

PREFACE

This report on the budgetary treatment of federal credit satisfies the requirements of Section 212 of the Balanced Budget and Emergency Deficit Control Reaffirmation Act of 1987 (P.L. 100-119). That statute directs the Congressional Budget Office (CBO), in consultation with the General Accounting Office (GAO), to "study and report to Congress on Federal direct loan and guarantee programs for fiscal year 1987 and fiscal year 1988." CBO was required to "provide information and recommendations on: (1) more accurately measuring the costs to the Federal Government of such credit programs, (2) comparing the cost of credit programs to other forms of Federal assistance, and (3) improving the allocation of resources between credit and other programs." CBO was also instructed to "discuss the considerations involved in establishing a system for using the information on the costs of credit programs as a part of the budget process."

Marvin Phaup of the Budget Process Unit prepared the study with the assistance of Kim Burke under the supervision of James L. Blum, Robert W. Hartman, and C.G. Nuckols, Jr. The data for the study were developed by analysts throughout the Budget Analysis Division. Many CBO staff members made important contributions, including Joseph Cordes, Alfred Fitt, Marilyn Flowers, Danila Girerd, Roy Meyers, David Montgomery, Fred Ribe, Robin Seiler, Robert Sunshine, Eric Toder, and Paul Van de Water.

GAO consultants for the report were James L. Kirkman, Christine Fishkin, and Randolph M. Lyon. Staff of the Office of Management and Budget contributed valuable reviews, namely Thomas J. Cuny, Robert W. Kilpatrick, and Kay McLennan of the Fiscal Analysis Branch; Richard Emery and Edward Johnson of the Budget Preparation Branch; Justine Rodriguez of the Office of Economic Policy; and Mark Weatherly of the Agriculture Branch. Staff of the House and Senate Budget Committees provided useful comments and suggestions. Barry Bosworth, William G. Gale, Herman Leonard, Elisabeth Rhyne, James H. Scott, and Thomas H. Stanton also contributed significantly to a review of the study.

Sheila Harty edited the report. Production assistance was provided by Robert Whitney. Kathryn Quattrone prepared the report for publication.

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CONTENTS

TABLES

FIGURES

BOXES

SUMMARY

For over 20 years, the budgetary treatment of direct federal loans and federally guaranteed private loans has been regarded as unsatisfactory--first by the President's Commission on Budget Concepts and subsequently by the Executive Branch, Members of the Congress, and the Comptroller General of the United States. The reason for this dissatisfaction is that credit contracts involving equal long-term costs to the federal government are not treated as equal in the federal budget. Only the amounts of cash actually paid or received in a current budget period are recorded in the annual budget.

Since a large part of a credit contract consists of amounts deferred for future payments, these amounts are not part of the current budget. Such failure to recognize the deferred payments of a credit contract will overstate the costs of direct loans and understate the costs of guaranteed loans. Thus, not surprisingly, numerous credit reform proposals have been put forward over the years to correct this failure and to reflect true budget costs.

DEFICIENCIES OF CURRENT PRACTICE

The accounting system used by the federal government for budgeting is well suited to measuring the cost of most cash transactions. The system is, in accounting terminology, on a cash basis. In other words, the budget cost of a transaction is cash paid out or cash received in a particular fiscal year. For those rare credit transactions where all payments and repayments are made within the same fiscal year in which the obligation is incurred, the amount recorded in the budget is an accurate measure of cost. For credit transactions that do not involve any payments in the same fiscal year, however, no effect on outlays or the deficit is recognized. Transactions are not recorded until cash changes hands. For a direct loan, the credit contract with the government is an exchange of cash now for a promise of cash later, often much later. For a guaranteed loan, the government promises to pay cash later if the borrower defaults.

Moreover, under a cash-basis system, direct loans receive a different budgetary treatment than guaranteed loans, even if the default, foreclosure, legal, and administrative costs are the same. A direct loan is recorded in the federal budget as a cash outlay in full when it is disbursed. In contrast, a guaranteed loan disbursed by a private lender is recorded in the federal budget only when cash outlays are made upon default. In fact, if the federal government collects a fee when the guarantee is issued, a collection will be recorded instead of an outlay--even though future outlays may then be committed.

The difference in the budgetary treatment between direct loans and guaranteed loans creates a bias in favor of guarantees because their costs are deferred. When the costs are known (after default) and finally recorded in the budget, they are well past the government's control. Consequently, loan guarantees have been growing much faster than direct loans in recent years. The total cost to the government of new guaranteed loans is now many times more than the cost of new direct loans.

The current budgetary treatment of credit distorts more than the choice between direct loans and guaranteed loans. It also distorts cost comparisons between federal credit and noncredit programs. For example, the cash-basis cost of a direct loan in a fiscal year is equal to the cash-basis cost of a grant. The long-term cost of a direct loan, however, may be much less than a grant because of loan repayments.

In short, without timely and accurate cost information on federal credit programs, proper budgetary decisions on the use of limited financial resources cannot be made. As a result, higher cost alternatives may be mistakenly chosen or more resources may be committed than intended.

CREDIT REFORM PROPOSALS

What is missing in the government's current accounting system is budget parity: a consistent and comparable basis of measuring the costs of cash and credit transactions. In 1967, the President's Commission on Budget Concepts proposed as a solution that, when accounting for direct loans, the budget ought to measure the total cost of extending credit rather than the cash paid when the loan is disbursed.

The essence of credit reform proposals is to separate the estimated subsidy costs from the nonsubsidized cash flows of credit transactions and to focus attention on the former for budgeting and analysis. This separation would be done by changing the accounting for credit programs. No changes would be made to the design of credit programs. Agencies would continue to operate credit programs as they do now, and no change would be apparent to those receiving federal credit assistance.

Subsidy Costs

The government's loss on the exchange of cash for a promise to pay is the subsidy cost to the government. In a credit transaction, the government gives assets worth more than what is paid back. This subsidy is the cost to the government that is relevant for budgeting. By focusing on subsidy costs of credit, the President's Commission on Budget Concepts hoped to create a unit of measure that would treat federal credit and cash transactions equally. The commission recommended that subsidy costs be calculated for loans, recorded in a new budget account, and then used as the basis for budget decisions. Any cash flows for credit activity that did not represent subsidy costs would be recorded in a separate account. The commission's recommendations were intended for direct loans, not guaranteed loans. Nevertheless, the solution recommended is sound for both kinds of loans.

The commission's recommended treatment of direct loans was not carried out, however, because of an inability at that time to calculate subsidy costs. Since then, major advances have been made in financial theory, in the development of new financial instruments, as well as in the use of computers and specialized software by government analysts. The Office of Management and Budget (OMB), for example, has developed a procedure for calculating subsidy costs that can be applied to various credit programs. OMB has, in fact, required federal agencies to measure the subsidy element of their credit programs since 1984.

Both the credit reform proposal passed by the Senate in 1987 and the Reagan Administration's credit reform proposal, revised in 1988 and endorsed by the Bush Administration in 1989, incorporate the strengths of the commission's recommendations. They also improve on the original. Significantly, each proposal uses subsidy costs as the budgetary basis for both direct loans and guaranteed loans. In other words, what would be measured and recorded in the budget when a credit contract is made would be its subsidy costs, not merely the cash paid or received by the government when the loan is disbursed.

Subsidy costs would reflect the full cost to the government of providing credit assistance. These costs would include loan defaults, delayed repayments, below market interest rates, and administrative expenses. Changes in the terms of loans, such as forgiving loans or waiving penalties, would also incur subsidy costs. Fees and premiums paid by borrowers for credit assistance would reduce the subsidy costs.

Control of these subsidy costs would require the Congress to make appropriations to the federal agencies administering credit programs. In their annual requests for appropriations, agencies would need to include estimates of subsidy costs for new loans and guarantees as well as adjustments to the terms of existing loans and guarantees.

To avoid bias and inconsistency in measuring the subsidy, both the Senate-passed and the Administration's revised proposals would designate the Treasury Department as a central authority to prescribe methods for calculating the subsidy costs of credit. The Treasury would either monitor these calculations or prepare the estimates itself. Nevertheless, estimates of subsidy costs are inherently uncertain and subject to error. Credit assistance involves transactions that extend over many years. Their exact costs cannot be known in advance. Errors in these calculations should diminish, however, as agencies gain more experience and better information. In the meanwhile, using subsidy costs rather than cash flows as the basis of budgeting for credit means, as one observer noted, that the budget "will be approximately right rather than precisely wrong."

Treatment of Accounts

A series of intragovernmental transactions and accounting entries would shift the emphasis in budgeting from cash flows to subsidy costs. New budget accounts would be created for each federal agency that administers credit programs. Separate accounts would distinguish the subsidy costs of new credit activity from the nonsubsidized portion of these loans and guarantees. The cash flows associated with loans and guarantees existing before credit reform would be recorded in a third account. These new budget accounts under credit reform would be:

- o Subsidy Accounts (for subsidy costs);

- o Financing Accounts (revolving funds for nonsubsidized cash flows); and

- o Liquidating Accounts (for loans and guarantees existing before credit reform).

Funds appropriated to cover the subsidy costs of direct loans would be recorded in the new subsidy account for each loan program. The nonsubsidized portion of direct loans would be borrowed from the Treasury and deposited in the new financing accounts. When the loans are to be disbursed, the subsidy costs would be paid to a financing account as well. The loans would then be disbursed to the borrower from a financing account. The borrower, in turn, would send all fees, interest, and repayments to the federal agency administering the credit; they would also be deposited in a financing account. The agency would then draw on the financing account to pay interest and principal on the loans from the Treasury.

Guaranteed loans would receive similar treatment. Funds appropriated to cover the subsidy costs of guaranteed loans would be recorded in a new subsidy account for each guarantee program. When a private lender pays out federally guaranteed loans, the subsidy costs for the guarantee would be transferred to a financing account. Any fees paid for the guarantee would also be recorded in these financing accounts and would offset some of the costs. The balance in the financing account of a guaranteed loan program would be invested in interest-bearing Treasury accounts until needed to pay default claims.

The subsidy costs of all new direct loans and guaranteed loans would be charged to the credit program, its administering agency, and the relevant program function in the federal budget. Under the Senate-passed proposal and the Reagan Administration's revised credit reform proposal, all nonsubsidized cash flows in the financing accounts would be reported in a nonprogram function of the budget that would be newly created for credit activity.

The way credit programs are handled by the Congress would also be changed. The new subsidy accounts, but not the financing accounts, would be allocated to committees under the budget resolution. Under the Senate-passed proposal, the financing accounts would be excluded from some deficit calculations under the Congressional Budget Act, which would further enhance the importance of the subsidy costs for credit programs. Excluding the nonsubsidized cash flows of credit programs would also provide a more useful deficit calculation for measuring the effect of the budget on the economy.

Because the subsidy, financing, and liquidating accounts would be included in federal budget outlays, neither the Senate-passed proposal nor the Administration's revised proposal would change the budget deficit as it is currently measured. However, as the accuracy of calculating subsidy costs increases and as old loans are closed out, the financing accounts could be treated in the budget so that only the subsidy costs of new credit assistance would be included in budget outlays and in the deficit. If such a budgetary treatment were adopted immediately, its effect would be to increase the deficit by $4 billion to $7 billion per year.

CBO RECOMMENDATIONS

Measuring the subsidy costs to the government for credit assistance, which was recommended 20 years ago by the President's Commission on Budget Concepts, now appears technically feasible. This budgetary treatment of credit would more accurately depict the costs of federal credit programs, allow comparisons between credit and noncredit programs and between loans and guarantees, and thus improve the allocation of budgetary resources. Credit reform would achieve the goal of budget parity through a consistent and integrated unit of cost measurement. The Congressional Budget Office's (CBO's) recommendations are as follows:

1. The Congress should adopt subsidy costs as the budgetary measure for federal credit programs.

2. Subsidy costs should be subject to annual appropriations.

3. The nonsubsidized portion of credit assistance should be separated from subsidy costs and recorded in new financing accounts.

4. When subsidy costs can be measured with reasonable accuracy, these financing accounts should be treated as a means of financing the deficit and only subsidy costs should be counted in total budget outlays.

5. An Executive Branch agency should be assigned responsibility for monitoring or preparing the calculation of subsidy costs and should also be subject to external review.

6. The schedule for carrying out credit reform should allow time for the new agency to calculate subsidy costs and for the Congress to prepare new budgetary procedures.

VIEWS OF THE GENERAL ACCOUNTING OFFICE

The General Accounting Office (GAO) has advocated credit reform for many years and supports all of CBO's recommendations, except one--namely, the fourth recommendation that the financing accounts be treated as a means of financing when subsidy costs can be measured with reasonable accuracy. GAO would prefer to carry out credit reform through its proposal for a capital budget. Under that plan, the financing accounts would be reported in a new category of the budget--the capital account--rather than in the existing means of financing.

CHAPTER I

INTRODUCTION

As the country's largest financial intermediary, the federal government intervenes in credit markets to provide assistance to certain borrowers and to increase market efficiency. This intervention is extensive, and some types of federal credit assistance are growing rapidly. At the end of fiscal year 1988, the government had $222 billion outstanding in direct federal loans and $550 billion outstanding in federally guaranteed private loans. In addition, government-sponsored enterprises (GSEs)--which are privately owned but federally chartered--had $666 billion outstanding in loans. During 1988, federal agencies and GSEs loaned or guaranteed 15 percent of all funds raised in U.S. capital markets.[1]

Rapid growth in federal credit programs is troubling because the current budget process operates without timely or accurate recognition of their costs. Most federal credit programs provide subsidies, such as low interest rates on direct loans or the absence of fees on guaranteed loans. The exact costs of credit subsidies, including uncertain future losses from loan defaults, are difficult to determine at best. The current measure of cost, however, fails utterly. The absence in the budget of a satisfactory measure of cost for credit activity makes it impossible to use budget data to compare costs accurately among credit programs. It also prevents cost comparisons between credit and noncredit programs. This situation distorts the allocation of budgetary resources.

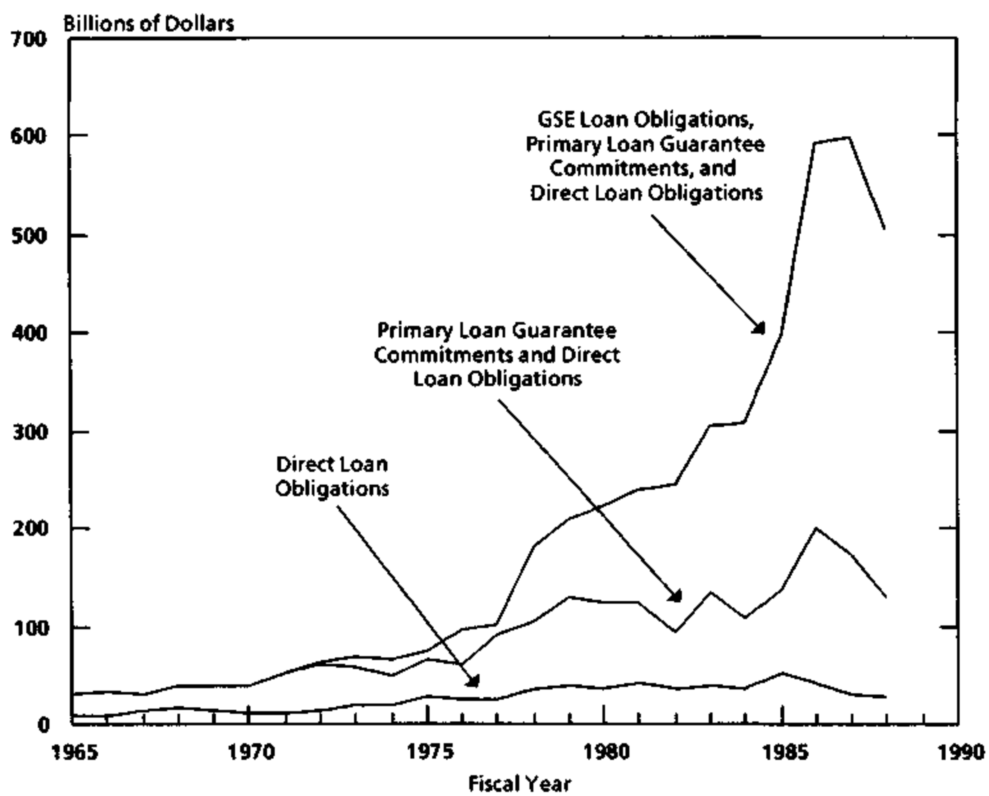
How the federal government can achieve budget parity--that is, comparable budget costs for cash and credit programs--is the focus of this Congressional Budget Office (CBO) report. The report analyzes various proposals for reforming the budgetary treatment of federal credit activity, including an initiative passed by the Senate in 1987 and a proposal advanced by the Reagan Administration in 1988 and then endorsed by the Bush Administration in 1989.

1. Office of Management and Budget, *Special Analyses, Budget of the United States Government, Fiscal Year 1990*, p. F-92.

THREE TYPES OF CREDIT

Federal credit programs are intended to meet various social and economic objectives. By providing more favorable terms than are available from private lenders, federal credit programs assist borrowers, including some who could not obtain funds otherwise. By creating secondary or resale markets for loans, these federal programs also help increase efficiency in credit markets.

Figure 1.
Growth of Federal Credit Activity, 1965-1988



SOURCE: Congressional Budget Office based on information from the Office of Management and Budget.

NOTE: Loan obligations of government-sponsored enterprises (GSEs) are distinguished from direct loans after 1972.

Federal credit programs consist of three types: direct loans, federally guaranteed loans from private lenders, and loans to and by GSEs. Government involvement varies among these three types--from direct disbursement (direct loans), to the assumption of default risk (guaranteed loans), to the guarantee of all debts (GSE loans). The unequal budgetary treatment of federal credit has contributed to disparities in the growth of these three types of credit and to differences in the growth of credit and direct federal spending.

The percentage rates of growth among all types of federal credit can be compared with the percentage growth in total federal outlays. For the last 15 years, GSE lending has grown the fastest, while direct lending has grown the least. From the three-year period before implementation of the Congressional Budget Act (1974-1976) to the most recent three-year period (1986-1988), federal outlays tripled. By comparison, the increase in annual direct loan obligations was less than half. Guarantee commitments have nearly quadrupled, and GSE loan obligations have increased more than tenfold. The growth of the three types of federal credit is depicted in Figure 1 on page 2.

Direct Federal Loans

Direct loans are made by federal agencies to borrowers. The loans are intended for many purposes, such as to purchase or operate farms, to start or expand small businesses, or to purchase or renovate housing. Borrowers are obligated by contract to repay their loans.

In 1988, the government obligated $27.2 billion in direct loans. Of this amount, $17.4 billion was for agriculture (including $13.3 billion for price support loans), $5.8 billion for domestic and export businesses, and $3.8 billion for housing. The cumulative total of direct federal loans outstanding at the end of 1988 was $222.0 billion.

Federally Guaranteed Private Loans

Federal agencies can also issue guarantees that obligate the government to repay a private lender all or part of a loan if the borrower defaults. Most federal guarantees are issued to support the creditworthiness of home mortgages. Guarantees of individual loans are called "primary guarantees." They are distinguished from "secondary guarantees" of securities, which represent an ownership interest in a pool of federally guaranteed loans. Such guarantees are referred to as secondary because they back an obligation already partly guaranteed. Most federal secondary guarantees are issued by the Government National Mortgage Association (GNMA or Ginnie Mae). Its guarantees back securities for mortgages that have a primary guarantee from the Department of Veterans Affairs (VA), the Farmers Home Administration (FmHA), or the Federal Housing Administration (FHA).

In 1988, the government committed itself to guarantee all or part of individual loans amounting to $100.7 billion. Of these primary guarantees, $67.8 billion were for home mortgages; $14.3 billion for business loans; $12.0 billion for education (largely guaranteed student loans); and $6.4 billion for agriculture. In addition, Ginnie Mae issued secondary guarantees of $53.1 billion. The total volume of outstanding loans with primary federal guarantees at the end of 1988 was $550.0 billion. Ginnie Mae had an additional $333.4 billion in secondary guarantees outstanding.

Loans to and by Government-Sponsored Enterprises

The federal government has also chartered six financial intermediaries to channel loans to preferred uses--agriculture, housing, and education. These GSEs typically borrow in capital markets and then loan to, or purchase loans from, retail credit outlets, such as banks and thrifts. Five GSEs are currently operating: the member institutions of the Farm Credit System (FCS), the Federal Home Loan Banks (FHLBs), the Federal Home Loan Mortgage Corporation (FHLMC or Freddie Mac), the Federal National Mortgage Association (FNMA or Fannie Mae), and the Student Loan Marketing Association (SLMA or Sallie Mae). A sixth, the Federal Agricultural Mortgage Corporation (FAMC or Farmer Mac), was created by the Agricultural Credit Act of 1987 and will soon be in operation.

In 1988, GSEs obligated $378.1 billion. Of this, $175.6 billion was obligated by the FHLBs; $80.6 billion by the FCS; $76.4 billion by Fannie Mae; $39.6 billion by Freddie Mac; and $5.9 billion by Sallie Mae. Outstanding loans from GSEs at the end of 1988 totaled $666.1

billion. GSEs are not included in the federal budget because they are privately owned.

SHORTCOMINGS OF CURRENT ACCOUNTING FOR CREDIT

The federal budget is a statement of all cash payments or receipts within a specified fiscal year made or received by federal agencies. Three organizing principles govern federal budgetary accounting: cash basis, annual, and unified. The cash basis of the budget means that transactions are recorded when cash is paid or received by the federal government. The annual or 12-month period of the budget is October 1 through September 30. The unified aspect of the budget includes--with some exceptions--outlays, receipts, and budget authority for all federal agencies.

Cash Basis and Annual. The principal shortcoming of the budget's cash-basis and annual accounting system for credit is that it cannot recognize an essential feature of every credit transaction: the promise to pay cash later. Under cash-basis accounting, when a direct loan by a federal agency is disbursed to a borrower, the full amount is recorded as an outlay--as if it were a grant. This treatment overstates the loan's true cost to the government because it ignores expected repayments. In reverse, repayments are recorded as offsetting collections when received. As a consequence, if repayments from old loans equal new disbursements, the budget would show zero outlays for loans in a fiscal year in which a large volume of lending actually occurred.

Similarly, guaranteed loans have no positive outlays until a default occurs. The substantial delay between commitment of funds and their outlay results in an understatement of the costs of new guaranteed loans in any current fiscal year. Treating guaranteed loans on a cash basis also requires that any fees received for new guarantees would show as collections in the current year budget accounts, where they may offset outlays for old guarantees.

Cash-basis budgeting results in treating differently some credit transactions that are equivalent in cost. A guaranteed loan can cost the government as much in the long term as a direct loan. Yet, none of the potential loss on the guarantee is recognized in budget outlays when the obligation is incurred. The loss is recorded when the default occurs. In contrast, 100 percent of the direct loan is recognized in budget outlays when the loan is disbursed; repayments are recognized in future years as collections or "negative outlays." The costs of direct loans are never explicitly recognized.

A cash-basis approach to the budget also results in treating equally some credit transactions that differ in cost. In cash-basis accounting, all loans of the same size have the same cost or budget outlay in the disbursement period. No distinction is made between high-default and low-default loans. Nor is a distinction made between loans given on deeply subsidized terms and loans given on terms of near-market interest rates.

Budget Deficit. A cash-basis treatment of credit encourages spurious attempts to reduce the budget deficit by substituting guarantees for direct loans. This substitution does not improve the government's long-term financial position. The President's 1989 and 1990 budgets, for example, proposed to replace certain rural and agricultural loan programs operated by the FmHA with federal guarantees of privately originated loans. Under the current accounting system, this change would have the effect of reducing outlays and thus the budget deficit by about $800 million. Nevertheless, program benefits and long-term costs would be largely unaffected.

Short-term deficit reductions can also be obtained by selling old loans and by refinancing existing loans with federally guaranteed private borrowing. For example, proceeds from loan sales reduce the deficit because they are recorded as offsetting collections, which represent accelerated loan repayments. Similarly, refinancing direct loans with federally guaranteed private loans reduces the deficit because it results in prepayment of existing loans and no current outlays for the guarantees. The Congress has recognized that such transactions are not true deficit reductions. Most loan asset sales and prepayments are excluded from the deficit calculations for sequestration purposes under the Balanced Budget Act (commonly known as the Gramm-Rudman-Hollings Act). Nevertheless, such transactions do count as deficit reduction for purposes of Congressional budget resolutions and the President's budget.

Budget Authority. The federal budget has an additional basis of accounting through budget authority. Budget authority is lawful permission to obligate federal financial resources. Therefore, budget authority is a useful instrument for budget control, since most programs are subject to annual appropriations that confer budget authority. However, budget authority is virtually useless in this capacity for credit programs.

Most federal loans and guarantees are financed through revolving funds. These funds are financing accounts where collections may be used for outlays in place of appropriations. Collections can include interest on loans, the repayment of principal, and loan sale proceeds. In addition, revolving funds may have indefinite authority to finance their activities by borrowing from the Treasury. The Congressional Budget Act of 1974 also specifically excludes guaranteed loans from budget authority.

Program Data. Credit data in the federal budget are also frequently inaccurate and unavailable at the program level. The General Accounting Office (GAO) has extensively documented the poor quality of data available from the federal government's financial accounting system.[2] The data at the program level are often unavailable because most credit programs are financed from multiprogram accounts where funds are commingled.

Cost Measure. What is required for budgeting is a comprehensive, long-term measure of cost. Credit reform is intended to produce such a measure--the subsidy costs to the government of providing credit assistance. Subsidy costs are the loss to the government from loan defaults, delayed repayments, and below market interest rates, as well as the administrative overhead in providing credit over the entire life of the credit contract.

The major advantage of incorporating subsidy costs in the federal budget is that the long-term costs of credit assistance would be recognized at the point of control. A credit contract irrevocably obligates financial resources of the federal government over the life of the loan or guarantee. Anticipated costs need to be converted into current cash equivalents when the loan is obligated or the guarantee is committed. In short, cost recognition at the point of control is the crux of credit reform.

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2. General Accounting Office, *Managing the Cost of Government: Building an Effective Financial Management Structure*, AFMD- 85-35 (February 1985); and *Financial Management: Examples of Weaknesses*, AFMD-88-35BR (February 1988).

TABLE 1. FEDERAL DIRECT LOANS OUTSTANDING FOR ACCOUNTS INCLUDED IN CREDIT REFORM, AT THE END OF FISCAL YEARS 1987-1988 (In thousands of dollars)

Agency--Account	1987	1988
Department of Agriculture		
Agricultural Credit Insurance Fund	27,599,712	25,481,166
FmHA--Self-Help Housing Land Development Fund	736	863
Public Law 480 (Foreign Agricultural Sales)	11,219,302	11,632,252
Rural Development Insurance Fund	6,430,758	5,141,335
Rural Development Loan Fund	33,451	32,139
Rural Electrification & Telephone Revolving Fund[a]	34,322,648	34,353,993
Rural Housing Insurance Fund	26,510,084	27,097,524
Rural Telephone Bank	1,446,602	1,413,410
Department of Education		
College Housing & Academic Facilities Loans	1,193,587	4,225
Environmental Protection Agency		
Abatement, Control, and Compliance	27,475	34,055
Funds Appropriated to the President		
AID--Private Sector Revolving Fund	17,143	22,673
Foreign Military Sales Financing	24,934,897	22,033,779
Overseas Private Investment Corporation	49,062	51,380
Department of Health and Human Services		
Health Resources and Services Direct Loans	440,400	513,605
Department of Housing and Urban Development		
Flexible Subsidy Fund	0	68,333
Housing for the Elderly or Handicapped	6,565,844	6,863,422
Nonprofit Sponsor Assistance	1,603	1,808
Rehabilitation Loan Fund	658,078	636,948

(Continued)

TABLE 1. (Continued)

Agency--Account	1987	1988
Department of the Interior		
BIA--Revolving Fund for Loans	108,372	101,058
Bureau of Reclamation Loan Program	519,693	59,602
Other Independent Agencies		
Export-Import Bank of the United States	11,201,614	9,905,279
Tennessee Valley Authority Fund (Power Program)	266,576	260,494
Small Business Administration		
Business Loan and Investment Fund	4,514,055	4,148,534
Disaster Loan Fund	3,719,271	3,260,085
Department of State		
Emergencies in the Diplomatic and Consular Service	1,963	2,151
Department of Transportation		
Federal Ship Financing Fund	1,611,621	1,294,447
Department of Veterans Affairs		
Direct Loan Revolving Fund	97,990	76,445
Education Loan Fund	39,863	18,424
Loan Guaranty Revolving Fund	1,204,002	1,287,913
Vocational Rehabilitation Revolving Fund	308	450
Total	164,736,710	155,797,792

SOURCE: Congressional Budget Office based on information from the Office of Management and Budget.

NOTE: Excludes forgiven loans of foreign military sales and commodity loans of the Commodity Credit Corporation.

a. Loans that are guaranteed by the Rural Electrification Administration and disbursed by the Federal Financing Bank are included.

TABLE 2. FEDERALLY GUARANTEED LOANS OUTSTANDING FOR ACCOUNTS INCLUDED IN CREDIT REFORM, AT THE END OF FISCAL YEARS 1987-1988 (In thousands of dollars)

Agency--Account	1987	1988
Department of Agriculture		
Agricultural Credit Insurance Fund	2,488,240	3,506,669
CCC Export Guarantee Programs	3,732,055	4,918,973
Rural Development Insurance Fund	1,918,296	1,687,778
Department of Commerce		
Economic Development Assistance Programs	95,239	123,276
NOAA--Federal Ship Financing Fund, Fishing Vessels	250,298	315,523
Department of Education		
Guaranteed Student Loans	40,066,775	47,610,000
Funds Appropriated to the President		
AID--Housing and Other Credit Guaranty Programs	1,328,052	1,409,216
Overseas Private Investment Corporation	307,924	365,679
Department of Health and Human Services		
Health Professions Graduate Student Loan Insurance Fund	1,304,653	1,850,000
Department of Housing and Urban Development		
Community Development Grants (Section 108)	53,885	138,945
Federal Housing Administration Fund	275,417,057	300,758,064
Guarantees of Mortgage-Backed Securities (GNMA)	308,996,739	333,444,575
Department of the Interior		
Indian Loan Guarantee and Insurance Fund	168,871	169,939
Other Independent Agencies		
Export-Import Bank of the United States	5,079,076	5,703,457
Tennessee Valley Authority Fund (Power Program)	1,150	1,400
Small Business Administration		
Business Loan and Investment Fund	9,013,810	9,710,532
Department of Veterans Affairs		
Loan Guaranty Revolving Fund	146,319,465	149,705,130
Total	796,541,585	861,419,156

SOURCE: Congressional Budget Office based on information from the Office of Management and Budget.

FOCUS OF THIS REPORT

Section 212 of the Balanced Budget and Emergency Deficit Control Reaffirmation Act of 1987, which mandates this report, specifically required that it focus on "Federal direct loan and guarantee programs for fiscal year 1987 and fiscal year 1988." The discussion of the loan activity of government-sponsored enterprises is limited, therefore, to a brief overview in Appendix A.

Other federal programs traditionally considered to be "credit" have been excluded from the analysis because CBO believes they are erroneously classified. An important example is the price support loan program of the Commodity Credit Corporation (CCC). Under this program, farmers receive advances from the government equal to the support price of their crop. If the market price of the crop is less than the support price, the borrower may forfeit the crop, which was posted as collateral, in full satisfaction of the "loan." The National Income and Product Accounts (NIPA) treat most disbursements under this program as commodity purchases rather than as loans. This treatment is followed here, even though CCC price support loans have accounted for half of the government's direct loan obligations in recent years. Other credit programs excluded from this report are:

- Direct loans issued to guaranteed borrowers in default;
- Loans to prevent default by a guaranteed borrower; and
- Programs for which no new loan obligations or guarantee commitments are projected in the CBO baseline after 1989.

For purposes of this report, federal programs that would be subject to credit reform consist of those loans and guarantees financed from the accounts listed in Tables 1 and 2 on pages 8-10. The accounts listed include those in the federal government's current credit budget and exclude those that CBO believes are not true credit programs. Because a single budget account may finance several programs, the number of separate credit programs covered in this report is about twice the number of accounts listed. New loan obligations and guarantee commitments for loan accounts included in this study are shown in Tables 3 and 4. The growth in new credit activity for programs that would be

TABLE 3. NEW FEDERAL DIRECT LOAN OBLIGATIONS, BY ACCOUNT, FISCAL YEARS 1987-1988
(In thousands of dollars)

Agency--Account	1987	1988
Department of Agriculture		
Agricultural Credit Insurance Fund	1,493,241	1,168,172
FmHA--Self-Help Housing Land Development Fund	500	0
Public Law 480 (Foreign Agricultural Sales)	803,662	837,358
Rural Development Insurance Fund	426,080	426,080
Rural Development Loan Fund	350	13,990
Rural Electrification & Telephone Revolving Fund	1,032,887	1,590,133
Rural Housing Insurance Fund	1,715,558	2,319,049
Rural Telephone Bank	185,115	80,139
Department of Education		
College Housing & Academic Facilities Loans	60,000	62,231
Environmental Protection Agency		
Abatement, Control, and Compliance	28,325	15,400
Funds Appropriated to the President		
AID--Private Sector Revolving Fund	15,150	9,486
Foreign Military Sales Financing	953,441	763,000
Overseas Private Investment Corporation	23,000	23,000
Department of Health and Human Services		
Health Resources and Services Direct Loans	845	0
Department of Housing and Urban Development		
Flexible Subsidy Fund	N.A.	N.A.
Housing for the Elderly or Handicapped	574,049	565,000
Nonprofit Sponsor Assistance	998	57
Rehabilitation Loan Fund	63,781	102,000

(Continued)

TABLE 3. (Continued)

Agency--Account	1987	1988
Department of the Interior		
BIA--Revolving Fund for Loans	7,469	8,546
Bureau of Reclamation Loan Program	43,257	25,203
Other Independent Agencies		
Export-Import Bank of the United States	677,066	692,934
Tennessee Valley Authority Fund (Power Program)	n.a.	n.a.
Small Business Administration		
Business Loan and Investment Fund	85,743	81,738
Disaster Loan Fund	207,743	184,922
Department of State		
Emergencies in the Diplomatic and Consular Service	515	533
Department of Transportation		
Federal Ship Financing Fund	681	0
Department of Veterans Affairs		
Direct Loan Revolving Fund	1,685	615
Education Loan Fund	29	18
Loan Guaranty Revolving Fund	1,007,893	848,807
Vocational Rehabilitation Revolving Fund	808	1,046
Total	9,409,871	9,819,650

SOURCE: Congressional Budget Office based on information from the Office of Management and Budget.

NOTES: N.A. = not applicable; n.a. = not available.

The table excludes forgiven loans of foreign military sales and commodity loans of the Commodity Credit Corporation.

TABLE 4. NEW FEDERAL GUARANTEE COMMITMENTS, BY ACCOUNT, FISCAL YEARS 1987-1988
(In thousands of dollars)

Agency--Account	1987	1988
Department of Agriculture		
Agricultural Credit Insurance Fund	1,565,492	1,254,879
CCC Export Guarantee Programs	2,998,011	4,557,345
Rural Development Insurance Fund	114,840	95,700
Department of Commerce		
Economic Development Assistance Programs	0	0
NOAA--Federal Ship Financing Fund, Fishing Vessels	79,840	93,487
Department of Education		
Guaranteed Student Loans	9,730,000	11,812,000
Funds Appropriated to the President		
AID--Housing and Other Credit Guaranty Programs	145,464	125,000
Overseas Private Investment Corporation	200,000	200,000
Department of Health and Human Services		
Health Professions Graduate Student Loan Insurance Fund	221,462	229,000
Department of Housing and Urban Development		
Community Development Grants (Section 108)	30,007	143,578
Guarantees of Mortgage-Backed Securities (GNMA)	139,975,500	53,071,000
Federal Housing Administration Fund	79,994,953	50,122,805
Department of the Interior		
Indian Loan Guarantee and Insurance Fund	38,963	38,158
Other Independent Agencies		
Export-Import Bank of the United States	6,753,524	5,739,057
Tennessee Valley Authority Fund (Power Program)	n.a.	n.a.
Small Business Administration		
Business Loan and Investment Fund	3,383,393	3,511,767
Department of Veterans Affairs		
Loan Guaranty Revolving Fund	34,900,051	17,302,354[a]
Total	280,131,500	148,295,773

SOURCE: Congressional Budget Office based on information from the Office of Management and Budget.

NOTE: n.a. = not available.

a. Excludes guarantee commitments for loan asset sales to public with recourse.

included in credit reform is a significant portion of the total credit activity of the federal government.

Following this general overview of federal credit programs and their current budgetary treatment, subsequent chapters discuss the development and implementation of credit reform. (The account statements of the federal credit programs that constitute the data base for credit reform are available from CBO as a separate publication, entitled *Data Base for Credit Reform*.)

CHAPTER II

A BRIEF HISTORY OF CREDIT REFORM

A number of reforms to the budgetary treatment of credit have been proposed over the past 20 years, and some have been adopted. The most recent credit reform proposals (discussed in Chapter III) are based on knowledge gained from earlier efforts to address the inadequacy of the current budget accounting system. This chapter discusses four of the most important precursors of the latest reform effort: the 1967 *Report of the President's Commission on Budget Concepts*; the credit budget adopted in the 1970s; the Office of Management and Budget's (OMB's) guidelines on federal credit programs issued to agencies in 1984; and the market-based credit reform proposals of the late 1980s. The chapter ends with an introduction to the latest reform effort, the so-called appropriation proposals.

THE PRESIDENT'S COMMISSION ON BUDGET CONCEPTS

One of the first and best proposals aimed at correcting the deficiencies of the current accounting system for credit was advanced by the President's Commission on Budget Concepts in 1967. The effect of the commission's recommendations for loans was to recognize in the budget the government's expected costs at the time that costs can be controlled--that is, in the year a loan is obligated. This proposal would treat loans and cash transactions comparably without abandoning completely the cash basis of the federal budget. Under this proposal, subsidy costs of credit would become the object of budgetary control.

A Unified Budget

The commission did not focus principally, however, on credit. Its most important recommendation--and the one adopted most completely--was for a single, comprehensive federal budget. This unified budget would replace the three budgets in use at that time--the consolidated cash budget, the administrative budget, and the national income accounts budget--and would include all federal direct loan programs. The budget would have a two-part structure for recording receipts/ expenditures and loans, reflecting the commission's view that direct loans are sufficiently different from cash expenditures to warrant separate treatment. An additional recommendation--intended to measure the effect of the budget on the economy--was to calculate a surplus or deficit by comparing expenditures other than loans with total budget receipts. The commission's recommended budget structure is shown in Table 5.

TABLE 5. RECOMMENDED BUDGET STRUCTURE FROM THE PRESIDENT'S COMMISSION ON BUDGET CONCEPTS OF 1967 (By fiscal year, in billions of dollars)

	1966 Actual	1967 Estimate	1968 Estimate
Receipt/Expenditure Account			
Receipts	131.1	147.7	165.2
Expenditures (Excluding net lending)	135.7	155.5	171.1
Surplus or Deficit	-4.6	-7.8	-5.9
Loan Account			
Loan Disbursements	14.6	18.3	19.0
Loan Repayments	10.8	13.1	14.6
Net Lending	3.8	5.2	4.4
Total Budget			
Receipts	131.1	147.7	165.2
Expenditures and Net Lending	139.5	160.6	175.5
Surplus or Deficit	-8.4	-12.9	-10.3

SOURCE: Congressional Budget Office based on the *Report of the President's Commission on Budget Concepts* (October 1967), Table 6, p. 85.

NOTE: Minus sign indicates deficit.

Inclusion of the Subsidy Costs of Direct Loans

Almost all federal loan programs contain at least some element of subsidy. The commission recommended that the subsidy provided in direct loan programs be identified and included in the receipt/ expenditure account of the budget. These subsidy costs would include the government's expected loss from loan defaults, delayed repayments, below-market interest rates, as well as administrative expenses. The remaining, nonsubsidized portion of direct loans would be separated into new loan accounts.

The commission also noted that in certain cases a direct loan is really more like a grant or direct expenditure and should be so treated in the expenditure accounts. Some foreign military loans that are typically forgiven are an example. Also, nonrecourse loans extended to farmers by the Commodity Credit Corporation can be considered a conditional purchase of commodities.

Exclusion of Guaranteed Loans and GSE Lending

The commission recognized that the volume of federally guaranteed private loans was growing rapidly and could affect federal expenditures. It recommended, however, that guaranteed loans continue to be excluded from the budget because they represent contingent liabilities. The commission also advised that the treatment of guarantees in the budget receive further study.

Existing government-sponsored enterprises would also be excluded from the budget if they met certain criteria--such as being completely privately owned. The total volume of borrowing and outstanding loans by GSEs at the end of each year, however, was to be included prominently in the budget as a memorandum item. Complete financial statements were also to be included in the *Appendix* to the federal budget in the form of "annexed budgets."

In retrospect, most of the commission's recommendations seem sound. The central idea that subsidy costs, rather than cash flows, should be the focus of federal budgeting for credit programs was a major conceptual advance.[1] The commission's recommendation on subsidy costs was not adopted fully, however, because no workable procedures existed for calculating subsidy costs. Consequently, when the commission's recommendations were implemented in the 1969 federal budget, the face value of loans was reported rather than their subsidy costs. Because of a lack of progress in calculating subsidy costs, the loan account was gradually deemphasized and then, starting with the 1974 budget, was discontinued as a separate account.

THE CREDIT BUDGET

In the late 1970s, OMB began to develop a separate budget for credit. The President's Commission on Budget Concepts had recommended further consideration of ways to control federally guaranteed private loans. In addition, concern had intensified about the disparity in the budget's treatment of costs between direct loans and guarantees.[2]

The credit budget consists of a comprehensive statement of credit activity projected for a fiscal year. Combined with this is a procedure for limiting some new loan obligations and guarantee commitments through appropriation acts. The credit budget measures the dollar amount of new federal loan obligations and guarantee commitments. Repayments on direct loans or guaranteed loans are not subtracted from the amount of new loans or guarantees reported.

Beginning with fiscal year 1981, a credit budget was included in the President's annual budget proposal and in the annual Congressional budget resolutions. In 1985, the credit budget was incorporated into the Congressional Budget Act under provisions that governed the content of annual budget resolutions. Ceilings were imposed in annual appropriation acts for about 40 percent of direct loans and 80 percent of

1. The commission's recommendations for credit reform have been endorsed many times. For example, Elmer B. Staats, Comptroller General of the United States, testified before the Budget Process Task Force, Committee on the Budget, U.S. House of Representatives, December 11, 1979: "For purposes of planning and control, it would be more desirable, as the Commission on Budget Concepts recognized, to have the costs of these programs recognized in the budget at the time the authority is provided, rather than at some later time when the Congress no longer has any choice about funding them."

2. Statement of Alice M. Rivlin before the Task Force on Credit, Committee on the Budget, U.S. Senate, December 10, 1981.

guaranteed loans. Actual levels of credit activity in many loan programs have been well below enacted ceilings because the limits are set sufficiently high to avoid limiting program activity. Furthermore, credit activity levels do not measure the costs of the programs and, therefore, do not help in comparing policy alternatives. In addition, the effect of credit on the allocation of economic resources depends on the size of the federal subsidy rather than on the amount of the loan.[3]

The credit budget has had modest success in increasing Presidential and Congressional review of federal credit activity. Still, it has never been integrated into the rest of the federal budget. No mechanisms exist in the current budget structure for forcing trade-offs--that is, trading spending programs for credit limits in order to meet a budget constraint.

REVISED CREDIT GUIDELINES FROM OMB

In August 1984, OMB issued a revised version of its Circular A-70--"Policies and Guidelines for Federal Credit Programs." The previous version was issued in 1965. An important change in the revised circular is the requirement that federal agencies calculate and transmit data to OMB on the subsidy costs of all their direct loan and guaranteed loan programs. The circular specifies the method to be used in measuring the federal subsidy by comparing private financing terms with those of federally assisted credit. Since 1984, these agency data have been used to support the subsidy costs reported in Special Analysis F, "Federal Credit Programs," of the President's budget documents.

The revised Circular A-70 requires federal agencies to refer to private financing terms when proposing or reviewing credit programs. These terms would become the basis for setting the minimum interest rate or fee on new loans or guarantees. The intent is for fees and interest rates on new federal loans to be adjusted with changes in the open market. This adjustment would prevent changes in market conditions from affecting the size of the subsidy.

3. William G. Gale, "Economic Effects of Federal Credit Programs" (Department of Economics, University of California at Los Angeles Working Papers, Number 483, June 1988).

The circular also contains a provision regarding securities (financial claims of debt or equity), which are ordinarily financed in securities markets. Unless the Secretary of the Treasury waives this provision, it requires that those securities completely guaranteed by the federal government must be financed by the Federal Financing Bank (FFB). (The FFB is described in Appendix B.) Under current law, all loans made by the FFB are treated as direct loans by the agency that guarantees them. These rules result in equal budgetary treatment for direct federal loans and for federally guaranteed private loans, which is accomplished by converting 100 percent guaranteed loans into direct loans.

The revised Circular A-70 is generally regarded as a step toward more equal budgetary treatment of credit. The OMB's revised circular accelerated the collection of data on subsidy costs and promoted the recognition of the fiscal importance of subsidies. An explanation of the OMB approach is contained in "Measuring the Subsidy Element of Federal Financing," an attachment to Circular A-70, available from OMB. Yet, the circular stops short of integrating subsidy costs into the budget. Moreover, whether or not the agency adheres to the circular depends on the views of the OMB Director and on the interests of individual OMB examiners.

MARKET-BASED PLANS

At the same time the OMB Circular A-70 was being revised, some economists and Members of Congress proposed selling newly originated direct loans to investors and reinsuring new guaranteed loans through private companies.[4] These market-based plans were meant to improve the budgetary treatment of federal credit programs. Through cash transactions outside the government, subsidy costs would be integrated into the budget process by converting them into outlays in the current fiscal year. The outlays would then be subject to control

4. *Morgan Guaranty Survey* (Morgan Guaranty Bank, New York, July 1983), pp. 11-15; Truth-in-Budgeting Act (H.R. 4629), introduced January 24, 1984, by Congressman Willis D. Gradison, Jr., and Senator Paul Trible; and Congressional Budget Office, *New Approaches to the Budgetary Treatment of Federal Credit Programs* (March 1984). Also, Congressman Willis D. Gradison, Jr., with Congressmen Anthony C. Beilenson, Leon E. Panetta, and Ralph Regula, *Congressional Record*, March 23, 1987, H5113 and E1081.

BOX 1
Accounting for Direct Loans and Guaranteed Loans Under the Reagan Market-Based Plan
(In dollars)

Direct Loans	
Disburses Loan (Outlays)	100
Sells Loan (Offsetting collections)	-80
Reports Net Outlays	20
Guaranteed Loans	
Collects Guarantee Fee (Offsetting collections)	-10
Pays Fee for Reinsurance (Outlays)	30
Reports Net Outlays	20

SOURCE: Congressional Budget Office.

through appropriations. Market-based variations include the 1987 Reagan Administration plan to sell all new direct federal loans and to reinsure all new federally guaranteed private loans; a proposal to pay subsidy costs to a GSE that would disburse subsidized loans and issue subsidized guarantees; and a related Reagan Administration plan to replace some federal credit programs with credit vouchers. These market-based plans would require no changes in the federal government's current cash-basis accounting system.

Loan Sales and Reinsurance

Under the 1987 Reagan market-based plan, promises to pay cash in the future would be converted into cash now through loan sales and reinsurance (see Box 1).[5] For direct loans, the budget would show no further references because these loans would no longer belong to the federal government. For guaranteed loans, the budget would show the one-time premium paid by the government to the private reinsurer as an outlay (minus any fees collected by the government). Agencies would be authorized to issue loans and guarantees only when their appropriations were sufficient to cover the subsidy costs of these trans-

5. Part 3b, "Federal Credit," *Budget of the United States Government, Fiscal Year 1988-Supplement.*

actions. Thus, under market-based plans, the Appropriations Committees could exercise control of federal credit programs by providing budget authority for subsidy costs.

A Variation of Government-Sponsored Enterprise

Concern over financial losses to the government from sales of direct loans and private reinsurance of guaranteed loans has effectively blocked these market-based plans. One alternative is to create a government-sponsored but privately owned enterprise that would originate loans and issue guarantees in exchange for federal payments of subsidy costs.[6] The intent would be to create an entity outside of government that would calculate subsidy costs in an objective manner. The subsidy and earnings requirements of this GSE, however, would be lower than that of a purely private financial intermediary. Subsidy costs would be reported and included in the budget as the amount paid by the federal government to the sponsored enterprise, minus any fees that were collected. These federal payments would be subject to annual appropriations.

The disappointing experience with similar sponsored enterprises--such as the Farm Credit System, which lost $4.6 billion in calendar years 1985 and 1986--has created doubt about the desirability of this approach. These enterprises are intended to be operated as low-risk, low-profit, financial intermediaries. They have frequently, however, assumed substantial risks and on one occasion incurred large losses, which the federal government had to bear.

Cash-Equivalent Vouchers

Yet another variation of the market-based plan is implicit in the recurring proposal to replace federal credit programs with cash-equivalent vouchers.[7] The Reagan Administration proposed to substitute

6. Barry P. Bosworth, Andrew S. Carron, and Elisabeth H. Rhyne, *The Economics of Federal Credit Programs* (Washington, D.C.: Brookings Institution, 1987), Chapter 7.

7. "Special Analysis F," *Special Analyses, Budget of the United States Government, Fiscal Year 1990*, p. F-14; and Congressional Budget Office, *An Analysis of the Administration's Credit Budget for Fiscal Year 1990* (April 1989), p.6.

vouchers, which the recipient can use as cash, for direct loans in housing for the elderly or the handicapped. Under this proposal, borrowers would be given vouchers with a cash value equal to the subsidy. Vouchers could then be taken to private lenders to negotiate credit on below-market terms. Once the borrower signs the voucher over to a lender, the lender could redeem the voucher for cash at the issuing agency. Under cash-basis accounting for credit, federal payments to lenders would be recorded as outlays. Thus, the subsidy costs of credit would be shown in the budget when the credit assistance is provided. The amount of vouchers that could be issued would be limited by annual appropriations.

Strictly speaking, the voucher plan is not a pure credit reform proposal. The plan would change the operation of federal credit programs as well as their budgetary treatment. Still, the voucher plan is a means of achieving comparable budget costs between cash and credit transactions.

APPROPRIATION PLANS

Perhaps the most promising proposals for credit reform are the so-called appropriation plans. These plans, offered by the Senate and the Reagan Administration after the Congress failed to act on the market-based plans, would make subsidy costs the basis of budgeting for credit. This focus on subsidy costs would be accomplished without market transactions, however. Instead, subsidy costs would be integrated into the budget through intragovernmental transfers rather than through loan sales, guarantee reinsurance, payments to GSEs, or vouchers.

All credit reform proposals address the need to measure, recognize, and control subsidy costs in the budget. Appropriation plans attempt to mimic the effect of market-based plans on the budget. Simultaneously, appropriation plans protect the government from losses that might be incurred if markets were used to convert federal credit contracts into cash. Because market transactions are not used to measure these subsidies under the appropriation plans, the government itself must determine the loss on credit activities. Procedures must be established to assure a consistent, comparable measure of subsidy costs throughout federal agencies. Once measured, these costs must be entered in the budget so that they are directly related to the decisions to incur them.

Under the appropriation plans, subsidy costs are recognized in the budget by separating the subsidy and nonsubsidy components of credit transactions. Under current budgetary treatment, these components are combined in a single account. Because separation of the subsidy component would not occur automatically under the appropriation plans, as it would under the market-based plans, new budget accounts must be created and maintained for the subsidy costs and nonsubsidized cash flows of credit transactions. Once measured and recognized separately, the subsidy costs of credit must become the focus of control. Under the appropriation plans, subsidy costs are identified in the budget resolution, allocated to Congressional committees of jurisdiction, and made subject to appropriation.

Several appropriation plans exist. Others could be devised that would achieve the need to measure, recognize, and control subsidy costs in the budget. Only two proposals, however, are currently under discussion and are presented in the next chapter.

CHAPTER III

THE SENATE'S AND THE ADMINISTRATION'S CREDIT REFORM PROPOSALS

To the detriment of good budgeting, the current cash-basis accounting system gives a false measure of long-term costs for credit programs. Cash flows through a credit account in a fiscal year currently include both the costly (subsidized) and costless (nonsubsidized) parts of the credit transaction and exclude all payments deferred to later years. The logic of credit reform is to measure the long-term subsidy costs to the government in a credit transaction; separate the subsidy from the nonsubsidized cash flows; and use only the subsidy costs as the basis of budgeting. In contrast to market-based plans, which transform all present and future cash flows from a credit contract into cash through market transactions in a current period, appropriation plans implement credit reform through changes in governmental procedures--administrative, accounting, and budgeting.

Two versions of appropriation plan have been proposed--one by the Senate and one by the Reagan Administration.[1] The Senate version was passed by the Senate on July 31, 1987 (Title III of H.J.Res.324, Joint Resolution Increasing the Statutory Limit on the Public Debt), but was deleted in the House and Senate Conference. The second version (the Federal Credit Reform Act of 1988) was offered by the Reagan Administration and subsequently endorsed by the Bush Administration. Both proposals effectively meet the basic requirements for credit reform: delegate a central authority to determine a procedure and oversee its use in calculating subsidy costs; create subsidy accounts to separate and recognize subsidy costs in the budget; and control federal credit activity through appropriations of budget authority for subsidy costs. The two proposals differ, however, in some details that could significantly affect the results of credit reform.

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1. The General Accounting Office has also advanced an appropriation plan. The GAO version, however, is identical to the Senate-passed proposal, except that the GAO would implement credit reform through adoption of a capital budget. See GAO, *Budgetary Treatment of Federal Credit Programs*, AFMD-89-42 (April 1989).

THE SENATE-PASSED CREDIT REFORM PROPOSAL

The Senate-passed proposal vests responsibility for calculating the government's subsidy costs in a newly created Federal Credit Management Agency within the Department of the Treasury. This agency and the Secretary of the Treasury would be authorized to require timely, uniform reporting on loan performance and cost by those federal agencies administering credit programs. Although the Federal Credit Management Agency would have substantial discretion in determining how subsidy costs are to be measured, the Senate-passed proposal appears to favor the use of interest rates on U.S. Treasury securities in calculating subsidies. (The role of interest rates in calculating subsidy costs is discussed in Chapter IV.)

Under the Senate's plan, subsidy costs would be highlighted in the budget by creating two new kinds of accounts for each federal credit program: a subsidy account and a financing account (see Box 2). The subsidy accounts would receive appropriations of budget authority, as provided by law, for the subsidy costs of credit assistance. The financing accounts would disburse all direct loans, financing these cash flows with receipts from the subsidy accounts and with borrowing from the Treasury. Separation of the subsidy costs of credit from their cash flows would distinguish the subsidy component of credit transactions for budgeting and appropriations.

Under this proposal, federal credit agencies would continue to administer credit programs as they do now. Agency loans or guarantees would obligate the subsidy account for the amount of subsidy costs and obligate the financing account for the amount remaining. The agencies would have authority to fund disbursements from the financing accounts by two means: subsidy collections and borrowing from the Treasury. The rate of interest paid on Treasury borrowing would not be lower than the average yield on marketable U.S. securities of comparable maturity. Loans from the Treasury would be repaid by the financing accounts with loan collections. If repayments and collections in a financing account were insufficient to cover the loan from the Treasury, the agency would request appropriations to repay the shortfall. Earnings realized in the financing accounts would be transferred periodically to the general fund of the Treasury.

BOX 2
Accounting for Direct Loans and Guaranteed Loans Under the Senate-Passed Proposal

Direct Loan from Federal Credit Agency

Transfers	$ 20 subsidy from subsidy account to financing account;
Borrows	$ 80 for financing account from Treasury; and
Disburses	$100 loan from financing account.

Subsidy account reports outlays of:	$20.
Financing account reports net outlays of:	$80.

Borrowing for the financing account is reported separately from the program function in the Credit Financing Activity function. Appropriations and budgetary actions are based on program account subsidy costs of $20. The sum of subsidy and financing account outlays is $100, or the same as aggregate cash flow before the subsidy and financing flows were separated.

Guaranteed Loan from Federal Credit Agency

Transfers	$20 from the subsidy account to the financing account; and
Collects	$10 guarantee fee credited to the financing account.

Subsidy account reports net outlays of:	$20.
Financing account reports offsetting collections of:	-$30.

Appropriations and budgetary action are based on the subsidy costs of $20, rather than the offsetting collection received from the public. The sum of subsidy and financing account outlays is -$10, or the same as aggregate cash flow before the subsidy and financing flows were separated.

SOURCE: Congressional Budget Office.

THE REAGAN ADMINISTRATION'S REVISED CREDIT REFORM PROPOSAL

The Administration's plan does not create a new agency to determine and oversee the measurement of subsidy costs. Rather, this proposal assigns final responsibility to the Secretary of the Treasury for determining the subsidy costs of each credit program. The Secretary is authorized to obtain relevant information from those federal agencies that administer credit programs and to prescribe rules for calculating the subsidy costs of these programs. Like the Senate plan, the Administration's plan would give the Secretary broad discretion to specify how subsidy costs are to be calculated. Unlike the Senate plan, the Administration's plan indicates a clear preference for the use of private interest rates, rather than Treasury interest rates, in calculating subsidy costs.

The Administration's proposal, like the Senate proposal, would create a new subsidy account for each federal credit program. In contrast, the Administration's proposal would add only two new financing accounts rather than one for each credit program. This variation would consolidate the financing of all new federal credit activity into two revolving funds administered by the Department of the Treasury.

One of these financing accounts, the Direct Loan Fund, would function much like the Senate's proposed financing account for a direct loan program. The Direct Loan Fund would:

- Receive subsidy payments from the subsidy accounts of the direct loan programs;
- Borrow the nonsubsidized portion of the loan from the Treasury;
- Receive fees and loan repayments collected by the agencies from borrowers; and
- Use these funds to retire its debts to the Treasury.

The other financing account, the Guaranteed Loan Fund, would function in a similar way for federally guaranteed loan programs. The Guaranteed Loan Fund would:

- Receive subsidy payments from the subsidy accounts of the federally guaranteed loan programs;
- Receive guarantee fees deposited by the agencies; and
- Hold these funds as a reserve against future defaults.

The balances of these two loan funds would be invested at interest with the Treasury. Authorization is provided in the Administration's proposal for the appropriation of sums necessary to cover unanticipated losses in either revolving fund. Excess earnings from these two funds would be transferred to the general fund of the Treasury.

Under the Administration's revised credit reform proposal, the federal agencies that administer existing federal credit programs would continue as they do now. Agencies would request annual appropriations for subsidy costs, but indefinite budget authority would be authorized for the subsidy costs of entitlement programs. When issuing a commitment to provide credit assistance, an agency would obligate two accounts: its subsidy account for the amount of the subsidy; and either the Direct Loan Fund or the Guaranteed Loan Fund for the remainder of the disbursement. As in the Senate-passed proposal, agencies would be limited in their level of credit activity either by the appropriation limit of the credit budget or by the subsidy appropriation, whichever is lower. Most collections of guarantee fees and loan payments would be credited to one of the two financing accounts. Agencies would be authorized to retain collected sums sufficient to cover the administrative expenses of operating these credit programs.

The Administration's proposal specifically requires that subaccounts be established within the financing accounts. These subaccounts would segregate cash flows for each individual credit program. This requirement is intended to avoid the financial obscurity that now results from the commingling of funds in multiprogram accounts.

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CHAPTER IV

CALCULATING SUBSIDY COSTS

Both the Senate-passed proposal and the Reagan Administration's revised credit reform proposal establish procedures to measure, recognize, and control subsidy costs. Neither proposal, however, solves all the difficulties raised by the credit reform effort. One essential prerequisite for successful credit reform is the ability to calculate subsidy costs with reasonable accuracy. This chapter discusses the conceptual and practical problems surrounding subsidy cost calculations. Unless the obstacles to accurate measurement can be overcome, subsidy costs cannot be used as the basis of budgeting for credit.

The difficulties in measuring subsidy costs are common to all appropriation plans. In fact, the failure in the early 1970s to adopt the credit reform recommendations of the President's Commission on Budget Concepts is generally attributed to an inability of the government to calculate subsidy costs. The current reform effort is more promising because today richer financial data exist, and the tools for making use of these data are improved. Reformers can point to advancements in financial theory, the development of specialized markets, an increase in computational power, and the additional 20 years of federal experience in operating credit programs. The proposed delegation of responsibility over calculating subsidy costs to a central cost authority also moves the credit reform effort forward. Although an element of doubt remains, calculating subsidy costs appears more feasible now than it did when credit reform was first attempted.

COMPONENTS OF FEDERAL CREDIT COSTS

The most general concept of cost is that of alternatives and opportunities forgone. The cost of doing one thing is not doing another. This understanding of cost is particularly apt with credit reform because allocating scarce financial resources among competing activities is the responsibility of the budget process. The budgetary cost of credit assistance, therefore, is the value of financial resources diverted from other activities.

Administrative Expenses

Administrative expenses for federal credit activity consume financial resources in a number of ways. Personnel and support facilities are required to process applications for assistance, perform credit checks, disburse monies, monitor collections, counsel delinquent borrowers, reschedule credit contracts, foreclose on collateral, manage and liquidate acquired property, and maintain detailed records of these operations. These expenses for credit activity are usually summarized in the budget documents as a single line item--administrative expenses.

Default Costs

Another cost of federal credit activity arises from defaults--that is, monies that are not repaid after being loaned to a borrower by the federal government or by a federally insured private lender. These losses from default, minus fees and other collections, divert financial resources from other uses. Defaults are widely assumed to be the principal cost of federal credit programs. Existing financial data, however, are insufficient to confirm this.

Tax Loss

Other costs of federal credit are incurred when direct loans or federally guaranteed loans displace similar services by a taxable supplier. Federal tax revenues decline by the amount of tax that would have been paid by the private lender. Although regarded sometimes as a "second-order" cost, tax losses on federal credit nonetheless reduce the quantity of federal financial resources available for other uses.

Alternative Use or Interest Costs

The costs of credit assistance also include the loss from a higher yielding alternative use. Even if administrative expenses and default costs are zero, the use of federal funds to finance a loan requires forgoing the return that could have been earned or the expense that could have been avoided through another use of those funds. Such returns are forgone, for example, when the government's cost of borrowing exceeds the rate of interest charged to the borrower. In this case, the difference between the interest rate on the loan and the federal borrowing rate may be the relevant cost, but only if the government has no other use for those funds with a higher yield than the interest rate on Treasury debt instruments (bills, notes, and bonds).

CONVERTING FUTURE COSTS TO PRESENT VALUE

Effective budgeting occurs when the cost of a decision to provide credit is recognized in the period when the cost can be controlled. This does not mean, however, that the simple sum of all costs to be realized in future years should be recognized in the current period. Money also has a time value. Money later is worth less than money now. To incorporate the time value of money into budgeting, future cash flows must be converted into present values by discounting the future amounts.

The discount rate applied to future contract receipts can incorporate expected defaults, taxes, and administrative expenses, as well as the return on alternative investments of comparable risk. The government's loss on a loan (the subsidy cost) is the cash paid out, minus the present value of the promised future payments. The government's loss on a guarantee is the present value of the commitment to pay off the loan, minus any fee received.

All financial assets--such as bonds and certificates of deposit--share the definition of a claim on future payments. The market price of these assets, like credit, is precisely "the present value of a promise to pay in the future." The value of a promise to pay is determined by three factors: what, when, and how sure. More precisely, they are:

- What the amount is of expected payments;
- When the payments are to be received; and
- How sure are the payments.

The larger, the sooner, the more certain the expected receipt, the greater its value. Every certain amount to be paid in a specified future period has a unique cash value. Uncertainty about future payments and interest rates, however, may cause different analysts to project different repayments and to apply different discount rates. Consequently, different values can be assigned to the same asset.

DATA GAPS AND DEFICIENCIES

Calculating subsidy costs seems simple: subtract the value of the asset received from the value of the asset given up. Moreover, calculating the value of direct federal loans and federally guaranteed private loans also seems straightforward: follow the rules specified by the central cost authority, project future cash flows period by period, apply an appropriate discount rate to the cash flows in each period, and add. Alternatively, loan cash flows can be discounted by a rate that incorporates expected defaults, delinquencies, and other costs. A number of difficulties arise, however, in projecting expected cash flows and selecting appropriate discount rates. Not all these difficulties can be entirely overcome by the existence of a central cost authority.

Projections of cash flows should be based on all relevant data from both federal and private credit experience. These data, however, are incomplete for almost all federal credit programs. In general, federal agencies do not have access to historical data on the characteristics of borrowers, on the financed project, or on the cash flows for individual loans and guarantees. These data are missing because the federal government's current financial accounting system was not designed to produce such information.

The historical cost data for federal programs are especially skimpy for a single account--a public enterprise revolving fund, for example--that has been used to finance more than one program. (See Appendix C for data available on federal loan and guarantee accounts.) The commingling of cash flows in such multiprogram accounts prevents losses from being attributed to any particular program or to general activities, such as direct loans or guarantees. This deficiency is especially severe in the major credit accounts of the Farmers Home Administration (Agricultural Credit Insurance Fund, the Rural Housing Insurance Fund, and the Rural Development Insurance Fund) and in the

Loan Guaranty Revolving Fund of the Department of Veterans Affairs. Some of the largest federal credit programs are financed from these accounts.

In addition, not even well-documented historical data provide an adequate basis for projecting cash flows because the relationship between cash flows and borrower characteristics may have changed. For example, the Export-Import Bank of the United States has recently negotiated loan terms to reduce future delays in loan payments. In this case, experience may be a poor guide to the performance of new credit contracts.

A few agencies do have historical data that would be useful in projecting cash flows for some federal credit contracts. The basic home mortgage program of the Federal Housing Administration records some costs by period of origination in order to calculate any excess premiums for return to insured borrowers. Research on existing financial records of the Small Business Administration (SBA) also demonstrates how its data might be used to project cash flows and calculate subsidy costs.[1] Moreover, efforts to improve the financial accounting system of the federal government continue.[2] Over a period of years, data could be collected from federal credit programs, which would then permit projections of cash flows to be more accurate.

Tax Component of Subsidy Costs

The costs to the government of providing a direct loan may appear lower than the fee required by a taxable private lender for making the loan--unless federal taxes are included in subsidy costs. Yet, the tax rate that would be paid by a private lender is difficult to estimate. In a similar case, the Office of Management and Budget's Circular A-104, which prescribes a method for evaluating proposed federal leases of

1. See Elisabeth Rhyne, "Report on Costs of Selling or Reinsuring SBA Guaranteed Loans" (unpublished study prepared for the Congressional Budget Office, September 1984) for an examination of cash flows for 8,235 loans guaranteed by the Small Business Administration between 1973 and 1983.

2. Office of Management and Budget, *Management of the United States Government, Fiscal Year 1989*, pp. 33-37.

capital assets, requires the use of the maximum tax rate on corporate profits as an estimate of the tax rate on income generated by a lease.

An alternative method for credit reform would be to omit tax considerations from projected cash flows and, instead, to incorporate the effect of taxes into the discount rate. This method could be accomplished by discounting cash flows from loans, minus collection costs, using the pretax rate of return earned by private lenders on comparable assets.

Special Problems of Administrative Expenses

Subsidy costs include the administrative expenses of originating loans and guarantees, collecting loan repayments, and recovering monies paid for defaulting guarantee claims. These expenses will be included in the amount paid to the financing account. This account will not incur these expenses directly, however. Rather, the agency administering the credit will bear the administrative expenses. The financing account should reimburse the agencies for these expenses as they are incurred. The current federal accounting system is often unable to identify administrative expenses accurately. Consequently, the General Accounting Office has excluded administrative expenses from its definition of subsidy.[3]

Excluding a component that belongs in subsidy costs is an unnecessary sacrifice. Many agencies already identify administrative expenses, others could do so, and all could increase their efforts. Rather than excluding administrative expenses from the definition of subsidy, a central cost authority--such as a Federal Credit Management Agency within the Treasury, as proposed by the Senate--could provide agencies with guidelines for identifying these expenses. Administrative expenses could be paid annually by the financing account to the agency's account for salaries and expenses. Subsequent audits might confirm these amounts or require additional payments or refunds.

3. General Accounting Office, *Budgetary Treatment of Federal Credit Programs*, AFMD-89-42 (April 1989), pp. 5, 18, and 19.

Missing Market Data

Calculating subsidy costs would be easier if a market price existed for each type of federal loan or guarantee. These market prices would reflect expectations of cash flows. For example, international loans reflect prospects of loan repayments by the borrowing country in their price per dollar of face value. Most federally originated credit contracts are not sold, however, and few comparable credit contracts are available in the private market. Many federal loans and guarantees are extended to borrowers who cannot qualify for private loans. Even in cases of mortgage insurance, for which private markets originate similar credit, differences in the economic circumstances of borrowers may prevent an accurate valuation of federal credit contracts. Nonetheless, market prices can be a useful benchmark for approximating subsidy costs of some federal credit assistance. Prices can serve either as an initial standard or as corroborating evidence in calculating subsidy costs.

SELECTING APPROPRIATE DISCOUNT RATES

An important step in calculating subsidy costs is to select an appropriate discount rate. Several rates are available: Treasury borrowing rates, market rates on risky assets, and rates somewhere in between. For simplicity, the discount rate is discussed in terms of subsidy costs on direct loans. Loans are assets, whereas guarantees and insurance are liabilities. Discounting for risk may be handled somewhat differently for liabilities.[4]

Treasury Borrowing Rates

The bills, notes, and bonds issued by the Treasury are believed to be virtually free of default risk. Rates on such debt, therefore, contain no

4. For a detailed treatment of the valuation of uncertain payments, see James F. Gatti and Ronald W. Spahr, "Discounting Negative Cash Flows: Estimating the Value of FSLIC Contingent Liabilities" (Federal Home Loan Bank Board *Research Paper* 146, Washington, D.C., September 1988 (Revised October 20, 1988)). See also Robert M. Buckley, "Pricing Federal Credit Programs: An Application of the Options Pricing Perspective to the AID Housing Guaranty Program" (Washington, D.C.: Urban Institute, October 1985); and Robert Van Order, "User Fees and Mortgage Markets," *Housing Finance Review*, 6 (New York: Elsevier Service Publishing Company, 1987), pp. 93-114.

risk premium and are commonly considered risk-free. Use of a Treasury borrowing rate to discount future cash flows on a credit con-tract treats those payments as though they were certain to be received. If the government were to use its own risk-free cost of borrowing to discount uncertain future cash flows, it would be the only financial institution to do so. An aversion to risk causes others, including federally insured banks and thrifts, to discount risky income at a higher than risk-free rate.

Those who recommend that the government use a risk-free rate to discount risky future income argue that the risk-free rate reflects what the government actually pays to provide credit assistance. GAO, for example, has advocated valuing federal loans by using Treasury borrowing rates to discount receipts, minus losses from defaults.[5] Using a risk-free Treasury rate for discounting supports a budget policy that recognizes only costs paid in cash.

Market Rates on Risky Assets

Others recommend that the government select a discount rate equal to the rate that the government would receive by investing in other equally risky assets. They maintain that the use of such a rate is necessary to capture the opportunity costs of credit or the value of alternatives forgone. The use of rates that account for risk is also necessary to distinguish the cost of assets with equal expected income but different degrees of risk.

Rates Between Treasury and Market Rates

A third option is to select rates somewhat higher than Treasury rates but lower than market discount rates. Analysts who recommend this option argue that individual loan markets are less than perfectly competitive. Market discount rates, therefore, are biased estimates of the full cost of lending. At the same time, use of Treasury borrowing rates for discounting results in a higher value for every risky financial asset than what could be obtained in perfectly competitive markets.

5. General Accounting Office, *Budgetary Treatment of Federal Credit Programs*, AMFD-89-42 (April 1989), Appendix II.

Unless the government can reduce risk further than private institutions, this overvaluation is improper.

No matter which type of rate is selected, the choice will be clouded by uncertainties. If a market discount rate is used to calculate the subsidy costs of a loan not ordinarily made by private lenders, the terms that lenders would charge must be estimated. Furthermore, the markup of the loan rate above the competitive market rate is unlikely to be known. If it is known, it would be unlikely to hold over time and across markets. Even with Treasury rates, the actual cost of borrowing over the life of a loan cannot be known when the federal loan is disbursed because the underlying Treasury debt will be refinanced several times over the life of a loan. These interest rates cannot be known in advance and have to be estimated.

COSTS TO THE GOVERNMENT VERSUS BENEFITS TO THE BORROWER

Some discussions of credit reform have been hampered in the past by misleading terms. "Benefits to the borrower" and "costs to the government" were terms or headings used to describe alternative approaches to measuring federal credit costs. The benefits-to-the-borrower approach emphasized the difference between the amounts paid by the borrower with and without federal credit assistance as the cost of federal credit programs. The costs-to-the-government approach, used by GAO, argued that some of the amount saved by the borrower with a federal loan was a genuine saving and should not be included in the costs of federal credit programs. To complicate matters, OMB calculated two costs of federal credit programs under the headings "costs to the government" and "benefits to the borrower." These costs were first reported in the 1983 federal budget.

In the first approach--"benefits to the borrower"--OMB calculated the government's loss on the credit transaction by comparing the interest rate on the federal loan with that on a comparable private loan. The lower the government rate and the higher the private rate, the greater the loss. The thinking behind this approach is that a competitive market interest rate would generate just enough revenue to cover all the private costs of the loan, including administrative expenses, default losses, and the lender's cost of capital. Any interest rate below the competitive market interest rate--assuming that the federal government's costs are equal to those of a private lender--is expected to produce losses to the government. These losses would be equal to the reduction in payments made by the borrower at the federal loan rate.

The second approach--"costs to the government"--compared the interest rate on the federal loan with the interest rate on a 10-year Treasury note. Only those federal loans with an interest rate below the rate on the Treasury note would have had subsidy costs. The rationale behind this approach is that the most significant cost of credit is the government's net interest cost.

OMB no longer uses these headings Instead, it now reports a single subsidy cost based on the difference between market terms and federally assisted loan terms. Nevertheless, these terms continued to be used through the 1988 budget to distinguish two approaches to calculating subsidy costs. Although neither OMB nor GAO saw the issue this way, the benefits to the borrower could be viewed as a measure of the costs to the government.

THE CURRENT OMB SUBSIDY COST MODEL

Measuring the subsidy element of federal financing has been required by OMB Circular A-70 since 1984. The circular prescribes the method by which subsidy costs are to be measured. A notable feature of the OMB model is that it does not require an estimate of actual future cash flows from federal loans and guarantees. Rather, the present value of those cash flows is inferred from the terms for "comparable" private credit. Differences between the terms on federal credit and private credit are used to determine the government's loss on the transaction. The OMB model assumes that the private market price of credit is a good approximation of the government's cost of operating a credit program. The OMB model can also be used with a variety of market-adjusted discount rates. Furthermore, this measurement model can produce consistent, replicable results by analysts inside and outside government.

The OMB model for measuring subsidy costs on direct loans contains four steps:

1. The private and federal credit contracts are used to project the period-by-period cash flows from a federal loan and a comparable private loan, assuming all repayments are made in full, on time;

2. The internal rate of return (IRR) on the private loan is identified (the IRR is the discount rate that equates the present value of future scheduled loan repayments with the amount advanced);

3. The private IRR is used to discount the scheduled repayments from the federal loan to determine its market value; and

4. The market value of the federal loan is subtracted from the amount disbursed to determine the loss to the government from the loan, or its subsidy costs.

For guarantees, the OMB model uses the estimated terms on the unguaranteed loan and the known terms on the guaranteed loan to project the two cash flows. The IRR on the unguaranteed loan is then calculated and used to discount the cash flows to the lender on the guaranteed loan. When the IRR is applied, the present value of those cash flows is less than the amount loaned. This difference is the increase in the market value of the loan from the guarantee, or its subsidy costs.

OMB reports the results of these calculations each year in the Special Analysis F of the *Budget of the United States Government*. Subsidy costs for federal credit activity projected in 1990 are shown in Table 6. The subsidy cost rate on direct loans, expressed as a percentage of the principal, indicates the cash equivalent of what the government expects to lose for each $100 obligated and advanced in 1990. This subsidy measure also indicates the budgetary cost of a loan that is equivalent to a grant the size of the subsidy amount.

TABLE 6. OMB SUBSIDY COST ESTIMATES (CURRENT SERVICES) FOR FISCAL YEAR 1990

	OMB Subsidy	
Account Title	As a Percentage of Principal	In Thousands of Dollars of Budget Authority
Direct Loan Programs		
Department of Agriculture		
Agricultural Credit Insurance Fund	21.21	281,422
FmHA--Self-Help Housing Land Development Fund	54.63	283
Public Law 480 (Foreign Agricultural Sales)	71.20	589,369
Rural Development Insurance Fund	15.64	69,054
Rural Development Loan Fund	67.43	9,780
Rural Electrification & Telephone Revolving Fund (FFB Loans)	4.26	41,194
Rural Electrification & Telephone Revolving Fund	31.21	278,393
Rural Housing Insurance Fund	46.65	1,117,383
Rural Telephone Bank	15.33	28,054
Department of Education		
College Housing & Academic Facilities Loans	38.00	11,669
Environmental Protection Agency		
Abatement, Control, and Compliance	59.42	19,391
Funds Appropriated to the President		
AID--Private Sector Revolving Fund	3.33	172
Foreign Military Sales Financing	21.00	89,372
Overseas Private Investment Corporation	15.40	3,670
Department of Health and Human Services		
Health Resources and Services Direct Loans	22.00	113
Department of Housing and Urban Development		
Flexible Subsidy Fund	22.10	8,067
Housing for the Elderly or Handicapped	20.00	110,261
Nonprofit Sponsor Assistance	22.00	220
Rehabilitation Loan Fund	40.68	34,578
Department of the Interior		
Bureau of Reclamation Loan Program	52.00	16,168
BIA--Revolving Fund for Loans	22.53	2,929
Small Business Administration		
Business Loan and Investment Fund	18.41	15,097
Disaster Loan Fund	23.93	67,004
Department of State		
Emergencies in the Diplomatic and Consular Service	39.60	277
Department of Transportation		
Federal Ship Financing Fund	1.90	95
Other Independent Agencies		
Export-Import Bank of the United States	3.33	20,180
Tennessee Valley Authority Fund (Power Program)	0.60	394

(Continued)

TABLE 6. (Continued)

Account Title	OMB Subsidy: As a Percentage of Principal	OMB Subsidy: In Thousands of Dollars of Budget Authority
Direct Loan Programs (Continued)		
Department of Veterans Affairs		
Direct Loan Revolving Fund	11.60	76
Education Loan Fund	43.70	8
Loan Guaranty Revolving Fund	9.27	89,823
Vocational Rehabilitation Revolving Fund	15.00	141
Guaranteed Loan Programs		
Department of Agriculture		
Agricultural Credit Insurance Fund	4.93	154,572
CCC Export Guarantee Programs	20.00	1,100,000
Rural Development Insurance Fund	2.03	2,013
Department of Commerce		
Economic Development Assistance Programs	44.10	9,138
NOAA--Federal Ship Financing Fund, Fishing Vessels	11.81	8,858
Department of Education		
Guaranteed Student Loans	34.05	4,286,569
Funds Appropriated to the President		
AID--Housing and Other Credit Guaranty Programs	22.67	29,358
Overseas Private Investment Corporation	14.70	26,651
Private Sector Revolving Fund	8.18	4,237
Department of Health and Human Services		
Health Professions Graduate Student Loan Insurance Fund	20.98	49,991
Department of Housing and Urban Development		
Community Development Grants (Section 108)	10.05	14,975
Federal Housing Administration Fund	1.20	707,752
Guarantees of Mortgaged-Backed Securities (GNMA)	1.90	1,258,943
Department of the Interior		
Indian Loan Guarantee and Insurance Fund	19.02	8,559
Other Independent Agencies		
Export-Import Bank of the United States	1.26	133,204
Small Business Administration		
Business Loan and Investment Fund	9.78	329,160
Department of Veterans Affairs		
Loan Guaranty Revolving Fund	7.86	1,088,679

SOURCE: Congressional Budget Office based on information from the Office of Management and Budget.

The subsidy cost rate on federally guaranteed loans, expressed as a percentage of the principal, tends to be lower, on average, than that on direct loans. As a total dollar amount of subsidy, however, the subsidy costs of guaranteed loans substantially exceed those of direct loans. Even low-subsidy programs, such as FHA and Ginnie Mae guarantees, involve high subsidy costs because the volume of guarantees is so large. Nearly half of all credit subsidy costs are for the Guaranteed Student Loans program (now called Stafford Loans).

The OMB model for measuring the subsidy costs of federal credit assistance has many desirable features. It is also an imaginative approach to the thorny problem of calculating subsidy costs. It is unlikely to be the final word, however. The Congress, if it decides to proceed with credit reform, can do much to promote progress in calculating subsidy costs. These steps could include:

- Making subsidy costs the basis of budgetary decisions. This step would greatly increase the importance of the subsidy component for budgeting, which would increase the scrutiny these costs receive.

- Assigning responsibility for calculating subsidy costs to a single oversight agency. This central cost authority and the agencies administering credit programs could be made jointly accountable for subsidy cost errors.

- Requiring that all data and methods used in calculating subsidy costs be available to the public for purposes of critical analysis and improvement of their accuracy.

CHAPTER V

DISTINGUISHING SUBSIDY COSTS FROM CASH FLOWS IN THE BUDGET

Credit reform aims to substitute subsidy costs for cash flows so that budget decisions will be based on a more meaningful measure of cost. Current credit reform proposals do this by removing all but the subsidy costs of credit from the program measure of budget costs. This strategy separates subsidy costs from all other cash flows, currently reported together in one account, and reports the nonsubsidized cash flows in a part of the budget where they will carry less weight than subsidy costs in policy decisions.

Options for reducing the budgetary significance of the nonsubsidized cash flows include moving these accounts to a nonprogram function of the budget or to the "means of financing" portion of the budget. Cash flows from credit transactions before credit reform, as well as nonsubsidized cash flows from credit transactions after credit reform, are to be treated in one of these ways. This chapter discusses the options available for distinguishing the subsidy costs of credit by reporting the rest of the cash flows elsewhere in the budget.

THE BUDGETARY TREATMENT OF CREDIT COSTS

Under current practice, the federal budget has the following structure:

total revenues
minus
total outlays
equals
the deficit

Total outlays are divided into budget functions that correspond to the various purposes for which the government spends money. These functions include defense, agriculture, and education, for example. Each function consists of all the budget accounts for programs used to achieve that particular objective. Each account reports the cash payments and receipts of its programs in the current fiscal year.

The contribution of a credit program to total outlays and, therefore, to the deficit consists of the program's outlays minus collections during that fiscal year. Outlays from a credit account include loan disbursements, payments for defaulting guarantees, interest, and administrative expenses. Outlays also include--as negatives or offsets--collections from fees, repayments of principal and interest, recoveries on defaults, proceeds from asset sales, and prepayments.

Cash flows into or out of a credit account during a fiscal year--even though they directly affect total outlays and the deficit--are only distantly related to the subsidy costs of new loans and guarantees issued in that fiscal year. Deficit reduction policies that reduce a credit program's outlays in a fiscal year do not necessarily reduce the government's cost. For example, selling federal loans, refinancing existing direct loans with guaranteed loans, and delaying loan disbursements until the beginning of the next fiscal year will reduce the deficit for a fiscal year but leave the government's long-term costs unchanged.

Under credit reform, only the subsidy costs would be reported as program costs--that is, in the program functions of the budget. The rest of the cash flows that currently are reported in the program's budget account would be shown in a financing account (for new loans and guarantees) or a liquidating account (for existing loans and guarantees). These nonsubsidy accounts would be included in the budget either in a nonprogram function, where they would continue to affect total outlays and the deficit, or in the means of financing section of the budget, where they would be excluded from outlays and the deficit.

The primary means of financing the deficit (or disposing of the surplus) is Treasury borrowing from the public. Other means include changes in Treasury cash balances, changes in checks outstanding from the Treasury, accrued interest payable on Treasury debt, profits from the sale of gold, proceeds from the sale of some loan assets, and the difference between the face value of coins and their cost of production (seigniorage).

These other means of financing can be quite sizable in any one year. They can also be positive or negative. If positive (such as profits on gold sales), the amount that must be borrowed from the public to finance the deficit through Treasury debt is reduced, although the deficit itself is not reduced. If negative (such as an increase in Treasury cash balances), the amount to be borrowed is increased, and the deficit is left unchanged. The significance of this portion of the budget can be seen in this simplified budget structure:

borrowing from the public
plus
other means of financing
equals
the deficit

Reporting the cash flows, minus the subsidy costs, in the means of financing section of the budget is called reporting them below the deficit line, or simply "below the line." The options for treating these accounts outside the program functions of the budget are discussed, first, for the nonsubsidized cash flows associated with new credit activity and, second, for the cash flows from existing credit activity.

REPORTING THE FINANCING ACCOUNTS FOR NEW LOANS AND GUARANTEES

Under both the Senate-passed proposal and the Administration's revised credit reform proposal, the financing accounts would disburse direct loans to borrowers and make payments for guaranteed loans in default. These financing accounts are revolving funds, which finance a continuing cycle of operations, including collections and expenditures. As revolving funds, these accounts are authorized to receive payments--principal, interest, fees, and premiums--from the borrowers. They would also receive payments of subsidy costs from the subsidy accounts. Credit reform would report subsidy costs in the program functions of the budget, but would report the financing accounts elsewhere. Just where else varies with different credit reform proposals. Descriptions of three approaches follow.

The Approach of the Senate and Administration Proposals

Both credit reform proposals would require the subsidy accounts to be reported in the program functions of the budget. Both proposals would also require a new nonprogram function--federal credit financing activities--to be created for reporting the financing accounts.

Placing the financing accounts in a separate, nonprogram budget function would increase the focus on subsidy costs in the budget. A change in the volume of new loans, for example, would affect outlays in the program functions only to the extent that subsidy costs were increased or decreased. Having fewer loan disbursements would lower program outlays only by the reduced amount of the subsidy provided, not by the reduced amount loaned. Less attention would be paid to the nonsubsidized cash flows reported in the nonprogram function of the budget. This shift in emphasis is appropriate for budget analysis because cash flows from the financing accounts represent financial intermediation rather than costs to the government.

Neither proposal, however, would affect the overall budget deficit. The new subsidy accounts and the new financing accounts are merely the existing cash flows for new credit activity split two ways. The two new accounts sum to the old flow.

Although the Senate treatment would not affect the overall deficit, it would affect whether the maximum deficit is reached under the Balanced Budget Act. Under the Senate proposal, the nonsubsidized cash flows in the credit financing accounts would not be included in total outlays for purposes of the Balanced Budget Act. While not restructuring the budget, as recommended by the President's Commission on Budget Concepts, this approach would accomplish a similar result. The reported budget deficit, however, would remain the same as under the Administration's proposal.

The Approach of the GAO and the President's Commission

An alternative approach would be to show two surplus or deficit calculations in the budget. One calculation would include the credit subsidy accounts and other spending items; the other calculation would include the same, plus nonsubsidized cash flows from the financing accounts. This approach would result in the reporting of two budget deficits, which may be confusing to the public and to the Congress. Doubts would arise about which is the "real" deficit. Confusion and suspicion already exist over the on-budget and total budget deficits.

This dual-budget approach was recommended, however, by the President's Commission on Budget Concepts and was suggested by the General Accounting Office. GAO would split current unified budget outlays into an operating component and a capital component to distinguish current expenses from asset purchases. GAO proposes to report these financing accounts in the capital component of the unified budget.[1]

The CBO's Approach to Credit Reform

A third approach to credit reform, suggested by the Congressional Budget Office, would report the financing accounts--but not the subsidy accounts--as a means of financing the deficit rather than as outlays.[2] If the financing accounts--but not the subsidy accounts--were moved below the line as a means of financing, only subsidy costs would be counted in outlays. The nonsubsidized cash flows through the financing accounts would not be included in outlays and in the deficit under CBO's version of credit reform. If outlays and the deficit were increased by the exclusion of the financing accounts, moving the financing accounts below the line would increase the means of financing by the same amount.

ABOVE-THE-LINE VERSUS BELOW-THE-LINE BUDGETARY TREATMENT

Moving the financing accounts below the line, while leaving the subsidy accounts above the line, does not change the amount to be borrowed from the public--even though it affects the reported deficit. The

1. For more details, see General Accounting Office, *Managing the Cost of Government, Proposals for Reforming Federal Budgeting Practices*, GAO/AFMD-90-1 (October 1989).

2. Statement of James L. Blum, Congressional Budget Office, before the Committee on the Budget, U.S. Senate, March 4, 1987. See also statement of Edward M. Gramlich, Congressional Budget Office, before the Committee on Small Business, U.S. House of Representatives, March 10, 1987.

greater the importance of the deficit for budgetary decisions, the stronger the case for below-the-line treatment. The following sections discuss in more detail the arguments for above-the-line and below-the-line treatment of the financing accounts (see Table 7).

The Case for Above-the-Line Treatment

Above-the-line treatment of the financing accounts means that these accounts are included in calculations of outlays and the budget deficit. Several benefits would result from this treatment:

- The deficit would be closer to federal borrowing requirements;
- The significance of subsidy cost errors for the deficit would be reduced; and
- Incentives to underestimate subsidy costs would be reduced.

Makes Deficit More Consistent With Treasury Borrowing. The federal deficit is important for participants in financial markets because the

TABLE 7. ABOVE-THE-LINE VERSUS BELOW-THE-LINE TREATMENT OF NONSUBSIDIZED CASH FLOWS

Budgetary Treatment	Loan Amount	Subsidy Cost	Financing Flows	Outlays and Deficit
Above-the-Line				
Direct loan	100	9	91	100
Guaranteed loan	100	5	-5	0
Below-the-Line				
Direct loan	100	9	91[a]	9
Guaranteed loan	100	5	-5[a]	5

SOURCE: Congressional Budget Office.

a. Not included in outlays.

deficit measures the new supply of Treasury debt. If the deficit is to reflect Treasury borrowing, then all federal spending that needs to be financed by the Treasury--and only that spending--should be included in the deficit. Below-the-line treatment of the financing accounts would increase the discrepancy between the deficit and funds borrowed from the public. To avoid this discrepancy, the financing accounts should be reported above the line with the subsidy accounts.

Reduces the Significance of Subsidy Cost Errors. Reporting the subsidy accounts above the line and the financing accounts below the line will change the reported deficit. The calculation of subsidy costs, however, will be subject to error. The significance of these errors will increase if they affect outlays and the deficit. Keeping the financing accounts above the line would prevent subsidy cost errors from affecting the deficit.

Reduces Incentive to Underestimate Subsidy Costs. Although the financing accounts can be reported so that their cash flows do not affect the deficit, this approach poses a danger for accurately calculating subsidy costs. Specifically, the pressure to meet deficit targets would create additional incentives to underestimate subsidy costs, which contribute to the deficit. Incentives would also exist to overestimate the nonsubsidized cash flows. These incentives can be moderated if both the subsidy accounts and the financing accounts are reported above the line.

The Case for Below-the-Line Treatment

Below-the-line treatment of nonsubsidized cash flows from federal credit transactions means that the financing accounts for new credit activity are not included in calculations of outlays and the budget deficit. Several benefits would result from this treatment:

- o The goal of comparable budgetary treatment for cash and credit programs would be achieved more fully;
- o The cash flows in the financing accounts would be reported in a manner consistent with their economic effects, which are negligible; and

- The budgetary consequences of the market-based plan on the deficit would be replicated (in that only subsidy costs and not cash flows would be included).

Achieves Comparable Budget Costs. The principal goal for credit reform is to achieve budget parity--that is, comparable budgetary costs between credit and noncredit programs and between direct and guaranteed loans. If left above the line, outlays from the financing accounts would continue to affect the deficit and budget decisions after credit reform. Consequently, the goal of budget parity would not be achieved.

Treating the financing accounts as a means of financing the deficit also provides a general defense against the use of some deceptive means for deficit reduction. Under the current federal accounting system, incentives for such means exist at both the program and the aggregate levels of the budget. These deceptions include selling loan assets, substituting guaranteed loans for equally subsidized direct loans, and issuing guarantees for fees that are insufficient to cover costs. If the financing accounts were reported below the line, credit reform would eliminate incentives for these deceptions at the program and aggregate level of the budget.

Reports Cash Flows Consistently With Their Economic Effects. Nonsubsidized cash flows should be reported below the line because they represent financial intermediation rather than costs to the government. They are the cash payments required by exchanges of equal-value assets. To the extent that these cash flows are of expected size and timing, their economic significance to the budget would already be reflected in their subsidy costs. Nonsubsidized cash flows do not affect the level of tax revenues that must be collected now or in the future to pay for federal spending. Without such effects, these cash flows should not affect the size of the deficit.

Nonsubsidized cash flows through the financing accounts are not pertinent for fiscal policy. They do not directly affect national savings or future tax burdens, and they are already excluded from the National Income and Products Accounts. Without below-the-line treatment of the financing accounts, the deficit would still need to be adjusted for loan disbursements, repayments, and loan sales--if the deficit were to be useful for fiscal policy.

Simulates the Market-Based Plan. The market-based plan for credit reform would sell direct federal loans to private investors and would reinsure federally guaranteed loans with private insurers. The great advantage of the market-based plan is that it is conceptually simple for users of the federal budget. An appropriation plan with below-the-line treatment of the financing accounts would achieve budgetary results similar to the market-based plan.

Effect on the Deficit

Reporting the financing accounts above the line will leave the deficit unchanged. Reporting the financing accounts below the line will affect the deficit. To assess the size of the budgetary effect of below-the-line treatment, CBO calculated the subsidy costs and the nonsubsidized cash flows for new loan obligations and guarantee commitments included in its 1990-1992 baseline. The account data for these calculations are available in a statistical supplement to this report, *Data Base for Credit Reform.* Summary tables of the data are included in Appendix D.

Under current above-the-line budgetary treatment of credit programs, both subsidy costs (from the subsidy accounts) and the nonsubsidized cash flows (from the financing accounts) are counted as outlays in the budget. Total baseline outlays for new credit activity from both subsidy and financing accounts are shown in Table 8. Subsidy costs calculated for new credit assistance exceed total outlays for new credit assistance in each year from 1990 through 1992. Moving the financing accounts below the line would increase outlays and the deficit by the amount of negative outlays reported for the financing accounts: -$6.0 billion, -$6.5 billion, and -$4.1 billion. The correct interpretation of this increase in the reported deficit is that the present value of the loss to the government on new federal credit assistance is $4.1 billion to $6.5 billion per year greater than outlays for new activity. This change in the deficit reflects a change in accounting for the subsidy rather than a change in policy or in costs.

The preferred treatment of the financing accounts depends heavily on accurately calculating subsidy costs. If these calculations were accurate, most arguments against below-the-line treatment of the financing accounts would be withdrawn. The financing accounts, there-

25-002 0 - 89 - 3 : QL 3

fore, should go below the line when the accuracy of the subsidy costs is reasonably high. In the meantime, reporting financing accounts above the line in a nonprogram function would be a step in the right direction. The Senate proposal, which excludes the financing accounts from certain calculations of the budget deficit, accomplishes much of the aim of below-the-line treatment and would also be a useful transition. Some modification of deficit targets in the Balanced Budget Act may be necessary in order to accommodate this treatment.

REPORTING CASH FLOWS FOR OLD LOANS AND GUARANTEES

The federal government has a large portfolio of direct loans and guaranteed loans with a potential life of up to 50 years. During this time, repayments, defaults, recoveries, and agency debt service continue but diminish year by year. Although credit reform usually refers to new

TABLE 8. DIVISION OF CBO BASELINE OUTLAYS INTO SUBSIDY ACCOUNTS AND FINANCING ACCOUNTS FOR NEW LOANS AND GUARANTEES, FISCAL YEARS 1990-1992 (In billons of dollars)

	1990	1991	1992
CBO Baseline Outlays	3.2	4.5	7.5
Subsidy Accounts Outlays			
Direct loans	1.4	2.0	2.2
Guaranteed loans	7.8	9.1	9.4
Total	9.2	11.0	11.6
Financing Accounts Outlays			
Direct loans	3.1	3.7	4.1
Guaranteed loans	-9.1	-10.2	-8.2
Total	-6.0	-6.5	-4.1

SOURCE: Congressional Budget Office.

NOTES: Minus sign indicates collections in excess of disbursements.

refers to new loans and guarantees, these old loans and guarantees existing before credit reform must also be considered. The Senate-passed proposal and the Administration's revised credit reform proposal differ in which account old loans and guarantees are reported and in whether or not they are included in the deficit under the Balanced Budget Act.

Existing Loans Under the Senate Proposal

Under the Senate-passed credit reform proposal, loans issued before credit reform would be accounted for in the financing accounts, which were created to handle the nonsubsidized cash flows for new credit assistance. The Senate proposal has the advantage of being able to separate the cash flows for old loans (and possibly guarantees) from the subsidy costs of new loans and guarantees. (The Senate proposal does not mention old guarantee commitments.)

The proposal, however, creates other problems. The financial condition of the financing accounts would be difficult to monitor and assess if old and new funds are commingled. Also, with above-the-line treatment, budget outlays would be affected by loan repayments, prepayments, and loan asset sales. To avoid both problems, old cash flows could be reported in liquidating accounts that could be treated below the line.

Existing Loans Under the Administration's Proposal

Under the Administration's revised credit reform proposal, payments and collections for all loan obligations and guarantee commitments made before credit reform would continue to be made from the existing program accounts. These accounts would become liquidating accounts, in effect, and would eventually expire. The old accounts would continue to be reported in the program function of the budget, together with the subsidy accounts for new loans and guarantees.

The Administration's proposal requires minimal accounting changes for credit programs. Some shortcomings of the current budgetary treatment of credit, however, would continue. Loan repayments and prepayments, defaults from guaranteed loans, and sales of loan assets acquired before credit reform would distort program outlays and the deficit. The subsidy costs for old loans and guarantees were incurred in previous years at the time the loans were disbursed or guaranteed. Combining cash flows from old credit assistance with the subsidy costs of new credit assistance diminishes the visibility and control of subsidy costs in the budget.

Recognizing Losses of Past Credit Assistance

No liquidating account should be moved below the line unless that account has been provided with financial resources sufficient to meet its expected liabilities. To do otherwise would obscure the recognition of losses.

A problem for both the Senate and Administration proposals is that several existing credit revolving funds have already accumulated substantial losses. The three credit revolving funds of the Farmers Home Administration and the direct loan revolving fund of the Department of Veterans Affairs owed $42.4 billion more than they reported in assets at the end of 1988 (see Table C-10 in Appendix C). In addition, the Department of Education has committed the government to pay interest annually for the life of outstanding guaranteed student loans. In 1988, the subsidy payments for interest on these student loans amounted to $1.3 billion. Similarly, the FmHA funds had an excess of $6.6 billion of interest paid over interest received in 1988. Liquidating accounts, created to receive the assets and liabilities of existing federal credit programs, would not have the financial resources to meet existing obligations.

The deficit condition of these accounts undermines the goal of consistency in the budgetary treatment of all accounts. Because these accounts have not received appropriations to restore all prior losses, they have no means of meeting their obligations other than borrowing, at interest, from the Treasury. More interest-bearing debt worsens their financial condition. In being forced to pay interest on subsidy costs incurred in the past, underfunded programs appear to be more costly than fully funded ones.

A sufficiently large appropriation to FmHA revolving funds would enable these accounts to pay off their debts to the Federal Financing

Bank. Interest costs, now charged to the revolving funds and reported in the program functions of the budget, would be shifted to the general category--interest on the public debt. Because such appropriations are intragovernmental transactions, they would have no effect on total federal outlays or on the federal deficit.

Restoration of equity for all credit reform accounts with accumulated losses would require appropriations of at least $42.4 billion. To do so for future losses from existing commitments would require a much larger amount. No estimate of the required total is available. Whatever the required amount, if these liquidating accounts were prohibited from financing new subsidized credit, the appropriations for prior losses would not increase budget outlays or the deficit. Moving the liquidating accounts below the line would affect the deficit, however, because the cash flows from old loans and guarantees would be excluded.

New Subsidy Costs for Old Loans

New subsidy costs can be incurred through existing loans by forgiving or rescheduling repayment, refinancing with new terms, or allowing prepayments with federally guaranteed private financing. In these cases, the new subsidy costs would be charged to new subsidy accounts under credit reform. The related nonsubsidized cash flows would be reported in liquidating accounts.

The subsidy costs of forgiving a loan, for example, would be the present value of the forgiven or expected repayments. These subsidy costs would be charged to the subsidy account and would be subject to appropriations. The subsidy account would then transfer the appropriated amounts to the liquidating account. Similar action would be taken for rescheduling or refinancing loans. In the case of loan prepayments with federally guaranteed private financing, the subsidy costs would be charged to the new guarantee.

Separate liquidating accounts would be the easiest method of accounting for loan obligations and guarantee commitments made before credit reform. The cash flows associated with these old loans and guarantees should be recorded in a nonprogram function of the budget, as provided in the Senate-passed proposal. These cash flows could also be reported below the line, provided the liquidating accounts receive sufficient appropriations to restore their financial balance. Funds appropriated to liquidating accounts would be invested at interest in Treasury accounts until used to meet existing obligations.

CHAPTER VI

CARRYING OUT CREDIT REFORM

For credit reform to succeed, subsidy costs must replace cash flows as the measure that counts in the budget. Experiments with appending the credit budget and the subsidy costs of credit to the budget documents have not effectively influenced federal budgeting. In the end, cash flows still dominate budgetary decisions about credit programs. This chapter outlines the major steps that would be necessary to carry out credit reform.

CREATING A CENTRAL COST AUTHORITY

Calculations of subsidy costs are inherently uncertain. Since credit programs involve transactions that extend over many years, the exact costs to the government of these programs cannot be known in advance. Given this uncertainty, federal agencies that administer credit programs would have an opportunity as well as an incentive to underestimate costs. To avoid this bias, a central agency should be given the authority to prescribe the methods by which the subsidy costs of credit programs are calculated and to monitor these calculations closely. Alternatively, this central cost authority could do the calculations itself. Either arrangement would ensure consistency and permit refinement of methods as experience is gained. This agency should build on the efforts of the Office of Management and Budget to develop useful subsidy cost calculations.

Both the Senate-passed proposal and the Administration's revised credit reform proposal would assign the authority for calculating subsidy costs to the Department of the Treasury. Under both proposals, subsidy costs would be calculated either by the Treasury or by the federal agencies administering credit programs under guidelines established by the Treasury.

Whether the central cost authority prepares or oversees subsidy cost calculations, the calculation process must be open to review. The principles, procedures, and data necessary to calculate subsidy costs must be disclosed to the Congress and to the public. Congressional agencies, such as the Congressional Budget Office and the General Accounting Office, should have sufficient information to replicate the calculation of subsidy costs for individual credit programs. Other interested groups and individuals should also have access to the same information. The widespread review of the subsidy cost calculations would help avoid bias and would improve accuracy over time.

ACCOUNTING FOR SUBSIDY COSTS IN THE BUDGET PROCESS

The main point of credit reform is to make budgetary decisions on the basis of subsidy costs. To this end, specific appropriations of subsidy costs would be sought for direct loans and guaranteed loans made during any subsequent fiscal year. For some entitlement programs, such as the Veterans home loan guaranty program, subsidy costs could be provided either through annual appropriations or through permanent indefinite appropriations.

Including Subsidy Costs in Budget Authority and Outlays

Subsidy costs would be expressed in terms of budget authority and outlays, as is done for many noncredit programs. Budget authority would represent the total amount of subsidy costs to be incurred by the government through new loan obligations and guarantee commitments during the budget year. When a federal agency obligates the government to make a direct loan or to guarantee a private loan, the subsidy costs involved would be calculated and charged against the appropriation. The nonsubsidized portion of direct loans would be an obligation of the financing account.

Outlays for subsidy costs would be recorded when loan disbursements are made. In some cases, as in the Export-Import Bank of the United States, loan disbursements may take place over several years after the loan is first obligated.[1] The rate at which loans are disbursed

1. For a detailed discussion of specific issues raised by credit reform for the Export-Import Bank, see Congressional Budget Office *Budgeting for Eximbank: A Case Study of Credit Reform* (December 1989).

is important in calculating outlays. Outlays of subsidy costs each year would include a portion of the subsidy costs of new loans obligated in previous years. Outlays for spending programs already have the same two components: outlays from budget year appropriations, and outlays from prior year appropriations.

Treating Subsidy Costs in Budget Resolutions and Committee Allocations

Budget authority and outlays of subsidy costs for credit would be treated in the President's budget and in the Congressional budget resolutions in the same manner as noncredit programs. The subsidy costs for new loans and guarantees would be placed in separate agency appropriation accounts. These accounts would be assigned to a specific program function of the budget and would be included in the Section 302 committee allocations under the Congressional Budget Act. If a credit program is regarded as an entitlement with permanent, indefinite appropriations to cover annual subsidy costs, these subsidies would be allocated to the relevant authorizing committees. Subsidy costs for programs other than entitlements would be allocated to the appropriations committees. Only the amounts in subsidy accounts would be allocated to committees under the credit reform proposals; cash flows in the financing accounts would be unallocated.

Several options exist for how cash flows from credit assistance provided before credit reform would be treated. Under the Administration's revised proposal, cash flows from loans made before credit reform would be recorded in the existing credit accounts of federal agencies. These cash flows would be allocated to budget functions and to committees in the same manner as they are now allocated. Under the Senate-passed proposal, loans and guarantees made before credit reform would be treated in the same manner as the nonsubsidized cash flows for new credit assistance. In other words, they would not be allocated to committees but would instead be reported in a new non-program function of the budget or, alternatively, as a means of financing the deficit.

The current definition of budget authority (Section 3(2) of the Congressional Budget Act) does not include authority to guarantee the repayment of indebtedness incurred by another person or government.

Credit reform, however, would extend this definition to the subsidy costs of guarantees. Carrying out credit reform would require increased budget authority for guaranteed loan programs. Conversely, budget authority for some direct loan programs would be smaller under credit reform because the nonsubsidized financing costs would no longer be included.

Continuing the Credit Budget

Limits on credit authority are now imposed in annual appropriation acts for about 45 percent of direct loans and 90 percent of guaranteed loans.[2] Activity levels for many programs are below the enacted limits because those limits are usually set high enough to avoid constraining the programs. If limits were retained under credit reform, the appropriations committees might set the limits on new credit authority in excess of the value of the subsidy cost appropriations. This would represent an underfunding of the programs, which could result in later supplemental appropriations.

The credit reform proposals of both the Administration and the Senate would continue the existing credit budget. Under the Administration's revised proposal, limits on the amount of new loan obligations and guarantee commitments would continue to be requested for many credit programs. Similarly, under the Senate-passed proposal, the budget resolutions would continue to specify levels of new credit authority. Loan obligations and guarantee commitments would be limited both in the aggregate and for each major function of the budget. The Senate proposal, however, would make subsidy appropriations paramount. A point of order could be lodged against any appropriation bill that provides new credit authority for programs without having corresponding appropriations for their subsidy costs.

A federal credit program could have subsidy costs of zero. The only controls on such a program would be to limit the volume of new credit activity. Zero subsidy costs could occur, for example, in a guaranteed loan program that charges a fee that is sufficient to cover all its costs. Maintaining such a credit program under the federal government,

2. Office of Management and Budget, "Special Analysis F," *Special Analyses, Budget of the United States Government, Fiscal Year 1990,* Tables F-2 and F-4.

rather than under a private financial institution, may be questioned. One justification for continuing the program under federal financing would be if the full costs were lower than they would be under private financing.

Little attention is now paid to the numbers for credit authority in the annual budget resolutions, except when a committee allocation is in danger of being exceeded. The recent budget agreement between the Administration and the Congress, for example, contained no mention of credit authority, which allows the government to incur loan obligations or guarantee commitments. Since appropriations for subsidy costs will place credit programs on a par with outlays for spending programs, eliminating the numbers for credit authority from the budget resolutions would not matter much. If the appropriations committees consider credit authority limits useful, the credit budget may be continued. Continuing these budgetary procedures may also ease the transition to credit reform.

Using Subsidy Costs for Purposes of The Balanced Budget Act and Sequestration

Under the Balanced Budget Act, programs for credit assistance are generally subject to sequestration, which is the cutting of program resources across the budget. Sequestrable resources for most credit programs are measured in terms of loan volume--new loan obligations and new guarantee commitments. Under credit reform, sequestrable resources might be limited to the subsidy costs provided in appropriation acts. This feature could reduce the volume of new credit activity in the event of sequestration.

An alternative approach would be to reduce the value of the subsidy costs provided, while leaving the volume of credit activity unchanged. This is done now for the Guaranteed Student Loans program, which is defined as an entitlement program. In the event of sequestration, the value of the government's subsidy payments for student loans is reduced, rather than the volume of guaranteed loans. The result would change the terms of the loans and guarantees, however, and could require a special rule for each credit program. In any event, the nonsubsidized cash flows for credit programs should not be subject to sequestration, since these cash flows do not constitute a cost to the government. The Senate-passed credit reform proposal recognized this by exempting the financing accounts from sequestration.

A similar choice will be necessary when defining the baseline budget for credit programs under the Balanced Budget Act. At present, the baseline is constructed by inflating the volume of loans and guarantees. With credit reform, discretionary appropriations for subsidy costs could be projected in the same manner as the discretionary appropriations for spending--that is, the previous year's appropriations would be assumed with an adjustment for inflation.

ANTICIPATING POTENTIAL PROBLEMS IN CREDIT REFORM

Using subsidy costs in the budget carries disadvantages as well as advantages. Subsidy costs would more accurately reflect the cost of federal credit programs than would cash flows. These costs would also provide a better basis for comparing federal credit programs with non-credit programs. Despite these advantages, the use of subsidy cost calculations could create some new problems for the Congress. These problems would result primarily from errors in the calculations and from differences in the methods used by the Congress and the Executive Branch.

Errors in Subsidy Cost Calculations

Errors in calculating subsidy costs are to be expected and could occur for technical reasons. The methods or data used to make the calculations could be flawed; relevant information in projecting loan defaults could be unavailable; or unduly optimistic interest rates could be assumed. Technical errors should diminish as experience is gained in calculating these costs.

Subsidy cost calculations will always be subject to some error, however, since the best technical projection of loss on a credit transaction will usually differ from the actual loss. These differences in loss may arise because market conditions change unexpectedly. The terms on many federal credit programs are fixed and do not change with market conditions. Rural electrification loans, for example, are provided at a fixed 5 percent interest rate. Nevertheless, if market conditions change after the budget year begins, the subsidy costs for credit programs could be higher or lower than when the subsidy appropriations were made.

As market interest rates rise or fall, credit reform could lead to requests for supplemental appropriations or rescissions of budget authority. These supplementals and rescissions would adjust the available budget authority for subsidy costs to the changed subsidy per dollar of loan, which could further complicate the budget process. Alternatively, if no supplementals or rescissions are requested, more or less credit assistance will be provided than originally assumed. This situation could be avoided by providing current indefinite appropriations for credit assistance programs with fixed terms while maintaining limits on loan volume. The budget authority and outlays associated with the appropriations, however, would end up higher or lower than originally estimated.

Differences in Subsidy Cost Estimates

Some problems may also result from differences in how subsidy costs are calculated by the Congress and the Executive Branch. Differences in the resulting estimates are likely to occur for new credit assistance when there is little previous experience on which to base the numbers. CBO may give one estimate for subsidy costs in a new program, and the Administration may give another. These differences might be quite reasonable given the lack of information available for making the original subsidy calculations. Nevertheless, some people believe that the differences in the estimates between CBO and the Administration disrupt the legislative process.

Differences in estimates may also arise for ongoing credit programs. It is quite normal for CBO and the Administration to forecast different levels in interest rates for the budget year. These differences, in turn, would lead to different estimates for subsidy costs. In addition, there may be differences in the assumptions for how quickly new loans will be disbursed, which would lead to different calculations for credit subsidy outlays. These kinds of differences are quite usual for direct spending programs and should be expected when credit programs and direct spending are treated equivalently. These differences might be larger in the case of credit subsidies, however, than with direct spending.

Attempts to manipulate subsidy cost outlays are also probably inevitable. Such attempts may involve concentrating loan volume at the end of the budget year or assuming lower disbursement rates. These attempts to evade the discipline of the budget process could generate policy issues for the Budget Committees and the Congress. Yet, as long as CBO's treatment of appropriations for subsidy costs is consistent with their treatment in the budget resolution and in the committee allocations, no special Congressional problems should result.

CBO RECOMMENDATIONS

The central fiscal agencies of the federal government--including OMB, GAO, and CBO--agree on how the costs of federal credit programs should be treated in the budget. They all believe that costs should be calculated in terms of the present value of the long-term costs of extending credit assistance. These fiscal agencies also agree on when these costs should be reported in the budget--namely, that they should be recognized in the budget period when the decision is made to incur them. Furthermore, the agencies agree that the subsidy costs of federal credit programs ought to be subject to the annual appropriation process. Such budgetary treatment of credit would:

- Measure the costs of federal credit programs more accurately;

- Allow comparisons of credit programs with noncredit programs; and

- Improve the allocation of resources between credit and noncredit programs.

Making subsidy costs subject to annual appropriations would permit the costs of federal credit programs to be controlled at the time of the decision to extend credit. This approach is consistent with the budgetary treatment of loans as recommended by the President's Commission on Budget Concepts in 1967.

The commission's recommendation to identify the subsidy costs involved in federal loan programs was not carried out at the time because no workable means existed for calculating subsidy costs. Since that time, OMB has developed a feasible approach. Therefore, CBO and others believe it is now time to proceed with the commission's recommendation in regard to direct federal loans and to include federally guaranteed private loans as well. In CBO's judgment, both the Administration's revised credit reform proposal and the Senate-passed credit reform proposal are workable approaches.

Budget parity--the long-held goal of a unified, consistent, and integrated system of accounting for all federal programs--can be achieved through credit reform. Accordingly, CBO makes the following recommendations:

1. The Congress should adopt subsidy costs as the budgetary measure for federal credit programs.

2. Subsidy costs reflect the relevant cost to the government of credit assistance and, thus, should be subject to the controls of the annual appropriation process.

3. The nonsubsidized portion of credit assistance should be distinguished from the subsidy costs by reporting them in separate financing accounts in a nonprogram function of the federal budget.

4. Once subsidy cost calculations can be measured with reasonable accuracy, the financing accounts should be treated as a means of financing the deficit, so that only subsidy costs of credit are included in budget outlays.

5. A central Executive Branch agency should be assigned authority for calculating the subsidy costs or monitoring their calculation and should be subject to external review of its methods and data.

6. Credit reform should be implemented with sufficient time, at least six months, for the new agency to prepare subsidy cost calculations and for the Congress to become familiar with the new budgetary procedures.

VIEWS OF THE GENERAL ACCOUNTING OFFICE

The GAO has advocated credit reform for many years and supports all the CBO recommendations, except one. GAO disagrees with the fourth recommendation that the financing accounts be treated as a means of financing when subsidy costs can be measured with reasonable accuracy. GAO would prefer to implement credit reform through its proposal for a capital budget. Under that plan, the financing accounts would be reported in a new category of the budget, the capital account, rather than in the existing means of financing.

APPENDIXES

APPENDIX A

GOVERNMENT-SPONSORED ENTERPRISES

The federal government influences the allocation of credit not only through direct federal loans and federally guaranteed private loans, but also through the creation and use of government-sponsored enterprises (GSEs). GSEs are financial intermediaries chartered by the federal government to perform specific financial functions, sometimes under the supervision of a government agency. Their purpose is to borrow in capital markets and to increase the flow of money to targeted borrowers. These borrowers include farmers, homebuyers, savings and loan institutions, and students.

GSEs may have public purposes, but they are wholly owned by private investors. Table A-1 provides information about the six GSEs now established: the Farm Credit Banks (FCB), the Federal Home Loan Banks (FHLB), the Federal National Mortgage Association (FNMA or Fannie Mae), the Federal Home Loan Mortgage Corporation (FHLMC or Freddie Mac), the Student Loan Marketing Association (SLMA or Sallie Mae), and the Federal Agricultural Mortgage Corporation (FAMC or Farmer Mac).

Four other federally created entities are also sometimes referred to as GSEs: the College Construction Loan Insurance Association (CCLIA or Connie Lee), the Financing Corporation (FICO), the Farm Credit System Financial Assistance Corporation (FAC), and the Resolution Funding Corporation (REFCORP). The Congressional Budget Office believes that these entities are not properly classified as GSEs. CCLIA, for example, is not privately owned. The other three were created, not for financial intermediation, but to finance the off-budget resolution of insolvent federally insured savings and loans and member institutions of the Farm Credit System (FCS).

TABLE A-1. GOVERNMENT-SPONSORED ENTERPRISES

Enterprise	Established[a]	Privatized[a]	Assets[b]	Major Asset
Farm Credit System				
Farm Credit Banks	1988[c]	1988[c]	48.6	Farm loans and agricultural mortgages
Banks for Cooperatives	1933	1968	13.1	Loans to cooperatives
Federal Home Loan Banks	1932	1951	174.5	Savings and loan advances
Federal National Mortgage Association	1938	1968	112.3[d]	Residential mortgages
Federal Home Loan Mortgage Corporation	1970	1970	34.4[e]	Residential mortgages
Student Loan Marketing Association	1972	1972	28.6	Guaranteed Student Loans and "warehouse" loans
Federal Agricultural Mortgage Corporation	1988	1988	f	(In development stage)

SOURCE: Congressional Budget Office.

a. Calendar year.

b. Total assets at the end of calendar year 1988, in billions of dollars.

c. The Agricultural Credit Act of 1987 required the Federal Land Bank and the Federal Intermediate Credit Bank in each Farm Credit District to merge into a single Farm Credit Bank by July 6, 1988. The Land Banks had been established in 1916 and privatized in 1947; the Intermediate Credit Banks had been established in 1923 and privatized in 1968.

d. Excludes $178 billion in residential mortgages held in pools to back securities issued and guaranteed by the Federal National Mortgage Association.

e. Excludes $226 billion in residential mortgages held in pools to back securities issued and guaranteed by the Federal Home Loan Mortgage Corporation.

f. Less than $50 million.

SPECIAL BENEFITS TO GSEs

GSEs have a special relationship with the federal government. This relationship comes not only from their government sponsorship, but also from certain government benefits available to most GSEs. One of these benefits is the authority to borrow from the Treasury. Other benefits are an exemption of GSEs' securities from registration requirements of the Securities and Exchange Commission (SEC) and an exemption from state and local income tax on the interest income of investors.

The special relationship of GSEs to the government constitutes an implicit, but real, federal guarantee of GSE debt. One effect of the implicit federal guarantee is that the average market yields on debt issued by several GSEs are comparable with the market yields on Treasury debt. The yield spreads are much less than those paid by fully private enterprises whose debts do not have a federal guarantee. This relatively low cost of borrowing reflects investors' perception that GSE debt is backed by the federal government.

BUDGET DATA ON GSEs

Federal budget authority and outlays exclude lending and borrowing by GSEs. This exclusion follows the suggestion of the President's Commission on Budget Concepts. The commission recommended in 1967 that the government adopt a unified budget that would provide a comprehensive statement of all federal financial transactions. The commission also recommended that the GSEs existing at that time be excluded from the unified budget when they "are completely privately owned."

Federal budget documents, however, do contain some information about GSE activities. The *Appendix* to the President's budget includes a summary of financial information for each GSE and a projection of its aggregate borrowing and lending through the budget year. Discussions of each enterprise--the government's implicit guarantee of its securities, its legal benefits enjoyed under federal law, and its lending and borrowing--appear in the *Special Analyses* volume of the budget. In this volume and in the *Statement of Liabilities and Other Financial Commitments of the United States Government*, published each year by

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the Treasury, GSE borrowings and guaranteed mortgage-backed securities are not considered government liabilities because the implicit federal guarantee is not legally binding.

The budget documents, like the annual statements of GSEs, report assets, liabilities, and capital at face value rather than at market value. Financial information based on face value cannot be used to measure accurately the financial position of an enterprise or the risk to the federal government from its guarantee of GSE liabilities. Accurate measurement requires that assets, liabilities, and capital be valued at market prices.

In 1986, the government published estimates of the market value of one GSE, Fannie Mae. The recently enacted Financial Institutions Reform, Recovery, and Enforcement Act of 1989 (FIRREA) requires that both the Treasury and the General Accounting Office conduct studies on the financial safety and soundness of GSEs, measure the risks to the government associated with each, and determine the impact of their operations on federal borrowings.

BORROWING BY GSEs

The outstanding debt and mortgage-backed securities of GSEs have increased at an extraordinarily rapid rate--approximately 18 percent per year, on average, since 1970. This growth has made the implicit federal guarantee of GSEs a potentially high-cost form of government intervention in credit markets. Outstanding GSE debt and mortgage-backed securities totaled over $720 billion at the end of calendar year 1988, as shown in Table A-2. Since GSEs are classified as nonfederal, their debt is not included in the federal debt. The 1988 amount was more than one-third of the outstanding federal debt held by the public and 8 percent of total outstanding debt in the United States. The amount of new debt issued and mortgage-backed securities guaranteed by GSEs now exceeds 50 percent of Treasury borrowing from the public, as illustrated in Figure A-1 on page 78.

TABLE A-2. SECURITIES OF GOVERNMENT-SPONSORED ENTERPRISES OUTSTANDING AT END OF CALENDAR YEAR (In billions of dollars)

Enterprise	1970	1975	1980	1985	1986	1987	1988	Estimated 1989	Estimated 1990
Farm Credit System									
Banks for Cooperatives	1.5	3.2	8.4	8.1	8.5	8.9	11.2	11.1	11.7
Farm Credit Banks[a]	11.3	23.7	53.6	61.8	55.6	35.3	43.4	42.0	42.0
Federal Home Loan Banks	11.2	20.6	36.6	73.6	88.1	105.1	126.7	145.0	160.0
Federal Home Loan Mortgage Corporation									
Debt	b	5.1	4.7	13.8	14.9	17.1	20.6	22.6	22.4
Mortgage-backed securities	b	1.2	16.8	92.0	146.9	208.9	220.7	252.7	279.5
Federal National Mortgage Association									
Debt	13.2	28.2	52.3	91.7	91.6	92.6	106.0	103.8	106.5
Mortgage-backed securities	b	b	b	48.8	86.4	130.5	167.2	185.3	205.7
Student Loan Marketing Association	b	0.2	2.3	12.7	15.5	21.3	25.0	29.1	33.5
Total	37.2	82.3	174.8	402.4	507.5	619.7[c]	720.7[c]	791.6[c]	861.3[c]

SOURCE: Congressional Budget Office based on information from the Office of Management and Budget.

a. Before fiscal year 1987, includes the Federal Intermediate Credit Banks and the Federal Land Banks.

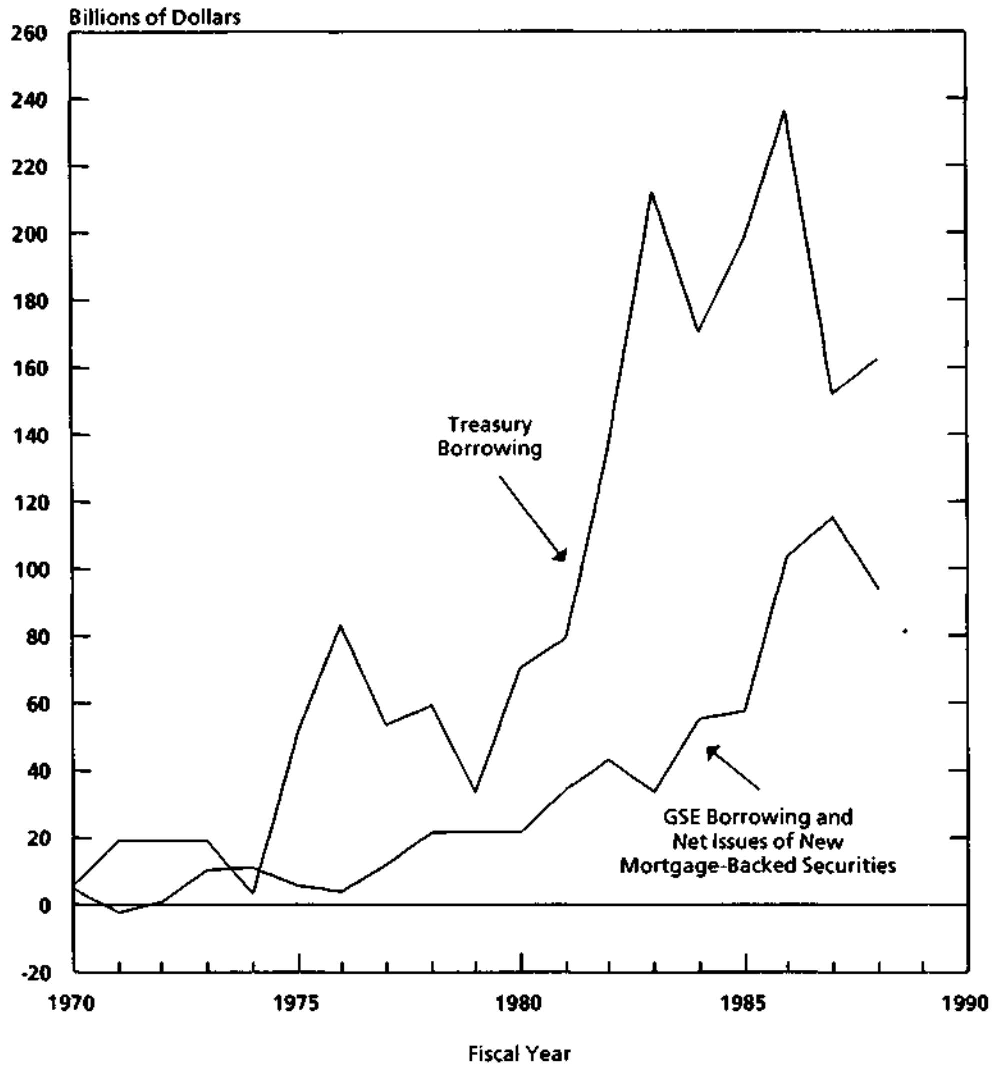
b. Not yet chartered.

c. Excludes securities of the Financing Corporation (FICO), the Farm Credit System Financial Assistance Corporation (FAC), and the Resolution Funding Corporation (REFCORP), since CBO believes that they are not properly classified as GSEs.

RISKS POSED BY GSEs

The special legal benefits granted GSEs and the implicit federal guarantee of their liabilities insulates the owners and creditors from risk of loss on funds advanced to their enterprises. This insulation was realized in the Agricultural Credit Act of 1987, which provided assistance to the FCS after it lost $4.6 billion in 1985 and 1986. The act did not require the owners of member institutions of the FCS to forfeit their equity investment as a condition of federal assistance.

Figure A-1.
New Borrowing from the Public by Government-Sponsored Enterprises and the Treasury



SOURCE: Congressional Budget Office based on information from the Office of Management and Budget.

Private owners enjoy most of the returns from the risk-bearing by GSEs without the burden of that risk. Federal regulation is currently the only means of controlling these risks carried by the government. Yet such federal regulation has been notable by its absence, even though four of the five active GSEs--Sallie Mae is the exception--have federal regulators. The Department of Housing and Urban Development (HUD) has rarely used its general regulatory authority over Fannie Mae and Freddie Mac. HUD also may limit the debt-to-capital ratios of Fannie Mae and Freddie Mac; yet this authority has little force since subordinated debt, which carries an implicit federal guarantee, is included in capital. With the recent passage of FIRREA, the Federal Housing Finance Board (FHFB) inherited the broad authority of the Federal Home Loan Bank Board to regulate the FHLBs. The Farm Credit Administration (FCA) has authority to assure the safety and soundness of FCS member institutions. This authority includes the power to prescribe minimum capital levels. The FCA will also regulate the safety and soundness of Farmer Mac, when that GSE begins operating.

The practice of neither measuring nor controlling the risks of GSEs could lead, if continued, to large and unanticipated federal outlays. Forthcoming reports on the risks to the government of each GSE, required by FIRREA from the Treasury and the General Accounting Office, may provide an opportunity to address these risks.

The implicit federal guarantee of GSE liabilities has a cost to the government. Its cost is comparable to that of the explicit federal guarantee of individual loans. If the government regularly collected detailed information about the risk of loss from each GSE, the subsidy costs of the federal guarantee could be calculated. These costs could then be included in the unified budget and compared with the costs of other credit assistance and with noncredit federal spending, as proposed under credit reform.

APPENDIX B

THE FEDERAL FINANCING BANK

The Federal Financing Bank (FFB) was established on December 29, 1973, as part of the Treasury Department. The FFB was intended to reduce the cost of federal borrowing by agencies other than the Treasury. This intent would be accomplished by consolidating and coordinating the marketing of debt by individual federal agencies.[1] Before 1973, several federal agencies had authority to borrow from the public, to sell (with an agency guarantee) direct loans they had originated, and to market (with an agency guarantee) the debt of others. The FFB was created to replace these financing transactions by lending to the agencies. The FFB was to finance its loans either with its own borrowing from the public or by borrowing from the Treasury. After one experiment with selling FFB debt to the public, borrowing from the Treasury was found to be the least costly form of financing. This means of financing has been used ever since by the FFB.

The FFB was intended to reform financing, not to change budgetary accounting. To assure the FFB's neutrality toward the budget, Section II(c) of the Federal Financing Bank Act of 1973 stated:

> Nothing herein shall affect the budget status of the federal agencies selling obligations to the Bank. . . or the method of budget accounting for their transactions. The receipts and disbursements of the Bank in discharge of its functions shall not be included in the totals of the budget of the United States Government and shall be exempt from any general limitation imposed by statute on expenditures and net lending (budget outlays) of the United States.

1. Robert W. Kilpatrick and Thomas J. Cuny, *The Federal Financing Bank and the Budget*, Technical Paper Series BRD/FAB 76-1, Office of Management and Budget (January 26, 1976); and Congressional Budget Office, *The Federal Financing Bank and the Budgetary Treatment of Federal Credit Activities* (January 1982).

The FFB was designed to reduce the cost of agency borrowing, agency sales of loan assets, and federal guarantees of securities issued by nonfederal borrowers. Unfortunately, the latter transactions had the effect of transferring federal credit activity off-budget.

LOAN SALES

Before the the FFB was established, the Farmers Home Administration (FmHA) and the Rural Electrification Administration (REA) had the authority to "sell loans" to investors in the form of fully guaranteed "Certificates of Beneficial Ownership." These certificates were more like agency debt than genuine loan sales because the government retained the associated credit risks. The paper sold was essentially undistinguishable from Treasury debt, except for being less marketable and having higher transaction costs.

The President's Commission on Budget Concepts recommended that "participation certificates" (shares of a pool of loans) should be treated as another means of financing, like Treasury borrowing, and not as an offset to expenditures. However, the authorizing statutes required that the proceeds from sales of Certificates of Beneficial Ownership be treated as offsetting collections. Thus, before and after the FFB was established, these agencies could both disburse new loans and generate offsetting collections by selling these certificates. The loan sales effectively eliminated loan transactions from the budget. The FFB replaced private investors and, hence, reduced the interest rate required on Certificates of Beneficial Ownership. Between 1975 and 1980, the amount of new direct loans from the FmHA increased from \$5.6 billion per year to \$15.8 billion per year. REA lending rose from \$1.1 billion per year to \$3.7 billion in the same period.[2] All borrowing by these accounts was through the FFB.

SALES OF GUARANTEED SECURITIES

Some agencies, such as the Department of Defense and the REA, have the authority to guarantee the debts of others. This guarantee reduces

2. Congressional Budget Office, *The Federal Financing Bank*, p. xv.

the interest rate required by commercial lenders. After the FFB was established, these agencies discovered that their borrowers, if guaranteed, could obtain funds directly from the FFB on more favorable terms than from private lenders. As a consequence, the FFB became a favored source of financing. These loans did not increase outlays or the deficit, however, because the FFB's transactions were not included in the budget. Thus, direct loans from federal agencies were recorded in outlays and in the deficit; equally subsidized direct loans from the FFB, guaranteed by the agencies, were not.

By the end of 1981, the FFB held $51.7 billion in loan assets (mostly Certificates of Beneficial Ownership) and $30.5 billion in direct loans to guaranteed borrowers. In 1981, the peak year, $21 billion of off-budget FFB outlays resulted.[3]

The Budget Committees, in developing the Concurrent Budget Resolution for 1984, recommended that outlays financed by FFB transactions be attributed on-budget to the responsible agencies, rather than off-budget to the FFB. The President's proposed budgets for 1985 and 1986 adopted this recommendation. Subsequently, the Balanced Budget and Emergency Deficit Control Act of 1985 (Title IV, Sec. 406(b)) amended the Congressional Budget Act to codify this practice by requiring that "all receipts and disbursements of the Federal Financing Bank with respect to any obligations which are issued, sold, or guaranteed by a federal agency shall be treated as a means of financing such agency. . . ." This rule prevents agencies from using the FFB to transfer direct loans off-budget.

3. Congressional Budget Office, *The Federal Financing Bank*, p. 27.

APPENDIX C

DATA AVAILABLE ON FEDERAL LOAN AND GUARANTEE ACCOUNTS

This appendix summarizes the types of data available on federal loan and guarantee accounts in the federal budget. The shortcomings of these data include the absence of program-level information on multi-program accounts and an inconsistency in reporting the data among agencies and among programs. Nevertheless, the data that are available can contribute to an understanding of the operation of federal credit programs. The data provided by fiscal year for most loan and guarantee accounts include:

- Outlays;
- Interest income and expense;
- Fees and premiums collected;
- Write-offs for direct loan defaults and disbursements for guaranteed loan defaults;
- Administrative expenses;
- Income or loss; and
- Government's equity and accumulated losses in the account.

OUTLAYS

With the focus of budgeting now on the deficit in any fiscal year, outlays have become the principal cost measure for federal credit in the budget. Outlays are shown by account for fiscal years 1987 and 1988 in Table C-1. Program detail is not available where a single account finances more than one program. For multiprogram credit accounts, the account total is shown in Table C-1. No data are reported in the table for the few accounts that finance both cash and credit programs.

TABLE C-1. OUTLAYS FOR FEDERAL CREDIT PROGRAMS, BY ACCOUNT, FISCAL YEARS 1987-1988
(In thousands of dollars)

Account	1987	1988
Department of Agriculture		
Agricultural Credit Insurance Fund	2,563,710	2,617,671
FmHA--Self-Help Housing Land Development Fund	422	6
Rural Development Insurance Fund	-209,557	449,808
Rural Development Loan Fund	-2,193	212
Rural Housing Insurance Fund	798,125	3,611,339
CCC Export Guarantee Programs	n.a.	n.a.
Public Law 480 (Foreign Agricultural Sales)	n.a.	n.a.
Rural Electrification & Telephone Revolving Fund	-251,954	-2,093,290
Rural Telephone Bank	-61,714	-117,024
Department of Commerce		
Economic Development Assistance Programs	n.a.	n.a.
NOAA--Federal Ship Financing Fund, Fishing Vessels	-2,989	174
Department of Education		
College Housing & Academic Facilities Loans	0	7,833
Guaranteed Student Loans	2,548,179	2,779,304
Environmental Protection Agency		
Abatement, Control, and Compliance	n.a.	n.a.
Funds Appropriated to the President		
AID--Housing and Other Credit Guaranty Programs	20,402	23,865
AID--Private Sector Revolving Fund	4,655	4,350
Foreign Military Sales Financing	n.a.	n.a.
Overseas Private Investment Corporation	-85,734	-110,388
Department of Health and Human Services		
Health Professions Graduate Student Loan Insurance Fund	-3,547	11,581
Health Resources and Services Direct Loans	n.a.	n.a.
Department of Housing and Urban Development		
Community Development Grants (Section 108)	n.a.	n.a.
Rehabilitation Loan Fund	-50,674	-23,259

(Continued)

TABLE C-1. (Continued)

Account	1987	1988
Department of Housing and Urban Development (Continued)		
Guarantees of Mortgage-Backed Securities (GNMA)	-462,925	-92,006
Federal Housing Administration Fund	-555,223	1,134,460
Housing for the Elderly or Handicapped	404,182	322,189
Flexible Subsidy Fund	n.a.	-35,981
Nonprofit Sponsor Assistance	-1	201
Department of the Interior		
BIA--Revolving Fund for Loans	-1,069	-673
Indian Loan Guarantee and Insurance Fund	5,193	1,101
Bureau of Reclamation Loan Program	51,894	32,309
Other Independent Agencies		
Export-Import Bank of the United States	-2,299,986	-894,199
Tennessee Valley Authority Fund (Power Program)	n.a.	n.a.
Small Business Administration		
Business Loan and Investment Fund	-2,655	-37,620
Disaster Loan Fund	-361,988	-347,884
Department of State		
Emergencies in the Diplomatic and Consular Service	2,616	3,524
Department of Transportation		
Federal Ship Financing Fund	416,766	-6,637
Department of Veterans Affairs		
Direct Loan Revolving Fund	-33,064	-79,804
Education Loan Fund	-9,871	-6,336
Loan Guaranty Revolving Fund	382,059	1,218,842
Vocational Rehabilitation Revolving Fund	-12	105
Total	2,803,047	8,373,773

SOURCE: Congressional Budget Office based on information from the Office of Management and Budget.

NOTE: n.a. = not available.

Outlays are negative for accounts whose offsetting collections have exceeded disbursements in that year. Some of the year-to-year changes in outlays reflect a change in default losses (the Federal Housing Administration and the Government National Mortgage Association programs, for example). Most of the big increases and decreases in account outlays, however, stem from other factors. These factors include changes in loan asset sales (the Rural Housing Insurance Fund), the conversion of existing direct loans into guaranteed loans (the Rural Electrification and Telephone Revolving Fund), and prepayments (the Rural Development Insurance Fund).

INTEREST INCOME AND EXPENSE

The federal budget reports on the interest income and interest expense for many credit accounts. On the income side, the rate of interest received per $100 of outstanding loans indicates the average interest rate collected from loans. The available data on interest income for direct loan accounts are shown in Table C-2. (Throughout this appen-

TABLE C-2. INTEREST INCOME AS A PERCENTAGE OF AVERAGE DIRECT LOANS OUTSTANDING, BY ACCOUNT, FISCAL YEARS 1987-1988

Agency--Account	1987	1988
AG--Rural Telephone Bank	7.89	8.00
VA--Direct Loan Revolving Fund	7.09	7.45
AG--Rural Electrification & Telephone Revolving Fund	7.46	6.84
AG--Rural Development Insurance Fund	6.57	6.61
SBA--Business Loan and Investment Fund	7.40	5.90
SBA--Disaster Loan Fund	4.88	4.74
AG--Rural Housing Insurance Fund	4.78	4.17
HUD--Rehabilitation Loan Fund	n.a.	4.05
AG--Agricultural Credit Insurance Fund	3.64	3.54
DOT--Federal Ship Financing Fund	1.09	2.27

SOURCE: Congressional Budget Office based on information from the Office of Management and Budget.

NOTE: n.a. = not available.

dix, average loans and guarantees outstanding are the average of the beginning-of-year and end-of-year totals.)

Interest expense shown in each account is a misleading measure of the government's cost of financing loans. Interest expense at the account level is affected not only by the interest rate the government pays on borrowed funds, but also by the proportion of the account's loans that is financed by borrowing. The ratio of loans to borrowing indicates the extent to which an account is financed by borrowing, which also reflects the accumulated losses in the account. Interest expense as a percentage of outstanding loans is shown in Table C-3 for loan accounts that report interest expense. The table also shows the ratio of loans to borrowing.

TABLE C-3. RATIOS OF INTEREST EXPENSE AS A PERCENTAGE OF LOANS, AND LOANS AS A PERCENTAGE OF BORROWED FUNDS, BY ACCOUNT, FISCAL YEARS 1987-1988

Agency--Account	Ratio of Expenses to Loans		Ratio of Loans to Borrowing	
	1987	1988	1987	1988
AG--Rural Development Insurance Fund	15.77	17.79	65.40	67.33
AG--Agricultural Credit Insurance Fund	15.08	15.74	72.38	66.82
AG--Rural Housing Insurance Fund	13.82	14.11	79.51	82.44
OIA--Export-Import Bank of the United States	13.98	12.83	102.51	96.31
HUD--Housing for the Elderly or Handicapped	9.14	8.87	106.32	107.85
AG--Rural Electrification & Telephone Revolving Fund	7.05	6.46	104.06	110.03
AG--Rural Telephone Bank	4.91	4.68	189.82	188.47
SBA--Disaster Loan Fund	3.22	3.15	n.a.	n.a.
DOT--Federal Ship Financing Fund	6.99	2.03	n.a.	n.a.
SBA--Business Loan and Investment Fund	2.90	2.03	260.24	262.35
HUD--Rehabilitation Loan Fund	n.a.	1.93	n.a.	n.a.
ED--College Housing & Academic Facilities Loans	4.74	n.a.	n.a.	n.a.

SOURCE: Congressional Budget Office based on information from the Office of Management and Budget.

NOTE: n.a. = not available.

The wide range of interest expense, shown in Table C-3 on page 89, reflects differences both in how the account is financed and in its accumulated losses, which also have to be financed with borrowed funds. The four revolving fund accounts with the highest interest expense are those most heavily dependent on Treasury borrowing--the three Farmers Home Administration accounts and the account of the Export-Import Bank of the United States. The FmHA accounts have the largest accumulated losses of the revolving fund credit accounts. They also have the largest negative interest spreads (see Table C-4 for the percentage of interest income minus interest paid on direct loans).

The sharp drop in interest expense in 1988 of the Federal Ship Financing Fund of the Maritime Administration in the Department of Transportation (DOT) illustrates the effect of financing credit account losses with Treasury borrowing. During 1987, this fund received an appropriation of $1.4 billion that was applied to debt reduction by the account. The Treasury, however, experienced no reduction in its own

TABLE C-4. INTEREST INCOME MINUS INTEREST PAID AS A PERCENTAGE OF AVERAGE DIRECT LOANS OUTSTANDING, BY ACCOUNT, FISCAL YEARS 1987-1988

Agency--Account	1987	1988
SBA--Business Loan and Investment Fund	4.50	3.87
AG--Rural Telephone Bank	2.98	3.32
VA--Direct Loan Revolving Fund	1.20	2.95
HUD--Rehabilitation Loan Fund	n.a.	2.12
SBA--Disaster Loan Fund	1.66	1.59
AG--Rural Electrification & Telephone Revolving Fund	0.40	0.37
DOT--Federal Ship Financing Fund	-5.91	0.24
ED--College Housing & Academic Facilities Loans	-1.45	n.a.
HUD--Housing for the Elderly or Handicapped	n.a.	-8.87
AG--Rural Housing Insurance Fund	-9.05	-9.94
AG--Rural Development Insurance Fund	-9.20	-11.18
AG--Agricultural Credit Insurance Fund	-11.44	-12.20

SOURCE: Congressional Budget Office based on information from the Office of Management and Budget.

NOTE: n.a. = not available.

outstanding debt as a result of this transaction. Consequently, interest expense declined for this account in 1988, even though the government's debt financing cost was unaffected.

FEES AND PREMIUMS

Fee income from guaranteed loans is similar to interest income from direct loans in that an account's losses cannot be determined from income; expenses must also be considered. Thus, the variation in fees does not correspond directly to differences in the government's loss. Both high- and low-fee credit accounts might involve large losses to the government, depending on their expenses. Table C-5 shows fees for

TABLE C-5. GUARANTEE FEES AS A PERCENTAGE OF NEW GUARANTEE COMMITMENTS, BY ACCOUNT, FISCAL YEARS 1987-1988

Agency--Account	1987	1988
FAP--AID--Housing and Other Credit Guaranty Programs	10.53	15.81
FAP--Overseas Private Investment Corporation	n.a.	6.17
COM--NOAA--Federal Ship Financing Fund, Fishing Vessels	n.a.	5.04
HUD--Federal Housing Administration Fund	4.03	4.04
HHS--Health Professions Graduate Student Loan Insurance Fund	n.a.	3.02
AG--Agricultural Credit Insurance Fund	0.68	1.22
SBA--Business Loan and Investment Fund	n.a.	1.08
AG--Rural Development Loan Fund	0.43	0.82
VA--Loan Guaranty Revolving Fund	0.98	0.78
OIA--Export-Import Bank of the United States	0.44	0.42
HUD--Guarantees of Mortgage-Backed Securities (GNMA)	n.a.	0.39

SOURCE: Congressional Budget Office based on information from the Office of Management and Budget.

NOTE: n.a. = not available.

guaranteed loans as a percentage of new guarantee commitments for credit accounts that report this information.

DIRECT LOAN WRITE-OFFS AND CLAIMS FOR GUARANTEED LOAN DEFAULTS

Federal losses as a result of defaults are an important factor in determining the costs of credit programs. These losses are difficult to determine from the budget documents, however, because policies for recognizing loss appear to vary widely among agencies. In addition, disbursements for defaults can be offset, in whole or in part, by subsequent recoveries.

TABLE C-6. WRITE-OFFS FOR DEFAULTS ON DIRECT LOANS AS A PERCENTAGE OF DIRECT LOANS OUTSTANDING, BY ACCOUNT, FISCAL YEARS 1987-1988

Agency--Account	1987	1988
VA--Education Loan Fund	0.76	50.98
DOT--Federal Ship Financing Fund	12.68	24.68
FAP--Foreign Military Sales Financing	9.13	11.74
IN--BIA--Revolving Fund for Loans	2.83	11.45
FAP--Overseas Private Investment Corporation	4.23	7.71
AG--Agricultural Credit Insurance Fund	3.05	5.06
SBA--Disaster Loan Fund	4.56	3.63
HUD--Rehabilitation Loan Fund	1.64	1.82
VA--Direct Loan Revolving Fund	1.49	1.78
VA--Vocational Rehabilitation Revolving Fund	1.58	1.58
VA--Loan Guaranty Revolving Fund	0.21	1.01
AG--Rural Housing Insurance Fund	0.11	0.50
OIA--Tennessee Valley Authority Fund (Power Program)	0.58	0.46
AG--Rural Development Loan Fund	0.32	0.41
AG--Rural Development Insurance Fund	0.48	0.03
OIA--Export-Import Bank of the United States	n.a.	0.02
HUD--Housing for the Elderly or Handicapped	n.a.	0.01

SOURCE: Congressional Budget Office based on information from the Office of Management and Budget.

NOTE: n.a. = not available.

Some federal agencies that administer credit programs keep loans on their books indefinitely, even loans with dim prospects of collection. Some agencies consolidate write-offs from several years into a single year, as the Department of Veterans Affairs appears to have done with its Education Loan Fund in 1988. Other agencies seem to maintain a fairly constant ratio of write-offs to outstanding loans. The variation in write-offs of direct loans by account, reported in Table C-6 on page 92, reflects inconsistency of accounting practice and genuine differences in loss. Unfortunately, these effects are not distinguishable in the reported data.

Disbursements for guarantee claims, shown in Table C-7, are less variable among agencies than loan write-offs. Some agencies reduce disbursements for guarantees by providing additional assistance to

TABLE C-7. DISBURSEMENTS FOR DEFAULTING GUARANTEES AS A PERCENTAGE OF AVERAGE GUARANTEED LOANS OUTSTANDING, BY ACCOUNT, FISCAL YEARS 1987-1988

Agency--Account	1987	1988
IN--Indian Loan Guarantee and Insurance Fund	4.67	10.23
AG--Rural Development Insurance Fund	2.67	6.79
AG--CCC Export Guarantee Programs	12.42	6.28
SBA--Business Loan and Investment Fund	6.28	5.29
AG--Agricultural Credit Insurance Fund	4.47	4.27
ED--Guaranteed Student Loans	3.56	3.28
HUD--Federal Housing Administration Fund	1.78	2.14
OIA--Export-Import Bank of the United States	0.00	1.97
VA--Loan Guaranty Revolving Fund	1.31	1.57
HHS--Health Professions Graduate Student Loan Insurance Fund	1.07	1.30
FAP--AID--Housing and Other Credit Guaranty Programs	0.50	1.06
COM--NOAA--Federal Ship Financing Fund, Fishing Vessels	0.57	0.15
HUD--Guarantees of Mortgage-Backed Securities (GNMA)	0.06	0.13

SOURCE: Congressional Budget Office based on information from the Office of Management and Budget.

borrowers. But when a guaranteed lender files a documented claim for default, the agency can hardly avoid a pay-off. Yet, disbursements for guarantee claims are not a complete loss to the agency. The government still has a claim against the borrower. Recoveries from such claims significantly reduce the cost of guarantees. For example, in 1988, the VA Loan Guaranty Revolving Fund received over $1.6 billion from sales of foreclosed properties.

ADMINISTRATIVE EXPENSES

The cost of administering loan and guarantee programs is another element in determining the government's loss on credit activity. These expenses include the personnel and support facilities to originate loans and guarantees, collect repayments, and maintain all accounts. Some credit accounts do not separately identify these expenses, however. Agencies that identify administrative expenses on credit programs and report them in the budget are listed in Table C-8. The ratios of operating expenses to loan or guarantee volume are relatively low compared

TABLE C-8. ADMINISTRATIVE EXPENSES AS A PERCENTAGE OF AVERAGE LOANS OR GUARANTEES OUTSTANDING, BY ACCOUNT, FISCAL YEARS 1987-1988

Agency--Account	1987	1988
FAP--AID--Housing and Other Credit Guaranty Programs	0.49	0.45
AG--Rural Development Insurance Fund	0.01	0.38
AG--Agricultural Credit Insurance Fund	0.22	0.30
IN--Bureau of Reclamation Loan Program	0.17	0.29
OIA--Export-Import Bank of the United States	0.14	0.18
HUD--Federal Housing Administration Fund	0.12	0.12
ED--Guaranteed Student Loans	0.42	0.08
IN--Indian Loan Guarantee and Insurance Fund	0.03	0.02
AG--Rural Housing Insurance Fund	0.05	n.a.
AG--Rural Telephone Bank	0.01	n.a.

SOURCE: Congressional Budget Office based on information from the Office of Management and Budget.

NOTES: Direct loans outstanding were used as the denominator for accounts with direct loan programs. For accounts with guarantees only, outstanding guaranteed loans were used.

n.a. = not available.

with those in commercial banking, where ratios in excess of 1 percent of outstanding loans are common.

INCOME OR LOSS

Data on income or loss is available for accounts that are public enterprise revolving funds. These revolving fund accounts use an accrual means of accounting to report income or loss in their "business-type" budget reports. Accrual means that revenues are reported when earned rather than when received, and expenses are reported when incurred rather than when paid. In this manner, revenue is matched with expenses that were incurred to produce those revenues. An accrual measure of income or loss for credit revolving funds is shown in Table C-9.

These budget reports do not customarily reflect gains or losses from changes in the value of fund assets and liabilities. An exception occurred in 1987 when the Government Accounting Office required the FmHA to recognize over $12 billion in unbooked losses in the loan portfolios of the Rural Housing Insurance Fund and the Rural Development Insurance Fund. This requirement produced a significant increase in reported program losses in 1987, but did not affect federal outlays or the budget deficit. Reported losses are those incurred on the entire portfolio for a current year; they should be distinguished from the expected long-term losses from commitments and obligations issued in a current period.

GOVERNMENT EQUITY AND ACCUMULATED LOSSES

Account equity is the value of fund assets minus the value of fund liabilities. If the value of liabilities exceeds the value of assets, equity is negative. Negative equity reflects accumulated losses in excess of appropriations of federal monies. Table C-10 shows available data on the government's equity position for federal credit revolving fund accounts. Four of the revolving funds--three FmHA funds and the VA Direct Loans--had a combined negative government equity of $42.4 billion at the end of 1988. Adding all credit revolving funds, govern-

TABLE C-9. INCOME OR LOSS FOR FEDERAL CREDIT REVOLVING FUNDS, BY ACCOUNT, FISCAL YEARS 1987-1988
(In thousands of dollars)

Agency--Account	1987	1988
AG--Agricultural Credit Insurance Fund	-15,748,532	-8,321,506
AG--FmHA--Self-Help Housing Land Development Fund	-1,895	-715
AG--Rural Development Insurance Fund	-2,108,693	-1,407,347
AG--Rural Development Loan Fund	-5,284	-4,248
AG--Rural Housing Insurance Fund	-7,454,178	-4,057,125
AG--Rural Electrification & Telephone Revolving Fund	-684,199	54,400
AG--Rural Telephone Bank	42,419	47,261
COM--Economic Development Assistance Programs	-308,452	-155,868
COM--NOAA--Federal Ship Financing Fund, Fishing Vessels	-437	1,582
FAP--AID--Housing and Other Credit Guaranty Programs	7,355	6,141
FAP--AID--Private Sector Revolving Fund	1,027	1,612
FAP--Overseas Private Investment Corporation	101,991	112,296
HUD--Rehabilitation Loan Fund	4,726	-1,521
HUD--Guarantees of Mortgage-Backed Securities (GNMA)	243,473	153,273
HUD--Federal Housing Administration Fund[a]	-187,998	-857,902
HUD--Housing for the Elderly or Handicapped	-60,859	-34,825
IN--BIA--Revolving Fund for Loans	5,484	5,304
IN--Indian Loan Guarantee and Insurance Fund	-1,179	-1,646
OIA--Export-Import Bank of the United States	65,302	-397,585
SBA--Business Loan and Investment Fund	-285,952	-275,133
SBA--Disaster Loan Fund	-119,915	-80,481
DOT--Federal Ship Financing Fund	233,552	-195,070
VA--Direct Loan Revolving Fund	14,631	9,502
VA--Education Loan Fund	2,862	-12,508
VA--Loan Guaranty Revolving Fund	-254,546	-752,182
VA--Vocational Rehabilitation Revolving Fund	-5	1,753
Total	-26,499,302	-16,225,538

SOURCE: Congressional Budget Office based on information from the Office of Management and Budget.

a. FHA net loss includes income of $99,565,000 in the Mutual Mortgage Insurance Fund in 1987, and a loss of $371,453,000 in that fund in 1988.

TABLE C-10. GOVERNMENT EQUITY FOR FEDERAL CREDIT REVOLVING FUNDS, BY ACCOUNT, FISCAL YEARS 1987-1988 (In thousands of dollars)

Agency--Account	1987	1988
SBA--Disaster Loan Fund	4,317,602	4,148,893
VA--Loan Guaranty Revolving Fund	2,404,587	2,747,075
SBA--Business Loan and Investment Fund	2,690,566	2,507,293
AG--Rural Electrification & Telephone Revolving Fund	2,596,635	2,347,863
HUD--Federal Housing Administration Fund	3,079,042	1,951,139
HUD--Guarantees of Mortgage-Backed Securities (GNMA)	1,586,727	1,740,160
FAP--Overseas Private Investment Corporation	1,186,926	1,299,183
OIA--Export-Import Bank of the United States	1,296,662	914,245
HUD--Rehabilitation Loan Fund	879,898	878,377
AG--Rural Telephone Bank	755,310	505,950
HUD--Housing for the Elderly or Handicapped	513,023	478,198
DOT--Federal Ship Financing Fund	509,294	314,224
COM--Economic Development Assistance Programs	246,963	302,156
HUD--Flexible Subsidy Fund	n.a.	262,078
FAP--AID--Housing and Other Credit Guaranty Programs	102,300	108,662
IN--BIA--Revolving Fund for Loans	101,920	108,001
FAP--AID--Private Sector Revolving Fund	63,814	72,246
AG--Rural Development Loan Fund	50,216	55,067
IN--Indian Loan Guarantee and Insurance Fund	32,137	35,405
VA--Education Loan Fund	43,068	18,914
COM--NOAA--Federal Ship Financing Fund, Fishing Vessels	31,843	16,435
HUD--Nonprofit Sponsor Assistance	7,103	7,099
AG--FmHA--Self-Help Housing Land Development Fund	5,319	5,352
VA--Vocational Rehabilitation Revolving Fund	1,760	1,753
VA--Direct Loan Revolving Fund	-1,588,864	-1,579,362
AG--Rural Development Insurance Fund	-3,012,753	-3,627,990
AG--Rural Housing Insurance Fund	-8,895,545	-9,618,495
AG--Agricultural Credit Insurance Fund	-23,041,512	-27,610,682
Total	-14,035,959	-21,610,761

SOURCE: Congressional Budget Office based on information from the Office of Management and Budget.

NOTE: n.a. = not available.

ment equity was a negative $21.6 billion. Assets and liabilities of these revolving funds could be valued more realistically. If valuation were based on the prospects for loan collection and payments required under existing guarantee commitments, then total equity would be much more negative than this amount.

APPENDIX D

SUMMARY TABLES OF THE DATA BASE FOR CREDIT REFORM

Under the Congressional Budget Office's recommendations for credit reform in this report, each existing credit account would be replaced by three new budget accounts--subsidy, financing, and liquidating accounts. These accounts would reflect program-level detail for each budget period. The tables in this appendix reflect the division of budget authority and outlays into the three new accounts by function and by Congressional jurisdiction for fiscal years 1990 through 1992. Account statements, which show these splits for each federal credit account, are available separately as *Data Base for Credit Reform* from CBO.

COMPILING THE DATA BASE

The effects of credit reform on the budget depend on when credit reform is assumed to be effective, which programs are included in credit reform, and whose subsidy rates and projections of credit activity are used in calculating budget authority and outlays. How the financing and liquidating accounts are treated in the budget depends on how credit reform is implemented. In its analysis of credit reform, CBO made the following assumptions about these factors:

- o Credit reform was fully implemented at the beginning of fiscal year 1990;

- o Credit reform includes the federal credit programs financed from the accounts shown in Tables 1 and 2 in Chapter I; and

- o Subsidy cost rates for the three-year period 1990-1992 are those calculated by the Office of Management and Budget for fiscal year 1990; future federal credit activity and cash flows are consistent with the CBO baseline projections for those three years.

To create the data base for this report, CBO analysts split loan disbursements into those arising from credit activity before and after credit reform. Only the disbursements from loans after credit reform are charged to the subsidy and financing accounts; disbursements for loans existing before credit reform are charged to the liquidating accounts.

CALCULATING BUDGET AUTHORITY AND OUTLAYS

The data base defines the budgetary effects of credit reform in relation to the CBO baseline for budget authority and outlays in fiscal years 1990 through 1992. Data for the three new budget accounts under credit reform--subsidy, financing, and liquidating accounts--are calculated as follows:

Subsidy Accounts

Budget authority is obtained by multiplying the OMB subsidy cost rate for each account by the CBO baseline projection of direct loan obligations or guaranteed loan commitments for that credit account. Subsidy account outlays are obtained by multiplying the OMB subsidy cost rate by the CBO projection of disbursements of direct or guaranteed loans for the account.

Financing Accounts

For guaranteed loans, budget authority for the financing account is zero because the subsidy cost payments and fee receipts are expected to meet the financing needs of guarantee programs. For direct loans, budget authority is equal to account obligations minus receipts to the account. These receipts include budget authority for the subsidy costs, repayments, loan asset sales, and other collections from new credit activity after 1989. Financing account outlays are calculated by subtracting subsidy outlays (because they are receipts to this account) from total outlays projected for new credit activity.

Liquidating Accounts

Budget authority for the liquidating accounts is the amount of budget authority that would be required to finance loans and guarantees made before credit reform. The calculation is based on the assumption that all budget authority in the baseline that is not required for financing new activity is required to finance previous commitments. Liquidating account budget authority is calculated by taking the baseline budget authority and subtracting the budget authority required for disbursements of new credit activity, plus any fees or collections that would have been available to finance credit activity before credit reform. When this calculation results in negative budget authority, it is reported as zero. Liquidating account outlays are the residual in baseline outlays after subsidy and financing outlays have been subtracted.

Under credit reform, total outlays from the three new budget accounts will equal baseline outlays. The sum of budget authority in the agencies' credit reform accounts for direct loans will also equal baseline budget authority, except when a liquidating account or a financing account reports negative budget authority. In that case, budget authority reported for that account will be zero and, consequently, the total will not equal the baseline. For guaranteed loan programs, credit reform will increase budget authority during the life of the liquidating accounts. This increase occurs because budget authority is required both to liquidate previous obligations (which is currently the case) and to fund the future cost of current commitments (which is unrecognized under existing policy).

DISTRIBUTION OF BUDGET AUTHORITY AND OUTLAYS

The creation of three new budget accounts under credit reform may affect the distribution of budget authority and outlays among budget functions and among Congressional committees or subcommittees of jurisdiction in certain situations. Specifically, a changed distribution will result if the new financing or liquidating accounts are separated from the new subsidy accounts, which may be done for purposes of budgetary reporting or of assigning Congressional budgetary responsibility.

By Budget Function

Budget authority and outlays of individual credit programs for 1990 through 1992 are tallied in Tables D-1 through D-3, by budget function. For 1990, subsidy account outlays would be $9.2 billion. Financing account outlays are a negative $6.0 billion because both the outlays from the subsidy account and the fees and collections from new credit activity are receipts to this account. Outlays for credit activity in the liquidating accounts would be $9.6 billion. In 1991 and 1992, subsidy account outlays increase to $11.0 billion and $11.7 billion (see Tables D-2 and D-3). In this same period, liquidating account outlays decrease to $7.9 billion and $4.8 billion as disbursements from obligations before credit reform diminish.

Under current policy, the total amounts in the CBO baseline for budget authority and outlays are reported in the program function of the budget. Under credit reform, only the subsidy account would be reported in the program function. The change in the budget authority and outlays by budget function under credit reform would be the difference between the baseline and the subsidy amount. This difference can be calculated from the data shown in these tables. The budget function for agriculture, in which direct loans dominate guaranteed loans in volume, would experience the largest decline in outlays and budget authority under this treatment. With the exception of health, all budget functions would report lower outlays for credit in 1990. With some exceptions, including an increase in education and housing outlays, these patterns persist throughout the period.

By Congressional Jurisdiction

The division of existing accounts into subsidy, financing, and liquidating accounts by Congressional committee or subcommittee of jurisdiction for fiscal years 1990 through 1992 is shown in Tables D-4 through D-6 (for the House) and Tables D-7 through D-9 (for the Senate). In general, subsidy outlays are higher than the baseline for committees or subcommittees with a high proportion of guaranteed loan programs and lower than the baseline for committees or subcommittees with a high proportion of direct loan programs.

TABLE D-1. THE DIVISION OF BUDGET AUTHORITY AND OUTLAYS INTO THE NEW BUDGET ACCOUNTS UNDER CREDIT REFORM IN FISCAL YEAR 1990, BY BUDGET FUNCTION (In millions of dollars)

Budget Function		Current Accounts (CBO Baseline[a])	New Budget Accounts Under Credit Reform: Subsidy Account	Financing Account	Liquidating Account[b]
		Budget Authority			
150	International Affairs	1,910.1	841.0	1,286.8	253.2
270	Energy	998.4	310.9	1,475.3	62.1
300	Natural Resources & Environment	59.9	33.6	26.3	0.0
350	Agriculture	5,350.2	346.8	1,031.0	4,055.7
370	Commerce & Housing Credit	6,794.0	3,757.1	1,491.6	5,661.0
400	Transportation	0.0	c	2.0	0.0
450	Community & Regional Development	1,702.2	942.1	774.6	1,223.9
500	Education, Training, Employment, & Social Services	3,681.9	3,500.4	19.1	3,509.4
550	Health	17.2	79.8	0.2	0.0
600	Income Security	0.0	11.3	39.7	0.0
700	Veterans Benefits and Services	1,414.6	1,650.9	1,577.9	0.0
Total		21,928.1	11,473.9	7,724.6	14,765.5
		Outlays			
150	International Affairs	600.5	579.7	219.6	-198.8
270	Energy	316.0	27.9	117.4	170.7
300	Natural Resources & Environment	36.6	15.5	12.7	8.4
350	Agriculture	2,272.0	271.8	967.2	1,033.0
370	Commerce & Housing Credit	3,321.1	2,635.1	-2,745.5	3,431.5
400	Transportation	67.2	c	2.0	65.2
450	Community & Regional Development	907.6	771.5	-610.9	747.0
500	Education, Training, Employment, & Social Services	3,782.0	3,488.7	-3,379.8	3,673.1
550	Health	17.2	50.4	-54.8	21.6
600	Income Security	0.3	0.2	0.8	-0.7
700	Veterans Benefits and Services	1,490.7	1,399.4	-568.6	659.9
Total		12,811.1	9,240.1	-6,040.0	9,611.0

SOURCE: Congressional Budget Office.

a. As projected in the revised CBO baseline, February 1989.

b. Liquidating account outlays calculated by subtracting financing and subsidy account outlays from baseline outlays.

c. Less than $50,000.

TABLE D-2. THE DIVISION OF BUDGET AUTHORITY AND OUTLAYS INTO THE NEW BUDGET ACCOUNTS UNDER CREDIT REFORM IN FISCAL YEAR 1991, BY BUDGET FUNCTION (In millions of dollars)

Budget Function		Current Accounts (CBO Baseline[a])	New Budget Accounts Under Credit Reform: Subsidy Account	Financing Account	Liquidating Account[b]
		Budget Authority			
150	International Affairs	2,221.9	877.3	1,275.5	385.8
270	Energy	1,042.0	331.0	1,548.4	69.1
300	Natural Resources & Environment	62.5	35.0	27.5	0.0
350	Agriculture	6,079.0	360.0	787.0	5,018.6
370	Commerce & Housing Credit	7,027.0	3,954.7	1,493.5	6,292.7
400	Transportation	0.0	c	2.0	0.0
450	Community & Regional Development	1,348.3	953.3	784.3	861.1
500	Education, Training, Employment, & Social Services	3,642.3	4,332.0	20.0	1,757.2
550	Health	17.9	82.9	0.2	40.6
600	Income Security	0.0	11.3	39.8	0.0
700	Veterans Benefits and Services	1,325.4	1,721.6	1,360.1	0.0
Total		22,766.4	12,659.2	7,338.9	14,425.1
		Outlays			
150	International Affairs	624.8	664.1	278.3	-317.6
270	Energy	349.3	89.4	331.1	-71.1
300	Natural Resources & Environment	61.4	34.5	27.0	-0.1
350	Agriculture	2,231.0	309.2	748.8	1,173.0
370	Commerce & Housing Credit	3,222.5	3,251.1	-3,290.4	3,261.8
400	Transportation	16.2	0.0	2.0	14.2
450	Community & Regional Development	909.0	832.2	-424.0	500.8
500	Education, Training, Employment, & Social Services	3,686.0	4,321.0	-3,472.1	2,837.2
550	Health	17.9	52.7	-57.4	22.6
600	Income Security	0.3	0.2	0.8	-0.7
700	Veterans Benefits and Services	1,305.1	1,462.3	-639.9	482.8
Total		12,423.6	11,016.6	-6,495.8	7,902.8

SOURCE: Congressional Budget Office.

a. As projected in the revised CBO baseline, February 1989.

b. Liquidating account outlays calculated by subtracting financing and subsidy account outlays from baseline outlays.

c. Less than $50,000.

TABLE D-3. THE DIVISION OF BUDGET AUTHORITY AND OUTLAYS INTO THE NEW BUDGET ACCOUNTS UNDER CREDIT REFORM IN FISCAL YEAR 1992, BY BUDGET FUNCTION (In millions of dollars)

Budget Function		Current Accounts (CBO Baseline[a])	New Budget Accounts Under Credit Reform: Subsidy Account	Financing Account	Liquidating Account[b]
		Budget Authority			
150	International Affairs	2,520.9	913.5	1,233.2	623.7
270	Energy	1,093.7	345.9	1,591.2	109.6
300	Natural Resources & Environment	65.1	36.5	26.6	2.0
350	Agriculture	7,457.0	373.1	541.4	6,632.8
370	Commerce & Housing Credit	5,193.0	4,121.4	1,464.4	3,957.9
400	Transportation	0.0	c	2.0	0.0
450	Community & Regional Development	1,267.4	962.5	762.9	746.9
500	Education, Training, Employment, & Social Services	3,594.1	4,437.1	20.8	922.8
550	Health	18.6	86.1	0.1	42.3
600	Income Security	0.0	11.3	39.6	0.0
700	Veterans Benefits and Services	1,289.9	1,800.2	1,211.8	0.0
Total		22,499.8	13,087.7	6,894.1	13,038.0
		Outlays			
150	International Affairs	741.6	727.3	327.4	-313.1
270	Energy	392.8	169.2	600.0	-376.4
300	Natural Resources & Environment	64.0	36.0	26.2	1.9
350	Agriculture	2,246.0	325.5	496.5	1,424.0
370	Commerce & Housing Credit	3,061.9	3,515.1	-2,745.5	2,292.4
400	Transportation	33.6	c	2.0	31.6
450	Community & Regional Development	910.8	878.0	-278.1	310.9
500	Education, Training, Employment, & Social Services	3,622.5	4,432.6	-1,903.1	1,093.1
550	Health	18.6	55.0	-60.0	23.7
600	Income Security	0.3	0.2	0.6	-0.6
700	Veterans Benefits and Services	1,272.6	1,525.1	-596.4	343.8
Total		12,364.8	11,664.0	-4,130.5	4,831.3

SOURCE: Congressional Budget Office.

a. As projected in the revised CBO baseline, February 1989.

b. Liquidating account outlays calculated by subtracting financing and subsidy account outlays from baseline outlays.

c. Less than $50,000.

TABLE D-4. THE DIVISION OF BUDGET AUTHORITY AND OUTLAYS INTO THE NEW BUDGET ACCOUNTS UNDER CREDIT REFORM IN FISCAL YEAR 1990, BY HOUSE JURISDICTION (In millions of dollars)

Jurisdiction	Current Accounts (CBO Baseline[a])	New Budget Accounts Under Credit Reform: Subsidy Account	Financing Account	Liquidating Account[b]
	Budget Authority			
House Appropriations Subcommittee				
Commerce, Justice, State	129.6	377.9	313.1	81.0
Energy and Water Development	27.1	14.1	13.0	0.0
Foreign Operations, Export Financing	917.9	254.6	1,049.3	84.9
VA, HUD, Independent Agencies	1,894.8	2,630.5	465.8	2,690.0
Interior	5.3	10.8	9.2	4.9
Labor, HHS, Education	30.9	11.8	19.3	0.0
Rural Development, Agriculture	13,614.4	2,245.2	4,217.5	8,200.6
Total Appropriations	16,619.9	5,544.9	6,087.2	11,061.3
House Authorizing Committee				
Agriculture	160.0	700.0	0.0	187.0
Education and Labor	3,651.0	3,488.7	0.0	3,509.4
Energy and Commerce	17.2	79.7	0.0	0.0
Merchant Marine and Fisheries	0.0	9.3	2.0	0.0
Public Works and Transportation	65.7	0.4	57.5	7.7
Veterans' Affairs	1,414.6	1,650.9	1,577.9	0.0
Total Authorizing	5,308.5	5,929.0	1,637.4	3,704.1
Total Budget Authority	21,928.3	11,473.9	7,724.6	14,765.5
	Outlays			
House Appropriations Subcommittee				
Commerce, Justice, State	-95.7	388.7	-256.1	-228.3
Energy and Water Development	25.1	8.7	8.0	8.4
Foreign Operations, Export Financing	-511.5	46.2	3.5	-561.2
VA, HUD, Independent Agencies	478.8	1,742.9	-3,009.1	1,744.9
Interior	10.5	10.8	1.3	-1.5
Labor, HHS, Education	58.3	0.0	0.0	58.2
Rural Development, Agriculture	7,323.9	1,394.8	1,893.0	4,036.1
Total Appropriations	7,289.4	3,592.1	-1,359.4	5,056.7
House Authorizing Committee				
Agriculture	160.0	700.0	-727.0	187.0
Education and Labor	3,723.7	3,488.7	-3,379.8	3,614.8
Energy and Commerce	17.2	50.4	-54.8	21.7
Merchant Marine and Fisheries	64.5	9.3	-7.9	63.1
Public Works and Transportation	65.7	0.4	57.5	7.7
Veterans' Affairs	1,490.7	1,399.4	-568.6	659.9
Total Authorizing	5,521.8	5,648.1	-4,680.6	4,554.2
Total Outlays	12,811.1	9,240.2	-6,040.0	9,611.0

SOURCE: Congressional Budget Office.

a. As projected in the revised CBO baseline, February 1989.

b. Liquidating account outlays calculated by subtracting financing and subsidy account outlays from baseline outlays.

TABLE D-5. THE DIVISION OF BUDGET AUTHORITY AND OUTLAYS INTO THE NEW BUDGET ACCOUNTS UNDER CREDIT REFORM IN FISCAL YEAR 1991, BY HOUSE JURISDICTION (In millions of dollars)

Jurisdiction	Current Accounts (CBO Baseline[a])	New Budget Accounts Under Credit Reform: Subsidy Account	Financing Account	Liquidating Account[b]
	Budget Authority			
House Appropriations Subcommittee				
Commerce, Justice, State	206.7	394.0	306.0	116.0
Energy and Water Development	28.3	14.7	13.6	0.0
Foreign Operations, Export Financing	1,098.8	265.4	1,037.4	112.5
VA, HUD, Independent Agencies	2,431.2	2,779.9	482.8	3,693.0
Interior	9.6	11.1	9.2	8.8
Labor, HHS, Education	32.2	12.3	20.1	0.0
Rural Development, Agriculture	13,779.2	2,347.4	4,063.7	8,487.3
Total Appropriations	17,586.0	5,824.9	5,932.8	12,417.6
House Authorizing Committee				
Agriculture	168.0	700.0	0.0	195.0
Education and Labor	3,610.1	4,319.8	0.0	1,757.2
Energy and Commerce	17.9	82.9	0.0	40.6
Merchant Marine and Fisheries	0.0	9.7	2.0	0.0
Public Works and Transportation	59.0	0.4	44.0	14.7
Veterans' Affairs	1,325.4	1,721.6	1,360.1	0.0
Total Authorizing	5,180.4	6,834.3	1,406.0	2,007.5
Total Budget Authority	22,766.4	12,659.2	7,338.9	14,425.1
	Outlays			
House Appropriations Subcommittee				
Commerce, Justice, State	-21.7	427.5	-171.9	-277.3
Energy and Water Development	27.7	14.5	13.4	-0.1
Foreign Operations, Export Financing	-489.1	86.8	54.2	-630.0
VA, HUD, Independent Agencies	200.6	2,103.1	-3,801.2	1,898.7
Interior	11.0	11.1	1.2	-1.3
Labor, HHS, Education	39.5	1.2	1.9	36.4
Rural Development, Agriculture	7,445.5	1,827.7	2,268.9	3,348.9
Total Appropriations	7,213.5	4,471.9	-1,633.5	4,375.1
House Authorizing Committee				
Agriculture	168.0	700.0	-727.0	195.0
Education and Labor	3,646.5	4,319.8	-3,474.0	2,800.7
Energy and Commerce	17.9	52.7	-57.5	22.7
Merchant Marine and Fisheries	13.5	9.7	-8.0	11.8
Public Works and Transportation	59.0	0.4	44.0	14.7
Veterans' Affairs	1,305.1	1,462.3	-639.9	482.8
Total Authorizing	5,210.0	6,544.7	-4,862.3	3,527.7
Total Outlays	12,423.6	11,016.6	-6,495.8	7,902.8

SOURCE: Congressional Budget Office.

a. As projected in the revised CBO baseline, February 1989.

b. Liquidating account outlays calculated by subtracting financing and subsidy account outlays from baseline outlays.

TABLE D-6. THE DIVISION OF BUDGET AUTHORITY AND OUTLAYS INTO THE NEW BUDGET ACCOUNTS UNDER CREDIT REFORM IN FISCAL YEAR 1992, BY HOUSE JURISDICTION (In millions of dollars)

Jurisdiction	Current Accounts (CBO Baseline[a])	New Budget Accounts Under Credit Reform: Subsidy Account	Financing Account	Liquidating Account[b]
Budget Authority				
House Appropriations Subcommittee				
Commerce, Justice, State	223.7	410.0	269.9	144.0
Energy and Water Development	29.5	15.3	14.1	0.0
Foreign Operations, Export Financing	1,331.8	276.3	1,002.5	302.4
VA, HUD, Independent Agencies	1,823.6	2,896.4	489.5	2,584.0
Interior	16.5	11.5	9.3	15.3
Labor, HHS, Education	33.5	12.8	20.9	0.0
Rural Development, Agriculture	13,984.4	2,444.5	3,842.5	8,874.5
Total Appropriations	17,443.1	6,066.7	5,648.8	11,920.0
House Authorizing Committee				
Agriculture	135.0	700.0	0.0	132.0
Education and Labor	3,560.6	4,424.3	0.0	922.8
Energy and Commerce	18.6	86.0	0.0	42.3
Merchant Marine and Fisheries	0.0	10.1	2.0	0.0
Public Works and Transportation	52.6	0.3	31.5	20.9
Veterans' Affairs	1,298.9	1,800.2	1,211.8	0.0
Total Authorizing	5,056.7	7,020.9	1,245.3	1,117.9
Total Budget Authority	22,499.8	13,087.7	6,894.1	13,038.0
Outlays				
House Appropriations Subcommittee				
Commerce, Justice, State	46.3	444.9	-121.1	-277.5
Energy and Water Development	28.9	15.1	13.9	-0.1
Foreign Operations, Export Financing	-437.4	126.0	111.3	-674.7
VA, HUD, Independent Agencies	106.1	2,256.8	-3,371.5	1,220.5
Interior	11.3	11.5	0.8	-1.0
Labor, HHS, Education	30.6	8.3	13.5	8.9
Rural Development, Agriculture	7,477.3	2,086.6	2,469.1	2,921.6
Total Appropriations	7,263.2	4,949.2	-883.7	3,197.7
House Authorizing Committee				
Agriculture	135.0	700.0	-697.0	132.0
Education and Labor	3,591.9	4,424.3	-1,916.6	1,084.2
Energy and Commerce	18.6	55.0	-60.0	23.7
Merchant Marine and Fisheries	30.9	10.1	-8.3	29.1
Public Works and Transportation	52.6	0.3	31.5	20.9
Veterans' Affairs	1,272.6	1,525.1	-596.4	343.8
Total Authorizing	5,101.6	6,714.8	-3,246.8	1,633.6
Total Outlays	12,364.8	11,664.0	-4,130.5	4,831.3

SOURCE: Congressional Budget Office.

a. As projected in the revised CBO baseline, February 1989.

b. Liquidating account outlays calculated by subtracting financing and subsidy account outlays from baseline outlays.

TABLE D-7. THE DIVISION OF BUDGET AUTHORITY AND OUTLAYS INTO THE NEW BUDGET ACCOUNTS UNDER CREDIT REFORM IN FISCAL YEAR 1990, BY SENATE JURISDICTION (In millions of dollars)

Jurisdiction	Current Accounts (CBO Baseline[a])	New Budget Accounts Under Credit Reform: Subsidy Account	Financing Account	Liquidating Account[b]
	Budget Authority			
Senate Appropriations Subcommittee				
Commerce, Justice, State	129.6	377.9	313.1	81.0
Energy and Water Development	27.1	14.1	13.0	0.0
Foreign Operations, Export Financing	917.9	254.6	1,049.3	84.9
VA, HUD, Independent Agencies	1,894.8	2,630.5	465.8	2,690.0
Interior	5.3	10.8	9.2	4.9
Labor, HHS, Education	30.9	11.8	19.3	0.0
Agriculture, Rural Development	13,614.4	2,245.2	4,217.5	8,200.6
Total Appropriations	16,619.9	5,544.9	6,087.2	11,061.3
Senate Authorizing Committee				
Agriculture, Nutrition, and Forestry	160.0	700.0	0.0	187.0
Labor and Human Resources	3,668.2	3,568.4	0.0	3,509.4
Commerce, Science, and Transportation	0.0	9.3	2.0	0.0
Environment and Public Works	65.7	0.4	57.5	7.7
Veterans' Affairs	1,414.6	1,650.9	1,577.9	0.0
Total Authorizing	5,308.5	5,929.0	1,637.4	3,704.1
Total Budget Authority	21,928.3	11,473.9	7,724.6	14,765.5
	Outlays			
Senate Appropriations Subcommittee				
Commerce, Justice, State	-95.7	388.7	-256.1	-228.3
Energy and Water Development	25.1	8.7	8.0	8.4
Foreign Operations, Export Financing	-511.5	46.2	3.5	-561.2
VA, HUD, Independent Agencies	478.8	1,742.9	-3,009.1	1,744.9
Interior	10.5	10.8	1.3	-1.5
Labor, HHS, Education	58.3	0.0	0.0	58.2
Agriculture, Rural Development	7,323.9	1,394.8	1,893.0	4,036.1
Total Appropriations	7,289.4	3,592.1	-1,359.4	5,056.7
Senate Authorizing Committee				
Agriculture, Nutrition, and Forestry	160.0	700.0	-727.0	187.0
Labor and Human Resources	3,740.9	3,539.1	-3,434.6	3,636.5
Commerce, Science, and Transportation	64.5	9.3	-7.9	63.1
Environment and Public Works	65.7	0.4	57.5	7.7
Veterans' Affairs	1,490.7	1,399.4	-568.6	659.9
Total Authorizing	5,521.8	5,648.1	-4,680.6	4,554.2
Total Outlays	12,811.1	9,240.2	-6,040.0	9,611.0

SOURCE: Congressional Budget Office.

a. As projected in the revised CBO baseline, February 1989.

b. Liquidating account outlays calculated by subtracting financing and subsidy account outlays from baseline outlays.

TABLE D-8. THE DIVISION OF BUDGET AUTHORITY AND OUTLAYS INTO THE NEW BUDGET ACCOUNTS UNDER CREDIT REFORM IN FISCAL YEAR 1991, BY SENATE JURISDICTION (In millions of dollars)

Jurisdiction	Current Accounts (CBO Baseline[a])	New Budget Accounts Under Credit Reform: Subsidy Account	Financing Account	Liquidating Account[b]
Budget Authority				
Senate Appropriations Subcommittee				
Commerce, Justice, State	206.7	394.0	306.0	116.0
Energy and Water Development	28.3	14.7	13.6	0.0
Foreign Operations, Export Financing	1,098.8	265.4	1,037.4	112.5
VA, HUD, Independent Agencies	2,431.2	2,779.9	482.8	3,693.0
Interior	9.6	11.1	9.2	8.8
Labor, HHS, Education	32.2	12.3	20.1	0.0
Agriculture, Rural Development	13,779.2	2,347.4	4,063.7	8,487.3
Total Appropriations	17,586.0	5,824.9	5,932.8	12,417.6
Senate Authorizing Committee				
Agriculture, Nutrition, and Forestry	168.0	700.0	0.0	195.0
Labor and Human Resources	3,628.0	4,402.7	0.0	1,797.8
Commerce, Science, and Transportation	0.0	9.7	2.0	0.0
Environment and Public Works	59.0	0.4	44.0	14.7
Veterans' Affairs	1,325.4	1,721.6	1,360.1	0.0
Total Authorizing	5,180.4	6,834.3	1,406.0	2,007.5
Total Budget Authority	22,766.4	12,659.2	7,338.9	14,425.1
Outlays				
Senate Appropriations Subcommittee				
Commerce, Justice, State	-21.7	427.5	-171.9	-277.3
Energy and Water Development	27.7	14.5	13.4	-0.1
Foreign Operations, Export Financing	-489.1	86.8	54.2	-630.0
VA, HUD, Independent Agencies	200.6	2,103.1	-3,801.2	1,898.7
Interior	11.0	11.1	1.2	-1.3
Labor, HHS, Education	39.5	1.2	1.9	36.4
Agriculture, Rural Development	7,445.5	1,827.7	2,268.9	3,348.9
Total Appropriations	7,213.5	4,471.9	-1,633.5	4,375.1
Senate Authorizing Committee				
Agriculture, Nutrition, and Forestry	168.0	700.0	-727.0	195.0
Labor and Human Resources	3,664.4	4,372.5	-2,823.4	2,800.7
Commerce, Science, and Transportation	13.5	9.7	-8.0	11.8
Environment and Public Works	59.0	0.4	44.0	14.7
Veterans' Affairs	1,305.1	1,462.3	-639.9	482.8
Total Authorizing	5,210.0	6,544.7	-4,862.3	3,527.7
Total Outlays	12,423.6	11,016.6	-6,495.8	7,902.8

SOURCE: Congressional Budget Office.

a. As projected in the revised CBO baseline, February 1989.

b. Liquidating account outlays calculated by subtracting financing and subsidy account outlays from baseline outlays.

TABLE D-9. THE DIVISION OF BUDGET AUTHORITY AND OUTLAYS INTO THE NEW BUDGET ACCOUNTS UNDER CREDIT REFORM IN FISCAL YEAR 1992, BY SENATE JURISDICTION (In millions of dollars)

Jurisdiction	Current Accounts (CBO Baseline[a])	New Budget Accounts Under Credit Reform: Subsidy Account	Financing Account	Liquidating Account[b]
Budget Authority				
Senate Appropriations Subcommittee				
Commerce, Justice, State	223.7	410.0	269.9	144.0
Energy and Water Development	29.5	15.3	14.1	0.0
Foreign Operations, Export Financing	1,331.8	276.3	1,002.5	302.4
VA, HUD, Independent Agencies	1,823.6	2,896.4	489.5	2,584.0
Interior	16.5	11.5	9.3	15.3
Labor, HHS, Education	33.5	12.8	20.9	0.0
Agriculture, Rural Development	13,984.4	2,444.5	3,842.5	8,874.5
Total Appropriations	17,443.1	6,066.7	5,648.8	11,920.0
Senate Authorizing Committee				
Agriculture, Nutrition, and Forestry	135.0	700.0	0.0	132.0
Labor and Human Resources	3,579.2	4,510.3	0.0	965.1
Commerce, Science, and Transportation	0.0	10.1	2.0	0.0
Environment and Public Works	52.6	0.3	31.5	20.9
Veterans' Affairs	1,298.9	1,800.2	1,211.8	0.0
Total Authorizing	5,056.7	7,020.9	1,245.3	1,117.9
Total Budget Authority	22,499.8	13,087.7	6,894.1	13,038.0
Outlays				
Senate Appropriations Subcommittee				
Commerce, Justice, State	46.3	444.9	-121.1	-277.5
Energy and Water Development	28.9	15.1	13.9	-0.1
Foreign Operations, Export Financing	-437.4	126.0	111.3	-674.7
VA, HUD, Independent Agencies	106.1	2,256.8	-3,371.5	1,220.5
Interior	11.3	11.5	0.8	-1.0
Labor, HHS, Education	30.6	8.3	13.5	8.9
Agriculture, Rural Development	7,477.3	2,086.6	2,469.1	2,921.6
Total Appropriations	7,263.2	4,949.2	-883.7	3,197.7
Senate Authorizing Committee				
Agriculture, Nutrition, and Forestry	135.0	700.0	-697.0	132.0
Labor and Human Resources	3,610.5	4,479.3	-1,976.6	1,107.9
Commerce, Science, and Transportation	30.9	10.1	-8.3	29.1
Environment and Public Works	52.6	0.3	31.5	20.9
Veterans' Affairs	1,272.6	1,525.1	-596.4	343.8
Total Authorizing	5,101.6	6,714.8	-3,246.8	1,633.6
Total Outlays	12,364.8	11,664.0	-4,130.5	4,831.3

SOURCE: Congressional Budget Office.

a. As projected in the revised CBO baseline, February 1989.

b. Liquidating account outlays calculated by subtracting financing and subsidy account outlays from baseline outlays.

GLOSSARY

Above the Line/Below the Line: In the federal budget, this distinction indicates whether a payment or collection affects the deficit. Above-the-line cash flows affect the measured deficit; below-the-line cash flows do not, but are regarded instead as a means of financing the deficit. Under current federal accounting practice, both loan disbursements and collections are recorded above the line. An excess of repayments over disbursements reduces the deficit. In contrast, federal borrowing and repayments of federal debt are currently recorded below the line and do not affect the deficit.

Account Data: Obligations, commitments, cash flows, and budget authority--consistent with CBO baseline projections--for the new subsidy, financing, and liquidating accounts to be created under credit reform. (Published in separate CBO supplement, *Data Base for Credit Reform.*)

Accrual Basis of Accounting: An accounting practice by which revenues are recorded when earned and expenditures are recorded when goods are received, services performed, or losses incurred--even though the receipt of the revenue or the payment of the expenditure may take place, in whole or part, in another accounting period.

Administration's Credit Reform Proposal (1987): A proposal for legislative action from the Reagan Administration to the Congress that would have carried out a market-based plan for credit reform.

Administration's Revised Credit Reform Proposal (1988): A proposal for legislative action from the Reagan Administration to the Congress that would have carried out an appropriation plan for credit reform. This proposal was also endorsed by the Bush Administration.

Appropriation Limitation: A statutory restriction in an appropriation act, which establishes the maximum or minimum amount that may be obligated or expended for a specified purpose.

Appropriation Plan: An accounting procedure for simulating the budgetary results of the market-based plan by making appropriations and transferring budgetary resources between accounts.

Book Value: The unpaid balance of a loan.

Budget Authority: Authority provided by law to enter into obligations (but not guarantee commitments) that will result in immediate or future outlays of government funds.

Budget Documents: Materials submitted conveying the President's budget proposal to the Congress, which usually include the Budget, Budget Appendix, Special Analyses, Historical Tables, The United States Budget in Brief, Major Policy Initiatives, and Management of the United States Government.

Capitalize: To convert future payments into a single present value. The market price of a financial asset is the capitalized present value of future expected payments.

Cash Flows: Cash receipts and payments.

Certificates of Beneficial Ownership: A form of agency debt sometimes considered as a sale of assets.

Credit Agencies: Any executive branch department, independent commission, board, bureau, office, or other establishment of the federal government that administers a direct loan or guaranteed loan program.

Credit Authority: Authority to incur direct loan obligations or issue primary loan guarantee commitments.

Direct Loan: A disbursement of funds that is contracted to be repaid with or without interest. Three other types of transactions are also considered direct loans: (1) acquisition of defaulted private loans that the government had guaranteed and for which the government makes direct payment to the lender to honor the guarantee; (2) the purchase by the government of a private loan in the secondary market; and (3) a sale of agency assets on credit terms of more than 90 days.

Discount Rate: The interest rate used in determining the present value of future payments.

Discounting: The calculation of the present value of an amount to be paid in the future.

Discounts from Par: The difference between face value and market value when market value is less than face value.

Entitlement Programs: Programs that make payments to any person, business, or unit of government that seeks the payments and meets the criteria set in law. The Congress controls these programs indirectly by defining eligibility and by setting the benefit or payment rules, rather than directly through the annual appropriation process.

Face Value (of a Loan): Generally represents the amount of money borrowed to be repaid at a future date.

Financing Accounts: One of three new types of budget accounts to be created under credit reform. These accounts receive subsidy payments from subsidy accounts and finance new direct loans and guarantees by borrowing the nonsubsidy portion from the Treasury. These borrowings are repaid with the proceeds of loan repayments and recoveries.

Government-Sponsored Enterprises: Privately owned enterprises established and chartered by the federal government to perform specific financial functions, usually under the supervision of a government agency, and whose transactions are excluded from the unified budget.

Guaranteed Loan Commitment: A legal or binding agreement by the federal government to guarantee, in whole or in part, the principal and/or interest on nonfederal loans when issued.

Internal Rate of Return (IRR): The discount rate that equates the present value of expected cash inflows from an investment to the present value of expected cash disbursements.

Liquidating Accounts: One of three new types of budget accounts to be created under credit reform. These accounts receive repayments and pay default costs for direct loans and guarantees made before credit reform.

Loan Guarantee: An agreement by which the government agrees to pay, in whole or in part, the loan principal and interest to a lender or holder of a security (debt) in the event of default by the borrower.

Market-Based Cost Data: Information regarding the subsidy costs of direct loans or federally guaranteed loans based on the market prices of loans and guarantees.

Market-Based Plan: A means of changing the budgetary treatment of federal credit programs by selling all newly originated loans and reinsuring all new federal guarantees.

Maturity: The time at which the last payment on a debt is due.

Means of Financing: Ways in which a budget deficit is financed or a budget surplus is used. A budget deficit may be financed by Treasury (or agency) borrowing, by reducing Treasury cash balances, by the sale of gold, by seigniorage on coins, by allowing certain unpaid liabilities to increase, or by certain equivalent transactions. Conversely, a budget surplus may be used to repay borrowing or to build up cash balances.

Nonrecourse Loan Sale: Sale of a loan asset by the government under which the buyer has no future claim on the government in the case of default by the borrower.

Nonsubsidized Cash Flows: Cash flows arising from the nonsubsidized component of a federal loan or guarantee. In a loan or guarantee, *all* cash flows except for the subsidy are nonsubsidized.

Offsetting Collections from the Public: Collections from the public that are the result of business-type charges and are reported in expenditure accounts rather than in revenue accounts.

Off-Budget: Federal spending excluded from the budget totals under provisions of the law, even though these outlays are part of total government spending.

On-Budget: Federal spending that is included in the budget totals as part of total government spending.

Outlays: Payments to liquidate obligations that usually take the form of checks, cash, or electronic funds transfer. Obligations may also be liquidated (and outlays incurred) by the accrual of interest on public issues of Treasury debt securities. In certain cases, the issuance of bonds, notes, debentures, or monetary credits to liquidate obligations is also treated as outlays. Negative outlays for a government activity occur when their offsetting collections exceed their outlays.

Parity: Equality, as in amount, status, or value. Budget parity refers to equal budgetary treatment of all transactions with the same cost whether they are loans, guarantees, or cash.

Participation Certificates: Shares of a pool of loans that the certificate issuer continues to hold and service. Under current budget concepts, the sale of such certificates should be treated as federal borrowing, not as offsetting collections.

Present Value: The current value of a claim on an amount or series of amounts of money to be paid in the future. A sum of money to be received in the future has a lower present value than the nominal, future amount because cash in hand can be invested at interest.

Public Enterprise Revolving Funds: Expenditure accounts authorized to be credited with collections, primarily from the public, that are generated by and earmarked to finance a continuing cycle of operations.

Reinsurance: The assumption of a portion of the risks insured by another party.

Rescission: Enacted legislation that cancels the availability of budgetary resources previously provided by the Congress before the authority would otherwise lapse.

Revolving Funds: *See* Public Enterprise Revolving Funds.

Scorekeeping: The process of recording federal actions against a budget or charting budget actuals against budget plans.

Seigniorage on Coins: The difference between the face value of minted coins and their cost of production. Seigniorage arises from the exercise of the government's monetary powers and differs from receipts coming from the public, since there is no corresponding payment by another party. Therefore, seigniorage is excluded from government receipts and treated as a means of financing the deficit, other than borrowing from the public, or as a supplementary amount to be applied to reduce debt or to increase the cash in the Treasury during a budget surplus.

Senate-Passed Proposal: For this report, refers to H.J. Res. 324, the Federal Credit Reform Act of 1987.

Sequestration: The across-the-board cancellation of budgetary resources (as defined in Section 401(c)(2) of the Congressional Budget Act) used to enforce the deficit targets in the Balanced Budget Act. Sequestration is triggered if the Office of Management and Budget estimates that the deficit for the upcoming fiscal year will exceed the target by more than $10 billion. No $10 billion margin is provided for fiscal year 1993, when the deficit target is zero.

Sold With or Without Recourse: Refers to federal loan assets that are sold to the public. The sale of loans with recourse implies that the purchaser has a right to collect expected payments from the federal government if the borrower defaults on a loan. The sale of loans without recourse implies that the purchaser of the loan bears all of the risk of future defaults and delinquencies on the part of the borrower. The government is not liable to make up the shortfalls associated with delinquencies and defaults on loans sold without recourse.

Subsidy: A payment, benefit, or service underwritten by the federal government for which there is no current charge. Also refers to the provision of loans, goods, and services to the public at prices lower than market value, such as interest subsidies.

Subsidy Accounts: One of three new types of budget accounts to be created under credit reform. This account receives appropriations and makes subsidy payments to the financing accounts.

Subsidy Costs: The loss to the government on federal credit transactions. In a direct loan, the government exchanges cash for a loan of lesser present value. In a guaranteed loan, the government obligates itself to pay an expected sum whose present value exceeds any fee collected.

Supplemental Appropriations: The appropriation of funds in addition to those contained in a regular or continuing appropriation act.

Treasury Debt: That portion of the gross federal debt incurred when the Treasury borrows funds directly from the public or another fund or account.

Treasury Securities: Debt instruments of various maturities sold by the Treasury, including Treasury bills (3 to 12 months), Treasury notes (1 to 7 years), Treasury bonds (more than 7 years).

Vendee Loans: A loan made by the federal government to a purchaser of a federally owned asset.

Write-Offs for Default: The amount of loans that are deemed uncollectible and subtracted from the cumulative face value of the loan portfolio.

SOURCES: General Accounting Office, *A Glossary of Terms Used in the Federal Budget Process* (March 1981); Congressional Budget and Impoundment Control Act of 1974, as amended; James L. Farrell, Jr., *Guide to Portfolio Management* (New York: McGraw-Hill, 1983); and Office of Management and Budget, *Budget of the United States Government, Fiscal Year 1989*, Parts 6b and 6e.