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United States General Accounting Office
Washington, DC 20548

April 10, 2001

The Honorable Ann Veneman
The Secretary of Agriculture

Subject: Rural Development: Assessment of Data Used to Support Non-Housing Direct Loan Programs Subsidy Cost Estimates

Dear Madam Secretary:

Rural Development's (RD) long-standing problems with estimating the cost of its credit programs in accordance with the Federal Credit Reform Act of 1990 and federal accounting standards—credit reform implementation—continues to be a major factor preventing the Department of Agriculture (USDA) from achieving an unqualified opinion on its consolidated financial statements. In addition, these problems materially affect USDA's budget submissions because the same cost estimates are generally used for both budget preparation and financial reporting.

Since April 1999, we have been assessing RD's credit reform implementation efforts in such areas as (1) identifying key cash flow assumptions, (2) improving cash flow models, (3) assessing cash flow model data, and (4) implementing other procedures to enhance the credit subsidy estimation process. RD has divided its credit programs into three areas: housing direct loans, non-housing direct loans, and guaranteed loans. Our efforts to date have primarily focused on the non-housing and guaranteed loan programs. This letter is part of a series of status reports[1] on RD's efforts to improve its credit program cost estimates, and focuses solely on RD's major non-housing direct loan programs,[2] which RD reported at $40.6 billion in loans outstanding as of September 30, 2000.[3]

[1]See *Credit Reform: Improving Rural Development's Credit Program Cost Estimates* (GAO/AIMD-00-286R, August 22, 2000) and two related correspondences: *Credit Reform: Rural Development's Efforts to Improve Loan Cost Estimates*, December 17, 1999, and *Credit Reform: Improving Rural Development's Loan Cost Estimates*, June 25, 1999.

[2]The major non-housing direct loan programs were Water and Waste Disposal, Federal Financing Bank Electric, Municipal Electric, Telecommunications Hardship, and Electric Hardship. The criteria used to identify these major programs included outstanding loan balances, obligation trends, and subsidy cost.

[3]Rural Development's Consolidated Financial Statements for Fiscal Year 2000.

The reasonableness of RD's loan program cost estimates is affected by the quality of its cash flow assumptions, which are calculated based on data recorded in RD's loan accounting systems. As part of our ongoing work, this letter provides our assessment of the accuracy of the data that RD uses to calculate key cash flow assumptions—the assumptions that have the greatest impact on the program's estimated subsidy cost. RD accounts for the major non-housing direct loan programs in the Program Loan Accounting System (PLAS), the Rural Electrification Administration system (REA), and the Federal Financing Bank system (FFB).

Results in Brief

For RD to prepare reasonable subsidy cost estimates, being able to draw on reliable data is an important first step. Our testing determined that the data included in RD's PLAS, REA, and FFB loan accounting systems that are used to calculate key cash flow assumptions for the major non-housing direct loan programs are generally accurate. The assumptions that RD has determined to be key for calculating the subsidy cost estimates for these programs are the average borrower interest rate and average loan term, except for the FFB electric program.[4] For this program, RD staff identified the average borrower interest rate as the key cash flow assumption.

In commenting on a draft of this letter, RD officials agreed with our finding. We have incorporated their comments as appropriate.

Background

The Federal Credit Reform Act of 1990, the related accounting standard, Statement of Federal Financial Accounting Standards (SFFAS) No. 2,[5] *Accounting for Direct Loans and Loan Guarantees*, and various budget guidance,[6] together known as credit reform, were established to more accurately measure the government's costs of federal credit programs. As part of implementing credit reform, agencies are required to estimate the net cost of extending or guaranteeing credit—generally referred to as the subsidy cost—based on the present value[7] of estimated net cash flows for the life of the loan, excluding administrative costs.

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[4]Based on our previous work to assess RD's credit reform implementation efforts, we agree with the key cash flow assumptions RD has identified for its major non-housing direct loan programs.

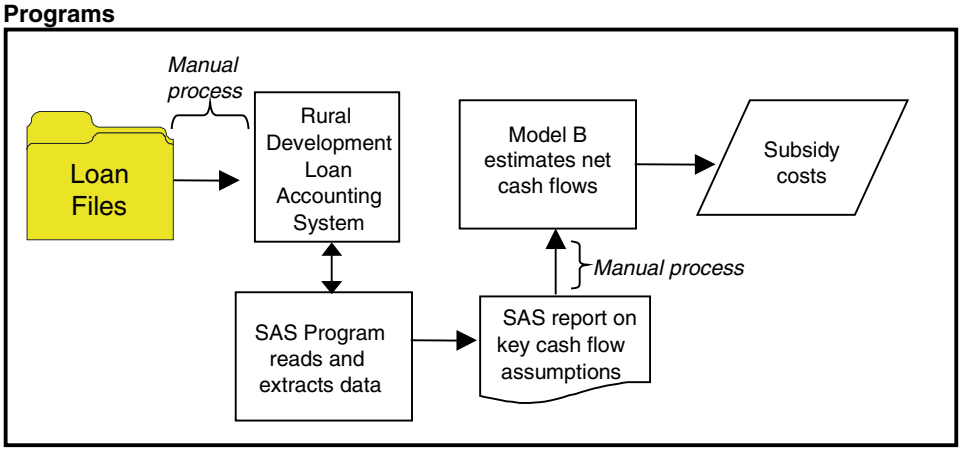
[5]SFFAS No. 2 was amended by SFFAS No. 18, *Amendments to Accounting Standards for Direct Loans and Loan Guarantees*. The objective of the amendments was to improve financial reporting related to subsidy costs and performance of federal credit programs.

[6]Office of Management and Budget circulars A-11 and A-34 include guidance for implementing credit reform including estimating credit subsidy costs.

[7]Present value is the worth of a future stream of returns or costs in terms of money paid immediately. In calculating present value, prevailing interest rates provide the basis for converting future amounts into their "money now" equivalents.

RD management is responsible for accumulating sufficient, relevant, and reliable data on which to base its estimated net cash flows. RD's process for estimating its net cash flows and calculating its subsidy costs are shown in figure 1.

Figure 1: Rural Development's Process for Calculating Subsidy Costs for Its Non-Housing Direct Loan Programs



Notes:

1. Except where indicated, these processes are automated.

2. Model B is the cash flow model for RD's non-housing direct loan programs.

3. SAS, a statistical analysis system, is an integrated suite of software designed to perform various functions such as data access, data management, data analysis, and data presentation. RD uses this SAS program to summarize and analyze loan accounting system data related to the key cash flow assumptions.

4. In conjunction with the Model B calculations, RD uses the Credit Subsidy Calculator, a computer software program developed by the Office of Management and Budget (OMB), to calculate the subsidy costs for the non-housing direct loan programs. The OMB Credit Subsidy Calculator was developed to provide a consistent approach to calculating the present values of credit program costs.

Source: Rural Development.

As RD makes loans to borrowers, data related to each loan—including the applicable term and interest rate—are entered in RD's loan accounting systems, and the associated loan documents are filed in headquarters or regional offices. From the loan accounting systems, key data such as loan amount or borrower interest rate are captured by an automated program that calculates RD's average borrower interest rate and average loan term assumptions. These assumptions are then manually entered into RD's cash flow model, a computer-based spreadsheet referred to as Model B,[8] which calculates an estimate for the subsidy cost of the program.

In response to prior audit findings, USDA organized a credit reform implementation task force and developed a detailed implementation plan. The task force has made

[8]RD has three cash flow models: Model A for direct housing loan programs, Model B for non-housing direct loan programs, and Model C for guaranteed loan programs.

progress in several areas, including completing and documenting sensitivity analyses[9] for the non-housing direct loan program's cost estimates. As reported in our August 22, 2000 letter,[10] we assessed RD's approach to performing sensitivity analyses in order to identify key cash flow assumptions. RD determined that there were two key cash flow assumptions for the major non-housing direct loan programs: average borrower interest rate and average loan term.[11] We agreed with RD's determination that these were the most significant cash flow assumptions based on our prior review. As a result, variations in these assumptions have the greatest impact on subsidy cost estimates. Therefore, it is critical that these assumptions be based on reliable data and be correctly calculated.

Scope and Methodology

In order to assess the reliability of the data in the loan accounting systems that support the calculation of key cash flow assumptions, which are entered in RD's cash flow model, we selected a random sample of loans (Water and Waste Disposal Program) or advances (all other programs) from the appropriate systems—PLAS, REA, and FFB—as of June 30, 2000. Prior to selecting these sample transactions, we determined that the unpaid principal balances recorded in the loan accounting systems agreed with the June 30 general ledger trial balances for each loan program. For the FFB electric loan program, our population comprised 631 loans. For the REA loan program (Municipal Electric, Telecommunications Hardship, and Electric Hardship), our population comprised 4,052 loans. For the Water and Waste Disposal loan program, our population comprised 5,844 loans.

For sampled loans, we obtained documentation from the RD loan files supporting the loan accounting systems' data that are used to calculate the average borrower interest rate and loan term assumptions used in the cash flow model. The documentation obtained included loan or bond agreements, Financial Requirement and Expenditure Statements, Voucher and Schedule of Payments, FFB Interest Rate Confirmation Notices, and Quarterly Federal Register Municipal Interest Rate Schedules. We then compared the data in the loan accounting systems to the supporting documents to verify that the recorded interest rates and components of the loan terms documented in the automated records agreed with the supporting documents.

We conducted our work in Washington, D.C., and at selected RD field offices from August 2000 through February 2001 in accordance with generally accepted government auditing standards. We received oral comments on a draft of our letter from the Office of the Chief Financial Officer, Rural Development.

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[9]Sensitivity analysis is a process used to identify the assumptions that, when adjusted, have the greatest impact on the credit subsidy estimate.

[10]GAO/AIMD-00-286R.

[11]However, for the FFB electric program, RD staff identified the average borrower interest rate as the key cash flow assumption.

Loan Accounting Systems Data Are Generally Accurate

Our testing determined that the data included in the PLAS, REA, and FFB systems that are used to calculate key cash flow assumptions for RD's major non-housing direct loan programs are generally accurate. For the PLAS and REA programs, RD has determined that the average borrower interest rate and average loan term are the key assumptions used in their calculation of subsidy costs. For the FFB electric program, RD has determined that the average borrower interest rate is the key assumption.

RD uses the borrower interest rates recorded in the three loan accounting systems to calculate the average interest rate assumption. In 323 of the 325 total sample loans[12] tested, the borrower interest rate recorded in the loan accounting systems agreed to the supporting documentation in the loan files. For two sample loans, RD could not locate the documentation to support the borrowers' interest rates. As a result, we counted those two items as errors because RD had no assurance that the rates for those loans were correct. However, these errors were not material, as shown in enclosure I, and therefore, we concluded that the interest rate data in RD's loan accounting systems for the major non-housing direct loan programs were generally accurate.

RD uses the loan maturity date and the loan advance date[13] recorded in the three loan accounting systems to calculate the average loan term assumption. In 323 of the 325 total sample loans tested, the advance date agreed to supporting documentation in the loan files. As with testing the accuracy of the interest rate data, the two errors related to missing documentation. In 320 of the 325 total sample loans tested, the maturity dates in the systems agreed to the supporting documentation. Of the five cases in error, the missing documentation mentioned above accounted for two, and there were three cases in which the maturity dates in the system did not agree with those in the loan files. These errors related to the Water and Waste Disposal loans included in RD's PLAS system. In two of the three cases, the loan system's maturity dates reflected 1 year more than the loan file documentation. In the remaining case, the loan system's maturity date reflected 5 years more than the loan file documentation. However, these errors were not material, as shown in enclosure I, and therefore, we concluded that the loan term data for the major non-housing direct loan programs were generally accurate.

Conclusion

Having reliable non-housing direct loan programs' data to prepare subsidy cost estimates represents important progress in achieving more reasonable estimates for the cost of these programs. Our testing showed that the information used to

[12]The 325 total sample loan population consisted of 114 REA loans, 97 FFB loans, and 114 Water and Waste Disposal loans.

[13]The advance date reflects the date the agency releases a portion of the total loan amount to the borrower.

calculate key cash flow assumptions for the major non-housing direct loan programs was reliable.

Agency Comments

In commenting on a draft of this letter, RD officials agreed with our finding. We have incorporated their comments as appropriate.

We are sending copies of this letter to Patricia Healy, Acting Chief Financial Officer, Department of Agriculture, and R. Mack Gray, Acting Deputy Under Secretary for Natural Resources and Environment. This letter will also be available on GAO's home page at http://www.gao.gov.

If you have any questions about this letter, please contact me at (202) 512-9508 or McCoy Williams, Acting Director, at (202) 512-6906. Key contributors to this assignment are listed in enclosure II.

Sincerely yours,

Linda M. Calbom
Director, Financial Management and Assurance

Enclosures

Sample Results

We selected a random sample of loans from RD's major non-housing direct loan programs in the Program Loan Accounting System (PLAS), the Rural Electrification Administration (REA) system, and the Federal Financing Bank (FFB) system. Table 1 and the accompanying notes identify the random samples selected, the number of errors found, and a projection of these errors to the population of the major non-housing direct loan programs in the three loan accounting systems.

Table 1: Summary of Sample Results for Rural Development's Major Non-Housing Direct Loan Programs

Loan accounting system	Major non-housing direct loan program	Population size	Sample size	Errors found in the interest rate data	Errors found in the loan term data	Conclusion
PLAS	Water and Waste Disposal	5,844	114	0	3 maturity date errors[a]	Not material
REA	Municipal Electric Telecommunications Hardship Electric Hardship	4,052	114	2[b]	2 interest rate, advance date, and maturity date errors[b]	Not material
FFB	Federal Financing Bank	631	97	0	0	No errors found

[a]For three of the sampled loans, the maturity dates did not agree to those in the loan files. When projecting these three errors to the population of 5,844, we are 95 percent confident that the errors in the population are between 42 and 389 loans. Our best estimate is that 154 loans have maturity dates that did not agree to those in the loan files. This fell below our tolerable amount of errors, which was 526 loans (a 9 percent tolerable error rate) for the Water and Waste Disposal sample.

[b]For two of the sample loans, RD could not locate the documentation to support the borrowers' interest rates, advance dates, and maturity dates. As a result, we counted those two items as errors because RD had no assurance that the system data for those loans were correct. When projecting these two errors to the population of 4,052, we are 95 percent confident that the errors in the population are between 13 and 220 loans. Our best estimate is that 71 loans had no documentation. This fell below our tolerable amount of errors, which was 365 loans (a 9 percent tolerable error rate) for the REA sample.

Staff Acknowledgments

Dan Blair, Marcia Carlsen, Carla Lewis, Jerry Pennington, and Ronda Price made key contributions to this report.

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