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UNITED STATES GENERAL ACCOUNTING OFFICE
WASHINGTON, D.C. 20548

ACCOUNTING AND FINANCIAL
MANAGEMENT DIVISION

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Mr. Harry S. Carver
Controller, Small
Business Administration

Dear Mr. Carver:

Subject: Survey of the Small Business Administration's Accounting for Loan Guaranty Fees (GAO/AFMD-82-79)

Our survey of the Small Business Administration's (SBA's) accounting for loan guaranty fees showed that information in its automated Loan Accounting System was not accurate. The accounting system carried over $2 million in delinquent guaranty fees, but a review of these receivables showed the system was wrong. The fees had already been paid or the related loans canceled and the fees no longer applicable. Because the Loan Accounting System was not producing reliable information, managers maintained manual memorandum records to account for guaranty fee collections and to initiate followup on delinquent fees--a duplicative and costly process.

SBA was established primarily to aid small businesses--those businesses not dominant in their field. SBA makes direct loans or guarantees loans made by participating lending institutions. Loan agreements obligate the Government to purchase the guaranteed portion of the loan (not over 90 percent of the balance outstanding) from the lending institution if the repayment of principal or interest is in default for over 90 days.

Depending on the type of guaranteed loan, the participating lender must pay the Government a one-time guaranty fee of either one-fourth of a percent or one percent of the guaranteed portion of the loan. The fee is payable when the loan is disbursed or 90 days following loan approval, whichever is earlier. The lender sends the fee to SBA's Financial Operations Division in Denver, where an automated billing system was established in 1978 as part of the Loan Accounting System.

If the guaranty fee is not paid within 90 days, the billing system sends the lender a notice of the amount due and the loan number. If, after 60 more days, the fee still is not paid, a second notice is sent to the appropriate SBA field office. The field office determines if the fee has been paid and, if not, forwards a copy of the notice to the lending institution. Then, if the fee is not paid within 15 days, the guarantee feature is terminated.

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We reviewed the Guaranty Fees Receivable account as of February 28, 1981, and found 1,894 loans with over $2 million in fees delinquent over 150 days. According to SBA's policy, the guarantee feature should have been terminated and the fees written off from the account. As of June 30, 1981, the Loan Accounting System still reported 952 of these fees as due the Government.

We discussed this matter with SBA officials who, acting on our suggestion, directed each field office to validate a list of receivable guaranty fees and to act to collect the fees or terminate the loan guaranties where applicable. The field offices found that 64 percent of the fees shown as still due the Government had been paid but had not been recorded in the accounting system. The remaining 36 percent of the fees should have been deleted from the accounting system because the loans, although approved, were not made.

We reviewed the documentation provided and found that the Loan Accounting System was wrong. The fees were being collected or the loans terminated but the transactions were not being recorded in the accounting system. Therefore, the accounting system did not provide reliable data on the status of guaranty fees and could not be used by managers to bill lending institutions for the fees. Thus, the billing process just discussed, which should be done by the automated billing segment of the Loan Accounting System, was being done manually.

SBA has identified the necessary changes to the automated billing segment of the system. It implemented some changes which should improve the efficiency and effectiveness of the system. For example, for some loans the guaranty fee is to be paid before the loan is released to the lending institution. However, the system was not programmed to record these advance fee payments and instead, recorded a receivable. The automated system now records the advance fee payment and has an edit to preclude recording the receivable in these cases.

We believe it is important that SBA ensure that the necessary changes to the automated Loan Accounting System be implemented quickly. Also, we recommend that the changes be thoroughly tested. Not only will SBA be able to more efficiently and effectively manage the guaranty fees by implementing the changes in the system, but the agency will also realize significant savings by eliminating the maintenance and use of manual memorandum records.

OBJECTIVES, SCOPE, AND METHODOLOGY

We surveyed SBA's automated Loan Accounting System to evaluate the adequacy of accounting and financial control for receivable guaranty fees and to determine if related financial reports are adequate and useful. We reviewed the pertinent records maintained and reports produced by SBA's centralized billing system which is part of the Loan Accounting System. We also reviewed the work done by SBA's Office of Portfolio Management in reviewing delinquent guaranty fees.

The review was made in accordance with our current "Standards for Audit of Governmental Organizations, Programs, Activities, and Functions," and included examinations of policies, procedures, documentation, accounting records, and computer reports. We discussed policies, procedures, and other matters with agency officials.

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We appreciate the courtesies and cooperation extended to our staff during the survey.

Sincerely yours,

John F. Simonette

John F. Simonette
Associate Director

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UNITED STATES GENERAL ACCOUNTING OFFICE
WASHINGTON, D.C. 20548

COMMUNITY AND ECONOMIC
DEVELOPMENT DIVISION

AUG 10 1982

Mr. Merritt W. Sprague
Manager, Federal Crop Insurance
Corporation
Department of Agriculture

Dear Mr. Sprague:

Subject: Concerns About the Actuarial Soundness of the Federal Crop Insurance Program

This letter is in response to your request during our meeting on June 21, 1982, that we inform you of our concerns about the Corporation's efforts to improve the actuarial soundness of the Federal Crop Insurance Program. You wanted this information to use during your planned comprehensive review of the Corporation's actuarial activities.

Our objective is to provide you with our observations on the Corporation's activities based on the information we have obtained to date in our on-going review. We are conducting our review at the Corporation's headquarters in Washington, D.C., and the National Service Office in Kansas City, Missouri. We interviewed knowledgeable Corporation officials and analyzed pertinent data and documentation relating to the actuarial activities.

As you know, the Federal Crop Insurance Act of 1980 (Public Law 96-365) authorized the nationwide expansion of a subsidized all-risk crop insurance program. The Corporation's primary efforts in implementing the act were directed toward expanding the program's geographic coverage and switching the marketing functions to the private insurance sector. The Corporation's strategy to improve the actuarial soundness of the program apparently relied on increased producer participation brought about by the expansion program. Supposedly, this would bring a higher proportion of low-risk producers into the program while creating a larger base to spread the risk.

The Corporation has made substantial progress in expanding the insurance program coverage. The rapid expansion, however, may result in increased exposure to loss because insurance rates may be based on questionable actuarial assumptions and methodologies. The Corporation has concentrated its actuarial resources on the expansion program; consequently it has not (1) performed the research necessary to resolve long-standing concerns regarding the program's actuarial soundness or (2) maintained normal review and evaluation activities.

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Concerns about the program's actuarial soundness

Since 1970, several studies, including our 1977 report, 1/ have raised various concerns about the soundness of the Corporation's actuarial assumptions and procedures. Further, the reinsured companies, through their rate evaluation committee composed of representatives from the insurance industry and academia, and the Corporation's own actuarial staff have raised additional concerns about the methodologies used in implementing the 1980 act which could significantly increase the Corporation's exposure to risk as the program expands nationwide. In our opinion, many of these concerns have contributed to inadequate rates as indicated by the Corporation's cumulative loss ratio in excess of 1.0 and the frequency and magnitude of losses incurred by some entire crop programs as well as selected State crop programs.

Our survey identified the following areas which we believe are the major problems which could affect the soundness of the actuarial rates.

1. The general rate-spreading assumption used by the Field Actuarial Offices to establish premium rates for county areas may result in instances in which premium rates are priced too low for county areas with higher than average yields, while county areas with lower than average yields are charged a premium rate that is higher than justified. Corporation procedures stipulate that a county classification area's premium rate should be set according to the risk of loss for the amount of insurance involved. In practice, however, field underwriters have generally established county area rates based on the premise that producers in areas with higher than average yields are better risks than producers in areas with lower than average yields.

2. The continued use of a target loss ratio of 0.9 to determine the premium rate factor required to accumulate program reserves may be unrealistic in regard to the Corporation's loss experience and may result in insufficient reserve accumulation as the program continues to expand. In addition, the uniform application of the same reserve factor to each county crop program's premium rate results in some programs being required to accumulate excessive reserves in order to cover the losses of programs which are less actuarially sound.

3. The Corporation's procedures for loading county premium rates with a factor to accumulate reserves for unforeseen (catastrophic) losses have not been changed or reevaluated for at

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1/ "The Federal Crop Insurance Program Can Be Made More Effective" (FOD-77-7, Dec. 13, 1977).

least 10 years. Yet, concerns have been raised as to whether this procedure is based on sound actuarial theory and research. Primarily, criticism centers around whether evaluation of such a small geographic area as a county is a valid basis for predicting catastrophic risks, which are generally based on a much larger geographic unit.

4. The Corporation's actuarial process is subject to many administrative adjustments and limitations that degrade the actuarial process. For example, increases or decreases in premium rates are allowed to vary only by a stipulated percentage regardless of the rate which is indicated by analysis of actual experience.

5. The premium rates for the 75-percent level of coverage may be priced too low while the premium rates for the 50-percent level of coverage may be priced too high due to the method the Corporation uses to set the rates. For example, premium rates for these levels of coverage are set by applying specific premium rate adjustment factors to the premium rate established for a 65-percent level of coverage based on actual experience. These premium rate adjustment factors were developed on the theory that increasing the level of coverage will result in a specified multiple increase in the amount of expected indemnities. The former Chief of the Statistical Service Branch expressed concern that the premium rate adjustment factors developed on this basis may not be valid for these levels of coverage.

6. The newly developed Individual Yield Coverage Program may expose the Corporation to a significantly higher loss risk if there is large participation of producers located in the potentially underpriced high yield county areas and they also elect the potentially underpriced 75-percent level of coverage. Additionally, the program's actuarial soundness may be compromised because county area yields can be substituted for actual producer yield. Such substitution provisions may preclude identifying and evaluating actual producer yield data which could provide field underwriters with additional insight into the propriety of the specific county area premium rates assigned to these producers. The actuarial soundness of some county crop programs may also be affected by increasing the potential for anti-selection in the county wherein producers with yields higher than the county areas average yield guarantee would elect to participate in this new program, while producers with average yields less than the area yield guarantee would elect to be covered under the existing county area program.

The Corporation recently contracted with Ernst and Whinney, a consulting firm, to perform an independent management level review of the Corporation's management information and actuarial practices and procedures. The report, dated June 14, 1982, recommended that a new, comprehensive ratemaking model be developed and listed several critical areas that need to be given priority in developing this model. Many of these critical areas are the same as those concerns outlined above.

Actuarial resources devoted to program expansion

Actuarial resources have been concentrated on expanding the crop insurance program. Consequently normal review and evaluation activities have been deferred for 2 years and very little research effort has been devoted to resolving longstanding concerns.

The Corporation has greatly increased insurance program coverage. A comparison of the programs offered for crop year 1980 with those for crop year 1982 disclosed that the number of counties covered nearly doubled, increasing from 1,676 to 2,999, while the number of county crop programs offered more than tripled, increasing from 4,629 to 14,498. During this same general time frame, the Actuarial Division's permanent, full-time staff, excluding research and development, was increased from 104 to 152, an increase of about 50 percent.

The Actuarial Division's two most significant normal review and evaluative activities are to rework one-third of the county average rates and coverages for each crop program and to reevaluate one-fifth of county actuarial structures each year. Our survey of the Statistical Services Branch and Field Underwriting Offices indicates that they have been unable to sustain this frequency of crop program reworks since crop year 1980. In fact, they have performed such evaluations at only half of the normal rate. According to actuarial personnel, this schedule slippage is primarily due to diverting staff to expand the program. For example, the Statistical Services Branch deferred all planned crop program reworks for crop years 1982 and 1983 due to the extraordinary efforts required to develop offers for more than 1,000 new counties and 8,500 county crop programs for crop year 1982.

The Actuarial Division's plan for reworking the crop year 1983 program requires the Statistical Services Branch to incorporate crop year 1980 actual yield experience into the crop year 1983 guarantees for only the wheat, corn, soybean, and cotton programs. Although these four crops represent a major portion of the Corporation premiums, the yield guarantees for the 24 other crop programs remain unadjusted for the low yields of crop year 1980. Additionally, this rework plan relies upon field underwriters to adjust all crop year 1983 program rates based on a set of administrative guidelines. Although this procedure will accomplish some degree of rate evaluation for all county crop programs, this method of rate setting is a departure from the normal evaluative approach.

The Director of the Actuarial Division stated that he needs to fill positions to the established personnel ceiling and that the new management needs to refrain from carrying out the Corporation's earlier ambitious expansion program. He said that in addition to maintaining normal review and evaluation activities, the Division needs to review the appropriateness of rates and coverages set up for the expansion counties. He said that the Division also needs sufficient staff to perform basic research and that the Corporation should develop a comprehensive plan for addressing these concerns as rapidly as possible.

In their report, Ernst and Whinney recognized that it would be a massive undertaking for the Corporation to develop a new, comprehensive model for ratemaking. They recommended that the Corporation devote its efforts to correcting individual concerns in the ratemaking process for crop year 1983 in order to establish rates at a more adequate level.

Concerns about the management information systems

In addition to problems in the area of actuarial soundness, the above-mentioned studies raised concerns about the Corporation's actuarial operations. These concerns are again being raised as a result of our survey. The insurance industry has voiced doubts that the Corporation's rework procedures will produce timely results due to their essentially manual nature. Under current procedures loss experience is 2 years old before it is incorporated into the Corporation's insurance offers; that is, crop year 1981 experience would normally be reflected in crop year 1983 rates and coverages. However, because of the manual nature of the operation and the deferral of rework activities, there will be at least a 3-year lag before the premium rates can be adjusted for crop years 1980 and 1981 loss experience through the normal rework procedure.

Another problem in incorporating and evaluating crop years 1980 and 1981 loss experience occurred because certain detailed analysis data is unavailable. Actuarial staff stated that the Corporation's recent offering of three levels of coverage and the implementation of the experience adjustment table necessitated changes in the reporting format of the detailed experience data. Some of the first programing changes by the Data Automation Division to extract, accumulate, and report this data have been done; however, several more reports will not be completed until the spring of 1983. Branch managers in both the Statistical Services Branch and the Data Automation Branch indicated that the delay in addressing data needs for evaluating recent experience in expanding the program is due to the lack of resources (1) to deal with the volume of changes brought about by the expansion and (2) simply to process an ever-increasing volume of data.

Over the years the Corporation has revised its unit guidelines, thereby redefining the size and characteristics of a unit, which is the operational entity upon which producers are indemnified. These revisions have been made in some instances to facilitate the acceptance and marketability of the crop insurance program. Some Corporation officials have contended that a portion of crop year 1981 losses are directly attributable to some loss adjustors' interpretations and applications of liberalized unit guidelines, thereby allowing producers to claim losses on a field by field basis when the producers' total production on all units may have decreased the amount of claimable loss. In addition, some of these officials stated that they believe the practice of compensating loss adjustors based on the number of units they adjust has contributed to some liberalized interpretations of unit guidelines.

The Corporation is revising both its unit guidelines and its method of compensating loss adjustors for crop year 1983. Corporation officials said that they believe these changes will correct some of the above problems. Loss experience by unit is is available in the Corporation's data base; however, no procedure is available through which the effect of changes in unit guidelines can be monitored or evaluated.

The Ernst and Whinney report commented on similar concerns and recommended that the entire work cycle for the actuarial department be challenged and the frequency and timing of reworking rates be accelerated. In addition, the report states that the management information systems currently do not provide all the information needed to analyze underwriting results and that the management information reports should be reviewed in detail to ascertain additions and modifications needed to facilitate management decisions.

Conclusions

Many concerns have been raised over the years about the Corporation's actuarial methodology; yet little has been done since the passage of the 1980 act to improve the soundness of the actuarial base. Our survey indicates that the Corporation has concentrated its actuarial resources on the expansion program and has not addressed the many long-standing concerns nor performed the normal updates of the county coverages and rates. The Corporation's operational strategy has apparently been to improve the actuarial soundness of the rates by obtaining better representation of low-risk producers in the program through increased participation, thus creating a larger base to spread the risk. Most concerns about the program's actuarial soundness will not be resolved by simply increasing participation.

We believe that the Corporation needs to slow down its rate of expansion and redirect its efforts toward improving the insurance program's actuarial soundness. We also believe that the Corporation needs to reassess its management information systems so that these systems will enable it to assemble, analyze, and incorporate insurance experience into its rates and coverages in a more timely way. In that regard, the Ernst and Whinney report should be useful in formulating a plan.

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We would appreciate being advised of the action taken or planned on these matters and will be happy to discuss them with you in more detail. We wish to acknowledge the cooperation and courtesies which were extended to our representatives during this survey.

Sincerely yours,

Keith O. Fultz

Keith O. Fultz
Senior Group Director

cc: Inspector General