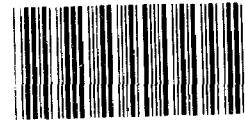


GAO

July 1987

# CROP INSURANCE

## Federal Crop Insurance Corporation Needs to Improve Decision-Making



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United States  
General Accounting Office  
Washington, D.C. 20548

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**Resources, Community, and  
Economic Development Division**

B-209886

July 23, 1987

The Honorable Ed Jones  
Chairman, Subcommittee on Conservation,  
Credit, and Rural Development  
Committee on Agriculture  
House of Representatives

The Honorable Terry L. Bruce  
The Honorable Dan Glickman  
The Honorable Sid Morrison  
The Honorable Timothy J. Penny  
The Honorable Charles W. Stenholm  
House of Representatives

Pursuant to your joint request of October 28, 1985, this report discusses the problems we found in how the management of the Federal Crop Insurance Corporation arrived at certain key decisions affecting the Corporation's financial viability and operations. The report contains recommendations to the Secretary of Agriculture and matters for consideration by the Congress directed at improving the Corporation's decision-making process and program operations.

We are sending copies of the report to the Director, Office of Management and Budget, and the Secretary of Agriculture.

Major contributors to this report are listed in appendix II.

J. Dexter Peach  
Assistant Comptroller General

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# Executive Summary

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## Purpose

In accordance with the Federal Crop Insurance Act of 1980, the U.S. Department of Agriculture's (USDA) Federal Crop Insurance Corporation (FCIC) has expanded crop insurance into a national program. In doing so, however, FCIC has had financial difficulties. For fiscal years 1982 through 1985, claim payments (indemnities) exceeded premium income by \$849 million.

In response to a congressional request, GAO reviewed key management decisions affecting FCIC's financial viability and operations to determine whether the decisions were based on complete and accurate data and analysis. GAO reviewed decisions affecting such things as forecasts of income and indemnities used in budget requests; a proposal to rely on reinsurance rather than both reinsurance and direct insurance; rates of payments to, and gains and losses shared with, private companies selling crop insurance; and actions to improve the program's actuarial soundness.

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## Background

FCIC insures farmers against unavoidable losses due to adverse weather, insects, and crop disease. Until 1980, FCIC offered insurance on 27 crops in 1,700 of the nation's 3,100 counties. The 1980 act called for an actuarially sound, nationwide program. For 1986, the program covered about 40 crops in about 3,000 counties.

FCIC has incurred a loss in every year of the expanded program and, as a result, has spent the entire \$500 million of capital stock authorized by the 1980 act and over \$350 million obtained from the Congress, another USDA agency, and the U.S. Treasury.

Prior to the 1980 act, crop insurance was sold and serviced primarily by FCIC employees. Currently, FCIC relies on private reinsured companies and master marketers. FCIC's policy was to encourage reinsured companies' sales, which accounted for about 80 percent of premiums in 1986, over those by master marketers. The reinsured companies sell and service policies under their own names and are compensated for their services on a commission basis (30 percent of premiums). Also, they are reinsured by FCIC against part of the risk and share in underwriting gains and losses with FCIC. Master marketers sell and service policies directly on FCIC's behalf and do not share in gains and losses. FCIC pays them on a commission basis (15 percent of premiums) and is responsible for adjusting claims on the policies the master marketers sell.



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## Results in Brief

In reviewing the adequacy of FCIC's data and analysis for major program decisions, GAO found that (1) FCIC's budget requests were based on forecasts of premium income and indemnities that were supported largely by judgmental decisions and program goals rather than by program experience, (2) FCIC's analysis supporting its proposal to terminate master marketer sales and to rely on reinsurance was neither accurate nor complete, and (3) FCIC agreed to new gain/loss sharing provisions with reinsured companies even though it had data showing that prior revisions to the provisions tilted the sharing of gains and losses in the companies' favor and that the new provisions would tilt them further.

On the positive side, GAO found that FCIC had adequate bases for the actions it took to improve the program's actuarial soundness and that, when fully implemented, these actions should enhance the program's actuarial soundness.

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## Principal Findings

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### FCIC's Budget Forecasting

FCIC's reliance on judgmental decisions and program goals has produced unreliable forecasts in its annual budgets. Through fiscal year 1987, FCIC consistently included in its budgets a surplus equal to 10 percent of forecasted income. Using this approach, for fiscal years 1982 through 1985, FCIC forecast, on a cumulative basis, that premiums would exceed indemnities by \$279 million. In fact, indemnities exceeded premiums by about \$849 million, a difference of about \$1.1 billion. Such unreliable forecasts, which necessitate funding outside the normal appropriations process, hamper the Congress' budget planning and oversight. In preparing FCIC's fiscal year 1988 budget, the Office of Management and Budget (OMB) required FCIC to base its forecast of indemnities on prior years' experience.

Premium income forecasts have been based on optimistic judgments of program officials rather than on documented quantitative data and analysis. For example, while premium income grew by only 10 percent during the 1982-85 period and never exceeded \$440 million annually, FCIC initially forecast premium income of \$700 million for 1987. OMB later reduced the forecast to \$586 million. (See ch. 2.)

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### Analysis of Reinsurance Proposal

On several occasions, congressional committees expressed concern over FCIC's policy to aggressively pursue the reinsurance program. In May 1985, FCIC proposed to terminate master marketer sales and, instead, rely on reinsured companies to sell insurance. FCIC said that this action would improve service to farmers and save an estimated \$18.3 million in 1986. In GAO's opinion, FCIC's movement to reinsurance cannot be justified on the basis of FCIC's analysis. Because of deficiencies in FCIC's cost analysis, GAO found that few if any savings would be achieved. Also, FCIC did not determine the proposal's impact on (1) expanding insurance availability to farmers, as the act requires, and (2) the program's actuarial soundness. More recently, FCIC said that it is no longer emphasizing reinsurance over master marketer sales. Nevertheless, FCIC projects that reinsurance will account for 90 percent of sales in 1987. (See ch. 3.)

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### Compensation to Master Marketers and Reinsured Companies

By relying on prior year compensation levels to develop the 1986 percent-of-premium rate for compensating reinsured companies, FCIC continued problems GAO had previously reported on. The 1980 act requires that FCIC compensate reinsured companies for their services based on FCIC's own costs to provide similar services. In a March 1984 report, GAO said that because of errors and other problems made in establishing the initial rates, which remained in effect from 1981 through 1985, the rates established were above FCIC's own costs. Because the private sector companies and FCIC now perform functions that were not performed when the initial rates were developed, FCIC will have to determine what its own costs for these functions are to comply with the act's requirements. Regarding master marketer compensation, FCIC developed the rate used in 1986 in accordance with the act's requirements. (See ch. 4.)

In addition to compensating reinsured companies for selling and servicing insurance and adjusting losses, FCIC began reimbursing them for state premium taxes in 1986. In GAO's opinion, the 1980 act prohibits FCIC from reimbursing the companies for such taxes. (See ch. 9.)

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### Gain/Loss Sharing Agreement

In March 1984 GAO reported that 1982 and 1983 revisions to the formula used to determine how gains and losses would be shared between FCIC and the reinsured companies tilted the formula in the companies' favor. New gain and loss provisions negotiated by FCIC for 1986 further tilt the sharing of gains and losses in the companies' favor and will increase government costs substantially. FCIC agreed to the new provisions even though a consulting firm it hired concluded that the existing provisions

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favored the companies and FCIC's own study showed that the new provisions would be substantially more costly than the existing provisions.

Further, the new provisions will adversely affect FCIC's ability to establish a reserve for unforeseen losses as required by the 1980 act. FCIC's goal is that 10 percent of premiums be used to establish the reserve. GAO found that under the gain/loss sharing provisions, the bulk of the 10 percent would be paid out to reinsured companies. (See ch. 5.)

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### Actions to Improve Program's Actuarial Soundness

FCIC has taken actions that should enhance the insurance program's actuarial soundness. It will be several years, however, before the actions can be fully implemented. The actions taken were based primarily on a comprehensive analysis of the program made by an actuarial consulting firm and center around two major efforts: the development and use of a computerized model to establish the premium rates charged farmers for six major crops and the development of insurance offers based on farmers' actual production histories rather than the average production of all farmers in designated areas. (See ch. 6.)

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### Matters for Congressional Consideration

This report raises two issues for consideration by the Congress. These are (1) the proper balance of sales to be handled through reinsured companies and master marketers and (2) the appropriate proportion of underwriting gains and losses that should be shared in by FCIC and the reinsured companies. (See chs. 3 and 5.)

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### Recommendations

GAO recommends that FCIC (1) develop a computerized model to forecast premium income and indemnities for its annual budgets, (2) either base reinsured company compensation rates on its own costs to provide insurance directly or propose that the act be revised, and (3) either stop reimbursing reinsured companies for premium taxes or obtain statutory authorization to do so. (See chs. 2, 4, and 9.)

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### Agency Comments

FCIC asserted that its actions were based on the best information available at the time and that GAO's views are largely based on hindsight. FCIC said that it will carefully assess the weaknesses suggested by GAO's work and continue to aggressively pursue its mission of a sound crop insurance program. GAO believes that its judgments are based on information and material that were available to FCIC management when its decisions were made. FCIC's comments are addressed in detail in various chapters of this report and in appendix I.

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**Abbreviations**

ACP	area coverage plan
AFMD	Accounting and Financial Management Division (GAO)
APH	actual production history
ASCS	Agricultural Stabilization and Conservation Service
CCC	Commodity Credit Corporation
CHIAA	Crop Hail Insurance Actuarial Association
FCIC	Federal Crop Insurance Corporation
FIA	Federal Insurance Administration
FM	financial management
GAO	General Accounting Office
OBPA	Office of Budget and Program Analysis
OGC	Office of the General Counsel
OIG	Office of the Inspector General
OMB	Office of Management and Budget
RCED	Resources, Community, and Economic Development Division (GAO)
USDA	U.S. Department of Agriculture



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# Introduction

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Farming is a high-risk undertaking. Beyond the perils of economic uncertainties caused by fluctuating prices for farm products, a farmer also faces many uncontrollable natural hazards. These can prevent planting of crops or destroy planted crops. Historically, 1 of every 12 acres planted is not harvested because of adverse weather or other natural disasters.

Before 1980, two federal programs—an insurance program and a disaster payment program—offered thousands of the nation's farmers some protection against loss of income when their crops were damaged or destroyed by natural causes. Two agencies within the U.S. Department of Agriculture (USDA) administered these programs. The Federal Crop Insurance Corporation (FCIC) administered the crop insurance program, and the Agricultural Stabilization and Conservation Service (ASCS) administered the disaster payment program.

The Federal Crop Insurance Program, which in the late 1970's covered as many as 27 commodities and about 1,700 of the nation's 3,100 counties, gave farmers in those counties the opportunity to mitigate the risks they faced from weather, insects, and disease by spreading the risks among many persons and over many areas and growing seasons. On the other hand, the disaster payment program, which was applicable nationwide, provided a form of free insurance covering six of the major commodities (wheat, grain sorghum, cotton, rice, barley, and corn), whereby farmers received federal disaster payments if adverse weather or other natural disaster prevented the planting or harvesting of these six commodities.

The Federal Crop Insurance Act of 1980 (Public Law 96-365, Sept. 26, 1980) radically changed these two programs. Essentially, the act called for (1) improving the insurance program and expanding it nationwide and (2) phasing out the disaster payment program.

Since passage of the 1980 act, FCIC has expanded its insurance coverage to include about 40 crops in about 3,000 counties. During this period, however, FCIC experienced and is still experiencing serious financial difficulties. For 1981 through 1985, insurance claims (indemnities) exceeded premiums by \$877 million. Further, program administrative and operating costs increased about 300 percent—from \$1.43 per insured acre in crop year 1980 to \$4.15 per insured acre in crop year 1985.<sup>1</sup>

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<sup>1</sup>A crop year is denoted by the calendar year in which a crop is harvested.

Because of its financial difficulties, FCIC had to suspend insurance payments to farmers four times in 1985 and 1986. In fact, FCIC's deteriorating financial condition has led us to question the Corporation's continued viability.<sup>2</sup> This report presents the results of our analysis of several key management decisions that had an impact on FCIC's deteriorating financial condition.

## Purpose, Objectives, and Management of the Federal Crop Insurance Corporation

The Federal Crop Insurance Corporation, a wholly government-owned corporation, was created in 1938. Its purpose is to promote the national welfare by improving the economic stability of agriculture through a sound system of crop insurance and providing the means for research and experience helpful in devising and establishing such insurance.

Before 1980, FCIC's program operated on a limited basis, covering certain commodities and selected counties. It was characterized by some as an experimental program. The 1980 act provides for an insurance program for agricultural producers to protect their production investment against essentially all unavoidable risks.

The 1980 act requires that FCIC shall, among other things:

- Use the private sector, to the maximum extent possible, to sell and service crop insurance policies.
- Provide higher coverage levels than previously available.
- Encourage the broadest possible farmer participation in the program by having FCIC subsidize a portion of the premium.
- Provide a program of reinsurance (whereby part or all of the risk is transferred from the original insurer to another party), to the maximum extent practicable, to begin not later than with the 1982 crops.
- Conduct a pilot program of tailoring the crop insurance to individual farmers' risks; this program would allow some farmers to obtain an increase in insurance coverage based on actual production history.
- Establish as expeditiously as possible a reasonable reserve against unforeseen losses.

The 1980 act vests overall management in a seven-member Board of Directors subject to the Secretary of Agriculture's general supervision. The act requires that the Board consist of the FCIC Manager, who is the

<sup>2</sup>Financial Audit: Federal Crop Insurance Corporation's Financial Statements for 1985 and 1984 (GAO/AFMD-86-58, Sept. 19, 1986).

chief executive officer; the two Under Secretaries or Assistant Secretaries of Agriculture responsible for federal crop insurance and for farm credit programs;<sup>3</sup> one person experienced in crop insurance but not employed by the federal government; and three active farmers. The farmers must be crop insurance policyholders from different geographic areas of the nation and cannot be federal employees.

FCIC headquarters is in Washington, D.C. Until March 4, 1986, when it reorganized, FCIC had a main office in Kansas City, Missouri, which handled program operations; 12 field actuarial offices, which established county insurance offers; and 18 regional offices, which provided field assistance for the marketing and contract servicing functions of FCIC's direct insurance operations. Under the reorganization, which FCIC said could take 2 years or more to fully implement, the Kansas City office remained as FCIC's main field office but certain of its divisions in Kansas City were abolished and their functions transferred to Washington, D.C., under the direction of two new assistant manager positions; 6 of the 12 field actuarial offices were upgraded to field underwriting offices, with the remaining offices now serving as subordinate service centers; and a new compliance division was established to monitor reinsured companies' activities. The 18 regional offices remain unchanged.

## How the Crop Insurance Program Works

As required by the 1980 act, the crop insurance program is to be operated on an actuarially sound basis. This means that FCIC's premium income is to be sufficient to do two things: (1) cover all loss claims and (2) establish a reserve for unforeseen losses.

While requiring that the program be actuarially sound, the 1980 act also requires that insurance be offered at various coverage levels up to 75 percent of the farm's recorded or appraised average yield and at various price elections (dollar value per unit of production). As a result, FCIC offers crop insurance at three coverage levels with three different price elections, giving the farmer nine insurance options.

In obtaining insurance, the farmer is guaranteed a certain amount of production—in bushels or pounds—per acre (referred to as the yield guarantee). For most commodities, farmers can select a yield guarantee from three coverage levels—50, 65, or 75 percent of the average yield calculated for each farm or area. For example, if the average yield for

<sup>3</sup>Since April 12, 1982, the Under Secretary for Small Community and Rural Development has had responsibility for both areas.

corn is set at 100 bushels per acre and the farmer selects the 65-percent yield guarantee option, FCIC would pay for anything less than 65 bushels per acre produced.

The farmers also select in advance how much money per bushel or pound they will receive if their production is less than their yield guarantee. Before the planting season, FCIC establishes three price levels for the commodity involved. One of the price selections must be at least 90 percent of the commodity's estimated market price at harvest time; the other two levels are at lesser amounts.

To understand how crop insurance operates, assume that a farmer with an average yield of 100 bushels of corn per acre selects the 65-percent yield guarantee option and a \$2.70 per bushel payment level. If a natural disaster occurs and the actual production drops to 20 bushels per acre, the farmer would have an insured loss of 45 bushels (65 percent of 100 bushels less the 20 bushels actually produced). FCIC would pay the farmer \$121.50 ( $\$2.70 \times 45$  bushels) for each acre insured.

Prior to the 1980 act, FCIC sold and serviced crop insurance policies using its own employees, some ASCS employees, and a small number of independent agents. Claims for losses were adjusted primarily by FCIC employees.

FCIC currently uses two systems of providing, or delivering, insurance to farmers—reinsured companies and master marketers. Reinsured companies are commercial insurance companies that offer crop insurance under their own company names and handle all matters involved in selling the insurance, servicing policyholders, and adjusting losses. FCIC reinsures these companies under a negotiated standard agreement that provides, among other things, for sharing gains and losses. For the services reinsured companies provide, FCIC compensates them on a commission basis (30 percent of premiums) and reimburses them for state premium taxes (estimated average of 2 percent of premiums).

Master marketers are private insurance companies or agencies that sell and service crop insurance on FCIC's behalf but are not responsible for loss adjustments. In some cases, insurance companies participate in the program as both reinsured companies and master marketers. In crop year 1985, the 48 reinsured companies handled 73 percent of FCIC's business; the approximately 60 master marketers handled 27 percent. FCIC pays master marketers 15 percent of premiums for their services.

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## How FCIC Is Funded

FCIC receives funds from three main sources—capital stock subscriptions from the U.S. Treasury, premium income from producers purchasing insurance policies, and appropriations for federal premium subsidies and administrative and operating expenses.

The 1980 act authorizes FCIC to issue and sell \$500 million in capital stock. The capital stock is to provide FCIC with necessary working capital as well as a reserve to cover losses when premium income and/or reserves are insufficient. As of August 1, 1985, all of FCIC's capital stock had been issued and sold to the U.S. Treasury.

The amount of premium income FCIC realizes each year is determined by the policies sold and the specific premium rates paid. The rates are established annually by FCIC's Board of Directors. They are to be established at a level that the Board deems to be actuarially sufficient to cover loss claims and to establish a reserve against unforeseen losses.

Administrative and operating costs are funded through appropriations. The amounts appropriated for fiscal years 1985 and 1986 were \$200 million and \$220.3 million, respectively. In addition, funds are appropriated each year to subsidize premium rates paid by farmers. The amounts appropriated and spent for premium subsidies are discussed in chapter 9.

The 1980 act provides also that certain administrative and operating expenses may be paid from premium income and other FCIC funds and that such payments may be restored by subsequent appropriations. The act also authorizes, subject to specified conditions, FCIC's use of funds from USDA's Commodity Credit Corporation (CCC) and issuance of notes and obligations to the Secretary of the Treasury if FCIC does not have enough funds at any time to make indemnity payments. FCIC's use of these provisions is discussed in chapter 2.

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## Objectives, Scope, and Methodology

We made this review as a result of a joint request by Representative Ed Jones, Chairman, Subcommittee on Conservation, Credit, and Rural Development, House Committee on Agriculture; and Representatives Terry L. Bruce, Dan Glickman, Sid Morrison, Timothy J. Penny, and Charles W. Stenholm. The overall objective of our review was to determine whether key management decisions affecting FCIC's financial viability and operations were based on complete, accurate, and up-to-date information. As requested, our review did not focus on the correctness of the decisions themselves (although we did find problems with some of

the decisions) but rather on the adequacy of data and analyses available to management and the consideration accorded these factors by management in reaching its decisions.

As agreed with the requesters' offices, we reviewed:

1. The method FCIC used to forecast policy sales, premium collections, and indemnity payments as presented in its budget requests to USDA, the Office of Management and Budget (OMB), and the Congress.
2. The basis for FCIC's proposal to use reinsured companies as its main delivery system.
3. The basis for changes for 1986 to FCIC's sales agreements with master marketers and reinsured companies regarding compensation rates.
4. The basis for FCIC's renegotiating gain and loss sharing agreements with reinsured companies.
5. The actions FCIC management took to correct actuarial deficiencies we identified in 1984.
6. FCIC's basis for proposing to treat all farms owned by one policyholder as a single unit.
7. FCIC's basis for requiring farmers to use production records in establishing crop yields.
8. The process FCIC uses to assure itself that its major decisions conform to legislative requirements.

We made our review primarily at FCIC's headquarters in Washington, D.C., and at its main field office in Kansas City, Missouri. At these locations, we interviewed FCIC officials, including the Manager and former Manager, and reviewed applicable records, files, and studies. We also interviewed members of FCIC's Board of Directors and reviewed all applicable exhibits presented to the Board and minutes of Board meetings from October 1981 through May 1986. We also reviewed applicable (1) legislation and legislative history, (2) studies made by FCIC, FCIC consultants, USDA's Office of the Inspector General (OIG), and others, and (3)

regulations and proposed changes (including the comments FCIC received on its proposed changes).<sup>4</sup>

The following paragraphs explain the methodology we used in reviewing each issue.

**Budget forecasts.** In determining how FCIC makes its forecasts, we (1) interviewed the former Manager, who resigned on April 27, 1986; the current Manager; and other key FCIC officials; (2) reviewed FCIC's Budget Office files for fiscal years 1981 through 1987; (3) traced FCIC's budget forecasts through USDA's and OMB's review and approval processes and interviewed USDA and OMB officials; and (4) compared FCIC's initial and final forecasts with actual data for fiscal years 1982 through 1985. To provide a basis for comparison with how FCIC does its forecasting, we obtained information from and interviewed officials of the Federal Emergency Management Agency's Federal Insurance Administration (FIA) on how FIA develops its forecasts of premium income and indemnities for the National Flood Insurance Program.

**FCIC's insurance-delivery system.** In reviewing and evaluating the basis for FCIC's proposal to use reinsured companies as its main insurance delivery system, we examined the FCIC cost-benefit study published in the May 22, 1985, Federal Register. FCIC cited the May 1985 study as the basis for its decision to go to a single, reinsured delivery system. In addition, we reviewed two other applicable FCIC studies made in 1985. We compared the criteria and procedures FCIC used in carrying out its May 1985 study with the criteria and procedures prescribed in USDA's Department-wide guidelines for conducting cost-benefit studies and OMB's Circular A-76, which provides guidance on cost-benefit analyses. We also reviewed the study to determine if it addressed the objectives of the 1980 act. Further, we discussed this study and, where appropriate, the other studies with FCIC, USDA, and OMB officials and with the associations representing master marketers and reinsured companies.

**Compensation rates and gain/loss sharing.** The bases for our analyses of these points were FCIC's agreements with reinsured companies and master marketers for 1986 and earlier years. The agreements are renegotiated each year. The compensation rates FCIC pays reinsured companies and master marketers are specified in the agreements. Also, FCIC

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<sup>4</sup>We are currently reviewing the effectiveness of FCIC's policies and procedures in establishing farmers' losses and claims, which will augment the information presented in this report regarding FCIC's management of the crop insurance program.



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shares in all gains and losses with reinsured companies as specified in FCIC's agreements with the reinsured companies.

In analyzing the bases for the 1986 compensation rates and gain/loss sharing rates, we began by reviewing our past reports about the adequacy of the information FCIC used in developing (1) the compensation rates for master marketers and reinsured companies and (2) the gain/loss sharing arrangements with reinsured companies.<sup>5</sup>

To determine the basis for the 1986 rates, we interviewed FCIC's former Manager, who negotiated the 1986 changes with the reinsured companies, and FCIC's Deputy Manager, who negotiated the 1986 changes with the master marketers. To determine whether the agreed-upon rates were supported by the data, we also examined the information these officials identified as having been used in the negotiations.

Actuarial soundness. In analyzing this issue, we relied heavily on our past work, which identified major problems with the crop insurance program's actuarial soundness.<sup>6</sup> The requesters' offices were primarily interested in the actions FCIC management had taken to address these problems. To identify such actions, we interviewed FCIC actuarial officials and examined FCIC's actuarial procedures. A significant portion of FCIC's corrective actions involved implementation of a computerized model for establishing premiums, which was recommended by an actuarial consulting firm. We examined the consultant's study to determine if the methodology was sound, assumptions were reasonable, and conclusions were supported by adequate evidence, and whether the study addressed the deficiencies that we and others had identified. We did not determine the accuracy of the information the consultant used because this would have required our duplicating much of the consultant's study. We also interviewed FCIC officials responsible for actuarial matters and examined FCIC's computerized rate-making model for establishing premiums to determine the extent to which FCIC implemented the consultant's recommendations.

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<sup>5</sup>Information on the Federal Crop Insurance Corporation's 1986 Standard Reinsurance Agreement (GAO/RCED-85-155, July 26, 1985) and Information on the Federal Crop Insurance Corporation's 1983 Standard Reinsurance Agreement (GAO/RCED-83-114, Mar. 9, 1983).

<sup>6</sup>More Attention Needed in Key Areas of the Expanded Crop Insurance Program (GAO/RCED-84-65, Mar. 14, 1984).

FCIC's bases for (1) proposing to treat all farm units owned by one policyholder as a single unit and (2) requiring farmers to use actual production records in establishing crop yields. To determine the bases for FCIC's decisions on these matters, we identified and examined the information FCIC's Board of Directors used in making these decisions. In addition, we interviewed the FCIC officials responsible for developing the supporting information.

Legal issues. In reviewing and evaluating FCIC's process for ensuring that its major policy and programmatic decisions are legal, we acquired a basic understanding of the process through interviews with officials from FCIC and USDA's Office of the General Counsel (OGC). Then, as agreed with the requesters, we made a detailed review of how the legal review process worked by focusing on four particular issues. These were FCIC's decisions to (1) transfer \$50 million from its expense account to its insurance fund, (2) reimburse reinsured companies for state premium taxes, (3) use unearned premium subsidies to make indemnity payments, and (4) fund reinsurance underwriting gains with premium income. For each of these issues, we interviewed FCIC and OGC officials and reviewed applicable legislation, legislative history, and FCIC files and records. Our purpose in talking to FCIC and OGC officials about each issue was to determine, among other things, whether a legal review occurred and whether FCIC considered OGC's legal opinions prior to FCIC's final decisions.

We conducted our review between October 1985 and May 1986 and made the review in accordance with generally accepted government auditing standards. We looked at the Federal Crop Insurance Program since its expansion in 1981 and updated our information as appropriate through May 1987.

# FCIC's Budget Forecasts Have Not Accurately and Completely Informed the Congress of Program Costs

FCIC's process for developing forecasts of program activity and costs has resulted in misleading and unreliable budget presentations. From fiscal year 1982, the first year for which FCIC's budgeting was based on the 1980 act's provisions, through fiscal year 1985, FCIC budget requests to the Congress forecast that premium income would exceed indemnities by a total of about \$279 million. During this period, however, indemnities exceeded premium income by a total of about \$849 million, a difference between the budget forecasts and actual experience of about \$1.1 billion.

We found that this occurred because FCIC's budget forecasts, which are generally developed about 15 months before the start of the budget year, have been based largely on the FCIC Manager's judgment and program goals and not on the results of a systematic, detailed review and analysis of program experience and existing data. In contrast, the Federal Insurance Administration has a more systematic and objective approach for forecasting premium income and indemnities for the National Flood Insurance Program. Although FCIC's initial forecasts are annually reviewed and approved by USDA and OMB before being submitted to the Congress, these reviews had only limited success in improving the accuracy and reliability of FCIC's budget forecasts for fiscal years 1982-85. At OMB's direction, however, FCIC's fiscal year 1988 budget submitted to the Congress relies heavily on prior years' experience in forecasting losses.

Because FCIC's budget presentations for fiscal years 1982 through 1985 always showed premium income exceeding indemnities, much of FCIC's \$849 million in losses had to be funded outside the normal appropriation process. This, in our opinion, hampered the effectiveness of the Congress' budget planning and oversight responsibilities and contributed, in part, to the overall budgetary dilemma the Congress is now trying to deal with.

## FCIC's Initial Forecasts Have Been Unreliable

The techniques FCIC used in forecasting premium income and indemnities have resulted in unreliable estimates of program costs. This occurred because FCIC's forecasts of premium income have been overly optimistic and because the indemnity amounts have been forecast without regard to program experience. The fiscal years 1982-85 FCIC forecasts of gross income<sup>1</sup> presented to the Department (referred to hereinafter as initial

<sup>1</sup>For purposes of this report, gross income (or loss) is defined as the difference between premium income and indemnities.

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forecasts) totaled about \$294 million. Although subsequent revisions by USDA and OMB reduced this figure to about \$279 million, FCIC experienced an actual loss of about \$849 million. Table 2.1 shows FCIC's initial forecasts of premium income, indemnities, and gross income for fiscal years 1982-85 and compares them with actual experience.

**Table 2.1: FCIC's Initial Forecasts of Premium Income, Indemnities, and Gross Income Compared With Actuals, Fiscal Years 1982-85**

Dollars in thousands

Premium Income	Fiscal year				Total
	1982	1983	1984	1985	
Forecast	\$439,748	\$876,700	\$918,000	\$706,000	<b>\$2,940,448</b>
Actual	398,668	289,269	434,638	439,850	<b>1,562,425</b>
Difference over/(under)	(41,080)	(587,431)	(483,362)	(266,150)	<b>(1,378,023)</b>
Percentage diff. to forecast over/(under)	(9)	(67)	(53)	(38)	<b>(47)</b>
<b>Indemnities</b>					
Forecast	\$395,773	\$789,030	\$826,200	\$635,400	<b>\$2,646,403</b>
Actual	528,073	594,824	635,048	653,426	<b>2,411,371</b>
Difference over/(under)	132,300	(194,206)	(191,152)	18,026	<b>(235,032)</b>
Percentage diff. to forecast over/(under)	33	(25)	(23)	3	<b>(9)</b>
<b>Gross Income</b>					
Forecast	\$43,975	\$87,670	\$91,800	\$70,600	<b>\$294,045</b>
Actual	(129,405)	(305,555)	(200,410)	(213,576)	<b>(848,946)</b>
Difference over/(under)	(173,380)	(393,225)	(292,210)	(284,176)	<b>(1,142,991)</b>
Loss ratio <sup>a</sup>	1.32	2.06	1.46	1.49	<b>1.54</b>

<sup>a</sup>Loss ratio is calculated by dividing indemnities by premium income.  
Source: FCIC budget data.

**Forecasts of Premium**  
**Income Have Been**  
**Optimistic**

To forecast premium income, FCIC requires data on two key factors—the number of acres that will be insured and the average premium to be charged per acre. Multiplying these two factors provides FCIC's forecast of premium income. These factors have been determined largely on the basis of the Manager's judgment. Because these forecasting decisions were made by the Manager<sup>2</sup> largely on the basis of meetings and dialogue with his staff rather than on reviews and analyses of documented

<sup>2</sup>The forecasts discussed in this report were prepared for fiscal years 1981 through 1987. The time period in which these forecasts were prepared preceded FCIC's current Manager. An official of FCIC's Budget Office told us that, although the method used to forecast premium income had not changed as of May 1987, the forecast of premium income presented in the fiscal year 1988 budget is less optimistic than prior forecasts.

quantitative data, we could not determine the specific bases for the decisions and the validity of any assumptions underlying the decisions. Reliable premium income forecasts are particularly important because FCIC's specific budget requests for such items as administrative and operating expenses and premium subsidies are estimated as a percent of premium forecasts.

In arriving at the forecast of premium income, the Manager has a series of meetings with key FCIC officials and, as needed, with staff members to discuss the expected program activity for the forecast year. According to the former Manager, the major factors considered included (1) historic trends, particularly in relation to forecasting the number of acres to be insured; (2) changes in the insurance program itself, such as premium rate increases, price selection offers, cancellation rates of policyholders, and new crop insurance offerings; (3) applicable external factors, such as public and private lenders' requirements that farmers take out crop insurance to qualify for a loan, and pending legislative proposals that could affect sales; and (4) anticipated weather conditions.

To facilitate consideration of the complex variables affecting FCIC's forecasts and proposed budget, the Manager had FCIC's budget staff develop various scenarios reflecting different assumptions. For example, scenarios can vary farmer participation rates or the proportions of policyholders selecting yield coverage level and price guarantee options. Until improved computer programming capability became available to FCIC for use in preparing its fiscal year 1986 budget request, the number of scenarios developed was limited because of the time and effort necessary to prepare each scenario. However, using the new computer program, the staff developed about 30 scenarios for the 1986 budget. But even with the new computer program, FCIC's forecasts of premium income for fiscal years 1986 and 1987 continued the optimism of forecasts for fiscal years 1982 through 1985.

Although the former Manager told us that he used historic trends in forecasting premium income, program participation—and thus the amount of premium income—was consistently overstated for fiscal years 1982 through 1985. In fact, actual premium income for fiscal years 1982 through 1985 averaged 47 percent below the forecasts FCIC

presented to the Secretary of Agriculture for review and approval.<sup>3</sup> Further, although the program's actual premium income was only about 10 percent higher in 1985 than it was in 1982 and never exceeded \$440 million in any of these years, FCIC still initially forecast \$760 million of premium income for fiscal year 1986 and \$700 million for 1987. Actual premium income for fiscal year 1986 was \$378 million, or about one-half the initial forecast of \$760 million. FCIC officials could not provide us with historical data or an analysis of trends supporting FCIC's optimistic forecasts for 1986 or 1987.

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### **Forecasts of Indemnities Have Not Been Based on Actual Experience**

FCIC has long had a goal that 10 percent of annual premium income be available to establish the reserve for unforeseen losses that is required by the Federal Crop Insurance Act, as amended. Thus, FCIC's loss ratio goal, that is, the ratio of indemnities to premium income, is 0.9, or 90 percent. FCIC uses the loss ratio goal to forecast the amount of indemnities it will have each year. Accordingly, FCIC management's forecasts of indemnities have consistently been at 90 percent of premiums. This approach has little to do with historical loss experience, which we believe should be the basis for forecasting indemnities.

The former Manager said that using the 0.9 loss ratio goal to forecast indemnities was reasonable because the 0.9 goal is factored into FCIC's premium-rate-setting formula. He said that the premium-rate-setting formula was designed to be accurate over a long period of time, not just a few years. Hence he said that he believes that the forecast of indemnities at 90 percent of premiums will be accurate over the long term. However, a review of loss experience for fiscal years 1982-85 shows that actual indemnities ranged from 25 percent below FCIC's initial forecast of indemnities to 33 percent above. (See table 2.1.) Although actual total indemnities for the period were only 9 percent less than forecasted indemnities, this relatively small difference resulted because the premium income forecast for the period was so much higher than the actual amount of premium income FCIC received. Because FCIC forecasts indemnities at 90 percent of premium income, if forecasts of premium income had been more accurate, indemnity forecasts would have been significantly understated.

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<sup>3</sup>Without 1983, the first year of the Payment-in-Kind Program, which substantially lowered the number of acres farmers planted, actual premium income averaged 38 percent below forecasted premiums.

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**Forecasts of Gross Income**  
**Have Been Routinely**  
**Overstated**

Although FCIC has had a loss in each year of the expanded program, it has never forecast a loss. This is because its forecasting procedures allow only one result—a forecasted gross income of 10 percent of forecasted premium income. The difference between FCIC's forecast and actual annual gross income ranged from about \$173 million to about \$393 million during fiscal years 1982-85 and, in total, was about \$1.1 billion less than forecast for the period. Although FCIC uses a loss ratio of 0.9 to forecast indemnities, its actual loss ratio for fiscal years 1982-85 averaged 1.54 and ranged from 1.32 to 2.06 annually. (See table 2.1.)

**USDA and OMB**  
**Reviews Have**  
**Improved Reliability**  
**of Forecasts Only**  
**Slightly**

For fiscal years 1982-87, USDA's departmental reviews of FCIC budget proposals resulted in a change to FCIC's forecasts of premium income, indemnities, and gross income in only 1 year, 1987, when USDA increased FCIC's estimates. OMB's reviews resulted in changes in the last 4 of the 6 years when it reduced the estimates for those years. (See table 2.2.) Like FCIC, USDA and OMB also forecast gross income as 10 percent of premium income. Thus, final forecasts of gross income included in FCIC's 1982-85 budget presentations to the Congress were only slightly more accurate than FCIC's initial forecasts—FCIC's initial forecasts of gross income of \$294 million were reduced to about \$279 million. (See table 2.3.)

**Table 2.2: Comparison of FCIC's Initial Forecasts With Final Forecasts Presented to the Congress for Fiscal Years 1982-87**

Dollars in millions

	Fiscal year					
	1982	1983	1984	1985	1986	1987
FCIC's initial forecasts:						
Premium income	\$440	\$877	\$918	\$706	\$760	\$700
Indemnities	396	789	826	635	684	630
Gross income	44	88	92	71	76	70
OMB-approved forecasts:						
Premium income	\$440	\$877	\$850	\$620	\$600	\$586
Indemnities	396	789	765	558	540	527
Gross income	44	88	85	62	60	59
Amount forecasts increased or (decreased):						
Premium income	\$0	\$0	(\$68)	(\$86)	(\$160)	(\$114)
Indemnities	0	0	(61)	(77)	(144)	(103)
Gross income	0	0	(7)	(9)	(16)	(11)

Source: FCIC budget data.

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On the basis of USDA's reviews of FCIC's 1987 budget proposal, the Deputy Secretary of Agriculture instructed FCIC to take immediate action to increase premium rates for all crops by 50 percent.<sup>4</sup> Using these increased rates, the FCIC budget proposal USDA submitted to OMB was based on a 1987 forecast of about \$1 billion in premium income rather than FCIC's initial forecast of \$700 million.

USDA's review and approval process for FCIC's budget proposals typically operates as follows:

- Prior to formally submitting its budget proposal to the Department for review and approval, FCIC obtains approval from USDA's Under Secretary for Small Community and Rural Development, under whom FCIC is organizationally located.
- About 15 months before the beginning of each fiscal year, FCIC submits its budget proposal for that year to USDA's Office of Budget and Program Analysis (OBPA). OBPA reviews FCIC's proposal and, based thereon, prepares a statement of issues and options for consideration by the Secretary and/or Deputy Secretary of Agriculture.
- About 1 month later (August), formal departmental hearings, called Secretary's hearings, are held. The Secretary or Deputy Secretary may chair these hearings. Subsequent to the Secretary's hearing, the Department provides FCIC with budget allowances, which FCIC uses to prepare the Department's FCIC budget proposal to OMB. The Department usually submits its proposal for all its constituent agencies, including FCIC, to OMB in mid-September.

OMB's reviews of USDA's budget proposals include analyses of FCIC forecasts of premium income, indemnities, and gross income. According to the OMB Budget Examiner who reviews the FCIC budget proposals, OMB's analyses of FCIC forecasts and comparison of them with historical data have shown that FCIC has inflated forecasts of participation rates, acres insured, and premium income. For this reason, OMB has used historical data for insured acreage, premium income, loss ratio, etc., rather than FCIC forecasts, to recalculate FCIC's needs for budget authority and outlays. Changes OMB made to FCIC budget proposals effectively lowered FCIC's and USDA's forecasts of premium income, indemnities, and gross income in all but two of the six budgets submitted to the Congress for fiscal years 1982-87. The biggest changes were made in fiscal years 1986-87. (See table 2.2.)

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<sup>4</sup>Although FCIC took action to increase premium rates, the increases were limited to 35 percent and not all rates were increased by this percentage.



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Although OMB's reviews resulted in lower and therefore more accurate forecasts of premium income, actual premium income was still 44 percent below forecasts for fiscal years 1982-85. (See table 2.3.) However, because OMB used FCIC's 0.9 loss ratio to compute indemnities in budget requests to the Congress, its lower forecasts of premium income for fiscal years 1982-85 resulted in less accurate forecasts of indemnities than FCIC's forecasts and only slightly more accurate forecasts of gross income. For the 1982-85 period, OMB forecasts of indemnities averaged 4 percent less than actuals and forecasts of gross income exceeded losses by about \$1.1 billion for the period.

Although FCIC used the 0.9 loss ratio to prepare its initial forecast of indemnities for fiscal year 1988, OMB instructed FCIC to develop a revised forecast based on prior years' experience. Thus, FCIC's 1988 budget request to the Congress forecast indemnities at 146 percent of forecasted premium income based on the 1981-85 loss ratio of 1.46. Specifically, FCIC forecast premium income of about \$512 million and indemnities of about \$749 million for fiscal year 1988, resulting in a projected loss of about \$237 million. In May 1987, an official of FCIC's Budget Office told us that OMB had not yet advised FCIC as to whether it would require that this same procedure be used to forecast indemnities in future years.

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**Table 2.3: Final Forecasted Premium Income, Indemnities, and Gross Income Presented to the Congress Compared With Actuals, Fiscal Years 1982-85**

Dollars in thousands

Premium Income	Fiscal year				Total
	1982	1983	1984	1985	
Forecast	\$439,748	\$876,700	\$850,000	\$620,000	<b>\$2,786,448</b>
Actual	398,668	289,269	434,638	439,850	<b>1,562,425</b>
Difference over/(under)	(41,080)	(587,431)	(415,362)	(180,150)	<b>(1,224,023)</b>
Percentage diff. to forecast over/(under)	(9)	(67)	(49)	(29)	<b>(44)</b>
<b>Indemnities</b>					
Forecast	\$395,773	\$789,030	\$765,000	\$558,000	<b>\$2,507,803</b>
Actual	528,073	594,824	635,048	653,426	<b>2,411,371</b>
Difference over/(under)	132,300	(194,206)	(129,952)	95,426	<b>(96,432)</b>
Percentage diff. to forecast over/(under)	33	(25)	(17)	17	<b>(4)</b>
<b>Gross Income</b>					
Forecast	\$43,975	\$87,670	\$85,000	\$62,000	<b>\$278,645</b>
Actual	(129,405)	(305,555)	(200,410)	(213,576)	<b>(848,946)</b>
Difference over/(under)	(173,380)	(393,225)	(285,410)	(275,576)	<b>(1,127,591)</b>

Source: FCIC budget data.

## Forecasting for Flood Insurance Is More Systematic and Objective Than That for Crop Insurance

FIA has a more systematic and objective approach to forecasting premium income and indemnities for the National Flood Insurance Program it administers than FCIC has for crop insurance. Although forecasting for crop insurance is undoubtedly more difficult than for flood insurance because of the number of different crops and perils covered, the system FIA has followed provides a contrasting approach to FCIC's judgmental forecasting process. The following briefly describes FIA's process.<sup>5</sup>

FIA's Financial Manager, Insurance Support Services, has prime responsibility for overseeing the development of FIA's budget forecasts. The actual forecasts of premium income and indemnities, however, are developed by an FIA actuarial staff member using a sophisticated computerized model. The model involves complex simulations, trend analyses, and regression analyses of data, particularly historical program experience data on individual policies.<sup>6</sup>

<sup>5</sup>This description is based primarily on information obtained through discussions with FIA officials.

<sup>6</sup>GAO analyzed the program's rate-setting process in *National Flood Insurance Program—Major Changes Needed If It Is to Operate Without a Federal Subsidy* (GAO/RCED-83-55, Jan. 3, 1983).

The basic process used in developing the forecasts is as follows:

- Using primarily historical and trend data, an estimate is made of the number of policies to be sold.
- To forecast indemnities, the first step is to calculate a loss frequency ratio—that is, a ratio of the number of claims filed to the total number of policies sold. This ratio is multiplied by the estimate of policy sales to arrive at an estimate of the number of policies on which claims will be submitted. The result is then multiplied by an estimate of the average dollar amount of claims to arrive at the forecast of total indemnities to be paid.
- The forecast of premium income is made by adding to the forecast of indemnities an allowance for unmeasurable losses and the estimated amount of administrative and operating expenses to be incurred.

The FIA Administrator uses the forecasts as a means of determining what, if anything, needs to be done to help achieve program goals. According to the Financial Manager, the FIA Administrator has generally approved the forecasts prepared by the Insurance Support Services staff with only minor changes. However, the Administrator has made program changes both to spur policy sales and to reduce the amount of indemnities paid, and these changes have been considered in developing revised forecasts. For example, in 1983 the Administrator acted to spur sales by adding a new and different type of insurance delivery system, a private sector system, when forecasted sales were not in line with FIA's long-term goals and policy sales objectives. Also, in 1985 he limited flood insurance coverage of finished basements, a major loss factor, to help lower indemnities and thus minimize premium rate increases.

According to the Financial Manager, FIA does not expect its forecasts to be accurate in any given year but does expect a reasonable degree of accuracy over a period of years. On this basis, the agency has been fairly successful. For example, for fiscal years 1981 to 1985, the agency forecast premium income of \$1.66 billion and indemnities of \$1.68 billion, while actual premium income and indemnities were \$1.53 billion and \$1.26 billion, respectively.

## FCIC Methods of Financing Losses Hamper Congressional Budget Oversight

Although FCIC's budget presentations to the Congress have always shown that premium income will exceed indemnities, the reverse has been true in each year of the expanded program. FCIC had to fund a portion of these losses outside the normal congressional committee appropriation process, either through after-the-fact appropriation requests or through the use of funds not specifically appropriated for this purpose. This type of financing hampers the Congress' control over the budget. Further, FCIC has depleted its entire authorized capital stock of \$500 million, a result not intended by the Congress.

The Congress exercises direct control over federal funds by setting budget priorities, establishing future funding levels through approval of budget authority and outlay estimates for individual programs, and controlling overall budget totals. More accurate forecasts would better enable the Congress to judge the relative cost-effectiveness of the FCIC program versus other federal programs competing for available funds. Also, the Congress would be made aware of the impact that estimated losses could have on the federal deficit and could take appropriate action.

To fund unbudgeted program losses, FCIC

- obtained \$250 million from CCC in fiscal year 1981 and \$450 million in 1986,
- borrowed \$113 million from the U.S. Treasury in fiscal year 1985,
- issued and sold to the Treasury its entire \$500 million worth of capital stock,
- used \$100 million of unearned premium subsidy appropriations for fiscal years 1982-86, and
- improperly transferred \$50 million from the administrative and operating expenses account to the insurance fund in March 1985 (this was subsequently transferred back).

Because its losses were not forecast, FCIC had to fund a portion of the losses after the normal appropriation process and losses occurred. For example, although the Congress authorized FCIC to obtain funds from CCC, FCIC used this authority after the normal appropriation process and after the losses had occurred. The 1980 act authorized FCIC to borrow an unspecified amount of funds from CCC, authority that FCIC used in fiscal year 1981 to obtain \$250 million to pay for crop year 1980 losses. The Food Security Act of 1985, enacted in December 1985, extended FCIC's authority to use CCC funds. FCIC's fiscal year 1987 budget request indicated that FCIC planned to use up to \$250 million of CCC's funds in fiscal

year 1986, and FCIC requested that amount from CCC in January 1986. Because its losses were greater than anticipated, however, FCIC obtained a \$450 million loan from CCC, through September 1986, to cover losses for crop years 1985 and 1986. Also, the \$113 million loan received from the U.S. Treasury to fund 1985 indemnities was not included in FCIC's fiscal year 1985 budget submission.

Further, because of its optimistic estimates of program activity, FCIC requested and received substantially more money than needed to fund premium subsidies. FCIC used these unearned premium subsidies, which amounted to about \$100 million for fiscal years 1982-86, to fund some of its losses. Although we believe that the use of such funds to pay indemnities conforms with current legislation,<sup>7</sup> the funds were used for a different purpose than that stated in FCIC's annual budget requests. Thus, FCIC's budget presentations to the Congress regarding premium subsidy funding needs were not accurate as to the amount of funds required or the uses to which those funds would be applied.

We believe that the depletion of FCIC's entire \$500 million of capital stock conflicts with congressional intent. House and Senate committee reports<sup>8</sup> on the bills resulting in the 1980 act show that the Congress intended that the \$500 million would be sufficient to enable FCIC to operate the expanded program when considered together with other changes in the act. This was done to eliminate the drain that had been occurring on the capital stock and insurance reserves caused by expenditures for administrative and operating expenses from premium income. The House and Senate reports suggest that capital stock could be used to make indemnity payments, and this is confirmed by the legislative history of subsequent appropriation acts; however, both reports indicate that the Congress was not pleased with the drain on FCIC's capital stock.

Although FCIC obtained the \$50 million it transferred from its administrative and operating expense account to an account designated as the FCIC Fund through the regular appropriations process, it used the funds for a purpose that differed from that shown in its fiscal year 1985 budget request. As discussed in more detail in chapter 9, we believe that FCIC's transfer of \$36 million of the funds was improper. FCIC restored

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<sup>7</sup>Chapter 9 presents a more complete discussion of the legal issues surrounding the use of unearned premium subsidies to pay indemnities.

<sup>8</sup>Senate Report No. 254, 96th Cong., 1st Sess. 12 (1979), and House Report No. 430, 96th Cong., 1st Sess. 16 (1979).

the full \$50 million to the administrative and operating expense account in August 1985.

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## Conclusions

FCIC needs to revise its budget forecasting procedures to improve the accuracy of its estimates of program activity and costs. More reliable estimates of the costs of the crop insurance program are needed to help the Congress make sound decisions in deliberations on the national budget and in judging the relative worth of this program compared with other programs competing for available funds. Further, more reliable estimates would provide FCIC management with a basis for requesting moneys from the Congress to fund anticipated losses before such losses occur rather than after the fact or for taking actions to improve program operations and management.

At OMB's direction, FCIC used prior years' experience in forecasting indemnities in its fiscal year 1988 budget request to the Congress. Thus, for the first time, the Congress has an FCIC budget that anticipates losses and, therefore, has some basis for judging the amount of money that will be needed to properly fund the program. According to an FCIC official, however, it has not been decided whether the same procedure will be used to forecast indemnities for future budgets.

Preparing accurate forecasts of premium income and indemnities 10 to 16 months in advance of a fiscal year is obviously no easy task. Changes that can occur during this period to the program itself and to external factors affecting the program, along with the vagaries of weather, make FCIC's forecasting task extremely difficult. Because of this difficulty, we would not expect FCIC to achieve a high degree of accuracy in its forecasts on a year-by-year basis. Nevertheless, the record shows that FCIC had developed a consistent pattern of overestimating premium income and understating losses. Moreover, we could not find any documented bases for premium income forecasts upon which specific budget amounts requested for such things as administrative and operating expenses are based. Contrasting FCIC's forecasting methods with FIA's methods offers some insight into the types of changes FCIC could make to help break this pattern.

In contrast to FCIC's reliance on judgmental decisions to forecast premium income and on its loss ratio goal to forecast indemnities, FIA's forecasts are based primarily on objective and quantitative data and are developed using a sophisticated computerized model. Further, the FIA

Administrator delegated the responsibility of forecasting to staff personnel who have forecasting experience and expertise, whereas in FCIC the former Manager had prime responsibility for this task. The FIA Administrator used the forecasts developed by his staff as a tool in making decisions about program changes that might be needed to meet established goals and objectives, rather than using the goals as a means of forecasting, as has been done by FCIC in forecasting indemnities.

## Recommendation to the Secretary of Agriculture

We recommend that the Secretary of Agriculture direct the FCIC Manager to develop a computerized model to forecast premium income and indemnities. The model should be developed so that, to the extent feasible, objective and quantitative data can be used to make the forecasts.

## Agency Comments and Our Evaluation

In commenting on a draft of this report (see app. I), FCIC said that we concluded it had inadequate forecasting methods because it overestimated business volume. This is not an accurate characterization of what we concluded or why. Basically, we concluded that FCIC's forecasts were unreliable because they were based largely on the FCIC Manager's judgment and program goals and not on the results of a systematic, detailed review and analysis of program experience and existing data. FCIC's forecasts of premium income and indemnities were not supported by historical trends.

Regarding our recommendation that FCIC develop a computerized model to forecast premium income and indemnities, FCIC said that modeling cannot solve the problem of choosing assumptions, particularly the difficult assumption of how many producers will participate in the program and at what economic levels. Also, FCIC said that it uses essentially the same process that FIA uses in making budget forecasts.

As we discuss in our report, FCIC does develop various scenarios reflecting different assumptions in developing its forecasts of premium income but not indemnities. However, FIA's model goes beyond this by involving complex simulations, trend analyses, and regression analyses of data to forecast both premium income and indemnities. One of the major problems we had with the way FCIC prepared its forecasts is that it used its loss ratio goal of 0.9 to project indemnities and, as a result, always projected a gain. OMB recognized this problem and instructed FCIC to base its fiscal year 1988 budget projections of indemnities on prior years'

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**FCIC's Budget Forecasts Have Not**  
**Accurately and Completely Informed the**  
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experience. FCIC's forecasts of premium income for fiscal year 1988 are more in line with actual experience.

The action taken to rely on prior years' experience for the 1988 forecasts is an improvement over the way FCIC was preparing its forecasts. Nevertheless, we believe that our recommendation that FCIC develop a computerized model to forecast premium income and indemnities is still valid because factors other than historical experiences, such as periodic changes to the program affecting such things as premium rates and indemnity payments, need to be considered in developing forecasts.



# Decision to Sell Crop Insurance Mainly Through Reinsured Companies Not Based on Sound Analysis

On May 22, 1985, FCIC announced that it was proposing to amend its regulations to terminate direct sales of FCIC policies by master marketers and to provide that reinsurance be the main means of crop insurance delivery. FCIC's stated objectives for its proposal were to maintain and/or improve the services to farmers and to save money—it estimated that \$18.3 million could be saved in fiscal year 1986 and \$13.3 million in 1987. We found, however, that FCIC's savings estimate was overstated and that its decision was not based on an accurate, complete, or objective study. In summary, FCIC's study did not

- adequately consider the impact of FCIC's decision on its ability to ensure the expanded availability of insurance to farmers, as intended by the 1980 act;
- measure the proposal's cost against the cost of an efficient delivery system that used both master marketers and reinsured companies;
- consider the costs of other feasible alternatives;
- include all the costs that would be involved in implementing its proposal; and
- adequately consider the proposal's impact on the program's actuarial soundness.

Further, the master marketer sales data that FCIC cited as its premise for doing the study, which was that the decreased sales handled by master marketers no longer justified a full government operation, were inaccurate. Although FCIC reported that master marketer sales decreased from \$366 million in 1981 to an estimated \$162 million in 1985, in fact, master marketer sales were only \$1.2 million in 1981 and actual sales were \$179 million in 1984.

FCIC rescinded its proposal in January 1986 because, among other things, it could not ensure that crop insurance would be made available to all farmers. The agency has long held that reinsurance should be the primary method of crop insurance delivery. Although the 1980 act neither mandates nor precludes an all-reinsurance program, congressional committees have instructed FCIC to maintain its direct sales of insurance.

In its fiscal year 1988 budget proposal sent to the Congress on January 5, 1987, FCIC projected that 90 percent of all sales in fiscal year 1987 would be through reinsured companies and proposed to fully privatize the delivery of crop insurance after a 5-year phase-out period of the

federal role.<sup>1</sup> To implement this proposal, FCIC proposed legislation in the 99th Congress (S. 2851) and again in the 100th Congress (H.R. 2303) intended to privatize crop insurance through an all-reinsurance program.<sup>2</sup> The legislation proposed, among other things, to eliminate premium subsidies and include administrative and operating costs in premium rates over the 5-year phase-out period.

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## FCIC Studies Supporting Reinsurance Proposal

FCIC made three studies in conjunction with its proposal to provide crop insurance mainly through reinsurance.

- The first study supported a March 12, 1985, advance notice in the Federal Register that FCIC was considering the feasibility and advisability of providing insurance strictly through reinsurance, thus eliminating FCIC's direct sales through master marketers. FCIC said that on the basis of preliminary estimates, this decision could result in first-year savings of \$37 million to \$39 million, with long-range annual savings of about \$29 million.
- The second study supported the May 22, 1985, notice of proposed rulemaking in the Federal Register that FCIC was proposing to amend its regulations to provide that reinsurance would be the main means of insurance delivery and that it would terminate delivery through master marketers. FCIC estimated that this action would result in savings of \$18.3 million in fiscal year 1986 and \$13.3 million in 1987.
- The third study, in draft form, was presented to FCIC management on June 11-12, 1985, by an FCIC task force<sup>3</sup> established to (1) examine all issues relating to the March 12, 1985, announcement, including other options and alternatives, and (2) recommend a plan of action to implement the proposal in the event the proposal was adopted. The task force estimated that FCIC could save \$41.7 million in fiscal year 1986 under an FCIC reinsurance organization.

Because the study discussed in the May 22, 1985, Federal Register was FCIC's official study supporting its proposal, our review concentrated on this study. We did, however, obtain information on the March study and review the task force's draft report used as a basis for its presentation to management (the draft was not issued in final form).

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<sup>1</sup>This proposal was also made in FCIC's fiscal year 1987 budget proposal. It would end the use of master marketers in the program.

<sup>2</sup>H.R. 2303 was introduced on May 6, 1987.

<sup>3</sup>Referred to as the Task Force on Contingency Planning.

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In response to our inquiry regarding the reasons for differences between the May and June savings estimates, the Director of FCIC's Strategic Planning and Evaluation Division, who participated in both studies, told us that the two analyses were carried out independently and that the assumptions, estimates, and projections were not meant to be the same. A brief description of FCIC's May 1985 study follows.

FCIC presented its study results in its announcement proposing to amend its regulations to use reinsurance as the main means of delivery with such other means as necessary to ensure the adequate delivery of insurance. FCIC said that it was considering this action to (1) maintain and/or improve service to farmers and (2) use federal tax dollars more efficiently and effectively. FCIC's study compared two options: one was to continue its dual delivery system of master marketers and reinsured companies and the other was to provide crop insurance mainly through reinsurance. FCIC said that under the first option, business would continue as usual but that its staffing level would be reduced to better reconcile staffing levels with business being serviced. FCIC said that under the second option, the master marketer sales and service agreement would be terminated and staff reductions would be even more essential.

FCIC stated that master marketer sales had declined from about \$366 million in 1981 to an estimated \$162 million for 1985, a decrease of 56 percent. (As discussed later in this chapter, the \$366 million sales attributed to master marketers included all direct sales of FCIC crop insurance, including those by FCIC employees.) The savings estimate was based on master marketer sales declining to \$120 million in fiscal year 1986 and \$70 million in 1987. FCIC said that eliminating master marketer sales and reducing its direct writing to only those areas where service under the reinsured program was determined to be insufficient, would result in savings of \$18.3 million for fiscal year 1986 and \$13.3 million in 1987. Table 3.1 shows the makeup of the 1986 savings estimate.

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**Table 3.1: Makeup of FCIC's May 1985 Savings Estimate for Fiscal Year 1986**

Dollars in millions

<b>Administrative and operating expenses</b>	<b>Dual delivery system (option 1)</b>	<b>Reinsurance (option 2)</b>	<b>Amount option 2 is over (under) option 1</b>
Loss adjustment for direct sales:			
Contract services <sup>a</sup>	\$7.6	\$0	\$(7.6)
FCIC overhead	7.1	0	(7.1)
<b>Total</b>	<b>\$14.7</b>	<b>\$0</b>	<b>\$(14.7)</b>
Compensation to companies for direct sales being handled by master marketers: <sup>b</sup>			
Master marketers (at 15% of premiums)	\$18.0	\$0	\$(18.0)
Reinsured companies (at 32% of premiums)	0	38.4	38.4
<b>Total</b>	<b>\$18.0</b>	<b>\$38.4</b>	<b>\$20.4</b>
Overhead:			
FCIC	\$49.0	\$25.0	\$(24.0)
ASCS <sup>c</sup>	12.8	12.8	0
<b>Total</b>	<b>\$61.8</b>	<b>\$37.8</b>	<b>\$(24.0)</b>
<b>Total</b>	<b>\$94.5</b>	<b>\$76.2</b>	<b>\$(18.3)</b>

<sup>a</sup>Payments to contractors who adjust loss claims on policies sold by master marketers.

<sup>b</sup>Direct sales estimated at \$120 million for fiscal year 1986.

<sup>c</sup>At the time of the study, FCIC was planning to obtain ASCS assistance in determining the actual production histories of farmers and to reimburse ASCS for its assistance.

Source: GAO presentation based on FCIC cost estimate data.

## FCIC Policy Was to Encourage Reinsurance Sales

FCIC has long held that reinsurance should be the primary method of crop insurance delivery.<sup>4</sup> As early as 1981, FCIC projected that reinsurance would account for 68 percent of its 1985 sales. FCIC's rationale for adopting its policy of encouraging reinsurance sales was elaborated on by the former Under Secretary for Small Community and Rural Development in testimony before the House Government Operations Committee's Subcommittee on Government Information, Justice, and Agriculture on May 26, 1983. The Under Secretary stated:

"... we need to recall that Congress clearly intended that the primary function of the federal crop [program] was a reinsurance [program]. There is a cap on ceiling employment under that operation at a low number, which implies that we would serve primarily as a catastrophic reinsurer and rely on the private sector for sales,

<sup>4</sup>In October 1981, FCIC's Board of Directors officially adopted an expansion philosophy to have the vast majority of insurance delivered through the private insurance sector with major emphasis on the reinsurance concept.

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service and claims. That is the most efficient, professional way, the most economically sound way to do that. And we made the policy decision to pursue on that course and we are aggressively carrying it out.”

However, the Under Secretary’s statement that it was the Congress’ intention that the primary function of the program be reinsurance does not coincide with congressional guidance. For example, the Conference Report on USDA’s fiscal year 1982 appropriations (H.R. Rep. No. 97-313) and the House Committee on Appropriations, in its report on USDA’s fiscal year 1983 appropriations (H.R. Rep. No. 97-800), expressed their intentions that FCIC maintain direct sales, including those made by FCIC employees and master marketers. Sales by FCIC employees, however, were terminated in 1983. Similarly, the House Committee on Agriculture, in its report on the Food Security Act of 1985 (H.R. Rep. No. 99-271), stated that although the 1980 act provided for a reinsurance program, “it should not be interpreted by the FCIC that reinsured companies be the only method by which crop insurance is sold under the Act.”

Section 508(e) of the Federal Crop Insurance Act, as amended, directs that, notwithstanding any other provision of the act, reinsurance is to be provided to the maximum extent practicable subject to certain terms and conditions enumerated in the act. The act, however, also encouraged other forms of private and public delivery systems to the maximum extent possible. In our opinion, the act neither mandates nor precludes FCIC’s delivering crop insurance mainly through reinsurance.

Although FCIC rescinded its reinsurance proposal in January 1986, its 1987 budget submission dated February 5, 1986, estimated that 98 percent of all sales would be through reinsurance in 1987. Further, FCIC proposed legislation in the 99th Congress (S. 2851) to implement a proposal presented in the 1987 budget submission to privatize the program by 1991. The proposed legislation was not acted on during the 99th Congress.

FCIC has encouraged reinsurance sales directly and indirectly. According to officers of the Master Marketers’ Association of America<sup>5</sup> and other public and private insurance officials we talked with, FCIC’s March 12, 1985, announcement that it intended to terminate the master marketer sales and service agreement, coupled with its delay in approving the

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<sup>5</sup>This association represents 20 master marketer companies.

final master marketer agreement by about 4 months, encouraged farmers to transfer their policies from FCIC to reinsured companies. According to internal FCIC documents, management anticipated this acceleration of transfers due to FCIC's announcement. For example, in anticipation of increased transfers resulting from the March announcement, on May 12, 1985, FCIC extended the deadline for transfers of master marketers' 1985 crop year FCIC policies to reinsured companies by about 3 weeks. In fact, FCIC reports show that the proportion of master marketer sales transferred to reinsured companies increased from 20 percent in 1984 to 31 percent in 1985.

In commenting on a draft of this report (see app. I), FCIC said that present management, since May 1986, has encouraged sales by both master marketers and reinsured companies. Nevertheless, the continued participation of master marketers in the program is in doubt. As discussed earlier, FCIC projects that reinsurance will account for 90 percent of sales in 1987, a 10 percent increase over 1986. FCIC also proposed legislation to privatize the program through an all-reinsurance program.

### Data Supporting Premise for Considering All- Reinsurance Program Were Inaccurate

In support of its March 1985 announcement that it was considering an all-reinsurance program, FCIC used the same inaccurate master marketer sales data that it later cited in its May 22, 1985, proposal to make reinsurance the main means of insurance delivery. FCIC estimated that reinsurance would account for 70 to 80 percent of total sales for crop year 1985 compared with 3 percent for crop year 1981, and that master marketer sales would decline from 40 percent in 1984 to 20 to 30 percent in 1985. Thus, FCIC said it was prudent to reconsider the wisdom of maintaining a full government operation to handle as little as 20 percent of the business for which it was designed. In a congressional briefing document dated March 11, 1985, FCIC presented data showing that master marketer sales had declined from \$366 million in 1981 to an estimated \$162 million in 1985. The \$366 million, however, included sales by FCIC employees, independent insurance agents, and others. Actual master marketer sales were only \$1.2 million in 1981. In 1984, the last year for which actual data were available at the time of the March 1985 announcement, master marketer sales were \$176 million (40 percent of all sales).

Further, less than 2 months before its March 1985 announcement, FCIC estimated that master marketers would account for 44 percent of total sales for crop year 1985. Similarly, in its June 1985 report to management, the contingency task force said that the most current information

showed a 60/40 sales split between reinsured companies and master marketers and that this was unlikely to change significantly in the near future. As discussed earlier, FCIC management anticipated the increased transfers to reinsurance that would result from the March announcement. Although transfers did increase, master marketers' sales still accounted for an estimated 27 percent of crop year 1985 sales.

### Design and Methodology of Study Supporting May 22, 1985, Announcement Were Deficient

FCIC's analysis leading to its May 22, 1985, announcement was incomplete and did not adequately support its proposal to amend its regulations because the analysis was deficient in several major respects. In summary, the analysis did not

- determine whether all farmers could be served adequately through reinsurance or what the proposal's impact would be on program participation,
- determine the proposal's impact on the program's actuarial soundness,
- consider the costs of other feasible alternatives,
- measure the proposed system's cost against the cost of an efficient dual delivery system, and
- include or adequately consider all costs involved in implementing the proposal.

These deficiencies could have been avoided or minimized had FCIC (1) followed OMB's guidance on the methodology to be followed and costs to be considered in cost analyses of this type<sup>6</sup> and (2) adequately considered the objectives of the crop insurance act. FCIC officials responsible for the study told us that while they were aware of OMB's guidance, they did not think to apply the guidance in designing the study.

### Impact on Farmers, Program Participation, and Actuarial Soundness Not Determined

FCIC did not determine (1) whether all farmers desiring crop insurance could be served through a delivery system that relied mainly on reinsurance and (2) the impact the proposal could have on the program's actuarial soundness. In its May 1985 announcement, FCIC said that reinsurance would be the main means of delivering crop insurance with such other means as the Manager determines are necessary to ensure the adequate delivery of insurance to farmers. The Assistant Manager for Administration told us that FCIC had not made a firm decision about what system would be used to handle the 40 percent of sales that were

<sup>6</sup>OMB Circular A-76 sets forth the policies and procedures for determining whether activities should be performed by federal agencies or under contract.

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being handled at that time by master marketers. Moreover, because FCIC had no firm plan on how farmers unable to obtain insurance through reinsured companies would be served, it did not determine what the costs of this effort would be.

On January 8, 1986, FCIC announced in the Federal Register that it had decided not to convert to a strictly reinsurance program. In announcing its decision, it said that

“The determination not to convert to a strictly reinsurance function was based on several factors, including the determination that further study was necessary to assure that crop insurance was available to all farmers under the mandate of the Federal Crop Insurance Act.” (Underscoring added.)

Further, although a major objective of the act is to achieve the broadest possible participation in the program, FCIC did not determine what impact its May 22, 1985, proposal would have on participation. Because the study supporting the proposal did not comment on this matter, FCIC could provide no assurance that all farmers desiring crop insurance could be served by reinsured companies.

Another mandate of the act that FCIC's study did not consider was that the program be operated on an actuarially sound basis. The 1980 act vests FCIC's management in the Board of Directors and specifically charges the Board with ensuring the program's actuarial soundness. The Board, however, did not formally review and approve FCIC's reinsurance proposal. The three private-sector Board members we interviewed on April 10, 1986, told us that, although they did not formally approve the proposal, they agreed with it.

FCIC's study did not address the proposal's impact on the program's actuarial soundness. Considering that FCIC had a potential liability of about \$7 billion in 1985 compared with administrative and operating expenses of about \$200 million, we consider this a major oversight. The fact that reinsured companies share in the underwriting gains and losses and master marketers do not is one factor affecting the program's actuarial soundness. (See ch. 5.) Another is program participation because actuarial soundness depends on spreading risks among as many farmers as possible. Program participation has been far below what FCIC envisioned it would be. For example, in crop year 1985, FCIC insured only about 18 percent of the potential acres it considered insurable compared with an October 1981 projected goal of 65 percent. (See tables 3.2 and 3.3.)



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**Table 3.2: Actual Participation for Crop Years 1981-85**

	Crop year				
	1981	1982	1983	1984	1985
Acres in millions					
Potential acres <sup>a</sup>	282	280	240	267	265
Insured acres	45	43	28	43	49
Participation percent	16	15	12	16	18

<sup>a</sup>This is the maximum number of acres FCIC estimates that it can insure under the program.  
Source: FCIC financial records.

**Table 3.3: Participation Projected for Crop Years 1981-85**

	Crop year				
	1981	1982	1983	1984	1985
Acres in millions					
Potential acres <sup>a</sup>	237	243	246	255	264
Insured acres	45	85	123	153	172
Participation percent	19	35	50	60	65

<sup>a</sup>This is the maximum number of acres FCIC estimates that it can insure under the program.  
Source: Master Marketing Seminar, October 1981.

**FCIC Analyzed Only One Alternative and Incorrectly Compared It With an Inefficient Existing System**

FCIC's May study considered only one alternative to its dual delivery system, and this alternative was compared with a system that FCIC recognized as being inefficient. Had FCIC followed OMB guidance on cost analyses, it would have analyzed all viable alternatives and used the most efficient operation of each alternative.

In its May announcement, FCIC stated that the reduced sales of its direct insurance had not been accompanied by a concurrent comparable reduction in supporting staff levels. Thus, it said that if the dual delivery system was maintained, FCIC staffing levels would be reduced to better match staff resources with business serviced. FCIC said that the estimated direct master marketer sales of \$162 million in 1985 represented about half the projected business FCIC staff levels were designed to handle, about \$338 million. Thus, although FCIC recognized that the organizational structure under the dual delivery option was inefficient with over 2.5 times the capacity required for projected 1986 sales of \$120 million, no adjustment was made for this fact in FCIC's cost analysis.

Consequently, FCIC's estimate of the proportion of sales handled by master marketers and reinsured companies was key to FCIC's cost savings estimates. For example, our computations showed that had FCIC costed out the option of maintaining master marketer sales at the 1984

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level (40 percent), estimated savings would be only \$5.5 million using FCIC's study methodology, while at the high range of FCIC's estimate of master marketer sales, 30 percent, estimated savings would be \$11.8 million. (See table 3.4.) In computing these savings, we assumed that overhead costs would remain unchanged. We believe that this assumption is valid because, as discussed above, FCIC was overstaffed in relation to the amount of direct sales serviced.

**Table 3.4: Comparison of Estimated Savings of All-Reinsurance Program at Various Levels of Direct Sales**

	Proportion of 1986 projected \$600 million sales sold direct		
	20 percent	30 percent	40 percent
Dollars in millions			
<b>Option 1 (dual delivery)</b>			
Cost of direct sales:			
Loss adjustment	\$14.7	\$18.4	\$22.3
Overhead	61.8	61.6	1.8
Compensation to:			
Master marketers	18.0	27.0	36.0
Reinsured companies	153.6	134.4	115.2
<b>Total cost (option 1)</b>	<b>\$248.1</b>	<b>\$241.6</b>	<b>\$235.3</b>
<b>Option 2 (all-reinsurance)</b>			
<b>Total cost (option 2)</b>	<b>229.8</b>	<b>229.8</b>	<b>229.8</b>
<b>Savings</b>	<b>\$18.3</b>	<b>\$11.8</b>	<b>\$5.5</b>

Source: The 20-percent column is from FCIC's study; GAO calculated the 30- and 40-percent columns using FCIC data and study methodology.

The Assistant Manager for Administration agreed that FCIC's estimate included some efficiency savings available under either option but said that certain functions, such as FCIC's claims division, could be eliminated under the reinsurance option that could not be eliminated if direct sales by master marketers continued. Also, in response to our question as to why an all-direct insurance option was not considered, he said that FCIC could not have mandated such a program and that reinsurance was the direction the crop insurance program was moving in. On this basis, reinsurance was considered the only viable option.

**FCIC Did Not Adequately  
Consider All Costs  
Involved in Replacing  
Direct Sales With  
Reinsurance**

FCIC's study did not include all costs that would be incurred in replacing direct sales with reinsurance and gave inadequate consideration to other costs. Employee termination, relocation, and associated costs alone were understated by more than \$5.5 million. Had FCIC considered all costs in its study, few if any savings would be shown for the reinsurance option.

Considerable variances exist between FCIC's May study and the contingency task force's study regarding the number of employees to be terminated and associated costs. Documentation supporting FCIC's May study showed that about 648 staff years would be saved, but termination costs were considered for only 100 employees at an average cost of \$30,000 each. According to FCIC's Assistant Manager for Administration, the reason for this was that about 500 of the employees to be terminated were temporaries for whom FCIC would incur no costs. According to the Director of FCIC's Personnel Division, however, FCIC would be responsible for lump-sum annual leave and unemployment costs for temporary employees as well as full-time employees.

Although the \$3 million in employee termination costs included in the May study was categorized as unemployment compensation, the Personnel Division Director told us that \$30,000 per employee for unemployment compensation was too high. On the basis of the Director's suggestion to use prior-year data to estimate unemployment costs for the 648 staff years to be saved, we estimate unemployment compensation costs to be \$1.3 million. OMB guidance provides that in addition to unemployment compensation costs, employee termination costs include severance pay, lump-sum annual leave payments, and early retirement costs. The contingency task force, which made a detailed analysis of the staffing needs for FCIC to operate primarily as a reinsurer, estimated that 750 full-time equivalent positions would be terminated. FCIC's task force estimated severance pay costs at \$2.5 million and lump-sum annual leave payment costs at \$1.125 million. According to the Personnel Division Director, the task force did not estimate costs resulting from early retirements because such costs are difficult to estimate and would be borne by the federal government and not by FCIC. Thus, the May 1985 study should have included employee termination costs of at least \$4.925 million (\$1.3 million plus \$2.5 million plus \$1.125 million), excluding early retirement costs.

In addition, FCIC's May study did not include any costs to relocate employees. The task force, however, estimated that 300 employees would be relocated at a cost of \$3.6 million. Hence, total costs for terminating the affected positions (without the costs for early retirement)

and for relocating employees would be \$8.525 million (\$4.925 million plus \$3.6 million), or \$5.525 million above the amount included in the May study.

In addition, we found that personnel compensation, benefits, and travel costs for the reinsurance option (option 2) were understated by about \$3 million. FCIC's detailed cost comparison shows that personnel compensation for option 2, \$11.584 million, was calculated by allocating a portion of the estimated headquarters and field personnel costs under the dual delivery system to the reinsurance option. Supporting documentation, however, shows that 552 estimated full-time staff years would be needed to implement option 2. Multiplying this figure by the \$25,000 average employee compensation used in option 1 results in a cost of \$13.8 million, or \$2.216 million more than is shown for option 2. Further, calculating personnel benefits and travel based on \$13.8 million, rather than on \$11.584 million (using the same method FCIC used), increases these costs by about \$294,000 and \$502,000, respectively. Thus, total personnel compensation, benefits, and travel were understated by \$3.012 million (\$2.216 million plus \$294,000 plus \$502,000).

Adding the \$3.012 million understated personnel costs and the \$5.525 million understatement of employment termination and relocation costs results in an understatement of option 2 costs of \$8.537 million. Hence, at a minimum, FCIC's \$18.3 million estimated savings for fiscal year 1986 should be reduced to about \$9.8 million. It should be noted that certain of the costs we included, such as the costs of relocating employees and offices, are one-time costs and would not affect savings in subsequent years.

We did not analyze the estimates for fiscal year 1987 and subsequent years because FCIC did not have supporting documentation.

The May study also did not consider a number of factors that would affect the costs of transferring direct sales to reinsurance. These included (1) office closing costs, such as costs to move equipment, furniture, supplies, and records and cancellation fees on space leased from the private sector; (2) the costs of the delivery system that would be needed to serve farmers unable to obtain insurance from reinsurance companies; and (3) the impact on federal tax revenues. In addition to not considering the impact on costs to the federal government, the study did not consider the cost implications of state and local taxes as provided for in OMB Circular A-76.

## Conclusions

FCIC's proposal to terminate master marketer sales and rely mainly on reinsurance was not based on a complete, accurate, and objective study. FCIC did not, as required by OMB, (1) measure the cost of the proposed system against an efficient dual delivery system that used both reinsured companies and master marketers or (2) consider all costs in estimating savings from implementing its proposal. Had FCIC followed the OMB procedures for cost analyses, FCIC's May 1985 study estimate would likely have shown few or no savings for the transfer. For example, no allowance was made for efficiencies that could have been achieved by restructuring an organization designed to handle \$340 million in direct sales to handle the estimated \$120 million in direct sales. If FCIC had, in developing its estimate, used the level of direct sales in effect the year before the study (40 percent), the savings estimate would be reduced from \$18.3 million to \$5.5 million and at 30 percent, to \$11.8 million.

Even these savings estimates would be high, however, because FCIC did not adequately address all costs of the proposed transfer. Employee termination and relocation costs alone were understated by about \$5.5 million (exclusive of early retirement costs), and personnel compensation benefits and travel costs were understated by about \$3 million. These factors alone would reduce FCIC's \$18.3 million savings estimate to \$9.8 million.

Also important is the impact the proposal would have on FCIC's ability to meet the 1980 act's objectives to expand crop insurance availability to farmers, to achieve broad participation, and to maintain an actuarially sound program. We believe that with FCIC falling far short of the participation goals initially envisioned for the program and indemnities exceeding premium income in each year of the expanded program, FCIC should have considered and studied whether a delivery system relying primarily on reinsurance could enable it to effectively carry out the above objectives.

Although present management says that it has been encouraging sales by both master marketers and reinsured companies since May 1986, in January 1987 FCIC projected that reinsured companies will account for 90 percent of sales in 1987. Also, in May 1987 FCIC proposed legislation that would, if enacted, call for an all-reinsurance program by September 30, 1991. In our opinion an all-reinsurance program may not be justified based on (1) our assessment of FCIC's cost analysis, (2) the lack of evidence that such a system will ensure the expanded availability to farmers as intended by the 1980 act, and (3) the insufficient consideration of

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an all-reinsurance system on the program's actuarial soundness. Further, because congressional committees have expressed concern with an all-reinsurance program and because reinsured companies are projected to account for 90 percent of sales in 1987, we believe that the Congress should clarify its intended policy regarding the system or systems FCIC should use to deliver crop insurance to farmers.

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## Matter for Consideration by the Congress

In view of congressional concern over the administration's move toward an all-reinsurance program, the Congress should consider what the proper balance of sales to be handled through reinsured companies and master marketers should be and, if necessary, amend the Federal Crop Insurance Act to specify the system or systems FCIC should use to deliver crop insurance to farmers.

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## Agency Comments and Our Evaluation

FCIC said that although we concluded that the materials used to support FCIC's shift to reinsurance were in some way inadequate or deficient, a good deal of information was available to FCIC management, particularly on the trend toward reinsurance and on FCIC's costs of handling policies sold by master marketers. Also, FCIC said that the report fails to note that FCIC followed the process of Notice of Rulemaking through which FCIC received and reviewed hundreds of comments on its proposal, which resulted in FCIC's decision to retain both delivery systems.

We do not agree with FCIC's comments. We said that the study FCIC cited in support of the proposal to terminate master marketer sales and to rely mainly on reinsurance was neither complete, accurate, nor objective. We based this conclusion on the fact that FCIC's study failed to consider all costs and pertinent factors as prescribed in OMB Circular A-76. While a good deal of information was available to management, the information was not adequately considered in its study. Further, as discussed in our report, FCIC management actively encouraged the trend toward reinsurance. Thus, the trend was not entirely due to market forces as FCIC's comments imply. Also, our objective was to review the basis for FCIC's decision to make its proposal, not the basis for its rescission. Moreover, FCIC's comments on this point do not take issue with any of the factual material presented in this chapter.

FCIC also said that present management has, since May 1986, publicly stated that its policy is to encourage sales by both reinsured companies and master marketers. In following up on this matter with the Secretary of FCIC's Board of Directors, we learned that the Board has not officially

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adopted this policy. Thus, the official policy of FCIC, to place major emphasis on reinsurance, as adopted by the Board in October 1981, remains in effect. Also, the continued participation of master marketers in the program is in doubt. We note that FCIC, in its fiscal year 1988 budget submitted to the Congress on January 5, 1987, projected that reinsured companies will account for 90 percent of all sales in crop year 1987, an increase of 10 percent over 1986. In view of the above we believe that it would still be appropriate for the Congress to clarify whether FCIC's movement to reinsurance is an acceptable policy. We have revised the matter for the Congress' consideration that was contained in our draft report to recognize present management's position to take an even-handed approach to both reinsured companies and master marketers.

# Data FCIC Used to Establish Reinsured Companies' Compensation Rate Perpetuate Problems We Reported on in March 1984

The data FCIC used to develop the master marketers' compensation rate for 1985-86 (15 percent of premiums) appear to be adequate on the basis of the 1980 act's requirements, but those used to develop the reinsured companies' rate for 1986 (30 percent of premiums plus reimbursement of state premium taxes) do not.

In 1984, we reported that, in conformance with the 1980 act's requirements, FCIC established the compensation rates for reinsured companies based on its own costs to provide similar services.<sup>1</sup> However, we reported that FCIC made errors in computing its costs and did not consider the increases in premiums that would result from changes required by the 1980 act. For 1986, FCIC revised the rate at which it compensated reinsured companies but, because the revised rate was based primarily on the relationship between total compensation and premium income for earlier years and FCIC had not adjusted the earlier years' rates for the problems we previously reported on, the 1986 compensation rate for reinsured companies may still have been higher than what the act permits.

FCIC, in conformance with the 1980 act's requirements, based the compensation rate used in 1986 for master marketers primarily on a study showing that the revised rate was consistent with those prevailing in private industry.

## Summary of Findings We Reported in March 1984

In our March 1984 report, we said that the compensation rates FCIC developed for private-sector companies might be too high because FCIC based compensation rates on (1) a percent of premiums without adjustments for anticipated premium increases resulting from the implementation of the 1980 act, (2) inappropriate administrative and operating expense data, and/or (3) a questionable method of reimbursing companies for loss adjustment expenses. Recognizing that the private-sector companies were providing services FCIC did not perform prior to the expanded program, we recommended that FCIC evaluate the rates established in relation to the revised premium base and the private sector's cost to provide such services.

Section 508(e) of the Federal Crop Insurance Act, as amended, provides that FCIC pay costs of reinsured companies to the same extent that such costs are covered by FCIC on its insurance policies. Thus, FCIC based the initial compensation rates for reinsured companies on the costs that it

<sup>1</sup>GAO/RCED-84-65, Mar. 14, 1984.



would incur to sell and service the same policies. Although not required by the act, FCIC used the same procedures to establish the compensation rate for master marketers. In its analysis, FCIC used its costs for fiscal years 1978-79 and crop year 1979 premiums. (As discussed later in this chapter, compensation rates for reinsured companies and master marketers were periodically revised through negotiations between FCIC and insurance industry representatives.)

The compensation rates established for master marketers and reinsured companies differed because they provide different services. The master marketers were compensated on a sliding scale in 1981 with reduced rates for large policies and carryover business; the average compensation rate was 13.6 percent for the limited business handled. For crop year 1982, they were compensated 18 percent for new business and 13 percent for carryover business. Beginning in crop year 1983, the compensation rates were based on a sliding scale, with reduced rates for larger policies. Also, if marketing sales goals were exceeded, the master marketers received an additional 2 percent commission on premiums. The compensation rates established for reinsured companies in 1981 were 27 percent for new business and 22 percent for carryover business. Also, for services provided in adjusting loss claims, the companies received 4 percent of premiums and 3 percent of the total indemnities paid on the company's policies.

We reported that in developing the percent-of-premium rates, FCIC did not give consideration to the expected increases in premium rates due to the higher coverage levels and price guarantees offered by the 1980 act. For example, between 1979 and 1982, the average per-acre premium increased from \$4.73 to \$9.21. This increase of \$4.48 per acre would have resulted in increased compensation of about \$31.2 million to master marketers if they had sold insurance on all 45 million acres insured by FCIC in 1982 and \$57.5 million to reinsured companies if they had sold the insurance.

We reported also that in establishing the initial compensation rates for reinsured companies, FCIC included costs, such as costs pertaining to FCIC's actuarial function, that should not have been included; made a mathematical error; and computed sales commission costs incorrectly. As a result, the compensation rate for reinsured companies was 5.9 percentage points higher than FCIC's own costs. In addition, we said that reimbursing the reinsured companies for loss adjustment work on the basis of 4 percent of premiums for fixed expenses plus 3 percent of

indemnities for variable expenses was questionable because those percentages bore no relationship to the actual costs the companies incurred. Applying these rates to FCIC's experience for the 1976-79 period, we found that compensation to the reinsured companies would have been about \$3.1 million more than FCIC's actual costs of \$24.7 million.

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## Compensation Rate Changes Since Our March 1984 Report

Since our March 1984 report, FCIC has changed the compensation rates for both reinsured companies and master marketers. The compensation rate for master marketers was changed to a flat 15 percent of premiums for new and carryover business beginning in crop year 1985.

The compensation rate for reinsured companies, established in 1981, remained in effect through crop year 1985; however, FCIC also offered the companies a new optional rate schedule for 1985. Under the option offered, FCIC would compensate a reinsured company at (1) 24 percent of premiums for sales of new and carryover business and (2) to cover loss adjustment services, 4 percent of the amount of premiums and, depending on a company's loss ratio, 0 to 3 percent of the dollar amount of loss claims adjusted. Thirty-eight of 48 companies opted for the new schedule. For crop year 1986, the compensation rate for reinsured companies was changed to a flat rate of 30 percent of premiums for sales of new and carryover business and loss adjustment services. In addition, FCIC agreed to reimburse reinsured companies for premium taxes imposed by states, up to certain prescribed limits. (See ch. 9.) FCIC estimated that reimbursement of state premium taxes would average 2 percent of the reinsured companies' premiums.

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## FCIC Actions in Response to Our Recommendations

In response to our March 1984 recommendation to evaluate the established compensation rates in relation to the current, and/or expected, premium base and the private sector's cost to provide such services, FCIC contracted with an actuarial consulting firm and an accounting firm to determine whether the compensation paid the reinsured companies was fair and equitable. The actuarial firm reviewed four reinsured companies and the accounting firm reviewed seven. The accounting firm, however, had not completed its study at the time FCIC set the rates for the 1986 reinsurance agreement.

In the negotiation process with reinsured companies, FCIC considered the actuarial firm's draft report of June 21, 1984,<sup>2</sup> and the accounting firm's

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<sup>2</sup>The draft report was not issued in final form.

preliminary September 7 and November 9, 1984, reports on two of the seven companies it reviewed. The results of both studies were inconclusive, however, because the reinsured companies' accounting records did not always segregate costs associated with FCIC business. To get around this problem, both firms relied heavily on discussions with officials of the reinsured companies to estimate and/or judge the reasonableness of costs allocated to FCIC activity.

The actuarial firm found that three of the four companies it reviewed received compensation in excess of costs equal to about 2 percent of premiums, but it cautioned that this profit may be illusory and could disappear if actual costs were known. The firm concluded that the cost of developing an accounting system to provide a completely accurate accounting of costs associated with FCIC business would be prohibitive. It recommended the continuation of the percent-of-premium method of reimbursement, noting that the percentage could be reduced for costs relatively easy to segregate and that these costs could be paid directly. Examples of this latter category included state premium taxes and association fees paid by the reinsured companies but not included in FCIC's computation of the compensation rate.

The accounting firm, in its final draft report of September 17, 1985, said that, according to company records and discussions with company officials, costs had exceeded reimbursement for six of the seven companies it reviewed; however, it said that it did not always agree with the assumptions the companies used in allocating costs. The firm concluded that a proper evaluation of the reasonableness of the reinsured companies' compensation was not possible without a uniform method of allocating the reinsured companies' costs, and it recommended that FCIC develop objective cost principles for this purpose. It recommended no change in the compensation rates until this could be accomplished; however, as noted above, FCIC had negotiated 1986 compensation rates before the firm issued its draft report.

Both firms found little relationship between the companies' loss adjustment costs and the reimbursement received from FCIC for this purpose based on a percentage of the amount of indemnities paid. The actuarial firm suggested that most of the loss adjustment costs be reimbursed through the percent-of-premium method. The accounting firm also recommended that FCIC consider changing the method of reimbursement, but only after the cost principles previously mentioned had been developed.

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## Data Used to Set 1986 Rate Assured Reinsured Companies of Compensation at Least as High as in Prior Years

In our March 1984 report, we cautioned that the initial compensation rates established for reinsured companies could result in substantially higher program costs and that the rates were likely to be viewed as a floor by the companies in future rate negotiations with FCIC. Because FCIC used prior years' compensation levels as the primary basis in negotiating the 30-percent compensation rate for the 1986 agreement, the problems we reported on in March 1984 were not resolved.

The former Manager carried out the negotiations on the 1986 agreement with reinsured companies' representatives. The negotiations were not well documented. However, on the basis of our discussions with the former Manager and our review of available documentation, it appears that the following data were used as the bases for the changes agreed to in the compensation rates.

FCIC held its first formal discussions with industry representatives on the proposed 1986 reinsurance agreement in October 1984. In accordance with the actuarial firm's recommendation, FCIC was proposing to base the compensation rate solely on a percentage of premium income rather than on both premiums and claims. FCIC's agenda for the discussions showed that FCIC initially proposed a compensation rate of 31 percent of premiums. To arrive at this percentage, FCIC calculated what the reinsured companies received as compensation under prior agreements, which was 30.9 percent. In addition, FCIC evaluated the reasonableness of the 31 percent by comparing it with administrative and operating expenses and the sales costs of various segments of the commercial property and casualty insurance industry. FCIC's evaluation showed that the 31-percent rate was comparable to the costs being incurred by those segments with the least costs and less than that for most other segments. FCIC also obtained similar data for member companies of the Crop Hail Insurance Actuarial Association (CHIAA)<sup>3</sup> and compensation rate data for companies reinsured under the National Flood Insurance Program. CHIAA member costs averaged 34 percent of premiums and the National Flood Insurance Program's compensation rates were 32 percent of premiums and 3.3 percent of losses, plus a variable percent of claims adjusted.

During subsequent negotiations, FCIC proposed a flat rate of 29 percent of premiums, plus reimbursement for state premium taxes. Some companies indicated that they would accept other provisions of the proposed

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<sup>3</sup>CHIAA processes financial and statistical data on crop premiums and losses for private insurance companies that FCIC reinsures.

agreement if the compensation rate was increased to 31 percent. FCIC agreed to 30 percent.

The actuarial firm also recommended that FCIC reimburse the companies for state premium taxes. The rationale for reimbursing companies for state taxes, set out in an FCIC newsletter (Crop Insurance Update, Sept. 1985), was that the reimbursement of state taxes is designed to encourage companies to expand into states with high taxes for out-of-state companies, thus increasing the availability of insurance to farmers. Although this provision was included in the standard agreement that was reviewed by USDA's Office of the General Counsel, we believe, as discussed in chapter 9, that the 1980 act precludes FCIC from reimbursing reinsured companies for such taxes.

## Data Used to Set Master Marketers' Compensation Rate Conform to 1980 Act's Requirements

Although, in our prior review, we found that FCIC calculated its costs correctly in establishing the compensation rate schedule for master marketers, we reported that FCIC had not adjusted the rates for expected increases in premiums resulting from changes to the Federal Crop Insurance Act, as amended. Although FCIC did not address this problem in setting the compensation rate used in 1986, its studies show that the compensation rate paid master marketers is consistent with rates prevailing in the private industry. This is in accordance with the 1980 act.

The Deputy Manager had prime responsibility for negotiating the 1985 agreement (which continued unchanged for 1986) with master marketer representatives—officials of one master marketer, which handled about 37 percent of all master marketing sales, and the Master Marketers' Association of America. The negotiations were not well documented. However, on the basis of our discussions with the Deputy Manager and review of available records, it appears that the data described below were used as the bases for the changes agreed to in the compensation rates.

FCIC's decision to have one compensation rate—15 percent of premiums—rather than different rates for new and carryover business and by size of policy was based on its desire to reduce the administrative burden of having to track and account for the different types of sales. The previous compensation rate schedule required that FCIC identify and classify policy transfers to ensure that canceled and reinstated policies were not claimed as new sales and to track increases and decreases in individual policy amounts due to changes in coverage.

FCIC began the process of revising the compensation rates for master marketers in early 1983 because it planned to change the rate for crop year 1984. FCIC analyzed prior-year premiums on master marketer sales and the compensation paid to master marketers. On the basis of its analysis, FCIC determined that a rate of 14.6 percent, with reductions in the rate for large policies, would provide master marketers with compensation equivalent to what they were receiving. On this basis, FCIC management submitted two proposals to the Board of Directors for revising the rate: (1) an 11.6-percent rate subject to reduction for large policies plus 3 percent not subject to reduction and (2) a 12-percent rate subject to reduction plus 3 percent not subject to reduction. The Board considered these proposals but, based on the former Manager's recommendation, deferred action until the 1985 crop year to afford master marketers an opportunity to comment on the proposals.

FCIC obtained and analyzed master marketer comments on the proposed rates for the 1985 agreement. Also, FCIC analyzed the sale commissions and other sales costs of companies selling farm multiperil and allied lines of insurance. This analysis showed that a compensation rate equal to 15 percent of premiums, without adjustment for large policies, was comparable to these companies' sales costs. The results of this analysis appeared to be the determining factor in changing the compensation rate to 15 percent. The Board approved the 15-percent rate in April 1984.

The Federal Crop Insurance Act does not prescribe that compensation to master marketers be limited to the costs incurred by FCIC as it does for reinsured companies. Section 507(c) provides that FCIC reimburse master marketers for administrative and program expenses incurred at rates of compensation consistent with those generally prevailing in the insurance industry. Thus, the method FCIC used to establish the compensation rate for master marketers conforms to the 1980 act's requirements.

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## Conclusions

The method used to compute the compensation rate paid master marketers conforms to the 1980 act's requirements; however, this is not the case for the compensation paid reinsured companies. FCIC's use of prior years' data to establish compensation rates for reinsured companies carried forward the problems we previously reported on; thus, the compensation levels may still be higher than what it would cost FCIC to provide the same services. In establishing the initial compensation rates based on the costs it incurred to provide the same services the reinsured companies would provide, FCIC did not adjust for expected increases in the premiums on which the compensation was based and used inappropriate

data in determining applicable costs for reinsured companies. By using prior years' data as a baseline to arrive at revised rates, FCIC has carried these errors into current rates.

Unless the act is amended, FCIC will have to devise a means of compensating reinsured companies that conforms to the act's requirements. One way to do this is to develop compensation rates for reinsured companies based on the costs FCIC currently incurs on the policies it sells directly through master marketers, including costs for such services as sales and loss adjustment activities. Another way is to adjust the current compensation rate for the problems we noted in our March 1984 report, that is, adjusting the rate for the increased premiums charged under the 1980 act and for the higher-than-justified rate resulting from the use of inappropriate and inaccurate data. If deemed necessary, this rate could then be increased by an appropriate amount to cover the estimated costs of any activities reinsured companies now perform that FCIC did not perform prior to the 1980 act.

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## Recommendation to the Secretary of Agriculture

We recommend that the Secretary of Agriculture direct the Manager of FCIC to either (1) base reinsured companies' compensation rates on the costs FCIC covers on the insurance policies it sells directly to farmers, as is required by section 508(e) of the Federal Crop Insurance Act, or (2) propose legislation to amend the act to allow FCIC to continue to establish the compensation rates through negotiations with the reinsured companies.

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## Agency Comments and Our Evaluation

Regarding the compensation rates paid to reinsured companies, FCIC made three major points. The first was that its analyses show that the compensation rates paid to reinsured companies may result in lower cost than what it would cost FCIC to perform the same functions. According to an FCIC official, the analyses FCIC refers to relate to the cost comparison performed in support of FCIC's proposal to move to reinsurance, in which compensation to reinsured companies was a major cost factor. (See ch.3.) We found numerous deficiencies with FCIC's cost comparison and concluded that had FCIC followed OMB's procedures for cost analysis, FCIC's May 1985 cost comparison would likely have shown few or no savings for the transfer of master marketer sales to reinsured companies. Thus, we do not believe that FCIC's analyses support its position on relative costs.

Second, FCIC took issue with our interpretation of section 508(e) of the Federal Crop Insurance Act. Specifically, in referring to the act's provision requiring FCIC to pay the companies' operating and administration costs to the same extent that such costs are covered by FCIC's policies, FCIC said that "to the same extent" is not the same as "in the same amount." Also, FCIC said that section 508(e) directs that reinsurance is to be provided upon such terms and conditions as the Board of Directors determines to be consistent with this section.

We agree that the act provides management with some latitude in setting compensation rates and that the compensation rates established do not have to exactly mirror FCIC's own costs. However, we also believe that the Congress intended that the compensation rates paid to reinsured companies to be reasonably consistent with the costs FCIC incurs on its own policies. In our March 1984 report we showed that the rates were not consistent because FCIC (1) made several errors in determining its own costs, upon which it based the rates that resulted in rates that were about 6 percentage points higher than FCIC's own costs, and (2) did not consider the expected increases in premium rates due to higher coverage levels and price guarantees. Regarding this latter point, we said that the average per-acre premium rates nearly doubled between 1979 to 1982 (from \$4.73 to \$9.21). Thus, because the reinsured companies were compensated on a percent-of-premium basis, the compensation paid to the companies would likewise have doubled over what FCIC's own costs were in 1979. Because FCIC revised the rates for 1986 without correcting the problems we reported on in March 1984, in our opinion the current rates are still not consistent with its costs and therefore do not conform to the act's requirements.

The third point FCIC made was that the 1980 act provides FCIC with the utmost latitude and recognizes that certain decisions can only be based on sound business judgment. In this connection FCIC cited the general powers provisions of FCIC under section 506. The general powers provisions provide FCIC with the necessary general authority to administer the program; they do not, in our opinion, give management the latitude to ignore the criteria set forth in section 508(e) on the establishment of compensation rates.



# Gain and Loss Sharing Provisions Favor Reinsured Companies

Depending on whether premium income is more or less than indemnities paid on the crop insurance policies sold by reinsured companies, a gain or loss occurs that is shared in by the companies and FCIC. In March 1984, we reported that revisions to the reinsurance program's gain and loss sharing provisions for 1982 and 1983 allowed the reinsured companies more potential gain while limiting the amounts of losses they could incur.<sup>1</sup> We said that the provisions for 1983 (which remained in effect through 1985) were tilted in the reinsured companies' favor.

Our analysis of the information FCIC had available to it in negotiating the standard reinsurance agreement for 1986 showed that FCIC had reasonably adequate data on which to base decisions about the agreement's gain and loss provisions. However, the provisions FCIC agreed to continued the trend of tilting the gain/loss sharing provisions in the reinsured companies' favor. This, in turn, adversely affects FCIC's ability to establish a reserve for unforeseen losses.

Before entering into negotiations with the reinsured companies on the 1986 agreement, FCIC had an actuarial firm (1) study the existing provisions under which FCIC and the reinsured companies share in the gains and losses and (2) make recommendations for improvement. Also, FCIC analyzed the costs of the various proposals considered during the negotiations. The actuarial firm concluded that the prior gain and loss sharing provisions were clearly biased in the reinsured companies' favor, but said that the bias may be appropriate if the companies' perception of inadequate premium rates is accurate. FCIC's cost analysis showed that, had the provisions for 1985 been in effect in 1981-83, the reinsured companies would have had losses equal to 1.4 percent of premiums, whereas under the 1986 provisions, the companies would have had gains equal to 4.5 percent of premiums.

We estimate that had the gain and loss provisions under the 1986 agreement been applicable to the reinsured companies' 1984 experience, the reinsured companies' net gain on the policies they sold and retained<sup>2</sup> would have increased by 3.5 percent of premiums. The reason for this increased gain was new stop-loss provisions included in the 1986 agreement that not only established lower limits on reinsured companies' losses but could result in FCIC's paying companies for a gain when their

<sup>1</sup>GAO/RCED-84-65, Mar. 14, 1984.

<sup>2</sup>FCIC's 1986 agreement contains ceding provisions under which the companies relinquish or transfer a portion of their business (premium and liability for losses) to FCIC. Our discussion of the gain/loss provisions in this chapter relates to the business that the companies retain, that is, do not cede.

overall business results in a loss. The primary reason for this is that over 80 percent of a company's loss in a state is not considered in applying the gain and loss formula. For example, one company that operated in several states wrote insurance policies in 1984 that resulted in a loss of about \$10.2 million; yet, if the new step-loss provisions of the 1986 agreement had been in effect in 1984, their application state-by-state would have resulted in FCIC's paying the company \$1.7 million for its share of a "gain."

Further, not only do the gain and loss sharing provisions work in favor of the reinsured companies, but they adversely affect FCIC's ability to establish a reserve for unforeseen losses. The 1980 act limits premium rates to those that the Board of Directors deems actuarially sufficient to cover indemnities and establish a reserve for unforeseen losses. Gains paid to reinsured companies reduce FCIC's ability to establish the reserve because such payments, even though an expense to FCIC, cannot be factored into premium rates. FCIC determined that to meet the 1980 act's requirement, an adequate reserve could be established by including a 10-percent-of-premium factor in its rate-making formula. However, under the gain and loss provisions of the 1986 agreement, reinsured companies would receive, at a minimum, a gain equal to 7 percent of premiums. Thus, on policies sold and retained by reinsured companies, FCIC would receive only 3 percent of premiums rather than the 10 percent it determined is needed to establish an adequate reserve. (This matter is discussed in chapter 9.)

## Summary of Findings We Reported in March 1984

In our March 1984 report, we concluded that FCIC expanded the reinsurance program authorized by the 1980 act before sufficient information was available to evaluate the reinsurance concept. We reported that the formula for distributing gains and losses as revised for crop years 1982 and 1983 provided reinsured companies with increasingly greater potential for gain while reducing their potential for losses, thus tilting the formula in the reinsured companies' favor. We said that while the formula was revised to try to get more companies involved and to encourage them to write insurance nationwide, using the formula to attain this result may not be cost effective and could affect FCIC's ability to build a reasonable reserve. Accordingly, we recommended that FCIC (1) moderate further expansion of the reinsurance program until the program could be evaluated to ensure that it was cost effective and (2) tailor its agreements to each reinsured company's area of operation with a formula based on the loss experience for that area.

Because the premium rates charged farmers do not include a factor for expected distribution of gains to reinsured companies, the use of premium income for this purpose will affect FCIC's ability to accumulate a reasonable reserve for unforeseen losses, as the 1980 act requires. We reported that unlike administrative costs, which are paid from appropriated funds, the distribution of gains is made from premium income or from FCIC capital stock sales if there is no income available. We concluded that if FCIC was ever to build a reasonable reserve, either the basis for establishing premium rates would have to include a factor for estimated gains to be distributed to reinsured companies or such distribution of gains would have to be paid out of appropriated funds.

We reported that the reinsurance agreements were revised to increase the reinsured companies' gains and decrease their losses. Applying the 1982 and 1983 agreements to reinsured companies' 1981 experience, we found that the reinsured companies' share of the total gain on policies they wrote would increase from 11 percent of premiums to 17 percent under the 1982 agreement and to 24 percent under the 1983 agreement, while their share of the loss would decrease from 35 percent in 1981 to 8 percent in 1982, and to 2 percent in 1983. (See table 5.1.)

**Table 5.1: How 1982 and 1983 Gain/Loss Formulas Would Have Increased Companies' 1981 Gains and Decreased Their Losses**

Dollars in thousands

Agreement	Total gain	Companies' share of gains		Total loss	Companies' share of loss		Net gain
		Amount	Percent		Amount	Percent	
1981	\$4,594	\$491	11	\$451	\$159	35	\$332
1982	4,594	786	17	451	34	8	752
1983	4,594	1,113	24	537 <sup>a</sup>	11	2	1,102

<sup>a</sup>The total loss incurred by FCIC is more than the actual loss because FCIC paid the companies for a "gain" up to a 1.28-1/3 loss ratio under the 1983 agreement.

We also questioned the use of a nationwide loss ratio to establish the gain and loss formula rather than one based on regional experience through selective sales. We reported that companies could limit their risk by (1) selecting the crops and areas of the country in which they sell insurance and (2) limiting coverage to a dollar limit in a state or county.

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## Consultant Study Showed That Gain and Loss Provisions Favored Reinsured Companies

The actuarial firm that reviewed FCIC's compensation rates also reviewed the gain and loss provisions of the 1983 agreement to determine if the provisions were fair and equitable to reinsured companies and FCIC. The firm, among other things, analyzed FCIC's 1969-83 loss experience nationally and for the three states having the largest reinsurance activity. In summary, the firm said that:

- The gain and loss formula was clearly biased in the reinsured companies' favor,<sup>3</sup> but the bias may be appropriate if the companies' perception of inadequate premium rates is accurate. Nevertheless, the imbalance reduced FCIC's ability to establish a reserve, and therefore expected distributions should be included in setting premium rates.
- Although it would be beneficial to vary the gain and loss formula by crop and region, the administrative costs of monitoring numerous formulas should be considered. Differences could, however, be recognized on a state basis.
- The reinsurance agreement could be structured along the lines of a more traditional quota share reinsurance contract with a stop-loss provision,<sup>4</sup> but there is a question about industry acceptance of such an agreement.

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## 1986 Agreement Continues Trend of Favoring Reinsured Companies

The 1986 agreement continues the trend of tilting the sharing of gains and losses in the reinsured companies' favor. Although FCIC attempted to reverse this trend in negotiations with the reinsured companies, its attempts were unsuccessful. FCIC's and our analyses both showed that the gain and loss sharing provisions in the 1986 agreement could increase program costs substantially.

Although the negotiations were not well documented, our discussions with FCIC officials and our review of available records indicate that FCIC had adequate data on which to base its decisions. FCIC used the actuarial firm's report and made cost analyses of the various proposals considered. FCIC apparently agreed to provisions that further tilt the sharing of gains and losses in the reinsured companies' favor because the reinsured companies were unwilling to accept other less favorable proposals made by FCIC.

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<sup>3</sup>In discussing the basis for this conclusion, the firm said that although the provisions were designed to provide the companies a target profit of 2.75 percent of premiums, which is comparable to private company direct sales, the amount of true risk assumed by the reinsured companies may be substantially less than the private companies.

<sup>4</sup>Under a quota share contract, the insurer cedes a fixed percentage of each policy to the reinsurer and shares in the gain or loss thereon with the reinsurer based on the percentage ceded. The reinsurer also pays the insurer a sales commission on the insurance ceded.

According to the former Manager, FCIC discussed a more traditional reinsurance arrangement with representatives of the reinsured companies before developing its initial proposal for 1986. He said that the arrangement discussed would have reduced the bias; however, it was unacceptable to the companies.

FCIC made at least six different proposals, the first of which it developed considering the actuarial firm's report. Also, FCIC made some limited cost analyses in developing its preliminary proposals and used a computer model to make a more detailed cost analysis of the final proposal, which was the one agreed to. In analyzing the final proposal, FCIC applied the proposal to all crop years 1981-83 sales, that is, both direct and reinsurance sales. This analysis showed that under the 1985 agreement, the reinsured companies would have absorbed a loss equal to 1.4 percent of premiums, while under the final proposal, the companies would have had a gain equal to 4.5 percent of premiums, a difference of 5.9 percentage points.

Our analysis shows that if the 1986 agreement had been in effect in 1984, the companies, rather than absorbing a loss of \$0.6 million on the total loss of \$79.9 million on the business they retained, would have been paid a gain of \$6.1 million. Thus, FCIC's costs would have increased by \$6.7 million, or 3.5 percent of 1984 premiums of about \$192 million. (See table 5.2.) Further, our analysis of individual companies' 1984 experience shows that while some companies' share of gains would have decreased and some companies' share of losses would have increased under the 1986 agreement, many companies would have been paid for a gain even though they had an overall loss on their business.

**Table 5.2: Comparison of Gain/Loss Sharing for All Reinsured Companies' 1984 Experience Under 1984 and 1986 Agreements**

Dollars in millions			
	1984 agreement	1986 agreement	Increase in gain or (loss)
Companies' share	(\$0.6)	\$6.1	\$6.7
FCIC's share	( 79.3)	( 86.0)	(\$6.7)
<b>Total loss</b>	<b>(\$79.9)</b>	<b>(\$79.9)</b>	

Source: FCIC's 1984 sales and loss information adjusted by GAO to compare the gain/loss sharing provisions of the 1984 and 1986 agreements.

## 1986 Agreement Will Reduce Benefits for Some Companies

The major problem tilting the previous agreement in the reinsured companies' favor was that the companies were to be paid for a "gain" even when their business resulted in a loss of as much as 128-1/3 percent of premiums. Under the 1986 agreement, this was changed so that companies operating within one state would share in losses when they have a loss ratio of more than 1.0, the breakeven point. (See table 5.3.) Also, a provision contained in the prior agreement that provided for an additional distribution of any net cumulative gain that each company experienced over a 5-year period was dropped from the 1986 agreement.

**Table 5.3: Comparison of Gain and Loss Sharing Percentages for 1986 and 1983-85 Agreements for One-State Companies**

1986 Loss ratio	Percent of premiums			
	Distribution of gain or (loss)			
	1983-85		One-state company <sup>a</sup>	
	Company	FCIC	Company	FCIC
0.00	11.33	88.67	15.375	84.675
0.40	11.33	48.67	12.375	47.625
0.75	11.33	13.67	9.751	5.250
0.90	6.67	3.33	7.000	3.000
0.95	5.00	0.00	5.000	0.000
1.00	4.25	(4.25)	0.000	0.000
1.10	2.75	(12.75)	(1.000)	(9.000)
1.28-1/3	0.00	(28.33)	(2.670)	(25.660)
1.60	(4.00)	(56.00)	(4.250)	(55.750)
2.00	(8.00)	(92.00)	(6.250)	(93.750)
3.00	(9.00)	(191.00)	(8.750)	(191.250)
5.33-1/3	(11.33)	(422.00)	(14.580)	(418.750)
5.65	(11.33)	(453.67)	(15.375)	(449.625)

<sup>a</sup>The 1986 agreement has new procedures for sharing of gains and losses for companies operating in more than one state.

Source: GAO report entitled Information on the Federal Crop Insurance Corporation's 1986 Standard Reinsurance Agreement (GAO/RCED-85-155, July 26, 1985).

The impact on FCIC's costs of the new gain and loss sharing provisions for companies operating in one state and the elimination of the 5-year distributions will likely be small. For example, applying the 1986 gain and loss sharing percentages to the 1984 experience of 17 companies, each of which operated in one state, shows that FCIC's costs would have decreased by about \$95,000. Also, FCIC estimates that under the 5-year distribution provision, which was dropped from the agreement, FCIC will pay reinsured companies \$1.7 million for the 1981-85 period.

## New Stop-Loss Provisions Could Increase FCIC Costs Substantially

FCIC proposed that stop-loss provisions be included in the 1986 agreement as part of its goal to operate as a traditional reinsurer. The specific provisions agreed to, could, however, increase FCIC's costs substantially.

The 1986 agreement contains two stop-loss provisions—State Stop Loss and National Stop Loss—that limit the amount of loss reinsured companies share in. Under the State Stop-Loss Provision, FCIC pays over 80 percent of a reinsured company's loss in each state in which the company had a loss before determining the amount of overall gain or loss to be shared in by FCIC and the company. More specifically, in determining the amount of overall gain or loss to be shared, FCIC includes 100 percent of gains for each state in which a reinsured company had a gain but includes only 10 percent of a loss for each state in which it had a loss of up to 200 percent of premiums and 20 percent of loss above 200 percent of premiums.

As illustrated in the following hypothetical example of a company operating in four states (table 5.4), the company will share in a gain of \$1,050 even though the company's total business resulted in a loss of \$300. The \$1,050 gain would then be used in calculating the company's loss ratio which, in turn, would be used to determine the amount of gain FCIC will pay the company in accordance with the procedures described below.

**Table 5.4: Hypothetical Example  
Illustrating FCIC's State Stop-Loss  
Provision**

State	Total gain or (loss)	Amount of loss absorbed by FCIC <sup>a</sup>	Amount of gain or (loss) company shares in
A	\$700		\$700
B	(1,000)	(\$900)	(100)
C	500		500
D	(500)	(450)	(50)
<b>Total gain or (loss)</b>	<b>(\$300)</b>	<b>(\$1,350)</b>	<b>\$1,050</b>

<sup>a</sup>Assumes a loss ratio of less than 2.0 under which FCIC would absorb 90 percent of the loss in each state.

If after applying the State Stop-Loss Provision described above, a company has an overall net gain, FCIC will pay the company 100 percent of the gain if it has a loss ratio above 0.95; 40 percent of the gain if it has a loss ratio of 0.85 through 0.95; and 7.5 percent of the gain if it has a loss ratio below 0.85. If the company had a loss, the loss is apportioned in accordance with the National Stop-Loss Provision described below.

As noted above, under the State Stop-Loss Provision, a company could actually be paid for a gain when in fact a loss occurred on the policies it wrote in all states. For example, had the 1986 agreement been in effect in 1984, one company would have been paid for a \$1.735 million gain on its business even though that business resulted in a total loss of about \$10.2 million. (See company D, table 5.5.) Under the 1985 agreement, the company would have had to absorb about \$495,000 of the \$10.2 million loss.

**Table 5.5: Comparison of Gain/Loss Sharing for Selected Reinsured Companies' 1984 Experience Under 1984 and 1986 Agreements**

Dollars in thousands

Company	Loss on business retained by companies	Distribution of gain (loss)			
		1984 agreement		1986 agreement	
		FCIC	Company	FCIC	Company
A	\$2,328	(\$2,354)	\$26	(\$2,700)	\$372
B	2,283	(2,194)	(89)	(2,424)	141
C	2,129	(2,258)	129	(2,889)	760
D	10,211	(9,716)	(495)	(11,946)	1,735
E	9,081	(9,229)	148	(11,244)	2,163

Source: FCIC's 1984 sales and loss information adjusted by GAO to compare the gain and loss sharing provisions of the current and prior agreements.

If after applying the State Stop-Loss Provision a company still has a loss on its total business, the National Stop-Loss Provision, shown in table 5.6 below, is applied.

**Table 5.6: National Stop-Loss Provision**

Percent of adjusted loss

Adjusted loss after applying State Stop-Loss Provision	Distribution of adjusted loss	
	Company	FCIC
If loss is: 100.0 to 105.0 percent of premiums	50	50
If loss is: 105.0 to 156.5 percent of premiums	25	75
If loss is: Over 156.5 percent of premiums	0	100

## Conclusions

FCIC had reasonably adequate data on which to make decisions on the gain and loss sharing provisions to be included in the 1986 agreement. It used the actuarial firm's study to help formulate its initial proposal, and it made cost analyses of the interim and final proposals. Nevertheless, the final agreement continues the trend of tilting the gain and loss sharing provisions in the reinsured companies' favor. FCIC's analysis showed that the provisions agreed to would have increased its 1981-83 costs by



5.9 percent of premiums, and we estimated that they would have increased FCIC's 1984 costs by 3.5 percent of premiums.

During its negotiations with reinsured companies, FCIC proposed provisions that would have been more favorable to the government than the provisions agreed to; however, the reinsured companies rejected these proposals. Although the reasons for FCIC's agreeing to provisions that further tilt the sharing of gains and losses in the reinsured companies' favor were not documented, the fact that the reinsured companies were able to reject FCIC's proposals indicate that they may have been in a better bargaining position than FCIC. FCIC's past efforts to expand the reinsurance program and eventually eliminate direct sales may also have made FCIC more willing to accept the final proposal. A continued reduction in the competition the reinsured companies face from direct sales would work to strengthen the companies' bargaining position further, and would, in our opinion, not bode well for future negotiations.

The 1986 agreement will result in reinsured companies' sharing in a greater portion of gains and a lesser portion of losses compared with prior years. This, in turn, will adversely affect FCIC's ability to establish a reserve for unforeseen losses because FCIC's premium rates do not include a factor for gains paid to reinsured companies. The new stop-loss provisions further tilt the gain and loss formula in the reinsured companies' favor. Of particular concern is that FCIC will have to pay companies for gains if their business results in an overall loss.

Considering FCIC's record of increasingly tilting the gain and loss sharing provisions in favor of the reinsured companies, we are not optimistic about FCIC's reversing this trend in the near future, particularly in light of FCIC's increasing reliance on reinsured companies.

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## Matter for Consideration by the Congress

The Congress should consider the actions taken by FCIC which continue to tilt the sharing of gains and losses in favor of the reinsured companies and, if necessary, amend the FCIC act to provide more specific guidance on how FCIC and reinsured companies should share in gains and losses.

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## Agency Comments and Our Evaluation

FCIC pointed out that its ability to establish a reserve for unforeseen losses on the policies companies cede to FCIC is not affected by the gain/loss share provisions. However, this comment is beside the point. Our discussion of the gain/loss share provisions was limited to the business

retained by the companies. Our report was revised to state this explicitly.

Also, FCIC said that one feature of the reinsurance agreement is to protect the companies against excessive loss experience on the portion of business that the companies retain. It said that for the business retained, FCIC and the companies have the potential of building a reserve proportionate to the risk borne. We disagree. The companies share in very little risk, yet would receive most of the net gain in a case where a company's indemnities equal 90 percent of premiums, FCIC's loss ratio goal. Also, as discussed in our report, the companies can receive payments under the gain/loss share provision even when their overall business results in a loss.

FCIC disagreed with our conclusion that there is little hope for reversing the trend of increasingly tilting the gain and loss sharing provisions in favor of the companies. It said that improvements in compensation to the companies have been primarily focused on making it possible for companies to survive the adverse experience since 1980, until premium rates are sufficient to solve the problem of FCIC's overall loss ratio of 1.5.

The tilting of the gain/loss share provision in the companies' favor based on a nationwide loss ratio, in our view, is not a sound business decision. Loss experience varies by company; one reason for this variance is that the companies cover different geographic areas and loss experience varies by geographic area. A nationwide loss ratio does not recognize this variance, but rather is based on a national average. If it is FCIC's objective to compensate reinsured companies because of inadequate rates, it would appear to be more cost effective to FCIC and more equitable to the companies to tailor the reinsurance agreements to each company's area of operation, as we recommended in our March 1984 report. In this way companies operating in geographic areas with adverse experience would be better able to survive and unnecessary subsidies to companies in other areas would be avoided.

# FCIC Has Acted to Enhance the Insurance Program's Actuarial Soundness

FCIC has taken a number of actions that, when fully and properly implemented, should enhance the crop insurance program's actuarial soundness. These actions address many long-standing concerns about FCIC's actuarial practices and center around two major efforts: the development of a computerized model for setting premium rates and the development of insurance offers based on farmers' actual production histories. It will, however, be several years before these actions can be fully implemented.<sup>1</sup>

## Actuarial Requirements and FCIC Experience

The definition of actuarial soundness for crop insurance is much less stringent than the usual definition for a typical insurance program. The legislative definition is that crop insurance premiums should be sufficient to pay all claims and to establish, as expeditiously as possible, a reserve for unforeseen losses. FCIC's goal is that 10 percent of premium income will be available to establish the required reserve. A typical commercial insurance program must fix premiums not only to pay claims and establish a reserve but also to cover all expenses and to provide for a profit.

With indemnities exceeding premium income by about \$877 million during the first 5 years of the expanded crop insurance program, it is clear that the program has not operated on an actuarially sound basis as prescribed by the Federal Crop Insurance Act. We and others have previously criticized FCIC's actuarial practices. In our March 1984 report,<sup>2</sup> we expressed concern that FCIC may have compromised the actuarial soundness of its insurance program by expanding the program under the 1980 act without addressing actuarial problems we identified, by neglecting its existing actuarial practices, and by delaying development of needed actuarial reports.<sup>3</sup>

<sup>1</sup>Also, in a recent review of the reinsured companies' loss adjustment activities, we found that the companies reviewed were not adjusting claims in accordance with governing policies and procedures and that this adversely affects FCIC's ability to establish an actuarially sound program. The results of our review were presented in testimony before the Subcommittee on Conservation, Credit, and Rural Development of the House Committee on Agriculture on April 29, 1987.

<sup>2</sup>GAO/RCED-84-65, Mar. 14, 1984.

<sup>3</sup>Although our report was issued in March 1984, we had apprised FCIC of our concerns about the crop insurance program's actuarial soundness by letter dated August 10, 1982.

## Summary of Actuarial Problems We Cited in March 1984 Report

In our March 1984 report, we said that, following the 1980 act, FCIC concentrated its efforts on expanding the program and did not give appropriate attention to the program's actuarial soundness.

- It did not do the research necessary to resolve long-standing concerns about its actuarial procedures. For example, previous government and industry studies had concluded that FCIC's procedures may result in excessive accumulation of reserves against catastrophic losses for some crops and not enough for others while accumulating insufficient reserves on an overall basis.
- It deferred normal actuarial review and evaluation activities needed to update and correct insurance offers and establish premium rates and coverages for new insurance offers. For example, crop year 1982 insurance offers for the grain, peanut, and tobacco crops were based on losses and yields experienced through crop year 1978 or earlier; and for cotton, on experience through 1975.
- It delayed development of various actuarial reports needed to analyze the most current experience on crop yields and losses. As of October 1983, only 7 of the 14 actuarial reports requiring revisions as a result of the 1980 act had been developed.

We also criticized FCIC's method of setting premium rates and insurance coverages by grouping farmers into a few large risk groups in each county based on estimated crop yields for a county or area within a county. This approach was termed the Area Coverage Plan. We said that rates and coverages set on this basis tended to attract higher risk producers, whereas establishing rates based on smaller risk groups and on actual crop yield data for each farmer would result in more equitable rates and coverages, thereby encouraging participation by lower risk producers. The program based on an individual farmer's actual yield data has become known as the Actual Production History Program, or APH.

We said that as a result of these deficiencies, the insurance program may not be actuarially sound and that FCIC had little assurance that the premiums set were adequate to cover potential loss claims. We made a number of recommendations directed at improving the program's actuarial soundness, which FCIC has since acted on.

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## FCIC Actions to Improve Actuarial Soundness

Regarding the research to resolve long-standing actuarial concerns, FCIC hired (1) an accounting firm to review its management practices and procedures to identify matters in need of attention and (2) an actuarial consulting firm to help resolve the problems identified by the accounting firm and others. The results of these studies and FCIC's actions thereon are summarized below.

The accounting firm that FCIC hired to review its management practices and procedures concluded, like us, that the most important changes FCIC needed to make were in the actuarial area. In its June 14, 1982, report, the firm recommended, among other things, that FCIC (1) revise and computerize its rate-making model and (2) hire an Associate or Fellow member of the Casualty Actuarial Society.<sup>4</sup> To help implement these recommendations, FCIC hired an actuarial consulting firm in 1983 to make a major study of FCIC's actuarial practices and develop a computerized rate-making model. The actuarial study and FCIC's actions in response to it are discussed below.

Regarding its recommendation that FCIC hire an accredited actuary, the firm said that while personnel in FCIC's actuarial department did a workmanlike job, they lacked a combination of mathematical expertise and insurance industry knowledge. As a result, FCIC's rate-making procedures remained relatively stagnant. Although FCIC did not hire an accredited actuary, an individual it hired in 1983 to oversee its actuarial department was working to become accredited at the time of our field work.

On the basis of the actuarial consulting firm's comprehensive analysis of the crop insurance program, FCIC made a number of changes that should help resolve the actuarial problems that have been of concern to our office and others. The actuarial firm, among other things, reviewed the priority matters identified by the accounting firm and designed a computerized rate-making model. The firm issued the last of 10 reports resulting from its analysis in December 1983. FCIC has adopted and acted on all of the firm's major recommendations. On the basis of our review and evaluation of these reports and FCIC's responses, we believe that the changes, if properly implemented, will enhance the program's actuarial soundness.

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<sup>4</sup>To qualify as a Fellow, a member must have passed all of the 10 required examinations; an Associate, 7 of the 10 examinations.

FCIC used the computerized rate-making model to establish premium rates for six crops in 1986: barley, corn, cotton, oats, soybeans, and wheat. FCIC officials estimate, however, that it will be at least 1990 before FCIC can accumulate the minimum amount of historical data needed to fully implement the model for these crops and thus ensure that its premium rates are actuarially sound. Also, FCIC limited the model's use to six crops because the model needs to be tested and validated before it can be adopted for use with other crops. The six crops were selected because of similar actuarial structures and because, as a group, they accounted for 76 percent of FCIC's premiums and indemnities in crop years 1981-85. In addition, one crop—soybeans—accounted for 55 percent of FCIC's losses in those years.

The new rate-making model was not fully implemented for even the six crops, however, because limits were administratively imposed on rate increases and decreases. FCIC used two different sets of guidelines limiting premium rate changes for the six crops. FCIC planned to limit premium increases to 15 percent to ensure stability in its rate structure and to not allow any decreases in premiums because of its cash flow difficulties. These limits were followed in establishing the 1986 premiums for barley, oats, and wheat. Before the model was used for corn, cotton, and soybeans, however, the Department imposed budgetary requirements on FCIC (see ch. 2) that resulted in FCIC's increasing the limit to 35 percent and allowing premium decreases of up to 5 percent.

Before it develops variations of its new rate-making model for use with other crops, FCIC plans to analyze the model's initial use and complete analyses necessary to validate assumptions incorporated in the model. At the time of our field work, only the Director of Actuarial Services and one other person he was training were qualified to use the model. FCIC officials told us that additional staff will be hired and trained to do the necessary work. Also, to fully implement the model, FCIC needs to accumulate additional farmer production data under APH and loss experience by coverage level. Due to the lack of such data, FCIC applies the model on a statewide basis only; premium rates at the county level are devised by apportioning the state premium rates to counties based on the historical relationship between state and county premium rates.

In response to the consultant's recommendations, FCIC made three other program changes that should result in more equitable and actuarially sound premium rates. First, in analyzing the relationship between the rates charged for the three coverage levels (that is, the 50-, 65-, and 75-percent coverage levels), the consultant reviewed (1) the loss experience

for corn and wheat for the three coverage levels by state and nationwide and (2) individual farm production data in areas where production data records were available for corn, cotton, soybeans, and wheat. The consultant concluded that the premiums charged for the 75-percent level should be increased between 10 and 30 percent relative to the 65-percent level for the crops reviewed as well as for other crops. The firm could not reach a conclusion about the relationship between the 50- and 65-percent levels because of the limited number of policies written at the 50-percent level. FCIC made adjustments that increased the relative difference between the 75- and 65-percent levels in the premium rates for crop year 1986.

Second, in analyzing FCIC's practice of offering premium discounts and imposing surcharges based on farmers' loss experience, the consulting firm found that the experience-rating system FCIC used to determine the discounts and surcharges was not a good predictor of future risk and was not providing significant actuarial benefit to the program. FCIC began phasing out its discount/surcharge system in 1985.

Third, the firm's analysis of loss experience for various levels of farmer productivity showed that the variability in year-to-year yields for high-yield producers was lower than the variability for low-yield producers. Therefore, the consultant recommended that premiums be fixed to reflect this difference. FCIC made such adjustments to premiums for crop programs converted to the APH Program and for which its new premium-rate-making model was applied.

## Actual Production History Program Eliminates Need for Periodic Updates of Area Yield Data

FCIC has implemented a system to obtain actual crop yield data and now bases insured yields on these data rather than on estimated area average crop yields for nearly all crops. Under FCIC's revised system of establishing insured yields, the periodic updating of area average yields is no longer necessary. (Ch. 7 discusses this change in detail.)

At the time of our March 1984 report, FCIC procedures required that it (1) review about 20 percent of county crop program structures to determine whether each county had an appropriate number of areas and whether the area boundaries should be changed and (2) update the expected yield for about one-third of its county crop programs each year. This was to be done for each crop in each area within each county. The reviews were important because, at the time, a farmer's insured yield was based on the average yield of the area in which the farm was located. The need for these periodic updates of area averages, however,

was eliminated as FCIC began establishing yields based on each farmer's own production history under the APH Program. According to FCIC plans, APH, which was first used for two crops in 1984, will be fully implemented by 1987.

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## Premium Rate Adjustments Rely Heavily on Judgmental Decisions

At the time of our prior review, FCIC used a statistically based method of periodically reworking premium rates. Under these procedures, FCIC required that its rate-setting formula, along with the most recent loss experience available, be used to establish new rates. FCIC's Actuarial Division was to annually review FCIC's experience and update premium rates on about one-third of the county crop programs. As we reported, FCIC had deferred these reviews to carry out program expansion following passage of the 1980 act. Rather than reinstate these reviews, FCIC instituted a special procedure to adjust premium rates for crop years 1983-85. This procedure relied heavily on judgmental decisions to adjust rates in 1983 and, for many crop programs, the 1983 rates remained in effect for 1984 and 1985.

Under the procedures in effect at the time of our prior review, it took FCIC from 2 to 4 years under the best of circumstances before the losses experienced in a given year would be included in the premium rates. Accumulating the data, evaluating the experience, and processing the changes took about 1 year. Because only one-third of the county rates were evaluated each year, it took 3 years to fully incorporate this information into the rates. For example, the 1980 experience would be incorporated into premium rate changes during the 1982-84 crop years. However, because FCIC deferred these procedures to concentrate on its expansion efforts, incorporating loss experience into premium rates was delayed even further. This was a critical factor affecting the program's actuarial soundness because, beginning in 1980, FCIC began experiencing losses that were much higher than in previous years.

FCIC used a special procedure to incorporate the loss experience of crop years 1980-81 into premium rates for 1983. On the basis of data analysis and some judgmental decisions, FCIC developed tables that prescribed percentage increases and decreases in premium rates according to state and county loss ratios. Adjustments, however, were limited to a maximum decrease of 16 percent and a maximum increase of 20 percent.

The 1983 rates remained in effect for crop years 1984-85, except for those crop programs or areas for which a program change, such as the switch to actual production histories, occurred. For crop programs or



areas affected by a change, FCIC officials adjusted the rates based on judgmental decisions.

Judgmental decisions also were used in setting premium rates for crop year 1986. The new rate-making model was used to develop premium rates for the six crops based on historical data at the state level rather than at the county level because required historical data at the county level were not available. To arrive at the premium rates at the county level, FCIC applied the historical ratio of county-to-state premium rates against the state rates established through the new rate-making model. According to FCIC officials, reliable data at the county level will not be available before 1990.

To adjust premium rates for crops for which the rate-making model was not used in 1986, FCIC officials established a table that prescribed the percentage adjustment to county premium rates based on premium volume and loss ratios. Like the procedure used to adjust premium rates for 1983, development of the table relied heavily on judgmental decisions and, thus, was not statistically valid.

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## All Required Actuarial Reports Have Been Developed

The 1980 act required (1) new and/or modified programs to collect and report data in FCIC's actuarial information system and (2) changes that led to revisions in the format of the reports depicting the insurance experience. The data to be collected and reported related to such things as the three yield guarantee levels, higher price elections, subsidized premiums, and the shift toward private industry involvement. As a result, FCIC requirements for information on acreage reporting, loss claims, marketing, and actuarial experience were all affected by the act. The reporting system for accumulating and displaying actuarial data on FCIC's insurance experience was especially affected. The format of at least 14 reports had to be changed and the presentation of FCIC insurance offers had to be modified. In our March 1984 report, we said that as of October 1983 only 7 of the 14 reports had been developed.

Since October 1983, FCIC has developed all the reports needed to collect the required actuarial data. As discussed previously, however, it will be several years before FCIC can accumulate all the data it needs to ensure that its premium rates are adequate.

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## Conclusions

FCIC's deferral of normal actuarial practices while it concentrated on program expansion created problems that FCIC has yet to recover from.

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FCIC incurred major losses in every year of the expanded program. More recently, FCIC has taken actions that should enhance the actuarial soundness of the crop insurance program. It will be several years, however, before FCIC can fully implement these actions and establish premium rates on an actuarially sound basis. In the meantime, many decisions affecting premium rates will, as they have since the expanded program began, continue to rely heavily on judgmental decisions.

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**Agency Comments**

FCIC said that it had no major disagreements with our conclusions.

# Move to Actual Production Histories Justified But Was Completed Without Evaluation Required by Act

A number of studies made prior to FCIC's decision to implement the Actual Production History Program recommended that FCIC replace its system of setting farmers' insured yields based on area averages with one based on farmers' individual production histories. Accordingly, we believe that FCIC had adequate support that a production history-based program was needed before it made its decision to implement the APH Program. However, FCIC did not fully comply with a provision of the 1980 act that requires FCIC to implement, evaluate, and report on an actual production history, individual risk-underwriting pilot program, which differs from APH in that additional factors, such as a farmer's loss experience, are considered. FCIC never implemented the required pilot program and, although FCIC issued a report on APH in July 1986, the APH Program had already been implemented on a national basis for nearly all crops.

## Studies Support Need to Set Yields Based on Farmers' Own Data

An FCIC consultant, a USDA task force, our office, and others have recommended over the years that FCIC develop a system of establishing insured yields based on farmers' actual production histories. These studies showed that the Area Coverage Plan (ACP) that FCIC used prior to APH encouraged farmers with below-average production to participate in the program and discouraged farmers with above-average production from participating. This resulted in what is commonly referred to as adverse selection.

Under ACP, adverse selection resulted from the fact that a farmer's insured yield was based on the average yield of all farmers in a county or other geographic area rather than on the farmer's own yield. The problem of adverse selection and how it is corrected under APH is illustrated in table 7.1 and discussed below.

**Chapter 7**  
**Move to Actual Production Histories**  
**Justified But Was Completed Without**  
**Evaluation Required by Act**

**Table 7.1: Hypothetical Example**  
**Depicting Differences in Yield**  
**Guarantees Under the Area Coverage**  
**Plan and the Actual Production History**  
**Program**

Bushels per acre	Farmer Jones	Farmer Brown
Area coverage plan: (Assumes an area average yield of 100 bushels of corn per acre and insurance coverage level selection of 75 percent)		
Actual average yield	75	125
Guaranteed yield	75	75
Loss needed to have claim	1	51
Actual production history program:		
Actual average yield	75	125
Guaranteed yield (75 percent)	56	94
Loss needed to have claim	20	32

Source: FCIC data developed for GAO.

In the hypothetical example shown, farmers Jones and Brown would be guaranteed the same production level under ACP, 75 bushels of corn per acre (75 percent of 100 bushels). Hence, farmer Jones could file a claim for a production loss of only 1 bushel per acre below his actual average yield of 75 bushels while farmer Brown would have to suffer a loss of 51 bushels per acre below his actual average yield of 125 bushels before filing a claim. Also, both farmers would be charged the same premium per acre, assuming the same price guarantee selection. Therefore, it is clear why farmer Jones would be more likely to participate in the insurance program than farmer Brown.

Under APH, farmer Jones' guarantee would be 56 bushels per acre (75 percent of 75 bushels) and farmer Brown's guarantee would be 94 bushels (75 percent of 125 bushels). Thus, farmer Jones could file a claim with a production loss of 20 bushels per acre, or a decrease in production of about 27 percent, and farmer Brown could file a claim with a loss of 32 bushels, or a decrease of about 26 percent. As the example shows, under APH, both farmers would have to suffer about the same percentage loss to be eligible to file a loss claim.

## 1980 Act's Requirement for Study and Evaluation Not Satisfied

The 1980 act requires that FCIC conduct, in at least 25 counties, a pilot program of individual risk underwriting with rates based on a farmer's individual loss experience and with yield guarantees determined from the farmer's actual yield history. Under an individual risk-underwriting program, farmers would be classified into risk categories based on their loss experience. This is different from APH which is used solely to determine a farmer's average production to arrive at the yield that FCIC will guarantee.

The pilot project was to begin in 1981 and end after the 1985 crop year. Further, the act requires FCIC to evaluate the pilot program after its completion and submit a report on the program's operation to the House Committee on Agriculture and the Senate Committee on Agriculture, Nutrition, and Forestry. The report is to include FCIC's recommendations with respect to implementing the program on a national basis. In September 1985, the House Committee on Agriculture, in its report on the Food Security Act of 1985 (H.R. Rep. No. 99-271), referred to this requirement and stated that APH was an outgrowth of the 1980 act and therefore the Committee expected FCIC's report prior to expansion of the APH Program. FCIC's report on the APH Program was issued in July 1986.

Although FCIC has tested different types of production-based yield-guarantee programs, it never formally evaluated and reported on any of them until after the APH Program was implemented on a national basis for nearly all the crops. However, FCIC used the experience gained under these programs in making changes and in establishing the APH Program. A brief description of some of the production-based programs FCIC has implemented follows.

- Individual Yield Coverage - Under this voluntary program, initiated in 1982, farmers having above-average yields were permitted to establish yield guarantees based on their actual production records.
- Growers' Yield Certification - This program, initiated in 1983, formalized FCIC's long-standing practice of insuring yields on the basis of processor or other marketing records for crops where county average yield data were not available.
- APH - This program has been implemented gradually, going from a total of 2 crops in 1984 to 6 in 1985 and 17 in 1986. By 1987, the APH concept will be implemented for all but specialty crops for which a totally different procedure—the Dollar Plan, which is based more on crop value than yields—is used.

In explaining why APH was not evaluated and reported on before it was implemented on a national basis, the former Manager told us that APH was still considered developmental in that many farmers did not have the records needed to implement the program as designed. Thus, he said that because the program was not fully developed, it could not be properly evaluated. The private-sector Board members told us that the Board considered establishing a pilot program for individual risk-underwriting as called for by the act when it decided to implement APH; however, the Board decided that (1) FCIC did not have the resources to implement both programs and (2) an individual risk-underwriting program could not be developed without first going through an APH Program that would encourage farmers to develop adequate production records.

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## **Actual Production History Program's Impact on Farmer Participation Not Studied**

One concern about APH is that it could adversely affect farmer participation in the crop insurance program because farmers might be unable to provide the production data FCIC requires.<sup>1</sup> This is the kind of issue that FCIC could have addressed if it had complied with the act's requirements to establish and study a pilot program. Instead, FCIC addressed this problem after implementing the APH Program by revising and loosening production data reporting requirements.

Comparing program participation for the year APH was implemented with the preceding year for the six crops covered by APH in 1984-85 shows that participation dropped for five of the six crops. (See table 7.2.) The only crop without decreased participation was cotton; however, the preceding year's production, and hence participation, had declined due to the Payment-in-Kind Program.<sup>2</sup>

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<sup>1</sup>The House Committee on Agriculture expressed concern about the negative impact APH could have on participation in its report accompanying the Food Security Act of 1985 (H.R. Rep. No. 99-271).

<sup>2</sup>The production history-based program used for cotton and rice was similar to, and a forerunner of, the APH Program.

**Chapter 7**  
**Move to Actual Production Histories**  
**Justified But Was Completed Without**  
**Evaluation Required by Act**

**Table 7.2: Acres Insured Before and After Implementation of APH in 1984 and 1985**

Crop	Acres in thousands		
	Year prior to APH	Year APH implemented	Percent increase (decrease)
Crops converted in 1984:			
Cotton <sup>a</sup>	981	2,123	116
Rice <sup>a</sup>	162	137	(15)
Crops converted in 1985:			
Corn	9,897	8,150	(18)
Grain sorghum	1,914	1,559	(19)
Peanuts	604	449	(26)
Tobacco	348	264	(24)

<sup>a</sup>In analyzing the data on cotton and rice, it should be noted that the 1983 production level was substantially lowered by the Payment-in-Kind Program.

Source: GAO calculations based on FCIC data.

The extent to which the declines shown in table 7.2 can be attributed to APH is not known because many factors affect farmers' decisions about whether to buy insurance. Nonetheless, the concern that APH could create participation problems led to several actions to ease reporting requirements and thereby limit the impact of APH on participation. Some of these actions were:

- Beginning in crop year 1986, farmers no longer were required to support their reported production histories with documentary evidence but instead could simply certify the accuracy of their reported production histories. FCIC plans to review and verify the accuracy of 15 percent of the production histories submitted by farmers each year.
- Beginning in crop year 1986, farmers growing crops that are mainly consumed on the farm could substitute estimates made by FCIC personnel for actual production histories.
- Beginning in crop year 1987, farmers unable to provide actual production history records will be able to obtain insurance but the coverage will be limited to the coverage they had in 1986. Their coverage in 1988 and subsequent years will be limited to 75 percent of their 1986 coverage.

## Conclusions

In our opinion, FCIC had ample evidence demonstrating that its system of determining farmer yields based on area averages should be replaced with one based on farmers' actual production histories. FCIC, however,

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**Chapter 7**  
**Move to Actual Production Histories**  
**Justified But Was Completed Without**  
**Evaluation Required by Act**

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did not fully comply with the requirements of the 1980 act to establish and evaluate an individual risk-underwriting pilot program. Further, FCIC implemented the APH Program on a national basis before preparing the required evaluation report. Board members said that APH experience was needed before an individual-risk program could be implemented and that FCIC did not have the resources needed to handle both APH and individual risk-underwriting programs.

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**Agency Comments**

FCIC said that it had no major disagreements with our conclusions.



# Decision to Change Definition of Farm Unit Not Adequately Supported

FCIC's Board of Directors approved a resolution in April 1985 limiting the subdivision of insurable farm units. It acted because of a long-standing belief that farmers having multiple units insured by FCIC manipulated unit production records to qualify for or increase claim payments. As a result of strong opposition from farmers and others, the Board agreed to delay the full implementation of its decision until the matter could be aired in public hearings and studies could be made. Although the Board and FCIC management believed that production records were being manipulated, studies made subsequent to the Board's decision did not support this perception, and the Board rescinded its decision. In our opinion, the Board did not have accurate and complete information on which to base its initial decision.

Subsequently, the Board decided that beginning in 1988 a premium surcharge would be imposed on farmers electing to insure multiple units. The Board's rationale for this decision was that multiple units increase FCIC's risk of loss. Although the studies discussed above do not support this contention, FCIC was continuing to study this matter, including possible alternatives to the surcharge.

## Basis for Decision on Farm Units Unsubstantiated

On April 10, 1985, the Board approved a resolution that placed restrictions on the subdivision of farms into multiple units. Under the resolution, all farm units with the same crops within a county were to be considered as one unit for insurance purposes for crop year 1986 and all within a state for crop year 1987. Previous FCIC policy permitted a farmer the option of subdividing a farm into multiple units, subject to certain limitations and guidelines.

FCIC officials and Board members we talked with said that concern about farmers manipulating unit production records to qualify for or increase a loss claim had been a long-standing concern of FCIC. With a farm subdivided into two or more units for insurance purposes, there is the potential for a farmer to purposely record or report production from one unit as coming from another, thereby underreporting production on a unit to qualify for or increase an insurance claim.

The Board and FCIC management devoted considerable effort to this issue. For example, the Board discussed the subdivisions of farms in 12 of the 30 meetings it held from late 1980 to April 1985. Further, FCIC management and staff devoted considerable effort to analyzing and developing proposals to change the unit rules. No studies were made,

however, to determine to what extent farmer manipulation of production records was a problem. FCIC implemented the Board's April 1985 resolution for two crop programs, forage production and raisins, in June and July 1985, respectively.

In response to strong farmer and industry opposition to its April 1985 decision, the Board, on September 16, 1985, voted to delay further implementation of its resolution for 5 months so that actuarial studies could be made and field hearings held. Accordingly, studies were made by FCIC and by the Crop Hail Insurance Actuarial Association. FCIC issued a report on its study on March 28, 1986, and CHIAA reported the results of its study to the Board on April 10, 1986. FCIC's field hearings were held in 12 locations throughout the country in November 1985. The former Manager reported the results of these hearings to the Board on April 7, 1986.

FCIC's and CHIAA's studies produced similar results. In summary, they found that (1) as the number of units per policy increased, the amount of the claim in relation to the insured liability decreased and (2) the more units there were on a policy, the more likely there would be a loss on that policy. In our opinion, neither finding supports the contention that farmers having multiple units constitute a significant and costly problem due to farmer manipulation of production records. As discussed below, the finding that the greater the number of units, the greater the potential for loss can have a legitimate cause.

As a result of the public hearings, FCIC found that the farmers opposed the decision because, among other things, it could result in eliminating claims for small or spot losses. Crops grown on one unit of a farm can be adversely affected by a natural hazard, such as hail or flood, that does not affect the crops grown on other units. In such a case, a farmer would be more likely to qualify for a claim if he or she had multiple insurance units because the yield on an affected unit is not averaged in with yields from unaffected units.

On May 8, 1986, the Board rescinded its decision. In its comments on a draft of their report, FCIC said that the Board voted to rescind its decision on the basis of the reaction of the Congress and producers. On the same day it rescinded its decision, the Board passed a resolution that FCIC begin requiring farmers subdividing farm units to pay a premium surcharge to cover the additional risk of policies with multiple units beginning in crop year 1988. The Federal Crop Insurance Act, as amended, does not allow FCIC to include administrative and operating

expenses in fixing premium rates. Thus, the surcharge cannot be imposed on the basis of the increased administrative costs associated with the handling of multiple units. It could, however, be imposed if justified on the basis of increased risk. The Board's rationale for imposing the surcharge is that multiple units in fact increase the risk for losses.

As discussed above, the two studies on the subject of units showed that as the number of units insured on a policy increased, the number of claims also increased but that this was offset by a decrease in the total dollar amount of the claims. CHIAA, in its report, stated that there are insufficient data to determine how FCIC losses are affected by the number of units. According to FCIC's Deputy Manager, FCIC was continuing to study this matter and, on the basis of the study results, FCIC may develop alternatives to the surcharge for the Board of Directors' consideration or find that the surcharge is justified on the basis of increased risks. According to FCIC, this study will also address the amount of the surcharge and how it should be administered.

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## Conclusions

The Board of Directors and FCIC management spent considerable time and effort to deal with what they perceived to be a major and costly problem, that is, farmer manipulation of production data among multiple farm units. Studies made subsequent to the Board's decision to limit subdivision of farm units, however, failed to support this perception, and the Board rescinded its decision. Moreover, the studies do not support the Board's subsequent decision to impose a premium surcharge on multiple units, which was based on the contention that multiple units increase FCIC's risk for losses. Although the Board's decision may prove to be supported by FCIC's current study, in our view, action by the Board to impose the surcharge was premature.

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## Agency Comments and Our Evaluation

FCIC said that it reversed its decision to change the unit definition guidelines based on the reaction of the Congress, including potential legislation on the subject, and producers' reaction. Also, FCIC said that the current studies were initiated not only to further support the decision to impose a surcharge but also to provide an indication of the amount of the surcharge and how it should be administered. FCIC expects to complete the studies in time for implementing the surcharge for the 1988 crop year. Our report was revised to acknowledge these comments.

# Legal Advice Provided FCIC on Some Matters Was Not Adequate

To ensure that its major program decisions conform to legislative requirements, FCIC generally has USDA's Office of the General Counsel review and approve such decisions. According to USDA's Deputy Assistant General Counsel responsible for FCIC activities, FCIC regularly asks OGC to review and approve all reinsurance and master marketer agreements, proposed changes to regulations, and major proposals presented to the Board of Directors. Furthermore, he stated that OGC attorneys are involved in all major litigation actions concerning FCIC and sit in on the Board of Directors' meetings and other meetings with master marketers and reinsured companies. Of the four issues having legal implications that we reviewed, we question three. The one issue we do not question involves FCIC's use of moneys appropriated to the FCIC Fund for premium subsidies to pay indemnity claims. The three we question involve

- transferring \$50 million in appropriations for administrative and operating expenses to the FCIC Fund to pay indemnity claims,
- reimbursing reinsured companies for the payment of state premium taxes, and
- funding reinsured companies' underwriting gains and losses with premium income.

## Amount Transferred Between Appropriations Exceeded Statutory Limit

Because its cash flow projections early in 1985 indicated that available funds would be insufficient to meet contractual commitments to pay claims, FCIC requested OGC's opinion on the legality of transferring \$50 million in appropriations for administrative and operating expenses to the FCIC Fund. According to OGC and FCIC officials, FCIC was orally advised that the transfer was legal. On the basis of OGC's advice, FCIC transferred the \$50 million in March 1985 under the authority of section 2257 of title 7 of the United States Code. Under this section, appropriated funds can be interchanged between accounts for miscellaneous expenses within any USDA bureau, division, or office subject to specified percentage limitations.

As part of a prior review, we apprised FCIC in August 1985 that, in our opinion, only \$14 million of the \$50 million could have been legally transferred.<sup>1</sup> We said that section 2257 limits the amount of appropriated funds that can be transferred to 7 percent of the total amount of the affected appropriation, in this case the Administrative and Operating Expenses appropriation, which totaled \$200 million for fiscal year 1985. Accordingly, we stated that USDA was obligated to transfer \$36

<sup>1</sup>See B-218812-O.M., July 30, 1985, and B-218812, Jan. 23, 1987.

million back to the Administrative and Operating Expenses appropriation.

In August 1985, FCIC restored the entire \$50 million to the Administrative and Operating Expenses appropriation from a supplemental appropriation.

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## Unearned Premium Subsidies Were Used to Pay Indemnities

On September 2, 1983, FCIC requested OGC's opinion on the legality of using unobligated appropriations not needed for premium subsidies in an account designated as the FCIC Fund to meet other contractual commitments. OGC's response of September 21, 1983, dealt with two central issues—whether unobligated premium subsidy appropriations could be used to pay other contractual obligations and whether these funds could be carried over from one fiscal year to the next, a practice FCIC was following at the time. OGC stated that funds appropriated for premium subsidy (1) cannot be used for other contractual obligations (that is, obligations other than those covered by section 508(b) of the act, which is described below) and (2) cannot be carried over. We agree with OGC on the first point and, on the basis of the statute in effect at the time, agree on the second point. Subsequent to OGC's decision, a statutory change was made allowing FCIC to carry over these funds from one year to the next. Thus, in our opinion, FCIC improperly carried over moneys appropriated to the FCIC Fund prior to the statutory change, that is, for fiscal years 1982-83.

As shown in table 9.1, appropriations to the FCIC Fund for fiscal years 1982-86 totaled about \$503 million, but only about \$402 million was needed to pay premium subsidies. FCIC used the balance of \$101 million to fund its losses, that is, the excess of indemnities over premium income. For the reasons discussed below, we believe that the use of these moneys to fund losses is legally permissible but that, as discussed in chapter 3, the practice hampers congressional budget oversight.

**Chapter 9**  
**Legal Advice Provided FCIC on Some Matters**  
**Was Not Adequate**

**Table 9.1: Amounts of Unearned Premium Subsidies Used to Pay Indemnities**

Dollars in thousands

<b>Fiscal year</b>	<b>FCIC'S initial subsidy request</b>	<b>Appropriation</b>	<b>Actual subsidy needed</b>	<b>Unearned premium subsidy</b>
1982	\$57,456	\$57,456	\$47,000	\$10,456
1983	145,000	115,575	91,417	24,158
1984	170,000	85,117	64,955	20,162
1985	157,000	110,000	98,776	11,224
1986	155,000	135,000 <sup>a</sup>	100,000	35,000
<b>Total</b>	<b>\$684,456</b>	<b>\$503,148</b>	<b>\$402,148</b>	<b>\$101,000</b>

<sup>a</sup>The fiscal year 1986 subsidy appropriation does not reflect a reduction of \$810,000 required by the Balanced Budget and Emergency Control Act of 1985, Public Law 99-177.

Source: FCIC budget data.

Section 508(b)(1) of the Federal Crop Insurance Act, as amended, authorizes FCIC to fix adequate premiums for insurance at such rates as the Board deems actuarially sufficient to cover claims for losses on such insurance and to establish a reserve for unforeseen losses, and section 508(b)(3) directs FCIC to subsidize a portion of farmers' premiums. Accordingly, the premium subsidy, as part of premium income to the Fund, is intended to be used to pay indemnities. Because the appropriations for section 508(b) are lump-sum appropriations that are not specifically restricted to premium subsidy payments, in our opinion, moneys appropriated to the fund that are not used for the premium subsidy can be used to pay indemnities.

At the time of OGC's September 1983 response, appropriations to the FCIC Fund were 1-year appropriations and thus could not be carried over to subsequent years. Beginning with the agriculture appropriations act for fiscal year 1984, however, a section in the general provisions included the appropriation to the fund in a group of appropriations that specifically were to remain available until expended, essentially making them no-year moneys.

Accordingly, the carryover of unobligated funds appropriated for the FCIC Fund for fiscal years 1982 and 1983 violated USDA's appropriations acts and may also have violated the Antideficiency Act (31 U.S.C. 1341), to the extent that they were used to make expenditures in excess of amounts properly available for expenditures in those fiscal years. The Antideficiency Act prohibits expenditures or obligations exceeding amounts available in an appropriation or fund. In accordance with the Antideficiency Act, FCIC should report to the President and the Congress

and state what, if any, corrective action will be taken. Technically, FCIC also should seek restoration of any carryover amounts improperly expended through a supplemental appropriation; however, because appropriations to the FCIC Fund are now no-year moneys, this would not appear to serve any useful purpose.

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## Reimbursing Reinsured Companies for State Premium Taxes Not Legally Permissible

USDA's OGC reviewed and approved FCIC's 1986 Standard Reinsurance Agreement, which contained a provision for FCIC to reimburse reinsured companies for premium taxes paid to state governments for insurance policies sold in those states up to prescribed limits. In prior years, companies had incurred this expense but had not been directly reimbursed for it by FCIC.

In our opinion, reimbursing reinsured companies for state premium taxes is not legally permissible. The Federal Crop Insurance Act, as amended, specifically exempts FCIC from the payment of all taxes imposed by the United States, the states, and local governments. Further, the act directs FCIC to pay operating and administrative costs incurred by reinsured companies to "the same extent that such costs are covered by the Corporation on the Corporation's policies of insurance." Thus, because FCIC cannot pay state premium taxes on its own insurance policies, FCIC cannot pay such costs to reinsured companies.

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## Funding of Reinsured Companies' Gains Adversely Affects Establishment of Reserve

Although the 1980 act is not clear about how FCIC should fund underwriting gains and losses for reinsured companies, the OGC did not raise this issue when it reviewed and approved the standard reinsurance agreement. This issue is particularly important because FCIC's funding of the reinsured companies' gains through premium income adversely affects its ability to establish the reserve for unforeseen losses, which is required by the act.

The Federal Crop Insurance Act, as amended, provides that FCIC fix premium rates that are actuarially sufficient to cover claims for losses and to establish as expeditiously as possible a reasonable reserve for unforeseen losses. FCIC rates are fixed so that 10 percent of the premiums charged are to fund the required reserve. In accordance with the standard reinsurance agreement, reinsured companies share in underwriting gains and losses. Therefore, funding of the reserve is lessened to the extent that the gains paid by FCIC to the reinsured companies exceed the amount of losses reinsured companies absorb. As discussed in chapter 5,

the 1986 reinsurance agreement will increase the proportion of gains paid to reinsured companies.

The question of the proper funding of the reinsurance companies' gains came to our attention as a result of a review of this matter by USDA's Office of the Inspector General. In a January 13, 1985, response to an OIG inquiry, USDA's OGC stated that in fixing premium rates, it is not legally permissible to include amounts needed to cover the underwriting gains and losses of reinsured companies. We concur and note that FCIC does not include such amounts in fixing rates. Further, although FCIC's act is quite clear on this matter, it is not clear as to the source of funding for the underwriting of reinsurance gains and losses. USDA's OGC did not raise and resolve this issue.

The House and Senate legislative committees, in their reports on the 1980 act, pointed out that using premium income for administrative and operating expenses, as was previously done, prevented the buildup of an adequate reserve for loss payments in catastrophic crop years. The committees said that in the absence of an adequate reserve, FCIC had to rely on capital stock subscriptions in years of catastrophic losses to raise money to cover the claims. This caused a continual drain on FCIC's capital stock.

Similarly, the funding of reinsured companies' underwriting gains and losses through premium income can adversely affect FCIC's ability to establish a reserve and can contribute to a drain on FCIC's capital stock. For example, as discussed in chapter 5, if FCIC achieved its loss ratio goal of 0.9 on policies retained by the reinsured companies, only 3 percent of premium income generated through reinsurance would be available for FCIC's reserve rather than 10 percent. The difference, 7 percent, would go to reinsured companies under the gain and loss sharing provisions.

In a November 1986 report on this matter, USDA's OIG recommended that the FCIC Manager propose legislation to amend the Federal Crop Insurance Act to provide for funding reinsurance underwriting gains and losses or seek an alternative source of funding for this program provision.<sup>2</sup> In an August 8, 1986, reply to a draft of the OIG's report, FCIC said

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<sup>2</sup>Federal Crop Insurance Corporation, *Crop Reinsurance Program Funds, Washington, D.C., and Selected Field Locations* (Audit Report No. 05607-2-FM, Nov. 6, 1986).



that its proposed legislation to privatize crop insurance, provides, at section 508(b)(1)(iii), that the premium be sufficient to cover all administrative and operating costs of the Corporation.<sup>3</sup> The OIG said that the proposed legislation, when implemented, would satisfy its recommendations. Although the proposed legislation expired with the 99th Congress, similar legislation was proposed in the 100th Congress. OIG's Program Operations Division Director told us that the OIG plans to continue to pursue this matter with FCIC through final resolution.

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## Conclusions

FCIC has adequate procedures to ensure that the major decisions it makes are first reviewed and approved by USDA's OGC. However, OGC's review and approval process, in some instances, did not prevent our questioning certain decisions. We do not mean to imply by this that FCIC should have sought our opinion.

Although approved by OGC, \$36 million of the \$50 million transfer of administrative and operating expense appropriations did not conform to applicable law. Also, OGC reviewed and approved the reimbursement of state premium taxes, which, in our opinion, is not legally permissible. To make such reimbursement proper, the Federal Crop Insurance Act would have to be amended. More specifically, part of section 508(e) of the act, which states that FCIC can only pay the reinsured companies' administrative and operating costs to the same extent that these costs are covered by FCIC when it writes insurance, would have to be changed to authorize such reimbursement because FCIC cannot pay such taxes on the policies it writes.

Moreover, we believe that in reviewing and approving the initial reinsurance agreement, OGC should have raised and resolved the question as to the proper funding of the reinsurance underwriting gain and loss provision called for in the agreement. FCIC's act requires FCIC to establish a reserve as expeditiously as possible and FCIC has determined that a 10-percent-of-premium factor would provide it with an adequate reserve for its unforeseen losses. However, if FCIC's loss ratio goal was met, the bulk of the 10 percent would be paid to reinsured companies and not be available to FCIC. In view of our recommendation that the Congress consider legislation that would specify how FCIC and the reinsured companies should share in gains and losses (see chapter 5), we are not making any recommendation on this matter.

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<sup>3</sup>Senate Bill No. S. 2851.

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## Recommendation to the Secretary of Agriculture

We recommend that the Secretary of Agriculture direct FCIC's Board of Directors and Manager to either (1) revise subsequent reinsurance agreements by deleting the provision requiring FCIC to reimburse the reinsured companies for state premium taxes or (2) propose legislation authorizing FCIC to reimburse reinsured companies for such taxes.

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## Agency Comments and Our Evaluation

FCIC said that this chapter most clearly illustrates the issue of our use of hindsight in evaluating FCIC's decision-making process. FCIC notes that although we said that it sought legal advice in making decisions, we concluded that certain legal opinions FCIC received and acted on were at variance with our opinion. FCIC said that it is concerned with the implication that FCIC must seek unanimity of legal opinion within government.

FCIC correctly characterizes our conclusions. However, we take issue with its statement about our use of hindsight. USDA's OGC had available to it the same material, including applicable statutes and legislative history, as we did in arriving at its opinions. The fact that we arrived at a different decision than USDA's OGC, does not, in our view, support FCIC's contention that we based our decision on hindsight. (FCIC's contention that we used hindsight in reviewing its decisions is discussed in greater detail in our supplemental comments in app. I.)

Regarding FCIC's comment on the need for it to seek unanimity of legal opinions within the government, we did not intend to imply that FCIC should have sought our opinion before making its decisions. The final report explicitly states this.



# Comments From the Federal Crop Insurance Corporation, U.S. Department of Agriculture

Note: GAO comments supplementing those in the report text appear at the end of this appendix.



United States  
Department of  
Agriculture

Federal  
Crop  
Insurance  
Corporation

Office of  
the Manager

Washington, D.C.  
20250

To: J. Dexter Peach, Assistant Comptroller General  
Resources, Community, and Economic Development Division  
General Accounting Office

9 APR 1987

From: Manager

Subject: GAO Draft Report, RCED-87-77, Dated March 1987, Entitled "CROP INSURANCE"  
Federal Crop Insurance Corporation Needs to Improve Decision-making"

Attn: 1540 (87-23)

The Federal Crop Insurance Corporation herewith transmits comments on the subject GAO Draft Report RCED-87-77.

The comments are those of the Corporation only and have been reviewed by OBPA. No comments were received from other agencies. Therefore, this constitutes the Department's response to the Draft Report.

E. RAY FOSSE

Attachment



Federal Crop Insurance Corporation  
is an agency of the  
United States Department of Agriculture

**Appendix I  
Comments From the Federal Crop Insurance  
Corporation, U.S. Department of Agriculture**

The Federal Crop Insurance Corporation (FCIC) has reviewed the GAO Draft Report, RCED-87-77, and submits the following comments on the contents and conclusions contained therein.

The GAO notes that

"The overall objective of our review was to determine whether key management decisions affecting FCIC's financial viability and operations were based on complete, accurate, and up-to-date information. . . ."

We have a concern, however, that in each chapter the GAO makes judgements based on their review of the course of action taken by the FCIC in the conduct of the business analyzed in the chapter. We observe that these conclusions are drawn with the benefit of considerable hindsight. In some cases these observations are made in light of specific consequences which, in most cases, could not have been evaluated in the decision-making process.

The GAO notes that management and the Board acted on the basis of some certain body of knowledge, and carefully reviews that body of material in most cases. It is then alleged that the body of knowledge was, in hindsight, inadequate or inaccurate to support the decision made.

We do not contend that, in every case the courses of action taken were correct in the perspective accorded to hindsight. We are concerned that, far more often than is suggested by the contents of this Report, actions were taken with the best collective managerial judgement applied to the best body of collectible and available information.

In the absence of all information and data, in the real world, Boards and Managers make informed judgments and proceed. They must accept the material available, and the need to act, promptly and forcefully in many cases, in the conduct of the business at hand.

A major conclusion that illustrates the basis of our concern appears in the Executive Summary where FCIC equality of treatment of the delivery systems is questioned and the deficiencies in business forecasts is noted. Having raised these questions, we are concerned that the investigators failed to note that in several speeches and in three Congressional hearings, current management has stated unequivocally its intention to treat the delivery systems equally; and that management adjusted forecasts of business as early as July, 1986, as part of its review of future budgetary needs. We realize the necessity to report on potential deficiencies and apparent discrepancies, however, we wish to raise several other aspects of the Report on which we would like to comment.

See comment 1.

See comment 2.

#### BUDGET FORECASTING

The essential element of the conclusion drawn herein, and the recommendation, is that FCIC overestimated its business volume and therefore had inadequate forecasting methods.

It is suggested that, in the face of unrealized forecasts, a computerized model be developed. Inherent in the resort to modeling techniques is the realization that not all facts are at hand for decision-making. Modeling is a sophisticated "what-if" exercise. In other words, a computerized model only enables the swift calculation of a solution and of many variations of assumed value or values. Modeling cannot solve the problem of choice of assumption. In FCIC, the difficult assumption is how many producers will participate and at what economic levels. These choices must reflect both historical experience and prospects for changes in the factors affecting program participation and other key assumptions. Once these assumptions are fixed, our budget unit employs all fixtures of modeling to produce a budget proposal based thereon.

The situation is that, since our funding requirements are nearly 80% directly driven by sales level, even a minor error affects budget. A catastrophic loss year means increased loss adjustment costs as well as excess indemnities. The 10-16 month budgetary lead time noted in the Report is actually longer. FCIC began the 1988 budget process in July 1986, without any firm statistics on the 1986 business level and before 1987 sales had even begun.

The Report notes the Flood Insurance forecasting activity which they describe as "more systematic and objective" than for crop insurance. The same process of assumptions and computerized extensions does take place in FCIC. We are concerned that the major differences in program and the greater difficulty in establishing assumptions and estimating participation, while noted, are given insufficient recognition, particularly in view of the extended impact of a minor error on the budget.

#### DELIVERY SYSTEM SHIFT

The Report describes at great length the materials used by management to support the proposed shift to a reliance on the reinsured company delivery system to provide crop insurance. GAO's opportunity to review the matter led to a conclusion that the material was in some way inadequate or deficient. As a practical matter, as noted in the Report, a good deal of information was available to management, most especially the trend to the reinsured company delivery system and concern over the size and cost of the agency vis a vis the segment of business remaining on federal policies.

It is unfortunate that the Report fails to note that the FCIC followed the process of Notice and Rulemaking in this process. A thorough review and evaluation of the hundreds of comments received, including the concerns expressed by Members of the Congress, was precisely at the basis of the

**Appendix I  
Comments From the Federal Crop Insurance  
Corporation, U.S. Department of Agriculture**

decision to retain both delivery systems and to adjust the size and structure of the Corporation to realistically reflect sales and service levels.

While one could argue the various conclusions of this chapter of the Report, we simply note that the end-user, the producer, determines the choice of delivery systems. Further, present management has stated publicly and before three separate committees of Congress since May 1986 that FCIC policy is to encourage the sales of insurance by both reinsured companies and master marketers.

In addition, positive steps have been taken to materially increase the functions to be performed by master marketers to enhance their position and to achieve efficiencies and economies. As an example, for the 1988 contract, sales and service contractors will be given the opportunity to utilize electronic transmission and reporting methods to enhance their role in the processing system.

We believe we are dealing even-handedly with the two systems and cite the dramatic growth of individual participants in each system as evidence there is ample opportunity under either one. Finally, we firmly believe the producer has and should have the final say as to the source of crop insurance service.

**COMPENSATION RATES**

In reviewing the matter of compensation the GAO notes that the rate for master marketers "appear(s)" to be adequate, that they "do not (appear)" so for reinsured companies. A conclusion is drawn that such compensation "may" exceed what it would cost FCIC to provide the same services. The Report concludes that a certain interpretation of the 1980 Act is governing, and that legislative change would be required to proceed according to current FCIC policy. It is, on those bases, alleged that FCIC has not employed sufficient analysis and judgment.

As to the conclusion, FCIC believes its analyses show not only that rates of expense reimbursement do not exceed what it would cost FCIC to perform the same functions but may actually be less than such cost.

The GAO study cites the 1980 Act, Section 508(e):

". . .The Corporation shall also pay operating and administrative costs to insurers of policies on which the Corporation provides reinsurance to the same extent that such costs are covered by the Corporation's policies of insurance."

"To the same extent" is not the same as "in the same amount."

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In the same Section 508(e) the 1980 Act also recognized unique needs for discretion and judgment:

". . . And directed, notwithstanding any other provision of this title, to provide reinsurance, to the maximum extent practicable, upon such terms and conditions as the Board may determine to be consistent with subsections (a) and (b) of this section and sound reinsurance principles, to insurers. . . ."

As for new or clarifying legislation, we submit that framers of the original Act fully realized the several dilemmas which would obtain from the implementation of a business operation within the framework of government. They appear to have realized that there would be gray areas for which they further provided a Board of Directors. The major factor of the reinsurance feature of the 1980 Act is that utmost latitude was permitted and that, at best, sound business judgment would be the only recourse in many instances.

In that connection, we quote from Section 506 of the Act, General Powers of the Corporation:

"(i) shall determine the character and necessity for its expenditures under this title and the manner in which they shall be incurred, allowed, and paid, without regard to the provisions of any other laws governing the expenditure of public funds and such determinations shall be final and conclusive upon all other officers of the Government;

(j) shall have such powers as may be necessary or appropriate for the exercise of the powers herein specifically conferred upon the Corporation and all such incidental powers as are customary in Corporations generally; and

(k) may enter into and carry out contracts or agreements necessary in the conduct of its business, as determined by the Board. State and local laws or rules shall not apply to contracts or agreements of the Corporation or the parties thereto to the extent that such contracts or agreements provide that such laws or rules shall not apply, or to the extent that such laws or rules are inconsistent with such contracts or agreements.

We believe that we are working within the authority of the Act. In practice and intent, FCIC Board and Management have diligently used all information and means at their disposal to administer the crop insurance program effectively, efficiently and with maximum economy.

**GAIN AND LOSS SHARING**

This chapter raises serious concern over the understanding of reinsurance in general, and the reinsurance instrument which FCIC uses in particular. The following is intended to explain not only the reinsurance features but to place in perspective the matter of impact of gain-loss distribution on building a reserve.



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The reinsurance agreement provides basically two standard reinsurance features. First, the cession of variable amounts of each policy to FCIC; for these cessions, FCIC receives the proportionate share of liability, premiums and losses. On this assumed portion of the business FCIC receives all gain or loss. The sections of the reinsurance agreement to which this fact applies are the assigned risk, the quota share, and the surplus share. Companies may, and most do, cede up to a maximum of 57% of their total book of business. To repeat, FCIC realizes all gain or loss on this assumption, in the same respect as if written on FCIC policies.

The second feature of the reinsurance agreement is the protection against excessive loss experience on the portion of the business retained by the companies. This is done in two steps, with a graduated schedule at both the state level and at the national level. It is only on this portion of the company writings that the company shares in the loss or gain. The reasoning is that the cost to the company for the element of protection against excessive losses is a limitation on underwriting gain.

Thus, as to the matter of FCIC building a reserve, the share of business assumed by FCIC provides as much opportunity for building reserve as if the business were written by FCIC. On the portion retained by the companies, both FCIC and the companies have the potential of building a reserve proportionate to the risk borne.

The Report notes that "FCIC has reasonably adequate data on which to make decisions on the gain and loss sharing provisions to be included in the 1986 agreement." The Report then draws a conclusion which appears to be based on the appropriateness of the FCIC decision.

We disagree with the conclusion. Improvements in compensation have been primarily focused on making it possible for companies to survive the adverse experience since 1980, until FCIC rate work solves the problem of the 1.5 loss ratio for the business as a whole. It is not likely that legislation will solve the basic problem of adverse experience. Concern for acceptable solutions restrains the direct and harsh approach to rate insufficiency, indeed it not infrequently aggravates the insufficiency.

#### ON ACTUARIAL SOUNDNESS AND ACTUAL PRODUCTION HISTORY

We have no major disagreements with the conclusions drawn in these portions of the Report, indeed, we are pleased with the affirmation of the course of action which was taken. We note that the report, at the conclusion of Chapter 6 states that action "will continue to rely heavily on judgmental decisions", and the conclusion to Chapter 7 notes the adequacy of the information supporting the course of action pursued.

#### UNIT DEFINITION DECISION

The Report notes that the decision of the Board of Directors to change the unit definition guidelines was taken after "considerable time and effort"

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It goes on to observe that the action of the Board rescinding its proposal was based on subsequent studies. As in the case of the delivery system matter, a decision made after "time and effort" was reversed on the basis of the reaction of the Congress, indeed in the face of potential legislation on the subject, and producer reaction. In support of the original judgment of the Board, we draw attention to the probability that there must be a value for an item so insistently demanded.

Additional studies have been initiated not only to further support the decision to impose a surcharge but also to provide an indication of how much to impose initially and how best to administer it. Studies are not completed as of March, 1987 but are expected in time for implementation of a surcharge effective with the 1988 crop year. Furthermore, additional statistical gathering devices have been put in place to provide a more definitive analysis of how much the surcharge should be. This becomes effective with the 1988 crop year.

**LEGAL ADVICE**

This chapter perhaps most clearly raises the issue of hindsight in evaluating the decision-making process. In no case is it alleged that the FCIC acted without, or contrary to, legal opinion. In fact, it is noted that legal advice was sought for any action for which it was deemed appropriate and several instances are cited. The Report simply concludes that the opinion received and acted upon was at variance with that propounded by the GAO. We are concerned with the implication that FCIC must seek unanimity of legal opinion within government to pursue a course of action.

**CONCLUSION**

As noted earlier, it is the contention of the FCIC that its decisions have been made with substantial evidence and consideration. What is true is that those decisions have been found, on occasion, to have been wanting in some respects. To the extent that unique factors, including the oversight activity of the Congress and the mission of the Department, affect the course of any government agency we are subject to such factors. To the degree that hindsight permits a most clear view of the appropriateness of various courses of action, we, too, might have acted differently had we had that benefit.

Notwithstanding the difficulties inherent in administering the crop insurance program, it is in the nature of an ongoing insurance activity that decisions must be made and service provided. We acknowledge the weaknesses of some courses of action and the growing pains of the past, many of which have had instructive value for all concerned. We accept the view that the concerns and guidance of the Congress and producers are essential to our vitality and our future. We shall carefully assess those elements of the Report which note weaknesses in the consultative process and look forward to continuing an aggressive program to meet our mission of a "sound program of crop insurance protection for American producers."

See comment 1.

The following are GAO's supplemental comments on FCIC's letter dated April 9, 1987.

## GAO Comments

1. FCIC, in its overall comments, contends that our conclusions are based on hindsight and that more often than not FCIC acted on the best collective managerial judgment applied to the best body of collectible and available information. In its comments on our discussion of legal issues (see ch. 9), FCIC said that our treatment of this matter most clearly raises the issue of hindsight in evaluating the decision-making process.

We believe that FCIC's characterization of our work as based on hindsight is inaccurate and misleading. For example, in the case of our review of legal issues, we concluded that FCIC has adequate procedures to ensure that the major decisions it makes are reviewed by USDA's Office of General Counsel. However, after reviewing applicable statutes and legislative histories we disagreed with some of the decisions OGC reached. Given that the material available to us was also available to USDA's OGC at the time it reached its opinions, we fail to see where we had the advantage of hindsight. As another example, we point to our review of FCIC's basis for deciding to sell insurance mainly through reinsured companies (see ch. 3). We used OMB guidance on cost studies as a basis for reviewing the adequacy of FCIC's study. Officials responsible for FCIC's study told us that although they were aware of OMB's guidance, they did not think to apply it. Thus, we used material in arriving at our conclusions that was also available to and should have been used by FCIC in preparing its study. Moreover, we would point out that FCIC did not identify any instance where we used information that was not available to FCIC management when the decisions were made.

2. Although FCIC said that our executive summary does not state that FCIC management (1) changed its policy on the treatment of reinsured companies and master marketers and (2) adjusted forecasts of business as early as July 1986, we did in fact note in the executive summary that OMB required FCIC to revise its forecasting method in preparing its fiscal year 1988 budget. The change in policy is included in the executive summary of the final report. FCIC's comments on this change are also discussed in chapter 2 of the final report.

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