United States General Accounting Office

GAO

Report to the Chairman, Subcommittee on Capital Markets, Securities and Government-Sponsored Enterprises, Committee on Banking and Financial Services, House of Representatives

May 1999

Farmer Mac

Revised Charter Enhances Secondary Market Activity, but Growth Depends on Various Factors

GAO
Accountability * Integrity * Reliability

GAO/GGD-99-85

GAO

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

General Government Division

B-280648

May 21, 1999

The Honorable Richard H. Baker
Chairman, Subcommittee on Capital Markets,
Securities and Government-Sponsored Enterprises
Committee on Banking and Financial Services
House of Representatives

Dear Mr. Chairman:

The Federal Agricultural Mortgage Corporation (Farmer Mac) is a government-sponsored enterprise (GSE) that was established in 1988 with a statutory mission to create a secondary market in agricultural mortgages, thus improving the availability of agricultural mortgage credit. By 1996, it was evident that Farmer Mac was having difficulties fulfilling its statutory mission. To relieve structural impediments that had limited Farmer Mac's ability to function efficiently, Congress passed the Farm Credit System Reform Act of 1996 (the 1996 Act), which significantly revised Farmer Mac's statutory authorities.

You asked us to review the progress that Farmer Mac has made in achieving its statutory mission and examine its future viability. Our objectives were to (1) examine actions taken by Farmer Mac to promote the development of a secondary market, including the introduction of new programs and products; the standardization of loan processes, including loan documents and underwriting standards; and the use of risk management techniques to facilitate safe and sound secondary market activities, and (2) analyze Farmer Mac's future viability and discuss the potential benefits and costs of a government-sponsored secondary market for agricultural mortgages.

Results in Brief

In an attempt to make the secondary market in agricultural mortgages an attractive alternative for lenders, Farmer Mac has (1) used its enhanced charter authorities to develop new programs and products and streamlined the process for buying loans; (2) standardized certain aspects of the loan processes, such as underwriting; and (3) developed risk management techniques to facilitate safe and sound secondary market activities. While these efforts have increased secondary market activity, Farmer Mac's share of the overall agricultural mortgage market remains small, about 1.2 percent.

Since its 1996 restructuring, Farmer Mac has introduced programs to directly purchase agricultural mortgages from lenders and to exchange agricultural mortgage-backed securities (AMBS) for mortgage loans held by lenders. Farmer Mac also has recently introduced a program (called AgVantage) through which it, in effect, provides to agricultural lenders loans that are based on agricultural mortgage collateral. Farmer Mac has standardized some aspects of secondary market transactions by requiring participating lenders to attest that their loans meet Farmer Mac underwriting standards. However, Farmer Mac has not developed standardized loan documents because it believes the cost would be prohibitive given the state-by-state variability of laws governing agricultural mortgages. Farmer Mac has also modified its loan underwriting standards by, for example, requiring larger down payments to address its increased exposure to credit risk allowed under the 1996 Act. Farmer Mac purchased futures and options to help manage the interest-rate risk of those loans it held in its portfolio, and its risk management techniques appeared to be generally consistent with industry risk management principles.

On the basis of our analysis, it appears that Farmer Mac could continue to be viable if (1) its recent rate of expansion is maintained, (2) it continues to experience rates of return that are comparable to current levels, and (3) economic conditions in the national and agricultural economies remain stable. For our analysis, we defined viability as the ability of Farmer Mac to generate sufficient profit from its core business operations in the secondary market in agricultural mortgages to provide a reasonable return to its investors.

There are trends (such as those previously cited) and events that could improve or worsen Farmer Mac's financial condition. If Farmer Mac develops new programs and products that are attractive to lenders or if Farm Credit System (FCS) institutions or other lenders increase participation in Farmer Mac programs, Farmer Mac's financial condition could improve. However, events such as a less favorable interest-rate environment or declines in the credit quality of agricultural mortgages could reduce Farmer Mac's future profitability.

Even if Farmer Mac is viable under its current operating structure, the more fundamental public policy issue is whether the public benefits it generates are greater than the potential public costs it imposes. One important determinant of the net benefits generated by Farmer Mac is the extent to which its activities compete with or complement those of other GSEs. Because there is potential for mission overlap among Farmer Mac, FCS, and the Federal Home Loan Bank (FHLBank) System, new or expanded activities by one of these entities can affect the benefits generated by the other two. In judging Farmer Mac's overall level of public benefit, Congress may want to consider how Farmer Mac interacts with these other GSEs.

Background

The Agricultural Credit Act of 1987 (the 1987 Act) authorized Farmer Mac to promote the development of a secondary market for agricultural real estate and rural housing loans. As a GSE, Farmer Mac is a federally chartered, privately owned and operated corporation that operates as a special purpose corporation. Farmer Mac is also an independent entity within FCS, which is another GSE.[1] When Congress passed the 1987 Act, some observers stated that a Farmer Mac-sponsored nationwide secondary market would develop quickly and be widely used. Others stated that Farmer Mac would serve more as a safety valve for the agricultural sector if FCS encountered difficulties.

A secondary market is a financial market for buying and selling loans, either individually or in the form of securities backed by cash flows from groups or "pools" of loans. By authorizing Farmer Mac to promote the development of an agricultural secondary market, Congress intended to (1) increase the availability of long-term financing to creditworthy farmers and ranchers at stable interest rates and (2) provide greater liquidity[2] in agricultural financing. Ideally, such a market would provide agricultural lenders with access to national capital markets, which, by returning cash to such lenders in exchange for the mortgages, would generate additional funds for them to lend and enhance their ability to manage credit and interest-rate risks.

Under Farmer Mac's originating statute, the 1987 Act, it was only to certify certain agricultural lenders and other financial institutions to act as third-party "poolers"—that is, financial institutions that would buy qualified loans from other lenders or "originators," assemble or "pool" the loans, and issue and sell securities that are backed by these pools to investors. Farmer Mac guarantees the timely payment of principal and interest to investors who purchase these mortgage-backed securities. The original statute did not permit Farmer Mac to buy and hold agricultural loans. The 1987 Act also required either originators/poolers to maintain a cash reserve to cover at least the first 10 percent of losses arising from defaults on the pools of loans backing Farmer Mac-guaranteed securities or holders of subordinated participation interests (SPI) to absorb these losses before

[1] In this report, we treat Farmer Mac and FCS as two distinct GSEs.

[2] A market is more liquid if investors can buy and sell large amounts of holdings without affecting the prices of the traded securities.

Farmer Mac's guarantee could be exercised.[3] The purpose of the reserve requirement was to minimize risks to Farmer Mac and the federal government by requiring originators, poolers, and investors to hold most of the loan's credit risk.[4]

Risk-based capital requirements for banks and FCS institutions required them to hold capital against the full amount of the sold loan, not just the 10 percent retained by the lender. Regulators of primary market lenders (e.g., banks and FCS institutions) viewed the retained SPI as the source of substantially all of the loan's credit risk and, therefore, obtaining Farmer Mac's guarantee did not reduce the amount of capital the lender was required to hold. As a result, the incentive for banks and FCS institutions—major agricultural mortgage lenders—to sell loans into Farmer Mac-guaranteed loan pools was reduced. Further, the 1987 Act required certain diversification standards to be met—that is, each pool was to be made up of loans secured by properties from different geographic locations that produce different agricultural commodities.

The necessity to operate through third-party poolers and establish the mandatory cash reserve or SPI increased the complexity and expense of secondary market transactions to both Farmer Mac and lenders. Under its original operating structure, Farmer Mac was unable to achieve a profit, and its prospects for survival were dim.

Eight years after its creation, Farmer Mac faced possible financial failure and was ineffective in creating a successful agricultural secondary market.[5] Farmer Mac requested and Congress granted new statutory authorities in the 1996 Act to improve Farmer Mac's ability to fulfill its statutory mission. Among other things, the revised charter allowed Farmer Mac to (1) purchase agricultural mortgage loans directly from lenders and serve as a pooler, (2) eliminate the mandatory 10-percent minimum cash reserve and SPI required with each loan pool and also eliminate the loan diversification

[3] SPIs represent the right to receive a portion of the principal and interest payments on a loan or pool of loans, but only after investors in the Farmer Mac-guaranteed securities backed by these pools had received all payments due to them. Originators could have retained SPIs in the loans they sold to Farmer Mac or they could have sold SPIs to a pooler.

[4] The required 10-percent loss reserve generally exceeded historical worst-case scenarios by a wide margin.

[5] According to our prior work, some factors that contributed to the slow development of the agricultural secondary market included: strong liquidity of agricultural lenders, stringent regulatory capital requirements for banks and FCS institutions originating agricultural mortgages, and weak loan demand—especially for long-term, fixed rate loans. See Federal Agricultural Mortgage Corporation: Secondary Market Development Slow and Future Uncertain (GAO/RCED-91-181, Sept. 10, 1991).

standards, (3) have its securities accorded full "agency status" in the financial markets,[6] and (4) relax and delay the implementation of regulatory capital standards for Farmer Mac. The first three revisions made Farmer Mac's operating structure essentially the same as Freddie Mac's and Fannie Mae's—the GSE facilitators of the secondary markets for residential mortgage loans.

Primary market lenders, secondary market entities, and investors in securities backed by cash flows from loan pools face credit, interest-rate, prepayment, management, and business risks. Farmer Mac faces credit risk—that is, the possibility of financial loss resulting from default by borrowers on farming assets that have lost value and/or other parties' failing to meet their obligations. This risk occurs when Farmer Mac holds mortgages in portfolio and when it guarantees principal and interest payments to investors in AMBS it issues. Farmer Mac's interest-rate risk[7] can result from the possibility of an increase in interest rates in the national economy that is not matched by an increase in interest rates paid by borrowers to Farmer Mac for loans that are held in portfolio by Farmer Mac. Farmer Mac's prepayment risk can result from the possibility of a decline in interest rates, which can cause borrowers to prepay their mortgages.[8] Farmer Mac faces management risk from the possibility of financial loss resulting from a management mistake that can threaten the company's viability. Finally, Farmer Mac faces business risk from the possibility of financial loss due to conditions within the agricultural sector that affect loan performance.

The risk characteristics of agricultural mortgage loans are different from those of conventional single-family residential mortgage loans.[9] Agricultural mortgages are commercial loans that fund a wide variety of agricultural activities (e.g., poultry farms or orange groves), while single-family mortgages fund a fairly homogeneous asset. As a result, in the event of loan foreclosure, farm properties can be harder to appraise and more

[6]Agency status results from regulatory exemptions and trading preferences of GSEs' securities. The 1996 Act requires (rather than allows) Federal Reserve Banks to act as Farmer Mac's depositories and fiscal agents.

[7]Interest-rate risk is the possibility that a fixed-rate debt instrument will decline in value as a result of a rise in interest rates.

[8]Prepayment risk is the potential loss of anticipated future income that results from borrowers' paying off their loans earlier than expected.

[9]The common definition of a single-family residential mortgage is a loan for purchase or refinance of a housing unit in a one- to four-unit structure. A conventional mortgage loan is one without federal mortgage insurance.

difficult to liquidate than a single-family residence. In addition, the financial and business skills of farm operators can affect the value of their collateral since their income comes largely from the mortgaged property, rather than from independent employment or investment income. As a result, assessing the risks of cash flows from agricultural loan pools can be more difficult than such an assessment for single-family residential mortgages. To some extent, agricultural mortgage loans are more like multifamily loans than single-family loans because multifamily loans are commercial loans in which income is derived largely from rental of the mortgaged property.

Farmer Mac strives to fulfill its statutory mission mainly by purchasing agricultural mortgages from lenders. Lenders who participate in the primary market for such agricultural mortgages include federally insured depository institutions, insurance companies, and FCS institutions. Once purchased by Farmer Mac, the mortgages can be held directly in portfolio or pooled to back newly issued AMBS. Farmer Mac, in turn, can hold some AMBS in portfolio and sell some AMBS to investors in national financial markets.[10] About $1.1 billion in total AMBS were outstanding as of year-end 1998; slightly more than half of the value was held by investors other than Farmer Mac. Farmer Mac guarantees timely payment of principal and interest to investors in its AMBS.

Farmer Mac conducts its operations through two broadly defined programs. The Farmer Mac I Program consists of agricultural and rural housing mortgage loans that do not contain federally provided primary mortgage insurance. The Farmer Mac II Program consists of agricultural mortgage loans containing primary mortgage insurance provided by the U.S. Department of Agriculture (USDA). Farmer Mac was authorized in the Food, Agriculture, Conservation, and Trade Act of 1990 (the 1990 Act) to facilitate the creation of a secondary market for USDA-guaranteed agricultural loans. Under Farmer Mac II, Farmer Mac can purchase—or have others purchase—the guaranteed portions of USDA loans, assemble them into pools, and hold them in portfolio or sell them as securities to investors. At year-end 1998, Farmer Mac held $306.8 million of Farmer Mac II AMBS in portfolio and other investors held $30.1 million.

[10]Farmer Mac also purchases rural residential mortgage loans and either holds them in portfolio or pools them to back newly issued AMBS.

Scope and Methodology

We focused our attention on the secondary market in agricultural mortgages under the Farmer Mac I Program because it is the primary program through which Farmer Mac conducts its secondary market activity. However, we included Farmer Mac II Program activity in our analysis of Farmer Mac's future viability. To address our objectives overall, we reviewed relevant literature, congressional testimony, Securities and Exchange Commission public filings, and relevant Internet World Wide Web sites. We also held numerous discussions with Farmer Mac executives and interviewed representatives of the American Bankers Association, Independent Bankers Association of America, and the Farm Credit Council.

To gain a better understanding of the agricultural mortgage market and its prospects for future growth, we met with financial and agricultural economists from USDA's Economic Research Service. Additionally, to obtain a regulatory perspective on Farmer Mac activities, we met with officials from the Farm Credit Administration (FCA), the Director of FCA's Office of Secondary Market Oversight, and the Department of the Treasury's Director of GSE Policy. In our analysis of the agricultural mortgage market, we did not undertake detailed analyses of competing FCS or FHLBank System products. We also did not analyze the USDA loan guarantee programs.

To determine Farmer Mac's risk management practices and exposure to each type of risk, we (1) obtained Farmer Mac's written and oral responses to questions on interest-rate, prepayment, credit, business, and management risks; (2) reviewed corporate policies and standards, including Farmer Mac's Seller/Servicer Guide (Farmer Mac guide), which specifies lender requirements for participation in Farmer Mac programs; (3) obtained data on Farmer Mac's current financial condition and operating results, such as delinquency rates and profit margins; (4) reviewed methodologies for determining capital adequacy, pricing, sensitivity to interest-rate changes, sensitivity to economic stress, and management information systems; and (5) examined copies of external auditors' reports and management letters. We also reviewed FCA's March 1998 regulatory examination report and discussed the report with FCA officials.

To help determine the potential market benefits from a government-sponsored secondary market for agricultural loans, we conducted a mail survey of approved Farmer Mac sellers and nonparticipants.[11] Using two

[11]An approved seller is a financial institution that has completed a seller application (supported by financial information, proof of sufficient insurance, and evidence of Farmer Mac stock ownership) and

mail questionnaires, we conducted the survey in late 1998 and early 1999 and telephoned selected nonrespondents in 1999. We obtained information on the background of the financial institutions, questioned their knowledge of and participation in Farmer Mac programs, and sought their views on Farmer Mac and the secondary agricultural mortgage market. Survey participants were chosen from lists provided by Farmer Mac. The 263 institutions—commercial banks, thrifts, mortgage bankers, trust companies, and FCS institutions—on Farmer Mac's approved sellers list (as of Oct. 1998) and the 331 financial institutions of various sizes with over $100 million in assets on Farmer Mac's nonparticipants list (as of Oct. 1998) were sent the respective surveys.[12] To the list of 331 nonparticipants, we added 3 large insurance companies that are agricultural mortgage lenders that were not on Farmer Mac's list. Our survey results are not generalizable to the universe of agricultural lenders, but the results are generalizable to the unique groups identified by Farmer Mac and us. We did not examine the impact of Farmer Mac on agricultural mortgage interest rates or the availability of agricultural mortgage credit. See appendixes I and II for a more detailed description of our survey methodology and survey results, respectively.

We constructed financial scenarios using various assumptions to help illustrate Farmer Mac's ability to sustain mission viability as described in appendix III. We defined mission viability as the ability of Farmer Mac to generate a profit from its core business of operating a secondary market in agricultural mortgages and to provide a reasonable rate of return to its equity investors. Our purpose was to construct scenarios to illustrate conditions that could affect Farmer Mac's future viability. These scenarios do not represent forecasts of the future. We were limited by our reliance on publicly available data in presenting our scenarios.

We reviewed the legislative history and statutory authorities governing Farmer Mac. We also reviewed legal opinions written by and on behalf of Farmer Mac, FCA, and the Farm Credit Council. The legal opinions addressed whether Farmer Mac has the authority to undertake the AgVantage Program, which is discussed in more detail in the next section of this report. The opinions also focused on the statutory language of the Farm Credit Act of 1971 (the 1971 Act), as amended, defining the

---

had it approved by Farmer Mac. A nonparticipant is a financial institution that has not been approved by Farmer Mac to participate in Farmer Mac's programs.

[12]By using a Farmer Mac-provided nonparticipants' list of commercial banks meeting certain Farmer Mac-determined thresholds, we eliminated from our survey many agricultural banks having $100 million or less in assets.

authorities of Farmer Mac as well as the legislative history of the 1971 Act and Farmer Mac's mission. We also discussed the legal opinions with officials from these three entities.

To provide a perspective on secondary market servicing guidelines and procedures, in addition to reviewing the Farmer Mac guide, we reviewed two Fannie Mae guides for servicing single-family and multifamily residential mortgages.

We did not independently verify the information supplied by Farmer Mac or others.

We conducted our work in Washington, D.C., between July 1998 and April 1999 in accordance with generally accepted government auditing standards. We obtained written comments on a draft of this report from the President and Chief Executive Officer of Farmer Mac. His written comments are discussed at the end of this letter and are reprinted in appendix IV.

Farmer Mac's Actions Taken to Promote Secondary Market Growth

Farmer Mac has developed new programs and products in an attempt to provide an alternative source of funding for agricultural lenders. Farmer Mac also has used its new charter authorities to streamline the process for buying loans, including some standardization, and developed a program to market its products to agricultural lenders. The market's reception of Farmer Mac's products thus far has been limited, and Farmer Mac's loan purchase volumes have remained small in relation to the primary market. For example, the share of agricultural mortgages sold to Farmer Mac has shown some growth since the 1996 restructuring, but its market share represented about 1.2 percent of the agricultural mortgage debt outstanding as of the third-quarter of 1998. In addition to its loan purchase programs, Farmer Mac, in 1998, initiated its AgVantage Program in which Farmer Mac in effect provides loans to agricultural lenders with the lenders' using agricultural mortgages as collateral. Activity under this program has been of relatively small volume to date.

In an attempt to facilitate an efficient secondary market, Farmer Mac has streamlined the process for buying loans and standardized some aspects of a secondary market transaction, including underwriting guidelines, but it believes that standardized loan documents, such as those used in the secondary market for residential mortgages, would be cost prohibitive.[13]

[13]Standardization refers to the application of established and industrywide loan documentation procedures in connection with loan originations.

To mitigate its exposure to risks, Farmer Mac uses risk management techniques to help it conduct secondary market activities in a safe and sound manner.

New Programs and Products Have Been Introduced

In its effort to stimulate greater secondary market activity, since 1996 Farmer Mac has developed several new programs and loan products that were designed to increase participation by traditional (e.g., rural banks) as well as nontraditional (e.g., mortgage banks) agricultural mortgage lenders. Through workshops and various marketing initiatives, Farmer Mac has increased the number and types of sellers approved to sell loans to Farmer Mac, established new programs, and expanded its product line. Farmer Mac expected these initiatives to enhance market reception to Farmer Mac, thereby increasing the volume of agricultural mortgages sold in the secondary market.

Secondary market activity is likely to be greater when the secondary market creates products that help lenders and investors manage various risks at low cost. For example, interest-rate risk associated with long-term, fixed-rate loans can often be managed at lower cost by secondary market investors (e.g., AMBS investors, including Farmer Mac) with access to long-term bond financing relative to primary market financial institutions that rely on deposit bases. Secondary market entities, such as Farmer Mac, can also use their nationwide operations to obtain geographic diversification of their loan purchases to help manage credit risk. While standards for underwriting, appraisal, and loan servicing are used to help manage credit risk, secondary market entities have relatively less ability than lenders to rely on borrower relationships to assess credit risk. Thus, from the pool of loans meeting their underwriting standards, secondary market entities increase their risk of purchasing loans with high credit risk from less creditworthy borrowers.

By establishing a training program, Farmer Mac sought to educate and attract lenders by increasing their interest in and improving their understanding of Farmer Mac and the secondary market for agricultural mortgages. In 1997, over 800 lenders attended the more than 20 seller/servicer workshops that Farmer Mac conducted across the nation to inform lenders of Farmer Mac's new authorities and programs and of the benefits of participating in the agricultural secondary market. Marketing initiatives have resulted in Farmer Mac's approving several nationally known, large commercial banks and mortgage banks as approved sellers from which it could buy loans, which has increased the potential for lender diversity. The initiatives also expanded the number of outlets through which Farmer Mac products can be marketed to customers. Lenders approved to submit loans for possible sale to the Farmer Mac I Program totaled 286 as of December 1998.[14] At its peak under the old charter, Farmer Mac had nine approved sellers (at that time known as poolers).

The mechanism that Farmer Mac established to purchase mortgages directly from lenders for cash and provide loans to agricultural lenders (i.e., the AgVantage Program) is called its Cash Window Program. This program grew out of the 1996 legislation that granted Farmer Mac greater flexibility in its business dealings with agricultural lenders. The 1996 Act authorized Farmer Mac to purchase loans directly from originating lenders. Before this act, lenders could only participate in the secondary market by selling agricultural real estate loans to qualified Farmer Mac poolers. Additionally, the Cash Window Program was designed to (1) provide lenders with new product terms and competitive interest rates for agricultural real estate loans and (2) provide a responsive process for better servicing the credit needs of lenders' borrowers. The Cash Window Program began in July 1996 and by December 1998, $732 million in loans were sold to Farmer Mac.

In late 1997, Farmer Mac introduced its Part-Time Farm Program, which covered farms with substantial off-farm income. This program offers a fixed-rate, 30-year home mortgage product for farms on at least five acres of land or farms generating at least $5,000 in gross farm sales from agricultural crops or livestock. The value of the home must represent at least 30 percent of the total appraised value of the property. Farmer Mac sought to facilitate the use of this program by making the origination and servicing requirements simple and using familiar documents and procedures. For example, standard conforming residential secondary market origination forms are used in this program.[15]

In February 1998, as an expansion of the Cash Window Program, Farmer Mac established the AgVantage Program, which allows Farmer Mac to fund eligible lenders by providing cash advances. The primary difference between the AgVantage Program and existing Farmer Mac programs is that, in this program, the lender does not sell its loans to Farmer Mac but instead issues a bond backed by eligible loans and other collateral. To

[14]Farmer Mac had 265 approved sellers as of October 1998, which was our cutoff date for including institutions in our survey. Forty-six percent (91 of 196) of those approved sellers responding to our survey reported actually completing transactions with Farmer Mac for the period January 1997 through September 1998. Of those institutions selling, pledging, or swapping loans, the average dollar amount transacted by an institution during that period was $6.1 million.

[15]Conforming mortgages are residential mortgages that meet Fannie Mae and Freddie Mac underwriting standards and are within the current 1999 conforming limit of $240,000.

facilitate access to this program, Farmer Mac has provided standard documentation, including a standard form for the bond. Farmer Mac guarantees the bond and purchases it.[16] This transaction allows the lender to keep the loans and associated credit risk, while increasing its debt and liquidity positions. Farmer Mac is to receive low-risk income from the bond and guarantee fees. This program was designed to meet the demand for long-term loans by being attractive to lenders with excess collateral, but inadequate liquidity.

Since the program's February 1998 inception through December 1998, 16 AgVantage bond transactions had been consummated with 10 AgVantage issuers, resulting in Farmer Mac guarantees for $143.6 million of AgVantage bonds. Due to the short-term nature of the obligations that had been issued, only $10.8 million of the $143.6 million remained outstanding at year-end 1998.

In addition to the Cash Window, Part-Time Farm, and AgVantage Programs, Farmer Mac can purchase loans through a Swap Program (introduced in early 1997). A swap is a transaction in which lenders exchange one or more eligible loans for Farmer Mac-guaranteed securities, rather than cash.[17] Unlike Cash Window transactions, which generally involve loans with Farmer Mac-specified terms, Farmer Mac is to negotiate these swap transactions with the lender and is to acquire loans with payment, maturity, and interest-rate characteristics that Farmer Mac would not purchase through its Cash Window Program. In January 1999, Farmer Mac reported that it had committed to enter into a $408 million long-term, standby purchase commitment that operates similarly to a swap in agricultural mortgages.[18] As of January 1999, Farmer Mac had

[16]Farmer Mac purchases general bond obligations issued by qualified lenders that are collateralized by Farmer Mac I- or Farmer Mac II-qualified farm mortgages, rather than purchasing the loans outright from lenders and then selling AMBS to investors. In April 1998, FCA concluded that the AgVantage Program was within Farmer Mac's statutory authority. In reaching her conclusion, FCA's General Counsel found that the AgVantage bonds are securities guaranteed by Farmer Mac, issued by certified facilities, and represent obligations backed by pools of qualified loans.

[17]Many qualified loans should be eligible for swap transactions on the basis of their conformity to Farmer Mac's "existing loan" criteria, which require that the loans be outstanding for at least 5 years and have low (60 percent or less) loan-to-value ratios and other indications of performance. Qualified loans outstanding for less than 5 years are eligible for swap transactions only on the basis of their conformity to Farmer Mac's more stringent credit ratios as of the date of their origination and are to be subject to other performance analyses.

[18]According to a Farmer Mac press release, the recipient of the standby commitment segregates the loans on its books and pays Farmer Mac an annual fee approximating its usual guarantee fee on the outstanding balance of the loans, in return for Farmer Mac's assumption of the credit risk on those loans. This structure permits the lender to retain the loans while reducing its credit risk and concentration exposures and, consequently, its capital requirements.

consummated four Farmer Mac I swap transactions totaling approximately $493 million (includes the previously mentioned $408 million transaction).

In 1997 and early 1998, complementary to its existing product lines, Farmer Mac developed new loan products that included a refined 1-year adjustable rate mortgage (ARM) and a new 3-year ARM with flexible borrower prepayment terms. These two loan products can be converted to a long-term, fixed-rate loan after a certain time period has elapsed. Farmer Mac also developed a 10-year, fixed-rate mortgage. See table 1 for a list of Farmer Mac's programs and their descriptions and features, in addition to the various loan products offered.

Table 1: Farmer Mac programs and products

Program	Program description	Product feature
Farmer Mac I[a]		
Cash Window Program	Sellers receive cash by selling 100 percent of qualifying first mortgage agricultural real estate loans directly to Farmer Mac.	Terms and rates are described below under the Full-Time Farm, Part-Time Farm, and AgVantage Programs.
Full-Time Farm Program	Designed for borrowers who live on agricultural properties and derive a significant portion of their income from farm employment.	Types of agricultural loans offered include: • 15-year fixed rate, 15-year maturity with 15- or 25-year amortization and partial open prepayment (annual, semiannual, or monthly payments); • 10-year fixed rate and 10-year maturity fully amortizing (semiannual or monthly payments); • 5-year reset loan with a 5-, 10-, or 15-year term; 5-, 10-, 15-, or 25-year amortization and open prepayment without penalty (annual, semiannual, or monthly payments); • 1- and 3-year ARMs, 15-year maturity, 15- or 25-year amortization, and open prepayment (semiannual payments); and • facility loans, 10- or 15-year fixed rate maturity, and fully amortized.
Part-Time Farm Program	Designed for borrowers who live on agricultural properties with a valuable residence and derive a significant portion of their income from off-farm employment.	Farmer Mac offers a 30-year fixed rate residential mortgage, which is a fully amortizing loan with monthly principal and interest payments and no prepayment limitations.
AgVantage Program	Allows sellers to retain qualified mortgages in portfolio and sell securities backed by those mortgages to Farmer Mac.	AgVantage bonds may range in maturity from short-term to 15 years and have low fixed or variable rates of interest.
Swap Program	Agricultural lenders receive mortgage-backed securities in return for qualifying agricultural real estate mortgages.	Security terms, rates, etc., are negotiated with the seller on the basis of the characteristics of the loan.
Farmer Mac II[b]		
Cash Window Program	Lenders receive cash by selling 100 percent of the guaranteed portion of USDA loans directly to Farmer Mac.	• 7-year fixed rate and 15-year fixed rate based on full amortization; • 5- or 10-year fixed rate based on full amortization with 5- or 10-year rate reset periods—which are tied to the Farmer Mac 5- or 10-year Reset Cost of Funds Index Net Yield; and • floating rate is tied to Farmer Mac 3-month Cost of Funds Index's "Net Yield" with calendar quarter rate adjustments or The Wall Street Journal's Prime Rate.
Swap Program	Lenders receive Farmer Mac-guaranteed securities in return for the guaranteed portion of USDA loans.	Security terms, rates, etc., are negotiated with the seller on the basis of the characteristics of the loan.

[a]Farmer Mac I operates as a secondary mortgage market for high-quality agricultural real estate and rural home mortgages. Participation is limited to financially healthy farmers as established in the Agricultural Credit Act of 1987.

[b]In the 1990 Act, Farmer Mac was authorized to serve as the pooler for secondary sales of agricultural and rural development loans that are guaranteed by USDA. This program benefits borrowers who are unable to get commercial credit at affordable rates because of financial problems.

Sources: Farmer Mac and FCA.

Increased authority granted to Farmer Mac by the 1996 Act, which allowed its operating structure to parallel that of Fannie Mae and Freddie Mac, has provided it with flexibility to develop programs. However, this expanded operational authority does not mean that program success will be guaranteed or that expected outcomes will be achieved. Although Farmer Mac has expanded its seller base and provided lenders with streamlined procedures, including some standardization, to access the secondary market, Farmer Mac acknowledges that it cannot be certain whether the new products it offers will generate a sufficient volume of loans that would allow Farmer Mac to continuously function as a profitable corporation.

One key factor that could hinder lenders' use of Farmer Mac programs would be their lack of knowledge about these programs. Our survey results showed that familiarity with Farmer Mac programs varied widely, with the majority of the nonparticipating respondents being unfamiliar with the programs—52 percent and 62 percent were unfamiliar with Farmer Macs I and II Cash Window Programs, respectively. With other programs, familiarity was even lower—70 percent of the respondents were unfamiliar with the AgVantage Program, and over 87 percent were unfamiliar with the Swap Programs under Farmer Macs I and II. Even among approved sellers, familiarity with some Farmer Mac programs was low. For example, 31 percent of the respondents were unfamiliar with the AgVantage Program; 75 percent and 78 percent were unfamiliar with the Swap Programs under Farmer Macs I and II, respectively.

The AgVantage Program's volume has been relatively small to date, but nevertheless, Farmer Mac officials consider the program to be beneficial because it encourages lenders to do business with Farmer Mac and it is considered to be competitive with advances offered by the FHLBank System.[19] Furthermore, Farmer Mac officials believe that the AgVantage Program is more advantageous to lenders than FHLBank System advances considering that AgVantage loans can be sold to Farmer Mac at a later time without the need for any additional paperwork requirements.

On the basis of our survey, 23 percent of the approved sellers surveyed said they are "likely" or "very likely" to participate in the AgVantage Program in the next 3 years; among nonparticipants, this proportion was 12 percent. The extent to which these lender inclinations result in increased secondary market activity for Farmer Mac has yet to be determined.

[19]FHLBanks make loans, called advances, on the security of mortgages and other collateral, to lenders who are owner-members of the FHLBank System.

Farmer Mac Has Standardized Some Loan Processes

Standardization, such as the development of standardized loan documents, can help streamline the process for buying loans. Thus, standardization has the potential to help lower transaction costs and increase the efficiency of the secondary market. Farmer Mac had standardized some aspects of the secondary market transaction by requiring its agricultural mortgage lenders to make representations and warranties[20] that the loans they are selling meet Farmer Mac underwriting standards. Farmer Mac officials told us that standardized loan documents have not been developed because of the prohibitive cost associated with standardization given that state laws governing agricultural mortgage loans and agricultural lending practices vary from state-to-state. Farmer Mac had established lender requirements in its Farmer Mac guide that provides various levels of standardization for different lender practices.

Loan Documentation Was Standardized to Some Extent

Although its statute is silent on loan document standardization, Farmer Mac has, to some extent, taken steps to standardize loan documentation for the agricultural secondary market. Standardization of loan origination documents is common in the secondary market for residential mortgages. In the secondary market for residential mortgages, Fannie Mae and Freddie Mac have increased efficiency through greater standardization of mortgage products and processes.[21] Standardized documents can reduce the cost and effort necessary to evaluate the quality of asset pools because inspection or review of each lending arrangement can be replaced with verification that adherence to the predetermined industrywide standards for loan origination has been maintained.

Farmer Mac officials stated that early in Farmer Mac's existence, it sought to standardize loan documents but was not able to achieve a level of standardization approaching that achieved by Fannie Mae and Freddie Mac. These Farmer Mac officials attributed this inability to differences in agricultural real estate state laws that differ greatly from state-to-state. Residential real estate state laws are more uniform. These officials also stated that, with the diversity of agricultural lender practices and the heterogeneous characteristics of agricultural loans, developing nationwide documents would be difficult and costly.

[20]A representation is any statement, or any attempt to give an impression about a state of facts, that was done to convince another person to make a contract. A warranty is a statement, either written or implied, that assertions made in completion of a contract are true.

[21]See Housing Enterprises: Potential Impacts of Severing Government Sponsorship (GAO/GGD-96-120, May 13, 1996), pp. 4 and 54.

Farmer Mac generally allows agricultural lenders the option of using Farmer Mac forms, their own forms, or an off-the-shelf commercial loan package. According to Farmer Mac's Chief Executive Officer and General Counsel, the vendor of the off-the-shelf package is to guarantee Farmer Mac that each loan package meets the legal requirements of all states where the loans were originated. These officials also stated that Farmer Mac forms do not meet the legal requirements of all states. Farmer Mac provides loan origination forms on a disk for use by lenders, but it only requires that participants use the loan summary and environmental survey forms. As long as other forms used by the lenders present information in substantially the same format as Farmer Mac forms, the use of Farmer Mac's forms is not required. These Farmer Mac officials noted that small lenders, rather than large lenders, are more apt to use the off-the-shelf commercial product because small lenders often lack in-house legal departments.

The Chief Executive Officer and General Counsel of Farmer Mac stated that regardless of whether the loan documents used are the lender's own or those of the commercial vendor, the documents must include legally enforceable standard Farmer Mac representations, warranties, and provisions to ensure that the loans conform to Farmer Mac's loan underwriting and appraisal standards. These officials also stated that since the initial use of representations and warranties in 1991, they have encountered no problems enforcing the terms of the loan agreements. The Farmer Mac guide states that Farmer Mac is to verify, via examination of loan files, that the documents submitted by lenders conform to Farmer Mac's underwriting standards and other loan origination requirements. Also, as stated in the Farmer Mac guide, Farmer Mac's verification of loan files does not relieve lenders of their obligations under the representations and warranties provided to Farmer Mac.

For its part-time farm loans—essentially, residential mortgage loans—Farmer Mac uses the standard, conforming residential mortgage loan application and documentation forms used in the residential mortgage secondary market. Also, to improve the consistency of information included in the closing/settlement statements for all loans sold to Farmer Mac, lenders are required to use the standard Department of Housing and Urban Development closing/settlement statement, which is commonly known as the HUD-1. This document provides an itemized listing of the funds that are payable at closing, such as loan fees and real estate commissions.

When submitting a loan for sale to Farmer Mac, sellers are to follow the following general steps:

- Meet with the customer and prepare a preliminary approval loan package.
- Submit the package to Farmer Mac for preliminary approval.
- Following approval and lock in of interest rate, complete the appraisal and title work.
- Close and fund the loan.
- Deliver executed legal documents to Farmer Mac for final approval.
- After being notified of final approval, submit a Notice of Purchase Request at least 2 days before the desired purchase date. (Farmer Mac wires purchase funds on the basis of the seller's instructions.)

If the loan documents are properly completed and submitted in accordance with Farmer Mac guidelines, the entire loan process from submission to completion is expected to take about 8 business days.

Farmer Mac officials expressed no concerns with their current approach of using lender or commercial off-the-shelf loan documents. They felt that the legal protections afforded by the inclusion of the Farmer Mac standard representations, warranties, and provisions were more important than the standardization of the forms. They also noted that the use of lender documents better supported the Swap Program since forms do not have to be redone. Also, the officials said that the current costs to Farmer Mac of achieving further standardization of loan documents exceed the benefits.

Farmer Mac Had Developed Standardized Lender Guidelines

The Farmer Mac guide specifies requirements for lender participation in Farmer Mac programs. The Farmer Mac guide requires participating lenders to follow certain standardized practices. For example, Farmer Mac requires inclusion of standardized representations and warranties (e.g., the seller is authorized to do business and loan information submitted to Farmer Mac is true and correct). In addition, the Farmer Mac guide specifies requirements for underwriting, collection of mortgage payments, administration of escrow accounts, and initiation of foreclosure proceedings. The guide includes nine underwriting standards, including those pertaining to obtaining a credit report and financial statements, the borrowers' debt-to-asset ratio, and the loan-to-value (LTV) ratio for the financed agricultural property. The Farmer Mac guide provides some underwriting flexibility to recognize differences and variances in financial reporting of agricultural borrowers. It also provides flexibility for special loan-servicing practices associated with specific agricultural activities, such as livestock operations and properties with irrigation systems. The

Farmer Mac guide includes sections on loan-making, -selling, and -servicing as well as seller requirements for participation in Farmer Mac programs. Individual chapters of the guide include credit and appraisal standards for various programs and guidelines for managing loan delinquencies.

To provide perspective to the Farmer Mac guide, we compared it with the two previously mentioned Fannie Mae guides for servicing residential mortgages—the single-family guide and the multifamily guide.[22] The Fannie Mae guides differ from the Farmer Mac guide due to differences in the types of industry served and loan programs. For example, single-family residential mortgages generally are not commercial loans (i.e., most finance owner-occupied housing), while multifamily residential and agricultural mortgages are commercial mortgages. Fannie Mae's multifamily guide includes separate sections for its delegated underwriting program and negotiated transactions. Under its delegated underwriting program, Fannie Mae delegates its authority to underwrite and determine the creditworthiness of a loan to the originating lender and agrees to purchase the loan without prior review. In return for this autonomy, the lender is to assume a percentage of the risk of default on the loan. In contrast, Farmer Mac generally takes on the full credit risk of backing AMBS. This practice conforms most closely to Fannie Mae's negotiated transactions program. In this program, Fannie Mae, similar to Farmer Mac, provides some underwriting flexibility to recognize differences among multifamily properties in specifying lender obligations in transaction documents.

The Fannie Mae and Farmer Mac guides share some similarities in the topics that they cover. For example, Fannie Mae's single-family guide and the Farmer Mac guide, have sections on lender relationships, mortgage and property insurance, special mortgage programs, delinquent mortgages, and mortgage foreclosures. However, the Fannie Mae guides address each servicer requirement and guideline in greater specificity than the Farmer Mac guide does. Farmer Mac officials told us that they continuously work on further developing Farmer Mac's guide as the corporation grows.

[22]We also reviewed Fannie Mae's Forms Guide, which contains required Fannie Mae standardized forms to be used by lenders.

Farmer Mac Uses Risk Management Techniques to Help Ensure Safe and Sound Operations

Farmer Mac is expected to fulfill its public policy purpose and earn a profit by taking prudent risks. Like any other private financial firm, Farmer Mac faces risks from changes in market interest rates; loan defaults and other credit problems; external business factors, such as natural disasters or industry competition; and poor management decisions that may adversely affect its profitability. Farmer Mac uses risk management procedures in its operations to help ensure that its secondary market operations are conducted in a safe and sound manner. Farmer Mac has mechanisms in place to measure, monitor, and take actions to control, its exposure to these risks.

On the basis of (1) unverified information provided by senior officers of Farmer Mac and its federal regulator and (2) reports and analyses done by third parties, such as external auditors and consultants, it appears that Farmer Mac generally manages its operations in ways that are consistent with industry risk management principles. For example, Farmer Mac strives to limit interest-rate risk by issuing AMBS in the capital markets and attempts to control losses from other risks, such as credit risk, through the monitoring of seller/servicer financial condition and servicing performance.

Principles of risk management that have been developed by various financial industry and regulatory bodies stress the importance of board of directors and management involvement in managing the risks undertaken by financial institutions.[23] Under these principles, an organization's risk management strategy is to be based on a framework of responsibilities and functions, driven by the board of directors down to operating levels, which are to cover all aspects of risk. The basis for this principle is the belief that unless the board of directors is fully integrated into the risk management approach, the organization's managers and employees will not be fully committed to risk management. To emphasize the importance of risk management, these principles state that a risk management group made up of senior managers is to be created. Farmer Mac's risk management function is overseen by the Asset Liability Committee, which is made up of senior managers, and its Board of Directors' Finance Committee.

[23]Principles of risk management have been developed by various industry and regulatory bodies, including the Bank for International Settlements, the International Organization of Securities Commissions, the Derivatives Policy Group, U.S. bank regulators, and a group assembled by Coopers & Lybrand. All of these risk management principles are broadly similar. The principles listed in this report are termed generally accepted risk principles and were developed by Coopers & Lybrand.

Interest-Rate Risk

Like other portfolio lenders,[24] Farmer Mac is exposed to interest-rate risk (the possibility of an increase in interest rates in the national economy that is not matched by an increase in interest rates paid by borrowers whose loans are held in portfolio by Farmer Mac). Farmer Mac employs several techniques to control interest-rate risk. Farmer Mac measures its exposure to interest-rate risk. Farmer Mac's management and Board of Directors are to ensure compliance with its interest-rate risk policy limits. Farmer Mac also purchases financial instruments to help manage part of its exposure to interest-rate risk. Constant monitoring and adjustment of the control techniques are necessary to avoid increases in Farmer Mac's exposure to interest-rate risk, which changes over time as the economy and its portfolio change.

Farmer Mac is exposed to interest-rate risk on its portfolio of guaranteed securities and other investments and on loans purchased through the Cash Window Program.

<u>Measurement of interest-rate risk</u>. The following two techniques are employed by Farmer Mac to measure interest-rate risk: duration gaps and market value of equity sensitivity.

Duration gaps measure the average economic life of a whole portfolio, rather than the time to final payment for each asset or liability. The difference between a firm's asset and liability durations is called its duration gap.

The duration gap measures the overall interest-rate risk exposure of Farmer Mac. The larger the gap in absolute value, the greater Farmer Mac's exposure to interest-rate risk. For example, if Farmer Mac's average economic life of its assets is 1.5 years greater than the average economic life of its liabilities, then it has a duration gap of 1.5 years. Should interest rates rise, Farmer Mac's net interest income would fall because interest expenses would rise sooner than interest income. Farmer Mac tries to manage interest-rate risk by managing its portfolio to keep the duration gap within a certain parameter.

Another technique that Farmer Mac uses in measuring interest-rate risk is to estimate the sensitivity of its market value net worth to various changes in interest rates. Market value net worth provides a measure of Farmer Mac's ability to absorb losses. Financial firms report their income

[24] A portfolio lender purchases loans to hold in portfolio or makes loans, or does both of these activities, and in the process can earn net interest income.

statements and balance sheets according to generally accepted accounting principles (GAAP).[25] GAAP relies primarily on the historical (book) value of the financial assets and liabilities, rather than on their current market value. The market value of such assets and liabilities is affected by current interest rates, but the market value also can change if the likelihood of prepayment or repayment changes. The market value of assets minus the market value of liabilities provides the market value of net worth.

For example, Farmer Mac carries a 10-year, 8-percent loan at the amount of unpaid principal over the life of the loan. If interest rates decrease, the market value of the loan increases because the loan earns a higher yield than the yield on a new loan. Likewise, the market value declines if interest rates rise because the yield would be greater on a new loan. One method of monitoring a firm's exposure to interest-rate risk is to regularly determine the market value of the firm's assets and liabilities (marking-to-market) and project how market value would change for assumed changes in interest rates.

Management of interest-rate risk. Once its interest-rate risk exposure is measured, Farmer Mac managers can change Farmer Mac's exposure by various actions that lengthen or shorten the expected maturity of assets and liabilities so that payment streams on assets and liabilities behave similarly. The managers may issue liabilities with variable maturity terms or call features—callable debt allows Farmer Mac to repay its bonds after a specified time frame, which is a useful option if interest rates were to decline—or levy prepayment penalties on borrowers who prepay their mortgages when interest rates fall. This is known as prepayment risk. Prepayment penalties allow Farmer Mac to offer competitive interest rates to farmers and ranchers and entice investors to accept lower rates of return on their investment in Farmer Mac-guaranteed securities. However, as indicated by agricultural lenders' responses to our survey, prepayment penalties reduce the competitive attractiveness of Farmer Mac products as compared with agricultural loan products offered by FCS and other agricultural lenders without prepayment penalties.

Management of interest-rate risk is important at Farmer Mac because of its investment portfolio and pipeline operations (loans submitted to Farmer Mac for approval and loans approved but not yet committed for purchase—i.e., locked in interest rate). Farmer Mac controls interest-rate risk associated with portfolio lending by striving to closely match the

[25]GAAP is a set of accounting rules and conventions defining acceptable practices in preparing financial statements. GAAP's aim is to provide conformity in financial statements reporting.

interest-rate sensitivity of its assets and liabilities and by requiring a yield maintenance provision[26] for loans that are paid off earlier than their scheduled payoff date. In addition, interest-rate risk can be avoided by issuing and selling AMBS and shifting the interest-rate risk to investors. In its role as financial guarantor of AMBS, Farmer Mac does not directly undertake interest-rate risk. Also, through the use of sophisticated hedging techniques, such as futures contracts, Farmer Mac attempts to align the duration of its assets and liabilities, thereby minimizing interest-rate risk.

Farmer Mac monitors interest-rate risk exposure through duration gaps and market value equity sensitivity reports that identify interest-rate mismatches. These two reports are provided to Farmer Mac's Board of Directors on a regular basis.

Credit Risk

Credit risk is the possibility of financial loss resulting from default by borrowers on farming assets that have lost value and/or other parties' failing to meet their obligations. Credit risk is inherent in the daily operations of all financial firms, including Farmer Mac. Like other financial firms, Farmer Mac's underwriting standards represent a major tool in limiting credit risk. Farmer Mac uses several techniques to measure and manage its credit risk exposure.

<u>Measures of credit risk</u>. Farmer Mac uses the two following basic measures of credit risk: (1) the volume of loans or bonds that are not performing according to the contractual agreement and (2) the dollar losses to Farmer Mac resulting from such nonperforming loans or bonds.

Typically, when a borrower fails to make a scheduled payment, the loan is termed delinquent. Delinquency rates are an early indicator of credit problems. After a period of continuing delinquency, the loan servicer or Farmer Mac may act to recover the loan principal by foreclosing[27] on the property and filing a claim with any party that insured or guaranteed the loan. At the time of foreclosure, the loan is said to have defaulted. Generally, only a small fraction of delinquent loans default. Farmer Mac said it monitors delinquency rates on a monthly basis, and its delinquency rates over the last 2 years have generally been less than 1 percent.

[26]A yield maintenance provision is an agreement designed to discourage prepayment and to compensate lenders for reinvestment costs during periods of falling interest rates.

[27]Foreclosure is a legal proceeding initiated by a creditor to take possession of collateral securing a defaulted loan.

The financial losses from defaults include any principal of the loan or bond not repaid, interest not paid, and expenses to foreclose or restructure,[28] adjusted by recoveries from collateral sales and insurance. Defaults and loss rates can be predicted by Farmer Mac when it has historical default and loss data for similar types of loans in various economic circumstances. With new types of products, defaults and losses are difficult to predict accurately, and product performance must be monitored carefully to control credit risk. Farmer Mac only has a limited history of loan performance data, so it uses the historical loan loss data of a FCS institution to construct hypothetical loan pools to estimate losses on loan pools. The result is to be used to determine the level of guarantee fees that Farmer Mac needs for a pool of loans to generate sufficient income to provide an adequate return and maintain a minimum level of capital.

Methods to manage credit risk. Farmer Mac manages credit risk by trying to control the number of defaults and minimize the losses that result from defaults. Farmer Mac controls defaults through credit underwriting, appraisal standards, and geographic and commodity diversification standards that provide a quality control over the credit risks it takes and help it to prevent defaults. To minimize losses from any defaults that do occur, Farmer Mac uses techniques called credit enhancements (e.g., USDA guarantees or collateral requirement) that should allow Farmer Mac to recover portions of its potential losses from collateral or from third parties, such as lenders, loan insurers, or loan guarantors.

Underwriting standards. Farmer Mac has underwriting standards to determine which mortgages it will buy, that it could then hold as investments or place into mortgage pools. Underwriting is the process of identifying the potential risks of loss associated with financial activities to determine loan eligibility, and underwriting also aids in the pricing of such risks. Underwriting is an integral part of business and financial transactions that occur daily throughout the private and public sectors of the economy and involve the transfer and pricing of risk. Underwriting standards provide guidelines that are used to (1) limit the type and amount of risk of loss permitted in a financial portfolio and (2) establish methods to control such risks. Farmer Mac's underwriting standards are discussed in appendix V.

[28] A loan restructuring occurs when a lender grants a concession to a borrower in financial difficulty. For example, the lender negotiates a workout agreement with the borrower to modify the original credit terms, rather than initiate foreclosure proceedings against the delinquent borrower.

Before Farmer Mac purchases a loan or bond or guarantees a security, certain underwriting standards are to be met. Underwriting standards cover numerous borrower and property characteristics that help Farmer Mac evaluate the likelihood of defaults and the severity of related losses. For example, as stated in the Farmer Mac guide, Farmer Mac has underwriting standards that indicate (1) whether a borrower has sufficient income to make the scheduled payments and a credit history suggesting that the borrower has met past obligations in an acceptable manner and (2) the maximum LTV ratio, which measures the borrower's equity (down payment) in the property. Experience has shown that borrowers with low amounts of equity in the property, and thus high LTV ratios, are more likely to default than borrowers with high amounts of equity. Farmer Mac has also established appraisal standards to estimate the value of the property serving as collateral for the mortgage and geographic and commodity diversification standards to mitigate Farmer Mac's exposure to a particular agricultural region or commodity product.

Because Farmer Mac does not make loans directly, standards are also to be used to qualify other parties to participate in its credit activities. For example, Farmer Mac has established standards for lenders, Central Servicers, and Contract Underwriters.[29] Such standards include measures of financial strength, past performance indicators, and management quality. Lenders, Central Servicers, and Contract Underwriters expose Farmer Mac to risks of default to the extent that they fail to follow standards adequately when making the loan or fail to collect payments diligently. Farmer Mac has also established audit and quality control procedures to monitor the performance of lenders, Central Servicers, and Contract Underwriters. Farmer Mac also sets standards for firms with which they share financial risk. For example, when Farmer Mac enters a transaction to exchange cash flows as a means to limit its interest-rate risk, there is credit risk that the other party may fail to meet its obligation (i.e., counterparty risk). To mitigate such risk, Farmer Mac sets minimum standards of financial strength for such parties.

Farmer Mac said it contracts out certain functions to take advantage of the experience and efficiency of outside resources. Two key functions that are contracted out are Farmer Mac's loan-servicing function and credit loan-underwriting function. As discussed below, Farmer Mac is to mitigate the risks of contracting by performing annual on-site inspections of the third-parties' operations for compliance with the terms of their agreements.

[29]Central Servicers and Contract Underwritiers are firms that Farmer Mac has contracted with to provide loan-servicing and loan underwriting services, respectively.

Farmer Mac divides the loan servicing into two functions, the Central Servicer and the Field Servicer. The Central Servicer has entered into a contract with Farmer Mac to provide general servicing for certain Farmer Mac I loans and is responsible for directing the Field Servicer in the performance of such servicer's duties. The duties of the Field Servicer include things such as maintaining borrower relationships, servicing the loans, annually inspecting the mortgaged property to detect any adverse trend in the property's condition and preparing a report related to such inspection, and monitoring for current hazard insurance policy and tax and assessment payments. The Field Servicer is also to assist the Central Servicer in resolving delinquent loans. The Central Servicer is also responsible for establishing, maintaining, and monitoring delinquent loans. Farmer Mac annually performs an on-site review of the Central Servicer to make certain that it is in compliance with the terms of the contract agreement. In addition, the Central Servicer is required to have its independent public accountants review its servicing operations for compliance with Farmer Mac requirements.

Contract Underwriters are entities that have entered into contracts with Farmer Mac to perform the function of underwriting loans in accordance with Farmer Mac's underwriting and appraisal standards. Contract Underwriters are required to review appraisals to ensure compliance with the requirements set forth in the Farmer Mac guide. Farmer Mac annually performs on-site due diligence of the Contract Underwriter and checks for compliance with Farmer Mac requirements.

<u>Farmer Mac made modifications to address increased credit risk since passage of the 1996 Act</u>. Before changes in Farmer Mac's operating structure authorized by the 1996 Act, Farmer Mac was responsible for a loan's credit loss in excess of 10 percent of outstanding loan principal. The 10-percent cash reserve or SPI required for every loan pool formed and securitized covered the first 10 percent in losses.

As a result of its new legislative authority granted in 1996, to purchase agricultural mortgage loans directly from lenders and to issue and guarantee 100 percent of the securities backed by such loans without a lender cash reserve or SPI requirement, Farmer Mac is subject to a first loss position.[30] To mitigate its increased credit risk position, Farmer Mac took the following steps

[30]The first loss position refers to the first 10 percent of losses arising from defaults on the pools of loans backing Farmer Mac-guaranteed securities.

- Farmer Mac lowered its loan underwriting standard LTV ratio for a qualified loan from 75 percent to 70 percent for loans up to $2.3 million. This change requires borrowers to increase their down payment or risk sharing in the loan, thereby decreasing the chance that borrowers will default on their loans because of their larger equity stake. The LTV ratio is important in determining the probability of default and the magnitude of loss.

- Farmer Mac increased the annual pool fee rate it normally charges lenders for providing loan pool guarantees from 25 to 50 basis points[31]—the maximum allowed by statute—of the initial principal loan amount. A portion of this fee is required by law to be set aside by Farmer Mac in a segregated account as a reserve against losses arising from its guarantee activities. Among other things, full recourse must be taken against such reserve before Farmer Mac may be authorized to draw upon its $1.5 billion line of credit with the Department of Treasury to satisfy its guarantee obligations.

- Farmer Mac established new loan loss reserves for Farmer Mac I loans securitized after 1996 (i.e., AMBS). Loan loss reserves represent the estimated amount necessary to cover anticipated credit losses in the loan portfolio. Farmer Mac I loans securitized before1996 had to be supported by the 10-percent cash reserve or SPI requirement.

To mitigate the credit risk from new products, Farmer Mac requires the following:

- AgVantage bonds, which are general obligations of the issuer, are to be over-collateralized continuously by eligible collateral in an amount ranging from 120 percent to 150 percent of the bonds' outstanding principal amount, depending on the financial status of the borrower. Eligible collateral includes qualified loans, cash, U.S. treasury securities, or securities guaranteed by an agency or instrumentality of the federal government.

- The eligibility for part-time farm loans, which are generally residential loans, is to be determined on the basis of lenders' compliance with the underwriting standards that are used for conforming residential mortgages. Part-time farm loans are underwritten to conforming residential ratios—a 28-percent inside ratio (monthly housing expense to gross monthly income) and a 36-percent outside ratio (total monthly debt

[31]A basis point is one one-hundredth of a percentage point.

expense to gross monthly income). Income may come from farming or nonfarming sources.

Farmer Mac currently uses a credit-scoring model[32] to monitor the credit quality of loans in pools to determine the financial performance of approved sellers and to determine if loan loss reserves are adequate. In addition, Farmer Mac stated that it uses credit scoring in connection with its credit approval process, but not as a determinative factor for credit approval.

Business Risk

We defined business risk as the possibility of financial loss due to conditions within the agricultural sector that affect loan performance. For example, Farmer Mac has business risk associated with being limited to operating in the agricultural and rural housing lines of business. Business risk cannot be easily measured, and many business risk factors are difficult to anticipate and control.

Farmer Mac is limited in its ability to manage its business risk exposure by legislation that requires it to serve a specific public mission. Farmer Mac's charter requires that its activities be concentrated in the buying and selling of agricultural and rural housing loans across the nation and in good and bad economic conditions. This requirement prohibits Farmer Mac from seeking alternative business opportunities to supplement, diversify, or replace current business when economic conditions or the promise of higher returns would lead a private firm into other lines of business. However, Farmer Mac can shift assets into new products and investments within its given line of business.

Even though diversification standards were eliminated by the 1996 Act, Farmer Mac requires its loan pools to be diversified both geographically and, with respect to agricultural commodities (products), to help it to avoid large exposure to regional economic shocks. Farmer Mac has established a standard for the maximum percentage that a region or commodity product can make up of the portfolio, which Farmer Mac said it periodically monitors for compliance.

Management Risk

Management and operations risk (subsequently referred to as management risk) is the possibility of financial loss resulting from a management mistake that can threaten the company's viability. In many respects, management risk encompasses all of the risks faced by Farmer Mac,

[32]A credit-scoring model uses statistical analysis to identify and weigh (or score) the characteristics of borrowers who have been most likely to make loan payments.

including interest-rate, credit, prepayment, and business risks. For example, since Farmer Mac's management establishes loan standards and financing policies, its decisions determine Farmer Mac's exposure to credit and interest-rate risk. Generally, the managers can expose Farmer Mac to losses through incompetence, inadequate planning, poor internal controls, risky business strategies, fraud, and negligence. Management risk is not easily quantified, but its control is crucial to the firm's successful operation.

Farmer Mac generally controls its exposure to management risk through personnel administration, strategic and operational planning, its policymaking process, internal controls systems, management information systems, and board of directors and management oversight of firm operations.

Indicators of Farmer Mac's Mission Achievement and Future Viability

The dollar value of Farmer Mac's loan purchases and the size of the secondary market have both increased since passage of the 1996 Act. Both trends represent positive indicators of progress in fostering secondary market developments. Even with this expansion, Farmer Mac-guaranteed securities and individual mortgage holdings accounted for about 1.2 percent of the agricultural mortgage debt outstanding as of the third-quarter of 1998. This compares to the approximately 16 percent of multifamily residential mortgage loans accounted for by the housing enterprises (Fannie Mae and Freddie Mac) as of year-end 1997.

Our analysis shows that Farmer Mac is currently viable in its agricultural mortgage mission activities. However, Farmer Mac's future viability depends on its growth potential in the secondary market for agricultural mortgages and the prospects for realizing that potential are unclear. There are trends and events that could improve or worsen Farmer Mac's financial condition. If Farmer Mac develops new products that are attractive to lenders or if FCS institutions or other lenders increase participation in Farmer Mac programs, Farmer Mac's financial condition could improve. However, events such as a less favorable interest-rate environment or declines in the credit quality of agricultural mortgage could reduce Farmer Mac's future profitability. Even if Farmer Mac continued to be economically viable under its current operating structure, it is difficult to determine whether the public benefits created justifies continued government sponsorship. These public benefits could affect and be affected by the activities of two other GSEs—FCS and the FHLBank System. These benefits and costs are difficult to quantify.

Indicators of Farmer Mac's Mission Fulfillment

Since the 1996 restructuring, two key measures show that Farmer Mac has made some progress in fulfilling its statutory mission by fostering secondary market development. Specifically, the dollar amounts of Farmer Mac's loan purchases and issued securities have both increased since passage of the 1996 legislation.

To foster development of a secondary market, Farmer Mac must be able to sustain growth in the purchase of loans over time. Loan purchase data provided by Farmer Mac are shown in table 2. Loan purchases have continued to grow in both of the Farmer Macs I and II Programs. Of particular importance is (1) the sustained growth in the Farmer Mac I Program and (2) data showing that the upward trend in this program has been greater than the growth of the Farmer Mac II Program. Total loan purchase dollar volumes have increased since the 1996 Act.

Table 2: Annual Loan Purchases by Farmer Mac at Year-end 1995-98

Dollars in millions

Program	1995	1996	1997	1998
Farmer Mac I	$113.5	$162.3	$230.5	424.3
Farmer Mac II	56.3	92.5	95.0	119.8
Total	**$169.8**	**$254.8**	**$325.5**	**$544.1**

Source: Farmer Mac.

The dollar value of Farmer Mac-guaranteed securities and loans held for securitization are also key indicators of secondary market development. After loans are purchased by Farmer Mac, they are grouped into packages, or pooled, and issued as Farmer Mac-guaranteed securities (i.e., AMBS). Farmer Mac either sells the securities to others or holds them in portfolio. Decisions to hold securities in portfolio or offer them for sale depend upon prevailing market conditions and are influenced by factors such as the market liquidity of the securities, the ability of investors to estimate risks of holding the securities, and general market knowledge about and acceptance of the securities. As shown in table 3, the amount of Farmer Mac-guaranteed securities outstanding has more than doubled since year-end 1995. Additionally, the amount held in portfolio has been fairly stable while the amount held by others has grown, which indicates a growing acceptance of AMBS, leading to a broader secondary market.

Table 3: Farmer Mac's Secondary Market at Year-end 1995-98

Dollars in millions

Category	1995	1996	1997	1998	Percentage change 1995-98
Farmer Mac I held by Farmer Mac	$278.6	$217.1	$192.9	$228.5	(18.0)%
Farmer Mac II held by Farmer Mac	138.5	199.4	249.5	306.8	121.5
Subtotal	**$417.1**	**$416.5**	**$442.4**	**$535.3**	**28.3**
Farmer Mac I held by others	$94.7	$214.4	$385.8	$567.5	499.3
Farmer Mac II held by others	4.8	11.6	23.3	30.1	527.1
Subtotal	**$ 99.5**	**$226.0**	**$409.1**	**$597.6**	**500.6**
Total securities outstanding	$516.6	$642.5	$851.3	$1,132.9	119.3
Loans held for securitization	0.0	13.0	47.2	168.1	--
Total secondary market	**$516.6**	**$655.5**	**$898.5**	**$1,301.0**	**151.8%**

Source: Farmer Mac.

Secondary Market Penetration Rate Remains Small

Even though Farmer Mac's operating results have been positive since its 1996 statutory changes, its secondary market penetration rate (i.e., percentage share of the agricultural mortgage market) remains small and is low compared to the penetration rate of the housing enterprises in the residential secondary markets. Interest income from nonmortgage investments is a significant source of income at Farmer Mac.

In 1991, we reported[33] that Farmer Mac's authorizing legislation indicated that Congress expected Farmer Mac would be able to develop a large, nationwide secondary market quickly, and that it would be widely used. We also reported that the secondary market development to that point had been slow, and that the future was uncertain.

While Farmer Mac's penetration of the agricultural mortgage market has been growing, it remains relatively small. As shown in table 4, at year-end 1995 there were about $517 million Farmer Macs I and II securities outstanding. Agricultural mortgage debt outstanding at that time was about $84.8 billion; Farmer Mac's market penetration was about 0.6 percent of this total market. Farmer Mac estimated that about half of the

[33]GAO/RCED-91-181.

agricultural mortgage loans outstanding at that time met its underwriting standards. Thus, Farmer Mac's penetration would have been about 1.2 percent of the agricultural mortgages meeting Farmer Mac underwriting standards. As of the third-quarter of 1998, Farmer Mac's market penetration rate was about 1.2 percent of the agricultural mortgage loans outstanding and about 2.4 percent of those estimated by Farmer Mac as meeting its underwriting standards.

Table 4: Farmer Mac's Share of Agricultural Mortgage Debt Outstanding at Year-end 1995-98

Dollars in millions

Category	1995	1996	1997	1998
Farmer Mac secondary market	$516.7	$655.5	$898.6	$1,301.0
Agricultural mortgage debt	84,800.0	87,300.0	90,200.0	94,295.0[a]
Farmer Mac market share (percent)	0.61%	0.75%	1.0%	1.2%

[a]Preliminary 1998 third-quarter Federal Reserve Bulletin data. Year-end data were not available as of April 1, 1999.

Sources: Economic Report of the President (Feb. 1999) and Farmer Mac.

Farmer Mac's Market Penetration Is Low Compared to the Housing Enterprises

Of the approximately $94 billion in total agricultural mortgage debt outstanding as of the third-quarter of 1998, about 31 percent was accounted for by FCS holdings, 29 percent by commercial banks, and 39 percent by other lenders, such as life insurance companies. The remaining approximately 1 percent was accounted for by Farmer Mac AMBS.

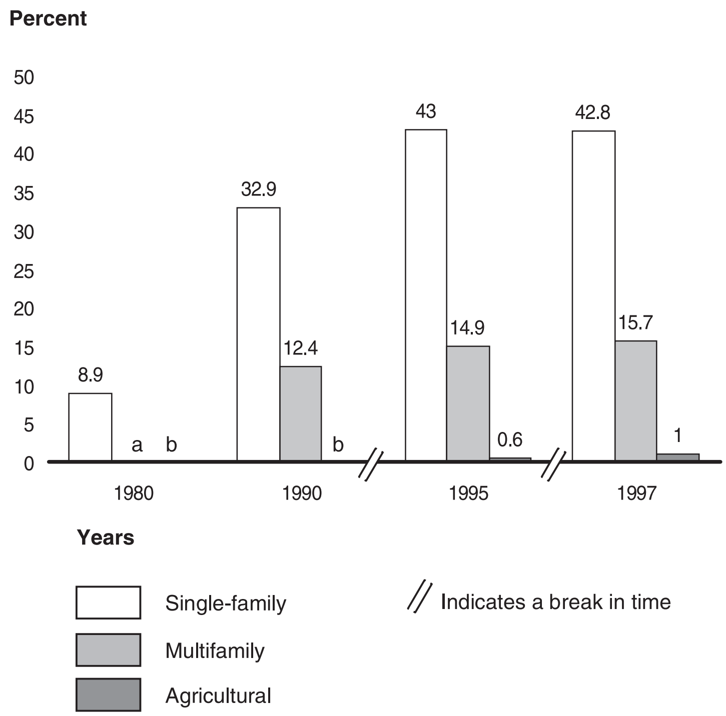
Farmer Mac's market penetration is low when compared to that of the housing enterprises. To provide perspective, we compared Farmer Mac's penetration to the housing enterprises' penetration of the conventional single-family (one- to four-unit) and conventional multifamily residential mortgage markets. As shown in figure 1, mortgage pools of the housing enterprises accounted for about 43 percent of conventional single-family and 16 percent of conventional multifamily residential mortgages outstanding as of year-end 1997.[34] As of year-end 1980, about one decade after the housing enterprises were chartered as GSEs, the single-family market penetration rate was about 9 percent. The enterprises did not enter the conventional multifamily market until 1983. The multifamily penetration rate may provide a better comparison with Farmer Mac's

[34]The housing enterprises compete for purchases of primarily conventional residential mortgages. To the degree that they purchase federally insured mortgages, the reported shares of the housing enterprises are overstated.

penetration rate, because multifamily mortgages, just as agricultural mortgages, are supported by income flows from commercial properties.

During its first decade of operations, Farmer Mac had the disadvantage of a more limited charter in relation to the housing enterprises. However, compared to the housing enterprises in their early years, Farmer Mac also had the advantage in that securitization of a wide variety of financial assets had already been achieved. We recognize differences such as these in making our comparisons. We are not suggesting that Farmer Mac should mirror the market penetration levels achieved by the housing enterprises in their first decade of operations. Nor are we suggesting that Farmer Mac should be expected to reach the market penetration levels reached by the housing enterprises in the long-term. For example, the possibly greater heterogeneity of borrowing farm operators and of farm properties serving as collateral for agricultural mortgages, even in comparison to multifamily residential mortgages, could lead to a different long-term outcome.

Figure 1: Secondary Market Penetration of Single-family, Multifamily, and Agricultural Mortgages



[a]Fannie Mae and Freddie Mac holdings of multifamily mortgages in 1980 were comprised of federally insured mortgages.

[b]Farmer Mac was established in 1988 and did not issue guaranteed securities until 1991.

Sources: Federal Reserve Bulletin, Economic Report of the President (Feb. 1999) and Farmer Mac.

According to Farmer Mac's 1996 annual report, Farmer Mac had achieved limited penetration into the agricultural mortgage credit market because of the (1) historical preference of lenders, particularly FCS institutions, to retain the loans in their own portfolios; (2) excess liquidity of many agricultural lenders; (3) disinclination of lenders to offer intermediate-adjustable term or long-term, fixed-rate loans as a result of higher profitability on short-term loans; and (4) lack of borrower demand for intermediate and long-term loans due to lower interest rates associated with short-term loans. Many of the factors are largely beyond the control of Farmer Mac.

Opinions from our survey support the first two reasons cited for limited penetration into the agricultural mortgage market. For example, 66 percent of nonparticipant lenders said that choosing to hold loans in portfolio was a reason that contributed a "very great" or "great" extent to their decision not to sell loans to Farmer Mac. The reason of having adequate funding to meet agricultural mortgage loan demands was also noted by 64 percent of the nonparticipant lenders. Other reasons were considered to be significantly lower in importance, according to our survey.

One particular change to Farmer Mac's program, cited as encouraging participation by both approved sellers and nonparticipating lenders, was the elimination of or phasing out of the prepayment penalty. Among the approved sellers we surveyed, 80 percent said that eliminating the penalty, and 54 percent said phasing out the penalty, would encourage them to sell more loans to a "very great" or "great" extent. Among nonparticipating lenders, these figures were 47 percent and 35 percent, respectively for encouragement to participate in Farmer Mac programs. For both groups of respondents, eliminating or phasing out the penalty led the list of proposed changes that would encourage lenders to sell agricultural mortgage loans to Farmer Mac. However, phasing out or eliminating the penalty would increase prepayment risks faced by investors and, therefore, could lead them to demand higher interest rates charged borrowers for loans sold to Farmer Mac. In our survey, we did not ask lenders how much they thought borrowers would be willing to pay for eliminating or phasing out the prepayment penalty.

Income From Nonmortgage Investments Is a Significant Source of Farmer Mac Income

In addition to its rate of market penetration, another indicator of Farmer Mac's mission fulfillment would be a declining percentage of its nonmortgage investments compared to its agricultural mortgage-servicing portfolio.[35] This would show that Farmer Mac was depending more on agricultural mortgages for viability and less on nonmortgage investments. In a previous report,[36] we identified profits from nonmortgage investments (i.e., investments other than those in agricultural mortgages) as a primary source of income at Farmer Mac. These investments were part of Farmer Mac's debt issuance strategy. According to Farmer Mac officials, this strategy has the stated purpose of increasing Farmer Mac's presence in the capital markets and improving the pricing of its AMBS, thereby enhancing the attractiveness of the loan products offered through its programs for the benefit of agricultural lenders and borrowers. Farmer Mac officials told us that the strategy's contribution to mission achievement should develop over a reasonable period of time. In doing our previous work, we voiced a concern that Farmer Mac's temporary approach could become a

[35]Farmer Mac's agricultural mortgage-servicing portfolio includes agricultural mortgages backing Farmer Mac AMBS (i.e., those held in Farmer Mac's portfolio and by other investors) plus mortgages held for securitization.

[36]Government-Sponsored Enterprises: Federal Oversight Needed for Nonmortgage Investments (GAO/GGD-98-48, Mar. 11, 1998).

permanent strategy to enhance profits even if it does not enhance Farmer Mac's ability to purchase agricultural mortgages.

Farmer Mac held about $1.2 billion in nonmortgage investments as of December 31, 1998. These investments were about 60 percent of Farmer Mac's balance sheet assets and slightly more than the approximately $1.1 billion in Farmer Mac's agricultural mortgage-servicing portfolio. Interest income from nonmortgage investments is a significant source of income at Farmer Mac.

Analysis of Farmer Mac's Future Viability

Although it is difficult to measure the overall benefits and costs associated with government sponsorship of Farmer Mac, a necessary condition for its overall benefits to exceed its cost is that Farmer Mac's direct economic benefits be positive. That is, Farmer Mac would have to be profitable or economically viable in carrying out its mission. If Farmer Mac cannot be profitable in its mission-related activities with the implicit subsidy it receives from government sponsorship, it is not likely that it is providing enough public benefit with its existing charter to justify the potential cost the implicit financial subsidy may be imposing on the federal government.

We constructed financial scenarios using various assumptions to help illustrate the relationship between Farmer Mac's secondary market penetration and its long-term ability to sustain mission viability. We considered the possibility of unfavorable economic conditions leading to no growth as well as favorable economic conditions leading to substantial growth in Farmer Mac's secondary market penetration.

Economic Scenarios Suggest That Farmer Mac Could Be Viable if Prevailing Economic Conditions Continue

To take into account the uncertainties regarding Farmer Mac's future growth, we constructed two economic scenarios to help illustrate Farmer Mac's ability to sustain mission viability. We define mission viability as the ability of Farmer Mac to generate a profit from its core business of operating a secondary market in agricultural mortgages and to provide a reasonable return to its investors. Farmer Mac is owned by its shareholders and its stock is publicly traded.[37] In our analysis, viability is a long-term concept in which the time horizon is defined at a future point in time when Farmer Mac could eventually become characterized as a mature, rather than a newly created, growing institution. Just as growth is uncertain, the number of years necessary for Farmer Mac to eventually become a mature institution is uncertain. Farmer Mac has yet to pay dividends to its shareholders, but returns to shareholders have been

[37] Farmer Mac stock without ownership restrictions is traded on The Nasdaq Stock Market under the name "FedAgri" and the symbol "FAMCK."

generated by increases in Farmer Mac's stock price. For long-term viability, our scenarios require cash flows that eventually compensate shareholders for the opportunity costs of their financial capital investments and associated risks.[38] This requires shareholders to receive a rate of return that is competitive with other investments. In our scenarios, we assume that the average required return on equity equals FCS' average return of 11.25 percent as of June 1998.

The first scenario holds the outstanding amount of Farmer Mac AMBS constant near its current level of about $1.5 billion, and the second scenario doubles Farmer Mac AMBS to $3 billion. The first scenario was constructed to illustrate whether Farmer Mac could be viable in the event that its mortgage-servicing portfolio did not substantially grow. The second scenario was constructed to illustrate Farmer Mac's viability if AMBS experienced a substantial increase, that is, if AMBS backed by agricultural mortgages doubled. The calculations are presented in appendix III.[39] The scenarios do not represent forecasts of the future. In presenting these scenarios, we rely on publicly available data and make a number of simplifying assumptions.

Our results were sensitive to alternative assumptions and to our reliance on annual 1998 Farmer Mac financial performance data. For example, the shares of Farmer Mac business were accounted for by pre-1996 Act guarantee activity; post-1996 Act guarantee and purchase activity; and Farmer Mac II activity was affected by choosing annual 1998, rather than the fourth-quarter of 1998, financial performance data. Specifically, the post-1996 Act Farmer Mac I activity involves relatively higher guarantee fees and greater credit risk than the other activities. Although the fourth-quarter 1998 statistics may provide a more accurate basis than annual statistics for estimating future trends in some variables, such as guarantee fees, the fourth-quarter statistics may reflect temporary rather than sustainable levels of some other variables, such as loan loss provisions.[40]

[38]Shareholders could be compensated either in the form of dividend payments or increases in stock price resulting from Farmer Mac's retention of earnings. Either form of compensation is dependent on Farmer Mac profits in the long term.

[39]The $1.5 billion of AMBS in the first scenario include a $408 million long-term standby purchase commitment entered into in January 1999. Farmer Mac reported in a press release that the long-term commitment operates as a swap in agricultural mortgages.

[40]If we had chosen fourth-quarter 1998 data, adjustments in loan loss provision statistics would have been required to make them more consistent with values that would correspond to likely expansion in new Farmer Mac I activity. Our reliance on publicly disclosed information would have limited our ability to make such adjustments.

For future nonmortgage investment holdings, we distinguished between (1) investment securities and (2) cash and cash equivalents. As of December 31, 1998, Farmer Mac's nonmortgage investment holdings were about $1.2 billion dollars, with $644 million accounted for by investment securities. On the basis of Farmer Mac's view that the debt issuance strategy's contribution to mission achievement should develop over a reasonable period of time, we arbitrarily reduced holdings of investment securities by half, or $322 million. Even with this reduction in investment securities, Farmer Mac investment securities would account for larger shares of balance sheet assets and mortgage-servicing portfolios than such investments for the housing enterprises. Cash and cash equivalents, which are short-term investments that can help Farmer Mac facilitate liquidity in the agricultural mortgage market, were kept constant at current levels.

To calculate revenues for each scenario, we assumed that the split between AMBS held in portfolio and sold to investors would equal the percentage splits as of December 31, 1998. We also used the year-end 1998 levels to specify average AMBS guarantee fees, average gain on AMBS issuance, and average interest-rate spread between retained portfolio holdings (i.e., mortgage and nonmortgage investments combined) and debt costs. To determine expenses and opportunity costs for each scenario, we calculated Farmer Mac capital requirements on the basis of the current statutory minimum capital standards. We specified required return on equity on the basis of the annual 1998 return of 11.25 percent on equity for FCS. We assumed the average provision for loan losses to equal the year-end 1998 average. Some expenses were treated as variable (depending on size); we calculated these expenses using average operating costs. Other expenses that we assumed to be subject to economics of scale were held constant. We recognize that by assuming fixed operating costs, we may have understated Farmer Mac's costs, particularly in scenario 2, which anticipates a substantial expansion in Farmer Mac's agricultural mortgage purchases. Our scenarios also did not incorporate Farmer Mac corporate income tax liabilities that would have the effect of reducing after-tax corporate income.

Results from the first scenario showed that Farmer Mac would have estimated revenues of $16.6 million and expenses of $15.6 million, or an economic profit of about $1 million. In the second scenario, Farmer Mac would have estimated revenues of $26.7 million and expenses of $20.4 million, or an economic profit of about $6.3 million. If we had developed scenarios with larger specified increases in Farmer Mac AMBS, estimated economic profits would have been greater than $6.3 million. However, our assumption of fixed operating costs would become more unrealistic in such a specified scenario.

Farmer Mac's nonmortgage investments affected the level of profitability in both scenarios. If we removed Farmer Mac's investment securities from our scenarios, annual revenues would be reduced by about $2 million and required return on equity would be reduced by about $1 million for both scenarios. With these reductions, economic profit would become about zero (i.e., a breakeven level) in our first scenario and about positive $5.3 million in our second scenario. In our 1998 report,[41] we questioned the need for a mature GSE to hold long-term nonmortgage investments to fulfill its statutory mission. The Department of the Treasury agreed with our assessment when it commented on our 1998 report.

A Number of Factors Could Have Major Impacts on Farmer Mac's Viability

Farmer Mac's potential for growth will be affected by its ability to provide benefits to commercial banks, FCS institutions, and other agricultural mortgage lenders. In addition, a number of other factors could have a major impact on Farmer Mac's viability. These factors include the following: (1) changing economic conditions in the national and agricultural economies, (2) potential changes affecting participation by FCS institutions in Farmer Mac programs, and (3) risk-based capital standards to be promulgated by FCA.

An important element in Farmer Mac's growth potential is that it continues to take actions intended to provide benefits to agricultural lenders. Our survey suggests that continued growth is possible. Seventy-three percent of the approved sellers who participated in our survey said that they are likely to increase sales to Farmer Mac in the next 3 years. In addition, about one-fourth of the nonparticipants responding to our lender survey said that they expect to begin participating in Farmer Mac programs in the next 3 years. To the extent these lenders' inclinations are carried out, they could enhance agricultural secondary market activity.

Economic conditions in the national and agricultural economies can affect the size of the overall agricultural mortgage debt market. Farmer Mac's rate of growth will be affected to some extent by the size of this overall market. While the residential mortgage market has grown, agricultural mortgage debt has declined. The 1997 constant dollar value of agricultural mortgage debt outstanding was slightly more than half of its 1980 value. If the decline in the constant dollar value of agricultural mortgage debt continues, it could directly affect Farmer Mac's growth potential.

[41] GAO/GGD-98-48.

Economic conditions in the agricultural and aggregate national economy can affect participants in the primary and secondary mortgage markets in other ways. For example, over the last 5 years, the economic environment faced by financial institutions has generally been favorable and interest rates have generally declined to relatively low levels. The agricultural economy has also been fairly strong. However, recent adverse trends in agricultural economic conditions, such as low commodity prices, reduced export demand, and weather-related problems in certain areas of the United States, have provided stress to the agricultural economy that could lessen the credit quality of agricultural mortgages. Over the past 2 years, delinquency rates on Farmer Mac I AMBS have generally been under 1 percent (except for the first quarter of 1998 when it was 1.15 percent). During the fourth quarter of 1998, FCS experienced an increase in loan losses and its provision for loan losses expanded dramatically. Farmer Mac's ability to serve as a safety valve for the agricultural sector if FCS encountered difficulties has yet to be tested. However, one financial industry group we interviewed suggested that within the next few years, we may have a test for whether Farmer Mac could help in a situation similar to the one presented in the 1980s in which agricultural real estate prices plummeted, the credit quality of agricultural mortgages declined, and FCS essentially stopped making loans.

Before Farmer Mac's recent, long-term, standby purchase commitment transaction, FCS institutions had not been active participants in Farmer Mac programs. An expansion of FCS' participation in Farmer Mac programs as a means to manage credit and interest-rate risks could help Farmer Mac's business expand.

Farmer Mac's January 1999 transaction of $408 million with a FCS institution illustrates the use of a Farmer Mac program to manage credit risk, because Farmer Mac is providing a guarantee to the FCS institution in the event of borrower defaults. In providing this service, Farmer Mac has the ability to diversify its credit risk by purchasing agricultural mortgages throughout the nation. However, in terms of evaluating credit risk, Farmer Mac is currently at a disadvantage compared to primary market lenders who have personal relationships with borrowers and knowledge of their local economies to evaluate credit risk. In the future, credit scoring, which has recently been introduced to evaluate credit risk associated with commercial lending, could help Farmer Mac evaluate credit risk.

Farmer Mac also has the ability to help lenders manage interest-rate risk. Increased demand by agricultural borrowers for long-term, fixed-rate agricultural mortgages could help facilitate growth in Farmer Mac's business as FCS lenders seek to manage the potentially higher level of interest-rate risk. Conditions for such expansion differ somewhat from those for participation by commercial banks. Specifically, FCS institutions have access to national capital markets. Therefore, they can be better able to manage interest-rate risk without secondary market sales than lenders who rely on their deposit bases.[42]

Increased AMBS issuance itself could facilitate the role of two other factors that could in turn promote greater expansion. First, increased AMBS issuance can create the possibility that investors may obtain expanded historical information on AMBS cash flow performance, improve investors' ability to evaluate risks from secondary market activity, lower yields they demand, and thus promote a further increase in secondary market sales. Second, increased AMBS issuance could help Farmer Mac realize economies of scale—a condition where average costs decline as output (i.e., in this case, loan purchase and other secondary market activity) increases. Farmer Mac is a relatively small corporation operating in a secondary market activity often characterized as exhibiting economies of scale. Therefore, the direct impact of expansions in Farmer Mac purchases could indirectly cause further expansion in the presence of economies of scale.

In the future, the relative importance of FCS institutions and commercial banks in making agricultural mortgage loans could have an effect on Farmer Mac's expansion. Commercial banks compete with FCS institutions in the primary mortgage market. However, because they are GSEs, FCS institutions (1) are less likely to rely on Farmer Mac to help them manage interest-rate risk than would commercial banks and (2) have been less likely to participate in Farmer Mac programs than commercial banks. If commercial banks continue to be more likely to sell their agricultural mortgages to Farmer Mac than FCS institutions, Farmer Mac's expansion could be better served by an expansion in the share of agricultural mortgages originated by commercial banks. FCA has announced changes in its regulatory policies and practices that are intended to increase competition among FCS institutions. If this increased competition increases efficiency, improvements in the ability of FCS institutions to compete with commercial banks could result. If this, in turn, would lead to an increase in FCS' share of the primary market for agricultural mortgages, Farmer Mac's growth potential could be constrained.

[42]GSEs can issue callable and noncallable debt with a wide range of maturities to manage their interest-rate risk.

The purpose of establishing a risk-based capital standard for Farmer Mac is to help ensure that its capital is aligned with the risks of its financial activities, including potential risks to taxpayers. Congress has recognized the role of risk-based capital standards in mitigating the risk to taxpayers from GSE financial activities. FCA has a congressional mandate to establish risk-based capital standards for Farmer Mac no sooner than February 1999. FCA must develop a stress test that exposes Farmer Mac to statutorily specified interest-rate and credit stresses. For example, the credit stress must be based on the worst credit conditions experienced by a region of the country accounting for at least 5 percent of the nation's population. FCA issued an advance notice of proposed rulemaking in 1998 seeking comments on its possible use of loan credit performance data for the Farm Credit Bank of Texas in developing the capital standard. FCA plans to issue a notice of proposed rulemaking in 1999 seeking comments on its proposed risk-based capital standards for Farmer Mac.

As of December 31, 1998, Farmer Mac held regulatory capital of $80.7 million, $30.5 million in excess of its regulatory minimum capital requirement of $50.2 million. Farmer Mac has stated that it does not expect the risk-based capital standards will require it to raise additional capital. However, in the long-term, the risk-based requirements could become more difficult to meet and, under such circumstances, Farmer Mac may need to make adjustments to its book of business or raise more capital to meet the standard. In such a situation, shareholders would likely require compensation for any additional equity investments. In turn, Farmer Mac's funding costs could rise, and, therefore, its growth could be reduced. This possibility, in which Farmer Mac may be called upon to raise capital to mitigate risk to taxpayers from Farmer Mac's financial activities, illustrates that Farmer Mac's viability under current capital standards is not necessarily the proper basis for judging the benefits and costs of government sponsorship.

Value Created From Government Sponsorship of Farmer Mac Depends on Activities of Other GSEs

Government sponsorship of a financial institution can generate a number of public benefits and costs, which are difficult to quantify. The benefits Farmer Mac can generate in the agricultural mortgage market depend on whether its new loan programs and products help agricultural lenders manage risks in ways that improve loan terms offered to borrowers. Its potential costs depend on the likelihood that taxpayers may be called upon if Farmer Mac is unable to meet its obligations. The net benefits and costs also depend on how Farmer Mac's activities interact with those of the two other GSEs—FCS and the FHLBank System.

Government sponsorship of a financial institution can generate a number of benefits. To the degree that lower funding costs and other benefits are passed on to borrowers in the affected financial sector, public benefits are generated. The special purpose charters can also provide GSEs with motivation to make investments that enhance efficiency in the affected financial sector. For example, GSEs that create secondary markets have incentives to make investments that facilitate standardization. In a 1996 report,[43] we found that government sponsorship of the housing enterprises was associated with lower interest rates on single-family residential mortgages, and that the enterprises increased efficiency through greater standardization of mortgage products and processes. Government sponsorship of Farmer Mac has the potential, if it remains viable and continues to grow, to generate benefits through loan programs and products that help agricultural lenders manage risks.

Government sponsorship also generates potential public costs. One potential cost is that taxpayers could be called upon if a GSE is unable to meet its financial obligations. Such a situation occurred in the late 1980s when FCS encountered financial difficulties. Opportunity costs can also be generated when the implied backing of certain financial institutions diverts funding from other financial institutions that may be able to serve the sector more efficiently. For example, the possibility is present that government sponsorship of Farmer Mac could reduce the incentives of other financial institutions to develop secondary market products of value to agricultural lenders. In addition, opportunity costs can also be generated when implied backing of financial institutions serving a specific sector diverts funding from other sectors.

As previously discussed, one limitation on Farmer Mac's growth could be its inability to reach a size sufficient to generate economies of scale. One approach to improving its growth potential could be to expand Farmer Mac's charter beyond agricultural mortgages, for example, to other rural and agricultural loans. While such an expansion could increase the scope of potential benefits generated by Farmer Mac, it could also increase potential costs and could affect both FCS and the FHLBank System.

The financial performance and benefits provided by FCS and the FHLBank System affects Farmer Mac and are affected by Farmer Mac's charter authorities and activities. For example, Farmer Mac's current programs and products provide an alternative-funding source for agricultural mortgage lenders, such as commercial banks that compete with FCS

[43] GAO/GGD-96-120.

institutions in the primary mortgage market. The AgVantage Program competes with FHLBank advances to rural lending institutions. In July 1998, the FHLBank System's regulator (the Federal Housing Finance Board) authorized mortgages on farm properties on which a residence is located and constitutes an integral part of the property, as collateral for advances received by FHLBank member institutions with total assets of $500 million or less. Given that there is currently a degree of overlap between Farmer Mac's activities and the activities of other GSEs, any expansion of Farmer Mac's charter would probably have effects on these other entities that would need to be taken into consideration.

Removing Farmer Mac's charter would eliminate potential benefits and costs resulting from its activities as a GSE. Elimination of Farmer Mac's charter could affect the public benefits and costs associated with FCS and FHLBank System activities.

Likewise, expansions in FCS lending to a wider variety of companies participating in the agricultural economy could create benefits. However, such expansion could increase the potential costs from government sponsorship of FCS, reduce agricultural loans made by depository institutions, and reduce agricultural mortgage loans sold to Farmer Mac. Expansion in the FHLBank System, such as the recent expansion to include certain agricultural mortgages as eligible collateral for obtaining FHLBank advances, may also limit Farmer Mac's growth potential.

In summary, charter revisions, regulatory changes, or other actions affecting the activities of each GSE in relation to agricultural and rural finance could in turn affect the financial performance and benefits generated by the other GSEs.

Conclusions

The share of loans in a primary market that are sold by lenders in a secondary market depends on the benefits generated by the secondary market. Farmer Mac has used its post-1996 charter authorities to streamline the process for buying loans and to develop new programs and products that have provided an alternative funding source for some agricultural lenders. Farmer Mac has also standardized some aspects of the secondary market transaction by requiring participating agricultural mortgage lenders to make representations and warranties that their loans meet Farmer Mac underwriting standards, but Farmer Mac has not standardized loan documents because state laws governing agricultural mortgage loans and agricultural lending practices vary. In addition, Farmer Mac employs risk management techniques to measure and manage its various risks and to help ensure that Farmer Mac conducts its secondary market operations in a safe and sound manner. We noted that elements of Farmer Mac's risk management techniques appeared to be generally consistent with industry risk management principles. Since its 1996 restructuring, Farmer Mac has made some progress in developing a secondary market in agricultural mortgages, but it currently has a relatively small market presence.

Farmer Mac is a niche player as a secondary market entity in the agricultural mortgage market. It appears that Farmer Mac can be viable if it continues to expand, it experiences returns that are comparable to current levels, and economic conditions in the overall and agricultural economies of the nation remain stable. Even if Farmer Mac continued to be economically viable under its current operating structure, it is difficult to determine whether the public benefits created justify continued government sponsorship. The future benefits from government sponsorship of Farmer Mac are potentially limited by possible expansions of competing FHLBank funding alternatives and increased competitive pressures from FCS institutions. Therefore, the potential public benefits created from government sponsorship of Farmer Mac could be affected by legislative, regulatory, and other developments affecting the FHLBank System and FCS as well as Farmer Mac.

Matter for Congressional Consideration

Farmer Mac, FCS, and FHLBanks now offer programs that compete directly and indirectly with one another. Therefore, the public benefits and costs of these three GSEs are interrelated. Congressional committees with jurisdiction may want to consider interactions among the activities and the charters of these three GSEs as part of their ongoing oversight.

Farmer Mac Comments and Our Evaluation

We received comments on a draft of this report from Farmer Mac. These written comments are provided in appendix IV.

Farmer Mac said, in general, it did not disagree with our statements on the background, history, and progress of Farmer Mac's development. However, Farmer Mac disagreed with our (1) conclusion that it is difficult to determine whether the public benefits created justifies continued government sponsorship of Farmer Mac, (2) comparison of Farmer Mac's secondary market penetration to the housing enterprises, and (3) characterization that Farmer Mac continues to rely on nonmortgage investments as a primary source of income.

Net Public Benefits Resulting From Government Sponsorship

Farmer Mac stated, "The Report's ultimate conclusion, that it is difficult to determine whether the public benefits provided by Farmer Mac justify continued government sponsorship, is inconsistent with the GAO's findings and analyses regarding Farmer Mac's economic viability and program development." Farmer Mac agreed with the positive findings about Farmer Mac's development and its economic viability and said that our ultimate conclusion conflicted with these findings. Farmer Mac also took issue with our conclusion that the activities of FCS and the FHLBank System affect the net public benefits provided by Farmer Mac. In addition, Farmer Mac stated that we should have but did not take into account its contribution to a more efficient agricultural credit market and the availability of a competitive supply of mortgage credit for agricultural borrowers.

In this report, a number of factors contribute to our conclusion that it is difficult to determine whether the public benefits created justifies continued government sponsorship of Farmer Mac. First, although our analysis shows that Farmer Mac is currently viable in its agricultural mortgage mission activities, its growth potential in the secondary market for agricultural mortgage and the prospects for realizing that potential are unclear. Since its restructuring resulting from the 1996 Act, Farmer Mac has experienced a favorable interest-rate environment that has contributed to profitability for financial institutions in general. Perhaps of greater importance, its agricultural mortgage-servicing portfolio has not been subject to major credit stress, such as a prolonged increase in default rates. Therefore, its ability to manage interest-rate and credit risks under stressful conditions has not been tested since the 1996 Act.

In addition, while Farmer Mac competes in various ways with FCS institutions and the FHLBank System, interaction between Farmer Mac and FCS institutions is subject to countervailing forces. On the one hand, as we explain in this report, FCS institutions have access to GSE-issued debt, and, therefore, FCS institutions may not have the same incentives as banks to sell mortgages to Farmer Mac to manage interest-rate risk. If banks remain more likely than FCS institutions to use Farmer Mac's products, the possibility of an expanded presence in agricultural lending (i.e., directly or indirectly) by FCS or the FHLBank System, as explained in this report, could lessen potential benefits to be generated by Farmer Mac. On the other hand, Farmer Mac has completed transactions with FCS institutions, but its limited experience to date is not sufficient to establish the likelihood of any future trend for its business with FCS. In addition, a more expansive definition of eligible mortgages on farm properties as collateral for FHLBank advances has increased the potential for competition between Farmer Mac's AgVantage Program with FHLBank advances. Since 64 percent of Farmer Mac approved sellers responding to our survey indicated that they were also members of the FHLBank System, the potential for overlap between GSE programs is significant. Because there is overlap in the three GSEs' activities, it is not clear how much value is added by a given GSE's existence that would not be generated by the others in its absence.

Most importantly, viability is not necessarily the only proper measure of the benefits and costs of government sponsorship. At some places in its comments, Farmer Mac appears to imply that viability is sufficient to indicate that its public benefits are greater than its public costs, although the viability measure does suggest that broader benefits might result from increased lender competition and wider availability of credit. There are a number of public costs and benefits that are not included in the viability measure. For example, due to potential liabilities and opportunity costs associated with government sponsorship, it is possible that the public cost generated by Farmer Mac activities may exceed its private cost. One potential public cost is that taxpayers could be called upon if a GSE is unable to meet its financial obligations. Opportunity costs can also be generated when the implied backing of certain financial institutions diverts funding from other financial institutions that may be able to serve the sector more efficiently. These potential costs resulting from government sponsorship of Farmer Mac cannot be statistically estimated.

Farmer Mac also stated that a broader standard than economic results, focusing on the secondary market's contribution to increased lender competition and wider availability of agricultural mortgage credit, would be a more appropriate measure of public benefits than viability.[44] To the extent that Farmer Mac develops unique programs and processes that improve the efficiency of agricultural mortgage markets, public benefits from such functions can exceed economic returns to Farmer Mac (i.e., spillover public benefits can be created). However, in activities where the GSEs provide similar or overlapping functions, market shifts among the GSEs are less likely to generate such spillover benefits. In the absence of statistical measures of lender competition and agricultural mortgage availability, these potential benefits also cannot be statistically estimated. In light of the measurement difficulties of the potential costs and potential

[44]Farmer Mac's comment letter also cited efforts that have attracted other nontraditional lenders into the agricultural mortgage market, particularly commercial mortgage lenders and agricultural supply and equipment companies. We discussed Farmer Mac outreach to nontraditional lenders, such as mortgage bankers, in this report. Also of note, we did not receive survey results from any respondent identifying itself as an agricultural supply and equipment company.

benefits and the difficulty in predicting Farmer Mac's growth potential, we reached the conclusion that it is difficult to determine whether the net public benefits resulting from government sponsorship of Farmer Mac justify continued government sponsorship.

Comparison of Farmer Mac's Market Penetration to That of the Housing Enterprises

Farmer Mac said that our draft report misleadingly compared Farmer Mac's market penetration to that of the housing enterprises during different time frames. Farmer Mac noted that the comparison in the draft report did not account for differences in operating charters, stage of development when the respective GSEs were created, and available resources to foster secondary market development. For these reasons, Farmer Mac stated that our report "contains no valid foundation for the finding that Farmer Mac's market penetration at its early stage of development is low compared to the housing enterprises and all references to that effect should be deleted from the report." In contrast to our conclusion, Farmer Mac stated, "…we believe the correct finding is that Farmer Mac's 2% market penetration during its first three years of operations compares very favorably to the housing GSEs' progress in the multifamily market, which is the more appropriate market for comparison with agricultural mortgages."

A major point of the section in the report containing these comparisons is that Farmer Mac's penetration of the agricultural mortgage market is relatively small. As Farmer Mac stated in its 1998 annual report, its $1.3 billion of secondary market activity at December 31, 1998, represented only 1.5 percent of all outstanding agricultural mortgages.

In comparing Farmer Mac's penetration to that of the housing enterprises over the first decade of their operations as GSEs, we recognize differences in operating charters, stage of development when the respective GSEs were created, and available resources to foster secondary market development. However, we believe that these market penetration comparisons, especially with multifamily residential mortgages, provide useful perspective in analyzing Farmer Mac's development.[45] In making these comparisons, we were not suggesting that Farmer Mac should mirror the market penetration levels achieved by the housing enterprises in their first decade of operations. Nor were we suggesting that Farmer Mac should be expected to reach the market penetration levels reached by the housing enterprises in the long-term. For example, the possibly greater heterogeneity of borrowing farm operators and of farm properties serving

[45]As discussed in this report, multifamily mortgages, just as agricultural mortgages, are supported by income flows from commercial properties.

as collateral for agricultural mortgages, even in comparison to multifamily residential mortgages, could lead to a different long-term outcome. We have revised the report to clarify our purpose in making these market penetration comparisons.

Farmer Mac was established as a GSE in 1988, and the 1996 Act made Farmer Mac's operating structure essentially the same as Freddie Mac's and Fannie Mae's. Fannie Mae and Freddie Mac became GSEs in 1968 and 1970, respectively. Prior to 1968, Fannie Mae was a government corporation. Freddie Mac was one of the first financial institutions in the nation to develop the ability to buy loans, form loan pools, and issue securities backed by loan pools. Fannie Mae began to issue securities backed by loan pools in the 1980s. As stated in this report, the housing enterprises did not enter the conventional multifamily market until 1983.

In relation to differences in operating charters, Farmer Mac's original charter was more limited than the housing enterprises' charters in that it created the necessity to operate through third-party poolers and establish a mandatory reserve or subordinated interest in its guarantee function. The housing enterprises did not have these constraints. However, Farmer Mac also had advantages during its first decade of operations compared to the housing enterprises during their first decade of aspirations as GSEs. Farmer Mac had the benefit of learning from the experiences of the housing enterprises, because it began operations in 1988, after the housing enterprises had developed the securitization concept for residential mortgages. In the 1990s, Farmer Mac also had the benefit of observing and learning from the dramatic expansion in securitization of residential mortgages and other financial assets.

While, Fannie Mae had been a government corporation before it was established as a GSE, this advantage was limited, because it became a GSE and continued as one for over a decade before it securitized residential mortgages. Regarding available resources to foster secondary market development, the housing enterprises initially focused their available resources on establishment of a secondary market in single-family rather than multifamily residential mortgage loans. In contrast to the housing enterprises lack of focus on multifamily mortgages, Farmer Mac, consistent with its statutory authority, has focused its available resources on establishment of a secondary market in agricultural mortgages.

Nonmortgage Investment Income

Farmer Mac said that our draft report incorrectly stated that interest income from nonmortgage investments continues to be a primary source of income at Farmer Mac. Farmer Mac said that net interest income from investments, including that from interest on cash and cash equivalents, was about one quarter of Farmer Mac's total revenues in 1998. Farmer Mac also stated that its nonmortgage investments are part of its debt issuance strategy as part of a broad business strategy to achieve increased market presence for Farmer Mac securities. Farmer Mac stated that the draft report should be revised to reflect more accurately the purposes for its debt issuance strategy and note that nonmortgage interest income should be characterized as a minor source rather than a primary source of income.

We relied on a number of statistical indicators for our analysis of interest income from nonmortgage investments. None of these indicators provided a precise measure of the percentage of Farmer Mac's net income accounted for by nonmortgage investments, because data are not publicly available on the allocation of Farmer Mac's interest and operating expenses among its various financial activities. In our 1998 report,[46] we indicated that as of June 30, 1997, Farmer Mac's nonmortgage investments of $931 million represented about 66 percent of Farmer Mac's assets. In its comment letter on our 1998 report, Farmer Mac stated that Farmer Mac's income from nonprogram investments represented about 38 percent of total net income.[47] As of December 31, 1998, Farmer Mac held $1.18 billion in nonmortgage investments (including cash and cash equivalents) that accounted for about 61 percent of total assets. As indicated in our report, Farmer Mac AMBS held by other investors has grown dramatically, which would logically lessen the relative importance of nonmortgage investment income compared to earlier periods. Because of the difficulty in precisely determining the importance of interest income from nonmortgage investments, we now characterize it as a significant rather than a primary source of income at Farmer Mac.

Farmer Mac has stated that the purpose of its investment policy is to increase its presence in the capital markets. In its comments, Farmer Mac stated that the number of investors purchasing Farmer Mac's debt and mortgage-backed securities has increased significantly as the market acceptance and liquidity of the securities has improved. As we stated in

[46]GAO/GGD-98-48.

[47]We understand that Farmer Mac's definition of nonprogram investments is equivalent to our definition of nonmortgage investments. We did not verify Farmer Mac's calculation nor determine Farmer Mac's method for allocating interest and operating expenses.

our 1998 report, these developments could be beneficial to achieving Farmer Mac's mission if they lead to benefits to Farmer Mac that are then passed on to borrowers in the form of more favorable loan terms.

As arranged with your office, unless you publicly announce the contents of this report earlier, we plan no further distribution until 20 days after its issue date. At that time, we will send copies of this report to Representative Paul E. Kanjorski, Ranking Minority Member, of your Subcommittee; Senators Richard G. Lugar, Chairman, and Tom Harkin, Ranking Minority Member, of the Senate Committee on Agriculture, Nutrition and Forestry; Representatives Larry Combest, Chairman, and Charles W. Stenholm, Ranking Minority Member, of the House Committee on Agriculture; Senators Phil Gramm, Chairman, and Paul S. Sarbanes, Ranking Minority Member, of the Senate Committee on Banking, Housing and Urban Affairs; Representatives Jim Leach, Chairman, and John J. LaFalce, Ranking Minority Member, of the House Committee on Banking and Financial Services; Henry Edelman, President and Chief Executive Officer of Farmer Mac; and Marsha Pyle Martin, Chairman and Chief Executive Officer of FCA. We will also make copies available to others on request.

Major contributors to this report are listed in appendix VI. Please contact me or William Shear, Assistant Director, at (202) 512-8678 if you or your staff have any questions.

Sincerely yours,

Thomas J. McCool

Thomas J. McCool
Director, Financial Institutions
  and Markets Issues

Contents

Tables

Figures

Abbreviations

AMBS	agricultural mortgage-backed securities
ARM	adjustable rate mortgage
FCA	Farm Credit Administration
FCS	Farm Credit System
GAAP	generally accepted accounting principles
GSE	government-sponsored enterprise
LTV	loan-to-value (ratio)
SPI	subordinated participation interests
USDA	United States Department of Agriculture
OSMO	Office of Secondary Market Oversight
FHLBank	Federal Home Loan Bank

Methodology for Survey of Farmer Mac Approved Sellers and Nonparticipants

To help determine the potential market benefits from a government sponsored secondary market for agricultural loans, we surveyed all 263 financial institutions that were currently approved to sell loans to Farmer Mac (as of Oct. 1998) and a sample of 334 commercial banks and insurance companies (as of Oct. 1998) that were not currently approved sellers but had been targeted by Farmer Mac as program candidates.

We asked officials at these financial institutions for their views on Farmer Mac programs and the secondary market for agricultural loans, their use of Farmer Mac services, and their behavior in the agricultural lending market. We conducted this mail questionnaire survey beginning in November 1998 and received 200 usable responses from approved sellers and 189 responses from nonparticipants by mid-February 1999.

Survey Population and Sample

Our ideal target populations were current participants in Farmer Mac programs and comparable institutions not currently approved to participate in any Farmer Mac programs.

The actual study populations we were able to survey were limited to those defined by available Farmer Mac records. We obtained a list of 263[1] financial institutions that had been approved to originate or pool agricultural loans and then sell them to Farmer Mac. Farmer Mac also provided us with a list of 331 nonparticipating (not approved to sell loans to Farmer Mac) commercial banks that met the marketing criteria developed by Farmer Mac. These banks had been designated by Farmer Mac as banks with significant potential for becoming Farmer Mac approved sellers. To this list of nonparticipants, we added three large insurance companies that were active in agricultural mortgage lending, but were not Farmer Mac members.

We chose to survey all 263 approved sellers and 334 nonparticipating institutions. No stratification or random probability sampling was used to select elements from the study populations.

Questionnaire Design

We created two self-administered mail questionnaires, one for approved sellers and another for nonparticipants. See appendix II for reproductions of the questionnaires and the results of the survey. To develop the questionnaires, we consulted officials from Farmer Mac and experts in the field of agricultural finance and asked them to review the draft

[1]In addition to the 263 approved sellers on our original sample frame, during the course of the survey we discovered 2 institutions on the nonparticipant sample that had become approved sellers, bringing the total to 265.

questionnaires. We also conducted six pretest interviews by telephone with a variety of institutions selected from both survey populations. The information gathered from these sources was used to improve the structure of the questionnaires and the wording of individual questions and response choices on the questionnaires.

Survey Administration

We mailed questionnaires to our samples on November 12, 1998. For the approved seller survey, we addressed the questionnaires to the individuals identified as contacts in Farmer Mac's records. For the nonparticipant survey, questionnaires were addressed to the President or Chief Executive Officer of the institution. Respondents were instructed to mail or fax their completed questionnaires. On December 3, 1998, we mailed replacement questionnaires to those who had not yet responded. On December 23, we sent an additional follow-up mailing to the remaining nonrespondents.

In early February 1999, we selected 6 approved sellers from the 57 who had not yet responded, and 11 nonparticipants out of 105 who had not yet responded and telephoned them to determine their reason for nonresponse and to prompt them to return questionnaires.

During our fieldwork, we discovered that 37 institutions on the nonparticipants' sample frame were already represented on the approved seller sample and were in fact approved sellers. These duplicate cases were removed from further consideration as nonparticipant sample elements.

Disposition of Survey Sample

When our fieldwork was concluded in mid-February 1999, we had received 200 usable approved seller questionnaires and 167 usable nonparticipant questionnaires. In addition, some of the nonparticipating institutions that did not return questionnaires told us that they did no agricultural lending, or reported that their answers were included in a questionnaire returned by another surveyed institution in the same bank holding company, which we counted as substantive responses. A total of 189 responses from nonparticipants were received.

The final response rate was 77 percent for the approved seller survey and 66 percent for the nonparticipant survey. See table I.1 for a more complete description of the dispositions of our survey samples.

Table I.1: Disposition of Samples

Disposition	Approved sellers	Nonparticipants
Total initial samples	**263**	**334**
Additional eligibles discovered during fieldwork	2	0
Sampled elements outside study population (ineligible)		
Out of business	5	10
Duplicate element or became seller	0	37
Sampled elements in the study population (eligible)—nonrespondents		
Undeliverable questionnaire	1	2
Refusal	3	6
All other nonresponses	56	90
Sampled elements in the study population (eligible)—respondents		
No agricultural lending	0	20
Responses rolled up on one questionnaire	0	2
Usable response	200	167
Response rate (respondents/total eligible)	**76.9%**	**65.8%**

Source: GAO.

Survey Error and Data Quality

Although we did not use any random probability sampling techniques to select our sample, and therefore our survey results are not subject to sampling error (imprecision in survey estimates caused by the natural variation that can occur among different possible samples of the same size), the practical difficulties of conducting any survey may introduce other types of errors. As discussed in the remaining text in this appendix, we took steps to minimize the extent of such errors.

Surveys may be subject to coverage error. Coverage error occurs when the sampling frame does not fully represent the target population of interest. For our seller survey, Farmer Mac gave us a list of approved sellers as of October 1998, but we did not verify this list nor did we necessarily capture all sellers approved after that date but before our survey ended. Because the nonparticipant sample was uniquely defined as those institutions that Farmer Mac was targeting as possible candidates for membership, it would not be subject to coverage error as commonly defined.

Measurement errors are defined as differences between the reported and true value of a characteristic under study. Such errors can arise from differences in how questions are interpreted by respondents, deficiencies in the sources of information available to respondents, the misreporting by respondents, or poorly designed questions. We received expert review of our survey questionnaire from a nationally recognized survey firm retained by Farmer Mac. We also conducted pretests with sampled respondents to minimize such measurement errors.

Nonresponse error arises when surveys are unsuccessful in obtaining any information from eligible elements or fail to get valid answers to individual questions on returned questionnaires. To the extent that those not providing information would have provided significantly different information from those that did respond, bias from nonresponse can also result. Because the seriousness of this type of error is often proportional to the level of missing data, response rates are commonly used as indirect measures of nonresponse error. We took steps to maximize response rates, such as multiple mailings and telephone calls to convert nonrespondents. In addition, during telephone follow up with 17 nonrespondents, we asked them why they had not yet responded, and none of the answers indicated that they held beliefs that could be associated with extreme questionnaire answers that would differ substantially from those who did respond.

Finally, surveys may be subject to processing error in data entry, processing, and analysis. We verified the accuracy of a small sample of keypunched records by comparing them to their corresponding questionnaires, and we corrected errors found. Less than 1 percent of the data elements we checked had random keypunch errors that would not have been corrected during data processing. In addition, we performed diagnostics to check the reliability of results during the processing and tabulation of survey data. Analysis programs were also independently verified. We did not, however, verify the substantive answers given by survey respondents.

GAO Survey Results of Farmer Mac Approved Sellers and Nonparticipants

GAO U. S. General Accounting Office

Survey of Farmer Mac Approved Sellers

Introduction

The U.S. General Accounting Office (GAO), an independent agency of Congress, has been asked to study the Federal Agricultural Mortgage Corporation (Farmer Mac) and the secondary agricultural mortgage market. We are surveying both approved sellers (participants) and non-participants in Farmer Mac programs. We are interested in your organization's activities, even if your organization does only a limited amount of agricultural mortgage lending.

Most of the questions in this survey can be answered easily by checking boxes or filling in blanks. A few questions require short narrative answers. Additional comments may be written at the end of the survey.

Your cooperation in completing this survey is important to our study. GAO will take steps to safeguard the privacy of your responses. Survey results will be reported in summary form only. Any discussion of individual answers or comments will omit any information that could identify the Respondent. Respondents interested in reading the report Incorporating the results of this survey are encouraged to check the box in question 34 to request a copy of the GAO report.

The survey should take about **30 minutes** to complete. If you have any questions about this survey, please call Mr. Joe Hunter at (202) 512-5450.

Please return the completed survey by fax to **(202) 512-3642** or **(202) 512-3774**, or in the enclosed preaddressed, prepaid envelope **within 10 business days of receipt**. In the event the envelope is misplaced, our return address is:

U.S. General Accounting Office
Attn: Mr. Joe Hunter
441 G Street, N.W.
Room 2A28
Washington, DC 20548

Thank you for your cooperation and assistance.

Please provide the following information in the event we require clarification of a response:

Name of primary respondent/Title: ______________________

Company/Institution: ______________________

Address: ______________________

City, State, Zip Code: ______________________

Telephone: (______)________-__________

Instructions

This survey should be completed by the person(s) who has the most knowledge about your institution's participation in the Farmer Mac programs.

If additional space is needed for questions requiring narrative responses, attach additional sheets as necessary and number responses accordingly.

1

Section I: Background Information About Your Institution

1. Which of the following classifications best describes your institution? *(Check one.)*

N=195

1. ❒ 82.6% Commercial bank
2. ❒ 1.0% Thrift institution
3. ❒ 0.0% Life insurance company
4. ❒ 4.1% Farm Credit System institution
5. ❒ 6.7% Mortgage banker
6. ❒ 0.0% Trust company
7. ❒ 5.6% Other - Specify: ____________

2. What was the **total asset size** of your institution as of **September 30, 1998**?

N=190

$___ ___ ___ , ___ ___ ___ , ___ ___ ___ , ___ ___ ___ . 00 Mean=$5.07 billion

3. Is your institution a member of the Federal Home Loan Bank (FHLB) System? (*Check one.*)

N=190

1. ❒ 63.7% Yes → ***Continue with question 4.***
2. ❒ 36.3% No → ***Skip to question 5.***

4. What was the dollar value of FHLB advances your institution obtained for the period **January 1, 1997 through September 30, 1998**?

N=113

$___ ___ ___ , ___ ___ ___ , ___ ___ ___ , ___ ___ ___ . 00 Mean=$28.7 million

5. Of all the agricultural mortgage loans **originated and/or purchased** by your institution, about what percentage of loans fall into each of the following categories? *(Enter percents. If none, enter zero.)*

N=112

1. Fixed rate mortgages with maturity of 5 years or less	___ ___ ___	24.0%
2. Fixed rate mortgages with maturity between 5 and 15 years	___ ___ ___	24.4%
3. Fixed rate mortgages with maturity greater than 15 years	___ ___ ___	15.7%
4. Adjustable rate mortgages	___ ___ ___	35.1%
5. Other -Specify: ____________	___ ___ ___	1.0%

(Total may not equal 100% due to rounding)

TOTAL **100%**

2

6. What were your institution's (on-balance sheet asset) holdings of **residential mortgages as of September 30, 1998**?
(Note: On-balance sheet assets are assets that are reported on the balance sheet under standard accounting practices.)

$___ ___ ___, ___ ___ ___, ___ ___ ___, ___ ___ ___. 00

N=172
Mean=$120.7 million

7. What were your institution's (on-balance sheet asset) holdings of **agricultural mortgages as of September 30, 1998**?

$___ ___ ___, ___ ___ ___, ___ ___ ___, ___ ___ ___. 00

N=173
Mean=$170.0 million

8. Please provide the dollar amount of agricultural mortgage loans **originated and/or purchased** by your institution for the period **January 1, 1997 through September 30, 1998**.

$___ ___ ___, ___ ___ ___, ___ ___ ___, ___ ___ ___. 00

N=161
Mean=$53.3 million

9. In general, of the agricultural mortgage loans that your institution **originates and/or purchases**, approximately what percentage of these loans does your institution **sell** in the secondary market? *(Enter percent. If none, enter zero.)*

N=185

___ ___ ___

Mean=25.7%

10. Of all the agricultural mortgage loans **sold** by your institution, about what percentage of loans fall into each of the following categories? *(Enter percents. If none, enter zero.)*

		N=117
1. Fixed rate mortgages with maturity of 5 years or less	___ ___ ___	3.6%
2. Fixed rate mortgages with maturity between 5 and 15 years	___ ___ ___	45.0%
3. Fixed rate mortgages with maturity greater than 15 years	___ ___ ___	33.8 %
4. Adjustable rate mortgages	___ ___ ___	14.7%
5. Other -Specify: ________________	___ ___ ___	2.9%
TOTAL	**100%**	

11. Please specify the type of secondary market participants that purchase your institution's agricultural mortgage loans. *(Check all that apply.)*

Number

1. ❐ 136 Farmer Mac
2. ❐ 28 Commercial bank
3. ❐ 0 Thrift institution
4. ❐ 30 Life insurance company
5. ❐ 26 Other - Specify: ________________

3

12. How important are each of the following reasons in your institution's decision **to sell** agricultural mortgage loans? *(Check one box in each row.)*

	Very great importance (1)	Great Importance (2)	Moderate importance (3)	Some importance (4)	Little or no importance (5)	Don't know/ not applicable (6)
a. To increase liquidity N=181	16.6%	19.3%	19.9%	16.0%	23.2%	5.0%
b. To manage credit risk N=182	8.8%	19.8%	25.3%	18.1%	22.5%	5.5%
c. To manage interest rate risk N=181	34.3%	35.4%	12.7%	6.6%	5.5%	5.5%
d. To enhance financial returns through fee income N=183	20.8%	30.6%	26.2%	14.8%	3.8%	3.8%
e. Other - Specify: N=41 ______ ______	46.3%	29.3%	12.2%	2.4%	0.0%	9.8%

Section II: Participation in Farmer Mac Programs

13. In what year was your institution first approved to participate in Farmer Mac programs?

N=184

2	1986
7	1988
7	1989
6	1990
3	1991
2	1992
4	1993
6	1994
8	1995
34	1996
44	1997
61	1998

14. What is your **current** relationship with Farmer Mac? *(Check all that apply.)*

Number

1. ❒ 74 Loan seller
2. ❒ 126 Loan seller-servicer
3. ❒ 19 Other - Specify: ______

4

15. How familiar or unfamiliar are you with each of the following Farmer Mac programs? *(Check one box in each row.)*

	Very familiar (1)	Generally familiar (2)	Unfamiliar (3)
Farmer Mac I Direct Loan (Cash Window) Sales N=194	35.1%	56.7%	8.2%
Farmer Mac I AgVantage N=191	7.3%	61.8%	30.9%
Farmer Mac I Swaps N=191	1.6%	23.0%	75.4%
Farmer Mac II Direct Loan (Cash Window) Sales N=193	29.0%	50.8%	20.2%
Farmer Mac II Swaps N=190	2.1%	19.5%	78.4%

16. Has your institution completed any transactions in the following **Farmer Mac programs** during the period **January 1, 1997 through September 30, 1998**? *(Check yes or no in each row. For each "Yes" response, please indicate the principal dollar amount sold/swapped in each program.)*

	Yes (1)	No (2)	If yes, provide the principal dollar amount Sold/swapped.
Farmer Mac I Direct Loan (Cash Window) Sales N=196	35.2%	64.8%	N=68 Mean=$6.6 million $ ___ ___ ___, ___ ___ ___, ___ ___ ___ .00
Farmer Mac I AgVantage N=196	3.1%	96.9%	N=6 Mean=$3.3 million $ ___ ___ ___, ___ ___ ___, ___ ___ ___ .00
Farmer Mac I Swaps N=196	0.5%	99.5%	N=1 Mean=$345 thousand $ ___ ___ ___, ___ ___ ___, ___ ___ ___ .00
Farmer Mac II Direct Loan (Cash Window) Sales N=196	22.4%	77.6%	N=43 Mean=$1.9 million $ ___ ___ ___, ___ ___ ___, ___ ___ ___ .00
Farmer Mac II Swaps N=196	1.0%	99.0%	N=2 Mean=$2.1 million $ ___ ___ ___, ___ ___ ___, ___ ___ ___ .00

5

17. Has your institution completed transactions in AgVantage **and** received FHLB advances? *(Check one.)*

N=194

1. ❐ 2.6% Yes, both. ➔ ***Continue with question 18.***
2. ❐ 97.4% No, not both. ➔ ***Skip to Section III on page 7.***

18. Does the AgVantage program offer agricultural credit that is unavailable through advances from the FHLB system? *(Check one.)*

N=6

1. ❐ 83.3% Yes
2. ❐ 16.7% No

19. In your opinion, what are the advantages and disadvantages of both the AgVantage program and the FHLB system? *(Write "same" where appropriate to indicate an advantage or disadvantage shared by both programs.)*

AgVantage	FHLB
Advantages:	**Advantages:**
Disadvantages:	**Disadvantages:**

6

Section III: Views on Farmer Mac

Please answer the following questions regardless or whether or not your institution has completed transactions with Farmer Mac. If your institution has completed Farmer Mac transactions, please answer the following question based on those experiences. If your institution has not completed any Farmer Mac transactions, please answer the following question based on your general knowledge of Farmer Mac programs.

20. Based on your knowledge or participation in any Farmer Mac program, to what extent, if at all, have you generally experienced (or think you would experience) the following benefits? *(Check one box in each row.)*

Potential Benefits of Farmer Mac Participation		To a very great extent (1)	To a great extent (2)	To a Moderate Extent (3)	To some extent (4)	To little or no extent (5)	Don't know/ not applicable (6)
a. Access to a long-term, stable supply of funds	N=193	24.9%	42.0%	18.1%	10.9%	2.1%	2.1%
b. Access to competitively priced funds	N=195	21.5%	39.5%	21.0%	14.9%	2.1%	1.0%
c. Reduction in capital requirements	N=193	9.3%	14.5%	26.9%	18.1%	22.3%	8.8%
d. Reduction in credit risk	N=193	8.8%	16.1%	25.9%	25.9%	19.2%	4.1%
e. Reduction in interest rate risk	N=193	26.4%	34.2%	20.2%	11.4%	5.2%	2.6%
f. Increased income from servicing fees	N=194	18.0%	29.9%	26.3%	21.1%	3.1%	1.5%
g. Increased income from origination fees	N=194	19.1%	23.7%	25.3%	21.1%	9.3%	1.5%
h. Ability to offer loans with competitive interest rates to borrowers	N=189	31.7%	36.5%	18.5%	9.0%	3.2%	1.1%
i. Ability to offer long-term fixed-rate loans to borrowers	N=189	42.3%	39.2%	10.6%	3.7%	2.6%	1.6%
j. Other – Specify: ____________	N=12	16.7%	16.7%	25.0%	8.3%	8.3%	25.0%

7

21. In your opinion, to what extent, if at all, would the following changes to Farmer Mac programs encourage your institution to sell **more** agricultural mortgage loans to Farmer Mac? *(Check one box in each row.)*

Potential Changes to Farmer Mac Programs	To a very great extent (1)	To a great extent (2)	To a Moderate Extent (3)	To some extent (4)	To little or no extent (5)	Don't know/ Not Applicable (6)
a. Standardize loan documents by state N=184	15.8%	13.0%	26.1%	13.6%	20.1%	11.4%
b. Eliminate the pre-payment penalty N=190	56.3%	23.2%	12.1%	4.2%	2.1%	2.1%
c. Phase out the pre-payment penalty over the term of the loan N=187	23.5%	30.5%	26.7%	9.6%	7.5%	2.1%
d. Establish an interest rate cap on adjustable rate mortgages N=186	13.4%	24.2%	31.7%	15.1%	12.4%	3.2%
e. Lessen the administrative burden N=136 Please specify: ______	16.2%	13.2%	19.9%	12.5%	16.2%	22.1%
f. Other – Specify: N=35 ______	37.1%	14.3%	5.7%	5.7%	2.9%	34.3%

Please explain your answers to the above question:

______

______

______

22. In your opinion, how likely or unlikely is it that your institution **would increase** loan sales to Farmer Mac **in the next three years**? *(Check one.)*

N=193

1. ❒ 36.3% Very likely
2. ❒ 36.8% Likely
3. ❒ 17.1% As likely as unlikely
4. ❒ 6.2% Unlikely
5. ❒ 2.1% Very unlikely

----

6. ❒ 1.6% Don't know/no opinion

8

In February 1998, Farmer Mac began a new program called AgVantage in which Farmer Mac purchases general obligation bonds issued by lenders and collateralized by agricultural mortgage loans as an alternative to buying the loans themselves. The lenders can leverage their agricultural mortgage loans while maintaining control of their mortgages and keeping their customers.

23. Based on your knowledge of or participation in the **AgVantage** program, to what extent, if at all, does AgVantage provide the following benefits? *(Check one box in each row.)*

Potential Benefits of AgVantage	To a very Great Extent (1)	To a great extent (2)	To a moderate extent (3)	To some extent (4)	To little or no extent (5)	Don't know/ not applicable (6)
a. Funding at attractive rates and terms N=186	6.5%	22.0%	17.7%	12.4%	7.5%	33.9%
b. Ability to get cash but keep customers and their mortgages N=186	10.2%	27.4%	14.5%	11.8%	4.8%	31.2%
c. Ability to offer loans with competitive interest rates to borrowers N=186	7.0%	24.7%	18.3%	11.3%	7.5%	31.2%
d. Ability to offer long-term fixed-rate loans to borrowers N=186	11.8%	22.6%	16.1%	12.4%	5.4%	31.7%
e. Ability to offer loans with flexible terms to borrowers N=186	5.4%	19.4%	22.6%	12.4%	7.0%	33.3%
f. Other – Specify: N=36 ______	2.8%	8.3%	2.8%	2.8%	5.6%	77.8%

24. In your opinion, how likely or unlikely is it that your institution **would participate** in AgVantage **in the next three years**? *(Check one.)*

N=194

1. ❒ 10.3% Very likely
2. ❒ 12.9% Likely
3. ❒ 27.8% As likely as unlikely
4. ❒ 23.7% Unlikely
5. ❒ 10.3% Very unlikely

----

6. ❒ 14.9% Don't know/no opinion

9

Section IV: Views on the Secondary Agricultural Mortgage Market

25. In your opinion, has Farmer Mac had a positive, a negative, or no effect on the availability of agricultural mortgage credit to date? *(Check one.)*

N=196

1. ❒ 14.3% Very positive effect
2. ❒ 51.0% Generally positive effect
3. ❒ 26.5% Neither positive nor negative effect
4. ❒ 0.5% Generally negative effect
5. ❒ 0.5% Very negative effect

----

6. ❒ 7.1% No basis to judge

26. In your opinion, what **positive** effects (if any) has Farmer Mac had on the availability of agricultural mortgage credit to date? *(Discuss in space below.)*

27. In your opinion, what **negative** effects (if any) has Farmer Mac had on the availability of agricultural mortgage credit to date? *(Discuss in space below.)*

28. Based on your experience in your market area, has Farmer Mac increased, decreased, or had no impact on competition in agricultural mortgage lending? *(Check one.)*

N=195

1. ❒ 11.3% Greatly increased competition
2. ❒ 43.6% Moderately increased competition
3. ❒ 33.8% Neither increased nor decreased competition
4. ❒ 1.0% Moderately decreased competition
5. ❒ 0.0% Greatly decreased competition

----

6. ❒ 10.3% Don't know/no opinion

Please explain your response:

10

29. In your opinion, is there a need for a secondary market for agricultural mortgage loans? *(Check one.)*

N=193

1. ❒ 96.9% Yes ➔ ***Continue with question 30.***
2. ❒ 3.1% No ➔ ***Skip to question 32.***

30. In your opinion, who should be responsible for the development of the secondary market for agricultural mortgages and why? *(Check all that apply.)*

Number

1. ❒ 112 Government-sponsored
2. ❒ 103 Private sector
3. ❒ 15 Other - Specify: ______

Please explain your response: ______

31. **If you checked more than one box in question 30**, please indicate which entity you believe should be **primarily** responsible for the development of the secondary market for agricultural mortgage loans? (*Check one.*)

N=48

1. ❒ 60.4% Government-sponsored
2. ❒ 37.5% Private sector
3. ❒ 2.1% Other - Specify: ______

Please explain your response: ______

32. Would you agree or disagree that even in today's low mortgage interest rate environment, few long-term fixed-rate agricultural mortgages are being originated? (*Check one.*)

N=187

1. ❒ 58.3% Agree ➔ ***Explain below, then continue with question 33.***
2. ❒ 41.7% Disagree ➔ ***Explain below, then skip to question 34.***

Please explain your response: ______

11

33. If you agree, in your opinion, which of the following is the **primary reason** that few long-term fixed-rate agricultural mortgages are being originated? (*Check one.*)

N=106

1. ❐ 11.3% Farmers are reluctant to borrow long-term fixed rate agricultural mortgages.
2. ❐ 30.2% Lenders tend **not** to offer long-term fixed-rate agricultural mortgages.
3. ❐ 38.7% Farmers seek long-term fixed-rate agricultural mortgages, but lenders tend **not** to offer them.
4. ❐ 19.8% Other - Specify: ____________

Please explain your response: ____________

34. ❐ Check here if you would like to receive a copy of the final report incorporating the results of this survey.

Please provide contact information if you would like the report mailed to someone other than the primary respondent:

Name: ____________

Address: ____________

City, State, Zip Code: ____________

35. Do you have any additional comments or observations you would like to share? Please use the space below. If necessary, you may add additional sheets.

REMINDER! Please review your responses to make sure that all appropriate questions have been answered.

Thank you for your cooperation and assistance.

Please return the questionnaire in the enclosed prepaid envelope or fax it to Mr. Joe Hunter at (202) 512-3642 or (202) 512-3774.

12

GAO U. S. General Accounting Office

Survey of Non-Participants in Farmer Mac Programs

Introduction

The U.S. General Accounting Office (GAO), an independent agency of Congress, has been asked to study the Federal Agricultural Mortgage Corporation (Farmer Mac) and the secondary agricultural mortgage market. We are surveying both approved sellers (participants) and non-participants in Farmer Mac programs. We are interested in your organization's activities, even if your organization does only a limited amount of agricultural mortgage lending.

Most of the questions in this survey can be answered easily by checking boxes or filling in blanks. A few questions require short narrative answers. Additional comments may be written at the end of the survey.

Your cooperation in completing this survey is important to our study. GAO will take steps to safeguard the privacy of your responses. Survey results will be reported in summary form only. Any discussion of individual answers or comments will omit any information that could identify the Respondent. Respondents interested in reading the report incorporating the results of this survey are encouraged to check the box in question 31 to request a copy of the GAO report.

The survey should take about **30 minutes** to complete. If you have any questions about this survey, please call Mr. Joe Hunter at (202) 512-5450.

Please return the completed survey in the enclosed preaddressed, prepaid envelope **within 10 business days of receipt**. In the event the envelope is misplaced, our return address is:

U.S. General Accounting Office
Attn: Mr. Joe Hunter
441 G Street, N.W.
Room 2A28
Washington, DC 20548

Thank you for your cooperation and assistance.

Please provide the following information in the event we require clarification of a response:

Name of primary respondent/Title: ____________________

Company/Institution: ____________________

Address: ____________________

City, State, Zip Code: ____________________

Telephone: (________)__________-________________

Instructions

This survey should be completed by the person(s) who has the most knowledge about your institution's agricultural mortgage lending practices.

If additional space is needed for questions requiring narrative responses, attach additional sheets as necessary and number responses accordingly.

1

Section I: Background Information About Your Institution

1. Which of the following classifications best describes your institution? *(Check one.)*

N=165

1. ❐ 161 Commercial bank
2. ❐ 0 Thrift institution
3. ❐ 2 Life insurance company
4. ❐ 1 Farm Credit System institution
5. ❐ 1 Mortgage banker
6. ❐ 0 Trust company
7. ❐ 0 Other - Specify: ______________________

2. What was the **total asset size** of your institution as of **September 30, 1998**?

N=164
Mean=$8.84 billion

$___ ___ ___ , ___ ___ ___ , ___ ___ ___ , ___ ___ ___ . 00

3. Is your institution a member of the Federal Home Loan Bank (FHLB) System? (*Check one.*)

N=164

1. ❐ 80.5% Yes ➔ ***Continue with question 4.***
2. ❐ 19.5% No ➔ ***Skip to question 5.***

4. What was the dollar value of FHLB advances your institution obtained for the period **January 1, 1997 through September 30, 1998**?

N=118
Mean=$240.0 million

$___ ___ ___ , ___ ___ ___ , ___ ___ ___ , ___ ___ ___ . 00

5. Of all the agricultural mortgage loans **originated and/or purchased** by your institution, about what percentage of loans fall into each of the following categories? *(Enter percents. If none, enter zero.)*

		N=159
1. Fixed rate mortgages with maturity of 5 years or less	___ ___ ___	35.4%
2. Fixed rate mortgages with maturity between 5 and 15 years	___ ___ ___	13.6%
3. Fixed rate mortgages with maturity greater than 15 years	___ ___ ___	2.2%
4. Adjustable rate mortgages	___ ___ ___	44.3%
5. Other -Specify: ______________________	___ ___ ___	4.5%
TOTAL	**100%**	

2

6. What were your institution's (on-balance sheet asset) holdings of **residential mortgages as of September 30, 1998**? (Note: On-balance sheet assets are assets that are reported on the balance sheet under standard accounting practices.)

N=156
Mean=$330.0 million

$___ ___ ___ , ___ ___ ___ , ___ ___ ___ , ___ ___ ___ . 00

7. What were your institution's (on-balance sheet asset) holdings of **agricultural mortgages as of September 30, 1998**?

N=160
Mean=$32.7 million

$___ ___ ___ , ___ ___ ___ , ___ ___ ___ , ___ ___ ___ . 00

8. Please provide the dollar amount of agricultural mortgage loans **originated and/or purchased** by your institution for the period **January 1, 1997 through September 30, 1998**.

N=131
Mean=$13.5 million

$___ ___ ___ , ___ ___ ___ , ___ ___ ___ , ___ ___ ___ . 00

9. In general, of the agricultural mortgage loans that your institution **originates and/or purchases**, approximately what percentage of these loans does your institution **sell**? *(Enter percent. If none, enter zero.)*

N=162
Mean=1.7%

___ ___ ___ %

If your institution does not sell agricultural mortgage loans ➔ Continue with question 10 below and then skip to Section II on page 5.
If your institution does sell agricultural mortgage loans ➔ Skip to question 11 on page 4.

10. To what extent, if at all, did the following factors contribute to your institution's decision **not to sell** any of the agricultural mortgage loans it **originates and/or purchases**? *(Check one box in each row.)*

	To a very great extent (1)	To a great extent (2)	To a moderate extent (3)	To some extent (4)	To little or no extent (5)	Don't know/ not applicable (6)
a. Choose to hold agricultural mortgage loans in portfolio N=144	54.2%	28.5%	11.1%	1.4%	1.4%	3.5%
b. Have adequate funding to meet agricultural mortgage loan demands N=144	47.2%	33.3%	11.1%	4.2%	1.4%	2.8%
c. Other – Specify: ________________ N=25	36.0%	32.0%	4.0%	4.0%	4.0%	20.0%

3

11. Of all the agricultural mortgage loans **sold** by your institution, about what percentage of loans fall into each of the following categories? *(Enter percents. If none, enter zero.)*

		N=15
1. Fixed rate mortgages with maturity of 5 years or less	___ ___ ___	3.9%
2. Fixed rate mortgages with maturity between 5 and 15 years	___ ___ ___	41.2%
3. Fixed rate mortgages with maturity greater than 15 years	___ ___ ___	22.9%
4. Adjustable rate mortgages	___ ___ ___	32.0%
5. Other -Specify: ______________________	___ ___ ___	0.0%
TOTAL	**100%**	

12. Please specify the type of secondary market participants that purchase your institution's agricultural mortgage loans. *(Check all that apply.)*

Number

1. ❒ 6 Commercial bank
2. ❒ 0 Thrift institution
3. ❒ 3 Life insurance company
4. ❒ 12 Other - Specify: _______

13. How important are each of the following reasons in your institution's decision **to sell** agricultural mortgage loans? *(Check one box in each row.)*

	Very great importance (1)	Great Importance (2)	Moderate importance (3)	Some importance (4)	Little or no Importance (5)	Don't know/ not applicable (6)
a. To increase liquidity N=16	0.0%	6.3%	31.3%	37.5%	18.8%	6.3%
b. To manage credit risk N=17	11.8%	23.5%	23.5%	11.8%	29.4%	0.0%
c. To manage interest rate risk N=17	41.2%	23.5%	23.5%	0.0%	11.8%	0.0%
d. To enhance financial returns through fee income N=17	11.8%	29.4%	41.2%	0.0%	17.6%	0.0%
e. Other - Specify: N=5 ______________	80.0%	0.0%	0.0%	0.0%	0.0%	20.0%

4

Section II: Knowledge of Farmer Mac Programs

14. How familiar or unfamiliar are you with each of the following Farmer Mac programs? *(Check one box in each row.)*

	Very familiar (1)	Generally familiar (2)	Unfamiliar (3)
Farmer Mac I Direct Loan (Cash Window) Sales N=165	4.8%	43.0%	52.1%
Farmer Mac I AgVantage N=165	0.6%	29.7%	69.7%
Farmer Mac I Swaps N=164	0.0%	12.8%	87.2%
Farmer Mac II Direct Loan (Cash Window) Sales N=165	5.5%	32.1%	62.4%
Farmer Mac II Swaps N=164	0.0%	13.4%	86.6%

15. Please characterize your institution's level of contact with Farmer Mac. *(Check all that apply.)*
Number

1. ❒ 59 No contact/Never participated in a Farmer Mac program
2. ❒ 83 Received Farmer Mac mail solicitation
3. ❒ 44 Solicited by Farmer Mac by means other than mail
4. ❒ 2 Former approved loan pooler
5. ❒ 15 Former approved loan originator
6. ❒ 2 Former approved loan servicer
7. ❒ 41 Attended a Farmer Mac workshop
8. ❒ 21 Familiar with Farmer Mac programs, but didn't attend a workshop
9. ❒ 17 Other - Specify: ____________________

16. To what extent, if at all, did the following factors contribute to your institution's decision **not to sell** agricultural mortgage loans to **Farmer Mac**? (Check one box in each row.)

	To a very Great Extent (1)	To a great extent (2)	To a Moderate Extent (3)	To some extent (4)	To little or no extent (5)	Don't know/ not applicable (6)
a. Non-competitive loan purchase rates offered by Farmer Mac to lenders N=151	5.3%	9.3%	8.6%	12.6%	27.2%	37.1%
b. Non-competitive loan purchase terms offered by Farmer Mac to lenders N=149	6.7%	5.4%	12.1%	12.1%	26.8%	36.9%
c. Low demand for long-term, fixed-rate agricultural loan mortgages N=151	3.3%	7.3%	8.6%	13.2%	48.3%	19.2%
d. Choose to hold agricultural mortgage loans in portfolio N=159	39.0%	27.0%	15.7%	5.0%	3.1%	10.1%
e. Have adequate funding to meet agricultural mortgage loan demands N=157	33.8%	30.6%	15.3%	7.0%	3.2%	10.2%
f. Farmer Mac's strict underwriting standards N=149	6.7%	10.1%	12.8%	14.8%	22.1%	33.6%
g. Farmer Mac's loan procedures N=150	9.3%	12.0%	13.3%	12.7%	18.7%	34.0%
h. Other – Specify: N=40	40.0%	10.0%	10.0%	2.5%	2.5%	35.0%

5

17. Based on your knowledge of any Farmer Mac programs, to what extent, if at all, do you think your institution would experience the following benefits by participating in Farmer Mac programs? *(Check one box in each row.)*

Potential Benefits of Farmer Mac Participation		To a very great extent (1)	To a great extent (2)	To a moderate extent (3)	To some extent (4)	To little or no extent (5)	Don't know/ not applicable (6)
a. Access to a long-term, stable supply of funds	N=162	10.5%	22.8%	25.9%	15.4%	9.3%	16.0%
b. Access to competitively priced funds	N=162	6.2%	20.4%	25.9%	17.3%	9.9%	20.4%
c. Reduction in capital requirements	N=160	4.4%	9.4%	20.0%	25.6%	20.6%	20.0%
d. Reduction in credit risk	N=159	5.7%	14.5%	20.8%	22.6%	19.5%	17.0%
e. Reduction in interest rate risk	N=162	9.9%	24.1%	24.1%	17.3%	9.9%	14.8%
f. Increased income from servicing fees	N=162	6.2%	21.0%	25.9%	21.0%	9.9%	16.0%
g. Increased income from origination fees	N=162	4.3%	19.1%	24.1%	24.7%	11.7%	16.0%
h. Ability to offer loans with competitive interest rates to borrowers	N=161	8.1%	28.6%	21.7%	15.5%	8.7%	17.4%
i. Ability to offer long-term fixed-rate loans to borrowers	N=162	16.7%	36.4%	13.6%	11.7%	6.8%	14.8%
j. Other – Specify: ____________________	N=13	15.4%	0.0%	0.0%	0.0%	0.0%	84.6%

6

18. In your opinion, to what extent, if at all, would the following changes to Farmer Mac programs encourage your institution to sell agricultural mortgage loans to Farmer Mac? *(Check one box in each row.)*

Potential Changes to Farmer Mac Programs	To a very great extent (1)	To a great extent (2)	To a moderate extent (3)	To some Extent (4)	To little or no extent (5)	Don't know/ not applicable (6)
a. Standardize loan documents by state N=154	5.2%	13.0%	26.6%	11.0%	16.2%	27.9%
b. Eliminate the pre-payment penalty N=155	22.6%	24.5%	14.8%	10.3%	8.4%	19.4%
c. Phase out the pre-payment penalty over the term of the loan N=150	10.0%	25.3%	18.0%	15.3%	10.7%	20.7%
d. Establish an interest rate cap on adjustable rate mortgages N=153	5.9%	19.0%	22.9%	15.7%	13.1%	23.5%
e. Lessen the administrative burden N=128 Please specify: ______	8.6%	18.8%	11.7%	3.1%	9.4%	48.4%
f. Other – Specify: N=30 ______	26.7%	10.0%	0.0%	0.0%	3.3%	60.0%

Please explain your answers to the above question:

19. In your opinion, how likely or unlikely is it that your institution **would participate** in Farmer Mac in **the next three years**? *(Check one.)*

N=163

1. ❐ 7.4% Very likely
2. ❐ 17.2% Likely
3. ❐ 25.8% As likely as unlikely
4. ❐ 25.8% Unlikely
5. ❐ 16.0% Very unlikely

----

6. ❐ 8.0% Don't know/no opinion

7

In February 1998, Farmer Mac began a new program called AgVantage in which Farmer Mac purchases general obligation bonds issued by lenders and collateralized by agricultural mortgage loans as an alternative to buying the loans themselves. The lenders can leverage their agricultural mortgage loans while maintaining control of their mortgages and keeping their customers.

20. Based on your knowledge of the **AgVantage** program, to what extent, if at all, do you think AgVantage provides the following benefits? *(Check one box in each row.)*

Potential Benefits of AgVantage		To a very great extent (1)	To a great extent (2)	To a moderate extent (3)	To some extent (4)	To little or no extent (5)	Don't know/ not applicable (6)
a. Funding at attractive rates and terms	N=157	1.9%	13.4%	12.1%	11.5%	5.1%	56.1%
b. Ability to get cash but keep customers and their mortgages	N=158	5.7%	16.5%	17.1%	10.8%	3.2%	46.8%
c. Ability to offer loans with competitive interest rates to borrowers	N=156	3.2%	13.5%	19.2%	10.3%	3.8%	50.0%
d. Ability to offer long-term fixed-rate loans to borrowers	N=155	9.0%	18.7%	16.1%	8.4%	1.3%	46.5%
e. Ability to offer loans with flexible terms to borrowers	N=155	2.6%	11.6%	18.1%	14.2%	4.5%	49.0%
f. Other – Specify: ____________	N=31	3.2%	3.2%	0.0%	0.0%	3.2%	90.3%

21. In your opinion, how likely or unlikely is it that your institution **would participate** in AgVantage in the **next three years**? *(Check one.)*

N=163

1. ❒ 2.5% Very likely
2. ❒ 9.8% Likely
3. ❒ 28.8% As likely as unlikely
4. ❒ 23.9% Unlikely
5. ❒ 14.7% Very unlikely

----

6. ❒ 20.2% Don't know/no opinion

8

Section III: Views on the Secondary Agricultural Mortgage Market

22. In your opinion, has Farmer Mac had a positive, a negative, or no effect on the availability of agricultural mortgage credit to date? *(Check one.)*

N=165

1. ❒ 2.4% Very positive effect
2. ❒ 21.2% Generally positive effect
3. ❒ 35.8% Neither positive nor negative effect
4. ❒ 0.0% Generally negative effect
5. ❒ 1.8% Very negative effect

----

6. ❒ 38.8% No basis to judge

23. In your opinion, what **positive** effects (if any) has Farmer Mac had on the availability of agricultural mortgage credit to date? (*Discuss in space below.*)

24. In your opinion, what **negative** effects (if any) has Farmer Mac had on the availability of agricultural mortgage credit to date? (*Discuss in space below.*)

25. Based on your experience in your market area, has Farmer Mac increased, decreased, or had no impact on competition in agricultural mortgage lending? *(Check one.)*

N=164

1. ❒ 0.0% Greatly increased competition
2. ❒ 14.6% Moderately increased competition
3. ❒ 57.3% Neither increased nor decreased competition
4. ❒ 0.0% Moderately decreased competition
5. ❒ 0.0% Greatly decreased competition
6. ❒ 28.0% Don't know/no opinion

Please explain your response:

9

26. In your opinion, is there a need for a secondary market for agricultural mortgage loans? *(Check one.)*

N=160

1. ☐ 74.4% Yes ➔ ***Continue with question 27.***
2. ☐ 25.6% No ➔ ***Skip to question 29.***

27. In your opinion, who should be responsible for the development of the secondary market for agricultural mortgages and why? *(Check all that apply.)*

Number

1. ☐ 63 Government-sponsored
2. ☐ 75 Private sector
3. ☐ 9 Other - Specify: ______

Please explain your response: ______

28. **If you checked more than one box in question 27**, please indicate which entity you believe should be **primarily** responsible for the development of the secondary market for agricultural mortgage loans? (*Check one.*)

N=42

1. ☐ 50.0% Government-sponsored
2. ☐ 47.6% Private sector
3. ☐ 2.4% Other - Specify: ______

Please explain your response: ______

29. Would you agree or disagree that even in today's low mortgage interest rate environment, few long-term fixed-rate agricultural mortgages are being originated? (*Check one.*)

N=155

1. ☐ 62.6% Agree ➔ ***Explain below, then continue with question 30.***
2. ☐ 37.4% Disagree ➔ ***Explain below, then skip to question 31.***

Please explain your response: ______

10

30. If you agree, in your opinion, which of the following is the **primary reason** that few long-term fixed-rate agricultural mortgages are being originated? (*Check one.*)

N=100

1. ❐ 5.0% Farmers are reluctant to borrow long-term fixed rate agricultural mortgages.
2. ❐ 36.0% Lenders tend **not** to offer long-term fixed-rate agricultural mortgages.
3. ❐ 45.0% Farmers seek long-term fixed-rate agricultural mortgages, but lenders tend **not** to offer them.
4. ❐ 14.0% Other - Specify: ____________________

Please explain your response: ____________________

31. ❐ Check here if you would like to receive a copy of the final report incorporating the results of this survey.

Please provide contact information if you would like the report mailed to someone other than the primary respondent:

Name: ____________________

Address: ____________________

City, State, Zip Code: ____________________

32. Do you have any additional comments or observations you would like to share? Please use the space below. If necessary, you may add additional sheets.

REMINDER! Please review your responses to make sure that all appropriate questions have been answered.

Thank you for your cooperation and assistance.

Please return the questionnaire in the enclosed prepaid envelope.

11

GAO Analysis of Farmer Mac's Future Viability

SCENARIO 1

Would Farmer Mac have been viable in 1998 (profitable including a reasonable return to shareholders) at its current agricultural mortgage market level but with a 50-percent reduction in its investment security portfolio?

Assumptions:

- The agricultural mortgage debt market remains the same size.
- The secondary market for agricultural mortgage securities outstanding remain constant at the December 31, 1998, levels. This includes $552 million held in Farmer Mac's portfolio (on balance sheet) and $598 million held by others (off balance sheet). However, we have included the $408 million swap transaction announced in January 1999 and made adjustments to guarantee fee income and loan loss provisions for this transaction. Thus, the size of the secondary market for scenario I is $1.558 billion.
- The net yield for on balance sheet interest earning assets is 63 basis points for calendar year 1998. (Net interest income = $10.569 million for calendar year 1998. The average balance for interest earning assets = $1,682 million; average net yield on interest earning assets = $10.569 million /$1,682 million or 63 basis points.)
- Investment securities are reduced by 50 percent from the December 31, 1998, total of $644 million to $322 million. Cash and cash equivalents and loans held for securitization remain at the December 31, 1998, totals of $541 million and $168 million, respectively.
- Guarantee fees remain constant at the calendar year 1998 total of $3.727 million.
- Gain on the sale of Farmer Mac agricultural mortgage-backed securities (AMBS) securities remain constant at the calendar year 1998 total of $1.400 million.
- Miscellaneous income remains constant at the calendar year 1998 total of $0.142 million.
- Other expenses/loan loss reserves remain constant at the calendar year 1998 total of $9.323 million, except for an extra provision for the swap transaction.
- Average required return on equity is assumed to equal the Farm Credit System's average return of 11.25 percent at June 1998.
- No capital above the minimum capital standards is retained.

Table III.1: Scenario 1: No Secondary Market Growth But Investment Securities Reduced by 50 Percent

Annual Revenues					Income Dollars in Millions
Net Interest Income Calculation					
Balance Sheet Interest Earning Assets at December 31, 1998	Amount (in millions)	Net Spread (basis points)			
Farmer Mac Securities	$552				
Loans held for securitization	168				
Investment Securities	322				
Cash/Cash equivalents	541				
Total Interest Earning Assets	$1,583	times	63 basis points	equals	$9.973
Guarantee fees:					3.727
Gain on sale of AMBS:					1.400
Estimated guarantee fee from Jan 1999 swap:[a]					1.346
Miscellaneous income:					0.142
Total Annual Revenues					$16.588
Annual Expenses (excludes interest expense netted out above)					
Provision for loan losses:					$1.614
Extra provision for swap loss reserves[b]					0.579
Total other expenses (excluding provision for loan losses):					7.709
Return on equity:					
Minimum capital:					
On balance sheet:	$1,583.0 million x 2.75%	=	$43.533 million		
Off balance sheet:	598.0 million x 0.75%	=	4.485 million		
Swap adjustment:	408.0 million x 0.75%	=	3.060 million		
	Total		$51.078 million	x 11.25%	5.746
Total Annual Expenses					$15.648
Economic Profit					$0.940

[a]Calculation: Average guarantee fee = total guarantee fees/AMBS outstanding = $3.727 million/$1,133 million = .00328 = 33 basis points. Swap amount = $408 million x 33 basis points = $1.346 million.

[b]Calculation: Provision for losses/guarantee income = $1.614 million/$3.727 million = 43 percent. Extra provision = estimated guarantee fees x 43% = $1.346 million x 43% = $0.579 million.

Source: GAO.

SCENARIO 2

What would Farmer Mac's situation be if it were able to double its December 31, 1998, market share from $1.558 billion (amount in scenario I) to $3.116 billion in outstanding Farmer Mac securities?

Assumptions:

- The agricultural mortgage debt market remains the same size.
- The $3.116 billion in outstanding Farmer Mac securities consist of $1.104 billion on balance sheet and $2.012 billion off balance sheet. This is the same distribution between on and off balance sheets as used in scenario 1 but doubles the amounts of agricultural mortgage securities outstanding.[1]
- All other assets are fixed at the same levels as in scenario 1.
- The net yield for on balance sheet interest earning assets is 63 basis points as in scenario 1.
- Revenues from guarantee fees, gains on AMBS issuance, and miscellaneous sources are doubled to reflect the doubling of the outstanding securities.
- Other expenses are considered fixed except for loan losses. Loan loss expense is doubled to reflect the doubling of the outstanding securities.
- Average return on equity is computed at 11.25 percent as in scenario 1.

[1]On balance sheet calculation: $552 million x 2 = $1.104 billion on balance sheet. Off balance sheet calculation = ($598 million off balance sheet + $408 million swap) x 2 = $2.012 billion.

Table III.2: Scenario 2: Farmer Mac Doubles Its Share of the Agricultural Mortgage Market

Annual Revenues					Income Dollars in Millions
Net Interest Income Calculation					
Balance Sheet Interest Earning Assets	Amount (in millions)	Net Spread (basis points)			
Farmer Mac Securities	$1,104				
Loans held for securitization	168				
Investment Securities	322				
Cash/Cash equivalents	541				
Total Interest Earning Assets	$2,135	times	63 basis points	equals	$13.451
Guarantee fees: $3.727 million annually x 2					7.454
$1.346 million for swap x 2					2.692
Gain on sale of AMBS: $1.400 million annually x 2					2.800
Miscellaneous income: $0.142 million annually x 2					0.284
Total Annual Revenues					$26.681
Annual Expenses (excludes interest expense netted out above)					
Provision for loan losses: $1.614 million annually x 2					$3.228
Extra provision for swap x 2					1.158
Total other expenses (excluding provision for loan losses): $7.709 million annually					7.709
Return on equity:					
Minimum capital:					
On balance sheet: $2,135.0 million x 2.75%	=	$58.713 million			
Off balance sheet: 2,012.0 million x 0.75%	=	15.090 million			
	Total	$73.803 million x 11.25%			8.303
Total Annual Expenses					$20.398
Economic Profit					$6.283

Source: GAO.

Comments From the Federal Agricultural Mortgage Corporation

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

FARMER MAC

May 10, 1999

Mr. Thomas J. McCool
Director, Financial Institutions
and Markets Issues
United States General Accounting Office
441 G Street, NW
Washington, D.C. 20548

Re: GAO Draft Report:
"Federal Agricultural Mortgage Corporation –
Revised Charter Enhances Secondary Market Activity,
but Growth Potential Depends on Various Factors"

Dear Mr. McCool:

Thank you for this opportunity to comment on the draft of the above-referenced General Accounting Office Report (the "Report"). We appreciate the cooperation afforded us by the GAO staff who worked on the Report. We are pleased to note that, after the second examination and review of Farmer Mac by the GAO over the course of the past two years, no serious deficiencies in the implementation of Farmer Mac's programs or mission have been identified for Congressional attention, and a number of positive findings were made about Farmer Mac's progress in establishing the secondary market for agricultural mortgages and the safety and soundness of its operations.

The Report states that it was prepared in response to a request by Congressman Richard H. Baker, Chairman of the Subcommittee on Capital Markets, Securities and Government Sponsored Enterprises of the House Committee on Banking and Financial Services, that GAO "review the progress that Farmer Mac has made in achieving its statutory mission and examine its future viability." It identifies specific objectives for the review as follows: "(1) examine actions taken by Farmer Mac to promote the development of a secondary market including introduction of new products; standardization and streamlining of loan processes; and use of risk management techniques to facilitate a safe and sound secondary market and activities; and (2) analyze Farmer Mac's future viability and the potential benefits and costs of a government-sponsored secondary market for agricultural mortgages." (Pages 1-2.)

Now on p. 1.

Mr. Thomas J. McCool
May 10, 1999
Page 2

In general, we do not disagree with the findings of the Report that review the background, history and progress of Farmer Mac's development in several areas of the business, but we do have comments on several specific issues raised and discussed in the Report.

Response to Specified Findings and Conclusions

1. *The Report's ultimate conclusion, that it is difficult to determine whether the public benefits provided by Farmer Mac justify continued government sponsorship, is inconsistent with the GAO's findings and analyses regarding Farmer Mac's economic viability and program development.*

Now on pp. 44 and 45.

The Report concludes that Farmer Mac: "has used its post-1996 charter authorities to streamline the process for buying loans and to develop new programs and products that have provided an alternative funding source for some agricultural lenders. . . has also standardized some aspects of the secondary market transaction. . . employs risk management techniques to measure and manage its various risks and to help ensure that it conducts its secondary market operations in a safe and sound manner. . . has made some progress in developing a secondary market in agricultural mortgages. . . and can be viable if it continues to expand, it experiences returns that are comparable to current levels, and economic conditions in the overall and agricultural economies of the nation remain stable." (Pages 75-76). We agree with these positive conclusions about Farmer Mac's success in pursuing its mission and appreciate the objective analysis that led GAO to make them.

Now on p. 45.
Now on p. 29.

We disagree, however, with what appears to be the ultimate conclusion of the Report, which questions whether the public benefits outweigh the costs of government sponsorship. It seems that this is inconsistent with the other conclusions, as well as the findings and analyses in the Report. Specifically, the Report states that: "[e]ven if Farmer Mac continued to be economically viable under its current operating structure, it is difficult to determine whether the public benefits created justifies [sic] continued government sponsorship." (Pages 76-77; see also pages 49-50 where the same statement is made). Notwithstanding the GAO's invocation of the word "difficult," the conclusion is not difficult at all, but straightforward: the GAO has determined that Farmer Mac would be profitable and viable and, therefore, the benefits of the Farmer Mac secondary market *do* justify its government-sponsored status. For the reasons set forth below, we request that the two referenced "costs/benefits" conclusions be modified to conform to the facts as reported by the GAO.

Now on p. 36.

On pages 59-60 of the Report, the GAO sets forth the following standard to determine whether the public benefits provided by Farmer Mac justify its continued government sponsorship:

> *[a] necessary condition for its overall benefits to exceed its cost is that Farmer Mac's direct economic benefits be positive. That is, Farmer Mac would have to be profitable or economically viable in carrying out its mission.* (Emphasis added.)

Mr. Thomas J. McCool
May 10, 1999
Page 3

In light of the stated purpose of Congress in establishing Farmer Mac,[1] we believe a broader standard than economic results, focusing on the secondary market's contribution to increased lender competition and wider availability of agricultural mortgage credit, would be a more appropriate measure. Nevertheless, the findings in the Report and the facts of Farmer Mac's financial performance and program development clearly establish that Farmer Mac *is* "profitable" and "viable" and has demonstrated growth trends and prospects that strongly suggest its future profitability and viability are not in jeopardy. The Report specifically states: "[o]ur analysis shows that Farmer Mac is currently viable in its agricultural mortgage mission activities." (Page 49). Earlier in the Report, "viability" is defined as Farmer Mac's "ability to generate sufficient profit from its core business operations in the secondary market in agricultural mortgages to provide a reasonable return to its investors." (Page 3). The Report notes further that "long-term viability. . . require[s] cash flows that eventually compensate shareholders for their financial capital investments and associated risks" and goes on to note that stockholders "could be compensated either in the form of dividend payments or increases in stock price resulting from Farmer Mac's retention of earnings." (Page 61; and footnote 37). Unquestionably, Farmer Mac's financial performance has met these "economic benefit" standards, as noted below.

Now on p. 29.
Now on p. 2.
Now on p. 37.

See comment 1.

Since 1996, when the reform legislation was enacted giving Farmer Mac the authority to offer an efficient secondary market to agricultural lenders, Farmer Mac has reported annual net profits of $777 thousand, $4.6 million, and $5.7 million. During that same three-year period, Farmer Mac's Class C common stock price appreciated at a compounded rate of over 100% annually, rising from about $7 per share at the beginning of 1996 to about $70 per share today. In addition, Farmer Mac's outstanding program guarantees increased from about $427 million at the end of 1995 to $1.84 billion at the end of March 1999. Although Farmer Mac's earnings did include some income from non-program assets during these years, that income was <u>not</u> needed to generate net income in each of the years cited. We note that the percentage contribution of net interest income from non-program assets has gradually declined since the first quarter of 1998, and in 1998, represented only approximately one quarter of Farmer Mac's total revenue.

See comment 2.

In an effort to test Farmer Mac's future viability under different financial circumstances, the Report constructed two hypothetical "economic scenarios" (Appendix III). We disagree with the approach used in the scenarios and with many of the assumptions on which they were built – particularly, the assumed 55 basis point net income spread on investment securities, cash and cash equivalents and the notion that an "expense" item labeled "return on equity" would be deducted from revenue to determine profit.[2] Still, the scenarios themselves support the conclusion that

[1] 12 U.S.C. Section 2279aa note.

See comment 2.

[2] This is a novel concept not supported by generally accepted accounting principles and not previously proposed in any other GAO report that we have been able to identify. It also is interesting to note that, despite the fact that Farmer Mac meets the GAO's own definition of profitability by virtue of the substantial increases in its stock price over the past three years, the GAO still includes "return on equity" as an expense item in calculating economic profit.

Mr. Thomas J. McCool
May 10, 1999
Page 4

Farmer Mac meets the current and future viability tests in the Report. In that regard, we note that the GAO already has concluded that Farmer Mac "is currently viable" and that it defines future viability as a "long-term concept [measured at]... a future point in time." (Page 60). Under Scenario II, Farmer Mac would be profitable if program volume were to increase to about $3.0 billion over the long term. It does not logically follow that Farmer Mac must achieve that level to be profitable under this scenario, since our *current* financial position generates a profit under the GAO's analysis in that scenario. Even so, attaining the stated threshold volume level seems a very realistic possibility, in light of the increases in volume we have achieved over the past three years.

Now on p. 36.

Turning to Scenario I, and with the long-term time horizon assumption in mind, we note that Farmer Mac's program guarantees at the end of March 1999 were $1.84 billion, some $299 million greater than the $1.541 billion figure used by the GAO to generate Scenario I. Thus, the premise of Scenario I, that the size of the Farmer Mac secondary market would remain constant over time at $1.541 billion already has been invalidated. If Scenario I simply were updated to reflect Farmer Mac's actual program volume at March 31, 1999 (accepting all other assumptions made by the GAO for this scenario), total revenue would increase about $1.6 million and the calculation would show an economic profit of $868 million, as distinguished from a loss of $367 thousand. (See attachment 1 for details of this calculation.) Even if Scenario I were not updated to reflect actual program volume at March 31, that scenario would show an economic profit if a fundamental flaw in the calculation were corrected.[3]

Thus, under both scenarios, Farmer Mac meets the GAO viability test. Ironically, the Report ends on a conclusion that Farmer Mac's future is somehow clouded, because Farmer Mac and two other GSEs have overlapping authorities. That conclusion seems to be a mere contrivance created to bring the Report to an unsubstantiated result not supported by the facts marshaled in the first two-thirds of its own text. In addition to the positive findings about Farmer Mac's progress in establishing the secondary market, as set forth throughout the Report, the GAO's own survey results show that "seventy three percent of the approved sellers who participated in [the] survey. . . are likely to increase sales to Farmer Mac in the next 3 years. . . and about one-fourth of nonparticipants responding to [the] survey. . . expect to begin participating in Farmer Mac programs in the next 3 years." (Page 66). Furthermore, our business with the Farm Credit System has grown over the years. Certainly, financial markets in the United States are increasingly competitive for all participants, but our track record to date is that of a growing and innovative company, thriving on competition.

See comment 3.

Now on p. 39.

[3] The GAO's calculation applies a yield (55 basis points) derived from "total assets" to a scenario that includes "earning assets" only. ("Total assets" includes earning assets, but also includes other non-income producing assets, such as interest receivable, guarantee fee receivable and prepaid expenses and other assets.) Farmer Mac's yield on earning assets was 63 basis points, as stated in its Annual Report on Form 10-K for the year ended December 31, 1998. Applying that yield to earning assets, as scenario 1 contemplates, would generate an economic profit, rather than a loss, as the GAO's calculation indicates.

See comment 2.

Mr. Thomas J. McCool
May 10, 1999
Page 5

Although the Report questions Farmer Mac's future viability, the facts are clear that Farmer Mac has demonstrated a consistent record of growth and profitability, which strongly suggests that it will maintain viability in the future. Even apart from "profitability" and "viability," we believe the most important determinant of Farmer Mac's "benefit" as a government-sponsored enterprise is its contribution to a more efficient agricultural credit market. We are disappointed that the GAO did not consider the principal benefit intended by Congress to be achieved by Farmer Mac, namely, to ensure the availability of a competitive supply of mortgage credit for agricultural borrowers.[4]

Nevertheless, the Report documents Farmer Mac's progress toward establishing the agricultural mortgage secondary market and determines that it has provided lenders with an alternative funding source for agricultural mortgages. As the Report notes, Farmer Mac has attracted an increasing number of "nationally known large commercial banks and mortgage banks. . . [which have] expanded the number of outlets through which Farmer Mac products can be marketed to customers." (Page 18). Although not acknowledged in the Report, Farmer Mac's efforts also have attracted other non-traditional lenders into the agricultural mortgage market, particularly commercial mortgage lenders and agricultural supply and equipment companies, which have further increased competition for agricultural mortgages and improved the availability of agricultural credit. We note that, according to the survey responses in Appendix II, over 65% of the approved sellers responded that Farmer Mac had had a positive effect on the availability of mortgage credit and about 55% responded that it had increased competition in their markets at least moderately. In addition, 96.9% of the approved seller-respondents and 74.4% of the nonparticipant respondents answered that there is a need for a secondary market for agricultural loans, and more than 50% of those responded that the secondary market should be developed by a government-sponsored entity. While the surveys did not inquire about interest rates, we firmly believe, based on our own discussions with lenders and data tracking, that Farmer Mac also has had a material impact on the availability of competitive interest rates to rural mortgage borrowers.

Now on p. 10.

All of this information, taken together, supports the conclusion that Farmer Mac not only is viable, but providing valuable service to agricultural mortgage lenders and borrowers. Accordingly, the conclusion in the Report that "it is difficult to determine whether the public benefits created justifies [sic] continued government sponsorship" should be changed to state that the public benefits of the Farmer Mac secondary market do justify its government-sponsored status.

2. *The Report misleadingly compares Farmer Mac's market penetration to that of the housing enterprises.*

Based on the data in the Report, the GAO determined that Farmer Mac's market share at the end of 1998 was about 1.2%. (Page 54, table 4). Without commenting on the figures used in

Now on p. 32.

[4] The Report states: "[w]e did not examine the impact of Farmer Mac on agricultural mortgage interest rates or the availability of agricultural mortgage credit." (Page 13).

Now on p. 8.

Mr. Thomas J. McCool
May 10, 1999
Page 6

the table, we note that Farmer Mac's program volume (outstanding guarantees and loans held for securitization) increased substantially during the first quarter of 1999 to $1.87 billion (table 4 fixes the number at $1.30 billion for year-end 1998). Using the more current figure increases Farmer Mac's market share to about 2%.

The Report goes on to compare Farmer Mac's market share to the positions Fannie Mae and Freddie Mac held in single-family and conventional multifamily mortgages at various times in history. The Report states: "[at] year-end 1980, about one decade after the housing enterprises were chartered as GSEs, the single-family market penetration rate was about 8.9 percent. . . and [they] did not enter the conventional multifamily market until 1984." (Page 55). Figure 1 of the Report shows that the housing enterprises' market share then grew to 42.8% of the single family market and 15.7% of the conventional multifamily market by 1997, some seventeen years later. (Page 56).

Now on p. 32.

Now on p. 34.

Assuming the correctness of the housing GSE figures, we suggest that the numbers do not reflect unfavorably on Farmer Mac, for several reasons. The discussion fails to point out clearly that the comparison being made is to the market share Farmer Mac attained after only three years of operation under a charter similar to that of the housing enterprises[5] versus that attained by the housing GSEs after 10 and 27 years, respectively.[6] The Report also fails to mention that when Fannie Mae was created as a GSE in 1968, it already had been in existence for about 30 years as part of the Department of Housing (later HUD), a government agency. So, unlike Farmer Mac, Fannie Mae had the advantage of momentum when it began business as a GSE. Furthermore, the time frame for the comparison being made relative to the stage of development of Farmer Mac versus that of the two housing GSEs is not comparable. The Report selects 1980 as a starting point for assessing the progress of the two housing GSEs, which is some 10 years after they began developing their markets, and then compares the combined growth rate of the two to Farmer Mac's progress during its first three years of development. Combining the total market penetration of the two housing enterprises and then comparing that to the progress of Farmer Mac, a single institution with a small fraction of the resources of either of the housing enterprises, is an inappropriate and misleading comparison.

---

[5] Prior to 1996, Farmer Mac operated under a charter substantially different from the housing enterprises and burdened by a 10% first loss "subordinated interest" and "poolers," both structural impediments to the effective implementation of an efficient secondary market, as recognized by Congress in eliminating those structural impediments in 1996. It also should be noted that, in 1996, at the time Farmer Mac began developing its current secondary market programs, it had equity of only about $12 million and fewer than 20 employees.

[6] Even in 1980, Fannie Mae and Freddie Mae were significant corporations with hundreds of employees working to develop secondary market activity in the residential mortgage market many multiples larger than the agricultural mortgage market that Farmer Mac was created to serve. It is noteworthy that the total volume of outstanding agricultural mortgages at the end of 1995, as reported by the USDA, was slightly over $79.3 billion, in comparison to the trillion dollar-plus housing market.

Mr. Thomas J. McCool
May 10, 1999
Page 7

See comment 1.

Considering the substantial distortions built into the GAO's comparison of Farmer Mac's market penetration to that of the two housing GSEs, we believe the correct finding is that Farmer Mac's 2% market penetration during its first three years of operations compares very favorably to the housing GSEs' progress in the multifamily market, which is the more appropriate market for comparison with agricultural mortgages. Although Farmer Mac's market penetration is modest, Farmer Mac's outstanding program volume at the end of March 1999 was three times greater than it was at the end of 1996. Further, as the survey responses indicated, many lenders, whether approved as sellers or not, contemplate using or increasing their use of the Farmer Mac secondary market over the next two to three years. Further still, Farmer Mac has recently developed new products to respond to market signals, which are being enthusiastically received and marketed by some sellers at the current time. Farmer Mac's market potential is likely to accelerate as competition between lenders intensifies with the addition of new lenders into the program. Also, despite the suggestion that regulatory changes increasing competition between Farm Credit System institutions may increase the System's share of the agricultural mortgage market at Farmer Mac's expense (as suggested on page 70), Farmer Mac's recent business experience with System institutions suggests that just the opposite result may occur. As noted in the Report:

Now on p. 41.

> Farmer Mac has the ability to help lenders manage interest rate risk. Increased demand by agricultural borrowers for long-term, fixed-rate agricultural mortgages could help facilitate growth in Farmer Mac's business as FCS lenders seek to manage the potentially higher level of interest rate risk. (Page 68.)

Now on pp. 40 and 41.

In any event, the Report contains no valid foundation for the finding that "Farmer Mac's market penetration at its early stage of development is low compared to the housing enterprises" and all references to that effect should be deleted from the Report.

3. *The Report incorrectly finds that interest income from non-mortgage investments continues to be a primary source of income at Farmer Mac.*

The Report states that "[i]n addition to its rate of market penetration, another indicator of Farmer Mac's mission fulfillment would be a declining percentage of its non-mortgage investments compared to its agricultural mortgage servicing portfolio." (Page 58.) It briefly discusses work previously done by the GAO to evaluate investment activities by the GSEs and refers to the contention of an earlier report that non-mortgage investments served as a primary source of income for Farmer Mac. The Report reiterates this contention. (Pages 58-59). We disagree for several reasons, primarily because Farmer Mac's investment activities are the consequence of debt issuances that are conducted in direct support of its program activities and are necessitated by its otherwise small presence in the capital markets. We agree that income is generated by the resulting investments, but disagree that it is a "primary" source of income for Farmer Mac. As noted earlier, net interest income from investments, including that from interest on cash and cash equivalents, has been declining steadily as a percent of total revenue since the

Now on p. 35.

Now on pp. 35 and 36.

Mr. Thomas J. McCool
May 10, 1999
Page 8

first quarter of 1998 and represented only about one quarter of Farmer Mac's total revenue in 1998. At the same time, non-mortgage investments have declined as a percent of outstanding guarantees and loans held for securitization, which suggests that Farmer Mac has made significant progress in its mission fulfillment based on the GAO's own standard.

Farmer Mac's ability to accomplish its mission by providing lenders and rural borrowers with access to funds at lower cost depends, in large part, upon the yields required by capital markets investors on securities issued by Farmer Mac or with its guarantee. It was to facilitate the accomplishment of that mission that Farmer Mac's Board of Directors adopted debt issuance and investment policies in February 1997 as part of a broad business strategy to achieve increased market presence for Farmer Mac securities. Farmer Mac's securities spreads were wide relative to those of other GSEs, due to its limited market presence and liquidity, and lack of investor awareness of or demand for its securities. The debt issuance policy allowed Farmer Mac to increase significantly and maintain its market presence through the prudent issuance of an adequate dollar volume of debt securities subject to the availability of safe, conservative investment opportunities for the use of the funds so raised.[7]

Farmer Mac's Board recognized that, during the early stages of implementation of these policies, the level of investments would be large relative to outstanding program assets (agricultural mortgages and guaranty obligations). It was anticipated, however, that, over time, the ratio of program assets to non-mortgage investments would change, with program assets becoming dominant as business volume increased. In this regard, significant progress has been made in developing program volume since February 1997, with outstanding guarantees and loans held for sale topping $1.87 billion by the end of the first quarter of 1999.

A number of indications of the success of the debt issuance policy have been registered since it was commenced in 1997. The number of investors purchasing Farmer Mac's debt and mortgage-backed securities has increased significantly, up 211% comparing the first quarters of 1998 and 1999, as the market acceptance and liquidity of the securities has improved. Further, Farmer Mac's name continues to be added to the "eligible investments" lists of a growing number of institutional and governmental investors. Our tracking of securities spreads also shows continued improvement relative to the securities of the other GSEs, contributing to the competitive pricing of Farmer Mac's products and, consequently, the benefit Farmer Mac is able to deliver to farmers and ranchers.

In addition, Farmer Mac successfully maintained its market access in the latter part of 1998 when competitive access to the capital markets was significantly curtailed for most (non-GSE) issuers. That market access permitted Farmer Mac to shift from public sales to portfolio retention of AMBS and so maintain its competitive product pricing during this period of widening securities

[7] In this regard, Farmer Mac's investment guidelines are perhaps the most conservative, and the dollar volume of securities it has issued in the capital markets is the smallest, of any of the GSEs.

spreads. Even with Farmer Mac's limited dollar volume as an issuer relative to the other GSEs (less than 1% of all GSE securities), we believe that our increased debt issuance activity has been critical to establishing a market presence adequate to achieve our program objectives.

Accordingly, we request that the discussion in the Report be revised to reflect more accurately the purposes for Farmer Mac's debt issuance and investment activity and to properly characterize investments as a minor source of income for Farmer Mac.

4. *Technical comments on the Report.*

Now on pp. 16-28.
See comment 4.
Now on p. 20.

The balance of our comments are technical in nature. We note that a significant portion of the middle of the Report, from about page 27 through page 47, is written with the use of the phrase "is to" as if to suggest that the matters under discussion are to be, but have not yet been, implemented. For example, on page 34, the Report states that "Farmer Mac is to employ several techniques to control interest rate risk." Without exception, each use in the Report of the phrase "is to" should be corrected to read "has" (or a similar usage of the past tense). Otherwise, the Report would imply that the respective actions have not been taken, when, if fact, they have.

Now on p. 10.
See comment 5.

On page 17, the Report notes that secondary market entities "have relatively less ability than lenders to rely on borrower relationships to assess credit risk. Thus, they increase their risk of purchasing loans with high credit risk from less creditworthy borrowers." The suggestion implicit in these statements is that Farmer Mac's exposure to credit losses may be greater than that of the lenders making agricultural loans not sold into the secondary market. We disagree. The general statement overlooks the fact that Farmer Mac has in place credit underwriting and appraisal standards that are applied rigorously to ensure that high credit quality loans are purchased. Additionally, every loan is screened against the standards by Farmer Mac or one of its contract underwriters before it is approved for purchase, and the work of the contract underwriters is subject to regular due diligence reviews by Farmer Mac. Lastly, originating lenders serve as the field servicers for Farmer Mac loans and are responsible for monitoring and maintaining borrower relationships.

Now on p. 18.
See comment 6.

On page 30, in regard to Farmer Mac's position concerning the standardization of loan documents, the Report states that Farmer Mac officials "said they saw no real potential value added from increased standardization." This statement requires further clarification. It is not Farmer Mac's position that further standardization lacks merit, but that the costs to Farmer Mac of achieving further standardization of loan documents exceed the benefits of doing so at this time.

Now on p. 23.
See comment 7.

On page 40 (top of the page), the report states that Farmer Mac monitors delinquency rates on a "quarterly basis." In fact, delinquency rates are monitored by Farmer Mac on a "monthly" basis.

Mr. Thomas J. McCool
May 10, 1999
Page 10

Now on p. 24.

On page 40 (middle of page), the Report states that "Farmer Mac does not have a history of loan performance data, so it uses the historical loan loss data of a FCS institution" for loss estimation purposes. By way of clarification, we note that Farmer Mac does maintain an extensive loan information database on all loans it purchases. This database includes loan performance data, but is limited in its historical perspective due to the relatively short time Farmer Mac has been authorized to purchase loans. For historical performance characteristics of agricultural mortgages, Farmer Mac has made use of the database assembled by the Farm Credit Administration in connection with the development of a risk-based capital regulation for Farmer Mac.

Now on p. 25.
See comment 8.

On page 43, in the context of a discussion of credit underwriting activities at Farmer Mac, the Report states that "Farmer Mac is to contract out certain functions where it lacks in-house experts." Farmer Mac does use outside contractors for the underwriting of loans, but not because it "lacks in-house experts." In 1996, a business decision was made to take advantage of experienced and efficient outside underwriters with the capacity to work with Farmer Mac, rather than build adequate internal resources to underwrite all loans submitted for sale. Farmer Mac does have in-house experts, but chooses to use outside resources to assist it in the underwriting review of loans offered for sale to assure efficient loan processing at a reasonable cost.

Now on pp. 27 and 28.
See comment 9.

On page 46, the Report discusses the use of credit scoring at Farmer Mac as a tool to assist in judging the credit quality of loans. The Report states that "[i]n the future, according to a Farmer Mac executive, Farmer Mac may incorporate such a model into its loan approval process." The statement should be revised to state that Farmer Mac does use credit scoring in connection with the "credit approval process," but not as a determinative factor for credit approval. Farmer Mac's current credit scoring model is used to evaluate loan quality at the time of approval, but is not a future loan performance predictor. Over time, we anticipate that the credit scoring model will be refined to become more of a quality predictor and will then be more fully incorporated into the credit approval decision making process.

Now on p. 39.
See comment 10.

On page 66, the Report states "[i]f the decline in the constant dollar value of agricultural mortgage debt continues, it could directly affect Farmer Mac's growth potential." It was noted earlier in our comment and in the Report, as well, that Farmer Mac's current market share is approximately 1.5% to 2.0% of total outstanding agricultural mortgages. According to USDA reports, the total outstanding principal of agricultural mortgages at the end of 1998 was approximately $87.6 billion (the Report cites agricultural mortgage debt of $94.3 billion at the end of 1998, based on Federal Reserve Bulletin data). Accepting either figure, we submit that the market offers substantial opportunity for Farmer Mac to continue its program growth, even in the face of a major contraction of agricultural mortgage debt. Putting this statement into context, according to USDA data, the lowest outstanding amount of agricultural mortgage debt since 1981 occurred in 1990 when debt fell to about $74.7 billion. Even in the unlikely event this situation were to be repeated in the future, Farmer Mac believes it would have a significant market opportunity at such a level.

Mr. Thomas J. McCool
May 10, 1999
Page 11

We request that the GAO give due consideration to the comments, clarifications and corrections presented herein in preparing the final Report. We firmly believe the benefits provided by Farmer Mac to the agricultural mortgage market are evident in the facts and findings of the Report and demonstrate that Farmer Mac is fulfilling its Congressional mission. Farmer Mac's board and management are committed to the continuing pursuit of that mission, and are pleased to have been given this opportunity to share our thoughts on these important matters.

Very truly yours,

Henry D. Edelman
President and CEO

Attachment I

GAO Analysis of Farmer Mac's Potential Viability (Scenario 1 updated for Farmer Mac actual guarantee volume as of March 31, 1999) (1)
(Dollars in millions)

Annual Revenues	Amount	Net Spread / Fee Rate	Income/ (Expense)
Net Interest Income Calculation			
Farmer Mac Securities	$ 801		
Loans Held for Securitization	17		
Investment Securities	322		
Cash/Cash Equivalents	541		
Total Interest Earning Assets	$ 1,681	0.55%	$ 9.246
Guarantee Fees	$ 1,841	0.33%	6.061
Gain on Sale of AMBS			1.400
Miscellaneous Income			0.142
Total Annual Revenues			16.848
Annual Expenses (excludes interest expense netted out above)			
Provision for Loan Losses			(2.193)
Total Other Expenses			(7.709)

Return on Equity	Amount	Minimum Capital Requirement (%)	Minimum Capital Requirement ($)	Assumed Return on Equity	Income/ (Expense)
On-Balance Sheet	$ 1,681	2.75%	$ 46.228		
Off-Balance Sheet	$ 1,040	0.75%	7.800		
			$ 54.028	11.25%	(6.078)
Total Annual Expenses					(15.980)
Economic Profit/(Loss)					$ 0.868

(1) Based on the assumptions used by the GAO in Appendix III, Scenario 1, except for the balance of Farmer Mac Securities and outstanding guarantees which have been updated as of March 31, 1999. The use of GAO assumptions, such as net spread and guarantee fee rate, is not meant to imply Farmer Mac's concurrence with the assumptions, but is used for illustrative purposes only.

The following are GAO's comments on the Farmer Mac letter dated May 10, 1999.

GAO Comments

1. We discussed Farmer Mac's accomplishments and growth throughout this report.

2. Farmer Mac suggested that instead of total assets, we use earning assets, a slightly smaller number, in constructing our scenarios on its future viability. Additionally, it was suggested that we use 63 basis points to calculate net interest income since it was the 1998 yield on the average balance of earning assets. These suggested changes have been incorporated into the scenario calculations. Farmer Mac also disagreed with the approach used in the economic scenarios in which we include return on equity as an opportunity cost. Farmer Mac referred to our approach as a novel concept not supported by generally accepted accounting principles. We measured long-term viability using an economic rather than an accounting definition of profit. This approach requires equity investors to receive a rate of return to compensate them for the opportunity cost of equity investment. The approach is based on accepted principles used in economics and finance.

3. In its comments, Farmer Mac stated that under both of our scenarios, Farmer Mac meets our viability test. Further, Farmer Mac said its track record is that of a growing and innovative company, and it reiterated the positive findings of our survey results. Among those who participated, 73 percent of the approved sellers said they are likely to increase sales to Farmer Mac in the next 3 years; and about one-fourth of nonparticipants expect to begin participating in Farmer Mac programs in the next 3 years. To put these findings in perspective, we have clarified our report to show that these findings represent inclinations of lenders' future actions, which could enhance agricultural secondary market activity, but only to the extent that they are carried out.

4. Farmer Mac stated that a significant portion of the draft report is written with the use of the phrase "is to" as if to suggest that the matters under discussion are to be, but have not yet been, implemented. We use "is to" in cases where we have not verified the actions. In cases where we reviewed documents verifying that action had been taken, the text of the report has been changed to reflect that the respective action was taken.

5. Farmer Mac took issue with a statement that secondary market entities have relatively less ability than lenders to rely on borrower relationships to assess credit risk. The comment cited standards Farmer Mac has in place

for underwriting, appraisal, and field servicers. We added qualifying language that is based on Farmer Mac's comment.

6. Farmer Mac asked that we clarify its position concerning the standardization of loan documents. The President and Chief Executive Officer of Farmer Mac stated that it is not Farmer Mac's position that further standardization lacks merit, but that the costs to Farmer Mac of achieving further standardization of loan documents exceed the benefits of doing so at this time. We have incorporated this position into the report.

7. Farmer Mac stated that it monitors delinquency rates on a monthly rather than a quarterly basis. The report now reflects this change. Additionally, in commenting on our report, Farmer Mac referred to our statement that "Farmer Mac does not have a history of loan performance data, so it uses the historical loan loss data of a FCS institution" for loss estimation purposes, and noted that it does maintain an extensive loan information database on all loans it purchases. We added qualifying language to our report to address this comment.

8. Farmer Mac took issue with our statement that it contracts out certain functions where it lacks in-house expertise. In its response, Farmer Mac stated that it was a business decision to contract out certain functions to take advantage of the experience and efficiency of outside resources. The report has been revised accordingly.

9. In its comment letter, Farmer Mac noted that the draft report incorrectly stated that Farmer Mac does not incorporate credit scoring into its loan approval process. We revised the text to note that Farmer Mac does use credit scoring in connection with the credit approval process, but not as a determinative factor for credit approval.

10. Farmer Mac took issue with our statement that if the decline in the constant dollar value of agricultural mortgage debt continues, it could directly affect Farmer Mac's growth potential. Farmer Mac stated the opinion that it would have significant opportunity even if decline in agricultural debt occurred. Farmer Mac's rate of growth could be affected to some extent by the size of the overall market. On the basis of this premise, we have not changed this language.

Farmer Mac's Underwriting Standards

Underwriting standards are to be used by Farmer Mac to determine which mortgages it will buy, which it could then choose to hold as investments or place into mortgage pools. Generally, eligible loans must meet each of the standards. The standards are meant to limit the risk that the mortgages will create losses for the pools or Farmer Mac by ensuring that the buyer has the ability to pay; the buyer is creditworthy and is likely to meet scheduled payments; and, in the event of default, the value of the agricultural real estate limits any losses. Farmer Mac requires lenders to provide representations and warranties to help ensure that the qualified loans[1] conform to these standards and other requirements of Farmer Mac.

Farmer Mac's underwriting standards have elements (e.g., factors such as past credit history and current and projected income and expenses that reflect the potential borrower's willingness and ability to repay the loan) that are similar to the standards in the housing secondary markets.

The underwriting standards are based on credit ratios, other quantitative measures, and qualitative terms. Farmer Mac's underwriting standards, by law, may not discriminate against small agricultural lenders or small loans of at least $50,000.

Newly Originated Loan Standards

Farmer Mac has nine underwriting standards for newly originated loans, each of which is summarized below. A newly originated loan is one that has been originated for less than a year.

- Standard 1: Creditworthiness of the Borrowers. Standard one confirms the 5Cs (character, capital, capacity, collateral, and conditions) of credit that are to be involved in each loan and requires loan originators to obtain complete and current credit reports for each borrower. The credit report must include historical experience, identification of all debts, and other pertinent information. All sellers are required to verify all information contained in the credit report.

- Standard 2: Balance Sheets and Income Statements. This standard requires the loan applicant to provide fair market value balance sheets and income statements for at least the last 3 years.

- Standard 3: Debt-to-Asset (or Leverage) Ratio. The entity being financed should have a pro forma debt-to-asset ratio of 50 percent or less on a market value basis. The debt-to-asset ratio is calculated by dividing pro

[1]A qualified loan is a loan that is on U.S. farmland secured by a first lien that meets the credit underwriting requirements of Farmer Mac.

forma liabilities by pro forma assets. A pro forma ratio shows the impact of the amount borrowed on assets and liabilities.

- Standard 4: Liquidity and Earnings. The entity being financed should be able to generate sufficient liquidity and net earnings, after family living expenses and taxes, to meet all debt obligations as they come due over the term of the loan and provide a reasonable margin for capital replacement and contingencies. This standard is achieved by having a pro forma current ratio of not less than 1.0; and a pro forma total debt service ratio of not less than 1.25, after living expenses and taxes. The current ratio is calculated by dividing pro forma current assets by pro forma liabilities. Total debt service coverage ratio is calculated by dividing net operating income by annual debt service. Net income from farm and nonfarm sources may be included.

- Standard 5: Loan-to-Value (LTV) and Cash Flow/Debt Service Coverage Ratio. The LTV should not exceed 70 percent in the case of a typical Farmer Mac loan secured by agricultural real estate, 75 percent in the case of qualified facility loans, or 85 percent in the case of part-time farm loans, with private mortgage insurance coverage required for amounts above 70 percent. A minimum debt service cash flow ratio of not less than 1.0 from the subject real estate securing the loan is required, except for loans in which the borrower's principal residence is on the property securing the loan. The pro forma total-debt service coverage ratio of the entity to be financed must not have been less than 1.50 for the last 3 years. The LTV ratio is important in determining the probability of default and the magnitude of loss.

- Standard 6: Minimum Acreage and Annual Receipts Requirement. Agricultural real estate must consist of at least five acres or be used to produce annual receipts of at least $5,000 to be eligible to secure a qualified loan.

- Standard 7: Loan Conditions. The loan (1) must be at a fixed payment level and either fully amortize the principal over a term not to exceed 30 years or amortize the principal according to a schedule not to exceed 30 years and (2) mature no earlier than the time at which the remaining principal balance (i.e., balloon payment) of the loan equals 50 percent of the original appraised value of the property securing the loan. The amortization is expected to match the useful life of the mortgaged asset and payments should match the earnings cycle of the farm operations. For facilities, the amortization schedule should not extend beyond the useful agricultural economic life of the facility.

- Standard 8: Rural Housing Loans Standards. Farmer Mac has adopted the credit underwriting standards applicable to Fannie Mae, adjusted to reflect the usual and customary characteristics of rural housing. These standards include, among other things, allowing loans secured by properties that are subject to unusual easements, having larger sites than those for normal residential properties in the area, and having property that is located in areas that are less than 25 percent developed.

- Standard 9: Nonconforming Loans. On a loan-by-loan determination, Farmer Mac may decide to accept loans that do not conform to one or more of the underwriting standards or conditions, with the exception of standard 5. Farmer Mac may accept those loans that have factors (i.e., compensating strengths) that outweigh their inability to meet all of the standards. Examples of compensating strength include substantial borrower net worth or a larger borrower down payment. The granting of standard 9 exceptions is not intended to provide a basis for waiving or lessening in any way Farmer Mac's focus on buying only high-quality loans. According to a Farmer Mac official, nonconforming loans currently comprise about 10 percent of the loans approved for sale to Farmer Mac.

In addition to the previously listed underwriting requirements, the 1999 maximum loan size to a single borrower is limited to $3.5 million for loans secured by more than 1,000 acres and $6 million for loans secured by 1,000 acres or less. The maximum size of an individual loan is indexed to the rate of inflation and is changed annually by Farmer Mac.

Seasoned Loan Standards

Farmer Mac views the history of loan repayment as an indicator of the operation's profitability and the borrower's willingness to repay the loan on time. As a result, Farmer Mac has developed loan criteria for seasoned loans. A seasoned loan is a loan that was originated at least 1 year before purchase and has completed at least one full installment of principal and interest payments.

The degree of re-underwriting required is dependent on the age of the loan and its updated LTV. If a loan is less than 5 years old, with an updated LTV of less than 60 percent and on which the borrower has paid on time since origination, the loan is eligible for sale to Farmer Mac if it met Farmer Mac standards at the time of origination. If a loan is over 5 years old with a current LTV equal to or less than 60 percent, and the borrower has paid on time for each of the last 3 years, no underwriting analysis is required and the loan is eligible for sale to Farmer Mac. Seasoned loans with an updated LTV of greater than 60 percent must be re-underwritten to meet all of

Farmer Mac's standards. Farmer Mac reserves the right to verify the credit quality and performance characteristics of seasoned loans.

Facility Loan Standards

Facility loans are loans made to specialized facilities such as dairies, feedlots, packing facilities, storage units, grow-out facilities (poultry and hog), and processing buildings. To qualify as a specialized agricultural facility, the currently appraised value of the buildings must exceed 60 percent of the total appraised value of the property.

All facility loans must comply with the previously listed credit standards for newly originated loans. In addition, they must meet certain requirements depending on the type of facility loan and on whether the borrower has a contractual relationship with product users. For example, the maximum LTV for hog and poultry facilities is 75 percent, whereas the maximum LTV for agribusiness facilities is 65 percent. Another example is where a poultry facility has a production contract or other credit enhancement with a financially strong product user, then the Farmer Mac underwriting thresholds are a maximum LTV ratio of 75 percent, a maximum debt-to-asset ratio of 65 percent, and a minimum total debt service coverage ratio of 1.25 to 1. Under a scenario without a credit enhancement, the thresholds would be a maximum LTV ratio of 65 percent, a maximum debt-to-asset ratio of 50 percent, and a minimum total debt service coverage ratio of 1.35 to 1. The difference in the underwriting requirements reflects the presumed ability that the loan can be repaid from a financial source not tied to the mortgaged property.

Part-time Farm Loan Standards

For part-time farm loans (a loan designed for borrowers who live on agricultural properties but derive a significant portion of their income from nonfarm employment) the requirements concerning acreage and annual agricultural income are the same as for the full-time program. The property must contain a single-family detached residence that should constitute at least 30 percent of the total appraised value of the property.

Because part-time farmers and part-time farms have much in common with conventional residential lending, this type of loan is underwritten according to conforming residential housing loans standards (i.e., 28 percent of monthly housing expense to gross monthly income and 36 percent of total monthly debt expense to gross monthly income). The maximum LTV for a part-time farm loan is 85 percent; private mortgage insurance is required on any part-time farm loan with an LTV greater than 70 percent. The maximum loan size is limited to $2.3 million, but there is no minimum loan size and no maximum acreage. Compensating factors, such as substantial borrower net worth or the borrower's making a large down payment, allow Farmer Mac to approve loans that vary from the standards.

Major Contributors to This Report

General Government Division, Washington, D.C.

Richard J. Hillman, Associate Director
William B. Shear, Assistant Director
Joe E. Hunter, Evaluator-in-Charge
Marion L. Pitts, Senior Evaluator
James R. Black, Senior Evaluator
Carl M. Ramirez, Senior Social Science Analyst
Anne K. Rhodes-Kline, Senior Social Science Analyst
Michelle A. Sager, Social Science Analyst
Jerry T. Sandau, Computer Specialist

Office of the General Counsel, Washington, D.C.

Rachel DeMarcus, Assistant General Counsel

Ordering Information

The first copy of each GAO report and testimony is free. Additional copies are $2 each. Orders should be sent to the following address, accompanied by a check or money order made out to the Superintendent of Documents, when necessary. VISA and MasterCard credit cards are accepted, also. Orders for 100 or more copies to be mailed to a single address are discounted 25 percent.

Order by mail:

U.S. General Accounting Office
P.O. Box 37050
Washington, DC 20013

or visit:

Room 1100
700 4th St. NW (corner of 4th and G Sts. NW)
U.S. General Accounting Office
Washington, DC

Orders may also be placed by calling (202) 512-6000 or by using fax number (202) 512-6061, or TDD (202) 512-2537.

Each day, GAO issues a list of newly available reports and testimony. To receive facsimile copies of the daily list or any list from the past 30 days, please call (202) 512-6000 using a touch-tone phone. A recorded menu will provide information on how to obtain these lists.

For information on how to access GAO reports on the INTERNET, send e-mail message with “info” in the body to:

info@www.gao.gov

or visit GAO’s World Wide Web Home Page at:

http://www.gao.gov

United States
General Accounting Office
Washington, D.C. 20548-0001

Bulk Rate
Postage & Fees Paid
GAO
Permit No. G100

Official Business
Penalty for Private Use $300

Address Correction Requested

[redacted]

(233573)