

GAO

Briefing Report to the Chairman,
Committee on Banking, Housing and
Urban Affairs, United States Senate

May 1989

FINANCIAL MANAGEMENT

Federal Housing Administration's Accounting Methods and Section 203 (b) Program





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

Accounting and Financial
Management Division

B-206207

May 5, 1989

The Honorable Donald W. Rieggle, Jr.
Chairman, Committee on Banking,
Housing and Urban Affairs
United States Senate

Dear Mr. Chairman:

At the request of the former Chairman of the Committee, we have

- reviewed, as of September 30, 1987, the financial condition of the Federal Housing Administration's (FHA) Mutual Mortgage Insurance Fund, particularly the Section 203(b) insurance program;
- gathered data to permit interpretation of FHA's financial statements in accordance with generally accepted accounting principles and comparison with some state requirements for private mortgage insurers; and
- provided information regarding the potential impact of the insurance program on Treasury cash flows and the federal budget.

We previously briefed your staff on the results of this work. This report presents a more detailed discussion of the information we provided to Committee staff at that briefing.

FHA was established in 1934 under authority granted to the President by the National Housing Act (Public Law 73-479). FHA and its functions were transferred to the U.S. Department of Housing and Urban Development (HUD) in 1965. The basic purpose of FHA programs is to encourage improvements in housing standards and conditions, provide an adequate home financing system through mortgage insurance, and exert a stabilizing influence on the mortgage market. To carry out this purpose, the Secretary of HUD administers FHA through four separate funds for its various mortgage insurance programs.

The Mutual Mortgage Insurance Fund (the Fund) is FHA's largest fund; as of September 30, 1987, the Fund had \$205 billion of insurance-in-force, and \$3.4 billion in total government equity. FHA's other three funds had \$72 billion of insurance-in-force and had accumulated a total deficit of \$2.2 billion. Historically, deficits in these funds are reimbursed through subsequent appropriations.

We contracted with the public accounting firm of Price Waterhouse to perform an audit of FHA's statement of financial position as of September 30, 1987, and an audit of all FHA's financial statements for the fiscal year ended September 30, 1988. These audits of FHA addressed many areas of concern to the Committee. Price Waterhouse auditors gathered data during these audits, and we asked them to collect other information to respond to the Committee's request. Specifically, we asked Price Waterhouse to do the following:

- Perform a detailed review of FHA's Section 203(b) insurance program, which makes up substantially all of the Fund's financial activities. This included reviewing and analyzing claim trends from fiscal years 1979 through 1987 by region, loan-to-value ratio, and mortgage size.
- Identify differences between FHA accounting methods and those followed by private mortgage insurers.
- Review cash-flow data for FHA's Fund and evaluate the Fund's impact on the federal budget.

We initially determined the scope of Price Waterhouse's work, monitored its progress at all key points, reviewed working papers and the draft report, and performed other procedures we deemed necessary. Financial statement audit work commenced in September 1987. (See Financial Audit: Federal Housing Administration Fund's 1987 Statement of Financial Position, GAO/AFMD-89-3.) The 1988 audit work is ongoing. Work related to the congressional request commenced in July 1988 and was completed in November 1988.

The results of the Price Waterhouse study are presented in appendix I of this report. Selected observations are as follows:

Financial Condition

- For each fiscal year from 1979 through 1987, insurance written in economically stressed regions, which include Colorado, Texas, Oklahoma and Louisiana, and for which default and foreclosure rates have been high, did not exceed 25 percent of the Fund's insurance portfolio. While this percentage has remained relatively stable, persistently unfavorable default and foreclosure trends have yet to significantly improve and continue to be a cause for concern.
- From fiscal year 1979 through 1987, the Fund showed a trend of writing insurance with more favorable loan-to-value ratios and thus more owner equity. This trend is significant because history has shown that those Fund-insured mortgages with more favorable loan-to-value ratios have had lower claim rates and losses.
- The average mortgage that the Fund insures has fallen behind national averages since fiscal year 1982. This may be in part because the Fund's maximum loan ceiling had not increased, remaining at \$90,000 through fiscal year 1987.
- As of December 31, 1987, both a HUD actuary and an independent contractor hired by HUD concluded that the Fund was in sound financial condition based upon historical trends and their assessment of probable future events. Based on the results of an economic stress test, the independent contractor further indicated that the Fund (1) would barely survive under more severe regional stress and (2) would not survive under national stress without U.S. Treasury support. The regional stress model assumed that the economic problems in the South and West would continue and intensify, with increasing claims and declining property values. The national stress model was based on a national depression and assumed that home prices would drop over 46 percent in 5 years and that the stress would last 10 years. These conclusions are based upon the results of future events, which are difficult to predict and which may affect the ultimate soundness of the Fund.

Accounting Methods

- In the past, FHA recognized losses as claims were filed--usually near the date of foreclosure. However, private mortgage insurers recognize losses based on defaults, which occur up to 1 year earlier than the date of foreclosure. As a result of the September 30, 1987, financial audit, FHA recognized losses based upon the date of defaults in its financial statements prepared in accordance with generally accepted accounting principles.
- FHA values property and loans at their estimated realizable value, consistent with generally accepted accounting principles.

Cash Flow and Budgetary Impact

- For fiscal year 1988, the Fund showed a net outlay of \$452 million, principally due to (1) a decline in new business and thus premium collections and (2) record high insurance endorsements from 1986 and 1987 entering their high claim period.
- In years when the federal budget is in a deficit position, and when the Fund generates an excess of premium and property sales receipts over claim payments, the amount Treasury must borrow in the financial markets is reduced. However, in a fiscal year such as 1988, when FHA paid more in claims than it had received in premiums and property sales proceeds, the federal deficit increases, and Treasury must obtain needed funds elsewhere. This means that unless the rest of the federal budget shows a surplus, Treasury must obtain funds through other revenue sources, spending reductions, additional borrowings in the financial markets, or a combination of these.

We did not obtain written agency comments on a draft of this report. We did, however, discuss our observations with agency officials and considered their comments in finalizing this report.

We would be pleased to discuss this report with you at your convenience. If you have any questions about this report, please call me at 275-9461 or Dennis J. Duquette, Director, Agency Financial Audits, at 275-9406. We are sending

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copies of this report to the General Deputy Assistant Secretary for Housing--Deputy Federal Housing Commissioner and to other interested parties. Copies will be made available to others upon request.

Sincerely yours,

A handwritten signature in cursive script that reads "Brian P. Crowley for". The signature is written in dark ink and is positioned above the typed name.

Frederick D. Wolf
Assistant Comptroller General

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ABBREVIATIONS

FHA	Federal Housing Administration
HUD	Department of Housing and Urban Development

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Price Waterhouse



March 8, 1989

The Honorable Charles A. Bowsher
Comptroller General of
the United States
U.S. General Accounting Office
Washington, D.C. 20058

Dear Comptroller General Bowsher:

At the request of the U.S. General Accounting Office, we have conducted a study of various aspects of the Federal Housing Administration (FHA), with particular emphasis on the Mutual Mortgage Insurance (MMI) Fund and the Section 203(b) insurance program. The results of our study are presented in this report. Much of the information needed for this study was obtained during our audit of FHA's Statement of Financial Position as of September 30, 1987, for which a separate report was issued. We are in the process of conducting a financial statement audit of FHA for the year ended September 30, 1988, for which a report will be issued at a later date.

Our study was conducted from July to September 1988. Its scope was to (1) review various aspects of the present financial condition of FHA's MMI Fund, and its major program, the Section 203(b) insurance program, (2) compare accounting principles and practices used in FHA's financial statements to generally accepted accounting principles, commercial practices and some state regulatory accounting requirements for private mortgage insurers (PMIs), and (3) provide information regarding the potential impact of FHA's cash flow on the federal budget. More specifically we



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- reviewed FHA's Section 203(b) insurance program which makes up substantially all of the MMI Fund's financial activities. Insurance claim trends relative to insurance written from 1979 through December 1987 were developed and analyzed by region, loan-to-value ratio, and mortgage size. We also reviewed the methodologies and assumptions used by HUD's actuary to determine their reasonableness, and the findings of an economic stress test¹ of the MMI Fund conducted by an independent contractor hired by HUD.
- identified differences between FHA accounting methods and those followed by PMIs. This allowed us to propose audit adjustments to bring FHA's accounting practices and reporting methods more into line with those followed by PMIs and generally accepted accounting principles. It further provided information to allow interpretation of FHA's financial statements. Two significant state regulatory accounting requirements for PMIs were also reviewed.
- obtained cash flow data on FHA's MMI Fund and evaluated its impact on the federal budget.

Further details about our scope, methodology and observations are presented in Sections I to IV following this letter. With respect to our review of the MMI Fund and the Section 203(b) program, we have the following observations:

- In economically stressful regions, those which include Colorado, Texas, Oklahoma and Louisiana, the percentage of insurance written has not fluctuated greatly since 1979, and approximates 25% of the MMI Fund's insurance portfolio. This is significant because claim rates, and thus losses, have been substantial in stressful regions. If insurance written in these regions had increasingly become a larger portion of the MMI Fund insurance portfolio, then the chances of the MMI's financial position deteriorating would be considerably greater.

¹/An economic stress test evaluates the ability of an entity to remain solvent under various future distress conditions. It involves forecasting future cash flows assuming various future economic conditions, which can include home price appreciation, mortgage default frequency, loss ratios and interest rates.

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- Overall, FHA/MMI shows a trend of writing insurance with more favorable loan-to-value ratios. The loan-to-value ratio is the relationship, usually expressed as a percentage of the principal amount, that a mortgage loan bears to the appraised value of the mortgaged property. A more favorable ratio would mean that the loan is a smaller percentage of the appraised property value, and thus that there is more collateral backing the loan. The significance of this is that loans with more favorable loan-to-value ratios default less often, and when they do, losses on them are typically less severe.
- The MMI Fund has built up equity of \$3.4 billion with \$205 billion of insurance in force at September 30, 1987, and will thus be able to sustain itself for a period of time should claim rates and losses become more severe. However, it must be noted that a significant component of the MMI Fund's equity was generated through investing prior year excess funds in government securities. If FHA must redeem its securities to fund net cash outflows resulting from greater claims and losses, then the Treasury may have to sell new government securities in the financial markets to raise the funds.

However, notwithstanding these positive factors, it is equally important to consider reasons for caution that were also noted during our analysis of the Section 203(b) program which include:

- A concern that over the last two years (1) the maximum loan amount that the MMI Fund can insure on an individual mortgage (the loan ceiling), and (2) the average mortgage amount the MMI Fund insures have not kept pace with home price appreciation. This is important because MMI Fund trends indicate that higher dollar value loans, through more stringent loan-to-value requirements or other factors, may be less risky since they have lower claim rates. If lower risk borrowers can no longer obtain FHA insurance because their loans are above the loan ceiling, then FHA may increasingly find itself insuring more risky borrowers, for whom claim rates may be greater. We believe that decisions concerning changes to FHA programs should only be made after an assessment of the potential cost of such changes is completed.



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- Persistently high default and foreclosure rates in stressful regions. While the percentage insurance in these regions to total MMI insurance has remained relatively stable, persistently unfavorable default and foreclosure trends have yet to significantly improve and continue to be a cause for concern.

In addition to our review of the MMI Fund and the Section 203(b) program, we also noted that (1) HUD's actuary has concluded that, as of December 31, 1987, the MMI Fund is in sound financial condition and (2) an independent contractor hired by HUD concluded, based on the results of an economic stress test, that as of December 31, 1987 the MMI Fund was in sound financial condition based on "probable future economic conditions". However, the independent contractor also noted that the MMI Fund "approaches the point of survivability" under more severe regional stress and, under national stress, does not survive without support from the U.S. Treasury.² The assessments made by the HUD actuary and the independent contractor, in large measure, relied on historical data. We caution that the dynamic nature of the mortgage market from a structural standpoint³, makes it difficult to forecast the MMI Fund's future financial viability based on prior experience.

²/The regional stress model assumed that the economic problems in the south and west continued and intensified with increasing claims and declining property values. The national stress model is based on a "national depression" with home prices dropping over 46% in five years with the "stress" lasting ten years.

³/Structural factors can include, among other things, (1) the use of adjustable rate mortgages, (2) interest rate volatility, and (3) the amount of personal income needed to make mortgage payments.

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With respect to accounting methods followed by FHA compared to those followed by PMIs and generally accepted accounting principles (GAAP), the primary difference relates to the timing by which claims losses are recognized and reported. PMIs typically accrue losses on or about the time defaults take place, under the theory that the default is the earliest measurable indicator that the company has incurred a loss. While not all defaults lead to insurance claims and losses, PMIs are able to estimate, based on prior experience, about how many defaults will turn into foreclosures and thus lead to claims and losses. By contrast, FHA has historically not reported losses until a claim has been filed, or at about the time a foreclosure is taking place. Since defaults may precede foreclosures by a year or more, the effect of the differing methods is that PMIs report losses sooner than FHA. However it should be noted that as part of our audit at September 30, 1987, FHA, for the first time, recorded loss reserves in its GAAP-based Statement of Financial Position to recognize losses resulting from defaults. HUD is evaluating the impact, if any, of this change on its budgetary and Treasury reports and will discuss this issue with Treasury, OMB and Congress.

It is equally important to recognize that FHA does follow generally accepted accounting principles with respect to valuing foreclosed property it owns and mortgage loans it holds. Consistent with commercial practices and generally accepted accounting principles, FHA makes an estimate of the cash (realizable) value of foreclosed property, and of losses resulting from loans for which full collection is in doubt.

Finally we noted that for fiscal year 1988, the MMI Fund had a net cash outflow of some \$452 million. This resulted principally from a decline in premium collections relative to fiscal year 1987 levels, and an increase in claim payments. One reason for the increase in claim payments is that the high levels of insurance written in 1986 and 1987 are now entering their historically high claim period. Like many private mortgage insurers, FHA, and particularly the MMI Fund experiences its highest rate of claims in the second and third year after the insurance is written, which gradually decreases and levels off to a more or less constant rate after the tenth year of the policy.

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Exacerbating the current cash flow situation is the timing of premium collection versus claim payment, and the manner in which prior year excess funds affected the federal budget deficit. In 1984, FHA began collecting, up front, the entire premium for virtually all of the MMI Fund insurance. This will initially generate substantial excess funds since the up front premium is meant to cover claim payments that will probably not reach significant levels until the second and third year after the premium is collected. However eventually, experience has shown, the insurance that generated the significant cash inflow from the up front premium will lead to claim payments. At a time when new insurance is declining, cash outflows from claim payments emanating from insurance written in prior years may well exceed cash inflows from new up front premium collections.

When the MMI Fund, or any other FHA fund, generates excess funds, they are invested in Treasury securities not sold in the financial markets -- in effect they are loaned to Treasury. Moreover, in years when FHA generates excess funds, they reduce the Federal deficit and thus the amount Treasury must borrow in the financial markets. However, if in later years MMI must redeem its investments to fund claims and losses, Treasury must repay what it has borrowed (with interest) and raise the needed cash somewhere else. This means that, unless the rest of the budget is in surplus, Treasury must obtain the needed cash through some combination of new borrowings in the financial markets, additional revenue sources, or spending reductions in other programs.

While we have made a number of observations, it is important to bear in mind that they were made based on facts and circumstances as they existed at the time of our study. We cannot warrant that our observations will continue to hold true in the future. Any conclusion about the future financial viability of the MMI Fund, or any FHA activity, must be viewed with caution because such conclusions are ultimately based on the outcome of future economic events and are thus subject to wide degrees of variation.

We provided a draft copy of this report to HUD, and received no disagreement about the information presented or the results of our study. We would be pleased to discuss this report with you or other interested parties at your convenience.

Sincerely yours,

Price Waterhouse

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ABBREVIATIONS

FHA	Federal Housing Administration
HUD	Department of Housing and Urban Development
MMI	Mutual Mortgage Insurance Fund
GI	General Insurance Fund
SRI	Special Risk Insurance Fund
GAO	General Accounting Office
GAAP	Generally Accepted Accounting Principles
PMI	Private Mortgage Insurer

STUDY OBJECTIVES

- **EVALUATE THE FINANCIAL CONDITION OF THE MMI FUND, PARTICULARLY THE SECTION 203(B) INSURANCE PROGRAM**
- **ANALYZE ACCOUNTING PRINCIPLES FOLLOWED BY FHA AND COMPARE THEM TO GENERALLY ACCEPTED ACCOUNTING PRINCIPLES AND THOSE FOLLOWED BY PRIVATE MORTGAGE INSURERS**
- **REVIEW CASH FLOW DATA AND ANALYZE THE IMPACT OF FHA CASH FLOW ON THE FEDERAL BUDGET**

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Study Objectives

In September 1987, the U.S. General Accounting Office (GAO) contracted with Price Waterhouse (PW) to conduct an audit of the Federal Housing Administration's (FHA) statement of financial position as of September 30, 1987 and all financial statements for the year ended September 30, 1988. Due to the knowledge obtained on these audits, GAO asked PW to gather data and conduct a study of FHA's Mutual Mortgage Insurance (MMI) Fund, concentrating on MMI's largest insurance program, that under Section 203(b) of the National Housing Act, as amended. The MMI Fund provides basic single family mortgage insurance. It is a mutual fund whereby mortgagors, upon termination of their mortgages, may share in surplus premiums paid into the fund that are not required for operating expenses and losses.

Objectives of the study were to

- Obtain data and evaluate various aspects of the financial condition of the MMI Fund, particularly the Section 203(b) insurance program,
- Analyze accounting principles followed by FHA and compare them to generally accepted accounting principles and to those used by private mortgage insurers (PMIs), and
- Review cash flow data and analyze the impact of FHA cash flow on the federal budget

JOB SCOPE AND METHODOLOGY

BUILDING ON FINANCIAL AUDIT WORK, WE:

- PERFORMED A COMPUTERIZED DATA ANALYSIS OF INSURANCE CLAIM DATA AND TRENDS FOR THE SECTION 203(B) PROGRAM
- PERFORMED AN ACTUARIAL REVIEW OF METHODOLOGIES AND ASSUMPTIONS USED BY THE HUD/FHA ACTUARY, AND REVIEWED THE RESULTS OF AN ECONOMIC STRESS TEST PERFORMED BY AN INDEPENDENT CONTRACTOR
- COMPARED FHA AND PRIVATE SECTOR ACCOUNTING METHODS RELATIVE TO KEY ELEMENTS OF THE MORTGAGE INSURANCE BUSINESS
- REVIEWED FHA RELATED CASH FLOW DATA PREPARED BY HUD, AND ANALYZED ITS EFFECT ON THE FEDERAL BUDGET

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Job Scope and Methodology

Much of the work performed for this study was a direct result of a financial audit of FHA's September 30, 1987 statement of financial position (balance sheet) conducted by Price Waterhouse under GAO contract. In prior years, specifically for fiscal years 1981 and 1984, GAO was unable to complete financial audits of FHA Funds because of significant accounting and reporting changes needed and due to deficiencies in FHA's accounting systems and financial records. Recent improvements to FHA's accounting systems and the adoption of new accounting principles enabled an audit to be conducted of FHA's September 30, 1987 statement of financial position. In addition to the information obtained during the financial audit, other data was obtained and analyzed to augment our study.

More specifically we:

- Extracted data from FHA's computer data base relative to insurance written and claims paid from fiscal 1979 through December 1987 for about 95% of FHA's Section 203(b) program. Data was then analyzed by (1) region, (2) loan-to-value ratio, and (3) mortgage size.
- Performed an actuarial review of the methodologies and assumptions used to estimate the surplus position of the Section 203(b) 30-year term mortgage plan as of December 31, 1987. The purpose of this review was to determine if such methodologies and assumptions were reasonable.
- Obtained a draft report on the results of an economic stress test conducted by an independent contractor hired by HUD. The findings and conclusions of this report were reviewed for reasonableness, but no independent testing of them was performed.
- Compared FHA's accounting principles and practices to those followed by private mortgage insurers. This was accomplished by using Price Waterhouse personnel with industry experience in accounting principles followed by these entities and then, in detail, comparing them to FHA's principles and practices.
- Reviewed cash flow data, furnished by FHA, relative to the MMI Fund, and determined its impact on the federal budget.

Work was completed from July to September 1988, and wherever possible utilized our financial statement audit work which commenced in September 1987, and is ongoing.

SUMMARY OF OBSERVATIONS MMI FUND FINANCIAL CONDITION

POSITIVE FACTORS:

- INSURANCE IN ECONOMICALLY STRESSED REGIONS HAS REMAINED AT ABOUT 25% OF TOTAL MMI INSURANCE
- FHA APPEARS TO BE WRITING INSURANCE WITH MORE FAVORABLE LOAN-TO-VALUE RATIOS
- THE MMI FUND HAS BUILT UP EQUITY OF \$3.4 BILLION
- THE HUD ACTUARY AND AN INDEPENDENT CONTRACTOR BOTH CONCLUDED THAT THE MMI FUND IS FINANCIALLY SOUND

REASONS FOR CAUTION:

- THE AVERAGE MMI LOAN AMOUNT HAS FALLEN BEHIND NATIONAL AVERAGES AND HOME PRICE APPRECIATION
- DEFAULT AND FORECLOSURE RATES IN ECONOMICALLY STRESSED REGIONS HAVE REMAINED PERSISTENTLY HIGH

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Summary of Observations

Our observations are categorized by objective. While we have a number of observations, any conclusions about the future financial viability of the MMI Fund or any FHA activity must be viewed with caution, because such conclusions are ultimately based on the outcome of future economic events and can thus subject to wide degrees of variation.

Observations on the MMI Fund, Section 203(b) Insurance Program:

An analysis of the Section 203(b) insurance program revealed both positive factors as well as reasons for caution. Below we have specified both favorable factors and reasons for caution.

Favorable factors:

- In the two most economically stressful regions, Region VI which includes Texas, Oklahoma and Louisiana, and Region VIII which includes Colorado, the percentage of insurance written remains approximately 25% of the MMI Insurance Fund portfolio, and has not fluctuated greatly since 1979. This is significant because claim rates, and thus losses, have been substantial in stressful regions. If insurance written in these regions had increasingly become a larger portion of MMI's insurance portfolio, then the chances of MMI's financial position deteriorating would be considerably greater.
- Overall, for the years 1979 to 1987 FHA appears to be writing insurance with more favorable loan-to-value ratios. The loan-to-value ratio is the relationship, usually expressed as a percentage, of the principal amount that a mortgage loan bears to the appraised value of the mortgaged property. A more favorable ratio would mean that the loan is a smaller percentage the appraised property value, and thus that there is more collateral backing the loan. The significance of this is that loans with more favorable loan-to-value ratios default less often, and when they do, losses on them are typically less severe.

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--The MMI Fund has built up equity of \$3.4 billion with \$205 billion of insurance in force at September 30, 1987, and will thus be able to sustain itself for a period of time should claim rates and losses become more severe. However, it must be noted that a significant component of the MMI Fund's equity was generated through investing prior year excess funds in government securities. If FHA must redeem its securities to fund net cash outflows resulting from greater claims and losses, then the Treasury will have to sell new government securities in the financial markets to raise the funds.

Reasons for caution:

- A concern is that the maximum loan amount that the MMI Fund can insure on an individual mortgage (the loan cap) has not kept pace with home price appreciation. This is important because trends indicate that higher dollar value loans may be less risky since they have lower claim rates. If lower risk borrowers cannot obtain FHA insurance because their loans are above the loan cap, then MMI may increasingly find itself insuring more risky borrowers, for whom claim rates may be greater.
- Persistently high default and foreclosure rates in stressful regions. While the percentage of insurance in these regions to total MMI insurance has remained relatively stable, persistently unfavorable default and foreclosure trends have yet to significantly improve and continue to be a cause for concern.

With regard to actuarial methodologies and assumptions used by FHA, and the results of an economic stress test:

- Both the HUD actuary and an independent contractor concluded the MMI Fund is in sound financial condition under "probable future economic conditions".
- However, the independent contractor noted that MMI "approaches" survivability with more severe regional stress and does not survive under national stress without support from the U.S. Treasury.
- The methodologies and assumptions used by HUD's actuary to estimate the FHA surplus position at December 31, 1987 for the 203(b) 30-year term mortgage program do not appear unreasonable.

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--The economic stress test as well as the analysis of the MMI Fund's actuarial soundness prepared by HUD's actuary, in large measure rely on prior experience to project the the future financial viability of the MMI Fund. The dynamic nature of the mortgage market from a structural standpoint, particularly as it affects government related mortgage insurance, makes it difficult to forecast the MMI Fund's future financial viability based upon prior experience. Moreover, the effect of factors such as (1) the increasing popularity of adjustable rate mortgages, (2) rapidly changing interest rates and (3) changes in the percentage of personal income devoted to mortgage payments are not yet fully understood.

SUMMARY OF OBSERVATIONS FHA ACCOUNTING METHODS

- HISTORICALLY FHA RECOGNIZED LOSSES AS OF THE FORECLOSURE DATE, NOT THE DATE OF DEFAULT
- PRIVATE MORTGAGE INSURERS RECOGNIZE LOSSES AS OF THE DEFAULT DATE, OR AT LEAST A YEAR SOONER THAN FHA
- AS A RESULT OF OUR AUDIT, FHA BEGAN RECORDING LOSSES AS OF THE DEFAULT DATE
- FHA HAS FOLLOWED SOME COMMERCIAL ACCOUNTING PRACTICES FOR LOAN LOSS RESERVES AND FORECLOSED PROPERTY VALUATION

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Observations on FHA's Financial Statements and Accounting Methods

- Historically, FHA recorded claims losses as of the date of foreclosure rather than as of the date of default. Therefore PMIs that follow generally accepted accounting principles record losses sooner. However, it is important to note that our audit of FHA's September 30, 1987 Statement of Financial Position made adjustments which brought this aspect of FHA's accounting and reporting more into line with accounting practices followed by PMIs.
- FHA has followed some commercial accounting practices. Loan loss reserves are recorded for loans with doubtful collection and property is stated at the estimated amount to be realized in cash upon its sale.

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***SUMMARY OF OBSERVATIONS
CASH FLOW AND
BUDGET IMPACT***

- CASH FLOW HAS ERODED SOMEWHAT IN FISCAL YEAR 1988 DUE TO A HIGHER LEVEL OF CLAIMS AND COMPARATIVELY LESS NEW INSURANCE
- THE HIGHER CLAIM LEVEL IS AT LEAST PARTLY ATTRIBUTABLE TO SIGNIFICANT LEVELS OF INSURANCE WRITTEN IN 1986 AND 1987 ENTERING THEIR HISTORICALLY HIGH CLAIM PERIOD
- FHA'S UP FRONT PREMIUM IS SCORED AS A BUDGETARY RECEIPT IN ITS ENTIRETY IN THE YEAR OF COLLECTION, ALTHOUGH IT IS MEANT TO COVER CLAIMS THAT WILL TAKE PLACE IN FUTURE YEARS
- WHEN CLAIM PAYMENTS EMANATING FROM PRIOR YEARS INSURANCE EXCEED NEW UP FRONT PREMIUM COLLECTIONS, FHA WILL SHOW A NET CASH OUTFLOW, AND INCREASE THE BUDGET DEFICIT

SECTION I

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Observations on MMI Cash Flow and its Impact on the Budget:

- Cash flow eroded somewhat in fiscal year 1988 such that that the MMI Fund showed a net cash outflow of \$452 million for all of fiscal year 1988. This was caused primarily by a higher level of claims and comparatively less new insurance. The latter will cause a decline in collections since there will be fewer up-front premiums.
- The increase in claim payments is partly attributable to the significant level of insurance written in 1986 and 1987 entering its high claim period (particularly the second and third year after the insurance was written). Given the significant level of insurance written by the MMI Fund in 1986 and 1987, there is good possibility that claims will continue at a high level, at least in the near term. Whether or not this continues to cause a net cash outflow by MMI is dependent upon FHA's ability to continue selling foreclosed property timely and at a reasonable return, and the amount of cash generated from up-front premiums on new insurance endorsements.
- When the MMI Fund, or any other FHA fund, generates excess funds, they are loaned to the government by investing them in Treasury securities not sold in financial markets. However, when FHA has a net cash outflow and must redeem securities with which to fund it, the federal deficit increases because needed funds must be obtained from other financing sources.

MMI FUND FINANCIAL CONDITION

ANALYSIS OF FHA'S SECTION 203(B) PROGRAM

- REGIONAL ANALYSIS
- ANALYSIS OF MORTGAGES
INSURED BY LOAN-TO-VALUE
RATIO
- ANALYSIS OF MORTGAGE SIZE
INSURED BY FHA

SECTION II

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MMI Fund Financial Condition
Analysis of FHA's Section 203(b) Program

A fundamental economic concept of mortgage insurance is the concept of risk dispersion. The concept refers to taking risks from different originators in different regions of the country, thus creating portfolio diversity and mitigating the volatility of aggregate losses. Equally important to regional dispersion is the dispersion of risk by those loan characteristics that are indicative of low and high risk borrowers -- loan-to-value and mortgage size being paramount among them. Loan-to-value represents the ratio of mortgage loan over the value of the property.

The dispersion of risk by loan-to-value is particularly important to FHA, because borrowers with both high and low loan-to-value ratios pay the same percentage fee. By policy, FHA does not make distinctions among borrowers, even distinctions based on borrower characteristics shown to be useful predictors of default as a basis for charging differential premiums.

Analyzing FHA-insured loans by their size is an equally important undertaking. If claim rates differ by mortgage size, then limitations applied to the size of the loan FHA can insure could have a financial impact on the fund. For example, if borrowers seeking higher dollar value loans, who have had more favorable claim experience, can no longer obtain FHA insurance because their loans are above the loan cap, then FHA might increasingly find itself insuring more risky borrowers, for whom claim rates may be greater. Thus, an element of cross-subsidization between high and low risk borrowers could be reduced.⁴

⁴/For a discussion of "cross-subsidization" see Barry P. Bosworth, Andrew S. Carron, and Elisabeth H. Rhyne, The Economics of Federal Credit Programs, (The Brookings Institution, Washington, D.C., 1987), pp. 60-61.

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There is, of course, a correlation between risk factors associated with loan-to-value ratios and the size of the insured mortgage. If, for example, lower dollar value loans had less favorable loan-to-value ratios than higher dollar value loans, then this might partially explain their having higher claim rates. In fact, Federal regulations applicable to FHA generally allow lower downpayments, and thus higher (less favorable) loan-to-value ratios, for loans of \$50,000 or less.⁵

But the fact that lower value loans have less stringent loan-to-value requirements might further exacerbate the risk that added costs associated with insuring more risky loans will not be covered by aggregate premium receipts. This is of particular concern if the loan ceiling increasingly restricts FHA/MMI from insuring higher dollar value loans with more favorable loan-to-value ratios, and better claim and loss experience, whose premium might be used to offset the added costs.

The following analysis of FHA's Section 203(b) program analyzes FHA's insurance by:

- region,
- loan-to-value ratio, and
- mortgage size

The following charts were prepared by us based on our analyses of FHA transaction extracts. They may not agree, in detail, with analyses prepared by HUD.

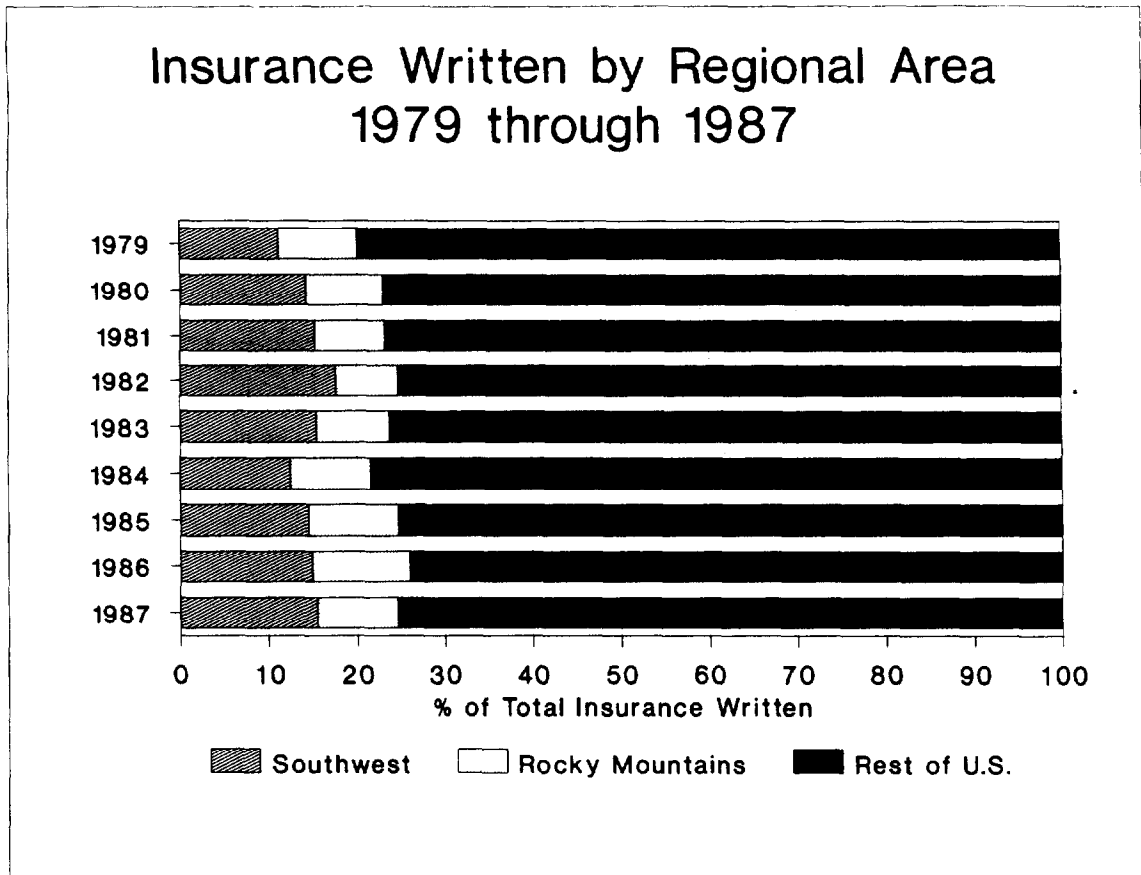
⁵/See 50 FR 19924-19927, May 13, 1985 and 24 CFR 203.18 which authorize higher loan-to-value ratios for HUD/FHA-insured owner-occupied homes or family units with appraised values of \$50,000 or less.

REGIONAL ANALYSIS

- THE AMOUNT OF INSURANCE IN DISTRESSED REGIONS HAS NOT FLUCTUATED GREATLY, REMAINING AT ABOUT 25% OF TOTAL INSURANCE WRITTEN
- CLAIM RATES HAVE REMAINED HIGH IN THE SOUTHWEST AND AND ROCKY MOUNTAIN REGIONS
- DEFAULT AND FORECLOSURE RATES HAVE BEEN INCREASING IN STRESSFUL REGIONS

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Chart II-1

--The two regions which have experienced the highest levels of claims and foreclosures are separately broken out. They are:

Rocky Mountains - Colorado, North Dakota, South Dakota
(Region VIII) Wyoming, Montana, and Utah

Southwest - Texas, Oklahoma, Arkansas, New Mexico,
(Region VI) and Louisiana

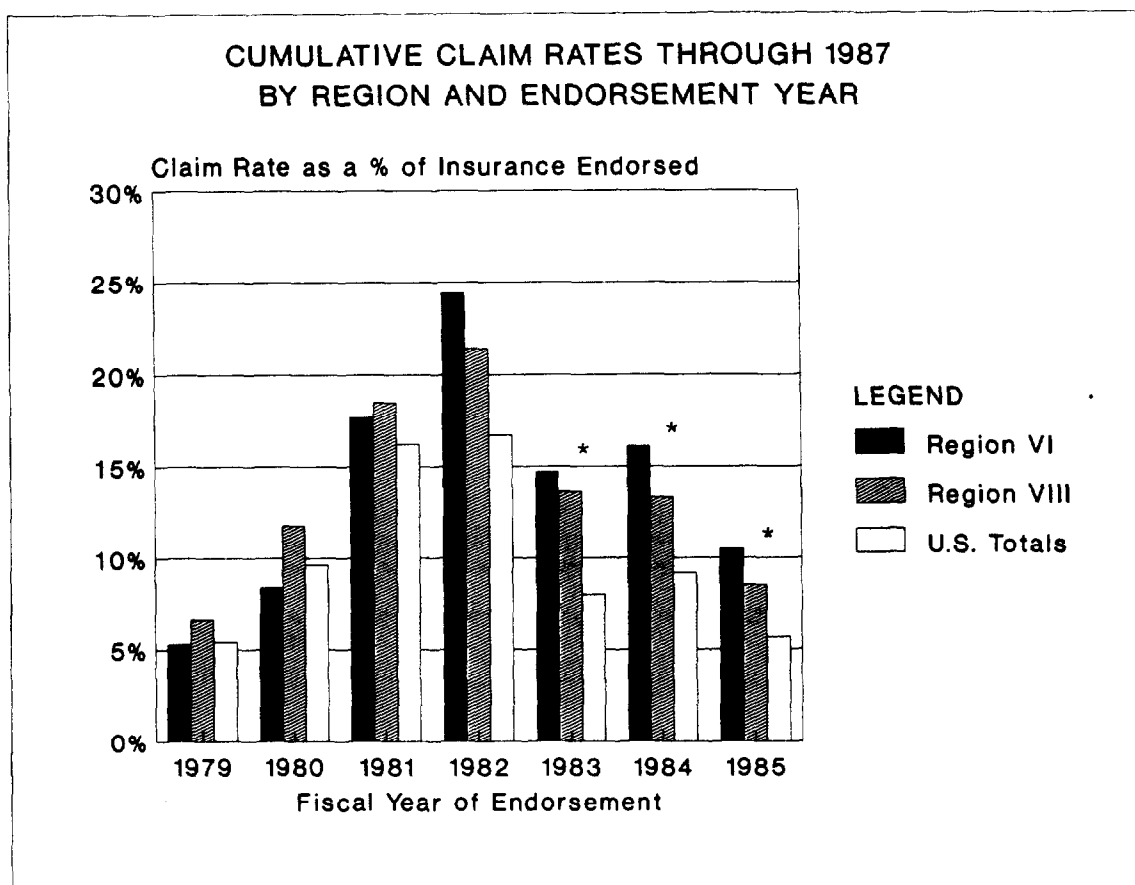
--The amount of insurance written in distressed regions has remained relatively stable since 1979 and has not exceeded 25% of the MMI Fund's insurance portfolio.

--Within the distressed regions Texas, Louisiana and Colorado have suffered substantial losses.

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Chart II-2



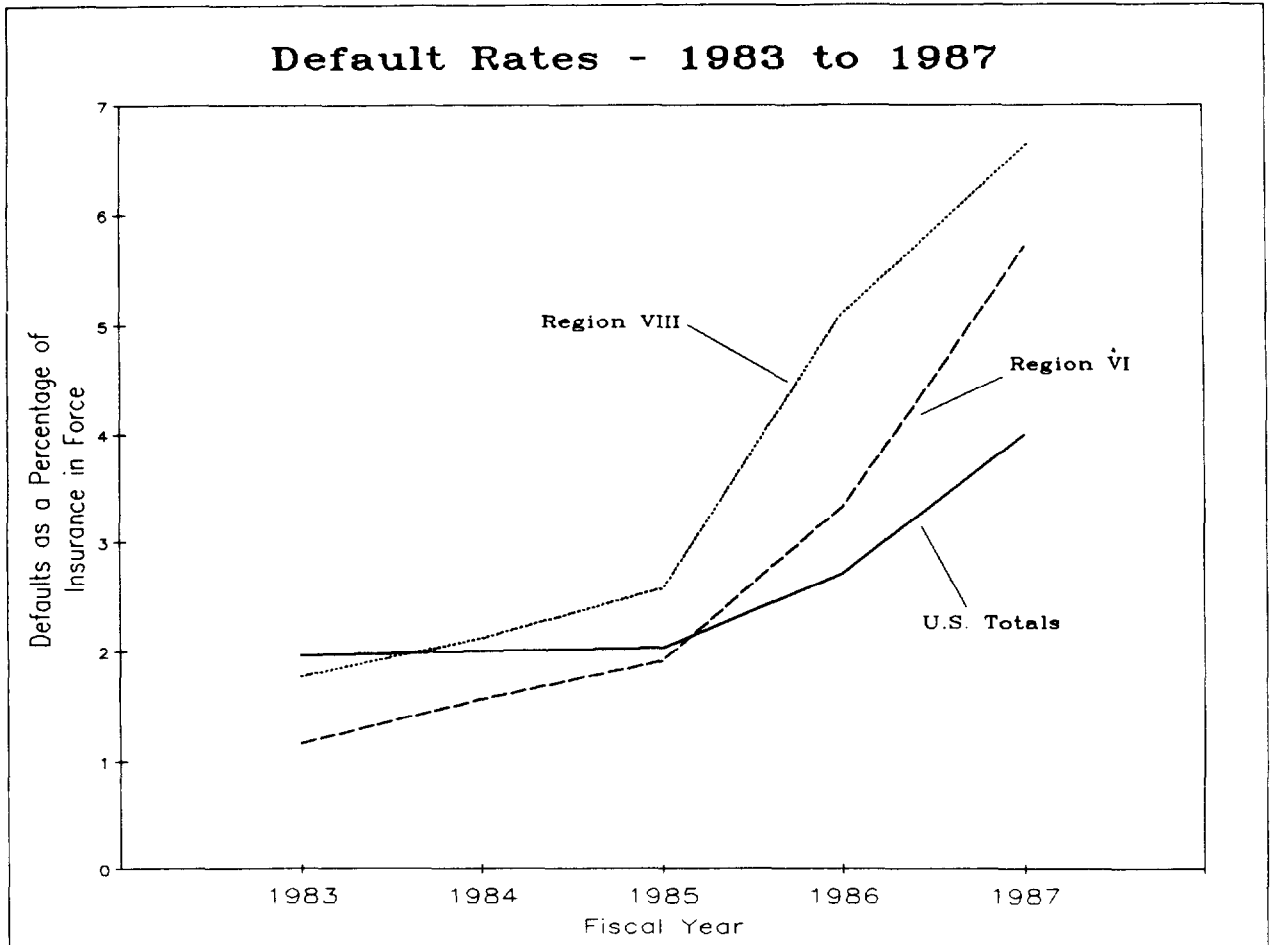
--This analysis covers only insurance endorsed through fiscal year 1985. This is because not enough claim experience has taken place relative to fiscal year 1986 and 1987 endorsements to yield meaningful data.

--Regions VI and VIII claim rates have most exceeded U.S. totals every year since 1981, due to economic stress in these regions.

* The downward trend of overall claim rates after 1982 is misleading since it has been shown that, historically, a number of additional claims will result from insurance endorsed in 1983, 1984 and 1985, as indicated in the loss distribution curve at Chart III-1.

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Chart II-3

--As with the claim rates, default rates are the highest in Regions VI and VIII, the two regions that have recently experienced the most economic distress, exceeding U.S. totals.

--While not all defaults will lead to claims, they are indicators of impending claims, and thus of impending payments.

Note: HUD is dependent upon mortgagees to report defaults. In the past, this data has not always been reliable.

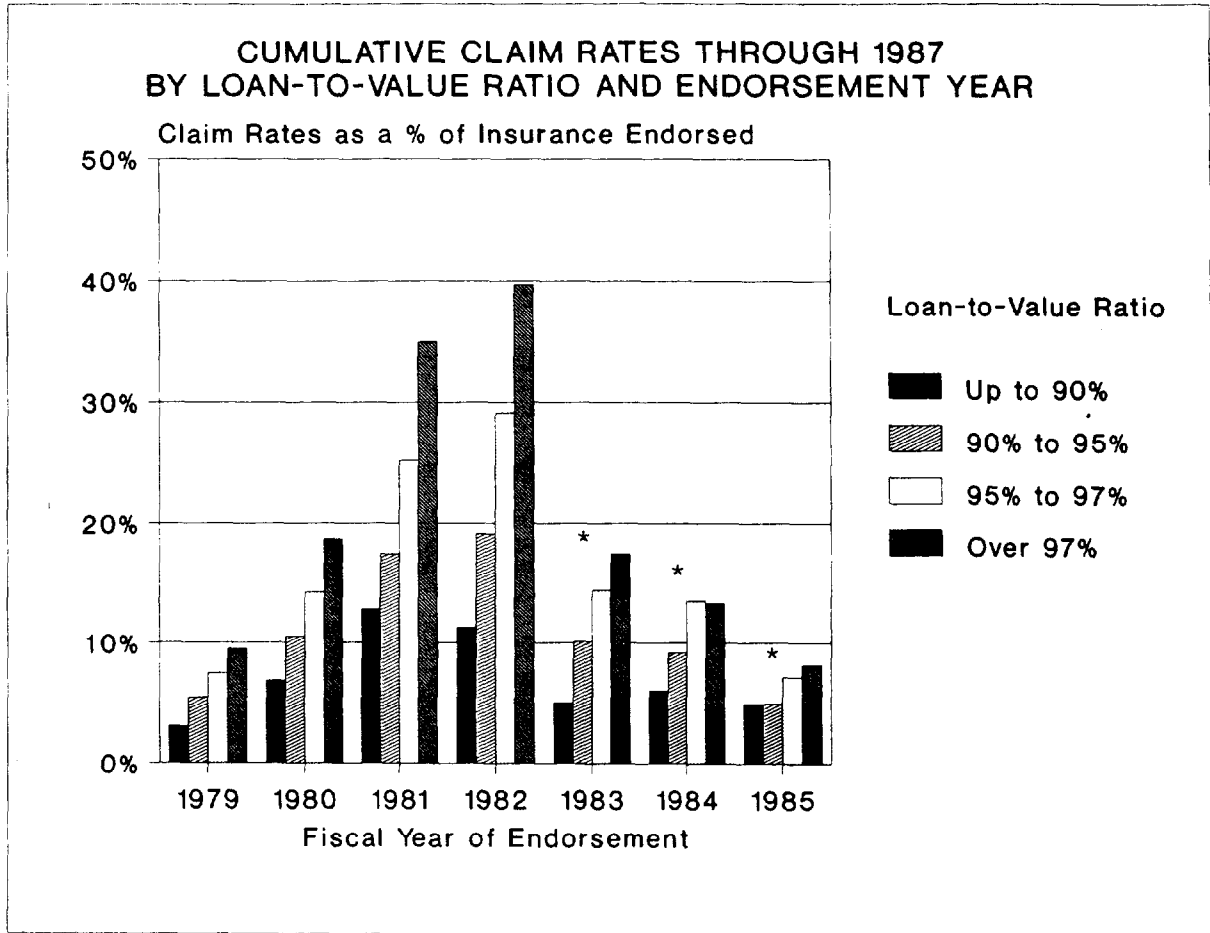
***ANALYSIS OF LOAN-TO-VALUE
RATIO: MMI FUND INSURED
MORTGAGES***

- IN RECENT YEARS, IT APPEARS AS THOUGH THE MMI FUND IS INSURING MORTGAGES WITH MORE FAVORABLE LOAN TO VALUE RATIOS
- CLAIM RATES ARE BETTER FOR INSURED MORTGAGES WITH MORE FAVORABLE LOAN TO VALUE RATIOS

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Chart II-6



--Claim rates are higher for higher loan-to-value ratios (i.e., when the loan represents a greater portion of the mortgaged property) and vice versa.

--Higher claim rates for 1981 and 1982 endorsements can be generally attributed to the recession, which affected most of the U.S.

--Cumulative claim data for years after 1985 is not yet meaningful, since there is minimal claim experience for those years.

* The downward trend of overall claim rates after 1982 is misleading since it has been shown that, historically, a number of additional claims will result from insurance endorsed in 1983, 1984 and 1985, as indicated in the loss distribution curve at Chart III-1.

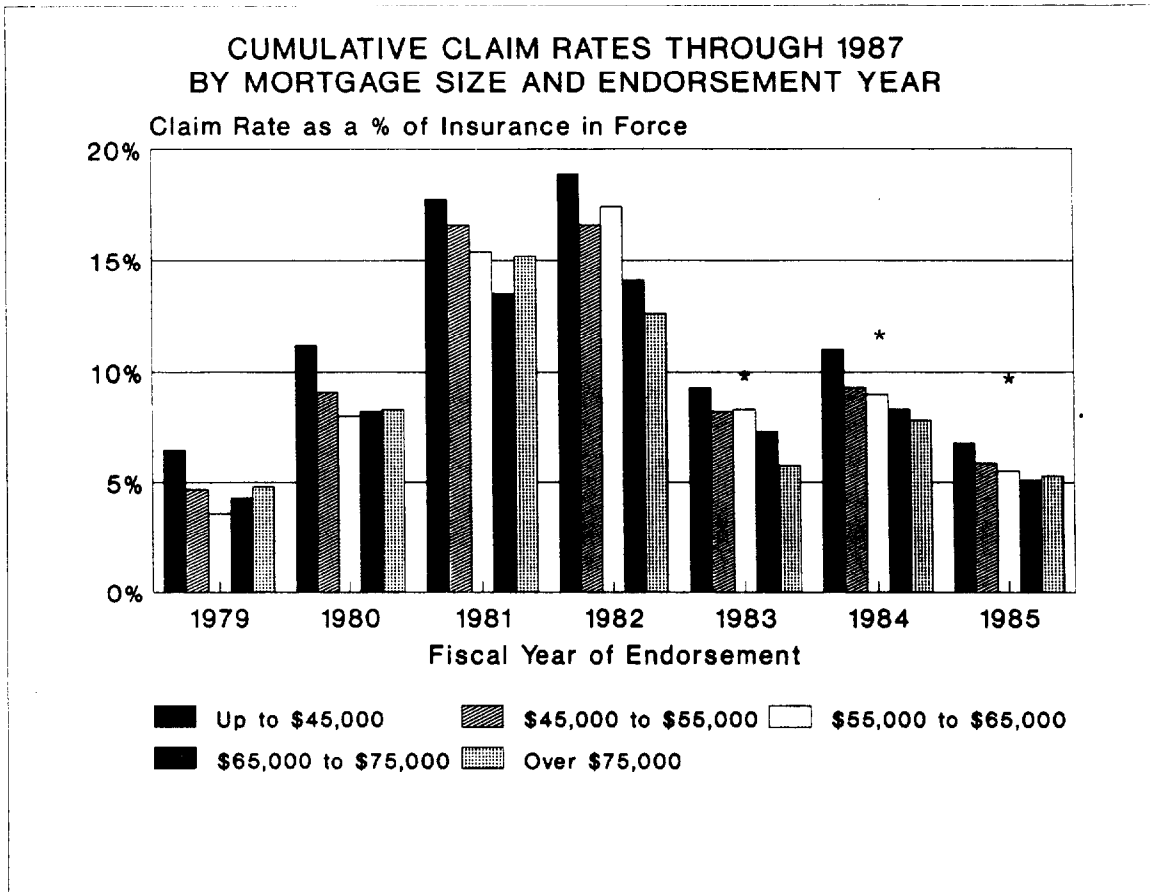
ANALYSIS OF MORTGAGE SIZE: MMI FUND INSURED MORTGAGES

- FOR INSURANCE ENDORSEMENTS THROUGH 1985, THE TREND HAS BEEN THAT HIGHER DOLLAR VALUE LOANS HAVE SHOWN MORE FAVORABLE CLAIM RATES
- IN 1986 AND 1987, THE GROWTH IN AVERAGE MMI MORTGAGE AMOUNTS FELL BEHIND GROWTH IN NATIONAL AVERAGES FOR HOME PRICES AND MORTGAGE LOANS
- AFTER FACTORING IN HOME PRICE APPRECIATION, FHA/MMI COULD BE INSURING COMPARATIVELY SMALLER LOANS WHICH, BECAUSE OF LESS FAVORABLE LOAN-TO-VALUE RATIOS OR OTHER FACTORS, HAVE HIGHER CLAIM RATES.

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Chart II-7



--For insurance endorsed from 1979 through 1985, claim rates have generally been lower in recent years for higher dollar value loans.

--Higher claim rates for 1981 and 1982 endorsements can be generally attributed to the recession, which affected most of the U.S.

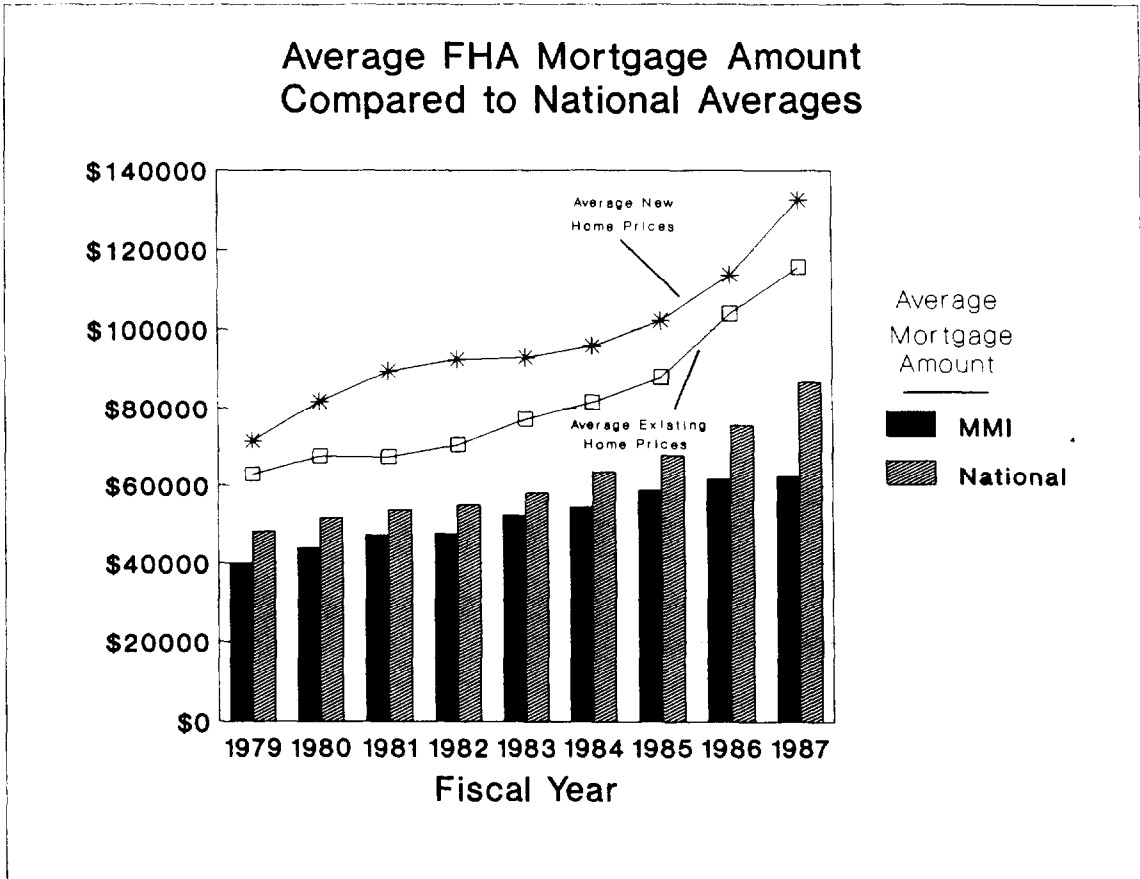
--Cumulative claim data for years after 1985 is not yet meaningful, since there is minimal claim experience for those years.

* The downward trend of overall claim rates after 1982 is misleading since it has been shown that, historically, a number of additional claims will result from insurance endorsed in 1983, 1984 and 1985, as indicated in the loss distribution curve at Chart III-1.

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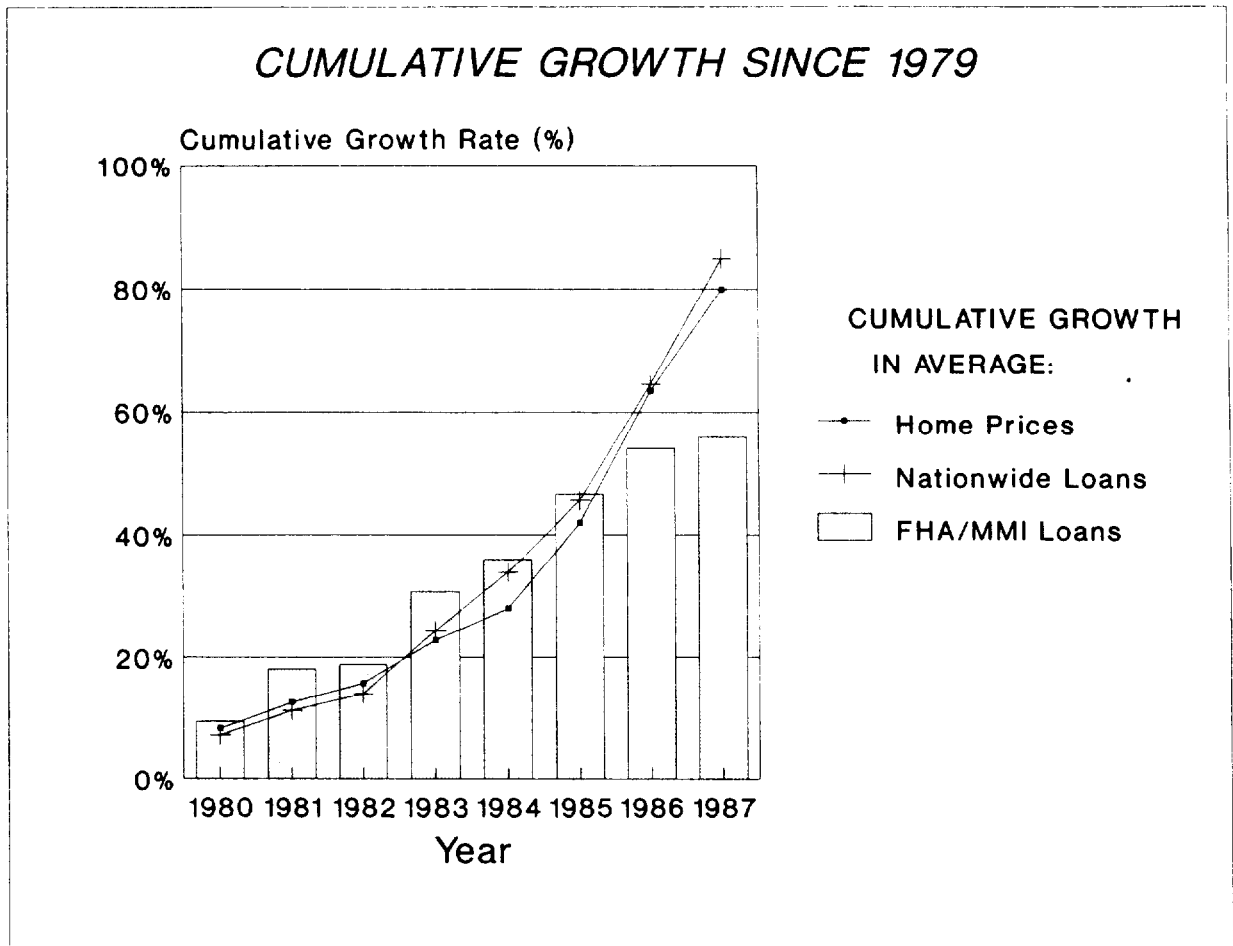
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Chart II-8



- The average mortgage MMI insures is substantially lower than nation-wide averages for new and existing home prices, and for average nation-wide mortgage amounts.
- The average mortgage MMI insures has fallen further behind national averages since fiscal year 1982. This may be in part because the maximum MMI loan ceiling has not been increased, remaining at \$90,000 through fiscal year 1987.
- The nation-wide average mortgage amount reflects about a 75% average loan-to-value ratio, which is much lower than loan-to-value ratios on most MMI-insured loans. This is because MMI/FHA generally has more lenient underwriting standards in the interest of making housing more accessible to home buyers.
- Data obtained from publications of the Office of Policy and Economic Research - Statistical Division, Federal Home Loan Bank Board, and from FHA/MMI records.

Chart II-9



--In 1986 and 1987, average home prices and the nationwide loan average grew at higher rates than did average FHA loans.

--After adjusting for home price appreciation, FHA/MMI may have insured smaller loans in 1986 and 1987 than it did from 1980 through 1985.

Note: Use of median rather than average home prices in Charts II-8 and II-9 would produce slightly different Charts.

*ANALYSIS OF FHA ACCOUNTING
METHODS, FINANCIAL STATEMENTS
AND STATE ACCOUNTING
REQUIREMENTS*

- **FHA ACCOUNTING COMPARED TO INDUSTRY PRACTICES**
- **INTERPRETATION OF FHA'S FINANCIAL STATEMENTS**
- **SOME STATE ACCOUNTING REQUIREMENTS**

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FHA Accounting Compared to Industry PracticesIntroduction

A primary objective of accrual accounting is to report the financial position and results of operations of an entity based on the occurrence of measurable events, regardless of whether cash has changed hands. This concept is particularly important for a entity such as FHA (or for any insurance enterprise) since the actual disbursement or collection of cash may precede or trail the event that gave rise to the cash transaction by a substantial time period. Thus, a favorable cash position, or positive cash flow, at any given point may not be reflective of the true financial position of the entity.

For example, an entity that collects an "up-front" fee to provide service over an extended period of time will show a substantial cash inflow at the time the fee is collected. But the cost associated with providing that service will probably be incurred (and paid) over a substantially longer period of time. Moreover, the timing of the receipt of the fee does not necessarily follow the loss payment pattern. If the "up front" fee proves insufficient to fund losses incurred over the service period, then it follows that the initial favorable inflow of cash was, standing alone, a poor indicator of the true financial viability of the entity.

The example provided above is very similar to the type of business FHA performs. FHA's largest program, providing insurance for conventional single family home mortgages, includes many of the same concepts as the example. A premium is charged "up-front" upon mortgage initiation to cover costs that will be incurred if the mortgage defaults -- an event that typically involves an extended period of time, but more heavily in the first 10 years of the mortgage. Measuring results of operations (income or loss) and financial position (equity or net assets) for this type of business transaction is difficult and, in FHA's case involves two fundamental questions:

- How should the up-front premium be accounted for in any given fiscal year if it is associated with costs that will be incurred over several periods?
- At what point in time for any particular fiscal year should the default costs and losses associated with the insurance be recorded?

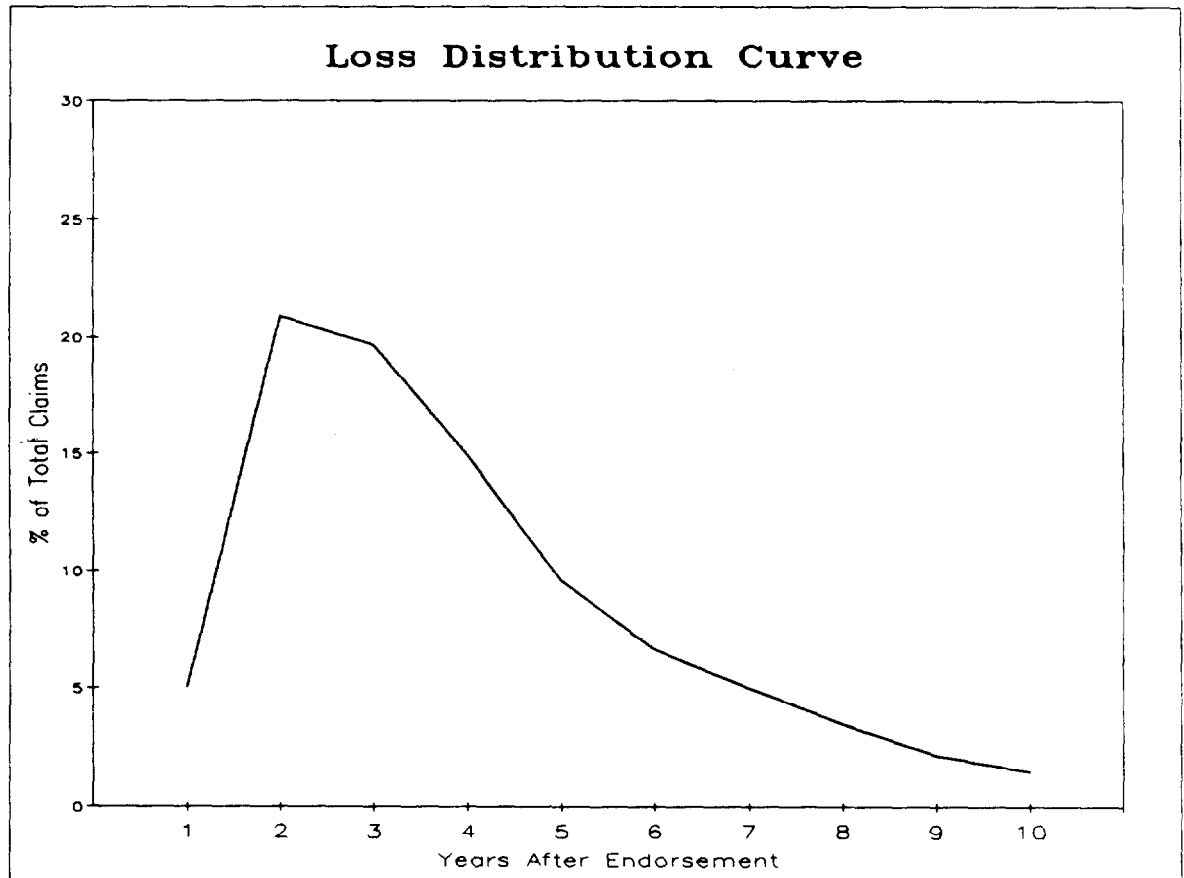
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In considering these two fundamental questions, perhaps the most important consideration of all is how they interact to produce net income or loss for any particular fiscal year. It seems logical that revenue should be matched to the cost it is meant to cover in order to yield a true picture of an entity's income or loss for a particular fiscal year. Thus, with respect to revenue, the real question centers around that portion of the up-front premium that can be recognized as revenue from year to year to cover default costs that have been incurred.

For FHA, as for any mortgage insurer, default costs are incurred on an uneven pattern. Chart III-1 depicts this pattern for FHA. It shows a relatively high loss rate in the second and third year of the mortgage gradually declining thereafter. The accounting methodology used should seek to distribute revenue and expenses over this curve in a similar manner. Thus, for example, in the second year after insurance endorsement, 20 percent of the premium collected should be recognized as revenue in order that it can be matched against default costs incurred in that year.

Chart III-1



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Accounting Principles Generally Accepted by the Private Mortgage Insurance Industry

Bearing the previous discussion in mind, we can answer the questions previously posed in terms of how they are addressed by private sector enterprises. In 1981, the American Institute of Certified Public Accountants together with representatives from the private mortgage insurance industry prepared a Proposed Statement of Position entitled Accounting for Mortgage Guaranty Insurance Companies, which described the accounting principles and methods to be followed by private mortgage insurers. While the principles described in that document were never formally adopted by the Securities and Exchange Commission, they are widely followed by the industry today.

Among the accounting principles and methods advocated by the proposed Statement of Position, the following major areas were specifically addressed: (1) losses, (2) property acquired in settling claims, and (3) premium revenue recognition. Each of these can be described as follows:

Losses - The primary question addressed involved when losses should be recorded. The argument essentially centered around whether to record losses as of (or within a reasonable period of) the date of default or the date of foreclosure. Recording losses as of the date of default would serve to accrue them much sooner, since defaults may occur as much as a year earlier than foreclosures. Some believed the default date was more appropriate since it is at this point that an entity has the first evidence that a loss may occur. Others believed that losses should be accrued only at the time of foreclosure when the loss is imminent. The statement of position concluded that losses should be accrued as of the date of default.

Property Acquired in Settling Claims - Mortgage insurance companies often acquire property in settling claims through foreclosure. The proposed Statement of Position advocated valuing the property at the amount expected to be realizable in cash. That amount should be net of costs such as maintenance and selling expenses.

Premium Revenue Recognition - For single premium policies, which FHA's up-front premium is, the proposed Statement of Position in effect advocated recognition of the premium as revenue over the life of the policy in a manner that approximates the historical incidence of loss. This method attempts to match premiums with the anticipated incidence of loss.

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Other Commercial Accounting Practices Relevant to FHA

Since FHA has a substantial number of mortgage loans, it is also important to address the accounting practices that are followed by most private sector financial institutions with respect to loan accounting. The two that are most relevant are:

- How the loans should be valued if full payment of principal and interest becomes doubtful, and
- How loans that are either initiated by or assigned to an entity should be valued when they include below market interest rates.

When full payment of loan principal and interest becomes doubtful, even though partial payments may still be received, many private sector financial institutions reduce the initial loan value to the amount they expect to ultimately collect. This is typically accomplished by recording a "loan loss reserve". In recognition of the doubt as to full collection of the loan, many companies will suspend the accrual of interest and account for any cash received, whether for principal or interest, as collection of principal. Loans where the accrual of interest has been suspended are often referred to as "non-performing" loans.

If an entity grants (or acquires) a loan at interest rates that are below prevailing market interest rates then a discount, reducing the loan carrying value, is typically recorded. Recording a discount in this situation recognizes the fact that, when below market interest rates are granted, an entity will actually recoup less than the original face value of the loan. For example, if an entity grants or assumes a loan with an interest rate of say 4% when market interest rates are 8%, then we can see that the entity is realizing substantially less interest income, and thus less cash flow, than market conditions would indicate. Presumably the money could have been loaned elsewhere for a greater return. But the fact that it was not means that time value of money considerations have caused a diminution in the stated value of the loan. Hence a discount is recorded. At FHA, as with many other Federal government entities, below market interest rates are often granted as part of fulfilling an agency's mission. Recording such discounts merely reflects the cost of granting such rates.

FHA ACCOUNTING COMPARED TO INDUSTRY PRACTICES

SIMILARITIES:

- FHA VALUES FORECLOSED PROPERTY AT THE AMOUNT THEY EXPECT TO RECEIVE IN CASH UPON ITS SALE
- FHA RECORDS LOAN LOSS RESERVES FOR MORTGAGE LOANS FOR WHICH FULL COLLECTION IS DOUBTFUL

DIFFERENCES:

- PRIVATE MORTGAGE INSURERS RECOGNIZE LOSSES AS OF THE DEFAULT DATE, OR AT LEAST A YEAR SOONER THAN FHA
- FHA ADMINISTRATIVE EXPENSES ARE BASED ON ESTIMATES RATHER THAN ACTUAL COSTS
- MOST FHA PREMIUMS ARE COLLECTED, IN THEIR ENTIRETY, UPON INSURANCE INITIATION
- FHA REVENUE RECOGNITION CURRENTLY TRAILS LOSS EXPERIENCE

Similarities and Differences

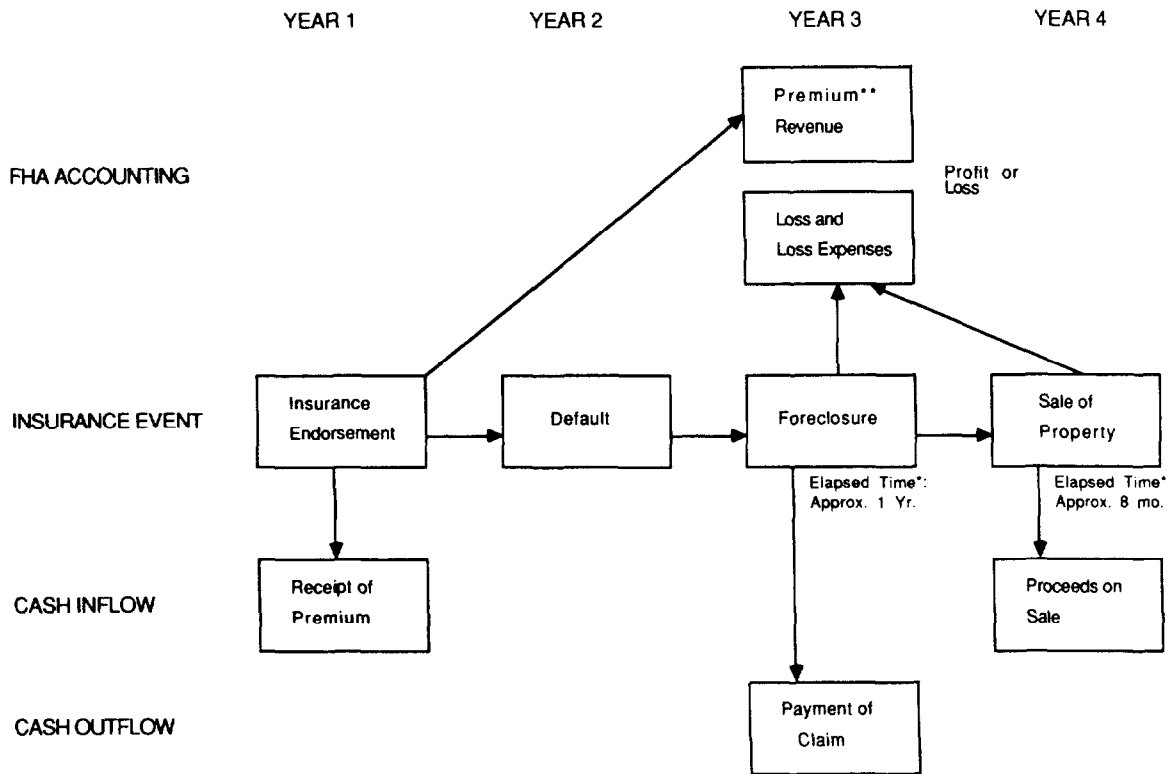
The audit of FHA's September 30, 1987 balance sheet identified adjustments necessary to make FHA's accounting consistent with that followed by private mortgage insurers (PMI). It is useful to understand the differences between the two, in order that the adjustments proposed can be better understood. Following is a discussion of differences and similarities between the accounting followed by FHA versus that followed by PMIs.

Differences

1. PMI's recognize losses sooner than FHA. Under accounting practices followed by mortgage insurers, losses are recorded as of the date of default rather than the date of foreclosure. By doing so, private mortgage insurers, in effect, record losses perhaps as much as a year sooner. A portion of the up-front premium is also recognized as revenue and is thus "matched" to the recorded loss, yielding a profit or loss. To illustrate the differences between FHA and PMI accounting methods, we have depicted each methodology in Charts III-2 and III-3, respectively. In both cases we assume a default has taken place in the second year after the insurance endorsement.

Chart III-2

FHA ACCOUNTING METHODOLOGY



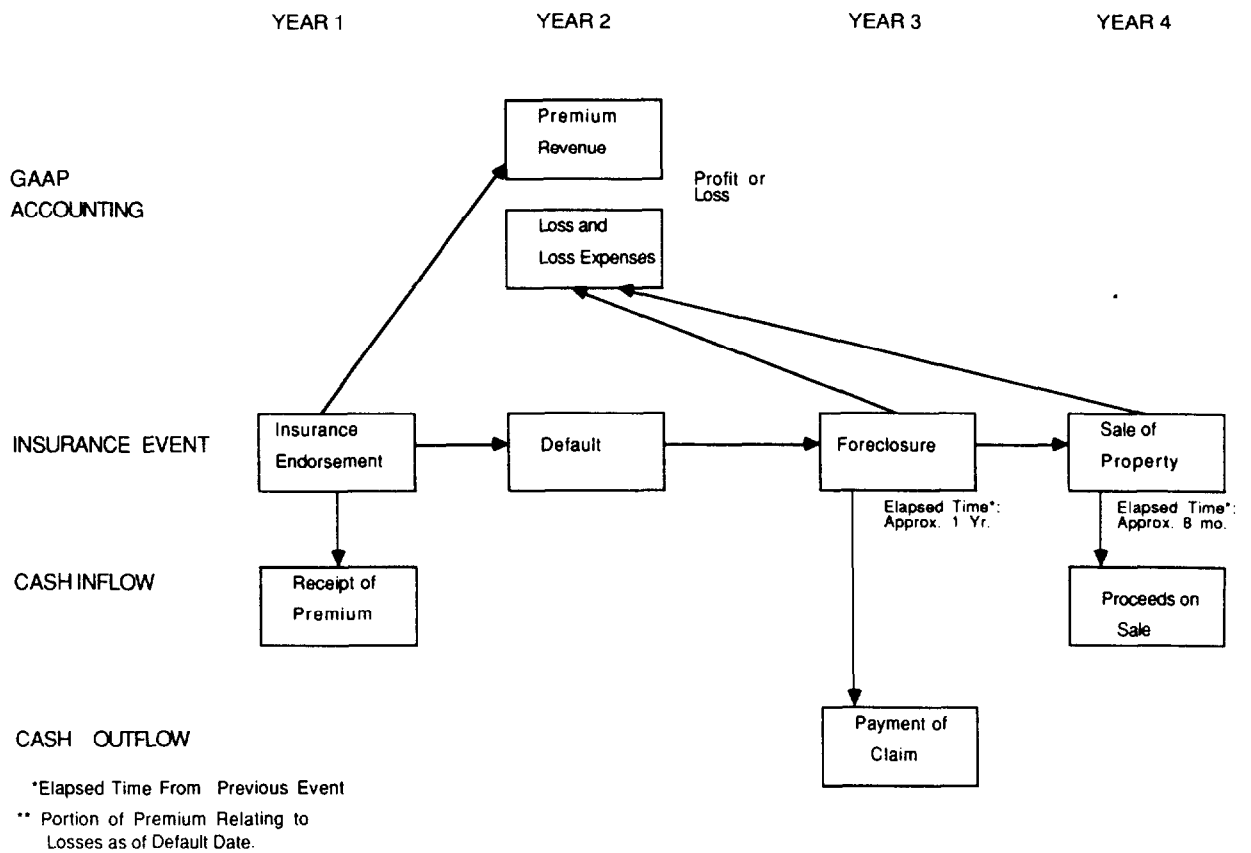
*Elapsed Time From Previous Event
** Portion of Premium Relating to Losses as of Foreclosure Date.

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Chart III-3

PMI MORTGAGE INSURANCE METHODOLOGY



Observe that if the default rather than the foreclosure date triggers accounting measurement, then the recognition of losses occurs as much as a year earlier. Both charts also depict the approximate timing of cash inflows and outflows. Note that, for a particular case, cash inflows and outflows occur at considerably different times.

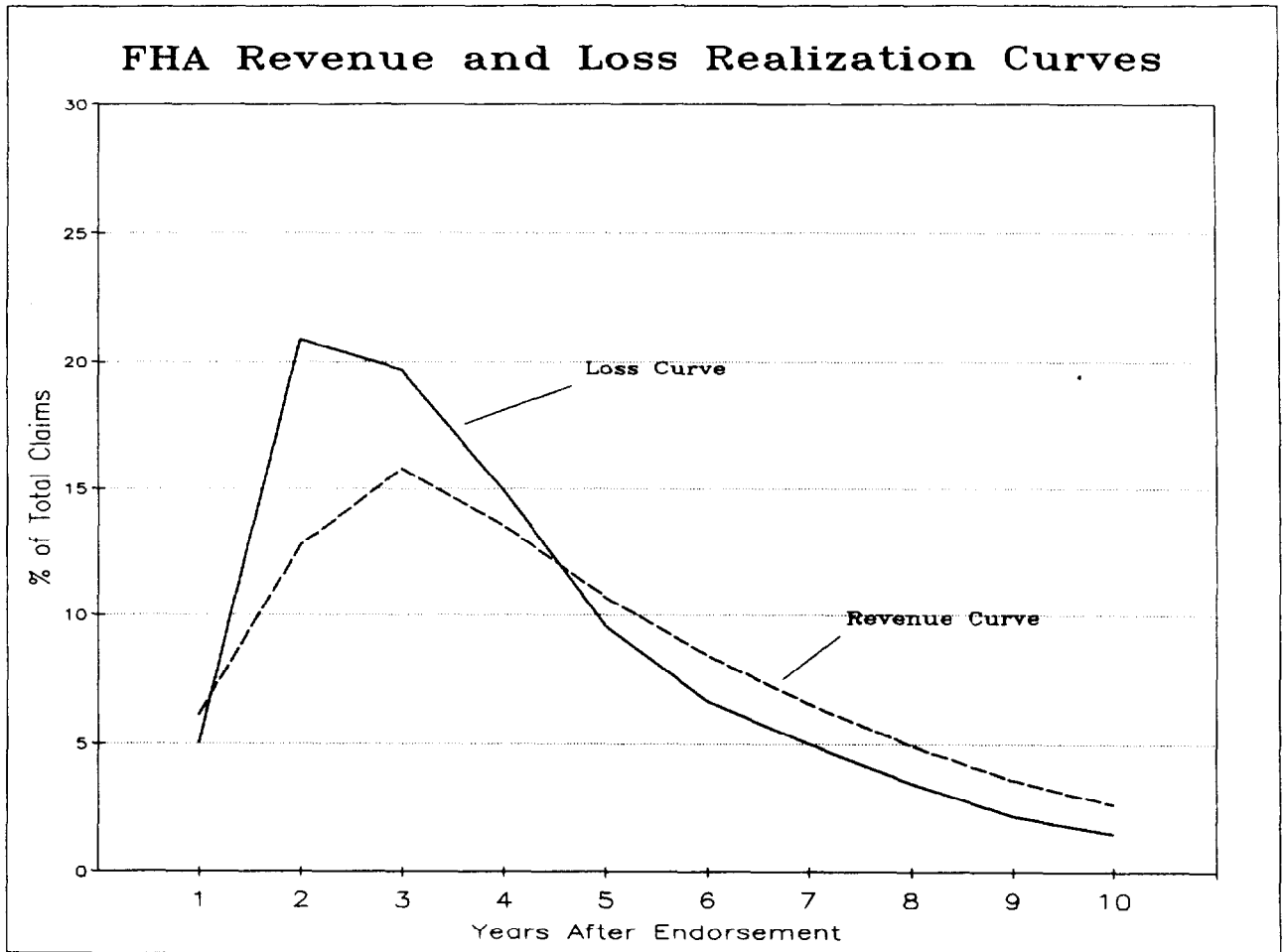
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2. FHA administrative expenses are based on estimates and are allocated to FHA by HUD. FHA no longer has separate staff or facilities. Instead, FHA operations are conducted, along with other housing activities, by HUD. Therefore, HUD bills FHA for providing administrative services. But the administrative expenses allocated and billed to FHA are based on estimates. There is no system that measures, with precision, the actual cost of carrying out FHA activities. Without a precise measure of the actual cost of providing FHA insurance, it is difficult to compare FHA's administrative expenses to those of private sector insurance entities, and still more difficult to measure cost savings from innovations such as FHA's direct endorsement program.
3. Most of FHA's premiums (particularly MMI) are collected up-front. Unlike many PMIs, FHA's MMI Fund collects its entire premium up-front. MMI began this practice in 1984. This meant that all cash to cover insurance losses was collected upon insurance initiation. Under FHA's present accounting, such premiums are initially invested in non-marketable Treasury securities until needed to fund insurance losses that will occur mostly over the next ten years. Under generally accepted accounting principles, these premiums are not all recognized as revenue in the year of collection, but rather are placed in an "unearned premium" account and are recognized proportionately into income over the loss exposure period.
4. Revenue recognition currently trails loss experience. Chart III-4 on the following page plots the revenue curve used by FHA to recognize a portion of the unearned premium as revenue each year. The chart also plots the most recent loss curve as determined by HUD's actuary. Under accounting principles followed in the private sector, these two curves should be approximately equal to ensure that losses and revenue are being accurately matched. For FHA they are not equal because while HUD's actuary updates the loss curve each year, he does not similarly update the revenue curve. In fact, the curve used to recognize revenue has not been updated since 1984. By not updating the revenue curve, it is quite possible that, absent any correcting adjustment, FHA's financial statements could show a loss simply through the mathematics of revenue recognition rather than through any true erosion in the sufficiency of the premium charged.

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Chart III-4Similarities

1. FHA does (like private sector entities) record allowances for losses on property sales and loan loss reserves. Therefore, FHA does make an attempt to state property received in claims settlement and loans at the amount expected to be realized in cash. This accounting method is consistent with private sector practices.

INTERPRETATION OF THE FHA FINANCIAL STATEMENTS

- **FHA'S INVESTMENTS OF OVER \$6 BILLION ARE NON-MARKETABLE**
- **FORECLOSED PROPERTY IS STATED AT ITS CASH (REALIZABLE) VALUE**
- **MORTGAGE NOTES RECEIVABLE ARE REDUCED FOR LOAN LOSSES AND BELOW MARKET INTEREST RATES**
- **LOSS RESERVES ARE NOW BASED ON DEFAULTS, NOT FORECLOSURES**
- **UP-FRONT PREMIUMS ARE RECOGNIZED AS REVENUE UPON RECEIPT FOR BUDGET PURPOSES, BUT RATABLY UNDER INDUSTRY ACCOUNTING PRACTICES**
- **FHA'S GENERAL AND SPECIAL RISK FUNDS RELY ON APPROPRIATIONS TO SUSTAIN THEIR OPERATIONS**

SECTION III

SECTION III

Interpretation of the FHA Financial Statements

Now that accounting principles and practices followed by similar private sector enterprises have been described, it is useful to illustrate how they relate to FHA's balance sheet. We highlight below the effect these principles have on FHA's major balance sheet categories:

1. FHA's investments of over \$6 billion are non-marketable. FHA invests its up-front premiums until they are needed to fund claim expenses. Unlike private sector enterprises however, FHA must invest its premium collections in non-marketable Treasury securities. The distinction between marketable versus non-marketable securities is an important one. Indeed, non-marketable Treasury securities have many characteristics of a receivable from Treasury rather than an investment. This is because they are, in fact, loaned to Treasury who uses them for other purposes. When FHA must liquidate its investments to fund claims, Treasury must obtain the needed cash through other revenue sources, spending reductions, additional borrowing in the financial markets, or some combination of these. In this respect, the use of FHA's premiums and the non-marketable nature of its investments are no different than Social Security's income and investments.
2. Foreclosed property is stated at the amount expected to be realized in cash. By following this accounting, the value of foreclosed property shown on FHA's balance sheet will represent the amount of cash the property will be converted into sometime in the future. FHA presently follows this method of accounting.
3. Mortgage notes receivable are reduced to reflect loans for which full collection of principal is doubtful and loans with below market interest rates. FHA now calculates a loan loss reserve and a discount for below market interest rate loans. Thus, the loan principal shown on the balance sheet reflects FHA's estimate of their true value. In addition, FHA now suspends the accrual of interest on loans with doubtful collection (i.e., "non-performing" loans).

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4. When analyzing mortgage notes receivable it is also important to realize that FHA's Mutual Mortgage Insurance Fund contains some subsidized activities. This is because MMI, like other FHA activities will, in certain circumstances, assume defaulted mortgages. To the extent such assumed mortgages are accepted at below market interest rates or remain non-performing, a subsidy is created since, absent FHA involvement, a foreclosure probably would have taken place and FHA would not have had to bear the additional costs associated with these loans. This fact is important when comparing MMI to a private mortgage insurer, since it can represent an additional cost of MMI that would not be borne by a private sector entity.
5. Loss reserves are now based on defaults rather than foreclosures. FHA has historically not accounted for losses based on the occurrence of default, choosing instead to account for the loss at the time of the foreclosure (at approximately the time a claim is filed with FHA). The appearance of a new caption on FHA's balance sheet entitled "loss reserves" will account for losses between the time of default and foreclosure -- these are known in the mortgage insurance industry as "incurred but not reported losses".
6. Up front premiums are recognized as income over an extended period under industry accounting methods, but in the year of collection for budgetary reporting purposes. This being the case, FHA's balance sheet contains a caption entitled "unearned premiums" which represents that portion of premiums collected for which the associated loss has not yet been incurred. Our later discussion of budgetary accounting as it relates to outlays describes the impact of differing accounting methods.
7. Borrowings from treasury relate exclusively to FHA's General and Special Risk Insurance Funds, which contain subsidized activities. These funds are highly reliant on budget appropriations to sustain their operations. Borrowings are necessary to fund the payment of claims by these funds, since monies are not appropriated to them until cash losses are actually realized on the sale of foreclosed property. It takes, at a minimum, two years for FHA to receive these monies.

SOME STATE ACCOUNTING REQUIREMENTS

- STATES HAVE MINIMUM CAPITAL REQUIREMENTS WHICH GENERALLY REQUIRE THAT PRIVATE INSURERS MAINTAIN A RATIO OF RISK TO CAPITAL OF 25 TO 1
- IN SOME CASES, REVENUE RECOGNITION METHODS AND ACCOUNTING PRACTICES ARE REGULATED

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Some State Accounting Requirements

Insurance regulations differ from state to state. However, two of the more important state requirements include:

--Minimum Capital Requirements - Generally private mortgage insurers must operate with a 25 to 1 ratio of risk to capital. This is the ratio total risk (percentage coverage on loans) over capital or equity. In the private sector, capital generally comprises policyholder surplus, paid-in-surplus and unassigned surplus, and the contingency reserve. Since FHA is government owned, its capital structure is different, and it has no capital requirement by policy or regulation. The risk to capital ratio was developed for private sector companies, and is probably not meaningful for the MMI Fund or any FHA activity. Moreover, it is difficult to compare FHA's equity to capital of a PMI because FHA's equity is affected by, for example, the fact that it (1) pays no income taxes as do private companies, (2) performs subsidized activities (by accepting notes rather than foreclosing, and by granting below market interest rates) for which there is an added cost, and (3) has borrowing capacity at the U.S. Treasury with favorable rates.

--Regulation of Revenue Recognition Methods. Unlike FHA, many private mortgage insurers do not collect the entire premium when the insurance is initiated. Instead front-end loaded premiums are charged in the earlier years and then, perhaps, level periodic premiums thereafter. Due to considerable controversy about the way in which front-end loaded premiums ought to be recognized, some states mandated revenue recognition methods. In any case, the objective is to match revenue recognition with loss incidence.

*ANALYSIS OF CASH FLOW
AND BUDGETARY IMPACT*

- ANALYSIS OF CASH FLOW
- BUDGETARY IMPACT

ANALYSIS OF CASH FLOW

- CASH FLOW HAS ERODED SOMEWHAT IN FISCAL YEAR 1988 DUE TO A HIGHER LEVEL OF CLAIMS AND COMPARATIVELY LESS NEW INSURANCE
- THE HIGHER CLAIM RATE IS AT LEAST PARTLY ATTRIBUTABLE TO SIGNIFICANT LEVELS OF INSURANCE WRITTEN IN 1986 AND 1987 ENTERING ITS HISTORICALLY HIGH CLAIM PERIOD
- CLAIM PAYMENTS COULD REMAIN AT HIGH LEVELS IN THE NEAR TERM SINCE THE HEAVY ENDORSEMENT YEARS WILL REMAIN IN THEIR HISTORICALLY HIGH CLAIM PERIOD FOR THE NEXT 2 TO 3 YEARS

SECTION IV

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Analysis of Cash Flow

Our analysis of cash flow was limited to FHA's mutual mortgage insurance fund, since it is FHA's largest insurance activity and because the general and special risk insurance funds, being subsidized, will normally show net cash outflows. In the MMI Fund's case, substantial cash inflows can result from:

- A significant level of new business that, with an up-front premium, will lead to a considerable inflow of cash,
- An acceleration of property sales such as through auctions, or
- A loan asset sale

Conversely, substantial cash outflows can result from:

- Significant prior year insurance endorsements entering their high claim period, and
- An acceleration of claim occurrences or increased claim rate caused by, for example, economic distress conditions.

Analyzing these factors standing alone provides an incomplete picture of MMI's financial status. For example, a situation where outlays exceed receipts may be quite natural if it resulted from significant prior year business entering its high claim period coupled with a decline in new business (and thus "new" up front premiums). Moreover, such a situation may not mean that an entity is in a particularly poor financial position, although that could be a possibility.

It is quite possible for operations such as MMI's that a substantially favorable cash position in the early years of the insurance term might mask later unfavorable events. Charts III-2 and III-3 in the previous Section showed that cash inflows or outflows occur at considerably different periods than the accounting measurement of profit or loss. Fluctuations in the level of insurance endorsements in any fiscal year can have a dynamic impact on cash flow, given the fact that most of MMI's premiums are collected upon insurance endorsement rather than ratably over the insurance term.

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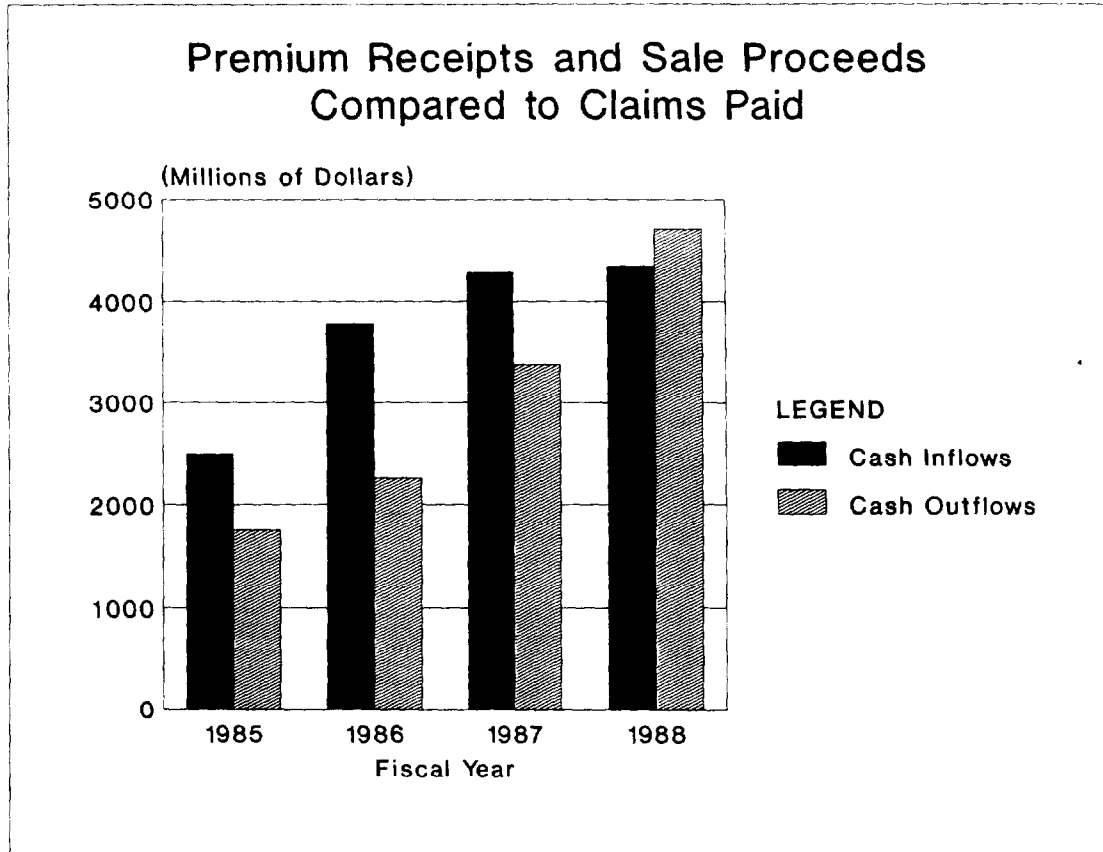
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Bearing the previous discussion in mind, we can analyze the MMI Fund's cash flow. Chart IV-1 shows that the MMI Fund began experiencing a net outflow of cash in fiscal year 1988, and had a net cash outflow of \$452 million for the entire fiscal year. This is partly attributable to a decline in premium collections, because of fewer insurance endorsements in 1988 compared to 1986 and 1987 levels (see Chart IV-2). However, cash flow was further eroded because claim payments increased during 1988. One important reason for the increase in claim payments is that the high levels of insurance written in 1986 and 1987 are now entering their historically high claim period. Recall that Chart III-1 showed that, historically, heavy claims and losses are experienced in the second and third year after insurance endorsement.

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Chart IV-1



--The chart shows that in 1988 the MMI Fund experienced an erosion in its cash flow.

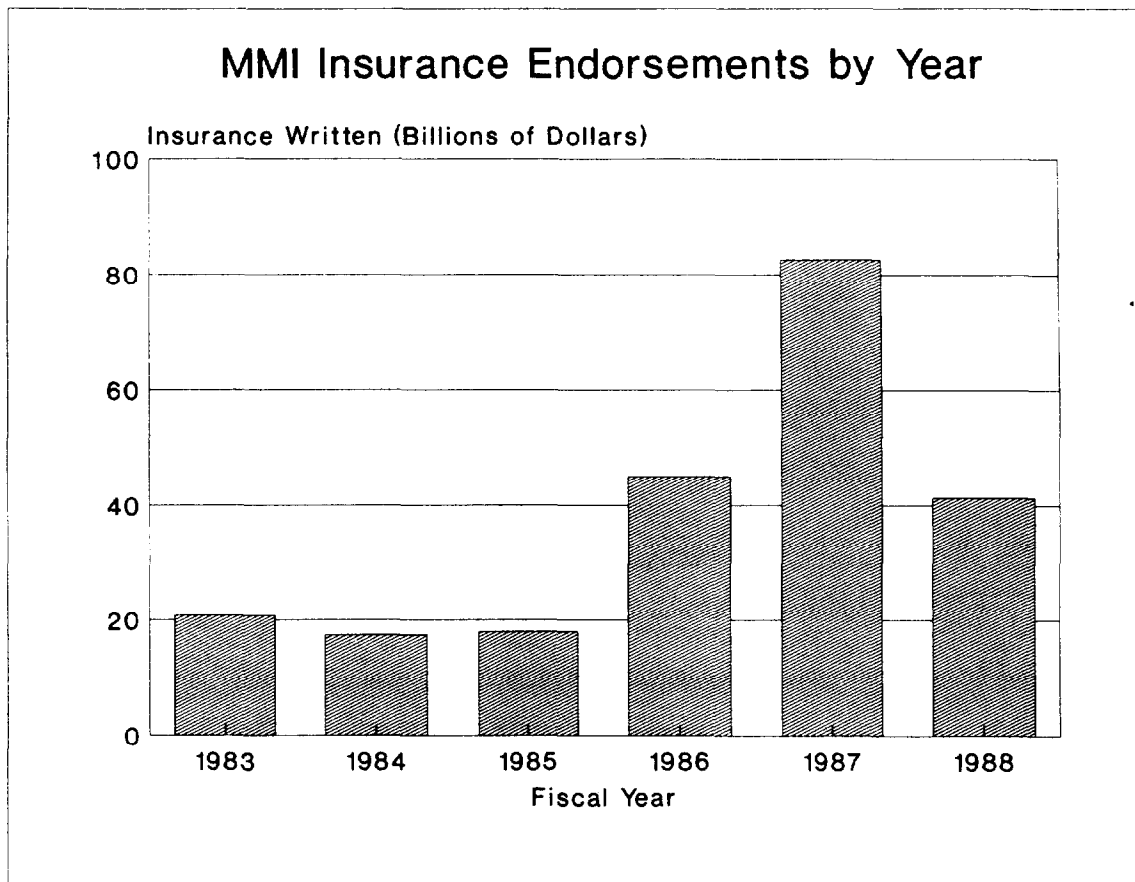
--This erosion can partly be attributed to two factors:
 (1) a decline in the level of insurance endorsements and
 (2) a higher level of claims, partly attributable to the MMI Fund's heavy endorsements years (1986 and 1987) entering their historically high claim period.

--The high level of claims involves obtaining foreclosed property. Cash flow could remain poor in the near term since it generally takes about 8 months to sell the property and generate cash inflows.

--Receipts primarily comprise premiums and cash received on the sale of foreclosed property. Virtually all outlays result from claim payments.

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Chart IV-2

--This chart illustrates the high level of insurance endorsements for the MMI Fund's Section 203(b) program in 1986 and 1987.

--Since these high endorsement years are now entering their historically high claim period (particularly years 2 and 3 after the insurance was written), there is a good possibility that claim payments will remain relatively high in the near term.

BUDGETARY IMPACT

- WHEN FHA BEGAN COLLECTING MOST OF ITS PREMIUMS UP FRONT, SUBSTANTIAL EXCESS FUNDS, AND THUS BUDGETARY RECEIPTS, WERE INITIALLY GENERATED
- BUT CLAIMS RELATING TO THESE PREMIUMS ARE ONLY NOW BEGINNING TO BE FELT
- WHEN CLAIM PAYMENTS EXCEED NEW PREMIUMS AND MMI SHOWS A NET CASH OUTFLOW, THE DEFICIT INCREASES
- MMI'S EXCESS FUNDS WERE INVESTED IN "NON-MARKETABLE" GOVERNMENT SECURITIES
- BUT WHEN THESE SECURITIES MUST BE REDEEMED TO PAY CLAIMS, THEN NEEDED FUNDS MUST BE OBTAINED IN THE FINANCIAL MARKETS

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Budgetary Impact

The MMI Fund's cash flow is also important when the budgetary matters are considered, because it has a direct impact on net outlays and thus the budget deficit. Moreover net outlays produced by the MMI Fund or any other FHA fund affect the deficit and thus warrant analysis.

In MMI's case, the primary cause for concern when net outlays are being generated, is that the Federal government will have to find some means of financing them. Recall that when MMI generated net cash inflows, they were invested in non-marketable Treasury securities -- in effect they were loaned to Treasury. Thus, in reality, MMI's excess receipts reduced the Federal deficit. However, if in later years MMI must redeem its investments to fund claims and losses, Treasury must repay what it has borrowed (with interest) and raise the needed cash somewhere else. This means that, unless the rest of the budget is in surplus, Treasury must obtain the needed cash through some combination of new borrowings in the financial markets, additional revenue sources, or spending reductions in other programs.

But the fact that MMI is generating net cash outflows, and thus outlays, may not mean that the fund has deteriorated. It may simply mean that insurance written in prior years is now generating claims as expected. The fact that there is a budget deficit may make an erosion of cash flow seem more serious than it really is, because it places an added financing burden on Treasury. Fluctuations in cash flow are an incomplete measure of an entity's true financial position. In terms of assessing the financial viability of a fund like MMI, it is perhaps more important to determine, based on changes in the characteristics of mortgages MMI chooses to insure, whether the premium charged will remain sufficient over the longer term to cover losses. If based on such an assessment it is judged that the premium will not be sufficient to cover future claim payments -- and such a conclusion is possible even when an entity is generating an inflow of cash -- then this a better indicator than strictly cash flow that the fund's financial position has begun to deteriorate.

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