

GAO

Report to the Chairman, Subcommittee
on Housing and Community Opportunity,
Committee on Banking and Financial
Services, House of Representatives

May 1997

HOMEOWNERSHIP

Potential Effects of Reducing FHA's Insurance Coverage for Home Mortgages





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

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

B-276382

May 1, 1997

The Honorable Rick A. Lazio
Chairman, Subcommittee on Housing
and Community Opportunity
Committee on Banking
and Financial Services
House of Representatives

Dear Mr. Chairman:

This report responds to your request that we analyze and present certain information on the implications of limiting the portion of single-family home mortgages insured by the Department of Housing and Urban Development's (HUD) Federal Housing Administration (FHA). Specifically, the report discusses the impact of a reduction in FHA's insurance coverage on (1) home mortgage lenders, the home mortgage market, and the types of borrowers served by FHA; (2) the financial condition of FHA's insurance fund; and (3) HUD's Government National Mortgage Association.

As agreed with your office, unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days from the date of this letter. At that time we will send copies of this report to the Secretaries of Housing and Urban Development and Veterans Affairs. We will make copies available to others on request.

Please call me at (202) 512-7631 if you or your staff have any questions. Major contributors to this report are listed in appendix V.

Sincerely yours,

Judy A. England-Joseph
Director, Housing and Community
Development Issues

Executive Summary

Purpose

Through its Federal Housing Administration (FHA), the Department of Housing and Urban Development (HUD) insures private lenders against nearly all losses resulting from foreclosures on single-family homes insured under HUD's Mutual Mortgage Insurance Fund (Fund). Although FHA has always received enough in premiums from borrowers and other revenues to more than cover these losses, losses totaled about \$12.8 billion in 1994 dollars, or about \$24,400 for each foreclosed and subsequently sold single-family home over the 19-year period ending in 1993. The Department of Veterans Affairs (VA) also operates a single-family mortgage guaranty program. However, unlike FHA, VA covers only 25 to 50 percent of the original loan amount against losses incurred when borrowers default on loans, leaving lenders responsible for any remaining losses. Virtually all FHA and VA single-family mortgages are pooled into securities that are then sold to investors with the help of HUD's Government National Mortgage Association (Ginnie Mae).

Concerned about the financial health of the Fund and its exposure to losses when borrowers default on the loans it has insured, the Chairman of the Subcommittee on Housing and Community Opportunity, House Committee on Banking and Financial Services, asked GAO to address the following three questions about the implications of limiting the insured portion of future FHA-insured loans to that used by VA: (1) How are lenders and the market expected to react to an increased risk of loss to lenders and how will this affect FHA's borrowers? (2) What potential financial impact will reducing FHA's coverage have on the Fund under different economic conditions? (3) What are the potential impacts of reducing FHA's insurance coverage on Ginnie Mae?

Background

FHA and VA are the principal providers of federally backed mortgage insurance. Together, they insured 46 percent of all the insured mortgages originated in 1995; FHA insured 32 percent and VA insured 14 percent.¹ FHA-insured single-family mortgages in the Fund were valued at about \$337 billion as of September 30, 1996. Although eligibility for VA's program is limited to U.S. veterans and their families and to certain active duty military personnel, FHA's program may be used by any household that meets financial underwriting and loan amount requirements. However, a

¹The remaining insured mortgages were insured by private companies, and a very small portion (less than 1 percent) was insured by the Department of Agriculture's Rural Housing Service. Although VA actually guarantees rather than insures mortgages, this report uses the term "mortgage insurance" to refer to the guaranty provided by VA as well as the insurance provided by FHA, the Rural Housing Service, and private mortgage insurers.

primary goal of FHA is to assist households who may be underserved by the private market.

Home mortgage lenders usually require mortgage insurance when a home buyer has a down payment of less than 20 percent of the value of the home because defaults are more likely on these loans than on loans with greater down payments. If an FHA-insured mortgage goes to foreclosure, FHA pays the lender for virtually all of the losses associated with the property and then almost always takes possession of and subsequently sells the property. VA, on the other hand, has the following two options if a mortgage it has insured goes to foreclosure: (1) paying the lender the insurance due and leaving the property with the lender or (2) purchasing the property from the lender and reselling it. For example, if the cost of paying the insurance claim is less than the estimated costs of taking possession of the property and reselling it, VA will choose the former—this is referred to as a VA no-bid. If VA chooses the “no-bid” option, the limit on the amount that VA guarantees against loss is from 25 to 50 percent of the mortgage’s balance, depending on the original loan amount. The partial VA guaranty allows VA the option of leaving a foreclosed property with the lender. Similarly, a reduction in FHA’s insurance coverage could result in FHA leaving foreclosed properties with lenders and paying only the insured portion of the mortgage’s balance.

FHA’s primary single-family mortgage program currently requires no federal funds to operate. The Fund, which supports this program, is required by law to contain sufficient reserves and funding to cover the estimated future payment of claims on foreclosed mortgages and other costs. Cash flows into the Fund from insurance premiums and from the sale of foreclosed property. According to Price Waterhouse’s most recent study of the Fund’s financial soundness issued in February 1997, at the end of fiscal year 1996, the Fund had an estimated economic value/reserves of about \$9.4 billion and an estimated capital reserve ratio of 2.54 percent—a ratio greater than the 2-percent capital reserve ratio target set by the Congress for fiscal year 2000.² The reserves in the Fund have always been more than enough to cover the expenses incurred. However, if the Fund were to deplete its reserves, the U.S. Treasury would have to directly cover lenders’ claims and other costs of the program, by law. On the other hand, VA’s program is not required to be self-sustaining; VA’s program receives an appropriation of federal funds each year.

²The capital reserve ratio is the economic value/reserves of the Fund expressed as a percentage of the outstanding principal balance of FHA-insured loans (insurance-in-force). The economic value/reserves of the Fund are the current assets available to the Fund, plus the net present value of all future cash inflows and outflows expected to result from mortgages insured under the Fund.

In 1995, virtually all FHA- and VA-insured mortgages were pooled into securities that were then sold to investors with the help of Ginnie Mae, which, like FHA, is a part of HUD. Under Ginnie Mae's program, issuers of securities backed by pooled mortgages sell the securities to investors. Issuers can be mortgage bankers, savings institutions, or other financial intermediaries. The investors that buy the securities are guaranteed by Ginnie Mae to receive timely principal and interest payments, regardless of the performance of the mortgages backing the securities or the issuer's performance. Ginnie Mae's net revenues (after expenses) totaled \$515 million in fiscal year 1996. Ginnie Mae derived its revenues from interest on U.S. securities and fees collected from lenders to cover its costs and offset its future payments of claims under the guaranty representing its major sources of revenues.

The actual impact of a reduction in insurance coverage on the financial condition of the Fund will depend on future economic conditions. Since uncertainty always exists when forecasting future economic conditions, especially over a long period of time, GAO prepared estimates of the financial impact on the Fund under three different economic scenarios (a baseline, an optimistic, and a pessimistic scenario), assuming a different rate of appreciation in the price of homes over the next 30 years for each economic scenario.³

Results in Brief

If FHA's insurance coverage is reduced and lenders become responsible for the risk associated with the uninsured portion of loans, lenders will likely make fewer and more costly FHA loans. The general consensus of a HUD-sponsored lender focus group was that the number of FHA-insured loans would fall by about 28 percent and that interest rates would increase by one-quarter to one-half of a percent.⁴ Although some decrease in volume and increase in interest rates would be likely, GAO's analyses indicate that the changes would likely not be as great as those that the focus group predicted. This is because the higher revenues earned by lenders from a one-quarter percent increase in interest rates would likely

³Although future economic conditions are uncertain, GAO placed greater emphasis in this report on its baseline economic scenario because it assumes slightly lower house price appreciation than the rates forecasted by DRI/McGraw-Hill, a private economic forecasting company that GAO used in developing its economic scenarios. GAO's baseline scenario assumes house price appreciation rates to be 1 percentage point lower than DRI's forecast. GAO's optimistic and pessimistic economic scenarios assume a house price appreciation of 2 percentage points higher or lower than the baseline, respectively.

⁴In October 1995, HUD held a lender focus group to identify lenders' anticipated responses to a reduction in FHA's insurance coverage. The lenders represented in the focus group were responsible for 35 to 40 percent of all FHA-insured loans in 1994.

produce more than enough revenue to lenders to cover any losses that they would incur if FHA's insurance coverage were reduced. Moreover, according to VA officials, there was no discernible reduction in the volume of VA loans after the Department's current policy of limiting losses on each property to the guarantee amount—referred to as the “no-bid” policy—went into effect in 1985. Nevertheless, any reduction in the volume of loans and increase in interest rates is likely to disproportionately affect higher-risk borrowers—low-income, first-time, and minority borrowers and those individuals purchasing older homes—the types of borrowers frequently served by FHA.

Although uncertainty is associated with any forecast, the federal government would likely improve the financial health of the Fund—by lowering its exposure to financial losses—if FHA's insurance coverage were reduced, according to GAO's analyses. Specifically, the ratio of the capital reserves/economic value in the Fund to its outstanding insurance liabilities—the capital reserve ratio—would likely increase over time if FHA provided only the partial coverage currently used by VA. This would likely occur in part because FHA would be liable for only a portion of the losses on loans that go to foreclosure and therefore would suffer lower financial losses than it would under full insurance coverage. The losses thus avoided by partial insurance coverage would more than offset the premium income lost from a reduction in the volume of FHA loans. Decreasing FHA's insurance coverage would have an even greater positive impact on the Fund's capital reserve ratio if future economic conditions are worse than the conditions assumed in GAO's baseline scenario. This would likely occur because FHA would face a greater number of insurance claims under adverse economic conditions and, in turn, the reduction in claims payments with partial insurance coverage rather than with full coverage would be greater.

Reducing FHA's insurance coverage might shift some losses from FHA to Ginnie Mae. When lenders who have issued securities backed by pools of FHA- and VA-insured mortgages are unable to pay investors in these securities, Ginnie Mae steps in and provides the investor with payments. Reducing FHA's insurance coverage might increase costs for Ginnie Mae if more lenders were unable to make payments to investors because they could not shoulder their portion of the losses on defaulted FHA-insured loans. However, if lenders respond to a reduction in FHA's insurance coverage by taking steps to maintain their financial position, such as targeting FHA-insured loans away from the riskiest borrowers and

increasing interest rates, the impact on Ginnie Mae's losses would likely be lessened.

GAO's Analysis

Lenders Are Likely to Make Fewer and More Costly Loans to Higher-Risk Borrowers If FHA's Coverage Is Reduced

Lenders are likely to reduce the number of FHA-insured loans made each year by tightening underwriting standards and increasing interest rates if FHA reduces the portion of losses it will cover on loans that go to foreclosure. The lender focus group convened by HUD indicated that an interest rate increase of one-quarter to one-half a percentage point for FHA-insured loans would be necessary to compensate them for the additional risk they would face.⁵ According to GAO's analysis, an interest rate increase of one-quarter percentage point—the lowest figure in the range estimated by the focus group—would produce more than enough revenue to cover lenders' estimated losses, even under the most adverse economic conditions experienced by FHA in the last 20 years. The focus group also projected that FHA's volume of loans would fall by 28 percent if its insurance coverage were reduced. However, VA officials told GAO that there was no discernible reduction in the volume of VA loans after VA's current no-bid policy went into effect in 1985. If lenders do not increase interest rates as much as the focus group predicted or if the rate increase is targeted to higher-risk borrowers, as is likely, the volume of loans made by FHA following a coverage reduction would likely fall by less than 28 percent.

Regardless of the size of the reduction in FHA's loan volume, reducing FHA's insurance coverage would likely have a greater effect on low-income, first-time, and minority borrowers, as well as on individuals purchasing older homes, than on other borrowers with better access to private mortgage credit. Lenders indicated that they would probably tighten underwriting standards for FHA-insured loans to target them away from borrowers in higher-risk categories. GAO's analysis indicates that, all else held equal, the loss rate and/or rate of foreclosure for minorities, buildings with multiple living units, loans written at higher interest rates, older properties, and smaller loans are higher, suggesting that those are the

⁵An interest rate increase of one-quarter to one-half percent on a \$100,000, 30-year loan, originated at 8 percent, would increase monthly mortgage payments by \$17 to \$35, respectively.

types of loans that lenders would likely refrain from making.⁶ Reducing FHA's insurance coverage would also lessen FHA's ability to stabilize local housing markets during regional economic downturns.

Reducing FHA's Insurance Coverage Would Likely Increase the Fund's Capital Reserve Ratio

The capital reserve ratio of the Fund would likely increase if insurance coverage levels were reduced. For each partial coverage scenario that GAO examined, the estimated capital reserve ratio for loans made by FHA in fiscal year 1995 is at least 25 percent higher than GAO's estimate of that ratio under full coverage. This higher ratio would occur because FHA would cover a smaller percentage of the losses on each foreclosed loan and because lenders would likely make fewer FHA-insured loans to higher-risk borrowers, thus exposing FHA to less risk than with full coverage. The capital reserve ratio is likely to increase regardless of whether FHA implements a partial coverage schedule identical to VA's or uses one of the other partial coverage options that GAO examined.⁷

The impact of reducing FHA's insurance coverage on the estimated economic value/reserves of the loans that FHA will insure in the future is less certain than the impact of reducing FHA's insurance coverage on the capital reserve ratio, assuming baseline economic conditions. The economic value of FHA loans is important for various reasons. First, the estimated economic value represents capital reserves that, when divided by the outstanding principal amount of FHA loans, equal the estimated capital reserve ratio. Second, the economic value provides an estimate of how profitable these loans are for FHA, which is important because estimated increases in economic value due to legislative changes allow additional mandatory spending authorizations to be made, other revenues to be reduced, or projected deficits in the federal budget to be reduced.

If FHA's insurance coverage is reduced, the change in the economic value of FHA loans will depend largely on the way that lenders respond. The smaller the reduction in FHA-insured loans that lenders make and the greater their ability to target FHA loans to less-risky borrowers, the greater the positive effect on the economic value of the new loans insured. GAO's estimates under baseline economic conditions of the economic value of

⁶Buildings with multiple living units are homes containing two to four living units, such as duplexes. Provided that they contain no more than four units, these homes are eligible for mortgage insurance through FHA's primary program.

⁷In addition to analyzing the impact of reducing FHA's insurance coverage to VA's current level of coverage, GAO also examined two other alternatives—(1) the impact of retaining full FHA insurance coverage for first-time home buyers and VA coverage for all repeat buyers and (2) reducing FHA's insurance coverage for all new FHA loans but to a level slightly higher than VA's.

the loans made by FHA in fiscal year 1995, assuming partial insurance coverage, range from about \$29 million less than to \$150 million greater than GAO's full coverage estimate of \$536 million.

Under GAO's pessimistic economic scenario, which assumes house price rates of appreciation of 2 percentage points lower than GAO's baseline economic scenario, reducing FHA's insurance coverage could have a much greater positive effect on FHA's economic value and the resulting capital reserve ratio. GAO estimates that a reduction in FHA's insurance coverage could increase economic value by as much as \$150 million under baseline economic conditions, compared with an increase in economic value of as much as \$199 million under pessimistic economic conditions.

Reducing FHA's Insurance Coverage Might Shift Some Losses to Ginnie Mae

Reducing FHA's insurance coverage might shift some losses from FHA to Ginnie Mae. Ginnie Mae is ultimately responsible for ensuring that investors receive timely principal and interest payments on securities backed by pools of FHA and VA mortgages. Ginnie Mae's costs increased after changes in VA's "no-bid" procedures took effect in the 1980s, in part because lenders were left to cover a portion of the losses on VA-guaranteed loans more often than they had in the past, causing some lenders to default.⁸ When lenders default, Ginnie Mae takes over the lenders' entire portfolio of FHA and VA loans that have been pooled into securities and becomes responsible for making timely payments to investors of any shortfalls in principal and interest payments. In addition, Ginnie Mae incurs costs for paying taxes and insurance, as well as costs associated with acquiring, managing, and disposing of portfolio properties.

The extent to which Ginnie Mae's losses might increase depends largely on lenders' responses to a reduction in FHA's insurance coverage. If lenders respond by very carefully targeting FHA-insured loans away from the most-risky borrowers, fewer loans will default, and lenders will be in a better position to cover their share of the losses for the FHA-insured loans that default anyway. The increase in losses for Ginnie Mae will then be lower than if lenders did not target loans as carefully. Similarly, if lenders increase interest rates on FHA-insured loans, they will have more funds for covering their share of the losses on the loans that default. Fewer losses

⁸In 1984, the Congress enacted provisions of the Deficit Reduction Act to, among other things, reduce the losses associated with foreclosures on VA home loans. The act required VA, in deciding whether to pay the VA guaranty on defaulted loans or acquire the property, to limit its loss to the amount of the guaranty. The act also required VA, in deciding whether to acquire a property, to consider post-acquisition costs that were previously excluded from VA's decision. After the implementation of these provisions in 1985, the number of VA no-bids increased substantially—rising from 2 percent of all VA foreclosures in 1982 to 24 percent in 1988.

will then be shifted to Ginnie Mae as a result of a reduction in FHA's insurance coverage.

Reducing FHA's insurance coverage would not likely affect Ginnie Mae's ability to provide lenders of FHA and VA loans with liquidity (cash), since Ginnie Mae's securities would continue to maintain the U.S. Government's full faith and credit guarantee.

Agency Comments

GAO provided HUD and VA with a draft of this report for their review and comment. GAO received written comments on the draft report from HUD. (See app. IV.) In addition, GAO received comments on the draft report from Ginnie Mae's Executive Assistant, which are discussed at the end of chapter 4. VA's Acting Under Secretary for Benefits provided GAO with a memorandum that clarified changes to information contained in the report and updated figures with more recent information. Where appropriate, GAO incorporated VA's clarifications into the report.

HUD disagreed with some of the conclusions reached by GAO. For example, HUD stated that it believes, on the basis of its analysis, which assumed a slightly higher rate of appreciation in house prices than that assumed in GAO's baseline and a 28-percent reduction in loan volume, that reducing FHA's insurance coverage will decrease the economic value of the Fund. HUD also stated that GAO overstates the private sector's ability to accept the transfer of risk. HUD said that the increase in price and rationing that will occur is understated by GAO and that eliminating the catastrophic coverage feature (insurance against all losses) of FHA insurance could result in losses that quickly overwhelm the resources of lenders. HUD also stated that GAO gives inadequate attention to the potential that FHA's lenders will withdraw from the marketplace in times of economic downturns under a partial insurance model.

GAO agrees with HUD that under certain combinations of assumptions about the rate of appreciation in house prices and reductions in loan volume, the estimated economic value of FHA loans would be less than under full insurance coverage. In general, the smaller the reduction in loan volume, the higher the economic value contributed by the remaining loans insured by FHA, according to GAO's analysis. Under its baseline scenario,⁹ GAO estimates a small (\$29 million) decline in economic value from changing to

⁹As in previous reports, GAO continues to use a slightly lower rate of appreciation in house prices than forecasted (1 percentage point) in its baseline estimate to be conservative in assessing the impact of reducing FHA's insurance coverage on the capital reserve ratio, which is a measure of how well the Fund can withstand difficult economic conditions.

partial insurance if the loan volume drops by 28 percent and lenders only loosely target their application denials toward high-risk categories of borrowers. Furthermore, under its optimistic economic scenario, which assumes higher-than-expected rates of house price appreciation, GAO estimates that the economic value of FHA's fiscal year 1995 loans will likely decline by about \$67 million to \$94 million below the value achieved under full insurance if the volume of loans is reduced by 28 percent. However, GAO believes that a 28-percent reduction in the volume of loans may not be likely and that such a fall in the volume of loans is even more unlikely if house prices increase at a rate greater than forecasted. Moreover, while both GAO's and HUD's analyses estimate that economic value would likely be reduced under certain assumptions, both analyses estimate that under these same assumptions, the capital ratio will be higher under partial insurance than under full insurance.

HUD believes that GAO is understating the likely increase in price (interest rates) resulting from partial insurance. GAO disagrees. GAO's analysis of the adequacy of the additional revenues that would be earned by lenders from a one-quarter-percent increase in interest rates to cover additional losses resulting from partial insurance is based on the most adverse economic conditions experienced by FHA in the last 20 years. While it is difficult to quantify the volatility of losses, GAO's analysis suggests that lenders would likely earn more than enough revenues to cover losses from a reduction in FHA's insurance coverage even under extremely adverse circumstances. Under GAO's baseline economic scenario, this increase in interest rates would cover losses several times over. As a result, GAO believes that it is unlikely that interest rates would increase by as much as one-quarter percentage point in a competitive marketplace. While GAO agrees that catastrophic losses may overwhelm the resources of some lenders, it does not believe that such losses would jeopardize FHA. During the lender focus group meeting, FHA lenders still concluded that making FHA loans under partial insurance is profitable and that 72 percent of FHA's loan volume would be retained.

In response to HUD's comment on the potential that FHA's lenders would withdraw from the marketplace in times of economic downturn under a partial insurance model, GAO has added information describing the role of FHA as a countercyclical force in the market during times of economic hardship and the adverse impact that partial insurance could have on this role. GAO's detailed responses and HUD's entire comments appear in appendix IV and are summarized and discussed at the end of chapters 2 through 4.

Contents

| | | |
|--|--|----|
| Executive Summary | | 2 |
| Chapter 1 | | 16 |
| Introduction | FHA's Insurance Coverage Is Higher Than That of Other Insurers | 16 |
| | FHA Is the Biggest Federal Insurer, but Private Mortgage Insurers Serve the Most Home Buyers | 17 |
| | Customers Targeted by FHA and VA | 18 |
| | FHA's Program Is Financially Self-Sufficient, but VA's Program Is Not | 19 |
| | Ginnie Mae Connects Federally Insured Mortgages With Secondary Market Investors | 20 |
| | Objectives, Scope, and Methodology | 20 |
| Chapter 2 | | 24 |
| If FHA's Insurance Coverage Is Reduced, Lenders May Make Fewer and Higher Interest Loans to Some Types of Borrowers | Mortgage-Lending Industry Officials Anticipate a Reduction in the Volume of Loans and an Increase in Interest Rates | 25 |
| | Lenders' Estimates of the Reduction in FHA's Volume of Loans and Increase in FHA's Interest Rates May Be Overstated | 26 |
| | VA's Views on Limited Insurance Coverage Differ From Lenders' Views | 28 |
| | Limiting FHA's Insurance Coverage May Cause Changes in the Lending Industry | 28 |
| | Reducing FHA's Insurance Coverage May Make It More Difficult for Some Borrowers to Purchase a Home | 29 |
| | Agency Comments and Our Evaluation | 33 |
| Chapter 3 | | 36 |
| Reducing FHA's Insurance Coverage Would Likely Improve the Financial Health of FHA's Fund | Our Approach to Forecasting FHA's Capital Reserve Ratio Under Partial Insurance Coverage | 37 |
| | Our Baseline Estimates of Increases in the Fund's Capital Ratio Attributable to Partial Insurance | 39 |
| | Our Estimates Under Other Economic Scenarios | 41 |
| | Conclusions | 43 |
| | Agency Comments and Our Evaluation | 44 |

| | | |
|---|---|----|
| Chapter 4 | | 45 |
| Reducing FHA's Insurance Coverage May Transfer Some Financial Losses to the Government National Mortgage Association | <p>Reducing FHA's Insurance Coverage May Contribute to Some Issuers' Defaults and Resulting Losses for Ginnie Mae 46</p> <p>Ginnie Mae's Exposure to Losses Depends on How Lenders Respond to a Reduction in FHA's Insurance Coverage 49</p> <p>Agency Comments and Our Evaluation 49</p> | 49 |
| <hr/> | | |
| Appendixes | <p>Appendix I: Description of Interest Rate Change Analyses 52</p> <p>Appendix II: Loss Rate Estimates and Volume-Reduction Scenarios 55</p> <p>Appendix III: Other Approaches Would Result in More Modest Changes to the Fund's Capital Ratio 60</p> <p>Appendix IV: Comments From the Department of Housing and Urban Development 62</p> <p>Appendix V: Major Contributors to This Report 78</p> | 78 |
| <hr/> | | |
| Related GAO Products | | 80 |
| <hr/> | | |
| Tables | <p>Table 1.1: VA's Partial Guarantee Schedule 16</p> <p>Table 3.1: GAO's Estimates of the Impact of Reducing Insurance Coverage to VA's Levels on Loans Insured by FHA in Fiscal Year 1995, Under Base Case Economic Conditions 40</p> <p>Table 3.2: Estimates of the Impact of Reducing Insurance Coverage to VA's Levels on Loans Insured by FHA in Fiscal Year 1995, Under Pessimistic Economic Conditions 42</p> <p>Table 3.3: Estimates of the Impact of Reducing Insurance Coverage to VA's Levels on Loans Insured by FHA in Fiscal Year 1995, Under Optimistic Economic Conditions 43</p> <p>Table I.1: Estimated Net Revenue to Lenders if They Had Increased Interest Rates by One-Quarter of a Percent in Response to an Insurance Coverage Reduction for FHA's 1981 Loans 53</p> <p>Table II.1: Impact of Characteristics of Borrowers, Loans, and Properties on Loss Rates 56</p> <p>Table II.2: Impact of Selected Characteristics of Borrowers, Loans, and Properties on Loss Rates 57</p> | 57 |

| | |
|--|----|
| Table III.1: Estimates of the Impact of Alternative Insurance Coverage Reduction Approaches on Loans Insured by FHA in Fiscal Year 1995, Under Base Case Economic Conditions | 61 |
|--|----|

Figures

| | |
|---|----|
| Figure 1.1: All Insured Mortgages, by Insurer, 1985-95 | 18 |
| Figure 2.1: Proportion of Home Purchase Loans Insured in 1994 for Low-Income Borrowers and Minorities | 30 |

Abbreviations

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|------------|--|
| FHA | Federal Housing Administration |
| GAO | General Accounting Office |
| Ginnie Mae | Government National Mortgage Association |
| HUD | Department of Housing and Urban Affairs |
| LTV | loan-to-value (ratio) |
| MBA | Mortgage Bankers Association |
| SAMS | Single-Family Accounting Management System |
| VA | Department of Veterans Affairs |

Introduction

Mortgage insurance helps home buyers with limited down payment funds to obtain mortgages. It is generally used when a borrower makes a down payment of less than 20 percent of the value of the home—when the mortgage has a loan-to-value (LTV) ratio greater than 80 percent. Most lenders require mortgage insurance for these loans because they are more likely to default than loans with lower LTV ratios. If a loan with mortgage insurance defaults, the lender may foreclose on the loan and collect all or a portion of the losses from the insurer. Losses generally include the unpaid principal balance and delinquent interest due on the loan, legal expenses incurred during foreclosure, the expense of maintaining the home, and any advances that the lender made to pay taxes or insurance. The primary mortgage insurers are the Department of Housing and Urban Development's (HUD) Federal Housing Administration (FHA), the U.S. Department of Veterans Affairs (VA), and private mortgage insurance companies.¹⁰ Although FHA operates a number of single-family mortgage insurance programs, its primary program is the Section 203(b) Single-Family Mortgage Insurance program.

FHA's Insurance Coverage Is Higher Than That of Other Insurers

While FHA's Section 203(b) program protects lenders against nearly 100 percent of the loss associated with a foreclosed mortgage, VA and private mortgage insurers limit their coverage to a portion of the mortgage's balance. The amount that VA guarantees against loss is established by legislation and has periodically increased. Furthermore, VA's guaranty depends on the loan's original amount, as shown in table 1.1 below:

Table 1.1: VA's Partial Guarantee Schedule

| Loan's original amount | VA's guaranty |
|--|--|
| Less than or equal to \$45,000 | 50% of the loan |
| Greater than \$45,000, but not more than \$56,250 | \$22,500 |
| Greater than \$56,250, but not more than \$144,000 | 40% of the loan or \$36,000, whichever is less |
| Greater than \$144,000 | 25% of the loan or \$50,750, whichever is less |

When a loan that it has guaranteed goes to foreclosure, VA chooses between (1) paying the amount of insurance due on the property and leaving it with the lender or (2) purchasing the property from the lender,

¹⁰For additional information on the insurance offered and borrowers served by FHA, VA, and private mortgage insurers, see our August 1996 report entitled [Homeownership: FHA's Role in Helping People Obtain Home Mortgages](#) (GAO/RCED-96-123).

taking possession of it, and reselling it. VA selects the option that is likely to be more financially advantageous. Specifically, if the guarantee amount, as calculated according to the guidelines shown in table 1.1, is less than the net expected costs of taking possession of the property and reselling it, VA is required by law to choose the former option—this is generally referred to as a VA “no-bid” because VA limits its losses by not acquiring the property.¹¹ Fewer than 12 percent of VA’s foreclosures during fiscal years 1990 through 1996 were “no-bids,” resulting in losses to lenders. The “no-bid” policy allows VA the option of not bidding on a foreclosed property, leaving the property with the lender, and limiting VA’s losses to the guaranty amount.

For private mortgage insurers, the type and amount of coverage selected by the lender determine how much the private mortgage insurer will pay if the borrower defaults and the lender must foreclose. Typically, this amount is limited to 20 percent to 30 percent of the losses but can go as high as 35 percent.

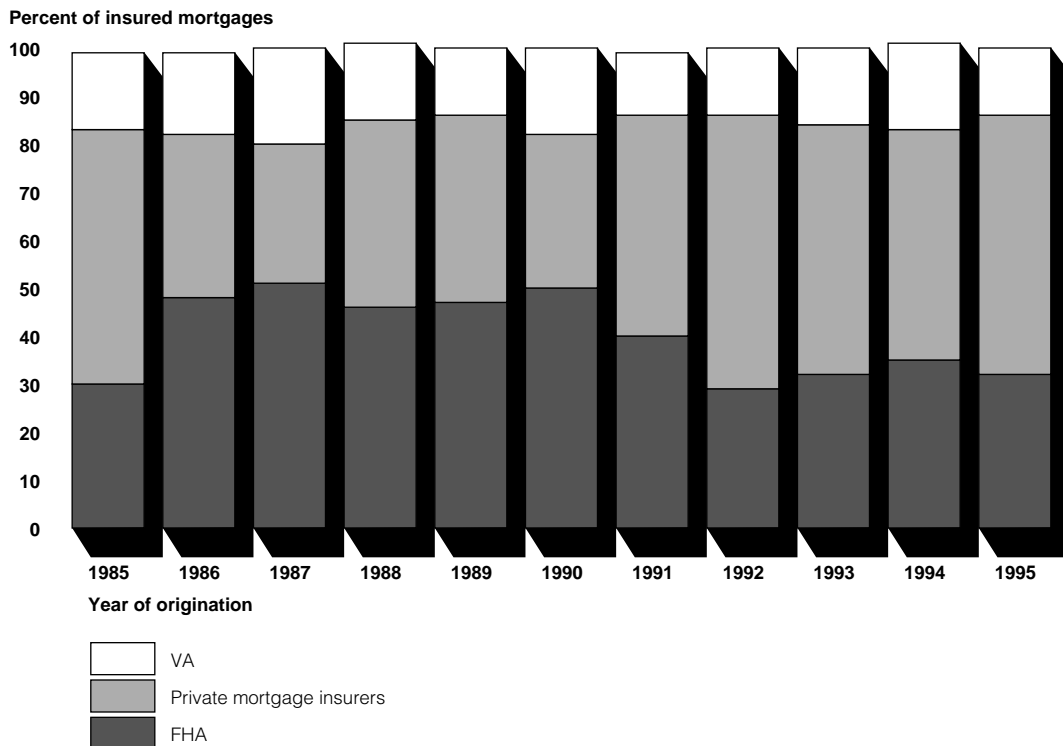
FHA Is the Biggest Federal Insurer, but Private Mortgage Insurers Serve the Most Home Buyers

FHA serves more homeowners than VA, but private mortgage insurers account for most of the mortgage insurance market, according to data on loans insured in 1995.¹² From 1985 through 1995, FHA’s share of all loans insured each year has fluctuated from a low of 29 percent in 1992 to a high of 51 percent in 1987. VA’s share during this period stayed at 13 to 20 percent. Private mortgage insurers’ share during the same period fluctuated from a low of 29 percent in 1987 to a high of 57 percent in 1992. The relative market shares of FHA, VA, and private mortgage insurers are shown in figure 1.1.

¹¹When determining whether to pay the guaranty amount or acquire the property, VA calculates the costs of acquiring and reselling the property by considering the following two primary factors: (1) the total indebtedness on the property (the outstanding mortgage balance, interest, and allowable charges) and (2) the net value of the property (the appraised fair market value minus the administrative costs of holding and reselling the property, currently estimated at 15.11 percent of the fair market value). If the total indebtedness minus the guaranty amount (i.e., the unguaranteed portion) is greater than the net value of the property, VA considers it as a “no-bid” case and will not acquire the property.

¹²The Department of Agriculture’s Rural Housing Service also insures a small number of mortgages each year.

Figure 1.1: All Insured Mortgages, by Insurer, 1985-95^a



^aThis figure does not include data on the small number of loans insured through the Department of Agriculture's Rural Housing Service.

Source: GAO's analysis of HUD's data.

Customers Targeted by FHA and VA

Although a primary goal of FHA is to assist borrowers who may be underserved by the private market, any household who takes out a loan no greater than FHA's maximum loan amount and who meets other financial qualifications is eligible to obtain FHA's mortgage insurance.¹³ VA's insurance is available only to U.S. veterans, their families, and certain active duty military personnel. Like FHA insurance, private mortgage insurance is available to any household who meets the insurer's loan guidelines and financial qualifications.

¹³The maximum loan amount permitted under FHA's program for single-family homes in the highest cost areas in the continental United States is currently set at \$160,950.

FHA's Program Is Financially Self-Sufficient, but VA's Program Is Not

Unlike VA, FHA requires no federal funds to carry out its primary single-family mortgage insurance program. Borrowers who obtain FHA-insured mortgage loans pay insurance premiums, which are deposited into HUD's Mutual Mortgage Insurance Fund (Fund). According to studies conducted by GAO and Price Waterhouse, the Fund's reserves exceed those needed to meet the legislatively prescribed capital reserve ratio.¹⁴ Price Waterhouse reported that the Fund had an estimated capital reserve ratio of 2.54 percent at the end of fiscal year 1996—a ratio greater than the 2-percent target set in 1990 by the Congress for fiscal year 2000. Capital reserve ratio estimates are computed by presenting the net present value of all future cash inflows and outflows expected to result from the mortgages insured by FHA (the economic value of the Fund) as of the end of a fiscal year, plus accumulated reserves, as a percentage of the total insurance-in-force at that time. Price Waterhouse estimated that by 2000, this ratio would be 3.57 percent. In addition to the capital reserve ratio, Price Waterhouse estimated that the economic value of the loans insured by FHA would increase from \$9.4 billion at the end of fiscal year 1996 to \$14.8 billion by the end of fiscal year 2000. Economic value provides an estimate of the profitability of FHA loans, which is important because estimated increases in economic value due to legislative changes allow additional mandatory spending authorizations to be made, other revenues to be reduced, or projected deficits in the federal budget to be reduced.

Although the most recent estimate of the Fund's capital reserve ratio exceeds the 2-percent legislative target, the Fund experienced substantial losses during the 1980s. This occurred primarily because foreclosure rates on single-family homes supported by the Fund were high in economically stressed regions. To help place the Fund on a financially sound basis, legislative reforms such as requiring FHA borrowers to pay more in insurance premiums were made in 1990.

VA's program requires an annual federal appropriation because premiums collected from borrowers of VA-insured mortgages do not cover the estimated future losses for these mortgages. In 1996, VA received a credit subsidy of \$697 million for covering costs associated with its mortgage insurance operations.

¹⁴Mortgage Financing: FHA Has Achieved Its Home Mortgage Capital Reserve Target (GAO/RCED-96-50, Apr. 12, 1996) and An Actuarial Review for Fiscal Year 1996 of the Federal Housing Administration's Mutual Mortgage Insurance Fund: Final Report, Price Waterhouse LLP (Feb. 14, 1997).

Ginnie Mae Connects Federally Insured Mortgages With Secondary Market Investors

Almost all mortgages insured by FHA and VA are pooled into securities that are then sold to investors with the help of HUD's Government National Mortgage Association (Ginnie Mae). Issuers of Ginnie Mae securities can be mortgage bankers, savings institutions, or other financial intermediaries. The investors that buy the securities are guaranteed by Ginnie Mae to receive timely principal and interest payments, regardless of the performance of the mortgages backing the securities or the issuer's performance. At the end of fiscal year 1996, Ginnie Mae had outstanding guarantees of mortgage-backed securities totaling \$533 billion.

Objectives, Scope, and Methodology

To obtain information on the impact of reducing FHA's insurance coverage, the Chairman, Subcommittee on Housing and Community Opportunity, House Committee on Banking and Financial Services, asked us to address the following three questions: (1) How are lenders and the market expected to react to an increased risk of loss to lenders and how will this affect FHA's borrowers? (2) What potential financial impact will reducing FHA's coverage have on the Fund under different economic conditions? (3) What are the potential impacts of reducing FHA's insurance coverage on Ginnie Mae?

To identify lenders' anticipated responses to a reduction in FHA's insurance coverage, we reviewed Price Waterhouse's summary of the results of a focus group held in October 1995 by HUD and interviewed officials from four mortgage-lending institutions. The lenders represented in the focus group were responsible for approximately 35 to 40 percent of all FHA-insured loans in 1994. The four lenders that we interviewed were among the largest FHA lenders in four regions. One of these lenders is the largest FHA lender nationwide, and 1 was among the 14 lenders in HUD's focus group.

We analyzed the reasonableness of the interest rate increase and loan volume decrease predicted by the lenders that participated in HUD's focus group. Specifically, we analyzed the group's estimated interest rate increase by comparing the increase in lenders' revenues likely to result from the rate increase with the increase in lenders' losses likely to result from a reduction in FHA's insurance coverage. Appendix I presents a more detailed discussion of this analysis. We analyzed the volume decrease predicted by the focus group by considering the following factors: (1) the potential effect of an interest rate increase on the number of FHA-insured loans made, (2) the likelihood that lenders would target an interest rate

increase toward higher-risk borrowers, and (3) the impact of tighter underwriting standards on FHA's volume of loans in the long run.

To obtain information on the types of borrowers that would most likely be affected by an insurance coverage reduction, we obtained information from VA and FHA on their mortgage insurance programs and the types of borrowers they currently serve. We also used HUD's data on foreclosed properties and on the demographic characteristics of FHA's borrowers to conduct a regression analysis. Specifically, we analyzed the effects of several variables on total loss rates and losses to the lender.¹⁵ Appendix II presents a more detailed discussion of this analysis.

To estimate the impact that reducing FHA's insurance coverage to VA levels would have on the estimated capital reserve ratio of the Fund, we used an econometric model of FHA's loan terminations and a model of the cash flows associated with FHA mortgages, both of which had been developed for a previous GAO report.¹⁶ Specifically, we used these models to estimate the impact of reducing FHA's insurance coverage on the estimated economic value and the resulting capital reserve ratio for loans insured by FHA in fiscal year 1995 under three different economic scenarios. Our baseline economic scenario assumes that house price appreciation rates are 1 percentage point lower than those in forecasts prepared by DRI/McGraw-Hill, a private economic-forecasting company. Our pessimistic economic scenario assumes that house price appreciation rates are 2 percentage points lower than our baseline. Our optimistic economic scenario assumes that house price appreciation rates are 2 percentage points higher than our baseline. Although future economic conditions are uncertain, to be conservative in assessing the impact of reducing FHA's insurance coverage on the capital reserve ratio and to be consistent with past analyses that we have made of the actuarial condition of FHA's Fund, we placed greater emphasis on the estimates prepared under the baseline economic scenario. Our estimates of the impact of reducing FHA's insurance coverage on the Fund's capital reserve ratio are based on the assumption that FHA's current premium structure would not change following a reduction in FHA's insurance coverage. Furthermore, because lenders' responses to a reduction in insurance coverage play an important role in the impact of a reduction on FHA's Fund, we also

¹⁵We defined loss rate as the loss (or profit) on a foreclosed property divided by the acquisition cost. We defined acquisition cost as the claim paid by FHA plus any extra costs incurred for FHA's acquisition of the property. We defined loss to the lender as any loss in excess of the amount that would be covered under VA's guarantee limits.

¹⁶See our April 1996 report entitled *Mortgage Financing: FHA Has Achieved Its Home Mortgage Capital Reserve Target* (GAO/RCED-96-50).

prepared estimates assuming several different FHA loan volume reduction scenarios.

Our econometric analysis estimated the historical relationships between the probability of a loan's foreclosure and prepayment and key explanatory factors, such as the borrower's equity and the interest rate. Using our estimates of these relationships, we developed forecasts of future loan performance to estimate the economic net worth and resulting capital reserve ratio for FHA loans originated in fiscal year 1995 under the three economic scenarios. We selected loans made in fiscal year 1995 because it was the most recent year for which complete data were available and because any change in FHA's insurance coverage would apply only to new FHA-insured loans and not to FHA's entire portfolio of existing loans. The econometric model and equations used to forecast the impact on the fiscal year 1995 loans were developed on the basis of historical data on the performance of FHA loans originated from fiscal year 1975 through fiscal year 1994.

We looked primarily at the impact of reducing FHA's coverage to VA's levels. However, we also looked at the impact of two alternative scenarios for reducing FHA's coverage: (1) retaining full coverage for first-time home buyers but reducing coverage to VA's levels for repeat buyers and (2) imposing a graduated coverage schedule that provides slightly higher coverage levels than VA's program for loans of low and moderate size—60 percent coverage for the lowest loan amounts, declining to 30 percent for the highest loan amounts. These scenarios are discussed in greater detail in appendix III.

We obtained data from FHA's property disposition database—the Single-Family Accounting Management System (SAMS)—so that we could examine the division of foreclosed loan losses between FHA and mortgage lenders if FHA were to change from full to partial insurance. We calculated the loss rate and determined what fraction of the loss rate would be paid by FHA, recognizing that the remainder would be paid by the lender, under a partial insurance program like VA's and assuming a no-bid type policy in effect for FHA. Appendix II presents a detailed explanation of this analysis.

To obtain information on the potential impacts on Ginnie Mae, we met with Ginnie Mae officials and reviewed an analysis conducted by Price Waterhouse for them on the likely results of reducing FHA's insurance coverage.

Our analysis of the implications of limiting the insured portion of future FHA-insured loans to that used by VA did not include assessing the implications of such a change on FHA's staffing levels.

We performed our work from May 1996 through March 1997 in accordance with generally accepted government auditing standards. HUD's comments on a draft of this report and our responses to them are included in chapters 2 through 4 and in appendix IV.

If FHA's Insurance Coverage Is Reduced, Lenders May Make Fewer and Higher Interest Loans to Some Types of Borrowers

Since its inception in 1934, FHA's single-family mortgage insurance program has protected private lenders against nearly all losses resulting from foreclosures. Losses incurred by FHA have averaged about \$24,400 for each foreclosed and subsequently sold defaulted single-family property.¹⁷ These losses were offset by insurance premiums paid by FHA's borrowers, not by funds from the U.S. Treasury. For home loans made by private lenders that are guaranteed by other federal agencies such as VA or made in the conventional market and insured by private mortgage insurers, lenders are not fully protected against losses.

A reduction in FHA's insurance coverage would increase lenders' vulnerability to risks associated with the uninsured portion of loans. Some FHA lenders and other mortgage-lending industry representatives believe that a reduction in FHA's insurance coverage will reduce the number of FHA mortgage loans made and increase interest rates on them as lenders try to compensate for losses on loans that go to foreclosure. While such market responses by lenders are expected, we question whether the volume of FHA-insured loans would decline as much and whether interest rates would increase as much as anticipated by FHA's lenders. VA officials told us that there was no discernible reduction in the volume of VA loans after its current partial insurance policy went into effect in 1985. While it is difficult to predict precisely such market responses, any reduction in the volume of loans and increase in interest rates would probably be borne disproportionately by low-income, first-time, and minority homeowners and those individuals purchasing older homes because these are the types of borrowers that are frequently served by FHA and that many housing advocates believe are not being completely served by the private market. For such borrowers, FHA represents a significant source of mortgage insurance. For this reason, reducing FHA's insurance coverage may make it more difficult and, in some cases, more costly for some potential home buyers to purchase a home. While some potential home buyers may be ruled out, others may have to delay their purchase of a home or reduce the value of the home purchased. Any reduction in FHA's insurance coverage would shift risk to originators of FHA mortgages, causing possible changes in the lending industry, such as mergers of small FHA lenders. Reducing FHA's insurance coverage could also lessen FHA's ability to stabilize local housing markets when regional economies decline.

¹⁷During the 19-year period ending September 30, 1993, FHA incurred losses totaling about \$12.8 billion in 1994 dollars following the foreclosure and subsequent sale of about 525,000 defaulted single-family housing loans that FHA had insured.

Mortgage-Lending Industry Officials Anticipate a Reduction in the Volume of Loans and an Increase in Interest Rates

To assess the impact that an FHA partial guarantee would have on the mortgage markets and borrowers, FHA sponsored a meeting of 14 FHA lenders in October 1995 to obtain their views. Price Waterhouse was retained by FHA and Ginnie Mae to gather the lenders' responses. According to an FHA official, collectively, the 14 lenders accounted for 35 to 40 percent of all FHA loans made nationwide. The lenders indicated that if FHA implements a partial insurance guarantee, they would (1) charge FHA's borrowers between one-quarter to one-half percent more in interest and (2) establish stricter underwriting standards that would limit the number of higher-risk borrowers who would qualify for an FHA-insured loan. The lenders believe that these two market responses would be necessary to offset losses they might incur if a borrower defaulted on a loan and to compensate them for the additional risk.

The lenders estimated that these two market responses would cause the number of FHA-insured loans they make to decline by 28 percent under normal economic conditions and more in the event of an economic or natural disaster in a particular geographical area.¹⁸ These lenders concluded that 18 percent of the 28-percent volume reduction would be due to higher-risk borrowers who, because of the higher costs and stricter underwriting standards, would not be able to obtain an FHA-insured loan, while the remaining 10-percent reduction would be due to low-risk borrowers who would opt to obtain privately insured mortgages at a lower cost.

The four FHA lenders we contacted agreed with the lenders convened by FHA that some borrowers would not be able to obtain an FHA loan, but none of the four offered estimates of specific percentage reductions in volume of loans. Those four lenders, who are among the largest FHA lenders in California, Colorado, Virginia, and Maryland, noted that they would also pass on costs they may incur from a reduction in FHA's insurance coverage to the consumer in the form of higher interest rates and that they would set higher underwriting standards that would exclude higher-risk individuals from qualifying for an FHA loan. These lenders said they would determine an appropriate interest rate to charge borrowers by considering factors such as the risk of default, amount of the loan, value and location of the property, and amount of funds they would no longer receive from FHA if borrowers defaulted on loans. The lenders believe that because of these changes, many high-risk people would not be able to acquire a home

¹⁸According to Price Waterhouse, the 28-percent decrease in FHA loans was a general consensus of the 14 FHA lenders.

because they would be either unable to afford the loan or unable to qualify for the loan under the more restrictive underwriting standards.

FHA lenders at the October 1995 meeting and other mortgage-lending industry representatives also pointed out other adverse impacts that reducing FHA's insurance coverage could have on them and the mortgage market. The lenders predicted that a partial FHA insurance guarantee would make some lenders less willing to make FHA loans and that some medium-sized lenders would stop making FHA loans because they would be unable to afford the increased risk of losses. Only one of the four lenders we spoke to indicated that he might stop making FHA loans because of a limit on FHA's insurance coverage.

An executive with the Mortgage Bankers Association (MBA) said that large FHA lenders will not pull out of the FHA market if FHA's coverage is reduced but that smaller lenders would leave the program because they would not be able to afford the additional risk associated with a partial guarantee. In addition, the executive stated that the existing insurance program is working well and is serving many borrowers who would not be served by the conventional market. Reducing the program's insurance coverage, the executive believes, would make lenders less inclined to make loans to some low- and moderate-income borrowers, first-time home buyers, and households in inner cities.

Lenders' Estimates of the Reduction in FHA's Volume of Loans and Increase in FHA's Interest Rates May Be Overstated

While we cannot estimate the actual loan volume and interest rate that may prevail if FHA's insurance coverage is reduced, our analysis of FHA's loan volume and interest rates under normal economic conditions shows that lenders may provide more loans at lower costs than predicted by those FHA lenders in the focus group if FHA reduces its insurance guarantee. As previously stated, FHA's lenders estimated that they will lose about 28 percent of their business if FHA loans were partially insured. This estimate is based on the following three assumptions: (1) as a result of the increased risk faced by lenders, interest rates charged to FHA's borrowers will rise by one-quarter to one-half percent; (2) the increase in interest rates and a tightening of underwriting standards will result in a loss of 18 percent of FHA's high-risk borrowers; and (3) the increase in interest rates will result in a further loss of 10 percent of FHA's least-risky borrowers.

Our analysis shows that these assumptions may overstate the extent to which FHA's loan volume may decrease and interest rates may increase.

Chapter 2
If FHA's Insurance Coverage Is Reduced,
Lenders May Make Fewer and Higher
Interest Loans to Some Types of Borrowers

This is because the higher revenues earned by lenders from a one-quarter to one-half percent increase in interest rates may exceed the losses that lenders would incur if FHA's insurance coverage were limited to the VA levels. This increase in lenders' net revenues could prompt some lenders to moderate any interest rate increases, resulting in a loan volume above that projected by the lenders. Finally, if FHA were to respond to a reduction in risk related to lower insurance coverage by lowering FHA's insurance premiums, this reduction in cost to FHA's borrowers would partly offset any interest rate increase by lenders. This reduction in borrowers' costs would also mitigate the effect of the lower-risk borrowers lost by FHA.

An increase in interest rates of one-quarter of a percent would produce enough revenue to lenders to cover losses, even under the most adverse economic conditions experienced by FHA in the last 20 years. We chose two criteria to determine the most adverse economic conditions. We examined Price Waterhouse's 1995 actuarial study to determine which fiscal year in the last 20 had the highest rate of lifetime foreclosures and HUD's A43 database to determine which fiscal year had the highest loss rate per foreclosed loan. We found that the highest rate of lifetime foreclosures was 22 percent for FHA loans written in fiscal year 1981 and the highest loss rate per foreclosed loan was 45 percent, for FHA loans written in fiscal year 1982. If 1981's foreclosure rate were repeated and loss rates per foreclosed loan were slightly higher than 1982's experience, the one-quarter percent increase in interest would still generate more income than a lender would lose in increased claims.

Furthermore, if the increase in interest rates charged to borrowers were less than the one-quarter to one-half percent assumed by the lender's focus group, fewer low-risk borrowers may opt to leave FHA's applicant pool. In addition, lenders would have the capacity and the incentive to target interest rate increases to higher-risk borrowers, such as those making low down payments. The exclusion of some higher-risk borrowers would reduce the lenders' expected losses and their incentive to increase rates.

While tighter underwriting criteria will lead to some reduction in FHA's business among higher-risk borrowers, some of that decrease may be temporary. Persons attempting to buy homes with low down payments or high payment-to-income ratios may be prevented from using the FHA program if tighter standards are imposed. However, those people could return to the home purchase market at a later time when their income and/or savings have increased. At that point, the decline in volume would

at least be partially replaced by an increase in more credit-worthy applicants.

VA's Views on Limited Insurance Coverage Differ From Lenders' Views

VA operates a home loan insurance program that, depending on the original amount of the loan, guarantees from 25 to 50 percent of the loan. VA officials told us that there was no discernible reduction in the volume of VA loans after the current no-bid policy went into effect in 1985.¹⁹ They also told us that despite repeated predictions from lenders and others at the time, they did not experience an exodus by VA's lenders because of the no-bid policy. VA officials noted that some of their lenders perceive that rates for VA loans are higher than those for FHA loans because of VA's no-bid policy. However, VA officials said they do not know if this is true because of the lack of supporting data.

VA officials also pointed out that on a typical foreclosure, the VA guarantee is adequate to cover most losses and that VA and the lender share in a substantial portion of the losses only for foreclosures that involve catastrophic losses. VA had no estimates of the savings that it realized because of its partial guarantee (no-bids) but told us they thought that the savings were relatively small. VA's data show that lenders sustained losses in less than 16 percent of VA's foreclosures during fiscal years 1992 to 1994.

Limiting FHA's Insurance Coverage May Cause Changes in the Lending Industry

Limiting FHA's insurance coverage would change the distribution of risk among market participants. Originators of VA's guaranteed loans or loans made without government guarantees are initially exposed to the risk of catastrophic losses (losses that exceed the amount insured). In the market for nongovernment-insured loans, the catastrophic risk is often sold to the government-sponsored enterprises—the Federal National Mortgage Association and the Federal Home Loan Mortgage Corporation. Because FHA's single family program provides 100-percent insurance coverage, FHA's lenders are not exposed to these risks. Any reduction in FHA's coverage would entail shifting this risk to the originators of FHA mortgages.

The lending industry could respond to this new distribution of risk in several ways. Lenders could sell this risk to other financial firms as occurs

¹⁹VA's no-bid policy is an option that limits losses to VA by allowing VA to take back a property or leave it with the lender, depending on which action is more in VA's financial interest. VA decides which option to follow after estimating and comparing the cost of taking possession of and reselling a foreclosed property with the cost of leaving the property with the lender and paying the lender the guaranteed portion of the mortgaged loan. When a no-bid occurs, the lender is responsible for losses incurred above those guaranteed by VA.

in the conventional mortgage market. Small, geographically concentrated lenders would be exposed to greater risk than would geographically diversified lenders, as the smaller lenders may experience losses from regional as well as national downturns. Small lenders may merge or be absorbed by larger lenders so as to geographically diversify, or may leave the FHA lending market. If lenders continued to hold this catastrophic risk, their regulators or shareholders might require capital to be held against this risk, decreasing the profitability of lending.

Reducing FHA's Insurance Coverage May Make It More Difficult for Some Borrowers to Purchase a Home

FHA plays a significant role in the single-family housing market by providing higher-risk borrowers with insured loans and stabilizing housing markets in areas that are affected by natural disasters or economic distress. For example, FHA insured 35 percent of the insured home purchase loans made in 1994. However, FHA fulfills an even larger role in some specific market segments, particularly low-income home buyers, minorities, central city residents, and borrowers qualifying for loans with high loan-to-value (LTV), housing-expense-to-income, or debt-to-income ratios.²⁰ The recipients of these loans are typically higher-risk borrowers that do not qualify for a conventional home loan with private mortgage insurance. While about a third of the loans that FHA insured in 1995 might have qualified for conventional mortgages, the other two-thirds probably would not have qualified, on the basis of maximum LTV and qualifying ratios of the loans that FHA insured.²¹ Without FHA's 100-percent insurance coverage on losses, private lenders anticipate that they would most likely serve fewer FHA high-risk borrowers and would raise interest rates on FHA loans. While we do anticipate that lenders would increase interest rates and reduce lending to higher-risk borrowers, as discussed previously, our analysis shows that the volume of loans may not decrease and interest rates may not increase as much as anticipated by FHA's lenders. For these reasons, reducing FHA's insurance coverage will make it more difficult and, in some cases, more costly for some potential home buyers to obtain home mortgages.

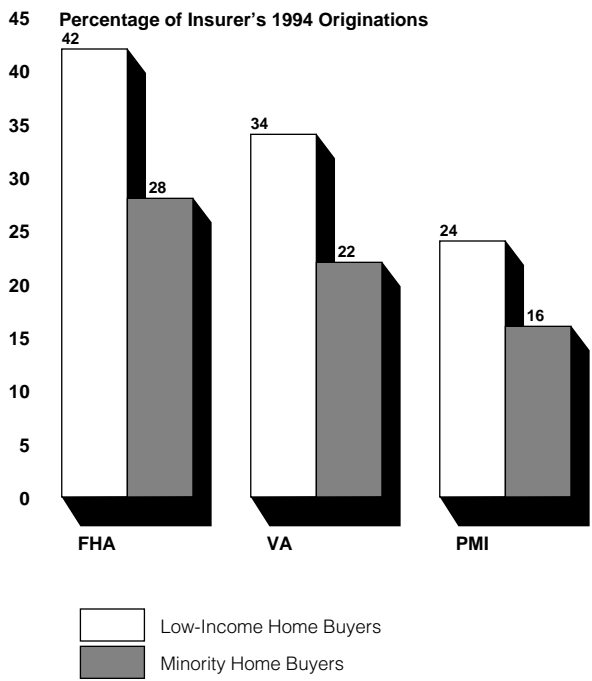
²⁰The LTV ratio is the amount of the loan divided by the property's appraised value. FHA's way of calculating LTV is different from the private sector's or VA's, which results in a slightly lower LTV ratio. The total debt-to-income ratio compares all of the borrower's long-term debt payments, including his/her housing expenses, with his/her income.

²¹For a full discussion of the role that FHA plays in the housing market, see Homeownership: FHA's Role in Helping People Obtain Home Mortgages (GAO/RCED-96-123, Aug. 13, 1996).

FHA Is a Significant Insurer for Low-Income, Minority, and First-Time Home Buyers

Borrowers with FHA-insured mortgages are more likely to have lower incomes, be first-time home buyers, or be minorities than borrowers with privately insured loans. While FHA insured about 35 percent of all insured mortgages used to purchase homes in 1994, it insured 46 percent of the insured home purchase mortgages made to low-income borrowers and 48 percent of those made to minorities. Furthermore, mortgages for low-income and minority home buyers constituted a greater portion of FHA's 1994 business than they did for private mortgage insurance or VA, as shown in figure 2.1. In addition, about 67 percent of all 1994 FHA home purchase borrowers were first-time home buyers.

Figure 2.1: Proportion of Home Purchase Loans Insured in 1994 for Low-Income Borrowers and Minorities



Source: GAO's analysis of data from the Home Mortgage Disclosure Act and the Mortgage Insurance Companies of America.

FHA also plays a primary role in providing central cities with mortgage loans. According to an October 1995 FHA study of 1993 data from the Home Mortgage Disclosure Act, 46 percent of the FHA-insured loans were for

properties located in central cities compared with 38 percent for private insurers.²² In terms of market share in central cities, FHA accounted for 35 percent of the FHA eligible market in 1993.²³

FHA also plays an important role in insuring high LTV ratio loans. FHA insured 43 percent of all the home purchase loans made in 1994 with an LTV ratio of at least 90 percent. Private mortgage insurers insured 37 percent and VA guaranteed 19 percent. Furthermore, FHA and VA loans account for almost all the loans made with LTV ratios greater than 95 percent. In 1994, 65 percent of FHA's home purchase loans and 86 percent of VA's loans had LTV ratios of at least 95 percent, compared with only 8 percent of the private mortgage insurance loans with such LTV ratios.

Most FHA-Insured Home Loans Would Most Likely Not Qualify for Private Mortgage Insurance

On the basis of the LTV and qualifying ratios of their FHA-insured mortgages and the maximum ratios generally permitted by private mortgage insurers, about 66 percent of the loans insured by FHA in 1995 would probably not have qualified for private mortgage insurance.²⁴ These loans had LTV ratios above the private mortgage maximum of 97 percent, had housing expense-to-income ratios above the private mortgage insurance maximum of 33 percent, or had total debt-to-income ratios above the private mortgage insurance maximum of 38 percent.²⁵

The number of first-time or low-income FHA borrowers who would not qualify for private mortgage insurance is even higher. Looking exclusively at first-time home buyers who took out FHA insurance in 1995, 77 percent would not have met the private mortgage insurers' LTV and qualifying ratio standards. An even greater portion (85 percent) of the low-income borrowers would not have met the private mortgage insurance companies' standards.

²²An Analysis of FHA's Single-Family Insurance Program, Department of Housing and Urban Development (Oct. 1995).

²³"FHA eligible" loans are conventional loans below FHA's maximum loan amount for each metropolitan area.

²⁴However, some of the borrowers obtaining those loans might have been able to obtain privately insured loans by increasing their down payments or buying lower-priced homes.

²⁵Not every borrower who meets the LTV and qualifying ratio guidelines used by private mortgage insurers automatically qualifies for private mortgage insurance because lenders and insurers consider additional factors, such as credit history, during the underwriting process. Similarly, borrowers who fail to meet all three of the private mortgage insurance guidelines may occasionally qualify for private mortgage insurance because of compensating factors considered during the underwriting process.

In addition, FHA's higher debt-to-income and LTV ratios means that FHA serves higher-risk borrowers who would most likely not qualify for conventional home loans. FHA is able to serve higher-risk borrowers because it insures lenders against almost 100 percent of the losses associated with a foreclosed loan. FHA, therefore, assumes 100 percent of the risk of loss on a loan it insures. Private lenders reduce the risk of loss on conventional loans by maintaining stricter underwriting standards and by requiring private mortgage insurance that protects them against a portion of the loss.

FHA Insures Housing Market Stability

FHA has been instrumental in providing housing market stability in some areas where private mortgage companies have decreased their single-family insurance activities because of a change in the areas' economy or problems from a natural disaster. Except for FHA's loan limit,²⁶ the terms under which FHA and VA mortgage insurance is available such as the maximum LTV ratio do not generally vary across different geographic locations, according to the FHA program's guidelines. However, private mortgage insurance companies may change the conditions under which they will provide new insurance in a particular geographic area to reflect the increased risk of losses in an area experiencing economic hardship. By tightening the terms of the insurance they would provide, private mortgage insurance companies have, in the past, decreased their share of the market in economically stressed regions of the country.

Private mortgage insurance companies accounted for about two-thirds of the insured market in 1984. However, changing economic and market conditions that occurred during the early and mid-1980s, including severe regional recessions and attendant declines in property values in some energy-producing states, resulted in decreasing loan activity by private insurers in some single-family markets. For example, in the five energy-producing states of Alaska, Colorado, Louisiana, Oklahoma, and Texas, the private mortgage insurance companies' market share declined from 41 percent in 1984 to 9 percent in 1987. In contrast, FHA increased its market share from 1984 through 1987, including in the aforementioned states. FHA's lenders and other mortgage industry officials indicated, however, that partial insurance would compromise FHA's mission to stabilize distressed communities. This is because the lenders' increased exposure to risk would make them disinclined to provide riskier borrowers with home loans in areas affected by economic distress or by natural disaster.

²⁶FHA's loan limit may differ among geographic areas to reflect differentials in the cost of housing.

Some FHA Loans Are More Risky Than Others

To determine which FHA borrowers represent the greatest risk to lenders and therefore are more likely to be denied a loan as a result of tighter underwriting standards applied by lenders, we analyzed the actual loss experience on foreclosed properties acquired and then sold from fiscal year 1992 through fiscal year 1994.²⁷ We found that five variables had consistent and significant associations with the losses that lenders would sustain if FHA's insurance coverage were to be reduced to VA's level. Those variables were (1) minority borrowers, (2) buildings with multiple living units (characterized as investor loans), (3) loans written at higher interest rates, (4) older properties, and (5) smaller loans. Loans with these characteristics have higher loss rates, all else held equal, and expose lenders to a greater risk of loss.²⁸ Therefore, lenders may disproportionately reduce their lending in these risk categories. While our analysis did not show that first-time home buyers have higher loss rates and expose lenders to a greater risk of loss, FHA's lenders convened at the 1995 focus group considered that many such borrowers would be priced out of the market. Our analysis of factors contributing to higher loss rates is explained in greater detail in appendix II.

Agency Comments and Our Evaluation

HUD stated that our report does not adequately discuss the impact that reducing FHA's insurance coverage would have on FHA's ability to stabilize regional housing markets during periods of economic distress. We agree that FHA has historically played a role in stabilizing local housing markets affected by economic stress. Information has been added to the report reflecting FHA's role in market stabilization and the possible effect that a reduction in FHA's insurance coverage could have on diminishing FHA's ability to continue to stabilize distressed communities.

HUD also stated that our report does not adequately discuss the impact that reducing FHA's insurance coverage would have on the structure of the lending industry. We agree that reducing FHA's insurance coverage may change the types and numbers of firms making FHA loans and the capital structure of those lenders. While a full analysis of the structure of the mortgage lending industry is beyond the scope of this report, we have added to this chapter a discussion of possible changes in the structure of the mortgage-lending industry.

²⁷Data were gathered and linked from three FHA databases—SAMS database of foreclosed properties, FHA's A43 (financial characteristics), and the F42 (demographic characteristics) database.

²⁸Previous work by GAO, Price Waterhouse, and others indicates that these variables influence the probability of foreclosure in the same way that they influence loss rates.

Chapter 2
If FHA's Insurance Coverage Is Reduced,
Lenders May Make Fewer and Higher
Interest Loans to Some Types of Borrowers

HUD disagreed with our finding that reducing FHA's insurance coverage may reduce the number of FHA loans by less than 28 percent. HUD pointed out that because lenders consider the volatility of losses as well as the expected level of losses, lenders may seek to reduce the volatility of losses even if the revenue from higher interest rates covers the expected level of losses. We agree that lenders consider volatility in their decision making, and that lenders would have an incentive to tighten underwriting if FHA insurance were limited. However, our expectation that lending will be reduced by less than 28 percent is not based on an assumption that underwriting will not be tightened. Rather, it is predicated on our analysis that suggests that with a one-quarter percent rise in interest rates, lenders would likely earn more than enough revenues to cover losses from a reduction in FHA's insurance coverage even under extremely adverse circumstances. If interest rates increase by less than one-quarter of a percent, fewer borrowers would be priced out of FHA's insurance. Our expectation is also predicated on the fact that borrowers excluded from the FHA program may reapply and qualify at a later date.

We disagree with HUD's comment that it is inappropriate to use VA's experience (including the VA no-bid procedure) as a basis for predicting lenders' response to a reduction in FHA's insurance coverage. HUD pointed out that VA has always operated a partial insurance program and that for this reason, it is inappropriate to use the example of changes in VA's no-bid procedure as a predictor of the impact that a reduction in FHA's insurance coverage would have on lenders' participation.

While it is true that VA has always provided only partial insurance coverage, as discussed in this report, the 1984 changes to VA's no-bid process, required by the 1984 Deficit Reduction Act, had a substantial impact on the number of foreclosed loans for which VA paid the total guarantee and left the property with the lender—rising from less than 2 percent of all VA foreclosures during fiscal year 1982 to 24 percent in fiscal year 1988. Therefore, lenders' response to changes in the VA program is likely to be indicative of their response to a change in the FHA program.

HUD also stated that the VA program is very limited and serves borrowers who are very different from the type served by FHA (i.e., borrowers who are concentrated geographically, with stable employment, higher incomes, and subject to military discipline) and for this reason the two programs are not comparable. While the VA program is available to some active military personnel, veterans, and their families, currently about 80 percent of VA's borrowers are veterans and not subject to military discipline. Also,

Chapter 2
If FHA's Insurance Coverage Is Reduced,
Lenders May Make Fewer and Higher
Interest Loans to Some Types of Borrowers

as pointed out in chapter 2, FHA's and VA's programs are similar in that a large proportion of the home buyers served by both programs are low-income borrowers and minorities and both play an important role in insuring high LTV loans. Finally, as discussed in our earlier report, VA's and FHA's programs serve similar geographic markets.²⁹

²⁹For a full discussion of FHA's and VA's role in the housing market, see Homeownership: FHA's Role in Helping People Obtain Home Mortgages (GAO/RCED-96-123, Aug. 13, 1996).

Reducing FHA's Insurance Coverage Would Likely Improve the Financial Health of FHA's Fund

Reducing FHA's insurance coverage to the level permitted for VA home loans would likely reduce the Fund's exposure to financial losses, thereby improving its financial health. However, the actual impact of reducing FHA's insurance coverage on the economic value/reserves, the resulting capital ratio of loans insured by FHA in fiscal year 1995, and the validity of our estimates would depend on future economic conditions and on how lenders would respond to a reduction in FHA's insurance coverage. We estimate that reducing FHA's insurance coverage would likely result in increasing the capital reserve ratio for the loans insured by FHA in fiscal year 1995 above the ratio that results from the current policy of full insurance coverage. A higher capital reserve ratio will result under reduced insurance coverage even if FHA's volume of loans declines by 28 percent as predicted by FHA's lenders. This occurs because the positive financial effect of the following factors more than offsets the loss of premium income on loans that are not insured by the Fund when the volume of loans is reduced. First, by reducing FHA's insurance coverage to VA's level, FHA would be liable for only a portion of the losses on loans that are foreclosed. Our analysis shows that FHA's losses on loans that go to foreclosure would be reduced by an estimated 16 percent if FHA were to go to a partial insurance coverage like VA's, thereby increasing the estimated economic value/reserves of the loans it insures. Second, when FHA's volume of loans is reduced, which would likely occur if FHA's mortgage insurance coverage were reduced, the capital reserve ratio increases because, on average, the loans that would be excluded from FHA's insurance would be higher-risk loans for which higher foreclosure and loss rates would be expected.

Our estimates also show that at various house price appreciation rates—a key factor influencing future economic value/reserves and resulting capital reserve ratios—the capital reserve ratio increases when moving from full mortgage insurance to partial insurance. In fact, if house price appreciation rates are 2 percentage points lower than those used in our estimate, reducing FHA's insurance coverage may have a much greater positive effect on the capital reserve ratio of the loans insured by FHA than on the capital reserve ratio in our baseline estimate.

Although our analysis indicates that reducing FHA's insurance coverage is likely to increase the Fund's capital reserve ratio, the impact on a key component of the ratio—the estimated economic value/reserves of the Fund—is less certain. This is because the effect of insurance coverage reductions on the economic value of the Fund depends largely on the way in which lenders respond in excluding loans from FHA insurance. This is

important because our analysis indicates that the smaller the reduction in the volume of FHA loans, the higher the economic value contributed by the remaining loans insured by FHA in fiscal year 1995. Our estimates of the impact of reducing FHA's insurance coverage on the Fund's capital reserves are based on the assumption that FHA's premium structure would not change following a reduction in FHA's insurance coverage.

Alternative approaches to reducing FHA's insurance coverage that we assessed—retaining full FHA insurance coverage for first-time home-buyers but reducing FHA's coverage for repeat buyers to VA's current level and reducing FHA insurance coverage to a level higher than VA's—also increased the capital reserve ratio above the full insurance ratio but not by as much as the VA limitation on insurance coverage did. (See app. III for a more detailed discussion of these analyses.)

Our Approach to Forecasting FHA's Capital Reserve Ratio Under Partial Insurance Coverage

The actual impact of reducing FHA's insurance coverage on the economic value/reserves, the resulting capital ratio of loans insured by FHA in fiscal year 1995, and the validity of our estimates would depend on future economic conditions and on how lenders would respond to a reduction in FHA's insurance coverage. To estimate the financial impact on FHA from a reduction in insurance coverage, we prepared estimates of economic value and resulting capital ratios under three different economic scenarios—baseline, optimistic, and pessimistic—assuming a different rate of appreciation in house prices over the next 30 years for each economic scenario.

Although future rates of appreciation in house prices are uncertain, to be conservative in assessing the impact of reducing FHA's insurance coverage on the capital reserve ratio of FHA's Fund and to be consistent with past analyses that we have made of the actuarial condition of the Fund, we placed greater emphasis on our mid-range baseline economic scenario, which assumes slightly lower house price appreciation rates (1 percentage point annually) than the rates forecasted by DRI/McGraw-Hill, a private economic-forecasting company. Our optimistic and pessimistic economic scenarios assume that price appreciation rates for houses will be 2 percentage points higher or lower than those in our baseline. Our estimates of economic value and resulting capital ratios under reduced insurance coverage were compared with our estimates for these measures under full insurance coverage to determine if the Fund's financial health would be improved. Appendix II contains a detailed description of how we

estimated the decrease in the average loss rate per loan to be employed under partial FHA insurance coverage.

While our estimates of the impact of reducing FHA's insurance coverage on the Fund's capital reserves are based on the assumption that FHA's premium structure would not change, the financial improvement in the Fund resulting from a reduction in insurance coverage may result in a lowering of FHA's premium charged to borrowers. If that occurs, the reduced insurance premium may at least partially offset any increase in the Fund's capital reserves.

Because the financial outcome of the loans made by FHA in fiscal year 1995 is sensitive to the volume of loans made, our three economic scenarios included estimates that we made under three loan volume assumptions—no change in the volume of loans, a 28-percent reduction in volume as predicted by FHA lenders, and a midpoint reduction of 14 percent. Furthermore, because FHA's lender focus group did not discuss how higher-risk and lower-risk borrowers would be identified for exclusion from the program, we used two different assumptions regarding lenders' ability to screen-out borrowers under each loan volume reduction. Under one assumption, which we call "loose-targeting," lenders would tighten underwriting standards to a limited extent so that there would be some tendency for higher-risk borrowers to be denied loans. Under the other assumption "tight-targeting" we assume a stronger tendency for denials to be concentrated on higher-risk applicants. Appendix II describes in detail how we implemented those assumptions.

Our estimates of the financial impact of reducing FHA's insurance coverage to VA's levels under our baseline, optimistic, and pessimistic scenarios follow. We present our estimates for the alternative coverage reduction scenarios in appendix III.

Our Baseline Estimates of Increases in the Fund's Capital Ratio Attributable to Partial Insurance

As shown in table 3.1, all of our baseline estimates of capital reserve ratios for loans made by FHA in fiscal year 1995 under VA's level of insurance coverage are higher than our estimated ratio of 1.48 percent under full insurance coverage remaining in effect.³⁰ Increases in the capital reserve ratio above those resulting from full insurance coverage range from 0.41 to 0.51 percentage points under the volume reduction scenarios.³¹

³⁰The 2-percent capital reserve target, prescribed by legislation, applies to the entire portfolio of FHA insured loans in the MMI Fund. HUD does not have to meet the 2-percent requirement on a sub-group of loans insured in a single year. The initial capital reserve ratio for loans written in a single year can be lower than 2-percent, and the loans can still contribute to an improvement in the Fund's financial health. This is due to the fact that, while the economic value of a group of loans written in 1 year, if estimated accurately, will not change over time, the volume of loans outstanding (the denominator) will decline. Thus, over time, the capital ratio for loans written in any given year will increase. In our analysis, what determines whether loans written in a given year contribute more to the Fund's financial health is whether the estimated capital ratio is greater than it would be with FHA's full insurance coverage in place. This, in fact, is the case under all our scenarios and options.

³¹We used the full mortgage principal to calculate capital reserve ratios in this report to maintain consistency with estimates in our previous reports. However, if FHA were to cover less than 100 percent of the mortgage's balance, it would be possible to calculate a capital reserve ratio using the smaller insured portion of mortgage principal rather than the full mortgage principal as the denominator. If the capital reserve ratio were calculated using only the insured portion of the mortgage balance under partial insurance, the ratios would increase above those we estimate, as the denominator in the ratio calculation would be smaller.

Chapter 3
Reducing FHA's Insurance Coverage Would
Likely Improve the Financial Health of
FHA's Fund

Table 3.1: GAO's Estimates of the Impact of Reducing Insurance Coverage to VA's Levels on Loans Insured by FHA in Fiscal Year 1995, Under Base Case Economic Conditions

Dollars in millions

| Level of coverage | Volume reduction (percent) | Volume reduction technique | Dollar volume of loans | Estimated economic value | Initial capital ratio^a (percent) |
|------------------------------|-----------------------------------|-----------------------------------|-------------------------------|---------------------------------|--|
| Full insurance coverage | 0 | N/A | \$36,200 | \$536 | 1.48 |
| VA insurance coverage levels | 0 | N/A | 36,200 | 686 | 1.89 |
| | 14 | Loose targeting | 31,100 | 588 | 1.89 |
| | | Tight targeting | 31,700 | 615 | 1.94 |
| | 28 | Loose targeting | 26,400 | 507 | 1.92 |
| | | Tight targeting | 27,300 | 543 | 1.99 |

Legend

N/A = not applicable

^a"Initial Capital Ratio" refers to the economic value of the loans insured by FHA in 1995 as a percentage of the total original loan amounts for these loans.

Source: GAO's analysis.

Although our analysis indicates that reducing FHA's insurance coverage is likely to increase the Fund's capital reserve ratio, the impact on a key component of the ratio—the estimated economic value of the Fund—is less certain. This is because the effect of insurance coverage reductions on the economic value of the Fund depends largely on the way in which lenders would respond in excluding loans from FHA's insurance.

The size and nature of the reduction in the volume of the loans that would accompany a reduction in FHA's insurance coverage to VA's levels are important factors in determining the reduction's impact on the economic value and resulting capital ratio of FHA's 1995 loans. If insurance coverage on FHA's 1995 loans were reduced to VA's levels with no change in the volume of loans insured, the estimated economic value of the loans would be \$686 million—substantially greater than our estimate assuming no coverage reduction (\$536 million). This is because of the reduction in claim payments that would be expected from lowered insurance coverage.

However, FHA's lenders estimate that 28-percent fewer FHA-insured loans would be made each year if a partial insurance program like VA's were established for FHA. With a 28-percent volume reduction, we estimate that the economic value of FHA's 1995 loans would be in the range of \$507 million to \$543 million—not substantially different from the

\$536 million-estimated economic value of the 1995 loans if full insurance coverage remained in effect.³² The reduction in lending volume under less than full insurance coverage scenarios partially offsets the increase in economic value stemming from reduced claim payments, as some of the loans that would not be insured would have had positive expected cash flows.

Although a reduction in FHA's insurance coverage to VA's levels would cause some volume reduction, as noted earlier, we question whether the reduction would be as high as the FHA lender estimate of 28 percent. This is important because our analysis indicates that the smaller the reduction in the volume of FHA's loans, the higher the estimated economic value of FHA's loans. For example, assuming a 14-percent volume reduction, we estimate that the economic value of the FHA-insured loans made in 1995 would be in the range of \$588 million to \$615 million if the insurance coverage were reduced to VA's levels, compared with the \$507 million to \$543 million estimated economic value under a 28-percent reduction.

Our Estimates Under Other Economic Scenarios

If future price appreciation for houses is lower (pessimistic case scenario) than predicted under our base case scenario, reducing FHA's insurance coverage to VA's levels could have a much more positive effect on economic value and the resulting capital reserve ratio than on the capital reserve ratio in our baseline scenario. As shown in table 3.2, if a VA-like partial guarantee had been in place for FHA in fiscal year 1995, the estimated capital ratio and economic value of the loans made that year under our pessimistic case scenario would be much higher under partial insurance than they would be with full insurance coverage.³³ The effect of reduced coverage is larger under our pessimistic scenario because in that scenario, our model projects higher claims in future years so that limited coverage would save more claim payments.

³²Our estimated change in economic value varies by about \$30 million, depending on how precisely lenders can target tighter underwriting standards to high-risk borrowers. Lenders may target their loan rejections even more or less precisely than we have assumed in our analysis, which could lead to values outside our estimated range.

³³Under our optimistic scenario, the capital ratio increases from 1.98 percent to 2.31 percent, if reduced insurance coverage results in no reduction in the volume of loans.

Chapter 3
Reducing FHA's Insurance Coverage Would
Likely Improve the Financial Health of
FHA's Fund

Table 3.2: Estimates of the Impact of Reducing Insurance Coverage to VA's Levels on Loans Insured by FHA in Fiscal Year 1995, Under Pessimistic Economic Conditions

Dollars in millions

| Level of coverage | Volume reduction (percent) | Volume reduction technique | Dollar volume of loans | Estimated economic value | Initial capital ratio^a (percent) |
|------------------------------|-----------------------------------|-----------------------------------|-------------------------------|---------------------------------|--|
| Full insurance coverage | 0 | N/A | \$36,200 | \$245 | 0.68 |
| VA insurance coverage levels | 0 | N/A | 36,200 | 444 | 1.22 |
| | 14 | Loose targeting | 31,100 | 383 | 1.23 |
| | | Tight targeting | 31,700 | 406 | 1.28 |
| | 28 | Loose targeting | 26,400 | 336 | 1.27 |
| | | Tight targeting | 27,300 | 366 | 1.34 |

Legend

N/A = not applicable

^a"Initial Capital Ratio" refers to the estimated economic value of the loans insured by FHA in 1995 as a percentage of the total original loan amounts for these loans.

Source: GAO's analysis.

If the future price appreciation for houses is higher (optimistic case scenario) than predicted under our base case scenario, reducing FHA's insurance coverage to VA's levels could have a much smaller positive impact on the capital reserve ratio than in our baseline scenario as shown in table 3.3. The impact on economic value depends on the extent of the volume reduction accompanying the limitation in insurance coverage. If the reduction in lending volume is as large as 28 percent, the economic value declines below that resulting in our baseline scenario, while a 14-percent reduction in lending leads to a small increase in economic value. However, it is likely that higher house price appreciation rates would be associated with smaller reductions in lending volume because lenders' expected losses would be lower.

Chapter 3
Reducing FHA's Insurance Coverage Would
Likely Improve the Financial Health of
FHA's Fund

Table 3.3: Estimates of the Impact of Reducing Insurance Coverage to VA's Levels on Loans Insured by FHA in Fiscal Year 1995, Under Optimistic Economic Conditions

Dollars in millions

| Level of coverage | Volume reduction (percent) | Volume reduction technique | Dollar volume of loans | Estimated economic value | Initial capital ratio ^a (percent) |
|------------------------------|----------------------------|----------------------------|------------------------|--------------------------|--|
| Full insurance coverage | 0 | N/A | \$36,200 | \$717 | 1.98 |
| VA insurance coverage levels | 0 | N/A | 36,200 | 837 | 2.31 |
| | 14 | Loose targeting | 31,100 | 721 | 2.32 |
| | | Tight targeting | 31,700 | 747 | 2.36 |
| | 28 | Loose targeting | 26,400 | 623 | 2.36 |
| | | Tight targeting | 27,300 | 650 | 2.38 |

Legend

N/A = not applicable

^a"Initial Capital Ratio" refers to the estimated economic value of the loans insured by FHA in 1995 as a percentage of the total original loan amounts for these loans.

Source: GAO analysis.

Conclusions

If FHA's insurance coverage were reduced to VA's insurance coverage levels, FHA would be insuring better-quality loans with less loss exposure. As a result, FHA's capital reserve ratio would increase. While the Fund's financial health has improved and is projected to continue to improve at least in the near term, reducing FHA's insurance coverage would enhance the Fund's ability to maintain financial self-sufficiency in an uncertain future. Forecasting economic value and resulting capital ratios to determine whether FHA will have the funds it needs to cover its losses over the 30-year life of an FHA mortgage is uncertain. Loan performance and, therefore, capital ratios, will depend on a number of economic and other factors, particularly on the actual rate of appreciation in house prices over that period. This uncertainty was demonstrated during the 1980s when the Fund experienced substantial losses requiring legislative reforms to help improve its financial health.

However, reducing FHA's insurance coverage does pose trade-offs affecting lenders, borrowers, and FHA's role. Private lenders will likely react by raising interest rates and making fewer higher-risk FHA loans although not to the extent predicted by FHA's lenders. Borrowers most likely affected by such reactions by lenders would be low-income, first-time, and minority home buyers and those individuals purchasing older homes—the type of

households for which FHA has historically been the primary lender. While the denial of home loans for some of these borrowers may be temporary, posing delays until their income and/or savings have increased, for other borrowers it may mean losing their only opportunity to become home owners. Finally, partial FHA insurance could result in changes in the lending industry, particularly among smaller FHA lenders and diminish the federal role in stabilizing markets.

Agency Comments and Our Evaluation

HUD stated that our report used overly conservative assumptions concerning house price appreciation rates and that using more optimistic assumptions would show that limits on FHA insurance would reduce the economic value to FHA of originated loans. As pointed out in our report, estimates of economic value and changes in economic value are sensitive to the underlying assumptions used in the forecast of future economic conditions and are subject to uncertainty. We disagree with HUD's statement that our assumptions are overly conservative. Our choice of baseline economic conditions is consistent with our approach in previous reports and conservative in terms of assessing the impact of reducing FHA's insurance coverage on the capital reserve ratio of FHA's Fund. We also disagree with HUD's conclusion that economic value would be reduced by a limitation in insurance coverage under optimistic assumptions concerning house price appreciation. The direction of the change in economic value depends in large part on lenders' behavior, which is difficult to predict. This is true for both the baseline and optimistic scenarios that we analyzed. Using a higher rate of house price appreciation than that assumed in our baseline scenario, we find that economic value is reduced by \$67 million to \$94 million if loan volumes are reduced by 28 percent. However, we believe that optimistic economic conditions are likely to lead to smaller reductions in volume than would pessimistic conditions. Thus, the 28-percent volume reduction under optimistic conditions is even less likely than under the baseline. If the volume of loans is reduced by 14 percent under optimistic economic conditions, the economic value increases by \$4 million to \$30 million above that resulting under full insurance.

Reducing FHA's Insurance Coverage May Transfer Some Financial Losses to the Government National Mortgage Association

Ginnie Mae's full guaranty of the timely payment of principal and interest to investors in its securities was established through legislation that, unless changed, would remain in place no matter what level of insurance coverage is provided by FHA for the single-family loans it insures. Specifically, Ginnie Mae's securities would continue to maintain the U.S. government's full-faith-and-credit guaranty, and Ginnie Mae's ability to provide lenders of FHA and VA loans with liquidity (cash or assets readily convertible into cash) would not be impaired. However, because of this full guaranty, Ginnie Mae officials believe that reducing FHA's insurance coverage would result in transferring some of the losses that would have been incurred by FHA under full insurance to Ginnie Mae. The amount of such additional losses that may be incurred by Ginnie Mae, however, is not clear. The amount will depend on how successful lenders are in reducing their risk of loss and the likelihood of default if lenders make fewer higher-risk loans and charge higher interest rates.

Ginnie Mae's net revenues (after expenses) totaled \$515 million in fiscal year 1996. The major source of Ginnie Mae's revenues was interest from U.S. securities and fees collected from lenders to cover its costs and offset its future payments of claims under the guaranty. Ginnie Mae incurs losses when its approved issuers (mortgage bankers, savings institutions, and other financial intermediaries) default on their payments to investors in Ginnie Mae securities. In the past, losses to Ginnie Mae's issuers on partially insured VA loans was one of several factors contributing to issuers' defaults. How lenders respond to a reduction in FHA's insurance coverage will largely determine the financial impact on Ginnie Mae. If FHA's lenders react to a reduction in coverage by making fewer higher-risk loans and increasing mortgage interest rates, lenders' risk of loss and possible default may be reduced. Ginnie Mae's costs could rise or fall depending on how well lenders target the reduced volume of loans toward the highest-risk borrowers and the extent to which revenues from increased interest rates are adequate to cover these losses. On the other hand, any reduction in the volume of loans resulting from a reduction in FHA's insurance coverage would also result in a proportionate reduction in Ginnie Mae's guaranty fees and net revenues. Since a reduction in FHA's insurance coverage could result in FHA's not taking possession of a foreclosed property, Ginnie Mae would also see an increase in its mortgage and property holdings.

Reducing FHA's Insurance Coverage May Contribute to Some Issuers' Defaults and Resulting Losses for Ginnie Mae

When a Ginnie Mae issuer defaults in making timely payments of principal and interest to investors, Ginnie Mae makes the payments and takes over the issuer's entire portfolio of FHA and VA mortgage loans that stand behind securities that Ginnie Mae has guaranteed. When Ginnie Mae takes over such portfolios, it exposes itself to greater financial losses because it must manage these portfolios by (1) collecting principal and interest payments from borrowers, (2) making payments to owners of the securities, and (3) awarding servicing contracts to firms that manage the portfolios.

Ginnie Mae officials pointed out that VA's partial insurance coverage has contributed to increasing the likelihood that issuers will default. VA currently guarantees a portion of the loan for the mortgage against loss, and issuers are responsible for losses incurred above those guaranteed by VA. If the Congress directed FHA to move to a partial insurance program similar to VA's, the move would likely expose the entire Ginnie Mae portfolio of newly securitized loans to losses from this new risk, according to Ginnie Mae officials. Ginnie Mae officials believe that the likelihood of losses to issuers from no-bids would increase substantially, especially during periods of economic decline.

To estimate the financial impact from partial FHA insurance, Ginnie Mae directed its consultant, Price Waterhouse, to explicitly simulate the implementation of a partial insurance program for FHA similar to that currently used in VA's guaranty program.³⁴ In doing so, Price Waterhouse assumed, under economic conditions similar to those in our base case, a decline in FHA's annual loan volume of 28 percent on the basis of the consensus reached by FHA's lender focus group discussed earlier.

The results of the model showed that issuers' increased exposure to losses along with a decrease in guaranty fees resulting from a lower volume of loans would have a negative financial impact on Ginnie Mae. However, the model's results also indicated that Ginnie Mae would remain sound and that its ability to provide the U.S. housing market with liquidity would not be impaired. The severity of the financial impact on Ginnie Mae would be curtailed, however, as lenders' redistributed insurance activity away from the riskiest borrowers in order to minimize the impact of an FHA partial guaranty on the lenders' financial resources. Under normal economic conditions, Price Waterhouse estimated that Ginnie Mae's guaranty fee revenues would decline by approximately 10 percent, on average, primarily owing to the 28-percent reduction in the volume of loans

³⁴This model, which combines a series of econometric models with a financial model, is designed to enable Ginnie Mae's management to simulate the impacts of changes in a wide variety of economic, financial, policy, and programmatic variables on Ginnie Mae's financial condition.

projected by the industry focus group. As a result, Ginnie Mae's net revenues would decline by from 2 to 7 percent annually. In present-value terms, the cumulative decline in net revenues over the period 1997 through 2007 is estimated at \$287 million, or 6.5 percent. At the same time, however, the results show that advances against defaulted mortgage-backed security pools would show little change primarily because of the offsetting effect of the issuers' response.³⁵ Specifically, according to Price Waterhouse, Ginnie Mae's losses on defaulted mortgage pools are curtailed as lenders respond to the reduced insurance coverage by redirecting lending away from risky borrowers. According to the model's results, the most dramatic effect on Ginnie Mae would be on its holdings of mortgages and properties. Since a partial insurance program could allow FHA the option of not taking possession of a foreclosed property but instead leaving it with the lender, Ginnie Mae could see a dramatic increase in the property it acquires from defaulted lenders. Price Waterhouse estimated that Ginnie Mae would see a five-fold increase in the dollar volume of mortgages and property holdings because of partial FHA insurance coverage. The Price Waterhouse analysis also indicated, however, that Ginnie Mae would remain financially sound, even under a partial insurance coverage, as indicated by the fact that Ginnie Mae's U.S. Treasury holdings (reserves for future losses invested in U.S. Treasury securities) would continue to follow a smooth path upward. The study's results show that the implementation of partial insurance coverage results in only a small decline in Ginnie Mae's U.S. Treasury holdings, compared with such holdings under full FHA insurance coverage, primarily because of the decreased volume of loans. Since Ginnie Mae's reserves would continue to grow in relation to securities outstanding, Ginnie Mae's financial soundness and ability to provide the U.S. housing market with liquidity should not be impaired, according to the Price Waterhouse study.

While the estimated impacts reported above provide an indication of the potential financial impact on Ginnie Mae, it should be noted that a number of personal and financial variables can lead to defaults by issuers and subsequent losses for Ginnie Mae. We did not have the opportunity during this review to completely evaluate the reasonableness of Ginnie Mae's model or the assumptions behind the analysis. Although the results seem reasonable, we question some of the assumptions used. As noted in chapter 2, we question whether the lenders' reduction in loan volume will approach the 28-percent reduction assumed in the analysis. Similarly, while the analysis assumes that lenders will increase interest rates in

³⁵Advances against mortgage-backed security pools consist of principal and interest payments made by Ginnie Mae to security investors to make up for those payments not made by defaulted Ginnie Mae issuers.

response to a partial FHA insurance program, the fact that the increased interest revenue would reduce the likelihood of lenders' defaults was not incorporated into the model. Both of these factors would tend to lessen the financial impact on Ginnie Mae.

During the 1980s, VA's No-Bids Were One of Several Factors Leading to Issuers' Defaults

During the 1980s, Ginnie Mae, while remaining profitable, began to experience increased defaults by issuers that exposed it to greater financial losses. As pointed out in our June 1993 report, four factors contributed to weakening Ginnie Mae's issuers' financial health and increasing defaults.³⁶ Changes in VA's home loan guaranty program, which resulted in lenders' becoming responsible for losses above the VA guarantee, were among these factors. Other factors were economic distress and a resulting decline in regional real estate markets, a flawed FHA multifamily coinsurance program design, and issuers' mismanagement of funds. Of the four factors that contributed to increasing issuers' defaults, Ginnie Mae officials considered declining regional real estate markets to be the major factor.

When borrowers are unable to repay their mortgages, the issuers who pooled these mortgages become responsible for making payments to investors. If Ginnie Mae's issuers sustain losses brought on by events such as those discussed above, some issuers may be financially weakened, causing them also to default. In honoring its guaranties to investors and acquiring these issuers' portfolios of defaulted mortgages, Ginnie Mae replenishes funds in certain accounts and hires firms to temporarily administer the portfolios.

In 1984, the Congress enacted provisions of the Deficit Reduction Act to, among other things, reduce losses associated with foreclosures on VA's home loans. The act required VA, in deciding whether to pay the total VA guaranty on defaulted loans or acquire the property, to limit its estimated loss to the amount of the guaranty. In making its decision on whether to acquire a property, the act required VA to consider post-acquisition costs that were previously excluded from VA's decision. This increased the number of foreclosed properties for which expected losses exceeded the guaranty amount. After these provisions were implemented in 1985, the number of VA's no-bids increased substantially—rising from 6 percent of all VA foreclosures in 1984 to 21 percent in 1987. When VA leaves properties with issuers, the issuers are responsible for losses incurred above those

³⁶See Government National Mortgage Association: Greater Staffing Flexibility Needed to Improve Management (GAO/RCED-93-100, June 30, 1993).

guaranteed by VA. As issuers' resources are reduced by such losses, the probability that they will default increases. When issuers default, Ginnie Mae is responsible for the portion of the losses not guaranteed by VA.

The number of defaulted Ginnie Mae issuers rose from 5 in 1983 to a peak of 19 in 1989, declined back to 6 in 1992, and has averaged 4 per year since then. In total, Ginnie Mae acquired portfolios of defaulted mortgages valued at about \$20 billion from its issuers from fiscal year 1987 through fiscal 1996; over half of this amount, \$11.5 billion, occurred in 1989.

Ginnie Mae's Exposure to Losses Depends on How Lenders Respond to a Reduction in FHA's Insurance Coverage

The extent to which a reduction in FHA's insurance coverage will increase Ginnie Mae's exposure to financial losses depends on how lenders react. Annually, about 72 percent of Ginnie Mae's newly guaranteed securities are made up of almost 100-percent FHA-insured mortgages, and the remaining 35 percent is partially guaranteed against loss to the lender by VA. At present, only VA loans, with their partial guaranty, are candidates for a possible no-bid. Providing partial insurance coverage on FHA loans would expose the entire pool of newly securitized FHA loans to the possibility of a no-bid, thus increasing the lender's and Ginnie Mae's risk exposure.

However, as noted in chapter 2, FHA's lenders will most likely respond to this increase in risk by making fewer higher-risk loans and by increasing interest rates for mortgages. Making fewer higher-risk loans would reduce the likelihood of borrowers' defaults, thus reducing lenders' risk. According to Price Waterhouse's analysis, "the severity of the FHA partial guaranty's negative financial impact on Ginnie Mae would be curtailed by lenders' redistribution of insurance activity away from the riskiest borrowers." At the same time, increasing interest rates may produce the additional revenue needed to cover any increased losses resulting from a reduction in FHA's insurance coverage—a factor not considered in the Price Waterhouse analysis. Our analysis in appendix I shows that increasing interest rates by an extra one-quarter percent would produce enough revenue to lenders to cover losses even under adverse economic conditions, thus reducing substantially the likelihood that issuers would default.

Agency Comments and Our Evaluation

In commenting on a draft of this report, Ginnie Mae officials stated that the discussion of the impact on Ginnie Mae was not well supported by the analytical results from the memorandum that Ginnie Mae's contractor provided us with. In addition, they stated that we should have included the

Chapter 4
Reducing FHA's Insurance Coverage May
Transfer Some Financial Losses to the
Government National Mortgage Association

results of an “extreme economic stress” level test conducted by Price Waterhouse for Ginnie Mae—rates of house price depreciation greater than those experienced during the Great Depression of 1929-33.

While Ginnie Mae’s contractor provided us with considerable quantitative material, we limited our discussion in this report to the material contained in the contractor’s memorandum that best summarized the impact on Ginnie Mae from a reduction in FHA’s insurance coverage. As such, we believe that the information contained in this report accurately summarizes and reflects the results contained in the memorandum from Ginnie Mae’s contractor. We chose not to include Ginnie Mae’s extreme economic stress scenario because (1) it is very unlikely that such a severe event would occur and (2) if it were to occur, the impacts would be so severe for FHA’s lenders (under either full or partial insurance coverage) that we question the usefulness of the forecasts, especially since such an economic event is far more severe than any recent historical conditions encountered.

Ginnie Mae also provided suggested clarifications to the report that we have incorporated where appropriate.

Description of Interest Rate Change Analyses

Chapter 2 described the potential lender responses and impacts on potential borrowers of a reduction in the Federal Housing Administration's (FHA) insurance coverage. This appendix provides a detailed description of the analyses we conducted of potential interest rate changes resulting from a reduction in FHA's insurance coverage. Appendix II describes our analysis of impacts on potential borrowers.

Interest Rate Changes Resulting From a Reduction in FHA's Insurance Coverage

We determined that lenders would be unlikely to increase interest rates by as much as the lender focus group convened by the Department of Housing and Urban Development (HUD) estimated. The focus group estimated that lenders would raise interest rates on FHA-insured loans by one-quarter to one-half of a percent to cover the losses they would become responsible for if FHA reduced its insurance coverage. As shown in table I.1, an increase of one-quarter of a percent would produce enough revenue to lenders to cover losses, even under adverse economic conditions. The adverse conditions we examined are based on foreclosure rates and balances of loans originated in fiscal year 1981, which had the highest rate of foreclosure of any year in the last 20, and a rapid rate of prepayment. The highest loss rate for any origination year was 45 percent for loans originated in fiscal year 1982. Our analysis of loans originated in that year indicates that lenders' losses would have been 7.7 percent, if a partial guarantee had been in place. The rate of losses to lenders used in the following analysis is 9 percent, which is higher than the 7.7-percent losses that we estimate lenders would have experienced for 1982 loans.

Appendix I
Description of Interest Rate Change
Analyses

Table I.1: Estimated Net Revenue to Lenders If They Had Increased Interest Rates by One-Quarter of a Percent in Response to an Insurance Coverage Reduction for FHA's 1981 Loans

| Year | As percentage of all 1981 originations | | | | Per \$1 million in originations | |
|-----------------------------|--|-------------------|--------------------|---------------------|------------------------------------|-----------------------------|
| | Loans resulting in claims | Loans that prepay | Loans still active | Remaining principal | Extra losses resulting from claims | Extra interest rate revenue |
| 1981 | 0.10 | 0.17 | 100.00 | 100.00 | \$95 | \$ 2,493 |
| 1982 | 1.59 | 0.42 | 99.73 | 99.67 | 1,494 | 2,435 |
| 1983 | 3.50 | 6.93 | 97.73 | 99.31 | 3,283 | 2,167 |
| 1984 | 2.88 | 4.15 | 87.30 | 98.89 | 2,692 | 1,984 |
| 1985 | 2.72 | 4.83 | 80.27 | 98.42 | 2,531 | 1,789 |
| 1986 | 2.33 | 14.08 | 72.72 | 97.88 | 2,159 | 1,378 |
| 1987 | 2.18 | 12.13 | 56.30 | 97.28 | 2,008 | 1,021 |
| 1988 | 1.84 | 4.10 | 41.99 | 96.59 | 1,679 | 870 |
| 1989 | 1.17 | 2.61 | 36.05 | 95.81 | 1,057 | 773 |
| 1990 | 0.83 | 2.28 | 32.27 | 94.93 | 741 | 692 |
| 1991 | 0.60 | 2.13 | 29.16 | 93.94 | 533 | 621 |
| 1992 | 0.45 | 2.91 | 26.43 | 92.81 | 399 | 535 |
| 1993 | 0.34 | 2.94 | 23.07 | 91.53 | 297 | 453 |
| 1994 | 0.26 | 2.62 | 19.78 | 90.08 | 224 | 381 |
| 1995 | 0.21 | 1.03 | 16.91 | 88.44 | 174 | 347 |
| Present value of cash flows | | | | | (\$9,901) | \$10,105 |
| Net revenue | | | | | | \$204 |

Source: GAO's analysis of data from Price Waterhouse's MMI Fund analysis for fiscal year 1995.

The first column in table I.1 shows the policy year, ranging from the 1st to the 15th year of a group of mortgages totaling \$1 million in unpaid principal at the time the loans were made. The second, third, and fourth columns show the fraction of loans that terminate in claims and prepayments and the fraction of remaining loans at the end of each year. We calculated these columns from data in Price Waterhouse's 1995 Actuarial Study and refer to FHA mortgages made in fiscal year 1981. The next column shows the reduction in principal from amortization on the standard 30-year fixed-rate mortgages calculated at an interest rate of 13.24 percent (the average rate on 30-year, fixed-rate FHA mortgages in 1981). The losses to lenders from a limitation on FHA's insurance coverage, per \$1 million of loan originations, would equal the following: \$1 million in originations times the percent of the original balance remaining each year after amortization; times the fraction of loans terminating in a claim in

Appendix I
Description of Interest Rate Change
Analyses

each year; times 1.05, the ratio of acquisition costs to the outstanding loan balance; times the 9-percent loss rate assumed for this analysis. The last column shows the extra revenue that would accrue to lenders from charging an extra one-quarter of a percent per year, calculated as one-quarter of a percent times the remaining mortgage balance. We show the present value of the additional claim costs and additional interest revenue at the bottom of the table (using 13.24 percent as the discount rate). The difference in present values demonstrates that the additional revenues generated by an interest rate increase of one-quarter would have been more than sufficient to cover the additional claim costs resulting from a limit in FHA insurance, even under the highly adverse circumstances of fiscal year 1981 and a 9- percent loss rate to lenders.

Loss Rate Estimates and Volume-Reduction Scenarios

This appendix provides a detailed description of our analysis of FHA's loss rates. We first describe the regression analysis that we conducted to determine which financial and demographic variables are associated with higher loss rates. We then describe our methodology for targeting loans with high loss rates for volume-reduction scenarios.

Impact of Characteristics of Borrowers, Loans, and Properties on Loss Rates

To determine what types of households would be most affected by a reduction in FHA's insurance coverage, we analyzed FHA's data on foreclosed properties acquired and sold by FHA during fiscal years 1992-94. We gathered and linked data from three FHA databases—the Single-Family Accounting Management System (SAMS, for data on foreclosed properties), A43 (for accounting data), and F42 (for demographics on borrowers). Using these data, we analyzed the effects of several variables on losses. We conducted regression analyses using two dependent variables—the total loss rate and the loss to the lender. The total loss rate was defined as the loss (or profit) on a foreclosed property divided by the acquisition cost (the claim paid by FHA plus any extra legal or other costs incurred by FHA for acquisition of the property). The loss to the lender was defined as any loss in excess of the amount that would be covered at the Department of Veterans Affairs' (VA) guarantee limits.

We found that certain variables had consistent and significant associations with losses that lenders would sustain, as shown in tables II.1 and II.2. Other things equal, loans on buildings with multiple living units, loans to minority borrowers, loans written at higher interest rates, loans for older properties, and smaller loans had higher loss rates.³⁷

The results in table II.1 are based on a merger of three HUD files, including the F42 database, which represents a sample of loans. The results in table II.2 use data from HUD's A43 database only, which is a population of mortgages originated.

³⁷Income and loan size were adjusted to 1995 constant dollars.

Appendix II
Loss Rate Estimates and Volume-Reduction
Scenarios

Table II.1: Impact of Characteristics of Borrowers, Loans, and Properties on Loss Rates

| Variable | Total loss rate | | Lenders' loss rate | |
|-----------------------------------|-----------------|---------------------------|--------------------|---------------------------|
| | Coefficient | Significance ^a | Coefficient | Significance ^a |
| Income and loan size in thousands | | | | |
| Intercept | 0.1126 | | -0.1608 | |
| Black | 0.0878 | ** | 0.0643 | ** |
| Hispanic | 0.0332 | ** | 0.0257 | ** |
| Native American | 0.0416 | | 0.0252 | |
| Asian and Pacific Island | 0.0023 | | 0.0082 | |
| Unknown race | 0.0517 | ** | 0.0597 | ** |
| Female | 0.0060 | | 0.0055 | * |
| Borrower age | -0.0000 | | 0.0002 | |
| Multiple living units | 0.1809 | ** | 0.1743 | ** |
| Income | -0.0000 | | -0.0000 | |
| First-time-buyer | 0.0066 | * | 0.0036 | |
| Interest rate | 0.0339 | ** | 0.0197 | ** |
| Loan size | -0.0020 | ** | -0.0003 | ** |
| Loan-to-value | 0.0078 | | 0.0011 | |
| No appraisal | -0.0040 | | -0.0088 | |
| Building age | 0.0030 | ** | 0.0021 | ** |
| R-squared | | 0.244 | | 0.216 |
| Observations | | | | 19,974 |

^aTwo asterisks indicate significance at the 99-percent confidence level, and one asterisk indicates significance at the 90-percent level.

Source: GAO's analysis of HUD's data.

Appendix II
Loss Rate Estimates and Volume-Reduction
Scenarios

Table II.2: Impact of Selected Characteristics of Borrowers, Loans, and Properties on Loss Rates

| Variable | Total loss rate | | Lenders' loss rate | |
|--------------------------|-----------------|---------------------------|--------------------|---------------------------|
| | Coefficient | Significance ^a | Coefficient | Significance ^a |
| Intercept | 0.6608 | | 0.1927 | |
| Black | 0.1049 | ** | 0.0812 | ** |
| Hispanic | 0.0450 | ** | 0.0341 | ** |
| Native American | 0.0436 | ** | 0.0407 | ** |
| Asian and Pacific Island | 0.0027 | | 0.0085 | |
| Unknown race | 0.0290 | ** | 0.0182 | ** |
| Multiple living units | 0.3067 | ** | 0.2536 | ** |
| Loan size | -0.0036 | ** | -0.0014 | ** |
| Loan-to-value | 0.0097 | ** | 0.0048 | ** |
| No appraisal | -0.0094 | * | 0.0021 | |
| R-squared | | 0.154 | | 0.106 |
| Observations | | | | 118,529 |

^aTwo asterisks indicate significance at the 99-percent confidence level, and one asterisk indicates significance at the 90-percent level.

Source: GAO's analysis of HUD's data.

Determination of Loss Rates and Volume-Reduction Scenarios

To estimate the impact of a reduction in FHA's insurance coverage to VA's levels on the economic value and resulting capital reserve ratio of FHA-insured loans, we adjusted the econometric model of FHA's home loans developed previously.³⁸ We made two adjustments to reflect the estimated decrease in the average loss rate per loan and the reduction in the volume of FHA loans that are likely from an insurance coverage reduction.

We applied VA's guaranty limits to the losses experienced on FHA loans during fiscal years 1992-94 and determined what portion of the losses would have been paid by FHA and what portion would have been borne by the lender if VA limits had been in effect for those loans. We estimated that lowering FHA's insurance coverage on these foreclosed loans would have lowered FHA's average loss rate by 17 percent (from 36 to 30 percent) and losses by about \$780 million over the 3-year period.

³⁸See *Mortgage Financing: FHA Has Achieved Its Home Mortgage Capital Reserve Target* (GAO/RCED-96-50, Apr. 12, 1996).

Regarding the adjustments that we made to our model to reflect reductions in FHA's loan volume, FHA's lender focus group indicated that FHA's loan volume would be reduced by 28 percent—18 percent because of higher costs and tighter underwriting standards targeted at higher-risk borrowers plus 10 percent because higher FHA costs would cause lower-risk borrowers to obtain lower-cost private mortgage insurance. However, the lender focus groups did not discuss how these changes would be implemented or how higher- and lower-risk borrowers would be identified. Hence, we estimated our loan volume reduction scenarios using two different assumptions regarding (1) lenders' ability to screen out higher-risk borrowers and (2) which lower-risk borrowers would seek private insurance. Under what we call the "loose-targeting" scenario, we assumed that lenders would tighten underwriting standards to a limited extent so that there was some tendency for higher-risk borrowers to be denied loans. Under our "tight-targeting" scenario, we assumed a stronger tendency for denials to be concentrated among higher-risk applicants. Under both scenarios, we assumed that lenders would screen out loans to properties with two to four living units, as these loans have high foreclosure and loss rates. These loans constituted 4 percent of the loans insured by FHA in fiscal year 1995. For the remaining loans, our loose-targeting scenario assumed that a further 14 percent of FHA's fiscal year 1995 insured loans would be screened out by tighter underwriting standards. The loans excluded would be loans written at loan-to-value (LTV) ratios of 95 percent or above and would be spread randomly through the lower half of the loan size distribution, as small loans have higher foreclosure and loss rates. Under tight targeting, we assumed that the smallest 14 percent of the loans with 95 percent or higher LTV ratios would not be insured.

We then eliminated 10 percent of fiscal year 1995's insured loans to account for lower-risk borrowers who may seek private insurance rather than FHA insurance because of costs. These loans were taken from the population of loans originated with LTV ratios of less than 95 percent, selected randomly from the top half of the size distribution.

While we chose to focus on the LTV, loan's size, and number of units in a property as our determinants of risk, lenders could use a variety of approaches to target FHA-insured loans away from borrowers associated with greater risks of loss. Our analysis of FHA's data on loan losses, as discussed above, indicates that in addition to the loan's size, its LTV ratio, and the number of units in the property, the age of the property, race of the borrower, and interest rate on the mortgage are associated with higher

Appendix II
Loss Rate Estimates and Volume-Reduction
Scenarios

foreclosure and/or loss rates on mortgages. However, while lenders may know the age of the property before making a loan, FHA's A43 database does not record the age of the property, so we could not use this variable to eliminate loans. We did not choose loans for volume reduction on the basis of the borrower's race.³⁹ Lastly, interest rates are driven largely by macroeconomic factors. For these reasons, we focused on the loan's size, the LTV ratio, and the number of units in the property to determine which loans carried the most risk and should be excluded from reduced-volume scenarios. Lenders could use additional variables to target risk even more closely.

³⁹Legislation prohibits discrimination based on race. Some analysts maintain that, though illegal, some lending decisions are influenced by race. The extent to which this happens is a subject of controversy and beyond the scope of this report.

Other Approaches Would Result in More Modest Changes to the Fund's Capital Ratio

While chapter 3 focused primarily on the financial impact on FHA's capital reserves of imposing insurance coverage limitations similar to those used in VA's loan guarantee program, we also estimated the impact of implementing two alternative methods of reducing FHA's insurance coverage. The primary objectives of the proposals we reviewed are to reduce FHA's liability while attempting to provide a higher level of coverage for those current FHA customers who may be underserved by the conventional market, such as first-time home buyers and borrowers with low and moderate incomes. Specifically, we estimated the impact of reducing FHA's insurance coverage to VA's levels for all repeat buyers while retaining FHA's existing 100-percent coverage for first-time home buyers. We also estimated the impact of imposing a graduated coverage schedule like VA's, adjusted to provide slightly higher coverage levels for loans of low and moderate size—60-percent coverage for the lowest loan amounts, declining to 30 percent for high loan amounts.

While, according to our analysis, these proposals had less of an impact than using VA's coverage levels on the estimated economic value of the Fund compared with the current full insurance policy, they do increase FHA's capital reserve ratio. For the first-time home buyer alternative, we estimated the economic value and the capital reserve ratio under the assumptions that there would be no reduction in the volume of loans and that the volume of loans for repeat home buyers would be reduced by 14 percent, while insurance coverage would remain unchanged for first-time buyers.⁴⁰ We estimate that this would increase economic value by \$96 million to \$118 million over our baseline's full-insurance estimate and increase the capital reserve ratio by about 0.3 percent.

Since loans of lower dollar amount have higher losses, we also examined the alternative of imposing insurance coverage limits that are similar to VA's but with slightly higher coverage levels for lower loan amounts. Specifically, insurance coverage was set at 5 percentage points higher than VA's for loans from \$90,000 to \$144,000 and the same as VA's for loans above \$144,000. For loans less than \$90,000, the insurance coverage was set 10 percentage points higher. We produced estimates assuming no reduction in loan volume and a 14-percent reduction in the volume of loans. Under these scenarios, we estimate an increase in economic value above our baseline's full insurance coverage scenario of \$90 million if loan volumes are not reduced but estimate an increase in economic value of \$9 million to \$20 million if loan volumes are reduced 14 percent. Capital

⁴⁰Because less risk is transferred to lenders under this and the following alternative, we reasoned that any reduction in the volume of loans would be less than that indicated by FHA's lender focus group.

**Appendix III
Other Approaches Would Result in More
Modest Changes to the Fund's Capital Ratio**

reserve ratios increase by about one-quarter of a percent. Our estimates under these two alternatives are shown in table III.1.

Table III.1: Estimates of the Impact of Alternative Insurance Coverage Reduction Approaches on Loans Insured by FHA in Fiscal Year 1995, Under Base Case Economic Conditions

Dollars in millions

| Insurance coverage | Volume reduction (percent) | Volume reduction technique | Dollar volume of loans | Estimated economic value | Initial capital ratio^a (percent) |
|---|-----------------------------------|-----------------------------------|-------------------------------|---------------------------------|--|
| Full insurance coverage | 0 | N/A | \$36,200 | \$536 | 1.48 |
| Retain full insurance coverage for first-time home buyers | 0 | N/A | 36,200 | 654 | 1.80 |
| | 14 | Loose targeting | 35,200 | 632 | 1.81 |
| | | Tight targeting | 35,000 | 639 | 1.82 |
| Reduce insurance coverage to levels higher than VA's | 0 | N/A | 36,200 | 626 | 1.73 |
| | 14 | Loose targeting | 31,100 | 545 | 1.75 |
| | | Tight targeting | 31,700 | 556 | 1.76 |

Legend

N/A = not applicable

^a"Initial Capital Ratio" refers to the economic value of the loans insured by FHA in 1995 as a percentage of the total original loan amounts for these loans.

Source: GAO's analysis.

Comments From the Department of Housing and Urban Development

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



U. S. Department of Housing and Urban Development
Washington, D.C. 20410-8000
April 4, 1997

OFFICE OF THE ASSISTANT SECRETARY
FOR HOUSING-FEDERAL HOUSING COMMISSIONER

Ms. Judy A. England-Joseph
Director, Housing and Community
Development Issues
U.S. General Accounting Office
Washington, D.C. 20548

Dear Ms. England-Joseph:

I am enclosing the comments of the Federal Housing Administration (FHA) on your proposed report entitled Homeownership: Potential Effects of Reducing FHA's Insurance Coverage for Home Mortgages.

The comments were developed by HUD's Office of Policy Development and Research and Office of Housing, and include some analysis by FHA's contractor, Price Waterhouse.

Thank you for the opportunity to review and comment upon this report. I believe the staff discussions on the draft were productive and useful.

Sincerely,

A handwritten signature in black ink, appearing to read "Sarah Rosen".

Sarah Rosen
Deputy Assistant Secretary
for Operations

Enclosure

HUD COMMENTS ON THE GAO REPORT

"Potential Effects of Reducing FHA's Insurance Coverage for Home Mortgages"

See comment 1.

The report indicates that its purpose is to analyze the potential impacts of a switch from full FHA insurance at 100% of the mortgage debt to partial insurance on lenders, the mortgage market, borrowers, the FHA Fund, and Ginnie Mae. However, the report fails to provide market context and fails to examine and compare the roles of FHA in relation to those of other mortgage market institutions. Such an examination would illuminate the particular role proposed for transfer to private counterparts and whether any private counterparts now exist or what practical impediments would have to be overcome to establish lower cost viable private counterparts.

The Department believes that shifting to partial FHA insurance would eliminate the catastrophic feature of FHA insurance making lenders liable for market-wide collateral property risk (as opposed to borrower credit risk). This risk is least predictable and most difficult for the private market to assume and diversify for. It is equally clear that no private counterpart exists currently (outside of the small VA program which is integrally tied to the FHA full insurance program). In the conventional market, the GSEs absorb the catastrophic risk in exchange for guarantee fees paid by lenders or to a declining degree federally supervised depositories with deposit insurance absorb the catastrophic risk. Therefore, there is no current private model from which to gauge lender and market reaction or its resulting impact on borrowers and the FHA fund. Past experience with regional downturns shows that catastrophic collateral losses can quickly overwhelm the resources of privately capitalized entities such as PMIs and the S & L depositories suggesting that Ginnie Mae and the Federal government (and ultimately the taxpayer) could still bear significant contingent liability.

HUD believes the GAO report overstates the ability of the private sector to accept the transfer of risk and understates the increase in price and rationing that will occur. In addition, inadequate attention is given to the potential for withdrawal of FHA from the marketplace in times of economic downturn under a partial insurance model. Finally, the Department believes partial insurance will decrease substantially the access of underserved borrowers and markets to mortgage credit.

**HUD Comments on GAO Draft Report:
"Potential Effects of Reducing FHA's Insurance Coverage
for Home Mortgages"**

See comment 2.

- o **The report must emphasize that analysis about the effect of reducing FHA insurance coverage is subject to sensitive assumptions about economic conditions. The Department's analysis shows a loss of economic value in the Mutual Mortgage Insurance Fund as a result of the reduction in coverage and volume.**

The Department believes, based upon its analysis, that the change to FHA insurance coverage will reduce the economic value of the Mutual Mortgage Insurance Fund. This is true for two levels of estimated volume reduction in FHA business. The GAO report estimates a positive effect. HUD and GAO have discussed methodology. The conclusions reflect different assumptions built into the analyses, with one key difference overly conservative assumptions about house price appreciation used by GAO.

Economic Value

The no-bid option essentially establishes a maximum amount of loss that FHA must pay that, in some cases, is lower than the amount of loss payable under current law. Thus, the Fund would be benefited by the reduction in the amount of losses paid as a result of the no-bid option. However, this risk of loss that FHA would not take is passed on to the lender. It is not clear exactly how lenders would react, but it is clear that these reactions would include a reduction in its lending volume. This reduction in mortgage origination would occur for two reasons. First, lenders will restrict credit due to the higher risk. Second, as the lenders increase interest rates on home mortgages to attempt to compensate for the increased risk, borrowers will drop out of the market due to these higher interest rates. The resulting lower mortgage originations will reduce the premiums collected by FHA. The effect of an FHA partial insurance on the economic value of the MMI Fund would be the net of these two separate counteracting effects - the increase in economic value due to lower loss payments against the decrease in economic value due to lower mortgage originations.

The GAO and FHA/Price Waterhouse estimates of the benefit of lower loss payments are quite similar. These estimates can be based on relatively good data, and the amount of benefit relies more on a rules-based decision (the no-bid decision) than on behavioral reactions of market participants. In contrast, the cost due to lower mortgage originations is much more

difficult to estimate, as it is the result of complex market behavior. Small differences in basic assumptions in both the GAO and FHA/Price Waterhouse models make large differences in the result. In fact, both analyses show that a change of as little as one percentage point in the predicted house price growth rate can make the difference between the estimated effect of the proposal on economic value being negative versus positive. Given this level of sensitivity to underlying assumptions that cannot be accurately predicted, we believe it is only prudent to clearly indicate that the effect of the proposal on economic value could quite possibly be negative.

Covering Expected Loss versus Volatility

GAO appropriately points out that the effect of partial insurance on FHA origination volume is unclear and very difficult to predict. They then perform analysis from which they conclude that the 28% reduction in FHA originations estimated by the lender focus group assembled by FHA is too large. This conclusion is based to a large degree on GAO analysis indicating that a 25 basis point increase in the interest rate would adequately cover the additional losses lenders would suffer, even for a book of business as bad as the 1981 book. GAO concludes that, if lenders can cover their additional expected losses, then they will have no incentive to reduce their originations. This conclusion ignores the fact that lenders make decisions based both on expected returns and on the volatility of those returns. A partial insurance program would increase both the expected losses and the volatility of those losses. Even if lenders can cover the higher expected losses with higher interest rates, they will still have an incentive to tighten underwriting standards (reducing originations) to reduce the volatility of losses. This is very clearly demonstrated in the case of high LTV loans, where lenders will not make such a loan (without mortgage insurance). Even though they could charge an interest rate high enough to cover the expected losses, lenders will still not make these loans because the risk (the volatility of losses) is too great. This was the reason for the creation of FHA insurance in the first place.

- o **The report should contain a chapter articulating the policy framework for considering such a change.**

The GAO report does not examine the magnitude of the policy choice presented. The proposal examined by the report would shift significant risk from the government to the private sector (lenders and the secondary

See comment 3.

See comment 4.

Appendix IV
Comments From the Department of Housing
and Urban Development

market), in exactly the opposite manner in which each sector now accommodates risk. The report must place the proposal itself in context by raising substantive issues such as:

--Has this level of risk distribution occurred before?

--Is there any current model for this risk distribution in the housing sector?

--What is the capacity of the private sector to assume increased risk based upon past experience and current practices?

See comment 5.

- o **The report's reliance on the VA experience (including the no-bid procedure) as an analogue to partial FHA insurance is inappropriate and possibly underestimates lender defections from the FHA program.**

-- The VA program has always been a partial guarantee so there is no experience with eliminating catastrophic coverage by moving from a full guaranty to a partial guarantee.

-- The VA program is a very limited benefit program serving a different borrower clientele (generally, concentrated geographically, with stable employment, averaging higher income, and subject to military discipline) than is true for FHA. A characteristic profile comparison of borrowers and geographic coverage in the two programs would show how noncomparable the two programs are.

See comment 6.

- o **Partial FHA insurance would eliminate the catastrophic feature of FHA insurance and place this risk on private lenders. However, in actuality, such a policy would all but eliminate FHA, which is well equipped to deal with such risk through national diversification and low cost of capital, while the risk would remain with the government and the taxpayer.**

-- Ending catastrophic coverage will not end catastrophic risk and costs unless lenders are very good at predicting the location of future recessions where the collateral home values will likely fall by more than the partial insurance guaranty. This is not a borrower credit issue, it is a marketwide economic stabilization issue.

-- While the report does indicate that loss rates are higher for smaller loans and older homes, it does not show how they are geographically distributed. It would be useful to know whether the higher loss ratios are geographically concentrated where

Appendix IV
Comments From the Department of Housing
and Urban Development

economic downturns have been experienced, which would be consistent with the proposition advanced above.

- FHA was specifically designed with 100 percent catastrophic coverage to give lenders and investors the confidence they needed to extend credit (loans) to borrowers of modest means for longer terms extending beyond the predictable economic horizon.
- The report appears to assume that conventional lenders using PMI bear catastrophic risk of loss. Not so. These lenders pay Fannie Mae and Freddie Mac guarantee fees to assume that risk and the GSEs diversify the risk across the entire nation, not the local area where the lender is operating. Only conventional portfolio lenders self insure and portfolio lending is becoming increasingly unattractive in the wake of secondary market securitization.
- The principal point is that one cannot eliminate catastrophic risk and cost by shifting the burden for the losses to lenders. All that will occur is that loan rates will rise by substantially more than the potential savings to FHA, and in the end when catastrophic losses occur, lenders will likely be overwhelmed, default, and shift the losses to GNMA.

- o **The report does not contain an adequate discussion of lenders' capital requirements.**

The drop in origination volume from the partial insurance proposal could be significant based on what FHA learned from recent negotiations on single-family risk sharing pilots. The partial insurance proposal is, in effect, a form of risk sharing with FHA lenders.

FHA's 1996 risk sharing negotiations took place with private MI companies, not lenders. No agreements have been finalized. However, what FHA learned from the MI negotiations may reflect on how lenders would view partial insurance.

During the negotiations, it became clear that MIs do not want to assume catastrophic risk on any loan -- particularly high risk FHA-type loans. If the MIs' risk exposure were to extend to the entire UPB of the loan, they would be required by their regulators to hold capital against the amount of UPB "at risk" of loss. Under traditional MI coverage which is limited to the top 25 to 35 percent of UBP, the capital

See comment 7.

Appendix IV
Comments From the Department of Housing
and Urban Development

requirement is based on a smaller at-risk portion of UPB.

Even if the MIs' regulators didn't require more capital on loans where they assume catastrophic risk, their shareholders probably would. Too little capital held against a risky portfolio places the insurer at higher risk of insolvency. Shareholders would incur considerable loss from an MI insolvency.

Based on their cost of capital, the MIs argued that it would not be economically feasible for them to assume catastrophic risk on loans under an FHA risk-share pilot. They argued that a more efficient use of their capital would be for the FHA to assume the catastrophic risk.

The partial insurance scheme which GAO reviewed places catastrophic risk on FHA lenders. About 20 percent of FHA lenders are regulated lenders (banks and thrifts); the rest are non-regulated lenders (mortgage banks). For regulated FHA lenders it is very likely that their regulators (i.e., OTS, OCC) would require additional risk-based capital to be held on partially-insured government-backed loans vis-a-vis fully-insured government-backed loans. (For example, a regulated FHA lender may issue GNMA mortgage backed securities. The regulators may give greater risk weight to the off-balance-sheet liability the GNMA issuer retains if the liability includes credit risk from partially insured mortgages).

For non-regulated lenders (mortgage banks), the assumption of catastrophic risk is likely to increase the amount of capital they need to offset increased risk of insolvency. The need for additional capital would be a prudent business decision. It may also be required by the lenders which provide mortgage banks with their warehousing lines of credit.

As with the MIs, the cost of capital for lenders may make it infeasible for them to write loans in which they retain catastrophic risk. This is particularly the case since FHA loans are generally riskier than conventional loans. GAO should not dismiss the Price Waterhouse estimate of a 28 percent reduction in FHA loan volume from this partial insurance proposal without at least some discussion of the impact of the proposal on lenders' capital requirements.

- o **The discussion underestimates the risks of FHA loans.**

Page 35 suggests that "66 percent of the loans insured by FHA in 1995 would probably not have qualified for

See comment 8.

Appendix IV
Comments From the Department of Housing
and Urban Development

private mortgage insurance." This statement is based on the assumption that only FHA loans with LTV over 97 percent or front- and back-end payment-to-income ratios of more than 33/38 percent would fail to qualify for private MI coverage. GAO should also consider that FHA accepts borrowers with credit blemishes who would be rejected by conventional lenders. FHA also accepts borrowers with multiple high-risk factors where the PMIs often do not. The higher risk profile of FHA borrowers is understated by GAO, further undermining GAO's conclusion that the reduction in FHA volume from partial insurance may not be as great as Price Waterhouse has suggested.

See comment 9.

- o **It is unreasonable to reduce FHA coverage without reducing the premium charge.**

Both the GAO report and the FHA/PW analysis assume FHA's premium rate will stay the same after the reduction in insurance coverage. This may be reasonable for the GI Fund condominium program which has a lower premium structure, but would likely be viewed as unfair for the MMI Fund programs which already generate substantial economic value for the Fund. Specifically, the FY 1996 book of MMI Fund business is projected to have a positive economic value of \$1.38 billion on \$59 billion insurance written according to the 1996 Price Waterhouse actuarial report. This equates to a capital ratio of 2.33 for the 1996 book. How could FHA justify a significant reduction in insurance coverage without a reduction in the premium rate for MMI Fund programs?

It is unlikely that, in addition to the full premium charge now collected that prospective mortgagors, both the underserved as well as the relatively higher income buyers would be willing to pay extra costs (25-50 basis points) to secure financing through FHA. Because the less risky borrowers will have other conventional options, the potential loss of their business because of pricing problems will exacerbate volume reductions.

See comment 10.

- o **The report does not point out the potential loss of FHA as a countercyclical force in the market.**

The report recognizes the fact that FHA serves proportionally more first time, minority and inner city homebuyers than do conventional lenders, and that the loss of this role could constitute redlining in some urban neighborhoods. However, the report does not recognize the countercyclical function of FHA.

One key role of FHA is to maintain a presence in the market during times of economic hardship. In other

Appendix IV
Comments From the Department of Housing
and Urban Development

words, private lenders and insurers are free to leave markets or to reduce their presence in markets when economic conditions or business judgements warrant this. Mortgage credit can become scarce in these situations, exacerbating the economic circumstances.¹ FHA is designed to be present in all markets throughout the country at all times. In effect, as economic conditions worsen at the local or regional level, the value of FHA full insurance increases, and FHA is relied on to provide financing where purely private financing is unavailable.

An excellent example is the experience of FHA and VA in the mining and oil belts of the mid 1980's.² At that time, as regional recessions hit these areas hard, and private mortgage insurers reduced their activity significantly. More to the point, partial insurance offered by VA decreased while the full insurance option of FHA increased. To the extent that the full insurance option is removed, the result will be to punish local markets in downturns.

¹ There may be an adverse impact upon existing homeowners to the extent that there is a reduction in the availability of mortgage credit for turnover of housing. Owners who could not find buyers may experience increased defaults.

² See 1995 data, attached.

Mortgage Insurance Data On Oil Patch States

FHA-Housing Comptroller

May 1995

**Appendix IV
Comments From the Department of Housing
and Urban Development**

Mortgage Lending Market Share Percentages by Calendar Year

Alaska

| | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 |
|--------------|------|------|------|------|------|------|------|------|------|------|------|
| FHA | 3.7 | 2.7 | 0.8 | 11.2 | 11.6 | 30.1 | 35.4 | 25.1 | 20.5 | 21.3 | 27.5 |
| VA | 23.5 | 29.0 | 15.6 | 23.7 | 20.2 | 14.2 | 5.9 | 9.7 | 7.8 | 8.5 | 9.5 |
| Conventional | 72.8 | 68.3 | 83.5 | 65.1 | 68.2 | 55.7 | 58.7 | 65.2 | 71.7 | 70.2 | 62.9 |

Oklahoma

| | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 |
|--------------|------|------|------|------|------|------|------|------|------|------|------|
| FHA | 11.3 | 7.8 | 21.3 | 20.5 | 11.2 | 16.9 | 23.7 | 20.6 | 19.4 | 12.7 | 13.5 |
| VA | 13.3 | 8.9 | 13.5 | 13.7 | 8.8 | 8.6 | 9.7 | 9.4 | 6.4 | 13.7 | 23.2 |
| Conventional | 75.4 | 83.3 | 65.3 | 65.8 | 79.9 | 74.6 | 66.6 | 70.0 | 74.2 | 73.6 | 63.3 |

Louisiana

| | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 |
|--------------|------|------|------|------|------|------|------|------|------|------|------|
| FHA | 12.7 | 10.3 | 13.0 | 12.8 | 6.8 | 11.4 | 18.0 | 15.7 | 12.4 | 13.9 | 16.4 |
| VA | 14.0 | 8.2 | 8.5 | 8.3 | 4.5 | 4.7 | 7.7 | 6.1 | 4.1 | 5.6 | 9.0 |
| Conventional | 73.3 | 81.5 | 78.5 | 78.9 | 88.7 | 83.9 | 74.3 | 78.2 | 83.5 | 80.5 | 74.6 |

Note: Data based on Survey of Mortgage Lending as of March 31, 1995.
Conventional percentages include PMI and uninsured mortgages.

**Appendix IV
Comments From the Department of Housing
and Urban Development**

Mortgage Lending Market Share Percentages by Calendar Year

| Texas | | | | | | | | | | | |
|--------------|------|------|------|------|------|------|------|------|------|------|------|
| | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 |
| FHA | 15.2 | 15.1 | 13.2 | 16.5 | 8.4 | 16.2 | 20.0 | 23.6 | 18.7 | 12.4 | 15.2 |
| VA | 15.9 | 14.1 | 10.1 | 11.0 | 9.1 | 8.5 | 10.6 | 7.6 | 6.0 | 14.8 | 19.3 |
| Conventional | 72.5 | 77.8 | 80.4 | 77.0 | 86.2 | 82.8 | 79.9 | 84.1 | 88.4 | 87.4 | 82.8 |

| Colorado | | | | | | | | | | | |
|-----------------|------|------|------|------|------|------|------|------|------|------|------|
| | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 |
| FHA | 26.1 | 20.9 | 26.9 | 31.8 | 23.3 | 32.4 | 35.6 | 30.7 | 24.9 | 20.4 | 16.2 |
| VA | 23.4 | 16.2 | 15.2 | 18.7 | 10.9 | 12.1 | 13.4 | 10.6 | 7.8 | 7.4 | 23.2 |
| Conventional | 50.5 | 62.9 | 57.9 | 49.5 | 65.8 | 55.5 | 51.0 | 58.7 | 67.3 | 72.2 | 60.6 |

Note: Data based on Survey of Mortgage Lending as of March 31, 1995.
Conventional percentages include PMI and uninsured mortgages.

The following are GAO's comments on the Department of Housing and Urban Development's letter dated April 4, 1997.

GAO's Comments

1. We believe that our report provides adequate information in chapters 1 and 2 on the relationship among FHA, VA, private lenders, and Ginnie Mae and the role that each plays in the U.S. housing market, especially in terms of the type of borrowers that each serves. Our report also provides information on the impacts that partial insurance would have on FHA, Ginnie Mae, private lenders, and potential home buyers. Also, we believe that our report provides reasonable estimates, on the basis of our analysis, of the impact on lenders and high-risk borrowers of a change to a partial insurance program for FHA. We agree that FHA's role in stabilizing housing markets during periods of economic distress will be lessened by a reduction in FHA's insurance coverage; hence, information has been added to reflect this in the report.

2. We believe that the report provides reasonable estimates of the range of possible changes in economic value that may result from a limitation of FHA's insurance coverage. We agree with FHA that the estimated effect of limiting coverage depends on assumptions about economic conditions, and we clearly indicate circumstances in which economic value is estimated to decrease as a result of a limitation on insurance coverage. One of our scenarios in table 3.1 (baseline forecast with a 28-percent reduction in the volume of loans) and two of our scenarios in table 3.3 (optimistic forecast with a 28-percent reduction in volume of loans) show declining economic value. Several other scenarios show changes that are positive but small in magnitude.

3. Our expectation that the volume of loans would likely decline by less than 28 percent is not based on a belief that lenders who are able to cover their expected risk will have no incentive to reduce their loan originations. Our expectation rests on two premises. The first premise is that the estimate made by FHA's lender focus group of a one-quarter to one-half percentage point increase in interest rates is overstated. We believe that the estimate is overstated because such an increase would cover expected losses 5 to 10 times over and would more than cover losses under the most adverse conditions experienced by FHA over the last 20 years. If lenders raise interest rates by a smaller amount than was predicted by the focus group, fewer potential borrowers would be priced out of the FHA program. The second premise is that borrowers who are excluded from the FHA program because lenders require higher down payments or higher income

may return to the housing market at a later date. For at least some of these borrowers, savings and/or income will have increased, allowing them to qualify for mortgages under more stringent underwriting standards. While we agree with FHA's lender focus group that issues of risk and the volatility of risk would cause FHA lenders to tighten underwriting standards, we believe that some of the resulting decrease in FHA's insured lending will be temporary, not permanent.

4. Text has been added to chapter 2, which discusses the transfer of risk for non-FHA loans. The added text discusses the possibility that limiting FHA's insurance coverage could change the distribution of risk among market participants and the fact that any reduction in FHA's coverage would entail shifting this risk to the originators of FHA mortgages.

5. We believe that the 1984 changes that were made in VA's procedures for determining when to acquire a foreclosed property or leave it with the lender provide valuable insight into the potential response of FHA's lenders to a change in their risk exposure. However, HUD believes that it is inappropriate to use VA's experience (including the VA no-bid procedures) as a basis for predicting lenders' response to a reduction in FHA's insurance coverage for two reasons. First, VA has always operated a partial insurance program, and for this reason, the 1984 changes in VA's no-bid procedure would not have as major an impact on lenders' participation as a reduction in FHA's insurance coverage. Second, HUD stated that VA's program is very limited and serves a very different type of borrower from the type served by FHA. We disagree on both points. While VA has always provided only partial insurance coverage, as discussed in this report, the 1984 changes to VA's no-bid process required by the 1984 Deficit Reduction Act had a substantial impact on the level of risk assumed by VA's lenders. The number of foreclosed loans in which VA paid the total guarantee and left the property with the lender increased substantially after the no-bid policy went into effect in fiscal year 1985. While VA's program is available to members of the armed forces, veterans and their families currently make up about 80 percent of VA's borrowers. In addition, as pointed out in chapter 2 of this report, FHA's and VA's programs are very similar in terms of the types of borrowers, LTV ratios, and geographic markets served.

6. We agree that one cannot eliminate the risk of catastrophic loss, and our report does not suggest that this may occur. Our report states that reducing FHA's insurance coverage will shift this risk to lenders, who will then respond by increasing interest rates and making fewer higher-risk loans. Lenders may sell this risk to other firms. Even after considering

catastrophic losses, HUD's lender focus group concluded that making FHA loans under partial insurance is profitable and that 72 percent of FHA volume of loans would be retained. The report also states that this increase in the risk of loss to lenders could lead to increased financial losses for Ginnie Mae.

7. Text that discusses the issue of capital requirements has been added to chapter 2.

8. We added information to the section of chapter 2 to explain that because other factors, such as credit history, are considered during the underwriting process, not every borrower who meets the private mortgage insurers' LTV and qualifying ratio guidelines may necessarily be eligible for private mortgage insurance. Similarly, we note that private mortgage insurance might still be provided to a borrower who fails to meet all of the LTV and qualifying ratio guidelines if compensating factors are deemed sufficient during the underwriting process. This information, although useful for understanding the types of borrowers likely to be most affected by an insurance coverage reduction, is not the basis for our critique of the 28-percent volume reduction estimate. As discussed in chapter 2, we believe that the 28-percent estimate is overstated for two reasons. First, the 28 percent estimate is predicated upon an interest rate increase of one-quarter to one-half percentage point, which our analysis indicates is more than is likely to occur. Also, potential borrowers who are excluded by tightened underwriting criteria may qualify for a loan at a later date—a possibility not considered by the lender focus group convened by FHA.

9. As noted in chapter 3, our analyses of the impact of a coverage reduction on the capital reserve ratio and economic value of FHA's fiscal year 1995 loans assumes, as did HUD's analysis, that FHA's premium structure would remain unchanged. Our analysis is largely based on the results of the lender focus group sponsored by HUD, which assumed a constant premium structure. Our report explains in chapters 2 and 3 that reducing FHA's insurance coverage might cause decisionmakers to lower premiums. Our report also explains that if this occurs, the reduced insurance premium may at least partially offset any increase in the Fund's capital reserve.

10. HUD stated that we did not adequately discuss the impact that reducing FHA's insurance coverage would have on FHA's ability to stabilize regional housing markets during periods of economic distress. We agree. Information has been added to the report reflecting FHA's role in market

Appendix IV
Comments From the Department of Housing
and Urban Development

stabilization and the possible diminishing effect that a reduction in FHA's insurance coverage could have on FHA's ability to continue to stabilize distressed communities.

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Appendix V
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Related GAO Products

Homeownership: FHA's Role in Helping People Obtain Home Mortgages (GAO/RCED-96-123, Aug. 13, 1996).

Mortgage Financing: FHA Has Achieved Its Home Mortgage Capital Reserve Target (GAO/RCED-96-50, Apr. 12, 1996).

Rural Housing: Opportunities Exist for Cost Savings and Management Improvement (GAO/RCED-96-11, Nov. 16, 1995).

Homeownership: Mixed Results and High Costs Raise Concerns About HUD's Mortgage Assignment Program (GAO/RCED-96-2, Oct. 18, 1995).

Property Disposition: Information on HUD's Acquisition and Disposition of Single-Family Properties (GAO/RCED-95-144FS, July 24, 1995).

Rural Housing: Shift to Guaranteed Program Can Benefit Borrowers and Reduce Government's Exposure (GAO/RCED/AIMD-95-63, Dec. 21, 1994).

Mortgage Financing: Financial Health of FHA's Home Mortgage Insurance Program Has Improved (GAO/RCED-95-20, Oct. 18, 1994).

Rural Development: Patchwork of Federal Programs Needs to Be Reappraised (GAO/RCED-94-165, July 28, 1994).

Homeownership: Appropriations Made to Finance VA's Housing Program May Be Overestimated (GAO/RCED-93-173, Sept. 8, 1993).

Homeownership: Actuarial Soundness of FHA's Single-Family Mortgage Insurance Program (GAO/T-RCED-93-64, July 27, 1993).

Government National Mortgage Association: Greater Staffing Flexibility Needed to Improve Management (GAO/RCED-93-100, June 30, 1993).

Homeownership: Loan Policy Changes Made to Strengthen FHA's Mortgage Insurance Program (GAO/RCED-91-61, Mar. 1, 1991).

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