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Report to Congressional Requesters

June 2007

FEDERAL HOUSING ADMINISTRATION

Decline in the Agency's Market Share Was Associated with Product and Process Developments of Other Mortgage Market Participants

GAO-07-645

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Highlights

Highlights of GAO-07-645, a report to congressional requesters

Why GAO Did This Study

The Federal Housing Administration (FHA) historically has been an important participant in the mortgage market, which includes loans that carry government insurance or guarantees (such as FHA-insured mortgages) and those that do not (conventional mortgages). The conventional market comprises prime loans for the most creditworthy borrowers and subprime loans for borrowers with impaired credit. Reduced demand for FHA-insured mortgages—which are used primarily by borrowers who would have difficulty obtaining conventional prime loans—has raised questions about the agency's role in and ability to adapt to the mortgage market.

This report discusses (1) trends in FHA's share of the market for home purchase mortgages from 1996 through 2005, and how they compared with the trends for other market segments; and (2) factors associated with the trends in FHA's market share and the implications of these trends for homebuyers and FHA. To address these objectives, GAO analyzed FHA and Home Mortgage Disclosure Act (HMDA) data and interviewed officials from FHA and other mortgage institutions.

www.gao.gov/cgi-bin/getrpt?GAO-07-645.

To view the full product, including the scope and methodology, click on the link above. For more information, contact William B. Shear at (202) 512-8678 or shearw@gao.gov.

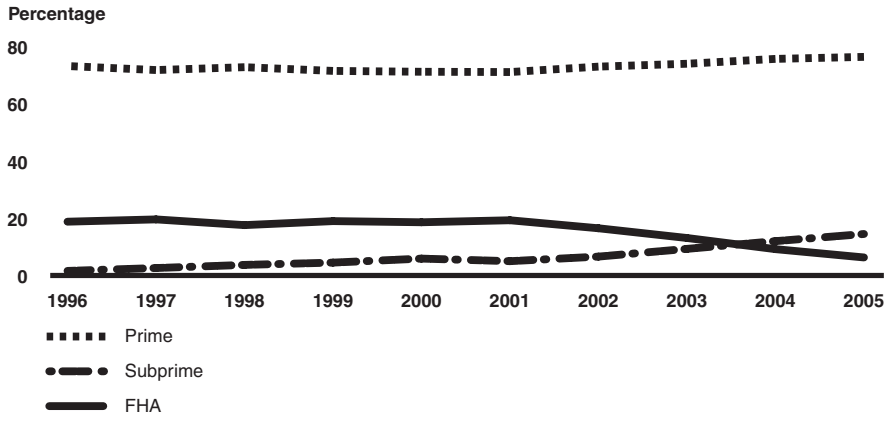
What GAO Found

From 1996 through 2005, FHA's share of the market for home purchase mortgages in terms of numbers of loans declined 13 percentage points (from 19 to 6 percent), while the prime and subprime shares grew 3 and 13 percentage points, respectively (see figure). The agency experienced a sharp decrease among populations where it traditionally has had a strong presence. For example, FHA's market share dropped 25 percentage points (from 32 to 7 percent) among minority borrowers and 16 percentage points (from 26 to 10 percent) among low- and moderate-income borrowers. At the same time, subprime market share among these groups rose dramatically.

The decline in FHA's market share was associated with a number of factors and has been accompanied by higher ultimate costs for certain conventional borrowers and a worsening in indicators of credit risk among FHA borrowers. More specifically, (1) FHA's product restrictions and lack of process improvements relative to the conventional market and (2) product innovations and expanded loan origination and funding channels in the conventional market—coupled with interest rate and house price changes—provided conditions that favored conventional over FHA-insured mortgages. In contrast to FHA-insured loans, the majority of conventional subprime loans had higher ultimate costs to borrowers, partly because their initial low interest rates could increase substantially in a short period of time.

Relatively high default and foreclosure rates for subprime mortgages and a contraction of this market segment could shift market share to FHA. The extent to which this occurs will depend partly on the ability of FHA and other market participants to offer mortgage alternatives to borrowers considering or struggling to maintain higher-priced subprime loans.

Market Shares for Home Purchase Loans, 1996-2005



Source: GAO analysis of HMDA data.

Contents

Figures

Abbreviations

APR	Annual Percentage Rate
ARM	adjustable rate mortgage
FFIEC	Federal Financial Institutions Examination Council
FHA	Federal Housing Administration
GSE	government-sponsored enterprises
HMDA	Home Mortgage Disclosure Act
HUD	Department of Housing and Urban Development
MBA	Mortgage Bankers Association
OFHEO	Office of Federal Housing Enterprise Oversight
RHS	Rural Housing Service
SFDW	Single-Family Data Warehouse
TOTAL	Technology Open to Approved Lenders
VA	Veterans Administration

GAO
Accountability * Integrity * Reliability

United States Government Accountability Office
Washington, DC 20548

June 29, 2007

The Honorable Richard Shelby
Ranking Member,
Committee on Banking, Housing, and Urban Affairs
United States Senate

The Honorable Wayne Allard
United States Senate

Through its single-family mortgage insurance programs, the Department of Housing and Urban Development's (HUD) Federal Housing Administration (FHA) insures private lenders against losses from defaults on mortgages that meet FHA criteria. FHA historically has been an important participant in the market for home purchase mortgages, which grew from 3.1 million loans in 1996 to 4.7 million loans in 2005.[1] FHA in the past has played a particularly large role among minority, lower-income, and first-time homebuyers and generally is thought to promote stability in the market by helping to ensure the availability of mortgage credit in areas that may be underserved by the private sector during economic downturns. However, demand for FHA-insured mortgages has dropped sharply in recent years, raising questions about the agency's role in and ability to adapt to a changing mortgage market. To help FHA adapt to market changes, in 2006 HUD submitted a legislative proposal to Congress that, among other things, would raise FHA's loan limits, give the agency flexibility to set insurance premiums based on the credit risk of borrowers, and reduce down-payment requirements from the current 3 percent to potentially zero. Our analysis of the major elements of this proposal are contained in a companion report that we are issuing today.[2]

The different parts of the mortgage market are defined by the types of mortgage institutions that serve them and the credit quality of the borrowers. The conventional market, comprising mortgages that do not carry government insurance or guarantees, has prime and subprime

[1]Home purchase mortgages do not include mortgages for refinancing existing loans.

[2]See GAO, *Federal Housing Administration: Modernization Proposals Would Have Program and Budget Implications and Require Continued Improvements in Risk Management*, GAO-07-708 (Washington, D.C.: June 29, 2007).

segments.[3] Prime borrowers typically have strong credit scores and obtain the most competitive interest rates and mortgage terms.[4] In contrast, subprime borrowers typically have blemished credit and lower credit scores, may have difficulty providing income documentation, and generally pay higher interest rates and fees than prime borrowers. Mortgages purchased by two government-sponsored enterprises (GSE), Fannie Mae and Freddie Mac, comprise another, albeit overlapping, market segment. The GSEs purchase (primarily conventional prime) loans and pool them to create securities sold to investors. The GSEs have goals directed at financing housing for lower-income families and in underserved areas. FHA is a major part of the market segment comprising loans with government insurance or guarantees, which primarily serves borrowers who would have difficulty obtaining conventional prime mortgages.[5] The borrowers are allowed to make very low down payments and generally pay interest rates that are competitive with prime mortgages but also pay fees or premiums to cover the cost of the guaranty.

To provide insights into FHA's role in the mortgage market, this report discusses (1) trends in FHA's share of the market for home purchase mortgages and selected submarkets from 1996 through 2005, and how they compared with the trends for the prime, subprime, and GSE market segments; and (2) the major factors associated with the trends in FHA's market share and the implications of these trends for homebuyers and FHA.[6] In addition, appendix III of this report provides information on selected borrower and loan characteristics of FHA mortgages and mortgages in the prime and subprime market segments.

[3]There is no uniform definition across the lending industry for what characterizes a loan as subprime. Subprime loans are generally given to borrowers with credit scores that are below a certain threshold, but that threshold can vary according to the policies of the individual lender.

[4]Credit scores, which assign a numeric value to a borrower's credit history, have become a common tool for assessing loan applications.

[5]The insurance or guarantees protect lenders against losses from loan defaults. The Department of Veterans Affairs and the Department of Agriculture administer the other two federal programs that guarantee single-family mortgages. Conventional loans with low down payments also may require mortgage insurance, which borrowers purchase from private companies.

[6]We calculated market shares in terms of numbers of loans. We use the term "submarkets" to mean subsets of the home purchase mortgage market defined by various borrower, loan, and census tract characteristics.

To analyze trends in the overall market for home purchase mortgages, we compiled and analyzed loan data for 1996 through 2005 collected under the Home Mortgage Disclosure Act (HMDA). HMDA requires lending institutions to collect and publicly disclose information about housing loans and applications for such loans. HMDA data capture about 80 percent of the mortgage loans funded each year, according to estimates by the Board of Governors of the Federal Reserve System (Federal Reserve), and are one of the most comprehensive sources of information on mortgage lending. HMDA data have a number of limitations that affected our analysis. More specifically, the data (1) understate the number of loans purchased by the GSEs, (2) do not include a precise indicator for subprime loans, and (3) do not distinguish first mortgages from "piggyback" loans (i.e., the junior lien in a pair of loans used to finance the same property) for most of the period we examined. While we acknowledge these limitations, we used HMDA data to evaluate long-term market share trends rather than to provide precise annual figures for each market segment, including the GSE segment. According to Freddie Mac, Fannie Mae, and Federal Reserve officials, our use of HMDA data was appropriate for this purpose. We identified subprime loans by merging the data with a HUD-maintained list of lenders that specialize in subprime lending. We identified piggyback loans using a data matching process based on an algorithm developed by the Federal Reserve and excluded these loans from our analysis. To analyze trends in various submarkets, we incorporated additional data from FHA, the Census Bureau, the Office of Federal Housing Enterprise Oversight, and TransUnion.[7] To determine the factors associated with the trends in FHA's market share and the potential implications of these trends, we analyzed HMDA data, information from HUD's Single-Family Data Warehouse (SFDW), the Mortgage Bankers Association's (MBA) National Delinquency Survey, and summary statistics provided by FHA and contained in prior studies from databases maintained by LoanPerformance.[8] We also reviewed literature, analyzed agency documents, and interviewed FHA officials, mortgage industry participants, and academic researchers. To determine borrower and loan characteristics for different market segments, we analyzed HMDA data, information from SFDW and the Federal Housing Finance Board, and summary LoanPerformance data. Appendix I contains additional

[7]TransUnion is one of the three main consumer credit reporting agencies.

[8]LoanPerformance is a private firm that maintains databases containing detailed information submitted by participating lenders and third parties (e.g., securities issuers and dealers) on millions of mortgages. SFDW contains detailed information on the borrower and loan characteristics of the mortgages FHA insures.

information on our scope and methodology. We conducted our work in Washington, D.C., from September 2006 through May 2007 in accordance with generally accepted government auditing standards.

Results in Brief

FHA's share of the market for home purchase mortgages declined substantially from 1996 through 2005, most significantly among minority borrowers who accounted for a growing share of subprime loans in that period. More specifically, FHA's market share in terms of numbers of loans fell from 19 percent in 1996 to 6 percent in 2005, with almost all of the decline occurring since 2001. In contrast,

- the market share for prime loans was relatively stable over the 10-year period, growing from 73 to 76 percent;
- the market share for subprime loans grew nearly every year, rising from 2 percent to 15 percent overall, with particularly large increases since 2001; and
- the market share of the housing GSEs—essentially a subset of the prime market—rose 3 percentage points overall (to roughly 30 percent in 2005), with nearly all of the growth occurring before 2002.

During the 10-year period, the same general pattern of declining market share for FHA and increasing market share for conventional loans held true in submarkets where FHA traditionally has played a major role. For example, among minorities, FHA's market share fell 25 percentage points (from 32 to 7 percent), while conventional prime and subprime shares rose 6 and 24 percentage points, respectively. The drop in FHA's market share was particularly large—35 percentage points—among Hispanic borrowers. Among lower-income (i.e., low- and moderate-income) borrowers, FHA's market share fell 16 percentage points (from 26 to 10 percent), while the prime and subprime shares grew 7 and 14 percentage points, respectively.[9] Consistent with these trends, in geographic areas with higher proportions of minority and lower-income borrowers, FHA lost substantial market share while subprime lending grew dramatically. The same pattern was also evident in areas with relatively low median credit scores and where median home prices rose to at least 75 percent of FHA's loan limit during the 10-year period.

[9]We defined lower-income borrowers as those with incomes less than 120 percent of the area median income.

The decline in FHA's market share was associated with several factors and has been accompanied by higher ultimate costs for certain conventional borrowers and a worsening in indicators of credit risk among FHA borrowers. More specifically, (1) FHA's product restrictions and lack of process improvements relative to the conventional market and (2) product innovations and expanded loan origination and funding channels in the conventional market—coupled with interest rate and house price changes—provided conditions that favored conventional mortgages over FHA products. For example, mortgage industry officials with whom we spoke cited FHA's administrative requirements and loan limits as factors that limited the attractiveness of FHA-insured mortgages. Additionally, historically low interest rates and rising house prices increased demand for loan products offered by the conventional market (especially subprime lenders), which featured flexible payment and interest options that allowed borrowers to qualify for mortgages despite the appreciations in home values. Most subprime borrowers opted for adjustable rate products (in 2005, more than 75 percent of subprime loans were adjustable rate), having been attracted by their "affordability" features, such as lower initial payments and interest rates. In contrast to FHA-insured loans, the majority of subprime loans had higher ultimate costs, in part because their initial interest rates could increase 3 percentage points in as little as 2 years and two-thirds featured prepayment penalties, which can deter borrowers from refinancing into lower-cost products. Subprime loans also have experienced relatively high rates of default and foreclosure, adding to concerns about their long-term cost to borrowers. Certain factors associated with the decline in FHA's market share also have negatively affected the financial performance of FHA's insurance program. More specifically, as conventional lenders expanded their presence in traditional FHA submarkets through the development of new products and use of automated underwriting tools, FHA experienced adverse selection—that is, conventional providers identified and approved relatively lower-risk borrowers, leaving relatively higher-risk borrowers for FHA.

While our report does not make recommendations, we make observations about how developments in the different segments of the mortgage market could affect FHA's market share in the future. The relatively poor performance of subprime mortgages in recent months and a contraction of this market segment could shift market share to FHA. But the size of this shift depends partly on the efforts of conventional mortgage providers, including the GSEs, to offer viable alternatives to subprime borrowers. Notwithstanding the actions of conventional providers, FHA could be a vehicle to provide lower-priced and more sustainable mortgage options for some borrowers who are considering or struggling to maintain higher-

priced subprime loans. However, careful assessment and management of the risks associated with serving these borrowers would be necessary to avoid exacerbating problems in the financial performance of FHA's insurance program.

We provided HUD with a draft of this report. HUD commented that we produced a straightforward, well-researched report on the reasons for the recent decline in FHA's market share. HUD also noted that additional product and pricing flexibility would help FHA to continue serving lower-income and minority households. We discuss HUD's comments in the agency comments section, and reproduced its written comments in appendix IV.

Background

Congress established FHA in 1934 under the National Housing Act (P.L. 73-479) to broaden homeownership, protect and sustain lending institutions, and stimulate employment in the building industry. Over time, FHA came to play a major role in extending mortgage credit to first-time homebuyers and historically underserved borrowers such as minority and lower-income families. For example, in 2005, slightly less than 80 percent of FHA borrowers were first-time homebuyers, more than 80 percent had lower incomes, and approximately 30 percent were minorities. (See app. III for additional information on the borrower and loan characteristics of FHA-insured, prime, and subprime mortgages.) FHA currently insures a variety of mortgages for home purchases, construction and rehabilitation, and refinancing, with its most popular program—Section 203(b)—offering 15- and 30-year mortgages for single-family dwellings.

Generally, borrowers are required to purchase mortgage insurance when the loan-to-value (LTV) ratio (the amount of the mortgage loan divided by the value of the home) exceeds 80 percent. FHA is a government mortgage insurer in a market that also includes private insurers. Private mortgage insurance policies provide lenders coverage on a portion (generally 20 to 30 percent) of the mortgage balance. However, borrowers who have difficulty meeting down-payment and credit score requirements for conventional loans may find it easier to qualify for a loan with FHA insurance, which covers 100 percent of the value of the loan. FHA-insured borrowers are required to make minimum cash investments of 3 percent, which may come from the borrowers' own funds or from certain third-party sources. Borrowers are permitted to finance their mortgage insurance premiums and some closing costs, which can create an effective LTV ratio of close to 100 percent for some FHA-insured loans. In fiscal

year 2006, the agency insured almost 426,000 mortgages, representing about $55 billion in mortgage insurance.

Congress has set limits on the size of the loans that may be insured by FHA. The limit for an FHA-insured mortgage is 95 percent of the local median home price, not to exceed 87 percent or fall below 48 percent of the Freddie Mac conforming loan limit, which was $417,000 in 2006. Therefore, in 2006, FHA loan limits fell between a floor in low-cost areas of $200,160 and a ceiling in high-cost areas of $362,790. Eighty-two percent of counties nationwide had loan limits set at the low-cost floor, while 3 percent had limits set at the high-cost ceiling. The remaining 15 percent of counties had limits set between the floor and ceiling, based on local median house prices.

FHA determines the expected cost of its insurance program, known as the credit subsidy cost, by estimating the program's future performance.[10] FHA's mortgage insurance program is currently a negative subsidy program, meaning that the present value of estimated cash inflows to FHA's Mutual Mortgage Insurance Fund (Fund) exceeds the present value of estimated cash outflows. The economic value, or net worth, of the Fund depends on the relative size of cash outflows and inflows over time. Cash flows out of the Fund for payments associated with claims on defaulted loans and refunds of up-front premiums on prepaid mortgages. To cover these outflows, FHA receives cash inflows from borrowers' insurance premiums and net proceeds from recoveries on defaulted loans. If the Fund were to be exhausted, the U.S. Treasury would have to cover lenders' claims directly.

A number of different private-sector and government institutions participate in the mortgage market. Along with FHA, the Department of Veterans Affairs' (VA) Loan Guaranty Service and the Department of Agriculture's Rural Housing Service (RHS) administer federal government programs that insure or guarantee single-family mortgages made by private lenders. Private lenders that loan borrowers funds for home purchase and refinance mortgages often work with mortgage brokers, independent contractors that originate the loan products of multiple

[10]Pursuant to the Federal Credit Reform Act of 1990, HUD must annually estimate the credit subsidy costs for its loan insurance programs. Credit subsidy costs are the net present value of estimated payments it makes less the estimated amounts it receives, excluding administrative costs.

lenders.[11] Fannie Mae and Freddie Mac are housing GSEs that purchase primarily prime conventional mortgages from lenders across the country, financing their purchases through borrowing or by issuing securities backed by the mortgages. Since 1994, HUD has set affordable housing goals for the housing GSEs and has adjusted the goals upward every few years. One goal is that at least 55 percent of the mortgages purchased by the GSEs must be made to families whose incomes are no greater than the area median income. The other two major goals concern the percentage of mortgages to borrowers residing in lower-income communities and certain high-minority neighborhoods (38 percent) and the percentage of borrowers with very low incomes and those with low incomes who live in low-income areas (25 percent).[12]

FHA's Market Share Declined from 1996 through 2005, While the Conventional Market Share Increased, Especially among Minority and Lower-Income Borrowers

FHA's share of the market for home purchase mortgages in terms of numbers of loans declined 13 percentage points from 1996 through 2005, while the prime share increased slightly and the subprime share grew 13 percentage points. Although the decline in FHA's market share was broad-based, FHA experienced particularly sharp decreases in submarkets where it traditionally has had a strong presence, such as among minority and lower-income borrowers. Consistent with these trends, in geographic areas with higher concentrations of these borrowers, FHA lost substantial market share while the subprime share grew dramatically. The same pattern held true in areas with relatively low median credit scores and where median home prices rose to at least 75 percent of FHA's loan limit during the 10-year period.

[11]Mortgage origination involves such functions as accepting loan applications and obtaining employment verifications and credit reports on the borrowers. It is distinct from mortgage underwriting, which refers to a risk analysis that uses information collected during the origination process to decide whether to approve a loan.

[12]For purposes of the GSE goals, lower-incomes neighborhoods are those with a median income less than or equal to 90 percent of the area median income and high-minority neighborhoods are those with at least a 30 percent minority population and a median income less than 120 percent of the area median. Low- and very-low-income borrowers are defined as those with incomes less than 80 percent and 60 percent of the area median income, respectively.

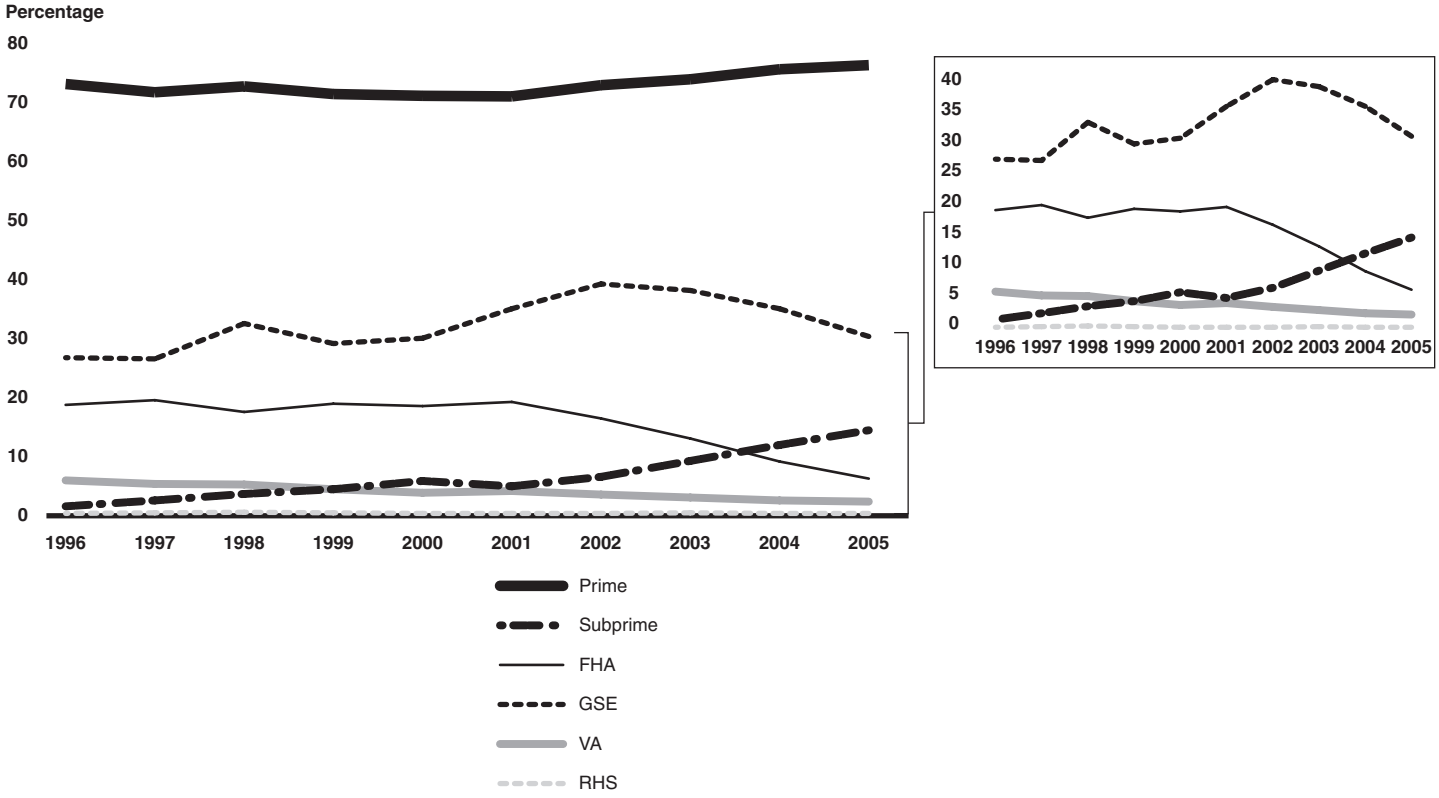
FHA's Market Share Decreased While Conventional Market Share, Particularly for Subprime Loans, Grew

From 1996 through 2005, FHA's share of the home purchase mortgage market declined while the conventional share increased.[13] As shown in figure 1, FHA's market share fell from almost 19 percent (about 583,000 loans) in 1996 to about 6 percent (about 295,000 loans) in 2005, with almost all of the decline occurring after 2001.[14] Although FHA's market share has fluctuated over time, during the past two decades it has generally been over 10 percent.

[13]During the 10-year period, VA and RHS had small market shares. VA's market share fell from 6 to 2 percent and RHS's market share remained at or near 0.4 percent.

[14]From 1996 through 2005, FHA's share of the overall mortgage market (home purchase and refinance loans combined) declined from 12 to 4 percent, while the prime share fell from 78 to 77 percent and the subprime share increased from 5 to 19 percent. Appendix II provides additional information on FHA and other market segments' share of the home purchase, refinance, and overall mortgage markets.

Figure 1: FHA and Other Market Participants' Shares of the Home Purchase Mortgage Market, 1996-2005



Source: GAO analysis of HMDA data.

Note: We calculated market shares based on numbers of loans and, to the extent possible, excluded piggyback loans. Data for the GSEs do not include loans originated and purchased in different years or all of the loans sold to intermediaries before being purchased by the GSEs.

Over the 10-year period, the market share for conventional mortgages rose from almost 75 percent (about 2.3 million loans in 1996) to about 91 percent (about 4.2 million loans in 2005), with much of the increase due to growth in subprime lending. More specifically, prime market share increased from 73 percent to 76 percent overall, falling somewhat from 1996 through 2000 but then increasing about 5 percentage points after 2000. Subprime market share increased substantially over the 10-year period, from 2 percent to 15 percent, with most of the increase occurring after 2001 (growing from 5 percent in 2001 to 15 percent in 2005). From 1996 through 2005, the market share for the GSEs (essentially a subset of the conventional prime market) increased 3 percentage points overall (to roughly 30 percent in 2005), growing about 13 percentage points from 1996 through 2002 but falling 9 percentage points thereafter.

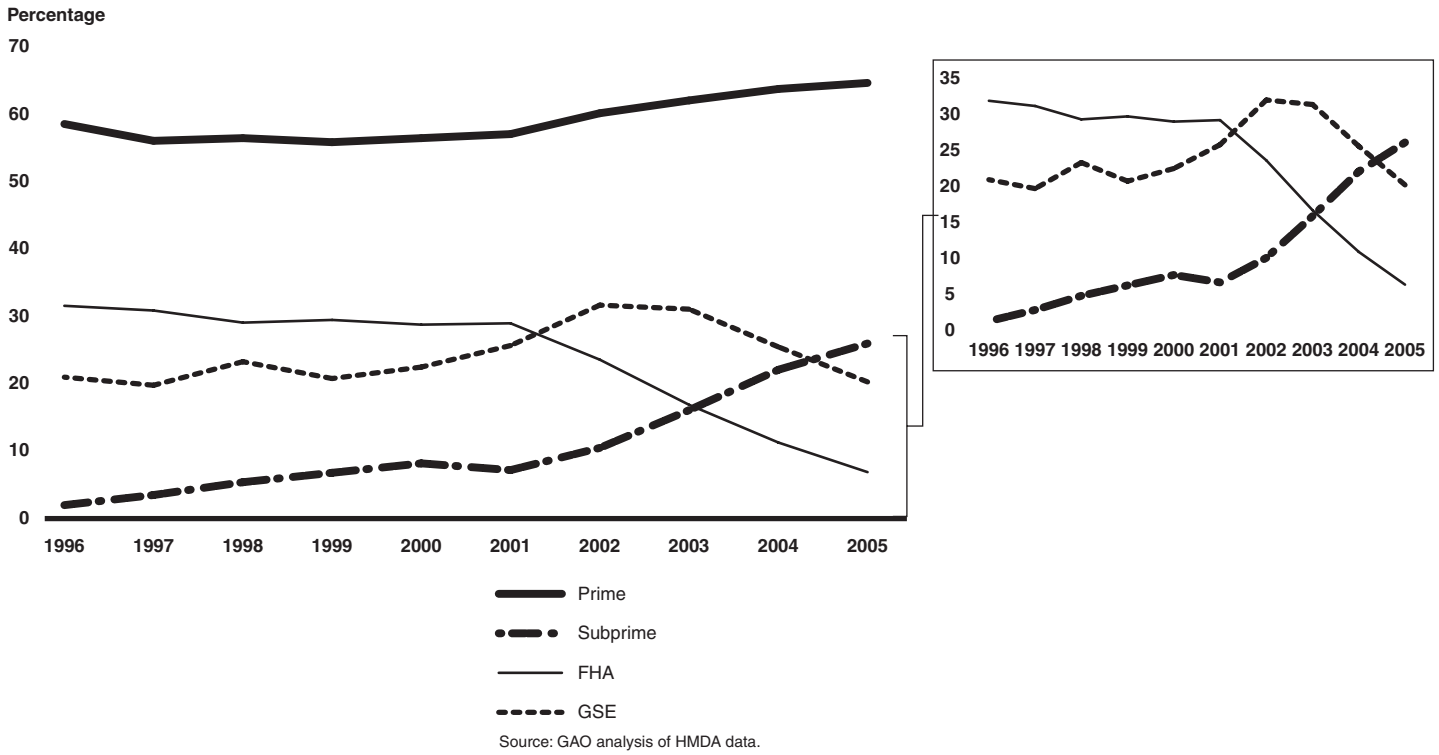
Especially among Black, Hispanic, and Lower-Income Borrowers, FHA's Market Share Declined Sharply and the Subprime Share Increased

From 1996 through 2005, FHA lost market share in certain key submarkets, especially among minority and lower-income borrowers, as well as among borrowers with mortgages within FHA's loan limits. At the same time, the market share for conventional mortgages, particularly subprime loans, grew in these submarkets. This trend also held true in census tracts with high concentrations of low-income and minority households, relatively low median credit scores, and median home prices within FHA's loan limits. Mirroring the trend in the overall home purchase mortgage market, FHA's loss of market share in these submarkets primarily occurred after 2001. (See app. II for details on the trends in specific submarkets for each market segment)

Racial Submarkets

FHA traditionally has played a major role among minority borrowers. However, over the 10-year period, FHA's share of this submarket fell substantially. Specifically, as shown in figure 2, FHA's market share dropped 25 percentage points (from 32 to 7 percent) among minority borrowers, but declined most sharply among black and Hispanic borrowers (by 27 and 35 percentage points, respectively). FHA's market share among white borrowers decreased from 16 percent to 7 percent during the 10-year period.

Figure 2: FHA, Prime, Subprime, and GSE Shares of the Minority Submarket for Home Purchase Mortgages, 1996-2005



Source: GAO analysis of HMDA data.

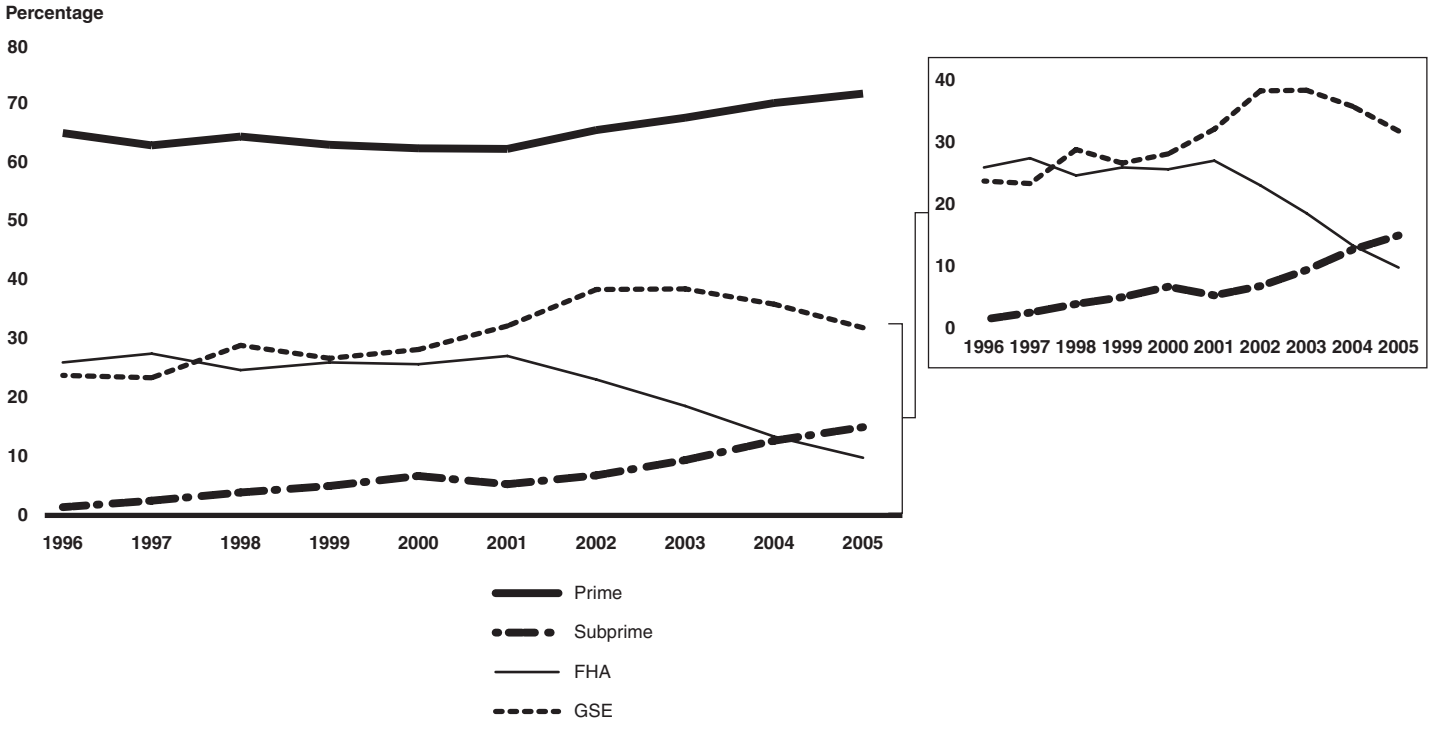
Note: We calculated market shares based on numbers of loans and, to the extent possible, excluded piggyback loans. Data for the GSEs do not include loans originated and purchased in different years or all of the loans sold to intermediaries before being purchased by the GSEs.

In contrast to FHA, prime market share increased about 6 percentage points (from 59 to 65 percent) among minority borrowers and 5 percentage points (from almost 77 to just over 81 percent) among white borrowers from 1996 through 2005. Over the same period, subprime market share increased 24 percentage points (from 2 to 26 percent) among minorities, but especially among black and Hispanic borrowers (29 percentage points for each group). Subprime market share among white borrowers increased from 1 to 9 percent from 1996 through 2005. GSE market share among minority borrowers ultimately did not change substantially, beginning and ending the period at roughly 20 percent. From 1996 through 2002, GSE market share among minority borrowers increased 11 percentage points (to roughly 32 percent), but fell by about the same amount thereafter. GSE market share among white borrowers increased 7 percentage points over the 10-year period, to roughly 35 percent in 2005.

Income Submarkets

Lower-income (i.e., low- and moderate-income) borrowers historically have relied heavily on FHA products, but FHA's market share dropped in this submarket as well.[15] From 1996 through 2005, FHA's market share decreased among borrowers of all income levels, but, as shown in figure 3, particularly among lower-income borrowers, where FHA's share declined 16 percentage points (from 26 percent to 10 percent). From 1996 through 2005, FHA's market share among upper-income borrowers fell from 9 to 2 percent.

Figure 3: FHA, Prime, Subprime, and GSE Shares of the Lower-Income Submarket for Home Purchase Mortgages, 1996-2005



Source: GAO analysis of HMDA data.

Note: We calculated market shares based on numbers of loans and, to the extent possible, excluded piggyback loans. Data for the GSEs do not include loans originated and purchased in different years or all of the loans sold to intermediaries before being purchased by the GSEs.

[15]We defined low income as less than 80 percent of the median income for the census tract, moderate income as at least 80 percent but less than 120 percent, and upper income as 120 percent and above.

Over the 10-year period, prime market share increased from 65 to 72 percent among lower-income borrowers and remained consistently high (above 80 percent) among upper-income borrowers. At the same time, subprime market share increased 14 percentage points (from 1 to 15 percent) among lower-income borrowers and 12 percentage points (from 2 to 14 percent) among upper-income borrowers. GSE market share increased 8 percentage points among lower-income borrowers (to roughly 32 percent in 2005), and remained at approximately 30 percent for upper-income borrowers.

FHA-Eligible Submarket

As previously noted, Congress has set limits on the size of FHA-insured loans. Although loans that fall within these limits comprise what has been called the FHA-eligible submarket, from 1996 through 2005 FHA's share in this submarket declined more sharply than in the overall home purchase mortgage market. Specifically, it decreased 16 percentage points (from 25 to 9 percent), with a steep decline occurring after 2001 when its market share was 24 percent. FHA's market share among minority borrowers in this submarket also fell dramatically (from 39 percent in 1996 to 10 percent in 2005), as did its share of loans to lower-income borrowers (from 28 percent in 1996 to 11 percent in 2005).

While FHA's market share declined in the FHA-eligible submarket, the prime and subprime market shares grew. Overall, the prime share in this submarket increased modestly (from 67 percent to 73 percent) from 1996 to 2005. In contrast, the subprime share increased 14 percentage points (from 1 percent to 15 percent). The GSE share in this submarket increased 15 percentage points from 1996 to 2002 (to roughly 40 percent) but fell to about 33 percent as of 2005.

Census Tracts Groupings Characterized by Population Characteristics and House Prices

To further analyze mortgage market trends, we examined FHA, prime, and subprime market shares in various census tract groupings.[16] Specifically, we looked at census tracts grouped based on (1) race and income characteristics, (2) median credit score, and (3) median home price in relation to FHA loan limits. For the credit score analysis, we limited our analysis to census tracts where FHA's market share averaged at least 5

[16]Census tracts are small, relatively permanent statistical subdivisions of a county. They usually have between 2,500 and 8,000 persons and, when first delineated, are designed to be homogeneous with respect to population characteristics, economic status, and living conditions. The spatial size of census tracts varies widely depending on the density of settlement.

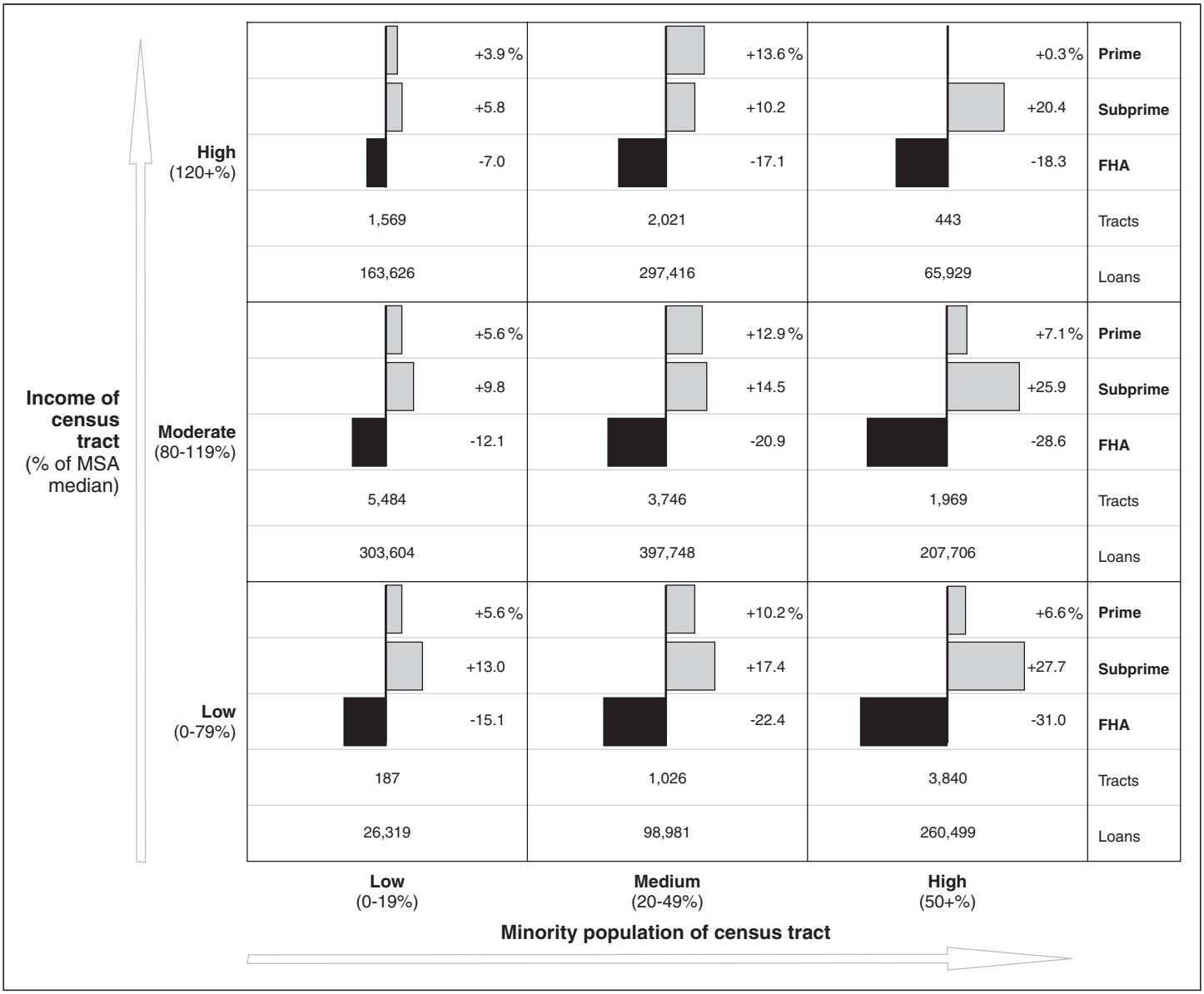
percent from 1996 through 1998 (representing about 75 percent of the census tracts nationwide).[17]

From 1996 through 2005, FHA lost market share in approximately 90 percent of the census tracts we included in our analysis. As shown in figure 4, the losses occurred primarily in census tracts with both medium to high concentrations of minorities and low to moderate median incomes.[18] At the same time, the market share for conventional loans increased for this group of census tracts, especially for subprime loans. This was particularly evident in census tracts with both the highest concentrations of minorities and low median incomes, where FHA's market share fell 31 percentage points and subprime market share increased 28 percentage points.

[17]We took this approach because our analysis examined changes in FHA's market share during a 10-year period when the trend in FHA's share was downward. By using the 5 percent threshold, our analysis excluded census tracts where FHA's market share started and ended the period at zero and census tracts where FHA's market share was sporadic and on average very small near the beginning of the period.

[18]We defined low-, medium-, and high-minority census tracts as those with minority populations of less than 20 percent, 20 to 49 percent, and 50 percent or more, respectively. We defined low-, moderate-, and upper-income census tracts as those with median incomes that were less than 80 percent, at least 80 percent but less than 120 percent, and 120 percent and above, respectively, of the median income for the associated metropolitan statistical area.

Figure 4: Changes in Market Shares for FHA-Insured, Prime, and Subprime Loans in Census Tracts with Different Race and Income Characteristics, 1996 through 2005



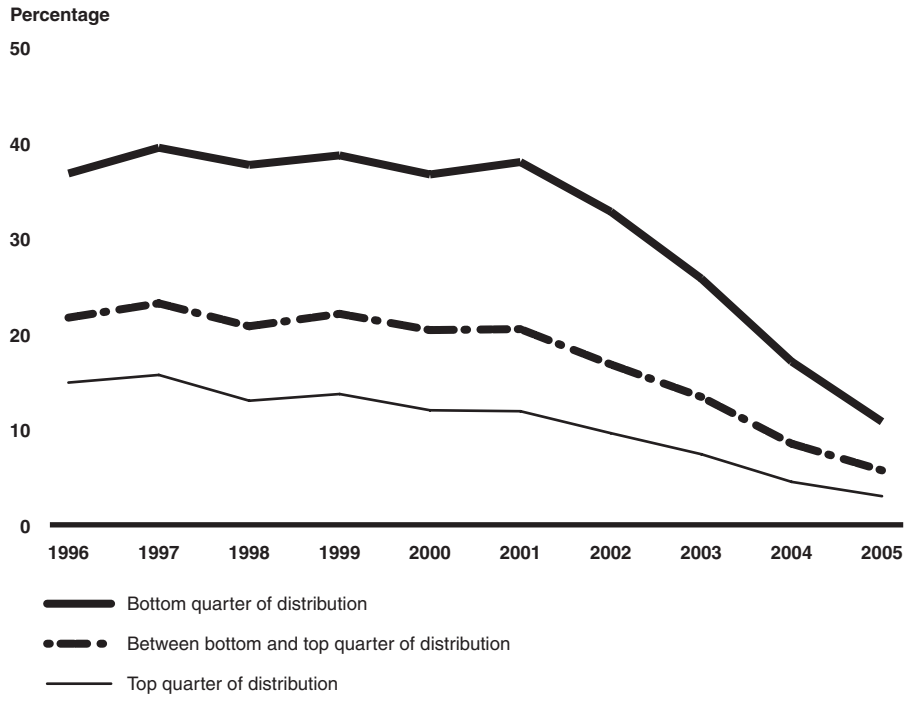
Source: GAO analysis of HMDA data.

Note: We calculated market shares based on numbers of loans and, to the extent possible, excluded piggyback loans.

From 1996 through 2005, FHA's market share declined in all of the census tract groupings we defined based on the median credit score of mortgage borrowers. However, FHA's share declined most sharply in census tracts with relatively low median credit scores.[19] Specifically, FHA's market share dropped 26 percentage points (from about 37 percent in 1996 to 11 percent in 2005) in census tracts with median credit scores in the bottom quarter of the credit score distribution for all census tracts included in our analysis, with the steepest decline occurring after 2001 (see fig. 5). At the same time, the prime and subprime market shares in these census tracts increased. More specifically, the prime share increased 12 percentage points (from about 51 percent in 1996 to 63 percent in 2005), and the subprime share increased 21 percentage points (from about 2 percent in 1996 to 23 percent in 2005). In census tracts with median credit scores between the bottom quarter and the top quarter of the distribution, FHA's market share fell 16 percentage points over the 10-year period, while the prime and subprime shares rose 10 and 12 percentage points, respectively. Finally, in census tracts with median credit scores in the top quarter of the distribution, FHA's market share decreased 12 percentage points, while the prime and subprime shares increased 9 and 7 percentage points, respectively.

[19]We obtained credit score data from TransUnion's TrenData database. TransUnion depersonalized and aggregated the data from consumer credit reports.

Figure 5: FHA's Market Share in Census Tract Groupings with Different Median Credit Scores, 1996-2005



Source: GAO analysis of HMDA and TransUnion data.

Note: We limited our analysis to census tracts where FHA's market share averaged at least 5 percent from 1996 through 1998. We calculated market shares based on numbers of loans and, to the extent possible, excluded piggyback loans. The credit score information is from TransUnion and represents the median credit score of mortgage borrowers in each census tract as of December 31, 2004.

From 1996 through 2005, FHA lost market share in census tracts where median home prices were above and below FHA's loan limits (which FHA adjusts annually within statutory caps), but experienced the greatest losses in census tracts where median home prices appreciated to at least 75 percent of FHA's loan limit during the 10-year period. In census tracts where the median home price was less than 75 percent of the FHA loan limit each year, FHA's market share dropped 24 percentage points (from 36 percent in 1996 to 12 percent in 2005). In census tracts where the median home price was at least 75 percent but less than 125 percent of the FHA loan limit each year, FHA's market share fell more modestly—13 percentage points (from 18 percent in 1996 to 5 percent in 2005). However, FHA lost almost all of its market share in areas where the median home price was less than 75 percent of the FHA loan limit early in the 10-year period but grew to at least 75 percent of the loan limit later in the period.

Specifically, FHA's market share in these areas fell 38 percentage points—from 41 percent in 1996 to 3 percent in 2005.

At the same time, conventional market share grew in the census tract groupings we examined. For example, in census tracts where median home prices were less than 75 percent of FHA's loan limit each year, the prime share increased 11 percentage points (from 53 percent in 1996 to 64 percent in 2005) and the subprime share increased 18 percentage points (from 2 percent in 1996 to 20 percent in 2005). The prime and subprime market shares increased even more in census tracts where median home prices rose from less than 75 percent of the FHA loan limit to at least 75 percent of the limit during the 10-year period. Specifically, prime and subprime shares increased 22 and 25 percentage points, respectively.

The Decline in FHA's Market Share Was Associated with Several Factors and Has Been Accompanied by Higher Costs for Certain Conventional Borrowers and Increased Credit Risk for FHA

During the period from 1996 through 2005, a combination of factors created conditions that favored conventional mortgages over FHA products. These factors included (1) FHA's product restrictions and lack of process improvements relative to the conventional market and (2) product innovations and expanded loan origination and funding channels in the conventional market. Most subprime mortgages, which grew in popularity as FHA's market share declined, had higher ultimate costs, in part because their initial interest rates could reset to higher rates. In addition, subprime mortgages performed worse than prime and FHA-insured loans. As FHA's market share fell, certain factors associated with this decline also contributed to a worsening in indicators of credit risk among FHA borrowers.

FHA's Process Inefficiencies and Product Restrictions Have Been Linked to the Decline in Use of FHA-Insured Mortgages

Lenders, mortgage industry groups, and consumer advocacy groups have cited FHA administrative requirements as a factor that contributed to the decline in the agency's market share over the 10-year period we examined. According to mortgage industry officials we interviewed, processing FHA-insured loans was more time consuming, labor intensive, and costly than processing conventional mortgages. For example, instead of having lenders submit all loan information electronically, FHA required lenders to send loan case files to FHA for review before the loans could be approved for insurance. If the review found a problem with the case file, FHA would mail the file back to the lender, who in turn would make the needed

corrections and mail the file back to FHA. Additionally, in contrast to conventional market requirements, FHA's appraisal process required that minor property repairs, such as cracked window panes, be corrected prior to loan closing. According to the MBA, some FHA lenders have reported substantially higher processing times and origination costs for FHA-insured loans than for conventional loans. In contrast with FHA, conventional loan processing became increasingly streamlined and less costly through the use of information technology and the Internet. According to mortgage industry officials with whom we spoke, FHA's more cumbersome processes made FHA's products less attractive than conventional products, particularly in competitive housing markets where it is important to be able to close on a home quickly.

However, in 2006, FHA made several administrative changes, such as allowing higher-performing lenders to approve FHA insurance without a prior review by FHA and simplifying its appraisal process. FHA and mortgage industry officials with whom we spoke said that these changes have increased the efficiency of loan and insurance processing, making FHA products more attractive and, therefore, more likely to be used.[20]

FHA and mortgage industry officials with whom we spoke also cited FHA's loan limits as a factor that contributed to the decline in FHA's market share. In some areas of the country, particularly in parts of California and the Northeast, median home prices have been substantially higher than FHA's maximum loan limits, reducing the agency's ability to serve borrowers in those markets. For example, the 2005 loan limit in high-cost areas was $312,895 for one-unit properties, while the median home price was about $399,000 in Boston, Massachusetts; about $432,000 in Newark, New Jersey; $500,000 in Salinas, California; and about $646,000 in San Francisco, California.

Some mortgage industry officials also pointed to other product restrictions as a reason why FHA loans have been less competitive than conventional loans. Many borrowers either cannot or do not want to make a down payment, and in recent years members of the conventional mortgage market (such as private mortgage insurers, the housing GSEs, and large private lenders) have been increasingly active in supporting low and no-down-payment mortgages. For example, the GSEs introduced no-down-

[20]For additional information about changes to FHA's administrative processes, see GAO-07-708.

payment mortgage products in 2000. In contrast, FHA does not offer a zero-down-payment product, which some lenders and industry observers have cited as a major factor underlying the decline in FHA's market share. (However, as previously noted, FHA allows borrowers to finance their up-front insurance premium and some closing costs; as a result, an FHA-insured loan could equal nearly 100 percent of the property's value or sales price.)

Developments in Conventional Market Products and Processes Occurred as FHA's Market Share Declined

During the 10-year period we examined, several developments associated with FHA's declining market share occurred in the conventional market. First, the conventional market offered products that increased consumer choices for borrowers, including those who may have previously chosen an FHA-insured loan. These products, in combination with historically low interest rates, made it easier for homebuyers to purchase homes in a period of strong house price appreciation. For example, to serve the lower-income and minority populations targeted by their affordable housing goals, the GSEs developed products featuring underwriting criteria that allowed for higher risks, such as Freddie Mac's Home Possible® Mortgage, which allows qualified borrowers to make no down payment. As the GSEs worked to meet their goals, their market share among lower-income and minority borrowers grew over much of the 10-year period we examined, while FHA's fell. More specifically, the GSE market share among lower-income borrowers grew nearly 14 percentage points from 1996 through 2002, while FHA's share dropped 3 percentage points over that period. During the same time frame, GSE market share among minority borrowers grew 11 percentage points, while FHA's fell 8 percentage points. Consistent with these observations, research by An and Bostic (2006) found a significant negative relationship between the change in the GSE and FHA shares of the overall mortgage market from 1996 through 2000.[21] However, as previously noted, the market shares for both FHA and the GSEs ultimately declined after 2002.

Other products offered by conventional mortgage providers—interest-only loans, no- and low-documentation mortgages, piggyback loans, and hybrid adjustable rate mortgages (ARM)—also became popular, especially during the subprime market's rapid growth after 2001, because they featured

[21]X. An and R. Bostic,"GSE Activity, FHA Feedback and Implications of the Efficacy of the Affordable Housing Goals," forthcoming in *Journal of Real Estate Finance and Economics*.

flexible payment and interest options that increased initial affordability.[22] For example, borrowers were attracted to hybrid ARMs because they could qualify on the basis of an interest rate at or near the initial rate rather than the higher reset rate. These nontraditional products came to represent a sizeable part of the subprime market after 2001. For example, according to data reported by an investment bank, from the first quarter of 2002 to the third quarter of 2005, the percentage of subprime mortgages that were interest-only loans increased from zero to 29 percent and the percentage that were no- and low-documentation loans increased from 30 to 41 percent. Over the same period, the proportion of subprime mortgages with piggyback loans, which are often used to avoid the need for mortgage insurance, increased from 2 to 33 percent.[23] Additionally, from 2002 through 2005, the percentage of subprime mortgages that were ARMs grew from 68 to 73 percent, with hybrid ARMs accounting for the majority of these loans.[24] In contrast, FHA (which, as previously discussed, lost substantial market share in submarkets where subprime lending grew dramatically) does not offer interest-only or no- and low-documentation products and did not begin insuring hybrid ARMs until 2004.

A second development in the conventional market was advances in underwriting technology that allowed conventional mortgage providers to process loan applications more quickly and consistently than in the past and broaden their customer base. For example, to help assess the default risk of borrowers, the mortgage industry increasingly used mortgage scoring and automated underwriting systems. Mortgage scoring is a technology-based tool that relies on the statistical analysis of millions of previously originated mortgage loans to determine how key attributes such as the borrower's credit history, property characteristics, and terms of the mortgage affect future loan performance. FHA implemented its own mortgage scoring tool, called the Technology Open to Approved Lenders

[22]Interest-only loans allow borrowers to defer the principal payments for some period and hybrid ARMs allow borrowers to pay a lower interest rate for a specified time, usually between 2 and 5 years, before the loan resets to the fully indexed interest rate (i.e., a rate that is comprised of an adjustable rate index plus the lender's margin). Piggyback loans are simultaneous second mortgages that allow borrowers to make little or no down payment. No- and low-documentation loans allow for less detailed proof of income or assets than lenders traditionally require.

[23]*UBS Mortgage Strategist*, 2005—Good or Bad for Vintage Subprime? (Jan. 31, 2006), 33. UBS analyzed data from LoanPerformance's TrueStandings Securities subprime database.

[24]Figures are from FHA-provided summaries of information from LoanPerformance's TrueStandings subprime database.

(TOTAL) scorecard, in 2004. However, in prior work we found that the way FHA developed TOTAL may limit the scorecard's effectiveness.[25] To the extent that conventional mortgage providers were better able than FHA to use scoring tools, lower-risk borrowers in FHA's traditional market segment may have migrated toward conventional products, contributing to the decline in FHA's market share.

A third development was an increase in mortgage originations through third parties such as loan correspondents and mortgage brokers, particularly in the subprime market.[26] This trend has been associated with the decline in FHA's market share because these mortgage originators primarily market non-FHA products. According to data reported by the trade publication *Inside B&C Lending*, loan correspondents and mortgage brokers increased their share of subprime loan originations from 66 percent in 2003 to 81 percent in 2005. In contrast, just 27 percent of FHA-insured mortgages in 2005 were originated by loan correspondents and mortgage brokers. According to the National Association of Mortgage Brokers, many mortgage brokers do not offer FHA products because they find the financial and audit requirements for participation in FHA programs cost-prohibitive.[27]

A fourth development in the conventional market was the growth in private mortgage securitization (the bundling of mortgage loans into bond-like securities that can be bought and sold on the secondary market), particularly for subprime loans. Securitization allowed lenders to sell loans from their portfolios, transferring credit risk to investors, and use the proceeds to make more loans. According to recent testimony by a senior official from the Federal Deposit Insurance Corporation, many lenders would not have found subprime mortgages attractive absent the

[25]For additional information on FHA's scorecard, see GAO, *Mortgage Financing: HUD Could Realize Additional Benefits from its Mortgage Scorecard*, GAO-06-435 (Washington, D.C.: Apr. 13, 2006).

[26]The term loan correspondent originally referred to lenders that originated, underwrote, and closed loans in their names (usually funding them with short-term lines of credit from banks) and then immediately sold the loans to other lenders. Today, the term is sometimes used synonymously with mortgage broker. Mortgage brokers originate loans for other lenders but seldom underwrite or close loans in their own names.

[27]FHA requires each of its loan correspondent firms (which include mortgage brokers) to have an annual audited financial statement and retain a minimum $63,000 net worth.

funding and credit-risk transfer features available through securitization.[28] At the same time, these securities were attractive to different types of investors. The combination of higher interest rates and higher risks for subprime loans facilitated the division of mortgage securities into risk tranches, which offer investors different risk and reward options. According to data reported by *Inside B&C Lending*, from 1999 through 2005, subprime securitization rates—that is, the dollar amount of securitized loans divided by the dollar amount of loan originations—rose from less than 40 percent to about 80 percent. In addition, the dollar volume of subprime loan securitizations increased from $61 billion in 1999 to nearly $508 billion in 2005.

As FHA Lost Market Share, Many Subprime Borrowers Obtained Loans with High Ultimate Costs and Credit Characteristics among FHA Borrowers Worsened

As a result of developments in the conventional market, including lower interest rates, more homebuyers—especially minority and lower-income families—were able to obtain conventional loans, but many of these loans had high ultimate costs. As previously discussed, much of the increase in mortgages to minorities and lower-income borrowers was due to the growth in subprime lending, and many of these loans offered lower initial costs through their interest-only features and low introductory interest rates. However, these mortgages became more costly as the interest rates on many of these loans reset to higher rates, typically 2 to 3 percentage points higher in a relatively short time period. A common subprime mortgage product is a 2/28 hybrid ARM, which features a fixed interest rate for 2 years, followed by a series of resets up to a fully indexed adjustable rate for the remaining 28 years of the loan.[29] Consider the example of a borrower who took out a $166,000 2/28 loan in 2003 with an initial interest rate of 7.5 percent and a first interest rate reset of 2.5 percentage points. During the first 2 years of the loan, the borrower's monthly payment was $1,161. But after the first interest rate reset, the borrower's monthly payment grew to $1,446, a $285 or 25 percent increase.[30] Additional resets up to the fully indexed interest rate—which

[28]Testimony from Sandra L. Thompson, Director, Division of Supervision and Consumer Protection, Federal Deposit Insurance Corporation, entitled *Mortgage Market Turmoil: Causes and Consequences*, before the Committee on Banking, Housing and Urban Affairs U.S. Senate (March 22, 2007).

[29]The fully indexed interest rate comprises an adjustable interest rate index, such as the Federal Home Loan Bank of San Francisco Cost of Funds Index, plus the lender's margin.

[30]We based the loan amount and initial interest rate in this example on average values for subprime loans made in 2003.

can be as much as 6 percentage points higher than the initial interest rate—would push the borrower's payments even higher. In contrast to the subprime market, the large majority of FHA-insured loans are fixed-rate mortgages. For example, fixed-rate loans accounted for 92 percent of FHA-insured mortgages made in 2005. Additionally, for FHA-insured hybrid ARMs, the allowable interest rate adjustments after the initial fixed-rate period are comparatively lower—1 percentage point for 3-year ARMs and 2 percentage points for 5-, 7-, and 10-year ARMs.[31]

Reflecting in part the generally lower credit scores of subprime borrowers, subprime mortgages are more likely than prime or FHA loans to be what the Federal Reserve has designated "high-priced" loans. HMDA data for the 2 most recent years available (2004 and 2005) include an indicator for such loans. This indicator is based on a loan's annual percentage rate (APR), which represents the cost of credit to the consumer by capturing the contract interest rate on a loan, the points and fees that a consumer pays, and other finance charges such as mortgage insurance premiums. Loans with APRs at least 3 percentage points higher than the rate on Treasury securities of comparable maturity are considered high-priced. Our analysis of 2005 HMDA data indicates that approximately 90 percent of the loans we had identified as subprime were high-priced. In contrast, less than 2 percent of FHA-insured loans made that year were high-priced.

Highly leveraged and weaker credit borrowers—the typical subprime borrowers who have obtained nontraditional mortgage products such as hybrid ARMs—are the most vulnerable to payment shocks.[32] Although borrowers could avoid mortgage resets by refinancing to fixed-rate mortgages, many of these borrowers face challenges to refinancing their subprime loans. For example, about two-thirds of subprime loans originated in 2005 had prepayment penalties—a substantially higher proportion than in other market segments. FHA, for instance, does not permit prepayment penalties on the loans it insures. Prepayment penalties generally last from 2 to 4 years from the mortgage origination date and can amount to 4 to 5 percent of the original loan amount. They can make it expensive to refinance because borrowers must pay the penalty if they

[31]FHA does not offer 2-year hybrid ARMs.

[32]For additional information about how some nontraditional mortgage products create the potential for payment shock, see GAO, *Alternative Mortgage Products: Impact on Defaults Remains Unclear, but Disclosure of Risks to Borrowers Could be Improved*, GAO-06-1021 (Washington, D.C.: Sept. 19, 2006).

wish to pay off the original loan before the prepayment period expires. In addition, subprime borrowers who made little or no down payment and live in areas that experienced home price depreciation may not have sufficient equity to refinance.

Borrowers who obtained subprime mortgages have experienced relatively high rates of default (i.e., more than 90 days past due) and foreclosure (i.e., in any stage of the foreclosure process). According to MBA, as of December 31, 2006, the cumulative default and foreclosure rates for all subprime mortgages were 7.78 and 4.53 percent, respectively. For subprime ARMs, the corresponding figures were 9.16 and 5.62 percent. In comparison, as of the same date, the default and foreclosure rates for FHA-insured loans were 5.78 and 2.19 percent, respectively (6.62 and 2.54 percent for ARMs) and for prime loans, were 0.86 and 0.50, respectively (1.45 and 0.92 for ARMs).[33]

Some mortgage industry researchers predict that subprime default and foreclosure rates likely will worsen as the loans age; a substantial portion of these loans have yet to reach the age when loans tend to experience the highest rates of default and foreclosure—between 4 and 7 years. Furthermore, because most recent subprime loans have adjustable-rate features, default and foreclosure rates for ARMs are in particular danger of increasing as interest rate resets cause monthly mortgage payments on these loans to rise. A recent study by the director of research and analytics at First American CoreLogic (one of the largest private sector providers of mortgage information) illustrates the potential scope of the problem posed by ARM resets. The study, which examined 8.37 million ARMs originated in 2004 through 2006, estimated that 1.1 million (13 percent) of these loans would go into foreclosure as they reset over the next 6 to 7 years.[34]

Although the subprime and FHA market segments both serve higher-risk borrowers, the extent to which subprime borrowers currently at risk of

[33]The default and foreclosure rates for loans reported in the December 31, 2006, MBA National Delinquency Survey are computed using the total number of loans as the base. The rapid growth in subprime loans in the last 2 years has increased the base for the default and foreclosure rate computations for these loans. All other things being equal, the growth in the base would lead to lower default and foreclosure rates. Given that many subprime loans are relatively new, the cumulative default and foreclosure rates for subprime loans are likely to worsen as the newer loans age.

[34]First American CoreLogic, Inc., *Mortgage Payment Reset: The Issue and the Impact* (Santa Ana, Calif.: Mar. 19, 2007).

default would have qualified for FHA-insured loans is not known. Such a determination would require analysis of detailed, loan-level data for subprime mortgages. Recently, a number of proposals have been made to help subprime borrowers at risk of foreclosure refinance into lower-cost fixed rate mortgages. For example, in April 2007, Freddie Mac announced plans to purchase $20 billion in mortgages that would refinance troubled subprime loans. Fannie Mae announced a similar initiative that same month.

Certain factors associated with FHA's decline in market share also contributed to a worsening in indicators of credit risk among FHA borrowers. More specifically, as conventional lenders expanded their presence in traditional FHA submarkets through the development of new products and use of automated underwriting tools, FHA experienced adverse selection—that is, conventional providers identified and approved relatively lower-risk borrowers, leaving relatively higher-risk borrowers for FHA. According to analysis by FHA, FHA's loan portfolio is becoming riskier in terms of the proportions of loans with high LTV, payment-to-income, and debt-to-income ratios.[35] (Lenders use these ratios to assess the creditworthiness of borrowers.) For instance, FHA's analysis indicated that the proportion of loans with effective LTV ratios over 97 percent rose from about 40 percent in 1999 to almost 60 percent in 2005. The higher the LTV ratio, the less equity borrowers have in their homes and the more likely it is that they may default on mortgage obligations. As we reported in November 2005, the substantial portion of FHA-insured loans with down-payment assistance do not perform as well as loans without such assistance, due partly to homebuyers having less equity in the transaction.[36] The changes in borrower characteristics have contributed to a decline in FHA's financial performance. In recent years, the credit subsidy rate for FHA's single-family mortgage insurance program has approached zero (the point at which estimated cash outflows equal estimated cash inflows). Furthermore, FHA has estimated that, absent program changes, the program for the first time would require a positive subsidy (i.e., appropriations) in fiscal year 2008. Therefore, it has been

[35]The payment-to-income ratio is a borrower's expected monthly housing expenses as a percentage of monthly income. The debt-to-income ratio is a borrower's expected monthly expenses on housing and other long-term debt as a percentage of monthly income.

[36]GAO, *Mortgage Financing: Additional Actions Needed to Manage Risks of FHA-insured Loans with Down Payment Assistance*, GAO-06-24 (Washington, D.C.: Nov. 9, 2005).

changes in the credit quality, rather than the volume, of loans FHA insures that have had the most significant implications for FHA.

Observations

Our analysis shows that in 2005 FHA was a much smaller part of the market for home purchase mortgages than it was just a few years earlier. Given FHA's history of serving minority and lower-income homebuyers, the agency's sharp drop-off in market share among these populations is particularly notable. Furthermore, the growth in low- and no-down-payment mortgages offered by conventional lenders has made FHA's product offerings less distinct. These trends raise questions about FHA's ability to fulfill its traditional role and operate successfully in a changing and competitive mortgage market. However, consistent with FHA's mission, substantial proportions of recent FHA borrowers are minorities and lower-income families, including many first-time homebuyers. Additionally, in the event of an economic downturn, FHA could help ensure the flow of mortgage credit to areas that private sector market participants may be reluctant to serve. Furthermore, recent developments in the subprime market may result in an increase in FHA's role in the mortgage market. For example, relatively high default and foreclosure rates for subprime mortgages and a contraction of this market segment could shift market share to FHA. The extent to which this occurs will depend partly on the efforts of conventional mortgage providers, including Freddie Mac and Fannie Mae, to provide alternatives to subprime borrowers. As our report noted, the GSEs have played a larger role among traditional FHA homebuyers and recently have proposed steps that would provide additional mortgage choices to many borrowers who obtained subprime loans.

Although further analysis would be required to determine how many subprime borrowers at risk of default would qualify for FHA-insured mortgages, FHA could be a vehicle to provide lower-priced and more sustainable mortgage options for some borrowers who are considering or struggling to maintain higher-priced subprime loans. FHA's recent efforts to modernize its products and processes might facilitate any expansion of the agency's role by increasing its operational efficiency and flexibility. However, attracting subprime borrowers to FHA could also have costs, as some of these borrowers may pose relatively high insurance risks. Careful assessment and management of these risks would be necessary to avoid exacerbating problems in the financial performance of FHA's insurance program.

Agency Comments and Our Evaluation

We provided HUD with a draft of this report. HUD provided comments in a letter from the Assistant Secretary for Housing-Federal Housing Commissioner (see app. IV). HUD stated that we produced a straightforward, well-researched report on the reasons for the recent decline in FHA's market share.

HUD also provided observations about the homebuyers FHA serves and the shift of some traditional FHA borrowers to subprime mortgage products that have the potential to become more costly. Additionally, HUD noted that additional flexibility, new mortgage insurance products, and risk-based pricing would help FHA to continue providing lower-income and minority households with homeownership opportunities at lower risk to themselves and with manageable risk to FHA's insurance fund.

We are sending copies of this report to the Chairman, Senate Committee on Banking, Housing, and Urban Affairs; Chairman and Ranking Member, Subcommittee on Housing and Transportation, Senate Committee on Banking, Housing, and Urban Affairs; Chairman and Ranking Member, House Committee on Financial Services; and Chairman and Ranking Member, Subcommittee on Housing and Community Opportunity, House Committee on Financial Services. We will also send copies to the Secretary of Housing and Urban Development and to other interested parties and make copies available to others upon request. In addition, the report will be made available at no charge on the GAO Web site at http://www.gao.gov.

Please contact me at (202) 512-8678 or shearw@gao.gov if you or your staff have any questions about this report. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. Key contributors to this report are listed in appendix V.

William B. Shear
Director, Financial Markets and
Community Investment

Appendix I: Objectives, Scope, and Methodology

Our objectives were to determine (1) trends in the Federal Housing Administration's (FHA) share of the market for home purchase mortgages and selected submarkets from 1996 through 2005, and how they compared with the trends for the prime, subprime, and government-sponsored enterprises (GSE) market segments; and (2) the major factors associated with the trends in FHA's market share and the potential implications of these trends for homebuyers and FHA. To supplement this analysis, we also developed information on the borrower and loan characteristics of FHA-insured mortgages and mortgages in the prime and subprime market segments from 1996 through 2005 (see app. III).

Analysis of Market Share Trends

To analyze trends in the overall market for home purchase mortgages, we compiled and analyzed loan data for 1996 through 2005 collected under the Home Mortgage Disclosure Act (HMDA).[1] HMDA data are compiled and published by the Federal Financial Institutions Examination Council (FFIEC).[2] HMDA requires lending institutions to collect and publicly disclose information about housing loans and applications for such loans. This information includes, among other things, the market participant or segment (conventional, FHA, Veterans Administration (VA), Rural Housing Service (RHS), GSE), loan amount, property type, census tract and certain tract characteristics, and loan applicant characteristics such as race, gender, and income. HMDA data capture about 80 percent of the mortgage loans funded each year, according to estimates by the Federal Reserve, and are one of the most comprehensive source of information on mortgage lending. In general, we limited our analysis to home purchase loans originated for owner-occupied, one-to-four family and manufactured homes. To the extent possible, we identified piggyback loans (i.e., the junior lien in a pair of loans used to finance the same property) using a data-matching process based on an algorithm developed by the Federal

[1]HMDA requires lending institutions to collect and publicly disclose information about housing loans and applications for such loans, including the loan type and amount, property type, and borrower characteristics (such as ethnicity, race, sex, and income). These data are the most comprehensive source of information on mortgage lending.

[2]FFIEC is a formal interagency body empowered to prescribe uniform principles, standards, and report forms for the federal examination of financial institutions by the Board of Governors of the Federal Reserve System, the Federal Deposit Insurance Corporation, the National Credit Union Administration, the Office of the Comptroller of the Currency, and the Federal Home Loan Bank Board, and to make recommendations to promote uniformity in the supervision of financial institutions.

Reserve and excluded these loans from our analysis.[3] As a result, our analysis focuses on first liens only. Because the HMDA data do not contain an indicator for subprime loans, we identified subprime loans by merging the data with a list—maintained by the Department of Housing and Urban Development (HUD)—of lenders that specialize in subprime lending. HUD's Office of Policy Development and Research compiles this list annually by analyzing HMDA data (e.g., lenders with lower origination rates and a large share of refinance loans are more likely to be subprime lenders) and contacting lenders directly. We designated conventional loans that were not attributable to subprime lenders as prime loans. However, because subprime specialists may originate some prime loans and nonsubprime specialists may originate some subprime loans, any analysis that uses this list will misclassify mortgages to some extent. Finally, HMDA data do not capture all of the loans purchased by the GSEs. According to GSE and Federal Reserve officials, HMDA data do not capture all of the loans the GSEs purchase, including (1) many loans initially sold to intermediaries (e.g., bank affiliates) and subsequently to the GSEs and (2) loans originated and purchased in different years. While we acknowledge these limitations, we used HMDA data to evaluate long-term market share trends rather than to provide precise annual figures for each market segment, including the GSE segment. According to Freddie Mac, Fannie Mae, and Federal Reserve officials, our use of HMDA data was appropriate for this purpose. Our analysis should be interpreted with these limitations in mind.

To analyze trends in various submarkets, we incorporated additional data from FHA, the Census Bureau, the Office of Federal Housing Enterprise Oversight (OFHEO), and TransUnion (one of the three main consumer credit reporting agencies). More specifically, from FHA we obtained annual nationwide data on FHA's loan limits for single-family properties. From the 2000 Decennial Census, we obtained information on the median house price for each census tract. From OFHEO, we obtained their annual house price appreciation index for all metropolitan statistical areas. Finally, from TransUnion, we obtained median credit scores for mortgage borrowers in each census tract nationwide as of December 31, 2004. We analyzed a number of submarkets defined by borrower race, borrower income, loan amount relative to FHA's loan limits, income and minority

[3]More specifically, we identified pairs of loans with identical characteristics, including lender; property location; loan purpose; and applicant race, gender, and income. For each matched pair of loans, we designated (within certain parameters) the loan with the smaller dollar value as the piggyback loan.

composition of the census tract in which the property was located, and whether the property was owner-occupied. We defined borrower race based on categories in the HMDA data. Prior to 2004, HMDA data included Hispanic as a race category but beginning in 2004 also included Hispanic as an ethnicity variable. For 2004 and 2005, we classified borrowers of Hispanic ethnicity as Hispanic race. We created borrower income categories using median family incomes calculated by HUD each year for metropolitan and nonmetropolitan areas. We defined borrowers with incomes of less than 80 percent of the area median income as low income, those with incomes of at least 80 percent but less than 120 percent of the area median as moderate income, and those with incomes of at least 120 percent of area median as upper income. Finally, we determined the FHA-eligible submarket by identifying loans with dollar amounts that fell within the relevant FHA loan limit.

For our analysis of census tract groupings, we limited our examination to census tracts where FHA's market share averaged at least 5 percent from 1996 through 1998. (We took this approach because our analysis examined changes in FHA's market share during a 10-year period when the trend in FHA's share was downward.) Therefore, our analysis excluded census tracts where FHA's market share started and ended the period at zero and census tracts where FHA's market share was sporadic and on average very small near the beginning of the period. We used Census Bureau files relating 1990 census tract definitions to 2000 census tract definitions to provide consistent geographic areas over the time period of our analysis. The large majority of the census tracts were the same in both 1990 and 2000. In many cases, however, 1990 census tracts were split into more than one 2000 census tract. In those cases, we aggregated the affected 2000 census tracts to the corresponding 1990 tract definitions and used the 1990 tracts as the unit of analysis for the entire 1996 through 2005 period. In other cases, two or more 1990 census tracts were combined to form one 2000 census tract. In those instances, we aggregated the affected 1990 tracts that corresponded to the 2000 tract definitions and used the 2000 tracts as the unit of analysis over the entire period.

We grouped the census tracts according to the percentage of the population that was minority, median income, median credit score, and median home price in relation to FHA loan limits. We defined low-, medium-, and high-minority census tracts as those with minority populations of less than 20 percent, 20 to 49 percent, and more than 50 percent, respectively. We defined low-, moderate-, and upper-income census tracts as those with median incomes that were less than 80 percent, at least 80 percent but less than 120 percent, and 120 percent and

above, respectively, of the median income for the associated metropolitan statistical area. We also grouped census tracts based on the TransUnion median credit score for mortgage borrowers as of December 31, 2004. We categorized census tracts into three groups: those with median credit scores in the bottom quarter of the credit score distribution for all census tracts included in our analysis, those with median scores between the bottom and top quarter, and those with median scores in the top quarter. Finally, we created three census tract groupings based on whether the median home price was below 75 percent of the applicable FHA loan limit each year, 75 to 125 percent of the FHA limit each year, or below 75 percent of the loan limit at the beginning of the 10-year period but at or above 75 percent of the limit later in the period.

We assessed the reliability of the data we used by reviewing existing information about the quality of the data, performing electronic data testing to detect errors in completeness and reasonableness, and interviewing Freddie Mac, Fannie Mae, FHA, and Federal Reserve officials knowledgeable about the data. We determined that the data were sufficiently reliable for the purposes of this report.

Analysis of Factors Associated with the Trends in FHA's Market Share and the Implications of These Trends

To analyze factors associated with the trends in FHA's market share and the implications of these trends, we used information from: the analysis described in the previous section, HMDA data, HUD's Single-Family Data Warehouse (SFDW), summary statistics provided by FHA and contained in prior studies from databases maintained by LoanPerformance, the Mortgage Bankers Association's (MBA) National Delinquency Survey for the fourth quarter of 2006, and other published industry data. In order to assess the reliability of the data we used, we reviewed related documentation and interviewed officials familiar with the data. In addition, for the HMDA and SFDW data, we performed internal checks to determine the extent to which the data fields were populated and the reasonableness of the values contained in the fields. We concluded that the data were sufficiently reliable for the purposes of this report. We also reviewed relevant academic literature and government and industry studies, including internal FHA analysis of SFDW data.

In addition to our data analysis, we interviewed representatives of four FHA lenders (Countrywide Financial, Wells Fargo, Bank of America, and Lenders One—a mortgage cooperative representing 87 independent mortgage bankers). We also interviewed officials from Fannie Mae, Freddie Mac, and four private mortgage insurance companies—AIG United Guaranty, Genworth Financial, Mortgage Guaranty Insurance

Corporation, and PMI Mortgage Insurance Company. Additionally, we interviewed representatives of six mortgage and real estate industry groups—MBA, National Association of Realtors, Mortgage Insurance Companies of America, National Association of Home Builders, National Association of Mortgage Brokers, and American Financial Services Association. We also spoke with representatives of the following consumer advocacy groups: Center for Responsible Lending, Consumer Action, Consumer Federation of America, National Association of Consumer Advocates, National Community Reinvestment Coalition, National Consumer Law Center, and National Council of La Raza. Finally, we interviewed officials from FHA and HUD's Office of Policy Development and Research.

Analysis of Borrower and Loan Characteristics

To determine the percentages of FHA, prime, and subprime home purchase loans with certain borrower and loan characteristics each year from 1996 through 2005, we analyzed information from HMDA data, SFDW, the Federal Housing Finance Board, and summary LoanPerformance data. The borrower and loan characteristics were race, income, loan type (fixed or adjustable rate), and presence of prepayment penalty. We also determined the average interest rate at mortgage origination, loan amount, and median credit score for FHA-insured loans and loans in the other market segments. In order to assess the reliability of the data we used, we reviewed existing information about the data quality and discussed the data with knowledgeable officials to ensure that we interpreted the information correctly. For the HMDA and SFDW data, we also performed electronic testing to assess the reasonableness and completeness of the information. We concluded that the data were sufficiently reliable for the purposes of our report.

We conducted this work in Washington, D.C. from September 2006 through May 2007 in accordance with generally accepted government auditing standards.

Appendix II: Data on Market Share Trends in the Mortgage Market and Selected Submarkets from 1996 through 2005

This appendix contains the results of our analysis using Home Mortgage Disclosure Act (HMDA) and Federal Housing Administration (FHA) data for calendar years 1996 through 2005. Tables 1 through 3 provide information on home purchase mortgages. More specifically, table 1 contains market shares for FHA and other market participants and segments over the 10-year period. Table 2 contains FHA market shares and numbers of mortgages in each state. Table 3 contains market shares in selected submarkets for FHA and other market participants and segments. Table 4 provides market shares for home purchase and refinance loans combined. Finally, table 5 provides market shares for refinance loans.

Table 1: Market Shares for Home Purchase Loans, 1996-2005

Market shares										
	1996	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**
Prime	73.2%	71.8%	72.8%	71.5%	71.2%	71.1%	73.0%	74.0%	75.7%	76.4%
Subprime	1.6	2.6	3.7	4.5	5.9	5.0	6.6	9.3	12.0	14.5
FHA	18.8	19.6	17.6	19.0	18.6	19.3	16.5	13.1	9.2	6.3
VA	6.0	5.4	5.3	4.5	3.9	4.2	3.6	3.1	2.6	2.4
RHS	0.4	0.5	0.6	0.5	0.4	0.4	0.4	0.5	0.4	0.4
GSE	26.8	26.6	32.6	29.2	30.1	35.1	39.3	38.2	35.1	30.4
Number of loans										
Prime	2,270,445	2,338,558	2,793,403	2,914,713	2,825,668	2,852,557	2,928,394	3,174,378	3,400,642	3,557,981
Subprime	48,778	85,721	143,395	181,779	235,044	199,875	265,000	397,833	540,352	675,389
FHA	582,781	637,354	675,737	774,259	737,914	776,380	660,726	561,582	413,754	294,777
VA	187,424	176,768	201,973	183,875	156,767	168,365	142,673	134,759	117,961	109,873
RHS	13,122	16,804	21,961	19,716	14,304	16,906	16,600	21,773	19,696	18,471
GSE	831,869	865,428	1,250,629	1,188,913	1,193,653	1,408,297	1,576,259	1,639,462	1,577,474	1,415,366

Source: GAO analysis of HMDA data.

Note: We calculated market shares based on numbers of loans and, to the extent possible, excluded piggyback loans. The prime, subprime, FHA, VA, and RHS market shares add to 100 percent (figures used in this table were rounded to the nearest tenth of a percent). The GSE market segment is primarily a subset of the prime market segment. Data for the GSEs do not include loans originated and purchased in different years or all of the loans sold to intermediaries before being purchased by the GSEs.

Table 2: State-by-State FHA Market Shares and Loan Counts for Home Purchase Loans, 1996-2005

State	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Market shares										
Alabama	12.8%	12.6%	11.9%	13.9%	16.8%	19.7%	19.2%	16.3%	13.0%	10.4%
Alaska	27.5	37.0	31.0	30.6	29.0	29.2	27.6	24.7	20.5	14.1
Arizona	22.3	22.1	20.1	21.7	22.6	23.1	20.5	15.8	8.6	2.8
Arkansas	22.9	22.4	19.4	20.3	20.5	23.9	22.9	20.8	16.1	13.4
California	23.9	24.1	21.8	21.5	18.8	16.8	11.0	6.1	1.9	0.6
Colorado	25.5	27.0	22.2	25.3	24.1	24.7	26.7	24.1	15.5	8.9
Connecticut	19.1	19.2	17.9	18.8	19.0	19.1	15.1	12.2	9.3	7.3
Delaware	16.3	17.2	18.7	17.0	18.4	20.0	16.5	11.8	8.3	5.5
District of Columbia	24.3	22.3	21.9	22.1	20.7	17.3	12.6	6.8	4.3	0.9
Florida	16.0	17.9	17.5	17.7	17.0	16.7	12.7	9.8	6.2	3.2
Georgia	17.5	18.4	15.8	21.1	21.0	23.4	22.2	18.2	14.6	10.7
Hawaii	9.1	13.1	12.6	12.9	9.0	7.3	5.2	3.3	1.3	1.2
Idaho	25.3	23.5	21.5	23.9	23.4	25.8	22.4	20.0	13.5	8.8
Illinois	17.8	19.9	15.6	18.6	16.8	17.6	15.5	12.2	7.9	4.9
Indiana	18.7	21.1	18.4	20.0	21.9	27.6	24.3	21.3	17.0	13.6
Iowa	11.6	13.8	13.0	13.5	12.7	14.4	11.5	9.8	7.9	6.3
Kansas	15.2	15.1	14.8	16.3	15.9	18.0	16.5	14.1	12.1	9.7
Kentucky	14.8	14.6	13.9	15.1	15.9	17.6	17.1	15.3	12.5	9.9
Louisiana	19.0	18.5	18.9	21.5	21.4	22.4	20.0	15.6	13.1	9.4
Maine	20.5	20.9	18.2	18.4	15.8	15.0	12.9	7.0	7.5	5.3
Maryland	33.7	35.6	34.1	32.7	31.6	30.4	25.5	16.6	9.5	3.4
Massachusetts	9.8	12.1	10.0	11.0	10.8	10.6	8.1	5.8	3.0	1.6
Michigan	15.3	18.0	15.2	17.0	16.4	18.0	16.4	12.8	10.0	7.5
Minnesota	26.5	24.7	18.1	19.0	17.2	18.1	15.4	11.9	8.4	6.1
Mississippi	21.8	18.6	16.4	15.5	18.0	22.9	21.2	18.0	13.9	12.1
Missouri	21.5	20.7	18.2	19.6	19.7	20.7	18.2	14.4	11.6	9.0
Montana	22.1	20.2	18.0	18.2	20.2	23.7	22.1	18.5	16.8	12.5
Nebraska	21.4	25.4	23.5	25.8	26.7	25.8	25.1	19.1	13.0	10.6
Nevada	25.7	27.8	22.8	27.2	23.6	20.2	18.1	13.1	5.0	2.4
New Hampshire	20.7	20.6	17.9	16.1	14.7	13.7	10.1	7.6	3.7	2.2
New Jersey	16.4	17.6	16.0	17.9	17.1	16.0	12.2	10.1	6.1	3.7
New Mexico	15.0	14.9	14.2	18.4	19.8	23.9	24.5	20.5	15.9	11.3
New York	16.3	16.8	16.1	16.2	15.2	14.8	11.6	9.6	6.5	5.2
North Carolina	12.3	12.9	10.5	13.0	15.1	17.3	16.3	13.3	10.7	8.4

State	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
North Dakota	25.7	26.6	28.8	27.4	23.8	27.6	22.1	18.5	18.2	15.9
Ohio	14.8	17.4	16.1	17.5	18.6	20.4	17.7	14.7	11.8	9.5
Oklahoma	25.4	24.2	25.3	25.4	22.9	25.4	23.4	22.1	17.2	14.8
Oregon	12.7	12.5	10.3	13.9	15.1	17.1	14.3	11.3	6.4	3.3
Pennsylvania	15.1	16.8	15.6	16.1	16.2	17.5	14.1	10.6	7.9	5.9
Rhode Island	21.7	25.1	22.5	24.4	23.5	22.7	17.3	13.1	7.7	3.4
South Carolina	8.4	8.3	6.0	8.2	10.0	11.3	10.3	8.8	7.7	5.6
South Dakota	20.4	21.0	19.5	19.2	17.6	18.4	17.4	17.1	13.5	8.7
Tennessee	25.6	24.0	21.5	22.5	21.5	24.7	21.9	18.8	13.9	10.2
Texas	20.9	21.1	20.5	21.7	20.9	22.8	22.3	20.4	18.0	13.3
Utah	27.3	27.4	22.0	26.5	29.9	33.0	29.6	26.3	19.3	12.2
Vermont	4.6	8.1	7.2	7.3	7.6	8.2	5.6	4.9	3.4	2.2
Virginia	24.7	24.0	21.9	22.7	22.8	22.0	17.8	13.1	7.4	4.4
Washington	17.2	16.6	12.4	15.5	15.6	17.9	15.6	12.6	7.6	4.1
West Virginia	9.2	7.5	8.1	9.2	10.3	12.3	12.1	8.7	7.3	6.5
Wisconsin	5.1	6.6	5.6	6.8	7.0	8.6	7.4	6.1	4.9	4.3
Wyoming	22.0	22.2	18.2	20.1	18.0	18.0	15.1	12.2	10.3	7.8

Number of loans

State	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Alabama	6,321	6,976	7,358	8,892	9,682	10,444	9,504	9,122	7,731	6,602
Alaska	1,380	2,092	2,111	1,819	1,805	2,043	2,007	2,102	2,246	1,567
Arizona	18,510	18,091	20,041	23,248	23,051	25,711	22,984	19,509	11,942	4,213
Arkansas	5,115	5,638	5,297	6,065	5,960	7,117	6,310	6,354	5,225	4,629
California	77,824	89,847	96,097	104,377	92,884	80,582	58,350	33,652	10,786	3,226
Colorado	19,302	20,986	21,691	26,302	25,603	25,672	25,527	23,320	15,587	9,222
Connecticut	7,433	7,717	8,827	10,189	9,494	9,794	7,923	6,397	5,153	3,970
Delaware	1,576	1,850	2,364	2,221	2,297	2,433	2,064	1,508	1,114	804
District of Columbia	1,078	1,194	1,565	1,799	1,673	1,385	1,013	579	411	86
Florida	35,857	41,886	49,058	53,671	51,341	52,985	40,258	33,967	22,818	12,703
Georgia	18,095	20,908	21,269	30,766	27,943	31,741	28,307	26,148	22,582	17,705
Hawaii	547	891	993	1,187	879	673	619	494	190	171
Idaho	3,456	3,795	4,226	4,997	4,659	5,377	4,541	4,831	3,570	2,733
Illinois	26,411	28,586	25,976	34,091	30,830	32,595	28,867	24,257	16,281	10,367
Indiana	13,508	15,265	15,179	17,886	18,993	24,199	20,549	19,154	15,835	13,024
Iowa	2,900	3,763	4,027	4,287	3,808	4,570	3,622	3,391	2,884	2,452
Kansas	4,094	4,446	5,136	6,067	5,304	6,327	5,440	5,008	4,501	3,838

State	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Kentucky	5,200	5,714	6,411	6,940	7,041	7,723	7,107	7,435	6,205	5,131
Louisiana	7,799	7,578	9,249	10,195	9,469	9,670	8,655	7,488	6,433	4,871
Maine	1,742	2,198	2,311	2,458	2,001	1,878	1,631	782	1,188	827
Maryland	21,739	24,431	27,897	28,920	28,269	29,088	24,441	16,135	9,799	3,444
Massachusetts	6,977	8,931	8,404	9,676	8,713	8,481	6,418	4,754	2,804	1,387
Michigan	20,381	20,956	22,149	26,331	24,120	25,320	22,341	18,291	14,356	10,212
Minnesota	17,164	15,323	14,595	15,606	13,848	15,169	13,084	10,685	7,203	5,174
Mississippi	5,049	5,100	5,168	4,809	5,215	6,153	5,261	5,065	4,080	3,690
Missouri	14,228	13,840	13,974	15,472	15,035	15,907	13,254	11,592	10,119	8,224
Montana	1,253	1,464	1,587	1,666	1,694	2,071	1,961	1,824	1,866	1,399
Nebraska	2,983	3,765	4,197	4,572	4,745	4,389	4,624	3,918	2,762	2,238
Nevada	8,974	9,938	8,989	11,988	10,601	9,780	8,759	7,581	3,150	1,602
New Hampshire	2,511	2,912	3,044	2,901	2,636	2,328	1,688	1,264	731	429
New Jersey	14,661	16,137	17,393	21,025	19,046	17,702	13,944	12,283	7,623	4,585
New Mexico	3,018	3,086	3,271	4,008	4,079	5,316	5,701	5,194	4,270	3,084
New York	20,500	22,090	24,313	26,064	23,589	23,055	18,735	16,360	11,670	9,241
North Carolina	12,802	14,620	13,420	17,822	18,476	20,646	17,945	16,005	13,933	12,040
North Dakota	1,260	1,394	1,853	1,628	1,248	1,531	1,315	1,252	1,331	1,257
Ohio	20,332	23,584	25,098	27,867	28,442	31,935	27,317	24,047	19,059	15,552
Oklahoma	8,611	8,712	10,864	11,274	9,403	10,308	9,205	9,232	7,554	7,046
Oregon	4,869	5,685	5,569	7,213	7,353	8,794	7,338	6,311	3,747	2,211
Pennsylvania	17,466	19,698	20,623	22,761	22,384	24,285	19,799	15,820	11,812	9,266
Rhode Island	2,104	2,494	2,705	3,315	3,069	3,085	2,466	1,743	1,086	481
South Carolina	4,338	4,368	3,610	5,058	5,538	6,081	5,189	5,105	4,793	3,733
South Dakota	1,249	1,467	1,632	1,619	1,416	1,553	1,400	1,456	1,290	888
Tennessee	18,026	17,125	17,163	18,547	17,554	19,305	16,283	15,291	12,623	10,088
Texas	47,836	49,485	58,722	66,753	66,412	73,528	69,465	64,823	58,715	45,779
Utah	8,348	8,313	7,119	9,230	10,074	11,281	9,782	10,034	8,538	6,501
Vermont	176	355	373	425	436	488	289	280	218	145
Virginia	21,282	22,184	24,346	27,480	27,966	29,486	23,927	18,576	11,300	6,496
Washington	11,843	14,672	12,553	15,840	15,030	17,740	15,726	14,553	8,995	5,298
West Virginia	983	922	1,150	1,292	1,466	1,821	1,736	1,338	1,273	1,188
Wisconsin	2,774	3,741	3,642	4,487	4,425	5,847	5,233	4,526	3,659	3,347
Wyoming	896	1,141	1,128	1,153	915	988	822	746	713	611
Total	**582,781**	**637,354**	**675,737**	**774,259**	**737,914**	**776,380**	**660,726**	**561,582**	**413,754**	**294,777**

Source: GAO analysis of HMDA data.

Note: We calculated market shares based on numbers of loans and, to the extent possible, excluded piggyback loans.

Table 3: Market Shares for Home Purchase Loans in Selected Submarkets, 1996-2005

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Minority borrowers										
Market shares										
Prime	58.6%	56.1%	56.5%	55.9%	56.5%	57.1%	60.2%	62.1%	63.8%	64.7%
Subprime	2.0	3.5	5.4	6.8	8.2	7.2	10.5	16.1	22.1	26.0
FHA	31.6	33.5	31.4	32.0	31.0	31.1	25.3	18.4	11.3	6.9
VA	7.5	6.5	6.2	5.0	4.2	4.4	3.7	3.2	2.6	2.3
RHS	0.4	0.4	0.4	0.3	0.2	0.3	0.3	0.3	0.2	0.2
GSE	21.0	19.8	23.3	20.8	22.5	25.7	31.7	31.1	25.5	20.3
Number of loans										
Prime	360,310	364,069	415,696	475,415	486,901	479,712	545,749	627,808	575,271	753,007
Subprime	12,259	23,003	40,079	57,711	70,455	60,502	95,162	162,540	199,081	302,296
FHA	193,975	217,379	231,473	272,433	266,912	261,088	229,657	185,532	101,724	80,038
VA	46,008	42,204	45,784	42,716	35,991	36,832	33,875	31,969	23,097	26,254
RHS	2,213	2,552	3,149	2,681	1,982	2,261	2,485	2,943	1,880	2,046
GSE	129,130	128,841	171,718	176,680	193,784	216,195	287,896	314,573	229,635	236,521
Lower-income borrowers										
Market Shares										
Prime	65.0%	62.9%	64.4%	63.0%	62.4%	62.3%	65.5%	67.6%	70.1%	71.7%
Subprime	1.4	2.5	3.9	5.0	6.7	5.3	6.8	9.4	12.7	15.0
FHA	26.0	27.5	24.7	26.0	25.7	27.1	23.1	18.6	13.4	9.8
VA	6.9	6.3	6.0	5.2	4.5	4.7	4.0	3.6	3.1	2.9
RHS	0.7	0.8	0.9	0.8	0.6	0.7	0.6	0.8	0.7	0.7
GSE	23.8	23.4	28.9	26.7	28.2	32.2	38.4	38.5	35.9	31.9
Number of loans										
Prime	1,185,411	1,210,961	1,469,715	1,569,101	1,486,038	1,498,980	1,592,975	1,749,681	1,868,304	1,828,021
Subprime	25,490	47,337	87,860	125,000	160,032	126,461	165,128	243,937	338,614	382,837
FHA	474,582	528,562	564,317	647,179	612,534	651,833	561,894	480,480	356,448	248,863
VA	125,811	120,664	137,619	128,740	107,526	113,866	96,576	92,749	82,616	73,229
RHS	12,576	16,207	21,208	18,836	13,595	15,657	14,896	20,301	18,484	17,208
GSE	433,235	451,031	659,117	664,874	670,876	774,874	932,713	996,578	955,888	812,593
FHA-eligible loans										
Market shares										
Prime	66.9%	65.2%	66.7%	65.4%	64.9%	65.2%	67.7%	68.8%	71.0%	72.5%
Subprime	1.4	2.6	4.0	5.1	7.0	5.4	7.0	9.6	12.7	15.2
FHA	25.4	26.2	23.3	24.3	23.6	24.4	21.1	17.7	12.8	9.2

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
VA	5.7	5.2	5.2	4.6	4.0	4.4	3.7	3.2	2.9	2.5
RHS	0.6	0.7	0.8	0.6	0.5	0.5	0.5	0.7	0.6	0.6
GSE	24.0	24.0	29.5	27.0	28.4	33.4	39.0	38.5	37.4	32.8
Number of loans										
Prime	1,428,428	1,522,418	1,872,251	1,977,376	1,870,710	2,038,154	2,082,838	2,093,435	2,228,157	2,260,564
Subprime	30,685	60,067	112,755	152,900	201,604	170,390	214,870	293,109	397,608	475,661
FHA	541,744	612,373	653,048	736,229	680,059	763,584	649,852	537,877	402,342	286,470
VA	122,170	121,717	146,434	138,893	115,075	138,048	113,959	97,958	90,380	79,195
RHS	12,685	16,633	21,761	19,169	13,874	16,620	16,389	21,109	19,151	17,835
GSE	512,969	560,485	826,462	817,983	819,521	1,042,809	1,201,354	1,171,130	1,173,893	1,023,192
Investor properties										
Market shares										
Prime	94.3%	94.6%	93.7%	94.9%	95.4%	94.3%	95.5%	92.8%	90.9%	90.4%
Subprime	2.6	4.4	5.7	4.7	4.0	3.7	4.4	7.1	9.1	9.5
FHA	2.8	0.7	0.5	0.4	0.4	1.4	0.1	0.1	0.0	0.0
VA	0.3	0.3	0.1	0.1	0.1	0.5	0.0	0.0	0.0	0.0
RHS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GSE	19.1	21.6	26.7	28.1	34.8	40.0	45.9	41.3	34.2	29.2
Number of loans										
Prime	369,504	446,786	522,788	595,192	638,724	698,132	845,224	1,033,234	1,355,352	1,647,122
Subprime	10,128	20,922	31,730	29,176	26,806	27,420	38,740	79,040	135,134	173,424
FHA	10,914	3,324	2,704	2,402	2,876	10,378	618	936	394	230
VA	1,264	1,302	760	588	958	3,946	402	324	188	192
RHS	104	70	134	76	108	66	66	54	68	72
GSE	74,788	102,140	149,234	176,248	233,034	295,728	406,028	459,400	510,338	532,204

Source: GAO analysis of HMDA and HUD data.

Note: We calculated market shares based on numbers of loans and, to the extent possible, excluded piggyback loans. The prime, subprime, FHA, VA, and RHS market shares add to 100 percent (figures used in this table were rounded to the nearest tenth of a percent). The GSE market segment is primarily a subset of the prime market segment. Data for the GSEs do not include loans originated and purchased in different years or all of the loans sold to intermediaries before being purchased by the GSEs.

Table 4: Market Shares for Home Purchase and Refinance Loans, 1996-2005

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Prime	78.0%	74.4%	80.1%	75.2%	71.8%	81.4%	83.7%	84.5%	75.8%	76.6%
Subprime	5.4	9.3	8.4	10.9	12.4	7.9	8.5	9.8	18.0	18.5
FHA	12.3	12.5	8.5	11.0	12.9	8.7	6.3	4.4	4.7	3.5
VA	4.0	3.5	2.7	2.6	2.7	1.9	1.4	1.2	1.3	1.2
RHS	0.3	0.3	0.2	0.3	0.2	0.2	0.1	0.1	0.2	0.2
GSE	28.9	27.0	38.4	31.1	26.9	40.3	46.0	49.9	36.1	30.1

Source: GAO analysis of HMDA data.

Note: We calculated market shares based on numbers of loans and, to the extent possible, excluded piggyback loans. The prime, subprime, FHA, VA, and RHS market shares add to 100 percent. (figures used in this table were rounded to the nearest tenth of a percent). The GSE market segment is primarily a subset of the prime market segment. Data for the GSEs do not include loans originated and purchased in different years or all of the loans sold to intermediaries before being purchased by the GSEs.

Table 5: Market Shares for Refinance Loans, 1996-2005

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Prime	85.7%	78.3%	85.4%	79.5%	73.1%	87.9%	88.8%	88.2%	75.8%	76.8%
Subprime	11.4	19.2	11.8	18.2	25.0	9.7	9.4	10.0	22.6	22.0
FHA	2.0	1.8	1.9	1.9	1.7	2.0	1.4	1.4	1.3	1.0
VA	0.9	0.6	0.9	0.4	0.2	0.4	0.4	0.5	0.2	0.2
RHS	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GSE	32.2	27.5	42.5	33.4	20.8	43.5	49.3	54.1	36.9	29.9

Source: GAO analysis of HMDA data.

Note: We calculated market shares based on numbers of loans and, to the extent possible, excluded piggyback loans. The prime, subprime, FHA, VA, and RHS market shares add to 100 percent (figures used in this table were rounded to the nearest tenth of a percent). The GSE market segment is primarily a subset of the prime market segment. Data for the GSEs do not include loans originated and purchased in different years or all of the loans sold to intermediaries before being purchased by the GSEs.

Appendix III: Data on Selected Borrower and Loan Characteristics for FHA, Prime, and Subprime Loans, 1996 through 2005

This appendix contains the results of our analysis of Home Mortgage Disclosure Act (HMDA) and Single-Family Data Warehouse (SFDW) data, information from the Federal Housing Finance Board, and summary LoanPerformance data. Specifically, tables 6, 7, and 8 contain information on selected borrower and loan characteristics for Federal Housing Administration (FHA)-insured, prime, and subprime loans. For prime and subprime loans, data were not available from the sources we used for the entire period we examined (1996 through 2005).

Table 6: Selected FHA Borrower and Loan Characteristics, 1996-2005

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Percentage of loans to all minority borrowers[a]	33.8%	34.8%	35.3%	36.9%	38.7%	36.6%	37.2%	34.9%	31.6%	29.3%
Percentage of loans to Hispanic borrowers[a]	14.4%	15.1%	15.8%	16.5%	17.6%	17.5%	18.0%	16.9%	14.7%	12.9%
Percentage of loans to black borrowers[a]	13.8%	13.9%	13.6%	14.0%	14.8%	13.3%	13.2%	12.4%	13.5%	13.2%
Percentage of loans to low-income borrowers[a]	44.4%	47.0%	48.5%	49.0%	48.1%	50.0%	53.4%	54.1%	55.4%	53.1%
Percentage of loans to moderate-income borrowers[a]	37.1%	35.9%	35.0%	34.6%	34.9%	33.9%	31.6%	31.4%	30.7%	31.3%
Average loan amount[a]	$85,683	$88,559	$91,279	$100,095	$104,406	$111,720	$117,796	$123,334	$122,840	$123,197
Average borrower credit score[b]		660	662	653	639	647	645	647	640	640
Average initial interest rate (ARMs)[b]	6.6%	6.4%	6.0%	6.3%	7.1%	5.7%	5.2%	4.3%	4.5%	4.9%
Average interest rate (fixed-rate mortgages)[b]	7.9%	7.8%	7.2%	7.5%	8.3%	7.3%	6.9%	6.0%	6.1%	5.9%
Percentage of first liens that are ARMs[b]	25.5%	32.3%	6.4%	6.6%	7.8%	2.9%	8.5%	7.1%	12.0%	7.6%
Percentage of first liens with prepayment penalties[a]	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Source: GAO analysis of HMDA and HUD data.

[a]Data from HMDA.

[b]Data from SFDW.

Note: FHA does not allow prepayment penalties on the loans it insures.

Table 7: Selected Prime Borrower and Loan Characteristics, 1996-2005

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Percentage of loans to all minority borrowers[a]	16.4%	16.3%	15.9%	17.7%	19.4%	19.4%	21.2%	21.7%	21.5%	23.9%
Percentage of loans to Hispanic borrowers[a]	4.8%	4.5%	4.5%	5.1%	6.0%	6.5%	7.1%	7.5%	8.5%	10.2%
Percentage of loans to black borrowers[a]	4.6%	4.6%	4.3%	4.4%	4.5%	4.0%	4.1%	4.6%	5.0%	5.8%
Percentage of loans to low-income borrowers[a]	25.0%	25.0%	25.7%	27.5%	26.7%	26.3%	27.5%	28.1%	28.0%	25.5%
Percentage of loans to moderate-income borrowers[a]	27.2%	26.7%	26.9%	26.3%	25.9%	26.2%	26.9%	27.0%	26.9%	25.9%
Average loan amount[a]	$114,315	$120,439	$127,858	$137,545	$147,814	$158,335	$178,201	$187,080	$212,528	$235,258
Average borrower credit score[b]							716	719	721	723
Average interest rate at origination (ARMs)[c]	6.9%	6.8%	6.4%	6.5%	7.0%	6.3%	5.6%	5.0%	5.2%	5.5%
Average interest rate (fixed-rate loans)[c]	7.8%	7.7%	7.1%	7.3%	8.1%	7.0%	6.7%	5.8%	6.0%	6.0%
Percentage of first-liens that are ARMs[d]							13.1%	11.8%	24.5%	22.5%
Percentage of first-liens with prepayment penalties[d]							0.5%	0.3%	4.0%	6.0%

Source: GAO analysis of HMDA data; information from Freddie Mac, Fannie Mae, and the Federal Housing Finance Board; and FHA-provided summaries of information in LoanPerformance's TrueStandings Servicing prime database.

[a]Data from HMDA.

[b]Data from Freddie Mac and Fannie Mae.

[c]Data from the Federal Housing Finance Board.

[d]Data from FHA-provided summaries of information in LoanPerformance's TrueStandings Servicing prime database.

Table 8: Selected Subprime Borrower and Loan Characteristics, 1996-2005

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Percentage of loans to all minority borrowers[a]	27.8%	30.5%	33.2%	39.6%	36.5%	36.0%	42.2%	47.2%	47.2%	53.5%
Percentage of loans to Hispanic borrowers[a]	7.7%	8.4%	9.1%	10.1%	10.2%	11.9%	17.1%	20.9%	23.0%	28.4%
Percentage of loans to black borrowers[a]	9.3%	12.8%	15.9%	17.7%	17.1%	16.6%	15.6%	15.4%	17.5%	18.6%
Percentage of loans to low-income borrowers[a]	24.5%	27.5%	32.3%	40.0%	40.1%	33.9%	31.8%	29.9%	30.9%	27.1%
Percentage of loans to moderate-income borrowers[a]	27.8%	27.7%	29.0%	28.8%	28.0%	29.4%	30.5%	31.5%	31.8%	29.6%
Average loan amount[a]	$122,478	$118,189	$110,638	$101,337	$94,758	$117,110	$150,050	$178,049	$204,234	$233,901
Average borrower credit score[b]							611	620	622	622
Average interest rate at origination (ARMs)[c]	8.7%	9.5%	9.7%	9.9%	10.6%	9.6%	8.5%	7.5%	6.9%	
Average interest rate (fixed-rate loans)[c]	10.1%	10.0%	9.6%	10.4%	11.3%	9.8%	8.6%	7.5%	7.3%	
Percentage of first liens that are ARMs[c]							67.6%	62.3%	71.9%	72.6%
Percentage of first liens with prepayment penalties[c]							64.1%	61.6%	59.9%	66.2%

Source: GAO analysis of HMDA data, information from UBS, and data from the Federal Reserve Bank of St. Louis.

[a]Data from HMDA.

[b]Data from UBS Mortgage Strategist (November 29, 2005). UBS analyzed data from LoanPerformance's TrueStandings Securities subprime database.

[c]Data from "The Evolution of Subprime Lending," by Anthony Pennington-Cross and Souphala Chomsisengphet, Federal Reserve Bank of St. Louis Review, January/February 2006, Vol. 88 (No. 1), pp. 42, 44, 50, 53. The paper presents analysis of data from LoanPerformance's TrueStandings Securities subprime database. This database consists primarily of the least risky (A-) grade of subprime loans. Therefore, the information we cite from the paper, including average interest rates, is not representative of riskier grades of subprime loans. The analysis is reprinted with the permission of the Federal Reserve Bank of St. Louis.

Appendix IV: Comments from the Department of Housing and Urban Development

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-8000

ASSISTANT SECRETARY FOR HOUSING-
FEDERAL HOUSING COMMISSIONER

JUN - 8 2007

Mr. William B. Shear
Director
Financial Markets and Community Investments
United States Government Accountability Office
441 G Street, NW
Washington, DC 20548

Dear Mr. Shear:

Thank you for the opportunity to comment on the Government Accountability Office (GAO) report entitled, "Federal Housing Administration: Decline in the Agency's Market Share Was Associated with Product and Process Development of Other Mortgage Market Participants" (GAO-07-645). I would like to congratulate you on producing a straight-forward, well-researched report on the reasons for the recent decline in FHA's market share.

The report shows that while FHA predominantly serves lower-income and minority first-time homebuyers, more lower-income and minority homebuyers are being served by the conventional mortgage market. FHA welcomes this trend as a positive development compatible with its historical mission of demonstrating the potential for stable homeownership among riskier borrowers. The report also shows, however, that some of FHA's traditional borrowers are being enticed by low initial mortgage interest rate and affordable monthly payments into signing up for subprime mortgage products that have the potential to become substantially more costly, jeopardizing their ability to retain homeownership.

By pricing risk in a mortgage insurance premium instead of the mortgage interest rate, FHA gives borrowers access to market rates of interest, lowers their current and overall borrowering costs, and facilitates more transparent mortgage transactions. By balancing borrowers' downpayments with their credit profile, FHA will be able to offer a range of products to meet their financial needs and long term goals. Some subprime borrowers facing mortgage interest rate resets, are currently refinancing with FHA to lower their borrowing costs. Unfortunately, many subprime borrowers will have insufficient cash or equity to refinance their mortgages. With FHA modernization, FHA could have served these borrowers.

FHA seeks to continue to offer viable mortgage alternatives for its traditional borrowers, making homeownership attainable at lower cost and lower risk to themselves. Given its historical experience with expanding homeownership, FHA is confident that, with additional flexibility, new mortgage insurance products, and risk-based pricing, it can continue to reach down the risk ladder and to demonstrate how lower-income and minority households can attain their dream of homeownership at lower risk to themselves and with manageable risk to FHA's insurance funds.

Thank you again for this excellent analysis of FHA's market share in recent years.

Sincerely,

Brian D. Montgomery
Assistant Secretary for Housing-
Federal Housing Commissioner

Appendix V: GAO Contact and Staff Acknowledgments

GAO Contact

William Shear (202) 512-8678 or shearw@gao.gov

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