PRIVATIZATION OF FANNIE MAE AND FREDDIE MAC: DESIRABILITY AND FEASIBILITY

A HUD REPORT

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FOREWORD

Since the 1970s the Federal National Mortgage Association (Fannie Mae) and the Federal Home Loan Mortgage Corporation (Freddie Mac) have been the main secondary market conduits providing funds for conventional mortgage lending in the United States. As enterprises chartered by the Federal Government, Fannie Mae and Freddie Mac receive significant public benefits, in exchange for pursuing specific public purposes, which include general market stability and liquidity and improved access to mortgage credit for low- and moderate-income families and underserved market areas. In addition, they are subject to financial safety-and-soundness regulation by the Office of Federal Housing Enterprise Oversight (OFHEO), an independent office within HUD established by the Federal Housing Enterprises Financial Safety and Soundness Act of 1992 (FHEFSSA).

It is appropriate that the rationale for the Federal sponsorship of these enterprises and the statutory structure of benefits and obligations imposed on them be reviewed on a periodic basis. This report conducts such a review, in accordance with FHEFSSA. The report considers the idea of Afull privatization@ of the enterprises, under which their ties with the Federal government would be ended.

This report demonstrates that a significant proportion of prospective homeowners remains underserved by the mortgage finance industry. The report reviews and evaluates the framework of housing goals that has been established by the Department for Fannie Mae and Freddie Mac, also in accordance with FHEFSSA, and finds that the housing goals represent a promising approach to focusing the resources of these enterprises on the mortgage credit needs of these homebuyers. Such a programmatic emphasis by these enterprises represents an appropriate exchange for the benefits that they receive through their ties with the Federal government.

For this reason, and because the existing system of regulation by HUD and OFHEO is very new but shows signs of fulfilling the intent of Congress when it enacted FHEFSSA, the Department recommends that the GSEs not be fully privatized at this time.

The Nation=s financial system is undergoing rapid structural and technological change and a private secondary market has begun to develop. This could cause the balance of the advantages and disadvantages of full privatization to change over time. Congress should therefore reexamine the privatization issue periodically.

Henry G. Cisneros
Secretary of Housing
and Urban Development

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EXECUTIVE SUMMARY

A. Overview

The Federal Housing Enterprises Financial Safety and Soundness Act of 1992 (FHEFSSA) required the U.S. Department of Housing and Urban Development (HUD) to conduct a study regarding the desirability and feasibility of repealing the Federal charters of the Federal National Mortgage Association (Fannie Mae) and the Federal Home Loan Mortgage Corporation (Freddie Mac), eliminating any Federal sponsorship of these enterprises, and allowing them to continue to operate as fully private entities.[1]

Fannie Mae and Freddie Mac are already stockholder-owned, privately managed enterprises. Their charters establish for them public purposes that include stability and liquidity in the secondary mortgage market, secondary market assistance relating to mortgages for low- and moderate-income families, and access to mortgage credit throughout the Nation. In exchange for their activities toward these objectives the GSEs are accorded various privileges that create business advantages for them. They are subject to specific Federal regulation to ensure that they fulfill their public-purpose mission and maintain adequate financial safety and soundness. HUD interprets the concept of full privatization to refer to the termination of the public-purpose obligations, the statutory market privileges, and, to the extent feasible (as discussed in the body of this report), the regulation.

Based on the analysis of this report, the Department concludes that there is no compelling reason to fully privatize Fannie Mae and Freddie Mac at this time. Specifically, the Department believes that the benefits achieved from full privatization would not offset the financial uncertainties and likely increases in borrowing costs that would be associated with full privatization. However, GSE status should not be taken for granted; its intent is to accomplish specific public purposes in return for significant benefits. Periodic reexamination is needed to ensure that this exchange of benefits for competitive advantages remains appropriate.

B. Background

Today, Fannie Mae and Freddie Mac are shareholder-owned Government-Sponsored Enterprises (GSEs) that create a national secondary market for residential mortgages. FHEFSSA divided the Federal Government's regulatory responsibilities over Fannie Mae and Freddie Mac (collectively termed Athe GSEs@ in this report) between

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Similar studies were required to be conducted by the U.S. Department of the Treasury, the U.S. General Accounting Office, and the U.S. Congressional Budget Office. HUD and the other three agencies collaborated in organizing a program of research, the product of which appears in the volume *Studies on Privatizing Fannie Mae and Freddie Mac* (U.S. Department of Housing and Urban Development, 1996).

the Secretary of HUD and the Director of the Office of Federal Housing Enterprise Oversight (OFHEO), an independent office within HUD. The Secretary has both general regulatory power and several specific authorities concerning housing goals, fair lending, review of new program requests, and other matters not involving financial safety and soundness. OFHEO oversees the financial safety and soundness of the GSEs, principally through capital regulation and regulatory examinations.

Fannie Mae and Freddie Mac purchase home mortgages below the conforming loan limit (currently $207,000 for a one-family property), which they either hold in their own portfolios with debt financing or sell to private investors through mortgage-backed securities (MBS). Investors are attracted to these securities by the GSEs= guarantee of timely payment of principal and interest, coupled with what the market perceives to be an implicit guarantee from the Federal Government. Although the GSEs= securities must state explicitly that they are not backed by the Federal Government, many investors believe that the Federal Government would intervene if a GSE became insolvent. This presumption derives from the Aagency status@ of the GSEsCthat is, their Federal charters, the eligibility of their securities to be held and used for many similar purposes as U.S. Government securities, their exemption from State and local income taxes, the authority of the Secretary of the Treasury to purchase up to $2.25 billion of each of these GSEs= securities (and thus extend credit to the GSE), and other statutory benefits. The borrowing or funding advantage that Fannie Mae and Freddie Mac derive from their agency status gives them a significant competitive advantage over banks, thrifts, and fully private issuers of MBS in the market for conforming fixed-rate mortgages.

Housing Goals. In exchange for their borrowing advantages, the GSEs have certain public responsibilities, including providing stability in the secondary mortgage market and increasing access to mortgage credit for lower income borrowers and in underserved areas. In particular, under FHEFSSA, Congress called for the Secretary to establish three housing goals to focus the GSEs on these borrowers and areas:

! A low- and moderate-income goal, which targets mortgages on housing for families with less than median income.

! A geographically targeted goal, which targets mortgages on housing in areas underserved by mortgage credit institutions.

! A special affordable goal, which targets mortgages on housing for very-low-income households and low-income households in low-income areas.[2]

These housing goals began to be implemented only recentlyCin 1993Cbased on the

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Table 3.1 defines each housing goal and gives information on each GSE's performance between 1993 and 1995. Table 3.2 gives information on the GSEs= activity in 1993B95 relative to the 1996B99 goal definitions and estimates the size of the mortgage market for each goal.

provisions of FHEFSSA.[3] Transitional goals became effective in 1993, and permanent regulations specifying the current goals became applicable at the beginning of 1996. The Department believes that the new housing goals have added to the GSEs= motivation to pursue affordable housing initiatives in the public interest, are beginning to bear fruit, and have the potential to succeed to an even greater extent in the coming years.

The GSEs= financing of housing for low- and moderate-income families has increased from under 30 percent of the GSEs' combined business in 1992 (just before the housing goals were established) to more than 40 percent in 1995. During the 1990s, the GSEs have been introducing flexibility into their underwriting standards and have markedly increased their outreach efforts and new products aimed at serving lower income families and underserved neighborhoods. It should be noted, however, that the GSEs are currently meeting most of the affordable housing goals by purchasing standard conventional loans, as opposed to loans that require more intensive underwriting and consumer education. Given that lack of downpayments and low incomes pose significant barriers to homeownership for these families, it may be appropriate to give additional consideration to these barriers as the GSE housing goals are reviewed over time.

The Department recently devoted 2 years of intensive work to establish new housing goals to more effectively target underserved neighborhoods and families in need, while also simplifying the structure of the goals. Detailed research was conducted and extensive discussions were held with all interested parties to carry out the intentions of Congress. These new goals are benchmarks, not ceilings, which were designed to represent a reasonable and appropriate minimum share of the GSEs= business, even in interest rate and economic environments more adverse to their fulfillment than during the past few years. The goals were established for the next 4 years rather than a shorter period, to enable the GSEs to engage in long-term planning. The Department expects periodically to review and revise them, if appropriate, based on experience with their operation and in light of market developments.

Privatization Arguments. Proponents of fully privatizing the GSEs argue that the secondary market has developed to the point where it no longer needs support through Federal sponsorship of the GSEs. It is argued that market failures that once justified a Government role do not exist in today's market; that there are more direct ways to help lower income borrowers; and that some funding advantage from the GSEs= agency status is not passed through to homebuyers, but rather is retained as excess returns for their shareholders. It is also argued that taxpayers bear a substantial implicit contingent liability from potential Fannie Mae or Freddie Mac default on their obligations that could be eliminated through full privatization. Finally, it is suggested that market disruptions from full privatization of the GSEs would be minimal.

They replaced a less-extensive goals framework, which was principally focused on mortgages on housing for low- and moderate-income families.

Maintain GSE Status Arguments. Advocates for maintaining GSE status for Fannie Mae and Freddie Mac argue that the GSEs have brought stability and liquidity to the mortgage market; that they have increased their provision of mortgage credit to lower income borrowers and geographic areas underserved by the mortgage markets; that, as fully private corporations, they would not devote substantial resources to this effort; that they are beginning to develop a secondary market for multifamily mortgages; that increased costs the GSEs would incur as a result of full privatization would be passed on to the consumer in the form of higher interest rates; and that Congress designed an adequate regulatory structure to monitor and control any implicit contingent liability to the taxpayer. It is further argued that there are uncertainties regarding the capability of private conduits to provide adequate liquidity for mortgage lending. It is observed that full privatization would eliminate the statutory mandate to the GSEs (through their respective charters) to promote access to mortgage credit throughout the Nation, raising the possibility of greater regional variation in terms of access to mortgage credit.

This report assesses these privatization arguments and discusses advantages and disadvantages of the current system.

Section C highlights the Department's conclusions and recommendations. Sections D and E then summarize more fully the report=s analysis of the effects of full privatization on the mortgage market. Section F summarizes the report's conclusions with respect to six specific issues raised in the statute.

C. HUD=s Conclusions and Recommendations in Brief

The current secondary market system under Federal sponsorship is functioning wellCit is the most advanced and liquid housing finance system in the world. The GSEs, in accordance with their charter obligations and housing goals, have stepped up their outreach to lower income families and areas previously underserved by the mortgage market. Therefore, the Department concludes that there exists no compelling reason at this time to change the Federal sponsorship of the GSEs, which constitutes an important feature of the system. Fannie Mae's and Freddie Mac's GSE status is well justified by the urgency of their public purpose responsibilities. As previously mentioned, the Department believes that the benefits from full privatization would not offset the likely increases in borrowing costs for homeowners and financial uncertainties that full privatization would bring about.

Markets are dynamic, however. The privatization issue should therefore be reexamined periodically to see if developments in financial markets, the needs of the mortgage market, or experience with the regulatory structure established under FHEFSSA indicate that another conclusion is warranted.

The main points of HUD=s analysis supporting these broad conclusions are as follows:

Unmet Needs in the Mortgage Market. Numerous studies have documented the substantial housing and credit problems faced by lower income and minority families. Lender discrimination, overly restrictive underwriting standards, and limited financial experience, among other reasons, have created problems for these families in obtaining credit.

The GSEs and Affordable Lending. The GSEs are important participants in the delivery system for affordable mortgage loans for families and in neighborhoods that traditionally have not been well served by the mortgage market. The GSEs account for a major portion of conventional loans going to low-income families and underserved market areas, although, as noted later in this Executive Summary, the GSEs lag other market participants in reaching those families that are currently not well served by the mortgage market. Because of the dominance of the GSEs in the mortgage market, their activities can have a major, positive impact on lending for these families. The acceptance of the GSEs= underwriting standards throughout the market has given the GSEs a major role in the industry=s ongoing re-evaluation of traditional underwriting standards. The GSEs= impact is further enhanced by their ability to enter into partnerships with local governments and nonprofit organizations and to conduct market outreach and education activities on a nationwide basis.

The New GSE Housing Goals. The new, performance-based housing goals focus the GSEs= activities on the areas of greatest need. The recent substantial increase in the GSEs= purchases of loans for lower income borrowers and loans in underserved areas shows that the housing goals approach is beginning to work. In the future, the housing goals are intended to ensure that the GSEs offer more customized mortgage products and pursue aggressive outreach programs to extend mortgage availability to those who have not been well served under more traditional approaches.

Effects of Full Privatization on Affordable Lending. The Department is concerned that fully privatizing the GSEs would reverse recent improvements in affordable lending that the GSEs have made under the housing goals. Specifically, full privatization could reduce the GSEs= willingness to develop flexible underwriting standards, offer mortgage products designed for lower income families, and undertake marketing and outreach in underserved neighborhoods Cparticularly with respect to loans that require more intensive underwriting and consumer education. Changes in the housing finance system that would accompany full privatization (including increases in mortgage interest rates) could have particularly severe impacts on those families that are currently not well served by the mortgage market.

Effects on the Broad Secondary Market. The recent growth of private issuers of mortgage-backed securities and the financial infrastructure that has developed for securitizing mortgages suggest that the broad secondary mortgage market could continue to operate efficiently if the GSEs were fully privatized (apart from the considerations of loan affordability and market underservice discussed above). The newly privatized GSEs would face competition from firms currently securitizing jumbo mortgages. The credit enhancements (e.g., senior-subordinated structures, corporate guarantees, and reserve funds) required by bond rating agencies would replace the presumed Government guarantee in determining the credit quality of GSE securities sold in the conventional secondary market.

Uncertainties Regarding Secondary Market Effects. There are significant uncertainties associated with the idea of full privatization relating to its potential effects on market liquidity, given the large share of the mortgage finance system that the GSEs represent. The liquidity of the current system depends significantly on the high demand for securities with agency status and on the ease with which these securities can be traded. The conditions under which investors would be willing to hold such a large volume of mortgage-backed securities without agency status are unclear. The current ready supply of mortgage funds through the secondary market has helped to stabilize the availability and price of mortgage loans in regions experiencing economic difficulties and in the presence of major economic dislocations such as the recent failure of hundreds of local thrift institutions. Increased market volatility would be particularly likely initially after full privatization became effective, as the mortgage finance industry adapted to the changed status of the GSEs.

The Federal Government=s Implicit Contingent Liability. OFHEO is now designing a state-of-the-art financial model that will support establishment of risk-based capital standards for each GSE, supplementing already-specified minimum capital requirements. In addition, OFHEO is conducting detailed examinations of the GSEs= business operations. When fully implemented, this system, which Congress mandated in 1992, is intended to reduce the possibility that the GSEs might become financially insolvent at some future date and that Federal taxpayers would be called upon to bail them out. Full privatization would end OFHEO=s financial safety and soundness oversight without necessarily ending this Atoo-big-to-fail@ status of the GSEs.

Feasibility of Privatization. Constructing an effective plan of privatization is feasible but would be a difficult undertaking. Careful and detailed planning would be essential to enable the process to occur smoothly without imposing undue burdens on the enterprises, excessive risks on taxpayers, or unnecessary instability on financial markets and the broader economy, while protecting commitments already made to investors in the debt securities and MBS of the enterprises.

Conclusion. There remains a substantial public-purpose rationale for the current GSE system. Given the recently-improved housing goals and safety and soundness oversight by OFHEO, the Department recommends that it be continued.

Recommendation. Because the Nation's financial system is undergoing rapid structural and technological changes and a private secondary market has begun to develop, the balance of the advantages and disadvantages of privatization could change over time. Congress should therefore reexamine the secondary market and the need for Federal sponsorship of the GSEs periodically, to determine whether the privatization issue should be revisited.

The remainder of this Executive Summary expands on the GSEs= role in the affordable lending market and the effects of privatization on the mortgage market.

D. Unmet Needs, GSE Affordable Lending, and the Housing Goals

By specifically charging the GSEs to purchase loans made to lower income borrowers and in underserved areas, Congress required that the GSEs return something to the public in exchange for the numerous Federal benefits they enjoy. This report concludes that much can potentially be gained if the Federal government can continue to focus the GSEs= efforts on the substantial needs that exist in lower income and minority housing markets.

Unmet Needs. Homeownership has long been a key aspiration of Americans, and its many public and private benefits continue to justify Government encouragement and support. There is ample empirical evidence that homeownership leads to more responsible and self-reliant citizens and promotes social and community stability. The GSEs have helped to expand the number of homeowners by reducing the cost of financing homeownership nationwide. However, there is also evidence that our highly efficient system for funding mortgages does not work everywhere or for everyone.

Census Bureau studies have shown how difficult it is for lower income families to accumulate cash for downpayments and closing costs and to make monthly mortgage payments. Many lower income and minority families were closed out of the housing market during the 1980s. Low-income families with children, who could most benefit from the advantages of homeownership, bore the brunt of this decline in homeownership. The share of the Nation's families with children living in owner-occupied homes fell from 71 percent to 63 percent between 1980 and 1991.

Research by HUD and others based on Home Mortgage Disclosure Act (HMDA) data suggests that there are pervasive and widespread disparities in mortgage lending across the Nation. A major study by researchers at the Federal Reserve Bank of Boston showed that mortgage denial rates were substantially higher for minorities, even after controlling for indicators of credit risk. A recent study at the Federal Reserve Bank of Chicago reported similar findings. Other studies, including those conducted by the GSEs, have found that overly restrictive underwriting and appraisal guidelines are one reason lower income borrowers and inner-city neighborhoods have not been well served by the mortgage market.

Affordable Lending Initiatives. Recently the GSEs, as well as conventional lenders and private mortgage insurers, have been reaching out to potential homebuyers. Fannie Mae and Freddie Mac have developed special mortgage products and entered into partnerships with local governments and nonprofit organizations to increase mortgage access to underserved borrowers. Even more importantly, the GSEs have been modifying their underwriting standards to address the needs of families who have found it difficult to qualify under traditional guidelines. For instance, the GSEs now allow loan approval based on "income stability," which helps lesser-skilled workers who, despite frequent job changes, manage to earn a steady income.

These new affordability efforts are being designed to attract creditworthy homeowners in a prudent fashion. Homebuyer education is a key component of the GSEs= new affordable lending programs. The GSEs are also working with families to cure delinquencies and avoid foreclosure. They are relying on intensive default monitoring and innovative loss mitigation programs to manage the credit risk of their new affordable programs.

Available data suggest potential benefits from encouraging the GSEs to continue improving their homeownership efforts. Surveys show that by a large margin, current renters, many of whom were closed out of the housing market due to high interest rates and slow income growth during the 1980s, desire to become homeowners. Harvard's Joint Center for Housing Studies reports that there is now a large homebuying potential among immigrant and minority households. The Urban Institute, in a study funded by HUD, reports that there is a significant low-income population of potential homeowners with low credit risk that could be reached with continuing outreach efforts. In absence of the incentives to reach out to this population that the charter mandates and housing goals provide, the GSEs would focus only on maximizing profits for shareholders, reducing the incentives to reach these populations.

GSEs= Improvements in Levels of Affordable Lending. The approach to affordable lending envisioned by the housing goals is beginning to produce results. The GSEs have increased their purchases of mortgages for lower income families significantly since the goals were first established, and they have been improving their mortgage purchase performance in low-income and high-minority neighborhoods where credit access has historically been limited. Fannie Mae, which has put the most emphasis on lending in inner-city neighborhoods, increased its activity in underserved areas (as defined for purposes of HUD=s 1995 final rule that established housing goals beginning in 1996) from 22.9 percent in 1993 to 31.2 percent in 1995, while Freddie Mac's activity increased from 21.3 percent to 25.1 percent over the same period (see Figure 1). While low interest rates were certainly a factor, the GSEs= affordable lending initiatives are a major reason for their increases in such lending.

The housing goals are important because they focus the activities of the two dominant players in the conventional mortgage market. Fannie Mae and Freddie Mac set underwriting standards and develop new products for the market, and in general, provide overall leadership to the industry. The new housing goals have been designed so that they provide a flexible framework that is consistent with the business operations of private corporations such as the GSEs.

More can be done. The GSEs lag other market participants in affordable lending. The bulk of their affordable housing purchases consists of loans with downpayments of 20 percent or more rather than loans with high loan-to-value ratios. Lack of funds for down-payment (as well as low incomes) pose significant barriers to homeownership for many families. The GSEs have begun to pursue innovative programs to provide access to mortgage credit to more such families, and given their substantial profits and statutory benefits, their efforts can improve. It will be important in HUD=s future regulatory reconsideration of the goals to consider whether the goals are motivating the GSEs to focus their activities sufficiently on this segment of the market, consistent with their charter obligations.

E. The Effects of Full Privatization

Full privatization would mean higher borrowing costs for the GSEs, and this would affect the way in which they conduct their portfolio and MBS operations, their ability to lend to underserved borrowers, and the pattern of competition in the overall secondary mortgage market. This section identifies some of the likely outcomes.

E.1 Effects on the GSEs= Operations

Full privatization of the GSEs and the consequent loss of agency status would impose higher credit enhancement and borrowing costs on the fully privatized enterprises. HUD expects that a portion of this effect would be passed along to borrowers in the form of slightly higher mortgage interest rates. A research report prepared for this study estimates that conforming rates are about 25B40 basis points lower than jumbo rates, other factors held constant. The ultimate impact of full GSE privatization on mortgage rates could be outside this range, depending on how markets would adapt if investors no longer presumed there to be an implicit government guarantee of GSE securities. Competition among the GSEs= successor enterprises and shifts to depository institutions would generate pressure to keep any increases small. While the effect of any rate increase would be across the board, it would likely be stronger for those who have been underserved historicallyCborrowers with low incomes and minorities. Such borrowers would continue to have access to FHA, which has been a dominant source of mortgage credit for under-served borrowers and whose rates would not be affected by GSE privatization.

The GSEs= borrowing costs would rise by an estimated 30B75 basis points, and the profitability of their portfolio operations would be reduced. The retained portfolio accounted for approximately 74 percent of Fannie Mae's income and 50 percent of Freddie Mac's income in 1995. The GSEs would also face higher credit enhancement costs when issuing MBS, causing their guarantee fees to rise. Additional credit enhancements would be necessary to maintain high bond ratings from private rating agencies, because the GSEs could then no longer rely on their Government-sponsored status for an automatic "AAA" rating for their securities.[4] The market and rating agencies could require the GSEs to hold a larger amount of capital against their on- and off-balance sheet liabilities. These increased funding costs to the GSEs are the main factor behind the higher interest rates and increased mortgage origination costs for homeowners although, as noted previously, competition in the market would create pressure to reduce such increases.

The Federal charters of the GSEs have enabled them to enjoy a protected duopoly position in the creation of pass-through securities and debt securities backed by conforming conventional mortgages. There is evidence that this has enabled the GSEs to retain a portion of their funding advantage rather than passing it fully to homebuyers. Full privatization, by allowing the GSEs and jumbo mortgage securitizers to compete, would tend to reduce this capacity.

The mortgage interest rate effect identified above would cause slightly increased homeownership costs for families at all income levels and diminished homeownership opportunities for some families. It would also bring about further changes and realignments in the mortgage finance industry. However, increased competition could also have a countervailing effect.

The remainder of this section discusses the specific impacts of full privatization on affordable lending, and then on the overall mortgage market.

E.2 Effects on Affordable Lending

While there is some uncertainty with respect to many of the market effects of full privatization, there is reasonable concern that the GSEs= efforts to assist underserved borrowers would decline. Because affordable loans typically involve higher marketing, servicing, and credit costs than loans originated under the GSEs= standard programs, their volume would be reduced if Fannie Mae and Freddie Mac lost their Federal benefits, as the GSEs would look for ways to reduce costs, increase margins, and achieve profitability hurdles. However, since the GSEs currently earn some profit on these loans,

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Even if a fully privatized GSE security were credit enhanced to obtain an "AAA" rating, the market price of that security would be expected to decrease due to the loss of agency status.

they or their competitors might choose to continue in the market to some extent.

In addition to the effect of higher mortgage interest rates on housing affordability noted above, impacts of full privatization of the GSEs could include:

(1) Underwriting Standards. Full privatization could cause underwriting standards for affordable loans to tighten. Without the housing goals and the underwriting reviews motivating the GSEs to purchase loans that provide social benefits, the profit motive of fully privatized GSEs would likely prompt a scaling back of underwriting flexibility. For prospective homebuyers, this might mean higher downpayment requirements and/or higher monthly income requirements. Lower income households, minorities, and households living in underserved areas would be most adversely affected. The elimination of the fair lending provisions of FHEFSSA would eliminate a structured process for periodic review of the GSEs= underwriting and appraisal guidelines and business practices.

(2) Marketing to Underserved Borrowers. Lending to lower income families requires more intensive outreach, education, and marketing efforts than lending to other families. Marketing, counseling, and servicing work associated with lower income lending is more labor intensive and costly. The GSEs have been making efforts to reach out and penetrate the lower income market over the past few years. To the extent that private sector lenders and conduits have been involved in such activity, they might continue to pursue it if the GSEs were fully privatized. However, without the Federal mandates to the enterprises, the successor enterprises to the GSEs would be more inclined to give priority to the pursuit of higher return investment opportunities and this would likely involve a scaling-back of such outreach.

(3) Homeownership. Higher interest rates, tighter underwriting, and reduced availability of long-term fixed-rate mortgages would likely cause some drop in the home-ownership rate, undercutting the gains made under the President=s June 1995 National Homeownership Strategy. A research report prepared for this study concluded that, to the extent that there would be such an effect, it would be particularly severe for younger homebuyers, low-income households, minorities, and those in central cities.

(4) Mortgage Market Initiatives. In a number of areas, the GSEs have undertaken special market initiatives and demonstration programs that test new approaches to mortgage finance. Fannie Mae, for instance, joined with the Federal Housing Administration (FHA) in a demonstration program for Home Equity Conversion Mortgages (HECMs) and is now attempting to develop more fully a secondary market for rural loans. Initiatives such as these could be scaled back based on profitability considerations if the GSEs were fully privatized.

(5) Development of Multifamily Secondary Market. One of the GSEs=

congressional mandates is to develop a secondary market for multifamily mortgages. The multifamily secondary market, which is just beginning to form, has not yet received the full benefits of the GSEs= efforts. Withdrawing the mandate would remove the GSEs= incentive to pursue multifamily housing efforts, which, in large measure, serve very-low-income families. A sustained GSE presence in the multifamily secondary market would enhance the liquidity of multifamily mortgages and provide the standardization that is needed for this market to develop. Full privatization would make multifamily purchases less attractive to the GSEs and likely shift some loans currently made by the GSEs to less efficient Government insurance programs.

(6) Single-Family Rental Housing. This report focuses primarily on single-family owner-occupied housing and multifamily rental housing. However, single-family rental housing (that is, 1-unit rental properties and rental units in 2B4 unit properties, whether or not the property contains an owner-occupied unit) occupies a significant place in the housing market, accounting for more than 12 percent of all housing units and 21 percent of units affordable to low- and moderate-income families. The GSEs play a role in this market, although a lesser one than in the single-family owner market. To the extent that full privatization leads to increased mortgage rates on these properties, some of the increases would be passed on to renters, thereby making these rental units less affordable.

(7) Effects of Competition. Competition in the market following full privatization would tend to exert mitigating pressures on some of the effects noted above, especially over a period of years. The GSEs= successor enterprises and their market competitors might be able to continue their activity in the affordable loan market to some extent, given that the GSEs currently earn at least some profit on most of these loans. They might then continue to purchase CRA-related loans originated by insured depositories, whose volume may well increase in coming years. The extent to which competitive incentives would exist to adapt underwriting standards and develop techniques of outreach to all segments of the market, however, is uncertain.

E.3 Effects on the Housing Finance System

Several kinds of market changes could follow from full privatization. The huge size of the GSEs and the fact that their full privatization has no historical counterpart make it difficult to establish the potential magnitude of each effect. Still, there is a considerable base of knowledge on the secondary market, including evidence from the jumbo market (which has always been fully privatized) that makes it possible to reach some reasonably secure judgments about some of the major market effects.

(1) Increased Competition. Currently, the GSEs account for more than 80 percent of the conventional MBS market, including both conforming and jumbo loans. Eliminating the GSE cost advantage with full privatization would cause a shift toward holding of mortgages in portfolio by banks and thrifts and toward direct competition among the successor enterprises to the GSEs and existing private conduits for securitizing both conforming and nonconforming mortgages. It would also bring market discipline to the conforming MBS marketCthe market would require interest rates on the enterprises= securities fully commensurate with their risks; and the GSEs would face increased competitive pressure to develop more efficient financial mechanisms.

(2) Continuing Secondary Market. The secondary market infrastructure that has developed with the GSEs is now well established and is benefiting private conduits as well. Private conduits, albeit on a substantially smaller scale than the GSEs, appear able to operate viable, competitive MBS programs, achieving liquidity that is reasonably close to that of the GSEs. The private secondary mortgage market has made great strides in the past few years. A solid infrastructure of private secondary market institutions, knowledge, and expertise now exists. Under full privatization, the MBS market would continue to be the major vehicle for funding mortgages.

(3) Uncertain Liquidity Effect. No private parallel mirrors the current scale of the GSEs= business in the mortgage market. An enormous demand would therefore be placed on the private market to provide the liquidity and credit enhancements that are now supported by the GSEs= agency status (that is, the factors that lead to the presumption of a Government guarantee on their securities). There is some question concerning the source of such credit enhancements. For instance, it may be difficult to market the large increase in subordinated debt that would be needed to support issuance of highly rated private MBS. Also, the commitment of private conduits to the secondary market changes from year to yearCone year=s leader in purchases may drastically reduce purchases in the next year as competing enterprises seek out markets offering the most attractive yields Cand the impact of this more fragmented, private system on market liquidity under full privatization is uncertain. Therefore, while there would probably be no major long-term adverse effects on liquidity from ending the agency status, there remains an element of uncertainty, particularly in the initial stages.

(4) Other Systemwide Effects. Full GSE privatization could be expected to bring other effects in the delivery of mortgage credit.

! Full privatization could reduce the willingness of lenders to originate fixed-rate, long-term conventional mortgages relative to ARMs, which pass the interest rate risk to the homeowner.

! Full privatization would remove statutory restrictions on vertical integration between the primary and secondary markets, and this would stimulate consolidation in the primary market. Smaller mortgage companies could either become correspondent lenders acting through the fully privatized GSEs, or they could be acquired by larger mortgage company conduits to take advantage of managerial economies. The

GSEs could become direct originators of mortgage loans.

! As noted above, full privatization would bring pressure for added credit enhancements. Private mortgage insurance (PMI) companies could be expected to provide somewhat deeper insurance coverage or reinsurance on mortgages and mortgage pools. Structures such as senior/subordinated bonds that are designed on the basis of credit risk would become more popular. The influence of credit rating agencies would obviously increase.

! Full privatization would reduce the GSEs= portfolio operations. This would not have a major impact on the mortgage market because the MBS market is now well-developed and is an effective mechanism for allocating interest rate risk.

! Full privatization would induce some shifting to the Government market. Because FHA insurance together with Ginnie Mae (the Government National Mortgage Association) would continue to provide the same protection against credit risk to both lenders and security investors, sufficiently large interest rate increases would make FHA-insured loans relatively cheaper. The opportunity for switching, however, would continue to be limited by FHA's lower loan limits, which constrain its activity to the lower half of the housing market, and by FHA's insurance premium, which is higher for all but the poorest of creditworthy risks.

! Full privatization could also induce some shifting to depository institutions. Higher interest rates would encourage banks and thrifts, which are already major funders of mortgages, to retain more mortgages in portfolio.

(5) Implicit Contingent Liability. Congress has been justifiably concerned about the possibility that financial claims could be imposed on Federal taxpayers if the GSEs were to encounter financial difficulties. The GSEs are highly leveraged firms that assume significant interest rate and credit risks. It is important that they be adequately capitalized and that their risks be closely monitored to minimize the possibility that there could ever be a call for financial assistance from the Federal Government. Congress recognized this when it established OFHEO as the safety and soundness regulator of the GSEs.

FHEFSSA mandated that OFHEO develop a system of capital regulation for the GSEs involving both minimum standardsCthat is, standards based on total assets, MBS, and other figures from the GSEs= financial statementsCand risk-based standards involving application of a computer-based simulation of stressful economic conditions. OFHEO has now established the minimum requirements and is constructing its stress test according to a framework established in FHEFSSA. Although no system of public capital regulation can give complete assurance that financial problems will not develop, the FHEFSSA standard was mandated with the objective of reducing the risk of failure to a very low level. OFHEO=s program of examinations of the GSEs, which was also mandated by FHEFSSA, provides further security to taxpayers.

Full privatization implies the substitution of market discipline for financial regulation of the type currently being implemented by OFHEO. That is, bond rating agencies would assess the risks in securities issued by the successor enterprises to the GSEs and publish the implied ratings instead of the automatic "AAA" that they now assign. Investors would presumably require commensurate pricing of the securities, although a key question is whether they would continue to believe it possible that the Federal Government would regard the enterprises as "too big to fail" in a time of financial difficulty. If so, then the GSEs could tend to become undercapitalized relative to the market's actual assessment of their risks, and this would tend to perpetuate the presumption of contingent taxpayer liability that currently exists. It would be appropriate that any specific plan for privatization anticipate this potential problem and include measures to ensure an adequately competitive market structure.

F. Conclusions on Statutory Study Topics

The statutory requirement for this report indicates that Congress is seeking insight responding to the "feasibility" and "desirability" of full privatization, and it enumerates six specific issues on which HUD is expected to report. Conclusions on these topics are presented in Chapters VIII and IX; the highlights are as follows:

Feasibility of Privatization. The report considers the Afeasibility@ of privatization, that is, whether it is possible to establish adequate operational processes to accomplish full privatization. The report concludes that a holding company approach could prove to be workable, in which new non-GSE corporations would be created as successors to Fannie Mae and Freddie Mac, each of which would include a subsidiary to liquidate the existing books of business. This approach is similar to an approach recently proposed by the management of the Student Loan Marketing Association (Sallie Mae), contemplating the full privatization of that enterprise. Other approaches are also possible.

Desirability of Privatization. The effects of full privatization are analyzed throughout this report and summarized in this Executive Summary. Weighing the various effects, HUD finds no compelling rationale to argue for full privatization at this time. However, the issue should be reconsidered periodically.

Topic 1: The requirements applicable to Fannie Mae and Freddie Mac under Federal law and the costs to the enterprises. Requirements of several types would be terminated under Congress=s concept of full privatization; these relate to the enterprises= obligations to attain HUD-specified housing goals, to OFHEO=s regulation of their financial safety and soundness, to reporting on mortgage purchases, and to fair lending objectives.

Topic 2: The cost of capital to the enterprises. It is estimated that the cost of debt could rise by 30B75 basis points, and that MBS financing costs could rise by around 30B35 basis points, depending on the securities ratings that became applicable to the successor enterprises. The GSEs= stock could be viewed as more risky than before, and if so, this would increase the GSEs= costs of raising any new equity.

Topic 3: Housing affordability and availability and the cost of homeowner-ship. If the GSEs were fully privatized, they would likely reduce their affordable lending initiatives that require more intensive underwriting and consumer education. Mortgage rate increases are likely and would make homeownership more expensive.

Topic 4: The level of secondary mortgage market competition subsequently available in the private sector. The degree of competition would increase due to the entry of jumbo conduits into the conforming market.

Topic 5: Whether increased amounts of capital would be necessary for the enterprises to continue operation. Increased capital would be necessary to maintain current levels of business with current MBS-portfolio composition. It is likely, however, that the GSEs= portfolio operations would be substantially cut back or eliminated, reducing such need for capital.

Topic 6: The secondary market for residential loans and the liquidity of such loans. The recent growth of private issuers of MBS and the financial infrastructure that has developed for securitizing mortgages suggest that the broad secondary mortgage market could continue to operate efficiently if the GSEs were fully privatized. However, there are significant uncertainties associated with the idea of full privatization relating to its potential effects on market liquidity, given the large share of the mortgage finance system that the GSEs represent.

G. HUD=s Recommendation

The Department finds that full privatization of Fannie Mae and Freddie Mac would likely increase interest rates to homebuyers and reduce outreach to low- and moderate-income prospective homebuyers and to market areas traditionally underserved by the industry. It would end the recently established system of dual programmatic and financial safety and soundness regulation of the GSEs, which is only now being implemented and which shows promise to further the achievement of still-significant public purposes. The Department concludes that no compelling public-interest justification for full privatization of the GSEs is apparent at this time. As the benefits of the GSEs= affordable housing efforts materialize during the next few years, the Department believes that the benefits should exceed any advantages of privatization.

The current GSE arrangement should be reassessed periodically, given the limited nature of experience to date under the affordable housing goals and the interim nature of progress to date in establishing capital standards for the GSEs. As broader financial markets and institutions evolve, the role of the GSEs in the housing finance markets will also evolve. The mortgage finance system, and broader financial markets, are changing rapidly, and this could affect the analysis of privatization and the weighing of its potential effects after a few years.

HUD therefore recommends reassessing the GSE arrangement periodically. A first review would be appropriate soon after some experience has been gained under the recently revised housing goals and OFHEO=s new risk-based capital requirements (scheduled to be issued in 1997). Technological and institutional changes in the relevant markets could also provide reason for a reassessment. Examination should be made both of the continued rationale for GSE status and the desirability of any changes to the structure of the housing goals or capital requirements, taking into account the scope of public benefits provided to the GSEs.

CHAPTER I

INTRODUCTION

A. The Purpose of This Report

The Federal Housing Enterprises Financial Safety and Soundness Act of 1992 (FHEFSSA or the Act) requires the Secretary of Housing and Urban Development (HUD), the Comptroller General of the United States, the Secretary of the Treasury, and the Director of the Congressional Budget Office (CBO) each to conduct and submit to the Committee on Banking, Finance and Urban Affairs (now the Committee on Banking and Financial Services) of the House of Representatives and the Committee on Banking, Housing, and Urban Affairs of the Senate a study regarding the desirability and feasibility of repealing the Federal charters of the Federal National Mortgage Association (Fannie Mae) and the Federal Home Loan Mortgage Corporation (Freddie Mac), eliminating any Federal sponsorship of these Government-Sponsored Enterprises (the enterprises, or the GSEs), and allowing the enterprises to continue to operate as fully private entities.[5]

HUD interprets Afull privatization@ of Fannie Mae and Freddie Mac to mean the removal of the full set of statutory benefits associated with their GSE status, as well as obligations to serve the public interest in several ways explicitly stated in the law. It differs from Aprivatization@ in the usual sense of the word, given that the GSEs are already privately owned, profitmaking corporations with boards of directors, publicly traded stock, and considerable autonomy to set their own business directions. It does not imply the inevitable and immediate termination of all existing regulations pertaining to the GSEs. For example, ongoing regulation to ensure the continued financial soundness of liquidating portfolios of securities issued prior to the date of Afull privatization@ would be appropriate.[6]

The Secretary is submitting this report to Congress in accordance with FHEFSSA. As required, this report examines the effects of privatization on six specified topics as well as several other relevant factors. These topics, and the locations within this report where they are discussed, are as follows:

(1) The requirements applicable to Fannie Mae and Freddie Mac under Federal law and the costs to the enterprisesCin Chapter I (below).

(2) The cost of capital to the enterprisesCin Chapter VI, Section E.

FHEFSSA, enacted October 28, 1992, is Public Law 102B550, Title XIII of the Housing and Community Development Act of 1992. Section 1355 specifies the requirement for this report.

This is further discussed in Chapters VIII and IX.

(3) Housing affordability and availability and the cost of homeownershipCin Chapters IV, V, and Section D of Chapter VI.

(4) The level of secondary mortgage market competition subsequently available in the private sectorCin Chapter VI, Section B.

(5) Whether increased amounts of capital would be necessary for the enterprises to continue operationCin Chapter VI, Section E.

(6) The secondary market for residential loans and the liquidity of such loansCin Chapter VI, Section B and Chapter VII, Section B.

(7) Other factors that the Secretary deems appropriate to enable the Congress to evaluate the desirability and feasibility of privatization of the enterprises. The Secretary deems especially relevant the status of implementation of the housing goals framework for the GSEs as established in FHEFSSA (Chapters IIIBV), the GSEs= role in promoting adherence to tenets of fair lending consistent with FHEFSSA and other statutes (Chapter III), and insights with respect to the potential market effects of privatization (Chapters VI and VII).

The sequence of topics presented has been chosen to facilitate the logical development of concepts. In Chapter IX, HUD=s conclusions with respect to the statutorily mandated study topics are presented. Section G of Chapter VII summarizes HUD=s conclusions with respect to the desirability of full privatization.

The Secretary, the Comptroller General, the Secretary of the Treasury, and the CBO Director commissioned five analytical studies to assist in the preparation of their reports and develop an appropriate, common analytical foundation on issues surrounding the concept of full privatization of the enterprises. These studies, accompanied by commentaries on them by academic experts and by Fannie Mae, have been published in a separate volume.[7]

Section B describes the public purpose obligations of the GSEs. Section C describes the statutory prerogatives accorded to Fannie Mae and Freddie Mac that have led securities rating agencies and investors to presume that there is an implicit Federal guarantee or backing on the GSEs= securities. Section D discusses the implications of full privatization for these obligations and prerogatives. Section E presents an overview of

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Studies on Privatizing Fannie Mae and Freddie Mac (Washington: U.S. Department of Housing and Urban Development, 1996). As noted in the introduction to the *Studies*, Freddie Mac declined to submit written commentary, although Freddie Mac staff participated in seminars on the five papers, and Freddie Mac has provided its views on privatization to HUD at other times.

the remainder of the report.

B. Fannie Mae and Freddie Mac as Government-Sponsored Enterprises

Fannie Mae and Freddie Mac are shareholder-owned GSEs, chartered by Congress to create a national secondary market for residential mortgages in the United States. Fannie Mae and Freddie Mac purchase home mortgages for their own portfolios, financed through unsecured debt obligations, and create mortgage-backed securities (MBS), in which the GSEs guarantee payment of principal and interest to MBS investors. Although the GSEs= MBS and debt securities are statutorily required to bear a statement that they are not backed by the full faith and credit of the United States, investors believe that an implicit guarantee existsCthat is, that the Federal Government would intervene if the GSEs became insolventCbased on the multifaceted relationship between the GSEs and the Federal Government. The framework of statutory advantages and obligations defines the GSE status of the enterprises. The elements of this relationship are enumerated in this and the next section and include various market privileges accorded to GSE securities, along with statutory mandates to fulfill four explicit public purposes. Based on the elements of this relationship and on investors= presumption of a guarantee, the GSEs= debt securities and MBS are accorded Aagency status,@ that is, they trade at interest rates only slightly higher than rates on U.S. Treasury securities.

By repealing the GSEs= Federal charters, privatization would relieve the GSEs of their statutory public purposes while simultaneously ending some of the statutorily based business advantages that are provided to them. As discussed throughout this report, the GSEs would not be completely relieved of government regulation as currently imposed on businesses in the lines of activity that the successor enterprises to the GSEs would pursue. Moreover, it might be deemed appropriate to strengthen some of the statutory restrictions that would continue to apply to them. HUD=s analysis on this topic is summarized in Chapter IX.

B.1 Public Purposes of the GSEs

The Fannie Mae Charter Act and the Freddie Mac Act establish the public purposes of the enterprises as follows:[8]

(1) To provide stability in the secondary market for residential mortgages.

(2) To respond appropriately to the private capital market.

Section 301 of the Federal National Mortgage Association Charter Act (Title III of the National Housing Act, 12 U.S.C. 1716 et seq., to be cited as the Fannie Mae Charter Act) and Section 301(b) of the Federal Home Loan Mortgage Corporation Act (Title III of the Emergency Home Finance Act of 1970, 12 U.S.C. 1451 et seq., to be cited as the Freddie Mac Act) establish the statutory public purposes of the enterprises. FHEFSSA (12 U.S.C. 4501 et seq.) amended the list of public purposes. The appendix to Chapter VII of this report describes the evolution of the public purpose statement since 1954.

(3) To provide ongoing assistance to the secondary market for residential mortgages (including activities relating to mortgages on housing for low- and moderate-income families involving a reasonable economic return that may be less than the return earned on other activities) by increasing the liquidity of mortgage investments and improving the distribution of investment capital available for residential mortgage financing.

(4) To promote access to mortgage credit throughout the Nation (including central cities, rural areas, and underserved areas) by increasing the liquidity of mortgage investments and improving the distribution of investment capital available for residential mortgage financing.

FHEFSSA divided the Federal Government=s regulatory responsibilities over Fannie Mae and Freddie Mac while restating the Secretary=s general regulatory power over the GSEs. Under FHEFSSA, the Secretary establishes housing goals, establishes fair housing requirements, reviews new program requests, and oversees all other matters not involving financial safety and soundness. The Office of Federal Housing Enterprise Oversight (OFHEO), an independent agency within HUD, was established to oversee the financial safety and soundness of the enterprises.

The programmatic and financial regulation mandated by FHEFSSA required substantial research by HUD and OFHEO. In the program area, HUD was to develop rules that would specify goals for the GSEs= mortgage purchases financing housing for specified, targeted sectors of the housing market and would cover many other subjects, as discussed below. In the financial area, OFHEO was to establish minimum capital standards based on on and off-balance sheet values, develop risk-based capital standards based on the results of a financial stress test analysis, and initiate a comprehensive program of regulatory examinations. HUD=s final rule was published in the *Federal Register* on December 1, 1995 (60 FR 61846). OFHEO published a proposed rule specifying minimum capital requirements on June 8, 1995, and an Advance Notice of Proposed Rulemaking (ANPR) relating to risk-based capital standards on February 8, 1995. OFHEO=s first Notice of Proposed Rulemaking (NPR) on specification of the benchmark credit loss experience and the housing price index to be used in constructing the Enterprises= risk-based capital requirements was published on June 11, 1996.[9]

B.2 Housing Goals

The Department has established minimum income-based and geographically targeted housing goals for the purchase of mortgages by each GSE. The purpose of the

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Citations are: for the ANPR on OFHEO=s approach to risk-based analysis, 60 FR 7468; and for the proposed rule on minimum capital standards, 60 FR 30201, and for the NPR, 61 FR 29592B29621.

housing goals is to ensure that an appropriate portion of each GSE=s mortgage purchases are targeted to low- and moderate-income families, very-low-income families, and low-income families in low-income areas, and borrowers living in areas underserved by the mortgage market. The regulation sets three specific goals for 1996 and 1997B99: a low- and moderate-income goal; a goal for mortgages on housing in central cities, rural areas, and other underserved areas (geographically-targeted goal); and a special affordable housing goal.[10]

The low- and moderate-income goal is broadly defined to include purchases of mortgage loans made to families with income at or below area median income (AMI). At least 40 percent of the dwelling units in properties whose mortgages are purchased by the GSEs in 1996 must be for such low- and moderate-income families, with this goal rising to 42 percent for 1997B99.

The geographically targeted goal requires the GSEs to purchase mortgages on properties located in census tracts within metropolitan areas where either (a) the median income of families does not exceed 90 percent of the area median income, or (b) minorities comprise 30 percent or more of the residents and the median income of families does not exceed 120 percent of the area median income. A similar definition applies to non-metropolitan mortgages are purchased by the GSEs in 1996 must be located in these areas, with this goal rising to 24 percent for 1997B99. The goal was set this way to target areas underserved by mortgage providers. HUD determined that income and race are appropriate statistical indicators of underservice.[11]

The special affordable housing goal is both income- and geographically based. The GSEs are directed to purchase mortgages on units occupied by low-income owners and renters in low-income areas, and mortgages on units in any area occupied by very-low-income owners and renters. The special affordable housing goal is set at 12 percent and 14 percent of the total number of dwelling units financed by each GSE=s mortgage purchases for 1996 and 1997B99, respectively. A further requirement is that, among their mortgage purchases that meet the total special affordable housing goal, each GSE must annually purchase qualifying multifamily mortgages in an amount at least equal to 0.8 percent of its total dollar volume of mortgages purchased in 1994.

To monitor compliance with these housing goals and to meet statutory requirements, the GSEs are required to submit data and other information on their single-family and multifamily businesses to the Secretary.[12] The reporting of data by the GSEs is designed

The housing goals are discussed further in Chapter III.

60 FR 61925B61958.

See Sections 1321B1328, 1336(a) of FHEFSSA, Sections 309(m) and (n) of the Fannie Mae Charter Act, Sections 307(e) and (f) of the Freddie Mac Act, and 60 FR 61873B75 and 61998B62000.

to fill the earlier information vacuum on the GSEs= activities.[13]

B.3 Fair Lending

The GSEs are prohibited from discriminating in any manner in the purchase of mortgages, including consideration of the age or location of a dwelling in a manner that has a discriminatory effect. HUD can refer cases of possible violations by the GSEs of the fair lending provisions of FHEFSSA to OFHEO, which can take enforcement action against the GSEs.

The GSEs are required to submit information to the Secretary to assist the Secretary in investigations under the Fair Housing Act and to assist in investigations under the Equal Credit Opportunity Act (ECOA) of mortgage lenders with which the GSEs do business. Upon direction from the Secretary, the GSEs must impose sanctions against lenders who violate fair lending laws. FHEFSSA requires HUD to periodically review the GSEs= underwriting and appraisal guidelines to ensure compliance with the fair lending provisions of that statute and the Fair Housing Act, and to make available to the GSEs information regarding violations of the Fair Housing Act, the ECOA or State or local fair housing/fair lending laws by lenders with whom they do business.

Finally, FHEFSSA and HUD=s regulation require the GSEs to analyze and report annually their underwriting standards and business practices to determine if they yield disparate results on a prohibited basis. They provide for the Secretary to periodically review and comment on the GSEs= underwriting and appraisal guidelines.

B.4 Programs Are Constrained

The GSEs are limited in the types of mortgages they may purchase. In particular, they may not purchase mortgages that exceed the conforming loan limit (currently \$207,000 for 1-unit properties, but 50 percent higher in Alaska, Hawaii, Guam, and the Virgin Islands, and higher for larger properties),[14] and they may not purchase mortgages with loan-to-value (LTV) ratios that exceed 80 percent unless such mortgages have private mortgage insurance (PMI), the seller retains a participation of at least 10 percent, or there is recourse to the primary lender in the event of default.[15]

It is also often said that the GSEs can only purchase Ainvestment grade@ mortgages. This refers to Section 304(a)(1) of the Fannie Mae Charter Act and Section

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The legislative history of the Act reflects congressional concern about the lack of complete and accurate data on the GSEs= business activities. S.Rep. No. 102B282, 102d Cong., 2d Sess., p. 39 (1992).

The conforming loan limit is increased each year based on the October-to-October increase (if any) in house prices as reported by the Federal Housing Finance Board=s Mortgage Interest Rate Survey.

Fannie Mae Charter Act, Sec. 302(b)(2); Freddie Mac Act, Sec. 305(a)(4)(c).

305(a)(1) of the Freddie Mac Act, which state that each GSE=s operations Ashall be confined, so far as practicable, to mortgages which are deemed by the corporation to be of such quality, type, and class as to meet, generally, the purchase standards imposed by private institutional mortgage investors.@ In practice, this means that conforming mortgages must meet the credit quality thresholds of >A= grade investments as defined by GSE underwriting standards.

The GSEs= activities are generally limited to Amortgages,@ but they may undertake some activities concerning certain types of loans, such as home improvement loans. The GSEs are prohibited from originating mortgages and, thus, are limited to secondary market operations. All new programs involving conventional mortgages to be implemented by the GSEs must be submitted for the Secretary=s review and approval or disapproval.[16]

B.5 Risks to Taxpayers and the GSEs= Management Under FHEFSSA: Capital Standards Governing Fannie Mae and Freddie Mac

Fannie Mae and Freddie Mac assume interest rate and credit risks in the purchase of mortgage products. To provide protection against these risks, Fannie Mae and Freddie Mac are required to hold a certain amount of capital that would be available if necessary to meet their debt obligations and to fulfill their guarantees of timely payment of principal and interest to investors in their MBS.[17] The levels of capital that Fannie Mae and Freddie Mac are required to hold were established by FHEFSSA, with implementation by OFHEO. The Act instituted capital standards for the GSEs based on a three-tiered approach: critical capital standards, minimum capital standards, and risk-based capital standards.[18]

Historically, the regulatory capital requirements for the GSEs have been lower than those of other financial institutions.[19] Risk-based capital standards for Fannie Mae and Freddie Mac are currently being developed by OFHEO to further reduce Fannie Mae=s and Freddie Mac=s risk of financial failure, by subjecting the enterprises to a capital standard sufficient to endure several credit and interest rate shocks over a 10-year stress period.[20]

C. Privileges Associated With GSE Status

FHEFSSA, Sec. 1322.

Freddie Mac uses the term AParticipation Certificates@ (PCS) for MBS.

FHEFSSA, Sec. 1361B1364.

See Chapter VII.

See congressional findings at Sec. 1302 (2) and (3) of FHEFSSA. In addition to the obligations identified above, each GSE is required to include five Presidential appointees on its 18-member board of directors (Fannie Mae Charter Act, Sec. 308(b); Freddie Mac Act, Sec. 303(a)(2)), and each GSE is required also to have a 15-member Affordable Housing Advisory Council to provide advice regarding possible methods for promoting affordable housing for low- and moderate-income families (Fannie Mae Charter Act, Sec. 309(o); Freddie Mac Act, Sec. 307(g)).

In exchange for the programmatic requirements and public purposes described above, the GSEs are accorded statutory privileges, which are outlined in this section. These provide Fannie Mae and Freddie Mac with significant borrowing advantages over other secondary market conduits, and over banks and thrifts with respect to certain forms of portfolio holdings.

C.1 Explicit Benefits

Explicit benefits accorded to the GSEs or their securities include the following:

(1) Debt securities and MBS issued by the GSEs receive almost the same preferred investment status as Treasury debt. They are lawful to be purchased, held, or invested in, to the same extent as U.S. Government securities.[21] As securities exempt from Securities and Exchange Commission (SEC) regulation by statutes specifically naming the GSEs (see the next item), they are designated as AGovernment securities.@[22] National banks, Federal savings associations, and Federal credit unions may invest in them without regard to asset diversification rules that would otherwise limit their investments in them, and they are eligible to be held by Federal Home Loan Banks for investment purposes.[23] They are eligible to be purchased in the open market operations of the Federal Reserve System, and they are eligible to be pledged as collateral for advances from Federal Reserve Banks.[24]

(2) The GSEs are exempt from debt and securities registration requirements of the SEC and the States.[25] If the GSEs= charters were repealed, all of the securities of the successor enterprises traded on national exchanges would have to be registered with the SEC and with the particular exchange on which they are traded. Reports would be filed with the SEC, including 10-K reports (which are similar to annual reports sent to shareholders), quarterly 10-Q reports, 8-K reports (which are filed when there are unexpected events or changes in the corporation that are important to investors and the SEC) , and regular disclosures of the holdings and transactions of Ainsiders@Cofficers and directors and any investors who control at least 10 percent of equity securities.

(3) The GSEs= debt securities and MBS receive favorable risk weights for purposes of calculating risk-based capital requirements of depository institutions. For thrift institutions regulated by the Office of Thrift Supervision (OTS), the risk weight is 20

15 U.S.C. 77rB1(a)(1); see also Sections 306(e) of the Freddie Mac Act and 311 of the Fannie Mae Charter Act; and on Fannie Mae, U.S. Department of Housing and Urban Development (1987), p. 54.

15 U.S.C. 78c(a)(42).

12 U.S.C. 24 (Aseventh@); 12 U.S.C. 1464(c)(1)(D)BB(F); 12 U.S.C. 1757(7)(E); 12 U.S.C. 1431(h).

12 U.S.C. 355; 12 U.S.C. 347; 12 CFR 201.108(b).

Sections 306(g) of the Freddie Mac Act and 304(d) of the Fannie Mae Charter Act.

percent, compared with 50 percent for qualifying whole mortgage loans and Anon-high-quality mortgage-related securities@ as defined by OTS.[26] Similar risk-weighting systems are specified for banks regulated by the Office of the Comptroller of the Currency, the Federal Reserve System, and the Federal Deposit Insurance Corporation,[27] except that the risk-weighting systems for Federally regulated banks assign less favorable weights to private-label MBS that OTS would classify as Ahigh-quality mortgage-related securities.@ These requirements translate, generally into risk-based capital requirements on the order of 1.6 percent of the book value of securities of these kinds held by thrifts or banks, with only half of this amount required to be held in equity capital.

(4) The GSEs are exempt from all State and local taxes except property taxes.[28]

(5) The Secretary of the Treasury is authorized in the Secretary=s discretion to purchase GSE securities not to exceed an aggregate principal amount of $2.25 billion.[29]

(6) The GSEs may conduct business in any State or territory, for example, without complying with any qualification or similar statute.[30] This means that the GSEs are exempt from submitting any special filings such State or territory may require for firms doing business within that State or territory.

(7) Federal Reserve banks may act as depositaries, custodians, and fiscal agents for the GSEs.[31] Based on this provision, GSE securities are traded through the AFed-wire@ system that is also used for trading of U.S. Government securities.

(8) In connection with certain lending, a GSE may provide contractually for the settlement or extinguishment, upon default, of the borrower=s right, title, or interest in the underlying mortgage(s), notwithstanding any Federal, State, or local law.[32]

(9) Freddie Mac=s rights and remedies with respect to any mortgage or obligation secured by Freddie Mac are immune from any impairment, limitation, or restriction under any law or administrative or other action that becomes effective after

12 CFR Section 567.6(E), (F), and (H). In the OTS system, Ahigh quality mortgage-related securities@ are securities that are rated in one of the two highest rating categories (i.e., at least AA) by at least one nationally recognized rating organization and meet specified structural requirements (12 USC 567.1(k) and 15 USC 78c(a)(41)).

12 CFR Parts 3, 208, and 325, respectively.

Sections 303(e) of the Freddie Mac Act and 309(c)(2) of the Fannie Mae Charter Act.

Sections 3048 of the Fannie Mae Charter Act and 306(c)(2) of the Freddie Mac Act.

Sections 309(a) of the Fannie Mae Charter Act and 307(a) of the Freddie Mac Act.

Sections 309(g) of the Fannie Mae Charter Act and 303(d) of the Freddie Mac Act.

Sections 304(a)(2) of the Fannie Mae Charter Act and 305(a)(5) of the Freddie Mac Act.

Freddie Mac=s acquisition of the subject or property.[33]

(10) Freddie Mac may sue and be sued, complain and defend, in any State, Federal, or other court and, more specifically, has the right to sue or complain in Federal district court without meeting the normal requirements for Federal court jurisdiction.[34] It may also remove any civil action to Federal district court.[35]

(11) Freddie Mac may utilize and act through any Federal department, establishment, or instrumentality and may use any information, services, facilities, and personnel of such entities.[36] The entities are authorized, but not required, to provide these services.[37] The purpose of this provision was to assist Freddie Mac during its startup period by allowing, for example, Freddie Mac to use office space or services in Federal buildings.

(12) For purposes of the civil service retirement law, certain Fannie Mae officers and employees (in particular, those who remained with Fannie Mae in 1968 when it was transformed from a Government agency to a GSE) are deemed to be Federal employees.[38]

C.2 Implicit Benefit

Based on these explicit benefits and on the framework of obligations imposed on the GSEs, the market presumes there to be an implicit Federal guarantee or backing of the GSEs and their securities.[39] That is, participants in financial markets assume that, even though no explicit Federal guarantee exists,[40] should a GSE fail to meet its obligations, Congress, and ultimately the American taxpayer, would assist the GSE. Fannie Mae=s and Freddie Mac=s financial instruments are regarded by securities rating agencies and investors as Aagency securities@ with AGovernment@ status. This status has a significant market impact, as demand for the securities is greater, particularly from the global capital markets.

As a result of this presumption of a guarantee and the explicit privileges listed

Section 307(a) of the Freddie Mac Act.

Section 303(f)(2) of the Freddie Mac Act.

Section 303(f)(3) of the Freddie Mac Act.

Section 303 8 of the Freddie Mac Act.

Ibid.

Section 309(d)(2) of the Fannie Mae Charter Act.

For an April 1991 study on the GSEs, the Treasury Department contracted with Standard and Poor=s (S&P) to develop credit ratings for the GSEs assuming the absence of any implicit guarantee. Fannie Mae was rated as >A!= and Freddie Mac as >A+=; the differences between these ratings and their actual >AAA= ratings provided a measure of the importance of the presumption of a guarantee. See U.S. Department of the Treasury (1991), pp. A-1 to A-4, A-25 to A-45.

The GSEs= obligations are not guaranteed by the United States. See, e.g., Sections 1302(4), 1381(f), and 1382(n) of FHEFSSA (requiring each GSE to state in its obligations and securities that such obligations and securities Aare not guaranteed by the United States@).

above, the GSEs can borrow at near-Treasury rates and sell securities at prices that exceed those of wholly private firms. Consequently, the GSEs= cost of doing business is less than that of competitors in the mortgage market.

These special privileges give the GSEs a significant competitive advantage in the secondary market, which has essentially made Fannie Mae and Freddie Mac the only firms in the business of purchasing mortgages and creating MBS backed by conventional conforming loans.[41] Because the GSEs have lower borrowing costs, they are able to price mortgages lower than the nonconforming loan market. This translates into conforming mortgage rates being about 25- to 40-basis points below nonconforming mortgage rates.[42]

D. Implications of Full Privatization for Statutory Features of GSE Status

A Full privatization@ would represent the ultimate step in what has been, for Fannie Mae a series of steps that have transformed it from its original status as a wholly-owned Government corporation to its current character as a GSE. Fannie Mae=s progression began in 1954, when it was converted to a mixed-ownership corporation (with its preferred stock held by the Federal Government and its common stock privately held), and continued in 1968 when it was reorganized as a privately owned corporation with a board of directors elected by its shareholders.[43]

Freddie Mac began its existence in 1970 as a constituent agency within the Federal Home Loan Bank System fully owned by the member institutions of the System. In effect, Freddie Mac was self-regulated from 1970 to 1989, because the Federal Home Loan Bank Board (now defunct), was both the board of directors and the regulator for Freddie Mac. Freddie Mac was transformed through a series of steps in the late 1980s, culminating in 1989 in the Financial Institutions Reform, Recovery, and Enforcement Act (FIRREA),[44] which established its present GSE status and made Freddie Mac subject to HUD=s regulation. Freddie Mac=s stock became publicly traded, and Freddie Mac was given essentially the same purposes and charter as Fannie Mae.[45]

Full privatization, by terminating the various GSE statutory benefits and obligations, would directly affect the terms on which the GSEs could undertake new business subsequent to the change in their organizational status to non-GSEs. As discussed in Chapter VIII, it is likely that the outstanding liabilities of the GSEs, including

Conventional loans are those without insurance or guarantee from any agency of the Federal Government, such as FHA, VA, or the Rural Housing Service (formerly the Farmers Home Administration). Conforming loans are conventional loans that conform to the loan size and loan quality conditions described in Section B.4.

Cotterman and Pearce (1996), p. 102.

This history is recounted in Chapter II of U.S. Department of Housing and Urban Development (1987).

P.L. 101B73.

This history is recounted in U.S. Department of Housing and Urban Development (1991b), Appendix, p. 3.

debt securities and MBS, would remain under the umbrella of the explicit and implicit benefits enumerated above, or equivalent benefits, to ensure their uninterrupted fulfillment, as expected by the individuals and organizations to whom expectations of future payment have been made. How to terminate the GSE status with respect to new business while maintaining the GSE prerogatives of the existing liabilities is the Afeasibility@ question posed in the statutory mandate for this report. This question is addressed in Chapter VIII.

E. Organization of This Report

Chapters IIBVIII present background analyses, culminating in Chapter IX, which states HUD=s conclusions on the statutory study topics and gives HUD=s policy recommendations.

Chapter II describes the GSEs= role in providing liquidity to the mortgage market and their impact on mortgage interest rates. It discusses the rise of securitization of mortgages and the dominance of the GSEs in the secondary market for conventional conforming mortgages. The role of the enterprises in allowing the mortgage market to weather the thrift crisis with little impact is recounted.

Chapters IIIBV examine the roles of the enterprises in providing mortgage credit for lower income families and families in underserved areas. In 1992, in enacting FHEFSSA and establishing the housing goal requirements, Congress recognized that the mortgage market works very efficiently for middle- and upper-income families in most areas of the country, but less well for other families. The GSEs have greatly increased their presence in these markets in the past 3 years for a variety of reasons, including the housing goals promulgated by HUD in 1993 and revised in 1995. These chapters conclude that fully privatizing the GSEs would reduce lending to lower income borrowers and their communities.

! **Chapter III** presents the housing goals, describes the performance of the GSEs during 1993B95, and discusses the revised structure and rationale for the three housing goals for 1996B99 (low- and moderate-income, geographically targeted, and special affordable), with emphasis on the 1995 improvements and simplifications. The chapter concludes that the structure of the goals is well designed to address the housing needs identified by the Congress in 1992.

! **Chapter IV** focuses on the impact of privatization on affordable lending in the single-family market. It reviews the market for affordable loans and the credit risks associated with these loans.

! **Chapter V** examines various questions relating to the GSEs and the market for multifamily mortgages.

Chapter VI broadens the discussion from effects of privatization on submarkets for affordable loans and underserved areasCto effects on the broader mortgage market and underlying securities markets. These depend to a significant degree on the nature of the current competition between the GSEs and the degree (if any) to which economies of scale exist in the GSEs= business. Effects are analyzed with regard to primary market lenders, mortgage insurers, other mortgage conduits (including those for jumbo mortgages), as well as impacts on the securities marketsCthat is, the GSEs= debt, MBS, and stock.

Chapter VII presents and applies a framework for evaluating the market effects of full privatization. Topics covered include the validity of various rationales for Fannie Mae=s and Freddie Mac=s GSE status, the impact of the enterprises= protected duopoly status on pricing of mortgage purchases and resulting effects on the GSEs= profits, potential effects on the pace of innovation in the mortgage market, consequences for the level of financial risk to taxpayers associated with the financing of residential mortgages, and regulatory costs to the enterprises and the Government with and without privatization.

Chapter VIII considers the feasibility of privatization, including various possible organizational structures for the privatized GSEs, and operational and transitional considerations. The section concludes that privatization would be feasible from a legal/statutory point of view, assuming appropriate attention to the operational considerations. It would, however, be extremely complex and require meticulous attention to details.

Chapter IX summarizes the findings of the preceding chapters and presents HUD=s policy recommendations.

CHAPTER II

MARKET ROLE OF THE GSEs

This chapter describes the history and growth of the secondary mortgage market and the impact of the GSEs= activities on mortgage market liquidity, interest rates, and homeownership. It emphasizes the important role the GSEs have played in developing a highly efficient secondary mortgage market system, which provides a stable and dependable source of liquidity for homebuyers.

A. Origin of Secondary Market Institutions

Although today Fannie Mae and Freddie Mac are similar in form, function, and regulation, they were established at different times and under different circumstances. This section provides a brief description of the origins of Fannie Mae, Freddie Mac, Ginnie Mae, and the secondary market.

Fannie Mae. The benefits of a well-developed secondary market have long been recognized. Congress, in enacting the National Housing Act of 1934, hoped that a system of private secondary market associations would develop to bring the benefits of lower capital costs to homeowners. In 1938, when none had formed, the President asked the Reconstruction Finance Corporation (RFC) to form one. It was chartered as the National Mortgage Association of Washington. On April 1, 1938, the name was changed to the Federal National Mortgage Association. It remained an RFC subsidiary until 1950, when it was transferred to the Housing and Home Finance Agency. As a Government corporation, it was to buy and sell Federal Housing Administration (FHA) mortgages financed from bond issues and borrowing from the U.S. Treasury.

From 1968 (when it became a privately owned corporation) to 1980, Fannie Mae=s activities were relatively uncomplicatedCborrowing funds to buy mortgages to be held in portfolio. It was not until enactment of the Housing and Community Development Act of 1980[46] that Fannie Mae was authorized to engage in the issuance of MBSCa major component of its business today.

Ginnie Mae. In 1968, because of the desire to reduce Federal outlays[47] and the Federal debt, Fannie Mae was split into two partsCone was Ginnie Mae (the Government National Mortgage Association), and the other retained the name Fannie Mae. Ginnie Mae was, and remains, part of HUD, and it guarantees securities, issued by private firms, that are backed by mortgages insured or guaranteed by FHA, the U.S. Department of

Authorization for Fannie Mae to issue MBS was approved by the Secretary of HUD and the Secretary of the Treasury on September 23, 1981.

Under budget scoring rules then in effect, some of Fannie Mae=s mortgage purchases were treated as Federal outlays, even though subsequent principal and interest payments were made to the Government.

Veterans Affairs (VA), or the U.S. Department of Agriculture=s Rural Housing Service (formerly the Farmers Home Administration). The first MBS were issued by Ginnie Mae in 1970.[48]

Freddie Mac. Freddie Mac was created by the Emergency Home Finance Act of 1970 and also chartered by the Federal Government, to ease concerns about Acredit crunches@ in the housing finance system by purchasing mortgages from thrifts. Freddie Mac initially followed the Ginnie Mae model, securitizing conventional mortgages originated by thrift institutions. Freddie Mac later began to hold mortgages in portfolio, but to a much lesser degree than Fannie Mae.[49]

Separate Markets. The secondary market effectively functions as three distinct markets: Government-insured, conventional conforming, and conventional nonconforming (or jumboCdiscussed later in this chapter). By the 1980s, virtually all FHA and VA loans were securitized by Ginnie Mae. The GSEs operate primarily in the conventional conforming market.[50] Although both Fannie Mae and Freddie Mac are allowed to purchase Government-backed loans, in practice they cannot compete with the price advantage that Ginnie Mae=s explicit Government guarantee allows. Thus the GSEs focus almost exclusively on the conventional market.

B. Liquidity and Development of Secondary Market Financial Instruments

The secondary market now provides an efficient, stable, and dependable source of liquidity for mortgage credit markets. It gives borrowers access to national capital markets and to a wide range of investors. Mortgage funds are now readily available, and homeowners no longer have to suffer through periods of shortages of funds as they did when thrifts dominated the housing finance system. Mortgage interest rates are now determined in the overall capital market and they respond quickly to changes in underlying credit conditions.

The GSEs played a major role in the development of the secondary market, although important roles were also played by Ginnie Mae and the conduits for Ajumbo@ mortgages (discussed below). The mortgage market was originally a local one, with homebuyers depending mainly on local savings and loan institutions for their mortgages. Fannie Mae initially developed the secondary market for conventional mortgages through its mortgage purchases for its portfolio. But the major development came with the advent of securitization, which allows the mortgage market to more efficiently access funds

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Today, Fannie Mae and Freddie Mac purchase some Government-backed loans, but such purchases are minuscule compared with their activities (initiated in the early 1970s) involving conventional mortgages.

Freddie Mac=s small portfolio functioned primarily as a holding instrument until loans could be securitized. However, Freddie Mac has greatly expanded its portfolio operation recently, from $26.5 billion in 1991 to $107.4 billion in 1995.

As defined in Chapter I, Sections B.4 and footnote 37.

through many channelsCinsurance companies, pension funds, mutual funds, banks, thrifts, and foreign investorsCall of which purchase MBS.

Mortgage-Backed Securities. MBS are securities backed by pools of mortgage loans. They are created either by the cash or the swap method. In a cash transaction, the loan originator sells the mortgage to Fannie Mae or Freddie Mac for cash. The GSEs then form pools of mortgages and sell shares of the pools to dealers, who then sell the shares to investors. In a swap transaction, the lender exchanges a pool of mortgages for more marketable MBS. The lender is then free either to hold the securities or sell them.

Monthly mortgage payments from homeowners are passed through by the GSEs to purchasers of MBS. Fannie Mae and Freddie Mac provide credit enhancement, guaranteeing that investors will receive their payments in full and on time. For this guarantee of timely payment, the GSEs charge a guarantee feeCgenerally about 22 basis points. As discussed later, more complicated derivative securities that partition the stream of cash flows from pools of Aplain vanilla@ MBS have been developed recently.

Just as Government insurance provided by FHA mortgages was necessary to demonstrate to the private market that long-term, self-amortizing mortgages were safe, Government backing has been critical to the development of the secondary market. Ginnie Mae securities, with their explicit Government guarantee of timely payment of both monthly principal and interest, were the first to be integrated into the capital markets, followed by Freddie Mac=s and Fannie Mae=s securities. Nontraditional investors, such as pension funds, are attracted to MBS because of their financial returns and their presumed Government backing.

Through mortgage securitization, the credit risks on individual mortgages are spread over the many mortgages in a pool, while at the same time the cash flows in the pools are desegregated to become accessible to small as well as large investors. Securitization accelerated during the 1980s. Among other things, securitization assisted in transferring the interest rate risk associated with funding fixed-rate mortgages from thrift institutions to capital market investors whose matching of expected maturities of assets and liabilities in their portfolios was facilitated by access to MBS.

The Secondary Market Today. At the end of 1995, the market in Fannie Mae and Freddie Mac MBS ($1.1 trillion) was almost one-third the size of the market in Treasury securities ($3.6 trillion). The huge size of this market and the standardization of financial instruments that trade in it, as well as investors= presumption of a Government guarantee, have made the GSEs= MBS almost as marketable as Treasury securities.

The secondary market also moves capital from capital-rich to capital-short areas. Through the secondary market, lenders have access to investors across the country, as well as the world, and are not dependent on the availability of local funds. By moving funds from areas where they were in surplus to those where they were in deficit, the secondary market has evened out regional differentials in mortgage rates.[51]

C. Recent History of the Housing Finance System

Mortgage markets have grown rapidly since the late 1960s. Single-family mortgage debt outstanding increased 13-fold during this period, from $280 billion in 1969 to $3,640 billion in 1995, which corresponds to an increase of 251 percent in real terms.[52] The growth in mortgage markets has outpaced growth in the overall capital markets. Single-family mortgages accounted for 18.9 percent of total domestic credit market debt outstanding in 1969, and 25.8 percent in 1994.

The mechanism for delivering housing funds changed substantially during this periodCfrom a very segmented system dominated by thrifts prior to the 1980s, to the efficient delivery system described above, which is completely integrated with the Nation=s overall capital markets. This section provides further insights on the dimensions of the transformation.

C.1 Housing Finance in Recent Decades

Prior to the 1980s, traditional thrift institutions dominated the funding of residential mortgages in the United States. Thrifts followed a Abuy and hold@ strategy: they took in deposits, made loans, and then held the loans in portfolio. Thrifts handled all parts of the mortgage transactionCdeposit collection, origination, servicing, and holdingCand therefore were exposed to the credit and interest rate risks associated with owning mortgages. The Federal Government heavily subsidized the thrift industry through underpriced deposit insurance and a significant tax advantage for concentrating on the mortgage business, both of which reduced mortgage rates to homeowners.

Shortages of Funds. The thrift-dominated mortgage market was somewhat insulated from the overall capital market and was characterized by periodic shortages of housing funds. The thrift industry was restricted in both the rate it could pay to attract funds and the types of investments allowed, and thrifts were restricted to lending only locally. During periods of high interest rates, depositors would shift their funds out of banks and thrifts into higher yielding assets because of regulations that restricted the interest rate that they could pay depositors, until the regulations were phased out over the 1980B86 period.[53] This would reduce the availability of mortgage funds to

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Prior to the development of securitization, Fannie Mae evened out geographical imbalances in mortgage markets by purchasing loans for its portfolio from areas with an excess demand for credit. The system has become much more efficient with the development of securitization.

Statistics in this paragraph were derived from the *Federal Reserve Bulletin*, various issues, and Board of Governors of the Federal Reserve System (1993). Growth in real terms has been measured by deflating single-family mortgage debt by the implicit price deflator for gross domestic product.

Although these ARegulation Q@ ceilings were not phased out completely until 1986, the constraining effect of the regulation was considerably reduced in June 1978, when banks and thrifts were allowed to offer six-month money market certificates with a minimum $10,000 deposit, and again in December 1980 when NOW (negotiated order homeownersCa process known as Adisintermediation.@[54] In addition, State usury ceilings limited the ability of lenders to raise mortgage interest rates, leading to rationing of mortgage funds on terms other than interest rates. As a result of disintermediation, the mortgage market did not react fully to overall capital market shifts and there were periods of shortages of mortgage funds, both regionally and nationally.[55] The broadening of Fannie Mae=s activities into conventional loans in the early 1970s and into MBS in the 1980s, and the creation of Freddie Mac in 1970, were responses to the periodic mortgage shortages that had characterized the thrift-dominated mortgage system.

Interest Rate Risk. From the 1930s (when FHA began to insure 20-year fully-amortizing fixed-rate mortgages) to the 1980s (when ARMs became popular) the standard thrift loan was a long-term fixed-rate mortgage. The practice of funding these long-term assets with deposit liabilities that could be withdrawn at any time exposed thrifts to interest rate risk. This policy of lending long and borrowing short is usually profitable because, on average, there is a positive spread between long-term and short-term interest rates. However, increased interest rate volatility after 1979 revealed the dangers in mismatching the durations of financial assets and liabilities. When interest rates peaked during the early 1980s, thrifts found their low-coupon mortgage assets originated during the 1970s to be heavily discounted. As a result, numerous thrifts saw their net worth disappear in the early 1980s.[56]

Deregulation. The 1980s brought a major change in the mortgage finance system. Financial deregulation relaxed deposit rate ceilings, allowing thrifts to compete for depositors= funds during periods of high interest rates. This change eliminated the disintermediation problem experienced previously, which had caused the availability of mortgage credit to dry up during high interest rate periods. The change also reduced the need for the GSEs to serve a countercyclical roleCthat is, increasing their purchases during high interest rate periods to provide thrifts the means to continue originating

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of withdrawal) accounts were allowed. The effects were virtually eliminated by early 1983 when banks and thrifts were allowed to offer money market deposit accounts and Super-NOW accounts with a $2,500 minimum deposit.

Though the thrifts could borrow from the Federal Home Loan Bank system to dampen the shortage, funds still sometimes were insufficient to meet the demand for mortgages. In addition, the requirement that thrifts lend only locally led to regional shortages. Regions with high growth rates, such as the South and West, sometimes had insufficient funds to lend at the same time that the North and Midwest had excess funds.

The link between thrift deposits (used as a proxy for mortgage credit availability) and housing starts has been examined in several academic studies (see McGarvey and Meador, 1991). These studies showed that shortages of thrift credit during the 1960s and 1970s caused the level of housing starts to decline. As explained in Section D.1, deregulation and the development of the secondary market have reduced, if not eliminated, the effects of thrift deposit flows on mortgage credit availability and housing starts.

High interest rates were only one factor explaining the decline of the thrifts during the 1980s. Other factors included high mortgage defaults in the energy belt, reliance on speculative ventures, fraudulent
behavior by some industry officials, failure to anticipate the effects of deregulation, and regulatory problems.

Fannie Mae experienced a similar interest-rate-mismatch problem as the thrifts in the early 1980s, when high interest rates caused its estimated mark-to-market net worth to turn negative between 1978 and 1984, reaching !$10.8 billion in 1981 (U.S. Department of Housing and Urban Development 1987, p. 100). In effect, Fannie Mae had become the country=s largest savings and loan, except that its mortgage portfolio was financed by borrowing rather than deposits.

loans.[57] Deregulation also allowed thrifts to hold adjustable rate mortgages (ARMs), which reduced their interest rate risk and increased affordability for borrowers.

C.2 Changes in the Primary Mortgage Market

A dramatic transformation has occurred in the institutional composition of mortgage originations in the primary market in recent years (see Figure 2.1). Thrifts originated half of residential single-family mortgages until the mid 1980s, when their market share began to collapse due to the thrift crisis. By 1990, thrifts originated only 30 percent of single-family mortgages and, by 1994, only 20 percent.[58] Their holdings of mortgages also fellC37 percent of outstanding single-family mortgage debt was held in thrift portfolios in 1985, compared with 23 percent in 1990 and only 14 percent in 1994. The thrifts= business operations have become more like those of mortgage companies, selling a large proportion of their fixed-rate originations into the secondary market.[59] Thrifts continue to retain many of their ARM originations, which have much less interest-rate risk than FRMs and which tend to be less standardized than FRMs.

As the thrift share of originations declined, the share originated by commercial banks and mortgage companies increased. Commercial banks increased from 22 percent of originations in 1980 to 24 percent in 1995. Mortgage companies have benefited most from expansion of the secondary market. Their share of mortgage originations increased from 22 percent in 1980 to 54 percent in 1995. A substantial part of the mortgage company growth has taken place since 1990, when their share stood at only 35 percent.

C.3 Growth in Securitization and the GSEs

Although Fannie Mae had been in existence since 1938, the secondary market still played a small role in the market in 1970, with Ginnie Mae, Fannie Mae and Freddie Mac together purchasing or securitizing only 5 percent of total residential mortgage loans. Fannie Mae did not start issuing MBS until 1981. Freddie Mac=s MBS activity was also low until the early 1980s, when the increased desire of thrifts to sell into the secondary market caused their business to grow.

The growth in the GSEs= secondary market purchases is shown in Tables 2.1 and 2.2:

Kaufman (1985, 1988) has reviewed the numerous academic studies regarding the countercyclical role of Fannie Mae. Kaufman indicated that previous work had, on balance, concluded that Fannie Mae had behaved countercyclically during the 1970s, although not aggressively. Based on analysis of housing starts and mortgage flows between 1980 and 1984, Kaufman found that Fannie Mae=s purchases did not have a significant countercyclical impact. He concluded that his findings raised questions as to the continued benefit of Fannie Mae as a Government-sponsored enterprise.

The drop in thrifts= share of originations is somewhat misleading because many thrifts bought or opened up mortgage banking subsidiaries in the 1980s.

The demand for MBS by thrifts increased with the passage of FIRREA in 1989, which established risk-based capital standards for thrifts. Fannie Mae and Freddie Mac securities received a lower risk weight than whole loans, which encouraged thrifts to swap their whole loans for MBS.

- Their issuance of MBS jumped substantially during the refinancing boom of the mid 1980s, rising from $62 billion in 1985 to $161 billion in 1986. Following a drop off in the late 1980s that coincided with a decline in mortgage originations, their MBS issuance most recently peaked at $430 billion during the refinancing boom of 1993 (Table 2.1).[60]

- Fannie Mae has exhibited the fastest growth in MBS issuances. In 1985, there were almost twice as many Freddie Mac MBS outstanding as there were Fannie Mae MBS ($100 billion versus $54 billion). By 1995, Fannie Mae had more outstanding MBS than Freddie Mac ($513 billion versus $459 billion) (Table 2.1).

- The stock of outstanding MBS for the two GSEs grew from $14 billion in 1980 to $154 billion in 1985, and to $972 billion by 1995. The share of total outstanding mortgage debt accounted for by the GSEs= MBS increased from 10 percent in 1985 to 26 percent in 1995 (Table 2.2).

- In addition to issuing MBS, the GSEs also purchase mortgages to hold in portfolio. Fannie Mae=s portfolio has generally ranged between 5 and 7 percent of outstanding mortgage debt as it rose from $52 billion in 1980 to $253 billion in 1995. Fred-die Mac=s smaller portfolio recently jumped from $21 billion in 1990 to $107 billion in 1995 (Table 2.2, top panel).

- The share of outstanding mortgage debt accounted for by the combined GSE portfolio and MBS operations has doubled over the past 10 years, from 17 percent in 1985 to 36 percent in 1995 (Table 2.2, bottom panel).

Another measure of the growth in the GSEs= role is obtained by analyzing their purchases relative to total originations in the primary market of conventional conforming loans. In 1980, only about 15 percent of conventional conforming loans were purchased by Fannie Mae and Freddie Mac combined. However, by 1986B87, Fannie Mae and Freddie Mac together had a share of more than 50 percent of conventional conforming originations. Figure 2.2 shows the trend in the GSEs= share of the conforming market, with a peak of 71 percent in 1993. The share dropped to 55 percent in 1994, as rising interest rates increased the ARM share of the market and originators held more mortgages in portfolio. There was a further decline in 1995 to 43 percent due to an increase in the percentage of fixed-rate mortgages held in portfolio by depositories.

The GSEs securitize proportionately more of the market in refinance periods because fixed-rate mortgages (FRMs) are the most popular then, and FRMs are more readily securitized.

Derivatives Market. The GSEs have also played an important role in the growth of the derivative security market. This second stage of securitization began in 1983 when Freddie Mac introduced collateralized mortgage obligations (CMOs), which turned the cash flows of MBS into a series of bond-like securities (called Atranches@ or Aclasses@) of different maturities, thus allowing issuers to target investors with specific maturity preferences, based on their portfolio strategies.[61] Most of the early CMO deals were made by Wall Street subsidiaries for arbitrage purposes and by private conduits to take homebuilders out of installment-sale financing and thrifts out of negative-equity loans.

Tax law complications initially limited the use of CMOs. To eliminate most of these problems, Real Estate Mortgage Investment Conduits (REMICs) were created in 1986.[62] The issuance of a REMIC is treated as an asset sale, rather than as financing of the issuer as in the case of a CMO. As such, it allows for substantial amounts of multiclass securities to be issued without infringing on the balance sheet of the issuer. The GSEs became the dominant players in the derivatives market after REMIC legislation passed in 1986.

CMOs and REMICs are important because they provide a means of reallocating the interest-rate and prepayment risks of fixed-rate mortgages to those investors best able to assume these risks.[63] For example, banks are attracted to the short-term tranches, insurance companies to the medium-term tranches, and pension funds to the long-term tranches, reflecting the relative durations of their respective balance sheet liabilities. More innovative types of REMIC tranches have been introduced to tailor cash flows to investor needs. The three most important are floating-rate classes (which appealed to banks and foreign investors), planned amortization classes (PACs) with predictable average lives (which appealed to pension funds), and interest-only and principal-only classes (which appealed to investors needing to hedge against interest rate changes). Annual issuances of derivative securities rose from $16 billion in 1985 to $112 billion in 1990, before peaking at $324 billion in 1993. Derivatives accounted for one half of all MBS issued in 1993, as shown in Table 2.1.[64]

The tranches are defined based on the priority of payout of scheduled and unscheduled principal payments on the underlying mortgages. All such payments would be made to the first tranche until it is fully paid off. Payments would then be made to the second tranche and so on, until all mortgage principal payments are paid out to all tranches. Thus the first tranche is a relatively short term investment and later tranches are longer term investments.

Through the addition of Sections 860AB860G to the Internal Revenue Code.

Prepayment risk is the risk borne by the holder of a mortgage associated with uncertainty as to when the mortgage will be prepaid. It arises especially with fixed-rate mortgages. When mortgage rates fall, prepayment rates increase. If a mortgage holder is dependent on continued cash flow over time from such a loan at the contract rate on the mortgage, and the loan is prepaid, the holder often is not able to invest the proceeds at a comparable rate. This is particularly a problem if the holder had funded the mortgage with high-interest obligations that cannot be prepaid. The clearest example of prepayment risk is probably the experience of savings and loans that were funding mortgages by high-interest rate long term certificates of deposit (CDS) in the 1980s. As rates fell, the S&Ls still had to pay high interest rates on existing CDS, but buyers prepaid their mortgages and refinanced into lower-rate mortgages, which carried lower rates than the average cost of funds to the S&Ls.

However, derivatives accounted for only 28 percent of the MBS market in 1994 and 8 percent in 1995. As Joseph Hu (1996) explains in an article on recent trends in the REMIC market, the increase in the level and volatility of interest rates beginning in April, 1994, made many of the more exotic REMIC tranches (such as the support tranches for floaters and planned amortization tranches) virtually illiquid. Hu expects the REMIC market to recover because investors prefer mortgage securities with structured cash flows. However, Hu expects to see REMIC structures much simpler than those issued in 1992 and 1993.

Secondary Market Infrastructure. The rapid growth of securitization in the 1980s gave rise to a new secondary market infrastructure in the real estate finance industry. Despite the generally high quality of underlying mortgage assets, MBS are instruments that contain structural and legal complexities that make their evaluation difficult even for sophisticated investors. Thus, investors desired better tools with which to evaluate these securities, and the bond rating agencies and other Wall Street investor information sources have developed an infrastructure to meet this demand. Sophisticated financial models were developed to estimate prepayments of the mortgages underlying the MBS pools and to value (price) the cash flows from these pools. Furthermore, investors also needed assurance that adequate support elements were in place to execute the terms and conditions of the securities that they were buying. Thus, an infrastructure of experienced loan originators (mortgage brokers), issuers of MBS, mortgage servicers, trustees, legal advisors, auditors, and MBS sellers has also developed since the early 1980s.

Ginnie Mae and the GSEs played major roles in the early development of the secondary market infrastructure, and the private label (i.e., non-GSE) market benefitted greatly from this development. In recent years, however, Wall Street, the Resolution Trust Corporation (RTC), and the private label market have fostered further developments. For example, Wall Street firms pioneered the senior/subordinated MBS structure for the jumbo market (see Section C.4) as an alternative credit enhancement to a GSE or Ginnie Mae guarantee. Multifamily mortgages acquired from failed thrifts were securitized by RTC using cash reserve accounts as credit enhancements, creating a new infrastructure for commercial MBS. And the private MBS market introduced conduits that help smaller lenders gain access to the private secondary market by pooling loans from several lenders.

C.4 Securitization in the Jumbo Market

In recent years there has been growing securitization of nonconforming or jumbo mortgages, rising from about $14 billion in 1989 to a peak of $97 billion in 1993. The share of jumbo originations securitized rose from 15 percent in 1989 to a peak of 48 percent in 1993 but has declined since then to 39 percent in 1994 and 27 percent in 1995.[65]

Expansion of securitization in this market is due to several factors. The rapid growth of the GSEs= securitization activities in the 1980s served to educate potential investors about MBS. Investors gained exposure to non-GSE securities from RTC

Excluding RTC issues. Source: Inside Mortgage Finance Publications, Inc., (various issues). Issuers and credit enhancements of these securities are tabulated in Cotterman and Pearce (1996), pp. 108 and 110.

issuances in the early 1990s.[66] In addition, the risks inherent in securities backed by jumbo mortgages were reduced as these mortgages began to be more broadly spread geographically in the 1990s. While 66 percent of all jumbo home purchase mortgages originated in 1989 were in California, only 35 percent were in California in 1993.

The jumbo securitization market is structured very differently from the conforming securitization market, which consists exclusively of Fannie Mae and Freddie Mac. In particular, the jumbo market appears to be highly competitive.[67] Entry and exit into the market has occurred fairly readily since its startup in the early 1980s. Of the 35 firms in the market in 1989, 20 were no longer there in 1993, but 18 new firms were in the marketCthus 33 firms issued jumbo MBS in 1993. Market shares shift continually, and the firm with market dominance has tended to change from year to year. Major jumbo MBS conduits include Independent National Mortgage, Residential Funding Corporation, GE Capital Mortgage Services, and Countrywide Funding Corporation.[68]

Lacking the agency status of the GSEs, private mortgage conduits must rely on some form of credit enhancement to obtain an investment-grade rating on their securities.[69] Conduits associated with large parent firms have the ability to rely on their parents= corporate guarantees. However, the primary method used since 1988 has been the senior/subordinated debt structure. A subordinated bond, which is typically 5 to 8 percent of the whole pool, absorbs default losses for the whole pool. By assigning most of the risk to the subordinated bond, the senior bond is made much less risky and thus sells at a premium over the smaller subordinated bond, which sells at a discount because of its greater credit risk exposure.[70] The credit rating agencies determine the size of the subordinated bond needed to achieve a given rating on the senior bond. By 1993, more than 80 percent of non-RTC securities issuances used a senior/subordinated structure.

C.5 Role of Presumed Implicit Guarantee

Most analysts believe that the agency status of the GSEs= securities was a key factor in the development of the secondary market. Mortgages are individually underwritten based on the credit characteristics of the individual borrower and the collateral value of the individual property. It would be very costly, particularly for nonlocal investors, to evaluate the risk attached to the individual mortgages backing their MBS investments. The need for such evaluation is absent in the case of the GSEs= MBS, which are backed by the overall creditworthiness of the GSEs. The presumption of a Government guarantee on the GSEs= debt securities, MBS, and derivative securities

RTC was created to sell off the assets of a large number of thrift institutions that became insolvent, beginning in the late 1980s.

See Hermalin and Jaffee (1996).

Source: *Inside Mortgage Securities*, April 7, 1995.

Private-label MBS deals must be rated by two different rating agencies, with the issuer required to take the higher level of credit enhancement required of the two. Four firms provide almost all the ratings: Fitch, Standard and Poor=s, Moody=s, and Duff and Phelps.

See DeLiban and Lancaster (1995) for a discussion of credit enhancement techniques for private conduit securities.

reduced the credit risks in these securities as perceived by investors, and this enhanced their attractiveness as investments. The secondary market has also lessened the credit risk associated with regional economic downturns by providing for geographic diversification in pools of mortgages. This type of credit risk amelioration is not dependent on an implicit or explicit Federal guarantee.

As discussed above, credit enhancement techniques have successfully developed in the private jumbo market, and credit rating agencies have increased their resources and expertise in the mortgage evaluation area. Thus, the question arises whether the Government role is still needed. Some argue that the mature secondary market no longer requires a Government underpinning, given that private institutions and structures have developed to account for credit risk. Chapters VI and VII will examine this question and the effects of fully privatizing Fannie Mae and Freddie Mac on the liquidity of the MBS market.

C.6 The GSEs= Role in Underwriting Mortgages and Developing Technology

Fannie Mae and Freddie Mac not only led the development of the secondary mortgage market in the 1980s, but have also been the stimulus for growing standardization in the primary mortgage market. The GSEs= underwriting standards are followed by virtually all mortgage originators, including lenders who do not sell many of their mortgages to Fannie Mae or Freddie Mac. Thus, they have enormous influence on the types of borrowers and properties that are approved for mortgages.

Both GSEs have been in the forefront of new developments in mortgage underwriting and origination technology. In the early 1990s both GSEs released automated underwriting systems. The Freddie Mac system is based on mortgage credit scoring, which allows explicit consideration of compensating factors. The system is based on statistical analyses of the default experience of millions of loans previously purchased by Freddie Mac and allows weights to be assigned to each underwriting element. As a result, the system does not require that applicants meet every individual underwriting threshold, but instead allows favorable borrower characteristics to compensate for elements that do not meet traditional thresholds. For example, low cash reserves at closing might be compensated by having two earners on the application, each of whom has long job tenure. The current Fannie Mae system is mainly a Arules-based@ system that automates its current underwriting standards, although Fannie Mae is also moving to incorporate mortgage credit scoring into its automated underwriting system. Lenders can use these systems to obtain underwriting evaluations, commitments to buy single-family mortgages, credit reports, and, in the case of Freddie Mac=s system, to order appraisals of the value of properties pledged as loan collateral. Such systems have the potential to reduce the cost of loan origination and to improve the quality of the loans the GSEs buy.[71]

See Office of Federal Housing Enterprise Oversight (1995), and Office of Management and Budget (1996), p. 133.

D. The Benefits from GSE Securitization

The GSEs= securitization activity has resulted in several benefits to the mortgage market: the mortgage market has been integrated into overall capital markets, mortgage interest rates have been reduced, and homeownership has been assisted. This section examines each of these benefits in turn.

D.1 Integration of Capital Markets

As Fannie Mae=s and Freddie Mac=s securitization volume grew in the 1980s, the mortgage market developed into a highly efficient system in which mortgage borrowers compete on an equal footing with other borrowers, such as major corporations and the Federal Government, for access to funds. Most of the mortgage market is now fully integrated with overall national and international capital markets. The outcome of integration is that mortgage rates almost instantaneously track shifts in Treasury rates instead of thrifts= deposit flows.

Hendershott and Van Order (1989) studied the integration of mortgage and capital markets. Integration was determined to have taken place if mortgage rates tracked Treasury rates, responding quickly to changes in the overall capital market, and mortgage funds were readily available at the going market interest rate. They found that the FHA/VA market was fully integrated by the early 1980s, and the conventional conforming market became integrated by mid-1987.[72] This contrasts with the earlier era of thrift dominance in which periods of high market interest rates led to shortages of housing funds due to disintermediation.

Because of the secondary market, the Nation=s housing finance system is much better insulated from market disruptions that in the past could have crippled it. For instance, the collapse of the thrift industry in the late 1980s and early 1990s had no significant impact on the flow of mortgage funds. Moreover, single-family residential mortgage credit was relatively untouched by the credit crunch experienced in the commercial and new construction markets in the early 1990s.[73] Despite the sharp decline

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Hendershott and Van Order=s conclusions about the timing and source of market integration are not universally held. Goebel and Ma (1993) found that integration of the conventional market occurred prior to the rapid growth in the secondary market between 1984 and 1987 and was largely a result of the interest rate deregulation that occurred around 1980. Other studies examining the effects of financial deregulation on market integration include Throop (1986) and Ryding (1990). Studies supporting Hendershott and Van Order=s focus on the stronger importance of the secondary market on market integration include Roth (1988) and Devaney, Pickerill, and Krause (1992).

Fergus and Goodman (1994) cite evidence that while home mortgage borrowers experienced a limited amount of non-price credit rationing in the 1989B92 period, the frequency was inconsequential compared to the pervasive problems faced by potential borrowers of construction funds or commercial real estate funds. Residential loan-to-value ratios were little changed during this period, and mortgage interest rates declined. The authors credit the secondary market with providing a ready source of liquidity for residential mortgage finance through this period. In addition, the FIRREA capital requirements for depository institutions were lower for home mortgage loans and MBS than for other types of loans.

in the number of thrift institutions from the mid 1980s to the mid 1990s, mortgage funds were readily available during the period, including the refinance boom of 1993B94.

A recent study provides evidence that thrifts= influence on mortgage flows declined during the 1980s. Bradley, Gabriel, and Wohar (1995) found that thrift deposit flows had a significant effect on thrifts= share of mortgage funds provided in the 1980s. However, while the thrift share of mortgage originations reduced mortgage rates relative to Treasury interest rates in the early 1980s, the effect was much weaker in the late 1980s. The authors attribute this weakened relationship to the development of the secondary market during the 1980s.

Bradley, Gabriel, and Wohar also concluded that the rise in interest rates that occurred in the early 1980s due to disruption in the thrift industry had a substantial negative effect on housing demand and may have exacerbated the downward trend of the economy. However, since the secondary market subsequently largely eliminated the link between thrift mortgage volume and mortgage interest rates, the growing thrift crisis had little effect on the single-family housing market in the later 1980s.[74] The historical counter-cyclical relationship between interest rates and housing development has been substantially reduced with the integration of mortgage markets into the national and international capital markets.

D.2 Lower Interest Rates

There is considerable evidence that the GSEs= secondary market activities have caused mortgage interest rates to be lower than they would have been in the absence of agency status for the GSEs.[75] Chapter VI reviews research studies that have focused on the effective interest rate differential between conforming conventional mortgages and jumbo mortgages. Cotterman and Pearce (1996), for example, estimate that conforming mortgages have interest rates that are 25B40 basis points (i.e., 0.25B0.40 percentage point) less than jumbo mortgages. The implications of the conforming loan differential for the effects of GSE privatization on interest rates are not completely straightforward, however. There is evidence that the conforming differential is affected by other factors besides the GSEs= agency status, including liquidity and marketability effects due to the huge size of the conforming market as well as the preferential treatment of the GSEs= MBS relative to private MBS under FIRREA risk-based capital standards.[76] To the extent that the conforming differential includes other contributing factors besides agency status, it could overstate the effect of privatization upon mortgage interest rates. These issues

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Two additional studies have examined the effect of mortgage availability on housing starts. Thorn (1985) and McGarvey and Meador (1991) found that housing starts were significantly influenced by mortgage availability, but that the relationship weakened after the late 1970s. Neither study tried to separate the effects of deregulation from those of the growing secondary market.

While the reduction in interest rates benefited homebuyers, it likely added to the difficulties faced by thrifts in the 1980s, by reducing their profit levels and making it more difficult for the thrifts to compete as portfolio lenders.

See benefit 3 in the list in Chapter I, Section C.1.

are discussed in Chapter VI.[77]

D.3 Reduced Housing Costs and Stimulus to Homeownership

Because the GSEs= agency status has allowed them to reduce interest rates on conforming mortgages, the elimination of Government sponsorship would be expected to raise interest rates. This, in turn, would make homeownership less affordable. Wachter, Follain, Linneman, Quercia, and McCarthy (1996) examined the potential magnitude of this effect, finding that a 50-basis-point increase in interest rates would cause home-ownership costs to rise by 1.8 percentage points for the average first-time homebuyer.[78] They find further that a 50-basis-point increase in interest rates would cause an additional 1.5 percent of homebuying households to come up against the underwriting constraint on the ratio of mortgage payment to income (assumed to be fixed at 28 percent),[79] based on the value of the housing that they would otherwise choose to own in the absence of any such limitCthis would constrain them to purchasing a smaller property than they would prefer. As discussed in Chapter VI of this report, it is likely that the mortgage interest rate effect of full privatization would be smaller than 50 basis points; consequently, the likely increases in homeownership costs and percentage of constrained households associated with full privatization would be smaller than the percentages estimated by Wachter et al.

Still, there would be some effect on homeownership rates. The same study estimated that a 50 basis point rise in interest rates would generate a homeownership rate decrease of 1.14 percentage points, averaging across all households (Wachter et al., 1996, p. 348). Their analysis assumed that there would be no mortgage interest rate effect of full privatization in the rental market and that ARM rates would rise as much as fixed-rate mortgage ratesCprobably too-stringent assumptionsCso the ultimate impact on homeownership rates would likely be smaller.[80] In addition, the figure would need to be scaled down based on a more plausible mortgage interest rate effect of full privatization, as in the projection of the homeownership cost effects discussed in the preceding paragraph.[81] Based on 100 million occupied housing units, the *unadjusted* Wachter et al.

The disagreement is related to the controversy about the extent to which the benefits of agency status are retained by stockholders, rather than being passed onto borrowers as lower interest rates. Chapter VII discusses this issue.

This figure is adjusted for income tax effects and reflects the roughly 5 percent increase in interest costs coupled with a 40 percent mortgage interest share of total housing costs (including principal payments, taxes, insurance, fuel, utilities, and maintenance). Wachter et al. (1996), pp. 343, 374.

That is, Aconstrained households@ would increase from 18.3 to 19.8 percent of households, an 8 percent increase in the number of such households. Wachter et al. (1996), pp. 344, 346.

Yezer (1996, pp. 379B380) discusses this issue. The proportion of mortgages on rental properties among the GSEs= total mortgage purchases ranged from 4 to 7 percent annually between 1993 and 1995, substantially less than the comparable proportion in the overall housing stock. (For example, 15 percent of properties mortgaged in 1989 through early 1991 were rental properties, according to the Census Bureau=s 1991 Survey of Residential Finance.) This implies that cost increases to the GSEs would affect interest rates on mortgages
for owner-occupied housing more than on mortgages for rental properties.

Wachter et al. present separate estimates of the homeownership rate effect of an increase in required downpayment from 10 percent to 15 percent of property value. It is not likely that mortgage insurance for mortgages with 10 percent downpayments would become unavailable to the degree assumed in Wachter et al.=s AB@ simulationsCsee Yezer (1996), p. 378.

figure translates into around 1 million fewer homeowners as the homeownership effect of full privatization, or about one percent of the total number, so the implied privatization effect would be less than this.[82] In some cases homeownership would be delayed rather than being permanently unobtainable; however, this would also mean delaying the benefits of ownership sought by families that seek to become homeowners. Any homeownership-reducing effect would be contrary to the goals of the President=s June 1995 National Homeownership Strategy, which aims to add up to 8 million new families to America=s homeownership rolls by the end of the year 2000, lifting the country=s homeownership rate to 67.5 percent, an all-time high.

Wachter et al. find considerable variation in the magnitude of potential negative effects on homeownership by age, minority status, and household income. These findings are discussed in Chapter IV, which considers the impact of privatization on affordable lending. As background for that discussion, the next section describes the socioeconomic characteristics of borrowers whose mortgages are purchased by the GSEs and originated by the major market actors in the single-family mortgage market.

E. Characteristics of Borrowers Obtaining Single-Family Mortgages

An important question in determining whether the public is earning a sufficient benefit in exchange for the advantage it provides to the GSEs is the extent to which their purchases of mortgages for lower income families and neighborhoods, as a share of their total business, match, exceed, or fall short of the corresponding shares of originations in the overall conforming market.[83] This section shows that the GSEs lag lenders such as banks and thrifts in facilitating financing for lower income families, although their performance is similar in other areas such as providing financing in high-minority neighborhoods.[84] In general, Fannie Mae has reduced the gap between its performance and the market, while Freddie Mac=s performance remains somewhat below the market.

Tables 2.3 and 2.4 report borrower and census tract characteristics of home purchase and refinance mortgages originated in metropolitan areas in 1994 based on HMDA data.[85] They compare the distributions of mortgages insured or guaranteed by FHA and VA with conventional conforming loans purchased and not purchased by the GSEs.

This result is comparable in order of magnitude to Savage and Fronczek=s (1993, p. 5-1) estimate that a 100 basis point interest rate rise would reduce homeownership by around 1 million households.

This is a separate question from the issue of whether the GSEs are meeting the statutorily mandated housing goals, which is analyzed in the next chapter.

Lind (1996a, 1996b) also shows that the GSEs= performance in affordable lending lags the market.

Home Mortgage Disclosure Act (HMDA) data are presented for the following major sectors of the mortgage market: Government loans insured by the FHA and guaranteed by VA; conventional conforming loans sold to the GSEs; conventional conforming loans not sold to the GSEs (called Anon-GSE loans@Cthese are mainly loans originated by banks and thrifts and held in portfolio); and manufactured housing loans. The Aconforming market@ totals do not include manufactured housing loans. Conventional jumbo loans that are above the conforming loan limit are not included since the issue here is affordability.

The following discussion focuses on Table 2.4, which includes only FHA-eligible loans, to highlight the affordable sector of the housing market.[86]

Comparisons With FHA. FHA stands out as the entity with greatest share of its loans for affordable lending. Certain groups accounted for a particularly high share of FHA-insured loans: very-low-income borrowers (18.3 percent), African-American and Hispanic borrowers (24.8 percent), and borrowers living in underserved areas (38.6 percent), that is, areas included under the GSEs= Geographically-Targeted Goal. On the other hand, such loans accounted for a smaller share of GSE loans; 11.4 percent to very-low-income borrowers, 10.6 percent to African-American and Hispanic borrowers, and 26.6 percent to borrowers living in underserved areas. The disparity is not surprising given that FHA=s mission is to focus on the more credit constrained borrowers purchasing a home for the first time. In 1994, two-thirds of FHA home purchase loans were for first-time homebuyers compared with 30 percent of GSE home purchase loans.[87]

Market Shares. These percentage comparisons do not take into account differences between the number of loans purchased by the GSEs and the number of loans insured by FHA. Because the aggregate volume of GSE business significantly exceeds that of FHA, in some cases the absolute numbers of loans of various types purchased by the GSEs are greater than the corresponding numbers for FHA loans. For example, in 1995 Fannie Mae purchased 258,000 loans made to first-time homebuyers (32 percent of its home purchase loans) and Freddie Mac purchased 159,000 such loans (30 percent of its home purchase loans), yielding a GSE total of 417,000 loans for first-time homebuyers, or 16 percent more than FHA=s 359,000 first-time homebuyer loans in 1995.

The market share data reported in Table 2.5 show the importance of the GSEs to the overall funding for lower income families, minorities, and underserved areas. The GSEs accounted for more than 20 percent of FHA-eligible home purchase loans going to these borrowers and their neighborhoods.

Comparisons With Portfolio Lenders. For the GSEs, the more relevant comparison is with the non-GSE portion of the conventional conforming market, which consists mostly of portfolio lenders such as thrifts and banks. Loans sold to the GSEs were less likely to be for the groups indicated in Table 2.4 than were loans not sold to the GSEs. For example, very-low-income borrowers (those with incomes equal to or less than 60 percent of area median income) accounted for 10.9 percent of Freddie Mac=s loans

FHA-eligible loans are defined as conventional loans whose loan size does not exceed the FHA loan limit for the metropolitan area in which the loan is made. Typically, the FHA loan limit is 95 percent of the area median house price, subject to a current minimum of $78,660 and a maximum of $155,250.

The Department=s Office of Policy Development and Research recently completed a study of FHA=s role relative to that of the GSEs and conventional lenders with affordable lending programs. It found that FHA underwriting and programs remained substantially more flexible when compared with the new conventional affordable lending initiatives and that FHA and conventional loans were made to significantly different types of borrowers. See Bunce et al. (1995).

and 11.8 percent of Fannie Mae=s loansCboth figures were below the 16.9 percent share of loans retained by banks that were for very-low-income borrowers. Similarly, low-income census tracts accounted for 10.0 percent of Freddie Mac=s loans and 11.1 percent of Fannie Mae=s loans, compared with 14.9 percent of loans retained by banks. On the other hand, the proportion of mortgages going to high-minority neighborhoods were more nearly comparable as between the GSEs= purchases (15.7 and 17.6 percent, respectively) and mortgages retained by banks (15.4 percent).[88] In addition, Fannie Mae=s figure for black and Hispanic borrowers (11.6 percent) was slightly greater than the corresponding figure for banks (11.4 percent).

There has been much discussion about why portfolio lenders hold greater percentages of loans to disadvantaged groups than the GSEs do. Canner and Passmore (1995) point out that portfolio lenders have extensive knowledge of their communities, which they are able to utilize to manage credit risk. In addition, they have direct interactions with their borrowers, enabling them to more flexibly assess credit risk. These factors allow the portfolio lenders to underwrite loans more flexibly than the GSEs, which must set underwriting standards to compensate for the fact that they cannot evaluate risk in such a detailed way.[89]

Another important factor influencing the types of loans held by portfolio lenders is the Community Reinvestment Act (CRA), which requires depository institutions to help meet the credit needs of their communities. CRA provides an incentive for portfolio lenders to initiate affordable lending programs with underwriting flexibility, and the loans are often held in portfolio because they do not conform to the GSEs= standards. In addition, the low profitability of holding plain-vanilla fixed-rate mortgages in portfolio makes affordable loans relatively more attractive to hold.

Comparisons Over Time. The next two chapters provide data showing that the GSEs have been improving their affordable lending performance since the housing goals were first established. An important question that can be answered with HMDA data is whether or not the GSEs have improved their affordable lending relative to that of other lenders, or has their improvement simply matched that of other lenders. Table 2.6 provides data on the characteristics of GSE and non-GSE home purchase loans for the years 1992 to 1994.[90] The data show that Fannie Mae has significantly improved its

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The fact that manufactured housing loans (which generally do not meet the GSEs= underwriting guidelines) are an important source of funding for lower income families shows up clearly in Table 2.4. In fact, the patterns for manufactured homes are similar to those for FHA-insured loans, except that FHA loans are more likely to be for a minority borrower.

Canner and Passmore (1995) present data that show that FHA and depository institutions assumed the greatest share of the credit risk associated with mortgage loans to lower income borrowers (52.3 percent) and black or Hispanic borrowers (52.7 percent) in 1994. The corresponding percentages for Fannie Mae and Freddie Mac were 15.3 percent for loans to lower income borrowers and 11.0 percent for loans to black or Hispanic borrowers.

Table 2.6 was limited to home purchase loans so that the trend data would not be distorted by changing shares of home purchase and refinance loans. For this reason, the percentages in Table 2.6 differ slightly from the corresponding percentages in Table 2.4.

affordable lending performance relative to depositories (banks and thrifts). Consider the percentages for very-low-income borrowers. In 1992, these borrowers accounted for 7.5 percent of Fannie Mae=s home purchase loans and 14.1 percent of depository home purchase loans, for a ratio of 0.53. By 1994, this (Fannie Mae/depository) ratio for very-low-income borrowers had risen to 0.75, which means that Fannie Mae=s performance had increased from 53 percent to 75 percent of the depositories= performance. Similar increases occurred for the other two categories (black and Hispanic borrowers and underserved areas).

Freddie Mac has also improved its affordable lending performance relative to the non-GSE sector, but not as much as Fannie Mae. While the Freddie Mac/depository ratio increased from 0.55 to 0.64 for very-low-income borrowers, the ratios for black and Hispanic borrowers increased only slightly (0.67 to 0.71) and the ratio for underserved areas remained constant (0.76). Thus, Freddie Mac has not closed the gap between its performance and the market=s performance to the same degree that Fannie Mae has.

F. Conclusions

Several conclusions emerge from this chapter. First, at the national level, the secondary market is an efficient, stable, and dependable source of liquidity for mortgage markets, and this market has been developed for conventional conforming mortgages by the GSEs. Through mortgage securitization, borrowers have access to national capital markets and a wide range of investors. Mortgage funds are readily available, and borrowers no longer have to experience periods of shortages of funds, as they did when thrifts, subject to a variety of government restrictions, dominated the housing finance system. Mortgage rates are now determined in the national capital market, and they respond quickly to changes in credit conditions. Most analysts believe that the presumed implicit guarantee on the GSEs= securities was a key factor in the development of this secondary market.

Second, at the regional level, the secondary market moves capital from capital-rich to capital-short areas. Lenders have access to investors across the country and are not dependent on the availability of local funds. By moving funds from areas where they are in surplus to areas of shortage, the secondary market has evened out regional differences in mortgage rates. At the same time, the secondary market has lessened the credit risk resulting from regional economic recessions by providing geographic diversification in the pools of mortgages.

Third, the GSEs have increased standardization in the primary mortgage market by developing underwriting standards that are followed by virtually all mortgage originators. More recently, both GSEs have been leaders in the development of mortgage underwriting and origination technology. This technology has the potential to reduce the time and costs involved in the mortgage origination process.

Fourth, if the GSEs were fully privatized, Chapter VI suggests that mortgage rates would rise slightly. This implies correspondingly higher costs of homeownership. Chapter IV suggests that underwriting standards would likely be tightened. Both of these effects would reduce the homeownership rate somewhat, contrary to the goals of the President=s June 1995 National Homeownership Strategy.

Fifth, the GSEs are an important funding source for affordable loans. For example, in 1995 the GSEs purchased 417,000 loans for first-time homebuyers (31 percent of their total purchases), which exceeded the 359,000 such loans insured by FHA, although the share of FHA=s loans for first-time buyers exceeded the corresponding share for the GSEs. However, HMDA data show that mortgages for very-low-income borrowers accounted for 11B12 percent of the GSEs= purchases, but 14B17 percent of the loans retained by thrifts and banks.

The HMDA data suggest that there is room for further improvement in the GSEs= performance. The housing goals, which are discussed in the next chapter, are designed to encourage the GSEs to make that improvement and close the gap between their performance and that of the overall market.

CHAPTER III

HOUSING GOALS APPROACH

A. Introduction and Main Findings

The American mortgage market works very efficiently for middle- and upper-income families in owner-occupied housing in most areas of the country. Highly standardized, investment-quality (so-called Aplain-vanilla@) mortgages are readily available to these families with minimal encouragement from the Government. Unfortunately, others do not enjoy such ready access to mortgage credit. Because Congress realized that equal access to mortgage financing was not available for certain families and locations (particularly for lower income families and their neighborhoods), Congress passed, with strong bipartisan support, the Federal Housing Enterprises Financial Safety and Soundness Act (FHEFSSA), which was signed into law on October 28, 1992. This law required that the Secretary of HUD establish housing goals for the GSEs to facilitate the provision of credit to lower income families and communities that historically had been underserved by the mortgage market.[91] The law also requires the Secretary of HUD, among other responsibilities, to oversee the anti-discrimination and fair lending practices of the GSEs to ensure equal access to credit.

By specifically charging the GSEs with providing credit to lower income families and borrowers in underserved areas, Congress intended that the GSEs fulfill important public purposes in return for the numerous Federal benefits that they enjoy. The three housing goalsClow- and moderate-income goal, geographically targeted goal, and special affordable goalCare the primary mechanisms for carrying out this congressional intent. In addition, periodic HUD reviews of the GSEs= business practices, underwriting and appraisal guidelines, and the fair lending enforcement mechanisms will further congressional intent by addressing fair lending and discrimination issues at the industry level. Reviews of underwriting practices could be an important adjunct to the GSEs= efforts to extend mortgage credit to underserved borrowers.

To evaluate the desirability of full privatization, an important issue concerns whether the current housing goals are useful mechanisms for ensuring that the GSEs= activities provide the public benefits that Congress intended. That is, do the housing goals show genuine promise for inducing increased lending to lower income families and underserved neighborhoods without unduly increasing risk or impairing profitability?

An equally important issue concerns the estimated public cost of achieving similar

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Prior to FHEFSSA, both GSEs= Charter Acts required them to support housing for low- and moderate-income families, but the provisions were less specific and detailed than the requirements in FHEFSSA. The Charter Acts did not specifically require that HUD establish special affordable and geographically targeted goals, discussed below.

benefits through the combined efforts of the public and private sectors under full GSE privatization. As some observers note, the GSEs are now viewed as a means of effecting social welfare policies without direct Federal spending.[92] If full privatization were to cause the GSEs to abandon these functions, it could cost the Federal Government more to achieve similar benefits with direct Federal programs than it costs to achieve them indirectly through the current GSE charters and goals.

This and the next two chapters examine various aspects of these issues.

Organization and Main Findings. This chapter focuses on the housing goal approach and its advantages for ensuring that the GSEs= activities assist targeted groups and locations. The chapter=s main conclusions are that broad-based performance goals are being set in a reliable and consistent manner, and that they provide an appropriate framework for encouraging the GSEs to improve their affordable lending performance.

First, the housing goals for the 1993B95 transition are reviewed and figures on the GSEs= activity relative to these goals are presented. Then the discussion turns to experience and insights gained by HUD during its development of the Final Rule on GSE housing goals, and the GSEs= activity in 1993B95 is restated based on the Final Rule goal structure and counting provisions for 1996B99. Over the past 2 years, HUD has had to address many complex analytical and policy issues that arose in setting performance standards. These issues ranged from estimating the share of overall mortgage activity in areas underserved by the mortgage market to evaluating the desirability of separate urban and rural subgoals.

Following this discussion of the housing goals, Chapter IV examines the affordable lending activities of the GSEs in the single-family mortgage market, while Chapter V analyzes their role in the multifamily mortgage market. These two chapters show that there is a national need for the GSEs to continue improving their affordable lending performance in these markets.

If they were fully privatized, Fannie Mae and Freddie Mac would likely pull back from lower income and underserved markets, rather than continuing with the improvement that they have made under the framework of the housing goals. If the GSEs are not fully privatized, HUD expects that, as they gain more experience with affordable lending products, the GSEs will be able to strengthen their performance within the goals in financing mortgages that support an extension of affordable housing into traditionally under-served markets, including loans with higher loan-to-value ratios and loans on housing for lower income families.

B. The GSEs= Housing Goals

See MacDonald (1995).

In October 1993 HUD established three transition housing goals for the GSEs for 1993B94, and in November 1994 HUD extended these goals to 1995.[93] Congress required that HUD finalize the housing goals based on experience gained during the transition period and on any further analysis that HUD deemed appropriate. In December 1995, after extensive analysis and consultations with interested parties, HUD issued a regulation that revised the structure of the goals and established levels of the goals for 1996 to 1999.[94] The structure of the low- and moderate-income goal was changed slightly, and the structures of the geographically-targeted and special affordable goals were changed substantially. This section describes the goals and reviews the GSEs= levels of activity relative to the transition goals and the goals as structured in the Final Rule. Tables 3.1 and 3.2 present figures under these two approaches and serve as a basic point of reference for this discussion.[95]

B.1 Low- and Moderate-Income Goal

The low- and moderate-income (Alow-mod@) goal was defined in both the Interim Notices and Final Rule to include mortgage purchases on housing for borrowers with incomes at or below area median income (AMI), as published annually by HUD.[96] During the transition period, the low-mod goal was generally 30 percent of the dwelling units in properties whose mortgages were purchased by each GSE, as mandated by the 1992 Act.[97] In the Final Rule, the low-mod goal was increased to 40 percent for 1996 and 42 percent for 1997B99. This means that at least 40 percent of the total number of dwelling units financed by each GSE=s mortgage purchases in 1996 must be for families with incomes less than or equal to AMI. HUD raised the level of the low-mod goal from the 30 percent target set out in the 1992 Act so that the goals would be more comparable with the GSEs= recent performance and the size of the overall market.

1993B95 Activity Under Interim Notice Goal Definitions. Table 3.1 provides data on the activity of the GSEs relative to the transition low-mod goal. It includes two sets of figures on low- and moderate-income activity. In both presentations, activity is

At 58 FR 53048B60867 and 59 FR 61504B61506, respectively.

At 60 FR 61845B62005. Loan-level data on mortgages purchased by the GSEs has allowed the Department to evaluate how the GSEs would have performed for 1993B95 under the new housing goals structure that will be in effect for 1996B99. The analysis is summarized later in this chapter. Appendixes to the Final Rule as published in the *Federal Register* present full details.

The percentages in Table 3.1 are based on the GSEs= annual performance reports to HUD, adjusted for missing data as described in the text. The percentages in Table 3.2 are based on HUD=s analysis of loan-level data provided by the GSEs. In the course of HUD=s analysis of the loan-level data, various technical issues have arisen with respect to the application of counting rules. Resolution of these issues, which is in process, could slightly affect some of the tabulated figures, but no difference of more than 0.5 percent is anticipated.

This goal includes both owners and renters, but because data on tenants= incomes is generally not available, a rent-based standard is used for most purchases of rental mortgages. This standard stipulates that a unit corresponding in size to a family of four is considered low- or moderate-income if rent does not exceed 30 percent of AMI, with adjustments for unit size as measured by the number of bedrooms.

In 1993, the low-mod goal for Freddie Mac was 28 percent.

measured by the ratio of units qualifying under the low-mod goal to the aggregate number of units eligible to be included in the calculation. In the upper set of figures, Amissing-data cases@ for which a GSE lacked data on borrower income, rent, or area median income were excluded from the denominator in the calculation, making these figures somewhat greater than the lower set of figures.[98]

This issue concerning the treatment of missing data in the calculation does not affect the broad conclusions from Table 3.1, which are as follows:

(1) Both GSEs surpassed their statutory low- and moderate-income goals for each year from 1993 through 1995, and by especially large margins in both 1994 and 1995.

(2) Each GSE=s low- and moderate-income percentage increased significantly between 1993 and 1995.

(3) Fannie Mae=s low- and moderate-income percentage exceeded Freddie Mac=s for every year from 1993 through 1995.

1993B95 Activity Based on the Final Rule Goal Definitions. Table 3.2 and Figure 3.1 show the GSEs= low-mod activity relative to the definition of the low-mod goal in the Final Rule.[99] As indicated, Fannie Mae=s low-mod activity in 1994 and 1995 exceeded the 1996B99 required levels, while in 1995 Freddie Mac fell slightly short of the 1996 low-mod goal and was more than 2 percentage points below the 1997B99 low-mod goal of 42 percent.

If the proportion of low-mod households among the Amissing data cases@ was the same as the proportion in the rest of the cases, then the upper set of percentages in Table 3.1, in which the Amissing data cases@ are excluded from the denominator, would be accurate. Only if none of the Amissing data cases@ were in the low-mod income range would the lower set of percentages, in which Amissing data cases@ are included, be accurate. That is, if L_M = number of low-mod households among missing-data cases, M = number of missing-data cases, L_R = number of low-mod households among reported-data cases, R = number of reported-data cases, and the actual proportion of low-mod households among total purchases is denoted by $P = (L_M + L_R)/(M + R)$, then it follows that if $L_M/M = L_R/R$, then $P = L_R/R$, and if $L_M = 0$, then $P = L_R/(M + R)$. In their annual performance reports to HUD, Freddie Mac included its Amissing data cases@ in the denominator (as in the lower set of percentages), while Fannie Mae excluded such cases (as in the upper set of percentages).

Differences in counting procedures between the interim notices and the final rule cause these numbers to differ slightly from those in Table 3.1. The Final Rule=s counting procedures include the following:

- If a GSE lacks data on an eligible mortgage to determine if it qualifies under a goal, the units in the property must be included in the denominator in measuring 1996B99 goal performanceCthat is, this is the procedure underlying the lower set of figures in Table 3.1.

- During the transition period, second mortgages were not eligible for counting toward goal performance under any of the goalsCthat is, they were excluded from both the numerator and the denominator. For 1996B99, second mortgages are eligible under all of the goalsCthat is, the dwelling units in all such properties are included in the denominator, and they are included in the numerator if the appropriate conditions apply.

- For measuring low-mod performance in nonmetropolitan areas, borrower income is compared to the greater of county income or statewide nonmetropolitan income. In the transition period, comparison was made with county income only. This means that if state nonmetropolitan income exceeds county income, more borrowers in the county would qualify as low- and moderate-income than if only the county benchmark were used.

The figures in Table 3.2 are comparable with the 1996B99 goal levels and will provide a basis for future analysis of the GSEs= activity across all years in a consistent manner.

Table 3.2 also shows that each GSE=s activity was less than the corresponding annual percentage of low- and moderate-income mortgagors in the overall market in which it operates. HUD determined that the size of the low- and moderate-income market ranges from 48 to 52 percent. In setting the low-mod goal, HUD adopted an approach that moves the GSEs significantly, but judiciously, toward the market size.[100]

B.2 Geographically Targeted Goal

For 1993B95, the geographically targeted goal applied only to central cities, as defined by the Office of Management and Budget. However, starting in 1996, HUD redefined this goal in accordance with FHEFSSA and its legislative history to better focus on underserved areas, regardless of location. The basis of the redefinition was the Department=s finding that areas underserved by the mortgage market, as shown by high mortgage denial rates and low mortgage origination rates, are those with low average incomes and high concentrations of minority residents.[101]

Metropolitan Areas. Within metropolitan areas, mortgage purchases count toward the 1996B99 goal if they finance properties that are located in census tracts where either the median family income in the tract does not exceed 90 percent of the AMI, *or* minorities comprise 30 percent or more of the residents and the median family income in the tract does not exceed 120 percent of the AMI.

This goal includes 47 percent of the census tracts in metropolitan areas and accounts for 44 percent of the metropolitan population. The tracts included in this definition suffer from poor mortgage access and depressed socioeconomic conditions. The average mortgage denial rate in these tracts is 21 percent, almost twice the denial rate in non-included tracts.

Nonmetropolitan Areas. In nonmetropolitan areas, mortgage purchases count if the mortgages finance properties that are located in counties where: the median family income does not exceed 95 percent of the greater of the State nonmetropolitan median income or the nationwide nonmetropolitan median income; *or* minorities comprise 30 percent or more of the residents and the median family income does not exceed 120 percent of the State nonmetropolitan median income.[102]

This range indicates that of the total number of dwelling units financed in the conventional conforming primary mortgage market, 48B52 percent are occupied by or affordable to families with incomes less than the area median income. During 1993 to 1995, which was a period of low interest rates and near-record affordability, the market size was at the high end of 52 percent or even greater. The important role played by the size of the conventional conforming market in setting the goal levels is further discussed later in the chapter.

For details, see Appendix B in the December 1, 1995, *Federal Register*, 60 FR 61925B61958.

In New England, nonmetropolitan portions of counties are used instead of whole counties when counties straddle metropolitan area boundaries.

Two important factors influenced HUD=s definition of nonmetropolitan underserved areasClack of available data for measuring mortgage availability in rural areas and the difficulty of operating mortgage programs at the census-tract level in rural areas. Because of these factors, the 1996B99 goals use a more inclusive, county-based definition in rural areas. HUD=s definition includes 66 percent of the counties in nonmetropolitan areas and accounts for 54 percent of the nonmetropolitan population.

Goal Levels and 1993B95 Activity. Under the central cities goal (which was the geographically targeted goal under the Interim Notices), purchases of mortgages on properties located within OMB-defined central cities counted towards the goal. The transitional goal for 1993 was 26 percent and 28 percent of Freddie Mac=s and Fannie Mae=s mortgage purchases, respectively. The goal was increased to 30 percent of each GSEs= mortgage purchases in 1994 and 1995. Neither GSE achieved its goal in 1993. Fannie Mae, however, substantially improved its activity, increasing its mortgage purchases in central cities to 31.5 percent in 1994 and 30.4 percent in 1995, surpassing its goal in both years. Freddie Mac showed no net increase in central city activity between 1993 and 1995, and did not achieve its central cities goal in any year during the three-year transition period.[103]

Activity Based on the Final Rule Goal Definitions. As discussed previously, the Final Rule substantially redefined this goal to focus on areas underserved by the mortgage markets. The geographically targeted goal is 21 percent for 1996 and 24 percent for 1997B99. HUD estimates that the mortgage market in areas included in the geographically targeted goal accounts for 25B28 percent of the total number of newly mortgaged dwelling units. Table 3.2 and Figure 3.2 demonstrate the GSEs= performance from 1993 through 1995 had the Final Rule=s geographically targeted goal been in effect. In 1995, 31 percent of Fannie Mae=s purchases financed dwelling units located in these areas, compared with 25 percent of Freddie Mac=s purchases. These represented significant gains over the GSEs= 1993 mortgage purchase activity in these areasCFannie Mae=s activity increased by 38 percent percent between 1993 and 1995, and Freddie Mac=s activity increased by 18 percent over this period.

B.3 Special Affordable Housing Goal

The special affordable goal is based on the GSEs= purchases of mortgages on rental and owner-occupied housing that meets the needs of very-low-income families and low-income families living in low-income areas. Thus, the special affordable goal is more

The difference between the GSEs in the treatment of loans with missing data, discussed above under the low- and moderate-income goal, is much less significant with regard to the central cities goal, because both GSEs

had geographic information on almost all of their loans in all years. Table 3.1 includes missing data cases in the denominator, but if they were excluded, in no case would a GSE=s activity rise by more than 0.1 percent.

targeted than the broad low-mod goal and focuses the GSEs= efforts on those families at the lower end of the income distribution who are experiencing the most severe affordability problems.

Goal Levels and 1993B95 Activity. The special affordable goals for 1993B95 were the most complex in structure of the three sets of goals, and they were stipulated in dollar amounts, rather than as a percentage of a GSE=s total purchases. They also contained a complex system of subgoals, for both single-family and multifamily purchases, and counting requirements. Further, the goal was combined for the 1993B94 period and proportionately determined for 1995 when the transitional goals were extended. Table 3.1 shows the GSEs= activity under the special affordable goal during the 1993B95 transition period. Both GSEs met the aggregate goals for 1993B94 and for 1995.

Final Rule Goal Definitions. In December 1995, the Department revised and considerably simplified the special affordable goals to reduce the compliance burden on the GSEs, while maintaining the focus of the 1992 Act on families most in need of adequate housing. The goal is now expressed as a percentage of each GSE=s total business, to make it more comparable with the other goals and to better take into account fluctuations in the size of the mortgage market. The Department has now:

! Replaced a complex four subgoal structure with one overall goal, while maintaining the focus on those most in needCthat is, very-low-income families (with incomes at or below 60 percent of AMI) and low-income families (with incomes at or below 80 percent of AMI) in low-income areas (with tract median incomes at or below 80 percent of AMI) are eligible for this goal.

! Allowed all low-income rental units in multifamily properties to count toward the goal if at least 20 percent of the units are affordable to families at or below 50 percent of AMI, or if at least 40 percent of the units are affordable to families at or below 60 percent of AMI. This was done so that mixed-income projects would not be penalized.

! Required each GSE to purchase a minimum annual dollar amount of special affordable multifamily mortgages: $1.3 billion for Fannie Mae and $0.99 billion for Freddie Mac. In response to public and congressional concerns that the GSEs might not provide adequate support for financing of multifamily housing, this component of the special affordable goal will encourage the GSEs to sustain a secondary market for affordable multifamily loans.

The special affordable goal in the Final Rule was set at 12 percent for 1996 and 14 percent for 1997B99. Table 3.2 and Figure 3.3 show the GSEs= 1993B95 level of activity relative to the Final Rule=s specification of the special affordable goal. Neither GSE would have achieved the goal in 1993, but during the past 2 years, both GSEs substantially increased their activity relative to this standard, with Freddie Mac rising from 7.2 percent in 1993 to 13.2 percent in 1995, and Fannie Mae rising from 10.0 percent in 1993 to 15.8 percent in 1995. During the low interest rate environment of 1993B95, Fannie Mae surpassed the 1997B99 requirement, while Freddie Mac surpassed the 1996 goal, but fell slightly short of the 1997B99 goal. Freddie Mac=s continued reentry into the multifamily market should further increase its performance under the special affordable goal.

C. The Housing Goals Approach and Public Benefits

In its recently issued regulation, HUD addressed complex issues involved with setting performance standards (i.e., housing goals) for these very large national corporations. In the period since the Interim Notices were issued HUD had to deal with a range of issues pertaining to how the GSEs can best meet their congressional mandates, and in developing the Final Rule HUD drew on insights gained. Through the goals, a flexible framework has been provided within which the GSEs can operate, and which has a solid analytical and policy basis. HUD=s experience has confirmed that the structure of the goals, as specified by Congress, represents an efficient means of ensuring that the GSEs fulfill their public-purpose responsibilities. Continuing with the present structure will provide further useful experience with this approach while ensuring continued provision of public benefits.

The discussion in this section of the advantages of the goals approach is organized around several factors that Congress required HUD to consider when setting the levels of the goals.

C.1 Consistent With Corporate Framework

Several characteristics of the housing goals show that they are consistent with the business operations of private corporations such as the GSEs:

! The goals are easily understood and are broad performance-based measures.

! The goals do not attempt to micromanage the GSEs, nor do they establish an array of subgoals, giving the GSEs maximum leeway to meet the goals.

! The goals adjust automatically to changes in the size of the market available for purchase by the GSEs because the goals are percentage based. That is, the goals adjust to current year GSE business volumes.

! The goals have been set for a 4-year period so that the GSEs can better plan their activities. The goals do not Aratchet up@ based on changes in the GSEs= performance.

- The goals are benchmarks that are designed to be attainable under varying economic conditions, including periods of higher interest rates and less favorable market conditions than those prevailing in 1993B95.

- The goals are clearly reasonable and feasible because they are set below the overall market level.

C.2 Targeting Impact

The importance of the housing goals derives from the fact that they can be used to target the activities of the two dominant players in the conventional mortgage market. Fannie Mae and Freddie Mac set underwriting standards and develop new products for the market, and in general, provide overall leadership to the industry. The housing goals provide an opportunity to influence the types of mortgages purchased by these two industry leaders.

Prior to 1993, HUD had housing goals for Fannie Mae, dealing with purchases of mortgages on low- and moderate-income housing and on properties located in central cities.[104] But these goals were not well-targeted. For example, Alow- and moderate-income@ was defined in terms of house price rather than borrower income, but many lower priced homes are purchased by higher income families, while some higher priced homes are purchased by lower income families. The move to an income-based standard represents a better-focused approach.

The best example of improved targeting of the goals is HUD=s change of focus for the geographically targeted goal. In 1993B1995, the transition period goal covered all parts of all central cities, as defined for statistical purposes by the Office of Management and Budget (OMB). However, this central city goal was not a good way to target efforts to neighborhoods most in need of mortgage creditCnot all parts of all central cities are underserved, and many underserved areas lie in other cities, in suburbs, or outside of metropolitan areas. Thus, the Department=s 1996B99 geographically targeted goal is based on underserved census tracts for metropolitan areas (in cities or suburbs) and on underserved counties for nonmetropolitan areas. As currently defined, this goal is particularly important for the congressional objective of reducing the substantial disparities in lending that exist between neighborhoods.

C.3 Goals Reflect Important Socioeconomic, Market, and Financial Factors

In establishing the goals, HUD considered in detail the statutory factors specified in

HUD did not establish goals for Freddie Mac because the Department had no jurisdiction over Freddie Mac until the passage of FIRREA in 1989. The 1992 Act was enacted before HUD completed promulgating goals for Freddie Mac under pre-1992 law.

the 1992 Act.[105] A brief review of these factors illustrates both the need for the housing goals and the sound analytical basis on which they are grounded.

National Housing Needs. Homeownership and the provision of affordable rental housing are basic objectives of U.S. housing policy. With respect to homeownership, many younger, minority, and lower income families were closed out of the ownership market during the 1980s. Low-income families with children, who could most benefit from the advantages of ownership, bore the brunt of the decline in ownership rates. There exists a large pent-up demand for homeownership on the part of lower income families.

Data from the Census and American Housing Surveys demonstrate that the need for affordable housing is substantial among lower income families.[106] These households, particularly those with very low incomes, are burdened by high rent payments and will likely continue to face serious housing problems, given the dim prospects for earnings growth in entry-level occupations. This slow earnings growth is compounded by the difficulty of poor households in finding affordable rental housing as low-cost units are lost to disrepair or are upgraded to serve higher income renters. While the GSEs can do little to mitigate the more extreme social problems, such as declining earnings, they can assist in making financing available for lower income homeowners and for affordable rental housing. This role of the GSEs in meeting the substantial needs of the housing market is discussed in Chapters IV and V.

Economic, Housing, and Demographic Conditions. HUD considered the condition of the housing market overall and relative to each of the goals. Demographic changes that will affect the demand for housing over the next few years include: continued increases in immigration, changes in age and family composition of households, and growth of nontraditional households such as singles and single-parent households.[107]

Previous Performance of the GSEs. In determining the goals, it was important for HUD to consider the GSEs= past purchase patterns. For example, trends in the GSEs= goals performance and whether they are leading the overall market are important questions in measuring their efforts in the affordable lending area. A low business volume of a particular property type (e.g., Freddie Mac=s multifamily and small rental property business volume in 1993) can indicate an area that should receive attention, as well as one where it may be difficult to increase activity rapidly.

These include: national housing needs; economic, housing, and demographic conditions; the performance and effort of the enterprises toward achieving the goals in previous years; the size of the relevant mortgage market relative to the size of the overall conventional conforming mortgage market; the ability of the enterprises to lead the industry in making mortgage credit available; and the need to maintain the sound financial condition of the enterprises.

See, for example, U.S. Department of Housing and Urban Development (1996b) and previous HUD reports to Congress on Aworst case housing needs@ cited therein; and Bogdon, Silver, and Turner (1993).

Details are related in U.S. Department of Housing and Urban Development (1996a).

Section B showed that the GSEs have been improving their activity relative to the goals over the past 3 years. However, Chapter II reported that the GSEs= purchases of lower income loans continues to lag those of other mortgage market participants such as portfolio lenders (see Table 2.4).

Size of the Markets for the Goals. Perhaps the most important and controversial consideration in determining the level of the goals was the size of the relevant loan market relative to the overall conventional, conforming market. Calculations of market size, based on extensive analysis of mortgage market data, convinced HUD to readjust the levels of the goals from the transition targets set out in the 1992 Act. For example, the low-mod goal was increased from 30 percent in 1993B95 to 40B42 percent in 1996B99 based in part on the estimated low-mod market share of 48B52 percent.

The greatest difficulty HUD encountered in estimating market share was gathering complete and consistent mortgage data.[108] No single data set was available for calculating either the shares of total units by property type or the percentages of various types of units qualifying for the goals. HUD relied on several major databases, which provided a wealth of useful information on the mortgage market.[109]

To take into account uncertainty in the market estimates, HUD conducted numerous sensitivity analyses to show the effects of alternative assumptions. In addition, HUD contracted with the Urban Institute to comment on the reasonableness of its market share approach and to conduct analyses related to specific comments received from the public about the market share methodology. The Urban Institute affirmed the validity of HUD=s methodology.

Need to Maintain the Sound Financial Condition of the Enterprises. The GSEs are substantial corporations as measured by asset size and profits. HUD considered the effect of each of the goals on the financial strengths of both GSEs. In its Economic Analysis of the Final Rule,[110] HUD evaluated the credit risks the GSEs would assume through the purchase of additional mortgages that are affordable to lower income households and that are for properties located in areas that are underserved by the mortgage market. That analysis concluded that the housing goals will have only a limited impact on the GSEs= credit costs and on their financial condition.

The housing goals will not require the GSEs to rapidly increase their purchases of risky mortgages and thereby jeopardize their profitability and financial condition. Rather,

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Congress addressed the Ainformation vacuum@ on mortgage originations by requiring the GSEs to provide loan-level data to HUD on their purchase activities and HUD to create public use data bases out of the GSEs= data.

HUD combined information from the Home Mortgage Disclosure Act reports, the American Housing Survey, HUD=s Survey of Mortgage Lending Activity, and the Census Bureau=s Residential Finance Survey.

U.S. Department of Housing and Urban Development (1995b).

the GSEs can meet the goals by continuing their outreach efforts and by making prudent adjustments to their existing underwriting standards. Chapter IV will discuss in more detail the credit risks associated with the GSEs= purchases of affordable loans.

D. Fair Lending Provisions

One means of achieving the Administration=s national homeownership goals is to eliminate mortgage lending discrimination and provide greater access to housing for underserved Americans. The Fair Housing Act (Title VIII of the Civil Rights Act of 1968, as amended) prohibits discrimination against any person because of race, color, religion, sex, national origin, handicap or familial status. This includes discrimination in the making or purchasing of mortgage loans, whether it occurs by implementing discriminatory underwriting guidelines or by other means. The Equal Credit Opportunity Act (ECOA) adds additional protections, including prohibitions against discrimination based on age and marital status.

In 1992, Congress enacted FHEFSSA, adding extra protections against lending discrimination. In December 1995, HUD issued final regulations implementing FHEFSSA. Together, FHEFSSA and its regulations provide for:

! The Secretary to periodically review and comment on the GSEs= underwriting and appraisal guidelines to ensure their consistency with the Fair Housing Act and FHEFSSA.

! The GSEs to submit to the Secretary, as part of their annual reports, an analysis to determine whether their business practices are consistent with fair lending requirements.

! The GSEs to furnish the Secretary with information about mortgage lenders with whom they do business to assist in investigations under the Fair Housing Act or ECOA.

! The Secretary to obtain information from Federal and State regulatory agencies about lender violations of the Fair Housing Act, ECOA, and State and local fair housing/fair lending laws. The Secretary shall make this information available to the GSEs (while limiting such information to protect confidentiality).

! The Secretary to direct the GSEs to take remedial actions against lenders that have violated the Fair Housing Act or ECOA. The range of remedial actions includes suspension, probation, reprimand, or settlement.

! The Secretary to consult the appropriate Federal financial regulators before directing a GSE to take remedial action against a lender.

- ! The Secretary, in directing a GSE to impose a penalty, to consider the impact of the penalty on the lender=s safety and soundness, and other factors such as the lender=s appropriate use of a secondary mortgage market underwriting guideline in committing the violation.

- ! The Secretary to advise the Director of OFHEO of violations or potential violations of FHEFSSA by the GSEs. OFHEO can seek cease-and-desist orders and civil money penalties against the GSEs for these violations.

FHEFSSA provides civil rights protections in addition to those under the Fair Housing Act. While the GSEs would still be subject to the Fair Housing Act with full privatization, the additional protections contained in FHEFSSA could be repealed. The specific impact of repealing these provisions is discussed below.

First, with fewer types of enforcement actions available, and with incentives for consultation removed, unneeded confrontation and litigation would be spawned. For instance, the possibility of direct action against a GSE by OFHEO might obviate the need for time-consuming investigations and lawsuits brought by individual plaintiffs. Plaintiffs who had been discriminated against, however, would still likely need to file suit to get whole relief since OFHEO is allowed only civil penalties and cease-and-desist orders. Also, the consultative approach to revising guidelines and business practices envisioned in FHEFSSA might be lost.

Second, without these provisions, gaps in coverage of other civil rights laws would grow. Over time, it is expected that FHEFSSA and its regulations would operate to cause the GSEs, with their dominant role in the mortgage market, to influence the lenders with whom they do business to avoid discriminating.

E. Conclusions

The housing goals provide a flexible framework within which the GSEs can operate to fulfill the mandate of Congress to meet the needs of the income groups and geographic areas targeted by FHEFSSA. The final goals established for 1996B99 have a solid analytical and policy foundation, based on detailed research by HUD. The importance of the housing goals derives from the fact that they target the activities of the two dominant players in the conventional mortgage market. They are broad-based performance goals that are easily understood and do not seek to fine-tune the GSEs= activities or otherwise interfere with their daily operations. The activity of each GSE with regard to each of the three goals now in effect has increased significantly between 1993 and 1995.

However, as shown in Chapter II, the share of the GSEs= loans made to the groups targeted by the goals has lagged behind the corresponding shares for depositories and for the overall conventional conforming market, which means that additional gains can be made. And Chapter IV shows that many of the loans purchased by the GSEs have relatively low loan-to-value (LTV) ratios, which means that they may not meet the needs of persons with a shortage of funds to make required downpayments. Under the housing goals framework, HUD expects that the GSEs will be able to improve their performance in purchasing higher-LTV and lower-income loans as they continue to gain experience with affordable lending products.

CHAPTER IV

SINGLE-FAMILY AFFORDABLE LENDING MARKET: GSE ROLE AND EFFECTS OF FULL PRIVATIZATION

A. Introduction and Main Findings

This chapter examines affordable lending activity in the single-family mortgage market, focusing particularly on the role of the GSEs in that market. The higher credit risk of affordable loans suggests that Fannie Mae and Freddie Mac would almost certainly reduce their affordable lending initiatives if they were privatized. This chapter examines the benefits to lower income families from the current system that would be lost under full privatization. It considers this issue in the context of what other market participants are doing in the affordable lending area.

Organization. The chapter has five additional sections. Section B lays the foundation for looking at possible losses to society from privatization by discussing the benefits lower income families gain from owning a home. It shows that there are a large number of potential homeowners who could benefit from affordability programs such as those offered by the GSEs. Section C summarizes recent initiatives of the GSEs and other market participants to extend homeownership opportunities to lower income families. Section D discusses the credit risk of affordable loans, which is an important determinant of the extent to which these loans would continue to be made if the GSEs were fully privatized. Section E discusses the effects of privatization on affordable lending activity. Section F presents the chapter=s main conclusions.

Terminology. When discussing the effects of fully privatizing the GSEs, this chapter distinguishes between Agoals-oriented@ loans and Aaffordable@ loans. Goals-oriented loans are loans that qualify for at least one of the three housing goals; they account for approximately one half of the GSEs= single-family mortgage purchases. AAffordable@ loans, which are sometimes called Acommunity lending@ loans, are defined here to include loans that the GSEs are purchasing under their new affordability initiatives and loans for lower income families who are making a very small downpayment. They are a subset of the broader group of goals-oriented loans. This chapter shows that affordable loans have higher credit and servicing costs than other goals-oriented loans, and consequently that they would be the loans most affected by fully privatizing the GSEs.

Main Findings. This chapter concludes that:

! Homeownership offers both public and private benefits justifying Government support (Section B).

! Some households desire to own a home but cannot raise enough cash for a downpayment or cannot afford the monthly mortgage payment. Others are unable to obtain financing due to inflexible underwriting standards or lender discrimination (Section B).

! The GSEs and other industry participants have recently begun to reach out to underserved households. The pool of potential homeowners who could benefit from the industry=s affordable lending programs is quite large (Section C).

! Most of the loans purchased by the GSEs to meet the housing goals have rather low loan-to-value ratios and do not appear to be highly risky, even though their financial returns are lower than the returns that the GSEs earn on their non-goal purchases (Section D).

! Credit risk is a more serious concern for the smaller number of goals-qualifying loans that the GSEs have been purchasing as part of their affordable lending initiatives (the so-called community lending loans). While the GSEs and the industry have gone to extra efforts to control credit risks on these loans by prudent underwriting and borrower counseling, these affordable portfolios are so young (1B4 years old) that more time and data are needed before conclusions can be drawn about their profitability (Section D).

! Much of the industry=s affordable housing outreach is due to efforts to satisfy CRA requirements. The housing goals provide incentives for the GSEs to purchase the CRA-type loans from thrifts and banks (Section E).

! Full privatization of the GSEs would cause the market to pull back from their affordable lending efforts (Section E).

Specifically, the GSEs are currently offering customized mortgage products, underwriting, and outreach that are expanding homeownership opportunities for lower income families. While prudent loans are being made under the new affordable programs, these loans typically entail higher costs than loans originated under the GSEs= standard programs. For this reason, affordable lending programs would be reduced if Fannie Mae and Freddie Mac lost their Federal benefits and were fully privatized. The overall increase in borrowing and credit enhancement costs that would result from the GSEs= loss of agency status would make it unprofitable for them to continue designing new programs and conducting outreach efforts aimed at more costly affordable loans, unless these loans were to begin carrying higher interest rates.

It is possible that requirements for secondary market mortgage purchases of affordable housing loans could be mandated of the enterprises after full privatization, as well as other purchasers of mortgages. The legal underpinnings and political outlook for enactment of such a statutory scheme are not yet clear.

B. Homeownership Benefits and Unmet Needs

This section lays the foundation for looking at possible losses to society from privatization by discussing the benefits lower income families gain from owning a home. It discusses the societal benefits of homeownership. It also presents evidence indicating that significant unmet demand and disparities in credit availability continue to exist in the mortgage market and finds that the size of the pool of potential lower income homeowners that could benefit from affordable lending programs is quite large.

B.1 Benefits of Single-Family Homeownership[111]

Homeownership has long been a key aspiration of Americans and, as such, a basic concern of Government. It provides both private and public benefits justifying Government encouragement and support.

Homeownership has expanded the range of individual choice, permitting households to tailor or customize their living arrangements more carefully to their particular situation. It improves access to the larger homes and better neighborhoods particularly needed by families with children. Because homeownership places households in the position of property management (that is, they must negotiate financing and provide for the operation, maintenance, and repair of the property), it cultivates responsibility and self-reliance, and this engenders both private and public benefits. To the extent that the development and reinforcement of these qualities improve prospects for individual economic opportunities, both private and public benefits are increased.

Homeownership is one of the most common forms of property ownership and sources of saving in society. Home equity is the largest source of wealth for most Americans. Among homeowners, about 60 percent of their wealth consists of home equity. Even among low-income homeowners, home equity comprises over half their wealth.[112] As such, it is thought to promote social or community stability by increasing the number of stakeholders and reducing disparity in the distribution of wealth and income.

While it is difficult to quantify the individual and social benefits from a broader range of choice, more responsible population, and more even distribution of wealth and income, the benefit is nonetheless real, particularly when judged by the degree of planning, sacrifice, and endurance households expend to become homeowners. Michelle White and Richard Green have provided empirical support for homeownership=s association with a more responsible, self-reliant citizenry in their study reporting that

For a review of economic research on the benefits of homeownership, see U.S. Department of Housing and Urban Development (1995a).

See U.S. Department of Housing and Urban Development (1995a), pp. 1B6.

children of homeowners are more likely to graduate from high school, less likely to commit crime, and less likely to have children as teenagers than children of renters.[113]

B.2 Unmet Demands for Homeownership

Aided by a long-term upward trend in the economy, both primary and secondary mortgage market institutions have evolved over time to make homeownership accessible to a growing fraction of Americans. However, despite this general improvement, some economic or racial stereotyping and imperfections in the market for mortgage credit remain, leaving pockets of unmet demand for homeownership.

Homeownership rates increased dramatically in the 1940s and 1950s, from 43.6 percent in 1940 to 61.9 percent in 1960. Subsequently, the rate rose more slowly, reaching a record high of 65.6 percent in 1980. However, historically high interest rates, low price appreciation, and a series of deep regional recessions caused a decline in the homeownership rate to 63.8 percent in 1986. The rate rose only slightly between 1986 and 1994 but rose to 64.7 percent in 1995, the highest level since the early 1980s. The stability between 1986 and 1994 resulted from increases among elderly households, offset by declines among families with children.

During the 1980s, the goal of homeownership was particularly elusive for low- and moderate-income families. Declines in ownership rates were most pronounced for younger, lower income households, particularly those with children. Between 1980 and 1991, the total ownership rate fell about 1 percentage point, from 65.6 percent to 64.2 percent, while the rate fell 7 percentage points for families with children, from 70.4 percent to 63.4 percent. The decline was even greater for young households, from 43.3 percent to 33.1 percent between 1980 and 1992. These declines were concentrated among single-parent households and married couples with children.[114] Homeownership rates were unchanged for upper income households but fell by 3 percentage points for very-low-income households.[115]

U.S. Census Bureau studies have shown that lower income and minority households have found it difficult to accumulate cash for required downpayments and closing costs or to make monthly mortgage payments. In addition to low incomes, high debts are a primary reason households cannot afford to purchase a home. Nearly 53 percent of renter families have both insufficient income and excessive debt problems that may cause difficulty in financing a home purchase.[116] High debt-to-income ratios

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These tendencies are especially strong for lower income households. Children of low-income homeowners are 15 percent more likely to stay in school than children of renters. White and Green (1994).

Joint Center for Housing Studies of Harvard University (1993), Table AB4.

Nelson and Khadduri (1992), Table 3, presents information on changes between 1978 and 1989.

Savage and Fronczek (1993), p. ix.

frequently make potential borrowers ineligible for mortgages based on the underwriting criteria established in the conventional mortgage market.

Furthermore, some potential low-income homebuyers do not understand the importance of establishing and maintaining a good credit history. Poor credit ratings are the result of unexpected and uninsured events like hospital bills, which often times are unpaid because of a lack of medical insurance. Other causes of poor ratings are the lack of budgeting skills.

In addition to the difficulties faced by low-income households, wide differences in ownership rates have persisted by race. The 1990 Census found that 69 percent of non-Hispanic whites were homeowners, compared with 43 percent of blacks, 42 percent of Hispanics, 54 percent of Native Americans, and 52 percent of Asians/Pacific Islanders. These differentials persist even when differences in income, age, and marital status are controlled.[117]

B.3 Disparities in Lending

There is much evidence suggesting that the current mortgage funding system does not work uniformly well for everyone everywhere.[118] Research based on HMDA data indicates that lower income and minority households and neighborhoods are not always well-served by today=s mortgage market.

Data on mortgage denial rates suggest that there are pervasive and widespread disparities in mortgage lending across the Nation. A major study by researchers at the Federal Reserve Bank of Boston showed that mortgage denial rates were substantially higher for minorities even after controlling for indicators of credit riskCthat is, the denial rate for similarly situated minority applicants would be 17 percent rather than the 11 percent observed for whites.[119] The findings of this study have been confirmed by a more recent reassessment and refinement of the same data by William Hunter at the Chicago Federal Reserve Bank.[120] Both studies found that denial differentials were concentrated among marginal applicants with bad credit ratings or high debt ratios. Among borrowers with good credit ratings, race did not matter.

Mortgage credit appears to be less accessible in low-income and high-minority neighborhoods. HUD analysis of 1993 HMDA data showed mortgage denial rates to be nearly twice as high in underserved census tracts as in served tracts (21 versus 11

See U.S. Department of Housing and Urban Development (1995a), p. 3, and Wachter and Megbolugbe (1992), p. 337.

HUD=s analysis on this point appears in Appendix B to the final rule on housing goals, 60 FR 61925B61958.

Munnell et al. (1992). Rachlis and Yezer (1993) and Yezer, Phillips, and Trost (1994) discuss some of the methodological and econometric problems with estimating single-equation models of mortgage rejection, such as the one estimated by Munnell et al.

See Hunter (1995). In addition, a study undertaken for HUD also found higher denial rates for minorities after controlling for credit risk. See Schnare and Gabriel (1994).

percent). Avery, Beeson, and Sniderman[121] found that mortgage application rates were lower and denial rates were higher in low-income census tracts, even after accounting for other loan and borrower characteristics. The effect of tract racial composition was more complicated. While whites faced higher denial rates in minority neighborhoods, minorities did not. In other words, minorities faced higher denial rates no matter where they attempted to borrow, while whites only faced the disparity in minority neighborhoods. In addition, Avery et al. found that home improvement loans had significantly higher denial rates in minority neighborhoods. A study by Freddie Mac economists also found disparities in minority and low-income census tracts.[122] After controlling for some credit risk effects, minority tracts were found to have lower application rates and acceptance rates, and lower income tracts were found to have lower application rates.[123]

B.4 Explanations for Lending Disparities

A number of possible explanations for these disparities have been suggested in the literature. For example, studies such as the Boston and Chicago Federal Reserve studies have found evidence of lender bias. These studies found that racial disparities could not be explained by differences in creditworthiness. In other words, minorities were more likely to have their applications denied than whites with similar credit characteristics. Bias is usually perceived as an aversion to a particular group. However, the Chicago Federal Reserve study attributes the disparities to a cultural gap between white loan officers and minority applicants, and conversely, an affinity to white applicants. Under either explanation the net effect is the same, that is, discriminatory treatment of minorities.

In addition, if race is correlated with risk, loan officers may effectively discriminate by using race as a screening device, rather than devoting effort to distinguishing the creditworthiness of the individual applicant.[124] While the intent may not be discriminatory, the outcome is.

Geographic disparities, or apparent redlining, can be the result of cost factors, such as the difficulty of appraising houses in such areas because of the paucity of previous sales to use as comparables. Comparables may also be difficult to find due to the diversity of central city neighborhoods. The small loans prevalent in low-income areas are less profitable to lenders because upfront fees are frequently based on a percentage of the loan amount, while the costs incurred are relatively fixed.

Underwriting rigidities may fail to accommodate creditworthy minority or low-

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Avery et al. (1994).

Shear et al. (1994).

Two other studies failed to find a relationship between tract racial composition and mortgage origination rates. See Holmes and Horvitz (1994), and Schill and Wachter (1993). Note that Schill and Wachter speculate that their lack of finding of a racial effect may be due to the high degree of correlation between applicant and neighborhood race.

See Calomeris, Kahn, and Longhofer (1994) for more discussion of this phenomenon, which is called Astatistical discrimination.@

income applicants. For example, under traditional underwriting procedures, the applicant who has conscientiously paid bills on time and has never used credit would be penalized for having no credit record. The applicant who remained steadily employed, but changed jobs frequently would also be penalized. Many of the changes undertaken by the GSEs to expand homeownership have focused on finding more flexible ways to establish creditworthiness that do not disadvantage creditworthy minority or low-income applicants.

Another underwriting issue involves successful communication of underwriting standards to lenders. There is evidence that private mortgage insurers= and secondary market underwriting guidelines have been viewed by the lenders as strict requirements, rather than guidelines allowing compensating factors. A study commissioned by Freddie Mac discovered that lenders tended to have more rigid perceptions of Freddie Mac underwriting standards than Freddie Mac intended.[125] The result was that lenders used criteria that denied loans that Freddie Mac would have found acceptable.

An additional barrier to homeownership is fear and uncertainty about the buying process and the risks of ownership. Bradley and Zorn (1996) found in focus groups with renters that even among those whose financial status would make them capable of homeownership, many felt that the buying process was insurmountable for them, because they feared rejection by the lender or being taken advantage of by real estate agents, lenders, and lawyers. Also, many feared the obligations of ownership, because of concerns about the risk of future deterioration of the house or the neighborhood.

While the literature has not resolved the issue of why the observed disparities exist, the GSEs and others in the lending community have recently begun to search for responsible ways to reduce these disparities. The initiatives they have undertaken are linked to the factors described above, which contribute, in varying degrees, to lending disparities. For example, recent counseling and outreach efforts by the industry are aimed at alleviating the concerns about the buying process mentioned above. Section C discusses these industry initiatives.

B.5 Size of Pool of Potential Homeowners

The pool of potential homeowners could be quite large. A recent survey by the National Association of Realtors (NAR) indicated that only one-third of renters prefer to remain renters for the foreseeable future.[126] Thus there are many potential homebuyers among the 34 million households who are currently renting.

Immigration is expected to be a major source of future homebuyers. Fannie Mae=s 1995 National Housing Survey revealed that immigrant renter households are almost 3

ICF, Incorporated (1991).

National Association of Realtors (1991).

times as likely as all renter households to list home purchase as their Anumber-one priority.@ At the same time, immigrants as a group are currently nearly twice as likely to be renters despite the fact that they appear as financially capable of becoming homeowners as the population at large.[127] The Joint Center for Housing Studies estimates that if the homebuying potential of immigrant households were realizedCi.e., they purchased with the same propensity as nonimmigrants with similar characteristicsCthen the number of homeowners in the largest 40 metropolitan areas would increase by about 900,000. In addition, the Joint Center estimates that another 950,000 native-born minority households in the same metropolitan areas would be added as homeowners if their rate of home-ownership matched that of their native-born white counterparts with similar income and demographic characteristics.[128]

Urban Institute Study. The Urban Institute recently estimated the potential size of the pool of lower risk potential homebuyers.[129] Of 20.3 million renter households having low- or moderate-incomes, roughly 16 percent were better qualified for homeownership than half of the renter households who actually did become homeowners over the sample period. When one also considered their likelihood of defaulting relative to the average expected for those who actually moved into homeownership, 10.6 percent or 2.15 million low- and moderate-income renters were better qualified for homeownership, assuming the purchase of a home priced at or below median area home price. These results indicate the existence of a significant lower income population of low-risk potential homebuyer households that might become homeowners with continuing outreach.

By way of comparison, the GSEs purchased an annual average of 170,000 loans to low- and moderate-income first-time homebuyers in 1993 and 1994, representing about 8 percent of the number of estimated potential low-risk buyers of homes priced at or below median area home price. Hence, the pool of well-qualified low-risk potential homebuyers is roughly 12 times larger than the annual volume of comparable borrowers served by the GSEs in 1993 and 1994.

C. New Affordable Lending Initiatives

In the past few years conventional lenders, private mortgage insurers, and the GSEs have begun implementing changes that are extending homeownership opportunities to lower income and historically underserved households. The industry has started offering more customized products, underwriting, and outreach so that the

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Fannie Mae (1995a), pp. 3 and 5.

Joint Center for Housing Studies of Harvard University (1995), Table 20.

Galster et al. (1995). The Urban Institute developed a logit-based analysis of households that were designated renters at the beginning of 1991 in the 1990 panel of the Survey of Income and Program Participation (SIPP). The probability of transitioning from renter to homeowner was then estimated directly by applying a logit regression to the mid-1992 subsample of white suburban renters and subsequent homeowners, who were thought most likely to be reflective of experience under current refinements in underwriting. These probabilities were then linked to all the remaining renter SIPP households to identify renters having relatively good prospects for transitioning to homeownership.

benefits of the mortgage market can be extended to those who have not been well served through traditional products, underwriting, and marketing. In some cases, those being served by special affordable programs would have qualified under conventional standards but did not know that the opportunity existed. Such outreach efforts can be expected to continue as mortgage originators seek new ways to expand business and to improve their CRA performance, and as the GSEs seek to meet their housing goals and develop new profitable markets.

The GSEs are well positioned to act as catalysts for primary lenders to create these benefits, given their dominant position in the mortgage finance industry. Furthermore, they have room to improve their affordable lending performance. Chapter II, which compared the characteristics of borrowers funded by the major sectors of the single-family mortgage market, showed that the GSEs, and particularly Freddie Mac, lag banks and thrifts in funding lower income families and their communities.

C.1 Recent Industry Affordability Initiatives

The new initiatives have focused primarily on introducing greater flexibility into the underwriting process and reducing the upfront costs of a mortgage. These initiatives started with GE Capital=s 1989 Community Homebuyer Program, which allowed home-buyers who completed a program of homeownership counseling to have higher than normal income-qualifying ratios and provide less than the full 5 percent downpayment from their own funds. Thus, the program allowed borrowers to qualify for larger loans than would be permitted under standard underwriting rules. Fannie Mae made the Community Homebuyer Program a part of its program offerings in 1990. Affordable Gold is a similar program introduced by Freddie Mac in 1992.[130]

Mortgage insurers and the GSEs have modified underwriting standards in several ways that treat low- and moderate-income households with more flexibility. The goal of these changes is not to loosen underwriting standards, but rather to identify creditworthiness by alternative means that more appropriately measure the circumstances of these households. Generally, underwriting standards are not relaxed on more than one dimension unless compensating factors (such as a strong credit history) offset the higher risk of the relaxed standard. The changes in underwriting standards include, for example:

! Using a stable income standard rather than a stable job standard. This particularly benefits low-skilled applicants who have successfully remained

The Community Homebuyer and Affordable Gold programs relax the front-end and back-end payment-to-income ratios to 33 percent and 38 percent (in some cases, 42 percent), respectively, compared with 28 percent and 36 percent in their standard programs. In addition, borrowers can satisfy 2 percent of their 5 percent downpayment with a gift from relatives or a loan from city government or nonprofit programs. Finally, counseling covers how to purchase a home, obtaining and maintaining a mortgage, family budgeting, and home repairs.

Table 4.1

Changes in Origination Volumes of Conventional Home Purchase Loans

Borrower Characteristics	Percentage Change in Origination Volume from Previous Year	
	1993	1994
All Borrowers	17%	18%
Income Less Than 80% AMI	38%	27%
Income Greater Than 120% AMI	8%	13%
African American	36%	55%
Hispanic	25%	42%
Non-Hispanic White	18%	16%

employed, even with frequent job changes.

! Using an applicant=s history of rent and utility payments as a measure of creditworthiness. This benefits lower income applicants who have not established a credit history.

! Allowing pooling of funds for qualification purposes. This benefits applicants with extended family members.

! Making exceptions to the Adeclining market@ rule.[131] This benefits applicants from inner city underserved neighborhoods.

Other industry efforts to reduce the borrower=s upfront costs have included mortgages with zero points and introduction of monthly insurance premiums with no upfront component.

C.2 Impact of Industry Affordability Initiatives

Standard underwriting procedures characterize a property as Ain a declining neighborhood@ if there is a high risk of losing value.

HMDA data suggest that the new industry initiatives may be having an impact. Between 1991 and 1994, conventional loans to low-income and minority families grew at much faster rates than loans to higher income and non-minority families. The number of conventional purchase loans going to families with less than median income increased by 27 percent between 1991 and 1992, compared with 10 percent growth for loans to higher income families. As shown in Table 4.1, these trends continued into 1993 and 1994. These data suggest that recent affordable initiatives may be increasing the flow of funds to underserved borrowers.

Of course, it must be remembered that these years were a period of historically low interest rates. Given that many lower income and minority renters were closed out of the housing market during the 1980s, the gains cited above were due to lower interest rates giving these households the opportunity to enter the homeownership market, as well as to the new affordable home loan programs.[132]

The introduction of these programs indicates a promising start by the industry to introduce a broader range of products and, where appropriate, apply more flexible guidelines to facilitate more lending to lower income families and their communities.

C.3 Recent Specific GSE Initiatives

The GSEs have been an important part of industry affordability efforts. They have developed new products, introduced flexibility into their underwriting standards, entered partnerships with community groups and city officials, and carried out both local and national marketing campaigns aimed at increasing homeownership. Fannie Mae, in particular, has begun to place a heavy emphasis on special programs and partnership efforts since the late 1980s. Freddie Mac has, since 1991, paid special attention to the impact of its underwriting guidelines on lower income borrowers. It organized its Underwriting Barriers Outreach Group (UNBOG) initiative in 1993 to recommend appropriate changes in its guidelines that would facilitate more affordable lending. Fannie Mae organized a similar group in 1994.

While the GSEs= activity targeted to low- and moderate-income markets has been substantial, total purchases under their special initiatives and community lending programs have been relatively small. For instance, Fannie Mae=s purchases under its community lending programs ranged from \$5 billion to \$8 billion between 1993 and 1995, while Freddie Mac=s annual purchases were less than \$1 billion.[133]

In response to low interest rates, first-time homebuyers have been the driving force in the recovery of the housing market in recent years. While first-time homebuyers represented about 40 percent of all buyers in the 1980s, their share rose to 46B48 percent between 1992 and 1995. See Chicago Title and Trust Family of Insurers (1992, 1993, 1994, 1995).

Loans identified as community lending in the loan-level data bases provided annually to HUD are as follows: Excluding HECM purchases only, Fannie Mae purchased 71,811 such loans (\$5,210 million) in 1993, 93,266 loans (\$7,903 million) in 1994, and 86,374 loans (\$6,550 million) in 1995. Freddie Mac purchased 7,628 such loans in 1993 (\$908 million), 5,039 loans (\$460 million) in 1994, and 10,869 loans (\$935 million) in 1995. In 1995, community lending comprised 7 percent of Fannie Mae=s total owner-occupied single family purchases, and 1 percent of Freddie Mac=s total single-family purchases.

Freddie Mac. Examples of Freddie Mac=s initiatives include:

- **Affordable Gold With a 3/2 Option**. This is an enhanced version of Freddie Mac=s Affordable Gold program with a variety of downpayment and closing cost options. The new Affordable Gold allows greater flexibilities in applying secondary financing to downpayment and closing costs. Using the 3/2 option, borrowers making a downpayment of 5 percent may use 3 percent from their own funds and any combination of gifts, grants, or secondary financing for the remaining 2 percent.[134]

- **Gold Measure.** Lenders are given a worksheet for Affordable Gold mortgages that helps the lender assess a borrower=s ability to manage mortgage debt by providing a statistically based measurement of the borrower=s total risk profile. Gold Measure seeks to help lenders take advantage of lending opportunities they otherwise may overlook, to dispel the myth that all affordable loans are risky, and to help lenders eliminate unintended bias in underwriting decisions.

- **Affordable Seconds.** This initiative provides a fast way to originate loans that include secondary financing by eliminating the need to submit most financing arrangements to Freddie Mac for individual review and approval. Rather, the second mortgages are tied to first-lien mortgages originated through Freddie Mac=s Affordable Gold programs.

- **NeighborWorks.** Freddie Mac is participating in NeighborWorks, a national initiative by the Neighborhood Reinvestment Corporation, which targets the revitalization of neighborhoods in 55 cities through programs to secure home-ownership for 10,000 low- and moderate-income families, primarily first-time homebuyers.

- **FHA 203(k) Rehabilitation Mortgage Purchase Program.** In mid 1994 Freddie Mac announced that it would purchase mortgages originated under FHA=s 203(k) Rehabilitation Mortgage Program. Such mortgages enable borrowers to combine acquisition/refinance and rehabilitation costs into one first mortgage, insured by FHA.

- **Alliances With Freddie Mac Seller/Servicers and National and Local Organizations Committed to Improving Housing Opportunities.** Freddie Mac will be working with these organizations in 90 cities over the next 3 years, to increase access to mortgage credit to underserved communities and minority residents.

Performance problems with this program have led to modifications, including elimination of premium pricing as possible source of 2 percent of the downpayment.

Fannie Mae. Examples of Fannie Mae=s initiatives include:

! **Fannie 97.** With this product, borrowers can qualify for a mortgage with only a 3 percent downpayment. This benefits low- and moderate-income borrowers who are able to make monthly payments, but have not yet saved enough for the normal downpayment and closing costs.

! **Startup Mortgage.** Borrowers are able to qualify for mortgages more easily because the borrower would make interest-only payments during the first year. Payments increase by 2 percent each year thereafter until they become fully amortizing, usually in the fourth to eighth year of the mortgage.

! **Underwriting Advisory Council and Internal Repurchase Review Board**. The Council, established in 1994, consists of 11 top lenders and advises Fannie Mae on underwriting issues and reviews draft underwriting changes. The Board, also established in 1994, reviews every affordable housing loan that Fannie Mae requests lenders to repurchase because it does not meet Fannie Mae=s underwriting requirements.

! **Home Equity Conversion Mortgages (HECMs).** Fannie Mae continues to be the sole secondary market for HECMs, the FHA-insured reverse mortgage initiative that allows senior citizens to tap into equity in their home. In 1995 Fannie Mae served 3,900 elderly households through their purchases of HECMs, a 40-percent increase over 1993. In 1995 Fannie Mae introduced **The Home Keeper Mortgage**, a conventional reverse mortgage program.

! **Partnership With Cities.** By the end of 1995, Fannie Mae had 20 local partnership offices, intended to work with local community groups, nonprofit housing organizations, and lenders to tailor Fannie Mae=s affordable lending products to local needs.

! **Partnership With the AFLBCIO Housing Investment Trust.** This partnership, which was initiated in February 1994, committed $400 million over 5 years for new construction and substantial rehabilitation of affordable multifamily housing. In 1995, Fannie Mae and AFLBCIO issued commitments for $31.65 million in permanent financing for seven rental housing projects.

! **Rural Conduit.** Fannie Mae, along with AgFirst Farm Credit Bank in Columbia, South Carolina, and the Federal Agricultural Mortgage Corporation (Farmer Mac), have developed a conduit to provide affordable mortgage funds to small rural communities with populations of 2,500 or less. AgFirst will purchase loans originated by Farm Credit associations, community banks, and other lending institutions nationwide. These loans, which will be standard Fannie Mae products, will be guaranteed by Farmer Mac and purchased by Fannie Mae.[135]

! **Housing For the Disabled.** In 1995 Fannie Mae expanded ***Community Living7***, their program that finances group homes, to include all groups of disabled persons. Under this initiative, Fannie Mae purchased mortgages on 123 group homes, serving nearly 500 individuals, for a total of $11.8 million.

Both GSEs have been involved in certain special initiatives, such as those for Native Americans. Fannie Mae and Freddie Mac have purchased HUD Section 184 construction/permanent loans and FHA Section 248 Native American Loan Program loans for Native Americans living on trust or restricted lands. Also, both enterprises have undertaken extensive efforts to provide education about homeownership. These initiatives have included issuing various publications about the homebuying process, advertising in various media, and sponsorship of homebuying fairs.

Rural lending is different than urban lending. Housing types are heterogeneous, incomes are frequently nontraditional and seasonal, and borrowers frequently lack credit ratings. As a result, the lending process is very labor intensive. Participants at recent forums on rural lending sponsored by the Department as part of the GSE rule-making process indicated that some of the difficulty associated with financing housing in rural areas results from inappropriate underwriting and appraisal standards, inadequate resources, and the lack of access to Government programs and secondary market funds. Urban-oriented lenders find it less costly to focus on urban areas, while small rural lenders may not have the capacity to undertake the labor-intensive process required to qualify low-income borrowers.

Table 4.2

Characteristics of Fannie Mae Housing Goal and Community Lending Loans, 1995

Borrower/Tract Characteristic	(1) ACommunity Lending@ Loans	(2) Housing Goal Loans	(3) Ratio (1)/(2)
	(percentage of loans with characteristic)		
Low income (under 80% of AMI)	62%	45%	1.4
High LTV (above 90%)	79%	35%	2.3
African American or Hispanic	30%	16%	1.9
First-time homebuyer	56%	39%	1.4
In underserved area	52%	52%	1.0
Low income and high LTV	43%	15%	2.9
Low income, high LTV, and in underserved area	23%	7%	3.3

Types of Borrowers Served by Community Lending Programs. Fannie Mae has been the more active of the two GSEs in the community lending area, with more than 179,000 community lending loans purchased during 1994 and 1995, compared with only 15,000 purchased by Freddie Mac during the same 2-year period. Table 4.2 shows distributions of single-family owner-occupied home purchase loans derived from Fannie ae=s 1995 data.[136] The community lending loans are more targeted across all the dimensions except underserved areas. In particular, they are much more likely to have high LTV ratios, with 79 percent of community lending loans having an LTV ratio above 90 percent, versus 35 percent of all home purchase loans that qualify for the housing goals.

D. Credit Risk of Affordable Loans

The effects of fully privatizing the GSEs on affordable lending obviously depend on the profitability of these loans. If mortgages to targeted groups yield a rate of return less than the financial return that private investors require, shareholder-owned firms will be less likely to originate or purchase affordable loans, except to satisfy Federal mandates such as CRA and the GSEs= housing goals.

The percentages in column (1) are based on Fannie Mae=s 1995 conventional single-family owner-occupied one-unit community lending loans (excluding HECMs) that were also home purchase loans and qualified for at least one of the three housing goals. The percentages in column (2) are based on all of Fannie Mae=s 1995 owner-occupied one-unit home purchase loans that qualified for at least one of the three housing goals.

This section summarizes findings from the economics literature on the default characteristics of mortgage loans. Several empirical studies have found that loans with low downpayments and loans for low-income borrowers have higher default rates than other loans. This section clarifies that most mortgages purchased by the GSEs to meet the housing goals are of solid credit quality, even though their financial returns are somewhat below the returns that the GSEs earn on their nongoal purchases. The big unknown concerns the credit quality of the smaller number of loans that are often purchased under the GSEs= affordable lending initiatives that combine low downpayments with risk control techniques such as prepurchase counseling and intensive servicing. There is little information on the default characteristics and loss ratios for these types of affordable loans that the market has been originating in the past few years. These loans need more seasoning before a serious evaluation of their credit risk can be made.

D.1 Insights from Economics Literature

There is substantial evidence from the economics literature that low downpayments and low income are the major determinants of mortgage default.[137] Table 4.3 reports the default experience through 1992 of Freddie Mac mortgages that were originated between 1975 and 1983. The default rate for high-LTV (loan-to-value) loans (those with more than 90 percent LTV ratio) is 6.2 percent, which is six times the default rate for under 80-percent-LTV loans and three times the overall average default rate of 2.16 percent. Loans for moderate- and middle-income families have experienced the lowest default rates across the LTV categories. The size and depth of this middle part of the housing market means that it experiences less house price volatility, which is one factor explaining the low level of defaults for this market segment. Default rates for very high-income borrowers (with incomes above 200 percent of AMI) are similar to those for very-low-income borrowers (less than 60 percent AMI).[138]

While there have been fewer studies of the effects of neighborhood location on mortgage default, studies using FHA and Freddie Mac data suggest that defaults are greater in lower income neighborhoods than in higher income neighborhoods, even after controlling for loan and borrower characteristics such as the LTV ratio and the individual=s income. However, a major study of this issue by the Federal Reserve could reach no definitive conclusions regarding neighborhood credit risk.[139] Loans in minority

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Mortgage default studies have consistently found the single most important determinant of default to be negative mortgage equity; that is, a situation when the house value has fallen below the outstanding mortgage balance. However, a very small percentage of mortgages with negative equity actually default. Generally, a precipitating event, such as a loss of job or divorce, is required before a borrower with negative equity will default. For a summary of the mortgage default literature, see Neal (1989) and Quercia and Stegman (1992).

The very-high-income housing market is typically a small part of the local housing market, which means that it experiences much volatility in house prices. This probably accounts for the high default rates in the very high-income end of the market.

The Fed study concluded that more research was needed on the effects of neighborhood location on mortgage defaults and the profits of depository institutions.

neighborhoods have experienced relatively high mortgage default rates. However, empirical studies have not found loans in these neighborhoods to be any more risky than loans in predominantly nonminority neighborhoods, once individual loan and borrower characteristics are controlled for.

D.2 GSE Goals-Oriented Purchases Are Not Very Risky

The GSEs do not suffer large credit losses. This is a result of the high downpayments on the mortgages that they purchase and, to a lesser extent, to the fact that most of their mortgages are for middle-income families.[140] In 1994 and 1995, more than half of the home purchase loans bought by the GSEs had LTV ratios below 80 percent, as did more than 65 percent of their total loans (that is, home purchase plus refinance loans). Reflecting its greater orientation toward affordable lending, Fannie Mae has purchased a larger proportion of high-LTV loans (LTVs above 90 percent) than Freddie Mac. Both GSEs increased their purchases of high-LTV loans between 1993 and 1995, from 20 to 30 percent of home purchase loans for Fannie Mae and from 16 to 23 percent for Freddie Mac.[141]

Goals-Oriented Loans. GSE loans that qualify for the housing goals show some surprising patterns with regard to their potential credit riskCmany of the loans have low credit risk characteristics and do not appear to be much more risky than nongoal loans. For example, loans to low- and moderate-income borrowers had low LTV ratios, and the majority of loans in underserved areas went to borrowers with above-median incomes:

! About 43 percent of the loans that meet the low- and moderate-income goal are loans to households with incomes in the Amoderate@ 80B100 percent of median income category.

! Very-low-income loans have lower (not higher) LTV ratios than higher income loans purchased by the GSEs. In 1995, 58 percent of very-low-income borrowers had LTV ratios less than 80 percent, compared with less than 50 percent of borrowers from the other income groups. Twenty-nine percent of very-low-income loans had LTVs above 90 percent, which was either similar to or less than the percentage of high-LTV loans for other income groups.

! A surprisingly large percentage of the GSEs= first-time homebuyer loans have been high downpayment loans. In 1995, 35 percent of Fannie Mae=s and 41 percent of Freddie Mac=s first-time homebuyer loans had downpayments of 20

See Board of Governors of the Federal Reserve System (1993).

In 1995, 66 percent of the GSEs= total single-family mortgage purchases went to families with incomes between 80 percent and 200 percent of AMI.

Both Fannie Mae and Freddie Mac require that loans with LTVs above 80 percent have private mortgage insurance, consistent with the statutory requirement for credit enhancement on mortgages purchased by the GSEs with LTVs in this range. Chapter I, Section B.4 gives details.

percent or more.

! Most loans purchased by the GSEs in underserved areas have low-risk characteristics. In 1995, more than half of such loans went to borrowers with incomes above the area median. In addition, 44 percent of 1995 underserved area loans had downpayments of 20 percent or more.

Essentially, the GSEs have found low-income and first-time homebuyer loans with large downpayments. While it is unclear how they have done this, three possible explanations come to mind. First, lenders simply may require higher downpayments to offset other risk factors of lower income borrowers.[142] Second, the GSEs= affordable housing programs are often done in concert with other partners that may, for example, provide a Asoft@ second mortgage or cash assistance that lowers the loan amount on the first mortgage that Fannie Mae or Freddie Mac purchases.

However, the above relationships are more likely due to the fact that the metropolitan AMI standard against which each borrower=s income is compared is not adjusted for family size. For instance, to determine whether a single borrower in a particular metropolitan area is low-income or not, his or her income is compared with the overall median family income in that metropolitan area. Given the recent increase in home purchases by singles, this procedure, which is required by statute, leads to an increase in the number of GSE purchases that count toward all three goals.

Below Average Returns. The low-risk characteristics of goals-oriented loans suggest that most are profitable loans and would be purchased by the GSEs with or without the housing goals. This was confirmed by a financial analysis of expected returns on equity (ROEs) that HUD conducted for its Economic Analysis of the final rule.[143] For instance, the expected ROEs for additional single-family loans that Freddie Mac would need to purchase to meet the new housing goals ranged from 17 percent to 23 percent under the various economic and risk scenarios considered by HUD. The ROE for Freddie Mac=s projected baseline business, which assumed that Freddie Mac would purchase loans with the same income and LTV distributions as it had in the past, ranged from 21 to

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Those without the requisite compensating factors may be relying on FHA-insured mortgage loans, which have lower qualifying thresholds.

U.S. Department of Housing and Urban Development (1995b). Expected return on equity is the expected (ex-ante) net income or profit, divided by the amount of invested capital, or equity. This return that investors expect from investing in a firm contrasts with the actual (ex-post) return, which can, of course, be quite different. The financial analysis was based on a model in which (1) earnings for the GSEs= MBS operations equal the guarantee fee minus administrative and credit costs and (2) earnings from the GSEs= portfolio operations equal the portfolio interest rate Aspread@ and the same administrative and credit costs as in (1). The interest rate spread in (2) is the difference between the mortgage yield on the portfolio and the interest rate paid on the debt that finances the portfolio. The mortgage yield is computed as an option-adjusted spread (OAS), which thus accounts for the prepayment potential of the mortgage. Expected credit costs were determined by combining borrower income and LTV distributions of projected GSE mortgage purchases with historical default patterns such as those given in Table 4.3. With this information, expected returns on equity could be estimated for different economic scenarios (that is, periods of higher or lower default ratesCsimulated by adjusting the default rates in Table 4.3) and for different characteristics of goals-oriented purchases (such as the GSEs having to purchase more loans with high-LTV ratios). Chapter V of the Economic Analysis includes a detailed discussion.

24 percent. Thus, goals-oriented purchases are expected to have lower and more volatile ROEs than baseline business. This reflects the lower incomes and higher LTV ratios of the additional goals-oriented loans, as compared with Freddie Mac=s overall baseline business.

The lower returns for the additional goals-oriented loans do not necessarily mean they are unprofitable loans for the GSEs. James Gatti and Ronald Spahr estimate that the rate of return that investors require on the GSEs= stock to be about 17 percent.[144] Thus, although the GSEs are earning below-average returns on their goals-oriented loans, these loans as a group remain profitable for the GSEs.

Section E, which discusses the effects on affordable lending of fully privatizing the GSEs, presents further results from HUD=s financial analysis. It shows the importance of portfolio earnings to the overall profits of the GSEs and to the funding of affordable loans. Moreover, any increased debt costs associated with fully privatizing the GSEs would reduce the GSEs= earnings on all of their business, and could make goals-oriented loans Aunprofitable@ somewhat faster than other business.

D.3 Credit Risk of Recent Affordable Programs

Approximately half of the GSEs= single-family mortgage purchases qualify for at least one of three housing goals. As the above section shows, most of these goals-qualifying mortgages do not appear to be highly risky. Questions have been raised, however, about the smaller number of mortgages that the GSEs have been purchasing as part of their affordable lending initiatives; that is, loans purchased under programs such as Fannie Mae=s Community Homebuyer Program or its 97-percent LTV initiative. These loans might be the ones particularly vulnerable if Fannie Mae and Freddie Mac were fully privatized.

This section reviews available information about the risk characteristics of affordable loans. It concludes that the new programs are being carefully designed to prevent excessive defaults, and at this early stage, there is no evidence supporting those who predict substantial defaults from these new initiatives. Still, because of their higher LTV ratios, affordable loans will likely experience more defaults than standard program loans. But more time and data are needed to gauge their relative performance and the impacts of the industry=s risk control techniques on mortgage defaults.

The Role of Affordable Loan Characteristics. The greater potential credit risk of affordable loans can be seen by comparing the characteristics of goals-qualifying loans that the GSEs identify as Acommunity lending loans@ with the characteristics of all loans that qualify for one of the housing goals. Table 4.2 shows that almost 80 percent of

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Gatti and Spahr (1995b).

Fannie Mae=s community lending loans purchased in 1995 had a high (over 90 percent) LTV ratio, compared with only 35 percent of its goals-qualifying loans. Studies show that low income coupled with a high LTV ratio significantly raises credit risk. Table 4.2 shows that Fannie Mae=s community lending loans are also much more likely than all goals-qualifying loans to have this combination (43 percent versus 15 percent).[145]

Available evidence on the recent performance of affordable loans is scant. Even affordability programs that have been active for a long time did not begin to produce large numbers of loans until the 1990s. It is clear, however, from discussions with industry sources that mortgages originated by families earning less than 80 percent of AMI involve greater default risk. The further down the income scale one goes, the less discretionary income there is available for emergencies, and the greater the likelihood that there will be no insurance or other resources available to assist during emergencies. These factors increase the likelihood and severity of extended delinquencies and foreclosures.

Techniques for Controlling Risk. The mortgage industry has adopted three ways of controlling the risk on lower income loans: (1) prudent underwriting changes that identify creditworthiness by alternative means that more appropriately measure the circumstances of lower income households; (2) prepurchase counseling and homebuyer education programs that teach borrowers how to better manage debt and home maintenance;[146] and (3) monitoring and loss mitigation programs that seek to avoid or reduce the costs of foreclosure.

The mortgage industry recognizes that a Afull-cycle@ lending approach that includes prepurchase education and early delinquency counseling is needed to mitigate the risks of affordable lending. Unfortunately, this approach is often quite labor intensive, which means that affordable loans are more expensive to originate and service than standard loans.

Early Performance. There are mixed reviews concerning the early experience for affordable lending loans. The GSEs, Mortgage Guaranty Insurance Corporation (MGIC),[147] and Countrywide Funding Corporation, for example, have reported that their loans serving lower income borrowers are experiencing higher delinquency rates than their standard loans.[148] Others have reported different experiences. BankAmerica=s Neighborhood Advantage Program loans are showing delinquency rates 25 percent lower

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It should again be noted that Table 4.3 shows that high income (above 200 percent AMI) borrowers with a high LTV ratio have a high risk of default as well.

Instead of restricting credit to certain groups with traditionally high default rates, lenders can allow households within those groups to self-select out on the basis of information provided in prepurchase education courses. Households for whom ownership could be financially risky generally decide not to purchase after they have completed such a course. A recent survey performed by the University of Michigan on households having undergone a homebuyer education course showed that more than 30 percent decided that ownership was not in their best interest.

In particular, MGIC has published research findings that suggest that low-downpayment affordable lending is overly risky. See Mortgage Guaranty Insurance Corporation (1994) and Steinbach (1995).

See Lehman (1995).

than their conventional counterparts. NatWest Bank loans under their Home Mortgage Opportunity Loan program, after 6 years of experience, show delinquency rates significantly below the delinquency rates of their entire portfolio.[149]

General Electric Mortgage Insurance Corporation (GEMICO), an innovator in low-downpayment lending, reports that its affordable loans have higher losses than standard products but that they are performing within expectations. A survey of affordable lenders conducted by the Federal Reserve Bank of Philadelphia concluded that flexible underwriting combined with buyer education can serve to expand homeownership to previously underserved borrowers while at the same time keeping default rates in line with other product lines.[150] Profits are lower because these loans have lower dollar values and they take more work to establish and monitorCnot because they are excessively risky.

The Neighborhood Reinvestment Corporation (NRC) recently convened a group of community development lenders to discuss delinquency rates on affordable loans. NRC, which funds the Neighborhood Housing Services, concluded that Athere are no conclusions on profitability of the lending because delinquency cure rates are high, the affordable books are young and of limited experience with default cost. At this point, most [community lenders] felt affordable lending was successful (financially) and going through the normal learning curve of early experiences tempering early products.@[151]

Relaxed Underwriting Versus Affordable Lending. Some have reached conclusions about affordable lending based on the default experience of loans originated under relaxed underwriting standards. But these conclusions need not apply to affordable lending, which involves much besides changes in underwriting. Affordable lending initiatives modify or revise traditional underwriting guidelines to identity borrowers with acceptable levels of risk and they create new products that address and manage risks inherent to lower income households. Generally, no more than a single aspect of underwriting standards is relaxed unless compensating factors, such as a strong credit history, offset the higher risk of relaxed standards. The use of compensating factors allows for flexible adjustments to traditional underwriting guidelines. Relaxed underwriting, on the other hand, typically involves multiple risk factors (such as a low downpayment combined with a high payment-to-income ratio) without the presence of compensating factors to offset the increased credit risk.[152]

NatWest attributes some of its success on these loans to its counseling program which delivers Acredit-ready@ applicants whose denial rates are 2 percent lower than that of applicants for their standard mortgage products.

The Philadelphia Fed established a Community and Consumer Affairs Department in 1985 to assist banks in meeting CRA requirements. In July 1993 they published *Community Reinvestment Advocates*, a compendium of submitted statements on the affordable housing initiatives of banks, lending consortia, nonprofit advocacy groups, and other organizations involved in community lending activities.

Letter from George Knight, Neighborhood Reinvestment Corporation, to Secretary Henry G. Cisneros, October 11, 1995.

A similar source of confusion surrounded data reported by the Mortgage Information Corporation, which showed 1995 originations having higher delinquencies than 1993 or 1994 originations. This trend likely reflects the high level of competition among lenders for the contracting volume of mortgage loans during the first 6 months of 1995Csmaller downpayments, eased credit underwriting, and deep-teaser adjustable rates were widespread during this period. It does not appear to be

Conclusions About Early Performance. Relatively high early delinquencies on affordable loans have made the industry anxious about their eventual performance. To a certain extent, these higher delinquencies on lower income, high-LTV loans should not be a surprise given findings from past studies of mortgage default. However, the industry has gone to extra efforts to control credit risks on these loans by prudent underwriting and intensive borrower counseling. The expectation is that these techniques will reduce defaults to levels consistent with the industry=s profit expectations for these loans. However, because the affordable portfolios are so young (1B4 years old), more time and data are needed before conclusions can be drawn about their profitability relative to standard program loans.

E. Effects of Full GSE Privatization on Affordable Lending

Profit is one of two primary reasons for the GSEs= purchasing any single-family mortgage. While individual loans may ultimately produce losses, the expectation at the time of purchase is one of profitability. The second reason is the public benefits motive: some mortgage purchases help the GSEs fulfill implicit or explicit mandates associated with their Federal charters. However, if the GSEs were fully privatized and HUD=s housing goals were eliminated, the incentive to make a number of these loans would be diminished.

Fannie Mae has indicated that the profit motive would have an overriding influence: Aa purely private Fannie Mae and Freddie Mac cannot be expected to continue to maintain special efforts to promote targeted financing.@[153] Section E.1 presents a financial analysis of affordable loans that supports Fannie Mae=s statement that some affordable loans would not be made, at least at current interest rates. Section E.2 summarizes the likely effects of full privatization on the market for affordable loans.

E.1 Financial Analysis

The financial analysis discussed in Section D.2 compared the financial returns of the additional purchases that the GSEs would have to make to meet the housing goals with the financial returns from their overall baseline business. As discussed in Section D.2, goals-oriented purchases appear to be less profitable than other purchases because the borrowers= lower incomes and the mortgages= higher LTV ratios raised credit costs. But, as also noted earlier, goals-oriented purchases as a group are not overly risky and thus had higher projected profits than one might have expected.

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due to the affordable lending initiatives in which GEMICO and others are involved. See Monsen (1996) for supporting analysis showing a poorer credit quality of 1994 and 1995 borrowers. Monsen shows that 1994 and 1995 borrowers had more late credit card payments than 1992 and 1993 borrowers, and that mortgage default rises with severe credit card delinquency.

Fannie Mae (1996f), pp. 1B2.

Some additional findings from this analysis show why fully privatizing the GSEs would reduce their purchases of affordable loans.

Portfolio Earnings. Most GSE earnings come from their portfolio operations.[154] Without the cushion of a highly profitable portfolio, the fully privatized GSEs would reduce their funding of the more risky affordable loans, unless these loans started carrying much higher interest rates. In fact, Freddie Mac=s increased portfolio profits have probably cushioned any negative impacts of the housing goals requirements. Freddie Mac=s portfolio tripled (from $33 billion to $107 billion) between 1992 and 1995.[155]

A comparison of model results for Fannie Mae and Freddie Mac shows why portfolio earnings are such an important source of funding for the GSEs= affordable loans. Table 4.4 reports expected credit costs, revenues, and ROEs for each GSE=s single-family purchase business assuming income and LTV distributions similar to 1994. Fannie Mae=s aggressiveness in the affordable lending area translates into its having higher expected credit costs than Freddie Mac. If the GSEs securitized all of their mortgages, then Fannie Mae=s after-tax earnings would be significantly below Freddie Mac=s, obviously not a tenable situation given there are only two firms in this industry. What equalizes the two firms= expected return on equity is Fannie Mae=s earnings from its much larger portfolio operation. Keeping loans in portfolio can be highly profitable for the GSEs because their agency status allows them to issue debt cheaply. By doing this, Fannie Mae brings its ROE into the 24B25 percent range, approximately the same as Freddie Mac=s.

Essentially, the two firms achieve similar expected returns on equity in different waysCFannie Mae has a larger portfolio to offset its greater credit risk while Freddie Mac has the combination of a smaller portfolio and lower credit risk. But as noted above, Freddie Mac has recently increased its retained portfolio.

Brent Ambrose and Arthur Warga, among others, have shown that loss of agency status would significantly increase the GSEs= borrowing costs, which would reduce, or even wipe out, the profits of their portfolio operations.[156] Thus, it could be expected that higher risk affordable loans would be the first casualty from the fully privatized GSEs not having a profitable portfolio operation to cushion their credit losses.[157]

MBS Operation. The GSEs= single-family guarantee fee averages about 22 basis

Chapter VI discusses this point.

The timing of Freddie Mac=s decision to increase its portfolio was likely based on many factors, including interest rate conditions, the imposition of the housing goals, and the fact that its stock was first made publicly available in 1989.

Ambrose and Warga (1996). Also see Chapter VI for discussion of the likely increase in the GSEs= borrowing costs under full privatization.

It is an open question as to whether the GSEs would find it profitable to fund any portfolio operation without their agency status. This issue is discussed in Chapter VI.

points. Earnings from Fannie Mae=s MBS operations turn negative in the Asevere economics@ scenario that HUD considered.[158] This suggests that if the GSEs were privatized, and could no longer rely on a profitable portfolio operation, guarantee fees on their MBS business would rise, and the more risky of the goals-oriented loans would not be purchased. This situation is exactly the one anticipated by Fannie Mae as quoted at the beginning of this section.

E.2 Effects of Privatization on Affordable Market

The recent improvement that the GSEs have made under the housing goals would be reversed by full privatization. Changes in the housing finance system that would accompany full privatization, such as higher interest rates, could fall most heavily on those that are not currently well served by the mortgage market. Prospects for significantly improved outreach to these families under the housing goals would be foregone.

(1) Higher Interest Rates. Fully privatizing the GSEs would cause home mortgage rates paid by borrowers to rise. While there is disagreement about how much they would increase, some researchers believe the jumbo-conforming interest rate spread, which is estimated by Cotterman and Pearce (1996) to be in the range of 25B40 basis points, is a reasonable guide to the magnitude. However, as discussed in Chapter VI, the change could be higher or lower given the uncertainty concerning the impact of ending the presumption of an implicit Federal guarantee on the GSEs= securities.

(2) Underwriting Standards. Privatization could cause underwriting standards to tighten. Without the housing goals and the underwriting reviews motivating the GSEs to purchase loans that provide social benefits, the profit motive of fully privatized GSEs could result in a scaling back of higher risk, lower profit lending. For prospective homebuyers, this may mean higher downpayment requirements and/or higher monthly income requirements. These could cause some prospective homebuyers to be denied the opportunity to purchase a home, to delay purchase of a home, or to buy a less costly home.

(3) Fewer Goal-Oriented Loans. Lower income households, minorities, and households living in neighborhoods underserved by the mortgage market could be disproportionately affected by privatization. Loans to these households are generally considered to be higher risk loans because factors usually associated with high risk, such as high LTV ratios, high payment burdens, and low loan sizes, are more prevalent among these groups. These households have benefited the most from the GSEs= special initiatives in response to their charter mandates. The withdrawal of these mandates would hurt these same households the most.

The severe economics scenario is based on 80 percent of the default rates and the loss rates experienced by Freddie Mac on their 1980B83 originations. These loans experienced record high default rates due to a combination of severe and rolling regional recessions, and to a lack of tightening of underwriting criteria until 1986. The scenario uses only 80 percent of the default rates actually experienced by the 1980B83 loans, because the GSEs= tighter underwriting standards introduced in 1986 would result in lower default rates.

(4) Marketing to Lower Income Borrowers. Lending to lower income families involves much more effort than lending to other families. The marketing, counseling, and servicing associated with lower income lending is more labor intensive and costly than other lending. With their Federal benefits and mandates, the GSEs have been making efforts to reach out and penetrate the lower income market over the past few years. However, as strictly private firms without their lower borrowing costs and without the pressure of the housing goals, the GSEs probably would not likely invest their marketing and outreach resources in this manner.

(5) Risk-Based Pricing. Advances in information technology have helped the mortgage finance industry make significant progress in quantifying credit risks posed by individual loan applications. Mortgage credit scoring systems, such as Freddie Mac=s Loan Prospector and similar systems already developed by private mortgage insurers, will likely lead to more risk-based pricing, that is, charging higher points, insurance premiums, guarantee fees, and interest rates to more risky borrowers. To a certain extent, past purchases of higher risk loans by the GSEs have involved cross-subsidization by their lower risk loans. But with more advanced technology to identify higher risk loans, the GSEs and other industry participants will likely reduce their reliance on uniform pricing in favor of risk-based pricing.[159]

Full privatization of the GSEs would hasten the trend toward risk-based pricing and further reduce cross-subsidization in the funding of mortgages. This could have two partially offsetting effects on lower income borrowers. The first is a negative effect. Specifically, the greater ability to identify higher risks would likely raise total loan costs paid by lower income borrowers, because lower income borrowers have been shown to be higher risk and they would be charged for it.[160]

The second possible effect on lower income borrowers from risk-based pricing could be beneficial. The advances in technology mean that more information will be available to lenders at reasonable cost. The additional information may produce a more efficient system that will ultimately extend access to mortgage credit to more lower income borrowers, or, in some cases, reduce its cost.

(6) Low-Income Homeownership. Wachter et al. (1996) examined the effect of GSE privatization on homeownership, assuming that interest rates rise and underwriting is tightened. Chapter II examined research by Wachter et al. and concluded that overall

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The GSEs do currently engage in some risk-based pricing. For example, the GSEs are now requiring deeper mortgage insurance coverage on higher LTV loans. Borrowers pay higher premiums to PMI companies for this additional coverage. In addition, the majority of the GSEs= purchases are now negotiated transactions. One of the items that is negotiated in such transactions is the GSEs= guarantee fee. However, the fact that lower income loans are mixed with higher income loans in most mortgage pools reduces the GSEs= ability to charge risk-based guarantee fees even in negotiated transactions.

Not all these costs will necessarily be paid to the GSEs. As noted in the preceding footnote, the GSEs could require more mortgage insurance coverage to offset the higher risk. In such cases, the lower income borrower may pay higher mortgage insurance premiums.

homeownership rates would drop by less than 1 percentage point. The same study found that the effects would be more severe for first-time homebuyers, low-income households, minorities, and those in central cities. Their homeownership rates could drop as much as three times the drop in overall rates.

Wachter et al. argue that privatization would likely reduce the GSEs= involvement in affordable housing programs. Without the housing goal requirements, these researchers view it unlikely that Fannie Mae and Freddie Mac would do as much in the affordable lending area. In addition, they argue that it is unlikely that other Government programs could fill the gap given the current fiscal environment, or that they would be as efficient as the GSEs even if they were funded. They conclude:

> our analysis suggests that social policies to enhance homeownership opportunity would suffer if the GSEs are privatized. Especially hard hit would be low- and moderate-income households seeking to become homeowners for the first time. Therefore, *if the impact of privatization on existing social policies is a major criterion in any ultimate decision to privatize the GSEs and if the commitment to these goals remains unchanged, we come down on the side of the status quo or some relatively minor variations to it.*[161]

(7) Mortgage Market Initiatives. In a number of areas, the GSEs have undertaken special market initiatives and demonstration programs that test new approaches to mortgage finance. Fannie Mae, for instance, has engaged in new programs for HECMs (noted earlier) and is attempting to develop a secondary market for rural loans. These initiatives could be scaled back if the GSEs were fully privatized.

(8) Impact on FHA and Portfolio Lenders. With full privatization, the GSEs would scale back on purchases of higher risk loans. It is appropriate to consider whether lenders using FHA mortgage insurance, or portfolio lenders, such as banks and thrifts, could increase their volumes and serve some of the borrowers formerly served by the GSEs. As discussed in Chapter II (see Table 2.4), both FHA lenders and portfolio lenders originate higher percentages of loans to underserved borrowers than the corresponding percentages for loans sold to the GSEs. Thus, some of the negative effects on affordable lending of fully privatizing the GSEs could be offset by more FHA-insured and portfolio lending.

Lenders who use FHA would offset some of the effects of privatization. However, the ability of these lenders to originate GSE-type affordable loans may be limited by the lower maximum mortgage limits of FHA, and FHA=s relatively higher mortgage insurance

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Wachter et al. (1996), p. 355.

premium.[162] And, as noted above, Wachter et al. believe that transferring borrowers from the GSEs to a Government-run credit enhancement program, such as FHA, would be less efficient than the current system.

Banks and thrifts, as discussed in Chapter II, serve lower income borrowers at a higher rate than the GSEs for several reasons. Portfolio lenders tend to be community-based institutions that know their borrowers and neighborhoods better than lenders who originate loans to sell to the GSEs. Portfolio lenders often seek out underserved borrowers and their neighborhoods to satisfy their CRA responsibilities. Currently, the GSEs offer an opportunity to leverage primary lenders= CRA affordable housing initiatives by providing a secondary market to sell them to. While it is recognized that the GSEs could be purchasing more of these CRA-type loans, full privatization would reduce their incentives to do this. If full privatization caused the GSEs to purchase fewer loans to underserved borrowers, the portfolio lenders would likely hold some of these loans, but their ability to hold more higher risk loans would be limited by FIRREA capital standards and by the normal profit considerations of bank and thrift shareholders.[163]

F. Conclusions

There are three reasons why the GSEs can be an effective delivery system for affordable housing. The first relates to the broad influence they have throughout the market on underwriting the credit risk of mortgages. There is substantial evidence that rigid and inflexible underwriting rules have been a major barrier to lower income and minority families obtaining mortgage financing. The GSEs (as well as other market participants) have recently started re-evaluating their traditional underwriting approaches and replacing them with more flexible, but still prudent, rules that treat underserved families more fairly. The fact that the GSEs= guidelines are accepted throughout the conforming market indicates the large potential role that the GSEs can play in extending lending opportunities to underserved borrowers.

The second relates to the GSEs= ability to organize substantial and focused efforts to remedy specific financing problems, whether they be of a local nature such as redlined neighborhoods or of a national nature such as inadequate funding in rural areas. Local and national lending organizations are more willing to enter into partnerships when the GSEsCand their offer to purchase affordable loans, thus giving them immediate liquidityCare also part of the effort. Examples of this include Fannie Mae=s central city partnerships and its recent rural lending initiative.

Bunce et al. (1995) show that the net present value of the FHA premium over a typical loan life of 8 years, is between 1.28 percent (of the mortgage amount) and 2.63 percent higher than a private mortgage insurance premium for LTV ratios of under 90 percent, and 90 to 95 percent, respectively. For loans with LTVs above 95 percent, the FHA premium is roughly equivalent to the private insurance premium.

FIRREA bank capital standards have higher reserve requirements for whole loans held in portfolio than for loans included in GSE-guaranteed MBS.

The third relates to the fact that a mechanism (the housing goals) exists for encouraging these large GSEs to focus their efforts on families and neighborhoods experiencing the worst problems. Chapter III discussed how the performance-based housing goals target the GSEs= efforts without being overly intrusive on their corporate management decisions and day-to-day operations.

The GSEs and other industry participants in the single-family mortgage market are beginning to reach out to families and communities underserved by the mortgage market. The GSEs have started offering customized mortgage products, flexible underwriting, and outreach that can expand homeownership opportunities for lower income families. Because these loans typically involve higher marketing, servicing, and credit costs than loans originated under the GSEs= standard programs, they would be reduced if Fannie Mae and Freddie Mac lost their Federal benefits and were fully privatized.

With their current Federal benefits, the GSEs can do more to support affordable lending. The GSEs currently lag other market participants in affordable lending. The bulk of their affordable housing purchases consist of loans with downpayments of 20 percent or more rather than loans with high loan-to-value ratios. Lack of funds for downpayment (as well as low incomes) pose significant barriers to homeownership for many families. While the GSEs have begun to pursue innovative programs to provide access to mortgage credit to more such families, given their substantial profits and statutory benefits, their efforts can improve. It will be important in HUD=s future regulatory reconsideration of the housing goals to consider whether the goals are motivating the GSEs to focus their activities sufficiently on this segment of the market, consistent with their charter obligations.

The next chapter continues with the analysis of affordable lending, focusing on the GSEs= role in the multifamily market and the possible effects of full privatization on that market.

CHAPTER V

MULTIFAMILY HOUSING MARKET: GSE ROLE AND EFFECTS OF FULL PRIVATIZATION

A. Introduction and Main Findings

This chapter looks at the current and potential public benefits that are associated with continued GSE participation in the multifamily mortgage markets. Potential benefits depend importantly on the likely changes resulting from implementation of the new GSE housing goals.

GSE support of a secondary market for multifamily mortgages can have important social benefits. The traditional finance system for multifamily housing which relied heavily on depository institutions to originate and hold these loans has changed significantly in the past two decades. Although portfolio lenders are likely to retain a large market share, these lenders may be less able to meet the full range of multifamily credit needs, leaving certain classes of affordable properties with inadequate access to debt financing.

A sustained GSE presence in the multifamily secondary market will enhance the liquidity of multifamily mortgages, possibly extending access to credit for affordable multifamily properties, and reducing the cost of credit for these properties. The Secretary=s housing goals will provide a mandate for the GSEs to maintain this presence. Specific benefits to families and to communities may include: (1) lower rents paid by tenants for newly built multifamily rental housing, (2) lower rents and/or better quality of existing multifamily rental housing, and (3) more stability in neighborhoods where multifamily rental units are located.[164] This section examines the ways in which the GSEs are beginning to bring about these social benefits, the incremental benefits from the GSE housing goals, and the effects of fully privatizing the GSEs.

An important issue in examining the effects of full privatization is the estimated cost of achieving similar social benefits through the combined efforts of the public and private multifamily finance sectors. Therefore, this chapter will also discuss the relative efficiency for the Federal Government of achieving these benefits indirectly through the GSEs= charters compared with alternatives available with full GSE privatization.

Organization. The remainder of this chapter is organized as follows. Section B discusses why the GSEs are less dominant in the multifamily mortgage market than they are in the single-family market, and how the housing goals are likely to change the GSEs= presence in the multifamily market. Section C discusses the various roles the GSEs should be performing in the multifamily market to meet the housing goals and to

U.S. Department of Housing and Urban Development (1995b), p. IV-16.

achieve social benefits. Next is a brief discussion of the potential for overlap in the roles of the GSEs and FHA in Section D. Following Section E, which describes the GSEs= current credit enhancement programs and recent initiatives in the multifamily market, Section F provides an examination of impacts of full GSE privatization, including the impact of a partial transfer of the GSEs= multifamily activity to the Government using FHA credit enhancementsCa transfer that would likely occur with full privatization. Conclusions from this chapter are presented in Section G and are summarized below.

Main Findings. The main findings of this chapter are: (1) the Secretary=s housing goals will increase and broaden the social benefits from the GSEs= presence in the secondary mortgage market for affordable multifamily properties, (2) full privatization, on the other hand, would reduce social benefits to the extent that multifamily loans currently purchased by the GSEs would be unable to obtain conventional or FHA-insured financing, and (3) the above two conclusions notwithstanding, the possible loss of social benefits in the multifamily market may not be large enough to drive the debate over GSE privatization.

B. Why the GSEs Are Less Dominant in the Multifamily Market

The secondary mortgage market for multifamily loans has been slow to develop relative to the single family mortgage market. The recent rise in multifamily securitization activity in the 1990s had much to do with necessity: failed thrifts could no longer lend, surviving thrifts were constrained by regulators, and securitization became the vehicle that would fill some of the void. Furthermore, multifamily securitization got a big boost from the Resolution Trust Corporation (RTC), the government agency created to dispose of the assets of failed thrifts. The RTC created investor acceptance of commercial MBS (including multifamily MBS). Finally, Wall Street developed what is called the AB@ piece market for private label single-family multiclass MBS. Market acceptance of the so called AABB@ senior-subordinated debt structure has been crucial to the rise of the secondary market for multifamily loans.

The GSEs have been involved in multifamily securitization since the mid 1980s. However, it has only been in the last several years that the GSEs have begun to impact the multifamily market in a significant way. This section discusses why the GSEs have not dominated the multifamily markets and what effect the Secretary=s housing goals are likely have on the market.

Recent GSE Multifamily Volumes. Figure 5.1 shows the GSEs= respective volumes of multifamily mortgage purchases by year from 1993 to 1995.[165] Fannie Mae=s multifamily purchases increased in 1995 to $6.1 billionCabout one-third higher than the $4.6 billion Fannie Mae purchased in 1993. Freddie Mac, on the other hand, has only

Includes REMICs and credit enhancements.

recently returned to the multifamily market after a 3-year hiatus.[166] Freddie Mac=s reentry to the multifamily market in late 1993 explains their virtual non-existent multifamily activity for that year: $191 million. Freddie Mac=s multifamily volume increased substantially in 1994, and again in 1995, when it reached nearly $1.6 billion.

The Multifamily Market Is Different. As discussed in Chapter II, the U.S. single-family mortgage market has evolved over the past two decades from a fragmented set of local markets in which regional credit shortages would often occur, to one which has become an efficient, national market that is well integrated into the broader capital markets.[167] The same cannot be said for the multifamily rental housing mortgage market.

As previously mentioned, the secondary market is much less developed for multifamily mortgages. Only about one-third of multifamily mortgages are sold in the secondary market, compared to about three-fourths of single-family mortgages. Furthermore, despite their recent growth in multifamily volumes, the GSEs do not dominate the multifamily secondary market as they do the single-family market. Multifamily mortgage purchases by Fannie Mae and Freddie Mac combined to $5.7 billion in 1994 compared to 1994 total origination volume estimated to be in excess of $30 billion.[168] Portfolio lenders, such as banks and thrifts, retain a significant market share in the multifamily mortgage market. The GSEs are large players, but they do not dominate this market.

The reason the GSEs do not dominate the multifamily mortgage market is primarily due to the difficulty the market has in securitizing these loans. Compared to single family loans, multifamily loans confound investors with greater cash flow uncertainty. This uncertainty arises from an inability to estimate accurately the default risk of multifamily loans. Difficulties include the following: (1) the loans are often not homogeneous with regard to type of collateral, interest rate, amortization, covenants, subordinated financing layers, etc.; (2) underwriting standards often differ among originators; (3) the loans are relatively large and therefore a single defaulted loan can constitute a relatively large fraction of a mortgage pool; (4) there is a lack of available information about the historical performance of similar loans; and (5) financial information about borrowers is often unaudited or not prepared carefully.[169] Thus, despite the recent trend toward increased securitization using various techniques for credit enhancement, the multifamily finance market is likely to remain less dependent on the existence of a secondary mortgage market and more dependent on portfolio lenders than is the single-family market.

Freddie Mac withdrew from the multifamily market in 1990 after experiencing large losses on multifamily mortgages it had purchased in the 1980s.

DiPasquale and Cummings (1992). Also see Appendix A of HUD=s final rule (24 CFR Part 81) and U.S. Department of Housing and Urban Development (1995b).

Of the $5.7 billion combined GSE purchase volume in 1994, about 24 percent represented loans originated prior to 1994. Thus the GSEs= 1994 combined purchases of multifamily mortgages originated in 1994 was only a little over $4 billion.

Single-family loans, on the other hand, are much more homogeneous; underwriting is highly standardized; individual loans are relatively small; data on historical loan performance is much easier to obtain; and standardized financial information on borrowers is readily available from credit bureaus.

Influence of the GSEs= Housing Goals. The Secretary=s housing goals for the GSEs will require Fannie Mae to maintain its recent commitment to multifamily housing, and will require Freddie Mac to increase its 1993B94 commitment, and to sustain its higher 1995 commitment.[170] The housing goals may have other beneficial impacts on the multifamily mortgage market. Specifically, the goals may motivate the GSEs to undertake new initiatives to address credit gaps in the market (see Section C below for further discussion of credit gaps). For example, the GSEs currently penetrate the market for large multifamily loans quite deeply.[171] New initiatives directed toward the purchase of smaller multifamily loans could help the GSEs maintain credit quality while addressing a credit gap in the market that would provide additional social benefits. Thus, the housing goals may broaden the positive impact of the GSEs= presence in the multifamily secondary market.

C. The GSEs= Role in the Multifamily Market

The GSEs can and do provide social benefits from their participation in the multifamily mortgage market despite their lack of domination of this market. Fannie Mae and Freddie Mac have the potential to reduce the cost of rental housing by performing several functions in the multifamily market. However, opinions differ among finance industry experts on the role the GSEs should be playing in the multifamily rental market and on the corresponding social benefits that the GSEs can provide. These differences are important to consider in the discussion of the impact of full privatization.

To sort out the differing views on the GSEs= multifamily role, the Department consulted with a wide range of multifamily finance experts. During the summer of 1995 HUD arranged two public forums on this subject, and met with active multifamily lenders.[172] Professional financial firms and academic researchers were also consulted. From public and private sector sources, the Department learned that, unlike single-family housing for which the finance industry has a clear perception of the GSE role, multifamily housing evokes differing, sometimes conflicting, perceptions from the industry as to the appropriate role of the GSEs in meeting the nation=s rental housing needs.

Fannie Mae could reduce its recent commitment to multifamily loan purchases and still meet its special affordable housing goals; however, multifamily housing contributes significantly toward Fannie Mae=s low and moderate income goal. Thus, in reality, Fannie Mae is unlikely to cut back on multifamily activity.

Fannie Mae purchased about 1,000 large (over $1.0 million in unpaid principal balance) multifamily loans in 1994. These large loans represented three-fourths of the total unpaid principal balance of Fannie Mae=s 1994 multifamily mortgage purchases. In 1993, Fannie Mae also purchased about 1,000 large multifamily loans. Crews, Dunsky, and Follain (1995) point out that Home Mortgage Disclosure Act data report only

2,300 multifamily originations in 1993 with unpaid balance over $1.0 million. With Freddie Mac increasing its 1995 purchases of multifamily loans to meet the GSE housing goals, the combined penetration of the GSEs in the large multifamily loan market is deep and growing.

The first multifamily session was June 26, 1995, and the second August 7, 1995. Both were held in Washington, DC. HUD also met with lenders and representatives of the Mortgage Bankers Association on August 1, 1995 to discuss the GSEs and their role in the multifamily market.

Rental Housing Needs. Acute rental housing needs[173] reached an all-time high in 1993 at 5.3 million households (U.S. Department of Housing and Urban Development, 1996). The needs are particularly evident among families with children. Certain subpopulations such as Hispanics and the elderly also have high incidence of acute housing need.

Acute housing needs are concentrated at the very lowest income levelsCthe Department estimates that about three-fourths of the 5.3 million households in need have incomes at or below 30 percent of AMI. Because of this skewing of needs toward the extremely low-income population, the participants in the Department=s public forums did not all agree that the GSEs have a role to play in meeting the Nation=s rental housing needs.

Subsidies or Credit Enhancements? Many with whom the Department consulted said that the conventional private market in multifamily finance currently works well for most properties. It is a system that many would describe as Anot broken@. This argument is based on the perception that the supply of debt and equity financing is currently ample for multifamily housing with the exception of properties with excessive credit risk (due to limits on property cash flow from renting to extremely low-income tenants) or properties in unstable markets. Given the concentration of housing needs among extremely low- income households, some experts conclude that rent subsidies (such as rental housing vouchers) are needed to supplement the private-sector multifamily finance industry, not credit enhancements[174] from the GSEs or even from FHA.

Given the current political climate in which additional rent subsidy funds are not a likely prospect, most market participants agree that Government-sponsored credit enhancements (including FHA mortgage insurance and the GSEs= secondary market purchases) can address some rental housing needs. Specifically, credit enhancements can be used without direct Federal subsidies to provide affordable housing for very low-income families (incomes at or below 60 percent of AMI).[175] However, to address the needs of families with incomes much below 60 percent AMI would require rent subsidies. Based on these observations, most participants at the HUD forums professed continued roles both for unsubsidized FHA insured multifamily programs[176] and for a GSE-enhanced secondary market in multifamily mortgages.

Among those who believe the GSEs do have a role in enhancing the secondary

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Defined as those who pay over 50 percent of their incomes for rent and utilities, or those who live in severely inadequate housing.

The GSEs= mortgage purchases are considered credit enhancements because they encourage lenders to extend more credit to potential borrowers.

In some local housing markets, credit enhancements may need to be combined with tax credits or local subsidies to maintain affordability for very low-income families.

AUnsubsidized@ means no project-based rental subsidies such as Section 8 assistance. It does not refer to credit subsidy for the provision of mortgage insurance.

market in affordable multifamily mortgages, the following four specific roles are commonly cited:

(1) Addressing Credit Gaps. Despite the perceived ample supply of multifamily mortgage credit in the current market, credit gaps or market niches may exist for certain classes of affordable multifamily properties.[177] The Department believes these credit gaps or niches, which are discussed in more detail in Appendix A of HUD=s final rule[178] provide evidence of market failure brought about by information asymmetries. Follain and Szymanoski (1995) discuss how information asymmetries can motivate credit rationing by private-sector multifamily lenders: specifically, high underwriting thresholds, which ration credit, may maximize lender returns due to the expense of gathering information on the credit risk posed by potential borrowers who fall below the thresholds. Credit rationing seems to be particularly likely on units affordable to very low-income tenants. Actively addressing credit gaps is considered by many to be a role for the GSEs.

One example of a credit gap is that of older existing properties in need of upgrading and rehabilitation. These properties are often relatively small (under 50 units), are located in cities or close-in suburbs, and may be occupied (which complicates the rehab process). Often, the economics of rehabilitating such a property require some subsidy, usually in the form of Federal tax credits, or locally funded subsidy (which complicates the financing by adding new layers of requirements). Some observers have expressed the view that too much capital may be flowing into newly constructed multifamily properties and not enough into fixing up older existing properties. According to this view, lenders compete aggressively for new construction loans while older existing properties have difficulty because of their credit risk and the problem of asymmetric information.

A major problem facing low-income households is that low-cost housing units continue to disappear from the existing stock.[179] The ability of the Nation to maintain the quality and availability of the existing affordable stock and to stabilize inner city neighborhoods depends on there being an adequate supply of capital to rehabilitate and repair older units. If this class of rental housing is experiencing a credit gap, the potential benefit from the GSEs addressing this gap could be great.

(2) Setting Standards. The GSEs may also have a role in setting standards for multifamily underwriting. While the GSEs do not dominate the multifamily market, they do, nonetheless, have a large presence in that market. This gives them the ability to set

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The term Aniche@ is somewhat misleading because the potential size of some of the niche markets is large.

60 FR 61846, 61905B61924 (Dec. 1, 1995).

Joint Center for Housing Studies of Harvard University (1995) finds that the number of unsubsidized low-cost units in the Northeast has fallen by half since 1974. In the Midwest, the addition of new subsidized units has offset the loss of unsubsidized low-cost units, but in every other part of the Nation, the total low-cost stock (subsidized and unsubsidized) is below 1974 levels.

standards. For example, underwriting thresholds change frequently in the multifamily market. One such threshold is the maximum LTV ratio. In the current environment, sound economic fundamentals have returned to multifamily lending after a period of overbuilding in the mid 1980s.[180] In the early 1990s there was a severe credit crunch for multifamily housing during which very little multifamily construction took place. Observers have told the Department that today=s maximum LTV is a Arealistic@ 70 to 80 percent for a conventional multifamily loan, whereas the standard had Adeteriorated@ to 100 percent during the mid 1980s, when markets were being overbuild. Such high LTVs might have been avoided in a market with GSE standards. The GSEs could bring stability to the mortgage markets and could enhance the market=s ability to securitize multifamily loans.[181]

However, any standards set by the GSEs should not be so rigid as to preclude deviations from the standards. Rigid standards imply a cookie cutter approach to multifamily lendingCthat is, an approach that has little room for differences in the way the final loan product will look to investors. Observers state that such rigidity in standards would not be a successful way to meet the credit needs of affordable rental properties.[182] Accordingly, the GSEs are becoming more flexible as evidenced by the development of special initiatives for the purchase of different types of affordable multifamily mortgages (see Section E below).

(3) Providing Liquidity. By sustaining a secondary market for multifamily mortgages, the GSEs can extend the benefits of increased mortgage liquidity that they bring to the single-family market. The initial effect of increased liquidity for multifamily mortgages is in reducing the yield spread, or difference, between the mortgage interest rate and the comparable maturity Treasury bond yield. Market observers have told the Department that the recent narrowing of yield spreads on privately issued multifamily MBS has been the result of increased liquidity as more investors compete for amenity-rich multifamily rental housing investments. The lower spreads are lowering capital costs for owners. Ultimately the lower capital costs will either reduce rents paid by tenants, improve the quality of the housing stock, or both. The GSEs can extend these benefits to affordable multifamily housing and, in particular, to the older existing stock, and benefit lower income renters without the need for subsidies.

That is, after the changes brought about by the Tax Reform Act and FIRREA. See DiPasquale and Cummings (1992) for a discussion of these changes.

Some would argue that Fannie Mae has already made progress in providing standards to the market through its underwriting guidelines for its Delegated Underwriting and Servicing (DUS) and Prior Approval programs (see Section E). Others note, however, that these two programs for which Fannie Mae sets underwriting standards represent only 39 percent and 17 percent, respectively, of Fannie Mae=s total multifamily business (including MBS). The remainder of Fannie Mae=s multifamily business consists of negotiated transactions, which are not underwritten using Fannie Mae=s guidelines. These negotiated transactions may be limiting market acceptance of Fannie Mae=s underwriting guidelines as standards.

For example, affordable properties often require one or more layers of subordinated financing to sustain economic feasibility. These subordinated layers often reduce the credit risk of the deal; yet, they may adversely affect some underwriting ratios which, if measured against rigid standards, may render the deal infeasible.

Market observers also indicate that today=s ample supply of credit for certain classes of multifamily properties along with credit gaps for others could change in the future. For example, the recent return to multifamily lending by banks and thrifts after the easing of the credit crunch may be driven in part by a desire for these institutions to maintain loan volume and fee income following the single-family refinance boom of 1993B94, and in part by CRA considerations. But banks and thrifts may eventually feel the burden of higher multifamily capital standards enacted by FIRREA or other portfolio management pressures (such as a desire to increase the liquidity of assets held in portfolio) and seek to reduce their holdings of multifamily mortgages. This could rapidly reverse the investment decisions that have contributed to the current Aample@ credit supply for multifamily housing. In such circumstances, the liquidity that comes from an efficient secondary market for multifamily mortgages would help these lenders maintain a presence in the primary market during such shifts in investment strategy. Increasing the liquidity of assets such as multifamily mortgages on affordable units would increase the interest of all investors in holding these assets.

To further illustrate the benefits of increased liquidity, market observers point out that the single-family mortgage market did not experience a credit crunch in the late 1980s as did the multifamily market. The liquidity that the single-family market enjoys due to the greater presence by the GSEs may explain the absence of a credit crunch for single-family debt financing during that time. However, the Department recognizes that an imbalance in supply and demand factors due to the overbuilding of multifamily units in the 1980s contributed to the multifamily credit crunch.

One potential benefit of the Secretary=s GSE housing goals will be to increase the GSEs= participation in the multifamily markets, thereby increasing the liquidity of multifamily mortgages. The increased liquidity will bring greater stability, making future multifamily credit crunches less likely.

(4) Product Innovation. A fourth area in which the GSEs may have a role is in product innovation. The terms of currently available conventional multifamily mortgage loans can also restrict access to credit for units intended for lower income occupancy. For example, the inability to lock in a permanent interest rate (at reasonable cost) at the start of construction or rehabilitation can add considerable risk to the financing of an affordable multifamily property. A rate increase occurring between the start of construction or rehabilitation and the execution of the permanent loan can severely impact the cash flow of an affordable property. Short term (10-year or less) balloon financing can have similar impact on cash flow from an intervening rate increase.

Although the GSEs are limited in their ability to introduce high-risk products, they nevertheless have the ability to pioneer new financial instruments such as permanent loans with forward rate commitments. In 1995 Fannie Mae launched a limited multifamily new construction initiative (see Section E below) which includes a forward rate commitment. If successful, such initiatives by the GSEs can help them to meet their housing goals while helping to address credit gaps for affordable multifamily units.

D. Overlap With FHA=s Role

The respective multifamily roles of FHA and the GSEs may overlap in several areas. This is an important consideration, because some industry experts believe that the impact of full GSE privatization on the multifamily market could be mitigated by a shift from GSE mortgage purchases to FHA-insured lending. The extent to which FHA can substitute for the GSE role in affordable multifamily housing will be discussed in Section F.

The first area of overlap between FHA and the GSEs with regard to multifamily housing is in types of tenants who occupy the units. That is, tenants of FHA-insured rental housing are often similar to the tenants who occupy GSE financed rental housing.[183] Second, FHA and the GSEs may be addressing similar credit gaps and market niches. Third, FHA, like the GSEs, also sets market standards. Fourth, FHA brings liquidity to the market (with help from the Government National Mortgage Association.) Finally, FHA also innovates mortgage products (for example, FHA is the only generally available source of a permanent loan commitment at the start of construction or rehabilitation without preoccupancy requirements).

However, one area in which the multifamily roles of FHA and the GSEs do differ is in the level of credit risk that can be absorbed. The HUD forum participants generally agreed that the GSEs cannot address the highest risk properties. This is FHA=s function. The GSEs should be willing to accept more risk than pure private conduits, but because the GSEs also have shareholder interests to protect, they should not be expected to assume the same level of risk as FHA. At present, measurement of multifamily credit risk is not very precise. Experts say that additional research is needed in this area.[184] Accordingly, there is also likely to be some overlap in credit risk levels of multifamily loans financed by FHA and the GSEsCat least until more is understood about risk measurement.

E. The GSEs= Current Multifamily Programs

The GSEs are currently taking steps to address the specific multifamily roles discussed above: credit gaps, underwriting standards, liquidity, and product innovation. Fannie Mae is farther along in this respect than Freddie Mac. The following is a summary of the basic multifamily credit enhancement programs, including recent initiatives, for both

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Wachter et al. (1996, pp. 358B360) show that the GSEs= multifamily mortgage purchases are secured by properties with similar tenant profiles as those backing unassisted FHA-insured multifamily mortgages.

Follain (1994).

GSEs:

Fannie Mae=s Basic Programs. Fannie Mae=s basic multifamily credit enhancement operation consists of (1) the Delegated Underwriting and Servicing program, (2) the Prior Approval program, and (3) negotiated transactions. The following are brief descriptions of each.

Under the Fannie Mae DUS program, specially approved lenders underwrite and originate multifamily loans for sale to Fannie Mae without obtaining prior approval from Fannie Mae on a loan-by-loan basis. Fannie Mae underwriting standards are used. DUS lenders are required to share in the default risk as an incentive to perform quality underwriting. The borrower can choose to sell the loan to Fannie Mae for cash, or, if a private conduit is involved, the sale can be a Aswap@ transaction in which the conduit receives Fannie Mae MBS and uses these securities to obtain cash for the borrower.

The Fannie Mae Prior Approval program has the same basic underwriting standards as the DUS program. However, unlike Fannie Mae=s DUS lenders, the lenders participating in the Prior Approval program do not share in the default risk; hence, Fannie Mae advance review and approval are required before a loan can be closed. As with the DUS program, Prior Approval loans can be cash transactions or swaps.

Fannie Mae=s negotiated transactions involve purchase of portfolios of multifamily mortgages from other institutions such as banks, conduits, and insurance companies or swaps involving senior debt pieces of multifamily REMICs. The mortgages in a negotiated transaction are frequently seasoned mortgages (that is, over a year old), although some new originations have been purchased by Fannie Mae on a negotiated basis. Generally, these loans were not underwritten using the same standards that Fannie Mae has for its DUS and Prior Approval programs. As a result, sellers often are required by Fannie Mae to provide credit enhancements on negotiated transactions.

Fannie Mae Multifamily Initiatives. The following is a brief description of Fannie Mae=s major multifamily initiatives:

! **Risk sharing with FHA.** In 1994 Fannie Mae and FHA announced a risk sharing pilot to finance 7,500 units of affordable multifamily housing. Fannie Mae will provide marketing, underwriting, and asset management functions, while FHA assumes half the total credit risk on each mortgage.[185]

! **Risk sharing with the AFLBCIO Housing Investment Trust.** In 1994 Fannie Mae launched this partnership to commit $400 million for new construction and

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As of May 1996, Fannie Mae has made commitments to finance 1,234 units for $35.2 million under its risk-sharing program with FHA. The FHA risk-sharing authority was extended through the end of fiscal year 1996 by the Housing Opportunity Program Extension Act of 1996 (P.L. 104B120).

substantial rehabilitation of affordable multifamily units over a 5-year period.

! **New Construction program.** In 1995 Fannie Mae announced this product line, which can be combined with FHA risk-sharing and the AFLBCIO Housing Investment Trust initiative; it allows borrowers to lock in the interest rate on the permanent loan before the start of construction or substantial rehabilitation.

! **Enterprise Mortgage Investment, Inc.** In this 1994 partnership, the Enterprise Foundation serves as a delegated community lender to provide financing to nonprofit developers of multifamily housing that will serve residents with incomes at or below 60 percent of area median.

! **DUS Seniors Living Pilot.** This initiative allows DUS lenders to sell mortgages to Fannie Mae on properties that extend services such as laundry and transportation to elderly residents.

Freddie Mac=s Basic Program and Initiatives. Unlike Fannie Mae, Freddie Mac underwrites all the multifamily loans it purchases through its *structured transactions*. Freddie Mac has no equivalent of the Fannie Mae DUS program. However, as with the Fannie Mae programs, structured transactions can be completed as cash deals or swaps for mortgage backed securities. Specific Freddie Mac initiatives include:

! **Risk sharing with FHA.** In 1994 Freddie Mac and FHA announced a risk sharing pilot to finance 5,000 units of affordable multifamily rental housing. Freddie Mac will underwrite and purchase the loans, while FHA will assume half the total credit risk on each mortgage.[186]

! **Tax-Exempt Bond Credit Enhancement Pilot.** This pilot provides credit enhancement for multifamily mortgages financed with tax-exempt bonds issued by State and local housing finance agencies on eligible affordable properties.

Do These Programs and Initiatives Address the GSEs= Multifamily Roles? These multifamily programs and initiatives indicate the GSEs have made a start toward addressing credit gaps, setting standards, providing liquidity, and product innovation. For example, conduits, which give smaller multifamily loan originators greater access to the liquidity of the secondary market, have expanded their volumes due in part to Fannie Mae=s willingness to negotiate swaps with conduits.[187] However, the GSEs have only begun fulfilling the roles that the participants in the HUD forums articulated. The key to the GSEs= ability to accomplish these public purpose objectives lies with the initiatives

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Freddie Mac has not made any commitments as of May 1996 under this initiative. As mentioned in the previous footnote, FHA risk-sharing authority was extended through the end of fiscal year 1996.

Hall (1994).

adopt-ed in 1994 or later. More time will be needed to determine how well current and future multifamily initiatives undertaken in response to the Secretary=s housing goals will perform.

F. Effects of Full Privatization

The GSEs purchase multifamily loans for two basic reasons. First, these purchases may generate profits for shareholders.[188] HUD=s GSE profit model shows that multifamily loans Fannie Mae and Freddie Mac are currently purchasing are expected to generate profits despite higher expected default rates than single-family loans because the GSEs receive higher guarantee fees on multifamily loans.[189] In fact, HUD=s model shows multifamily loans should generate higher profit margins than single-family loans under stable economics, but larger potential losses in economic downturns, which is consistent with the normal risk-return tradeoff for any type of asset.

Second, multifamily programs help the GSEs fulfill explicit or implicit mandates associated with their Federal charters. Multifamily programs are especially effective for the GSEs to meet their housing goals established by the Secretary because relatively high percentages of multifamily units are affordable to very low-, low- and moderate-income households.[190]

Full privatization would make the profit motive much more compelling for the GSEs in their decisions to continue purchasing multifamily mortgages. The Secretary=s housing goals would no longer be available to keep the GSEs in the multifamily market, and even if some form of Federal mandate were to exist in a post-privatization environment, it would most likely be weaker than the current housing goals with regard to multifamily mortgages.

Full privatization would also make multifamily loans less profitable for the GSEs. Without investors= presumption of an implicit Federal guarantee, fully private successors to the GSEs would be required by the capital markets to hold more equity capital in reserve for these loans. Reduced profits along with the reduction in Federal mandates could result in fewer multifamily mortgage purchases by the GSEs. At a minimum, fully privatized successors to the GSEs would be unlikely to maintain current affordable multifamily initiatives, even if they continued to purchase multifamily mortgages with less credit risk using their basic programs. Thus, full privatization of the GSEs could result in

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The profit motive was certainly a major factor in Freddie Mac=s decision to temporarily withdraw from the multifamily market in 1990 after experiencing large losses in the late 1980s.

U.S. Department of Housing and Urban Development (1995b), p. V-6.

For example, more than 90 percent of the multifamily rental units backing the GSEs= mortgage purchases in 1994 were affordable at or below AMI, while less than 40 percent of purchases involving owner-occupied single-family units met this median-income definition. Freddie Mac=s decision to reenter the multifamily market in 1993 was probably influenced by a recognition of the value of multifamily programs in meeting its housing goals.

less capital flowing to multifamily properties.

Wachter et al. (1996) argue that the reduction in social benefits would be fairly small. Their argument is based on the lack of dominance by the GSEs in the multifamily market and the existence of a Asubstantial@ amount of competition from the private sector. That is, even if the GSEs reduce their purchases of multifamily loans backed by affordable units, many of these loans would still be made in a post-privatization environment. This is particularly true for Fannie Mae=s negotiated transactions, which are usually seasoned loans, and most of which are credit enhanced by the sellers. The credit enhancements that Fannie Mae receives on its negotiated transactions expose the enterprise only to small residual credit risks.[191] For these loans, full privatization of the GSEs would not produce a significant shift of credit risk to the private sector; hence, it is reasonable to conclude that most of Fannie Mae=s credit-enhanced negotiated transactions would still be made in a post-privatization environment. Wachter et al. conclude that the policy decision on privatization Ashould not be driven by concerns about multifamily finance.@

The social benefits lost by a reduction in the GSEs= multifamily purchases could be restored if the Federal Government (FHA and Ginnie Mae) were to provide credit enhancements and liquidity for those mortgages that could not switch to conventional financing.[192] Given the substantial overlap in the multifamily roles of FHA and the GSEs as discussed in Section D, it is plausible that such a shift of multifamily loans from the GSEs to FHA and Ginnie Mae could occur. The question then becomes, would the increase in direct Federal multifamily programs to maintain social benefits carry a higher social cost than the current GSE charters?

A precise answer to this question is not available. However, as Wachter et al. (1996) point out:

> Despite [the] similarities [between the GSEs and FHA], we believe a fundamental difference exists between them. A government-run guarantee program has neither the mandate nor the incentives to manage the multifamily programs as efficiently as the GSEs....[A] government institution like FHA seems destined to be less aggressive in its response to [multifamily] mortgage defaults than a private firm responsible to its stockholders.[193]

As of December 31, 1995, Fannie Mae reported having the primary risk of default (including loans for which Fannie Mae shares risk under its DUS program) on only 56 percent of its multifamily loans. See Fannie Mae (1996a).

Because FHA multifamily mortgage insurance programs are not considered to be self-supporting, any expansion of FHA volume would be subject to the availability of credit subsidy.

Pp. 364B365.

If Wachter et al. (1996) are correct that the GSEs can run a multifamily program more efficiently than the Government, one could argue that the role of the GSEs in the multifamily market should be expanded rather than reduced through full privatization. Such an expansion of the GSEs= role would capture some of the mortgages that FHA is now guaranteeing. Wachter et al. (1996, p. 366) make this argument and call for FHA to do fewer direct multifamily loan guarantees in favor of more risk-sharing with the GSEs. HUD is in general agreement with this approach, as is evident from the risk-sharing demonstrations the Department has negotiated with the GSEs, and with the Department=s legislative proposals for continuation and expansion of FHA risk sharing authority.

The key to differentiating between the GSEs and FHA as the more efficient guarantor of multifamily mortgages seems to be the level of credit risk involved. For relatively low risk loans, Wachter, et al., are probably correct in saying the GSEs are more efficient than FHA. However, for higher risk loans, FHA may be less costly. The reason is that a direct Government guarantee program such as FHA does not have to earn profits for shareholders as do the GSEs.[194]

G. Conclusions

There are three main conclusions from this chapter. The first is that the Secretary=s housing goals will keep Fannie Mae committed at least to its recent level of activity in the multifamily mortgage market, and the goals will require Freddie Mac to increase its commitment to multifamily housing. Together, the GSEs are likely to continue their current initiatives with respect to affordable multifamily housing and to undertake new initiatives in the future. This will ultimately increase the level of social benefits that derive from the GSEs= participation in the multifamily secondary mortgage market, and broaden their impact as initiatives reach into neighborhoods previously underserved by the mortgage market.

Second, full privatization would reduce social benefits and would shift some multifamily loans currently made by the GSEs to possibly less efficient Government guarantee programs of FHA. It is doubtful that the GSEs would maintain all their current multifamily initiatives without a Government mandate.

Bunce et al. (1995) make this argument in the context of single-family mortgage loans. That is, FHA can and does guarantee higher risk single-family loans than do the GSEs. In addition, Follain and Szymanoski (1995) provide a framework for determining whether the government should intervene in the multifamily mortgage market and for choosing among the types of intervention available. Once it has been determined that the social benefits from government intervention exceed the social costs involved, the government must choose between the direct multifamily mortgage insurance programs of FHA and the indirect guarantees provided by the GSEs with implicit government backing. Under the authors= framework, the choice should be based on the relative costs of the two options. The GSEs have an operating efficiency advantage that may outweigh FHA=s lower cost of capital in this comparison, provided the level of risk involved is not too high. In high-risk cases, the cost advantage may shift in FHA=s favor. The latter could occur if the GSEs= investors demanded higher returns on equity to compensate them for the higher risk exposure.

Third, the above two conclusions notwithstanding, the possible loss of social benefits and efficiency in the multifamily market may not be large enough to drive the debate over GSE privatization, because the effect is relatively small compared with the effect of full privatization on the single-family market.

CHAPTER VI

MARKET AND INSTITUTIONAL EFFECTS OF FULL PRIVATIZATION

A. Introduction and Main Findings

Previous chapters have documented the importance of the GSEs to the mortgage market and the advantages of current institutional arrangements, focusing especially on the financing of affordable loans and increasing the outreach of the mortgage lending industry to historically underserved markets. This chapter examines the effects of privatization on the GSEs and the broad mortgage and MBS markets.

A.1 Main Findings

The chapter concludes that full privatization and the consequent loss of agency status would have several effects on the mortgage market, including:

The GSEs= borrowing costs on debt securities would increase by 30B75 basis points, and this would cause a substantial reduction in their portfolio operations, if not their elimination. In view of the highly developed nature of the MBS market, the resulting effects on the broad housing finance system would probably be minimal.

The GSEs would have to increase their capital holdings and would face higher credit enhancement costs when issuing MBS because of the loss of agency status.

Lower demand for MBS could result in a 30B35 basis point increase in MBS financing costs.

These increased borrowing and MBS costs would be reflected in some combination of higher mortgage rates or reduced mortgage funding from the industry. A plausible projection of the increase in mortgage rates would be around 25 basis points, although the eventual magnitude of the effect would depend on the ability of the fully privatized GSEs to establish the credit quality of their securities at reasonably low cost, the effects of competition in the mortgage and MBS markets, and other factors discussed in this chapter.

In their mortgage purchase activities the newly privatized GSEs would face competition from firms currently securitizing jumbo mortgagesCa sector that has experienced growth in volume and financial infrastructure in recent years. The jumbo providers would also face competition from the GSEs in the jumbo part of the market.

Several other likely effects, including shifts toward shorter term mortgages and ARMs, Government-insured mortgages, and mortgages held by depository institutions, are discussed in this chapter.

A principal theme of this chapter is that the magnitudes of many of these broad market effects would depend on factors such as the existence of economies of scale, whether the fully privatized GSEs would enter other lines of business such as mortgage origination and servicing, and whether they could achieve economies of scale there. Uncertainty about these underlying factors lends a degree of uncertainty to this portion of HUD=s analysis.

This chapter is the first of two chapters that consider the broad market effects of full privatization. Chapter VI is concerned with identifying the effects on markets and institutions that could ensue and estimating their magnitudes. Chapter VII then turns to the related normative question: In what ways could these effects be beneficial or deleterious for borrowers and for those served by the broader mortgage market?

Chapters IV and V have already begun to consider the normative question. They discussed in detail the effects of full privatization on affordable lending in the single-family and multifamily mortgage markets, showing that the GSEs, as well as other industry participants, have begun to reach out to underserved families. The GSEs have introduced new product offerings and changed their underwriting standards to better recognize the special circumstances of lower income families. They have significantly increased their purchases of affordable loans over the past few years. Full privatization could reverse these encouraging trends. Because affordable loans typically involve higher marketing, servicing and credit costs than loans originated under the GSEs= standard programs, they would likely be reduced if Fannie Mae and Freddie Mac lost their Federal benefits and were fully privatized. Chapter VI includes the analysis of mortgage rates that underlies some of the conclusions of those earlier chapters.

A.2 Factors Affecting the Direction and Magnitudes of Effects

Establishing the potential magnitudes of the broad market effects is highly speculative. Full privatization of the GSEs has no historical precedent; consequently there is no direct empirical evidence on which to draw concerning the consequences of GSE privatization. However, it is possible to identify likely market effects under alternative scenarios and sets of assumptions, including evidence from the already-fully privatized jumbo mortgage sector.

The market effects of full privatization hinge critically on several conditions relating to the market environment within which the GSEs operate and the costs of their operations. Specifically, the following discussion considers:

- ! The extent to which the GSEs have been insulated from competitive forces and thus have had the ability to retain any portion of the value of the Government=s implicit guarantee for themselves and their stockholders rather than pass it on to borrowers.

- ! The degree to which there are economies of scale in the technology of converting mortgages into debt securities and mortgage pass-through securities.

- ! The differential between the value of Government support for the GSEs and that for banks and thriftsCboth implicit and explicit.

- ! The degree to which the Government could actually become free from the perceptions of investors that it bears contingent liability with respect to the credit risks and other risks associated with the GSEs= operations.

- ! The degree to which the presumption of an implicit Government guarantee extends as a stabilizing influence into private-issue mortgage markets.

No truly conclusive evidence on any of these factors exists. Because of this uncertainty, there is uncertainty concerning many of the broad market effects.

While many analysts have treated specific aspects of these issues, the more comprehensive survey by Hermalin and Jaffee (1996) is helpful in understanding the relationships among the factors listed above. For example, with respect to the first factor, they contend that because the market for mortgage-related securities backed by conforming mortgages is currently dominated by the two GSEs, the two have Amarket power@ and can engage in Atacit collusion@[195]Cthat is, although they do not explicitly collude, they have sufficient market power to affect yields in the market for their MBS and debt securities, within limits determined by the presence of potential entrants into this market (i.e., private-label securities issuers), the supply of funds from investors, and the demand for funds by mortgage borrowers. This, they argue, results in one of two overall general outcomes:[196]

First, the GSEs= security yields, plus the amount of additional yield that investors would require in the absence of the presumed Government guarantee, might be only slightly greater than the yields that would be offered by non-GSE conduits in mortgage-related securities markets. In this case the GSEs would be issuing essentially the same volume of mortgage debt and MBS that would be issued in a competitive market without GSEs; the volume of mortgages funded would be similar to the volume issued in such a competitive market; and the GSEs would be retaining the full amount of the yield

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See Chapter VII for a discussion of tacit collusion.

This analysis summarizes discussion and conclusions reached by Hermalin and Jaffee (1996, pp. 287B289).

differential associated with the value of their agency status. Under full privatization, borrowers would pay the same mortgage rate for the same volume of credit as they would without the GSEs.

The second possibility is that the GSEs= security yields are greater than those described in the preceding paragraph. The GSEs would then be issuing a greater volume of debt and MBS than would be the case in a competitive fully privatized market. Again, potential competitors would be locked out of the GSEs= market, but the GSEs would be capturing less of the yield differential associated with their agency status, and borrowers would be enjoying somewhat lower mortgage rates. Full privatization could then be expected to increase mortgage rates and reduce the volume of credit. (Additional factors bearing on the outcome are discussed later in this chapter.)

The discussion that follows focuses principally on the second of the two general scenarios presented by Hermalin and Jaffee. This discussion relies on several empirical studies (reviewed in Section C) that have found that interest rates are lower on conforming than nonconforming loans. These studies suggest that at least some of the benefits of agency status are being passed through to homeowners.

Prior to this discussion, Section B reviews the effects of full privatization on mortgage finance institutions. Section C then examines the cost of debt and the prospects for secondary market portfolio lending under full privatization. Section D interprets available evidence about the likely impacts on mortgage rates, and Section E considers the implications for the GSEs, including effects on stockholders= interests.

B. Effects of Full Privatization on Mortgage Finance Institutions

This section discusses the likely role the GSEs and other depository institutions would play in a fully privatized mortgage market. The outcome is seen to depend on the likely existence of economies of scale in the secondary mortgage market, and on other preconditions.

B.1 Effects on Market Concentration

The effect of full privatization on the future degree of competition in the mortgage securitization industry depends in part on whether the GSEs currently enjoy economies of scale.[197] After reviewing the likely effects on competition under either case, this section discusses the extent to which there are economies of scale in secondary market operations.

The manner in which privatization is implemented, and the strategies implemented by the GSEs and existing private conduits in response, would also have significant bearing on the outcome.

Economies of Scale Absent. If the GSEs do not enjoy economies of scale, existing private conduits could expand their market share and many new competitors could enter the MBS market in response to privatization. With the loss of their borrowing advantage, and no significant advantage owing to the scale of their operation, the GSEs would be placed on an equal footing and in competition with other MBS conduits such as those in today=s jumbo loan market. As competition intensified, the fully privatized GSEs= share of the conforming market would surely be expected to decline and the two GSEs could shrink in size. In the absence of scale economies, it is possible that a significant portion of the former GSEs= volume would be shifted to banks and thrifts. This issue is discussed in detail in Section B.2, below.

Economies of Scale Present. On the other hand, if the GSEs do enjoy significant economies of scale, following privatization the GSEs might continue much as they are today with respect to the size and scope of their operations. Scale economies would permit the GSEs to maintain market share in the face of greater competition from the larger private conduits. The principal effect of privatization would be that the GSEs would no longer be passing benefits associated with their presumed-guarantee advantage on to borrowers or stockholders.

Scale economies have implications for the magnitude of any post-privatization rise in mortgage rates. If most of the GSEs= borrowing advantage was due to their economies of scale, so that even after elimination of agency status the GSEs= costs would remain lower than costs to banks and thrifts, their continuing, post-privatization scale economies would tend to mitigate any rise in mortgage rates associated with the loss of agency status. The GSEs would remain large and continue to dominate the secondary market for Aconforming@ loans.[198] The GSEs would, however, be free to move into the Ajumbo@ market, possibly driving smaller private-label conduits out of business and bringing about greater concentration in the mortgage market.

Are There Economies of Scale? There can be little doubt that mortgage securitization involves some economies of scale. The institution of mortgage pooling represents prima facie evidence of scale economies: the larger the pool, the lower the credit risk and the lower the cost of issuing MBS, other things being equal. With respect to Fannie Mae and Freddie Mac, the development of a protected duopoly operating nationwide, doing business with many decentralized primary lenders has allowed for the realization of economies associated with standardized terms on which mortgages are purchased into the secondary market, accompanied by regional diversification within mortgage portfolios and MBS, reducing the need for detailed information by investors in mortgage-related securities.

There is also evidence of economies of scale in the nonagency mortgage

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See Section D for a more complete set of factors and their effect on mortgage rates from full privatization.

origination and servicing industries. Some of this evidence is anecdotal or institutional in character: servicers are often willing to accept lower rates of return for large package deals.[199] The trend toward industry consolidation is also consistent with scale economies: The collective market share of the top 25 originators at the end of 1995 was 38 percent, up from 31 percent at the end of 1992. Similarly, the collective share of the top 25 servicers rose from 28 to 38 percent over the same period. New technologies and lower origination volumes following the refinance boom of 1992B93 are motivating originators and servicers to expand their operations to achieve economies of scale, or alternatively to exit the industry.

The ability of private firms operating nationwide to issue MBS in the jumbo market suggests that they too operate at a level sufficient in size to take advantage of economies of scale. The private firms have developed sophisticated information processing systems and efficient operating systems that have led to sustained growth in the jumbo market.[200] Thus, despite an order of magnitude difference between the GSEs and smaller firms, the smaller firms would likely remain viable and competitive in a fully privatized secondary market. However, to the extent that scale economies remain a feature of both the GSE and private-label sectors of the post-privatization MBS market, the trend toward industry concentration can be expected to continue and even accelerate in the event of privatization with the removal of institutional barriers that have separated the two sectors of the industry.

B.2. Effects on Depository Institutions

This section considers whether full privatization would tend to enhance the role of depository institutions as mortgage holders as compared with private conduits including the successor enterprises to the GSEs. At the end of 1995 banks and thrifts together held or securitized 32 percent of the outstanding mortgage debt, compared to 34 percent for Fannie Mae and Freddie Mac, and 6 percent for private conduits.[201] The effect of full privatization on depository institutions would depend on the relative magnitudes of implicit and explicit government support received by them and other primary and secondary mortgage market participantsCthe GSEs, private conduits, and others. This section compares the types of implicit and explicit net subsidies available to the depositories and GSEs and then considers implications of full privatization on the depository institutions.

What Subsidies Apply to Banks and Thrifts? The potential role of depository institutions in MBS and mortgage markets with fully privatized GSEs depends in large part on the level of government support received by depositories. The greater the differential

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Cotterman and Pearce (1996), p. 149.

Cotterman and Pearce (1996), p. 106, attribute part of the growth of the private sector MBS market to the significant growth in GSE securities in the 1980s which Aproduced an expansion of intellectual and institutional capital among private sector participants in the securitization process.@

The others were: 12 percent for Ginnie Mae and 14 percent for all other holders including individuals, various governmental agencies, life insurance companies, pension funds, and others. See Table 2.2.

between the subsidies for the GSEs and the depositories, the greater the potential magnitude of pricing adjustments with privatization.

The depositories are not subject to a framework of statutory benefits and obligations like those that apply to the GSEs as discussed in Chapter I. They benefit from deposit insurance, which attracts lower cost loanable funds, but for it they pay fees to the Federal Deposit Insurance Corporation.[202] They are subject to capital limitations that are intended to preserve their financial safety and soundness. CRA requirements are established to ensure an appropriate orientation toward housing needs in their individual market areas. Thrifts are required to have a more specialized orientation toward housing finance than banks. The housing-related role of thrifts and many banks is facilitated by access to low-interest advances through the Federal Home Loan Bank (FHLBank) System,[203] which does enjoy many of the borrowing advantages of Fannie Mae and Freddie Mac.

Would Business Shift to Banks and Thrifts? The shifting of much of the GSEs= business to banks and thrifts is not a forgone conclusion. The capacity of banks and thrifts to step in and establish themselves in place of the GSEs as the primary conduit for mortgage funds depends on several conditions. Most importantly, it depends on the relative cost advantages of portfolio investment by banks and thrifts as compared to MBS execution through private-issue conduits. Even if portfolio lending by banks and thrifts did not turn out to be the least-cost mode, it is possible that banks and thrifts could gain in market position by offering MBS products that are competitive with private issuers of MBS.

The question of relative cost advantage as between bank and thrift portfolio lending and private-issue MBS funding of mortgages is difficult to assess. However, the following observations can be made: First, neither the conforming nor the jumbo conventional mortgage market is fully securitized, so both portfolio and MBS funding coexist in both the conforming and jumbo markets. Over the first half of this decade, the securitization rate for conforming mortgages declined from the neighborhood of 60 percent to 44 percent and the rate for jumbo mortgages went from 48 percent to 27

Thrifts now pay 23 cents per hundred dollars of deposits for their deposit insurance. Banks pay premiums at a minimal rate because the bank insurance fund is well capitalized. The thrift premium could be a temporary circumstance that will change once their deposit insurance reserves have been replenished. The administration and Congress are considering legislation that would reduce or end the difference between bank and thrift premiums to prevent a precipitous exit from the thrift industry. See Testimony of John D. Hawke, Jr., Under Secretary of the Treasury for Domestic Finance, before the House Committee on Banking and Financial Services, March 19, 1996.

Federal Home Loan Bank advances are short- and long-term, near-Treasury-rate loans that can be extended to thrifts and banks for the purchase of mortgages or other assets. They are funded with consolidated bonds issued against the 12 Federal Home Loan Banks collectively. As far as investors are concerned, the FHLBank bonds are the same as Fannie Mae and Freddie Mac debt. However, the volume of FHLBank bond debt and hence the potential volume of advances is limited by statute to no more than 20 times the total paid-in capital stock and legal reserves of all 12 Banks. See Scavotto (1994), p. 7-15, and First Boston Corporation (1986), pp. 97B99. The reader should note that FHLBank advances are not limited to banks and thrifts only. They can also be extended to insurance companies, credit unions, and in certain instances State housing finance agencies.

percent.[204] Second, anecdotal evidence suggests that some of the larger banks and thrifts, as well as those in high-housing-cost States, have specialty jumbo loan programs and are well represented in the jumbo market in competition with private-issue conduits like Countrywide, GE Capital, RFC, and others. Thus, banks and thrifts and private-label conduits coexist in the jumbo market, implying that neither has a significant cost advantage over the other.

A related question is whether banks and thrifts could potentially gain as a result of the loss of ability to capture the value of agency advantages by the GSEs. The capturing of some of the advantages by the GSEs is consistent with a tendency for mortgage rates to rise after full privatization. In this situation, some mortgages formerly judged unsuitable for portfolio funding would then appear profitable at the higher rate and be funded through bank and thrift portfolio lending. However, while this implies a shift toward depository portfolio lending, numerous studies have indicated that if yields were to be corrected for expected losses from interest rate risk, portfolio funding of fixed-rate mortgages would be viewed as generally unprofitable for all but the most efficient depository institutions making low-risk mortgages.[205] This is largely because MBS and CMO instruments are cost-effective mechanisms for reallocating interest rate risk, which means they could establish the unsubsidized gross mortgage yield available in the marketplace under full privatization.

The situation with respect to the potential competitiveness of prospective MBS issuance by depositories is more straightforward. Securities rating specialists confirm that the rating for an MBS issue depends on the credit quality of the underlying mortgage collateral and the overcollateralization the issuer is willing to provide. Therefore, since the rating for a bank or thrift issue depends on the quality of the mortgages made and extra collateralization provided, not the financial condition of the institution itself, banks and thrifts might be able to compete with private issuers of MBS.

To the extent that banks and thrifts have enjoyed any relative advantage in funding jumbo mortgage investment through portfolio rather than MBS funding, one might expect that advantage to decline with full privatization of the GSEs. This is because eliminating the distinction between the conforming and jumbo markets would make the pure liquidity advantages of the vast conforming MBS market available to what was the relatively small jumbo MBS issues, so the current 25 to 40 basis point spread would narrow. Jumbo MBS rates would decline, reducing the cost advantage, if any, of banks and thrifts for funding jumbo loans in portfolio. The compression of jumbo rates and resulting reduction of any

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See *Inside Mortgage Securities*, January 26, 1996, p. 9. Analysts observe that banks and thrifts have in recent years augmented portfolios with a larger share of whole loan mortgage investment given the lack of good
alternatives.

See McNulty (1994), pp. 5-13 to 5-19, for a review of studies that examine the profitability of thrifts holding fixed-rate mortgages in portfolio.

bank and thrift cost advantage would put added pressure on the profitability of portfolio funding of fixed-rate mortgages in the jumbo market. Thus, the jumbo rate decline would further squeeze jumbo portfolio lending.

A final question concerns how a shift from GSE funding to that by banks and thrifts or private-issue conduits would affect the availability of long-term, fixed-rate mortgages, which are now a mainstay in the U.S. mortgage market. To the extent that mortgage lending relies more heavily on portfolio funding or private-issue conduits requiring greater collateralization of MBS, one might expect to observe less generous terms for long-term, fixed-rate loans and therefore a decline in their utilization. There would be a corresponding increase in the use of ARMs, which banks and thrifts are more willing to hold in portfolio.

B.3 Effects on the Mortgage-Backed Securities Market

Full privatization and the loss of agency status would have two effects on the GSEs= MBS: It would reduce the demand for the GSEs= securities and it would increase the credit enhancement costs necessary to obtain a given rating on those securities. A countereffect would be the introduction of additional competition in the conforming market from conduits operating in the jumbo market. However, the net effect would be a rise in interest rates. Despite the rise in MBS finance costs, the MBS would continue as the primary vehicle for funding fixed-rate mortgages.

Reduced Demand for GSE MBS. The guarantee of timely payment of principal and interest makes the GSEs= MBS an attractive option to investors. This guarantee exposes the GSEs to credit risk; yet, because of their agency status and the automatic >AAA= rating assigned by national rating agencies, investors do not require any risk premium to account for the possibility that the enterprises might not make their payments. The preference by investors for the GSEs= MBS relative to private market MBS is evident in market price data: Goodman and Passmore (1992) assert that the GSEs= MBS have traded at interest rates 45B60 basis points below private label issuers.[206] By comparison, Lea (1990) cites a Freddie Mac study that found Freddie Mac=s mortgage securities to trade 25B30 basis points below comparable >AA= nonagency MBS.[207] Anecdotal evidence from Wall Street brokers indicates that the yield differential between agency and non-agency MBS has been 30B40 basis points.[208] Given the range of estimates and additional factors discussed below, a reasonable range for an increase in MBS rates from full privatization is 30B35 basis points.

White (1996), p. 309.

Lea (1990), p. 194.

Staples (1996), p.11. In discussing the agency and nonagency CMO markets, this principal at Morgan Stanley states that a 30B40 basis point differential is observed across major classes of MBS.

The preference for the GSEs= securities would be expected to change under full privatization, depending on whether, and to what extent, bank and thrift regulators would adjust capital requirements for holding private-label MBS.[209] Favorable capital requirements currently bolster demand for the GSEs= MBS. GSE securities have a 20-percent risk weight under capital requirements applied to commercial banks and thrifts, or significantly lower than the 50-percent capital requirement for holding whole mortgages. High-quality private-label MBS currently have 50-percent risk weights for banks and 20 percent for thrifts. The lower risk weight for GSE MBS gives banks an incentive to hold their MBS since the required capital costs are lower relative to other assets. In fact, this lower risk rating was one factor explaining the surge in securitization throughout the 1990s.[210] If the GSEs= agency status is ended, and particularly if thrift regulators revise upward the risk weights on high-quality private-label MBS, demand for MBS would be affected and upward pressure on interest rates would be generated.[211]

Competition from Jumbo Conduits. Competition would increase in the conforming MBS market as jumbo conduits became more competitive with the elimination of GSE benefits. The size of the conforming MBS market would be attractive to conduits and they would quickly enter the market and attempt to capture market share from the GSEs. The intense competition for market share in the jumbo market is illustrative of what could be expected in the conforming MBS market. The private conduits have shown enormous growth in recent years and they have expanded their infrastructure and developed expertise that could be used in the conforming market.

MBS as Primary Vehicle. The MBS (including REMICs) would remain the primary vehicle for funding fixed-rate mortgages. The MBS markets for both agency and non-agency securities are well developed and have the necessary infrastructure to support the mortgage market if full privatization were to take place. From the perspective of the issuer, MBS have proven to be an effective method for transferring interest rate risk to capital market investors, and, from investors= perspective, MBS have become well received investment instruments for portfolio management strategies.[212] Thus, there is no reason for the MBS market not to continue as the primary vehicle for funding fixed-rate mortgages.

The decrease in demand would also depend on whether the GSEs= MBS would continue to be preferential securities held as collateral for repurchase agreements (repos). When depository institutions use the GSEs= securities as collateral, the repos are not subject to reserve requirements, and because repos are not considered deposits, they are not subject to deposit insurance. Both of these factors serve to lower the cost of funds to the institution issuing the repos. See Gardner and Mills (1991), p. 452, and pages 124B125 for a description of repo transactions, characteristics of repos, and their markets.

As a percentage of outstanding mortgage debt, commercial bank holdings of MBS increased from 5.4 percent in 1989 to 10.4 percent in 1992. Weicher (1994), Table 1, p. 52.

The price of MBS would not collapse since underlying MBS are generally high quality mortgages and, for those mortgages with LTVs above 80 percent, carry private mortgage insurance. Ambrose and Warga (1996, pp. 193B195) cite the liquidity of the MBS market and PMI as reasons that may limit the effect of full privatization on the GSEs= MBS operations.

Cotterman and Pearce (1996), pp. 106B107, note that in the middle to late 1980s, an effort was undertaken to educate and familiarize investors with the Aspecial properties@ of mortgage securities.

Conclusion. While difficult to quantify the above effects, the likely result is that MBS yields and mortgage rates would rise under privatization, at least in the short run. Section D discusses studies that attempt to estimate the increase in mortgage rates from privatization by analyzing the spread between the conforming and jumbo loan markets.

B.4 Reallocation of Credit Risk Taking

Full privatization would mean that the GSEs= MBS would no longer be automatically rated Atriple A@ simply because they carried the name AFannie Mae@ or AFreddie Mac.@ With ending of agency status for such a large volume of mortgage securities, MBS investors and other mortgage market participants would be vulnerable to more credit risk. Full privatization would cause some realignments in credit risk taking:

! **PMIs.** Private mortgage insurance (PMI) companies might be expected to become even more heavily capitalized than is the case now. Investors in MBS may require higher capitalization rates to protect against PMIs defaulting on their coverage of mortgage defaults. Moreover, PMIs could be expected to provide somewhat deeper insurance coverage or reinsurance on mortgages.

! **FHA.** FHA insurance, in tandem with Ginnie Mae=s guarantee of prompt and timely payment to MBS holders, would continue to provide the same protection against credit risk to both lenders and security investors. Thus, if interest rates or the insurance premiums that borrowers pay on conventional loans were to rise by sufficient increments, switching to FHA-insured lending might be observed since FHA-insured loans could be relatively cheaper. Absorbing loans from the GSEs would improve FHA=s ability to spread and diversify risk in its portfolio. The opportunity for switching, however, would continue to be limited by FHA=s lower loan limits that constrain its activity to the lower half of the housing market and by FHA=s higher insurance premium for all but the poorest of creditworthy risks.

! **Depository Institutions.** Canner and Passmore (1995) recently reported that depository institutions assumed the credit risk associated with about 28 percent of the mortgage loans originated in 1994. Fannie Mae and Freddie Mac together, FHA, and the PMI companies each accounted for roughly 17 percent of the credit risk.[213] As discussed earlier, banks and thrifts would be expected to increase their share of credit risk, given that they would likely hold even more mortgages in portfolio if the GSEs were fully privatized.

! **Other.** Structures such as senior/subordinated bonds that are currently designed

Canner and Passmore classified mortgages based on who would assume the first portion of the loss in the event of defaultCFHA, a private mortgage insurer, GSEs=, or a depository institution.

as tools of credit risk management would also become more popular. Purchasers of subordinated bonds would be taking on the credit risk. The influence of bond rating agencies that rate these securities would obviously increase.

B.5 Other Institutional Changes

With full privatization, the GSEs could expand beyond their normal businesses of purchasing and securitizing mortgages. They would be free to exploit potential cost savings from integrating primary market and secondary market functions under one management and overhead structure. Not only would they continue to hold and securitize mortgages, but they could also originate, service, and market mortgages and ancillary mortgage products. This trend to vertical integration of primary and secondary market functions is already emerging in the jumbo loan market with large mortgage companies, such as Countrywide.[214] In contrast, the GSEs are now legally prohibited from originating mortgages. However, they are becoming much more involved in the primary market with their development of automated underwriting and appraisal software for lender/servicers with which they do business. If the restrictions on the GSEs were removed through full privatization, Fannie Mae and Freddie Mac could be expected to accelerate their involvement in the primary market. One way for the GSEs to effect this would be to purchase existing companies with significant primary market presence.

One would also expect the recent trend toward consolidation in the mortgage banking industry to continue. Smaller mortgage companies would likely be acquired by the larger ones or switch to mortgage broker and correspondent relationships with large mortgage company conduits. The GSEs may have slowed this trend by helping smaller mortgage companies to remain competitive. Unless private conduits in a post-privatization environment are able to match the GSEs= quick access to price quotes and purchase commitments, the smaller mortgage companies may find it more difficult to compete with larger originators.

B.6 Can the Government Convince Investors That It Will Not Intervene?

Among the benefits of privatization are elimination of contingent taxpayer liability in the event of a GSE financial failure and more efficient pricing and resource allocation (see Chapter VII). However, these benefits and the market effects outlined above will only materialize if the Government can credibly repudiate its implicit commitment to backing the GSEs. Today the GSEs= debt securities and MBS are statutorily required to bear a disclaimer stating that they do not reflect a full faith and credit guarantee of the U.S. Government. Nevertheless, rating agencies and the investors they serve assume that in

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Vertical integration of origination, servicing, and securitizing mortgages not only avoids duplicative costs but improves incentives by holding all parts of the business accountable to one management structure. The effect of poor decisions then becomes internal to the organization, affecting the bottom line, and can be more easily laid to responsible parties.

the event of financial difficulty by one GSE, the Government would step in and assist. The question is whether, post privatization, the implications of the disclaimer would come to be believed, so that rating agencies and investors would judge the risks of GSE securities strictly on the intrinsic riskiness of the securities.

It is possible that withdrawal of agency status could free the GSEs from Government regulation while in practice leaving the Government vulnerable to ultimate tax expenditures that would preserve the GSEs from any financial disaster associated with the credit risk they bear. If investors and other market participants perceive that to be the case, then there might be little change in the conforming market, and the GSEs would likely become the dominant, if not only, participants in the jumbo market as well. This is the Atoo-big-to-fail@ argument.

There are, however, several factors that suggest that investors would come to be convinced that the Government would not stand behind Fannie Mae and Freddie Mac post privatization. The Federal Government=s repudiation of all explicit governmental benefits would cause the rating agencies to rate Fannie Mae and Freddie Mac as fully private firms. In addition, the GSEs would be facing competition in the MBS market from firms such as GE Capital and CountrywideCthey would no longer be the only two firms in the industry. This would reduce the likelihood that the Government would choose to bail them out in the future. The GSEs might also choose to enter new lines of business where they would not be the dominant firms.

B.7 Conclusion

Chapter II discussed the importance of the GSEs= agency status in the early development of the secondary market and the subsequent development of secondary market infrastructure that provided ready access to national and international capital markets. Now that the secondary market has developed, several economistsCincluding Lea (1990), Hermalin and Jaffee (1996), White (1996), and Kaufman (1996)Cagree that the need for Federal intervention has passed, and institutions and markets are sufficiently mature to function on their own. They argue that now that the investment had been made and a well-integrated secondary market infrastructure is in place with years of demonstrated success, the GSEs= agency status is no longer needed. In short, they believe that the private market is perfectly able to take it from here.

This chapter and Chapter VII discuss how market developments support this argument. Nevertheless, at the initial stages, there remains uncertainty about the effects of full privatization. Given the huge size of the GSEs= operations, an enormous demand would be placed on the private market to replace the credit enhancements currently provided by agency status. Even if private MBS were credit enhanced to >AAA= status, it is not clear whether current large holders of the GSEs= securities would care to hold such large amounts of private securities. Banks and thrifts may choose to alter their investment strategies if they are required by Federal financial regulators to hold additional capital against the GSEs= securities. In the absence of the GSEs= agency status, investors such as pension funds, life insurance companies, and, especially, foreign investors desiring to maintain a diversified portfolio, might choose to reduce their MBS holdings. Moreover, there is some question as to whether the large increase in subordinated debt necessary to credit enhance MBS could be placed in the market without a significant increase in mortgage rates.

C. Debt Costs and the Prospects for Secondary Market Portfolio Lending Under Full Privatization

The effect of privatization on the cost of debt to the GSEs is among the statutory study areas pursuant to FHEFSSA. Because of the unprecedented nature of GSE privatization, no definitive answer to this question can be given, but an estimated range of possible effects based upon the relevant economics literature is provided in this section.

If the GSEs were to lose their agency status advantage, they could no longer fund their highly leveraged portfolio at near Treasury borrowing rates. Thus the profitability of their portfolio funding operations would be reduced because of increased borrowing costs. As between privately issued debt and MBS, MBS would be the less-costly way to fund fixed-rate mortgages in a post-privatization environment.

C.1 Debt Costs

The GSEs= bonds are currently rated >AAA= by private credit rating agencies based primarily on their presumption of an implicit Federal guarantee of the GSEs= securities.[215] The effect is essentially to drive any default risk premium on the GSEs= debt issuances to zero. However, if the GSEs were fully privatized so that the presumption of a guarantee were to be eliminated, then the market would value the bonds based on the GSEs= intrinsic risk given their capitalization.

In the absence of agency status, a Standard and Poor=s study commissioned by the Treasury Department estimated that GSE debt would receive an >A= rating.[216] In addition to the lower bond ratings, the GSEs= debt instruments would likely not be given preferential treatment by other financial regulators. The decrease in demand and lower bond ratings would cause the price of their bonds to fall or, in other words, their borrowing costs to rise.[217]

See Chapter I for a discussion of factors underlying the presumption of a Federal guarantee.

U.S. Department of the Treasury (1991), pp. A-25 to A-35 (Freddie Mac) and A-36 to A-45 (Fannie Mae). Given the GSEs current capitalization levels as discussed in Chapter VII, S&P=s ratings are likely to still be valid.

Foreign investors also invest in GSE bonds and rely heavily on the Aagency@ status of the GSEs= bonds in making their investment decisions. The loss of Aagency@ status would likely lead to a decrease in demand for the GSEs= bonds.

Results of the study by Ambrose and Warga (1996) are consistent with a post-privatization increase in securities yields, at which the GSEs could borrow, in the range of 30 to 75 basis points. Ambrose and Warga compared portfolios of the GSEs= noncallable bonds to finance industry and corporate bond portfolios. Their results suggest that privatization would precipitate an increase in GSE bond yields from 32 to 46 basis points if the GSEs received an >AA= bond rating after being fully privatized, and from 47 to 72 basis points if they received an >A= rating.[218] These findings suggest that a 30 to 75 basis point range encompasses the likely increase in borrowing costs for the GSEs in the event of full privatization.

Callable Debt. Another factor that could cause the cost of debt to the GSEs to rise would be the reduction or elimination of callable debt issuance. In the 1990s, the GSEs significantly increased the amount of callable debt issued to fund portfolio operations. The issuance of callable debt helps the GSEs closely match durations of assets and liabilities, which lowers even further any prepayment risk on the asset side of the portfolio. However, the yield benefit of the agency status appears to be greater for callable than for noncallable debt. Ambrose and Warga present yield figures based on portfolios of callable GSE, finance industry and corporate bonds similar to the analysis for noncallable instruments summarized above. In three out of four cases defined by year of issue and type of bond, the callable debt-GSE debt spread was greater than the corresponding noncallable spread for >A= and >AA= issues.[219] There is anecdotal evidence from Wall Street brokers that the presumption of a guarantee is extremely important to traders, dealers, and investors in the secondary market. It is particularly important in the callable debt market, which is made up primarily of GSE obligations.

A significant impact from the higher debt costs is expected to be on the portfolio operations. The higher costs are expected to make portfolio operations not profitable and possibly cause the GSEs to cease portfolio operations, as will now be discussed.

C.2 Secondary Market Portfolio Lending

Fannie Mae and Freddie Mac have recently increased the proportion of mortgages that they retain on their balance sheets rather than securitize. Fannie Mae=s retained mortgage portfolio grew from 25.4 percent of all mortgages financed at year-end 1991 to

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Ambrose and Warga (1996), pp. 180B183. By controlling for the liquidity and tax effects, Ambrose and Warga test for effects from changes in risks in the mortgage markets, as measured by prepayment risk. Tables 1 and 2 of Ambrose and Warga=s study present yield estimates for both callable and noncallable debt, however, if the GSEs are fully privatized it is unlikely that the GSEs will be able to issue callable debt. Consequently, this analysis focuses on Ambrose and Warga=s noncallable results. Moreover, yield estimates based on >AAA= issues are not included here because of the high variance in estimates due to small sample size. Consistent with the Ambrose and Warga estimates, White (1996, p. 309) notes that Fannie Mae=s long-term debt currently trades at 55B60 basis points lower than an >A= rating would otherwise warrant.

The exception is finance industry bonds in 1985B90.

33.0 percent of all mortgages financed at year-end 1995. During the same period, Freddie Mac=s retained mortgage portfolio grew from 7.0 percent to 19.0 percent of all mortgages financed.

The major source of net revenue for the GSEs has been from their mortgage portfolio operations. As shown in Table 6.1, about 74 percent of Fannie Mae=s income was generated from its portfolio operations during the 1990s, even though it accounted for only 30 percent of Fannie Mae=s total business (total assets and outstanding MBS) in 1995. The percentage of gross revenues attributable to the portfolio business was about 50 percent for Freddie Mac, increasing to 57 percent in 1995, as shown in Table 6.2. Recognizing the potential for generating revenue, Freddie Mac increased its retained portfolio five-fold, from $21.4 billion in 1990 to $107.4 billion in 1995.

Whether the GSEs would be able to continue generating as much of their income from portfolio operations depends on the impact of privatization on the cost of debt and capital requirements; these two components are critical for determining the cost of funding a portfolio. Portfolio lending is intrinsically riskier than securitization because it entails interest rate risk for the conduit. The increased cost of debt would, at a minimum, lead to a substantial decrease in the GSEs= portfolio operations, net profits, and consequently, stock price. While there would be a rise in mortgage rates, it might not be enough to make a portfolio operation profitable for a fully privatized GSE. The increased borrowing costs for a private firm that assumes the interest rate risks associated with holding fixed-rate mortgages in portfolio would probably render the business unprofitable. It is likely to be less profitable than thrifts with their subsidized deposits and FHLBank advances. As noted earlier, it is not clear that mortgage rates would rise enough to make it profitable for thrifts to hold more fixed-rate mortgages in portfolio.[220] It is likely that MBS would be the markets= preferred method for allocating interest rate risks.

As discussed above, the GSEs could expect to incur higher debt costs from ending the GSEs= agency status. An increase in interest expenses from loss of agency status would substantially reduce the GSEs= net interest income. Ambrose and Warga estimate that the higher interest rate would raise after-tax interest costs by $1.37 billion to $2.75 billion for Fannie Mae and by $0.33 billion to $0.66 billion to Freddie Mac.[221] Using the lower bound, the higher debt costs would have reduced 1995 net income by 64 percent and 30 percent for Fannie Mae and Freddie Mac, respectively.

C.3 Implications: Reallocation of Interest Rate Risk Taking

MBS would remain the major vehicle for transferring interest-rate risk to investors. As discussed in Chapters II and VII, the MBS market is highly developed and would

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See Cotterman (1994), pp. 11-11 to 11-18, for a review of profitability of holding fixed-rate mortgages by thrifts.

Ambrose and Warga (1996), pp. 185, 187.

continue to operate if the GSEs were fully privatized. There would be a substantial reduction, if not elimination, of the GSEs= portfolio operations (and interest rate risk), which would be offset to an unknown degree by increased portfolio holdings by banks and thrifts.

But what would be lost to the marketplace were the GSEs no longer able to fund mortgages with portfolio investment? In general, not much. In the past, GSE portfolio financing could make a difference to the market when depositories were subject to disintermediation. However, with the maturation of the MBS market as well as deregulation of interest rates, a direct alternative avenue to the capital market exists. McGarvey and Meador (1991) have shown that with deregulation of banks and thrifts and establishment of a well-integrated MBS market, the housing market no longer appears subject to short-run interruptions in the flow of credit. The relative stability in the market for single-family housing, despite the thrift crisis, is ample evidence of this.

It matters little to the average borrower whether mortgage credit comes through a pool held in portfolio or a pool backing MBS. The borrower=s rate and price are the same. The only exceptions might be instances where the borrowers or mortgages might be considered too unusual for regular MBS investors, such as custom products or specialized affordable lending programs for which there is little experience. In such instances the agency status advantage and portfolio funding could allow a loan to be made at a lower price or rate than would otherwise be possible.

D. Effect of Full Privatization on Mortgage Rates

There is considerable evidence that the growing role of the GSEs in the 1980s caused interest rates to be lower in the conforming mortgage market than they are in the nonconforming market. The lower conforming mortgage rates were partially due to the GSEs= funding advantage that, of course, would be taken away if they were fully privatized. Unfortunately, analysts have not reached full agreement on the funding advantage=s effect on current and past interest rates, which makes it difficult to estimate the effects of privatization on mortgage rates. This section reviews the research that has been conducted as well as the various interpretations that have been offered as to why interest rates are lower in the conforming mortgage market.

D.1 Research on Mortgage Rates

There have been several research studies sponsored by HUD and others on the GSEs= effect on mortgage rates. The studies have focused on the effective interest rate differential between conforming conventional mortgages and jumbo mortgages.

The first of the studies, by Hendershott and Shilling (1989), analyzed a sample of conventional fixed-rate loans originated by California savings and loans in 1978 and

1986. After controlling statistically for other factors, they found that conforming loans were only 3 basis points lower than jumbo loans in 1978, when GSE securitization accounted for only a small share of total originations. By 1986, when the GSEs dominated the conventional conforming market, the conforming interest rate was 30 basis points below the rate on loans far above the conforming limit, and 15 basis points below the rate on loans slightly above the conforming limit.

A HUD-sponsored study by ICF, Inc. (1990) found smaller differentials based on loans originated in 1987 in seven large States. While the conforming loans had interest rates that were 23 basis points below large jumbo loans, the differential was an insignificant 10 basis points below small jumbo loans.[222]

Cotterman and Pearce (1996) extended the previous studies, examining fixed-rate loans originated from 1989 to 1993. They examined loans originated in a number of large States by mortgage banks as well as by banks and thrifts. They estimate that conforming mortgages have interest rates 25B40 basis points less than jumbos, other things held constant. The differential declined over the sample period and declined with an increase in the securitization of jumbo loans.

Gatti and Spahr (1995a) take a different approach. Rather than measuring the conforming loan differential, they use an option pricing approach to determine the value of agency status to Freddie Mac. They estimate that the value of agency status to Freddie Mac is 8.3 basis points.[223] However, this calculation does not appear to take into account second-order factors influencing the supply and demand of GSE MBS, which, in addition to the loss of agency status per se, may have a significant bearing on the effect of privatization on mortgage rates. These second-order effects include factors such as the incidence of increased GSE MBS issuance costs, changes in risk-weighting under FIRREA, scale economies and liquidity effects with regard to both GSE and nonagency MBS, the cost of private credit enhancements, and the overall efficiency of the MBS market. These factors are all reviewed in the next section. The omission of factors such as these may explain a significant portion of the difference between the Gatti-Spahr estimate of the value of agency status and the estimates of the conforming loan differential cited above.

D.2 Interpretation and Implications

The conforming loan differential reflects factors that differ systematically between jumbo and conforming loans: the absence of agency status in the jumbo sector, and differences in technology and costs as between the two sectors. The latter differences

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Large jumbos are those whose loan size is more than 15 percent over the conforming loan limit, while small jumbo loans are those with loan sizes less than 15 percent over the conforming loan limit.

Gatti and Spahr (1995a), p. 29.

include such factors as economies of scale in the GSEs and the different risk-weighting treatments accorded to conforming and jumbo MBS in risk-based capital standards as imposed on GSEs and depository institutions (see Section B.3, above).[224]

To the extent that the factors that underlie the conformingBjumbo rate differential are similar to the factors that would affect the conforming rate following full privatization, the 25B40 basis point estimate represents a first approximation to the effect of privatization upon mortgage rates. Projecting the effect of full privatization on mortgage rates can therefore be based on an analysis of the factors underlying the conforming loan differential and the extent to which they are relevant to the full privatization issue. These issues will now be discussed, along with additional factors that could cause the post-privatization rise in mortgage rates to either exceed or fall short of the 25B40 basis points Cotterman-Pearce figure.

The factors reviewed below are essentially the same considerations that led Cotter-man and Pearce to caution that, because of the complexity of factors influencing the conforming loan differential, their 25B40 basis point estimate should be interpreted only as a measurement of the effect of a modest change in the GSEs= operations, such as reducing the conforming loan limit by 10 percent. They point out that privatization Awould require large adjustments in the financial markets, and the conforming loan differential might not a good guide to the changes in mortgage rates under these conditions.@[225]

Cost of Private Credit Enhancements. If the demand for private credit enhancements such as subordinated debt is less than perfectly elastic, Cotterman and Pearce point out that privatization would push the market to absorb significant additional quantities of credit enhancement products, bidding up their price and ultimately contributing to a further rise in mortgage rates.[226] For example, privatization could result in a five-fold increase in the amount of AB@ paper which is heavily used in the senior/subordinated structures of private label MBS issuers, with the potential for significant adverse liquidity and price effects. To the extent that this occurs, the conforming loan differential would tend to understate the effect of full privatization.

Incidence of GSE Cost Increases. As will be discussed in Chapter VII, there is evidence that the GSEs do not pass the full benefit associated with the presumption of an implicit Government guarantee to borrowers in the form of lower mortgage rates. A portion of this subsidy accrues to the GSEs themselves and their stockholders. Given that the benefits associated with agency status are not fully passed through to borrowers, it follows that the cost associated with the loss of agency status might not be entirely shifted

This discussion follows that of Cotterman and Pearce (1996), p. 156.

Cotterman and Pearce (1996), p. 102.

See Cotterman and Pearce (1996), pp. 156f. See also Section B.4 of this chapter.

to borrowers, and the magnitude of post-privatization rise in mortgage rates would tend to be correspondingly reduced.

The GSEs= Degree of Market Dominance. Moreover, competition for mortgage business among the GSEs and other prospective holders and securitizers of conforming conventional mortgages would also limit the capacity of the GSEs to pass costs associated with the loss of agency status on to borrowers. The GSEs are the largest institutions among the businesses and individuals that establish the market supply of conforming mortgage loans; the others include depository institutions, investors in the Ginnie Mae pools that securitize FHA and VA mortgages, several government agencies, and a variety of others. In the single-family market the two GSEs together hold or securitize 35 percent of the mortgagesCfar larger than any other holder or securitizer. This gives them a degree of market power and potential ability to affect mortgage rates. (In the multifamily market their share is 12 percent; this is also large compared to other market participants, but less of a dominant share.) Ultimately, the degree of mortgage interest rate rise would be determined by the rates offered by the GSEs and other mortgage loan suppliers, consistent with any reductions in the volume of demand for mortgage loans. To the extent that privatization raises the degree of competition in the MBS and mortgage lending industry, it limits the extent to which the GSEs can shift privatization-caused cost increases to borrowers in the form of higher interest rates. Thus, the conforming loan differential would overstate the magnitude of any post-privatization rise in mortgage rates.

Scale Effects. Shilling (1996) argues that the conforming loan differential is due to both agency status and substantial cost savings attributable to GSE economies of scale. In support of this argument, he notes that two studies estimated the effect of agency status to be lower, when the value of agency status was measured by comparing the value of the GSEs= stock and net worth.[227] Ambrose and Warga (1996) make similar comments about the effects of the GSEs= volume of business on liquidity. To the extent that GSE scale economies and liquidity of GSE MBS are preserved, the observed conforming differential could overstate the magnitude of a post-privatization rise in mortgage rates.[228]

Loan Size Effects. A further complication with the conforming loan differential is that jumbo and conforming loans differ not only with regard to their eligibility for acquisition by the GSEs, but also with regard to loan size. ALoan size effects@ include differences between jumbo and conforming loans with regard to risk, servicing and origination costs, and prepayment behavior. Jumbo loans could be riskier, and therefore

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See Gatti and Spahr (Shilling cites the 1994 version) and Cook and Spellman (1992).

As discussed in Section B.1 of this chapter, it appears unlikely that privatization would have significant, large scale, rapid impacts on scale economies or MBS industry market structure, at least in the short run. To the extent that GSE MBS liquidity derives from investor familiarity (rather than factors associated with agency status such as favorable treatment under FIRREA), liquidity would also be expected to remain largely unaffected by privatization.

more expensive, than conforming loans, because of the greater geographic concentration of jumbo loans and because of the effect of the thinness and volatility of the market for expensive homes upon the likelihood of default and upon foreclosure costs. On the other hand, servicing and origination costs per dollar of loan value are lower for jumbo loans, tending to reduce jumbo rates in relation to conforming rates. The value of a borrower=s prepayment option is larger for jumbo loans, tending to cause a relative increase in jumbo rates.[229] A priori, therefore, there are reasons to suppose that jumbo interest rates could be either higher or lower than conforming rates, aside from any effect of agency status on the pricing of conforming loans. Using 1978 data, Hendershott and Shilling (1989) find that Asize effects@ on jumbo loans are, on balance positive; that is, they cause the conforming differential to overstate the magnitude of a post-privatization rise in mortgage rates. Hendershott and Shilling estimate the magnitude of this effect at approximately 5 basis points.

Liquidity Effects. Van Order (1989) reasons that the interest rate differential between conforming and jumbo loans derives not only from the GSEs= agency status but also from the added liquidity of the GSEs= MBS, which trade in a market handling roughly 5 times the volume of the jumbo MBS market.[230] The large size of the conforming market relative to the smaller jumbo market makes the securities easier to sell, because there is more information in the market about the securities, and an individual deal will have a smaller impact on the price. The magnitude of any post-privatization rise in mortgage borrowing costs would therefore be greatly influenced by the effect of privatization on agency MBS liquidity. To the extent that GSE MBS liquidity derives from factors (such as investor familiarity) that are unlikely to be significantly affected by privatization, the conforming loan differential would tend to overstate the magnitude of any post-privatization rise in mortgage rates. However, investor familiarity with MBS could be challenged for a period of time after privatization, during which a temporary decline in liquidity could result in higher GSE borrowing and MBS issuance costs, contributing to a greater rise in mortgage rates than that indicated from the conforming loan differential.

Capital Requirements. The differences between risk-based capital requirements of thrift and banks as applied to holdings of mortgage-related securities are described in Chapter I and discussed above in this chapter. Assuming no change in these

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The value of a mortgage loan to a lender/investor is less, the sooner it is repaid, other things being equal. Jumbo borrowers tend to prepay more quickly than conforming borrowers because (a) the savings are greater;

and (b) jumbo borrowers are viewed as more sophisticated in exercising their refinancing options. Staples (1996), p. 11. A priori, therefore, one would expect to find that lenders will charge more for jumbo than for conforming loans in order to compensate for more aggressive refinancing/prepayment behavior among jumbo borrowers, other things being equal.

Van Order (1989), p. 20. The enormous growth in the GSEs= operations in the 1980s brought liquidity to the conforming conventional market. As of the end of 1995, the $1 trillion outstanding in Fannie Mae and Freddie Mac MBS was nearly 30 percent of the level of outstanding Treasury securities. Private-label MBS comprised slightly more than $200 billion. The effect of this growth in liquidity on interest rates is evident from the fact that the conforming/jumbo differential was very small in 1978 when the secondary market was small (Hendershott and Shilling, 1989). However, it is difficult to quantify the separate roles of liquidity and the GSEs= agency status on interest rate differentials.

accompanying full privatization, the difference between conforming and jumbo interest rates should reasonably well capture the magnitude of their potential effect with full privatization. If the capital requirements were to increase (based, for example, on new analysis of the intrinsic riskiness of these securities), this would tend to increase the magnitude of any post-privatization rise in mortgage rates.

Loss of Implicit Government Guarantee. Full privatization and the loss of agency status would result in higher borrowing and MBS issuance costs to the GSEs assuming investors would no longer presume there to be a Government guarantee on these securities after full privatization. It is possible (albeit not capable of empirical confirmation) that investors attach importance to the presumed guarantee as a symbol of the Government=s ultimate commitment to market stability as well as the safety of their principal and underlying collateral. If so, and if full privatization of Fannie Mae and Freddie Mac would definitively alter investors= presumptions, then the 25B40 basis point estimate could be an underestimate of the effect of full privatization.

Long-Run Efficiency Gains. Short-run effects of privatization on mortgage rates should be distinguished from long-run effects. Over time, Cotterman and Pearce observe that increased liquidity in the nonagency MBS market could result in cost reductions, contributing to lower interest rates.[231] By enhancing the geographic diversity of nonagency mortgage pools, privatization would reduce the credit risk associated with these pools, lowering the cost of credit enhancements and ultimately resulting in lower mortgage rates not only for Ajumbo,@ but Aconforming@ products as well.[232] Other efficiency gains could derive from GSE entry into the jumbo market or vertical integration into the origination and servicing sectors of the mortgage finance industry.[233] Further, post-privatization reductions in mortgage rates for jumbo mortgages would be the expected consequence of increased investor familiarity with nonagency MBS products, compounded by the elimination of institutional barriers between the jumbo and conforming sectors of the mortgage loan and MBS markets, which would expand the scope for exploitation of scale economies by nonagency participants.

Conclusion. Privatization would likely result in a rise in interest rates on 30-year, fixed-rate conforming mortgage loans. This increase would result not only from the loss of agency status per se, but of a host of factors influencing the supply of funds to the conduits, and the technology of the conduits= enterprise.

Because it includes the effects of FIRREA risk-weighting of GSE MBS as well as agency status, the differential between conforming and jumbo fixed-rate mortgage loans

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Cotterman and Pearce (1996), p. 157.

Sixty percent of nonagency volume is currently comprised of California mortgages. Staples (1996), pp. 11. Nonagency MBS issuers would presumably enter the Aconforming@ market following privatization.

On current trends regarding vertical integration, see Section B.5 of this chapter.

is a useful starting point for predicting the rise in mortgage rates that would result from privatization. Taking into consideration the range of factors causing it to over- or under-state any post-privatization rise in interest rates, empirical results regarding the conforming differential can be interpreted as suggesting that conforming rates would rise by approximately 25 basis points, although given uncertainty about many of factors discussed above, there is corresponding uncertainty about the precise magnitude of the effect. For reasons discussed above, the rise in rates is likely to be greater during an initial adjustment period than in the long run.

E. Implications for Fannie Mae and Freddie Mac

Full privatization would affect the revenues and expenses of the GSEs. This section reviews the implications of full privatization on the main sources of income and the future earnings prospects for the GSEs and their likely effect on stockholders= interests.

Higher Funding Costs. As discussed previously in this chapter, the loss of the GSEs= agency status would cause a reduction in the demand for debt and MBS issued by the GSEs. GSE notes and debentures which are currently rated >AAA= because of agency status would be downgraded, probably to >A,=[234] resulting in higher borrowing costs. The GSEs might well respond by attempting to raise the status of their issuances by means of credit enhancements or higher capital levels, but these efforts would also result in significantly higher costs than the GSEs enjoy today.[235] Demand for GSE MBS would be further reduced by the likely termination of favorable risk-weighting. Privatization-imposed cost increases have been estimated at 30B75 basis points for long-term, noncallable debt and 30B35 basis points for GSE MBS.[236]

The effects of privatization would be especially far-reaching in the area of callable debt, which is, at the present time, primarily comprised of GSE issuances due to the premium placed on agency status by investors. If the issuance of callable debt became significantly more difficult as a consequence of privatization, this could, in conjunction with rising GSE debt costs, severely curtail the portfolio activities of the GSEs. Without easy access to the callable debt market, the portfolio acquisition of additional fixed-rate mortgages would subject the GSEs to significant interest rate risk. A significant reduction in the level of mortgage portfolio investment activity would appear to be a likely consequence.

Privatization would also have significant adverse consequences for GSE equity

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See Section C.1 of this chapter.

The credit enhancement could take the form of overcollateralization, pool insurance, corporate guarantees, or using a senior-subordinated structure. Each of these forms of credit enhancements would result in higher costs to the GSEs.

See Sections B.3 and C.1 of this chapter.

share values, with the magnitude of this effect depending in part on the manner in which privatization is implemented.

Guarantee Fee Revenues. Compounding the reduced revenues from the portfolio operations, the GSEs would be expected to generate lower revenues from MBS operations under privatization. The lower revenues would result primarily from increased competition with a reduction in market share. This reduction depends on the final composition of the secondary market, which cannot be predicted since it depends, in part, on whether economies of scale exist within the market (see Section B above). To a degree, the lower revenues from reduced market shares would be offset by an increase in the guarantee fee charged by the GSEs, but the effect on revenues would depend on the size of the fee increase and the price elasticity of MBS.

New Business Line Revenues. A countereffect to the price reduction would be the increased flexibility of the GSEs to enter new lines of business. These new lines of business represent additional areas for growth by the GSEs that would translate favorably with respect to stock prices; for example, originating and servicing loans. As noted by Hermalin and Jaffee (1996), copying of new program and product lines by competitors would limit the ability of the GSEs to capture monopoly rents from new program and product development, as they probably have in the past.

Other Expenses. Other costs that the GSEs would incur after privatization include the removal of the GSEs= exemptions from State and local income taxes and SEC securities regulations. Lifting these exemptions would also raise the GSEs= costs and lower their profits; however, this would be capitalized into the value of the stock and would be part of a one-time change in the stock price.[237] Similarly, the GSEs may incur expenses for an increase in the provision for default losses, if their current provision is too low relative to the risks faced by the GSEs. Also, as noted in Section D.2, the GSEs will incur additional credit enhancement costs associated with getting ratings for their MBS.

Stockholder Interests. In general, the value of stockholders= shares in an enterprise undergoing significant structural change depends on the effects of the change on future earnings prospects of the enterprise and any effects of the change on the riskiness in future investments in the GSEs relative to other companies. As between these two, the broad categories of factors that could affect future earnings prospects are relatively clear, so the following discussion concentrates on these.

The future earnings prospects following full privatization that would be relevant to stockholders include earnings on both the liquidating portfolio and ongoing business. As discussed in Chapter VIII, the liquidating portfolio would be subject to continued

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Expenses incurred by the GSEs that would not be expected to change significantly under privatization include: foreclosed property expenses, administrative expenses, and provisions for Federal income taxes.

regulation and to limitations on access to its capital until the liquidation was completed, but these would eventually terminate, so the associated earnings would support the stock value. There could be effects associated with the time when management could obtain access to the capital, for the benefit of stockholders, depending on the details of the plan of privatization.

Overall, the GSEs= stock prices are likely to fall, at least at the outset, due to the potential instability of the GSEs= market positions, including the introduction of new competitors, and less portfolio profits due to increases in borrowing costs. To the extent that the agency advantages of the GSEs have enabled them to obtain returns above what they would have earned in a more competitive environment, an aim of full privatization would be to reduce this possibility, and to the extent that this is successful, future returns to equity would be reduced. Chapter VII discusses this possibility further.

If market yields on the enterprises= debt securities rise, as postulated above in this chapter, expected returns to equity would be reduced. It is possible that increased debt yields would prompt a relative shifting from debt to equityCin effect, increasing the level of capitalization to raise ratings on debt securities. If the fully privatized enterprises choose to hold more capital relative to debt than they would as GSEs (taking account of the prospects of future specification of capital requirements by OFHEO), this could tend to reduce returns to equity.

Such effects might be offset by enhanced earnings prospects associated with the removal of line-of-business restrictions and certain regulatory obligations on the enterprises. In particular, the possibilities of integrating primary and secondary market activities, diversification into related lines of business that the enterprises would be unable to enter as GSEs, and entry into financing of jumbo-level securities would tend to raise the revenue prospects of the enterprises.

A stock price decline would imply losses for stockholders who bought their shares relatively recently and paid market price premiums to previous stockholders based on the prospect of a continued share in the GSEs= profitability based on agency status. However, to the extent that only part of any agency status advantage is currently capitalized into the stock prices, the prices would not fall by as much as might occur had the full advantage been capitalized.

F. Conclusions

The GSEs= loss of agency status and other benefits would cause an increase in mortgage rates and a decrease in mortgage funding as the cost to the GSEs of issuing debt and MBS rose. The increase in mortgage rates would be driven by a reduction in demand for GSE MBS and debt securities, although there would be some offsetting effects from private conduits entering the conforming market and from GSEs entering the jumbo market. The increase in mortgage rates is estimated to be about 25 basis points, although the numerous uncertainties surrounding the market impacts of full privatization make this an approximate estimate.

There is uncertainty about many of the institutional effects of removing Federal sponsorship from the secondary market reviewed in this chapter. These include the degree to which the secondary market would become more fragmented as jumbo conduits enter the conforming market, the degree to which mortgage funding would shift to depositories and FHA, and the costs of credit enhancements that the GSEs would face following full privatization. Much of the uncertainty relates to the large scale of the GSEs= business that would be affected by the change. Given the large size of the GSEs, markets would be subject to potential strains particularly at the outset, soon after the removal of agency status.

The efficiency gains in the mortgage markets from full privatization are discussed in more detail in Chapter VII.

CHAPTER VII

FULL PRIVATIZATION AND THE EFFICIENCY OF THE MORTGAGE FINANCE SYSTEM

A. Introduction and Main Findings

Fannie Mae was chartered as a GSE in 1968 with public-purpose objectives specified in its Federal charter. These purposes included increasing liquidity in the housing finance system, extending mortgage credit to those who would otherwise be unable to obtain it, and providing stability to the secondary mortgage market. Although these objectives have been re-articulated since thenCin 1989 when public purposes were also first specified for Freddie Mac, and then in 1992Cthe principal themes have remained unchanged.[238] The privatization question may be interpreted as a question regarding the continued relevance of the public-purpose objectives of the GSEs. This chapter considers a series of factors that bear upon the assessment of overall merits of privatization relative to a status quo GSE arrangement.

Chapters IV and V have already described some of the factors relevant to the assessment of the status quo arrangement as compared to full privatization. They discussed the particular advantages of the GSE arrangement relative to public objectives for promoting homeownership opportunities and expanding the reach of mortgage finance institutions into underserved market areas.

Chapters II and VI discussed additional factors relevant to full privatization. Chapter II described the major progress of the broad mortgage finance system that has occurred in the past 25 years, specifically, the creation of efficient linkages between the mortgage market and broader capital markets facilitated by the GSEs. Chapter VI indicated that there is uncertainty concerning the potential effects of full privatization, and the possibility that costs of mortgage borrowing could rise, especially for a period of time soon after full privatization is implemented.

This chapter considers a third broad group of factors relevant to the privatization issue, related generally to efficiency of the GSEs in the context of the larger mortgage finance system. Many of these factors are presented in other writings as factors that generally support the idea of full privatization. Specifically:

! It is argued that Amarket failures@ that once justified the GSEs= role have largely been rectified and consequently do not exist in today=s secondary market. Some proponents of full privatization claim that the secondary market system, which is

The 1968 public purposes and 1989 and 1992 changes to them are reproduced in the appendix to this chapter.

now large, advanced, and completely developed, can stand on its own.

! It is argued that the funding advantage the GSEs derive from their agency status is not completely passed through to borrowers but, rather, is partially captured by the GSEs and their stockholders. It is argued that full privatization, by fostering a greater degree of competition, would end the GSEs= ability to capture some of the value of their funding advantage for the benefit of shareholders.

! It is argued that under full privatization taxpayers= exposure to implicit contingent liability associated with the possibility of insolvency of Fannie Mae or Freddie Mac would be reduced.

! It is argued that after full privatization strong incentives for rapid innovation in the mortgage finance system would continue to exist.

! It is argued that significant regulatory cost savings could be achieved by fully privatizing the GSEs.

Issues underlying these claims are considered in turn in the following five sections of this chapter.

Main Findings. Many of the market failures that once justified the GSEs no longer exist. Nationwide credit shortages, regional credit imbalances, and an undeveloped secondary mortgage market can no longer be used to justify government support of the MBS market. Rather, the main rationale for maintaining the current GSE arrangement is to provide homeownership opportunities to borrowers who traditionally have not been served by the mortgage finance system. It appears that the funding benefits that the GSEs= gain from their agency status are not all passed on to homeowners. While the implication of contingent liability associated with the GSEs= operations is a serious concern for taxpayers, OFHEO has been created to monitor and control the GSEs= financial safety and soundness.

The chapter reaches mixed conclusionsCthat some of the points raised by the proponents of privatization are relevant, while others require qualification. It is important to bear in mind the conclusions of Chapter VI, that uncertainty remains about several of the effects of removing Federal sponsorship from the secondary market, given the large share of the market represented by the GSEs. Increased market volatility would be particularly likely initially after full privatization became effective, as the industry adapted to the removal of the GSEs= agency status. The final section of the chapter recapitulates the main findings from this and previous chapters in the report that relate to the assessment of full privatization.

B. Market Failure Rationales for Government Support of the Secondary Market

Markets cannot always be relied on to allocate resources efficiently. An economy with freely operating markets may provide some goods or services in excessive amounts and others in amounts that may be deemed insufficient, or it may even fail to make some goods or services available at all, even when people would be willing to pay the costs of providing them. Such so-called Amarket failures@ can generally be attributed to one or more of the following conditions: public goods (where some benefit is provided to many persons collectively), monopoly power possessed by market participants, costly information, imperfect information, and externalities (when one person=s or business=s consumption or production activity affects another person or business). In any such market situation, there is the possibility that government intervention could help achieve a more efficient outcome.[239]

At least five particular types of market failure have affected mortgage finance markets in the past or present and have been suggested as possible justifications for the GSE arrangement in the mortgage finance market: nationwide credit shortages and disintermediation, regional credit imbalances, thin markets, asymmetric information, and externalities.

Nationwide Credit Shortages and Market Instability.[240] As discussed in Chapter II, credit shortages caused by depositors withdrawing their funds from thrift institutions during periods of high interest rates were a major reason Congress extended Federal sponsorship to the secondary market. However, Regulation Q was completely phased out by 1986, freeing depository institutions to pay higher interest rates to attract depositors in times of rising interest rates.[241] Consequently, disintermediation and credit shortages resulting from Federal regulations can no longer be used to justify Government support of the secondary market.

Under full privatization there would no longer be a charter mandate requiring the GSEs to Aprovide stability in the secondary market for home mortgages.@ The GSEs contend that they reduce cyclical swings in housing market activity, but this has not been demonstrated statistically.[242] However, given the development of the secondary mortgage market, it is unlikely that full privatization would lead to the cyclical shortages in mortgage credit that existed during the 1960s and 1970s.

Regional Credit Imbalances. A related type of market failure concerns regional

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While government intervention may help reduce or eliminate the effects of such market failures, government intervention is not always required.

Woodward (1988) further discusses this issue and the rationale relating to regional credit imbalances.

Regulation Q set a ceiling on the interest rate depositories could offer on deposits. When the market interest rates rose above this ceiling, funds would be withdrawn from depository institutions and invested for higher returns elsewhere. One consequence was a reduced supply of funds for financing mortgages.

See, for example, Fannie Mae (1996d), pp. 331B332. Kaufman (1985) summarized previous studies indicating that while Regulation Q was in effect Fannie Mae performed a countercyclical role; but he concluded, based on econometric analysis on a later, post-Regulation Q business cycle, that Fannie Mae=s countercyclical effect on housing starts and mortgage credit availability was Anot meaningful@ (p. 68).

mismatches in the supply of, and demand for, mortgage credit. Prior to the rise of securitization, at a time when mortgage lending was dominated by depository institutions, mortgage lenders were largely dependent on locally generated funds, and this led to shortages of credit in fast-growing areas and surpluses in slow-growing areas.

This market failure has been remedied through the rise of nationwide lending and insuring institutions and the development of the mortgage-backed security. These developments made it possible for lenders to originate mortgages in areas experiencing temporary shortages of depository inflows. This moved capital to areas where it was most needed and helped make the mortgage finance system more rational and more liquid. In addition, interstate banking has developed and spread throughout the United States.[243] This means the banking system is no longer tied to regional deposit flows, narrowing regional differences in mortgage flows and reducing the need for the Government=s support of the secondary market.

Full privatization could contribute to greater regional differences in interest rates than exist at present, although the effects here are expected to simply reflect differences in credit risk and to be minimal given the development of a nationwide lending system. There would no longer be a charter mandate requiring the GSEs to promote Aaccess to mortgage credit throughout the Nation.@ The GSEs contend that in accordance with this mandate they have supported declining markets such as the oil patch States during the 1980s and California during the 1990s. However, the degree to which the GSEs can achieve such support depends importantly on the presence of private mortgage insurance companies (PMIs) in distressed housing markets, since the loans they purchase must have mortgage insurance if the loan-to-value ratio (LTV) is greater than 80 percent. Chappelle (1988) discusses the hasty PMI retreat from the insured housing market in the oil patch states in 1985 and 1986.[244] Once PMIs exit a housing market, Fannie Mae and Freddie Mac are unable to absorb high-LTV loans. Thus, it is not clear that privatizing the GSEs would have any significant impact in declining markets.

Thin Markets.[245] Before the Government-sponsored market for MBS was established, the MBS market was very small and consequently MBS were not very marketable or liquid.[246] Investors were reluctant to hold securities that could not be readily traded. In the early stages of the MBS market, the GSEs with their agency status and their standardized product offerings could attract a larger group of investors than a fragmented private MBS market could.

The Riegle-Neal Interstate Banking and Branching Efficiency Act of 1994 lifted restrictions on interstate banking implying that most financial institutions would no longer be intimately tied to local deposits to fund housing finance.

Chappelle (1988), p. 34.

Hermalin and Jaffee (1996, pp. 295B296) further discuss this issue and the rationale relating to asymmetric information.

As noted in Chapter II, only five percent of mortgage originations were securitized in 1970.

Market changes that have remedied this problem include the following:

- ! The secondary market now has a highly developed institutional infrastructure. Large banks with nationwide origination and servicing networks now serve the entire country. Private mortgage insurance is readily available from well-capitalized and diversified firms. Rating agencies have gained much experience and expertise quantifying the credit risk on MBS issued by private conduits. Wall Street firms have developed information systems and models for pricing MBS.

- ! The mortgage securities market offers a wide variety of products and structures that support the efficient allocation of interest-rate, prepayment, and credit risks.[247] CMO securities with sophisticated tranche structures match maturity preferences of a range of investors. Senior/subordinated structures are available to allocate credit risk to those investors willing to assume it.

- ! The growth in the jumbo securitization market indicates the potential for securitization in the absence of agency status.

Many analysts argue that a principal rationale for the GSEs and their agency status was to overcome the reluctance of private enterprise to make the Alumpy@ start-up investment in the institutional infrastructure that would ultimately benefit markets with lower information costs and increased liquidity. The above points suggest that this problem has now been surpassed and the mortgage finance system is now better equipped to operate efficiently without the GSEs= agency status.

Asymmetric Information. Another cause of market failure, asymmetric information, refers to the difficulty faced by capital market investors in mortgages in assessing the credit quality of their investments. When investors cannot easily observe the risk and return of an asset, they may heavily discount it.[248] By creating securities backed by a geographically diversified pool of mortgages with similar characteristics, the GSEs reduce their credit risk and therefore their guarantee cost in issuing MBS, a savings which is at least partially passed on to borrowers.[249]

The GSEs demonstrated the advantages of risk sharing through mortgage pooling. Their success encouraged the development of a secondary mortgage market for jumbo mortgages. In addition, national mortgage insurers, lenders, and private conduits now control credit risk by diversifying their mortgage holdings. Thus there is no reason to suppose that privatization would eliminate the benefits derived from mortgage pooling.

Markets with these characteristics are referred to by economists as Acomplete@.

Hermalin and Jaffee (1996), p. 295.

Mortgage default risk resulting from asymmetric information associated with the performance of regional economies can be mitigated through geographically diversifying mortgage pools.

The GSEs have also contributed significantly to the reduction in informational asymmetries by the development and nationwide introduction of standardized underwriting guidelines, loan application forms, loan documents, seller/servicer acceptance guidelines, and other provisions that enhance the confidence of the investment community in GSE mortgage-related securities. These standards greatly reduce the time and expense that investors would otherwise incur gathering and evaluating detailed information regarding loan, borrower and lender characteristics as well as recourse in the event of default.

By demonstrating the effectiveness of techniques such as mortgage pooling and standardized guidelines and forms, innovations pioneered by the GSEs have spread throughout the mortgage lending industry. Given the benefits of standardization to the industry, the low cost of continued standardization, and the significant expense that would be involved in developing more customized, firm-specific forms and procedures, it appears highly unlikely that privatization would precipitate the return to an earlier, less efficient, and more expensive way of doing business.

Externalities. Homeownership has long been a key aspiration of Americans and thought to provide positive external benefits to society.[250] Homeownership is a major tie helping to bind the social fabric and keep it from unraveling. As one of the most common forms of property ownership accounting for more than half the wealth of most homeowners, it promotes community and social stability by reducing disparity and increasing the number of stakeholders in society. As noted in Chapter IV, it also reinforces virtues of self reliance and responsibility.

The private market will not factor external benefits of homeownership into decision making. A fully privatized mortgage market would neglect these external benefits and the outcome would not be an efficient one. There are numerous other ways of channeling government support to a more efficient outcome in the presence of external benefits to homeownership. The GSEs represent one alternative which was designed to address regional disparity in mortgage credit availability and can be adapted to address disparity with respect to specific locational and borrower classesCthat is, underserved areas and borrowers. Chapter IV discusses the advantages of the current GSE system and how the housing goals mechanism can be utilized to remedy locational and borrower credit disparities.

Conclusion. The market failures identified above have been relevant to mortgage finance in the past and have provided the rationale for the agency status of the GSEs. With the exception of the externality issue, compelling arguments have been advanced that these instances of market failure are less relevant today than they were prior to the

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See U.S. Department of Housing and Urban Development (1995a).

development of GSEs= MBS and the associated institutional infrastructure including private mortgage insurance and sophisticated MBS evaluation technology. Changes in the regulatory environment including the elimination of Regulation Q and the rise of nationwide banking appear to have further eroded the market failure argument advanced at different times in favor of the continuation of agency status. From the standpoint of a market failure analysis, however, the positive externalities associated with homeownership appear to remain a relevant factor in support of the continuation of programs to subsidize homeownership among lower income households, whether through GSE status or some other means.

C. Effects of Protected Duopoly Position of the GSEs

Fannie Mae and Freddie Mac are the two enterprises that have been specifically chartered to act as financial conduits between investors and primary lenders of conforming conventional mortgages, restricted from diversifying into businesses other than acting as secondary market conduits, and provided with the statutory benefits and obligations enumerated in Chapter I. This arrangement provides sufficient financial advantages as to make entry into their same line of business impossible for other enterprises.[251] This arrangement is a Aprotected duopoly.@

The two GSEs together have a degree of potential influence on both the yields they pay to investors and on mortgage interest rates, given their market positions in securities markets (particularly those for MBS and callable debt) and as purchasers of mortgages. As issuers of MBS and mortgage-related debt securities, they accounted for 65 percent of the market, competing only with issuers of Ginnie Mae securities (23 percent) and private conduits (12 percent). As purchasers of mortgages, they accounted for 36 percent of the market for single-family mortgages, competing as funders of mortgages with banks and thrifts (31 percent), originators of FHA mortgages to be securitized through Ginnie Mae (13 percent), and others.[252] Fannie Mae=s and Freddie Mac=s annual volumes of securities issued are far larger than the volumes for any other issuer of mortgage-related securities, and the GSEs= annual volumes of single-family mortgages purchased are far larger than the purchase volume of any other individual purchaser of single-family mortgages for holding or securitization.

Because of this market position, the GSEs are able to Atacitly collude@ to increase profits,[253] which in turn inhibits pricing efficiency.[254] An implication is that as a result of the protected duopoly status of the GSEs, the full benefits of agency status are

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See Hermalin and Jaffee (1996), pp. 255B263.

See Tables 2.1 and 2.2.

This means that through repeated interaction the GSEs, acting independently, behave as though there is a monopolistic agreement between them even though there is not. Explicit collusion between two or more firms is a violation of the Sherman Act.

The theory of tacit collusion relied on by HUD in this report is presented solely in the context of this report and should not be interpreted as a statement of Federal antitrust enforcement intent or policy.

not being passed through to homebuyers through lower mortgage interest rates. Some of these benefits are retained for the benefits of shareholders, i.e., profits that would be competed away through price competition in the MBS market if the number of firms were greater.

Chamberlin (1929) was the first to argue that firms of an oligopoly,[255] producing a homogeneous product, recognize their interdependence and are able to sustain a monopoly price without explicit collusion.[256] From a dynamic context, each firm acting in its self-interest appears to cooperate because an aggressive action from one firm may trigger a rational reaction or retaliation from its opponent. That is, price cutting may yield short-run profits to the undercutting firm but trigger a price war that would reduce both firms= profits in future periods. Firms recognize this and thus might not attempt to undercut their competition. Pricing above marginal cost is sustainable when the mutual, future gains from tacit collusion outweigh the profit from not colluding.

Hermalin and Jaffee (1996) enumerate reasons why tacit collusion is likely to exist among the GSEs. This analysis discusses the conforming market=s intensity of competition in securitization, suggestive evidence of tacit collusion, and comparison to the jumbo market.

Intensity of Competition. The intensity of competition is determined by the number of competitors, market concentration of participants,[257] commitment to the market,[258] homogeneity of outputs, capacity,[259] and changing conditions of demand[260] and supply.[261] These market characteristics are combined to determine the scope for tacit

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An oligopoly exists when a market is dominated by a few relatively large firms which sell similar or identical products. A duopoly is a special case of an oligopoly in which there are only two firms.

In a competitive market, firms are price takers, which means the number of participants is large enough such that no one firm can influence market price. In the case of a duopoly, the two firms act as a shared monopoly. The firms, by tacitly colluding, are price makers and charge a higher price than would be offered in a more competitive market.

The conforming mortgage-related securities market is dominated by two firms, Fannie Mae and Freddie Mac. Hermalin and Jaffee (1996, p. 243) showed that over the 5-year period from 1989 to 1993, market share has been approximately equally distributed between the two firms which is characteristic of a duopoly. A competitive market would have a larger number of firms each issuing a smaller share of total mortgage-related securities.

The GSEs= Federal charters require them to be in the secondary conforming mortgage market.

Capacity is the maximum amount of output a firm is physically capable of producing given its capital. Fannie Mae and Freddie Mac have shown they are capable of rapidly increasing the amount of securities they issue. In the 5-year period between 1989 and 1993, the volume of securities issued by Fannie Mae increased by 217 percent and Freddie Mac=s rose by 184 percent. Much of the increase occurred in 1993 in response to the refinancing boom. The ability of each GSE to expand capacity and capture market share during a pricing war makes each firm increasingly less willing to initiate one, and especially so in a situation like that of the GSEs where neither firm can be driven from the market. This strengthens the case for tacit collusion as the only way for these firms to increase profits.

The demand for mortgage-related securities is difficult to measure. When demand is uncertain, a firm cannot determine whether a change in its total sales results from a movement in market demand or from a rival firm undercutting the collusive price. Under these circumstances, a firm may use a Atrigger strategy@ where, in response to a given drop in sales, a firm lowers its price, regardless of the cause of the drop in sales. Thus, at least temporarily, the collusive arrangement breaks down, though collusive pricing may appear again later.@

The changing conditions in the supply of mortgage-related securities are cyclical. Sustaining collusion can be difficult in cyclical markets, because firms can raise profits by increasing securitization during periods when mortgage originations are increasing.

collusion. In the MBS market for conforming conventional mortgages, the first five factors support a market strategy of tacit collusion. This two-firm market has a Herfindahl index of 5004.[262] Over the past five years, no convincing evidence has been brought forward suggesting that either firm has engaged in sustained predatory pricing behavior for the purpose of raising market share at the expense of its rival. Commitment of each firm to the market is strong for at least two reasons: the GSEs face a barrier to exit[263] and their assets currently cannot be invested in other lines of business. There is a high level of homogeneity among securitized mortgage pools making it easy to monitor changes in price and quantity. While the final factor, changing conditions of demand and supply, is not generally considered conducive to tacit collusion, it appears to be outweighed by the other factors identified here in the case of the conforming conventional MBS market.

Suggestive Evidence. Positive economic profits for Fannie Mae and Freddie Mac would be consistent with tacit collusion.[264] Consistent with positive economic profits were Fannie Mae=s and Freddie Mac=s relatively high returns on equity (ROEs), which ranged from 20.3 to 27.7 percent between 1992 and 1995. ROEs for banks in the same period ranged from 13.0 to 15.3 percent. In 1993, the average ROE for investment and brokerage firms was 15.5 percent, compared with ROEs of 25.3 percent for Fannie Mae and 22.2 percent for Freddie Mac. While this evidence suggests positive economic profit, it is not conclusive because it does not account for the tradeoff between risk and returnCthat is, investors may have required a higher return on the GSEs= stock because they judged the GSEs= stock to be more risky.

Gatti and Spahr (1995) use a capital asset pricing model to estimate the expected rate of return that investors require on Fannie Mae and Freddie Mac stock. Their estimates of the cost of common equity in 1995 are 16.1 and 16.7 percent, respectively.[265] Actual ROEs were 24.3 percent[266] for Fannie Mae and 22.0 percent for

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Based on data from *The Mortgage Market Statistical Annual for 1994* (Washington: Inside Mortgage Finance Publications, Inc., 1994), as calculated by Hermalin-Jaffee (1996, p. 243). The Herfindahl index is a measure of market concentration with regard to number of firms and distribution of market share. Where S_i is the market share for the *i*th firm and *n* is the total number of firms in the market,

n

In a two-firm industry (n=2) if each of the firms has 50 percent of the market, the Herfindahl index is 5000. The index value 5004 indicates nearly equal market shares for Fannie Mae and Freddie Mac (counting both their portfolio and MBS).

Current law commits Fannie Mae and Freddie Mac to the secondary conforming mortgage market. Driving its rival firm from the market is not a viable business strategy for these firms. See Hermalin and Jaffee (1996), p. 244.

See Hermalin-Jaffee (1996), pp. 248B253, for a discussion of this point, including the concept of economic profits.

Gatti and Spahr (1995b) estimate betas of 1.54 for Fannie Mae and 1.37 for Freddie Mac. Betas measure the tendency of a stock to move with the market. For a beta of 1.0, if the market rises or falls by 10 percent, it is expected that the stock will rise or fall by 10 percent. Stocks with betas greater than 1, are more volatile than the market. As the market rises or falls, the stock will do better or worse than an average stock=s performance. Using a Treasury risk-free rate of 6.87 percent for August 10, 1995, and a risk premium of 6.71 percent (published by Ibbottson Associates), Gatti and Spahr obtained cost-of-equity estimates of 16.1 percent for Fannie Mae and 16.7 percent for Freddie Mac. Gatti and Spahr=s beta estimates are very close to those produced by Value Line Investment Services (1.60 for Fannie Mae and 1.55 for Freddie Mac). Value Line also reports similar betas for major lenders such as Great Western (1.5), Bank of America (1.45), and NationsBank (1.5).

This ROE did not take into account Fannie Mae=s special contribution of $350 million in Fannie Mae common stock to the Fannie Mae Foundation. This contribution was intended to enable the Foundation to expand the scope of its public service and consumer outreach programs beginning in 1996.

Freddie Mac in 1995. Thus, this analysis is consistent with the GSEs having retained some of the value of their funding advantage for the benefit of shareholders.[267]

Comparison to the Jumbo Market. The secondary market for jumbo mortgages consists of 34 firms. As discussed in Chapter II, in the past 5 years there has been constant turnover among the top four firms with the largest market shares. Firms experience free entry and exit. To gain market share, firms undercut price; this may drive weak firms from the market. Homogeneity among securitized mortgage pools in the jumbo market leads to intense price competition. Firm behavior in the jumbo market is characteristic of a more competitive market.

Conclusion. The suggestive evidence of high and stable rates of return, relative to other financial institutions, is consistent with the conclusion that much of the funding advantage derived from agency status is passed on to the GSEs= shareholders. The duopoly position of the GSEs enables them to keep a portion of their funding advantage. This diversion of the funding advantage to the GSEs= shareholders lessens the efficiency of targeting the subsidy to those most in need.

D. Possible Contingent Liability to Taxpayers

One basis for concern about the status of the GSEs has been that it has insulated them from exposure to Amarket discipline.@ That is, it is claimed that the GSEs have incentives to pursue riskier business strategies than firms in similar circumstances would have if governed more by market forces. It is feared that reduced market discipline could cause the GSEs to: set their capital/asset ratios low; manage interest rate and default risks less conservatively; and, during times of severe financial problems, pursue recovery strategies that involve additional interest-rate risk and default risk. If so, such business practices would increase the probability and severity of taxpayers= potential liability, should Congress elect to assist the GSEs if they should encounter financial difficulties.

This section begins by reviewing the basis for these claims. Several pertinent considerations are then discussed, including the implications of the creation of the Office of Federal Housing Enterprise Oversight (OFHEO) in 1992.

D.1 Capital[268]

In general, management has an incentive to operate in a highly leveraged condition, with a low ratio of capital to assets; this makes it possible to generate more earnings for a given capital investment. Credit market forces would ordinarily restrict this

According to Hermalin and Jaffee, additional evidence of tacit collusion is found in the ratio of market value to book value. The ratios of market value to book value in 1994 were 2.54 for Fannie Mae and 2.63 for Freddie Mac. A ratio above 1 supports a conclusion of positive economic profits.

The ideas presented here are further developed in U.S. Department of Housing and Urban Development (1987), pp. 94B99.

leveraging tendency of management in two ways. First, as leverage is increased the likelihood of insolvency rises because capital may not be adequate to cover losses. Management realizes that, in case of insolvency or negative net worth, creditors of the firm would demand prompt payment of amounts due and attempt to accelerate principal where possible, while additional financing would be difficult to obtain and the firm would fail. For the GSEs, even if management and stockholders presume the existence of a Federal guarantee on debt, a desire on their part for a degree of income stability might lead them to choose an operating approach for the MBS or portfolio business that yields a measure of safety. Second, even if net worth remains positive and there is no insolvency, the cost of debt would tend to rise as the capital/asset ratio fell because capital acts as a form of collateral for bondholders. In general, increased borrowing costs provide a firm with a substantial incentive to avoid extremely low capital/asset ratios.[269]

The perceived Federal backing of the GSEs= obligations significantly reduces both incentives for operating with a high capital/asset ratio, thus encouraging the corporations to operate with extremely low ratios. The GSEs are able to use the Federal relationship in lieu of capital adequacy to preserve preferential borrowing conditions. Given that arguments for maintaining a high capital/asset ratio have been removed by the Federal relationship, the GSEs have an incentive to expand their portfolio investments or pay out dividends so that its capital/asset ratio is quite low.

Figure 7.1 shows the capital-to-total asset ratios for the GSEs and banks. The figure reveals that the GSEs are thinly capitalized relative to their banking counterparts. In 1995, Fannie Mae and Freddie Mac=s capital as a percent of their portfolio holdings and MBS was only 1.32 and 0.98 percent, respectively. This implies that the GSEs have a greater probability of eroding their capital base during difficult economic times.

D.2 FHEFSSA Requirements and OFHEO=s Activities

Congress, motivated by the low capital levels maintained by the GSEs and by public concern over the taxpayer bailout of federally insured thrift institutions, mandated several studies to evaluate the capital adequacy of the GSEs and the extent of taxpayers= exposure to financial risk. These studies appeared in the early 1990s. They generally sought to investigate Fannie Mae=s and Freddie Mac=s ability to withstand adverse economic conditions. Specifically, in both 1991 and 1992, HUD published reports to Congress on the financial safety and soundness of the housing GSEs. In this same period, the U.S. Department of the Treasury published reports on the safety and soundness of all GSEs. Other studies were written by the General Accounting Office and the Congressional Budget Office.[270] Then, in 1992, Congress passed FHEFSSA, which

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In the GSEs= case, a third factor may well be operating, namely, an apprehension on the part of stockholders that excessive risk taking might lead to loss of agency status; restraint on risk taking through appropriate management of the capital/asset ratio might ensure retention of the existing Federal charters with their advantages.

U.S. Department of Housing and Urban Development (1991a, 1991b, 1992a, 1992b); U.S. Department of the Treasury (1990, 1991); U.S. General Accounting created OFHEO, whose primary function is overseeing the financial safety and soundness of Fannie Mae and Freddie Mac. This section summarizes the analysis and findings of the HUD studies and OFHEO=s progress. Conclusions of the other Government studies of Fannie Mae=s and Freddie Mac=s capital are summarized in Stanton (1996b).

Office (1991); and Congressional Budget Office (1991).

Analyses of Capital Adequacy. HUD=s *Capitalization Study* and *1991 Reports to Congress on Fannie Mae and Freddie Mac* analyzed the potential financial risks the GSEs could pose for the Federal Government based on their exposure to default and interest rate risks.[271] Using a stress test analysis, default and interest rate risks were characterized in terms of the length of time over which the GSEs could maintain positive stockholders= equity during a period of falling house prices and interest rates similar to that which occurred during the Depression of the 1930s.

The *Capitalization Study* analyzed scenarios involving interest rate risk and credit risk separately, to distinguish their effects on the GSEs= ability to survive the stress scenario. The findings were that if interest rate changes were unaccompanied by rises in default rates, Fannie Mae and Freddie Mac would be well protected by the callability of their debt.[272] But, as demonstrated in HUD=s later *1991 Reports to Congress*, adverse credit risk experience with mortgages originated just before and just after the beginning of a period of economic stress with falling interest rates caused both Fannie Mae and Freddie Mac to exhaust their capital in the seventh year of the basic stress-test simulations under the conservative assumptions of either a constant dollar-balance of mortgages or a constant number of mortgages held and securitized.[273] A critical factor in the GSEs= ability to survive would be the promptness of their reaction to a downturn in economic conditions; they generally survived the test simulations in which they were assumed to stop taking on new business.

In the *1991 Report of the Secretary of the Treasury on Government-Sponsored Enterprises*, the Treasury Department included an analysis of the financial safety and soundness of the GSEs assuming there were no implicit Federal guarantee, prepared by Standard and Poor=s Corporation. The S&P assessment evaluated credit risk, interest rate risk, management and operations risk, and business risks. Freddie Mac was rated an >A+=.[274] Fannie Mae was rated an >A!=.[275]

New Financial Regulator. OFHEO was formally established on June 1, 1993. Based on the 1992 Act, the Office was created to protect taxpayers against potential future losses in connection with obligations of the two GSEs. In carrying out this mission, Congress gave OFHEO the authority of an independent Federal financial regulator. OFHEO was created to conduct ongoing safety and soundness examinations of Fannie

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U.S. Department of Housing and Urban Development (1991c, 1992a, 1992b).

U.S. Department of Housing and Urban Development (1991c), pp. 52, 55 (Freddie Mac) and 64, 66 (Fannie Mae). Both Fannie Mae and Freddie Mac pursue a variety of sophisticated risk-management techniques to protect their portfolios against interest rate risk; these are described in their respective Annual Reports.

U.S. Department of Housing and Urban Development (1992a, pp. 63 and 66; 1992b, pp. 62 and 63). From 1991 to 1995, both Fannie Mae and Freddie Mac have increased their capital to total asset and outstanding MBS ratios from 1.12 to 1.32 percent and from 0.63 to 0.98 percent, respectively. From 1993 to 1995, the GSEs purchased a greater percentage of high-LTV loans. Since increases in their capital ratios and high LTV loans have inverse effects on the GSEs= financial soundness, it is uncertain if the GSEs would fare better if HUD=s stress analysis was repeated using 1995 data.

U.S. Department of the Treasury (1991), Appendix 25.

Ibid., Appendix 36.

Mae and Freddie Mac, as well as quarterly tests to ensure that the two GSEs are adequately capitalized.

For every quarter prior to and including the quarter ending December 31, 1995, the GSEs have been classified as Aadequately capitalized.@ To be classified as Aadequately capitalized@, the GSEs must have sufficient capital to meet a minimum capital standard. This standard is determined based on the following ratios: (1) 2.50 percent of aggregate on-balance-sheet assets; (2) 0.45 percent of the unpaid principal balance of outstanding MBS and substantially equivalent instruments; and (3) 0.45 percent of other off-balance-sheet obligations.[276] For the quarter ending December 31, 1995, Fannie Mae=s capital was $10,959 million, which exceeded its minimum capital level by $508 million; Freddie Mac=s capital was $5,829 million, which exceeded its minimum capital level by $245 million.[277]

Risk-Based Standard. OFHEO is in the process of developing a second capital adequacy standard that will be risk-based. This measure will determine the amount of capital that a GSE must hold to survive a dramatic shift in interest rates, accompanied by 10 years of adverse credit conditions. On February 8, 1995, OFHEO issued an Advance Notice of Proposed Rulemaking titled ARisk-Based Capital@.[278] This was the first step in an administrative process leading to a final rule establishing the mechanism for setting risk-based capital levels for Fannie Mae and Freddie Mac. On June 11,1996, a Notice of Proposed Rulemaking (NPR) was published that provided two components of the credit stress portion of the risk-based capital testCthe Benchmark Loss Experience and the House Price Index. A 90-day public comment period is provided by the NPR. This rule announced OFHEO=s intention to complete the remaining components of the stress test by 1997.

If OFHEO=s risk-based capital tests require the GSEs to raise their capital levels, there would be a number of economic effects of higher capital requirements. Depending on the response of the GSEs, the higher capital requirements could result in higher guarantee fees and interest rates and/or a reduction in the portion of their funding advantage retained for the benefit of shareholders. The net effect of the higher capital requirements would be to reduce the cost, in terms of potential increases in interest rates, of privatization in the future.

Examinations. OFHEO is required by statute to conduct an annual onsite examination of Fannie Mae and Freddie Mac and to submit its conclusions as part of an

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Ratios include 0.45 percent of other off-balance-sheet obligations except as adjusted by the Director to reflect the differences between the credit risk of these obligations and the credit risk of MBS. (See 60 FR 30204, June 8, 1995).

Letters dated March 11, 1996, from OFHEO to both Fannie Mae and Freddie Mac, confirmed that each GSE satisfied its minimum capital standard for the quarter ending on December 31, 1995.

60 FR 7468B7479.

Annual Report to Congress. The purpose of examining Fannie Mae and Freddie Mac is to verify that they are being managed and operated prudently. Oversight of the GSEs involves evaluation of management and operating systems, including the processes used by the GSEs to identify and control exposure to risk.

In 1994 and the first quarter of 1995, OFHEO conducted its first onsite examinations of Fannie Mae and Freddie Mac. An initial examination focused on the use of derivative contracts by the GSEs. OFHEO=s objective was to determine the business purposes of these derivatives and potential risk exposure to the GSEs= safety and soundness. They concluded that the growth and composition of derivative contract portfolios reflected Fannie Mae=s and Freddie Mac=s responses to opportunities associated with changing market conditions and that the use of derivative contracts by the GSEs was based on sound business purposes that did not pose significant safety and soundness concerns.

A second set of examinations assessed the strength of the GSEs= corporate governance. This entailed the review of oversight, planning, policies and procedures, management reporting, and audit and risk assessment. The examinations were also designed to enhance OFHEO=s institutional knowledge of the GSEs and establish priorities for future examinations. OFHEO concluded that corporate governance at the GSEs was sound.[279]

D.3 Concluding Remarks

This section has noted that Fannie Mae and Freddie Mac are insulated by the agency status of their securities from market discipline, which in a competitive market motivates a fully private corporation to keep its risk in check to keep its borrowing rates down. Given the GSEs= thin capitalization and enormous size, the contingent liability to taxpayers creates a legitimate concern. Congress created OFHEO to develop sensible, well-constructed regulations that provide incentives for the GSEs= management to operate their institutions in a financially safe manner.

E. Innovation in Mortgage Finance

Innovation in mortgage finance is the creation, through research and development, of new products, programs, and methods for financing mortgages. The incentive to innovate through research and the development of new technologies among the GSEs is driven by their incentives to reduce costs. It could be argued that agency status, by shielding the GSEs from competition, has undermined incentives for innovation. The possibility of full privatization raises the question whether motives to innovate would be stronger or weaker in a fully competitive market, without the protected duopoly status of

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Office of Federal Housing Enterprise Oversight (1995), p. 32.

the GSEs.

The Federal Government (through FHA and Ginnie Mae), the GSEs, and private label MBS conduits have all made major innovations in mortgage finance.[280] Examples include the creation of ARM mortgage products by thrifts, the introduction of CMOs by Freddie Mac, and the use of senior/subordinated securities by Wall Street firms and non-agency secondary market institutions. More recent changes include automated credit scoring, discussed below in more detail.

E.1 Incentives to Innovate

Regardless of whether the GSEs are fully privatized, incentives to innovate relate to the prospective profits from expanding into new markets and improving efficiency. Firms seize opportunities that make Agood business sense,@ that is, where the marginal benefit of developing the new products and programs would exceed the marginal cost, even adjusting for use of the product or program by competitors. This is particularly true for development of products and programs for capturing market share either in existing or in new markets.

In existing markets, market share can be captured through the use of innovative products and techniques to lower costs to the lenders and ultimately to the borrowers. One recent example is the development of automated underwriting and credit scoring software to improve selection of mortgages for purchase in the secondary market, while lowering costs to borrowers. Initial research reveals an improved capability for identifying loans that are generally of lower quality but are acceptable for purchase by the secondary market. Even under full privatization, such techniques would likely be developed by large private conduits since these mortgages can be shown to be investment quality and, therefore, yield a rate of return sufficient for investment.

E.2 Difference in Character of Incentives to Innovate Under Full Privatization

Hermalin and Jaffee (1996) argue that while the GSEs have been quite efficient, their innovation has been of an Aopen@ character, that is, benefits from either GSE=s innovations are soon enjoyed by Amimicking firms@ throughout the entire industry. In this case, advances in innovation do not increase one firm=s competitive advantage.[281] Examples include the development of mortgage pass-through securities, CMOs and

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AThe Federal Government is generally credited with conducting three successful social experiments in the mortgage market: demonstrating the feasibility of long-term, self-amortizing loans; mortgage insurance; and securitization. In all three cases, the private sector has successfully copied the Federal models.@ (Weicher, 1994, p. 50) Weicher provides a succinct overview of major developments in mortgage finance.

Hermalin and Jaffee do not discount the importance of research and development Ato the industry as a whole (consider, for example, the innovation of MBS in the 1970s and 1980s or current efforts to streamline mortgage origination)@ (Hermalin and Jaffee, 1996, p. 241). AAdmittedly the ability to mimic does not imply the desire to mimic; in particular, smaller firms may not find it cost effective to automate as much as large firms. This, however, is better seen as an economies of scale issue@ (Ibid., fn 16).

REMICs in the 1970s and 1980s, and the more recent development of automated underwriting and mortgage credit scoring technologies.

Ending of the protected duopoly status of the GSEs could have the effect of changing incentives concerning innovation, making it become more Aclosed@ in nature. This could retard innovation in the secondary mortgage market. On the other hand, Berger and Hannan (1994) find that efficiency among commercial banks is greater among those operating in less concentrated markets. Inefficiency associated with concentrated markets represents as much as 1.3 percent to 4.6 percent of operating costs. More study is need-ed to determine whether similar findings apply to the MBS industry.

E.3 Innovations Benefiting Marginal Borrowers

As discussed elsewhere in this study, access to credit markets is among the GSEs= charter mandates.[282] Fulfillment of this mandate, as well as the housing goals, will likely require the development of new, innovative types of products to reach lower income borrowers. These include, for example, community homebuyer and other homeownership counseling/education programs; Native American trust land loans; acquisition/rehabilitation loans; targeted consumer outreach and education efforts; a variety of underwriting experiments; and partnerships with local governments and nonprofit organizations involving training, technical assistance, and financial support for programs to assist targeted groups. Through the use of these programs, the GSEs are engaging in community lending programs that more aggressively target potential first-time and low-income homebuyers who would not otherwise enter the market.

Under full privatization, the incentive for the GSEs to be involved in such activities could be less. The rapid progress of the GSEs in meeting their housing goals for targeted groups following FHEFFSA suggests that such activities are partially carried out as a consequence of charter mandates as well as simple profit-maximizing consideration. To the extent that the GSEs have developed innovative loan products and community-based partnerships geared toward the needs of targeted groups, therefore, it appears likely that such innovation would be reduced under privatization.

E.4 Summary

At this time, there does not appear to be any convincing evidence that privatization would have significant positive or negative consequences for the pace of purely profit-oriented innovation in mortgage finance. With regard to innovation geared toward fulfillment of charter mandates, including the expansion of homeownership opportunities among low-income and minority borrowers and in low-income areas, however, it is reasonable to conclude that privatization would undermine incentives for innovation.

See section 301(3) of the Fannie Mae Charter Act and sections 301(3) of the Freddie Mac Act.

F. Regulatory Costs

Under full privatization, the costs to the Federal Government of HUD=s programmatic oversight would be eliminated.[283] However, privatization could result in regulatory costs to the Federal Government associated with SEC=s regulation of the GSEs= securities and U.S. Department of Justice (DOJ) and Federal Trade Commission (FTC) antitrust enforcement.[284]

F.1 Elimination of HUD and OFHEO Regulatory Costs

The Secretary. HUD incurs general regulatory costs, associated with the HUD staff and resources, from implementing its GSE regulations. HUD=s general regulatory costs include the costs of regulatory staff, overhead, and contracts. The expected total annual costs for administering the GSE regulations in 1995 is approximately $2,265,000, as summarized below:[285]

Staff Wages and Benefits[286]	$ 1,350,000
Overhead and Operating Expenses[287]	540,000
Contracts	375,000
Total	$ 2,265,000

However, approximately 50 percent of the costs would be incurred in the absence of the GSE regulations. Thus HUD would be expected to continue to incur approximately $1.1 million in costs.

OFHEO. The regulatory costs related to OFHEO=s oversight of the GSEs is paid for by the regulatees, Fannie Mae and Freddie Mac. In 1995, OFHEO=s budget was $14.9 million supporting 65 employees (full-time equivalent). However, these costs are expected to decrease over time as developmental projects are completed.[288]

F.2 Addition of SEC Regulation

Any explicit capital standards would have to be instituted by the legislation implementing the privatization; otherwise there would be no explicit capital standards because the GSEs would not come under the jurisdiction of any of the other financial regulators, such as the Federal Deposit Insurance Corporation (FDIC) or Federal Reserve.

The GSEs would remain subject to fair lending statutes that are administered by HUD and DOJ and subject to other applicable Federal requirements, such as the Office of Occupational Safety and Health Administration (OSHA) rules, but there would be no change in regulatory costs from privatizing the GSEs.

Under FHEFSSA, the GSEs are assessed for the expenses of OFHEO; however, unlike all other federally regulated financial institutions, the GSEs are not assessed for the costs of the Secretary=s regulatory oversight.

Assumes a staff level of 18 full-time employees.

Assumed to be 40 percent of staff wages and benefits.

Office of Federal Housing Enterprise Oversight (1995), p. 40.

Currently the GSEs are exempt from requirements to register their debt and MBS with the SEC, even though Fannie Mae and Freddie Mac securities currently trade on the New York Stock Exchange. If the GSEs= charters were revoked, all securities traded on national stock exchanges would have to be registered with SEC and with the particular exchange on which they are traded. The GAO has estimated that the pretax value of the GSEs= current exemption from SEC registration requirements at $102 million.[289] Future first offerings would be registered in compliance with the Securities Act of 1933. In addition, annual reports and other periodic disclosures of the GSEs= financial status and changes in conditions would be filed with SEC. The GSEs also would be required to make a regular disclosure of the holdings and transactions of Ainsiders@Cthe officers and directors of a corporation and those who control at least 10 percent of equity securities.[290]

Lifting the GSEs= exemption from the Securities Act of 1933 would require the GSEs to comply with the Trust Indenture Act of 1939. This Act requires all corporate bond and other debt securities to be issued under an indenture agreement approved by SEC and provides for the appointment of a qualified trustee free of conflict of interest with the issuers[291].

SEC expects current staff would be able to review and evaluate the fully privatized GSEs= disclosure statements and registrations. The evaluations would typically be conducted by accounting staff in conjunction with an attorney or analyst, with review by superiors.

F.3 Addition of Department of Justice and Federal Trade Commission Oversight

Repealing the GSEs= Federal charters would eliminate institutional barriers to entry into the conforming mortgage market. If positive economic profits are being earned, firms would have increased incentive to enter the market. To the extent that the GSEs= size, knowledge, or experience would then enable them to exercise market power over entry or prices, intervention from the Government could still be necessary[292]. The competitiveness of markets is governed by DOJ=s Antitrust Division and FTC=s Bureau of Competition.

In the event that allegations of collusion or price fixing were made against fully privatized GSEs, DOJ would commence an investigation to determine if the allegation

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U.S. General Accounting Office (1996), p. 5. The SEC charges 1/29th of one percent or 3.45 basis points for every dollar of publicly offered securities.

These requirement are part of the Securities Exchange Act of 1934. See Downes and Goodman (1990), p. 471.

The Trust Indenture Act of 1939 provides protective clauses for bondholders: bondholders must receive semiannual financial reports, periodic filings must be made with SEC showing compliance with indenture provisions, and the issuer must be liable for misleading statements. See Downes and Goodman (1990), pp. 536B537.

Stanton (1996a, b) discusses the issues involved in restructuring the GSEs.

was credible. This investigation would include obtaining documents, conducting interviews, and taking depositions from company officials by staff lawyers and analysts. At the conclusion of the investigation, if a determination were made that charges would be brought against the companies then DOJ would enter into negotiations with the companies to obtain an agreement to correct the problem. If a consent degree could not be obtained, then litigation would commence. Depending on the complexity and significance of the charges, the investigation could take from a minimum of several months to several years.

F.4 Summary

There is potential budget savings to the taxpayer of $1.1 million annually from fully privatizing GSEs; however, the cost savings would only be realized if full investigations of fully privatized GSE actions by DOJ and the FTC were not required. Cost savings would not be realized by GSEs since the elimination of fees for OFHEO=s oversight would be more than offset by fees charged by the SEC.

G. Conclusions

Chapters IVBVII have considered various factors that should be weighed in any consideration of the desirability of privatization. The principal conclusions are collected belowCfirst those from this chapter, followed by summaries of those from the earlier chapters.

Main Findings of Chapter VII. Findings of this chapter that relate to the efficiency of the mortgage finance system are as follows:

! Many of the market failures that existed at the time the GSEs were initially chartered no longer exist. Problems such as nationwide credit shortages due to thrift disintermediation, regional credit shortages, and thin security markets have largely been solved. The private secondary mortgage market has made great strides in the past few years. A solid infrastructure of private secondary market institutions, knowledge, and expertise now exists. The secondary market for single-family mortgages has developed to the point that it has the potential to operate efficiently without the Federal Government=s sponsorship of Fannie Mae and Freddie Mac.

! A shortcoming of the current GSE system is that only part of the GSEs= funding advantage is passed through to borrowers. Their protected duopoly position enables Fannie Mae and Freddie Mac to keep a portion of their funding advantage. Consistent with the GSEs earning high and stable rates of return relative to other financial institutions is that much of the funding advantage is passed on to the GSEs= shareholders. This lessens the efficiency of targeting the subsidy to those most in need.

! The contingent liability that the GSEs impose on taxpayers is being addressed through the structure of capital standards and regulatory examinations that Congress specified in 1992. OFHEO is now at work monitoring business risks of the GSEs and developing risk-based standards to ensure that the GSEs are adequately capitalized.

! There is no firm evidence that the pace of profit-oriented innovation in the mortgage finance industry would be significantly affected by privatization. With regard to loan products and outreach efforts directed at raising the rate of homeownership among targeted groups, however, there is reason to believe that privatization would slow down the pace of innovation.

! Privatization would not significantly affect regulatory costs to the Federal Government.

In addition to the above points, this chapter discusses positive externalities related to homeownership which remain significant and support the agency status of the GSEs. The extent to which lower income and minority families and neighborhoods are able to generate and enjoy the positive externalities from homeownership is dependent on their access to mortgage credit. Numerous studies have documented the substantial credit problems faced by lower income and minority families. The GSE secondary market has helped to reduce the cost of financing homeownership nationwide and has thereby significantly expanded the numbers and types of individuals who are served by the mortgage finance system. By expanding the opportunity of homeownership to more families and increasing the homeownership rates in more neighborhoods, the aggregate net benefits from homeownership have been increased as well.

Conclusions from Chapters IVBV: Market Underservice Issues. The GSE arrangement, through its charter mandates to the GSEs and HUD=s housing goals framework, offers a reasonable framework of incentives for the GSEs to provide homeownership opportunities to borrowers who have traditionally been underserved by the mortgage market.

In accordance with their charter mandates and the affordable housing goals, the GSEs are having impacts on both single-family and multifamily housing finance markets. With regard to single-family mortgage financing, efforts have been made to expand homeownership opportunities for lower income families by offering customized mortgage products, introducing more flexible underwriting, and providing outreach programs. Loans originated under these programs typically involve higher marketing, servicing, and credit costs than loans originated under the standard program. The programs are profitable because of the low borrowing costs of GSEs.

Fully privatizing the GSEs would likely reverse recent improvements in affordable lending that the GSEs have made under the housing goals. Under full privatization, mortgage market institutions would likely adopt more rigid underwriting standards, offer fewer mortgage products designed for lower income families, and undertake less marketing and outreach in underserved neighborhoods. It would likely become more difficult for banks and thrifts to find a secondary market outlet for affordable housing loans that they desire to make to serve their communities. Changes in the housing finance system that would accompany full privatization (including increases in mortgage interest rates) could have particularly severe impacts on those families that are currently not well served by the mortgage market.

Conclusions from Chapter VI: Uncertainty Issues. There is uncertainty about the effects of removing Federal sponsorship from the secondary market, as detailed in Chapter VI. This uncertainty includes the significant area of credit risk. Given the huge size of the GSEs= operations, the private market would have to provide the liquidity and credit enhancements that the GSEs now provide. In doing so, the secondary market would be more fragmented as the funding of mortgages shifted from the GSEs to jumbo conduits, depositories, and the FHA. Compounding this shift would likely be a reduction in 30-year fixed-rate mortgages in favor of shorter term fixed rate and ARM mortgages, at higher interest rates and reduced mortgage funding. These are potentially significant changes, and consequently market disruptions at the initial stages following full privatization are especially possible.

Conclusions from Chapter VII: Market Efficiencies. This chapter concludes that many of the market failures that once justified the GSEs have been resolved. Many of the benefits of a well-functioning secondary market would likely continue if the GSEs were fully privatized. Private MBS conduits and the newly privatized GSEs would fulfill most, if not all, of the major functions currently carried out by the GSEs. But privatization would likely cause mortgage borrowing costs to rise, and the rate of homeownership among targeted groups to decline. Due to the unprecedented nature of GSE privatization, the full, long-term implications of such an action are subject to uncertainty.

The main costs associated with the current GSE arrangement are contingent liability of taxpayers, regulatory costs, and economic efficiency costs associated with the protected duopoly position of the GSEs and the ability of the GSEs to capture some of the value of the benefits associated with their GSE status. Contingent liability concerns are currently being analyzed by OFHEO and will be more fully addressed once OFHEO=s risk-based standard is completed and implemented. Regulatory costs associated with monitoring the GSEs are small but would increase under privatization.

Overall Conclusions. These chapters have considered broadly the market benefits and costs of the GSEs= charters. The benefits are realized by homebuyers, capital market investors, and the GSEs. Homebuyers enjoy slightly lower interest rates and an elastic supply of funds. Capital market investors enjoy more certainty regarding credit risk, which translates into a well-functioning, liquid market for the GSEs= securities. The GSEs and their shareholders enjoy a consistently high rate of return on equity.

After a consideration of feasibility issues in Chapter VIII, Chapter IX makes concluding comments on the desirability of privatization.

APPENDIX TO CHAPTER VII

The Statutory Public Purposes of Fannie Mae and Freddie Mac

In establishing Fannie Mae as a GSE in 1968 (in P.L. 90B448, sec. 802(b)) Congress specified Fannie Mae=s public purposes as follows:

> To establish secondary market facilities for home mortgages, to provide that the operations thereof shall be financed by private capital to the maximum extent feasible, and to authorize such facilities toC
>
> (a) provide supplementary assistance to the secondary market for home mortgages by providing a degree of liquidity for mortgage investments, thereby improving the distribution of investment capital available for home mortgage financing; [and]
>
> (b) provide special assistance (when, and to the extent that, the President has determined that it is in the public interest) for the financing of
>
> (1) selected types of home mortgages (pending the establishment of their marketability) originated under special housing programs designed to provide housing of acceptable standards at full economic costs for segments of the national population which are unable to obtain adequate housing under established home financing programs, and
>
> (2) home mortgages generally as a means of retarding or stopping a decline in mortgage lending and home building activities which threatens materially the stability of a high level national economy....

Objectives (a) and (b) were the same public purposes that Congress originally declared for Fannie Mae as a Government corporation in 1954 (P.L. 68B560, sec. 201). A further purpose was specified in both the 1954 and 1968 statements in connection with portfolio management and liquidating functions that were assigned before 1968 to Fannie Mae and thereafter to Ginnie Mae.

In 1989 (P.L. 101B73, sec. 731(m)(1)) Congress respecified objectives (a) and (b) in the above statement of Fannie Mae=s public purposes as follows:

> (1) provide stability in the secondary market for home mortgages;
>
> (2) respond appropriately to the private capital market; [and]
>
> (3) provide ongoing assistance to the secondary market for home mortgages (including mortgages securing housing for low- and moderate-income families involving a reasonable economic return) by increasing the liquidity of mortgage investments and improving the distribution of investment capital available for home mortgage financing....

At that time Congress also provided a statement of public purposes for Freddie Mac containing essentially the same three elements but without an analogous preamble (P.L. 101B73, sec. 731(a)).

In 1992 (P.L. 102B550, secs. 1381(a)(2)(A) for Fannie Mae and 1382(a)(3)(A) for Freddie Mac) Congress changed the parenthetical material in public purpose 3 to read

> (including activities relating to mortgages on housing for low- and moderate-income families involving a reasonable economic return that may be less than the return earned on other activities)

and added a fourth public purpose, as follows:

> (4) promote access to mortgage credit throughout the Nation (including central cities, rural areas, and underserved areas) by increasing the liquidity of mortgage investments and improving the distribution of investment capital available for residential mortgage financing.

In addition, the term Ahome mortgage@ was changed to Aresidential mortgage.@

CHAPTER VIII

THE FEASIBILITY OF PRIVATIZATION

The statutory mandate for this study is phrased in terms of distinct questions of Afeasibility@ and Adesirability.@ HUD interprets the feasibility question as referring to the operational processes through which full privatization would be accomplishedCthe question whether, if it were deemed Adesirable@ to accomplish full privatization, operational obstacles could impede or even fatally frustrate the process. The desirability issues have been addressed in the preceding chapters, concluding that there is substantial question whether, on balance, full privatization would be Adesirable.@ This chapter explores the feasibility question briefly, highlighting basic issues identified in the research studies. The chapter concludes that the operational issues are both important and complex: If a decision were to be made to pursue the idea of full privatization further, extensive analysis on legal and financial issues would be essential to enable the process to occur smoothly, without imposing either undue burdens on the institutions and individuals directly involved, excessive risks on taxpayers, or unnecessary instability on financial markets and the broader economy.

A. Introduction

The central task in implementing full privatization of Fannie Mae and Freddie Mac would be to separate their assets and liabilities based on whether they relate to existing portfolio and MBS or to the generation of future business. That is, full privatization would require division of the functions of each enterprise intoC

! The liquidation of the mortgages held in portfolio by the GSEs and the fulfillment of all obligations connected with their liabilities, MBS, and other off-balance sheet items. The winding down could be phased to payoffs of mortgages, or to the maturing of the debt, necessitating that some mortgages held in portfolio be securitized.[293]

! Ongoing business.

Various approaches are possible. This chapter discusses oneCa Aholding company@ option that was recently proposed by the Student Loan Marketing Association (Sallie Mae) for its own full privatization. The discussion is intended to highlight basic issues that would have to be confronted, regardless of what particular privatization approach is selected.

The implications of these two strategies are discussed in U.S. Department of Housing and Urban Development (1989).

In the holding company model, separate business units would be created to handle the liquidation and ongoing-business functions. The ongoing-business unit would have the capacity to utilize intangible assets of Fannie Mae and Freddie Mac, including their business relationships, trade secrets, and ongoing contractual rights and obligations involving mortgage sellers and servicers, investment bankers, mortgage insurers, and other trading partners. The liquidating unit would have essentially all of the financial liabilities and mortgage assets at the beginning. With such a separation, legal rights and obligations could be established for the liquidating unit in a manner that would enable it to continue to honor all of Fannie Mae=s and Freddie Mac=s previous commitments to holders of the debt securities and MBS, while simultaneously allowing maximum flexibility to the ongoing-business unit to pursue the activities it chooses. Separation means that the debt backing the liquidating assets would be unambiguously distinct from the debt backing ongoing business, and this would greatly facilitate the assignment of different properties to the two categories of debt.

An important requirement of feasibility is that the separation must be accomplished in a manner that does not impose new constraints on the holding of the GSEs= existing debt liabilities and MBS and that does not increase the risk borne by the holders. Any other approach would tend to disrupt markets and/or conflict with the expectations of holders when they purchased the securities.[294] This strongly suggests that financial safety and soundness regulation of the winding-down portfolios be maintained, consistent with the arrangement at the time the securities were originated.

A second important requirement of feasibility is that the interests of Fannie Mae and Freddie Mac stockholders must be appropriately respected; otherwise, stockholders would inevitably seek to block the privatization effort. Shareholder suits are a real possibility.[295]

As a basis for considering the implications of these requirements, Table 8.1 displays the major categories of financial assets and liabilities that create value in Fannie Mae and Freddie Mac. The table shows valuations of the various items in both book-value and Afair-value@ terms. Book value is valuation according to Generally Accepted Accounting Principles (GAAP), i.e., value as shown on a conventional balance sheet, based generally on historical cost-accounting principles. Fair value represents the market value of an asset or liability, disregarding any potential effect of the envisioned transaction on the market price. The table includes the major categories in Fannie Mae=s and Freddie Mac=s balance sheets, as well as their off-balance-sheet activities including MBS businessCwhich have fair values but not GAAP values.

GAAP accounting and fair-value accounting each generate aggregate values

Stanton (1996a, 1996b); Fannie Mae (1996b); U.S. Department of Housing and Urban Development (1987, 1989); Student Loan Marketing Association (1994a).

Stanton (1996a, 1996b); Fannie Mae (1996b).

based on the sum of the components, as shown in the table. The table shows also a third kind of aggregate valuation for each enterprise, namely, the market value of outstanding stock, shown at the bottom of the table. The latter is the only one of the three concepts that includes the value of each company as a going concern. The going-concern value is what mainly accounts for the difference between market value and aggregate fair value, which is $2.4 billion in the case of Freddie Mac and $19.8 billion for Fannie Mae. These differences reflect value in employment contracts, property and equipment, trade secrets, business relationships of the companies, management and staff business skills, corporate lore and traditions, and the value of any enhanced profitmaking capacity that equity holders assume to be associated with the continuing agency status of the enterprises.

Capital, based on the financial assets, outstanding liabilities, and off-balance-sheet activities of Fannie Mae and Freddie Mac, is what provides security to the debtholders that the enterprises can fulfill their liability obligations even under adverse business conditions. It also protects taxpayers against potential claims that may arise out of the GSEs= agency status. Simulation analyses by HUD and others in the early 1990s revealed economic situations in which substantial amounts of capital could be needed to ensure financial survival. This capital, measured either in book-value or fair-value terms, which are relatively close in value, comprises somewhat more than half of what stockholders view as the value of their equity interests, based on the market price of their stock. To the extent that privatization shifts capital to the ongoing business unit, the interests of bondholders and taxpayers would be infringed relative to the security they enjoy with the GSE arrangement; but also, such shifting would enhance the interests of stockholders. Thus, critical elements of the privatization plan are the extent of such shifting at the time of privatization and the phasing of later movement of capital from the liquidating unit to the ongoing business as the liquidation runs its course.

Another critical element of the privatization plan is how to preserve going-concern value in both the liquidating unit and the ongoing business unit. The intangibles that underlie it both support the prospective returns on the existing book of business and the future value-creating capacity of the enterprises through new business. These intangibles cannot be easily divided. This is an important reason why historical examples in which tangible property and equipment of an enterprise have been divided (such as the telephone system and railroad examples highlighted by Stanton) are not good models for financial services businesses like Fannie Mae and Freddie Mac.

The challenge in privatization is thus to accomplish the separation in such a way as to preserve the status of the equity as both security for the outstanding liabilities and a foundation for generation of new business simultaneously. Section 2 considers a particular structural model of full privatizationCthe holding company arrangement proposed recently by Stanton and by Sallie MaeCto determine its viability relative to this requirement. Section 3 examines the particular agency attributes of the existing securities, which are fundamental to the preservation of debtholders= interests in privatization. Section 4 discusses directly the feasibility of transforming the equity rights in the existing businesses into equity rights in the liquidating and ongoing components in a reasonable manner, while the legal rights of existing stockholders are appropriately accommodated. Finally, risks to taxpayers, which must be prudently controlled during the transition, are discussed in Section 5.

B. Structural Division of the Businesses

B.1 Holding Company Model

One approach to full privatization is a holding company model. It is developed in a 1994 privatization proposal advanced by Sallie Mae, and it is one of the options suggested in Stanton=s research study.[296] It would involve creation of a new, State-chartered corporation with subsidiaries that would include the liquidating unit and one or more ongoing-business units. Equity would exist in the holding company, whose shares would be issued in exchange for shares of Fannie Mae and Freddie Mac. The holding company would be the sole stockholder in the liquidating unit. The capital needs of the liquidating unit would be defined through application of methodologies such as those already being applied by OFHEO to Fannie Mae and Freddie Mac (including a risk-based capital requirement). As liquidation proceeds, more and more capital would be transferred to the holding company and made available to the ongoing-business units.

Stanton writes of a need for Afirewalls@ to prevent the penetration of agency status beyond the liquidating unit to other units of the holding company. This could be difficult to accomplish. At the beginning, although the capital would be divided on paper between the liquidating unit and the remainder of the business, capital in the holding company and other units would likely come to be regarded as accessible in the event of severe financial problems in the liquidating unit. For this reason, a degree of agency status would likely adhere to the debt of the ongoing-business units at the outset, but it would diminish as the liquidation proceeds and the ongoing-business units came to dominate the businesses.

Stanton raises the possibility that the ongoing-business units would choose to issue new stock to raise additional working capital.[297] This could prove difficult at the outset given the transitional situation of the enterprises at that time; the actual need would depend on the extent to which capital would be provided to the ongoing-business units at the outset from the existing capital of Fannie Mae and Freddie Mac and on the detailed nature of ongoing-business plans.

Stanton (1996a, pp. 29B31); Student Loan Marketing Association (1994a, pp. 19B26).

Stanton (1996b, p. 81). In addition, Stanton identifies as a separate approach the creation of a new federally chartered corporation to carry out public purposes, although it does not represent a distinct, basic structure but could be implemented along with any of Stanton=s other four approaches.

B.2 Other Approaches

The following alternative approaches to the holding company model are identified by Stanton:[298]

Separate company model separates the management and equity in the liquidating component from the ongoing component. Assuming private ownership of each, it requires a formal division of the stock. This would tend to impair the financial capacity of both the liquidating company and the ongoing component; that is, the equity in the existing businesses serves both purposes simultaneously. It would require declaration that the equity in the liquidating component will revert to the ongoing component when full liquidation is accomplished.

Breakup would involve dividing the existing assets and liabilities of the GSEs, much as the assets of AT&T were broken into regional and long-distance telephone operating companies and a manufacturing unit in the 1980s. There seems little advantage to be gained in breaking up the liquidating units. Several ongoing-business units could be created, depending on the interests of management. The division would likely be functional, not regional given that value is created by Fannie Mae=s and Freddie Mac=s ability to operate nationwide. Since value is created by their ability to operate portfolios in tandem with MBS, division of the one from the other would reduce value. A better approach would be division by lines of business.

Long-term privatization means privatization in stages over several years. The holding company model does represent a form of long-term privatization since, as described above, full privatization would be accomplished only after the full liquidation had been accomplished; this could require as much as 30 years. Another approach that has been proposed is some sort of Adirected transition@ toward privatization in which Fannie Mae and Freddie Mac would take measures while still GSEs to build capacity to privatize smoothly;[299] this could include, for example, building capital toward some target or shifts among lines of business.

Additional strategies, which could complement one of the above structural options, are identified in the commissioned studies and elsewhere in the literature. These include:

! Creation of a new business entity to handle subsidized business, or expansion of the mandate of some existing agency. This was mentioned by Stanton, Wachter et al., and the Freddie Mac Task Force, as being of possible advantage to compensate for possible shifting of Fannie Mae=s and Freddie Mac=s orientation

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Stanton (1996a, pp. 31B37).

See U.S. Department of Housing and Urban Development (1989), Chapter 4.

away from low- and moderate-income mortgagors and other public-purpose-oriented aspects of their activities.[300]

! Extension of a full-faith-and-credit guarantee for the liquidating debt. This is mentioned in both the Freddie Mac Task Force Report and the HUD 1987 Report.[301] Such a guarantee could tend to compensate for loss of equity value, to some extent. On the other hand, in the holding company structure as described above there is substantial incentive to efficient management of the liquidating operation, which would tend to be lessened by the presence of such a guarantee.

C. Agency Attributes of Liquidating and Ongoing Components

One of the requirements for privatization identified above is that, to the maximum extent, the prerogatives enumerated in Chapter I for the GSEs= debt securities and MBS should be maintained post-privatization so that their riskiness is not affected. This section reviews the various statutory prerogatives that underlie the agency status, which underlie their riskiness as perceived by their holders. These features would likely need to be maintained as they are transferred to the liquidating unit. Specifically, these features are:

! Treatment of the securities as AGovernment@ securities: They can be held without limitation by pension funds, banks and thrifts; they can be used by the Federal Reserve in open market operations; they collateralize public deposits.

! State/local tax exemption (except property taxes).

! Access to the Federal Reserve book-entry system for recording of security transfers.

! OFHEO=s financial safety and soundness regulation. Continued monitoring of capital would be necessary, to ensure that the liquidating unit maintains sufficient capital to meet standards, but also that the relatively cheap borrowing ability of the liquidating unit is not used to build excess capital for the use of the other units, in addition to meeting the needs of the liquidating unit.

! Consistent with this arrangement, the conditional access to a $2.25 billion line of credit could be maintained with respect to the liquidating subsidiary. It could be allowed to diminish in size as the size of the portfolio dwindles and eventually phased out as the liquidation occurs.

Stanton (1996a, pp. 35B36); Wachter et al. (1996, pp. 354B355); Advisory Committee to the Board of Directors of the Federal Home Loan Mortgage Corporation (1986, pp. 35B42).

Advisory Committee to the Board of Directors of the Federal Home Loan Mortgage Corporation (1987, Subcommittee on Finance Report, p. 4); U.S. Department of Housing and Urban Development (1989, p. 54).

- The existing Federal charters could be maintained for the liquidating component but would have to be redrawn to some extent to reflect the new relationship with the State-chartered holding company.

- New debt securities issued by the liquidating unit (to the extent that such issuance is necessary given the particular wind-down plan adopted) would presumably be exempt from securities registration requirements of SEC and the States; securities of the ongoing-business units would be subject to these requirements.

- Securities issuances of the liquidating unit could be coordinated with the Treasury Department, as long as volumes remain significant.

These provisions mirror the provisions that currently underlie the securities of Fannie Mae and Freddie Mac and would serve to maintain the bondholders= interests.

D. Equity Interests

Equity value would be affected as a consequence of a full privatization by essentially two types of factors. First, Hermalin-Jaffee conclude (and Chapter VII concurs) that Fannie and Freddie tacitly collude; that is, they set prices on their securities in a manner that creates more profits than the enterprises would earn absent agency status. Full privatization, by ending the statutorily based distinction between jumbo and conforming markets and enabling existing jumbo conduits, Fannie Mae, and Freddie Mac to compete with each other in either range, would reduce the likelihood of such tacit collusion continuing.

Beyond this effect, equity value is subject to a variety of potentially value-depressing and value-enhancing factors. It is unclear what the ultimate effect would be on borrowing/lending spreads; this would depend on elasticities of supply of mortgages and demand for MBS. These issues are discussed further in Chapter VI of this report.

On balance, it seems likely that the value in stock would be reduced at the outset, in the absence of an arrangement to offset the effect. This means that it would be difficult to impose an Aexit fee,@ although arguments may be advanced for one based on the years of Government benefit that would be provided to the GSEs if they were not privatized. On the other hand, as Stanton indicates, there is also a question of the justifiability of some sort of capital augmentation payment to compensate for loss of equity value. If no such compensation payment is provided, Stanton and Fannie Mae both argue that stockholder suits would be brought, based on the contention that a Ataking@ has occurred.[302]

Stanton (1996a, pp. 14B16 and 38B41; 1996b, pp. 76B80); Fannie Mae (1996b, pp. 62B66).

E. Taxpayer Risks and Interests

In its privatization proposal, Sallie Mae speaks of a need to protect stability of the student loan program in its privatization.[303] A comparable need exists with respect to the housing GSEs. Specifically, in the case of Fannie Mae and Freddie Mac several important public-purpose restrictions and obligations governing the existing enterprises would cease (in the absence of new statutes that impose them in some fashion post-privatization):

- Line-of-business restrictions concerning types of loans, from whom mortgages may be acquired, and cap on dollar amount of loan.

- New program consistency with charter act purposes; requirements for HUD review of new programs.

- Housing goals requirements; requirements for Affordable Housing Advisory Council.

- Obligation to provide data to assist the work of the Secretary in combating any discriminatory practices of lenders with whom the enterprise does business.

- Obligation to provide unit level data on mortgage and borrower characteristics to HUD.

- General regulatory power (to ensure that purposes are accomplished subject to examination of books and verification of data).

Previous chapters have discussed the implications of the cessation of these aspectsCwhether their intended effects would come to be supplanted by other public or private mechanisms.

F. Conclusions

This chapter has examined briefly the operational implications of privatizationCwhether it is legally possible to separate each of the existing enterprises into liquidating and ongoing-business units in a manner that appropriately respects the rights and interests of debtholders, stockholders, and taxpayers. We conclude that a holding company model would offer one potentially viable approach to full privatization, although it appears that other structural approaches would also be available. It would be essential to respect appropriately the potentially competing interests of the enterprises and their

Student Loan Marketing Association (1994b, p. 1).

stockholders and the publicCa potentially difficult task. It has been possible here only to sketch some of the issues that would arise; further discussion is provided within the volume of research studies and elsewhere.[304]

Most importantly, the details of the privatization plan would be critical to the success of any effort to fully privatize the enterprisesCthat is, whether, in the execution of the plan, appropriately prudent management of financial risks will be engendered in both the liquidating business units and the ongoing business units as they commence operations as fully private entities. The literature also indicates that privatization would require specific measures to protect the interests of stockholders in the existing enterprises and gain their support for the idea of privatization. More extensive legal research is essential to develop a full understanding of the stockholders= rights and craft appropriate procedures to avoid litigation that could become a barrier to any full privatization effort.

Stanton (1996a, 1996b); Fannie Mae (1996b); and literature cited therein.

Table 8.1

Basic Balance Sheet Values, December 31, 1995
($ Billions)

	Fannie Mae		Freddie Mac	
	Book Values	**Fair Values**	**Book Values**	**Fair Values**
Assets:				
Mortgages held (net of reserves and amortized purchase discounts)	252.6	260.4	107.4	109.2
Other (largely investments and cash)	64.0	62.9	29.8	29.5
Liabilities:				
Debt securities [1]	299.2	306.1	120.0	118.4
Other	6.4	5.0	11.4	12.0
Off-balance-sheet items:				
MBS: outstanding [2]	[513.3]		[459.0]	
Fair value		2.2		1.2
Other		(3.3)		0.2
Value of income tax on excess of fair value over book value		(3)		(1.3)
Equity:				
Book value	11.0		5.9	
Fair value		11.0		8.4
Value of stock [4]	30.8		10.8	

Sources: Fannie Mae (1996a); Freddie Mac (1996).

[1] Includes subordinated debt.
[2] Adjusted for MBS in portfolio.
[3] Included in other liabilities.
[4] Based on average of high and low stock prices for 4th quarter.

CHAPTER IX

CONCLUSIONS AND RECOMMENDATIONS

This chapter summarizes the findings of the report concerning the issues raised in the statutory mandate for the study. It then states policy conclusions.

A. Conclusions on Issues Raised in Report Mandate

As detailed in Chapter I, this report was prepared in response to Congress=s mandate to address a series of specific topics bearing on the feasibility and desirability of full privatization of the GSEs. This section considers each of these topics and indicates HUD=s conclusions, as developed throughout the report.

Topic 1: The requirements applicable to Fannie Mae and Freddie Mac and the costs to the enterprises.

The requirements applicable to Fannie Mae and Freddie Mac are enumerated in Chapter I. FHEFSSA defines full privatization as the repeal of the enterprises= charters, elimination of any Federal sponsorship of the enterprises, and allowing the enterprises to operate as fully private entities. Accordingly, under full privatization, any special privileges or obligations defined in the charters and other laws (including FHEFSSA) regarding their GSE status would cease, although other requirements applicable to fully private financial organizations would apply.[305]

Most importantly, the enterprises would no longer be subject to HUD=s regulation to establish important housing goals. If the successor enterprises chose to form commercial banking or thrift subsidiaries to engage in primary lending, the subsidiaries would be subject to CRA requirements for lending in adjacent communities. If the successor enterprises limited their primary lending subsidiaries to mortgage banking companies or functioned solely as secondary market financial conduits, they would not be subject to CRA requirements.

The enterprises= ability to issue debt and sell MBS in connection with their ongoing business activities would be subject to securities ratings by the private rating agencies, which in turn would be based on the degree of risk underlying each issueCthe riskier the issue, the lower the rating and the higher the interest rate that the market would require.

Other privileges or obligations could continue to apply, depending on the nature of the charters of the successor enterprises and the lines of business that they chose to enter.

The enterprises would no longer be required to report data on their mortgage purchases to the Department, which would mean a return to the Ainformation vacuum@ on the GSEs, as cited by the Senate report on the 1992 Act. If they chose to form a bank, thrift, or mortgage banking company subsidiary to engage in primary lending, the subsidiaries would be subject to HMDA reporting requirements, but if they chose to function solely as secondary market financial conduits, there would be no reporting requirement.

With regard to the main privileges of the enterprises listed in Chapter I:

! The GSEs= securities would not be accorded preferred investment status as described in Chapter I, although under existing law they could retain some elements of preferred investment status if the successors issued MBS rated AA or above. To the extent that some of the current investors in Fannie Mae and Freddie Mac securities require their AAA ratings, Fannie Mae and Freddie Mac would need to reorient themselves toward a different clientele.

! The ongoing business activities of the successor enterprises would not be regulated by OFHEO but would be subject to securities registration requirements of the SEC and the States. The financial safety and soundness of the liquidating portfolios would require regulation.

! MBS held by depository institutions could continue to have 20-percent risk weights if the MBS met regulatory requirements for AA ratings or had similar evidence of financial safety and soundness; general debt securities of successor enterprises to Fannie Mae and Freddie Mac would have 100-percent risk weights. Current risk weightings of the GSEs= securities encourage mortgage lending activity by depository institutions.

! The successor enterprises would be subject to all State and local taxes, not just local property taxes.

! They would have to comply with any special qualification requirements of the States within which they do business.

! The conditional $2.25 billion lines of credit with the Treasury would cease. Although Chapter VI argues that it is not likely, the enterprises could remain Atoo big to fail@ with an indefinite degree of implicit, potential taxpayer liability. There is thus an uncertain situation with respect to taxpayer liability.

! The GSEs would have to utilize private entities as depositaries, custodians, and fiscal agents, although they could continue to utilize Federal Reserve banks if they included a commercial banking arm.

Finally, while the enterprises would continue to be subject to existing fair lending law, including the Fair Housing Act, the enterprises would not be subject to: specific requirements for HUD to periodically review the enterprises= underwriting and appraisal guidelines to ensure consistency with the Fair Housing Act; required reporting on business practices to HUD and annual HUD analysis of business practices to determine whether such practices discriminate on an unlawful basis; requirements to furnish specified information to HUD in connection with fair lending enforcement; and enforcement actions by OFHEO to remedy fair lending violations of FHEFSSA by the enterprises. These requirements are authorized by FHEFSSA or the GSEs= charters, which would be revoked under full privatization.

Given the extent of these regulatory changes, if Congress elects to pursue further the concept of full privatization, HUD suggests that enactment of other provisions be considered, to ensure thatC

! Affordable housing loans continue to be purchased by the secondary market.

! Secondary market enterprises continue to use their leadership role in the mortgage market to effectuate fair lending.

! An adequate degree of financial safety and soundness is maintained. The liquidating portfolios will require continued financial safety and soundness regulation to ensure that commitments to debtholders and MBS holders are fulfilled. Also, the potential for creating entities conducting ongoing business that would be Atoo big to fail@ after transition also may merit continuing regulation.

Further regulation could also be appropriate if the enterprises retain Federal charters, depending on the lines of business the enterprises chose to undertake.

Topic 2: The cost of capital to the enterprises.

Chapter VI indicates that the debt rating of the GSEs would likely decline from its current AAA to AA or (most likely) A, and based on this, the costs of debt could rise by as much as 30 to 75 basis points. Moreover, interest rates on MBS would tend to rise as well, by 30 to 35 basis points, and the GSEs would be required to hold greater reserves backing individual MBS issues. Corresponding to this perceived increased riskiness of debt and MBS, the GSEs= stock would likely also come to be viewed as more risky than before; this would increase the GSEs= costs of raising any new equity.

Topic 3: Housing affordability and availability and the cost of homeownership

The overall conclusion of Chapter IV is that, given the higher credit risk of affordable loans, Fannie Mae and Freddie Mac would almost certainly reduce their affordable lending initiatives if they were fully privatized. The chapter shows that this is a particular problem given the presence of a large number of potential homeowners who could benefit from affordability programs such as those offered by the GSEs. The GSEs and other industry participants have recently begun to reach out to these underserved families; full privatization of the GSEs would cause the market to pull back from these efforts. The reduction in home mortgage rates resulting from GSE status has particularly beneficial effects with respect to borrowers of modest means.

In the multifamily area, certain classes of affordable properties have inadequate access to debt financing. A sustained GSE presence in the multifamily secondary market would enhance the liquidity of multifamily mortgages, extending access to credit for affordable multifamily properties, and reduce the cost of credit for these properties. The Secretary=s housing goals provide a mandate for the GSEs to maintain this presence. Full privatization, on the other hand, would reduce social benefits and would shift some conventional multifamily loans currently purchased by the GSEs to possibly less efficient Government insurance programs of FHA.

The mortgage market currently underserves various parts of the country. HUD has identified market areas that are Aunderserved@ by mortgage credit providers, based on proportions of low-income and minority families and has established goals for the GSEs= business in these areas. Privatization would end HUD=s ability to establish these goals and would likely precipitate a reduction in the supply of mortgage credit for these areas. Privatization would also terminate the requirement that Fannie Mae and Freddie Mac purchase only mortgages below the conforming loan limit, which also tends to motivate the provision of mortgage capital to lower income borrowers.

With respect to homeownership, Chapter II of this report cites research suggesting that an increase in mortgage interest rates that would likely be associated with full privatization of the GSEs would raise the cost of homeownership and cause some reduction in homeownership rates. The latter effect would be contrary to the goals of the National Homeownership Strategy currently being pursued by the President.

Topic 4: The level of secondary mortgage market competition subsequently available in the private sector.

The jumbo securitization market is highly competitive. Chapter VI finds that conduits of substantially smaller scale than the GSEs can operate viable, competitive MBS programs, achieving liquidity which is reasonably close to that of the GSEs. Competition in what is now the conforming market would increase as jumbo conduits entered this market, although it seems likely also that the market would continue to be dominated by a few, large securitizers based on the existence of some economies of scale.

Uncertainty exists concerning the effects of removing Federal sponsorship from the secondary market, particularly in view of the GSEs= current market dominance and the market=s substantially increased demand for credit enhancements under full privatization. Market disruptions at the initial stages following full privatization are especially possible.

Topic 5: Whether increased amounts of capital would be necessary for the enterprises to continue operation.

The effect of privatization on required amounts of capital depends on the business mix selected by the privatized enterprises and on the level of risk that they chose to maintain. The increase in funding costs of debt associated with a shift from AAA to AA or A ratings would almost certainly prompt a substantial reduction, or even a complete cessation, of the portfolio operations of the enterprises. In this case, the enterprises= capital would be applied to the MBS business and might not have to be raised substantially. (Because an MBS program involves much less exposure to interest rate risk than a portfolio operation, less capital is required.) If, however, the GSEs maintained a mix of portfolio and MBS business similar to their current pattern, capital would have to be increased substantially.

Topic 6: The secondary market for residential loans and the liquidity of such loans.

The secondary market infrastructure that has developed with the GSEs is now well established. The private secondary mortgage market has made great strides in the past few years, and a solid infrastructure of private secondary market institutions, knowledge, and expertise now exists. Clearly, private conduits have been the beneficiaries of the secondary market infrastructure that has developed with the GSEs.

Under full privatization, the MBS market would continue to be the major vehicle for funding fixed-rate mortgages. Credit enhancements (e.g., senior-subordinated structures, corporate guarantees, and reserve funds) required by bond rating agencies would replace the presumed Government guarantee in determining the credit quality of mortgage-related securities sold in the conforming secondary market.

The two GSEs, through their MBS and portfolio operations, currently account for most of the liquidity in the conforming mortgage market (i.e., conventional mortgages less than $207,000). Under full privatization, an enormous demand would be placed on the private market to provide the liquidity and credit enhancements that are now supported by the GSEs= agency status (that is, the factors that lead to the presumption of a Government guarantee on their securities). There is some question concerning the ability of the market to increase the volume of credit enhancements provided to the market in a short time period. Therefore, while there would probably be no major long-term adverse effects on liquidity from ending the agency status there remains an element of uncertainty, particularly in the initial stages.

Topic 7: Other factors deemed appropriate to enable the Congress to evaluate the desirability and feasibility of privatization of the enterprises.

HUD believes that the current structure of responsibilities, prerogatives, and regulation for Fannie Mae and Freddie Mac is serving the public interest effectively. There is no compelling reason why it should be changed at this time, and there continues to be a strong public-interest rationale for maintaining it. The following points argue for this conclusion:

! Identifiable categories of borrowers have been and continue to be underserved by mortgage markets; they are identified by their incomes and by demographic features of neighborhoods (particularly income and the proportion of minority residents) and include borrowers for both single-family and multifamily housing. The lending community, encouraged by FHEFSSA (on the secondary market level), CRA (for primary lenders), HMDA reporting, and increased enforcement of fair lending laws by HUD and the Department of Justice (DOJ), has begun to reach out to these markets. Increasing housing affordability and improving homeownership opportunities for these underserved homeowners are important public-purpose objectives that are served by the presence of the GSEs. Statutory features identified in the report allow the GSEs to have a competitive advantage over others in the market: The affordable housing goals represent an appropriate responsibility to be placed on the GSEs in exchange for these market advantages.

! The housing goals established for the GSEs by HUD reflect important socioeconomic, market, and financial considerations. The goals focus on the broad performance of the GSEs and, as such, have been set in a reliable and consistent manner that should assure fulfillment of congressional intent without micromanagement of the GSEs= operations or business strategies.

! The GSEs have made demonstrable progress in supporting affordable housing initiatives following the enactment of FHEFSSA. The GSEs= financing of housing for low- and moderate-income families has increased from under 30 percent of the GSEs= combined business in 1992 (just before the housing goals were established) to more than 40 percent in 1995.

! Despite recent improvements of performance of the GSEs in supporting affordable housing initiatives, more remains to be done. The GSEs lag depositories and other market participants in the funding of loans for lower income borrowers, and they are currently meeting most of the affordable housing goals by purchasing standard conventional loans, as opposed to loans that require more intensive underwriting and consumer education.

! The Department is concerned that fully privatizing the GSEs would reverse recent improvements in affordable lending that the GSEs have made under the housing goals. Specifically, full privatization could reduce the GSEs= willingness to develop flexible underwriting standards, offer mortgage products designed for lower income families, and undertake marketing and outreach in underserved neighborhoodsC particularly with respect to loans that require more intensive underwriting and consumer education.

! The potential contingent liability of taxpayers associated with the GSEs is an important concern. It will be effectively controlled through the regulatory structure established by Congress when it enacted FHEFSSA. This development of this structure, involving a financial regulator (OFHEO) separate from the program regulator, was a constructive advance toward ensuring the safety and soundness of the GSEs.

! HUD=s ability to exercise its fair lending oversight responsibilities through the GSEs is also a valuable element of the GSE structure. It includes HUD=s ability to seek the assistance of the GSEs in gathering data in connection with fair lending law enforcement, requirements to promote fair lending on a Amacro@ basis through HUD review of underwriting and appraisal guidelines and annual review of the GSEs= business practices, and regulatory enforcement through OFHEO. Under full privatization of the GSEs, these would be replaced by a time-consuming, case-by-case approach to resolution of discrimination cases.

B. Recommendations

HUD recommends maintaining the existing corporate structure. Most importantly, the housing goals should be continued, because they have led the GSEs to purchase more affordable housing loans, and further gains toward the new, better targeted goals are anticipated. The concept behind FHEFSSA makes sense, and the initial implementation of its provisions is only now just underway. Progress has been made on the part of the GSEs in achieving the housing goals, but more remains to be done; the Act and related rule need time to work.

HUD also recommends that the GSE arrangement be reassessed periodically. First, there has been only limited experience under the housing goals, and no experience under the eventual full set of risk-based and minimum capital standards. Continual reassessment will provide information based on experience with both the functioning and impacts of the housing goals and with the risk-based capital standards that OFHEO will promulgate. In addition, future FHEFSSA-mandated reviews of the GSEs= underwriting and appraisal practices should produce further information relevant to the analysis of full privatization. If OFHEO=s forthcoming risk-based capital regulations require changes of any significant scope in the enterprises= capital relative to their books of business, then the magnitudes of many of the potential effects identified in this report could change.

Second, it is possible that as markets and institutions evolve, the rationale for the GSEs could change even more. Ongoing change in the overall capital market provides a strong rationale for reexamining the GSE structure periodically. Numerous broad market factors could change, which could affect the ability of markets to accommodate the GSEs as fully private entities and the degree of confidence that could be had in the outcome of the privatization process.

HUD therefore recommends reassessing the GSE arrangement soon after some experience has been gained under the recently revised housing goals and OFHEO=s new risk-based capital requirements (scheduled to be issued in 1997), and periodically thereafter. Examination should be made both of the nature of unmet needs in the mortgage marketplace that would indicate a continued rationale for GSE status, and whether there are any reasons for changing the goals or the capital requirements. GSE status should not be taken for granted; its intent is to accomplish specific public purposes in exchange for which substantial benefits are provided to the GSEs. Periodic reexamination will ensure that this balance of public benefits and GSE advantages continues to make sense.

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