Opening the Doors to Homeownership: Challenges to Federal Policy

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The U.S. homeownership rate reached a record high of 67.1 percent in mid-2000, a gain of about 3 percentage points from 1994. By then, some 71 million U.S. households had attained homeownership. The HUD-stated policy objective, however, is to reach a 70-percent homeownership rate by 2006. The question arises, however, as to whether such a goal is achievable. To shed light on the homeownership policy objective, this article examines those factors that have contributed to the recent gains in homeownership as well as those that might constrain further upward movement in that rate. In particular, the article sheds light on the role of household economic status and educational attainment in the achievement of homeownership and considers as well the role of the Federal Housing Administration (FHA), Ginnie Mae, and the other secondary market institutions in support of Federal housing policy.

Recent Gains in Homeownership: Winners and Losers

Evidence from the 5-year period ending in the third quarter of 1999 suggests that gains in homeownership derived importantly from minority communities. Homeownership rates among Blacks and Latinos jumped a substantial 4.6 and 5.2 percentage points during this period, relative to a 3.7 percentage point gain for Whites. In percent terms, Black and Hispanic homeownership rates moved up by 11 and 13 percent respectively, relative to about a 5-percent gain for Whites.

Even with those gains, however, sizable homeownership rate gaps persist between minority and White populations. These gaps in homeownership eased down by only about a percentage point over the 1994–99 period and remained close to 27 percentage points. For example, by late 1999, nearly 74 percent of Whites had achieved homeownership status, compared with only about 46 to 47 percent of Black and Hispanic households.

Minority homeownership gains were well evidenced in suburban locations, where the rate of minority homeownership moved up from about 50 to 55 percent during this period. Among suburban Whites, homeownership rates moved up from about 74 to 77 percent. The ownership rate among households earning less than median family income was 50 percent in 1999. Among households under the age of 35, the homeownership rate was about 40 percent in 1999. Interestingly, the rate for young households has dropped a full 5 percentage points since 1979. The highest homeownership rate—among households in the 55 to 64-year-old group—was approximately 81 percent.

Who Chooses Homeownership?

Clearly, achieving the HUD policy objective of a 70-percent U.S. homeownership rate requires significant upward movement in homeownership rates among minorities. Overall, the 70-percent policy goal requires that 3.8 million additional families be added to the ranks of U.S. homeowners. HUD estimates that the gap between minority and non-minority families must be reduced by a full 15 percent to reach this goal.

In a recent study, we assessed how to close the homeownership gap between minority and nonminority populations.¹ Specifically, our research sought an improved understanding of the housing tenure choice dynamics of racial and ethnic minorities. Further, it speaks to the economic, financing, locational, neighborhood, and other factors that have led to this persistent homeownership gap. The study sought to assess the variability in the economic and demographic determinants of homeownership choice among households in Los Angeles County over time and across race-ethnicity and immigrant groups. With 8.9 million residents in 1990, Los Angeles County was dramatically diverse in both its residential composition and in its array of neighborhood living environments.

In 1990 California's homeownership rate of 57.5 percent and Los Angeles County's rate of 50.4 percent were far below a national average of about 64.0 percent. In part, this was due to relatively high house prices in California and the consequent lack of affordable housing. Racial and ethnic variations in median household income also were substantial in Los Angeles County over the 1980–90 period. Among movers, Black and Latino median incomes rose only to about \$28,000 in 1990, far below the \$45,000 recorded for White median income in 1990. During the same period, median housing prices rose from about \$110,000 in 1980 to approximately \$212,000 by the end of the decade.

During the 1980s, census data indicate that homeownership rates of White households in Los Angeles County increased to about 57 percent, whereas those of Black households declined perceptibly, to about 37 percent. Asian households scored significant gains in the 1980s, approaching the homeownership levels of White households.

Our study focused on the homeownership choices of those who moved during the 1985– 90 period. Residential length-of-stay among homeowners well exceeded that of renters; accordingly, homeownership rates overall were relatively low among the recent mover sample. By decade's end, for instance, less than one-fifth of Los Angeles County's Black movers and about one-fourth of Latino movers had achieved homeownership.

To test for factors that influence homeownership, our research draws upon the public use microdata sample (PUMS) file of the 1980 and 1990 decennial census. The statistical model includes controls for demographic factors (race-ethnicity, age, marital status, number of people in the household, number of workers in the household, migrant origin and history), as well as economic factors (salary income, dividend and other income, education level of the householder, neighborhood house prices), and other factors that affect the likelihood of homeownership. The large sample size provided by the census permits stratification of the statistical model by race-ethnicity and immigrant status to enable comparison of variations in homeownership determinants among racial, ethnic, and immigrant groups in a single year and across time.

After controlling for various demographic factors, our findings point to the overriding importance of household economic and human capital characteristics in an explanation of the decision to own. For instance, attainment of a college degree (relative to a high school degree) serves to significantly boost homeownership probability (by 4 percentage points in 1990). As expected, the homeownership probabilities of those who did not graduate

from high school were significantly dampened (7 percentage points less) relative to counterparts with higher levels of education. This confirms the belief that attaining higher levels of education is important in increasing homeownership. With respect to income, higher levels of wage and salary income, dividend income, and other income all serve to significantly boost homeownership probability. An increase in income of \$10,000 served to increase the probability of homeownership by approximately 6 percentage points.

The analysis further controlled for the effects of immigrant status on the likelihood of homeownership. Homeownership choice among newly arrived immigrants was 5 percentage points lower after controlling for the lower income and education of immigrants. Further, if the immigrants were Latino, homeownership was reduced by an additional 12 percentage points. At the same time, status as an Asian, both immigrant and nonimmigrant, resulted in slightly higher homeownership rates. After immigrants had been in the United States for a little as 5 years, their homeownership rates were closer to those of native-born citizens of the same race. After 10 years, the homeownership rates of Latino immigrants were approximately 5 percentage points lower than native-born Latinos; by contrast, the homeownership rates of Asian immigrants were higher than native-born Asians.

Having controlled for the various economic and demographic effects discussed above, our findings indicated a sizable and significant effect of household race-ethnicity in the determination of tenure choice. Relative to Whites, Black households had a lower probability of homeownership of 11 percentage points in 1990. Among Latinos and Asians, the coefficients on race-ethnic status were relatively stable and of limited magnitude over the period, with Latinos having slightly lower and Asians slightly higher homeownership. These results were based on the assumption that the impact of income, education, and other factors were similar by race. In fact, there were important differences in the impact of additional income and immigrant status by race.

The homeownership effects of increases in wage and salary income, dividend income, and other income among Latino and Black households substantially exceeded those of other racial and ethnic groups. The impact of asset-based income for Asians was consistently twice as important as for Whites during the 1980s.

Our study provides evidence of sizable and significant differences in homeownership probability among Asian and Latino immigrants. Relative to immigrants who had arrived in the United States during the previous 5 years, homeownership probabilities among Latino immigrants in 1990 moved up with duration of residence in the United States. For the 1990 sample, homeownership probabilities among Latino immigrants were greatest among those who had been in the United States for 20 to 30 years. Compared with nativeborn Latinos, these immigrants had higher probabilities of homeownership (approximately 5 and 15 percentage points in 1980 and 1990, respectively). Immigrant status was much less important for Asians than Latinos. In fact, the only immigrants with lower homeownership probabilities than natives were those who arrived more than 30 years ago.

Given differences in the impact of economic and demographic factors by race and ethnicity, our study employed a simulation technique to assess the approximate percentage of the gap in homeownership between Whites and Blacks and between Whites and Latinos that was explained by differences in economic and demographic characteristics. Among movers in 1990, the gap between Whites and Blacks was 22 percentage points. At the same time, Blacks experienced severe income and education deficits. The results of this simulation technique imply that approximately one-half of the gap would have been closed in 1990 had Blacks achieved the socioeconomic status of Whites. This is in sharp contrast to the results for Latinos. The White-Latino gap was 15 percentage points in 1990. The gap was almost completely explained by differences in the socio-economic characteristics of Latinos and Whites; specifically, differences in income, education, and immigrant status. The unexplained portion of the gap was only 3 percentage points in 1990.

There were three primary findings of the analysis:

- Asians, both natives and immigrants as a group, have homeownership rates that are at least as high as those of Whites.
- Latinos have lower homeownership rates than Whites, but the lower rates are explained by differences in income, education, and immigrant status.
- Blacks have lower homeownership rates than Whites, and even though the gap was largely explained by lower income and education levels in 1980, half of the gap (11 percentage points) remained unexplained by differences in the characteristics of Blacks and Whites.

What do these results mean for homeownership, both in Los Angeles and more generally? First, the growing Asian population is very good for housing demand. The relative incomes of Asians and Whites are similar, and it appears that Asians may actually have higher levels of housing demand than do Whites, but the differences are small. Second, growing numbers of Latinos have had a slightly depressive effect on homeownership, mostly because the growth of the Latino population derives from recent immigrants with low incomes and low education. As the duration of Latino immigrant stays increases, and as income and education levels catch up to those of Whites, it is likely that Latinos will have similar housing demand to Whites.

On the other hand, the findings regarding Black households are troubling. It has been well established that difficulties in access to housing and housing finance markets have had an important depressive effect on Black homeownership. At the same time, it is not likely that these difficulties increased over the time frame of the analysis to the extent that the gap in homeownership, which is not accounted for, would have nearly quadrupled. This leaves us searching for other explanations. Given that the share of the Black population declined over the period, one can ask the question about whether this finding can be explained by selective out-migration of Black homeowners to locations outside Los Angeles County. In other words, is there evidence that the decline in Black homeownership in Los Angeles County is compensated for by increases in Black homeownership rates in the surrounding counties such as San Bernardino, Orange, and Riverside?

Our most recent results suggest selective out-migration from Los Angeles County among Black households choosing to own. Our findings suggest a substantially smaller unexplained gap in homeownership attainment among Black movers to Inland Empire San Bernardino County. Housing is substantially more affordable in Inland Empire counties. Although Black movers to San Bernardino County had income levels below the averages of other racial and ethnic groups in that county, those income levels were higher than Black movers in Los Angeles County. Results clearly indicate that more affluent Black households were choosing to own outside of Los Angeles County boundaries.

Finally, the White-Black gap in homeownership choice in San Bernardino County was closed altogether if we simulate for Black home purchases in economically more viable and integrated neighborhoods. Homeownership traditionally has been the primary investment vehicle of the typical U.S. household. Evidence from our study suggests that the

availability of affordable housing in newer, integrated neighborhoods outside the city serves to boost homeownership propensities of Black movers.

Housing Finance

HUD also seeks to support the homeownership goal via the Federal Housing Administration (FHA). Indeed, as is indicated by Home Mortgage Disclosure Act (HMDA) data, the FHA market share among loans originated to minority populations has moved up perceptibly in recent years. Between 1993 and 1998, the FHA share among home purchase loans originated to Blacks increased from 37 to 42 percent; in the case of Hispanics, that share moved up from 37 to 46 percent. In marked contrast, the FHA share of home purchase loans originated to White households fell during this period, from 17 percent in 1993 to less than 15 percent in 1998. Clearly, the FHA appears vital to the origination of home purchase loans to Black and Hispanic households.

However, FHA contributions to HUD homeownership goals depend on support of FHAinsured mortgages in secondary mortgage markets. Historically, approximately 95 percent of all securitized FHA- and Veterans Administration (VA)-insured mortgages have been pooled in Ginnie Mae mortgage-backed securities (MBS). Ginnie Mae's full-faith-andcredit guarantee ensures that investors receive timely payments of scheduled principal and interest due on the pooled mortgages that back their securities, regardless of issuer or borrower defaults. In principle, the full-faith-and-credit guarantee means that investors require lower yield on the MBS, which through the securitization process allows lenders to reduce borrowing costs to homebuyers. Ginnie Mae securities are among the most widely held and traded mortgage-backed securities in the world, making them a stabilizing influence in the flow of capital to the United States mortgage market. Ginnie Mae has guaranteed more than \$1.5 trillion in mortgage-backed securities. There are currently more than \$550 billion Ginnie Mae MBS outstanding.

Among secondary mortgage market participants, Ginnie Mae guarantees reflect a greater share of loans from lower income and minority groups than that of the GSEs. In 1990 almost 50 percent of Ginnie Mae-guaranteed mortgage-backed securities were backed by loans to homebuyers whose incomes were below the median for metropolitan areas in which they resided, which was commensurate with the percentage of total mortgages originated for households with below median incomes (52 percent).² In 1990, 9 percent and 6 percent of Ginnie Mae-guaranteed MBS were backed by mortgages made to Black and Hispanic homebuyers, respectively. This distribution also mirrored the percentages of total originations made to Black and Hispanic homebuyers in the primary market.³ As indicated by data from the mid-1990s, FHA-insured home purchase loans were concentrated to a greater extent on low-income and minority borrowers, first-time homebuyers, and borrowers with higher loan-to-value (LTV) ratios than those with loans insured by private mortgage insurers.⁴ In 1995, 66 percent of FHA's borrowers might not have qualified for private mortgage insurance for the loans they received.⁵

In 1996 FHA insured 23 percent of the 984,495 home purchase loans made to lowincome homebuyers, and these homebuyers represented approximately 39 percent of FHA-insured loans.⁶ In addition, FHA insured 30 percent of all loans made to minority home-buyers in 1996, and these homebuyers represented about 31 percent of FHAinsured loans.⁷ The FHA insured more loans for minority borrowers in 1996 than the private mortgage insurers.⁸ Furthermore, about 74 percent of FHA-insured loans in 1996 were made to first-time homebuyers.⁹ FHA insured a higher percentage of loans for firsttime home-buyers than its overall share of the insured home purchase market.¹⁰ While 63 percent of FHA-insured loans made in 1996 had LTV ratios exceeding 95 percent, only about 7 percent of conventional loans below the maximum FHA loan limit had LTV ratios exceeding 95 percent in 1997.¹¹ In 1997, 76 percent of FHA loans originated with first-time homebuyers.¹²

Use of the FHA program has been disproportionately high among Black borrowers relative to White, Hispanic, and Asian borrowers.¹³ Whereas the relative importance of the FHA program tends to decrease as household income increases, Black borrowers have remained substantially more likely to use the FHA program than White or Asian borrowers at all income levels.¹⁴ Indeed, even higher-income Blacks (those earning more than 120 percent of the area median income (AMI)) have relied more heavily on FHA mortgages than lower-income Whites, 39 percent to 31 percent, respectively. Data also show that Ginnie Mae has devoted more of its business to lower income segments of the market than Fannie Mae and Freddie Mac, where lower income is defined as households with incomes below 80 percent of the median family income. From 1991 to 1994, 33.5 percent of Ginnie Mae's business served the lower income market, while only 13.4 percent of Fannie Mae's and 13.1 percent of Freddie Mac's business served the lower income market.¹⁵

Recently, changes in mortgage market conditions and environment have created significant challenges for Ginnie Mae. During 2000, increases in fixed-rate mortgage interest rates contributed to a sizable decrease in FHA/VA-insured mortgage origination volume from the 162.2 billion recorded in 1999 (see exhibit 1).

Exhibit 1



Fixed-Rate FHA/VA Originations and Ginnie Mae Issuance

Source: FHA, VA, and Salomon Smith Barney

The reduction in mortgage securitization derived as well from a decrease in borrower refinancing, which is a major source for the mortgage originations for the pools securitized in the secondary mortgage market. As a consequence of these factors, the volume of mortgages available for pooling and securitization decreased significantly in the secondary mortgage market. The decreased mortgage origination activity led to a reduction of secondary mortgage market activity by Ginnie Mae and the GSEs (see exhibit 2).

At the same time, Fannie Mae and Freddie Mac have developed securitization programs targeting Government-guaranteed loans and have increased the share of FHA/VA loans that they buy for their portfolios. Both Fannie Mae and Freddie Mac have substantially

Exhibit 2



increased purchases of mortgage securities guaranteed by Ginnie Mae and other Government agencies or issued by private firms.¹⁶ Additionally, Fannie Mae and Freddie Mac have come under increased pressure from HUD to increase their focus on servicing lowand moderate-income homebuyers. A revised affordable housing regulation proposed by HUD in 2000 seeks to establish numeric purchasing goals of affordable housing mortgages and provides a further incentive for the GSEs to purchase FHA and VA loans.

Available data indicate that in 1998 Fannie Mae purchased \$6 billion in FHA loans. In 1999 it purchased \$8.8 billion through the first 6 months of the year, and, according to a speech given by the CEO Frank Raines in September 1999, Fannie Mae's total purchases of FHA loans for that year had reached \$16 billion.

In 1998 the Fannie Mae-I mortgage-backed securities (MBS) program securitized \$1.8 billion of FHA and VA loans. In 1999 a dozen lenders put \$4.5 billion into Fannie Mae-I securities.¹⁷ New accounting rules for hedging activities, such as FAS 133, make the business of servicing more complex and could make the Fannie Mae-I program even more attractive to issuers. In 1999 Fannie Mae securitized about \$4.4 billion of FHA and VA mortgages in its Fannie Mae-I program, and overall bought about \$23 billion of government guaranteed loans in that year.¹⁸

Recent evolution in mortgage market economic and regulatory conditions has led to increased Federal Home Loan Bank (FHLB) participation in the secondary market for FHA/VA loans. The FHLB's expansion into the FHA/VA market, while consistent with its mission charter "to support the residential mortgage lending of their memberstockholders and provide an attractive and safe stock investment,"¹⁹ has been made possible because of its portfolio purchase capability. In addition, FHLB banks provide members with access to economical wholesale credit products through new programs with better execution and higher commitment goals.

A primary vehicle used by the FHLB to increase its FHA/VA market participation has been its Mortgage Partnership Finance (MPF) program.²⁰ That program was launched as a

pilot program by FHLB Chicago in 1997.²¹ The MPF program is designed to offer member banks an alternative secondary market execution for Government-guaranteed fixedrate mortgages.

The MPF program creates a partnership between FHLB member institutions and the FHLBs through risk-sharing arrangements. Member institutions have expertise in originating loans and customer relations, and are well experienced in managing market, credit, and servicing risk. On the other hand, FHLBs fund and retain mortgages in their portfolios, managing funding, interest rate, and option/prepayment risk. Thus, rather than paying guarantee fees to sell their loans to a secondary market agency, members receive credit enhancement fees from the FHLB for their credit expertise.²² The MPF program poses a challenge to Ginnie Mae's business, since the FHLB can offer a more attractive price execution for FHA and VA loans. Commitments by the MPF program soared from \$6.8 billion in December 1999 to \$24 billion in March 2000. The MPF retained portfolio reportedly grew from \$1.8 billion in January to \$4.4 billion in March.²³

In recent years, Ginnie Mae's ability to fulfill its mission and to respond to the competitive environment has been constrained by organizational and programmatic limitations. In contradistinction to the GSEs, Ginnie Mae lacks a portfolio capability. While Fannie Mae and Freddie Mac, and most recently the FHLB, have used their portfolio capabilities to support their programs to the benefit of their constituencies, Ginnie Mae has not had a similar opportunity to implement such a program to further its support of low- and moderate-income homebuyers.

As suggested above, a variety of factors, notably including Ginnie Mae's various organizational constraints, success of the FHLB's MPF program, and the increased participation of the GSEs in the FHA/VA market via Fannie Mae's Fannie Mae-I program, have contributed to the loss of Ginnie Mae market share. Ginnie Mae had 93.4-percent market share of FHA and VA mortgage securitizations at the beginning of 2000, a figure close to the historical average.²⁴ However, by the end of the first quarter 2000, Ginnie Mae's market share had fallen to 84.7 percent.²⁵ As a result of these and other factors, Ginnie Mae's market share of securitized FHA/VA loans fell to its lowest point of 74 percent by the end of the second quarter.²⁶

An important source of pricing disadvantage for Ginnie Mae is its lack of portfolio capability. A Ginnie Mae portfolio investment program might provide for a wider variety of product parameters (expand the Ginnie I or Ginnie II pooling requirements). Additionally, Ginnie Mae's market participation as an investor would likely provide greater confidence to dealers and investors in its MBS programs. Ginnie Mae's competitive position is further hampered due to constraints on program flexibility including an inability to vary the guarantee fee structure in response to market conditions or to provide preferential treatment to significant (large) customers. Similar portfolio investment activities undertaken by Freddie Mac and Fannie Mae and more recently by the FHLB demonstrate the importance of these activities to the pricing and liquidity of their secondary market securities.

For example, a review of yield spreads between the current coupon Ginnie Mae and Fannie Mae and Freddie Mac MBS from March 29, 1999, through March 22, 2000, illustrates the fact that despite the lower credit quality of the GSEs' guarantee, conventional MBS had higher prices and lower yields than Ginnie Mae MBS. From the beginning of this period through mid-March 2000, Ginnie Mae MBS yields were higher than the GSEs, by nearly 10 basis points. The data suggest that homebuyers did not receive the full benefit of Ginnie Mae's full-faith-and-credit guarantee during this period because of this price distortion in the market, due in part to the GSEs' portfolio purchases. Ginnie Mae portfolio activity would address this particular technical distortion.

In recent analysis, we applied time-series econometric methods to explain the fluctuations in yield spread between Fannie Mae and Ginnie Mae MBS over the 1994–98 period. The methodology for analyzing monthly time-series data provided an empirical basis to attribute and quantify the impact of different factors on changes in the yield spread. The model results indicated that Ginnie Mae MBS yields would have been one or two basis points lower than yields on Fannie Mae MBS if Fannie Mae did not increase the liquidity of the MBS market through its portfolio purchases.

These competitive pressures could lead to a diminished presence of Ginnie Mae in the secondary market. Indeed, the reduction in Ginnie Mae activity occurs at a time when homeownership attainment among low- and moderate-income and minority house-holds remains substantially below the national housing rate, and the number of low- to moderate-income families with severe housing needs has reached a high of 5.4 million.²⁷ The supply of capital to low- to moderate-income homebuyers could be further reduced if the GSEs were to tighten mortgage underwriting requirements (as occurred during previous cyclical downturns) or return to investment in Government-insured versus conventional mortgage finance instruments because of ongoing GSE assessments of risk.

In the wake of a perceptible decline in the issuance of Ginnie Mae MBS, the program may compromise the size and liquidity necessary to provide the much-needed investor market support. It is also possible that *cherry picking* by Fannie Mae, Freddie Mac, and the FHLB, in which the best performing and most profitable of the Government-insured loans are selected for purchase, may lead to an increased risk profile of Ginnie Mae. In this case, Ginnie Mae would be left to securitize fewer loans and loans of lesser credit quality, which may result in adverse changes of prepayment parameters and other characteristics of the MBS. In addition, Ginnie Mae can expect a decrease in the proportion of FHA loans relative to VA loans in new MBS issuances, which could lead to changes in the security's risk profile.

From the Ginnie Mae perspective, adverse selection of Government-backed loans could have unfavorable liquidity and pricing implications for the MBS it guarantees. Undoubtedly, the differentially comprised Ginnie Mae pools would be risk-assessed and priced accordingly by the investment community; such an outcome could have adverse pricing implications for the Government-insured mortgage borrower in the primary market. Similarly, adverse Ginnie Mae pricing implications could derive from possible reductions in program liquidity.

It is possible that in the short term, the increased competition between the GSEs and a reduction in the supply of Ginnie Mae's full-faith-and-credit securities could result in lower borrowing costs to FHA/VA/RHS customers. However, as suggested above, during periods of economic slowdown or market crises (such as during September 1998), the volatility of demand for FHA/VA/RHS collateral may increase. In times of economic downturn and market volatility, the GSEs may find themselves under significant pressure to reduce their market presence due to increased risk of defaults, profitability pressures, and worsening financial conditions. In this case, the achievement of Federal housing goals for low- and moderate-income households could be compromised. Such an outcome would be exacerbated if Ginnie Mae were weakened and less able to provide a stable link between primary mortgage markets and capital markets.

Author

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Notes

- 1. The research is based on the study by Gary Painter, Stuart Gabriel, and Dowell Myers (1999) titled "Race, Immigrant Status, and Housing Tenure Choice." The full research report is available from the Research Institute for Housing America and is forthcoming in the *Journal of Urban Economics*.
- Canner, Glenn, and Gabriel, Stuart. 1992. "Market Segmentation and Lender Specialization in the Primary and Secondary Mortgage Markets" *Housing Policy Debate*, 3, 2: 241–329.
- Canner, Glenn, and Gabriel, Stuart. 1992. "Market Segmentation and Lender Specialization in the Primary and Secondary Mortgage Markets" *Housing Policy Debate*, 3, 2: 241–329.
- 4. U.S. General Accounting Office. "Homeownership: Achievements of and Challenges Faced by FHA's Single Family Mortgage Insurance Program." (June 2, 1998), page 5.
- 5. U.S. General Accounting Office. "Homeownership: Achievements of and Challenges Faced by FHA's Single Family Mortgage Insurance Program." (June 2, 1998), page 5.
- 6. U.S. General Accounting Office. "Homeownership: Achievements of and Challenges Faced by FHA's Single Family Mortgage Insurance Program." (June 2, 1998), page 6.
- 7. U.S. General Accounting Office. "Homeownership: Achievements of and Challenges Faced by FHS's Single Family Mortgage Insurance Program." (June 2, 1998), page 6.
- 8. U.S. General Accounting Office. "Homeownership: Achievements of and Challenges Faced by FHS's Single Family Mortgage Insurance Program." (June 2, 1998), page 6.
- 9. U.S. General Accounting Office. "Homeownership: Achievements of and Challenges Faced by FHS's Single Family Mortgage Insurance Program." (June 2, 1998), page 6.
- 10. U.S. General Accounting Office. "Homeownership: Achievements of and Challenges Faced by FHS's Single Family Mortgage Insurance Program." (June 2, 1998), page 6.
- 11. U.S. General Accounting Office. "Homeownership: Achievements of and Challenges Faced by FHS's Single Family Mortgage Insurance Program." (June 2, 1998), page 6.
- 12. http://www.hud.gov/fha

- 13. Gabriel, Stuart, John Goering, and Ronald Wienk. 1996. "The Role of FHA in the Provision of Credit to Minorities," in *Mortgage Lending, Discrimination, and Federal Policy*. Urban Institute Press, pp. 183–250.
- 14. Gabriel, Stuart, John Goering, and Ronald Wienk. 1996. "The Role of FHA in the Provision of Credit to Minorities" *Mortgage Lending, Discrimination, and Federal Policy*. Urban Institute Press, pp. 183–250.
- 15. Ginnie Mae. "Fitting the Pieces Together: Ginnie Mae, Affordable Housing and the Secondary Mortgage Market." (1997), p. 36.
- 16. Office of Federal Housing Enterprise Oversight 2000 Report to Congress, p. 56.
- 17. As reported by FM Watch in The GSE Report, February 11, 2000.
- 18. Inside Mortgage Finance, November 19, 1999, and March 3, 2000.
- 19. http://www.fhlbanks.com/about.htm.
- 20. "Prospects for Ginnie Mae Changes Dimming as MBS Prices Remain Strong," *Inside MBS & ABS*. (August 11, 2000).
- 21. "Chicago's FHLBank Says Program's Loans Rise to \$10.2 Billion," *The Wall Street Journal.* (July 11, 2000).
- 22. http://www.fhlbc.com/mpf.htm.
- 23. See FM Watch's GSE Report, March 2000.
- 24. "Prospects for Ginnie Mae Changes Dimming as MBS Prices Remain Strong," *Inside MBS & ABS*. (August 11, 2000).
- 25. "Prospects for Ginnie Mae Changes Dimming as MBS Prices Remain Strong," *Inside MBS & ABS*. (August 11, 2000).
- 26. "Prospects for Ginnie Mae Changes Dimming as MBS Prices Remain Strong," *Inside MBS & ABS*. (August 11, 2000).
- 27. OMB website: Remarks by Jack Lew, Director of the Office of Management and Budget to The Urban Institute on May 2, 2000, titled "The FY 2001 Budget: The Choices Before Congress and Why They Matter in a Time of Surplus."