approach does not take advantage of the wealth of information currently available on mortgage activity.

In revising the rule, HUD has carefully reviewed existing information on mortgage activity in order to understand the weakness of various data sources, has conducted sensitivity analyses to show the effects of alternative parameter assumptions, and has hired independent researchers to assist in determining best estimates for the more important determinants of the housing goal market shares. HUD is well aware of uncertainties with some of the data and much of this Appendix is spent discussing the effects of these uncertainties on the market estimates.

The remainder of this section responds to several major comments about the market share methodology made by Freddie Mac and others. But with respect to Freddie Mac's statements that HUD's methodology is ''fatally flawed'' and based on ''arbitrary assumptions,'' HUD has three specific comments here:

(A) HUD contracted with Urban Institute researchers to independently evaluate its methodology for estimating market shares for the various goals. They concluded that HUD's conceptual approach is ''a reasonable approach to determining the size of the low- and moderate-income, underserved areas, and special affordable markets relative to the size of the overall conventional, conforming mortgage market.'' [1] They also concluded that Freddie Mac's approach for measuring mortgage market property shares was the wrong approach (see discussion below).

(B) Freddie Mac commissioned Abt Associates to evaluate HUD's methodology for the proposed rule. Abt Associates concluded that ''the point is not that HUD misused the data. On the contrary, HUD made reasonable attempts to arrive at plausible estimates.'' [2] (Emphasis added.)

(C) HUD has set conservative goals. For example, the Low- and Moderate-Income Goal is 40 percent for 1996 and 42 percent for 1997 and subsequent years. These goals are well below the market shares projected by HUD and the Urban Institute. In addition, the Abt study estimated that the low- and moderate-income market was 41–57 percent, placing the Low- and Moderate-Income Goal for 1997 and subsequent years at the bottom of Abt's range of estimates of market size. It should further be noted that Abt's estimates were made based on the proposed rule. A number of liberalizations in the counting rules have been made in the final rule, which mean that market estimates should be revised upward in light of these changes.

It also should be emphasized that neither GSE objected to HUD's basic model for calculating the size of the markets relevant to each of the housing goals, which involves estimating (1) the share of the market (in dwelling units) by type of property (single-family-owner, single-family-rental, and multifamily), (2) the proportion of dwelling units financed by mortgages for each type of property meeting each goal, and (3) projecting the size of the market by weighting each such goal share by the corresponding market share. The GSEs' comments focused on how the underlying estimates were derived and the resulting impacts on the size of the market for each goal. As noted above, HUD recognizes the uncertainty regarding some of these estimates, which led the Department to undertake a number of sensitivity analyses and to contract with Urban Institute researchers to reduce some of this uncertainty.

2. Major Issues

(1) Market volatility. Freddie Mac commented that HUD's analysis ignores the impact that changes in national economic conditions can have on the size of the market, stating that its recent efforts to expand the reach of the secondary market in support of low- and moderate-income people ''were aided by very favorable interest rates and macroeconomic conditions that made housing extraordinarily affordable.'' However, Freddie Mac observed, fluctuations of interest rates of approximately 250 basis points in the past year have demonstrated that housing can become much less affordable in a short period, but ''HUD's market estimates assume that the favorable conditions of 1993 and 1994 will continue indefinitely.''

HUD response. HUD has addressed the concerns about market volatility in two major ways:

(A) HUD has conducted detailed sensitivity analyses for each of the housing goals. These analyses present different estimates of market size by varying key assumptions: the size of the multifamily market; the low- and moderate-income shares of single-family owner-occupied homes [3], single-family rental homes, and multifamily units; the breakdown of the single-family market between owner-occupied units and rental units; and the multifamily loan amount per unit. These analyses support the feasibility of the goals under a wide range of conditions.

(B) With regard to volatility in the multifamily market, Freddie Mac stated the HUD's use of Residential Finance Survey (RFS) data is inappropriate, because they draw on a period when multifamily lending was unusually high. HUD did not use the RFS data in its baseline model. As the proposed rule noted, the RFS, based on a period with a high level of multifamily originations, overstates the probable level of multifamily originations in the 1996–97 period.

HUD recognizes that there is volatility in the multifamily market, and for this reason contracted with Urban Institute researchers to develop a ''steady-state'' multifamily originations model which abstracts from the volatility of interest rates, refinancings, and waves of maturing balloon mortgages.[4] This model generated projections of multifamily activity no less than, and in some cases substantially greater than, those used by HUD in this rule.

(2) Size of the multifamily market. Both GSEs commented that in the proposed rule the role of multifamily financing is consistently overstated. In particular, both GSEs advocated the use of data from the Home Mortgage Disclosure Act (HMDA) reports, rather than the Survey of Mortgage Lending Activity (SMLA), used by HUD in the proposed rule.

HUD response. HUD addressed this comment in two ways:

(A) HUD commissioned four papers on the multifamily market by Urban Institute researchers [5] and held two seminars on this topic with a wide range of participants, including the GSEs. These papers compared and evaluated

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[1] Dixie M. Blackley and James R. Follain, ''A Critique of the Methodology Used to Determine Affordable Housing Goals for the Government-Sponsored Housing Enterprises,'' October 1995, p. 21.

[2] Abt Associates, ''Evaluation of HUD-Proposed Housing Goals for the GSEs,'' February 6, 1995, p. 12.

[3] The GSEs have generally advocated use of the HMDA data. In a number of the sensitivity analyses, the percentages of single-family owner-occupied homes which qualify for the low-mod goal have been reduced below the levels reported by the 1993 and 1994 HMDA data.

[4] Robert Dunsky, James R. Follain, and Jan Ondrich, ''An Alternative Methodology to Estimate the Volume of Multifamily Mortgage Originations,'' September 1995.

[5] These are: The previously cited papers by Blackely and Follain (1995) and Dunsky, Follain, and Ondrich (1995); ''Estimating the Volume of Multifamily Mortgage Originations by Commercial Banks Using the Survey of Mortgage Lending Activity and Home Mortgage Disclosure Act data,'' by Amy D. Crews, Robert Dunsky, and James Follain (October 1995); and ''What We Know About Multifamily Mortgage Originations,'' by Amy D. Crews, Robert M. Dunsky, and James R. Follain (October 1995).