

The following information was corrected in this document on February 19, 2009, at 5 p.m.

- 1) In the *Preface*, a sentence was changed to correct a typographical error. The sentence now states the paper was prepared by the Office of Policy Analysis and Research. It previously incorrectly stated the paper had been prepared by the Office of Policy Development and Research.
- 2) On p.21 in the section, *Single-Family MBS Issuance Declines; Enterprise Share Rises Significantly*, information in the text and accompanying graph was incorrect and revised to reflect correct data and accurate single-family mortgage-backed security data.

MORTGAGE MARKETS
AND
THE ENTERPRISES
IN 2007

Original Publication July 2008
Revised February 2009

Preface

This Office of Federal Housing Enterprise Oversight (OFHEO) research paper reviews developments in the housing sector and the primary and secondary mortgage markets, the secondary market activities of Fannie Mae and Freddie Mac, and the financial performance of the Enterprises in 2007. An appendix provides tables with historical data on the activities and performance of the Enterprises, federally-established loan limits, mortgage interest rates, housing activity, and regional and national home prices, which provide a context for the survey of recent activity provided in the paper. The paper is part of OFHEO's ongoing effort to enhance public understanding of the nation's housing finance system. The paper was prepared by Andrew Leventis, Forrest Pafenberg, Valerie Smith, and Jesse Weiher of the Office of Policy Analysis and Research. Scott Laughery and Hanna Nguyen provided research assistance.

James B. Lockhart III
Director

July 2008

Contents

Page

Summary	1
Housing and Mortgage Market Developments	1
House Prices Weaken Significantly	2
Alternative Measures Evidence Varying Rates of House Price Deceleration	3
Loan Delinquencies and Foreclosure Activity Rise.....	6
Home Sales Continue to Decline; Inventories Rise Further	7
Turmoil in the Secondary Market Erupts in July.....	9
Private-Label MBS Issuance Declines Sharply in Second Half	11
Federal Home Loan Bank Advances Rise Dramatically in the Third Quarter	12
Interest Rates Respond to Market Conditions and Federal Reserve System Actions; Economy Growth Slows	13
Mortgage Originations Fall.....	16
Refinance Share of Single-Family Originations Fluctuates but Ends Year Lower	17
ARMs Lose Favor and Equity Extraction Declines.....	18
Mix of Purchase-Money Originations Continues to Change.....	20
Consolidation Among Originators Continues; Retail Lending Channel Gains Share	21
Single-Family MBS Issuance Declines; Enterprise Share Rises Significantly	23
Residential Mortgage Debt and MBS Outstanding Rise; Foreign Investors Increase Share of MBS Outstanding	24
Enterprise Secondary Mortgage Market Activities	26
Enterprise MBS Issuance Increases Sharply.....	26
Enterprise Total and Single-Family Purchases Up Sharply.....	27
Enterprise Multifamily Purchases Double	27
Purchases for the Retained Portfolio Increase at Freddie Mac but Drop at Fannie Mae.....	28
Enterprises Reduce Presence in Subprime, A-, and Alt-A Markets	29
Refinance Share and Loan-to-Value Ratios of Enterprise Single-Family Purchases Increase	30
Mortgages with High-Risk Features Backing Enterprise MBS Rise but Fall in Second Half	31
ARM Share of Purchases Declines	31
Enterprises Continue to Manage Single-Family Mortgage Credit Risk	32
Enterprises Increase Exposure to Mortgage Insurers.....	33
Estimated Enterprise Credit Loss from House Price Correction Increases Sharply	34
Enterprise Share of Mortgage Debt Outstanding Increases Dramatically	35
Financial Performance and Condition of the Enterprises	35
Enterprises Incur Heavy Losses.....	35
Enterprises' Net Income Continues to Fall as Guarantee Fee Income Increases	36
Losses due to Mark-to-Market Accounting and Certain Transactions Associated with Credit Guarantee Businesses also Increase.....	39

Credit Losses, Delinquencies, Property Acquisitions, and Provisions for Loan Losses	
Increase Significantly.....	39
Administrative Expenses Decline or Are Flat	42
Mortgage Portfolios Show Little or No Growth; Composition of Portfolios Changes	
Little.....	43
Enterprise MBS Held by Other Investors Increases	43
Holdings of Private-Label Securities Continue to Pose Risk of Fair Value Losses	44
Funding Costs Rise	45
Enterprises Tap the Preferred Stock Market to Shore Up Capital	48
Enterprises Effectively Manage Interest Rate Risk	48
Enterprise Equity Positions Weaken; Preferred Stock Represents Increasing Share of	
Regulatory Capital	50
Capital Cushions Come under Pressure but Enterprises Maintain Adequate Capital	
Levels throughout the Year.....	51

Boxes, Figures and Tables**Page**

Box A. Markets Increasingly Pessimistic About Future House Price Growth.....	5
Box B. Enterprise Credit Default Spreads in 2007.....	47
Figure 1. House Price Appreciation Over Previous Four Quarters	2
Figure 2. One-Year Change in House Prices by Census Division	3
Figure 3. Four-Quarter Percent Change in House Prices	4
Figure 4. Mortgages Delinquent and Entering Foreclosure.....	7
Figure 5. New and Existing Home Sales.....	8
Figure 6. Months Supply of Homes Available for Sale	8
Figure 7. Home Sales by Intended Use	9
Figure 8. Share of Subprime Mortgages Seriously Delinquent or in Foreclosure, Origination Years 2001 - 2007	10
Figure 9. Private-Label MBS Issuance by Sector.....	12
Figure 10. FHLB Advances 2000 – 2007Q4.....	13
Figure 11. Treasury Yield Curve in 2007.....	14
Figure 12. 10-Year Treasury and 30-Year Fixed-Rate Mortgage (FRM) Commitment Rates	15
Figure 13. Commitment Rates on Single-Family Mortgages.....	15
Figure 14. Single-Family Mortgage Originations	16
Figure 15. Single-Family Conventional Originations by Market Segment.....	17
Figure 16. 30-Year FRM Rate and Refinance Share.....	18
Figure 17. ARM Share of Conventional Non-Jumbo Single-Family Loan Applications and Commitment Rates on 30-Year FRMs.....	19
Figure 18. Percentage of Refinance Loans with Higher/Lower Loan Amount.....	20
Figure 19. Loan-to-Value Ratios of Conventional Single-Family Mortgages and Percentage of Originations with LTV > 90%	21
Figure 20. Concentration of Single-Family Mortgage Originations Among the Top 25 Originators	22
Figure 21. Single-Family Mortgage Originations by Source	23
Figure 22. Distribution of Single-Family MBS Issuance, by Issuer.....	24
Figure 23. MBS Holdings by Sector	25
Figure 24. MBS Holdings by Institution	25
Figure 25. Enterprise Single-Class MBS Issuance.....	26
Figure 26. Enterprise Single-Family Mortgage Purchases.....	27
Figure 27. Enterprise Multifamily Mortgage Purchases	28
Figure 28. Enterprise MBS Purchases by Issuer	29
Figure 29. Enterprise Purchases of Private-Label Securities by Segment.....	30
Figure 30. Average Loan-to-Value Ratios of Enterprise Single-Family Purchases and Percentage of Purchases with LTV > 90%	31
Figure 31. Percent of Mortgages Evaluated by Enterprise Automated Underwriting Systems Prior to Purchases.....	32
Figure 32. Enterprise Credit Protection.....	34
Figure 33. Enterprise Share of Residential Mortgage Debt Outstanding	35
Figure 34. Enterprise Single-Family Serious Delinquency Rates	40
Figure 35. Enterprises' Property Acquisitions and Ending Inventory.....	41
Figure 36. Enterprise Loan Loss Reserves	42
Figure 37. Composition of Enterprises' Combined Mortgage Portfolios.....	43
Figure 38. Enterprise Retained Portfolios and MBS Outstanding.....	44
Figure 39. Spreads Between Enterprise 10-Year Debt and Comparable Maturity Treasury and Swap Yields	46
Figure 40. Subordinated Debt Spreads to Senior Debt (10-Year or 12-Year Original Maturity)	47

Figure 41. Fannie Mae Equity Capital: GAAP, Core, Fair Value, and Market Capitalization End of Year.....	51
Figure 42. Freddie Mac Equity Capital: GAAP, Core, Fair Value, and Market Capitalization End of Year.....	51
Figure 43. Enterprise Capital Cushions (Based on OFHEO-directed Capital Requirements)	52
Figure 44. Enterprise Risk-based Capital Requirements and Surplus	53
Table 1. Fannie Mae Financial Highlights	37
Table 2. Freddie Mac Financial Highlights	38
Appendix. Historical Data Tables	54

MORTGAGE MARKETS AND THE ENTERPRISES IN 2007

SUMMARY

The year 2007 will likely go down as one of the most challenging in the history of the nation's housing and mortgage markets. Declining house prices, a weak housing sector, and continued deterioration of the performance of subprime mortgages led to a virtual collapse in the prices of securities backed by subprime and Alt-A loans. The resulting losses at many financial institutions and heightened uncertainty led to reduced liquidity and a repricing of risk in mortgage and broader financial markets, a widening in credit spreads, and a flight to more secure forms of investments such as Treasury and government-sponsored enterprise (GSE) securities. Despite Federal Reserve System actions to boost market liquidity, those developments diminished mortgage market activity in the second half of the year. For the year, single-family mortgage originations fell 18 percent from 2006, with most of the decline due to a cessation of subprime and Alt-A lending in the second half. The drop in originations lowered issuance of mortgage-backed securities (MBS) by nine percent, but the share of total single-family MBS issued by Fannie Mae and Freddie Mac ("the Enterprises") rose to nearly 58 percent.

The market turmoil in the second half of 2007 caused the credit quality of the on- and off-balance sheet mortgage assets of Fannie Mae and Freddie Mac to deteriorate and their mortgage investments to lose value. As a result, the Enterprises incurred much higher credit losses and had to increase their loan loss reserves significantly in anticipation of further losses. For the year, Fannie Mae and Freddie Mac reported combined losses of \$11.1 billion on a pre-tax and \$5.1 billion on an after-tax basis. On a fair value basis, their performance was much worse. Faced with declining capital levels and rising funding costs, both Enterprises tapped the preferred stock market, raising significant capital in the second half of the year, and took other measures to enhance and maintain their capital positions. Despite those challenges, Fannie Mae and Freddie Mac played a key role in providing liquidity and stability to the secondary mortgage market through their securitization activities and by purchasing mortgage assets shunned by many traditional market players. Both Enterprises were classified as adequately capitalized at the end of each quarter of 2007.

HOUSING AND MORTGAGE MARKET DEVELOPMENTS

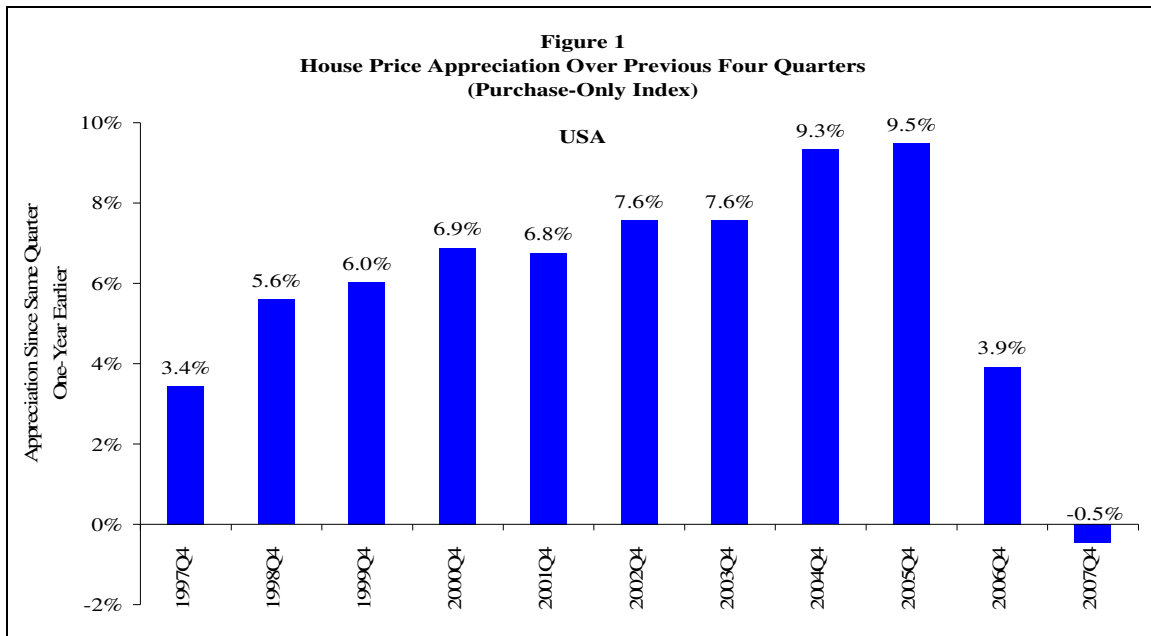
The house price boom of 2001 through 2005 was fueled by rapid growth in subprime, Alt-A, and other non-traditional mortgage lending. As typically occurs in a credit boom, that expansion of credit was accompanied by a steady deterioration of underwriting standards that continued after house price growth slowed in late 2005 and 2006. In 2007, prices decelerated dramatically, and markets anticipated significant further price weakening. Single-family mortgage delinquencies and home foreclosures increased, and home sales fell from levels at the height of the boom. Growing investor awareness of the extent of poor underwriting in subprime lending led to a virtual collapse of the primary and secondary markets for subprime, Alt-A, and non-traditional mortgages, which

contributed to disruptions in broader financial markets and sharp declines in single-family mortgage originations and MBS issuance. Interest rate movements and the market turmoil affected the mix of mortgages originated.

House Prices Weaken Significantly

The vast price increases of the housing boom that peaked in 2005 had diminished home affordability and made residential real estate less attractive to investors. As a result, housing demand fell and the supply of homes available for sale increased, dampening appreciation rates in 2006 and 2007. Tightening credit policies and turmoil in the mortgage markets in the second half of 2007 caused the slowdown in price appreciation to become more pronounced. Notably, that sharper deceleration occurred without any significant weakness in the broader economy.

According to OFHEO's purchase-only house price index (HPI), which omits refinancings that are based on appraisals, the four-quarter change price in U.S. house prices was -0.5 percent between the fourth quarters of 2006 and 2007. By contrast, for the prior four-quarter period (ending in the fourth quarter of 2006), prices had grown 4.0 percent. The latter value, in turn, was less than half the growth rate in the prior two years (Figure 1).

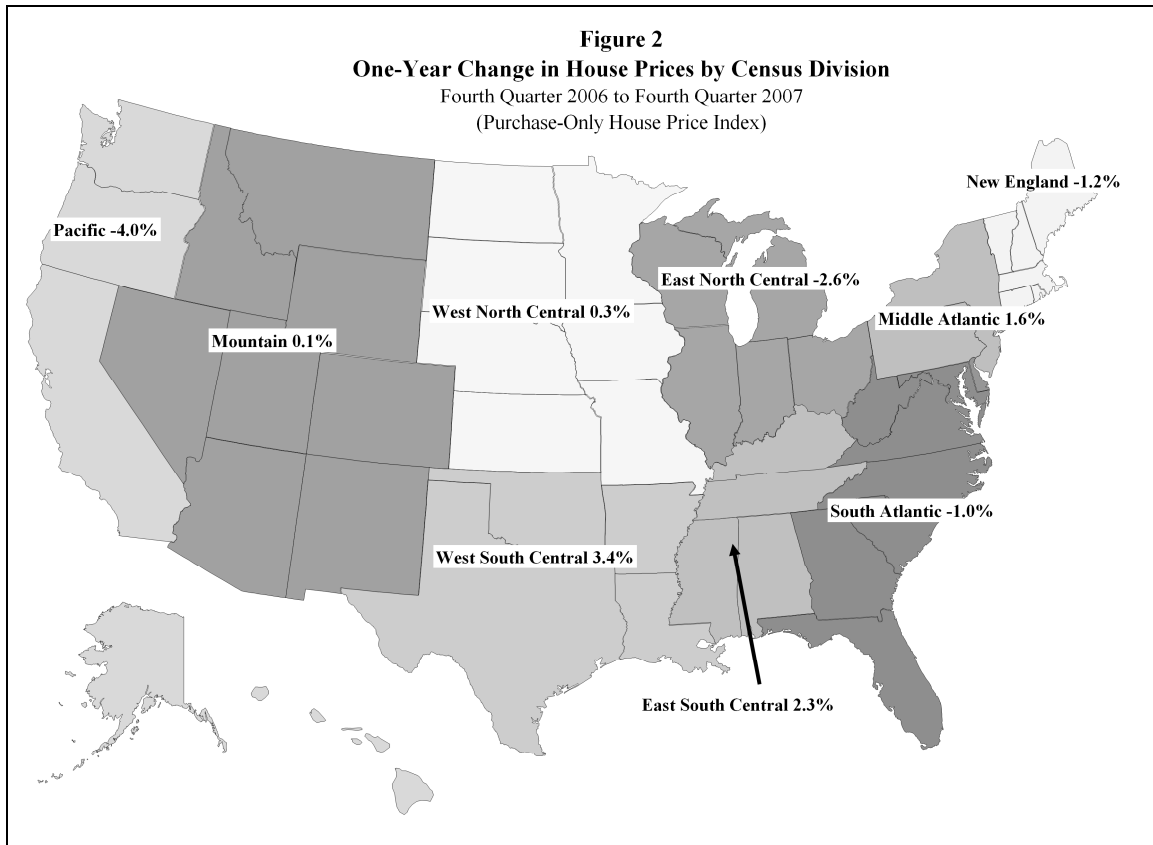


Source: OFHEO

The severity of the slowdown varied sharply across geographic areas, with greater weakness generally evident in California, Florida, Nevada, and parts of the Midwest and residual strength along the Gulf Coast. Across Census Divisions (regional collections of states), vast differences existed in observed price changes between the fourth quarters of 2006 and 2007 (Figure 2). According to OFHEO's purchase-only HPI, prices in the Pacific and East North Central Divisions, the worst performing divisions, fell by 4.0 percent and 2.6 percent, respectively. The 4.0 percent price decline in the Pacific

Division, which represented over a ten percentage point change from the prior four-quarter period (when prices rose 6.1 percent), was primarily driven by deteriorating conditions in California. Prices fell in that state about 12.5 percent in the four quarters ending in the fourth quarter of 2007, versus a decrease of only 1.5 percent in the prior four-quarter interval.

The West South Central and East South Central Census Divisions, the areas with the strongest house prices in 2006, managed only small price gains of 3.4 percent and 2.3 percent, respectively, last year. Those growth rates were 3.1 and 4.0 percentage points, respectively, below the rates exhibited in the prior four-quarter period. Even the states with the strongest 2007 prices had appreciation rates significantly below those observed in 2006. Utah, the state with the greatest price run-up in 2007 according to OFHEO's purchase-only price index, experienced price appreciation of 6.3 percent, down from 17.1 percent in the prior year.

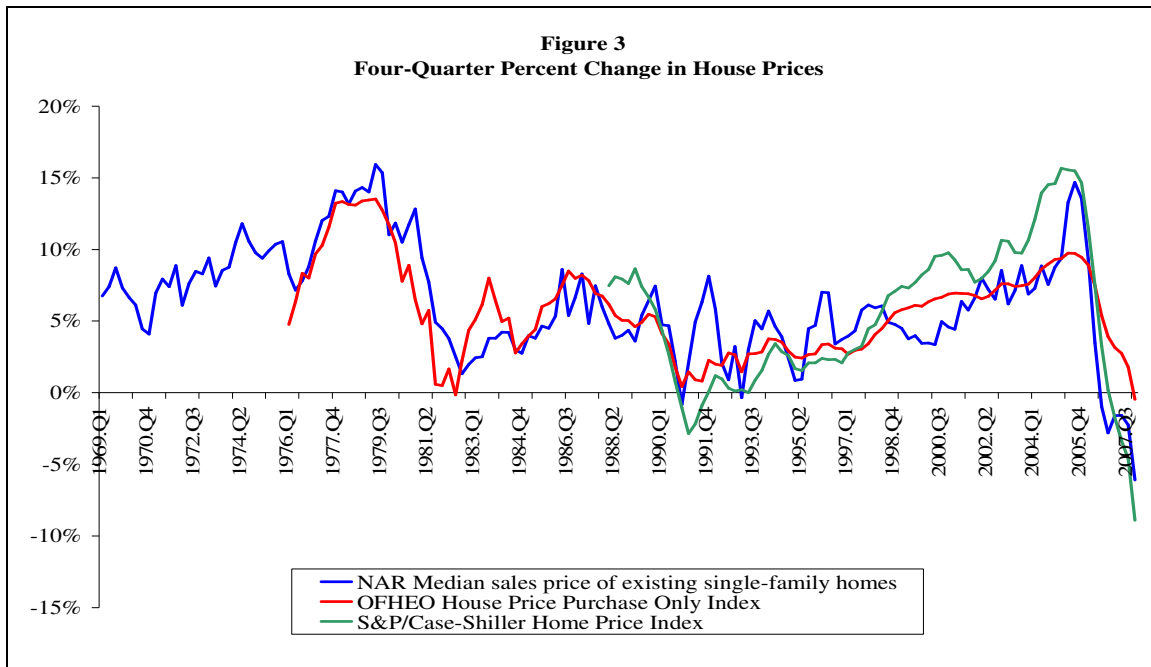


Source: OFHEO

Alternative Measures Evidence **Varying Rates of House Price Deceleration**

Although the price declines measured by OFHEO's HPI were quite large, OFHEO's indexes generally estimated much smaller price declines than were measured by other house price metrics. For the U.S. as a whole, price declines were much greater when measured by the National Association of Realtors' (NAR's) median price series and the

S&P/Case-Shiller National Home Price Index. According to those series, prices fell 6.1 percent and 8.9 percent, respectively, in the four-quarters ending in the fourth quarter of 2007, a far cry from the 0.5 percent decline measured by OFHEO's purchase-only index (Figure 3). The divergence between the measured price trends was not as severe for the four quarters ending in the fourth quarter of 2006, when OFHEO's index measured a national price increase of 3.9 percent and the other two measures estimated price changes of +0.2 percent (S&P/Case-Shiller) and -2.8 percent (NAR median prices).



Source: OFHEO based on data from National Association of Realtors, S&P/Case-Shiller

That the OFHEO series measured a more muted price decline in 2007 than the S&P/Case-Shiller index is perhaps not surprising; during the height of the real estate boom, the S&P/Case-Shiller index consistently estimated appreciation rates that were several percentage points higher than the OFHEO index measured. Irrespective of the house price measure used, it is clear that market conditions weakened significantly in 2007. That deterioration was accompanied by steadily more pessimistic expectations about future price movements (Box A).

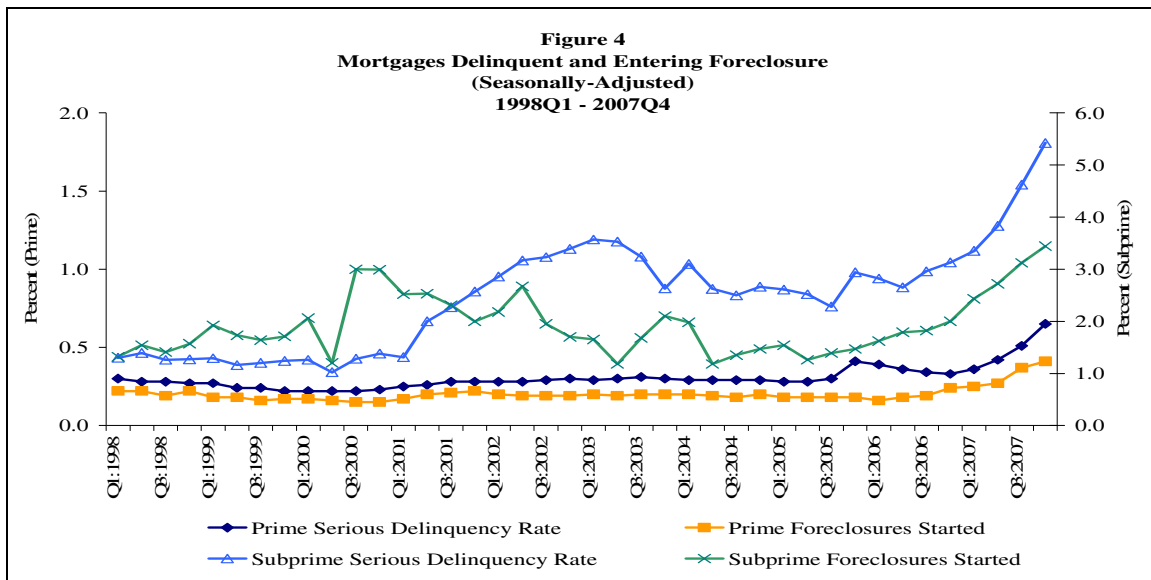
Loan Delinquencies and Foreclosure Activity Rise

As home prices fell in 2007, single-family mortgage delinquencies and home foreclosures jumped dramatically. Indeed, delinquency and foreclosure rates accelerated throughout the year, particularly in areas where price declines were significant. In the fourth quarter of 2007, 1.48 percent of single-family mortgages were seriously delinquent (90 days or more past due) or in foreclosure. That rate was more than 50 percent higher than the rate of 0.96 percent reported in the same quarter one year earlier. Deterioration in the performance of subprime loans was the primary driver of the worsening performance of the whole market. The serious delinquency rate for subprime mortgages increased from 3.13 percent in the fourth quarter of 2006 to 5.42 percent four quarters later, while the

serious delinquency rate for prime loans rose from 0.33 percent to 0.65 percent in that period (Figure 4).

The share of all loans entering foreclosure increased almost 30 basis points over the course of 2007. Whereas 0.54 percent of mortgages entered the foreclosure process in the fourth quarter of 2006, 0.83 percent started the process in the final quarter of 2007, nearly double the rate in the final quarter of 2005. As with delinquencies, the performance of subprime mortgages drove the overall market. Subprime loans entering the foreclosure process jumped from two percent in the fourth quarter of 2006 to 3.44 percent four quarters later, while the share of prime mortgages entering foreclosure rose from 0.24 percent to 0.41 percent.

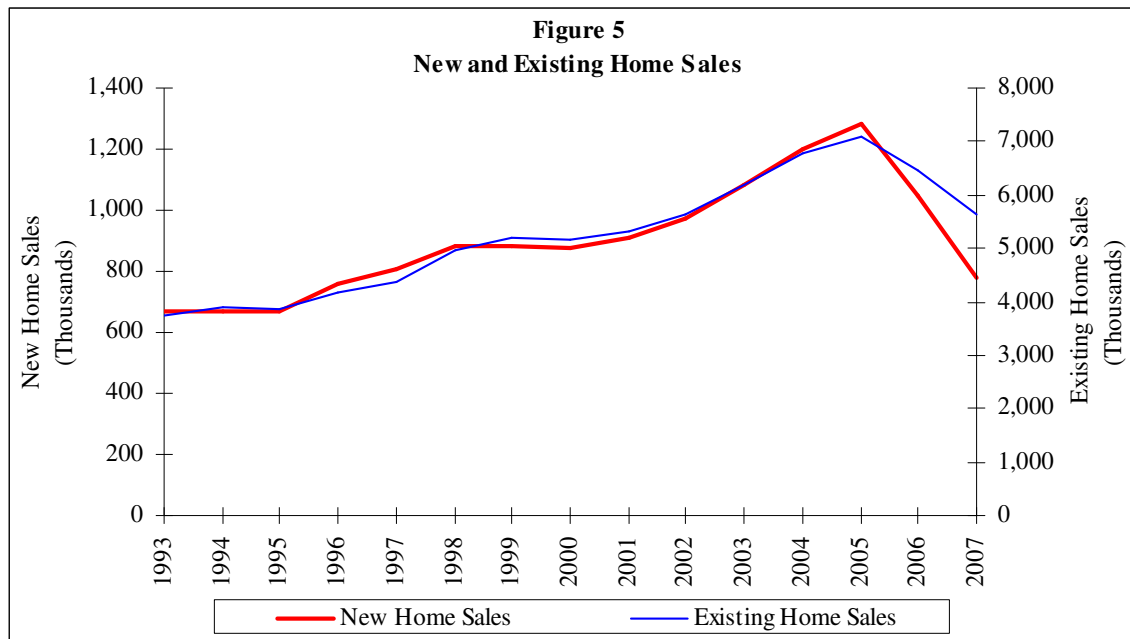
While those figures show poor (and deteriorating) performance of single-family mortgages for the U.S. as a whole, conditions in a number of states were markedly worse than the national experience. According to data from the Mortgage Bankers Association, foreclosure rates were at historically high levels in Michigan, California, and Florida in the fourth quarter of 2007. The growth rate in foreclosure starts was particularly dramatic in Florida and California.



Source: Mortgage Bankers Association

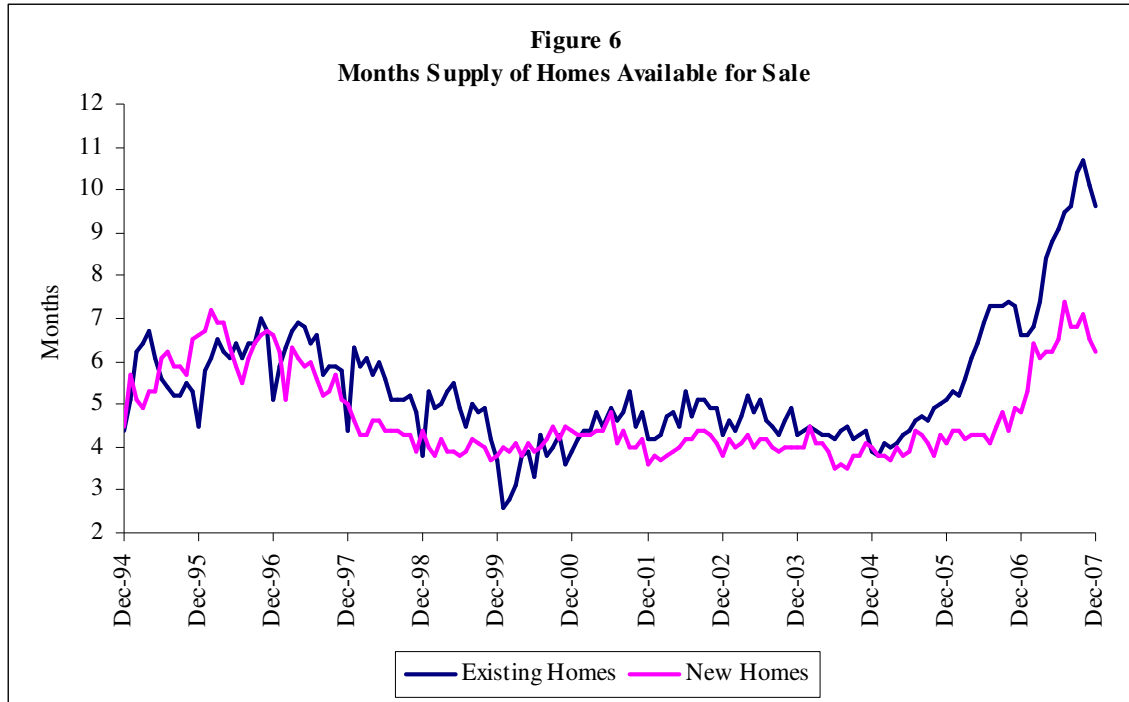
Home Sales Continue to Decline; Inventories Rise Further

With anemic house price growth and outright price declines in many areas, homebuyers became hesitant in 2007, and home sales slid further from 2005 peaks. Sales of existing and new one-to-four unit properties in 2007 were 5,652,000 and 776,000, respectively, down 13 percent and 26 percent, respectively, from levels in the prior year and 20 percent and 40 percent, respectively, from their 2005 highs (Figure 5). The sales rate for existing homes was at its lowest level since 2001, and the pace of new home sales was lower than it had been since 1997.



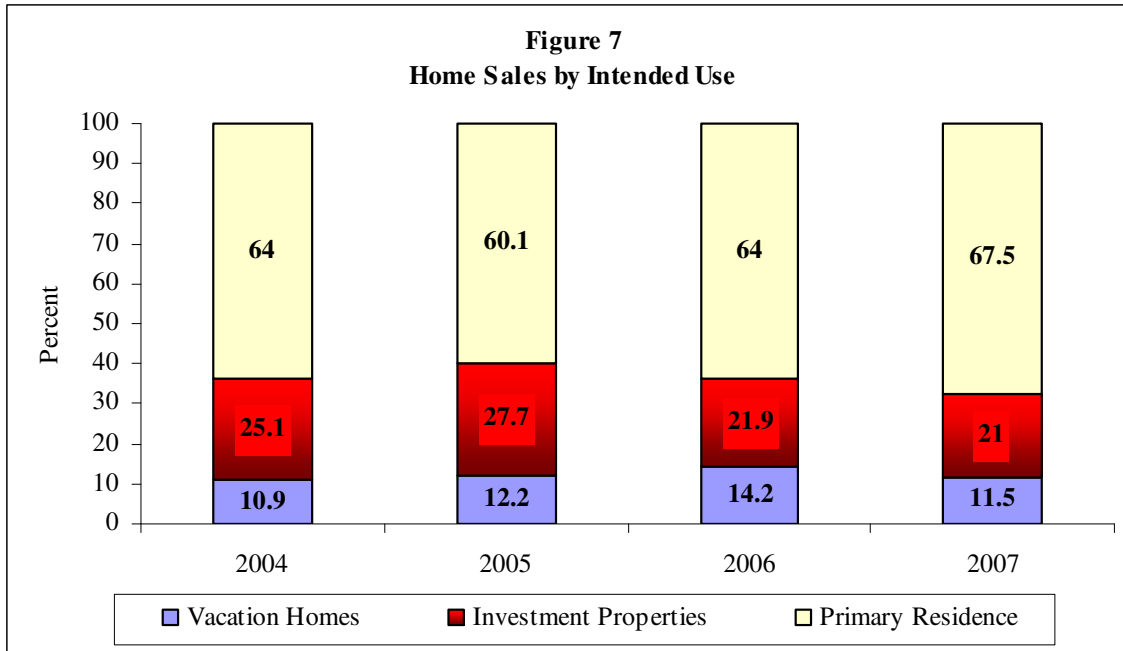
Source: U.S. Bureau of the Census (new home sales) and National Association of Realtors (existing home sales)

As home sales fell, inventories of properties available for sale (expressed as months of supply of houses on the market at current sales levels) rose above the already-elevated levels of 2006. Housing analysts view a six-month supply of properties available for sale as the historical norm. At the beginning of 2007, between six and seven months of supply was available for sale for both existing and new homes, far above the lows of less than four months at the peak of the housing boom in 2005. By the end of 2007, the supply of both existing and new homes had reached 9.6 months (Figure 6).



Source: National Association of Realtors

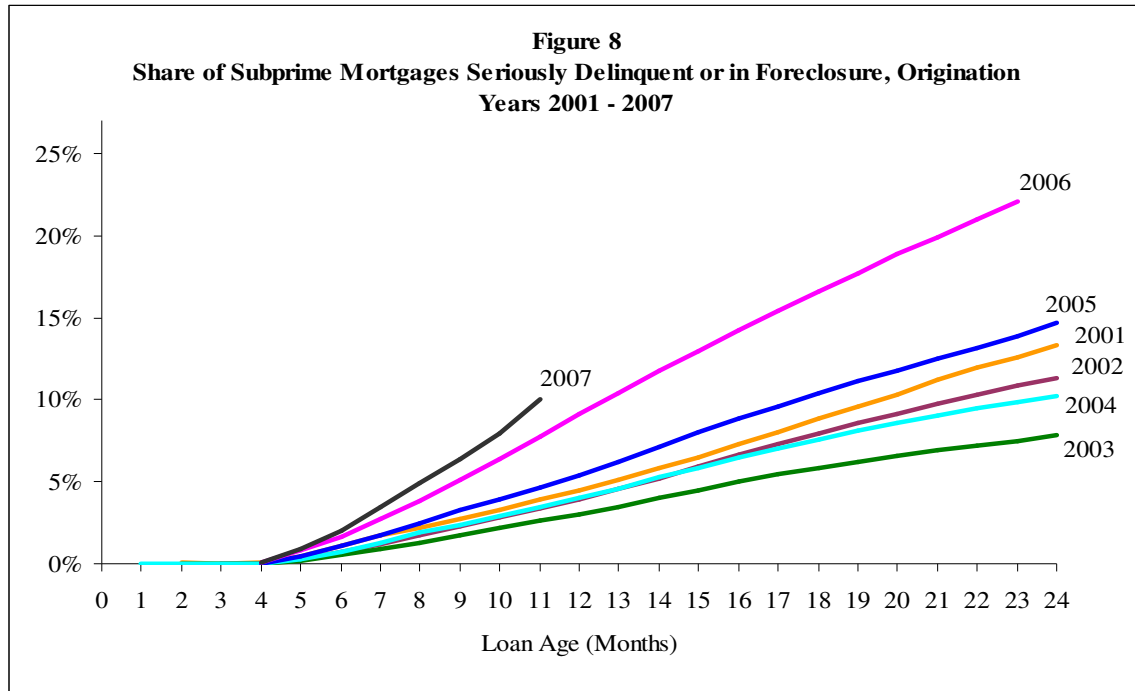
Investor interest in real estate speculation diminished in 2007, continuing a downward trend from the 2005 peak of the boom. Based on annual survey data collected by the National Association of Realtors, 21 percent of homes purchased in 2007 were investment properties, about one percentage point below the share in 2006 and 6.7 percentage points below the 2005 high (Figure 7). Speculative interest diminished as the large price increases of the early part of the decade continued in fewer areas and home inventories began to mount. Financially constrained speculators were forced to sell their properties, further adding to inventory levels and putting additional downward pressure on home prices.



Source: National Association of Realtors

Turmoil in the Secondary Market Erupts in July

In 2007 investors became increasingly aware of significant problems in the performance of subprime and Alt-A mortgages. Of particular concern were recently originated subprime loans. According to data from First American LoanPerformance, of all fixed-rate and 2-year hybrid adjustable-rate (2/28) subprime mortgages originated in 2007 and subsequently securitized, 10 percent were seriously delinquent or in foreclosure within 12 months of origination (Figure 8). That rate compares to 7.8 percent for similar mortgages originated in 2006 and 4.7 percent for those originated in 2005.



Note: Reflects 30-year fixed-rate and 2/28 hybrid adjustable-rate mortgages with borrower credit scores at origination of less than 660.

Source: OFHEO based on data from First American LoanPerformance

In June 2007, credit rating agencies began to reconsider the ratings of private-label MBS (PLS)¹ backed by subprime mortgages and collateralized debt obligations (CDOs)² exposed to such securities. In response, financial markets began to reassess the market value of mortgage-related securities. Falling prices for subprime PLS and CDOs collateralized by them quickly began to impose large market-value losses on investors. In mid-August there was a broad, global reduction in the supply of credit for securities backed by subprime mortgages. Uncertainty about the decline in value of subprime collateral backing specific PLS and CDOs led liquidity in the markets for those securities to become extremely scarce overnight.

The market's concerns about the performance of subprime mortgages were reflected in the prices of related credit derivatives in 2007. The prices of ABX indexes³ on subprime

¹ A private-label MBS carries no guarantee by Fannie Mae, Freddie Mac, or the Government National Mortgage Association (Ginnie Mae) and is collateralized by a pool of conventional single-family mortgages with balances that are too large for the Enterprises to buy (jumbo loans), single-family mortgages to borrowers that have credit problems of varying degrees of severity or provide little documentation, home equity loans, or multifamily mortgages.

² A CDO is a corporate entity constructed to hold a portfolio of fixed-income assets, often asset-backed securities, and sell rights to the cash flows from those assets, and the associated risks, to investors. The credit risk of the collateral is allocated among different tranches; senior tranches (rated triple A), mezzanine tranches (double A to double BB), and equity tranches (unrated). Losses are applied in reverse order of seniority, so that junior tranches offer higher coupon rates to compensate for higher risk.

³ The ABX indices are based on portfolios of credit default swaps (CDS) on selected tranches of PLS backed by subprime mortgages. (For a discussion of CDS, see Box B on page __). Each ABX index is

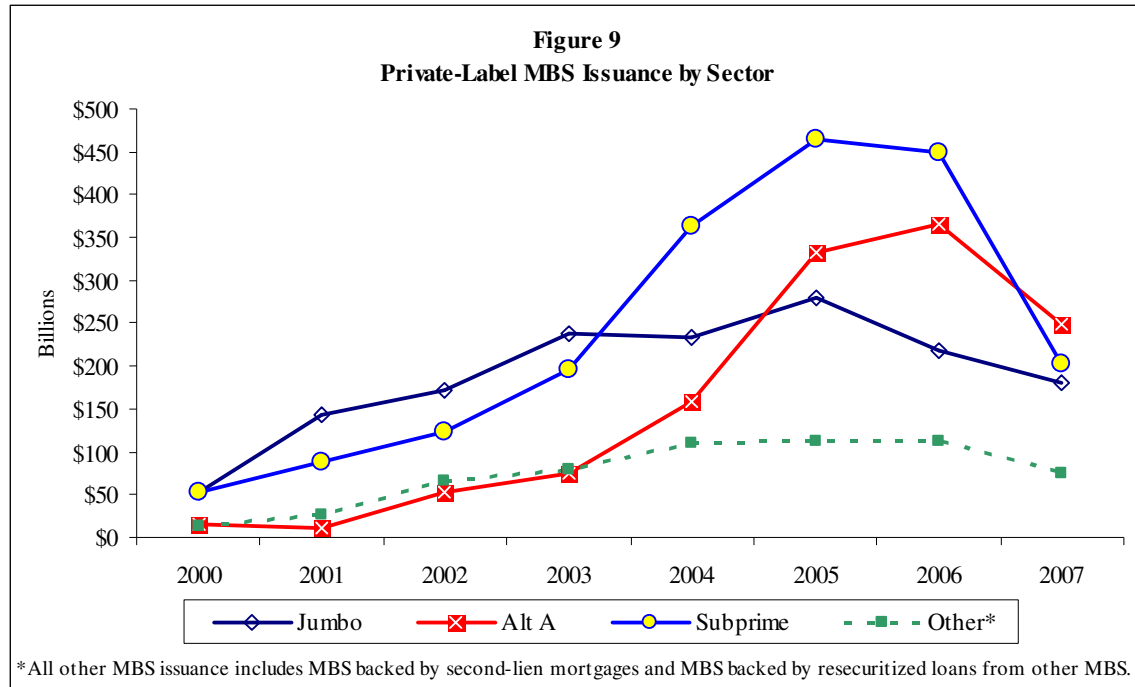
PLS tranches that carried the lowest investment-grade rating (triple B) fell steadily through much of the year, reflecting increasingly pessimistic market expectations of credit losses on those tranches. The prices of ABX indexes on triple A-rated subprime PLS tranches were consistently close to par through June but began to decline steadily in mid-July, reflecting growing market expectations of credit losses on those most senior tranches.

Private-Label MBS Issuance Declines Sharply in Second Half

With investors sharply reducing their purchases of PLS backed by subprime mortgages as of mid-August, only \$29.7 billion of those securities were issued in the third quarter of 2007, down 64 percent from already deflated levels for the second quarter. The fourth quarter was worse, with only \$11.9 billion of subprime PLS issued. Many major issuers failed to securitize any subprime loans during the third and fourth quarters. For the year, the volume of subprime PLS issuances was \$201.5 billion, down 55 percent from \$448.6 billion in 2006 (Figure 9).

The fear of exposure to residential mortgage credit risk in the second half of 2007 spilled over into the markets for PLS backed by Alt-A mortgages and jumbo loans—conventional single-family mortgages with balances too large to make them eligible for purchase by Fannie Mae and Freddie Mac. Investors became less willing to invest in any mortgage-related securities not guaranteed by the Enterprises or the Government National Mortgage Association (Ginnie Mae). Only \$38.2 billion of Alt-A and \$40.3 billion of jumbo PLS were issued in the third quarter of 2007, down 62.2 and 33.5 percent, respectively, from the second quarter of the year. The fourth quarter issuance volumes of Alt-A and jumbo PLS were worse than the third quarter, with only \$13.6 billion of Alt-A and \$19.3 billion of jumbo PLS sold. For the year, the volume of PLS issuances backed by Alt-A mortgages was \$249.6 billion, down 32 percent from \$365.7 billion in 2006. Issuance of jumbo PLS totaled \$180 billion in 2007, down 18 percent from the \$219 billion issued in 2006.

based on a weighted-average of the CDS on tranches from a portfolio of 20 PLS, where each tranche has the same credit rating, e.g., triple-A.



Source: Inside Mortgage Finance Publications

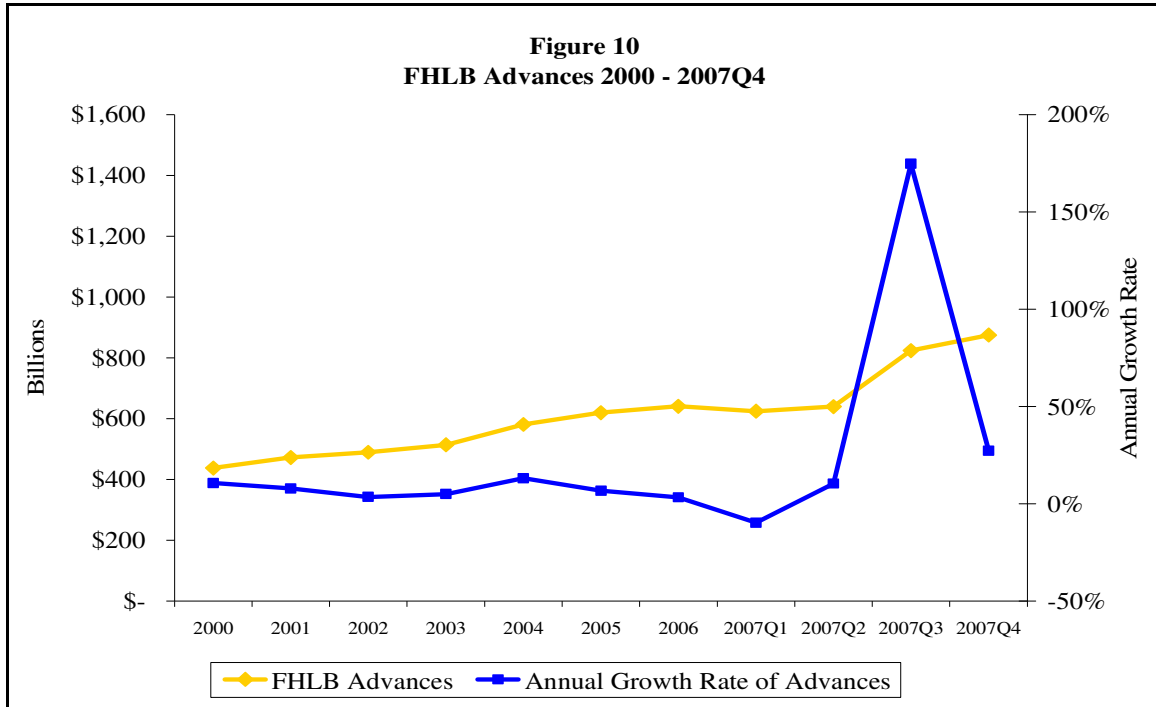
Federal Home Loan Bank Advances Rise Dramatically in Third Quarter

In late July losses incurred by an asset-backed commercial paper (ABCP) conduit that held subprime mortgages led investors globally to spurn the ABCP market, forcing financial institutions to scramble to tap bank credit lines and seek alternative sources of funding. That development led to a sharp increase in outstanding Federal Home Loan Bank (FHLB) System advances (a form of collateralized lending). FHLB advances grew by approximately 50 percent in the third quarter of 2007 at an annual growth rate that was almost 17 times larger than the annual growth rate in the previous quarter (Figure 10). That growth increased the concentration of advances among member institutions. According to the FHLB System's Combined Financial Reports, the top 10 FHLB members (in terms of advances) held 40 percent of all advances at the end of the third quarter of 2007, up from 34.9 percent at the end of the second quarter.

Interest Rates Respond to Market Conditions and Federal Reserve System Actions

Interest rates movements in 2007 responded to conditions in housing and mortgage markets as well as Federal Reserve System ("the Fed") actions to support market liquidity. Through mid-2007, the Fed maintained its target for the federal funds rate at 5.25 percent, the level reached in July 2006 after a three-year period in which the Fed had steadily raised that target from a low of one percent in February 2001. By August of 2007, turmoil in the secondary mortgage market and related losses incurred by financial institutions had led to sizable increases in interest rates on overnight loans between banks

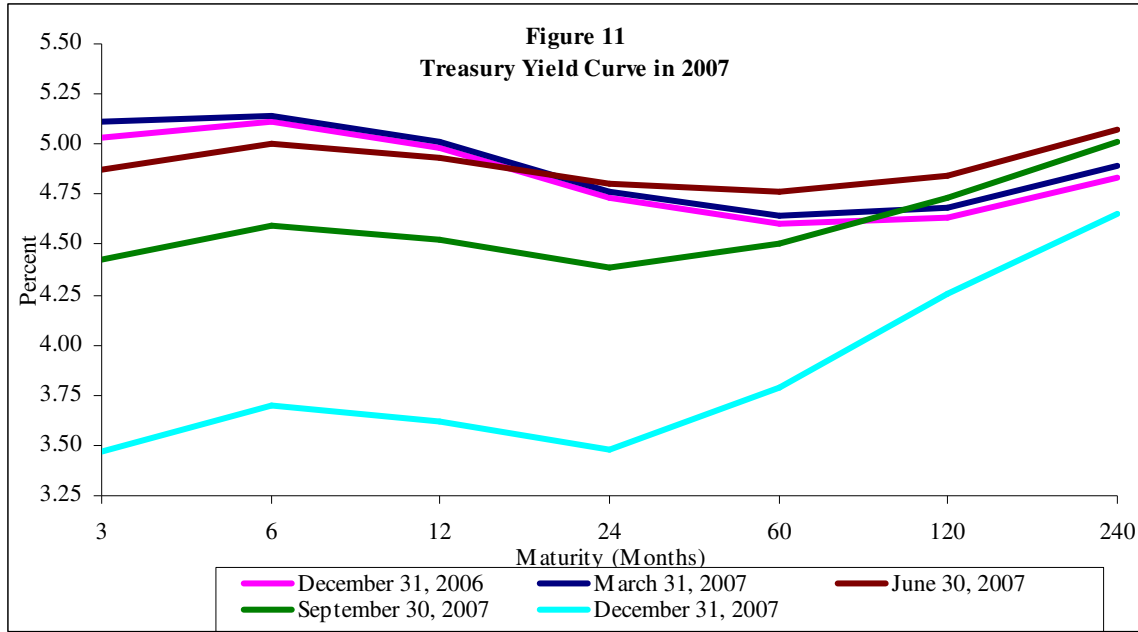
and raised the possibility of a liquidity crisis in money markets. In response, the Fed and other central banks took aggressive steps to bolster financial market liquidity. The Fed cut the federal funds target rate by 50 basis points in mid-September and by another 50 basis points in the last quarter of the year.



Source: Federal Home Loan Banks Office of Finance

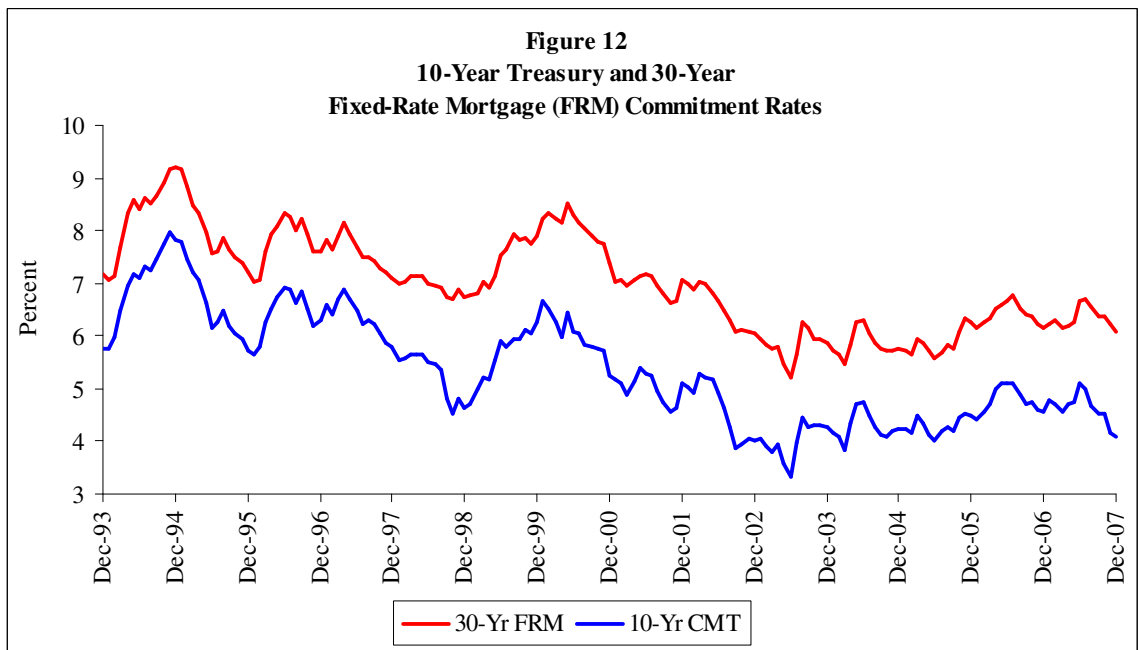
Broader interest rates responded to the Fed's actions, and the Treasury yield curve shifted significantly downward and became much steeper in that quarter (Figure 11). By the end of 2007, the yield on the 1-year Constant Maturity Treasury (CMT) was 3.62 percent, 137 basis points lower than at year-end 2006. The yield on the 10-year CMT was 4.26 percent at the end of 2007, down 37 basis points from the end of 2006.

Interest rates on 30-year fixed-rate mortgages (FRMs) generally track the 10-year CMT very closely. Commitment rates on 30-year FRMs rose 56 basis points in the first seven months of 2007, dropped 60 basis points from July through December, and ended the year at roughly the same level at which they started (Figure 12). The decline in mortgage rates in the second half of the year was not quite as large as the drop in the 10-year CMT, which fell by 90 basis points, indicating that investors perceived increasing risk in long-term mortgages. For the year, the commitment rate on 30-year FRMs averaged 6.34 percent, down slightly from 6.41 percent in 2006.



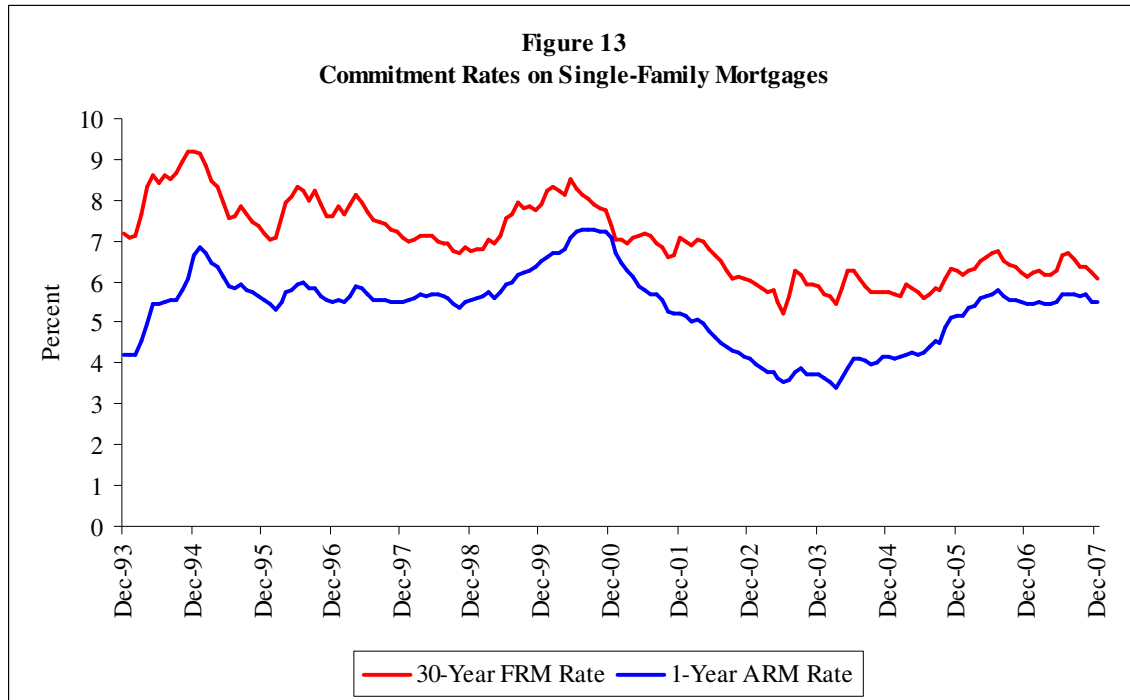
Source: Board of Governors of the Federal Reserve System

From January through July of 2007, the spread between commitment rates on 30-year FRMs and 1-year adjustable rate mortgages (ARMs) widened by 23 basis points (Figure 13). However, after the market turmoil commenced in August, the FRM-ARM spread narrowed by 39 basis points, reflecting a larger decline in FRM commitment rates in the second half of the year.



Source: Freddie Mac Primary Mortgage Market Survey

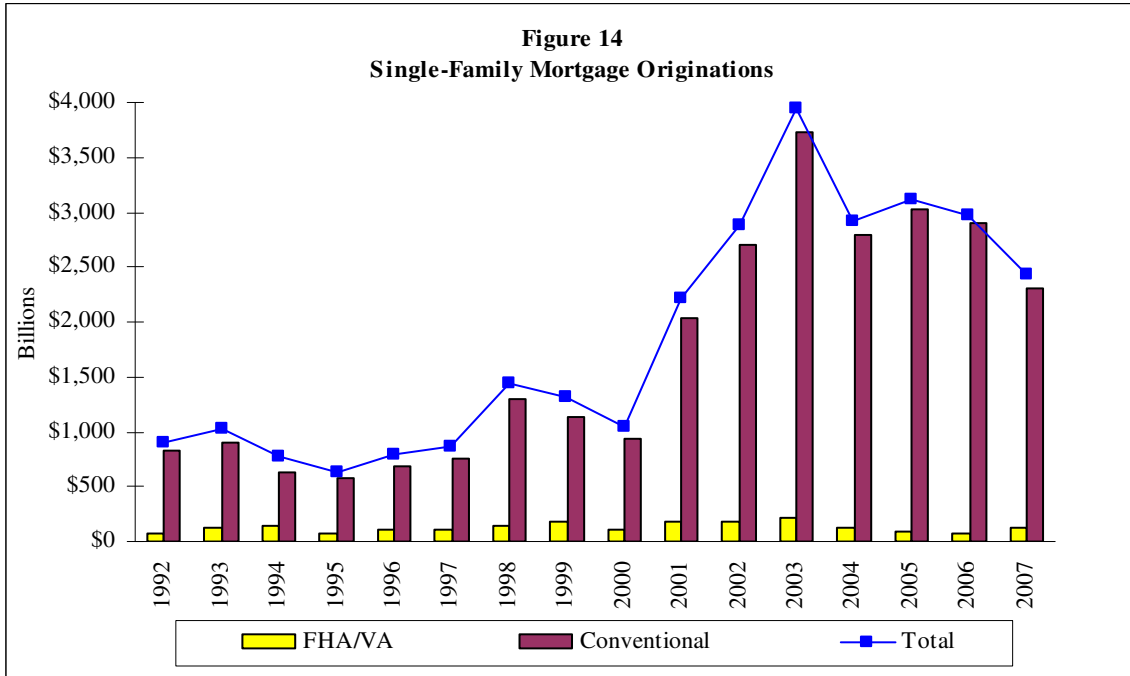
Despite the decline in interest rates in the second half of 2007, by the end of the year the housing sector threatened to lead the broader economy into recession. The effects of the housing contraction spread through the economy more broadly by the fourth quarter, when growth slowed sharply. However, the economy as a whole expanded 2.5 percent for the year, little changed from growth of 2.6 percent in 2006.



Source: Freddie Mac Primary Mortgage Market Survey

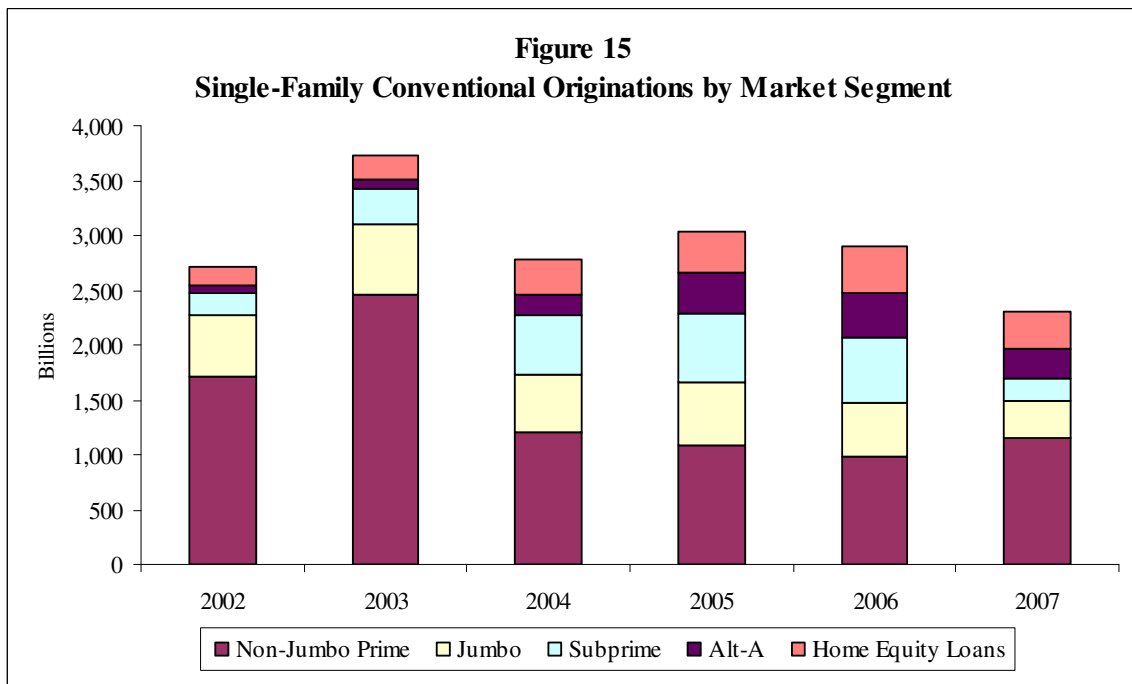
Mortgage Originations Fall

Declining house prices, a weakening housing sector, turmoil in the secondary mortgage market, and slower growth late in the year caused a significant decline in single-family mortgage originations in 2007. For the year, single-family lending totaled \$2.43 trillion, down 18 percent from \$2.98 trillion in 2006 (Figure 14). Originations of conventional loans—those that carry no government insurance or guarantee—fell 20 percent from \$2.90 trillion in 2006 to \$2.31 trillion in 2007. From the third quarter of 2005 through the second quarter of 2007, rising mortgage rates and a weakening housing market reduced originations \$20.7 billion on average per quarter. In conjunction with the collapse of the secondary market for PLS backed by subprime and Alt-A mortgages, conventional originations fell by \$160 billion in the third quarter of 2007 and by \$120 billion in the fourth. Originations of mortgages insured by the Federal Housing Administration (FHA) and guaranteed by the Department of Veterans Affairs (VA) totaled \$120 billion for the year, a 50 percent increase over the \$80 billion originated in 2006.



Source: Inside Mortgage Finance Publications

The decline in originations in the second half of 2007 resulted almost entirely from the sharp drop in subprime and Alt-A lending. Subprime and Alt-A originations totaled \$466 billion in 2007, less than one-half the \$1 trillion in 2006 (Figure 15). The second half of 2007 also brought a sharp decline in originations of jumbo mortgages. For the year, jumbo lending totaled \$347 billion, down 28 percent from a total of \$480 billion in 2006.

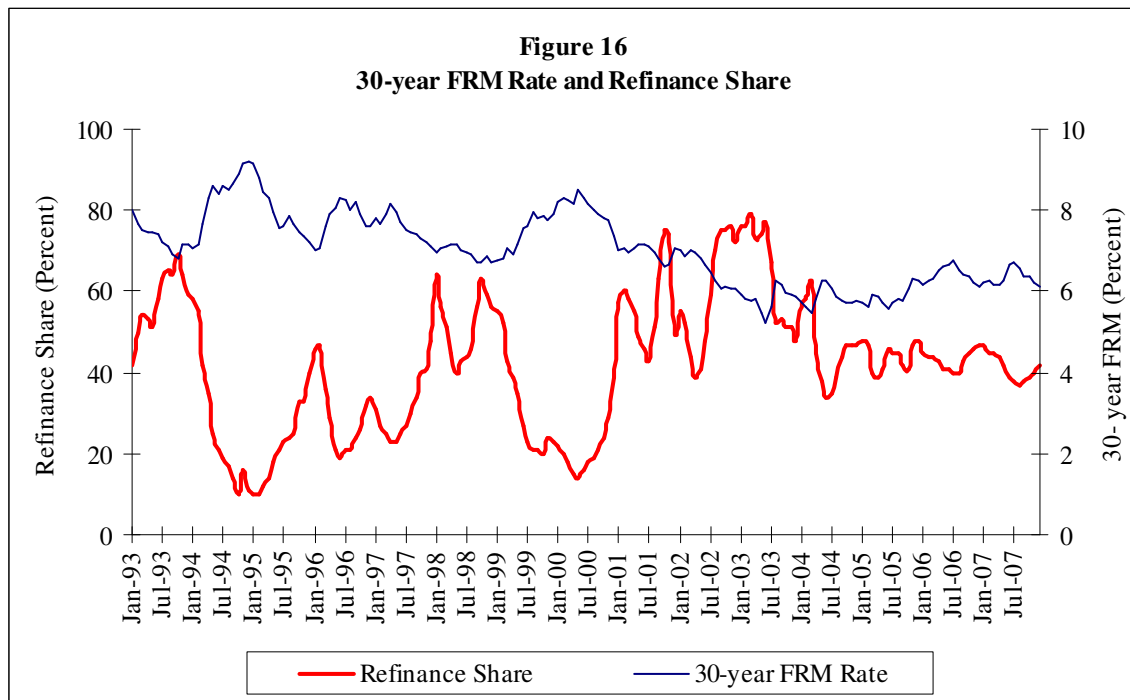


Source: Inside Mortgage Finance Publications

The credit performance of jumbo mortgages did not deteriorate significantly in 2007. Nonetheless, the collapse of the secondary markets for PLS backed by subprime and Alt-A mortgages reduced the capacity of dealers to purchase and securitize jumbo mortgages and investor demand for PLS backed by jumbo loans. As a result, the spread between the yields of 30-year fixed-rate jumbo and non-jumbo loans increased significantly.

Refinance Share of Single-Family Originations Fluctuates but Ends Year Lower

Changes in mortgage interest rates in 2007 continued to affect the share of single-family mortgages taken out to refinance existing loans. According to Freddie Mac's Primary Mortgage Market Survey (PMMS), in the first three months of the year, refinance mortgages comprised between 45 and 47 percent of the dollar volume of lending. By mid-year, when FRMs rates rose to between 6.6 percent and 6.7 percent, the refinance share fell to 37 from 39 percent. As interest rate declined later in the year, the refinance share rebounded and ended the year at 42 percent (Figure 16). For the year, refinance loans accounted for 41.3 percent of originations, down from 43.3 percent in 2006 and 44.1 percent in 2005.

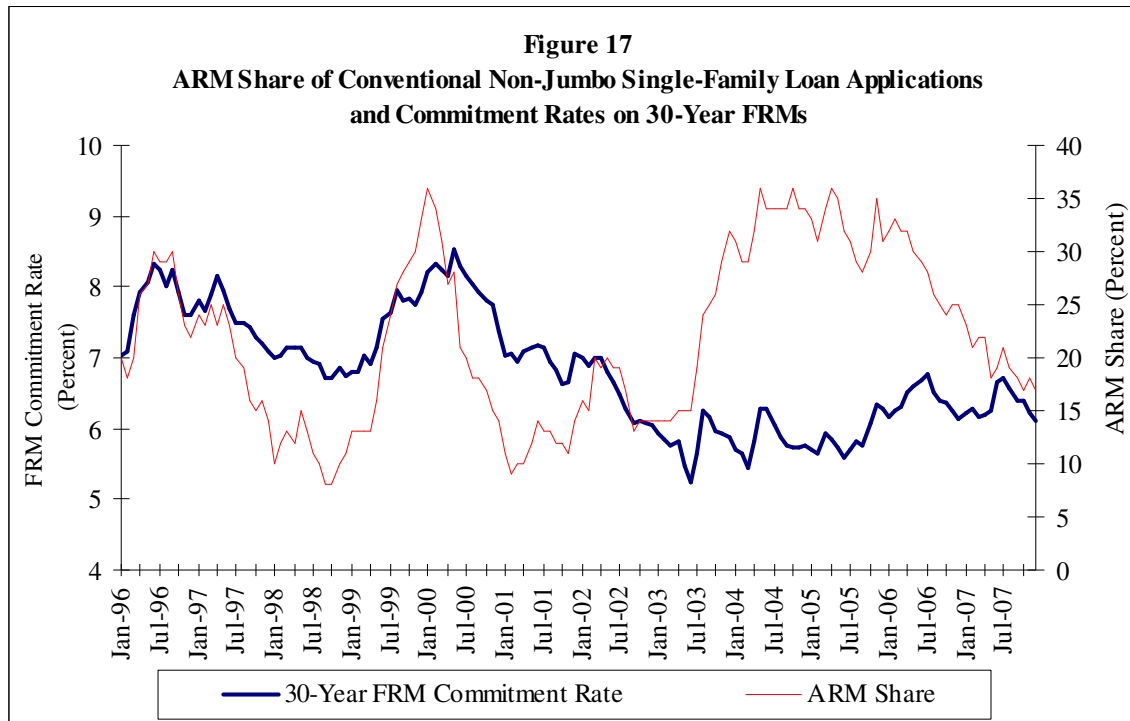


Source: Freddie Mac Primary Mortgage Market Survey

ARMs Lose Favor and Equity Extraction Declines

According to Inside Mortgage Finance Publications, adjustable-rate loans represented 30 percent of all single-family mortgages originated in 2007, down significantly from 45 percent in 2006 and 48 percent the year before. The drop in the ARM share reflected the dramatic decline in originations of subprime loans, most of which carry adjustable rates, and interest-only ARMs, which were curtailed significantly in the second half of the year.

Statistics on conforming conventional loan applications from Freddie Mac's PMMS provide a lower estimate of the ARM share of single-family lending because that survey does not cover the subprime or the jumbo markets, where the majority of mortgages are ARMs. The PMMS indicates that the ARM share of conventional non-jumbo single-family loan applications was 20 percent in 2007, down from 28 percent in 2006 (Figure 17).



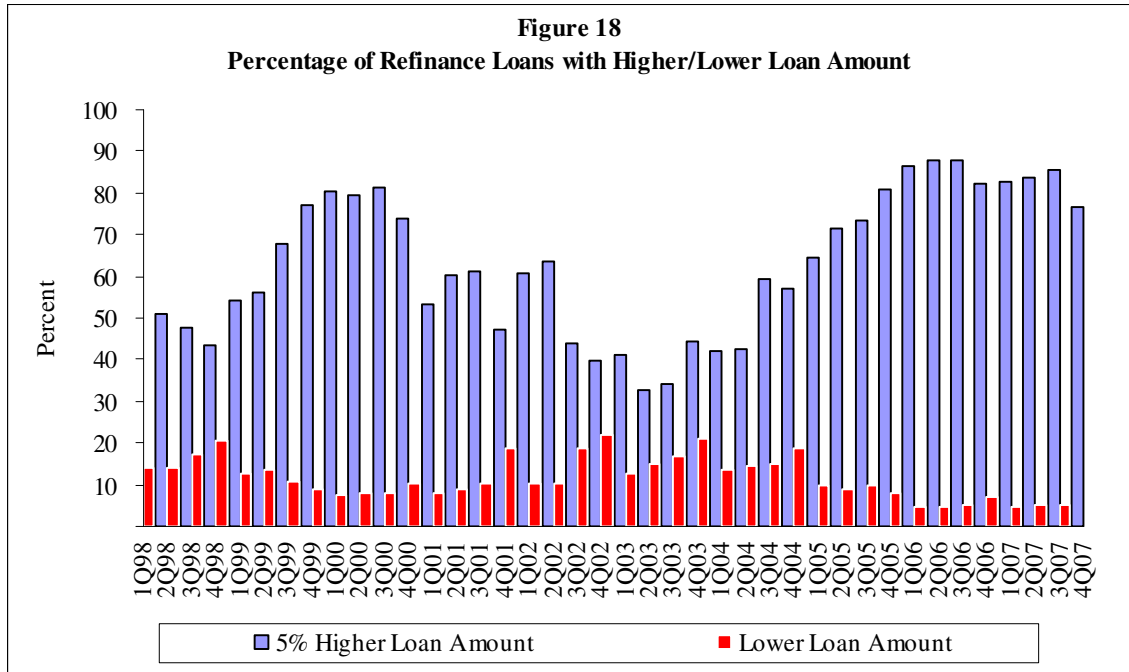
Source: Freddie Mac Primary Mortgage Market Survey

The weakness of home prices led to a decline in home equity extraction in 2007. According to Freddie Mac's PMMS, U.S. homeowners cashed-out approximately \$250 billion in home equity with prime, conventional first-lien mortgages, down substantially from \$322 billion in 2006, but close to the \$242 billion cashed-out in 2005. Over 82 percent of refinance mortgages in 2007 had loan amounts at least five percent higher than the original loans, down from 86 percent in 2006 (Figure 18). On average, the rate on the new mortgage tended to be approximately four percent higher than for the refinanced loan, down from six percent in 2006. The median price appreciation of properties from the time the original loan was made until it was refinanced fell from 31 percent in 2006 to 23 percent in 2007. The median age of refinanced mortgages in 2007 was 3.6 years, up from 3.2 years in the prior year. Those trends reflected the slowdown of house price appreciation since the peak of the real estate boom in 2005.

Mix of Purchase-Money Originations Continues to Change

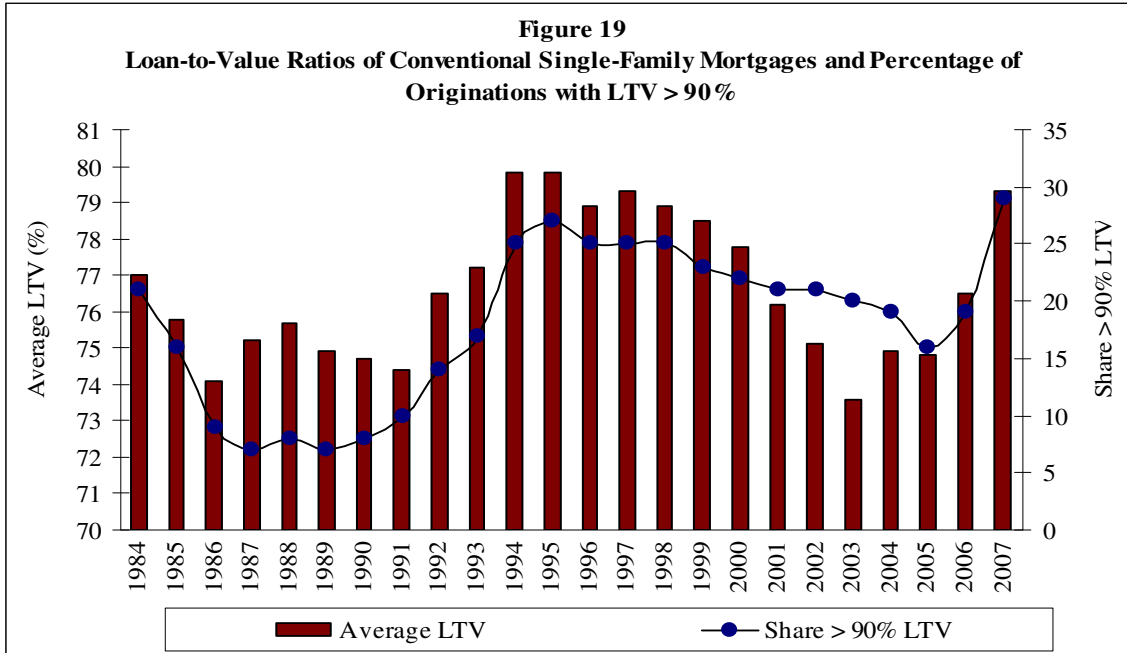
The Monthly Interest Rate Survey (MIRS) of the Federal Housing Finance Board, which tracks the terms of single-family, conventional, purchase-money originations, provides further information on the terms of newly originated mortgages in 2007. The survey also

permits comparison of purchase-money jumbo and non-jumbo mortgages. According to MIRS, the non-jumbo share of total purchase-money originations, based on the total dollar volume of loans, rose from 67 percent in 2006 to 76 percent in 2007, reflecting the decline in jumbo originations in the second half of the year.



Source: Freddie Mac Primary Mortgage Market Survey

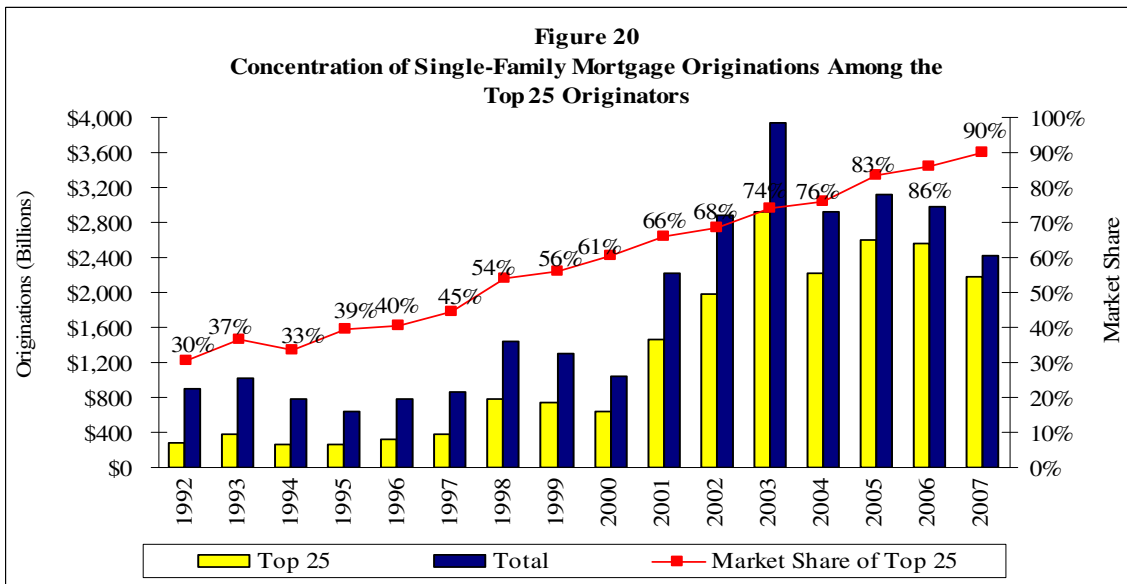
According to MIRS, the average loan-to-value (LTV) ratio of single-family conventional, purchase-money mortgages was 79.3 percent in 2007, up from 76.6 percent in 2006. The proportion of such loans with LTV ratios greater than 90 percent, which had previously peaked at 27 percent in 1995, rose to 29 percent in 2007, up significantly from 19 percent in 2006 (Figure 19).



Source: Federal Housing Finance Board Mortgage Interest Rate Survey

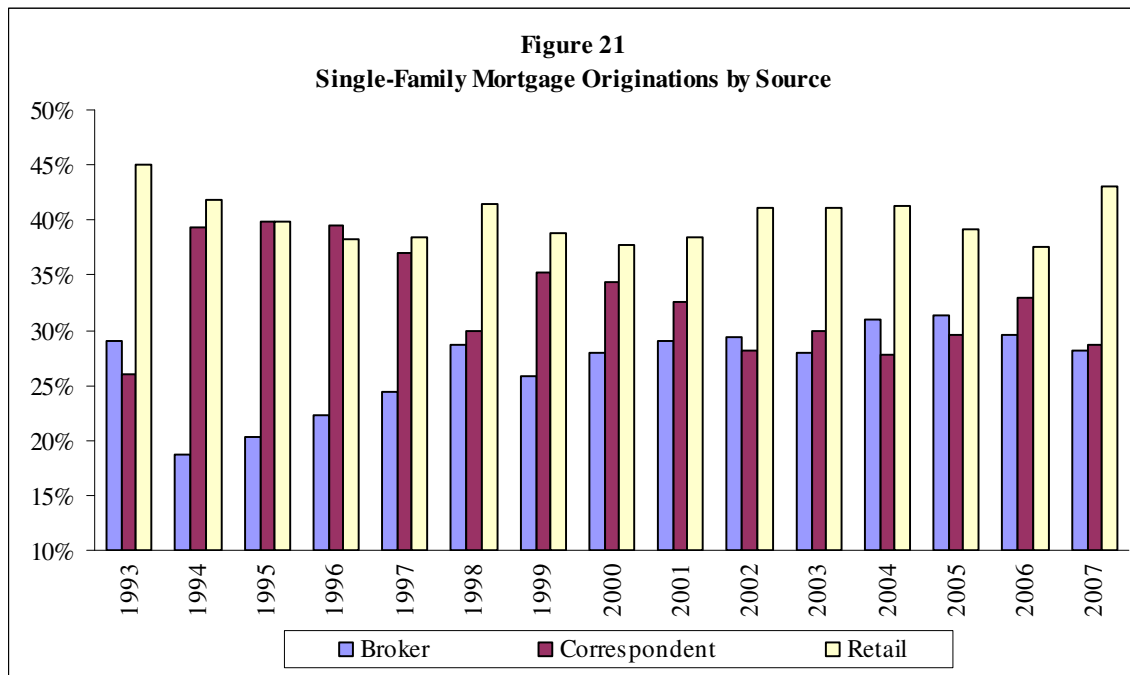
**Consolidation among Originators Continues;
Retail Lending Channel Gains Share**

The long-running trend toward consolidation in the single-family mortgage origination business continued in 2007. According to the Inside Mortgage Finance Publications, the top 25 lenders' share of all originations grew three percentage points from 86 percent to 90 percent (Figure 20). That was nearly triple the level in 1992, when the top 25 lenders accounted for only about 30 percent of all loans.



Source: Inside Mortgage Finance Publications

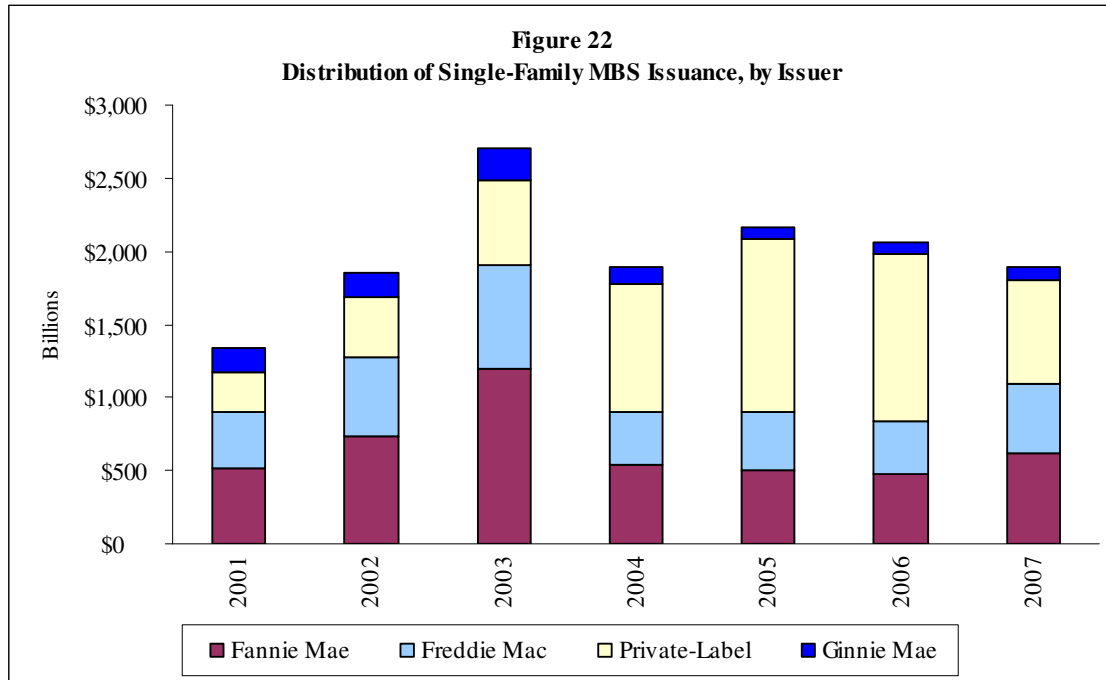
In 2007, lenders made an increasing share of single-family originations through the retail channel, in which they lend directly to consumers, whether through a branch office, a call center, the Internet, or some other direct means. According to Inside Mortgage Finance Publications, the retail share of originations rose from 37.6 percent in 2006 to 43.1 percent in 2007, the largest retail share since 1993 (Figure 21). In wholesale production, the share of loans acquired from correspondents (lenders that close loans in their own name and sell them) dropped from 32.9 percent in 2006 to 28.6 percent last year. Brokers accounted for about 28.2 percent of loan originations in 2007, down from 29.5 percent in the prior year. The decline in wholesale lending resulted from the collapse of nontraditional mortgage lending and general tightening of underwriting standards in the second half of the year.



Source: Inside Mortgage Finance Publications

Single-Family MBS Issuance Declines; Enterprise Share Rises Significantly

The volume of single-family mortgages securitized in 2007 fell by eight percent to \$1.9 trillion, reflecting the decline in single-family mortgage originations. Fannie Mae's and Freddie Mac's combined share of MBS issuance rose substantially to 57.7 percent from 40.6 percent in 2006 (Figure 22). The Enterprises' combined share rose due to a decline in private-label MBS issuance, which fell 38 percent, to \$707 billion, as a result of the liquidity freeze in the non-agency market in the second half of 2007. Only \$168.7 billion in PLS were issued in the second half of 2007, approximately 21 percent of total MBS issuance. Issuance of PLS comprised 37.4 percent of all MBS issuance in 2007, down sharply from 55.7 percent in 2006. Ginnie Mae's market share rose to 4.9 percent in 2007 from 3.7 percent in 2006.

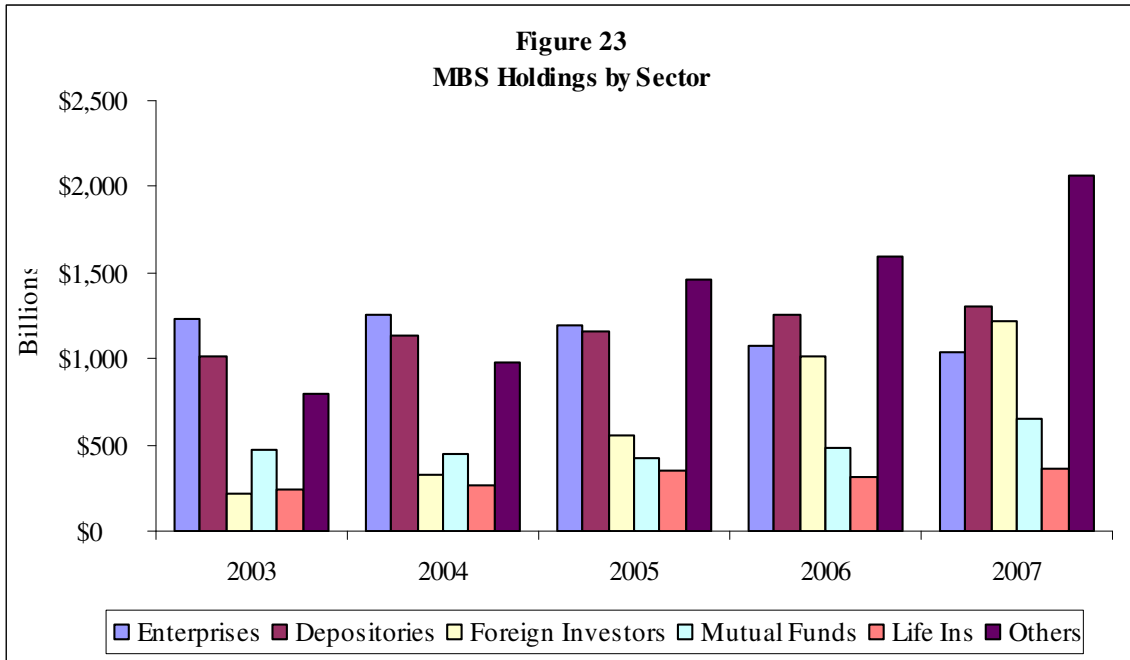


Source: Fannie Mae, Freddie Mac, and Inside Mortgage Finance Publications

Residential Mortgage Debt and MBS Outstanding Rise; Foreign Investors Increase Share of MBS Outstanding

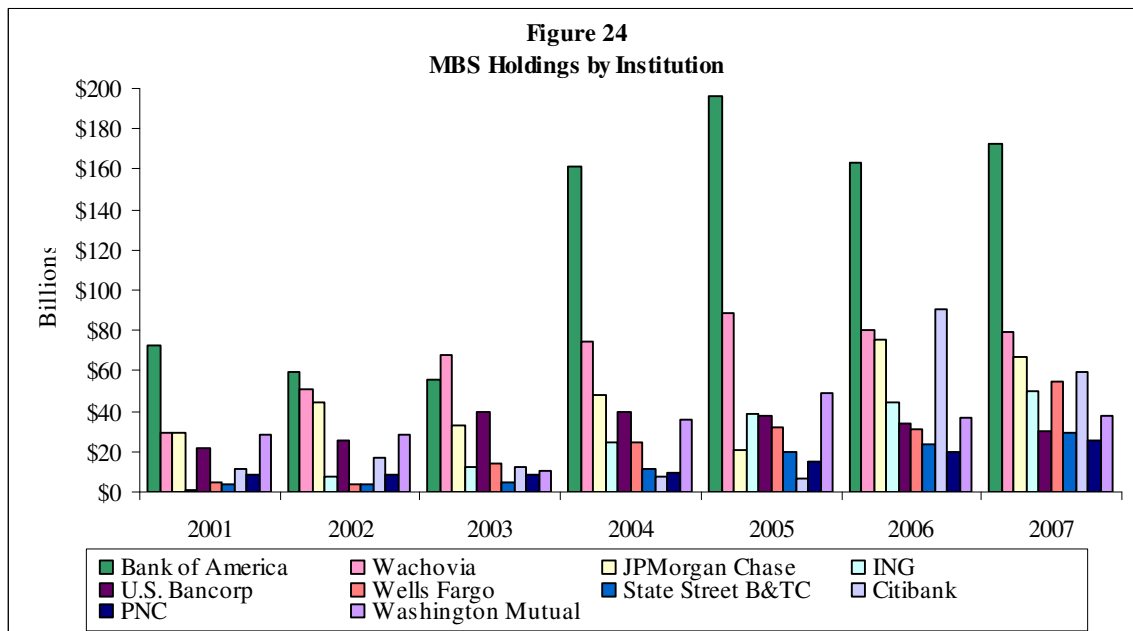
Residential mortgage debt outstanding (including single-family and multifamily loans) grew seven percent to \$12.0 trillion in 2007. Mortgage debt owed by households reached \$11.1 trillion, up 117.2 percent since the beginning of 2000. Higher interest rates and a slower pace of home sales dampened the growth of mortgage debt outstanding last year, as did a reduced ability of consumers to tap their home equity through refinancing in an environment of weak or falling house prices.

Outstanding MBS issued by U.S. firms increased 15.7 percent to \$6.6 trillion in 2007 despite the decline in MBS issuance. Since 2000, the share of that total held by foreign investors—a category that includes private firms and foreign central banks—has increased from six percent to over 18 percent (Figure 23). Depository institutions held 20 percent of MBS outstanding at year-end 2007, down from 22 percent at the end of 2006, despite an increase in the dollar value of depository holdings. Other investors—a category that includes hedge funds, nonprofits, and other groups for which detailed data are not available—held 31 percent of MBS outstanding, up from 28 percent at year-end 2006.



Source: Board of Governors of the Federal Reserve System

Although the MBS holdings of all U.S. depository institutions grew by over \$45 billion in 2007, the concentration of MBS holdings in the largest U.S. banks' portfolios decreased during the year. The MBS portfolios of the top two bank MBS investors fell to 3.8 percent of all MBS outstanding, down from 4.3 percent in 2006 and 5.5 percent in 2005 (Figure 24).



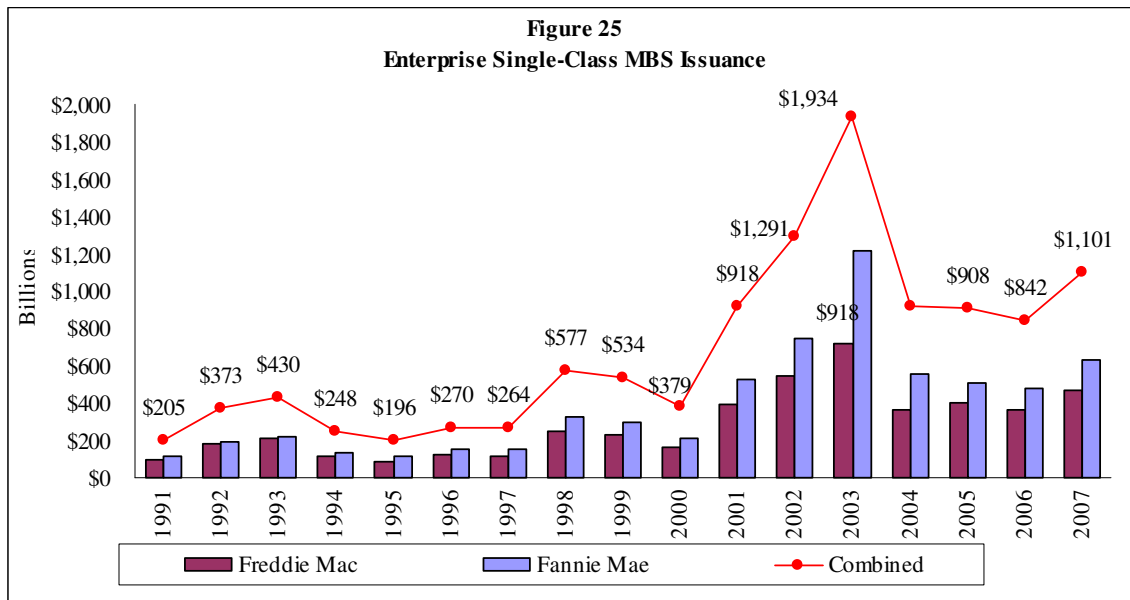
Source: OFHEO based on data from the Federal Deposit Insurance Corporation

ENTERPRISE SECONDARY MORTGAGE MARKET ACTIVITIES

Fannie Mae and Freddie Mac increased their MBS issuance by nearly one-third in 2007 as competition from the private-label market virtually ceased in the second half of the year. Freddie Mac increased its purchases of mortgage securities and whole loans for its retained portfolio, while Fannie Mae's purchases declined. Both Enterprises reduced their purchases of PLS backed by subprime, Alt-A, and other nontraditional mortgages and of whole loans of those types. The share of single-family mortgages backing MBS issued by Fannie Mae and Freddie Mac with features that pose high credit risk was higher than in 2006 but declined in the second half of the year. The sensitivity of each Enterprise's credit losses to the prices of single-family homes increased substantially.

Enterprise MBS Issuance Increases Sharply

The volume of MBS issued by Fannie Mae and Freddie Mac rose sharply in 2007, despite a decline in primary market originations. The Enterprises' combined single-class MBS issuance rose 31 percent to \$1.1 trillion (Figure 25). Fannie Mae's single-class MBS issuance rose 31 percent to \$630 billion, while Freddie Mac's volume also rose 31 percent to \$471 billion.



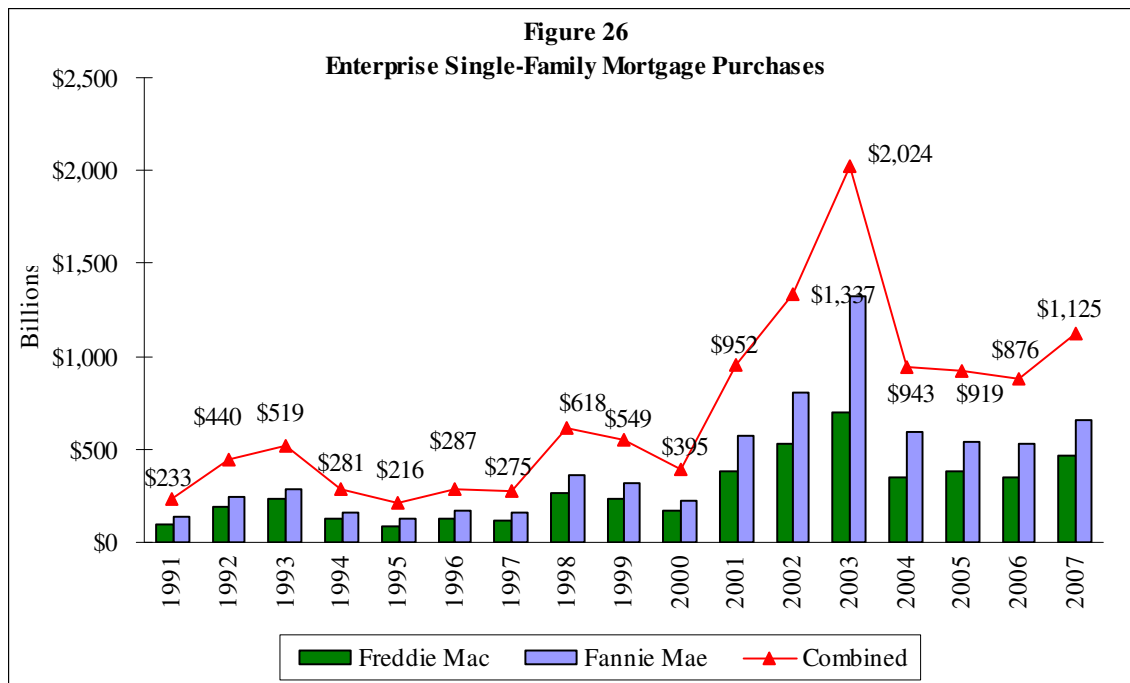
Source: Fannie Mae and Freddie Mac

Enterprise issuance of multiclass MBS, mostly Real Estate Mortgage Investment Conduit (REMIC) securities, fell 21 percent at Freddie Mac and 10 percent at Fannie Mae in 2007. The Enterprises issued a combined \$246 billion in multiclass MBS in 2007, down 16 percent from \$294 billion in 2006.

Enterprise Total and Single-Family Purchases Up Sharply

Larger MBS issuance by Fannie Mae and Freddie Mac boosted the Enterprises' combined purchases of single- and multifamily mortgages (defined to include cash purchases from lenders and swaps of whole loans for MBS) to \$1.2 trillion in 2007, up 31 percent from 2006. Fannie Mae's purchase volume increased 29 percent to \$705 billion in 2007, while Freddie Mac's total mortgage purchases rose 34 percent to \$488 billion.

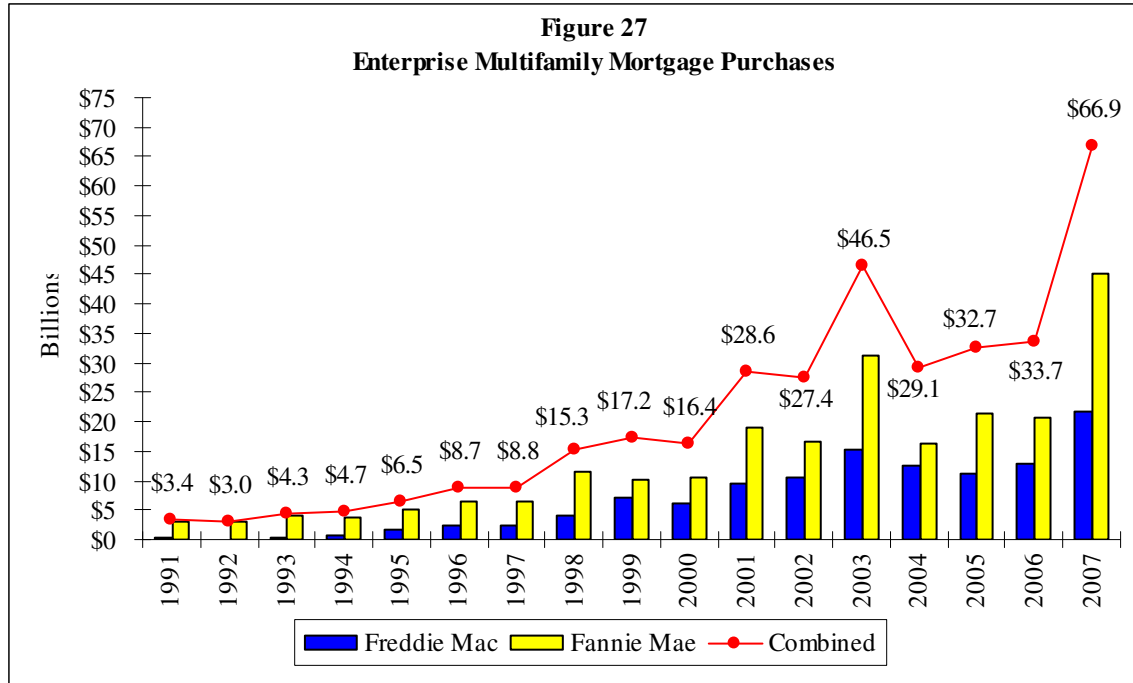
Purchases by the Enterprises of single-family mortgages rose 28 percent in 2007 to \$1.1 trillion from \$876 billion in 2006, despite the decline in single-family mortgage originations (Figure 26). Freddie Mac's purchases were \$466 billion in 2007, up 33 percent from 2006, while Fannie Mae's purchases were \$659 billion, up 26 percent. Those totals were the highest single-family purchase volumes by the Enterprises since 2003.



Source: Fannie Mae and Freddie Mac

Enterprise Multifamily Purchases Double

Fannie Mae and Freddie Mac increased their multifamily activity substantially in 2007. Combined Enterprise purchases of multifamily mortgages doubled to \$66.9 billion from \$33.7 billion in 2006. Fannie Mae purchased \$45.3 billion in multifamily loans, up 119 percent from 2006 (Figure 27). Freddie Mac purchased \$21.6 billion in multifamily mortgages, up 66 percent from the previous year. Most of the units financed with multifamily loans purchased by the Enterprises count toward the affordable housing goals established by the Secretary of Housing and Urban Development (HUD).



Source: Fannie Mae and Freddie Mac

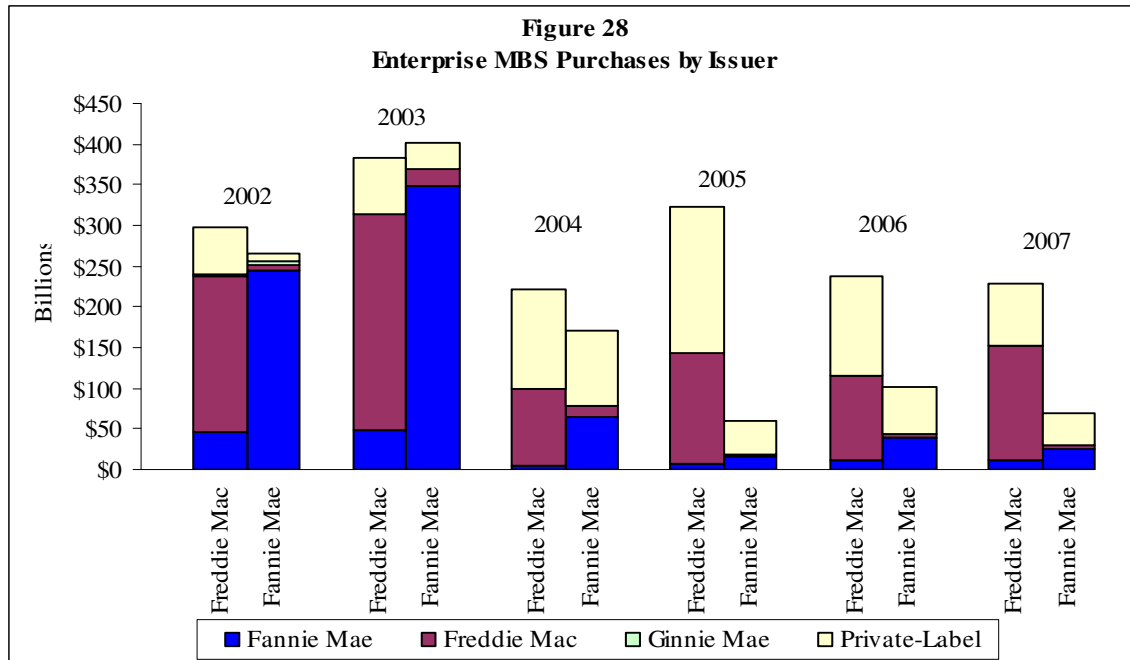
Purchases for the Retained Portfolio Increase at Freddie Mac but Drop at Fannie Mae

Although the activity of the retained mortgage portfolios of Fannie Mae and Freddie Mac (i.e., purchases, sales and liquidations) varied throughout 2007, overall, their portfolios showed little or no growth for the year, and they have grown little, if at all, since the limits on portfolio growth imposed by OFHEO took effect in mid-2006.⁴ Purchases of mortgage securities and unsecuritized mortgages for the retained portfolio increased at Freddie Mac in 2007, but fell at Fannie Mae. For Fannie Mae, purchases were offset by sales and liquidations out of the retained portfolio, leading to a slight decline in its end-of-year balance. For Freddie Mac, purchases less sales and liquidations led to a slight increase in the retained portfolio's end-of-year dollar balance.

Fannie Mae purchased \$25 billion of its own MBS in 2007, compared to \$38 billion in 2006 and \$16 billion in 2005 (Figure 28). Freddie Mac purchased \$141 billion of its

⁴ The growth of Fannie Mae's retained portfolio continued to be constrained from January through August 2007 by OFHEO's Consent Order of May 2006, whereas Freddie Mac's continued to be constrained by the Enterprise's voluntary agreement with OFHEO's recommendation to limit the growth of its portfolio starting in August 2006. The Enterprises' portfolio mortgage assets were initially limited to the level held as of December 31, 2005 for Fannie Mae and as of June 30, 2006 for Freddie Mac, with an allowance for growth of 2 percent annually and no more than 0.5 percent quarterly in the case of Freddie Mac. In September 2007, OFHEO provided the Enterprises with additional flexibility in managing their portfolios to comply with the caps imposed by those agreements. See: *September 19, 2007 OFHEO News Release available upon request from FHFA*. Those limits were lifted effective March 1, 2008.

MBS, compared to \$104 billion in 2006 and \$136 billion in 2005. Both Enterprises decreased their purchases of PLS significantly in 2007. Purchases of PLS by Fannie Mae fell 35 percent to \$37 billion, while PLS purchases by Freddie Mac declined 38 percent to \$76 billion. Combined Enterprise PLS purchases fell 37 percent to \$114 billion in 2007. The private-label share of Enterprise purchases declined to 38 percent, down from 53 and 58 percent in 2006 and 2005, respectively.



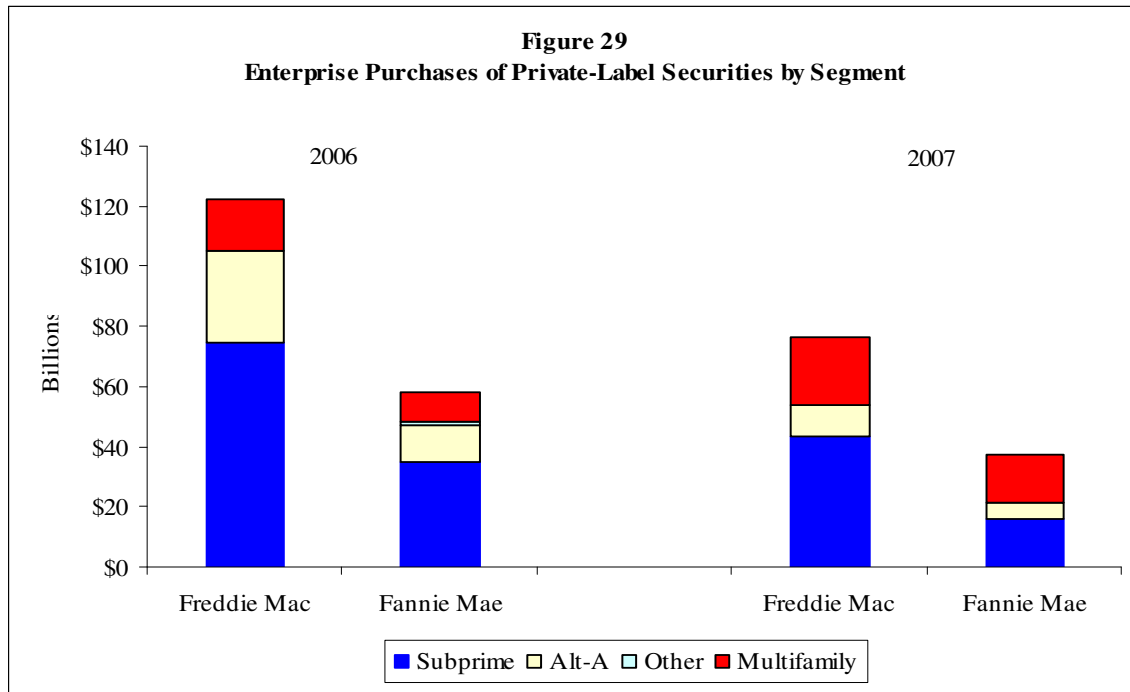
Source: Fannie Mae and Freddie Mac

Enterprises Reduce Presence in Subprime, A-, and Alt-A Markets

Freddie Mac and Fannie Mae reduced their presence in the markets for subprime, A-, and Alt-A mortgages and PLS backed by those loans in 2007. Fannie Mae reduced its purchases of those types of mortgages, both in terms of dollar volume and share of overall single-family purchases, relative to 2006. Fannie Mae's purchases of Alt-A loans totaled \$106 billion, down from approximately \$112 billion the year before. Freddie Mac increased its whole loan purchases of Alt-A mortgages in 2007. Freddie Mac purchased \$72 billion of Alt-A mortgages in 2007, up from \$45 billion in 2006.

Fannie Mae and Freddie Mac also reduced their purchases of PLS backed by subprime, A-, and Alt-A mortgages in 2007, particularly in the second half of the year. They bought a total of \$113.6 billion in PLS, down 37 percent from \$180 billion the year before. Purchases in the second half of the year were less than one-half of the level in the first half. The Enterprises purchased \$59.6 billion of PLS backed by subprime loans, down 46 percent from \$109.6 billion the previous year (Figure 29). They purchased \$15.3 billion of PLS backed by Alt-A mortgages, 64 percent less than the \$42.5 billion acquired in 2006. The only segment in which Fannie Mae and Freddie Mac increased

their PLS purchases in 2007 was in the multifamily market, where they purchased \$38.3 billion in PLS backed by multifamily mortgages, up 44 percent from \$26.6 billion in 2006.

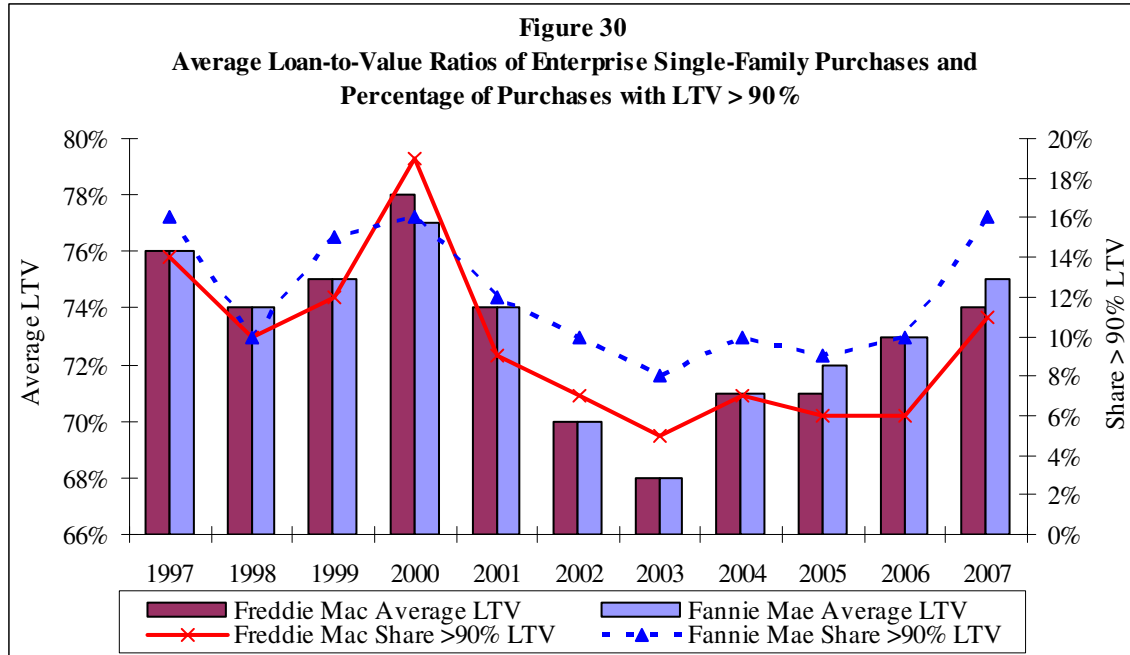


Source: Fannie Mae and Freddie Mac

Refinance Share and Loan-to-Value Ratios of Enterprise Single-Family Purchases Increase

The refinance share of single-family mortgages purchased by Fannie Mae and Freddie Mac rose in 2007. Fannie Mae's refinance share of purchases increased to 50 percent, up from 48 percent in 2006, whereas Freddie Mac's share rose to 53 percent from 47 percent. Refinance mortgages tend to be of higher credit quality than purchase loans.

The loan-to-value ratios of the single-family mortgages purchased by Fannie Mae and Freddie Mac also increased. The weighted average LTV ratio of loans purchased by Freddie Mac increased to 74 percent in 2007 from 73 percent in 2006, while the weighted average LTV ratio for Fannie Mae acquisitions rose to 75 percent from 73 percent (Figure 30). The proportion of loans with high LTV ratios also rose significantly at both Enterprises. The proportion of loans greater than 90 percent LTV purchased by Fannie Mae was 16 percent in 2007, up sharply from 10 percent in 2006. The proportion for Freddie Mac in 2007 was 11 percent, up from six percent in 2005.



Source: Fannie Mae and Freddie Mac

Mortgages with High-Risk Features Backing Enterprise MBS Rise but Fall in Second Half

The share of single-family mortgages backing MBS issued by Fannie Mae and Freddie Mac with features that pose high credit risk was higher in 2007 than in the previous year. For example, 11 percent of loans backing Enterprise MBS had low credit scores (FICO < 700) and LTV ratios above 80 percent in 2007, up from seven percent in 2006. Six percent of mortgages backing MBS had very low credit scores (FICO < 660) and LTV ratios greater than 80 percent, up from four percent in the previous year.

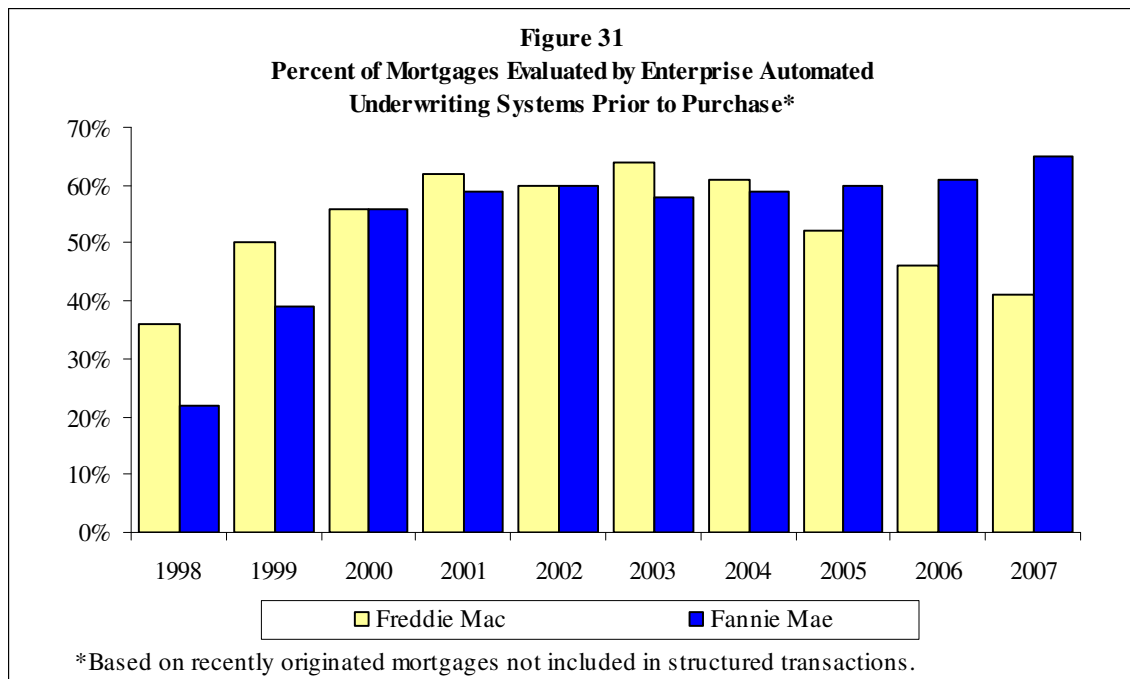
Fannie Mae and Freddie Mac tightened their underwriting standards in the second half of 2007, which reduced the proportion of MBS backed by mortgages with high-risk features. For example, 13 of loans backing Enterprise MBS issued in July had low credit scores (FICO < 700) and LTV ratios greater than 80 percent. By December, the share of loans backing MBS with both those features had declined to 12 percent.

ARM Share of Purchases Declines

The adjustable-rate share of Enterprise single-family purchases declined in 2007. Adjustable-rate loans represented 11.4 percent of Fannie Mae's purchases, down from 17.7 percent in 2006. For Freddie Mac, ARMs represented 16.8 percent of single-family acquisitions, down from 22 percent the previous year. Adjustable-rate loans generally have a higher default rate than fixed-rate loans partly because the rates on ARMs, while originally low, may change over time and because ARMs are frequently used to qualify marginal buyers who could not qualify for the same mortgage amount with a FRM. If monthly payments increase as interest rates rise, the risk of default also increases.

Enterprises Continue to Manage Single-Family Mortgage Credit Risk

Freddie Mac and Fannie Mae continued to manage the credit risk of single-family mortgages by using automated underwriting systems (AUS) to evaluate the credit quality of new purchases and obtaining credit enhancements on higher-risk loans. Such systems combine LTV ratios, credit scores, debt-to-income ratios, and other loan and borrower characteristics to classify loans in terms of their relative risk of default. The percentage of loans processed through Freddie Mac's Loan Prospector (LP) dropped to 41 percent in 2007, down from 46 percent in 2006 and 52 percent in 2005. Freddie Mac reported in its annual report that the share of mortgages it purchased that were underwritten by lenders using alternative AUS increased in 2007. Sixty-five percent of Fannie Mae's 2007 single-family purchases were evaluated prior to purchase through its Desktop Underwriter (DU), up from 61 percent in 2006 (Figure 31).



Source: Fannie Mae and Freddie Mac

As part of its post-purchase quality control review process, Fannie Mae and Freddie Mac each uses its respective AUS to evaluate the credit quality of virtually all single-family mortgages that were not evaluated by the system prior to purchase. Particular focus is placed on performing quality control reviews of purchases identified as high-risk mortgages. Additionally, each Enterprise allows some large lenders to use their own or the other Enterprise's AUS to evaluate mortgages prior to purchase. As a result, the data in Figure 43 understate the proportion of loans purchased by the Enterprises that were evaluated using automated underwriting prior to origination.

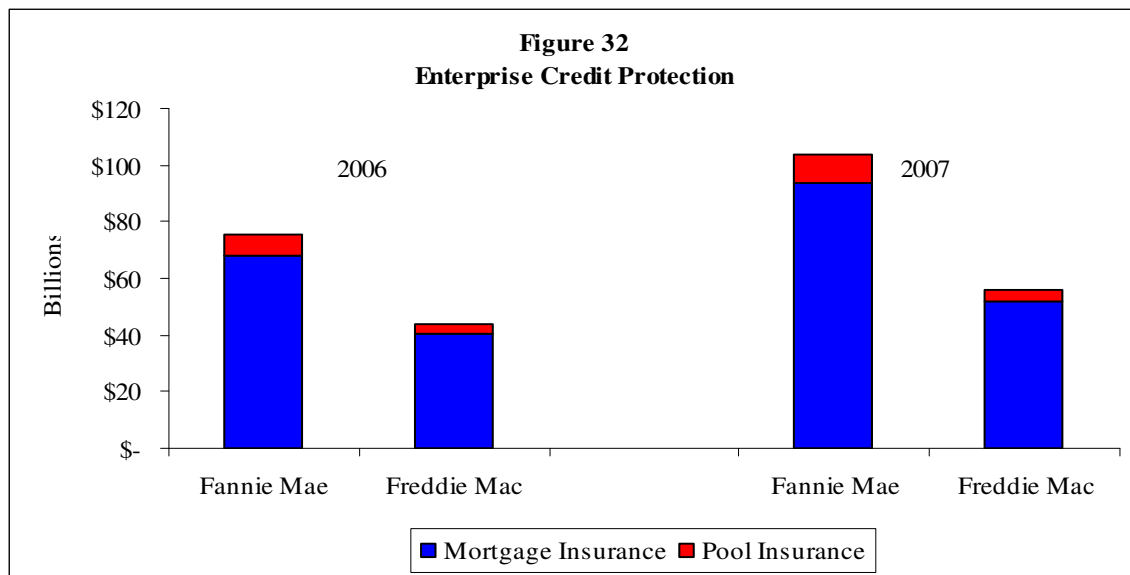
Fannie Mae and Freddie Mac also reduce their credit risk exposure by obtaining credit enhancements on higher-risk single-family mortgages. Credit enhancements include

primary mortgage insurance on loans with original LTV ratios greater than 80 percent and agreements in which lenders or other third parties pledge collateral or agree to accept losses on loans that default. In addition, a portion of the mortgages purchased by each Enterprise are insured by FHA or guaranteed by VA. Credit enhancements transform a portion of the credit risk associated with individual loans into counterparty risk. The Enterprises manage counterparty risk by establishing eligibility requirements for and monitoring the condition of counterparties.

The share of Freddie Mac's new business purchases with credit enhancements was 17 percent in 2007, up slightly from 16 percent in 2006. The percentage of new Fannie Mae MBS issuances with lender-only and shared-risk credit enhancements was two percent in 2007, down from eight percent in 2006. The percentage of new Freddie Mac MBS issuances with lender-only and shared-risk credit enhancements was 21 percent in 2007, up from 17 percent in 2006. The share of Fannie Mae's outstanding mortgage credit book with primary mortgage insurance or other credit enhancements was about 21 percent, up from 19 percent at year-end 2006.

Enterprises Increase Exposure to Mortgage Insurers

Fannie Mae and Freddie Mac have significant credit exposures to private mortgage insurers. Seven firms provide nearly all primary (loan-level) insurance, and there is significant concentration among the coverage provided by that relatively small group. The top four mortgage insurers that provided the most primary insurance coverage for Freddie Mac at the end of 2007 accounted for 75 percent of that Enterprise's primary coverage, up from 72.9 percent at year-end 2006. Freddie Mac had a total exposure to mortgage insurers, from primary mortgage and pool insurance, of \$55.7 billion at the end of 2007, up from \$43.9 billion at year-end 2006 (Figure 33). Fannie Mae reported \$104.1 billion in total mortgage insurance exposure at the end of 2007, up from \$75.5 billion at year-end 2006.



Source: Fannie Mae and Freddie Mac

Estimated Enterprise Credit Loss from House Price Correction Increases Sharply

The credit losses each Enterprise incurs on its single-family credit book of business are sensitive to the prices of single-family homes. That sensitivity increased substantially in 2007 as house prices decelerated sharply in the second half of the year. Freddie Mac estimated that, as of the end of 2007, an immediate five percent decline in home values would increase credit losses over the life of its loans by \$3.1 billion, net of the beneficial effect of credit enhancements, compared with \$770 million at the end of 2006. Without credit enhancements, the lifetime loss sensitivity was \$4.0 billion in 2007, up from \$1.1 billion at the end of 2006. The net credit loss sensitivity at the end of 2007, \$3.1 billion, represented about 8.2 percent of Freddie Mac's core capital as of year-end and about 0.18 percent of the Enterprise's conventional single-family mortgage credit book of business. At the end of 2006, the corresponding figures were 2.2 percent and 0.05 percent, respectively.

Fannie Mae estimated that, as of the end of 2007, an immediate five percent decline in home values would increase credit losses over the life of its loans by \$4.5 billion, net of the beneficial effect of credit enhancements, compared with \$2.0 billion at the end of 2006. Without credit enhancements, the lifetime loss sensitivity was \$9.6 billion, up from \$3.9 billion at the end of 2006. The net credit loss sensitivity at the end of 2007, \$4.5 billion, represented about 10 percent of Fannie Mae's core capital as of that date and 0.18 percent of the Enterprise's conventional single-family mortgage credit book of business. At year-end 2006, the corresponding figures were 4.7 percent and 0.09 percent, respectively.

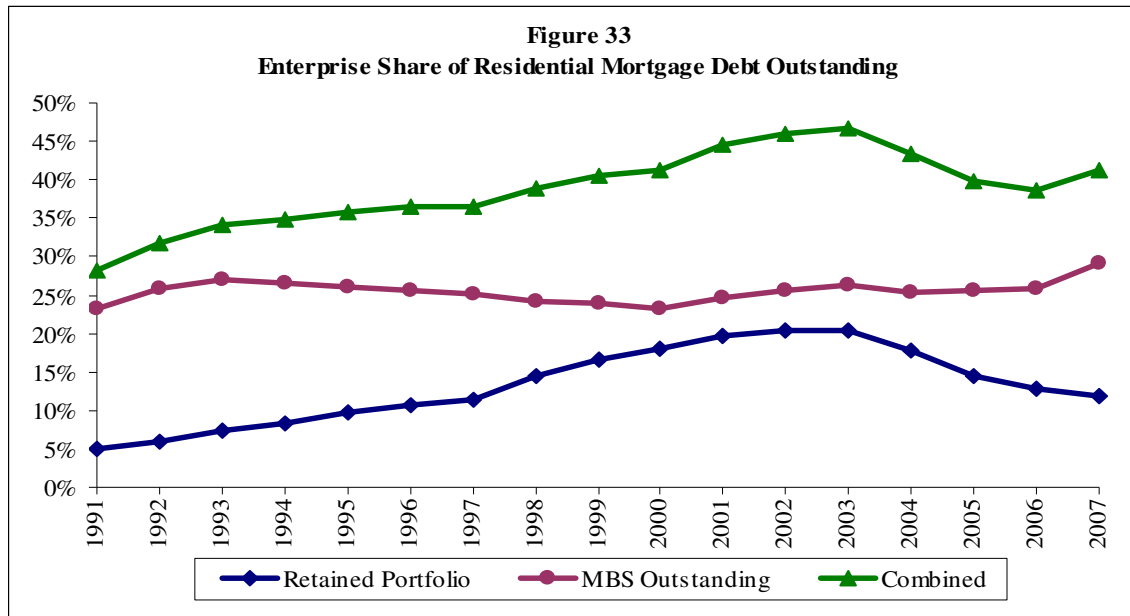
Enterprise Share of Mortgage Debt Outstanding Increases Dramatically

At the end of 2007, the combined books of business of Fannie Mae and Freddie Mac represented 41.1 percent of residential mortgage debt outstanding (including single-family and multifamily loans) of \$12.0 trillion, up from 38.7 percent at the end of 2006 (Figure 33). Combined Enterprise MBS held by other investors increased from 25.9 percent to 29.2 percent of mortgage debt outstanding, its highest level ever, which more than offset the decline in the retained portfolios' share from 12.7 percent to 12.0 percent, its lowest level since 1997.

FINANCIAL PERFORMANCE AND CONDITION OF THE ENTERPRISES

The market turmoil in the second half of 2007 reduced the credit quality of the on- and off-balance sheet mortgage assets of Fannie Mae and Freddie Mac and lowered the value of their mortgage investments. As a result, the Enterprises reported significantly higher credit losses, had to increase their loan loss reserves significantly in anticipation of further losses, and reported very large losses for the year. Faced with declining capital levels, Fannie Mae and Freddie Mac tapped the preferred stock market, adding over \$15 billion of preferred stock to their balance sheets in the second half of the year, and took other measures to enhance and maintain their capital positions. Despite those challenges,

both Enterprises continued to perform their statutory mission and were classified as adequately capitalized at the end of each quarter of 2007.



Source: Fannie Mae, Freddie Mac, Board of Governors of the Federal Reserve System

Enterprises Incur Heavy Losses

Although Fannie Mae and Freddie Mac each operated at a profit in the first half of 2007, both Enterprises incurred very large financial losses for the year. Freddie Mac reported its first annual loss ever. Combined, the Enterprises incurred \$11.1 billion in pre-tax losses and after-tax losses of \$5.1 billion⁵ (Tables 1 and 2). The comparable figures for 2006 were income of \$6.5 billion and \$6.4 billion, respectively. The predominant sources of losses in 2007 were lower net interest income, higher losses related to items subject to mark-to-market accounting, and higher expenses and/or losses associated with the Enterprises credit guarantee books including higher credit losses and provisions for future losses.

Financial results for the Enterprises, measured from a fair value perspective, were more dismal than their results under Generally Accepted Accounting Principles (GAAP). Fannie Mae incurred a fair value loss of \$13.3 billion, whereas Freddie Mac's loss was \$24.7 billion.⁶ Those losses were driven mainly by declining asset prices and a higher guarantee obligation (Freddie Mac) reflecting an increase in anticipated credit losses, higher risk of greater credit losses, and a general reluctance or inability on the part of many investors to hold mortgage assets.

⁵ After-tax losses reflect the federal income tax benefit of Low-Income Housing Tax Credit partnership investments.

⁶ Fair value income/loss is defined as the change in the fair value of net assets adjusted for capital transactions such as dividend payments and stock issuances/redemptions.

Table 1. Fannie Mae Financial Highlights

SELECTED FINANCIAL HIGHLIGHTS ¹					
(Dollars in Billions)					
EARNINGS PERFORMANCE:	2003	2004	2005	2006	2007
Net Income (\$)	8.1	5.0	6.3	4.1	-2.1
Net Interest Income (\$)	19.5	18.1	11.5	6.8	4.6
Guarantee Fees (\$)	3.4	3.8	4.0	4.3	5.1
Net Interest Margin (%) ²	2.12	1.86	1.31	0.85	0.57
Average Guarantee Fee (bps) ³	21.9	21.8	22.3	22.2	23.7
Return on Common Equity (%) ⁴	27.6	16.6	19.5	11.3	-8.3
Dividend Payout Ratio (%) ⁵	20.8	42.1	17.2	32.4	N/M
BALANCE SHEET POSITION:					
Total Assets (\$)	1,022.3	1,020.9	834.2	843.9	882.5
Outstanding Debt (\$)	961.3	953.1	764.0	767.0	796.3
Mortgages:					
Mortgage Assets (\$)	919.6	925.2	736.8	726.4	723.6
MBS (\$) (excluding Fannie Mae MBS held in Portfolio)	1,300.5	1,408.0	1,598.9	1,777.6	2,118.9
Mortgage Assets as % of Total Mortgage Portfolio	41.4	39.5	31.3	28.8	25.1
Capital:					
Core Capital ⁶ /MBS plus Total Assets (%)	1.2	1.4	1.6	1.6	1.5
Core Capital/Total Assets (%)	2.6	3.4	4.7	5.0	5.1

Source: Fannie Mae

N/M = Not Meaningful

¹ Data for 2003 are based on restated and revised financial results.² Taxable equivalent net interest income divided by average earning assets.³ Guarantee fees divided by average MBS outstanding net of MBS held in portfolio.⁴ Calculated as annualized net income available to common stockholders divided by average common stockholders' equity.⁵ Paid common dividends as a percentage of net income available to common stockholders.⁶ The sum of (a) the stated value of common stock, (b) the stated value of outstanding noncumulative perpetual preferred stock, (c) paid-in capital, and (d) retained earnings less treasury stock.

Table 2. Freddie Mac Financial Highlights

SELECTED FINANCIAL HIGHLIGHTS¹					
(Dollars in Billions)					
EARNINGS PERFORMANCE:	2003	2004	2005	2006	2007
Net Income (\$)	4.8	2.9	2.1	2.3	-3.1
Net Interest Income (\$)	9.5	9.1	4.6	3.4	3.1
Guarantee Fees (\$)	1.7	1.4	2.1	2.4	2.6
Net Interest Margin (%) ²	1.27	1.24	0.66	0.47	0.44
Average Guarantee Fee (bps) ³	23.3	17.5	16.6	17.1	16.6
Return on Common Equity (%) ⁴	17.7	9.4	8.1	9.8	-21.0
Dividend Payout Ratio (%) ⁵	15.6	34.9	56.9	63.9	N/M
BALANCE SHEET POSITION:					
Total Assets (\$)	803.4	795.3	806.2	804.9	794.4
Outstanding Debt (\$)	739.6	731.7	748.8	744.3	738.6
Mortgages:					
Mortgage Assets (\$)	660.5	664.6	709.5	700.0	710.0
MBS (\$) (excluding Freddie Mac MBS held in Portfolio)	752.2	852.3	974.2	1,122.8	1,381.9
Mortgage Assets as % of Total Mortgage Portfolio	46.8	43.8	42.1	38.3	33.8
Capital:					
Core Capital ⁶ /MBS plus Total Assets (%)	2.1	2.1	2.0	1.8	1.7
Core Capital/Total Assets (%)	4.0	4.3	4.4	4.4	4.8

Source: Freddie Mac
N/M = Not Meaningful

¹ Data for 2003 are based on restated and revised financial results.

² Taxable equivalent net interest income divided by average earning assets.

³ Guarantee fees divided by average MBS outstanding net of MBS held in portfolio.

⁴ Ratio computed as annualized net income available to common stockholders divided by the simple average of beginning and ending stockholders' equity, net of preferred stock (at redemption value).

⁵ Paid common dividends as a percentage of net income available to common stockholders.

⁶ The sum of (a) the stated value of outstanding common stock, (b) the stated value of outstanding noncumulative perpetual preferred stock, (c) paid-in capital, and (d) retained earnings, less Treasury stock.

Enterprises' Net Interest Income Continues to Fall as Guarantee Fee Income Increases

Net interest income continued to decline at both Fannie Mae and Freddie Mac in 2007, primarily as a result of higher funding costs. Fannie Mae's net interest income declined by almost one-third or \$1.2 billion, to \$4.6 billion. That decline was driven by a 28 basis point decline in the net interest yield, which fell to 57 basis points. The decline in net interest yield was driven primarily by higher debt cost. The average cost of interest-bearing liabilities rose 35 basis points to 5.14 percent, whereas the average yield on interest-earning assets increased by only 5 basis points. Freddie Mac experienced a decline in its net interest income of 9.2 percent or \$0.3 billion, to \$3.1 billion. The Enterprise's net interest yield fell 3 basis points, driven also by higher funding costs.

With the continued decline in net interest income and the rapid growth in MBS outstanding, guarantee fee income continues to comprise a greater share of the Enterprises' total revenues. However, as discussed below, costs associated with the guarantee business of Fannie Mae and Freddie Mac increased significantly in 2007 due to the declining credit quality of loans underlying their MBS. For the year, Fannie Mae's guarantee fee income increased \$0.8 billion or 19.3 percent to \$5.1 billion. That increase in guarantee fee income reflects an increase in the average effective guarantee fee rate of 1.5 basis points or 6.8 percent to 23.7 basis points, and an 11.7 percent increase in the average outstanding balance of MBS and other guarantees.

Although Freddie Mac's guarantee fee income increased 10.1 percent year-over-year, Freddie Mac experienced a decline in its average effective guarantee fee of 2.9 percent or one-half basis point to 16.6 basis points. That decline is attributable entirely to a decline in the amortization of credit and buy-down fees. To mitigate the impact of higher credit-related expenses (discussed below), starting in the fourth quarter both Fannie Mae and Freddie Mac increased their guarantee fees on new business. They also increased their purchase of credit enhancements.

Losses due to Mark-to-Market Accounting and Certain Transactions Associated with Credit Guarantee Businesses Increase

Mark-to-market accounting continued to have a detrimental impact on the earnings of Fannie Mae and Freddie Mac. Freddie Mac experienced higher mark-to-market derivatives losses of about \$0.7 billion due to decreasing long-term interest rates, and higher losses on the guarantee asset of \$0.5 billion. The higher losses on the guarantee asset were driven by a decrease in mortgage interest rates during the year, which shortened the life of the asset. Those losses were largely offset by higher income from amortization of the guarantee obligation of \$0.4 billion, which reflects both higher expected default costs associated with the growth of the guarantee obligation resulting from newly-issued guarantees, as well as a higher average balance of MBS and structured securities. Due to the weakening of the U.S. dollar relative to the Euro, Freddie Mac also incurred much higher foreign currency losses—\$2.3 billion compared to less than \$0.1 billion the year before—that were offset by an unrecognized gain of \$2.3 billion on

the Enterprise's foreign-currency swaps attributable to the same source. Fannie Mae experienced much higher fair value derivatives losses (\$2.6 billion), driven also by a decrease in long-term interest rates.

The Enterprises experienced higher expenses and/or losses related to their credit guarantee business. Both Fannie Mae and Freddie Mac recorded much higher credit losses and provisions for loan loss (discussed below). In addition, Freddie Mac experienced a five-fold increase in losses on certain credit guarantees, to \$2.0 billion, driven by expectations of higher future default costs, and a 13-fold increase in losses on loan purchased, to \$1.9 billion, driven by the decline in market prices for those loans. Fannie Mae reported an increase in losses on certain guarantee contracts of \$1.0 billion, also driven by expectations of higher future default costs.

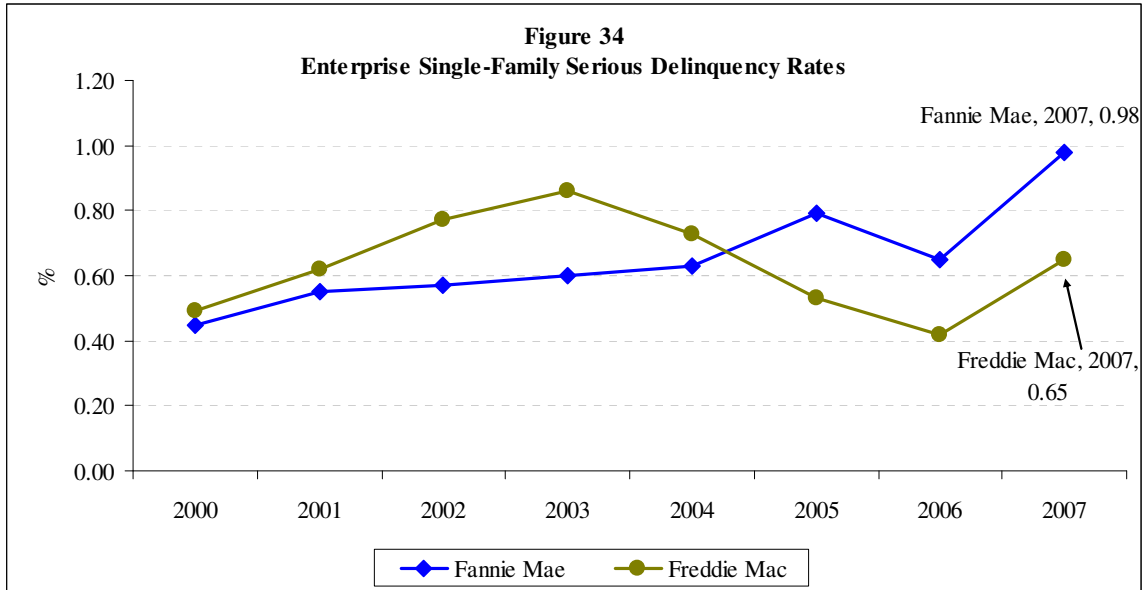
Credit Losses, Delinquencies, Property Acquisitions, and Provisions for Loan Losses Increase Significantly

Weakness in the housing market in 2007, brought on by declining house prices, resulted in significantly higher credit losses, single-family mortgage delinquencies and foreclosures, and loan loss provisioning at both Fannie Mae and Freddie Mac.

Freddie Mac's credit losses (charge-offs plus foreclosure expenses) more than doubled in 2007 to \$0.5 billion, reflecting primarily higher foreclosure expenses and amounts previously transferred to reduce the carrying value of loans purchased under guarantees. The Enterprise's annualized credit loss ratio (credit losses divided by the average mortgage portfolio, excluding non-Freddie Mac mortgage-related securities and that portion of structured securities backed by Ginnie Mae MBS) increased to 3.0 basis points, compared to 1.4 basis points the year before. At Fannie Mae, credit losses totaled \$1.3 billion or 5.3 basis points of its average guarantee balance, compared to \$0.5 billion and 2.2 basis points of the average guarantee balance in 2006.⁷

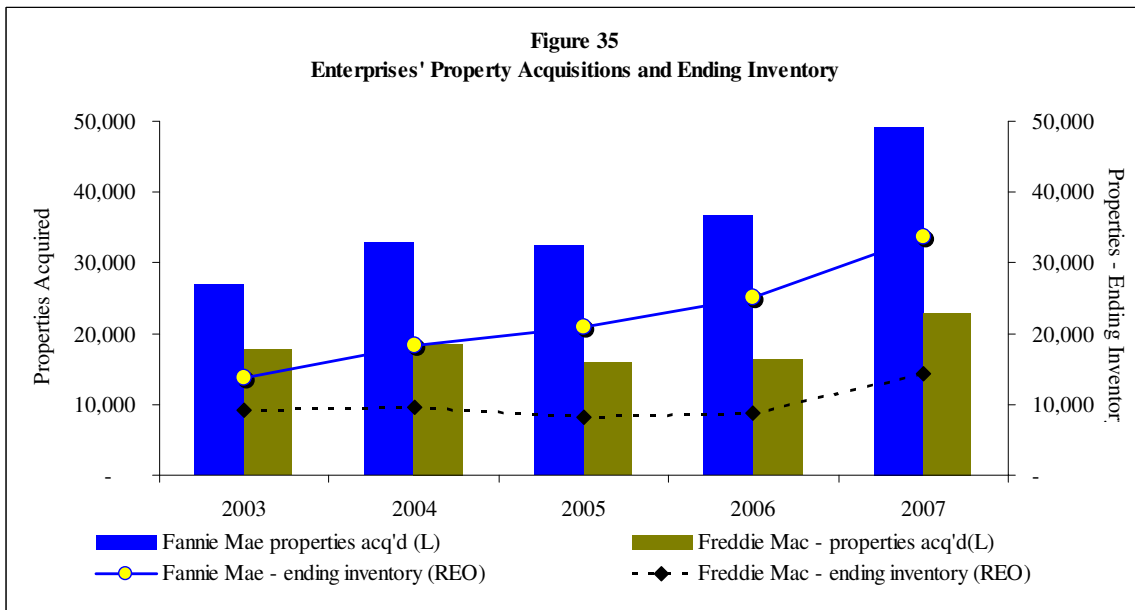
Serious delinquency rates on single-family mortgages were up sharply at both Enterprises. Fannie Mae's rate increased by one-third to 0.98 percent by the end of 2007 (Figure 34). The highest delinquency rates were in the Midwest and Southeast regions. Freddie Mac's single-family delinquency rate was 0.65 percent at the end of the year. That delinquency rate reflected 79,569 delinquent loans. The comparable figures for 2006 were 0.42 percent and 46,777 delinquent loans, respectively.

⁷ The credit loss ratio including the effect of SOP 03-3 fair value losses (losses on delinquent loans purchased out of trusts) was 9.8 basis points and 2.8 basis points for 2007 and 2006, respectively.



Source: Fannie Mae and Freddie Mac

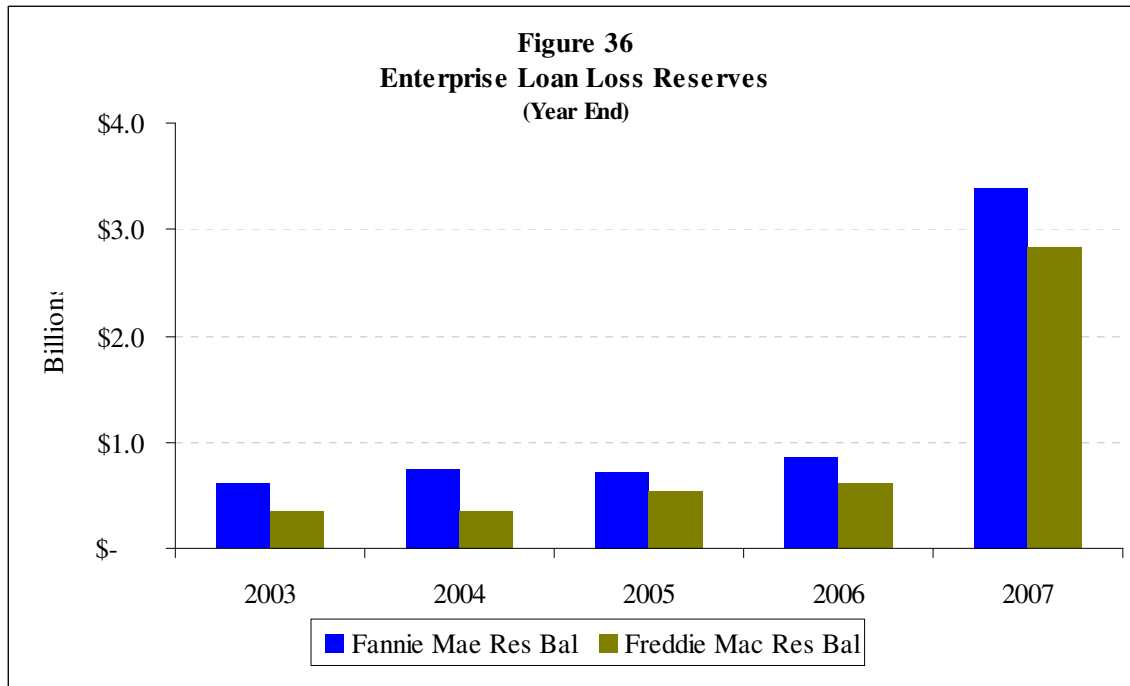
Acquisition of foreclosed properties in 2007 followed the trend of seriously delinquent single-family loans at both Fannie Mae and Freddie Mac. Properties acquired through foreclosures at Fannie Mae increased 34.3 percent in 2007 to 49,121 properties. In addition, Fannie Mae’s Real Estate Owned (REO) inventory increased 34.2 percent to 33,729 properties. Freddie Mac saw its foreclosures increase 39.4 percent to 22,840 properties. At year’s end, the Enterprise’s REO inventory was 14,349 properties, up 63.8 percent from the year earlier period (Figure 35).



Source: Fannie Mae and Freddie Mac

Rising credit losses and anticipation of further losses due to continued weakness in the housing markets caused both Fannie Mae and Freddie Mac to increase significantly their

provisions for loan losses in 2007. Fannie Mae added a total of \$4.6 billion to its allowance for loan losses and reserve for guarantee losses—nearly 8 times the level provisioned the previous year. At the end of 2007, the Enterprise’s loss reserves totaled \$3.4 billion, up from \$0.9 billion the year before (Figure 36). Fannie Mae’s loss reserve ratio (combined allowance for loan losses and reserve for guaranty losses, divided by the guaranty book of business) tripled in 2007, increasing from 0.04 percent at the end of 2006 to 0.12 percent one year later. Freddie Mac added \$2.9 billion to its loss reserves in 2007—a ten-fold increase from the previous year.⁸ At the end of 2007, the Enterprise’s loan loss reserve totaled \$2.8 billion, up from \$0.6 billion the year before.



Source: Fannie Mae and Freddie Mac

Administrative Expenses Decline or Are Flat

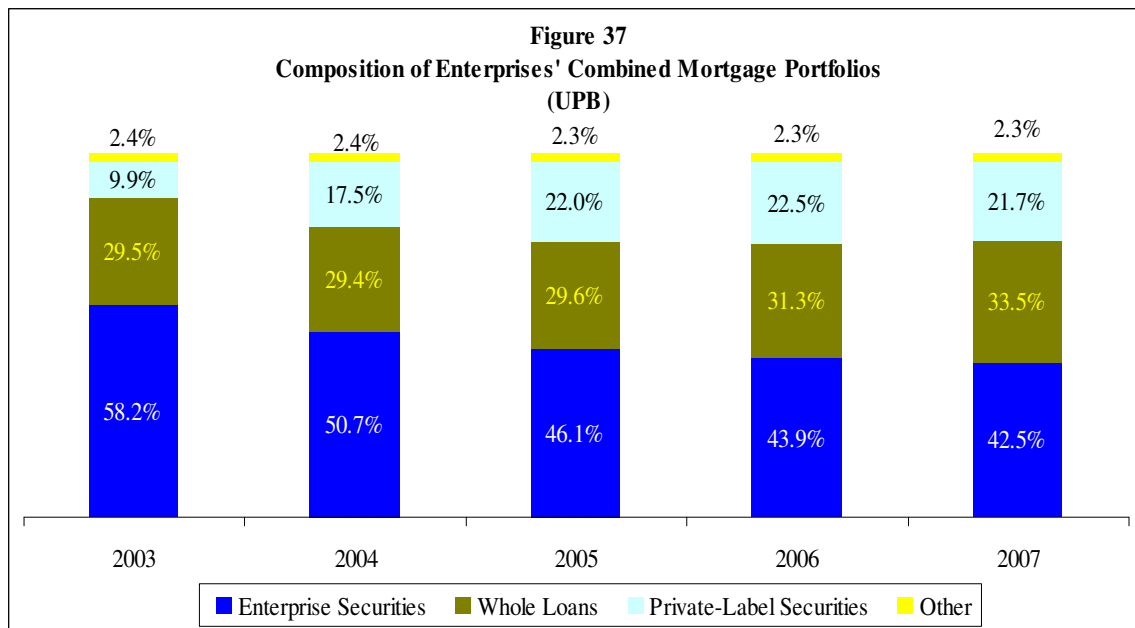
Fannie Mae reduced its administrative expenses by more than \$400 million in 2007, to \$2.7 billion. That reduction reflects lower expenses related to the restatement, regulatory examinations, investigations, and litigation. The Enterprise’s administrative expenses as a percentage of its average total mortgage portfolio declined from about 12.7 basis points in 2006 to 9.9 basis points in 2007. Administrative expenses at Freddie Mac were mostly flat in 2007, totaling \$1.6 billion. Administrative expenses as a percentage of the Enterprise’s average total mortgage portfolio improved to 8.6 basis points down from 9.3 basis points the year before.

⁸ Freddie Mac transferred \$0.5 billion of reserves associated with non-performing loans purchased from mortgage pools underlying its MBS, structured securities, and long-term standby agreements.

Mortgage Portfolios Show Little or No Growth; Composition of Portfolios Changes Little

The combined mortgage portfolio assets (net) of Fannie Mae and Freddie Mac totaled \$1.4 trillion at the end of 2007, a change of about \$7.2 billion from the end of 2006. Freddie Mac grew its mortgage portfolio assets (net) by a modest 1.4 percent in 2007, to \$710.0 billion. That was below its growth limit of \$724.4 billion. The mortgage portfolio assets of Fannie Mae shrunk for the third consecutive year, albeit only slightly, to \$723.6 billion, the lowest level since 2001.

The composition of the combined mortgage portfolios of Fannie Mae and Freddie Mac remained largely unchanged in 2007, with the biggest change occurring in the amount and share of whole loans. The unpaid principal balance (UPB) of whole loans held by the Enterprises increased 8.2 percent in 2007 to \$485.7 billion. That increase reflects, in large part, the increased volume of multi-family whole loans held by Fannie Mae. Whole loans represented 33.5 percent of the UPB of the Enterprises' combined mortgage portfolio assets at the end of the year, up from 31.3 percent the year before. The Enterprises continued to hold large volumes of their own securities, although their combined holdings fell 2.0 percent to \$615.6 billion. Finally, the volume and share of PLS declined slightly, by about 2.6 percent to \$313.7 billion. Those assets represented 21.7 percent of the UPB of the Enterprises' combined mortgage portfolio assets, compared to 22.5 percent the year before (Figure 37).

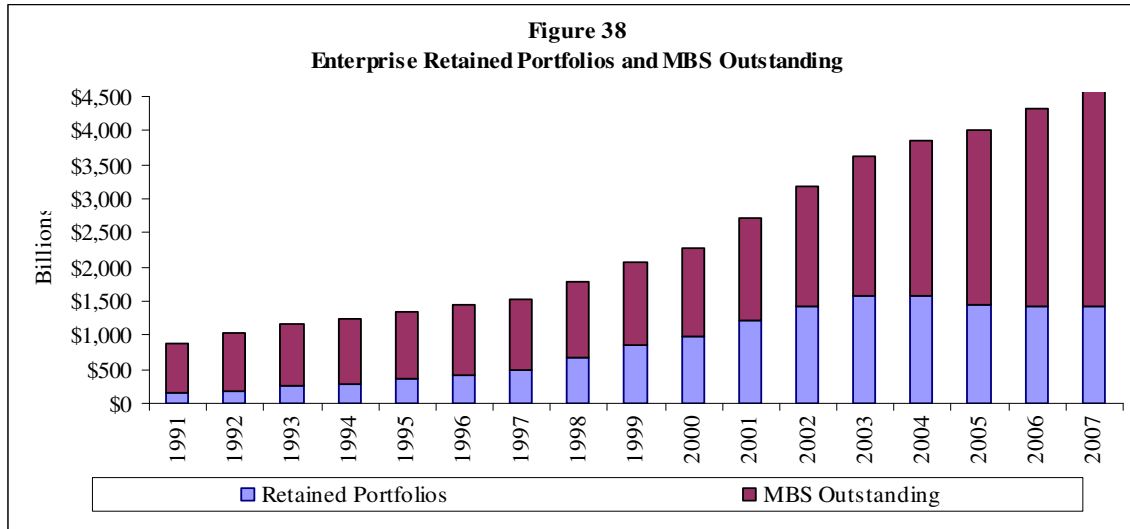


Source: Fannie Mae and Freddie Mac

Enterprise MBS Held by Other Investors Increases

The credit guarantee businesses of Fannie Mae and Freddie Mac were not constrained in 2007, and the volume of Enterprise MBS held by other investors rose nearly 21 percent to

\$3.5 trillion (outstanding principal balance) by the end of 2007 (Figure 38). The Enterprises' combined book of business (MBS held by other investors plus mortgages and MBS held by each Enterprise, including MBS guaranteed by the other Enterprise) rose 14 percent in 2007 to \$4.95 trillion, up from \$4.33 trillion at the end of 2006.



Source: Fannie Mae and Freddie Mac

Holdings of Private-Label Securities Continue to Pose Risk of Fair Value Losses

The dominant theme in the mortgage markets in 2007 was the virtual collapse of subprime lending due to the deterioration in the credit quality of subprime loans. That, in turn, caused PLS backed by those and other types of nontraditional mortgages to lose value due to widening spreads and general illiquidity as investors' appetite for the securities waned.

While overall activity declined in the private-label market in 2007 and traditional investors in those securities looked to other, safer investments, Fannie Mae and Freddie Mac continued to support the private-label market, including the subprime sector. Of the \$314 billion of PLS held by the Enterprises at the end of 2007, approximately \$217 billion (UPB) were backed by subprime and Alt-A mortgages. At year's end, PLS backed by subprime mortgages represented 9.2 percent of the Enterprises' combined mortgage portfolio assets (UPB), whereas securities backed by Alt-A mortgages represented about 5.8 percent of their combined mortgage portfolio assets (UPB).

The liquidity risk of PLS is significantly greater than that of the MBS guaranteed by Fannie Mae and Freddie Mac. Accordingly, by investing heavily in PLS (primarily in 2004 and 2005), the Enterprises significantly increased their exposure to fair value losses from changes in market prices. In addition, holding those assets made Fannie Mae and Freddie Mac increasingly interdependent with other very large investors—e.g., major banks and investment banking firms and the structured investment vehicles (SIV) they sponsor—who invested in similar securities. To the extent that those institutions

recognize fair value losses on their private-label portfolios under GAAP, Fannie Mae and Freddie Mac may have to do so as well. The Enterprises' fair value losses in 2007 were due primarily to declines in the market value of their PLS holdings.

During 2007, Freddie Mac recognized \$10 million of credit losses as impairment expense on PLS backed by subprime loans held in its mortgage portfolio related to four positions rated below triple-A at acquisition. As of December 31, 2007, the Enterprise had recorded \$504 million of unrealized losses, net of tax, in accumulated other comprehensive income (AOCI)⁹ on the remaining securities backed by subprime loans rated below triple-A.¹⁰ In addition, included in AOCI were \$5.0 billion of unrealized losses, net of tax, associated with Freddie Mac's triple-A-rated PLS backed by subprime collateral that resulted principally from decreased liquidity in the subprime market.

Fannie Mae recognized \$1.0 billion in losses on subprime securities classified as trading in 2007. In addition, the Enterprise recorded \$160 million of other-than-temporary impairment on \$1.7 billion of UPB of subprime PLS classified as available-for-sale (AFS). As of December 31, 2007, Fannie Mae reported \$2.3 billion of gross unrealized losses in AOCI on subprime PLS classified as AFS.

Funding Costs Rise

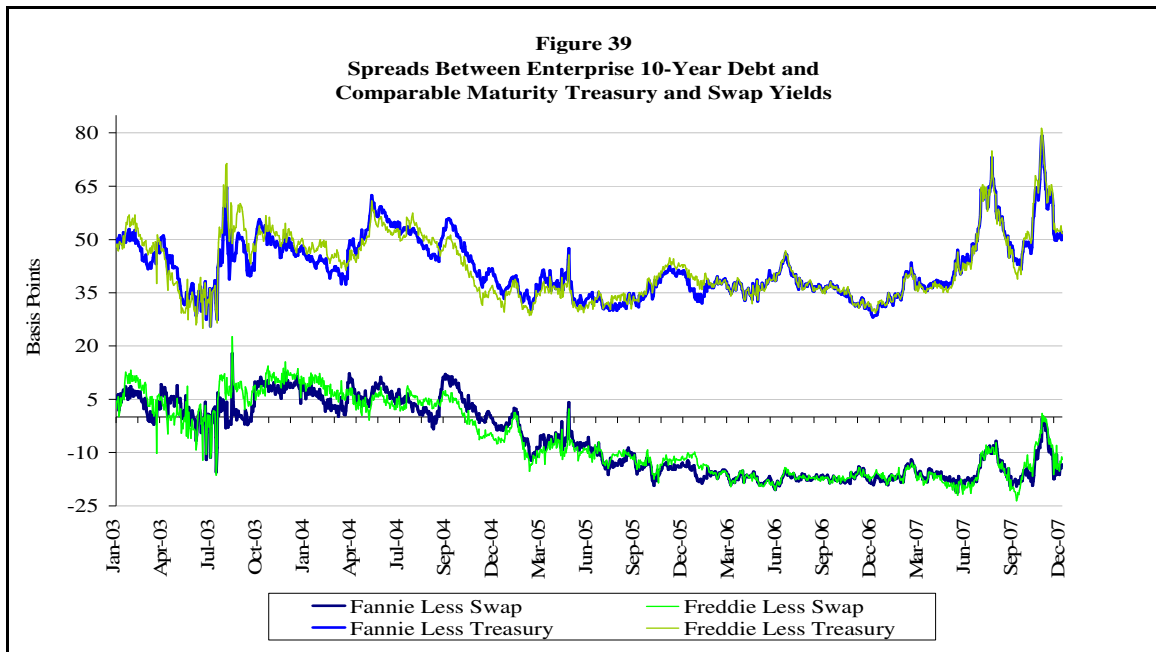
The amount and types of funding used by Fannie Mae and Freddie Mac depend, among other things, on the relative cost of alternative debt and derivative combinations and the amount and types of assets they acquire for their respective mortgage portfolios. Changes in the amount and type of debt issued by the Enterprises in 2007 reflect changes in their portfolio purchase activities, portfolio management strategies, liquid investment portfolios, and other assets.

Total Enterprise new debt issuance volume declined sharply in 2007. Combined, Fannie Mae and Freddie Mac issued \$2.5 trillion of new debt, down 17.8 percent or \$548 billion from the previous year. That decline was driven by a sharp decline in short-term debt issuance, especially at Fannie Mae. The Enterprises' combined short-term issuance totaled \$2.1 trillion in 2007, compared to \$2.7 trillion the year before. Their issuance of long-term debt rose 5.0 percent in 2007, to \$382.5 billion. That increase was driven by increased issuance of callable debt. Fannie Mae and Freddie Mac combined issued \$257 billion of callable debt in 2007, up from \$223 billion of such debt the year before. Despite the decline in total debt issuance, the combined outstanding debt of Fannie Mae and Freddie Mac increased marginally (less than one percent) in 2007.

⁹ AOCI is a component of shareholders' equity under GAAP and includes such items as unrealized gains/losses on AFS securities. AOCI and all of its components are excluded from the calculation of Enterprise regulatory capital.

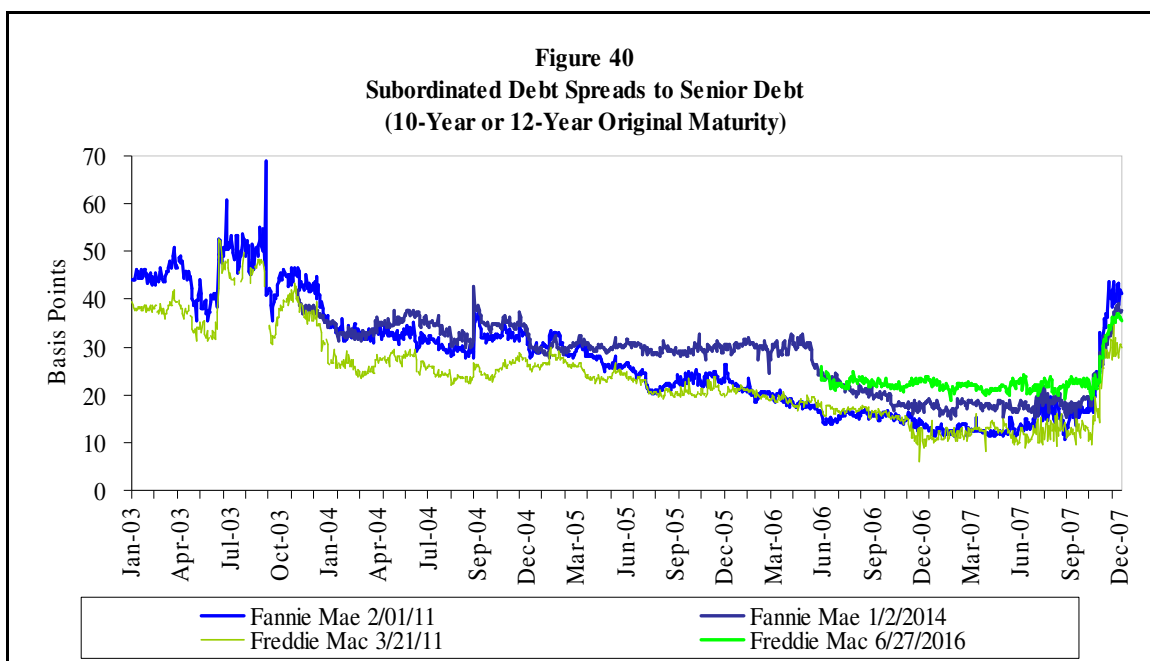
¹⁰ Between December 31, 2007 and February 25, 2008, the credit ratings for mortgage-related securities backed by subprime loans with an aggregate UPB of \$16 billion were downgraded by at least one credit rating agency.

Overall credit market conditions and concerns about the earnings and capital of large financial institutions with large mortgage exposures caused the funding costs of Fannie Mae and Freddie Mac to rise in the second half of 2007, especially in the last quarter of the year. Spreads between the yields of intermediate and long-term senior Enterprise debt and the yields of comparable-maturity Treasury debt widened to levels not seen in more than five years. The spreads between the yields of Enterprise senior debt and interest rate swaps narrowed during that period (Figure 39).



Source: OFHEO based on data from Bloomberg Financial LP

Similar developments occurred in the markets for subordinated debt issued by Fannie Mae and Freddie Mac in the final quarter of 2007. Spreads between the yields of each Enterprise's subordinated and senior debt widened significantly, reaching levels not seen since the days following the announcement of the management shakeup at Freddie Mac in mid-2003 (Figure 40). Spreads on credit default swaps on Enterprise debt also increased, especially in the second half of 2007 (Box B).



Source: OFHEO based on data from Bloomberg Financial LP

Enterprises Tap the Preferred Stock Market to Shore Up Capital

In addition to their activity in the debt market, Fannie Mae and Freddie Mac were also very active in the preferred stock market in 2007. Heavy losses caused an erosion in the Enterprises' regulatory or core capital in the latter part of the year. In order to ensure adequate capital levels, both Enterprises issued significant volumes of preferred stock. After retiring \$1.1 billion in preferred stock in the first half of 2007, Fannie Mae issued \$8.9 billion of preferred stock in the second half in multiple transactions—\$7.9 billion in the fourth quarter alone. The cost of Fannie Mae's issues, which carried different terms, ranged up to 8.3 percent. Freddie Mac issued \$8.6 billion of preferred stock in 2007, also in multiple transactions. That total includes \$1.5 billion issued in the first quarter (\$0.5 billion to complete a planned replacement, initiated in 2006, of \$2.0 billion of common stock with an equal amount of preferred stock and \$1.0 billion to replace additional common stock repurchased in that quarter), and \$0.6 billion to replace higher-cost preferred stock previously redeemed. The total also includes \$6.5 billion of preferred stock issued to bolster Freddie Mac's capital base, including a single offering totaling \$6.0 billion in December. The initial cost of Freddie Mac's preferred stock issues, which also carried different terms, ranged from 5.6 percent to 8.4 percent.

Enterprises Effectively Manage Interest Rate Risk

Fannie Mae and Freddie Mac rely on a mixture of callable debt and derivatives to mitigate their exposure to interest rate risk. Those cash market and financial derivative instruments allow the Enterprises to reduce the effects of movements in the level of interest rates, changes in the shape of the yield curve, and changes in interest rate volatility. The Enterprises also manage their exposure to interest rate risk through asset selection. For instance, increased investment in ARMs in recent years has helped to

reduce their exposure to convexity risk. Derivative instruments used by the Enterprises to manage their exposure to interest rate risk include primarily interest rate swaps, options (e.g., swaptions, caps and floors), and futures contracts.

Fluctuating interest rates throughout 2007 caused the Enterprises to alter their hedging strategies primarily by acquiring more interest rate protection. Freddie Mac increased the notional amount of its total interest rate derivatives portfolio from \$744.6 billion to \$1,241.3 billion in 2007, an increase of more than two-thirds. That increase reflects primarily an increase in interest rate swaps and option-based derivatives. The fair value of Freddie Mac's financial derivative contracts decreased from positive \$7.7 billion at the end of 2006 to positive \$4.5 billion one year later, due to a decline in swap rates. At year's end, interest rate swaps had a negative fair value of \$7.8 billion, whereas option-based and foreign currency swap contracts had a combined positive fair value of about \$12.2 billion.

Similar to Freddie Mac, Fannie Mae increased its holdings of derivatives used to manage risk. The notional amount of its risk management derivatives portfolio increased \$141.1 billion or almost one-fifth to \$886.5 billion. That increase was driven primarily by an increase in the interest rate swap book. The estimated fair value of the Fannie Mae's risk derivative contracts decreased from a net asset of \$3.7 billion at the end of 2006 to a net liability of \$0.6 billion one year later.

Both Fannie Mae and Freddie Mac make monthly disclosures of their exposure to interest rate risk using various risk measurement tools that indicate the extent of some but not all aspects of their interest rate risks. Currently, Fannie Mae publicly discloses information on its effective duration gap on a monthly basis.¹¹ That tool measures the difference between the duration of portfolio assets and liabilities. A positive duration gap indicates a greater exposure to declining interest rates, whereas a negative duration gap signals a greater exposure to rising rates. Fannie Mae also reports the fair value sensitivity of its net assets and net portfolio to a 50 and 100 basis point increase and decrease in interest rates.

Freddie Mac's monthly risk disclosures are the duration gap and portfolio market value sensitivity (PMVS). PMVS measures the sensitivity of the Enterprise's portfolio market value attributable to common shareholders to adverse parallel (50 basis points) and non-parallel (25 basis points) shifts in the LIBOR yield curve. Results are expressed as a percentage of the fair value of net assets attributable to common shareholders. The lower the level of PMVS, the better protected the Enterprise is against the assumed changes in interest rate levels or the shape of the yield curve.

Risks, as measured by those indicators, were reasonably well contained in 2007. The duration gap at Fannie Mae averaged less than one month, whereas Freddie Mac's averaged zero months. As of the end of 2007, the effects on the estimated fair value of

¹¹ Beginning with the month of June 2007, Fannie Mae changed the methodology it uses to calculate its monthly effective duration gap. The revised calculation reflects differences between the proportional fair value weightings of its assets and liabilities, based on the daily average for the reported month.

Fannie Mae's net assets from a hypothetical instantaneous decrease in interest rates of 50 basis points and an increase of 100 basis points were roughly equal—3.0 and 2.8 percent, respectively. The comparable values as of December 31, 2006 were losses of 2.7 and 0.6 percent, respectively.

Freddie Mac also estimates the sensitivity of its portfolio market value at the end of the year assuming an immediate, 100 basis-point parallel shift in the LIBOR yield curve. Those results show a pre-tax loss in portfolio market value of \$1.7 billion, about three times the level at the end of 2006 (\$560 million).

Enterprise Equity Positions Weaken; Preferred Stock Represents Increasing Share of Regulatory Capital

Fannie Mae and Freddie Mac saw their equity positions weaken in 2007, especially their market capitalizations and fair value of net assets. At the end of 2007, total shareholders' equity under GAAP was up 6.0 percent to \$44.0 billion at Fannie Mae, the highest year-end level ever (Figure 41). That growth, however, reflects a \$7.8 billion net increase in preferred stock, which offset a \$4.4 billion decline in retained earnings and \$0.9 billion increase in AOCI losses.

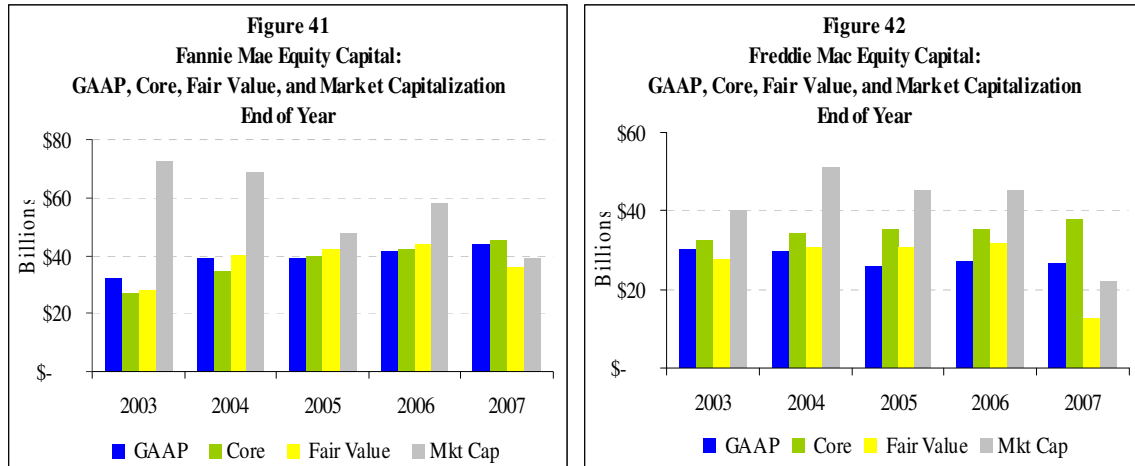
At the same time, however, Freddie Mac saw a small decline in its total shareholders' equity (under GAAP) to \$26.7 billion, the lowest level since 2005 (Figure 42). The increase in preferred stock was more than offset by higher accumulated other comprehensive losses associated with mark-to-market losses on the Enterprise's AFS mortgage assets (\$3.7 billion in 2007 versus \$267 million in 2006) and a reduction in retained earnings.

Both Enterprises saw their core capital, which excludes AOCI, increase—by 8.2 percent or \$3.4 billion to \$45.4 billion at Fannie Mae, and by 7.1 percent or \$2.5 billion to \$37.9 billion at Freddie Mac. At the end of 2007, preferred stock represented 37.3 percent of Fannie Mae's core capital, up from 21.7 percent a year earlier. Preferred stock also represented 37.3 percent of the core capital of Freddie Mac, up from about 17.3 percent a year earlier. Concerns about the rising proportion of preferred stock comprising Freddie Mac's capital caused Fitch Ratings to downgrade the Enterprise's preferred stock rating from AA- to A+ in December; the agency's rating for Fannie Mae's preferred stock was AA- at year's end.

Whereas changes in book equity (both GAAP and core capital) were modest at both Fannie Mae and Freddie Mac in 2007, year-over-year changes in their fair value net assets were substantial. Despite the heavy capital infusions, each Enterprise's fair value of net assets tumbled in 2007. Fannie Mae's fair value of net assets fell by 18.1 percent or \$7.9 billion to \$35.8 billion, the lowest level since 2003 and 18.7 percent below its GAAP equity. Freddie Mac's fair value of net assets fell 60.4 percent or \$19.2 billion to \$12.6 billion, less than one-half of its book value at the end of the year.

Finally, the market capitalization of Fannie Mae and Freddie Mac, an indicator of investors' views of the Enterprises' future prospects, plummeted in 2007. Fannie Mae's

market capitalization decreased by about one-third, to \$39.0 billion, about 88 percent of its year-end GAAP equity. Freddie Mac's market capitalization decreased by more than one-half to \$22.0 billion, about 82 percent of its year-end GAAP equity.



Source: Fannie Mae and Freddie Mac

Capital Cushions Come under Pressure but Enterprises Maintain Adequate Capital Levels throughout the Year

Fannie Mae and Freddie Mac are subject to capital adequacy standards established by the Federal Housing Enterprises Financial Safety and Soundness Act of 1992 (the Act). The regulatory framework incorporates two quantitative assessments of capital: a minimum and risk-based capital (RBC) standard. The Act requires the OFHEO Director to determine the capital level and classification of the Enterprises not less than quarterly and to report the results to Congress.

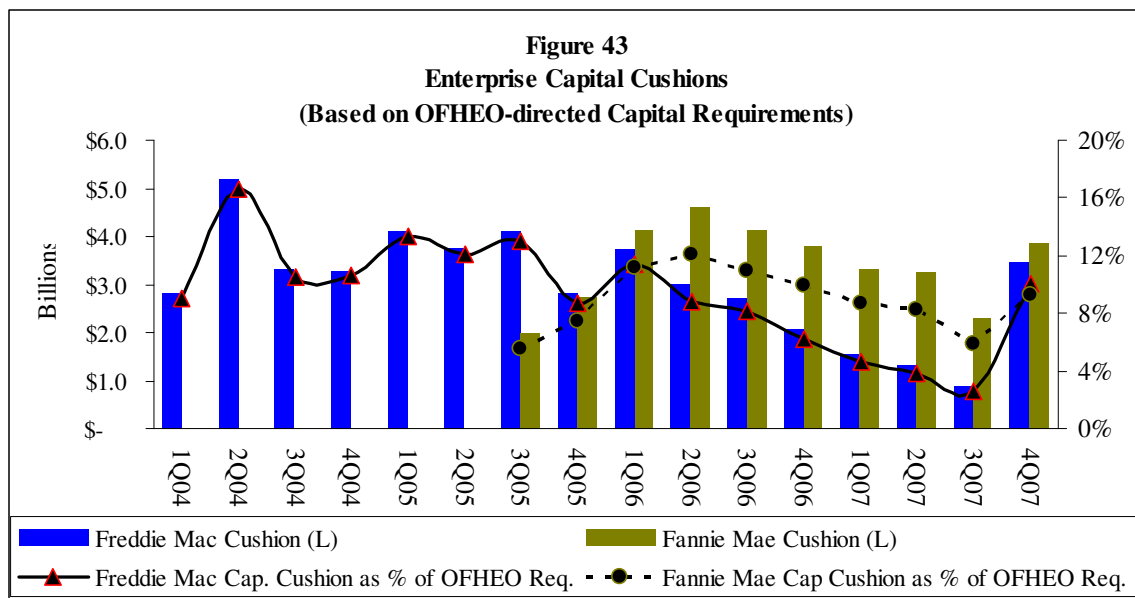
OFHEO classifies the Enterprises as adequately capitalized, undercapitalized, significantly undercapitalized, or critically undercapitalized. Federal statute requires the Enterprises to meet both the minimum capital and RBC standards to be classified as adequately capitalized. Minimum capital represents an essential amount of capital needed to protect an Enterprise against broad categories of business risk. For purposes of minimum capital, an Enterprise is considered adequately capitalized if core capital equals or exceeds its minimum capital requirement. That requirement equals 2.5 percent of assets plus 0.45 percent of adjusted off-balance sheet obligations. Because of elevated operational risk, OFHEO imposed a 30 percent surcharge of the minimum capital requirement on Freddie Mac effective in the first quarter of 2004 and on Fannie Mae effective in the third quarter of 2005.

Each Enterprise's RBC requirement is the amount of total capital—core capital plus a general allowance for loan losses less specific reserves—that the Enterprise must hold to absorb projected losses resulting from adverse interest rate and credit risk conditions specified by statute, plus an additional amount mandated by statute to cover management and operations risk. The RBC standard is based on stress test results calculated for the two statutorily prescribed interest rate scenarios, one in which 10-year Treasury yields

rise 75 percent (up-rate scenario) and another in which they fall 50 percent (down-rate scenario). The interest rate movements in both scenarios are generally capped at 600 basis points. Each Enterprise's RBC requirement is the amount of total capital that would enable it to survive the stress test in whichever scenario is more adverse for that Enterprise, plus 30 percent of that amount for management and operations risk.

Since the inception of the dual capital standard, the minimum capital requirement has governed the capital adequacy of Fannie Mae and Freddie Mac. Combined, they were required to hold \$4.5 billion more core capital at year-end 2007 than at the end of the previous year. That increase, which includes the 30 percent capital surcharge, was driven largely by expansion of the Enterprises' off-balance sheet obligations as their balance sheet assets shrunk or grew only slightly in 2007. At year-end, Fannie Mae's estimated core capital of \$41.5 billion exceeded its OFHEO-directed minimum requirement by \$3.9 billion. That represented a 9.3 percent surplus over the OFHEO-directed capital requirement. Freddie Mac's core capital of \$34.4 billion exceeded its OFHEO-directed minimum requirement by \$3.5 billion as of the end of the year. That represented a 10.0 percent surplus over the OFHEO-directed capital requirement.

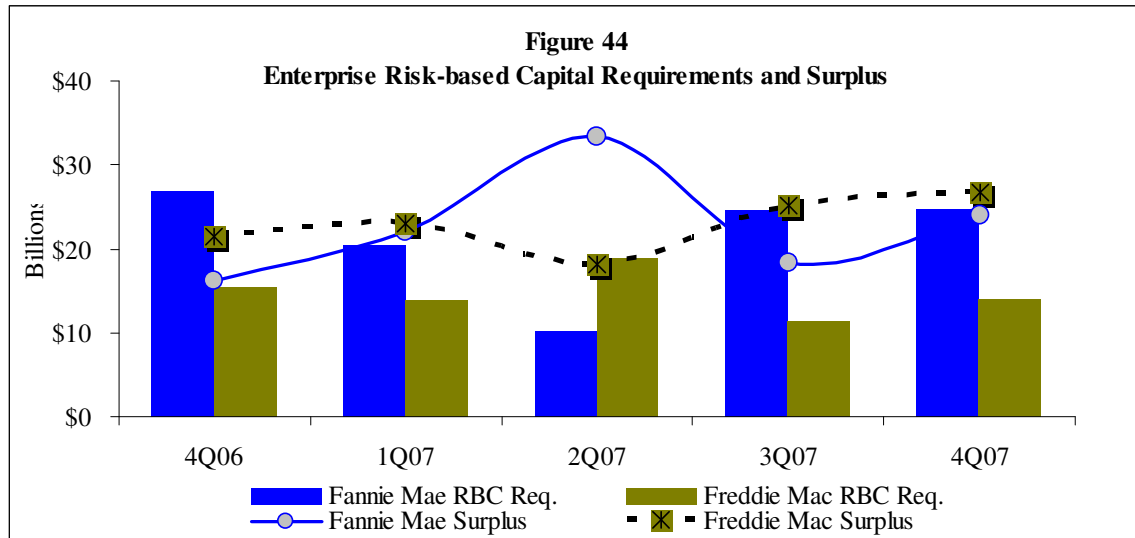
While the Enterprises held adequate capital cushions at the end of the year, those cushions grew very low during the course of the year, especially at Freddie Mac, which failed to meet its OFHEO-directed capital requirement at the end of November (without year-end accounting adjustments). Very large capital infusions in the fourth quarter (discussed above) greatly enhanced the Enterprises' year-end capital positions (Figure 43).



Source: OFHEO

Fluctuations in interest rates caused the RBC requirements of Fannie Mae and Freddie Mac to vary widely in 2007. Nonetheless, the Enterprises continued to meet their RBC requirements by wide margins. Fannie Mae's requirement ranged from a low of \$10.2

billion in the second quarter to a high of \$24.7 billion in the fourth quarter. The Enterprise had an estimated total capital of \$48.7 billion at the end of 2007, exceeding the RBC requirement in that quarter by \$24.0 billion, a factor of nearly two. Fannie Mae's RBC requirement was determined by the down-rate stress test in all but the first quarter (Figure 44).



Source: OFHEO

Freddie Mac's RBC requirement ranged from \$11.3 billion in the third quarter of 2007 to \$18.9 billion in the second quarter—its highest RBC requirement ever. Freddie Mac had total capital of \$40.9 billion at the end of 2007, up from \$36.7 billion at the end of 2006. That capital exceeded the Enterprise's RBC requirement by \$26.8 billion, or more than two times. Like Fannie Mae, Freddie Mac's RBC requirement was determined by the up-rate stress test in the first quarter of the year and the down-rate stress test the remainder of the year.

Both Fannie Mae and Freddie Mac were classified as adequately capitalized at the end of each quarter of 2007.