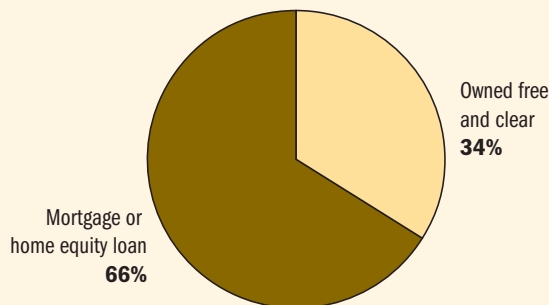


Characteristics of Outstanding Residential Mortgage Debt: 2006

The purpose of this note is to review data from several sources regarding the composition of outstanding mortgage debt in terms of the borrowers, the products and characteristics such as loan-to-value ratios and other important measures of credit quality.

CHART 1
Owner Occupied Units with Mortgage or Home Equity Debt

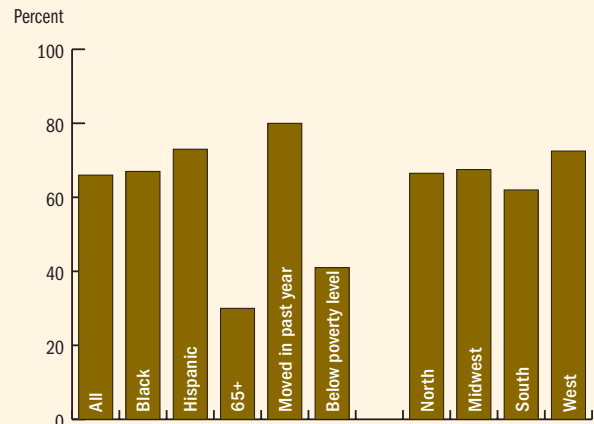


Source: 2005 American Housing Survey

Several of the characteristics that are highlighted are based upon data from the 2005 American Housing Survey (AHS). Only 66 percent of homeowner households have a mortgage on their residence. As shown in Chart 1, the other 34 percent own their home free and clear. Chart 2 shows more detailed information regarding homeowner households that have either a mortgage or a home equity loan on their properties. Note that only about 30 percent of those 65 and older have mortgage or home equity debt. Households with income below the poverty level also are much less likely to have a mortgage, although there is likely some overlap with the figure for senior households. Regionally, homeowners in the West are most likely, and homeowners in the South are least likely to have a mortgage on their property.

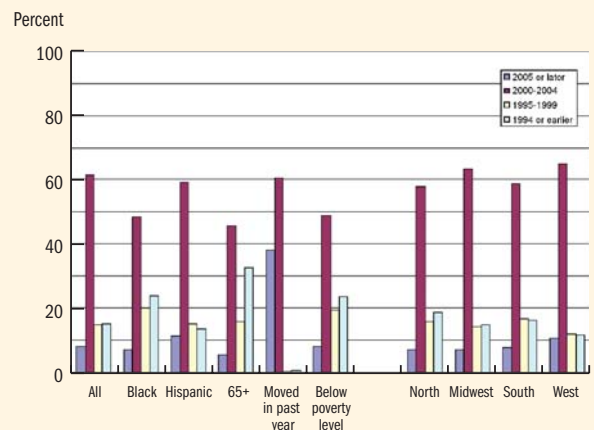
Chart 3 shows data from the AHS regarding the origination year of the primary mortgage by homeowner characteristic. According to this data, about 70 percent of outstanding loans have been originated since 2000. This number is lower for those over 65,

CHART 2
Mortgage or Home Equity Loan on Property



Source: 2005 American Housing Survey

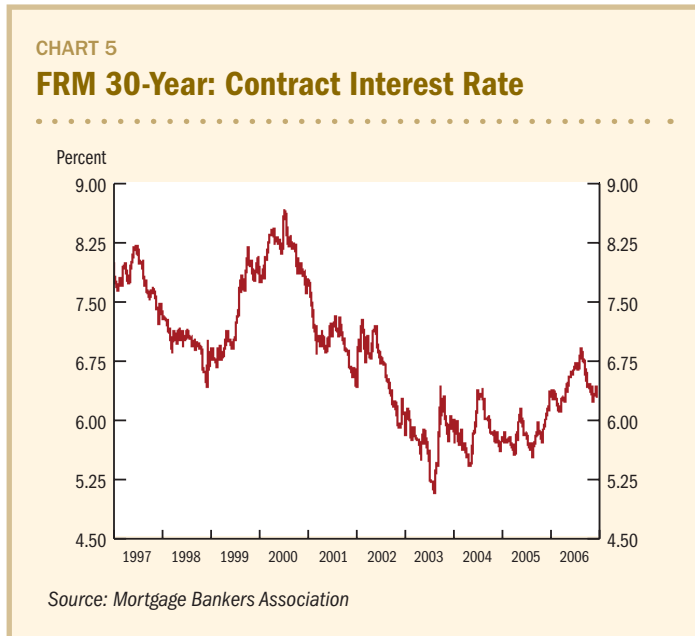
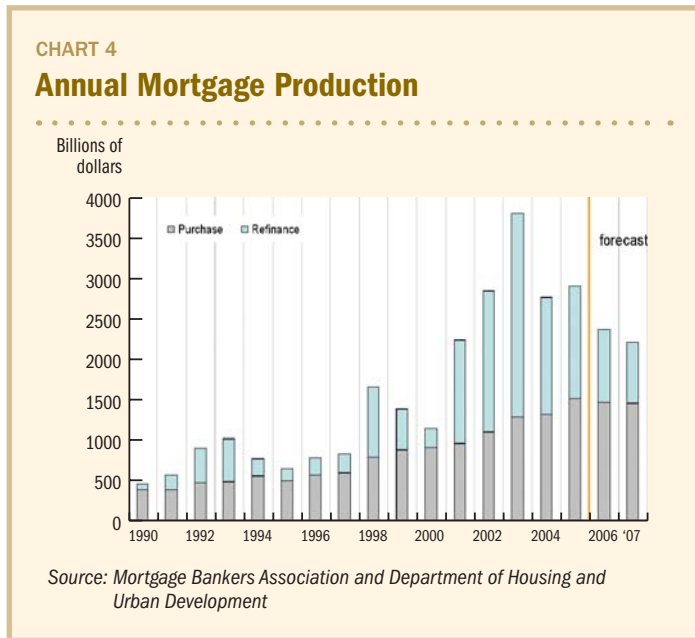
CHART 3
Mortgage Debt by Origination Year



Source: 2005 American Housing Survey

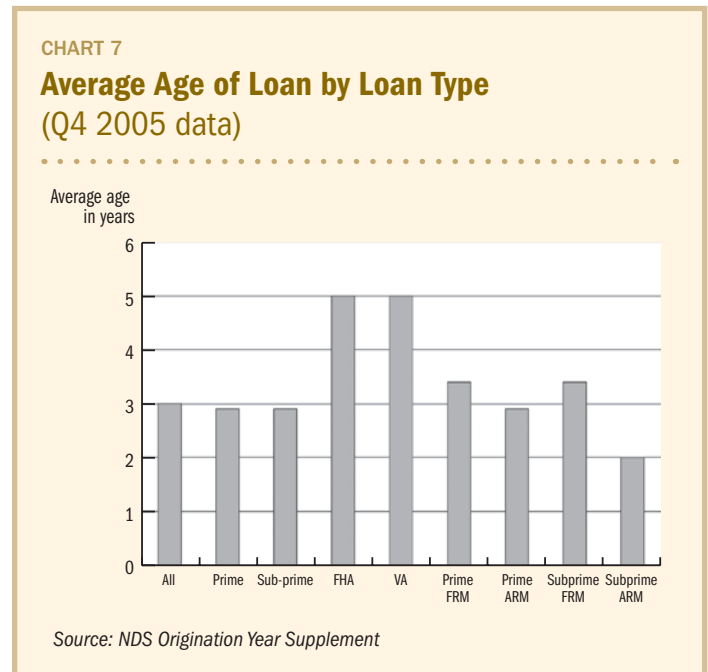
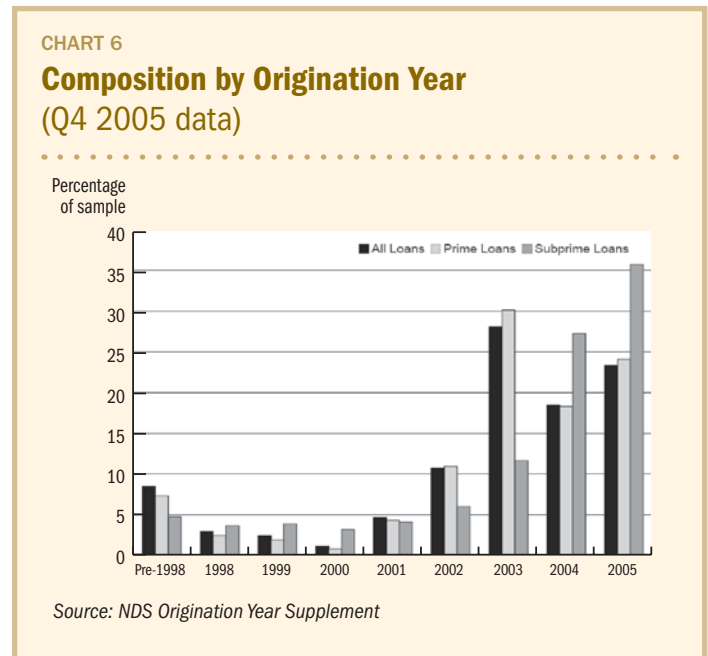
and for blacks. Regionally, a higher proportion of those in the West have younger mortgages.

Chart 4 further addresses the age distribution of outstanding mortgages shown through origination patterns. 2003 was a record year for originations, with almost \$4 trillion in originations: \$2.5 trillion in refinances and \$1.5 trillion in purchase originations. As Chart 5 shows, 2003 saw 40-year lows in terms of mortgage rates, and homeowners and the industry responded with the largest ever refinance wave. As a result of this large origination cohort, home mortgage debt owed grew from a little over \$7 trillion in 2003 to \$8.2 trillion in 2004, according to the Federal Reserve's Flow of Funds data. 2004 and 2005 were also record years for purchase mortgage originations, while refinance originations declined relative to 2003.



Data from MBA's National Delinquency Survey Origination Year Supplement at year-end 2005 indicates that an even greater proportion of outstanding loans are from recent years than is indi-

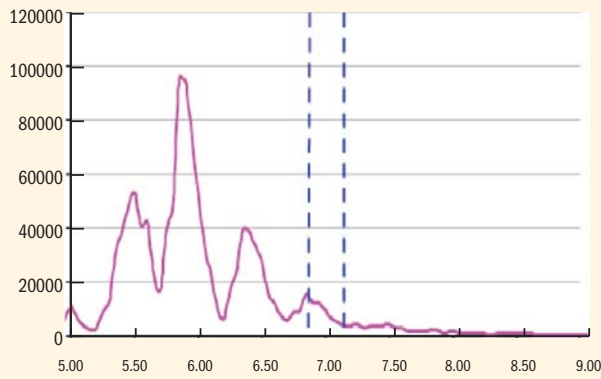
cated in the AHS data. Chart 6 shows the proportion of loans in the NDS Origination Year Sample that were originated in the indicated years. This data indicates that more than 86 percent of outstanding loans have been originated since 2000, and 80 percent since 2002. For subprime loans, an even greater proportion were originated in the last couple of years, with almost 75 percent of outstanding subprime loans originated since 2003. Chart 7 shows the average age of outstanding loans by loan type. For all loans, the average age is three years. FHA and VA loans average five years, while subprime ARMs average only two years old.



This compressed distribution of loan ages is also reflected in a compressed distribution of rates on outstanding mortgages. Data collected by UBS on the distribution of weighted average coupons on outstanding 30-year fixed-rate MBS issued by Fannie Mae is shown in Chart 8. The vast majority of outstanding Fannie Mae MBS have coupon rates below 6 percent.

CHART 8

30-Year FNMA WAC Distribution – July 2006

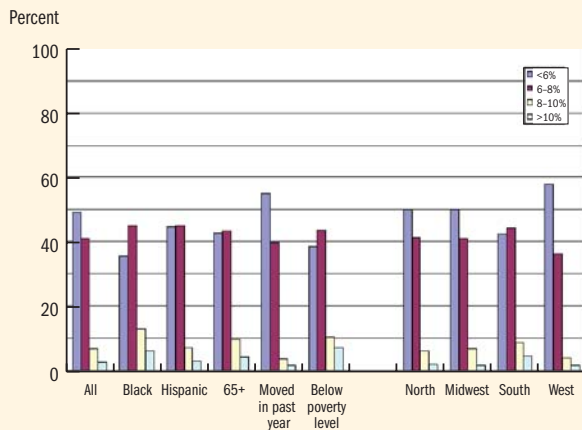


Source: UBS Mortgage Strategist

By comparison, Chart 9 shows data on the distribution of current rates from the AHS. Note from this chart that recent movers and those in the West, who tend to have larger average loan balances, are most likely to have rates in the lowest rate bracket.

CHART 9

Distribution of Current Rates on Mortgages



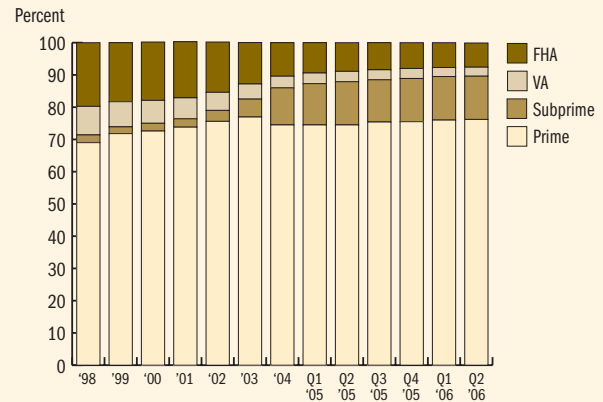
Source: 2005 American Housing Survey

Chart 10 utilizes the complete NDS sample to show how the distribution of loan types has changed over time. The primary change over this eight year period is that the government loan share has declined significantly, while the prime and subprime shares of the market have expanded.

Another trend that has changed the composition of outstanding mortgage debt is that the ARM share has remained high, even in the presence of low fixed-rate mortgage rates and a flat yield curve. As Chart 11 shows, the ARM share across all types of mortgages has grown from about 18 percent in 2003 to about 25 percent as of the second quarter of 2005. Among prime mortgages, the ARM share has increased from about 16 percent in 2003 to about 20 percent; for subprime mortgages the ARM share increased from about 45 percent to about 59 percent.

CHART 10

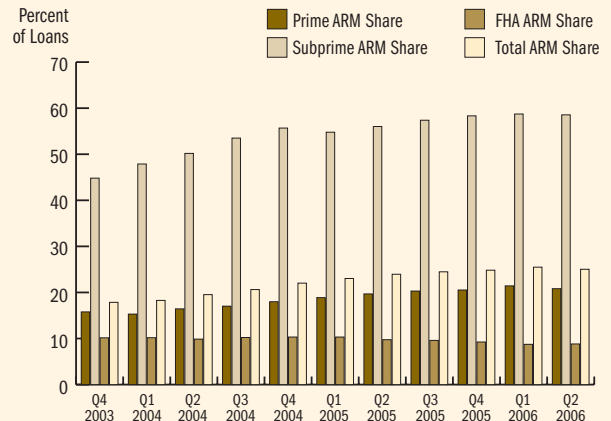
Share of Outstanding Loans by Loan Type: 1998–present



Source: National Delinquency Survey

CHART 11

ARM Share by Loan Type



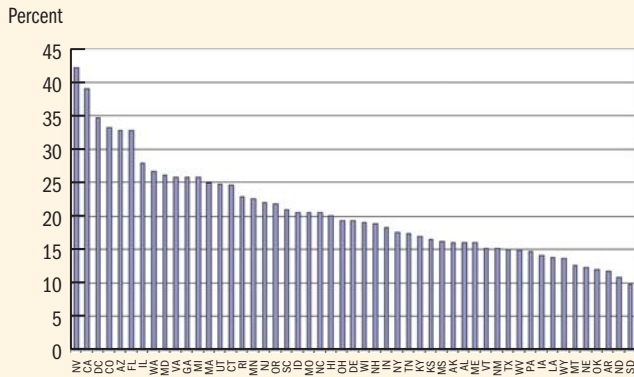
Source: National Delinquency Survey

ARMs have typically been more popular in high housing cost areas. For example, California has always had a higher ARM share than much of the nation, while Texas and other states in the Southwest have had consistently lower ARM shares. In the quarter two 2006 data as shown in Chart 12, Nevada had the highest ARM share in the country with 42 percent of outstanding loans being ARMs. The Nevada housing market has boomed in recent years as population growth rates have consistently been in the double digits. These recent buyers have followed the national trend of choosing ARM loans at a higher rate than homebuyers in earlier years.

The AHS also has data on outstanding principal balances across different characteristics. As shown in Chart 12, note that senior homeowners with mortgages have predominantly small remaining balances (less than \$50,000). Recent movers and those in the West have the highest proportion of larger balance loans. The data in Chart 13, which shows the distribution of combined

CHART 12

ARM Share by State

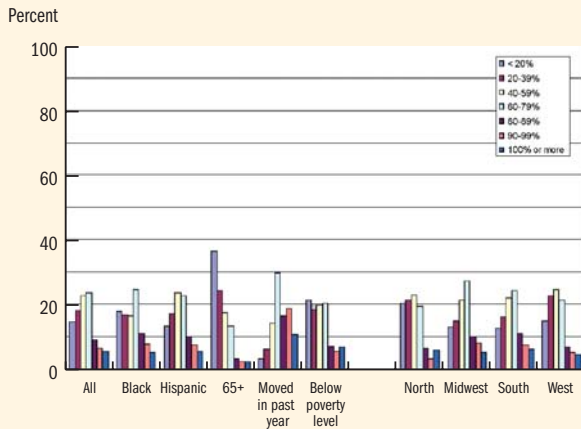


Source: MBA's National Delinquency Survey

loan-to-value (CLTVs) ratios by characteristic, show similar patterns. Clearly, the vast majority of homeowners with a mortgage have CLTVs below 80 percent. However, there are a measurable number that self report CLTVs above 100 percent, particularly those who moved within the past year.

CHART 13

Distribution of CLTVs for Households with Outstanding Mortgages



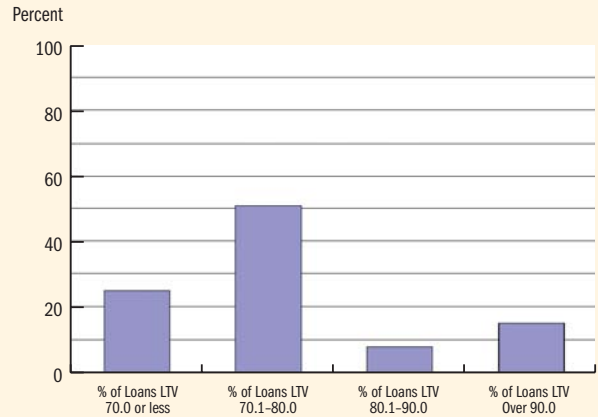
Source: 2005 American Housing Survey

To further examine the current equity position of recent homebuyers, we examine additional data regarding LTVs and home price performance from other data sources. According to the Federal Housing Finance Board's (FHFB) Monthly Interest Rate Survey (MIRS), in 2005 approximately 23 percent of purchase mortgages had LTVs above 80 percent, as shown in Chart 14. Chart 15 shows the distribution of these initial LTVs by state. In 2005, the states with the highest proportion of LTVs greater than 80 percent included Louisiana, Mississippi, Iowa and Missouri. This might seem surprising as these are not high housing cost states. However, these are states with relatively high FHA shares, and FHA specializes in high-LTV lending. Moreover, these are

LTVs for first mortgages, and many recent originations have piggybacked seconds that would increase the CLTV for these loans. One might expect a higher proportion of piggyback lending in higher cost states. In their analysis of the 2005 HMDA data, the Federal Reserve estimated that 22 percent of purchase mortgages had piggybacked second mortgages that year.

CHART 14

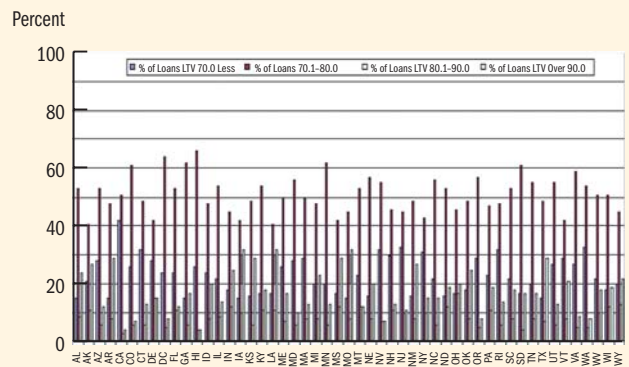
Distribution of LTV at Origination, 2005



Source: Federal Housing Finance Board

CHART 15

Distribution of LTV at Origination by State, 2005



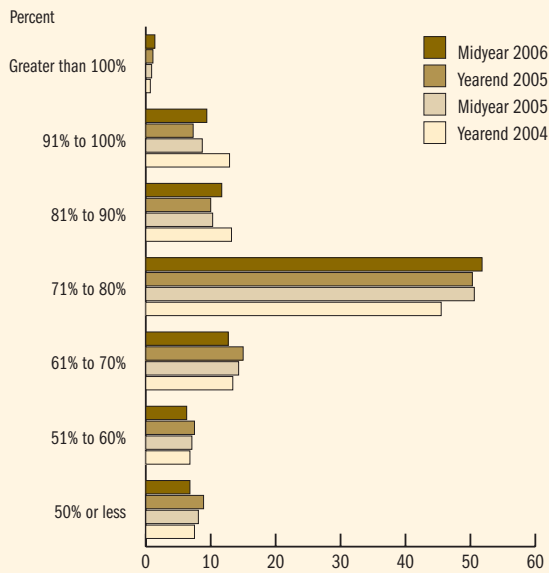
Source: Federal Housing Finance Board

A further analysis of data from MBA's Midyear 2006 Mortgage Originations Survey shows little trend in first mortgage LTVs over time. The weighted average LTV over the past two years has remained in the mid-70s. The distribution of LTVs has changed somewhat, with a slightly larger proportion of loans in the 71-80 and higher LTV ranges.

With respect to credit score, trends in MBA's Mortgage Origination Survey have been stable. About half of the dollar volume of first mortgage originations in the first half of 2006 were for loans with FICO scores above 700. About three quarters were for loans with FICO scores above 650. Of the remaining one quarter, most were in the 600-650 bracket.

CHART 16

First Mortgages LTV Distribution

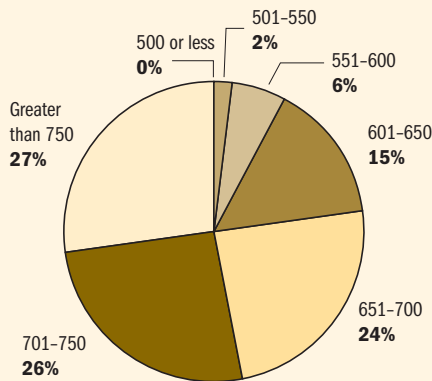


Based on percent share of dollar volume. Distributions based on all survey participants and not restricted to repeater companies.

Source: MBA's Midyear 2006 Mortgage Origination Survey

CHART 17

Distribution of FICO Scores for First Mortgage Originations in the First Half of 2006



Source: MBA's Midyear 2006 Mortgage Origination Survey

cashout percentages are lowest in the prime sector. The proportion of loans that are option ARMs is highest in the near prime sector. These sources report that one percent of subprime loan volumes are option ARMs; other sources suggest that there are no subprime option ARMs. The investor share is highest in the near prime sector, while the interest only share is highest among prime ARM loans. Finally, note that prepayment penalties were not rare in many segments of the market in 2005 with the exception of the prime fixed space. Also, more than 50 percent of near prime ARMs had prepayment penalties.

CHART 18

FICO Score and Sector: 2005 Originations

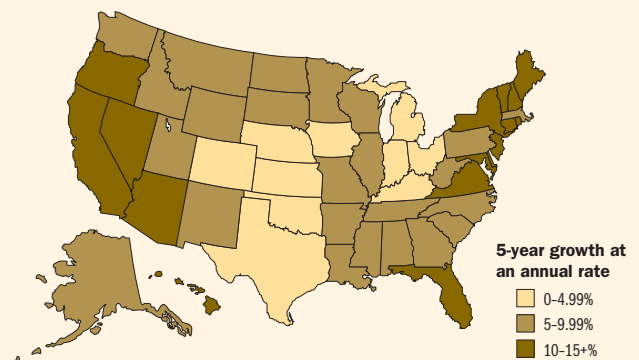
Sector	Orig. Bal. (\$MM)	Initial GWAC	Avg. Loan Size (\$K)	FICO	Comb. LTV	% CA	% Full Doc	% Cash-Out	% Investor	% IO	% Prepay Penalty	% Option ARM	Gross Margin
Prime ARM	\$123,575	4.25	\$453	732	73.9	54.0	44.3	26.4	4.5	55.1	15.4	24.4	256.2
Near Prime ARM	\$189,195	3.88	\$321	711	80.0	50.2	24.9	34.9	14.2	45.1	52.6	43.9	282.4
Subprime ARM	\$290,601	7.10	\$200	624	85.9	32.2	56.9	51.2	5.5	30.4	72.4	1.1	582.6
Prime Fixed	\$47,114	5.86	\$499	742	70.6	39.2	54.7	27.6	1.0	15.2	1.7	NA	NA
Near Prime Fixed	\$94,944	6.21	\$215	717	76.2	26.8	40.0	38.3	15.7	28.9	15.6	NA	NA
Subprime Fixed	\$66,446	7.48	\$128	636	81.2	26.9	70.2	68.4	4.0	5.5	76.6	NA	NA

Source: Bear Stearns, LoanPerformance

The housing market over the past five years has been extremely strong, particularly in 2004 and 2005. Consider that over the past 30 years, home price appreciation at the national level has averaged about 5 percent. It was roughly double that over the past five years. However, not all parts of the country benefited equally during this boom. The most rapid rates of appreciation were concentrated on the coasts, while the interior of

CHART 19

5-year Average Home Price Growth, Yearly

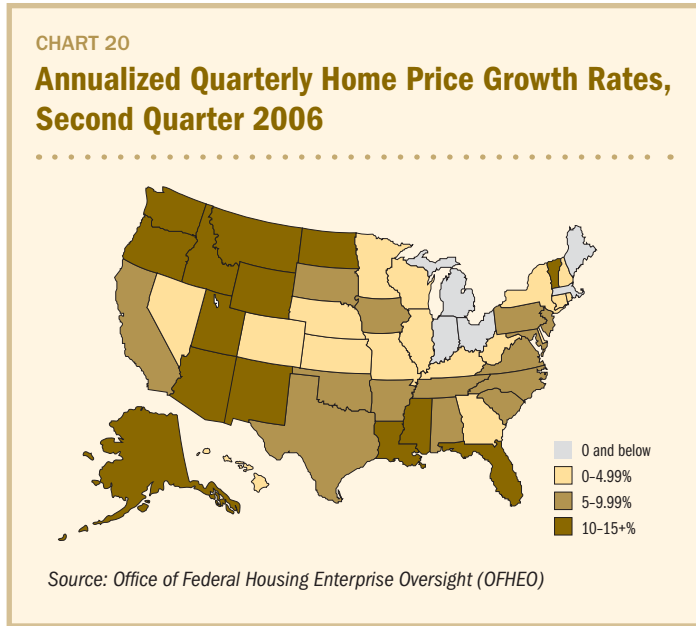


Source: Office of Federal Housing Enterprise Oversight (OFHEO)

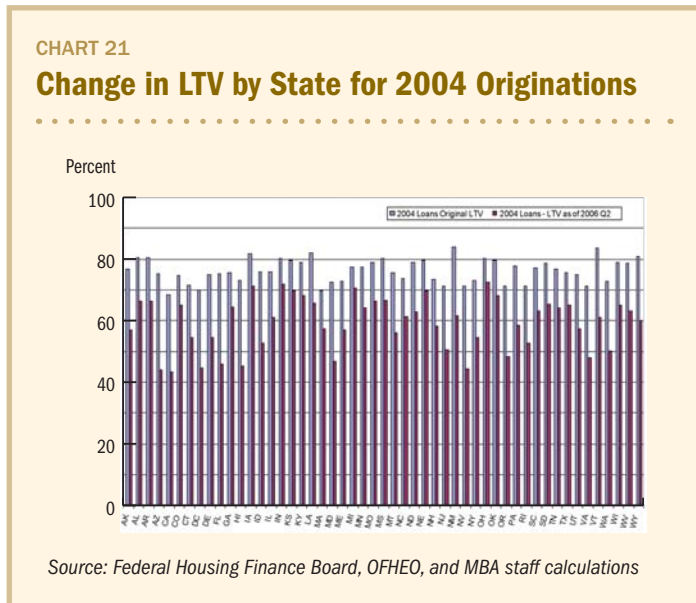
Data from Bear Stearns and LoanPerformance for 2005 originations provides a more detailed breakdown by market segment. This chart only captures a portion of all securitized product. MBA estimates that total first mortgage originations in 2005 were approximately \$3 trillion, while the total originations from this chart are \$813 billion. However, some of the comparisons across market segments are quite interesting. Note that average loan size and FICO score is highest in the prime sector, and lower for the near prime and subprime sectors. LTV and

the country experienced appreciation rates more in line with historical norms.

However, as of the second quarter of 2006, annualized quarterly appreciation rates had fallen significantly. Although, there were still some areas in the country that were experiencing double digit price gains, five states experienced home price declines. Clearly, the housing market has normalized. MBA forecasts that home prices will flatten out for the next couple of years, with national level prices rising at only low single-digit rates.

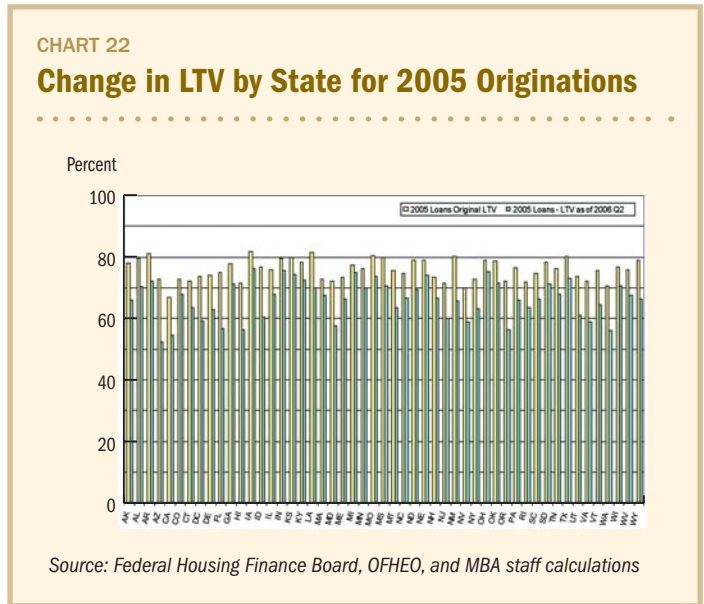


However, with the home price gains of the past few years, there has been a substantial growth of home equity, even for recently originated loans. The Federal Reserve's Flow of Funds data show that aggregate home equity increased from \$10.9 trillion in 2004 to \$12.9 trillion by the second quarter of 2006. In the charts below, this growth in equity is tracked by state by examining the initial LTV at origination for the 2004 and 2005 cohorts,



and then calculating the LTV as of the second quarter of 2006. The loan balance changes through amortization (assuming a 30-year term and holding the rate constant at the initial rate). The home value changes based upon the cumulative change in the state-level index.

The results show that for both 2004 and 2005 originations, LTVs have dropped appreciably in most areas of the country. The implication is that even if home prices remain flat or even decline somewhat from their current level, it is unlikely that there will be large numbers of borrowers who are underwater as a result, given the cushion of equity that has been built up over the last several years.



To conclude, the stock of outstanding mortgages as of the second quarter of 2006 are predominantly young loans. One result of this is a tighter concentration of mortgage rates than many may realize. Due to the strong housing markets of recent years, homeowners have built up a substantial buffer of home equity. Therefore, even though we anticipate somewhat weaker housing

CHART 23
Homeowning Household Distribution By Mortgage Type

Household Mortgage Type	Percent	Percent of Those with a Mortgage
No mortgage	34.6	
Fixed rate	49.2	75.2
Adjustable rate	16.2	24.8
Jumbo	3.9	6.0
Conforming	12.3	18.8
TOTAL	100	100

Source: American Housing Survey; Mortgage Bankers Association

markets over the next couple of years as the market normalizes, as well as some modest increases in mortgage delinquency and foreclosure rates, we do not expect any significant decline in mortgage credit quality.

About the MBA Research DataNotes

Author:

Mike Fratantoni, Ph.D., Senior Director, Single Family Research and Economics, Mortgage Bankers Association

Any questions or for more information, please contact Mike at mfratantoni@mortgagebankers.org.

Research DataNotes are a series produced by members of MBA's research and economics group designed to explain and explore technical aspects of the real estate finance industry.

This edition has been printed directly from camera ready copy.

© 2006 Mortgage Bankers Association, Washington, DC. All rights reserved.

All rights reserved. No part of this publication may be downloaded, stored in a retrieval system, reproduced or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior written permission of the copyright owner.

Disclaimer: Although the MBA takes great care in producing DataNotes and all related data and other information products, MBA does not guarantee that the information provided is accurate, current or suitable for any particular purpose. MBA Research DataNotes is provided on an "as is" basis, with no warranties of any kind whatsoever, either express or implied, including, but not limited to, any warranties of title or accuracy or any implied warranties of merchantability or fitness for a particular purpose. Use of the information provided in MBA Research DataNotes is at the user's sole risk. In no event will MBA be liable for any damages whatsoever arising out of or related to the information provided, including, but not limited to direct, indirect, incidental, special, consequential or punitive damages, whether under a contract, tort or any other theory of liability, even if MBA is aware of the possibility of such damages.