



HOUSING FINANCE AT A GLANCE

A MONTHLY CHARTBOOK

June 2023

ABOUT THE CHARTBOOK

The Housing Finance Policy Center's (HFPC) mission is to produce analyses and ideas that promote sound public policy, efficient markets, and access to economic opportunity in the area of housing finance. *At A Glance*, a monthly chartbook and data source for policymakers, academics, journalists, and others interested in the government's role in mortgage markets, is at the heart of this mission.

We welcome feedback from our readers on how we can make *At A Glance* a more useful publication. Please email any comments or questions to ataglance@urban.org.

To receive regular updates from the Housing Finance Policy Center, please visit [here](#) to sign up for our bi-weekly newsletter.

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INTRODUCTION

UPDATES TO HFPC'S AT A GLANCE CHARTBOOK

The Housing Finance Policy Center's At A Glance Chartbook for June 2023 includes 4 new permanent pages. These pages provide important trends on critical topics to both the mortgage and broader housing market. The information will also increase the breadth of topics covered by the chartbook and give more context for topics previously explored.

The following pages were added to the At A Glance Chartbook:

Refinanceability: [Page 9](#) of the chartbook shows trends in agency mortgages that are potentially refinanceable and the composition of mortgage loans by their interest rate. Loans are counted as refinanceable if the note rate is at least 50 basis points over the average monthly mortgage rate calculated from Freddie Mac's weekly Primary Mortgage Market Survey. Many borrowers took advantage of the low rates in 2020 and 2021 to refinance; with current mortgage rates at levels that are substantially above those prevailing over the last few years; the refinanceable share is low. Following a jump in the share of mortgages with a rate of 3.5 percent or less over 2020 and 2021, the share of outstanding mortgage volume with a rate of 3.5 percent or less remains sizeable having declined by only 4.0 percentage points from a high of 54.9 percent in April 2022 to 50.9 percent in May 2023.

New Residential Production: [Page 22](#) of the chartbook shows trends in single-family and multifamily completions as well as manufactured housing shipments, complimenting the discussion of existing home inventory on page 21. It also shows the for-sale share of single- and multifamily completions as well as the owner-occupied share of mobile homes. The figures illustrate that, overall, new residential production has increased from its Great Recession-era lows, but the lack of single-family completions and manufactured housing shipments limit the recovery in total production. While most single-family homes completed are for-sale, very few multifamily units are for-sale. The share of owner-occupied mobile homes is increasing but remains at least below rates recorded in the second half of the 2000s.

Regional Home Price Indices: [Page 25](#) of the chartbook shows regional year-over-year house price changes, building on the house price discussion on page 24. In May 2023, house prices in the West region were 4.6 percent lower than their level 12 months ago, decelerating from the 5.6 percent year-over-year decline in April. In contrast, house prices rose in the Northeast, Midwest, and South regions of the country by 3.7, 3.4 and 0.3 percent respectively.

Homeownership Rates: [Page 26](#) of the chartbook focuses on homeownership rates, at a national level and broken out by age and race and ethnicity. After falling to 62.9 percent in the second quarter of 2016, the homeownership rate has risen to 66.0 percent, but still lower than its first quarter of 2005 peak of 69.0 percent. By age groups, the homeownership rate for households 65 years old and above is closest to its 2000s peak levels. By race and ethnicity, the homeownership rate among Hispanic households is closest to returning to its 2000s peak.

This month's chartbook also updated [page 19](#) with the 2022 Home Mortgage Disclosure Act data. Across all channels, the share of purchase lending to applicants of color reached a peak of 32.3% in 2006. Following the Great Recession and amidst a period of very tight credit, the share of purchase loans extended to borrowers of color declined to a low of 21.7% in 2013. Since then, it has slowly recovered. In 2022, the borrower of color share stood at 33.1% in 2022, up from 31.8% in 202 and exceeding its last peak of 32.3 percent in 2006.

Inside this Issue:

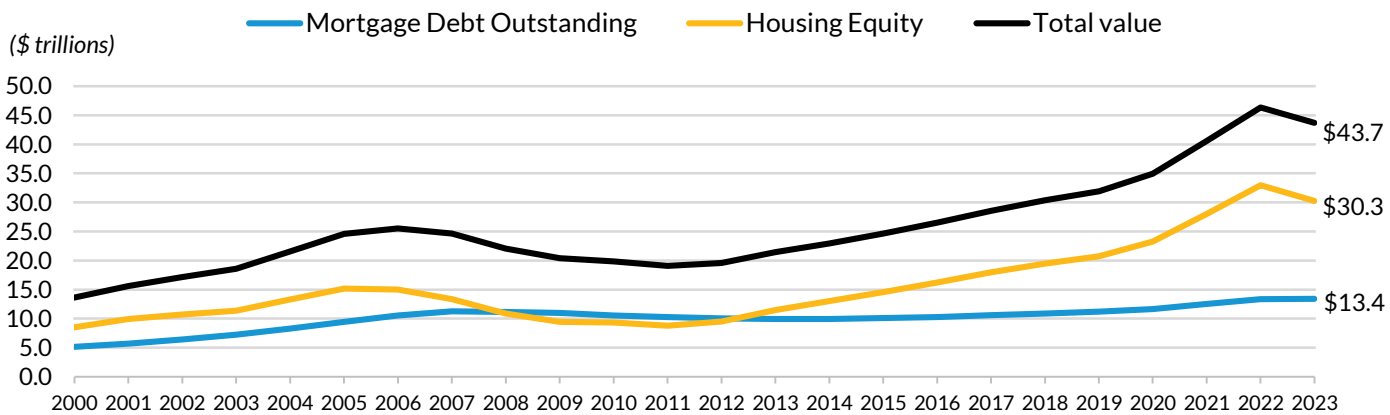
- Active housing listings have largely declined over time and the distribution of inventory has shifted towards higher priced homes ([Page 23](#)).
- As of April 2023, with a either a 20 percent down payment or a 3.5 percent down payment, the share of median income needed for the monthly mortgage payment exceeds its respective peak achieved in November 2005 ([Page 23](#)).
- Only the most affordable homes registered year-over-year house price gains in May 2023 ([Page 24](#)).

OVERVIEW

MARKET SIZE OVERVIEW

The Financial Accounts of the United States has indicated an increasing total value of the housing market since 2012, driven primarily by housing equity. In the first quarter of 2023, the total value of the single-family housing market declined from \$46.3 trillion in the fourth quarter of 2022 to \$43.7 trillion as housing equity decreased from \$33.0 trillion to \$30.3 trillion, the first quarterly decline since 2011. Mortgage debt owed stayed steady at \$13.4 trillion. By the end of 2022, agency MBS accounted for 66.2 percent (\$8.9 trillion) of the total mortgage debt outstanding while private-label securities and home equity loans make up 3.2 percent each (\$0.43 trillion and \$0.44 trillion, respectively). Unsecuritized first liens, both Bank Portfolio and Other, comprise the remaining 27.3 percent (\$3.7 trillion) with banks making up 19.2 percent (\$2.6 trillion), credit unions 4.1 percent (\$0.56 trillion), and other non-depositories accounting for 4.0 percent (\$0.54 trillion) of the total (not shown).

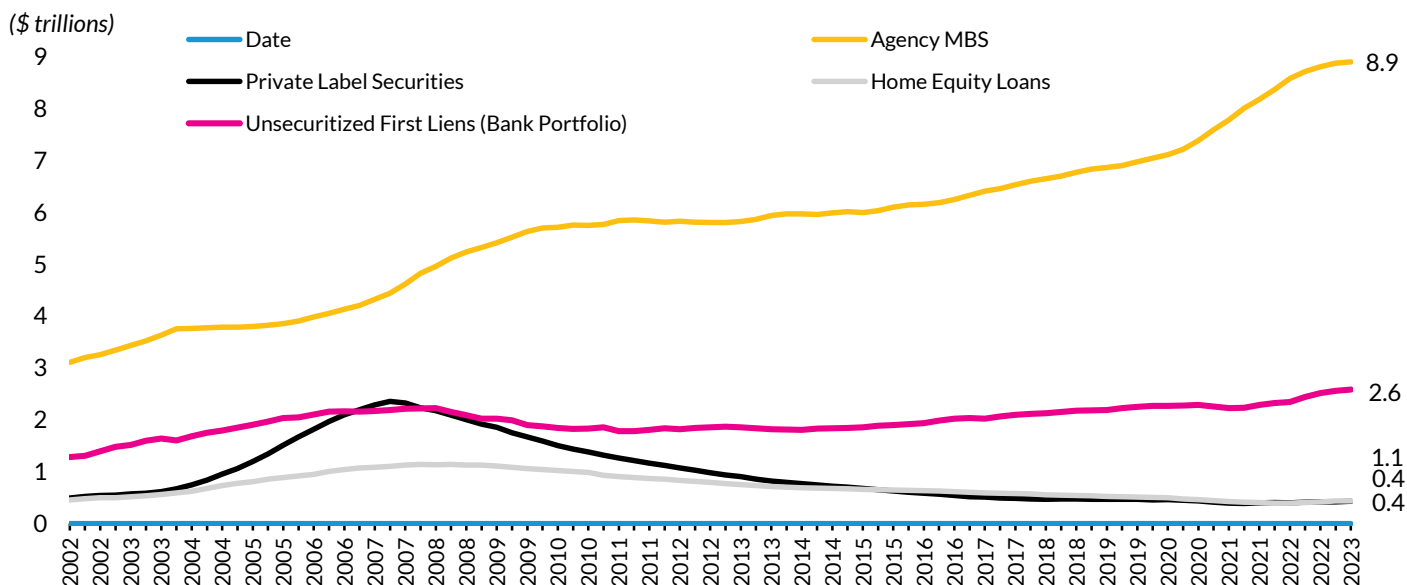
Value of the US Single Family Housing Market



Sources: Financial Accounts of the United States and Urban Institute. Last updated March 2023.

Note: Single family includes 1-4 family mortgages. The home equity number is grossed up from Fed totals to include the value of households and the non-financial business sector.

Composition of the US Single Family Mortgage Market



Sources: Financial Accounts of the United States and Urban Institute. Last updated March 2023.

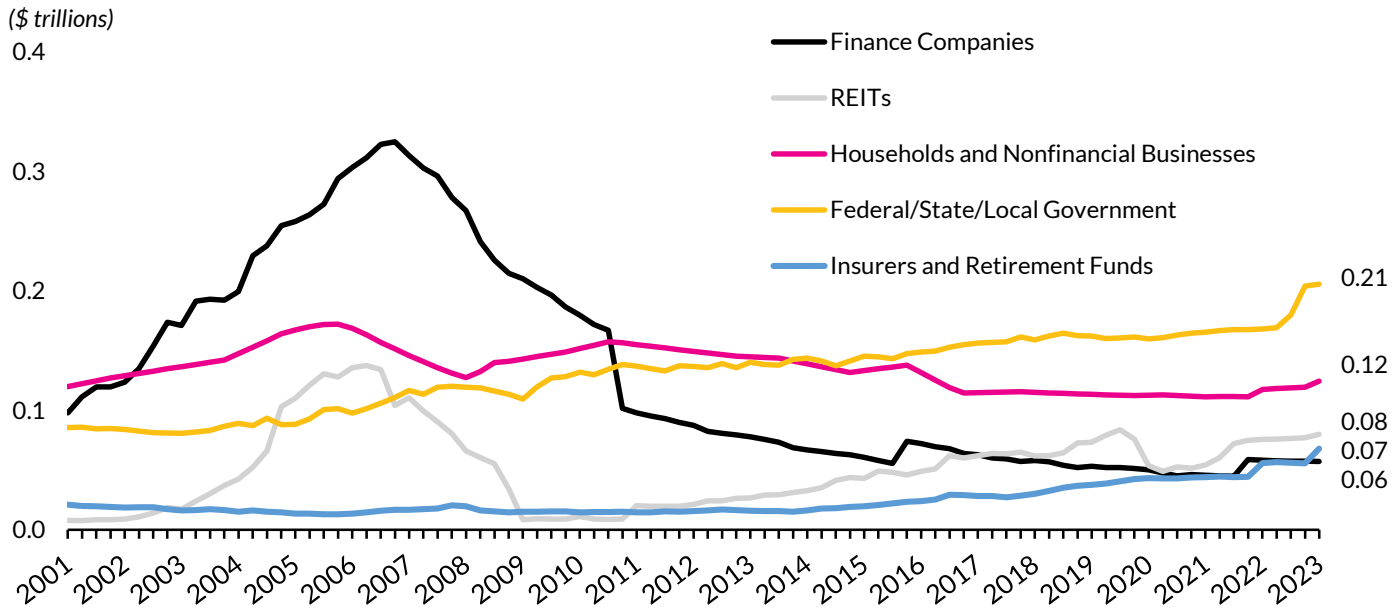
Notes: Unsecuritized First Liens (Other) includes mortgages not held on bank balance sheets.

OVERVIEW

MARKET SIZE OVERVIEW

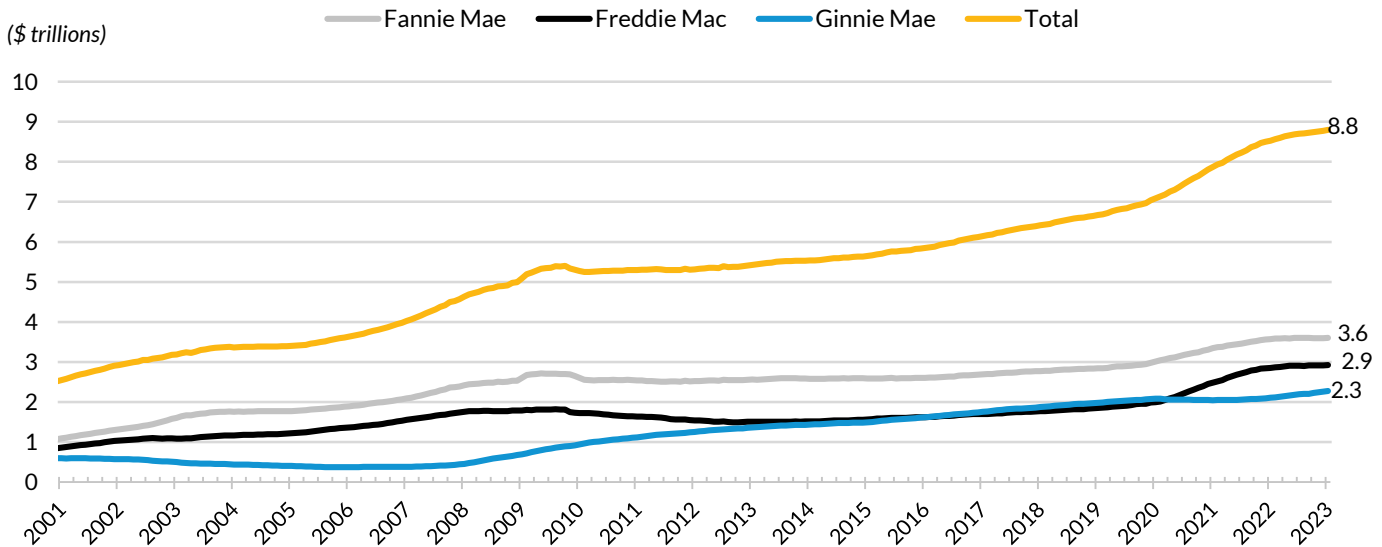
As of Q1 2023, unsecuritized first liens held outside banks and credit unions totaled \$ 0.54 trillion, an increase of about 12.6 percent relative to Q1 2022. Amid higher interest rates, holdings by federal/state/local governments, the largest holders of these unsecuritized first liens, grew by 22.4 percent over the year. By April 2023, outstanding securities in the agency market totaled \$8.8 trillion according to loan-level data, 40.9 percent (\$3.6 trillion) of which was Fannie Mae, 33.3 percent (\$2.9 trillion) Freddie Mac, and 25.78 percent (\$2.3 trillion) Ginnie Mae. After closing the gap in securitized volume with Freddie Mac in the aftermath of the Great Recession, Ginnie securitized volumes have lagged over the past few years.

Unsecuritized 1st Liens Held by Non-Depositories



Sources: Financial Accounts of the United States and Urban Institute. Last updated June 2023.

Agency Mortgage-Backed Securities



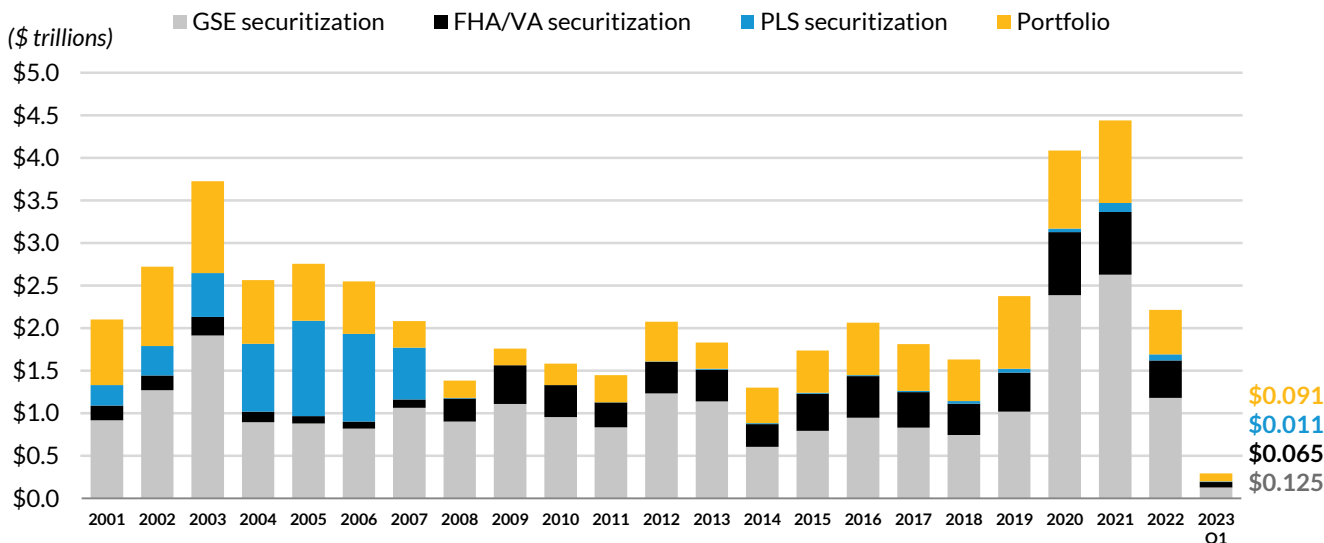
Sources: eMBS and Urban Institute.

OVERVIEW

ORIGINATION VOLUME AND COMPOSITION

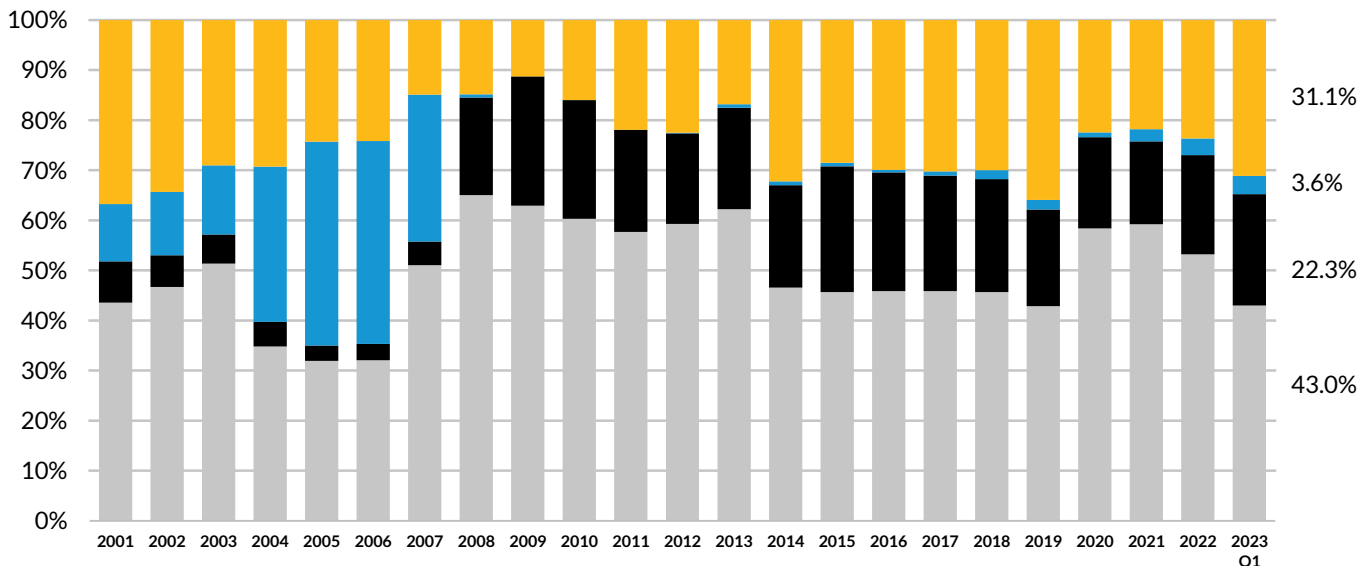
First Lien Origination Volume

Amid rising interest rates, mortgage origination volume totaled \$291 billion in the first quarter of 2023, versus \$725 billion trillion for Q1 2022. The decline in originations largely reflects fewer refinance loans. The GSE share was lower in Q1 2023 at 43.0 percent, compared to 63.0 percent in Q1 2022. The PLS share was 3.6 percent in Q1 2023, down from 4.8 percent in Q1 2022. The decline in the share of GSE and PLS originations was offset by portfolio loan share which reached 31.1 percent in Q1 2023, an increase compared to the 14.8 percent share in Q1 2022. The FHA/VA share in Q1 2023 stood at 22.3 percent, up from 17.5 percent in Q1 2022. However, while the shares of portfolio and FHA/VA originations rose year-over-year, origination volume in each of these segments fell over the same period.



Sources: Inside Mortgage Finance and Urban Institute. Last updated May 2023.

(Share, percent)

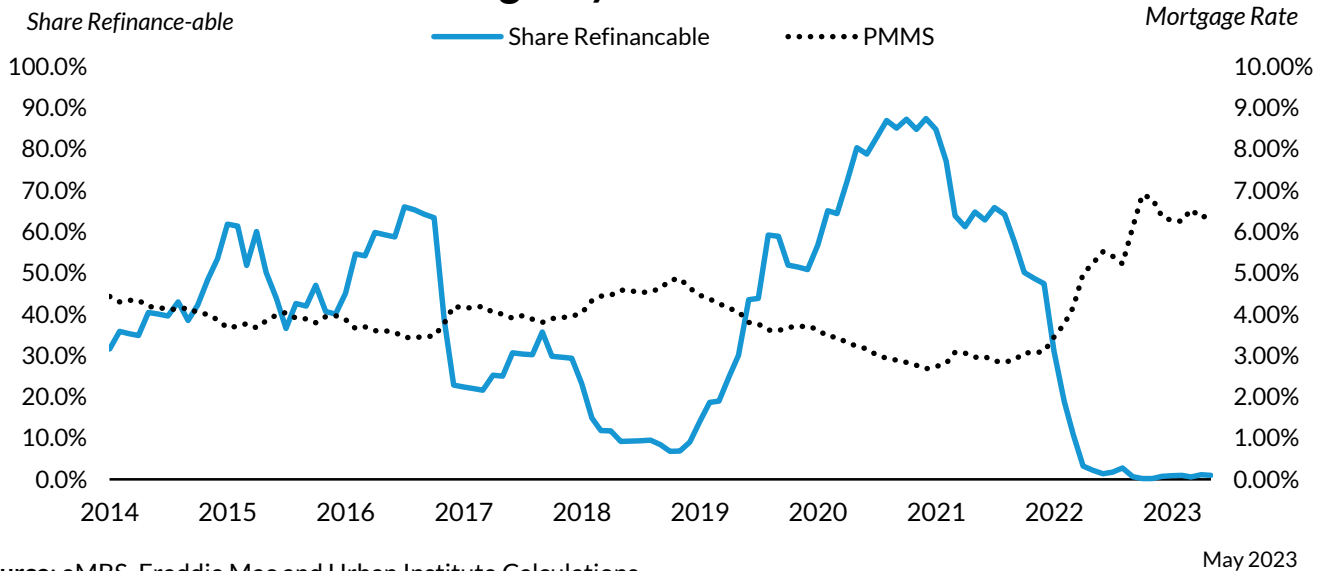


Sources: Inside Mortgage Finance and Urban Institute. Last updated May 2023.

REFINANCEABLE MORTGAGES

After peaking at 4.87 percent in November 2018, mortgage rates began to decline, falling to 2.68 percent in December 2020. Amid falling mortgage rates, the share of agency loans considered refinancable rose from 6.8 percent in October 2018 to 87.4 percent in December 2020. Lower mortgage rates contributed to a burst in refinancings over 2020, 2021 and the first four months of 2022. The share of agency mortgages with a rate less than 3.5 percent expanded significantly, from 11.0 percent in December 2019 to 54.9 percent in April 2022. As mortgage rates rose over 2022, remaining elevated through 2023 to-date, the share of agency mortgages considered refinancable has plummeted to 1.0 percent in May 2023. Higher mortgages helped reduce both refinancability, with many current borrowers having already refinanced into lower rates, and homebuyer affordability, as inventory of affordable remains low. Amid higher rates, the share of outstanding mortgage volume with a rate of 3.5 percent or less has declined by only 4.0 percentage points from a high of 54.9 percent in April 2022 to 50.9 percent in May 2023.

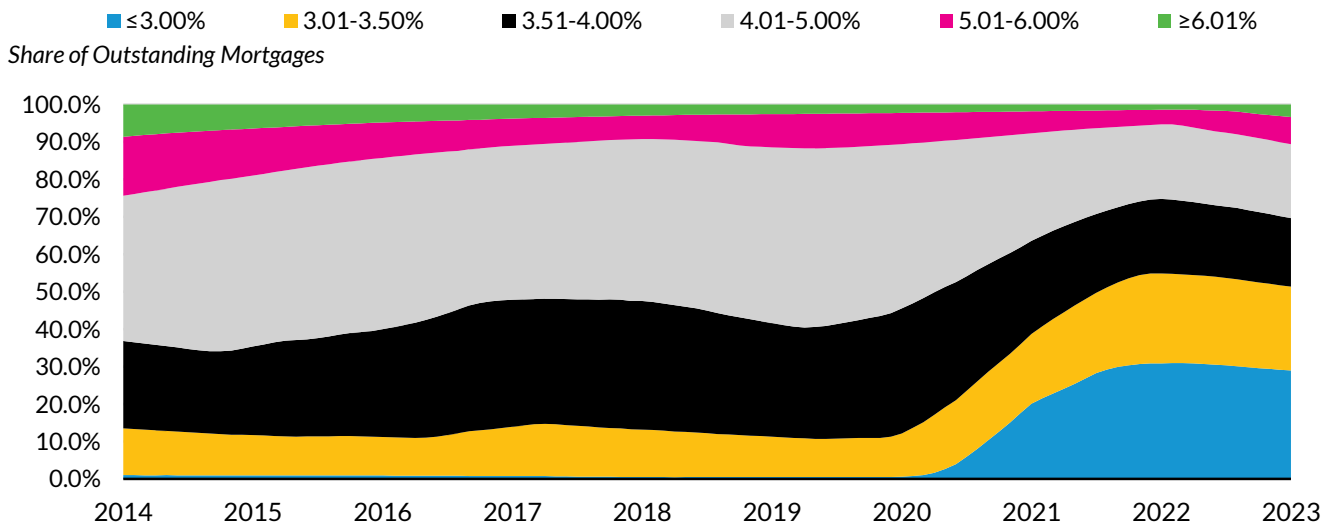
Refinancable Share of Agency Loans



Source: eMBS, Freddie Mac and Urban Institute Calculations

Note: Loans are counted as refinancable if the note rate is at least 50 basis points over the mortgage rate reported by Freddie Mac's Primary Mortgage Market Survey.

Outstanding Agency Mortgage Volume by Interest Rate



Source: eMBS, Freddie Mac and Urban Institute Calculations.

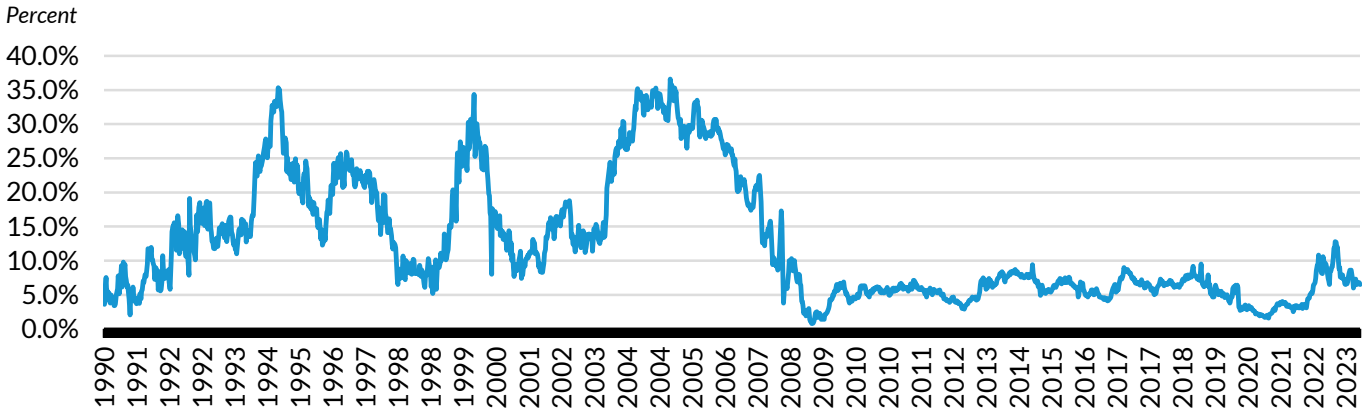
May 2023

OVERVIEW

PRODUCT COMPOSITION AND REFINANCE SHARE

The adjustable-rate share of weekly mortgage applications varied widely in the 1990s and the early to mid-2000s, ranging from a low of 5 percent to a high of over 35 percent. From 2009 to early 2022, the ARM share remained very low, generally between 5 to 8 percent, as ultra-low rates persisted, and product risk was wrung out of the market following the housing bust. However, with rates rising substantially in 2022 and affordability worsening, the ARM share increased from 3.1 percent in the week ending January 7, 2022 to 12.8 percent as of the week ending October 14, 2022. As rates have stabilized just above six percent, the adjustable-rate share has broadly decreased to 6.5 percent by the week ending June 9, 2023.

Adjustable-Rate Mortgage Share of Applications

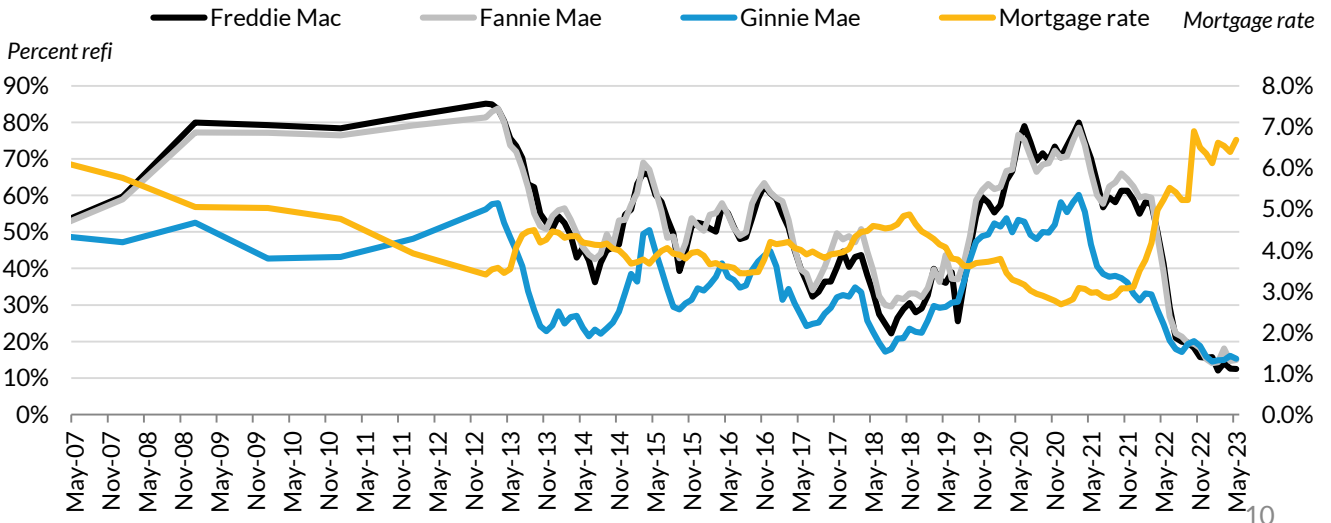


Source: Mortgage Bankers Association (MBA) Weekly Mortgage Applications Survey.

Note: Includes purchase and refinance applications. Data updated through June 9, 2023.

Despite some monthly variation, from late 2018 through March 2021 the percent refi at issuance (refi share) generally increased for both the GSEs and for Ginnie Mae as interest rates dropped. Refinance originations reflect mortgage rates from 6-8 weeks earlier. Since April 2021, and in reaction to higher interest rates, the refi share has declined significantly. In May 2023, the Fannie Mae refi share is 15.0 percent, and the Ginnie Mae refi share is 15.3 percent. Meanwhile, the Freddie Mac refi share is 12.5 percent, down near a series low of 12.1 percent from February 2023. The refi share across the GSEs has declined much more than Ginnie Mae's as rates increased in 2022. This has led to a rare convergence in refi share for GSE and Ginnie Mae channels. In recent months, the refi share across all agency channels appears to have stabilized at lower rates as mortgages remain broadly steady at higher rates.

Percent Refi at Issuance



Sources: eMBS and Urban Institute.

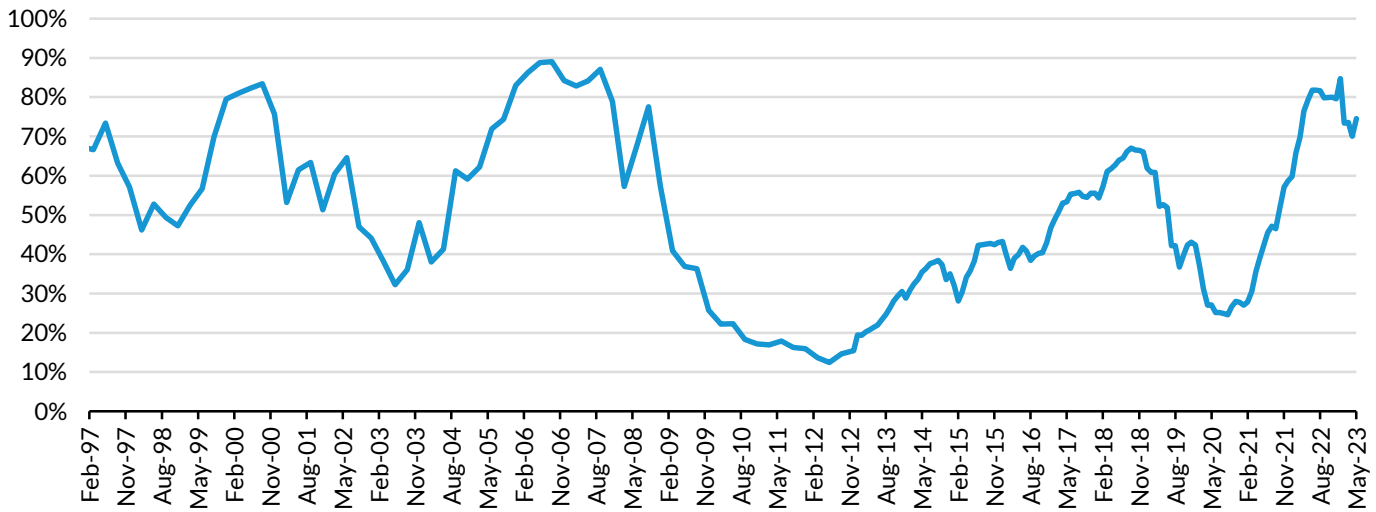
Note: Based on at-issuance balance. Figure based on data from May 2023.

OVERVIEW

CASH-OUT REFINANCES

When mortgage rates are low, the share of cash-out refinances tends to be relatively smaller, as rate/term refinancing allows borrowers to save money by taking advantage of lower rates. But when rates are high, the cash-out refinance share is higher since the rate reduction incentive is gone and the only reason to refinance is to take out equity. The cash-out share of refinances generally declined in 2020, reaching 25 percent in September 2020 due to increased rate refinances amidst historically low rates. With rates rising dramatically and the bulk of rate-refinance activity behind us, the cash-out share increased to 84.8 percent as of January 2023 but has modestly declined to 74.5 percent in May as rates have settle modestly below their recent peak. The cash-out share remains elevated, but the absolute volume of cash-out refinances is low. The cash-out refi share of total originations continues to decline, but the cash-out refi share is lower in Fannie and Freddie than FHA or VA. While FHA may not be the optimal vehicle for home equity extraction, it may be the only way for lower credit borrowers to extract cash from their homes.

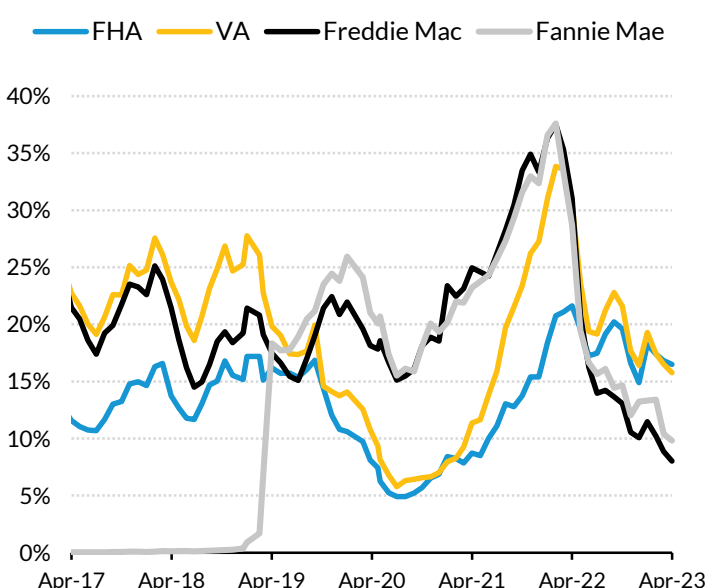
Cash-out Share of Conventional Refinances



Sources: Freddie Mac, eMBS and Urban Institute.

Note: The cash-out share for conventional market is calculated using Freddie Mac's quarterly refinance statistics from 1995 to 2013. Post 2013 it is calculated monthly using eMBS. Data as of May 2023.

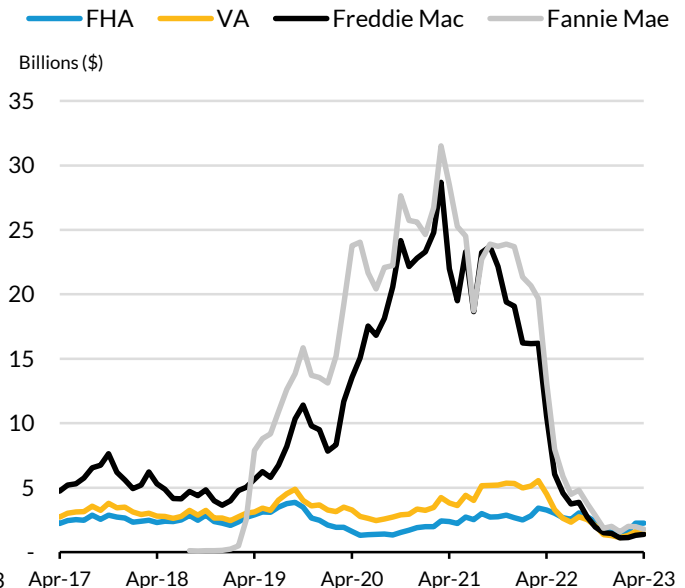
Cash-out Refi Share of All Originations



Sources: eMBS and Urban Institute.

Note: Data as of April 2023.

Cash-out Refinance Volume by Agency



Sources: eMBS and Urban Institute

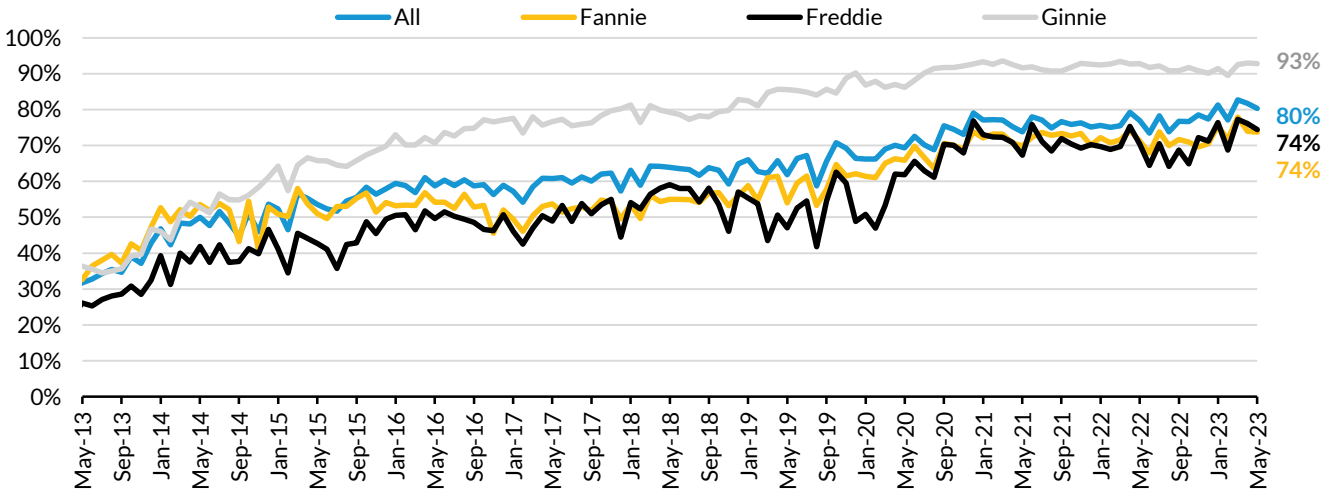
Note: Data as of April 2023.

OVERVIEW

AGENCY NONBANK ORIGINATION SHARE

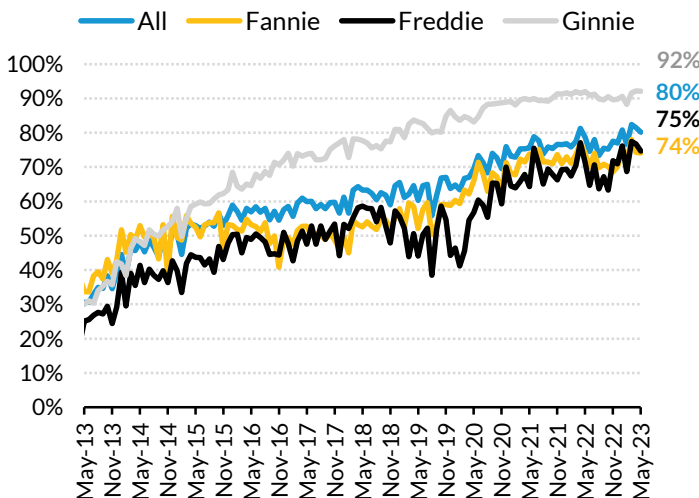
The nonbank share for agency originations has been rising steadily since 2013, standing at 80 percent in May 2023. The Ginnie Mae nonbank share has been consistently higher than the GSEs, standing at 93 percent in May 2023. Both Fannie and Freddie had nonbank shares of 74 percent in May 2023. Overall, nonbanks accounted for a larger share of refis than purchase loans. However, this reflected the greater nonbank share across Ginnie Mae refi loans. The nonbank purchase share was higher among both Fannie and Freddie purchase loans relative to refi loans in May 2023.

Nonbank Origination Share: All Loans



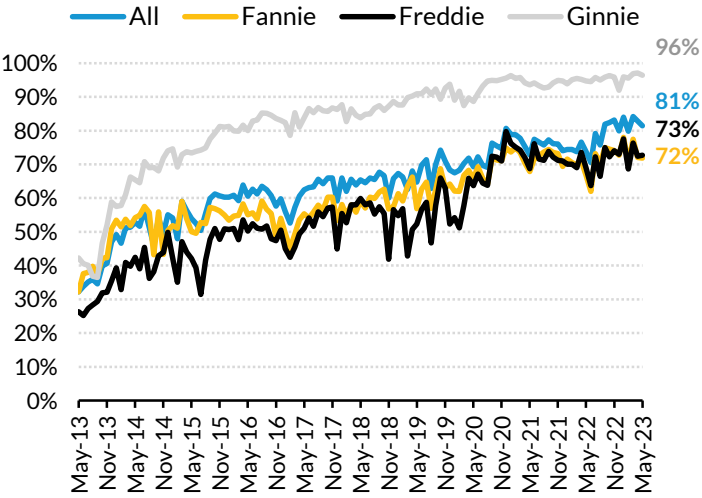
Sources: eMBS and Urban Institute.

Nonbank Origination Share: Purchase Loans



Sources: eMBS and Urban Institute.

Nonbank Origination Share: Refi Loans



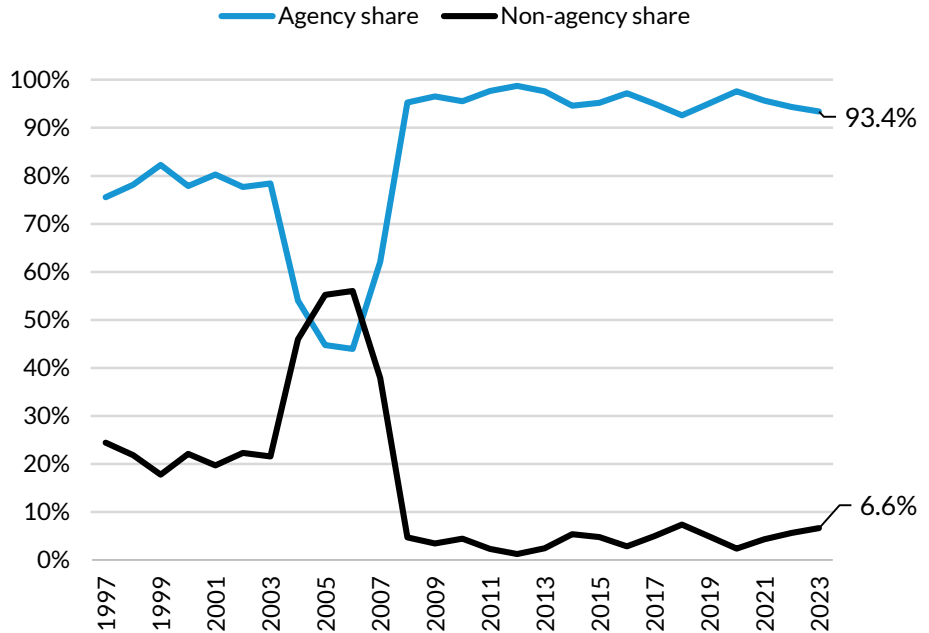
Sources: eMBS and Urban Institute.

OVERVIEW

SECURITIZATION VOLUME AND COMPOSITION

Agency/Non-Agency Share of Residential MBS Issuance

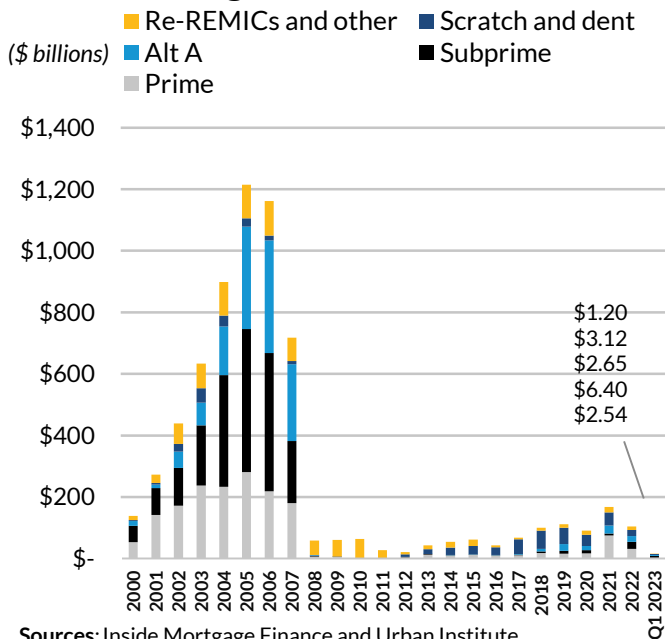
The non-agency share of mortgage securitizations increased gradually from 1.2 percent in 2012 to 7.4 percent in 2018. In 2020, the non-agency share dropped to 2.41 percent, reflecting increased agency refinances and less non-agency production due to COVID-19. The non-agency share has risen modestly since 2020, rising to 6.6 percent by April 2023, nearer its 2018 level. In dollar terms, non-agency issuance reached \$15.9 billion in Q1 2023, a decrease relative to the \$42.5 billion in Q1 2022 and \$28.6 billion in Q1 2021. Non-agency securitization totaled \$4.4 billion in April 2023, its second consecutive increase since February 2023. These numbers remain small compared to 2021 and the first half of 2022 levels.



Sources: Inside Mortgage Finance and Urban Institute.

Note: Based on data from April 2023. Monthly non-agency volume is subject to revision.

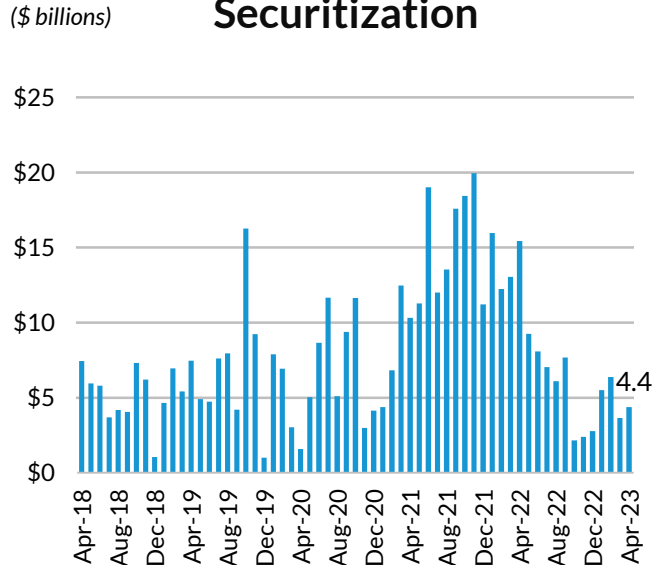
Non-Agency MBS Issuance



Sources: Inside Mortgage Finance and Urban Institute.

Note: Data through Q1 2023.

Monthly Non-Agency Securitization



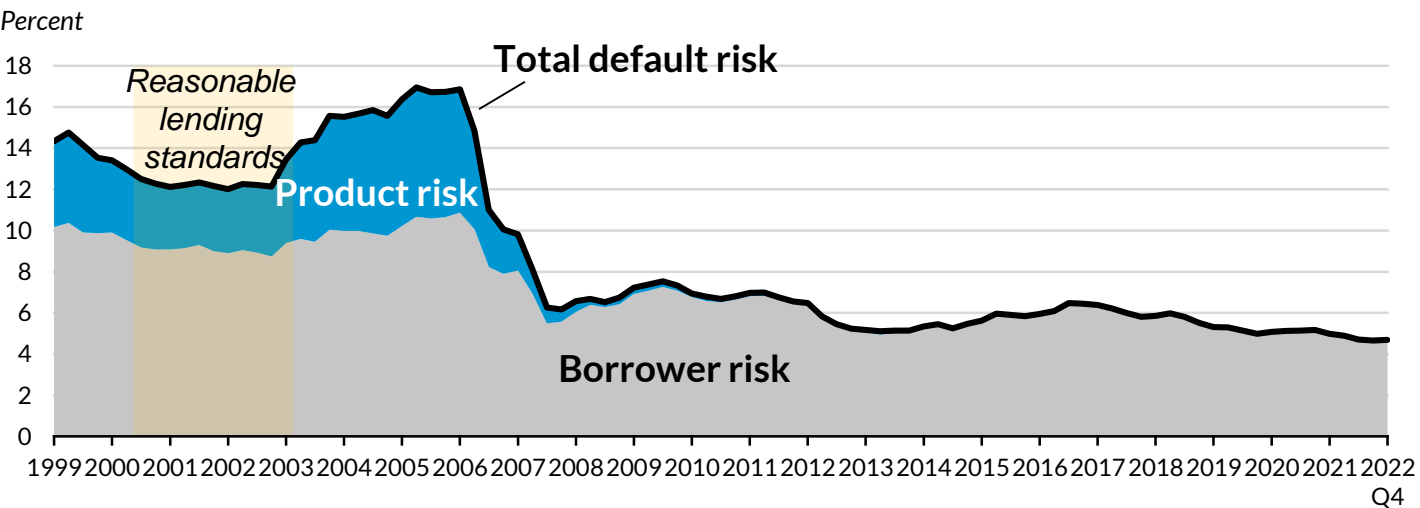
Sources: Inside Mortgage Finance and Urban Institute.

CREDIT BOX

HOUSING CREDIT AVAILABILITY INDEX

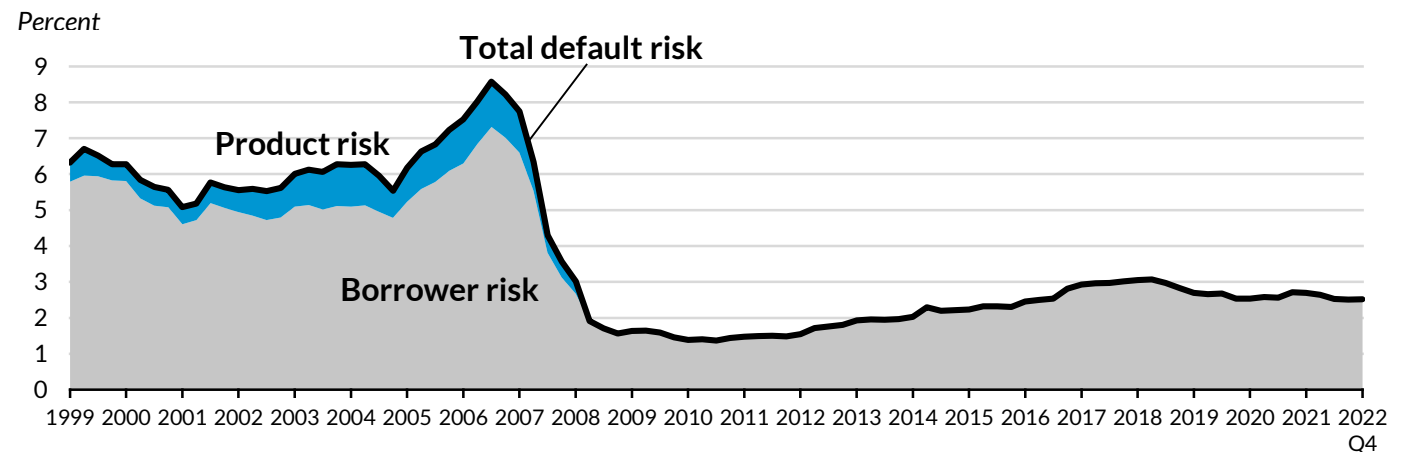
The Urban Institute’s Housing Credit Availability Index (HCAI) assesses lenders’ tolerance for both borrower risk and product risk, calculating the share of owner-occupied purchase loans that are likely to go 90+ days delinquent over the life of the loan. The HCAI stood at 4.7 percent in Q4 2022, remaining flat from Q3 2022 and lower from Q4 2021. The tightening from Q4 2021 to Q4 2022 reflects a decrease in default risk taken across all channels but was led by a seven percent decline among the GSEs, followed by a six percent decrease among portfolio and private label securities and three percent decline in the government channel. Note that we updated the methodology as of Q2 2020, see new methodology [here](#). More information about the HCAI is available [here](#).

All Channels



GSE Channel

The trend toward greater credit availability in the GSE channel began in Q2 2011. From Q2 2011 to Q1 2019, the total risk taken by the GSE channel more than doubled, from 1.4 percent to 3.1 percent. This is still very modest by pre-crisis standards. However, accelerated tightening throughout 2020 induced by market conditions due to COVID-19 drove down credit risk to 2.5 percent in Q4 2020. The increase in Q1 2021, to 2.58 percent, marked the first expansion of credit availability in the GSE channel since Q1 2019. In Q4 2022, credit availability stood at 2.52 percent, slightly up from 2.51 percent in Q3 2022 and down from 2.69 percent in Q4 2021.



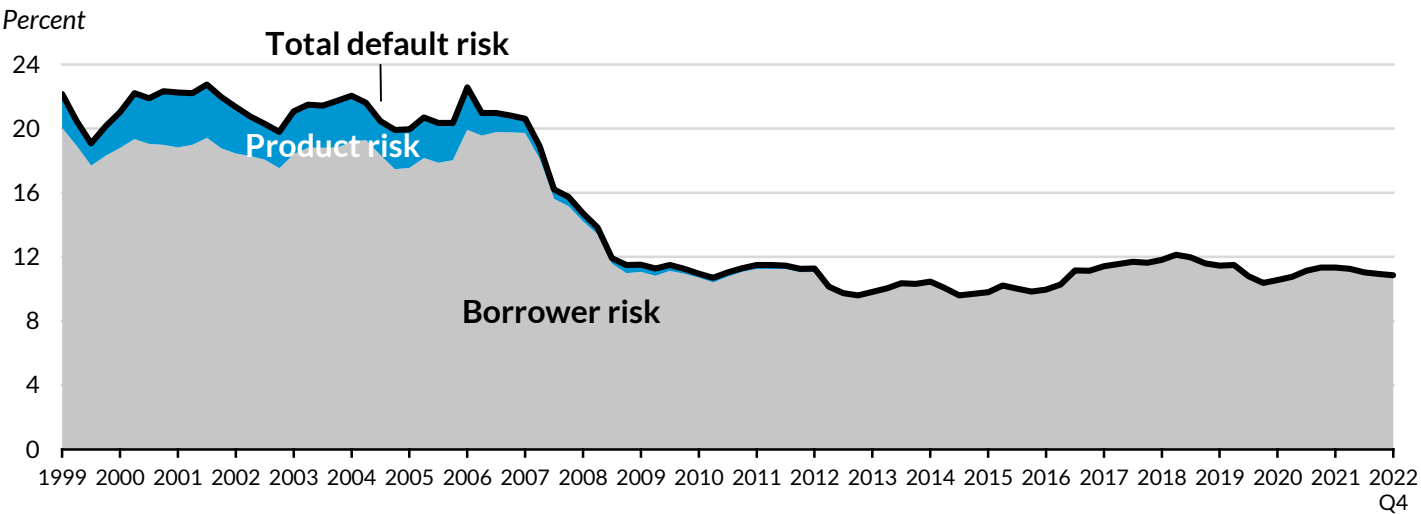
Sources: eMBS, CoreLogic, HMDA, IMF, and Urban Institute.

Note: Default is defined as 90 days or more delinquent at any point. Last updated April 2023.

CREDIT BOX HOUSING CREDIT AVAILABILITY INDEX

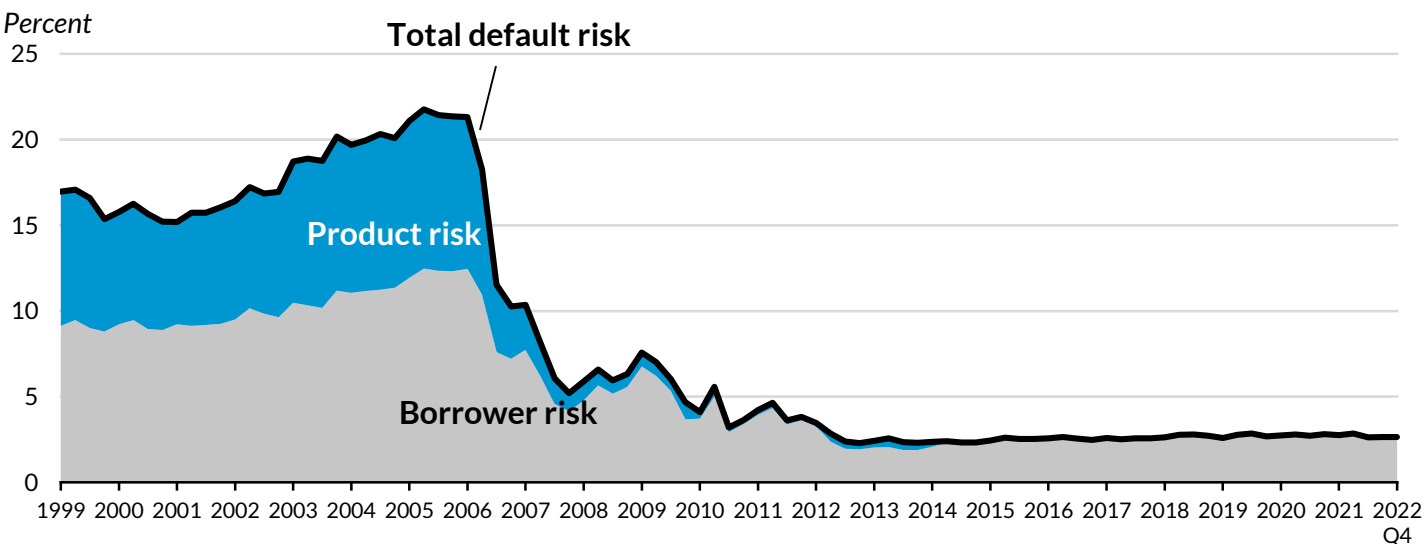
Government Channel

The total default risk the government loan channel is willing to take bottomed out at 9.6 percent in Q3 2013. It fluctuated in a narrow range at or above that number for three years. In the eleven quarters from Q4 2016 to Q1 2019, the risk in the government channel increased from 9.9 to 12.1 percent but has since receded. After declining to 10.4 percent in Q3 of 2020, the government channel had begun to increase risk to 11.3 percent up until Q1 2022 before dropping to 10.9 percent in Q4 2022; far below the pre-bubble range of 19 to 23 percent.



Portfolio and Private Label Securities Channels

The portfolio and private-label securities (PP) channel took on more product risk than the government and GSE channels during the bubble. After the crisis, the channel's product and borrower risks dropped sharply. The numbers have stabilized since 2013, with product risk well below 0.5 percent and total risk largely in the range of 2.3-3.0 percent; it was 2.6 percent in Q4 2022. This is a shadow of the default risk taken prior to the Great Financial Crisis.



Sources: eMBS, CoreLogic, HMDA, IMF, and Urban Institute.

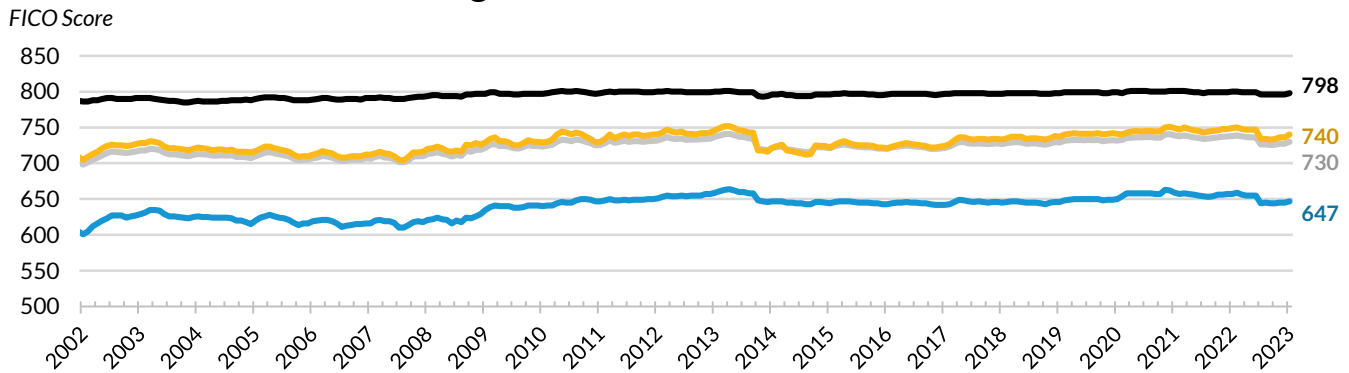
Note: Default is defined as 90 days or more delinquent at any point. Last updated April 2023.

CREDIT AVAILABILITY FOR PURCHASE LOANS

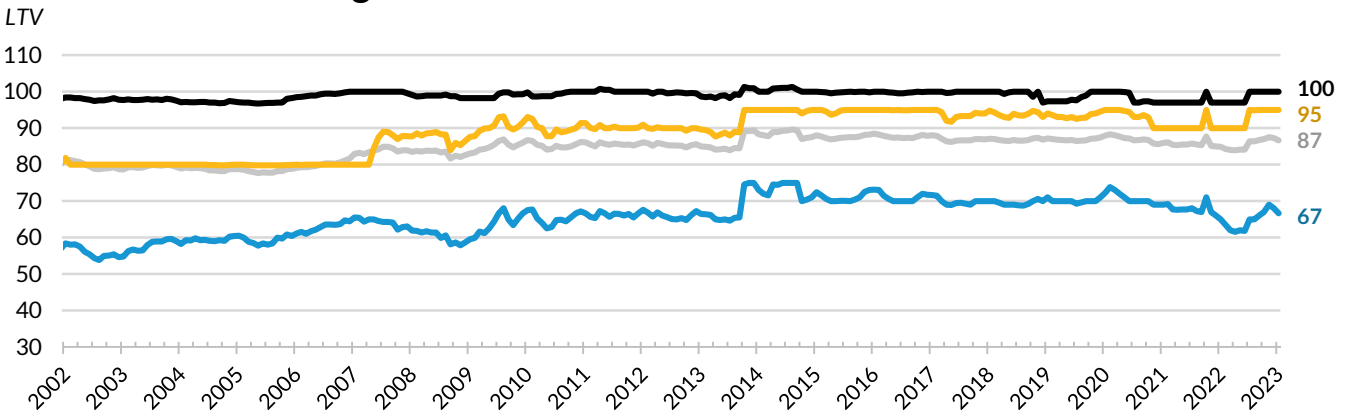
Access to credit remains tight by historical standards, but it has loosened marginally in recent months for lower FICO borrowers. The median FICO for current purchase loans is about 18 points higher than the pre-housing crisis level of around 722. The 10th percentile, which represents the lower bound of creditworthiness to qualify for a mortgage, was 647 in April 2023, which is still high compared to low-600s pre-bubble. The higher rate environment has coincided with a rise in DTIs. However, DTIs largely stabilized since January 2023 with the 10th percentile DTI declining modestly. Since the fourth quarter of 2022, the median LTV at origination of 95 percent also remains higher.

— Mean — 90th percentile — 10th percentile — Median

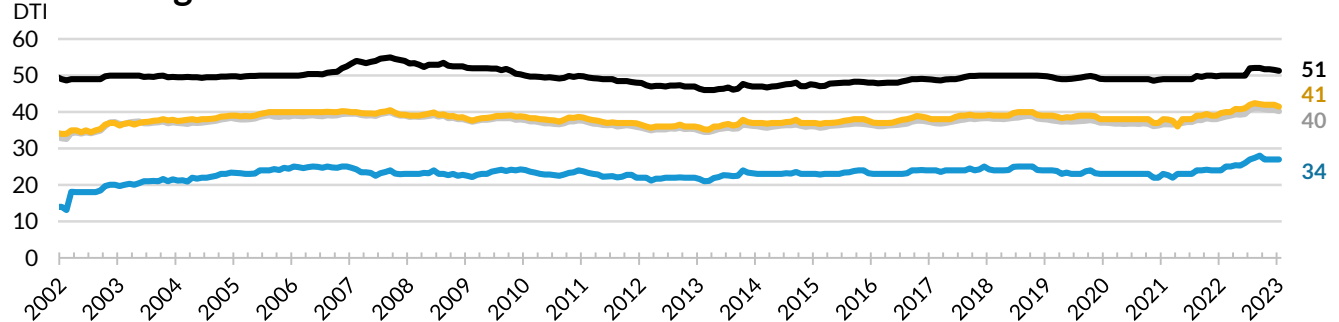
Borrower FICO Score at Origination



Combined LTV at Origination



DTI at Origination



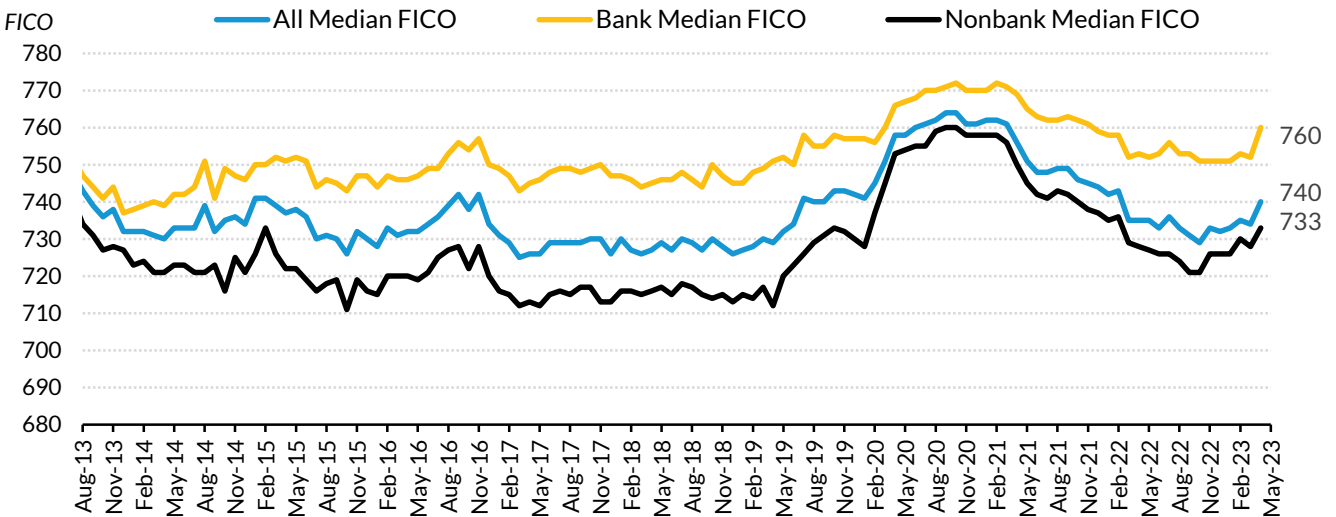
Sources: Black Knight, eMBS, HMDA, SIFMA, CoreLogic and Urban Institute.

Note: Includes owner-occupied purchase loans only. DTI data prior to April 2018 is from CoreLogic; after that date, it is from Black Knight. A back-update to the Black Knight historical series was made in September 2021 for data starting from 2001 onward. Data as of April 2023.

AGENCY NONBANK CREDIT BOX

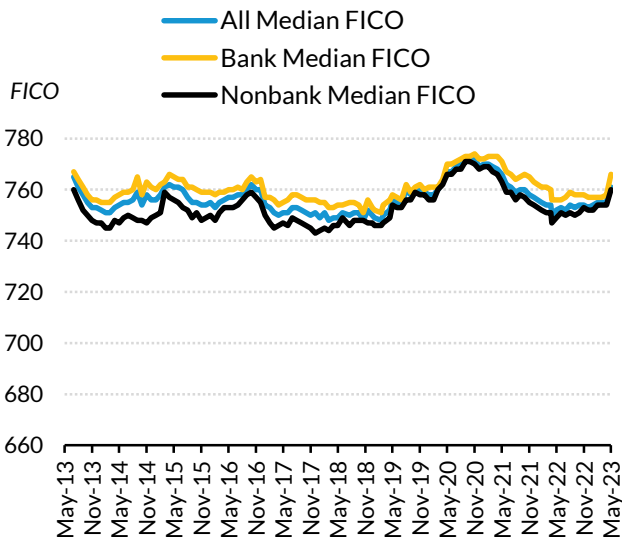
After falling in 2021 and most of 2022, median FICO scores have risen modestly in 2023, from 726 to 740, as interest rates have settled slightly off their recent peak. FICO scores for banks and nonbanks in both GSE and Ginnie Mae segments increased during the Q1 2019 to Q1 2021 period due to increased refi activity in response to lower rates; as refi activity tapered, FICO scores fell. Borrowers of refi loans typically have higher FICO scores than borrowers of purchase loans which boosted median scores amid the most recent refi wave and reduced scores as rates rose. There has also been a sharp cut-back in FHA lending by banks post-2008. As pointed out on page 11, banks now comprise only about 7 percent of Ginnie Mae originations. The gap between agency bank and nonbank FICOs reached 27 points in May 2023. The difference between the median FICO on bank and non-bank GSE loans stood at 6 points in May 2023. But across Ginnie Mae loans, the gap currently sits at 15 points.

Agency FICO: Bank vs. Nonbank



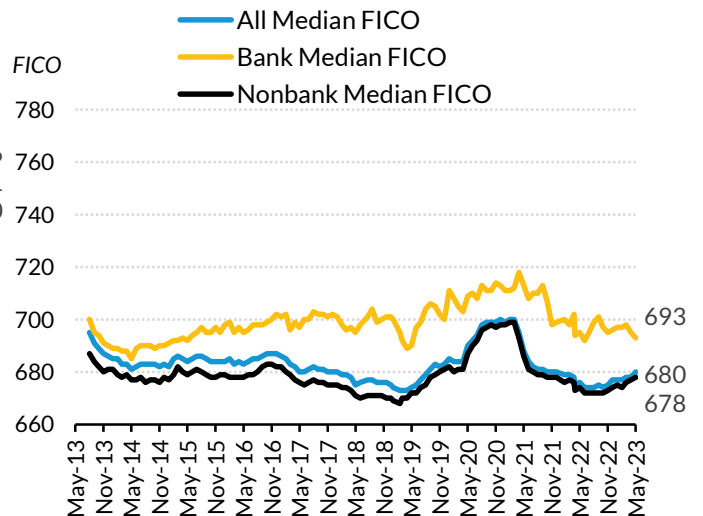
Sources: eMBS and Urban Institute.

GSE FICO: Bank vs. Nonbank



Sources: eMBS and Urban Institute.

Ginnie Mae FICO: Bank vs. Nonbank



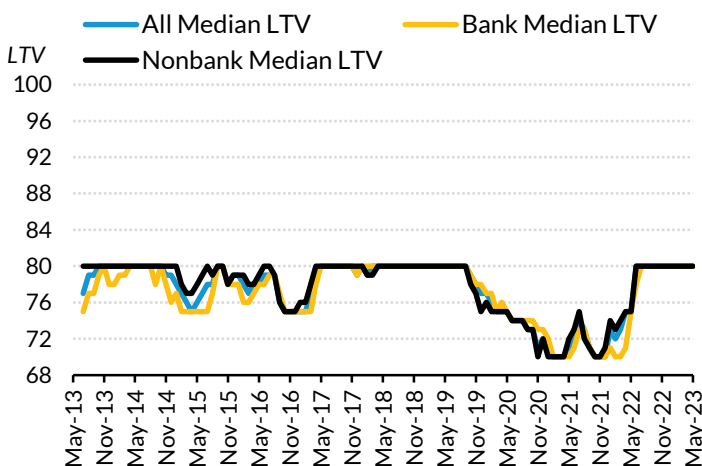
Sources: eMBS and Urban Institute.

CREDIT BOX

AGENCY NONBANK CREDIT BOX

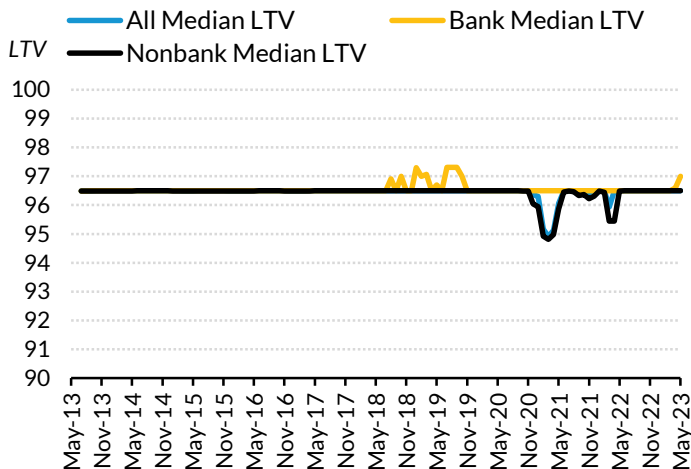
Nonbanks are more expansive in their lending than their bank counterparts, as indicated by higher back-end DTIs in both GSE and Ginnie Mae markets. From early 2017 to early 2019, there was a sustained increase in DTIs, which has reversed beginning in the spring of 2019. This is true for both Ginnie Mae and the GSEs, for banks and nonbanks. As interest rates in 2018 increased, DTIs rose, because borrower payments were driven up relative to incomes. As rates fell during most of 2019 and 2020, DTIs fell as borrower payments declined relative to incomes. Since March 2021, DTIs have increased, reflecting the rise in rates and steep house price increases, both of which force households to borrow more in relation to income. In recent months, nonbank median DTI has declined marginally as rates have retreated from peak levels, pushing down the overall DTI.

GSE LTV: Bank vs. Nonbank



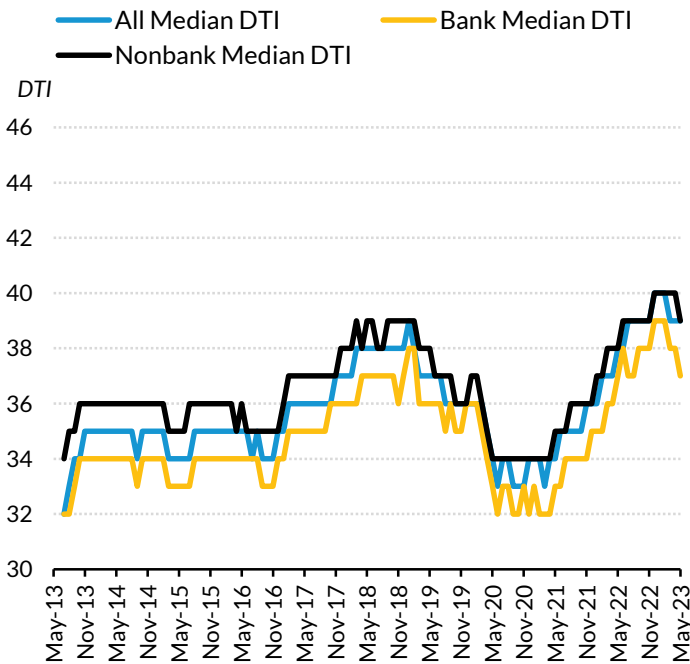
Sources: eMBS and Urban Institute.

Ginnie Mae LTV: Bank vs. Nonbank



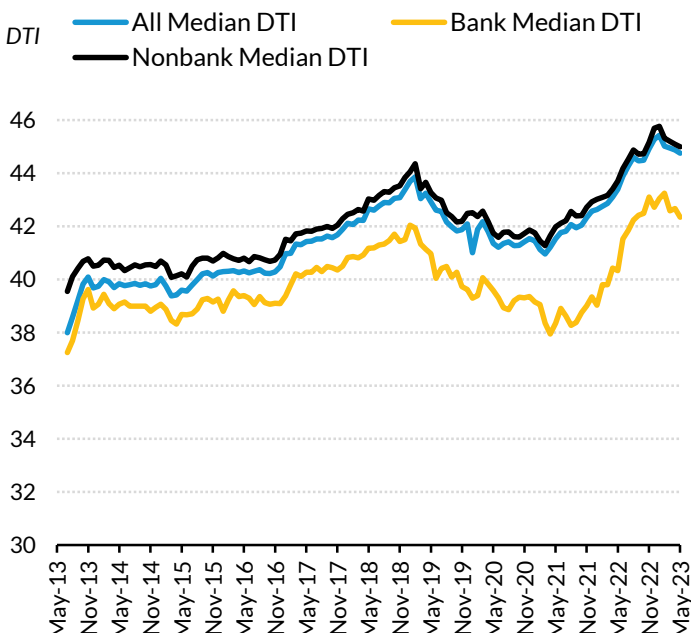
Sources: eMBS and Urban Institute.

GSE DTI: Bank vs. Nonbank



Sources: eMBS and Urban Institute.

Ginnie Mae DTI: Bank vs. Nonbank



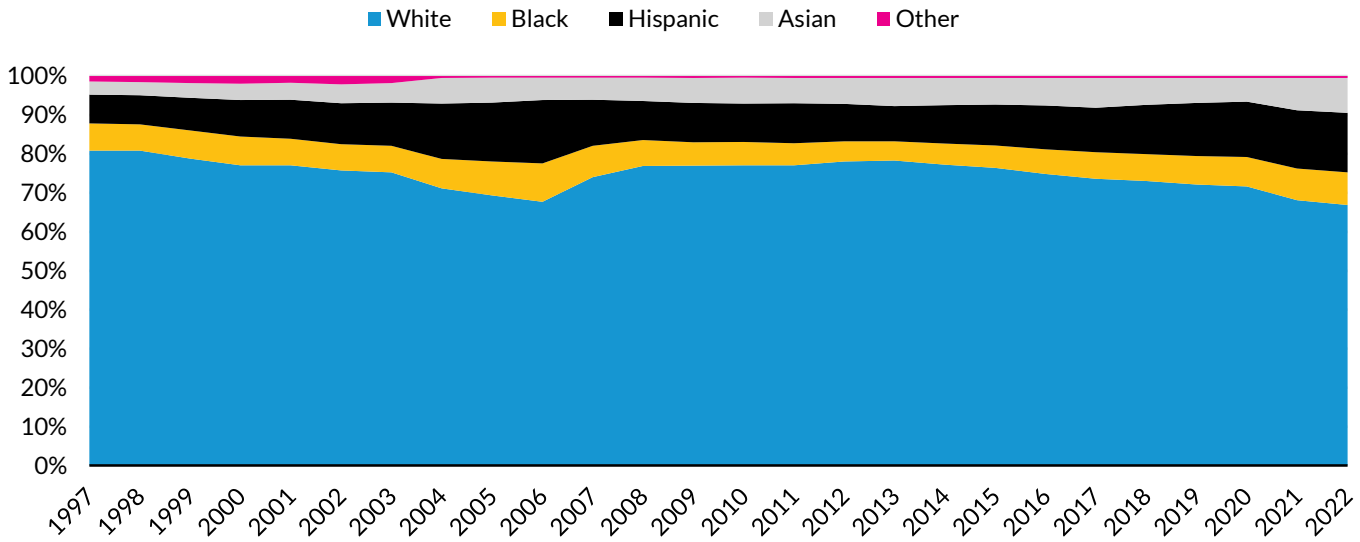
Sources: eMBS and Urban Institute.

STATE OF THE MARKET

RACIAL & ETHNIC COMPOSITION

Across all channels, the share of purchase lending to applicants of color reached a peak of 32.3% in 2006. Following the Great Recession and amidst a period of very tight credit, the share of purchase loans extended to borrowers of color declined to a low of 21.7% in 2013. Since then, it has slowly recovered. In 2022, the borrower of color share stood at 33.1% in 2022, up from 31.8% in 2021. But, the share of purchase lending to borrowers of color varied widely by channel in 2022. At 49.6 percent and 43.1 percent, respectively, borrowers of color accounted for a larger share of FHA and PLS purchase lending. Borrowers of color represented a smaller loans share in the GSE, Portfolio and VA channels, 29.4 percent, 31.4 percent and 32.9 percent, respectively.

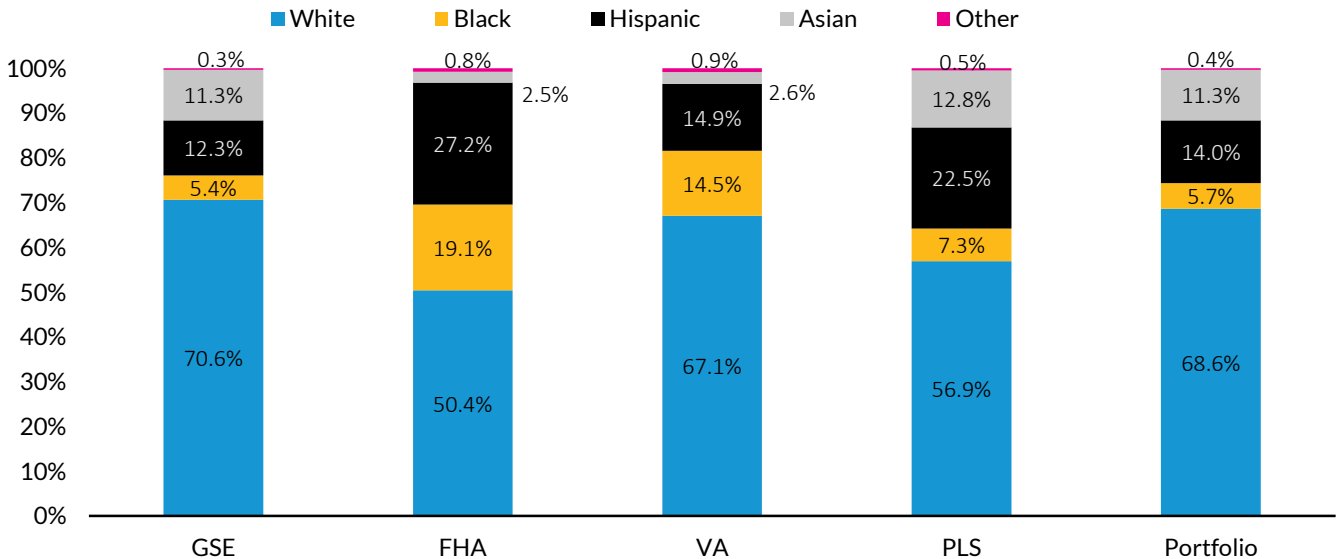
2022 Purchase Loan Shares by Race



Source: 1997 to 2022 Home Mortgage Disclosure Act (HMDA).

Note: Includes purchase loans only. Shares based on loan counts

2022 Purchase Loan Channel Shares by Race



Source: 2022 Home Mortgage Disclosure Act (HMDA).

Note: Includes purchase loans only. Shares based on loan counts

STATE OF THE MARKET

MORTGAGE ORIGINATION PROJECTIONS

Both Fannie Mae and the MBA estimate 2023 origination volume will be \$1.65 trillion. For the full year of 2023, each organization expects total origination volume to be below its level in 2022 continuing the decrease from the recent peak established in 2021. The lower full year projections of mortgage originations in 2023 is primarily due to the expectation that the refi share will also be lower. Another contributing factor, as illustrated on page 20, is an expectation of fewer home sales in 2023 relative to 2022. However, expectations for originations over full year 2024 are expected to exceed their 2023 level, but not return to 2022 levels, primarily due to an anticipation that the refi share in 2024 is expected to be higher compared to 2023 but is expected to remain below 2022 rates .

Total Originations and Refinance Shares

Period	Originations (\$ billions)		Refi Share (percent)	
	Total, FNMA estimate	Total, MBA estimate	FNMA estimate	MBA estimate
2022 Q1	774	689	50	45
2022 Q2	683	678	27	30
2022 Q3	534	480	20	19
2022 Q4	396	398	17	17
2023 Q1	323	333	18	20
2023 Q2	437	463	15	20
2023 Q3	424	480	15	22
2023 Q4	405	514	20	25
2018	1766	1677	30	28
2019	2462	2253	46	44
2020	4374	4108	64	64
2021	4570	4436	58	62
2022	2386	2245	32	30
2023	1588	1790	17	22
2024	1901	2164	26	27

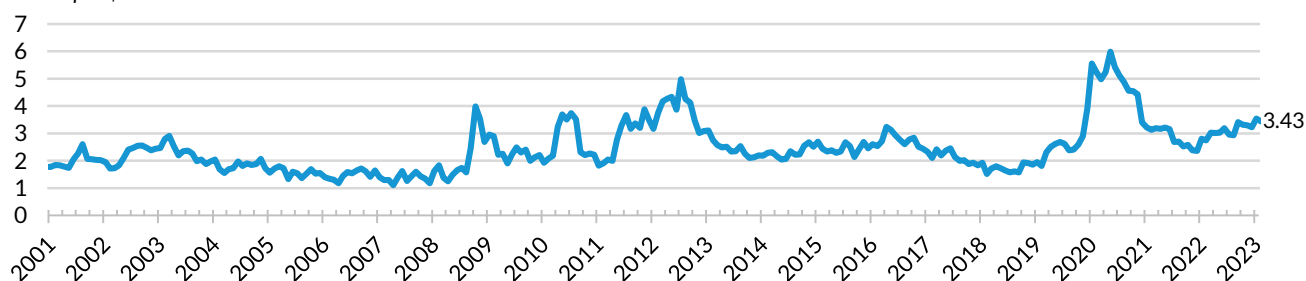
Sources: Fannie Mae, Mortgage Bankers Association and Urban Institute.

Note: Shaded boxes indicate forecasted figures. All figures are estimates for total single-family (1-4 unit) market. Regarding interest rates, the yearly averages for 2017, 2018, 2019, 2020, and 2021 were 4.0, 4.6, 3.9, 3.0, and 3.0 percent. For 2022, the annual averages for Fannie, Freddie, and MBA are 5.3, 4.6, and 6.6 percent.

Originator Profitability and Unmeasured Costs

In May 2023, Originator Profitability and Unmeasured Costs (OPUC) stood at \$3.43 per \$100 loan, down from \$3.54 per \$100 loan in April 2023. Higher profitability seen in 2020 and early 2021 reflected lender capacity constraints amidst strong refi demand. Reduced profitability in 2022 reflected slower refinance activity, forcing originators to compete more aggressively on price. OPUC, formulated and calculated by the Federal Reserve Bank of New York, is a good relative measure of originator profitability. OPUC uses the sales price of a mortgage in the secondary market (less par) and adds two sources of profitability; retained servicing (both base and excess servicing, net of g-fees), and points paid by the borrower. As volumes decline, fixed costs are spread out over fewer loans, overstating the relative profitability. OPUC is generally high when interest rates are low, as originators are capacity constrained due to refinance demand and have no incentive to reduce rates. Conversely, when interest rates are higher and refi activity low, competition forces originators to lower rates, driving profitability down. While higher interest rates are limiting the slope profitability, originators are squeezing profits in other ways contributing to a steady rise in OPUC since a low in March 2022.

Dollars per \$100 loan



Sources: Federal Reserve Bank of New York, updated monthly and available at this link:

<http://www.ny.frb.org/research/epr/2013/1113fust.html> and Urban Institute. Last updated May 2023.

Note: OPUC is a monthly (4-week moving) average as discussed in [Fuster et al. \(2013\)](#).

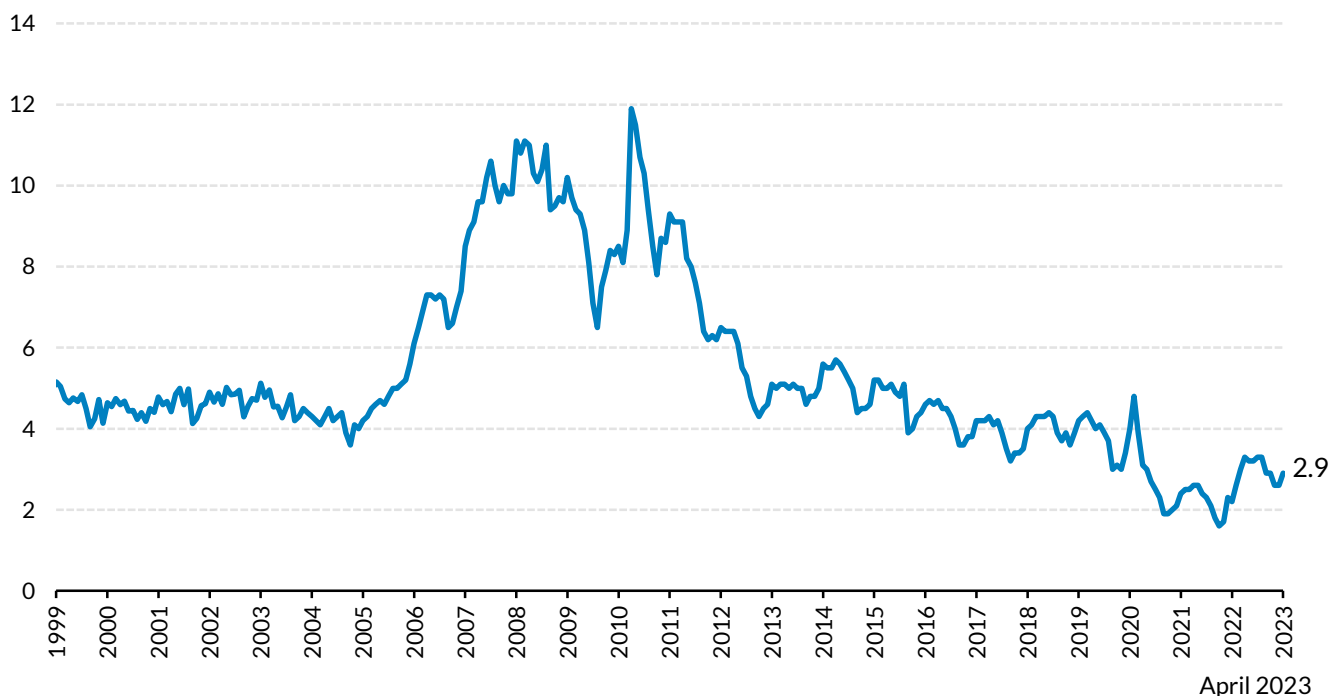
STATE OF THE MARKET

HOUSING SUPPLY

Months' supply of existing homes, single-family and condos/co-ops, remains low, although higher than the very low levels seen in 2021. Months' supply increased over much of 2022, reflecting some seasonality and coinciding with rising interest rates over most of the year, but it declined from the end of 2022 through the first quarter of 2023. Entering the Spring buying season, months' supply of existing homes, single-family and condos/co-ops, was 2.9 in April 2023, up from 2.6 in March. In addition to low existing inventory, Fannie Mae, the MBA, and the NAHB forecast full year 2023 housing starts to be below 2022 levels. And Fannie Mae, the MBA, and the NAHB all predict total home sales in 2023 to also be below 2022 home sales activity.

Months' Supply

Months



Source: National Association of Realtors and Urban Institute. Data as of April 2023.

Housing Starts and Home Sales

Year	Housing Starts, thousands			Home Sales, thousands		
	Total, FNMA estimate	Total, MBA estimate	Total, NAHB estimate	Total, FNMA estimate	Total, MBA estimate	Total, NAHB estimate*
2017	1203	1208	1205	6123	6158	5520
2018	1250	1250	1247	5957	5956	5350
2019	1290	1295	1292	6023	6016	5431
2020	1380	1397	1397	6462	6506	5889
2021	1601	1605	1606	6891	6896	6189
2022	1553	1551	1551	5671	5099	5167
2023	1308	1388	1324	4861	4285	4601
2024	1233	1455	1327	4971	4626	5038

Sources: Mortgage Bankers Association, Fannie Mae, National Association of Home Builders and Urban Institute.

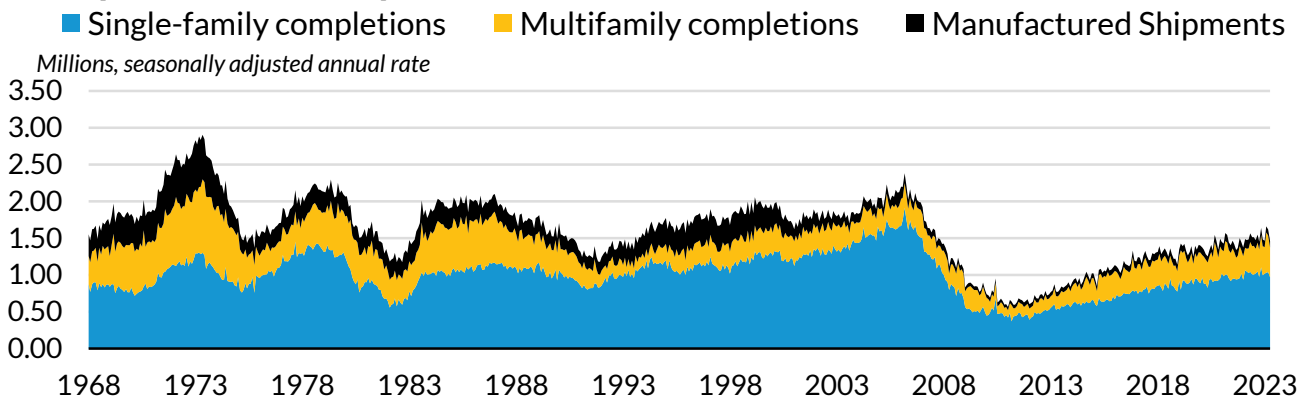
Note: Shaded boxes indicate forecasted figures; column labels indicate source of estimate. The NAHB home sales also excludes existing condos and co-ops reported by NAR.

OVERVIEW

New Residential Production

New residential production, including single-family and multifamily completions as well as manufactured housing shipments, reached 1.60 million units in May 2023, 2.2 percent higher than its level in May 2022, 1.57 million. Since reaching a low of 565,000 units in January 2011, new production has risen by 183 percent. However, current production is 67.2 percent of its March 2006 level of 2.38 million units. While single-family completions and manufactured housing shipments in May 2023 remain 52.8 percent and 26.7 percent of their respective 2000s peaks of 1.91 million units and 307,000 units respectively, multifamily unit completions in May 2023 are 29.8 percent above their 2000s peak of 392,000. However, only 4.0 percent of multifamily units completed in 2023 Q1 were for-sale, down significantly from its 2007 Q2 peak of 43.9 percent. Among single-family completions, 73.6 percent were built for-sale in 2023 Q1. In 2009 Q2, the share fell to as low as 59.8 percent. The owner-occupied share of mobile homes fell from 2006 to 2014, but partially recovered in the ensuing years.

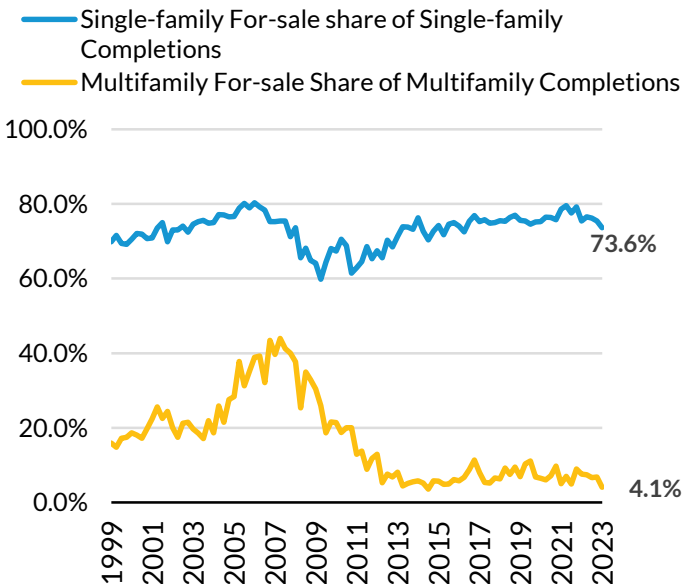
Completions and Shipments



Source: U.S. Census Bureau (BOC) and Urban Institute Calculations.

May 2023

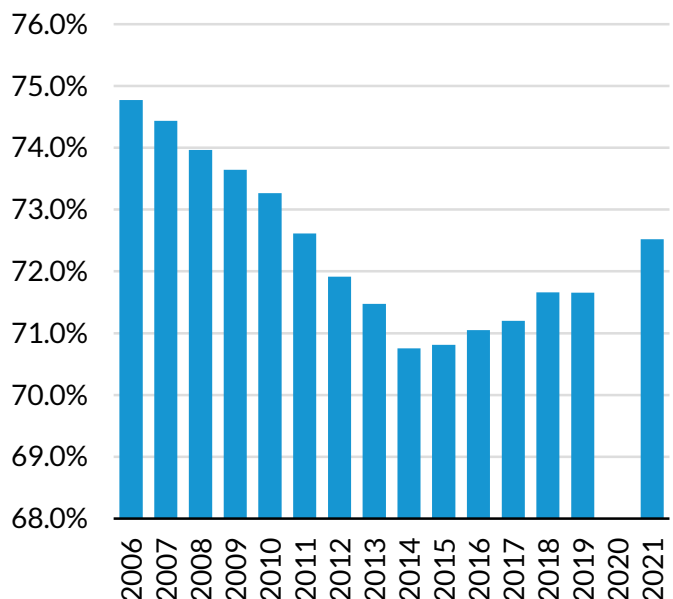
Share of Residential Completions Built For Sale



Source: U.S. Census Bureau (BOC) and Urban Institute Calculations.

May 2023

Owner-Occupied Share of Occupied Mobile Homes



Source: 1-year American Community Survey.

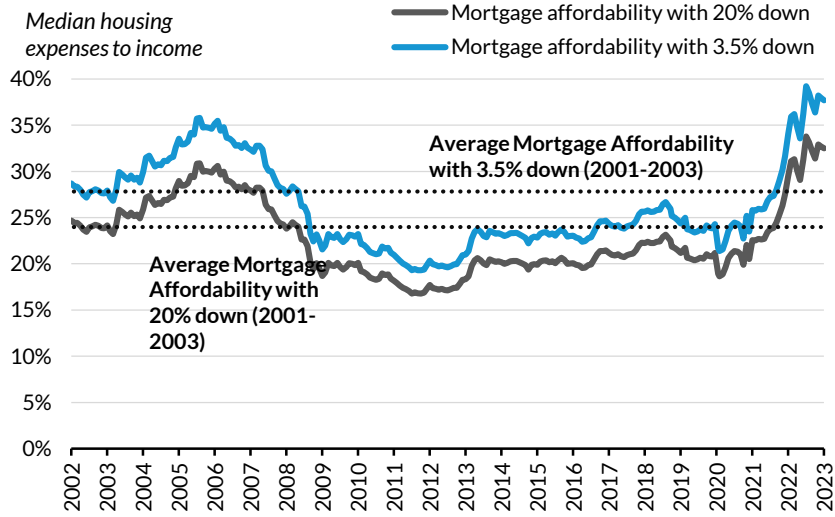
Note: This data for 2021 is not available due to the pandemic.

STATE OF THE MARKET

HOUSING AFFORDABILITY

National Mortgage Affordability Over Time

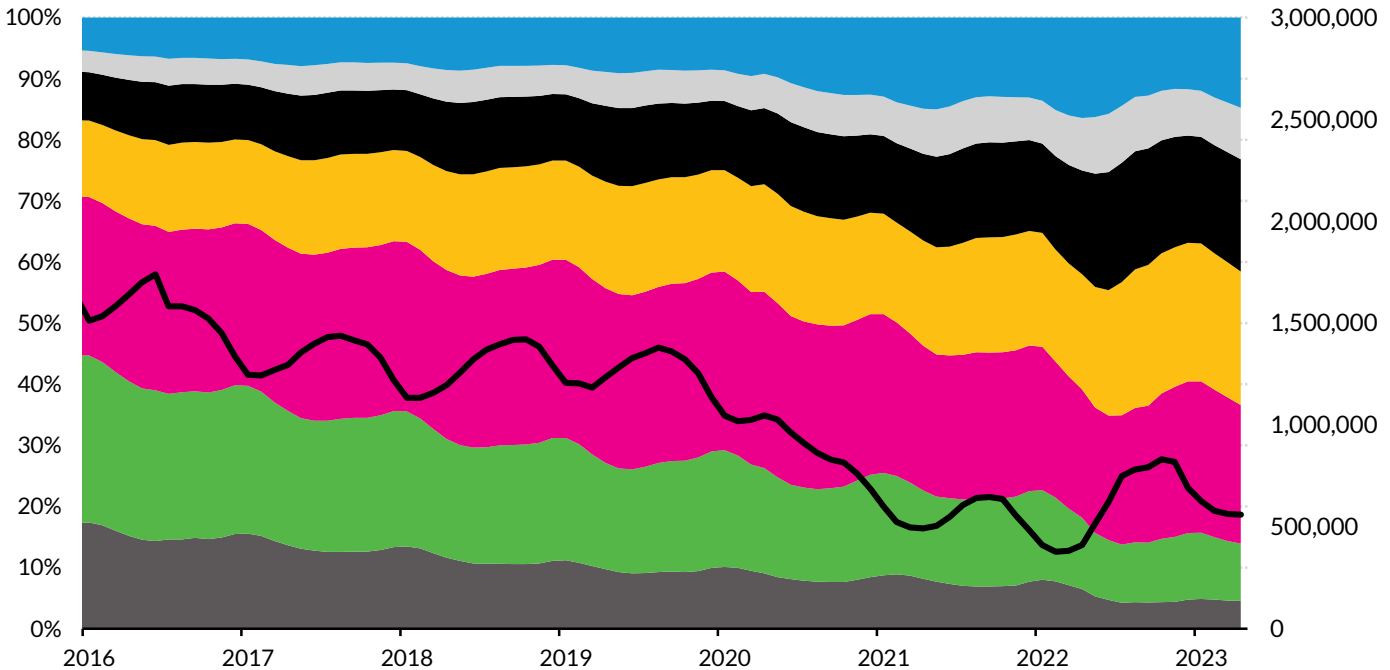
After some modest relief in December and January, mortgage affordability worsened in February, but, as rates have modestly retreated, mortgage affordability improved slightly in March and April. However, rates and house prices remain elevated. As of April 2023, with a 20 percent down payment, the share of median income needed for the monthly mortgage payment stood at 32.5 percent, slightly higher than the 30.9 percent at the peak of the housing bubble in November 2005; and with 3.5 percent down it is 37.7 percent, also slightly above the 35.8 percent prior peak in November 2005. As shown in the bottom picture, even amid seasonality, active listings have largely declined over time and the distribution has shifted markedly towards higher priced homes.



Active Listings by Price Tier Over Time

Share of Active Listings

- Under \$100K
- \$100 - \$200K
- \$200 - \$350K
- \$350 - \$500K
- \$500 - 750K
- \$750K - \$1M
- Above \$1M
- Total Active Listings (Right)



Sources: National Association of Realtors, US Census Bureau, Current Population Survey, American Community Survey, Moody's Analytics, Freddie Mac Primary Mortgage Market Survey, Realtor.com, and the Urban Institute.

Note: Mortgage affordability is the share of median family income devoted to the monthly principal, interest, taxes, and insurance payment required to buy the median home at the Freddie Mac prevailing rate for a 30-year fixed-rate mortgage and property tax and insurance at 1.75 percent of the housing value. Data for the bottom chart provided by Realtor.com as of April 2023.

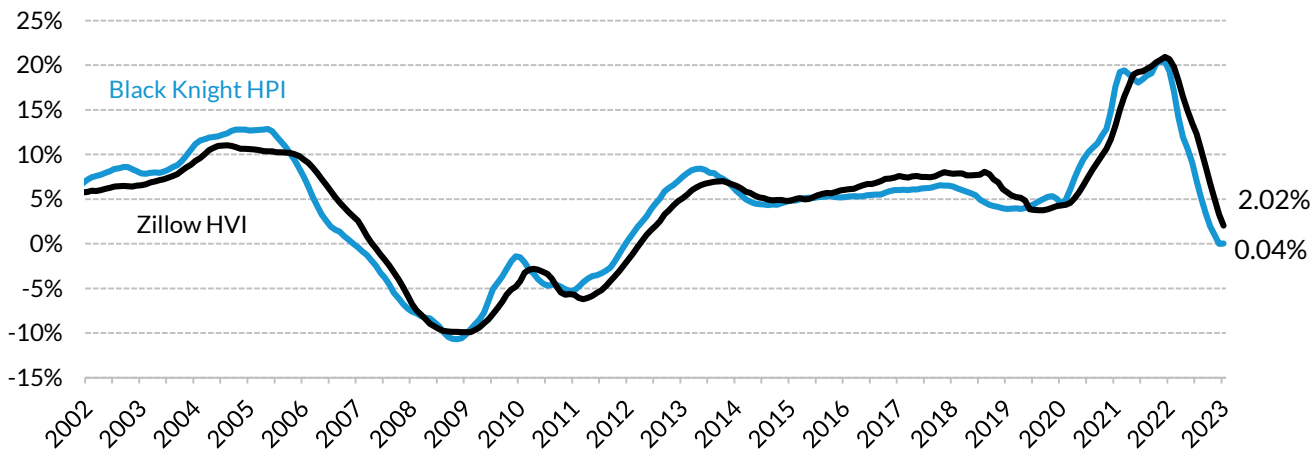
STATE OF THE MARKET

HOME PRICE INDICES

National Year-Over-Year HPI Growth

According to Black Knight's updated repeat sales index, year-over-year home price appreciation was 0.04 percent in May 2023, roughly constant from the previous month, indicating that home prices may have bottomed. Year-over-year home price appreciation as measured by Zillow's hedonic home value index was 2.02 percent in May 2023, down from 3.30 percent in April 2023. Home price appreciation has continued to slow since March 2022; that may have modestly improved affordability. However, affordability remains low amid the broader increase in home prices combined with a sharp rise in interest rates over 2022.

Year-over-year growth

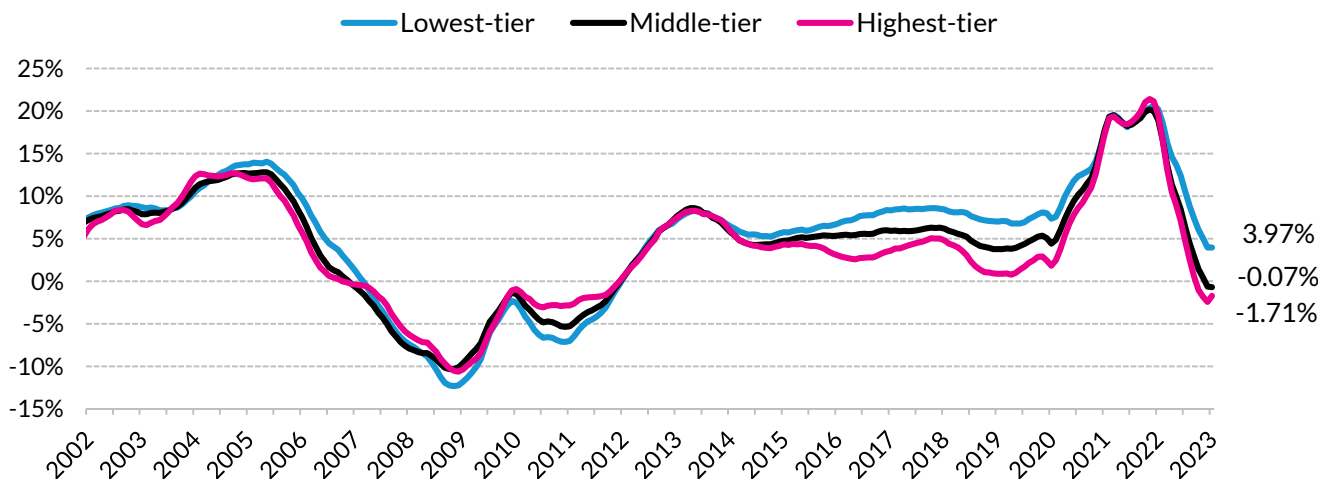


Sources: Black Knight, Zillow, and Urban Institute.

Note: Black Knight modified the methodology behind their HPI in February 2021, resulting in changes to historic price estimates. Data as of May 2023.

National Year-Over-Year HPI Growth by Price Tier

House price growth accelerated in the second half of 2020 into 2022 across all price tiers. With higher-priced homes experiencing steeper appreciation in 2020 and 2021, year-over-year growth in the highest-tier had surpassed the middle and lowest tiers by Feb 2022. With rates rising sharply in 2022, the rate of appreciation has slowed for all price tiers. In May 2023, highest-tier and middle-tier homes have declined on a year-over-year basis by 1.71 percent and 0.07 percent, respectively. However, among the most affordable, lowest-tier homes, prices rose by 3.97 percent over the past year.



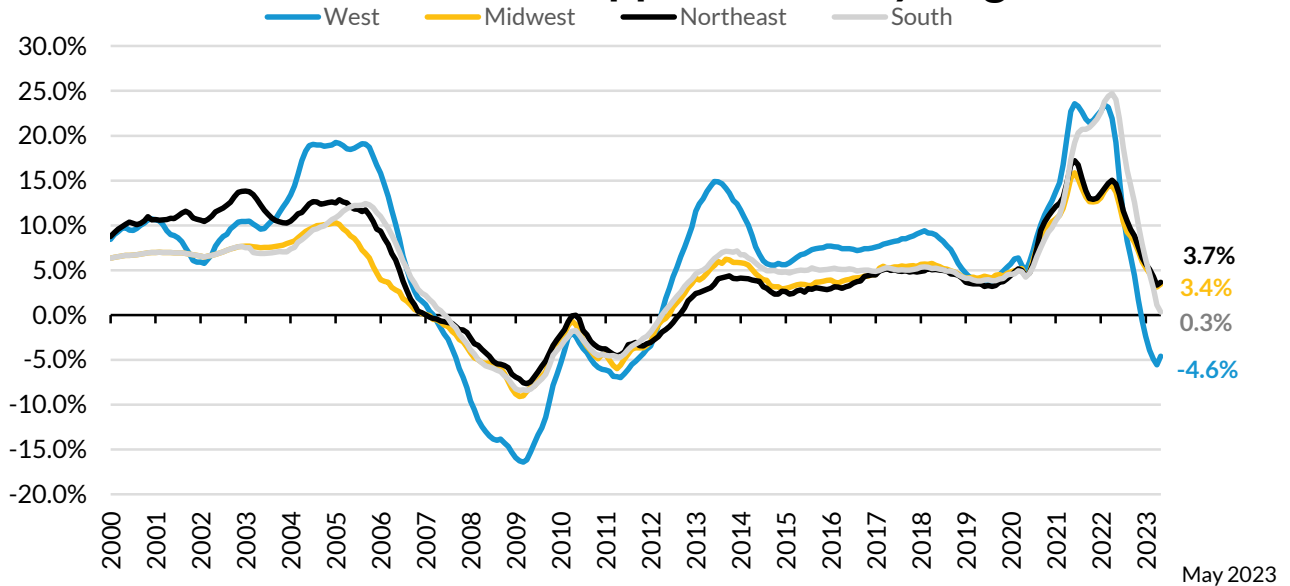
Sources: Black Knight and Urban Institute. Note: Black Knight modified the methodology behind their HPI in February 2021, resulting in changes to historic price estimates. Data as of May 2023.

OVERVIEW

REGIONAL HOME PRICE INDICES

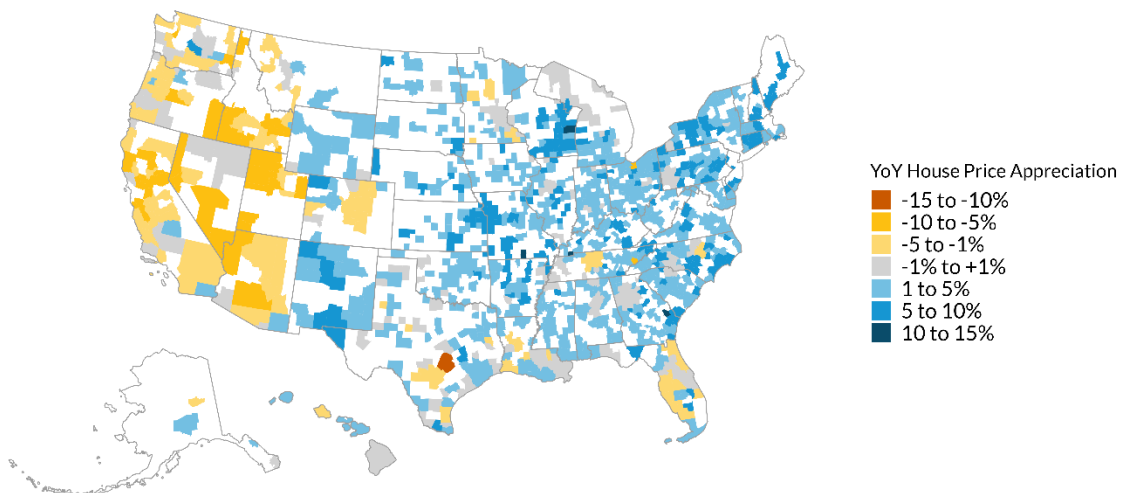
In May 2023, house prices in the West region were 4.6 percent lower than their level 12 months ago, decelerating from the 5.6 percent year-over-year decline in April. In contrast, house prices rose in the Northeast, Midwest, and South regions of the country by 3.7, 3.4 and 0.3 percent respectively. This house price softening reverses nationwide acceleration over most of 2020 and 2021. The acceleration in house price growth over this period was led by the South and by the West. While house price performance across the South is traditionally not an outlier region compared to the other three regions of the country, house prices across the West are historically more volatile.

Year over Year House Price Appreciation by Region



Source: Black Knight and Urban Institute Calculations.

Year over Year House Price Appreciation by Metro and Micropolitan Areas

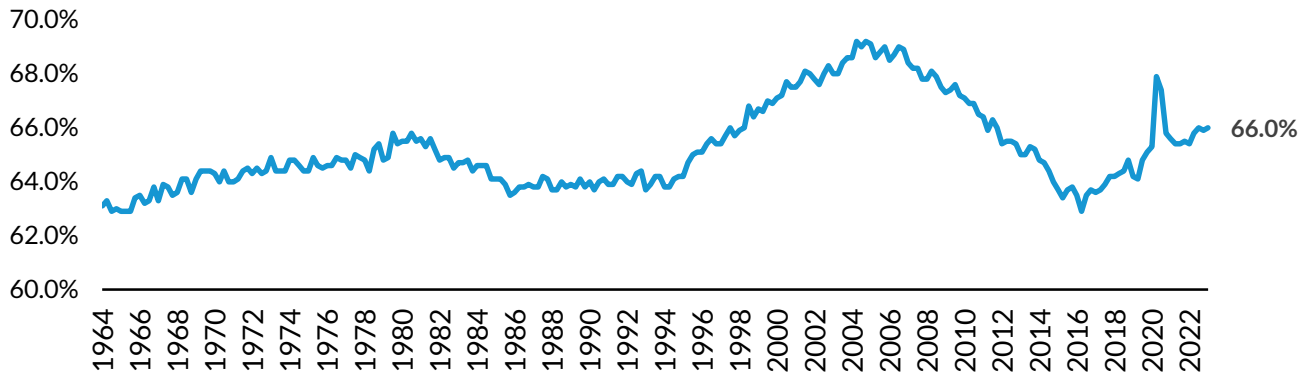


Source: Black Knight and Urban Institute Calculations.

HOMEOWNERSHIP RATES

After falling to 62.9 percent in the second quarter of 2016, the homeownership rate has begun to recover. In the first quarter of 2023, the homeownership rate was at 66.0 percent, 0.1 percentage point higher than its fourth quarter of 2022 rate, 65.9 percent, and 0.6 percentage point higher than its rate in the first quarter of 2022, 65.4 percent. However, the homeownership rate remains three percentage points below its first quarter of 2005 peak of 69.0 percent. By age groups, senior households are more likely to be homeowners relative to younger households. In addition, the homeownership rate for households 65 years old and above is closest to its 2000s peak levels. By race and ethnicity, white households are more likely to be homeowners relative to households of color. However, the homeownership rate among Hispanic households is closest to returning to its 2000s peak.

Homeownership Rate

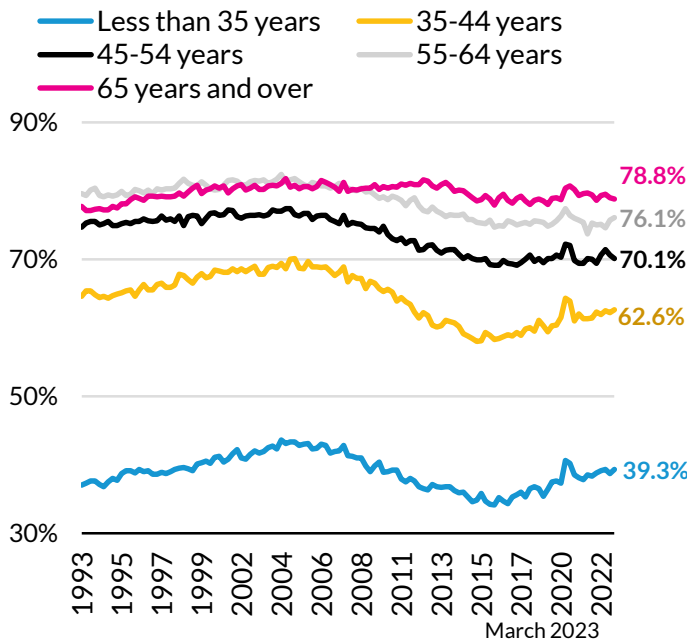


Source: U.S. Census Bureau (BOC) and Urban Institute Calculations.

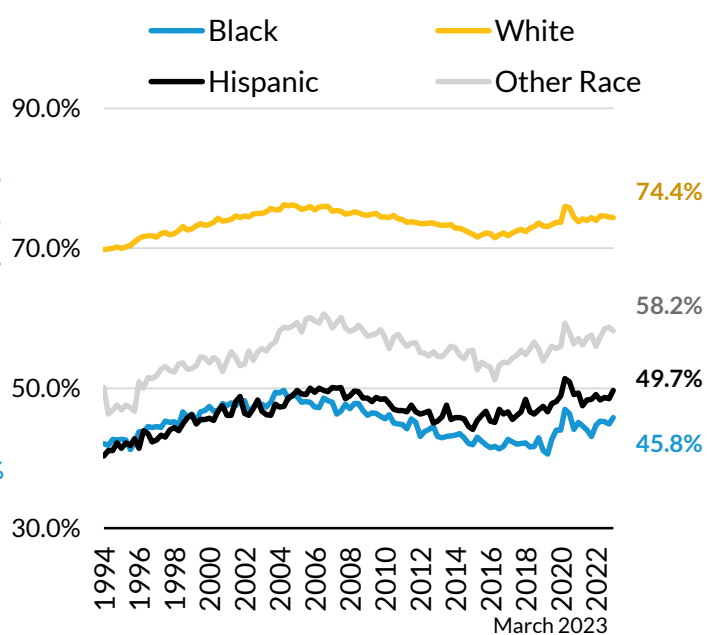
Note: Data from 2020 and 2021 is poor due to low survey response rates during the pandemic.

March 2023

Homeownership by Owner Age



Homeownership Rate by Race/Ethnicity



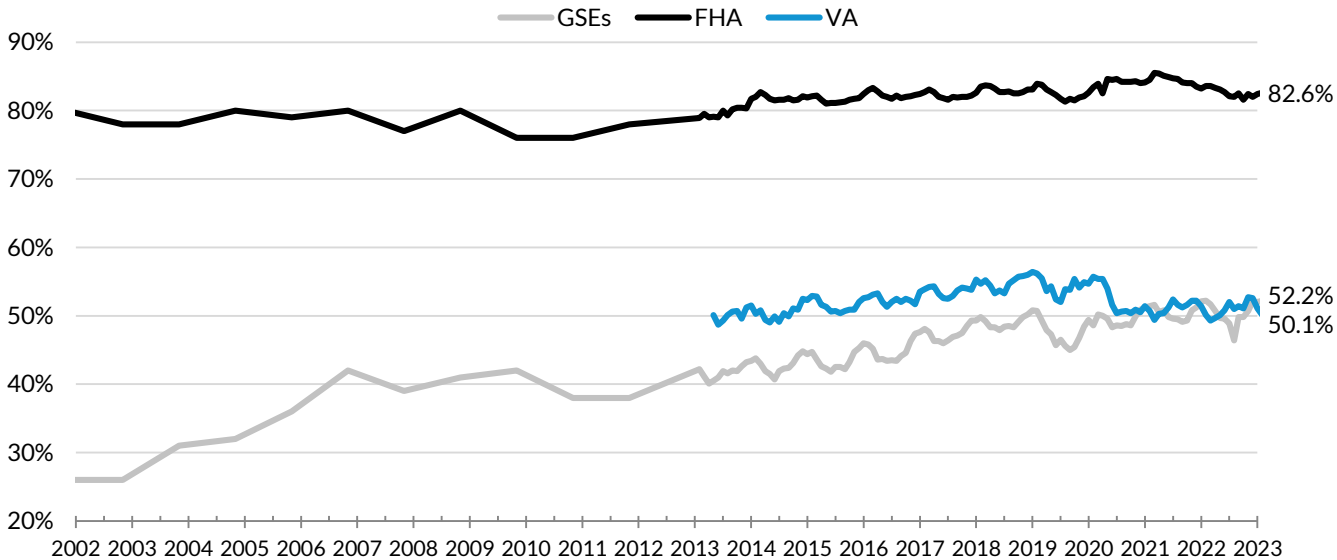
Source: U.S. Census Bureau (BOC) and Urban Institute Calculations.

STATE OF THE MARKET

FIRST-TIME HOMEBUYERS

First-Time Homebuyer Share

In April 2023, the FTHB share for FHA, which has always been more focused on first time homebuyers, was 82.6 percent. The FTHB share of GSE lending in April was 52.2 percent; the VA share was 50.1 percent. The bottom table shows that based on mortgages originated in April 2023, the average FTHB was more likely than an average repeat buyer to take out a smaller loan, have a lower credit score, and have a higher LTV, thus paying a higher interest rate.



Sources: eMBS, Federal Housing Administration (FHA), and Urban Institute.

April 2023

Note: All series measure the first-time homebuyer share of purchase loans for principal residences.

Comparison of First-Time and Repeat Homebuyers, GSE and FHA Originations

Characteristics	GSEs		FHA		GSEs and FHA	
	First-time	Repeat	First-time	Repeat	First-time	Repeat
Loan Amount (\$)	323,846	340,971	284,982	299,047	311,660	343,364
Credit Score	745	756	676	672	718	741
LTV (%)	86	76	95	92	90	81
DTI (%)	38	38	45	47	41	41
Loan Rate (%)	6.44	6.39	6.36	6.32	6.40	6.35

Sources: eMBS and Urban Institute.

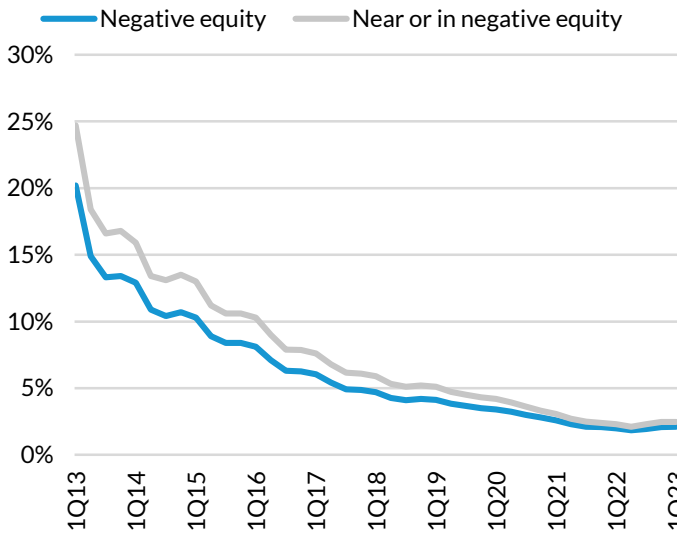
Note: Based on owner-occupied purchase mortgages originated in April 2023.

STATE OF THE MARKET

DELINQUENCIES AND LOSS MITIGATION ACTIVITY

Loans in and near negative stayed steady at 2.5 percent from Q4 2022 to Q1 2023. The share of loans in or near negative equity in Q1 2023 consists of approximately 2.1 percent with negative equity, and 0.4 percent with between zero and 5 percent equity. The share of loans that are 90 days or more delinquent or in foreclosure increased by 7 basis points, from 1.74 percent in Q4 2022 to 1.81 percent in Q1 2023. This number includes loans where borrowers have missed their payments, including loans in COVID-19 forbearance. The bottom chart shows the share of loans in forbearance according to the MBA Weekly Forbearance and Call Volume Survey, launched in March 2020. After peaking at 8.55 percent in early June 2020, the total forbearance rate declined to 2.06 percent as of October 31st, 2021, the final week of the call survey. The MBA has since moved to conducting a monthly survey with the most recent forbearance rate decreased 2 bp to 0.49 percent as of May 31, 2023. GSE loans have consistently had the lowest forbearance rates, standing at 0.23 percent at the end of May. The most recent forbearance rate for other (e.g., portfolio and PLS) loans was 0.58 percent; Ginnie Mae loans had the highest forbearance rate at 1.06 percent.

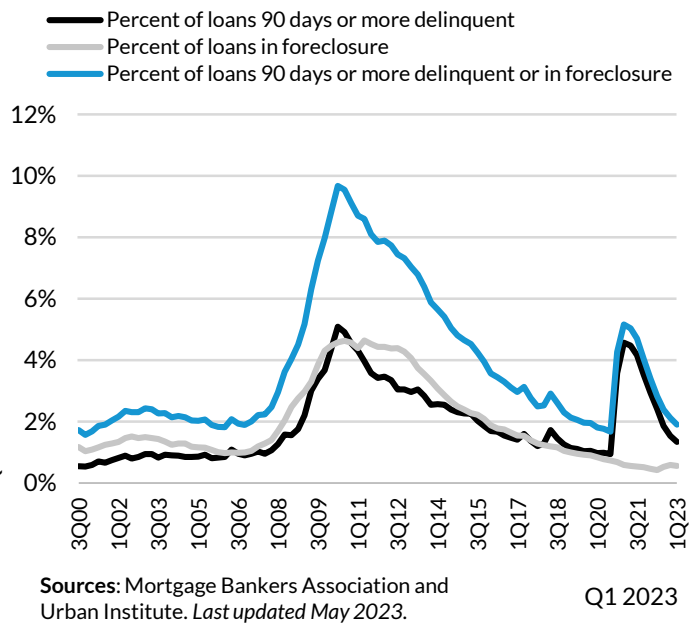
Negative Equity Share



Sources: CoreLogic and Urban Institute.

Note: Loans with negative equity refer to loans above 100 percent LTV. Loans near negative equity refer to loans above 95 percent LTV. Last updated June 2023.

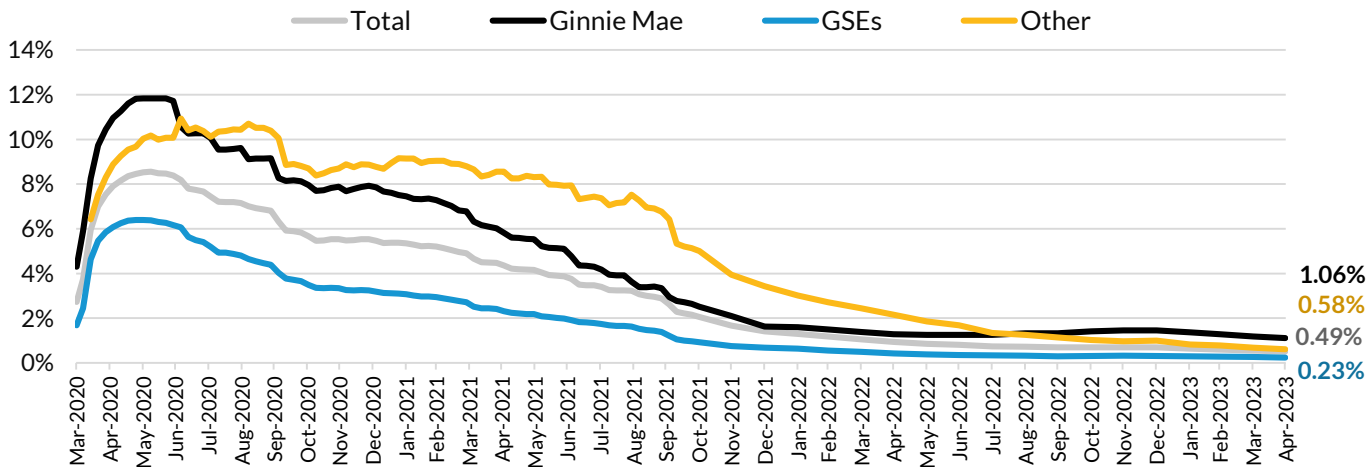
Loans in Serious Delinquency/Foreclosure



Sources: Mortgage Bankers Association and Urban Institute. Last updated May 2023.

Q1 2023

Forbearance Rates by Channel



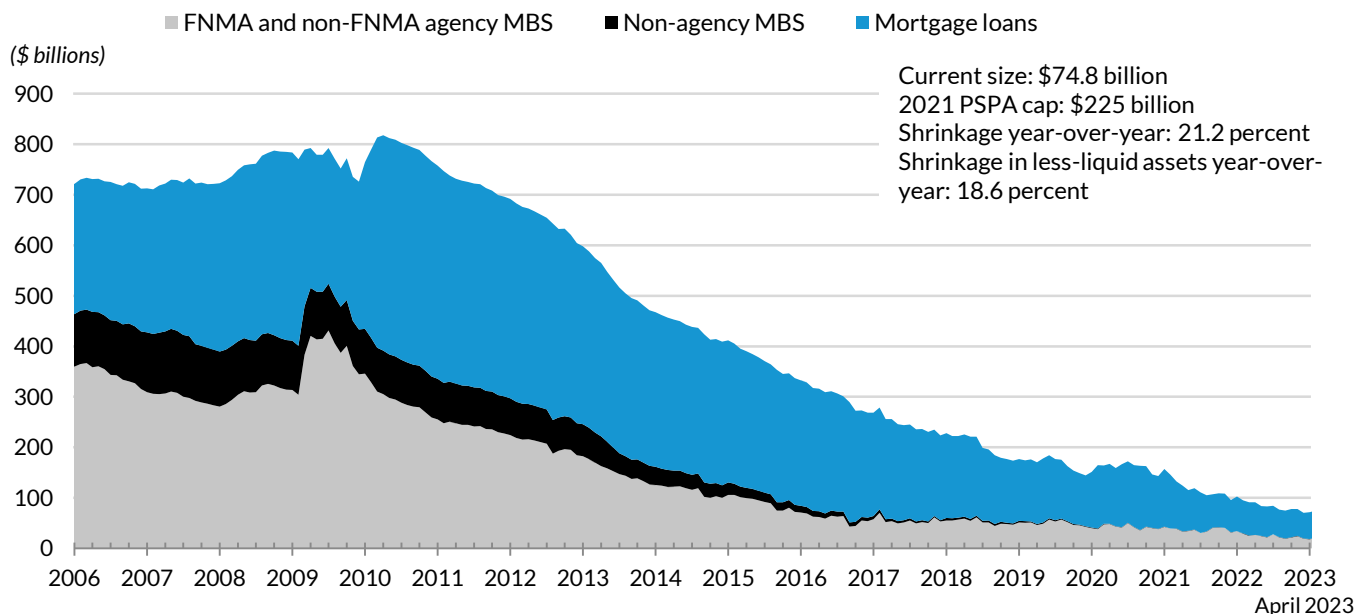
Source: MBA Weekly Forbearance and Call Volume Survey. Forbearance rates as of May 31st, 2023

GSES UNDER CONSERVATORSHIP

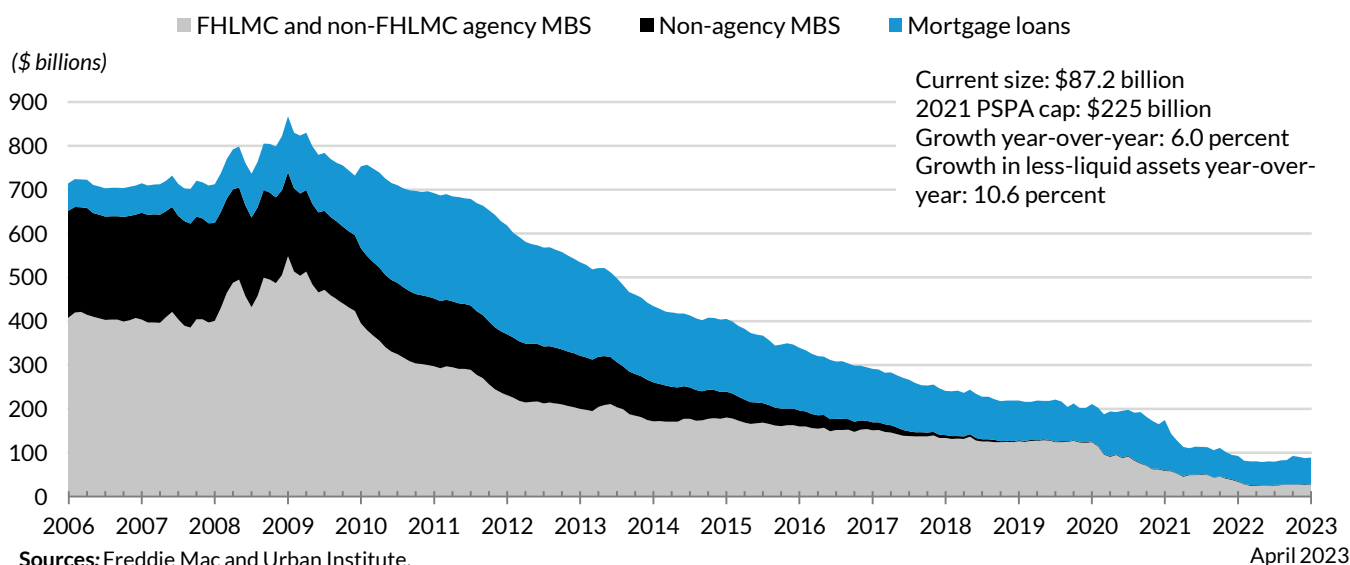
GSE PORTFOLIO WIND-DOWN

The Fannie Mae and Freddie Mac portfolios remain well below the \$225 billion cap mandated in January 2021 by the new Preferred Stock Purchase Agreements (PSPAs). From April 2022 to April 2023, the Fannie portfolio contracted year-over-year by 21.2 percent, and the Freddie portfolio grew by 6.0 percent. Within the portfolio, Fannie Mae contracted their less-liquid assets (mortgage loans, non-agency MBS), by 18.6 percent and Freddie Mac increased their less-liquid assets by 10.6 percent, over the same 12-month period.

Fannie Mae Mortgage-Related Investment Portfolio Composition



Freddie Mac Mortgage-Related Investment Portfolio Composition



Note: Effective March 2021, Freddie Mac doesn't provide FHLMC/non-FHLMC breakout of agency MBS. The above charts were updated in May 2021 to reflect this.

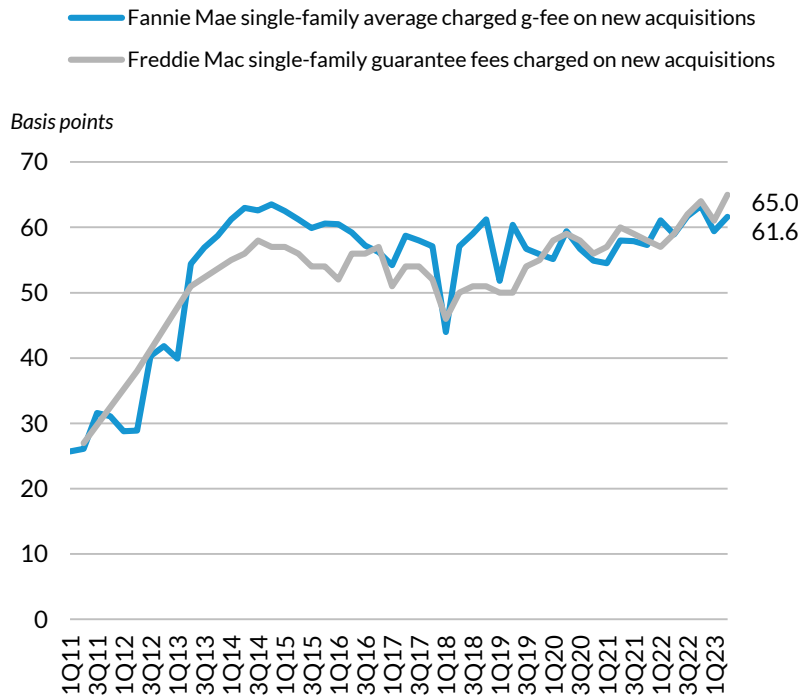
GSES UNDER CONSERVATORSHIP

EFFECTIVE GUARANTEE FEES

Guarantee Fees Charged on New Acquisitions

Fannie Mae's average g-fees charged on new acquisitions increased from 59.4 bps in Q4 2022 to 61.6 basis points in Q1 2023. Freddie's increased from 61.0 basis points in Q4 2022 to 65.0 basis points in Q1 2023. Fannie Mae and Freddie Mac's average g-fees charged have largely converged since the first quarter of 2020, but the current gap of 3.4 is the widest it has been since Q1 2022. Today's g-fees are markedly higher than g-fee levels in 2011 and 2012, and have contributed to the GSEs' earnings amid sharp drops in acquisition volume; the bottom table shows Fannie Mae LLPAs, which are expressed as upfront charges. In October 2022, the GSEs announced the elimination of LLPAs for loans to FTHB's earning up to the AMI, affordable mortgage products such as Home Possible and Home Ready, and for loans supporting the Duty to Serve program. In January 2023, the GSEs released an updated LLPA Adjustment Matrix, effective May 1, 2023.

Sources: Fannie Mae, Freddie Mac and Urban Institute.
Last updated May 2023.



Fannie Mae Upfront Loan-Level Price Adjustments (LLPAs)

Credit Score	LTV (%)								
	≤60	30.01 – 60	60.01 – 70	70.01 – 75	75.01 – 80	80.01 – 85	85.01 – 90	90.01 – 95	>95
> 779	0.000	0.000	0.000	0.500	0.375	0.375	0.250	0.250	0.125
760 – 779	0.000	0.000	0.000	0.250	0.625	0.625	0.500	0.500	0.250
740 – 759	0.000	0.000	0.125	0.375	0.875	1.000	0.750	0.625	0.500
720 – 739	0.000	0.000	0.250	0.750	1.250	1.250	1.000	0.875	0.750
700 – 719	0.000	0.000	0.375	0.875	1.375	1.500	1.250	1.125	0.875
680 – 699	0.000	0.000	0.625	1.125	1.750	1.875	1.500	1.375	1.125
660 – 679	0.000	0.000	0.750	1.375	1.875	2.125	1.750	1.625	1.250
640 – 679	0.000	0.000	1.125	1.500	2.250	2.500	2.000	1.875	1.500
< 640	0.000	0.125	1.500	2.125	2.750	2.875	2.625	2.250	1.750

Effective 5/1/2023

Sources: Fannie Mae and Urban Institute.
Last updated January of 2023.

GSEs UNDER CONSERVATORSHIP

GSE RISK-SHARING TRANSACTIONS

Fannie Mae and Freddie Mac have been laying off back-end credit risk through CAS/STACR and reinsurance transactions and front-end risk via originators, reinsurers and mortgage insurers. Since 2014, the GSEs have transferred majority of their credit risk to private markets. Fannie Mae's CAS issuances since inception total \$2.16 trillion; Freddie's STACR totals \$2.69 trillion. After the COVID-19 spread widening in March 2020, and the re-proposed capital rules released by FHFA shortly thereafter, Fannie Mae did not issue any deals from Mar 2020 to Sep 2021, while Freddie Mac continued to issue. With the changes in the final Capital Rule more CRT friendly, and more positive attitude toward CRT at FHFA, Fannie resumed CAS issuance in October 2021.

Fannie Mae – Connecticut Avenue Securities (CAS)

Date	Transaction	Reference Pool Size (\$m)	Amount Issued (\$m)	% of Reference Pool Covered
2013	CAS 2013 deals	\$26,756	\$675	2.5
2014	CAS 2014 deals	\$227,234	\$5,849	2.6
2015	CAS 2015 deals	\$187,126	\$5,463	2.9
2016	CAS 2016 deals	\$236,459	\$7,392	3.1
2017	CAS 2017 deals	\$264,697	\$8,707	3.3
2018	CAS 2018 deals	\$205,900	\$7,314	3.6
2019	CAS 2019 deals	\$291,400	\$8,071	2.8
2020	CAS 2020 deals	\$210,000	\$3,130	1.5
2021	CAS 2021 deals	\$142,202	\$3,095	2.2
2022	CAS 2022 deals	\$227,576	\$6,173	2.7
January 2023	CAS 2023 – R01	\$23,101	\$731	3.2
February 2023	CAS 2023 – R02	\$20,647	\$709	3.4
April 2023	CAS 2023 – R03	\$38,969	\$622	1.6
May 2023	CAS 2023 – R04	\$21,404	\$765	3.6
Total		\$2,159,123	\$57,349	2.7

Freddie Mac – Structured Agency Credit Risk (STACR)

Date	Transaction	Reference Pool Size (\$m)	Amount Issued (\$m)	% of Reference Pool Covered
2013	STACR 2013 deals	\$57,912	\$1,130	2.0
2014	STACR 2014 deals	\$147,120	\$4,916	3.3
2015	STACR 2015 deals	\$209,521	\$6,658	3.2
2016	STACR 2016 deals	\$183,421	\$5,541	2.8
2017	STACR 2017 deals	\$248,821	\$5,663	2.3
2018	STACR 2018 deals	\$216,581	\$6,055	2.8
2019	STACR 2019 deals	\$271,105	\$5,947	2.2
2020	STACR 2020 deals	\$403,591	\$10,372	2.6
2021	STACR 2021 deals	\$574,706	\$11,024	1.9
2022	STACR 2022 deals	\$327,773	\$11,203	3.4
March 2023	STACR Series 2023 – DNA1	\$15,167	\$611	4.0
April 2023	STACR Series 2023 – DNA2	\$18,242	\$762	4.2
May 2023	STACR Series 2023 – HQA1	\$13,876	\$317	2.3
Total		\$2,694,248	\$71,399	2.6

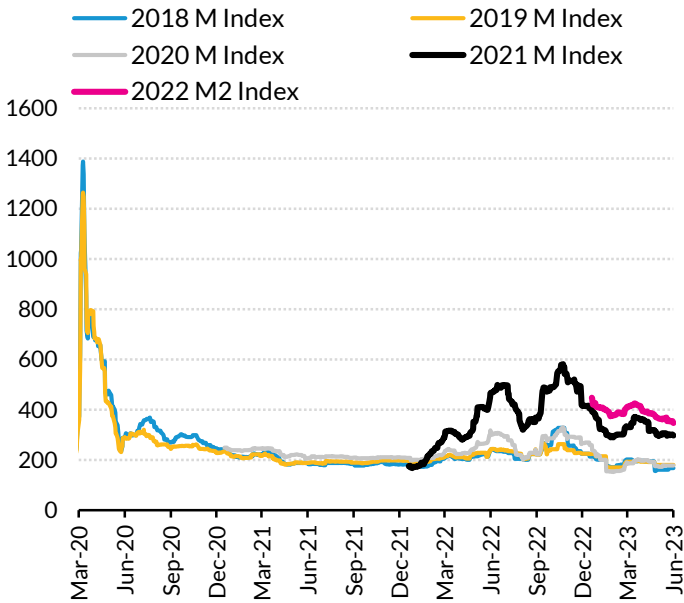
Sources: Fannie Mae, Freddie Mac and Urban Institute. Note: Classes A-H, M-1H, M-2H, and B-H are reference tranches only. These classes are not issued or sold. The risk is retained by Fannie Mae and Freddie Mac. "CE" = credit enhancement.

GSES UNDER CONSERVATORSHIP

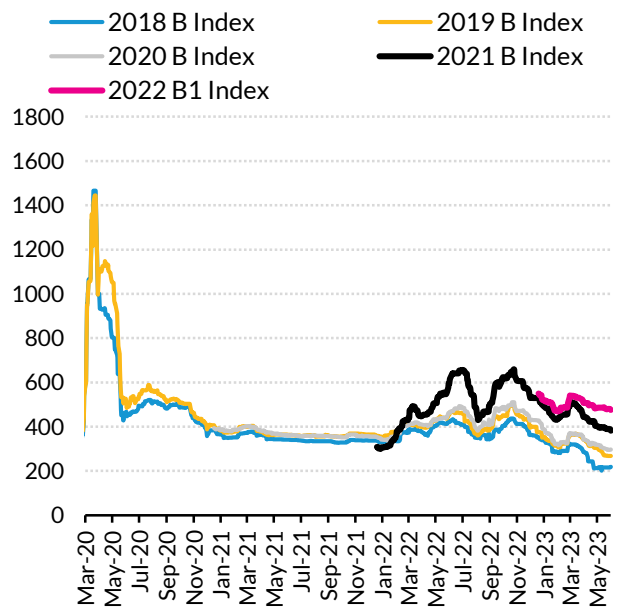
GSE RISK-SHARING INDICES

The figures below show the spreads on 2018, 2019, 2020, 2021 and 2022 indices, as priced by dealers. Note the substantial spread widening in March 2020. This reflected expectations of higher defaults and potential credit losses owing to COVID-19, as well as forced selling. Since then, spreads have narrowed significantly. Spreads, while volatile, were generally widening from February through November of 2022. This reflects slower prepayment expectations and longer exposure to default risk in the face of higher rates. The widening is more pronounced for 2021 and 2022 indices due to less embedded home price appreciation including recent price declines in some market and a growing risk of a recession. Spreads have largely declined over the last 5 months as mortgage non-performance and the unemployment rate remain low. Note that the 2020 and 2021 indices are heavily Freddie Mac as Fannie did not issue any new deals from Q2 2020 to Q4 2021.

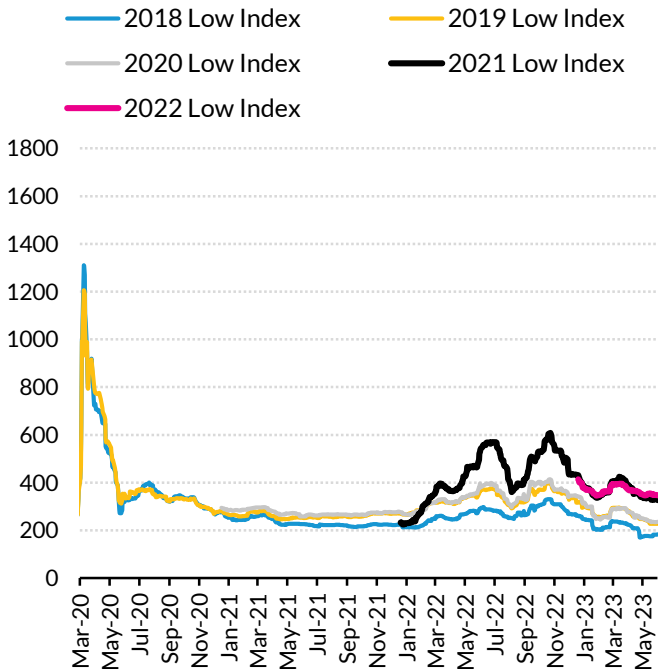
M Indices



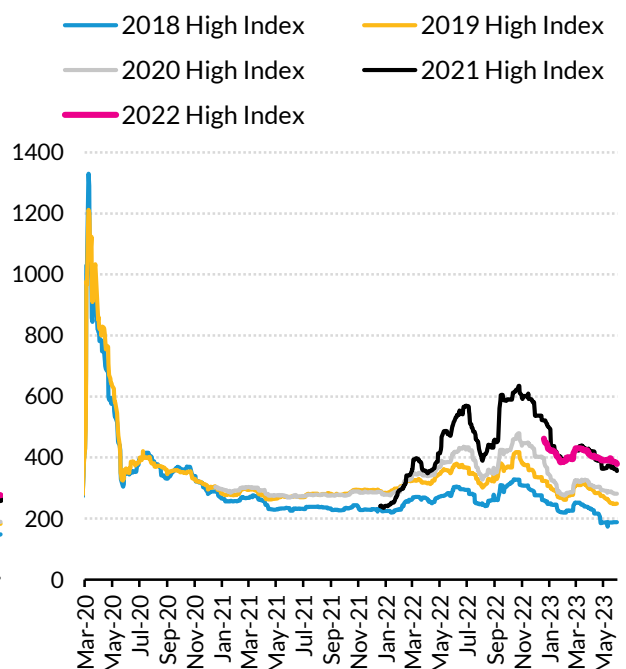
B Indices



Low Indices



High Indices



Sources: Vista Data Services and Urban Institute.

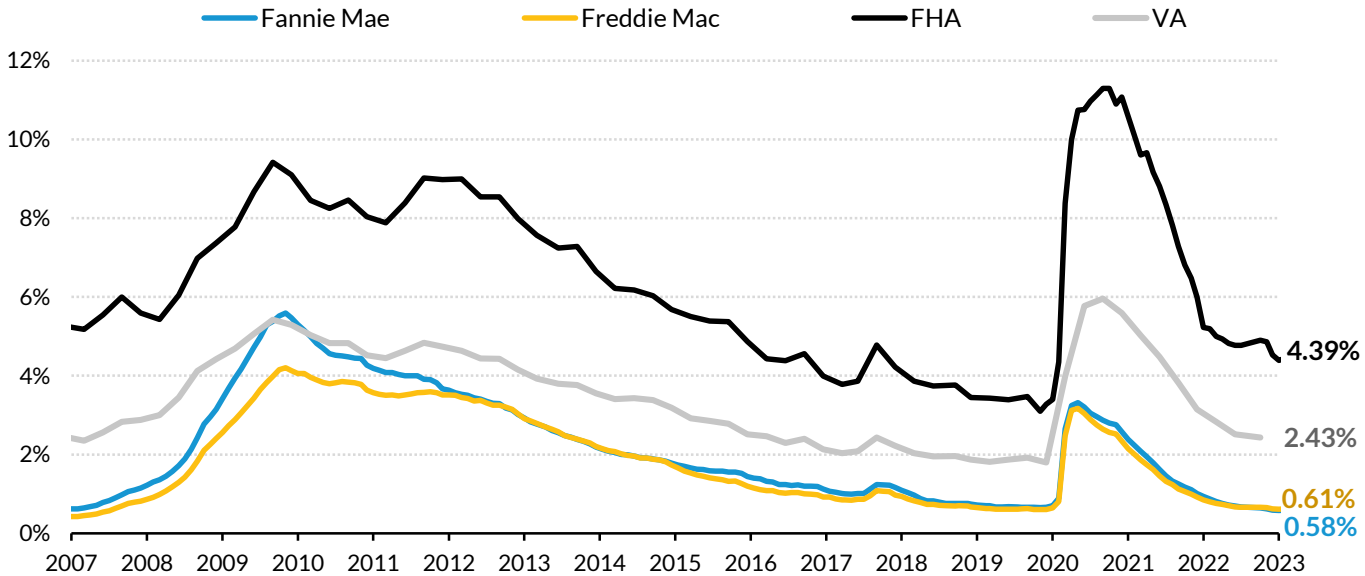
Note: Data as of June 15, 2023.

GSES UNDER CONSERVATORSHIP

SERIOUS DELINQUENCY RATES

Serious delinquency rates for single family loans have continued their decline. Fannie Mae single-family loans decreased slightly from 0.59 percent in March 2023 to 0.58 percent in April 2023, the serious delinquency rate among Freddie Mac loans likewise decreased slightly from 0.62 percent in March to 0.61 percent in April. Serious delinquency rates for FHA loans, which are higher than those on GSE or VA loans, decreased from 4.53 percent in March to 4.39 percent in April. In Q4 2022, VA serious delinquency rates declined to 2.43 percent from 2.51 percent in Q3. Note that loans that are in forbearance are counted as delinquent for the purpose of measuring delinquency rates. Fannie and Freddie multifamily delinquencies increased marginally from 0.35 percent and 0.13 percent respectively in March 2023 to 0.38 percent and 0.19 percent in April 2023.

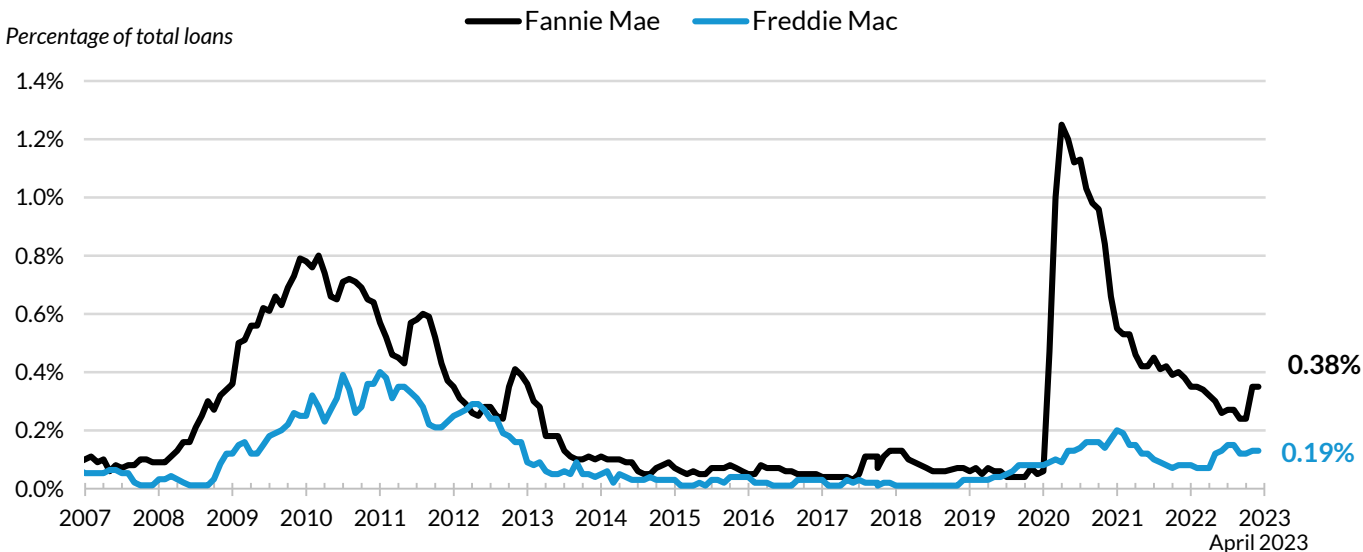
Serious Delinquency Rates—Single-Family Loans



Sources: Fannie Mae, Freddie Mac, Federal Housing Administration, MBA Delinquency Survey and Urban Institute.

Note: Serious delinquency is defined as 90 days or more past due or in the foreclosure process. Not seasonally adjusted. VA delinquencies are reported on a quarterly basis, last updated for Q4 2022. GSE and FHA delinquencies are reported monthly, last updated for April 2023.

Serious Delinquency Rates—Multifamily GSE Loans



Sources: Fannie Mae, Freddie Mac and Urban Institute.

Note: Multifamily serious delinquency rate is the unpaid balance of loans 60 days or more past due, divided by the total unpaid balance.

AGENCY ISSUANCE

AGENCY GROSS AND

NET ISSUANCE

Agency gross issuance totaled \$384.8 billion over the first five months of 2023, \$241.7 billion by the GSEs and \$143.1 billion by Ginnie Mae. These levels are considerably lower than early 2022 issuance activity. Total 2023 net issuance (new securities issued less the decline in outstanding securities due to principal pay-downs or prepayments) also lags 2022 levels. However, Ginnie Mae has been stronger to-date as the \$69.6 billion issued through May exceeds the \$38.9 billion issued over the same period in 2022.

Agency Gross Issuance

Agency Net Issuance

Issuance Year	GSEs	Ginnie Mae	Total	Issuance Year	GSEs	Ginnie Mae	Total
2002	\$1,238.9	\$169.0	\$1,407.9	2002	\$357.20	-\$51.20	\$306.10
2003	\$1,874.9	\$213.1	\$2,088.0	2003	\$334.90	-\$77.60	\$257.30
2004	\$872.6	\$119.2	\$991.9	2004	\$82.50	-\$40.10	\$42.40
2005	\$894.0	\$81.4	\$975.3	2005	\$174.20	-\$42.20	\$132.00
2006	\$853.0	\$76.7	\$929.7	2006	\$313.60	\$0.20	\$313.80
2007	\$1,066.2	\$94.9	\$1,161.1	2007	\$514.90	\$30.90	\$545.70
2008	\$911.4	\$267.6	\$1,179.0	2008	\$314.80	\$196.40	\$511.30
2009	\$1,280.0	\$451.3	\$1,731.3	2009	\$250.60	\$257.40	\$508.00
2010	\$1,003.5	\$390.7	\$1,394.3	2010	-\$303.20	\$198.30	-\$105.00
2011	\$879.3	\$315.3	\$1,194.7	2011	-\$128.40	\$149.60	\$21.20
2012	\$1,288.8	\$405.0	\$1,693.8	2012	-\$42.40	\$119.10	\$76.80
2013	\$1,176.6	\$393.6	\$1,570.1	2013	\$69.10	\$87.90	\$157.00
2014	\$650.9	\$296.3	\$947.2	2014	\$30.5	\$61.6	\$92.1
2015	\$845.7	\$436.3	\$1,282.0	2015	\$75.1	\$97.3	\$172.5
2016	\$991.6	\$508.2	\$1,499.8	2016	\$127.4	\$125.8	\$253.1
2017	\$877.3	\$455.6	\$1,332.9	2017	\$168.5	\$131.3	\$299.7
2018	\$795.0	\$400.6	\$1,195.3	2018	\$149.4	\$112.0	\$261.5
2019	\$1,042.6	\$508.6	\$1,551.2	2019	\$197.8	\$95.7	\$293.5
2020	\$2,407.5	\$775.4	\$3,182.9	2020	\$632.8	\$19.9	\$652.7
2021	\$2,650.8	\$855.3	\$3,506.1	2021	\$753.5	\$5.6	\$759.1
2022	\$1,200	\$527.4	\$1,727.4	2022	\$276.6	\$133.3	\$409.3
2023 YTD	\$241.7	\$143.1	\$384.8	2023 YTD	\$26.0	\$66.0	\$92.0
YTD 2023 % Change Over 2022	-64.7%	-44.1%	-59.1%	YTD 2023 % Change Over 2022	-86.9%	69.6%	-61.3%
2023 Annualized	\$580.0	\$343.44	\$923.472	2023 Annualized	\$62.4	\$158.4	\$220.8

Sources: eMBS and Urban Institute.

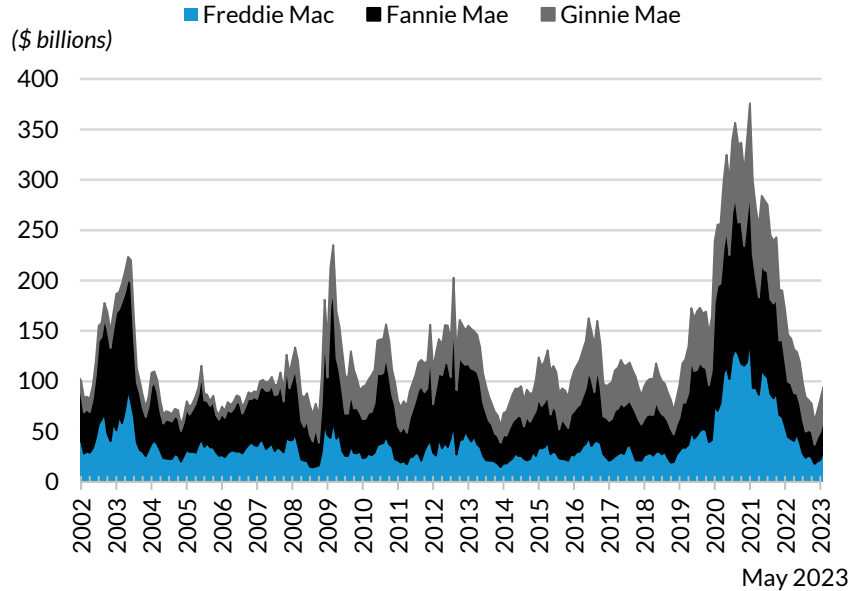
Note: Dollar amounts are in billions. Data as of May 2023.

AGENCY ISSUANCE

AGENCY GROSS ISSUANCE & FED PURCHASES

Monthly Gross Issuance

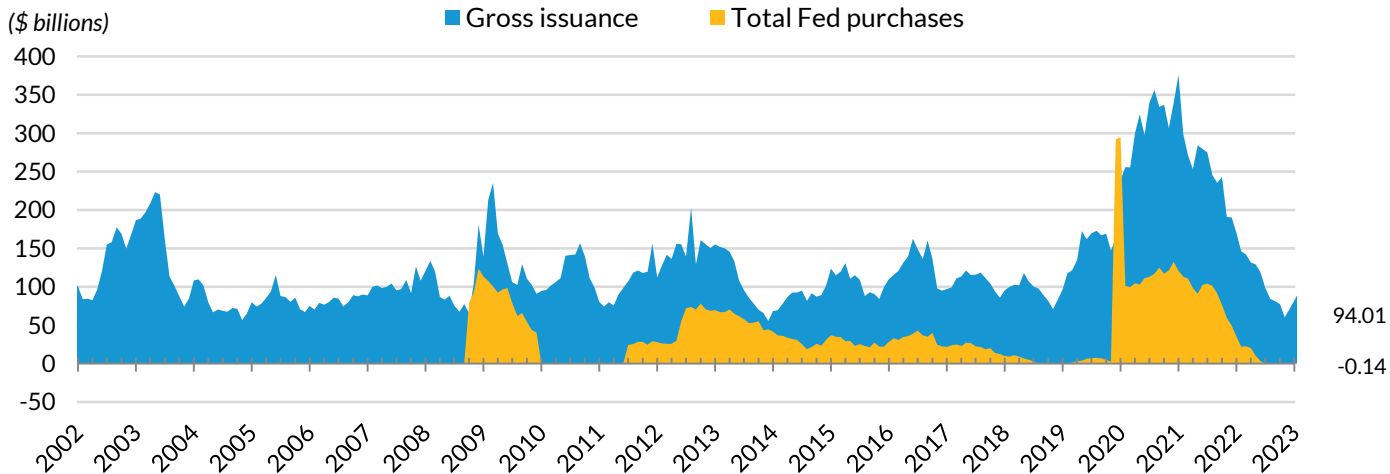
While FHA, VA and GSE lending have dominated the mortgage market since the 2008 housing crisis, there has been a change in the mix. The Ginnie Mae share of new issuances has risen from a pre-crisis level of 10-12 percent to 34.8 percent in February 2020, reflecting gains in both purchase and refinance shares. The Ginnie share then declined to a low of 20.4 percent in November 2020, reflecting the more robust ramp up in GSE refinances relative to Ginnie Mae refinances. The Ginnie share increased in recent months while refinances were low reaching a high of 40.8 percent in November 2022. The Ginnie share decreased from 39.3 percent in April to 35.4 percent in May 2023 but remains high by historical standards.



Source: eMBS and Urban Institute Calculations

Fed Absorption of Agency Gross Issuance

Agency MBS on the Federal Reserve's balance sheet now totals (\$0.14), down from \$2.66 trillion in November 2022. The Fed's purchases of agency MBS dropped to \$0 in November 2022, reflecting their policy of allowing paydowns up to \$35 billion to run off. Beginning in June 2022, the Fed allowed up to \$17.5 billion to run off each month; the cap on runoffs increased to \$35 billion per month in September 2022. The Federal Reserve's portfolio was a critical policy tool during the pandemic. In March of 2020, the Fed announced they would buy mortgages in an amount necessary to support smooth functioning markets; March and April of 2020 were the largest two months of mortgage purchases ever and exceeded total issuance. Once the market stabilized, the Fed began to purchase \$40 billion net of MBS each month; this buying plus runoff replacements equated to purchases of \$100 to \$125 billion per month. In November 2021, the Fed began to reduce purchases, with these purchases ending in March 2022.



Sources: eMBS, Federal Reserve Bank of New York and Urban Institute.

May 2023

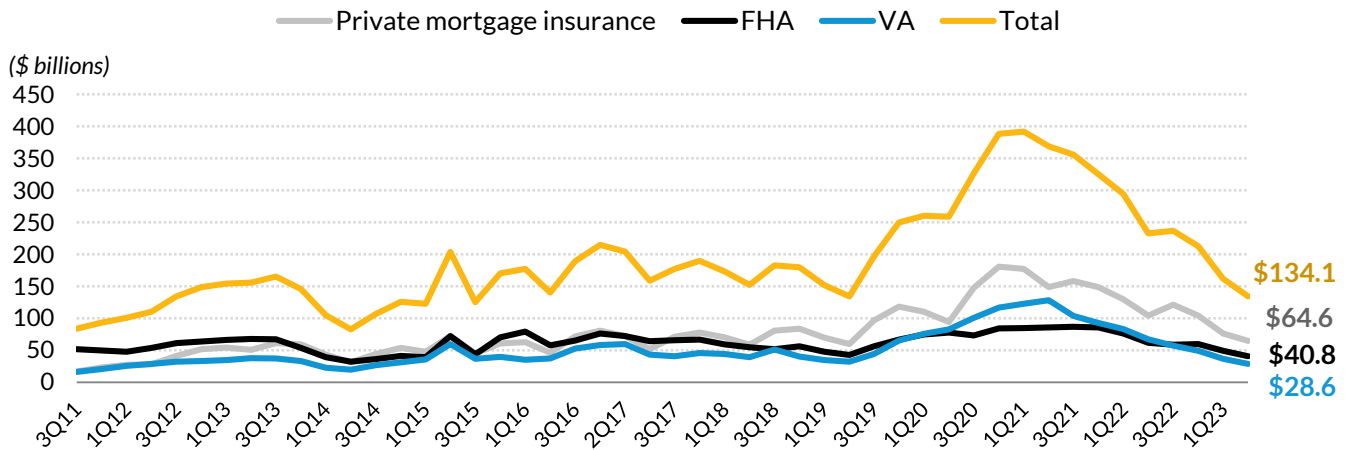
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AGENCY ISSUANCE

MORTGAGE INSURANCE ACTIVITY

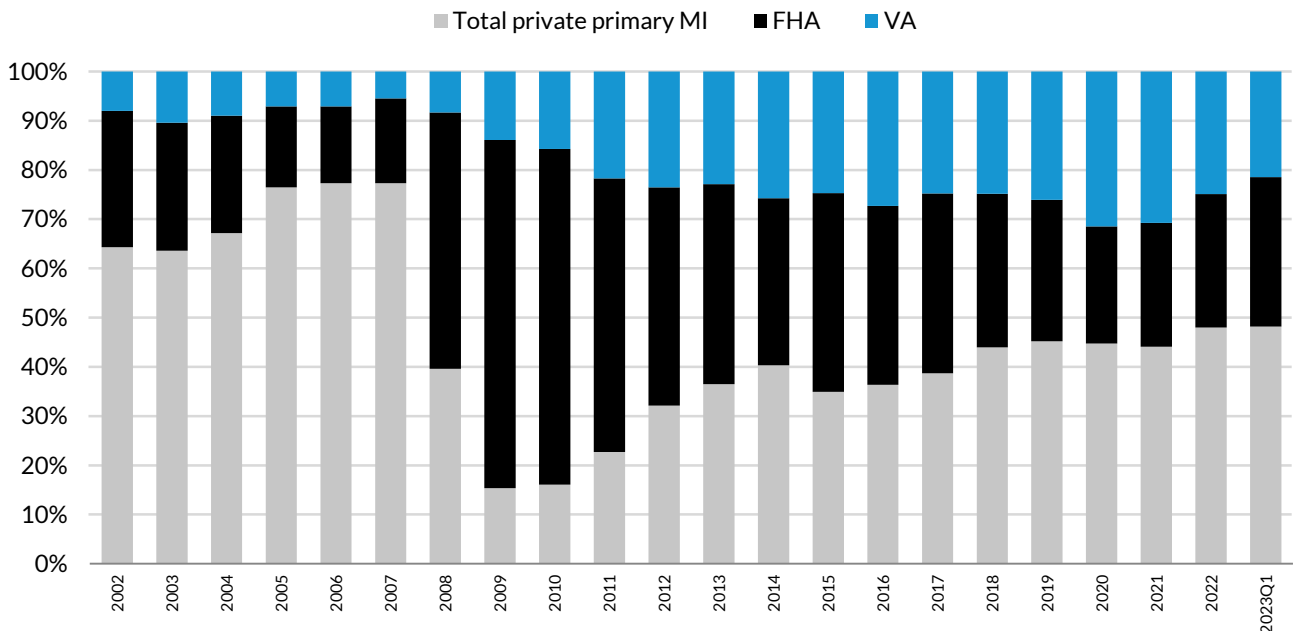
MI Activity

In the first quarter of 2023, private mortgage insurance written decreased by \$39.5 billion, FHA decreased by \$20.9 billion, and VA decreased by \$38.2 billion relative to Q1 2022. Over the same period (i.e. from Q1 2022 to Q1 2023), the private mortgage insurers share increased from 44.7 to 48.2 percent, FHA's share increased from 26.5 to 30.4 percent, and VA's share decreased from 28.8 to 21.4 percent.



Sources: Inside Mortgage Finance and Urban Institute. Last updated May 2023.

MI Market Share



Sources: Inside Mortgage Finance and Urban Institute. Last updated May 2023.

AGENCY ISSUANCE

MORTGAGE INSURANCE ACTIVITY

FHA premiums rose significantly in the years following the housing crash, with annual premiums rising from 50 to 135 basis points between 2008 to 2013 as FHA worked to shore up its finances. In January 2015, President Obama announced a 50 basis points cut in annual insurance premiums. In February 2023, Vice president Harris announced another 30 basis points cut to FHA insurance premiums, making FHA mortgages more attractive than GSE mortgages for the overwhelming majority of borrowers putting down less than 5%. As shown in the bottom table, a borrower putting 3.5 percent down with a FICO score less than 740 will currently find FHA financing to be more financially attractive, borrowers with FICOs of 740 and above will find GSE execution with PMI to be more attractive. This calculation shows both the FHA MIP cut and the new GSE LLPAs; it reflects the more favorable GSE LLPAs for LMI borrowers.

FHA MI Premiums for Typical Purchase Loan

Case number date	Upfront mortgage insurance premium (UFMIP) paid	Annual mortgage insurance premium (MIP)
1/1/2001 - 7/13/2008	150	50
7/14/2008 - 4/5/2010*	175	55
4/5/2010 - 10/3/2010	225	55
10/4/2010 - 4/17/2011	100	90
4/18/2011 - 4/8/2012	100	115
4/9/2012 - 6/10/2012	175	125
6/11/2012 - 3/31/2013 ^a	175	125
4/1/2013 - 1/25/2015 ^b	175	135
1/26/2015 - 3/19/2023 ^c	175	85
Beginning 3/20/2023	175	55

Sources: Ginnie Mae and Urban Institute.

Note: A typical purchase loan has an LTV over 95 and a loan term longer than 15 years. Mortgage insurance premiums are listed in basis points.

* For a short period in 2008 the FHA used a risk based FICO/LTV matrix for MI.

^a Applies to purchase loans less than or equal to \$625,500. Those over that amount have an annual premium of 150 bps.

^b Applies to purchase loans less than or equal to \$625,500. Those over that amount have an annual premium of 155 bps.

^c Applies to purchase loans less than or equal to \$625,500. Those over that amount have an annual premium of 105 bps.

Initial Monthly Payment Comparison: FHA vs. GSE with PMI

		Assumptions							
Property Value		\$300,000							
Loan Amount		\$289,500							
LTV		96.5							
Base Rate									
Conforming Base Rate		6.90							
FHA Base Rate		6.91							
FICO		620 - 639	640 - 659	660 - 679	680 - 699	700 - 719	720 - 739	740 - 759	760 +
FHA MI Premiums									
FHA UFMIP		1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75
FHA MIP		0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55
PMI									
PMI Annual MIP		1.50%	1.31%	1.23%	0.98%	0.79%	0.70%	0.58%	0.46%
Monthly Payment									
FHA		\$2,074	\$2,074	\$2,074	\$2,074	\$2,074	\$2,074	\$2,074	\$2,074
GSE plus PMI		\$2,269	\$2,223	\$2,203	\$2,143	\$2,097	\$2,076	\$2,047	\$2,018
GSE plus PMI Advantage		-\$195	-\$149	-\$130	-\$69	-\$23	-\$2	\$27	\$56

Sources: Enact Mortgage Insurance, Ginnie Mae, and Urban Institute. FHA and 30-year conforming rates from MBA Weekly Applications Survey.

Note: Rates as of June 16, 2023.

Mortgage insurance premiums listed in percentage points. Grey shade indicates FHA monthly payment is more favorable, while blue indicates PMI is more favorable.

The PMI monthly payment calculation is based on the 25 percent coverage that applies to Fannie Mae's HomeReady and Freddie Mac's Home Possible (HP) programs.

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