

HOUSING FINANCE POLICY CENTER



HOUSING FINANCE AT A GLANCE

A MONTHLY CHARTBOOK

March 2024

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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Findings From Optimal Blue Rate Locks

Optimal Blue loan level rate lock data provide daily insights into mortgage lending. With this data set, we investigated timely changes in loan characteristics and lending volume in response to changes in prevailing mortgage interest rates.

The range of mortgage rates offered increased as rates increased

Shopping around for a good mortgage rate became more important as the federal reserve tightened monetary policy and lending costs increased over 2022. We found that variation in interest rates, the difference between the 25th and 75th percentiles of mortgage rates offered in a given week increased significantly in 2022 and has remained elevated through 2023 and so far in 2024 ([page 38](#)).

From 2015 through 2019, variation in interest rates held steady at around 50 basis points. In 2020, as rates decreased to historic lows, this spread decreased to around 40 basis points. Then the spread increased to about 80 basis points as interest rates increased in 2022. The widening in the mortgage rate distribution is generally mirrored by rises in the ICE MOVE index, a measure of interest rate volatility. That is, both the distribution in mortgage rates and the MOVE index experienced a similar rise over 2022 and have remained elevated since. More recently, however, as the MOVE index has declined, the mortgage rate distribution has not narrowed.

In general, there is greater variation in interest rates on refinance loans than purchase. Rates also vary more among government loans (those backed by FHA, VA and USDA) than conventional loans. Variation in interest rates is also greater for borrowers with low credit scores than high ([page 39](#)). These borrowers who are more likely to experience greater variation in interest rates on a weekly basis would likely benefit more from shopping around for better rates.

Cashout refinance loans in a high-rate environment

Less than 2 percent of outstanding agency loans have an interest rate at least 50 basis points higher than the prevailing market interest rate on a 30-year mortgage ([page 9](#)). Most borrowers refinancing now are receiving a higher interest rate, therefore most refinance activity is to extract equity ([page 11](#)). Borrowers pursuing cashout refinances have lower median credit scores than borrowers who pursue rate/term refinances. The median credit scores on rate/term and cashout refinances also increased during 2020, surpassing the

median credit score for purchase loans as a cashout refinance was the most economic way to extract equity. Following the rise in interest rates in 2022, median cashout refinance credit score dropped to a series low and remains low relative to other originations ([page 40](#)), suggesting that the most vulnerable borrowers are the major users of cash out refinances as the vehicle of choice to extract equity; higher credit score borrowers have more attractive options to extract equity, such as home equity line of credit, and may have less need for the cash.

The share of lower credit score borrowers pursuing cashout refinances is higher now than it was in 2013. Moreover, as the cashout refi share increased for all borrowers in 2020 and 2021, borrowers with credit scores below 660 seemed to lag in this rush to refinance, with the lowest cashout share at the beginning of the run-up in mid-2020 and the highest at the peak in early 2022. The cashout refinance share for these lower credit borrowers has been very slow to decrease relative to other groups, as it may be their best option to obtain cash.

Affordability is especially constrained for low-income homebuyers

We are in the midst of a housing affordability crisis, even with interest rates slightly down from October 2023, it is more difficult to afford a house now than it was at the peak of the 2005 housing bubble ([page 23](#)). The median homebuyer in 2023 and so far in 2024 is cost burdened, paying at least 30 percent of monthly earnings on debt payments. However, this crisis is not felt evenly by everyone; lower income homebuyers are more severely cost burdened, with the median homebuyer in 2023 and so far in 2024 with an annual income less than \$150,000 paying over 40 percent of their monthly income on debt payments ([page 41](#)).

Inside this Issue

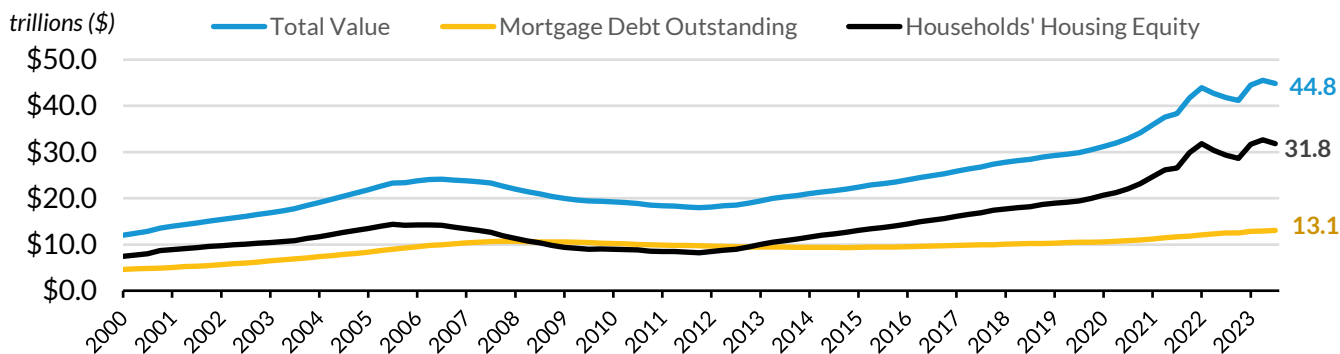
- The Ginnie Mae share of monthly agency gross issuance reached a new series high of 43.5 percent in February ([page 35](#)).
- Agency MBS held by commercial banks increased 16 percent from 2023 Q3 to 2024 Q1 after 6 consecutive quarters of declines ([page 7](#)).
- The serious delinquency rate on Freddie Mac's multifamily loans increased to 0.44 from 0.28 percent, nearly equal to Fannie Mae's rate of 0.45 percent ([page 33](#)).

OVERVIEW

MARKET SIZE OVERVIEW

In the fourth quarter of 2023, the total value of the housing market owned by households decreased by 1.5 percent to \$44.8 trillion, driven by a 3.5 percent decrease in households' housing equity to \$31.8 trillion. Outstanding mortgage debt owed by households rose by 1.0 percent over the quarter to \$13.1 trillion. Despite the small decline, the total housing market value owned by households in the fourth quarter of 2023 is 85.8 percent above its fourth quarter of 2006 peak. The strong growth in the value of homes owned by households largely reflects households' housing equity, which more than doubled since the fourth quarter of 2006, rising by 124.0 percent. Outstanding mortgage debt owed by households expanded by 31.3 percent during the same time. In the fourth quarter of 2023, agency MBS accounted for 65.1 percent (\$9.1 trillion) of total mortgage debt outstanding while home equity loans made up 3.7 percent (0.51 trillion) and private-label securities made up 3.1 percent (0.43 trillion). Unsecuritized first liens, both Bank Portfolio and Other, comprise the remaining 28.2 percent (\$3.9 trillion) with Banks making up 18.8 percent (\$2.6 trillion), and Other accounting for 9.4 percent (\$1.3 trillion). Of Other, credit unions account for 4.2 percent (\$0.59 trillion), and other non-depositories accounted for 5.2 percent (\$0.73 trillion) of the total (not shown).

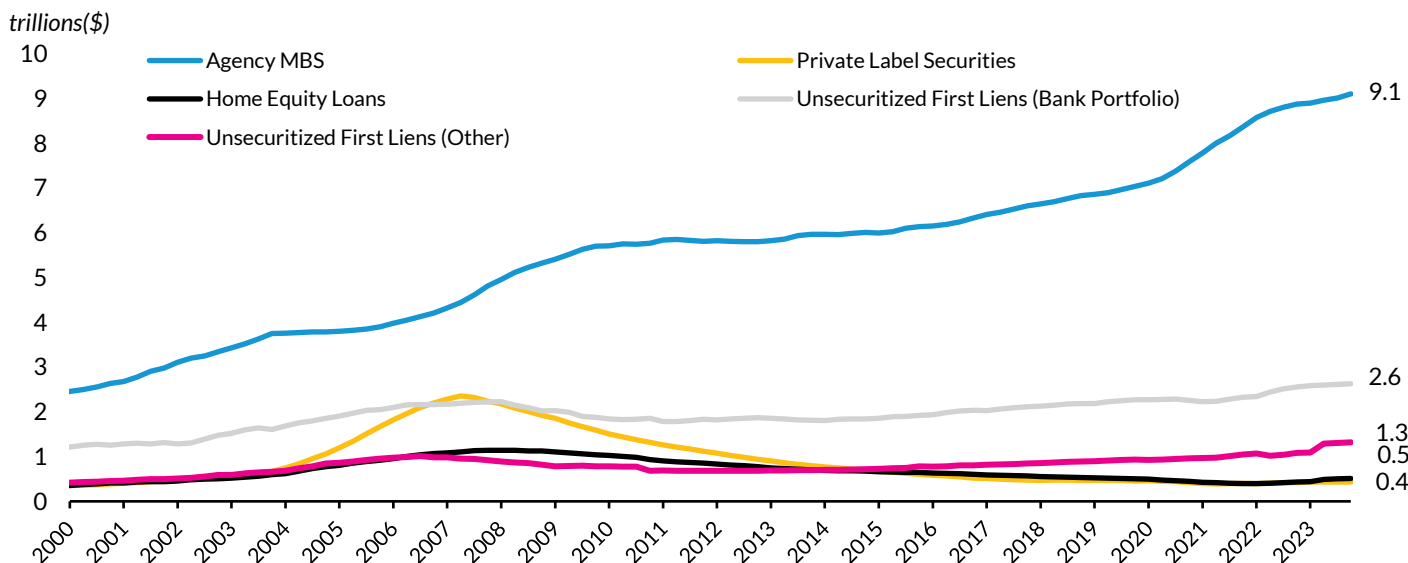
Value of the US Single Family Housing Market



Sources: Financial Accounts of the United States, Table B.101 and Urban Institute. Last updated March 2024.

Note: Single family includes 1-4 family owner-occupied mortgages.

Composition of the US Single Family Mortgage Market



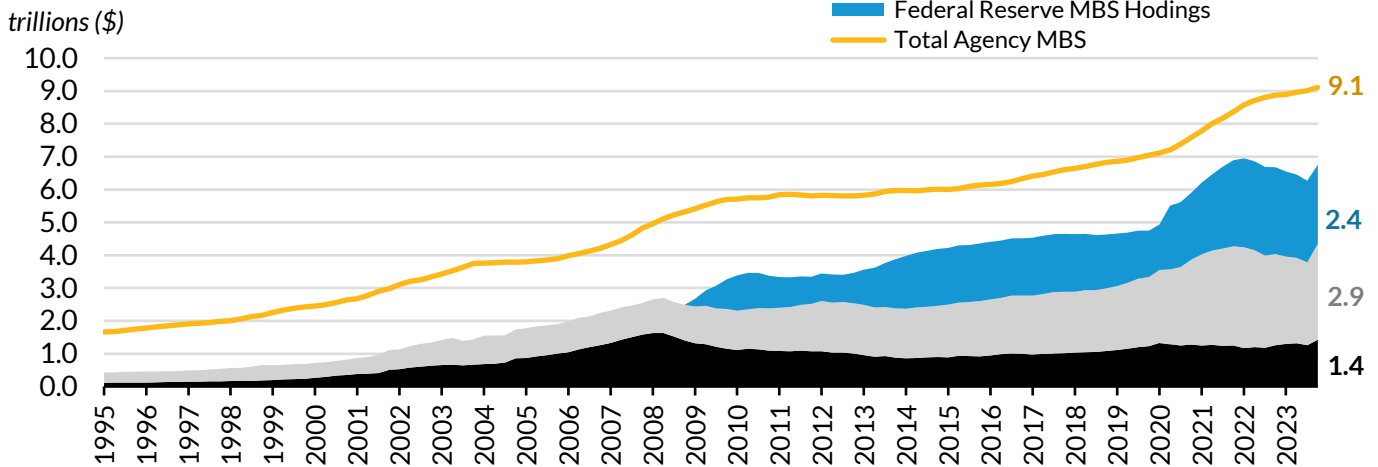
Sources: Financial Accounts of the United States and Urban Institute. Data as of Q4 2023.

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

MARKET SIZE OVERVIEW

The three largest holders of the \$9.1 trillion in outstanding agency MBS are commercial banks (\$2.9 trillion), the Federal Reserve (\$2.4 trillion) and foreign investors (\$1.4 trillion). The foreign investor holdings includes both sovereign as well as private holdings. The Federal Reserve had a noticeable reduction in their holdings over the past year. From Q4 2022 to Q4 2023 Federal Reserve holdings are down by 9 percent, while commercial bank holdings and foreign investor holdings are up by 5 percent and 13 percent, respectively. By the end of January 2024, outstanding securities in the agency market totaled \$9.0 trillion according to loan-level data, 40.3 percent (\$3.6 trillion) of which was Fannie Mae, 33.2 percent (\$3.0 trillion) Freddie Mac, and 26.5 percent (\$2.4 trillion) Ginnie Mae. After closing the gap in securitized volume with Freddie Mac in the aftermath of the Great Recession, Ginnie Mae securitized volumes have lagged particularly over the 2020-2022 period; the gap began to close again in 2023.

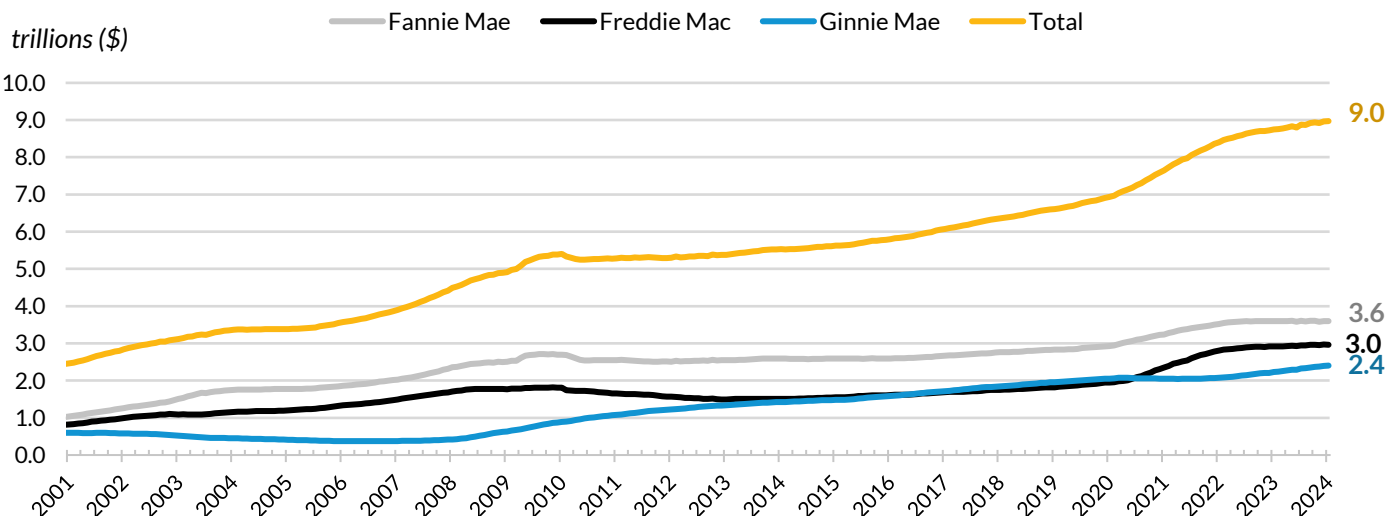
Primary Holders of Agency MBS



Sources: Financial Accounts of the United States (table L.211), Board of Governors of the Federal Reserve System, Federal Deposit Insurance Corporation, Moody's Analytics and Urban Institute Calculations. Data as of Q4 2023.

Note: A small amount (roughly 5%) of foreign MBS holdings is agency debentures. Holders not shown: Households, nonfinancial business, federal, state and local governments, insurance companies, pension and retirement funds, money market and mutual funds, REITs, ABS issuers, brokers,

Agency Mortgage-Backed Securities



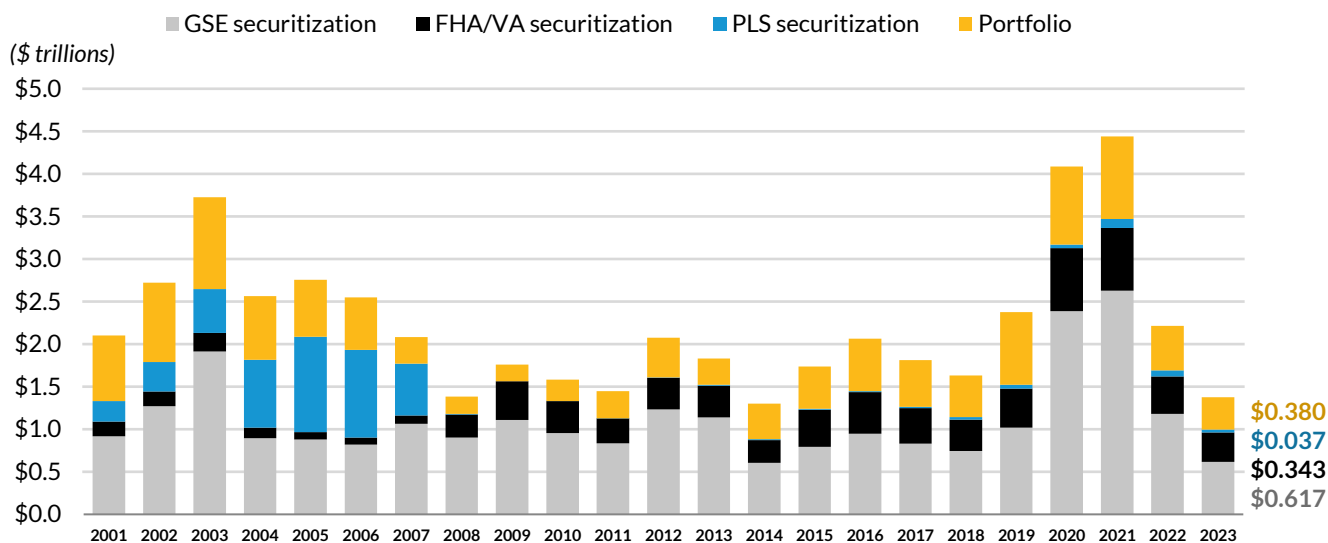
Sources: eMBS and Urban Institute.

Note: Debt between top and bottom charts do not match as top chart includes investor-owned properties. Data as of February 2024.

ORIGINATION VOLUME AND COMPOSITION

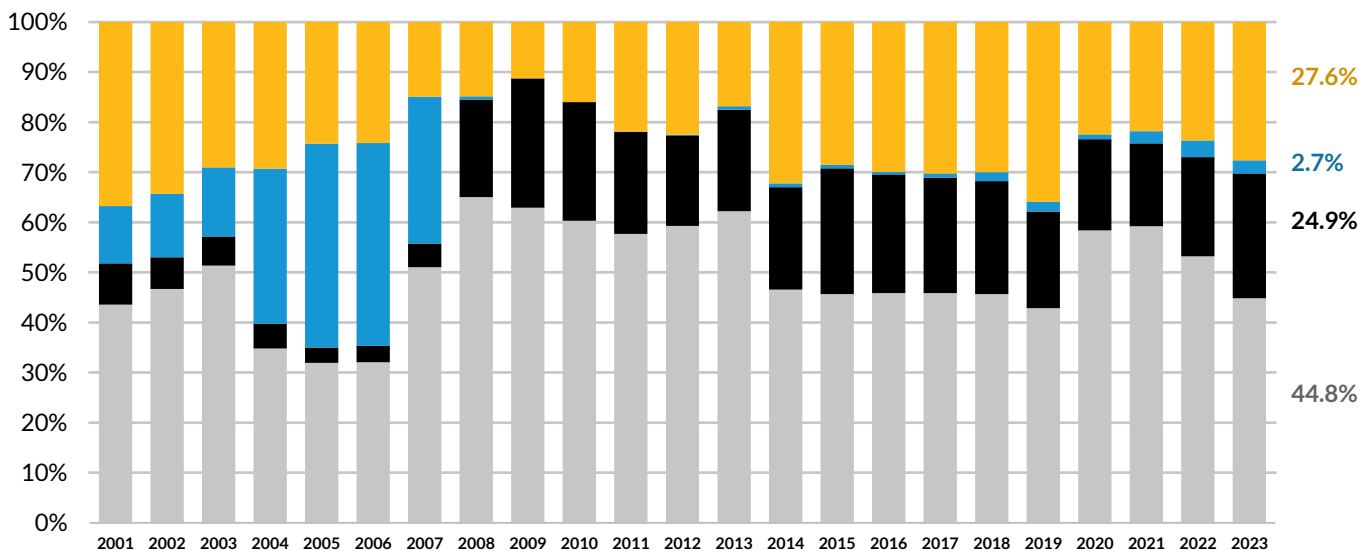
First Lien Origination Volume

Amid rising interest rates, mortgage origination volume totaled \$1.376 trillion for full year 2023, versus \$2.215 trillion for full year 2022. The decline in originations largely reflected fewer refinance loans. The GSE share was lower in 2023 at 44.8 percent, compared to 53.2 percent in 2022. And the PLS share was 2.7 percent in 2023, down from 3.3 percent in 2022. In contrast, portfolio originations made up 27.6 percent of total volume in 2023, up from 23.7 percent in 2022 and the FHA/VA share in 2023 stood at 24.9 percent, up from 19.8 percent in 2022.



Sources: Inside Mortgage Finance and Urban Institute. Data as of Q4 2023.

(Share, percent)



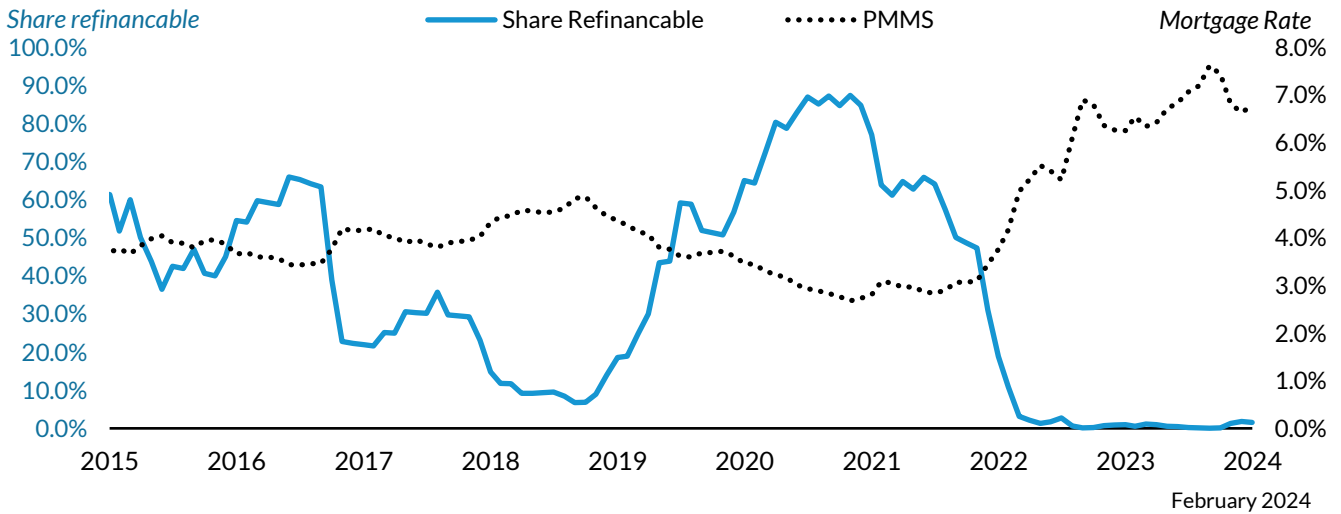
Sources: Inside Mortgage Finance and Urban Institute. Data as of Q4 2023.

OVERVIEW

REFINANCABLE 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 and 2023, the share of agency mortgages considered refinancable plummeted to 3.21 percent in April 2022 and remains low at 1.57 percent in February 2024. Higher mortgage rates helped reduce both refinancability, with many current borrowers having already refinanced into lower rates, and homebuyer affordability. Reduced affordability largely reflects higher mortgage payments and low housing inventory as current homeowners are disincentivized to sell and give up their low-rate mortgages. Amid higher rates, the share of outstanding mortgage volume with a rate of 3.5 percent or less has declined by 7.3 percentage points from a high of 54.9 percent in April 2022 to 47.6 percent in February 2024.

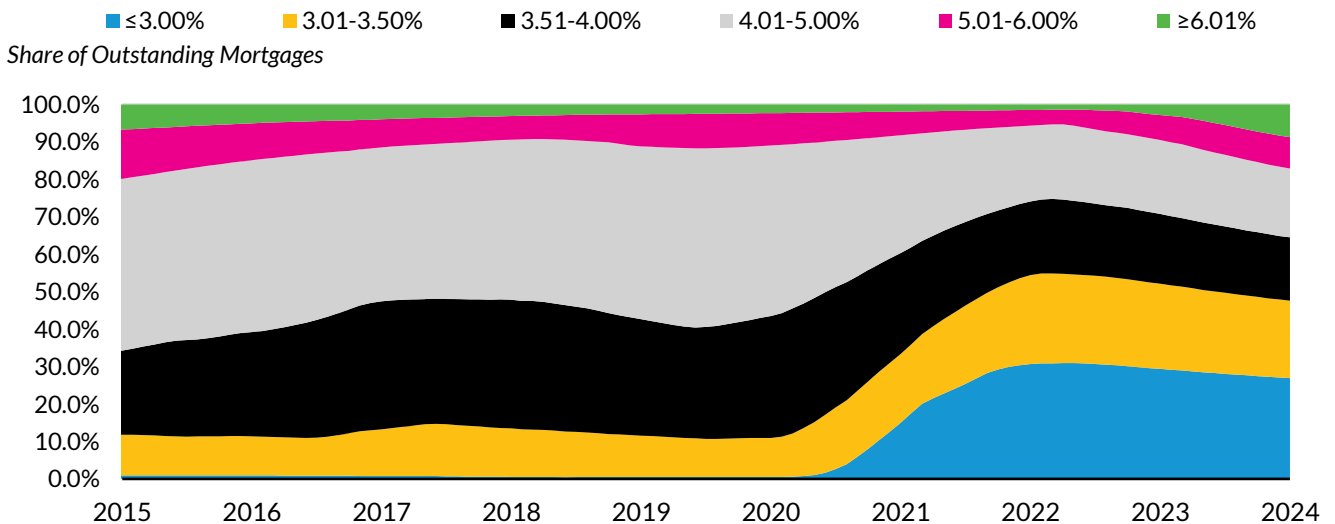
Refinancable Share of Agency Loans



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.

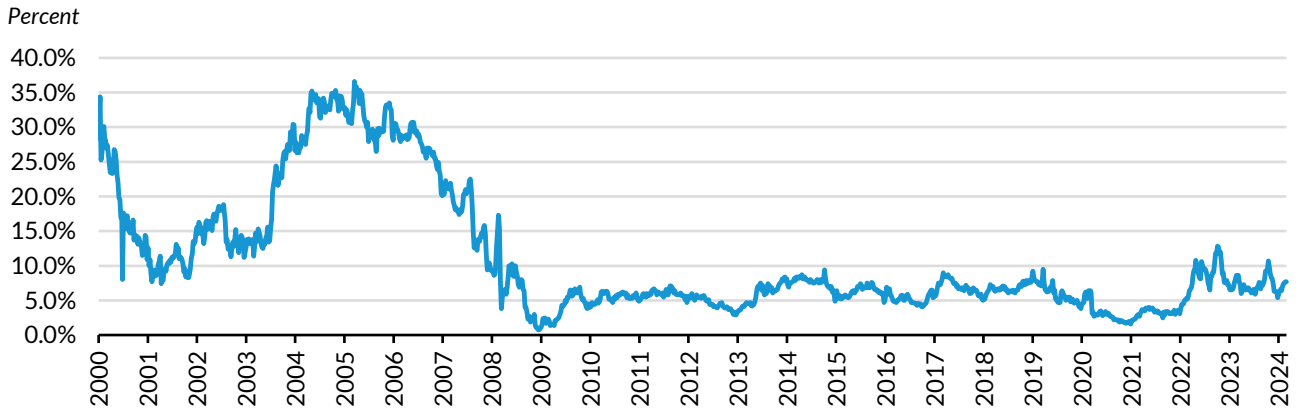
February 2024

OVERVIEW

PRODUCT COMPOSITION AND REFINANCE SHARE

The adjustable-rate share of weekly mortgage applications varied widely in the early to mid-2000s, ranging from a low of 7 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. After subsiding to 5.9 percent by July 21, 2023, the ARM share began another ascent peaking at 10.7 percent, but was at 7.7 percent as of March 8, 2024, within its 2009-2018 range.

Adjustable-Rate Mortgage Share of Applications

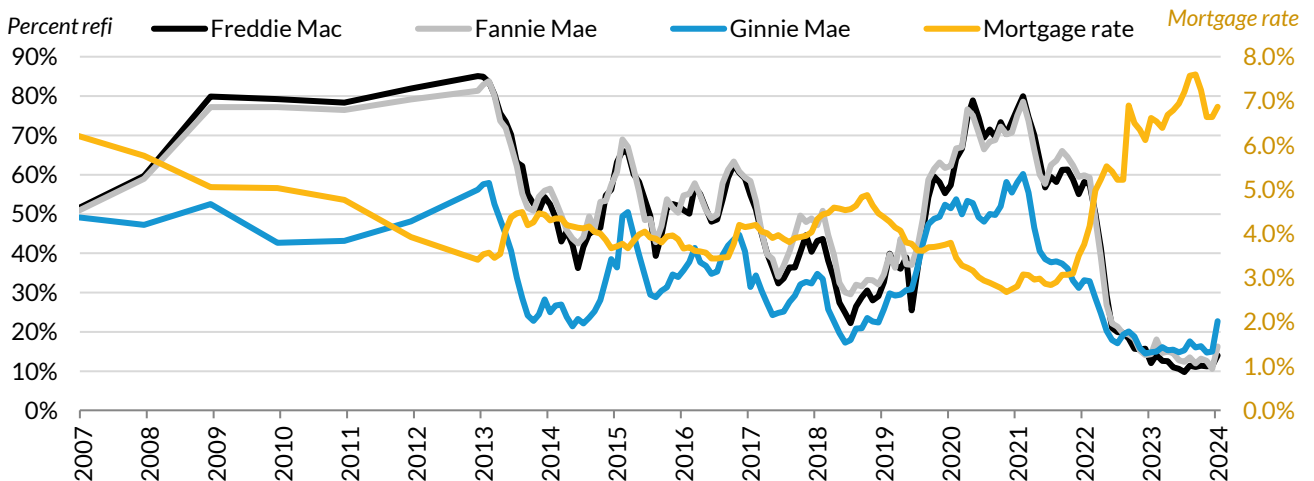


Source: Mortgage Bankers Association (MBA) Weekly Mortgage Applications Survey.

Note: Includes purchase and refinance applications. Data updated through March 8, 2024.

Percent Refi at Issuance

Despite some monthly variation, from late 2018-though 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. In response to increasing interest rates, the refi share has declined significantly over 2022, from over half of GSE originations in the beginning of the year to less than 20 percent by the end of 2022. In January 2024, the Fannie Mae refi share was 16.3 percent. The Freddie Mac refi share was 14.0 percent, and the Ginnie Mae share was 22.7 percent. The refi share across the GSEs has declined much more than Ginnie Mae's as rates increased in 2022 and 2023. This led to a rare reversal, where the Ginnie Mae refi share now exceeding that of the GSEs.



Sources: eMBS and Urban Institute.

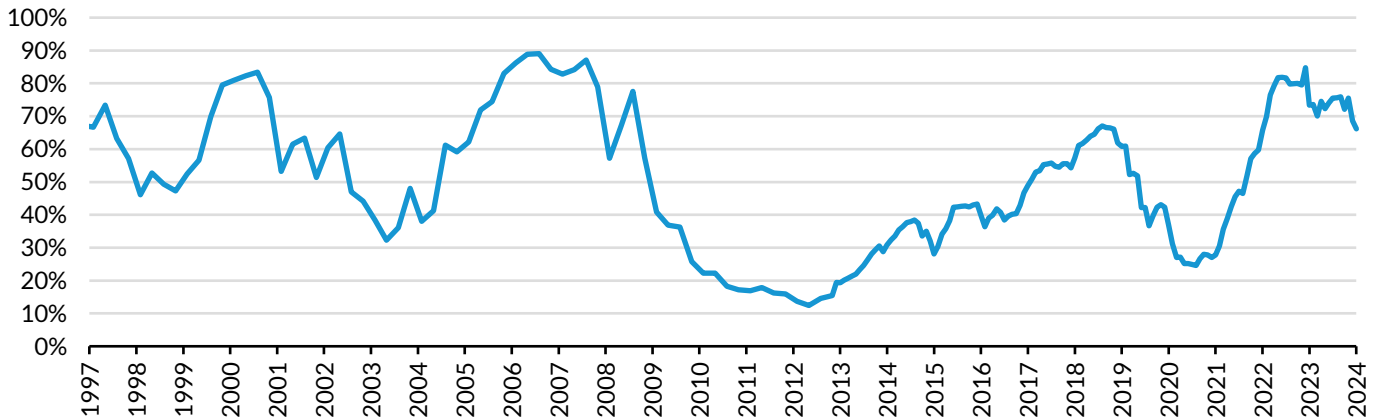
Note: Based on at-issuance balance. Figure based on data from February 2024.

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. As mortgage rates have come off their highs, the cash-out share has broadly declined and is now at 66.1 percent in February 2024. However, while the cash-out share of total refinances remains elevated, the volume of cash-out refinances is low. Moreover, the cash-out refi volume of total originations for Fannie Mae and Freddie Mac lags that of FHA. While cash-out refinances 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.

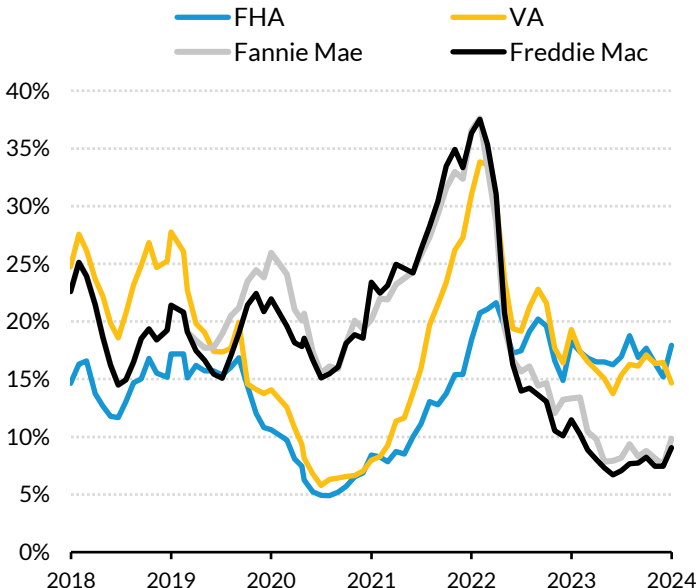
Cash-out Share of Conventional Refinances



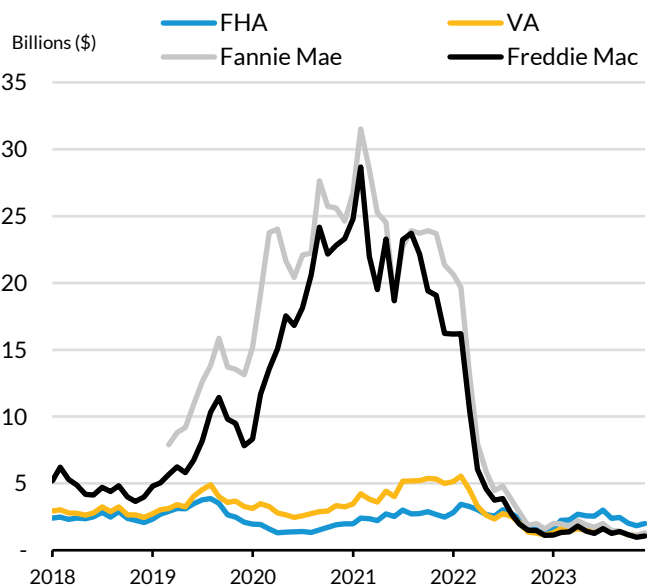
Sources: Freddie Mac, eMBS and Urban Institute.

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 February 2024.

Cash-out Refi Share of All Originations



Cash-out Refinance Volume by Agency



Sources: eMBS and Urban Institute

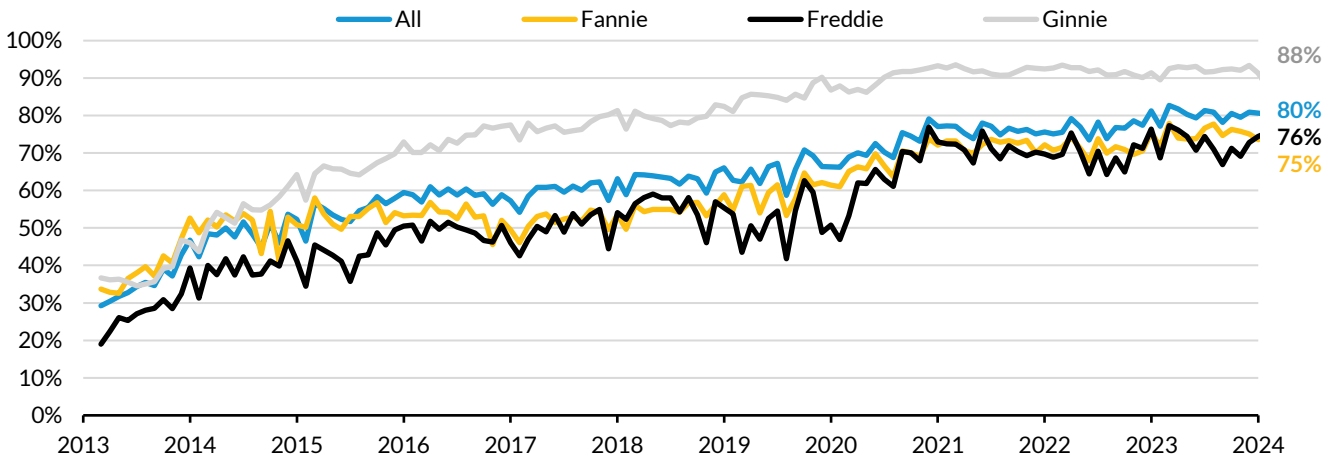
Note: Data as of January 2024. Fannie Mae started reporting cash-out volume in 2018.

OVERVIEW

AGENCY NONBANK ORIGINATION SHARE

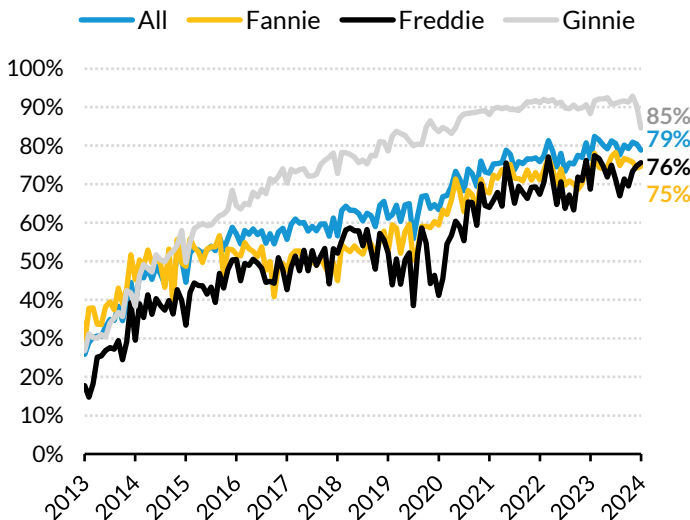
The nonbank share for agency originations has been rising steadily since 2013, standing at 80 percent in February 2024. The Ginnie Mae nonbank share has been consistently higher than the GSEs, standing at 88 percent in February 2024. Fannie and Freddie had nonbank shares of 75 and 76 percent, respectively, in February 2024. Overall, the nonbank share of refis exceeded that of purchase loans. However, the Ginnie nonbank purchase share decreased from 90 to 85 percent from January to February 2024. Conversely, the nonbank share of Fannie and Freddie refi loans increased over the same month by 5.8 and 3.0 percent, respectively.

Nonbank Origination Share: All Loans



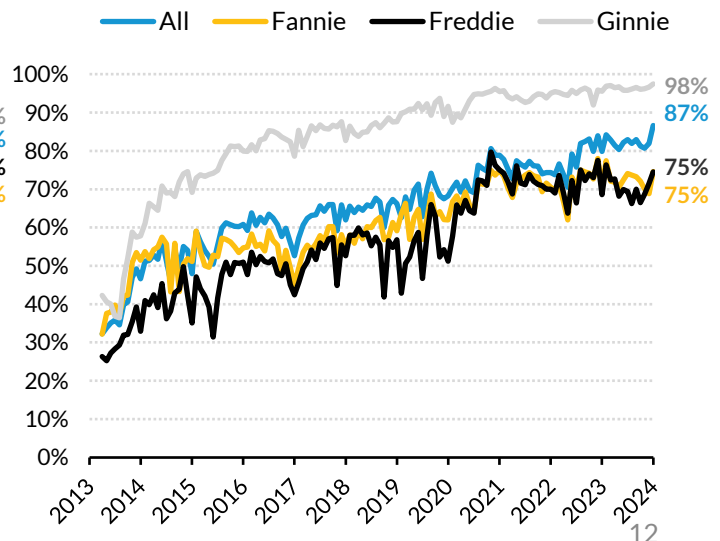
Sources: eMBS and Urban Institute. Data as of February 2024.

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

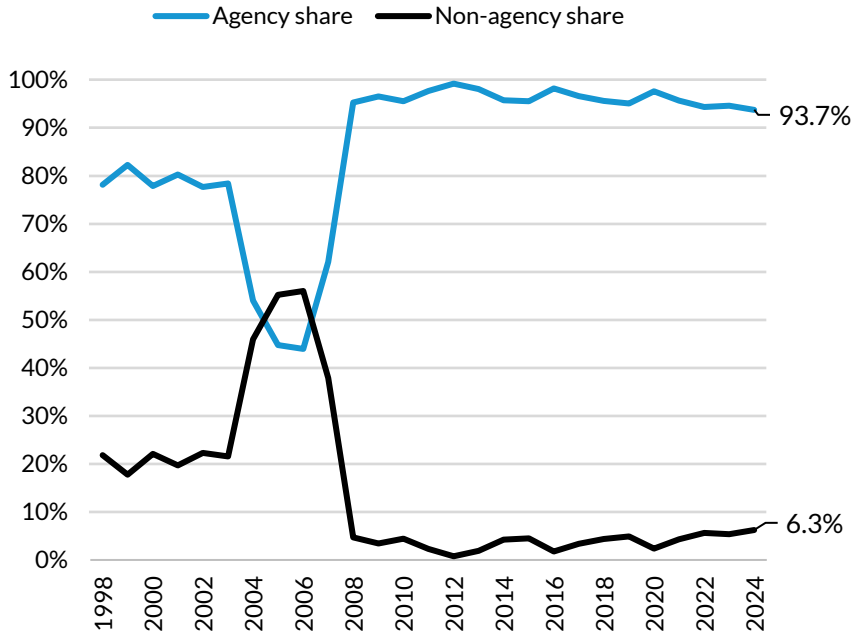
Agency/Non-Agency Share of Residential MBS Issuance

During the housing boom years, the non-agency share of residential MBS issuance rose to more than half of all residential MBS issuance. Amid the collapse in the housing market, the non-agency share contracted to 1.26 percent in 2012. It has remained low since then, oscillating between 2.41 percent and 7.42 percent over this time period and sitting at 6.3 percent in February 2024.

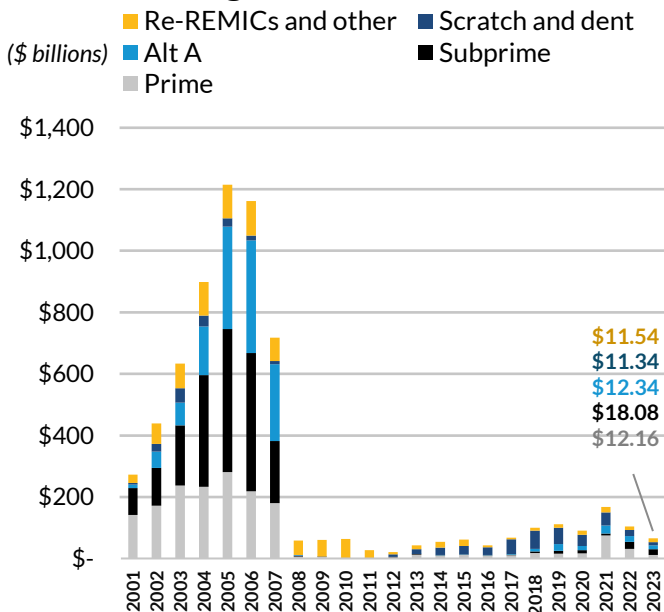
In Q4 2023, non-agency issuance reached \$13.8 billion, a decrease relative to the \$18.1 billion in Q3, but an increase from \$7.3 billion in Q4 2022. Full year non-agency issuance for 2023 was \$65.5 billion, far below the 2022 level of \$103.9 billion. Non-agency securitization totaled \$7.7 billion in February 2024, a significant increase from December 2023, when it stood at \$3.5 billion and higher than volume in February 2023, when it stood at \$6.4 billion.

Sources: Inside Mortgage Finance and Urban Institute.

Note: Based on data from February 2024. Monthly non-agency volume is subject to revision.



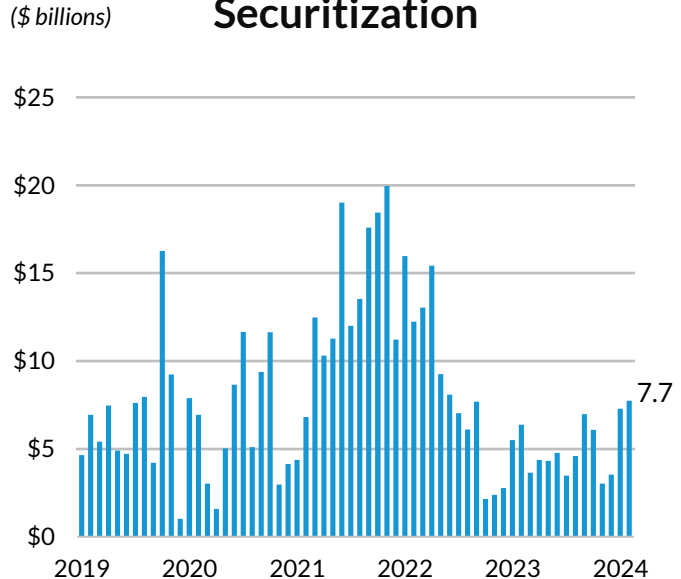
Non-Agency MBS Issuance



Sources: Inside Mortgage Finance and Urban Institute.

Note: Data through Q4 2023.

Monthly Non-Agency Securitization



Sources: Inside Mortgage Finance and Urban Institute.

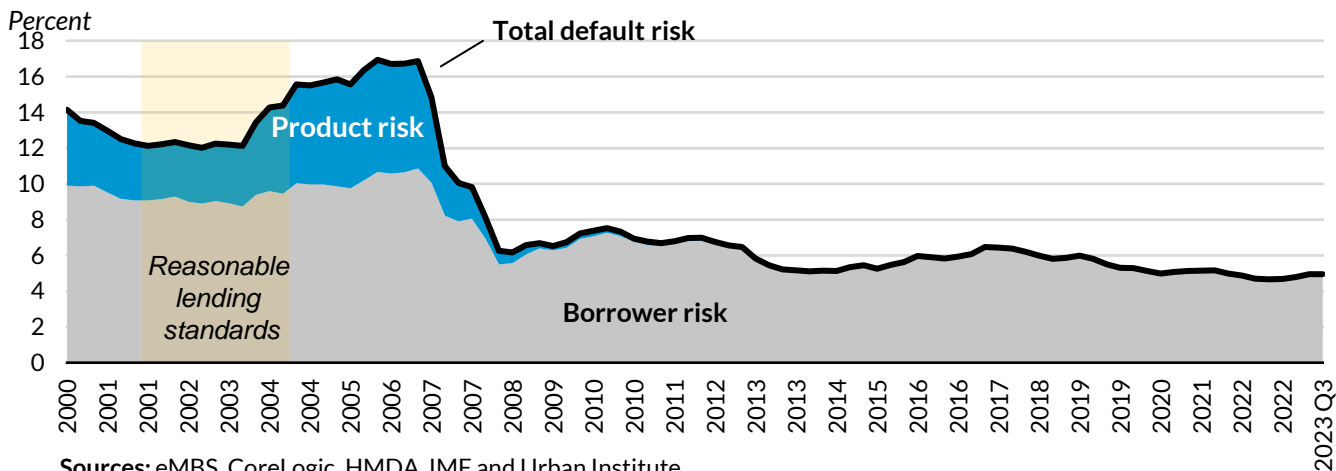
Note: Data though February 2024

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 4.96 percent in Q3 2023, down slightly from Q2 2023, but up year-over-year. The loosening from Q3 2022 to Q3 2023 reflects an increase in default risk driven by a 10 percent increase among portfolio and private label securities. The GSE channel was largely unchanged; but there was tightening in the government channel, with a nearly seven percent decline in default risk taken year-over-year. Note that we updated the methodology as of Q2 2020, see new methodology [here](#). More information about the HCAI is available [here](#).

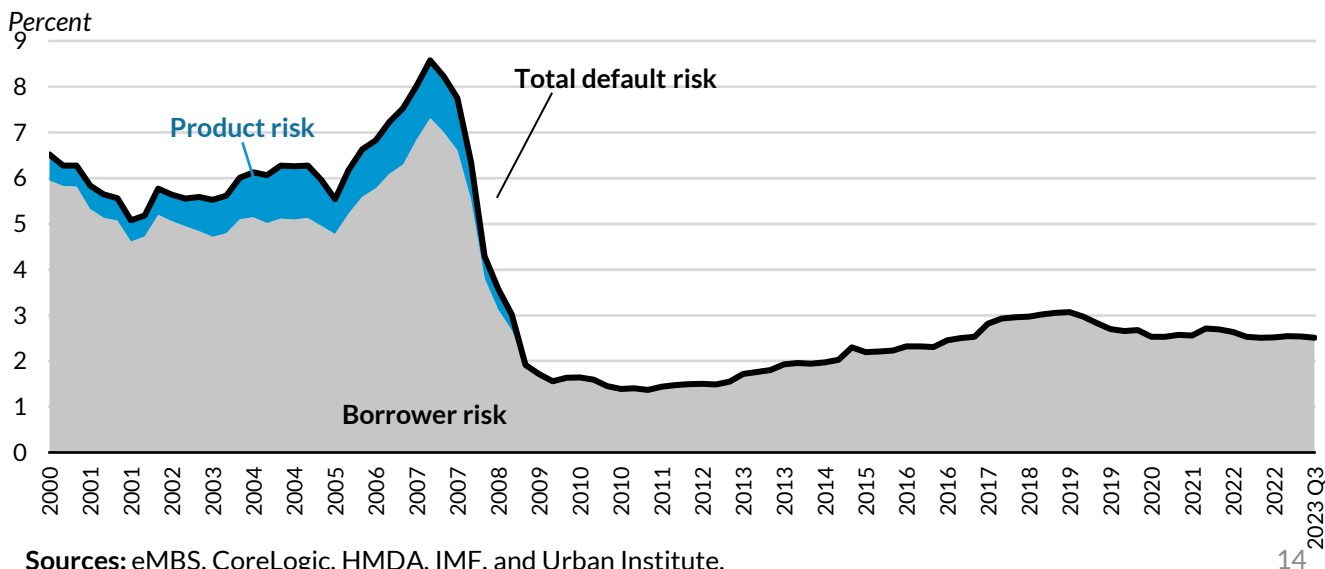
All Channels



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

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 Q3 2023, credit availability stood at 2.51 percent, at parity with availability in Q3 2022.



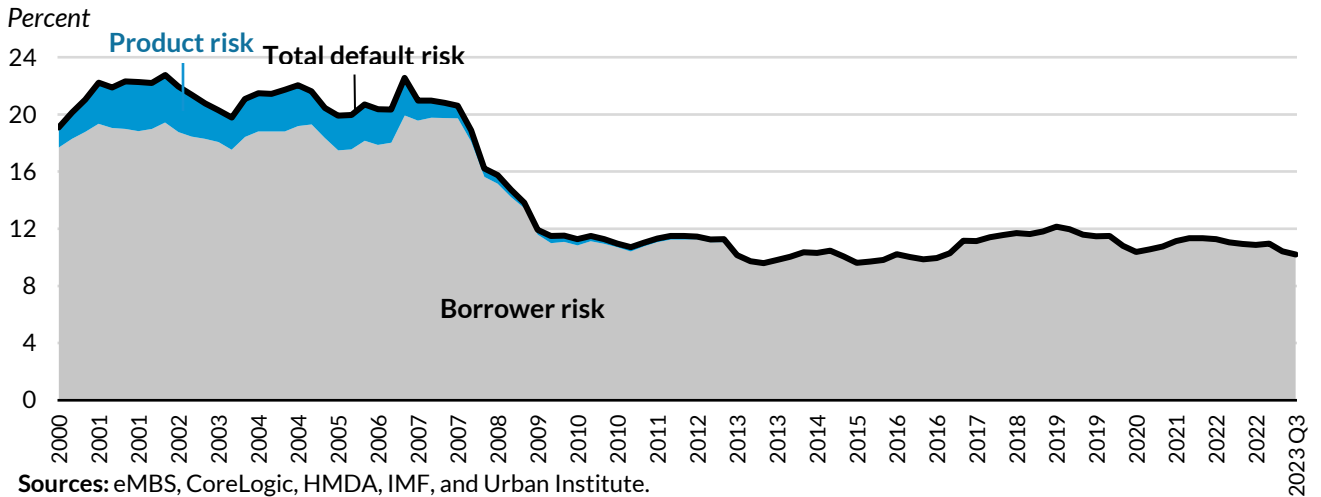
Sources: eMBS, CoreLogic, HMDA, IMF, and Urban Institute.

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

HOUSING CREDIT AVAILABILITY INDEX

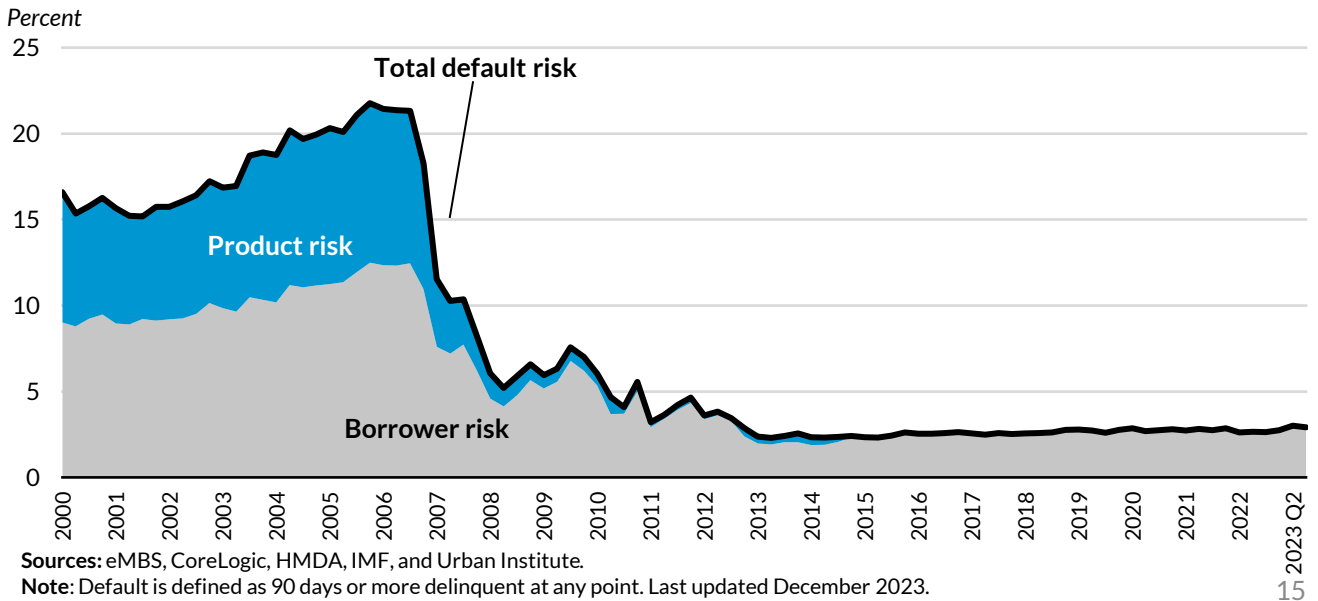
Government Channel

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 but has since dropped to 10.2 percent in Q3 2023; far below the pre-bubble level 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. In the third quarter of 2023, PP risk was measured at 2.9 percent, up substantially from 2.7 percent a year ago. Overall, risk in the PP channel is a shadow of the default risk taken prior to the Great Financial Crisis.



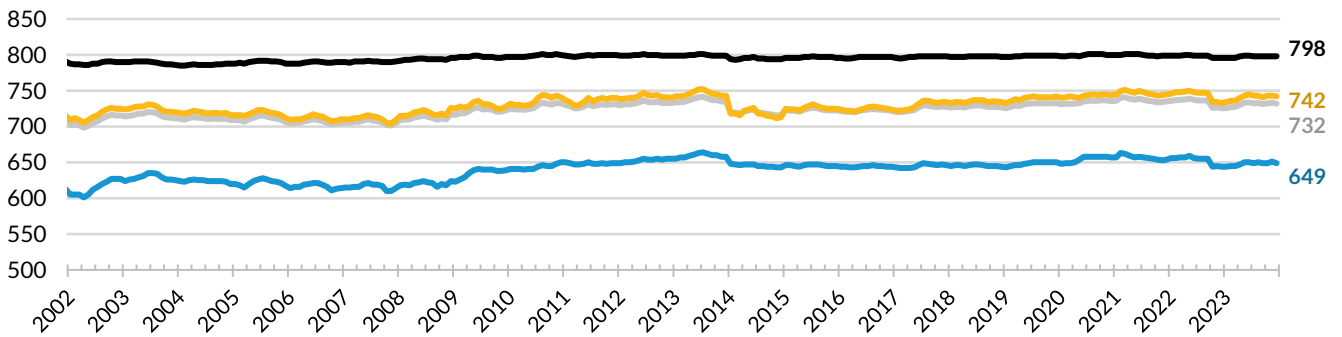
CREDIT AVAILABILITY FOR PURCHASE LOANS

Over 2023 and into early 2024, credit standards have tightened, mostly across the FICO dimension, but remain broadly easier relative to the levels that prevailed in December 2021, just prior to the significant rise in interest rates. Median FICO score at origination in December 2023 was 742, just under its 745 level in December 2021. Median DTI was 43 percent, which remains above its December 2021 rate of 39 percent. Median LTV sat at 95 percent in December, above its December 2021 level of 90 percent.

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

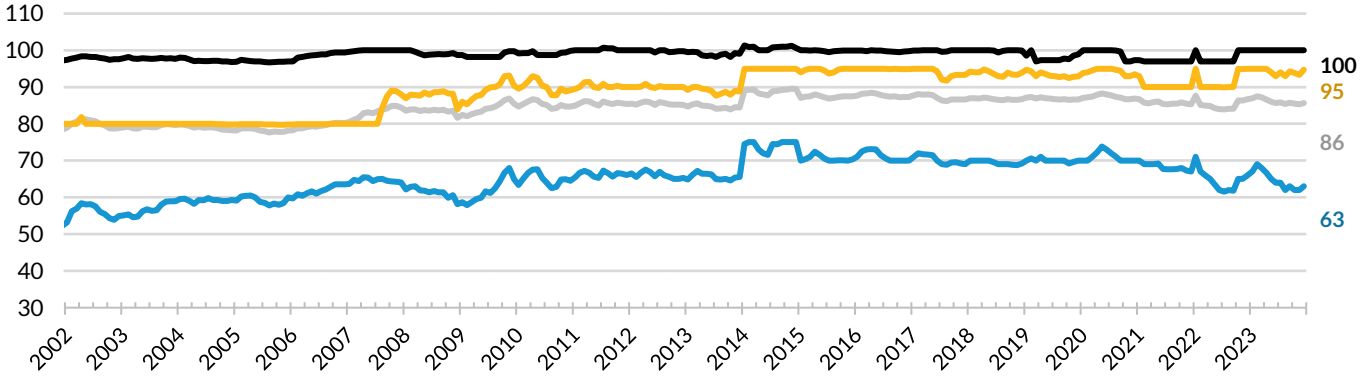
Borrower FICO Score at Origination

FICO Score



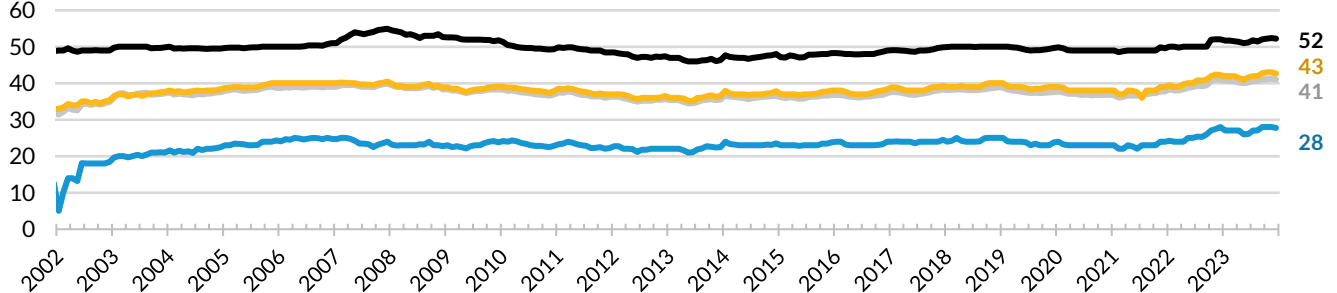
Combined LTV at Origination

LTV



DTI at Origination

DTI



Sources: ICE, 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 ICE.

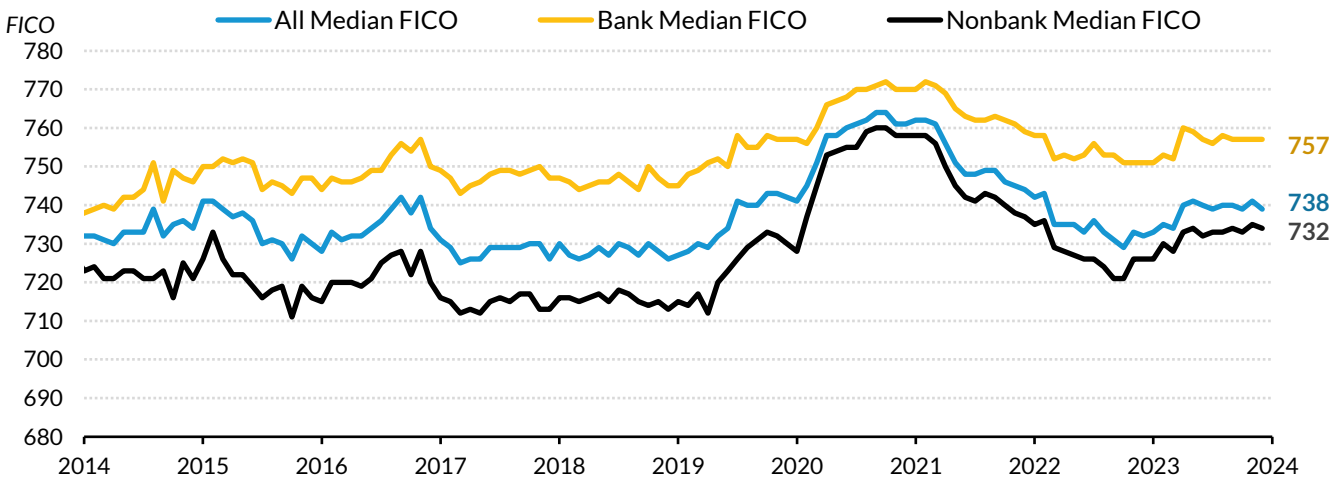
A back-update to the ICE historical series was made in September 2021 for data starting from 2001 onward. Data as of December 2023.

CREDIT BOX

AGENCY NONBANK CREDIT BOX

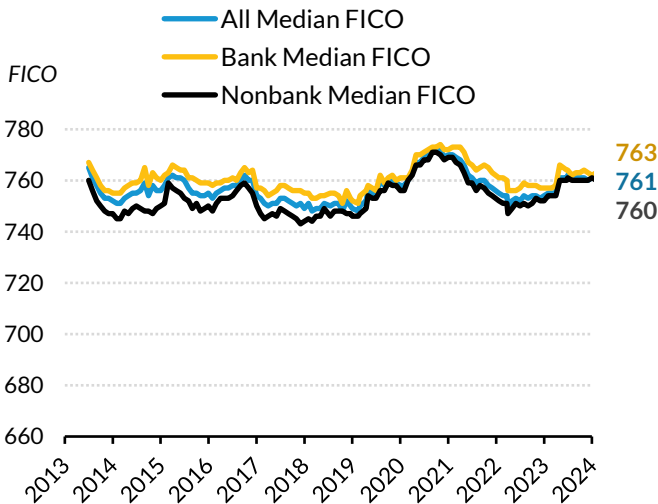
FICO scores for banks and nonbanks in both GSE and Ginnie Mae segments increased from Q1 2019 to Q1 2021 due to increased refi activity in response to lower rates; as refi activity tapered, FICO scores fell. Borrowers of refi loans typically have higher FICO scores than borrowers of purchase loans, which boosted median scores amid the most recent refi wave and reduced scores as rates rose. But after falling in 2021 and most of 2022, median FICO scores are higher over 2023, rising from 726 to 738 in February 2024, despite a sharp contraction in refinance activity. This likely reflects the fact that with affordability stretched due to the increases in interest rates and home prices, qualification often requires higher FICO scores to compensate. The gap between agency bank and nonbank FICOs reached 25 points in February 2024. The difference between the median FICO on bank and non-bank GSE loans stood at 3 points in February 2024. But across Ginnie Mae loans, the gap currently sits at 23 points. Due to the sharp cut-back in FHA lending by banks post-2008, banks now comprise only about 12 percent of Ginnie Mae originations.

Agency FICO: Bank vs. Nonbank



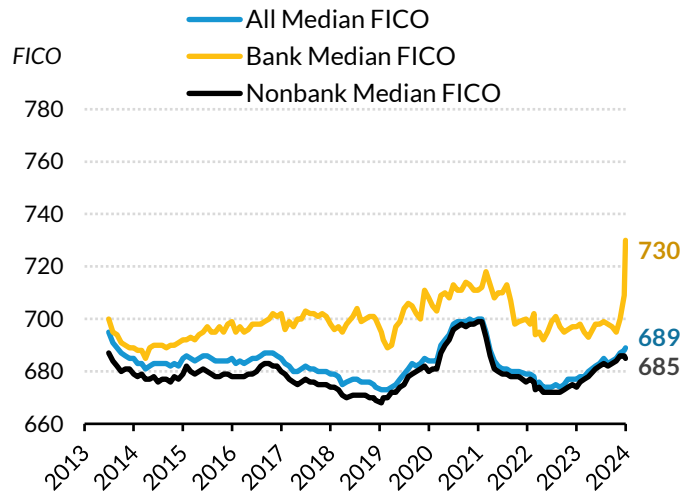
Sources: eMBS and Urban Institute. Data as of February 2024.

GSE FICO: Bank vs. Nonbank



Sources: eMBS and Urban Institute.

Ginnie Mae FICO: Bank vs. Nonbank



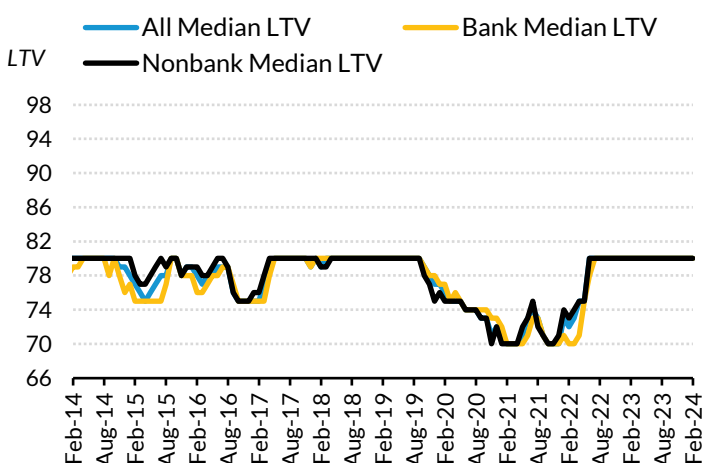
Sources: eMBS and Urban Institute.

CREDIT BOX

AGENCY NONBANK CREDIT BOX

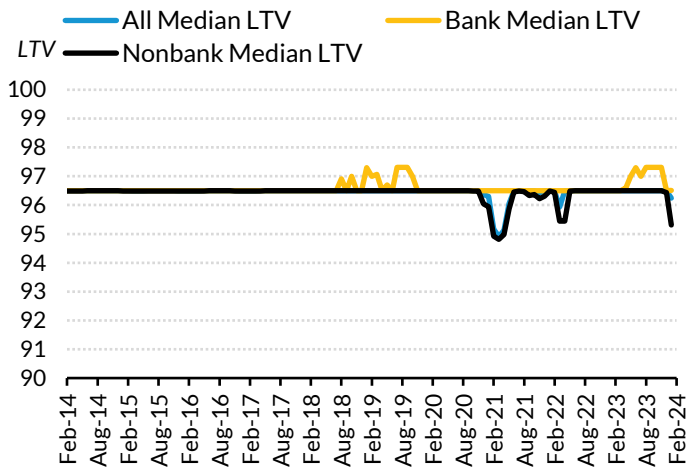
Nonbanks are more expansive in their lending than their bank counterparts, as indicated by higher back-end DTIs in both GSE and Ginnie Mae markets. From early 2017 to early 2019, there was a sustained increase in DTIs, which has reversed beginning in the spring of 2019. This is true for both Ginnie Mae 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 elevated house price increases, both of which force households to borrow more in relation to income.

GSE LTV: Bank vs. Nonbank



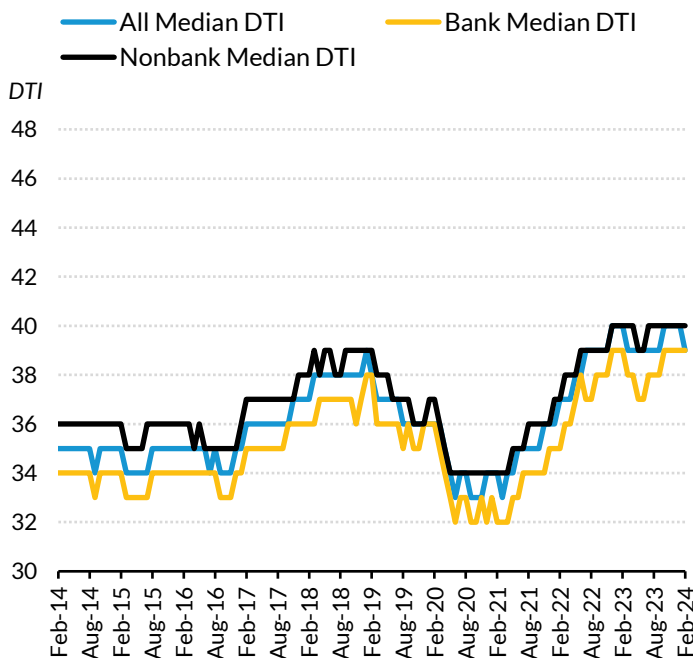
Sources: eMBS and Urban Institute.

Ginnie Mae LTV: Bank vs. Nonbank



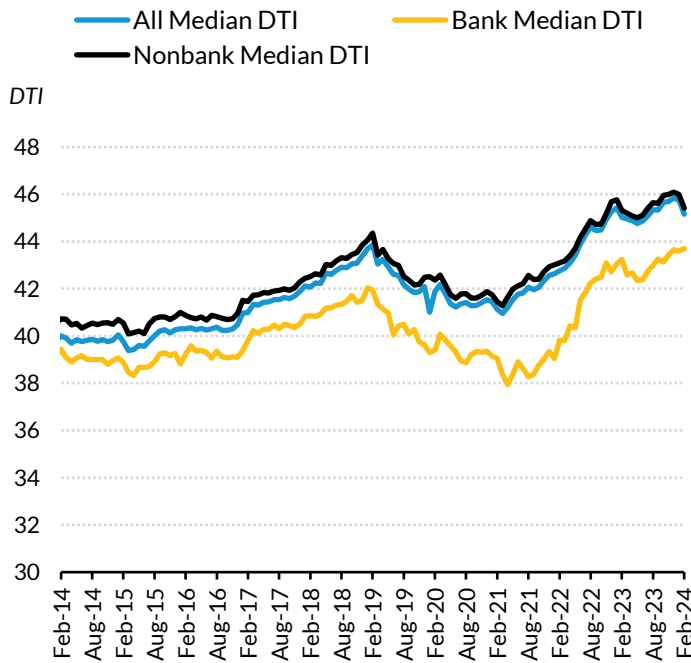
Sources: eMBS and Urban Institute.

GSE DTI: Bank vs. Nonbank



Sources: eMBS and Urban Institute.

Ginnie Mae DTI: Bank vs. Nonbank



Sources: eMBS and Urban Institute.

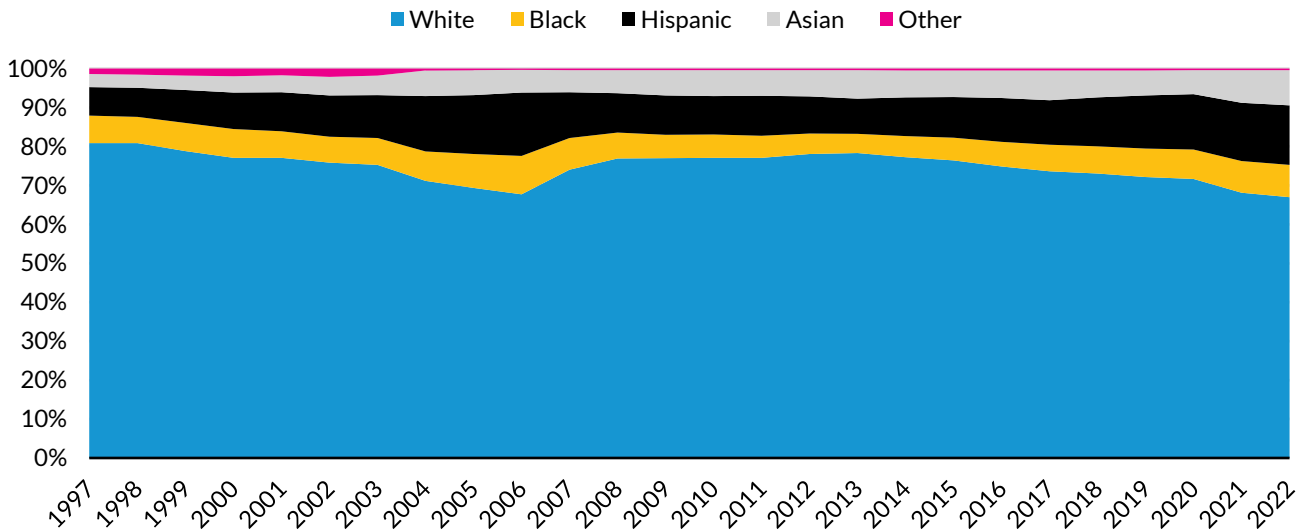
Note: Data as of February 2024.

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 percent 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.

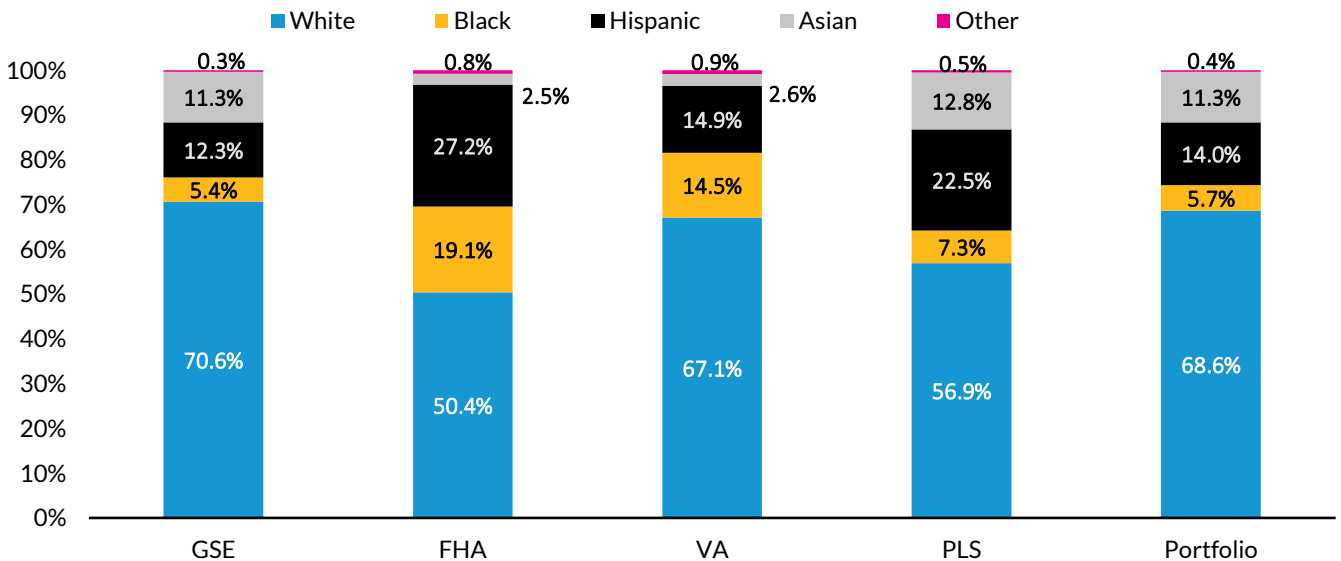
2022 Purchase Loan Shares by Race



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

For the full year of 2023, both Fannie Mae and Mortgage Bankers' Association reported total origination volume was 36.7 to 27.0 percent below its level in 2022, respectively, continuing the decrease from the recent peak established in 2021. The lower full year mortgage originations in 2023 was primarily due to the lower refi share. A second contributing factor, as illustrated on page 21, is fewer home sales in 2023 relative to 2022. However, originations over full year 2024 are expected to exceed their 2023 level but are not projected to return to 2022 levels. Current projections for 2025 predict origination and refinance levels similar to those in 2022.

Total Originations and Refinance Shares

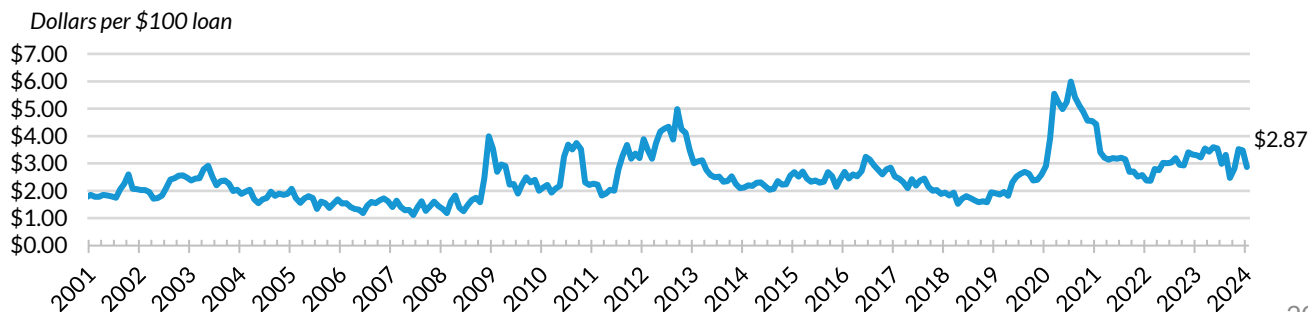
Period	Originations (\$ billions)		Refi Share (percent)	
	Total, FNMA estimate	Total, MBA estimate	FNMA Estimate	MBA Estimate
2023 Q1	323	333	18	20
2023 Q2	421	463	17	20
2023 Q3	397	444	16	18
2023 Q4	329	399	16	19
2024 Q1	309	377	19	23
2024 Q2	467	518	19	21
2024 Q3	519	566	24	24
2024 Q4	469	549	26	26
2019	2462	2253	46	44
2020	4374	4108	64	64
2021	4570	4436	58	62
2022	2374	2245	31	33
2023	1502	1639	17	19
2024	1764	2010	23	23
2025	2178	2339	29	27

Sources: Fannie Mae, Mortgage Bankers Association and Urban Institute. Data as of March 2024.

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, 2021, and 2022 were 4.0, 4.6, 3.9, 3.0, 3.0, and 5.3 percent.

Originator Profitability and Unmeasured Costs

In January 2024, Originator Profitability and Unmeasured Costs (OPUC) stood at \$3.48 per \$100 loan, down from \$3.52 per \$100 loan in December 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. 2023 profitability reflected less, but still significant competition between mortgage originators. 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 rates are limiting volume, originators are adapting to the new environment by slashing head counts and fixed costs.



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. Data as of February 2024.

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, or the inventory of homes as a share of home sales, remains low, although higher than the record low levels seen in 2021. Despite some fluctuation, existing months' supply increased over much of 2022 and 2023. From January 2023 to January 2024, month's supply increased 14.4 percent. Fannie Mae, the MBA, and the NAHB reported housing starts over full year 2023 lagged levels in 2022. In 2024, industry forecasters expect housing starts to be lower than in 2023, with a rebound in 2025. Amid the lack of inventory, and reduced affordability, home sales in 2023 were much lower than in 2022. However, 2023 will likely be the cyclical low point as industry forecasters do not expect further declines in sales in 2024. Forecasts call for higher home sales in 2025 to levels much closer to the pace in 2022.

Months' Supply



Source: National Association of Realtors and Urban Institute. Data as of February 2024.

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	5740	5167
2023	1413	1422	1415	4758	4770	4342
2024	1387	1509	1381	4913	5127	4570
2025	1406	1486	1393	5397	5592	5041

Sources: Fannie Mae, Mortgage Bankers Association and National Association of Home Builders forecasts as of March 2024, and the 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.

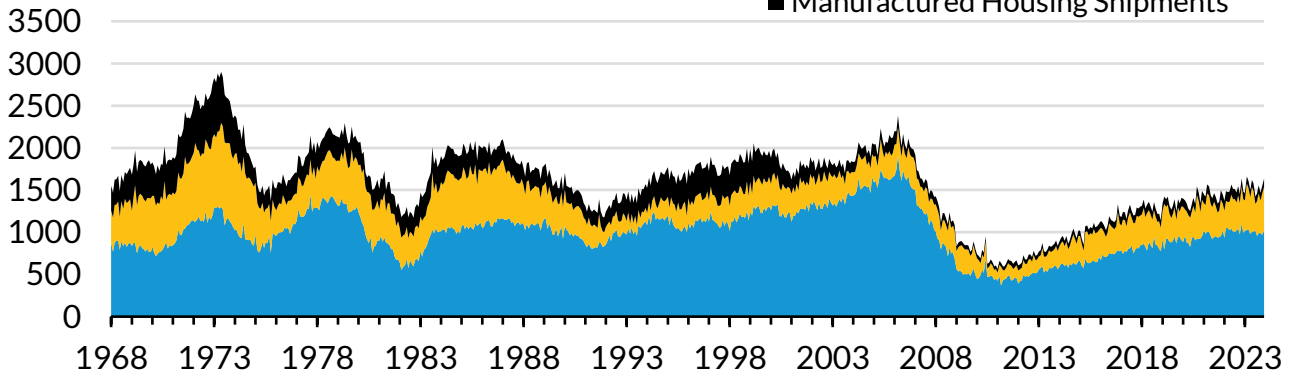
OVERVIEW

New Residential Production

New residential production, including single-family and multifamily completions as well as manufactured housing shipments, reached a seasonally adjusted annual rate of 1.53 million units in January 2024, 4.8 percent higher than its level in January 2023, 1.46 million units. Since reaching a low of 565 thousand units in January 2011, new production has risen by 172 percent. However, current production is still 29 percent lower than the peak March 2006 level of 2.38 million units. In January 2024, single-family completions are 53 percent lower than the March 2006 peak of 1.91 million units. Multifamily completions are 46 percent greater than their level in March 2006. Only 4.2 percent of multifamily units completed in 2023 Q4 were built-for-sale, down significantly from its 2007 Q2 peak of 43.9 percent. The share of single-family units built for sale is 73.3 percent, starting to rise after dropping amid high interest rates in early 2023, although still 3.5 percentage points lower than the share built for sale in 2022 Q3. The owner-occupied share of mobile homes fell from 2006 to 2014, but partially recovered in the ensuing years.

Completions and Shipments

Thousands, seasonally adjusted annual rate

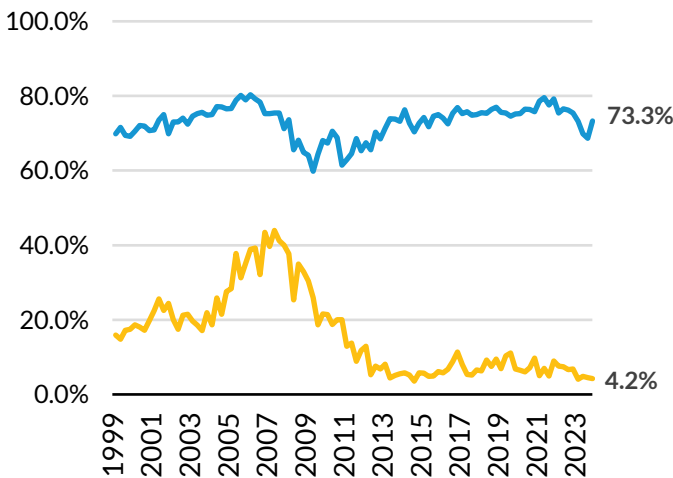


Source: Moody's Analytics, U.S. Census Bureau (BOC) and Urban Institute Calculations

January 2024

Share of Residential Completions Built For Sale

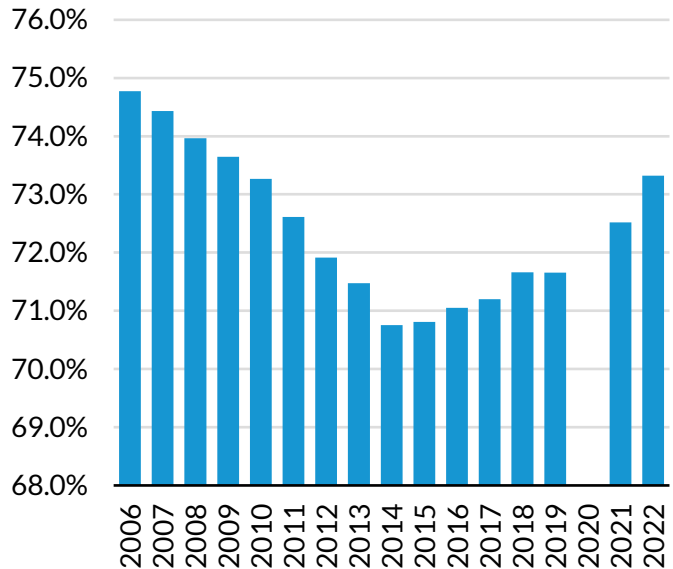
Single-family For-sale share of Single-family Completions
 Multifamily For-sale Share of Multifamily Completions



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

December 2023

Owner-Occupied Share of Occupied Mobile Homes



Source: 1-year American Community Survey.

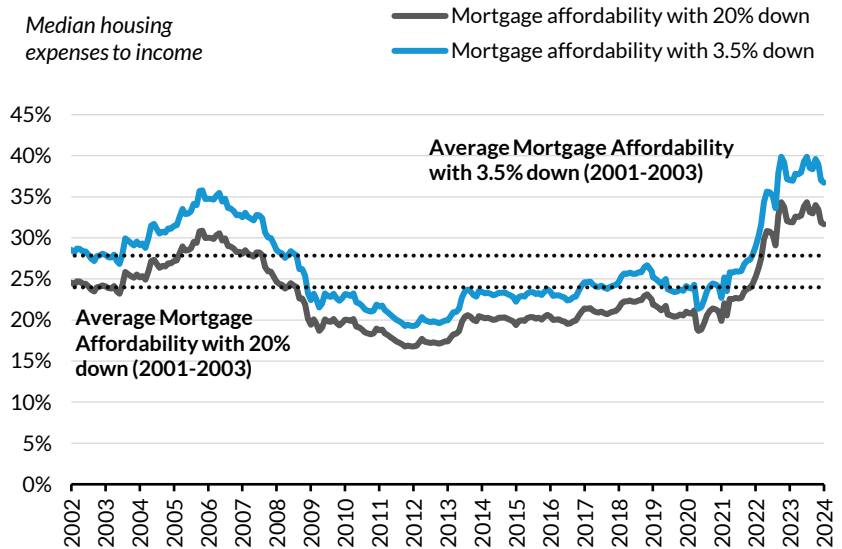
Note: This data is not available for 2020 due to low response rates during the pandemic.

STATE OF THE MARKET

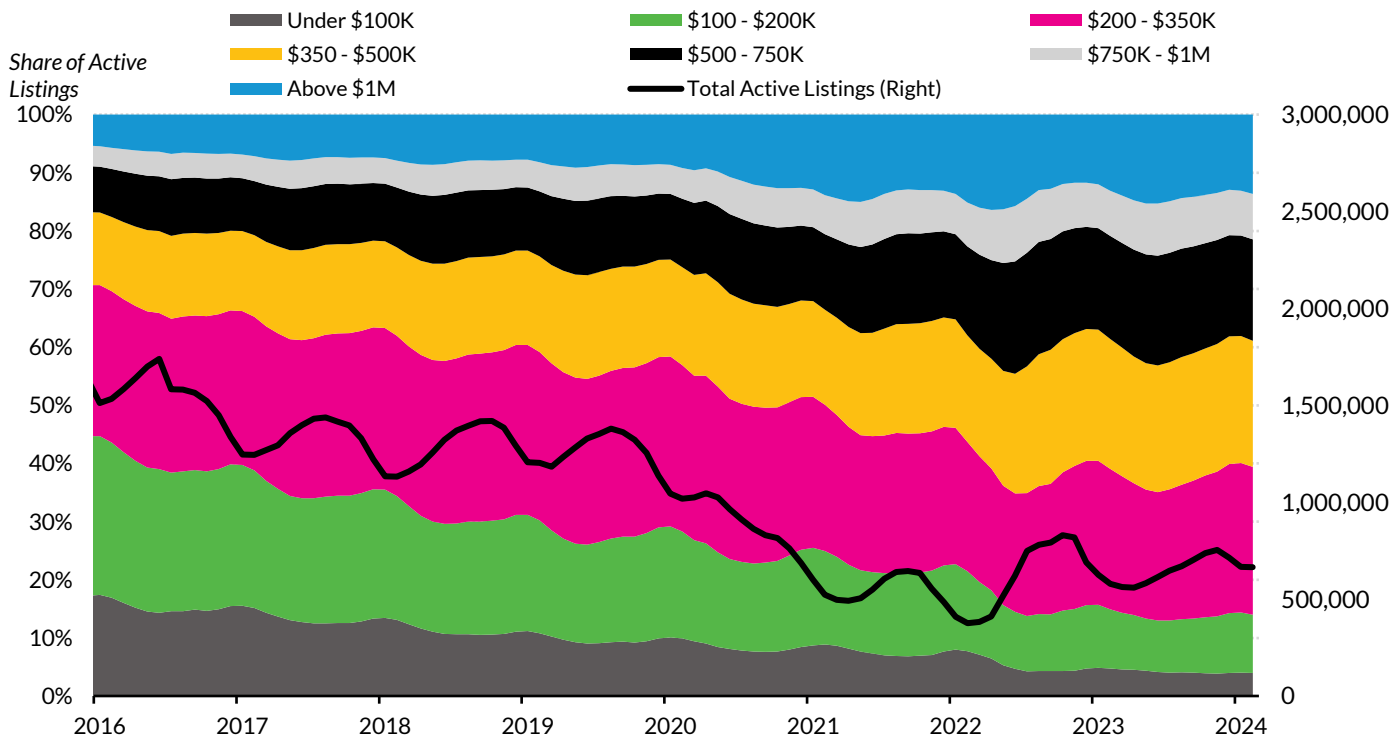
HOUSING AFFORDABILITY

National Mortgage Affordability Over Time

Mortgage affordability, while marginally better than the record high in October, remains close to the worst level since the inception of this series in 2002. As of January 2024, with a 20 percent down payment, the share of median income needed for the monthly mortgage payment stood at 31.6 percent, higher than the 30.9 percent at the peak of the housing bubble in November 2005; and with 3.5 percent down the housing cost burden is 36.7 percent, also above the 35.8 percent prior peak in November 2005. As shown in the bottom picture, even amid seasonality, active listings remain lower over time and the distribution has shifted markedly towards higher priced homes.



Active Listings by Price Tier Over Time



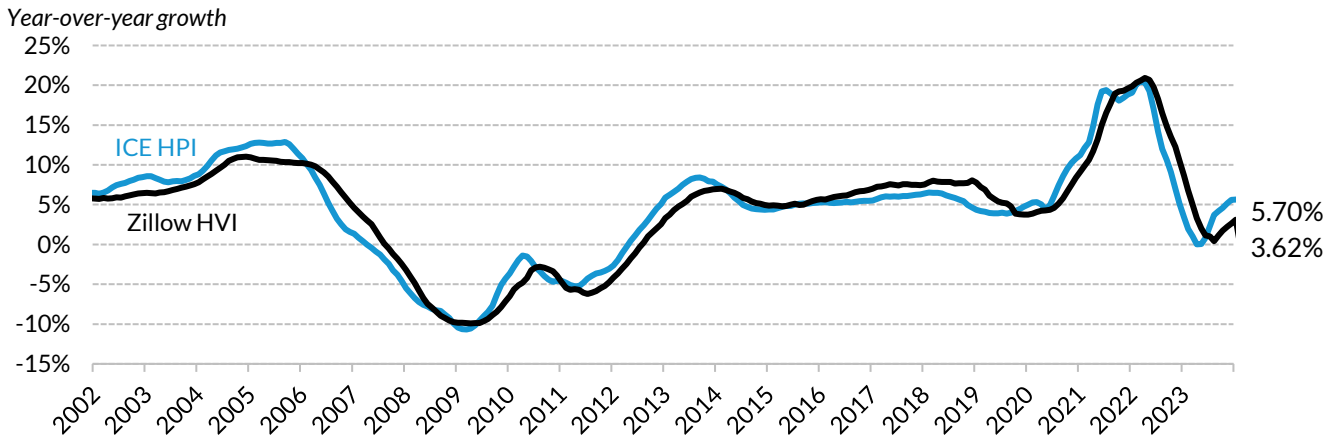
Sources: National Association of Realtors, US Census Bureau, Current Population Survey, American Community Survey, Moody's Analytics, Freddie Mac Primary Mortgage Market Survey, Realtor.com, and the Urban Institute.

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 February 2024.

STATE OF THE MARKET HOME PRICE INDICES

National Year-Over-Year HPI Growth

According to ICE's repeat sales index, year-over-year home price appreciation was 5.70 percent in February 2024, up from the previous month's 5.63 percent, despite a slight decline in house prices in September through December 2023. Year-over-year home price appreciation as measured by Zillow's hedonic home value index is similarly increasing and stands at 3.62 percent in February 2024, up from 3.13 percent in January. Affordability remains low amid the annual increase in home prices combined with elevated interest rates since 2022.

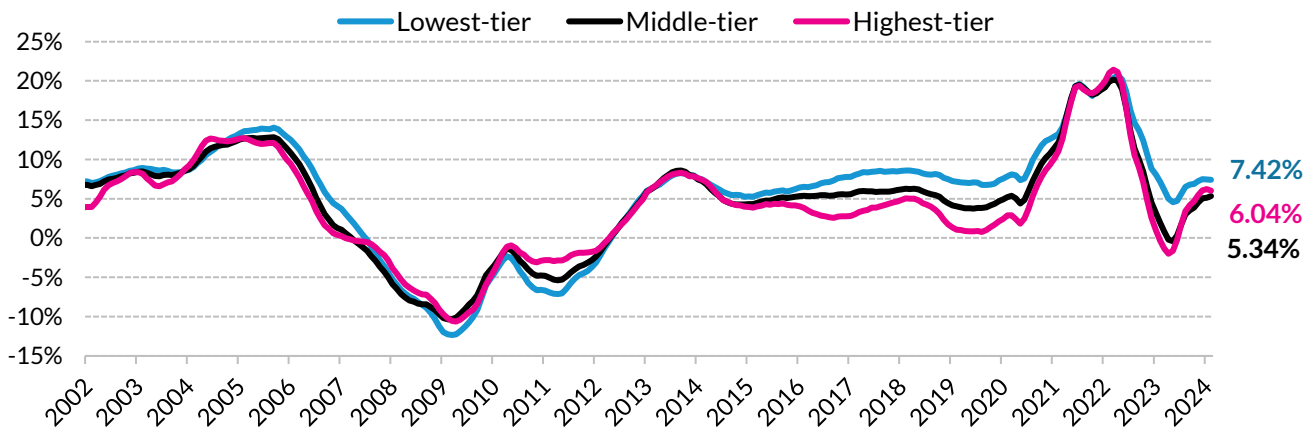


Sources: ICE, Zillow, and Urban Institute.

Note: ICE modified the methodology behind their HPI in February 2021, resulting in changes to historic price estimates. Data as of February 2024.

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 February 2022. With rates rising sharply in 2022, the rate of appreciation slowed, then dropped for all price tiers. After bottoming at the end of Q1 2023, home prices began to rise. From May 2023 to January 2024, year-over-year house price appreciation increased each month at all tiers. Year-over-year appreciation now shows signs of slowing with appreciation at the highest tier decreasing from 6.21 percent in January to 6.04 percent in February and appreciation at the lowest tier relatively unchanged from 7.43 to 7.42 percent. Appreciation for middle-tier homes is still growing, from 5.14 to 5.34 percent in February.



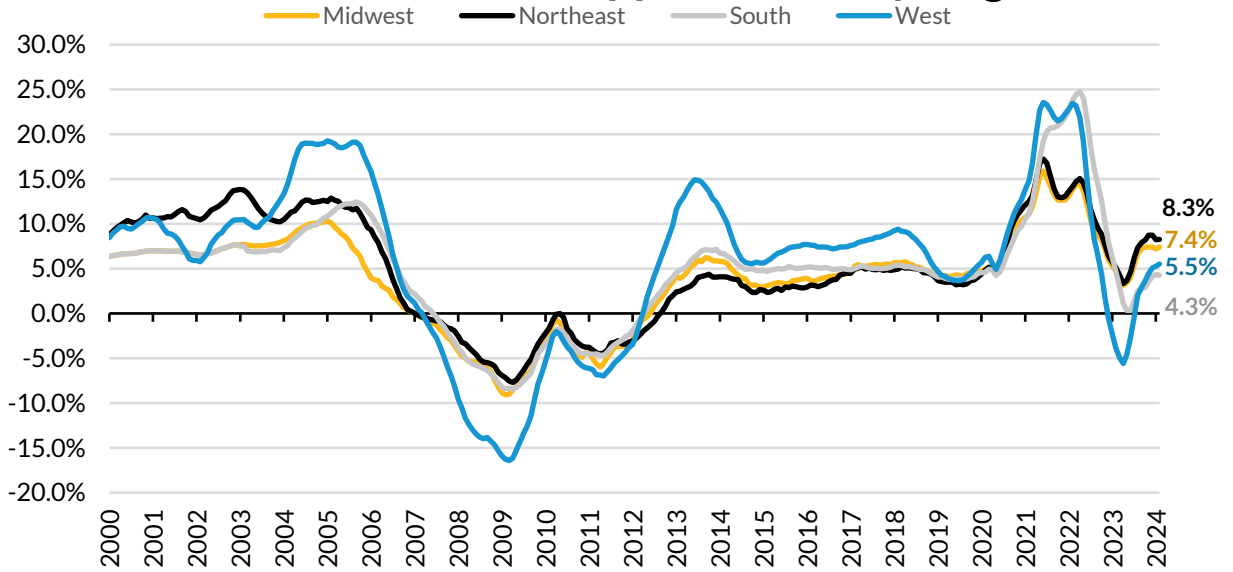
Sources: ICE and Urban Institute.

Note: ICE modified the methodology behind their HPI in February 2021, resulting in changes to historic price estimates. Data as of February 2024.

REGIONAL HOME PRICE INDICES

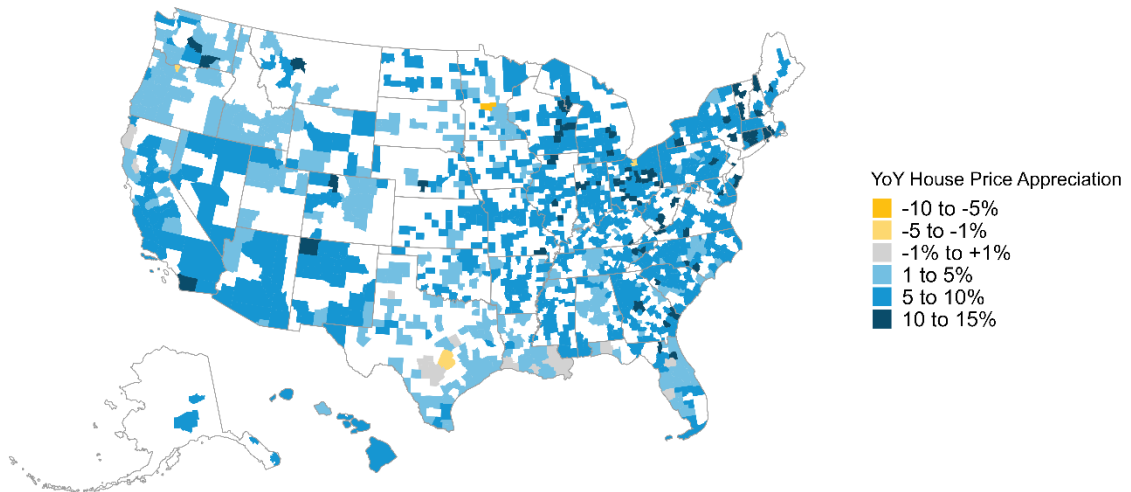
In February 2024, house prices in all regions of the country were higher than their level 12 months ago. The Northeast has the highest appreciation at 8.3 percent, followed closely by the Midwest at 7.4 percent. After lagging the rest of the US since July 2022, the West now has higher appreciation than the South at 5.5 and 4.3 percent, respectively. From 2020 to the first quarter of 2021, home prices rose sharply, led by the South and West. From Q2, 2022 to Q1, 2023, home prices fell for most of the country, with the most dramatic drops in the South and 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: ICE and Urban Institute Calculations. Data as of January 2024

Year over Year House Price Appreciation by Metro and Micropolitan Areas



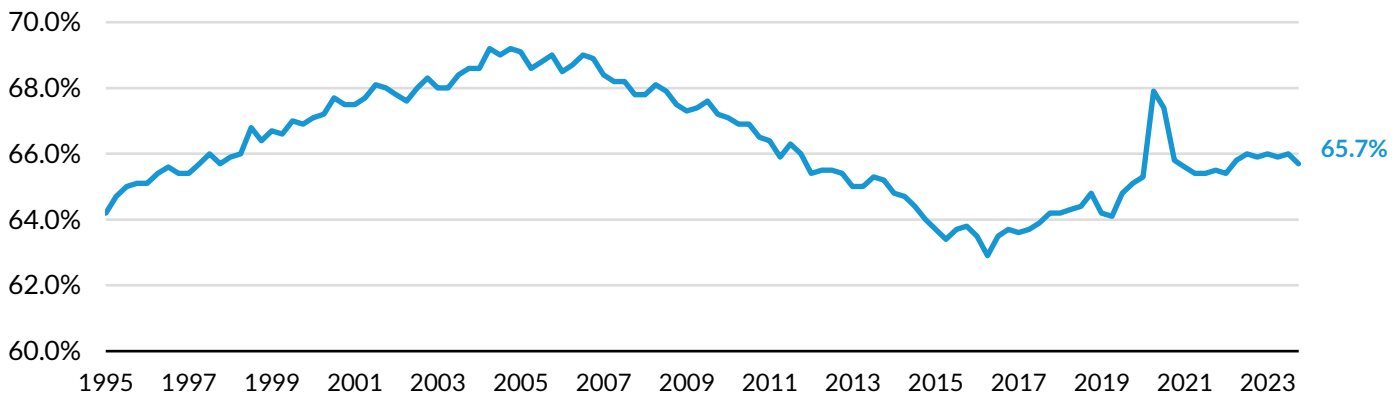
Source: Black Knight and Urban Institute Calculations.
 Note: Data as of February 2024.

STATE OF THE MARKET

HOMEOWNERSHIP RATES

In the fourth quarter of 2023, the homeownership rate was at 65.7 percent, close to the rate in the third quarter of 2023, 66.0 percent, and the fourth quarter of 2022, 65.9. After falling to 62.9 percent in the second quarter of 2016, the homeownership rate has begun to recover, but remains 3.3 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.

Overall Homeownership Rate

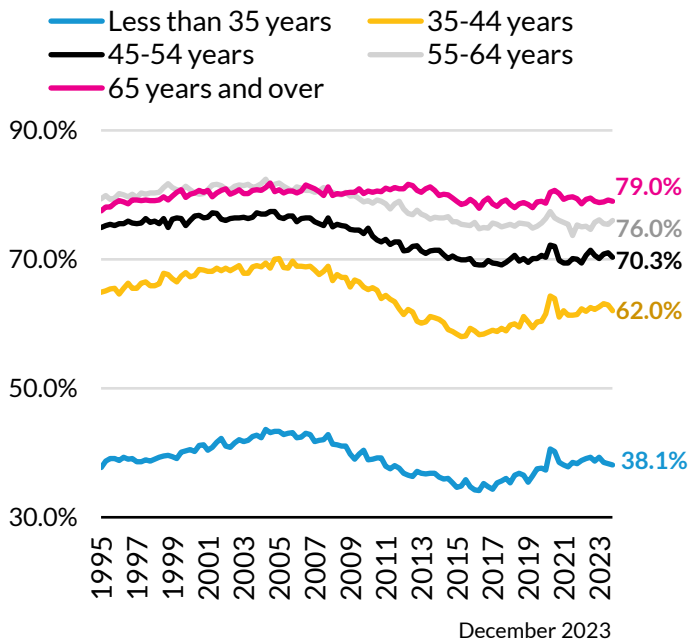


Source: Moody's Analytics, U.S. Census Bureau (BOC) and Urban Institute Calculations.

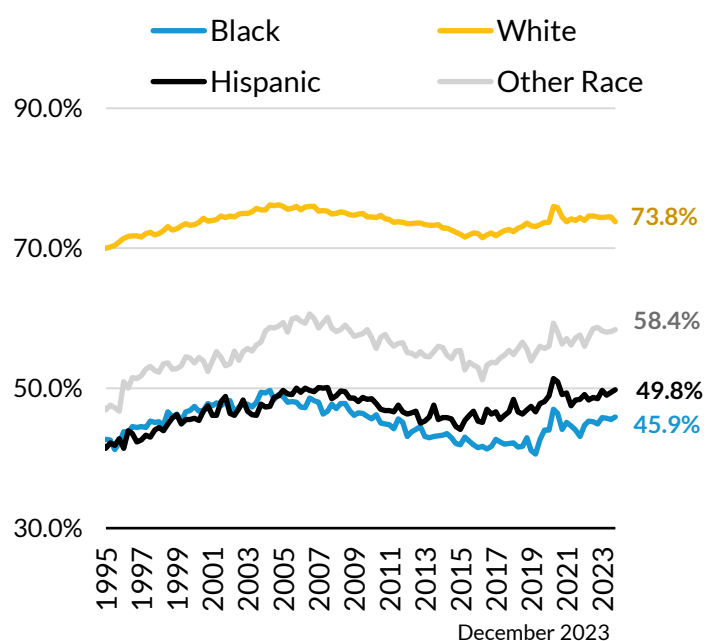
Note: Data from 2020 and 2021 is poor due to low response rates during the pandemic.

December 2023

Homeownership by Owner Age



Homeownership Rate by Race/Ethnicity



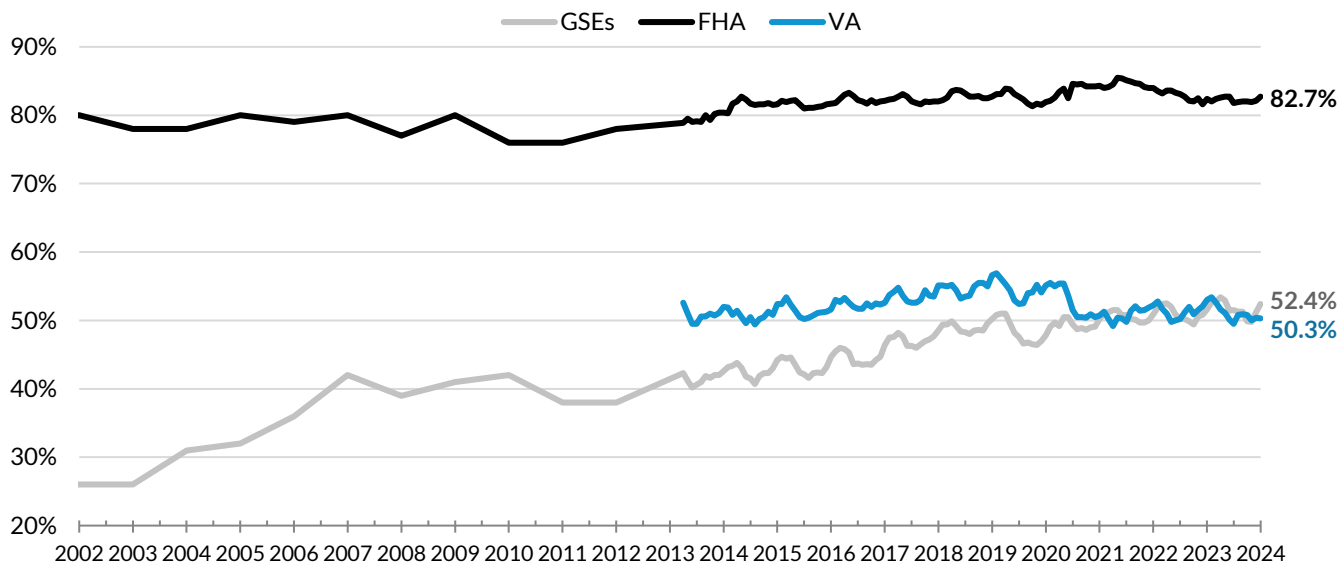
Source: U.S. Census Bureau (BOC) and Urban Institute Calculations.

STATE OF THE MARKET

FIRST-TIME HOMEBUYERS

First-Time Homebuyer Share

In January 2024, the FTHB share for FHA, which has always been more focused on first time homebuyers, was 82.7 percent. The FTHB share of GSE lending in January was 52.4 percent; the VA share was 50.3 percent. The bottom table shows that based on mortgages originated in January 2024, 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.



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

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

November 2023

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 (\$)	\$336,473	\$367,488	\$317,115	\$323,222	\$330,281	\$367,243
Credit Score	750	761	688	688	723	746
LTV (%)	84	76	94	92	90	81
DTI (%)	37	39	45	46	41	41
Loan Rate (%)	6.66	6.66	6.39	6.42	6.52	6.56

Sources: eMBS and Urban Institute.

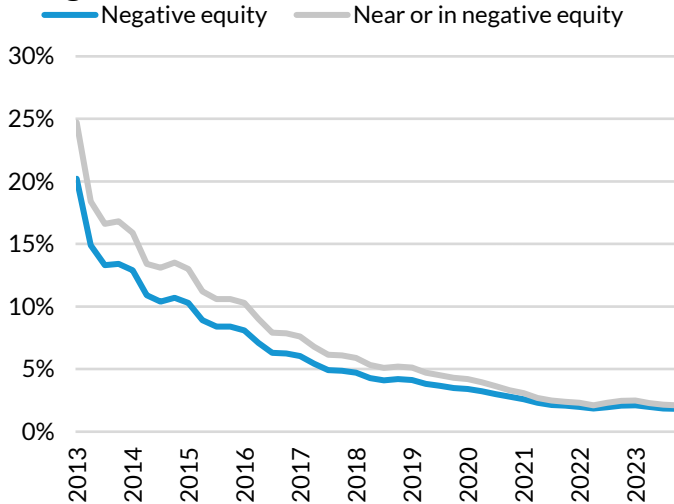
Note: Based on owner-occupied purchase mortgages originated in January 2024.

STATE OF THE MARKET

DELINQUENCIES AND LOSS MITIGATION ACTIVITY

The share of loans in and near negative equity decreased slightly from 2.2 percent in Q3 2023 to 2.1 percent in Q4. In the fourth quarter of 2023, the composition of loans in or near negative equity consisted of approximately 1.8 percent with negative equity, and 0.3 percent between zero and 5 percent equity. The share of loans that are 90 days or more delinquent or in foreclosure increased by 5 basis points, from 1.47 percent in Q3 2023 to 1.52 percent in Q4 2023. This reflects the first increase in the share of mortgages 90 or more days delinquent since 2020; the foreclosure rate is marginally lower than the previous quarter. Serious delinquencies include 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 remaining flat at 0.22 percent as of February 29, 2024. GSE loans have consistently had the lowest forbearance rates, standing at 0.12 percent at the end of February. The most recent forbearance rate for Other (e.g., portfolio and PLS) loans was 0.29 percent; Ginnie Mae loans had the highest forbearance rate at 0.40 percent.

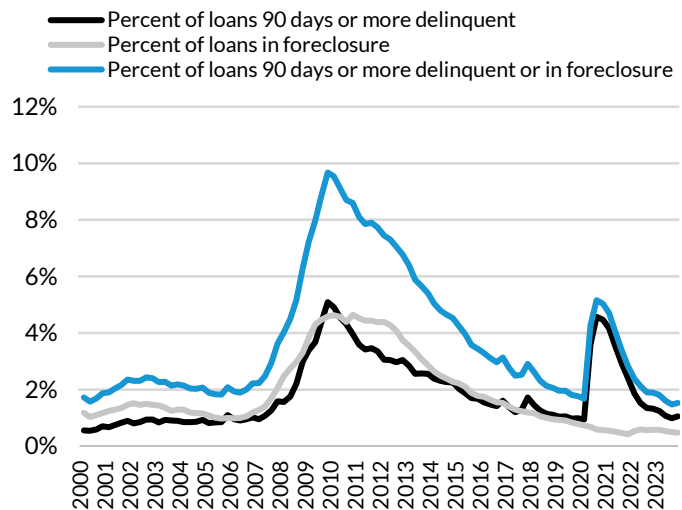
Negative Equity Share



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 for December 2023.

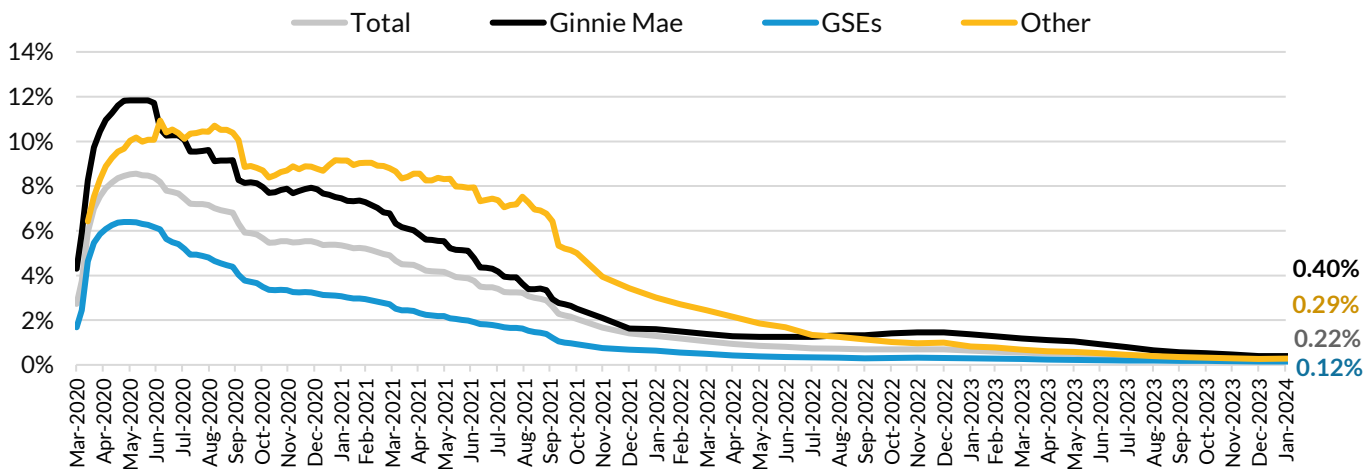
Loans in Serious Delinquency/Foreclosure



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

Q4 2023

Forbearance Rates by Channel



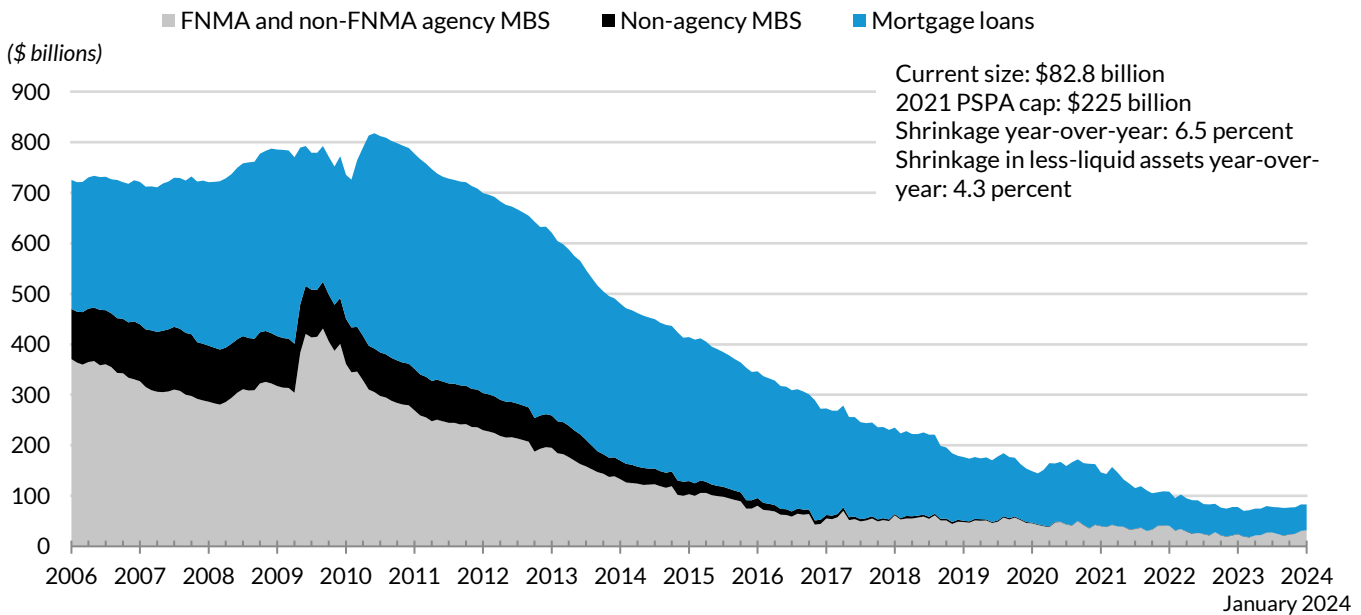
Source: MBA Weekly Forbearance and Call Volume Survey. Forbearance rates as of February 29, 2024

GSES UNDER CONSERVATORSHIP

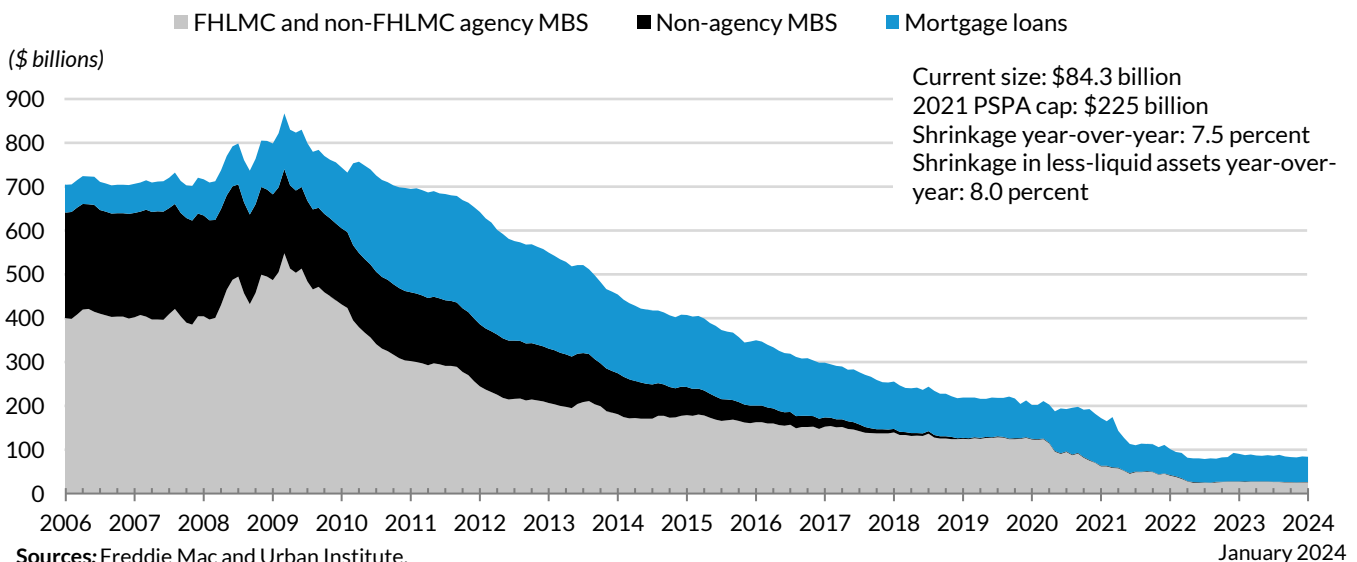
GSE PORTFOLIO WIND-DOWN

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), at \$82.8 and \$84.3 billion, respectively. From January 2023 to January 2024, the Fannie and Freddie portfolios shrank by 6.5 and 7.5 percent, respectively. Within the portfolio, Fannie Mae and Freddie Mac contracted their less-liquid assets (mortgage loans, non-agency MBS), by 4.3 and 8.0 percent, respectively, over the same 12-month period.

Fannie Mae Mortgage-Related Investment Portfolio Composition



Freddie Mac Mortgage-Related Investment Portfolio Composition



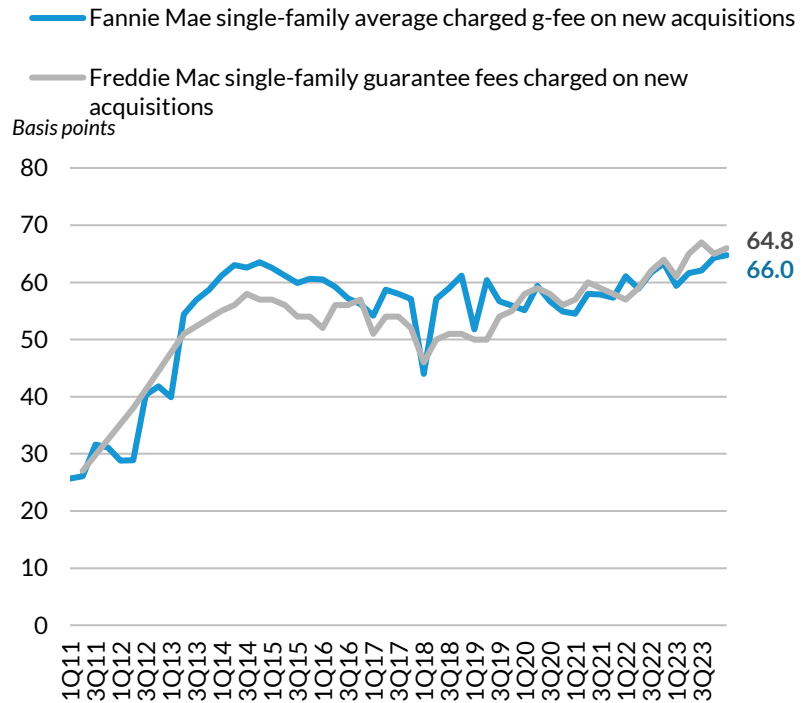
Note: Effective March 2021, Freddie Mac doesn't provide FHLMC/non-FHLMC breakout of agency MBS. The above charts were updated in May 2021 to reflect this.

GSES UNDER CONSERVATORSHIP

EFFECTIVE GUARANTEE FEES

Guarantee Fees Charged on New Acquisitions

Fannie Mae’s average g-fees charged on new acquisitions increased from 64.3 basis points in Q3 2023 to 64.8 basis points in Q4 2023. Freddie’s increased from 65.0 basis points in Q3 2023 to 66.0 basis points in Q4 2023. Today’s g-fees are markedly higher than g-fee levels in 2011 and 2012, contributing 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 LPA Adjustment Matrix, effective May 1, 2023.



Sources: Fannie Mae, Freddie Mac and Urban Institute.
Data as of Q4 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

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 the bulk of the credit risk on most of their mortgages to the private markets. Fannie Mae's CAS issuances since inception total \$2.15 trillion; Freddie's STACR totals \$2.63 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. During the first quarter of 2024, both Fannie Mae and Freddie Mac have issued two CAS and STACR deals each.

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	\$222,224	\$5,849	2.6
2015	CAS 2015 deals	\$187,127	\$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	\$205,998	\$7,314	3.6
2019	CAS 2019 deals	\$290,211	\$8,073	2.8
2020	CAS 2020 deals	\$58,015	\$2,167	3.7
2021	CAS 2021 deals	\$142,202	\$3,095	2.2
2022	CAS 2022 deals	\$325,601	\$8,920	2.7
2023	CAS 2023 deals	\$191,497	\$5,440	2.8
January 2024	CAS 2024 - R01	\$19,674	\$752	3.8
March 2024	CAS 2024 - R02	\$19,061	\$751	3.9
Total		\$2,189,522	\$64,598	3.0%

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	\$179,196	\$6,658	3.7
2016	STACR 2016 deals	\$183,421	\$5,541	3.0
2017	STACR 2017 deals	\$248,821	\$5,663	2.3
2018	STACR 2018 deals	\$243,007	\$6,055	2.5
2019	STACR 2019 deals	\$181,753	\$5,807	3.2
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
2023	STACR 2023 deals	\$87,794	\$2,838	3.2
February 2024	STACR Series 2024 - DNA1	\$18,798	\$572	3.0
March 2024	STACR Series 2024 - DNA2	\$23,710	\$712	3.0
Total		\$2,677,602	\$72,491	2.7%

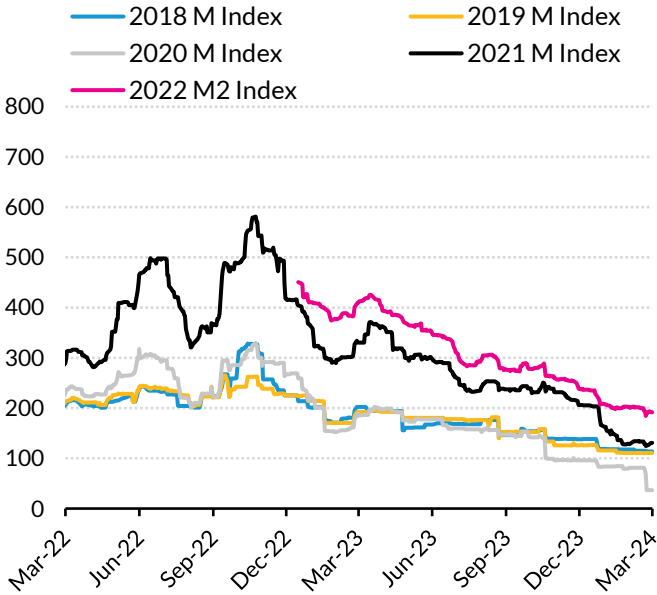
Sources: Fannie Mae, Freddie Mac and Urban Institute. **Note:** Classes A-H, M-1H, M-2H, and B-H are reference tranches only. These classes are not issued or sold. The risk is retained by Fannie Mae and Freddie Mac. "CE" = credit enhancement.

GSES UNDER CONSERVATORSHIP

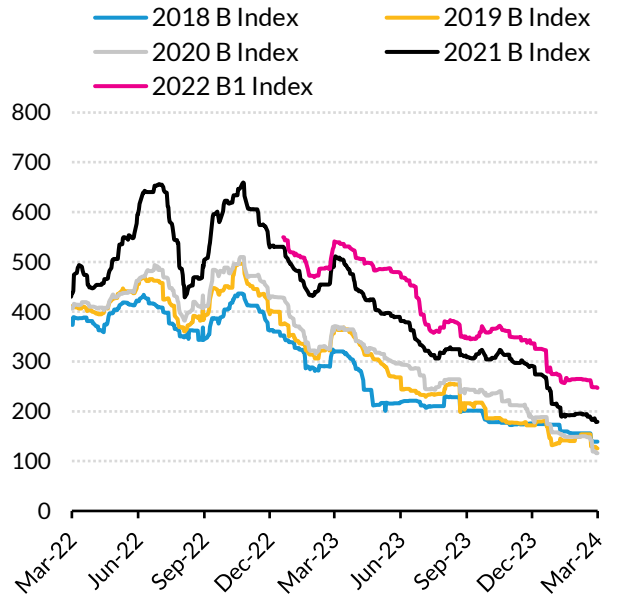
GSE RISK-SHARING INDICES

The figures below show the spreads on 2018, 2019, 2020, 2021 and 2022 indices, as priced by dealers. The spread between 2021 indices and previous vintages 2018-2020 widened from February through November 2022 and remained wide through 2023, but not to the same degree of widening that took place during the pandemic. Since December 2023, 2021 indices dropped to align more with previous vintages. However, 2022 indices remain elevated compared to 2018-2021 indices. This pattern reflects lower embedded home price appreciation and therefore higher credit risk on newer vintages.

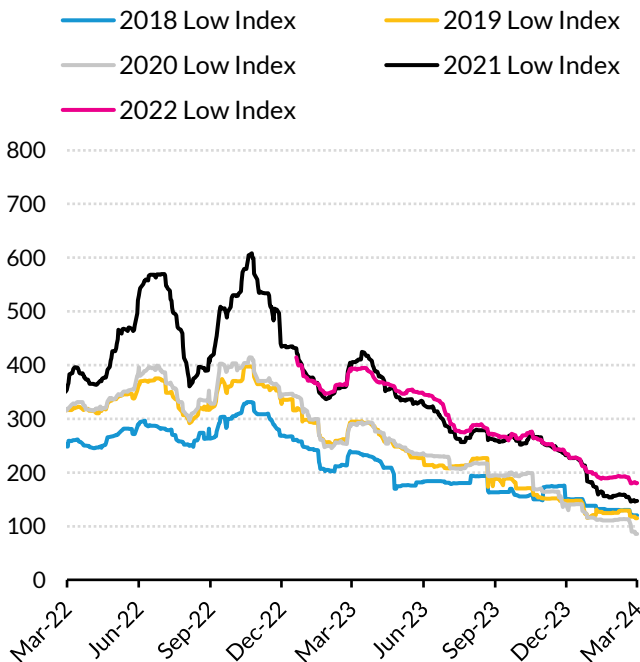
M Indices



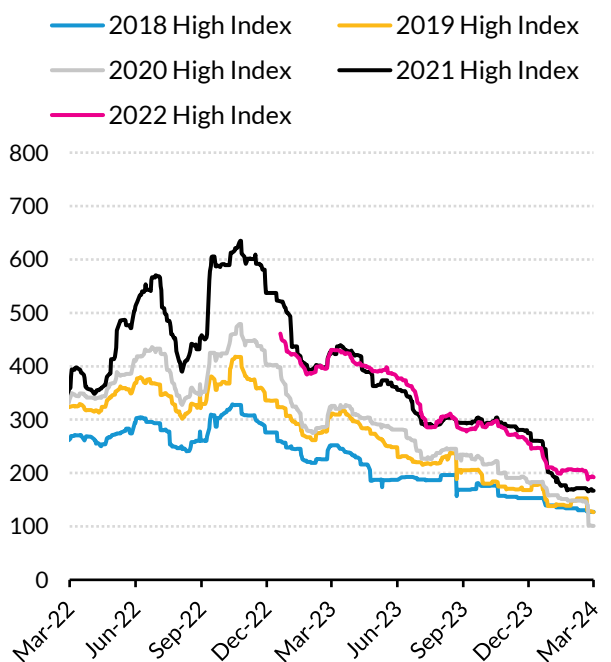
B Indices



Low Indices



High Indices



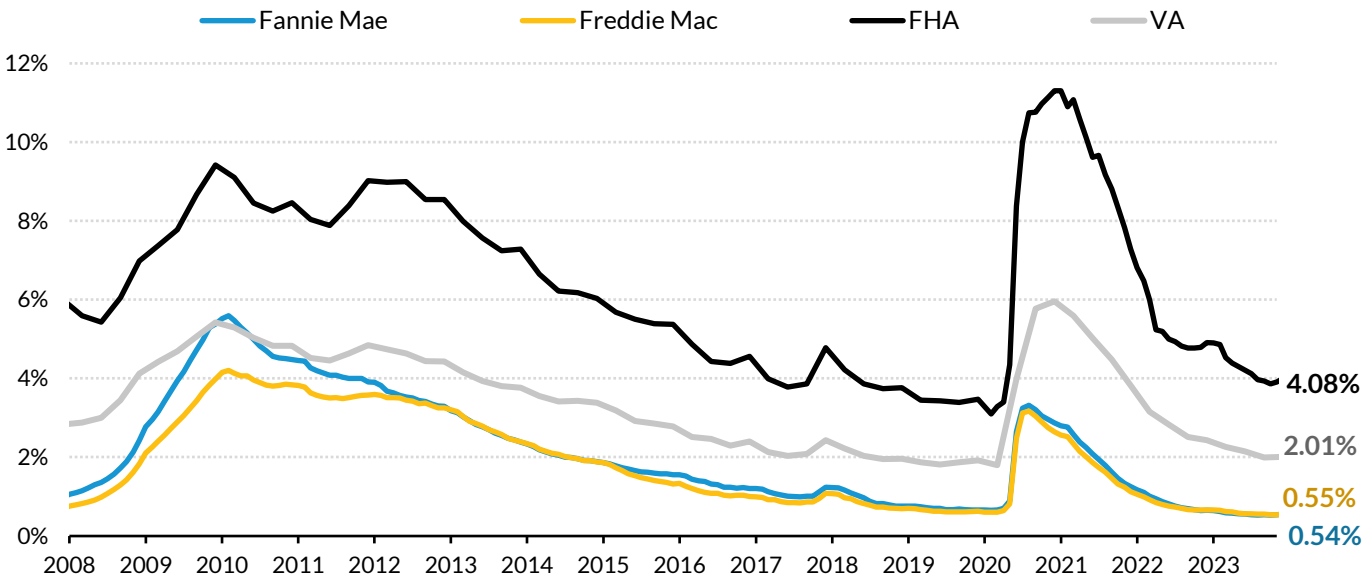
Sources: Vista Data Services and Urban Institute.
 Note: Data as of March 15, 2024.

GSES UNDER CONSERVATORSHIP

SERIOUS DELINQUENCY RATES

Serious delinquency rates for single family loans have declined to pre-pandemic levels, and seasonal trends now govern changes in delinquencies. In January 2024 Fannie Mae and Freddie Mac single-family loans both held steady at 0.54 and 0.55 percent, respectively. Serious delinquency rates for FHA loans, which are higher than those on GSE or VA loans, increased from 4.01 percent in December 2023 to 4.08 percent in January 2024. In Q4 2023, VA serious delinquency rates increased to 2.01 percent from 1.99 percent in Q3 2023. Note that loans that are in forbearance are counted as delinquent for the purpose of measuring delinquency rates. Serious delinquency rates on Fannie and Freddie multifamily loans have risen since 2022. In January 2024, Fannie Mae's serious multifamily delinquency rate sits at 0.45 percent, down from 0.54 percent in September. Freddie Mac's serious delinquency rate increased rapidly from 0.28 percent in December to 0.44 percent in January 2024.

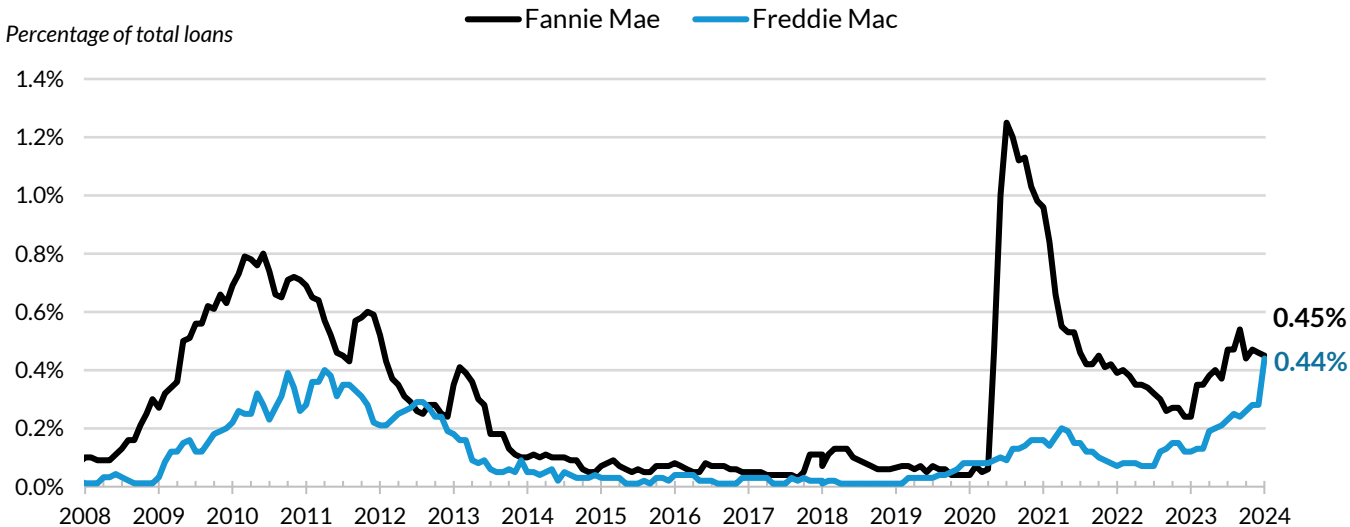
Serious Delinquency Rates—Single-Family Loans



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 2023. GSE and FHA delinquencies are reported monthly, data as of January 2024.

Serious Delinquency Rates—Multifamily GSE Loans



Sources: Fannie Mae, Freddie Mac and Urban Institute. Data as of January 2024.

Note: Multifamily serious delinquency 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 \$139.4 billion in the first two months of 2024, \$81.6 billion by the GSEs and \$57.7 billion by Ginnie Mae. These levels are up 1.0 percent from 2023 issuance activity through February. Total 2024 net issuance (new securities issued less the decline in outstanding securities due to principal pay-downs or prepayments) outpaces 2023 levels. Both the GSEs and Ginnie Mae have been stronger to-date as the \$49.0 billion issued in 2024 exceeds the \$37.0 billion issued through February 2023.

Agency Gross Issuance

Issuance Year	GSEs	Ginnie Mae	Total
2003	\$1,874.9	\$213.1	\$2,088.0
2004	\$872.6	\$119.2	\$991.9
2005	\$894.0	\$81.4	\$975.3
2006	\$853.0	\$76.7	\$929.7
2007	\$1,066.2	\$94.9	\$1,161.1
2008	\$911.4	\$267.6	\$1,179.0
2009	\$1,280.0	\$451.3	\$1,731.3
2010	\$1,003.5	\$390.7	\$1,394.3
2011	\$879.3	\$315.3	\$1,194.7
2012	\$1,288.8	\$405.0	\$1,693.8
2013	\$1,176.6	\$393.6	\$1,570.1
2014	\$650.9	\$296.3	\$947.2
2015	\$845.7	\$436.3	\$1,282.0
2016	\$991.6	\$508.2	\$1,499.8
2017	\$877.3	\$455.6	\$1,332.9
2018	\$795.0	\$400.6	\$1,195.3
2019	\$1,042.6	\$508.6	\$1,551.2
2020	\$2,407.5	\$775.4	\$3,182.9
2021	\$2,650.8	\$855.3	\$3,506.1
2022	\$1,200	\$527.4	\$1,727.4
2023	\$637.9	\$382.9	\$1,020.7
2024 YTD	\$81.6	\$57.7	\$139.4
YTD 2024 % Change Over 2023	-6.2%	13.4%	1.0%
2024 Annualized	\$81.6	\$57.7	\$139.4

Agency Net Issuance

Issuance Year	GSEs	Ginnie Mae	Total
2003	\$334.90	-\$77.60	\$257.30
2004	\$82.50	-\$40.10	\$42.40
2005	\$174.20	-\$42.20	\$132.00
2006	\$313.60	\$0.20	\$313.80
2007	\$514.90	\$30.90	\$545.70
2008	\$314.80	\$196.40	\$511.30
2009	\$250.60	\$257.40	\$508.00
2010	-\$303.20	\$198.30	-\$105.00
2011	-\$128.40	\$149.60	\$21.20
2012	-\$42.40	\$119.10	\$76.80
2013	\$69.10	\$87.90	\$157.00
2014	\$30.5	\$61.6	\$92.1
2015	\$75.1	\$97.3	\$172.5
2016	\$127.4	\$125.8	\$253.1
2017	\$168.5	\$131.3	\$299.7
2018	\$149.4	\$112.0	\$261.5
2019	\$197.8	\$95.7	\$293.5
2020	\$632.8	\$19.9	\$652.7
2021	\$753.5	\$5.6	\$759.1
2022	\$276.6	\$133.3	\$409.3
2023	\$38.0	\$174.0	\$212.0
2024 YTD	\$24.0	\$25.0	\$49.0
YTD 2024 % Change Over 2023	84.6%	4.2%	32.4%
2024 Annualized	\$144.0	\$84.0	\$264.0

Sources: eMBS and Urban Institute.

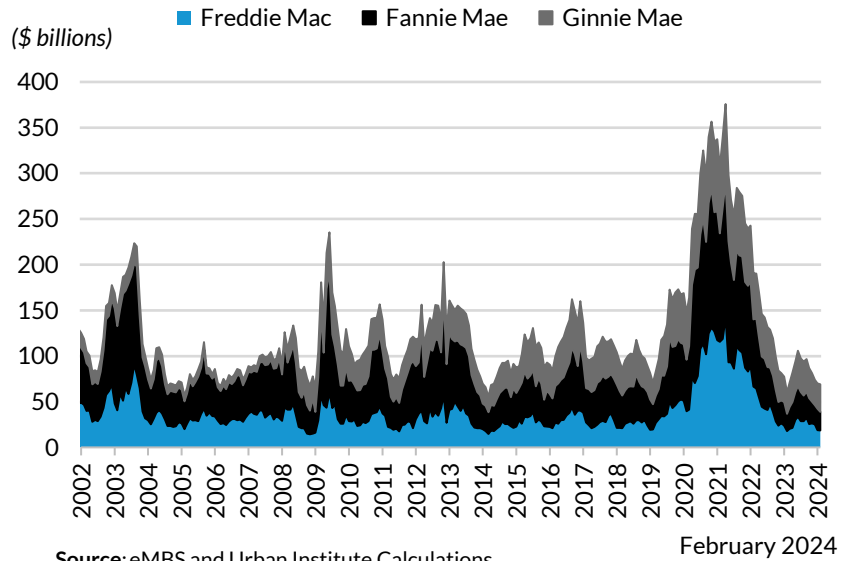
Note: Dollar amounts are in billions. Data as of February 2024.

AGENCY ISSUANCE

AGENCY GROSS ISSUANCE & FED PURCHASES

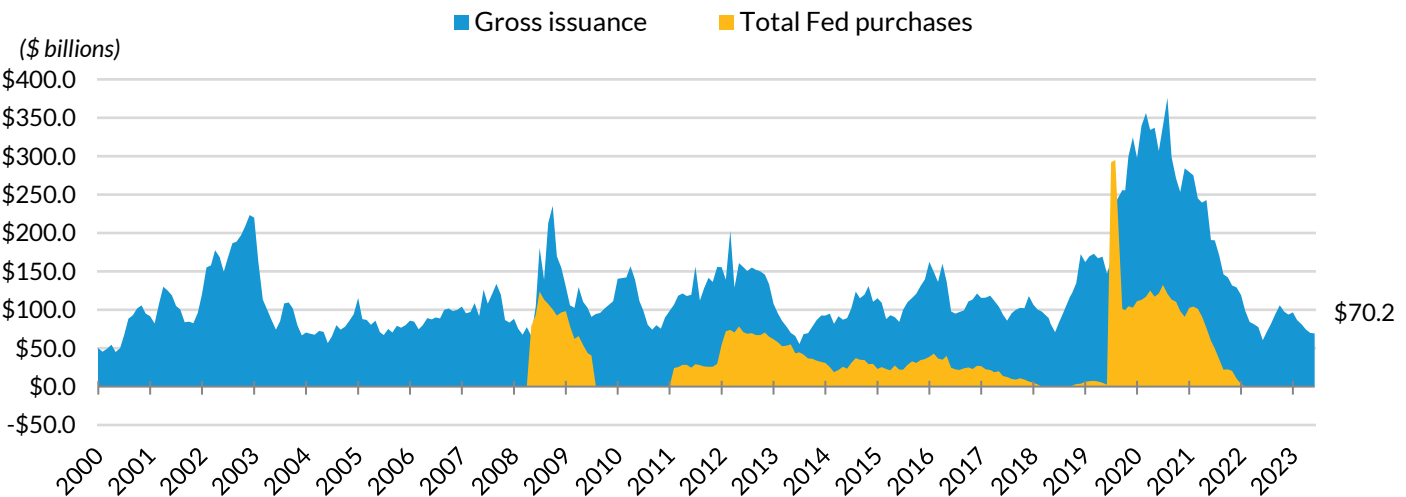
Agency issuances by the GSEs and Ginnie Mae totaled 69.2 billion in February 2024, 14.8 percent greater than volume in February 2023. While FHA, VA and GSE lending have dominated the mortgage market since the 2008 housing crisis, there has been a change in the mix. The Ginnie share of new issuances has 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 reached a new series high of 43.5 percent in February 2024.

Monthly Gross Issuance



Fed Absorption of Agency Gross Issuance

The Fed's purchases of agency MBS dropped to \$0 in November 2022 and has remained negligible since, 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.

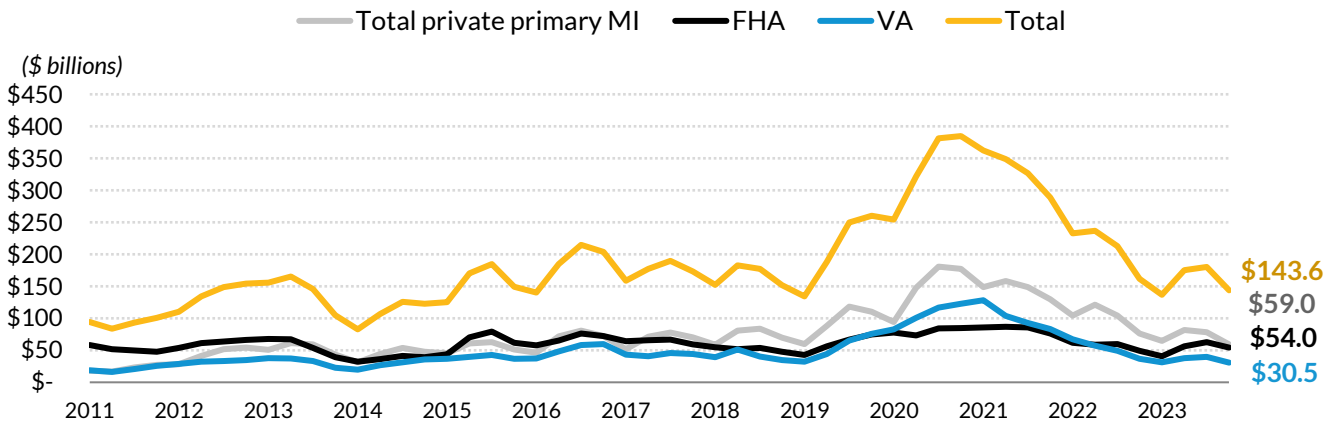


AGENCY ISSUANCE

MORTGAGE INSURANCE ACTIVITY

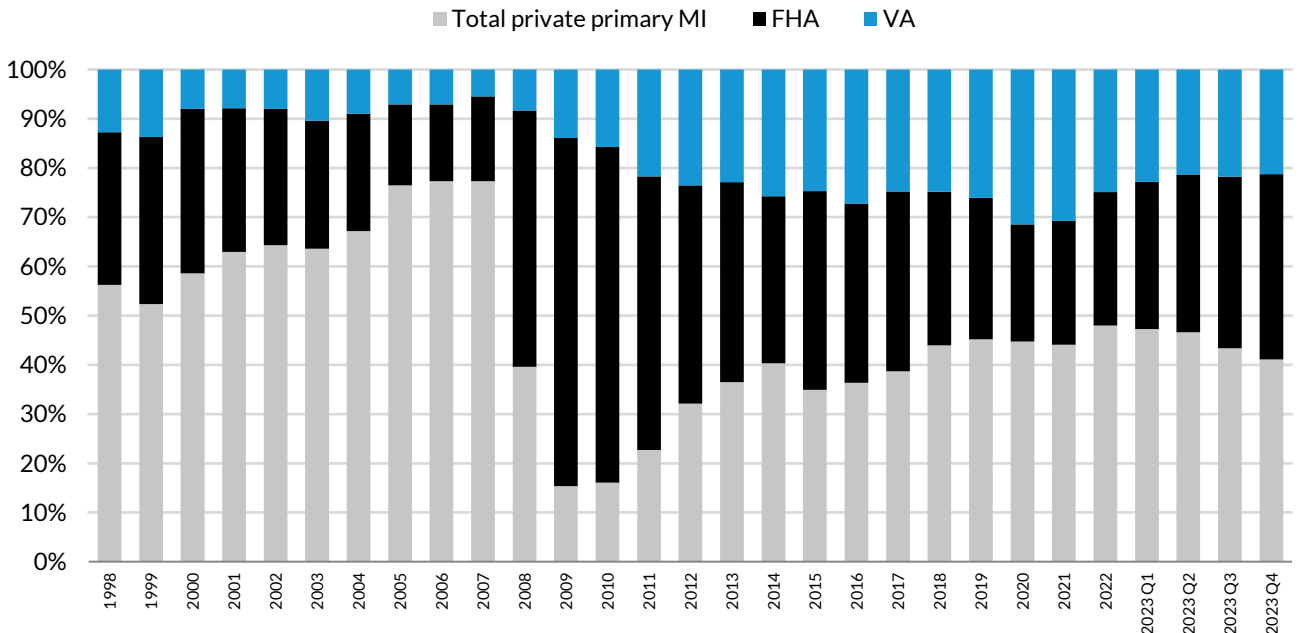
MI Activity

Total mortgage insurance written decreased by \$36.8 billion to \$143.5 billion from Q3 to Q4 of 2023. The FHA and VA insurance activity decreased by \$8.7 and \$8.8 billion, respectively, while private insurance activity decreased by \$19.2 billion. The private mortgage insurers share decreased from 43.4 to 41.1 percent and VA's share decreased marginally from 21.8 to 21.3 percent. In contrast, FHA's share increased from 34.8 to 37.6 percent.



Sources: Inside Mortgage Finance and Urban Institute. Last updated February 2024.

MI Market Share



Sources: Inside Mortgage Finance and Urban Institute. Last updated February 2024.

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 most borrowers putting down less than 5 percent. 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 FICO's of 760 and above will find GSE execution with PMI to be more attractive. This calculation reflects both the FHA MIP cut and 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		7.10							
FHA Base Rate		7.10							
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	1.75
FHA MIP	0.55	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	\$2,112	\$2,112	\$2,112	\$2,112	\$2,112	\$2,112	\$2,112	\$2,112	\$2,112
GSE plus PMI	\$2,307	\$2,261	\$2,242	\$2,182	\$2,136	\$2,114	\$2,085	\$2,056	
GSE plus PMI Advantage	-\$195	-\$149	-\$130	-\$70	-\$24	-\$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 March 15, 2024.

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

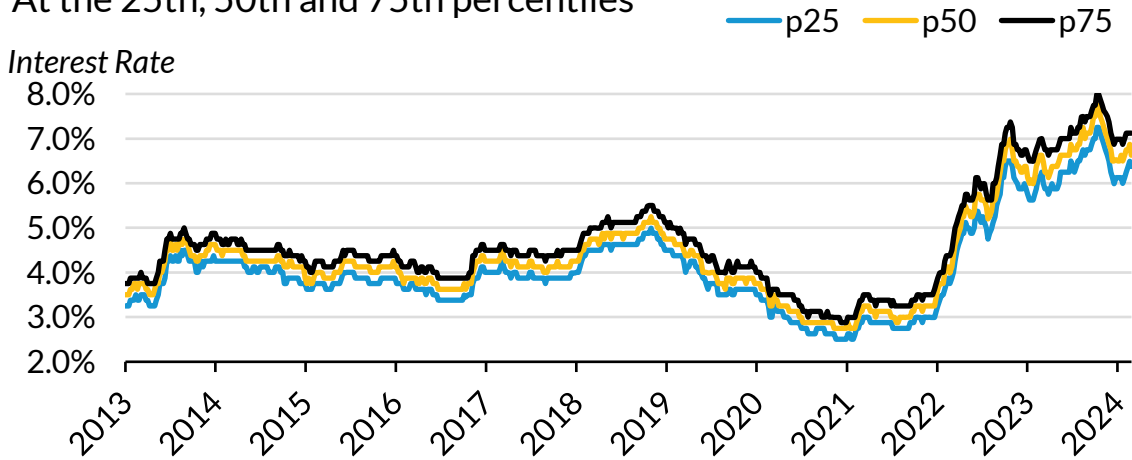
The PMI monthly payment calculation is based on the 25 percent coverage that applies to Fannie Mae's HomeReady and Freddie Mac's Home Possible (HP) programs.

Variation in Interest Rates

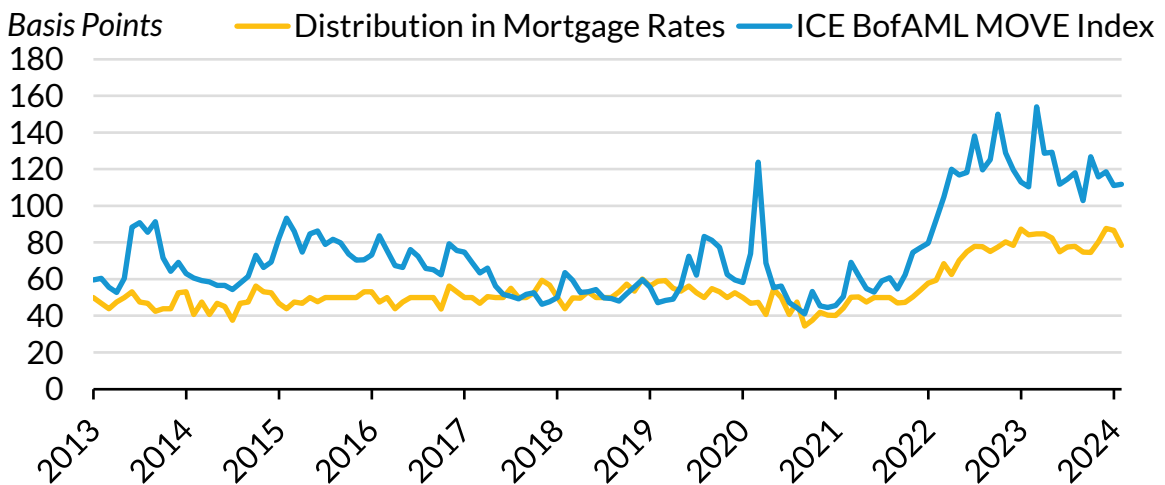
Optimal Blue loan level rate lock data provide daily insights into mortgage lending. With this data set, we investigated timely changes in interest rate locks. From 2015 through 2019, variation in interest rates held steady at around 50 basis points between the 25th and 75th percentile of rates locked in each week. In 2020, as rates decreased to historic lows, this spread decreased to around 40 basis points. Then the spread increased to about 80 basis points as interest rates increased in 2022. The widening in the mortgage rate distribution is generally mirrored by rises in the ICE MOVE index, a measure of interest rate volatility. That is, both the distribution in mortgage rates and the MOVE index experienced a similar rise over 2022 and have remained elevated since. More recently, however, as the MOVE index has declined, the mortgage rate distribution has not narrowed.

Weekly Interest Rate Locks

At the 25th, 50th and 75th percentiles



Variation in Weekly Interest Rates



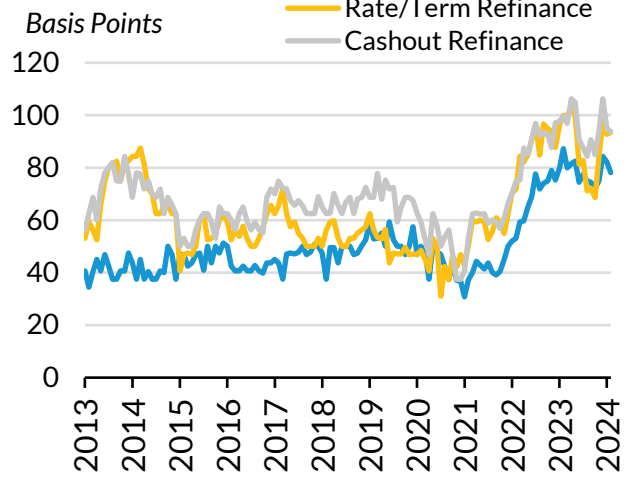
Source: Optimal Blue, Yahoo.com and Urban Institute Calculations.

Note: Only including rate locks with a 30-year loan term. Locks measured by the week the lock was requested, not at origination. Not all locks result in an originated loan. Spread in interest rates calculated as the difference between the 75th and 25th percentiles of interest rate locks made in a single week. MOVE index and interest rate distribution visualized here as monthly averages. Basis point = 1/100th of a percent.

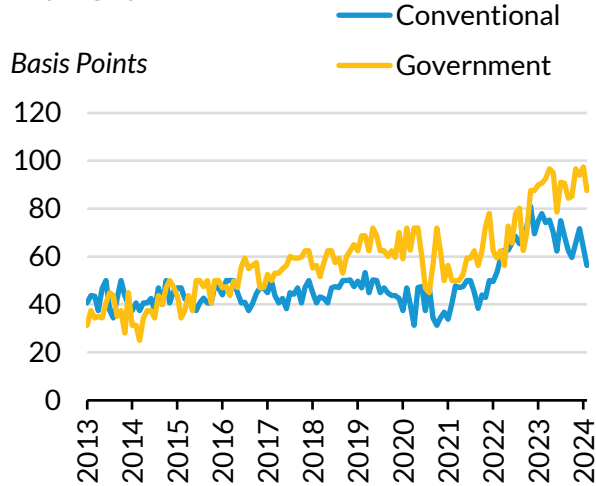
Variation in Interest Rates by Loan Characteristics

Like the previous page, here we show the variation in mortgage rates received by borrowers securing rates in a given week. In general, there is greater variation in interest rates on refinance loans than purchase. Rates also vary more among government loans (those backed by FHA, VA and USDA) than conventional loans. Variation in interest rates is also greater for borrowers with low credit scores than high. These borrowers who are more likely to experience greater variation in interest rates on a weekly basis would likely benefit more from shopping around for better rates.

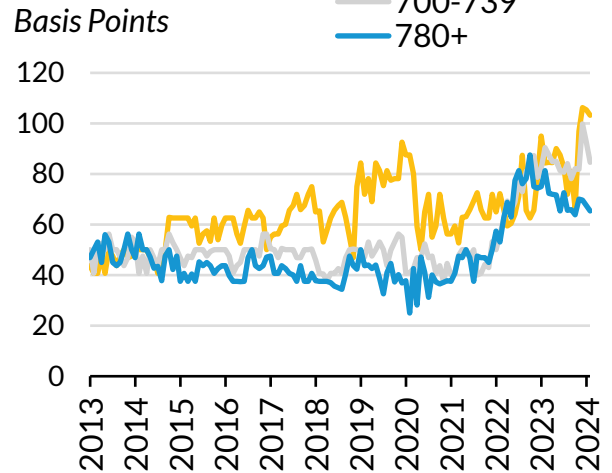
Spread in Weekly Interest Rates by Loan Purpose



Spread in Weekly Interest Rates by Loan Channel



Spread in Weekly Interest Rates by Credit Score



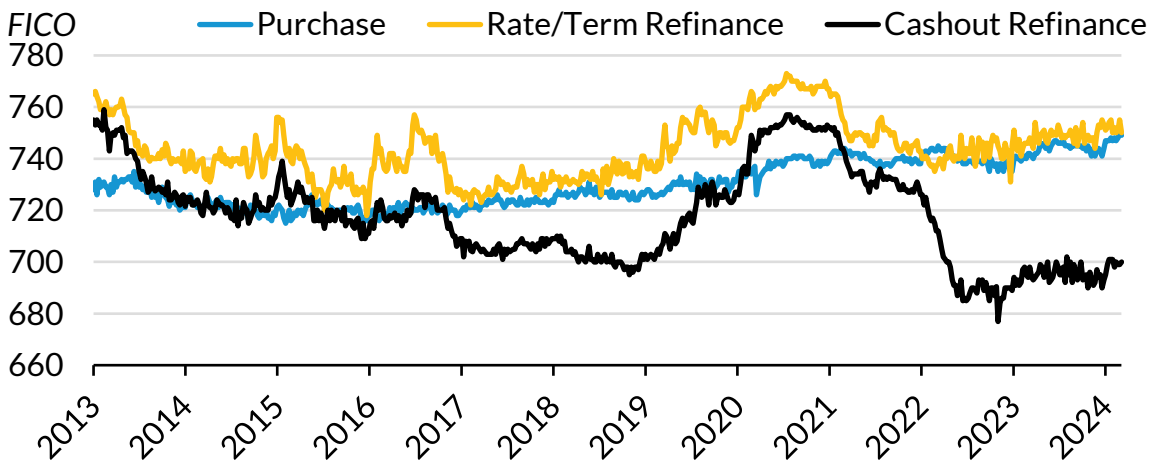
Source: Optimal Blue and Urban Institute Calculations.

Note: Only including rate locks with a 30-year loan term. Locks measured by the week the lock was requested, not at origination. Not all locks result in an originated loan. Spread in interest rates calculated as the difference between the 75th and 25th percentiles of interest rate locks made in a single week, then spreads are averaged by month to reduce noise. Basis point = 1/100th of a percent.

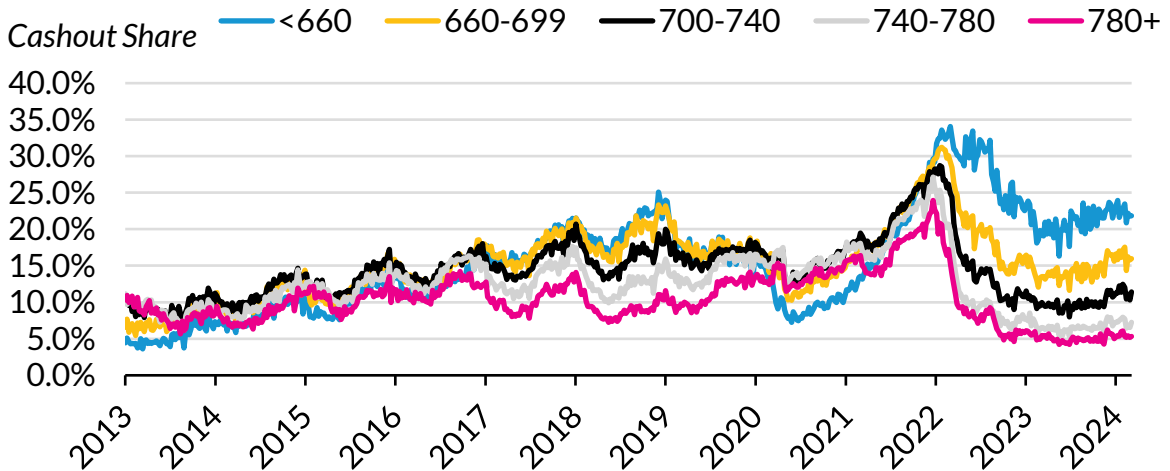
Cashout Refinance Loans

On the top chart on this page, we see that borrowers pursuing cashout refinances have lower median credit scores than borrowers who pursue rate/term refinances. The median credit scores on rate/term and cashout refinances also increased during 2020, surpassing the median credit score for purchase loans as a cashout refinance was the most economic way to extract equity. Following the rise in interest rates in 2022, median cashout refinance credit score dropped to a series low and remains low relative to other originations, suggesting that the most vulnerable borrowers are the major users of cash out refinances as the vehicle of choice to extract equity; higher credit score borrowers have more attractive options to extract equity, such as home equity line of credit, and may have less need for the cash. Moving to the bottom chart, the share of lower credit score borrowers pursuing cashout refinances is higher now than it was in 2013. Moreover, as the cashout refi share increased for all borrowers in 2020 and 2021, borrowers with credit scores below 660 seemed to lag in this rush to refinance, with the lowest cashout share at the beginning of the run-up in mid-2020 and the highest at the peak in early 2022. The cashout refinance share for these lower credit borrowers has been very slow to decrease relative to other groups, as it may be their best option to obtain cash.

Median Weekly Credit Score by Loan Purpose



Cashout Refinance Loans as a Share of all Rate Locks



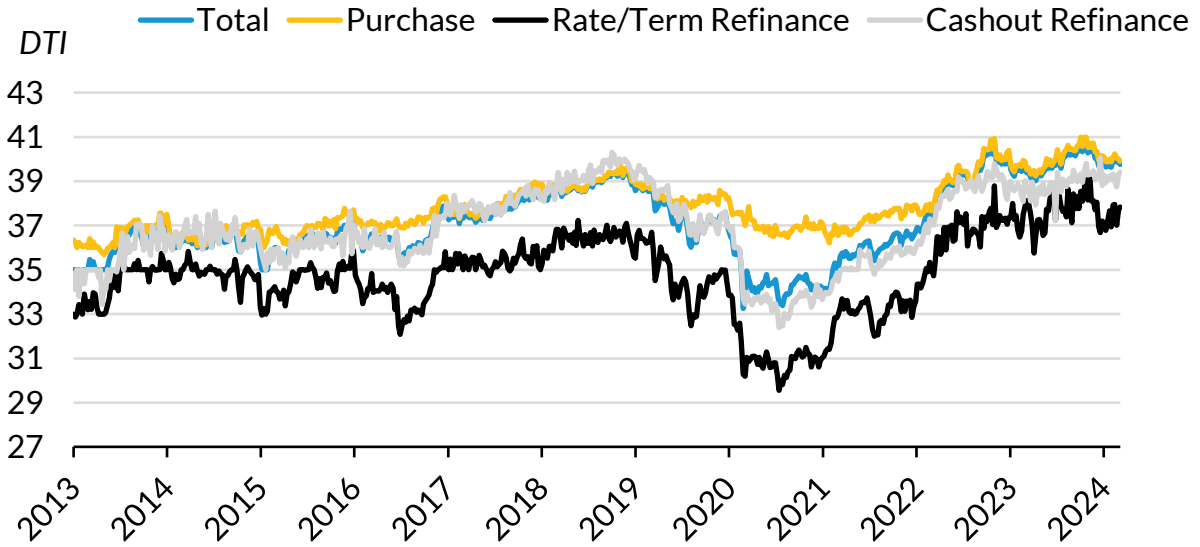
Source: Optimal Blue and Urban Institute Calculations.

Note: Only including rate locks with a 30-year loan term. Locks measured by the week the lock was requested, not at origination. Not all locks result in an originated loan.

Affordability by Income

We are in the midst of a housing affordability crisis, even with interest rates slightly down from October 2023, it is more difficult to afford a house now than it was at the peak of the 2005 housing bubble ([page 23](#)). The median homebuyer in 2023 and so far in 2024 is cost burdened, paying at least 30 percent of monthly earnings on debt payments. However, this crisis is not felt evenly by everyone; lower income homebuyers are more severely cost burdened, with the median homebuyer in 2023 and so far in 2024 with an annual income less than \$150,000 paying over 40 percent of their monthly income on debt payments.

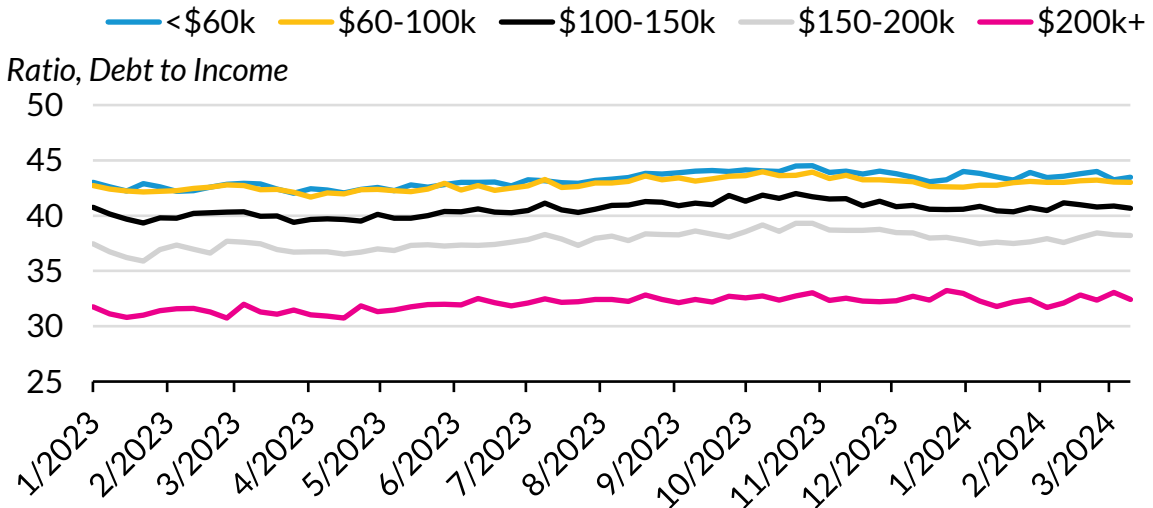
Median Debt to Income by Loan Purpose



Source: Optimal Blue and Urban Institute calculations.

Note: Includes only loans with a 30-year loan term.

Median Debt to Income by Household Income



Source: Optimal Blue and Urban Institute Calculations.

Note: Includes only purchase loans with a 30-year loan term. Back-end debt-to-income (DTI), including non-housing monthly debt payments.

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