



HOUSING FINANCE AT A GLANCE

A MONTHLY CHARTBOOK

April 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.

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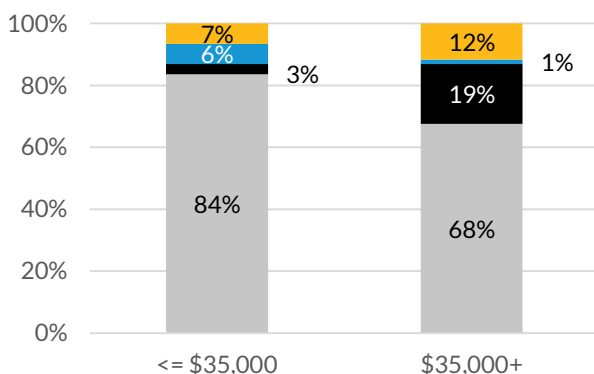
INTRODUCTION

How Changes to Federal Home Improvement Loans Can Support Homeowners

Despite recent fluctuations, private spending on home improvements has risen sharply since 2019. Traditionally, home improvements, like remodeling, occur around a sale transaction as a seller prepares the home for listing or when a new homebuyer wants to personalize their home.

But improvements can also alter a home's functionality. In response to the pandemic, homeowners added an additional room for an office. And amid higher interest rates, homeowners may renovate their home instead of purchasing a new one.

Distribution by Cost of Home Improvement Job



Source: Urban Institute calculations of 2021 American Housing Survey.

Note: Other includes homeowners insurance settlement, contractor arranged financing and other fund sources.

Refinances and home equity loans are thought to be popular sources of funds used for improvements. However, as the figure above illustrates, this source of financing is more prominent for larger projects. Although cash is used in the majority of both less expensive and more expensive projects, it accounts for a significantly greater share of less expensive projects. In addition, the use of credit cards or retail store charge cards is also a significantly greater share of less expensive projects than more expensive ones.

However, there are differences in funding sources based on when the homeowner moved into their home. And the relative differences are greater among more expensive home improvement projects. For this analysis, new homebuyers moved into an owner-occupied home in 2020 or 2021 and all other homeowners moved before 2020. This is consistent with the standard definition of new construction in census data.

The 2021 American Housing Survey shows that among less expensive projects, more than 80 percent of new homebuyers and non-new homebuyers use cash from savings. But new homebuyers are slightly more likely to use cash and credit cards. In contrast, non-new homeowners are likely to refinance or take out a home equity loans as well as to use some other financing option.

Among more expensive projects these differences are greater. Non-new homebuyers are significantly less likely to use cash and even more likely to use a refinancing or a home equity loan as well as another financing source. Although credit cards are used less among more expensive improvement projects, the gap between its share among new homebuyers as compared to non-new homebuyers is greater among more expensive projects.

The US Department of Housing and Urban Development (HUD) and the government-sponsored enterprises Fannie Mae and Freddie Mac, provide home improvement loans, but structural issues limit their effectiveness.

Amid a growing share of older homes, which partly reflects lower levels of new construction since the Great Financial Crisis, addressing the structural challenges of home improvement loan programs would be helpful. For new homebuyers who haven't built additional equity beyond their down payment, home improvement loans could reduce the reliance on higher interest credit cards. For non-recent homebuyers, home improvement loans could provide additional funds toward a renovation.

Home improvement or renovation loans are the only programs in which borrowers can obtain a loan based on the after-repair market value of the home, a key benefit. However, home improvement lending is very cumbersome. In its response to HUD's recently completed Request for Information (RFI) on its 203(k) program, the Urban Institute recommended a number of proposals that could expand access. For example, the limited 203(k) program, which is more streamlined than the standard program, is capped at \$35,000 and cannot be used for structural repairs. Raising the cap will allow homeowners, who are more likely to finance these higher cost projects, to use the more streamlined product. And streamlining the standard program should expand access for structural projects that have the potential to significantly boost a home's value.

INSIDE THIS ISSUE

- Overall, house prices continue to rise year-over-year, but at a slower pace. For the highest tier homes, prices in March 2023 were 1.83 percent lower than they were 12 months ago (Page 22).
- Monthly non-agency securitization has risen for four consecutive months and at \$6.4 billion sits at levels last seen in September 2022 (Page 12).
- The Fannie Mae multifamily serious delinquency rate jumped 11 bp to 0.35 percent, the highest rate since May 2022, and the largest single-month increase since the beginning of the pandemic (Page 29).

Distribution by Homeowner Move-in Time

<= \$35,000				
	Cash from savings	Cash from refinancing or home equity loan	Credit card or retail store charge card	Other
Recent Homebuyers	87%	1%	8%	4%
Non-recent Homebuyers	83%	4%	6%	7%
Difference	3%	-2%	2%	-3%
\$35,000+				
	Cash from savings	Cash from refinancing or home equity loan	Credit card or retail store charge card	Other
Recent Homebuyers	78%	10%	4%	8%
Non-recent Homebuyers	66%	20%	1%	12%
Difference	12%	-11%	3%	-4%

Note: Other includes homeowners insurance settlement, contractor arranged financing and other fund sources.

Data reflects first improvement project.

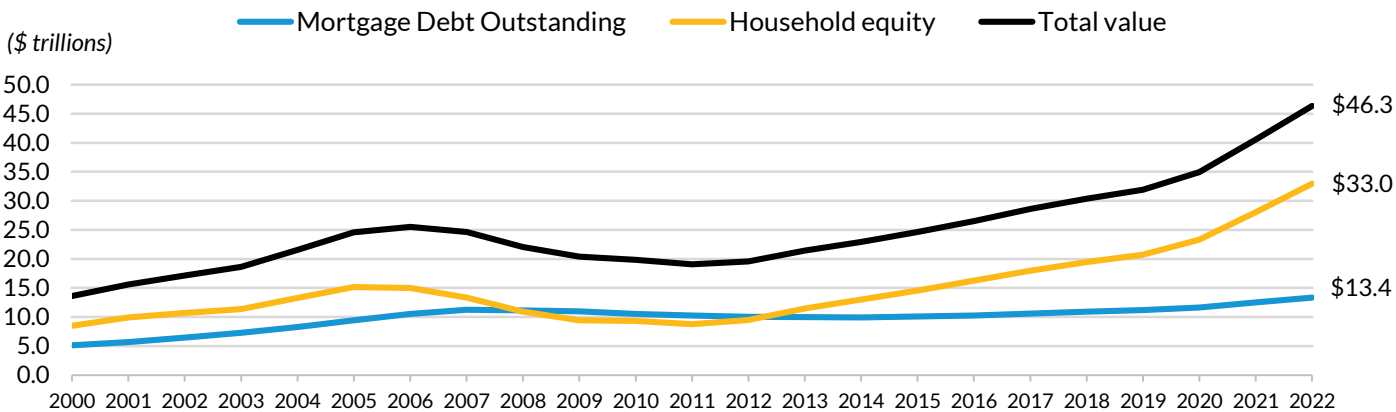
Source: Urban Institute calculations of 2021 American Housing Survey.

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 household equity. Over 2022, the total value of the single-family housing market expanded from \$40.6 trillion to \$46.3 trillion as housing equity expanded from \$28.0 to \$33.0 trillion while mortgage debt owed rose from \$12.5 to \$13.4 trillion. By the end of 2022, agency MBS accounted for 67.8 (\$8.9 trillion) percent of the total mortgage debt outstanding while private-label securities and home equity loans make up 3.2 (\$4.2 billion) and 3.3 (\$4.3 billion) percent, respectively. Unsecuritized first liens comprise the remaining 25.7 (\$3.4 trillion) percent with banks making up 17.5 (2.3 trillion) percent, credit unions 4.3 percent (\$5.7 billion), and other non-depositories accounting for 3.9 (\$5.1 billion) percent of the total.

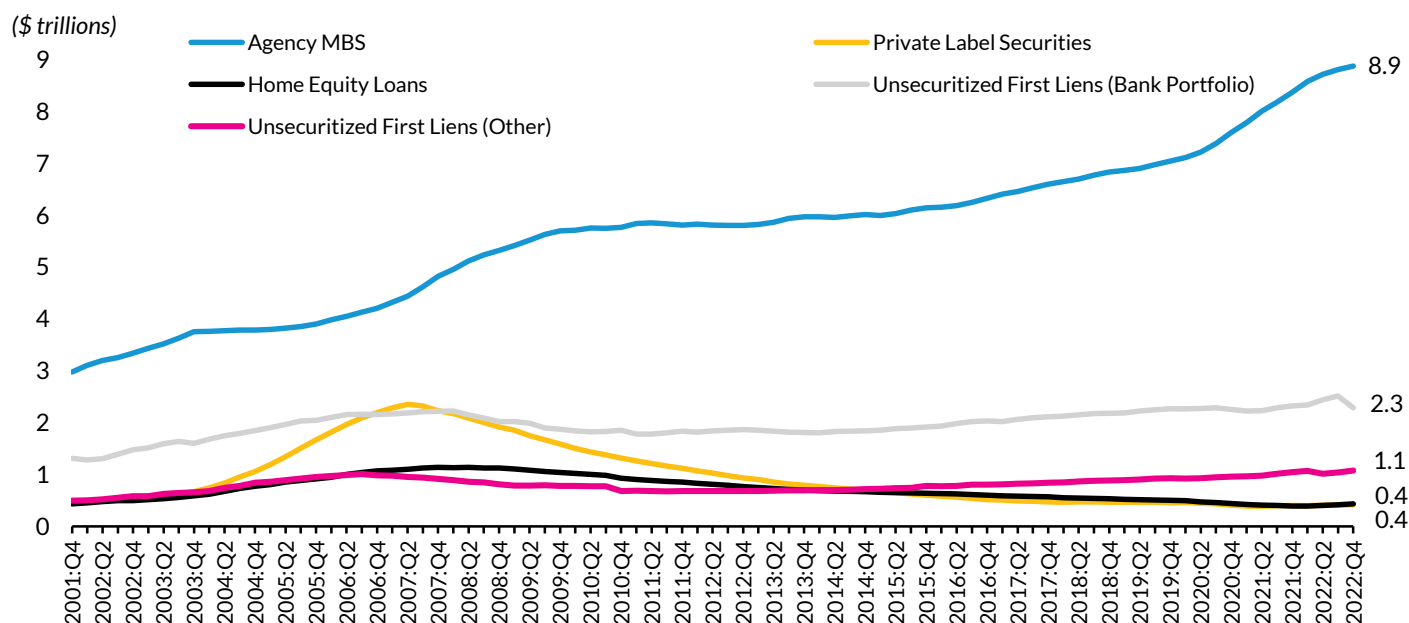
Value of the US Single Family Housing Market



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.

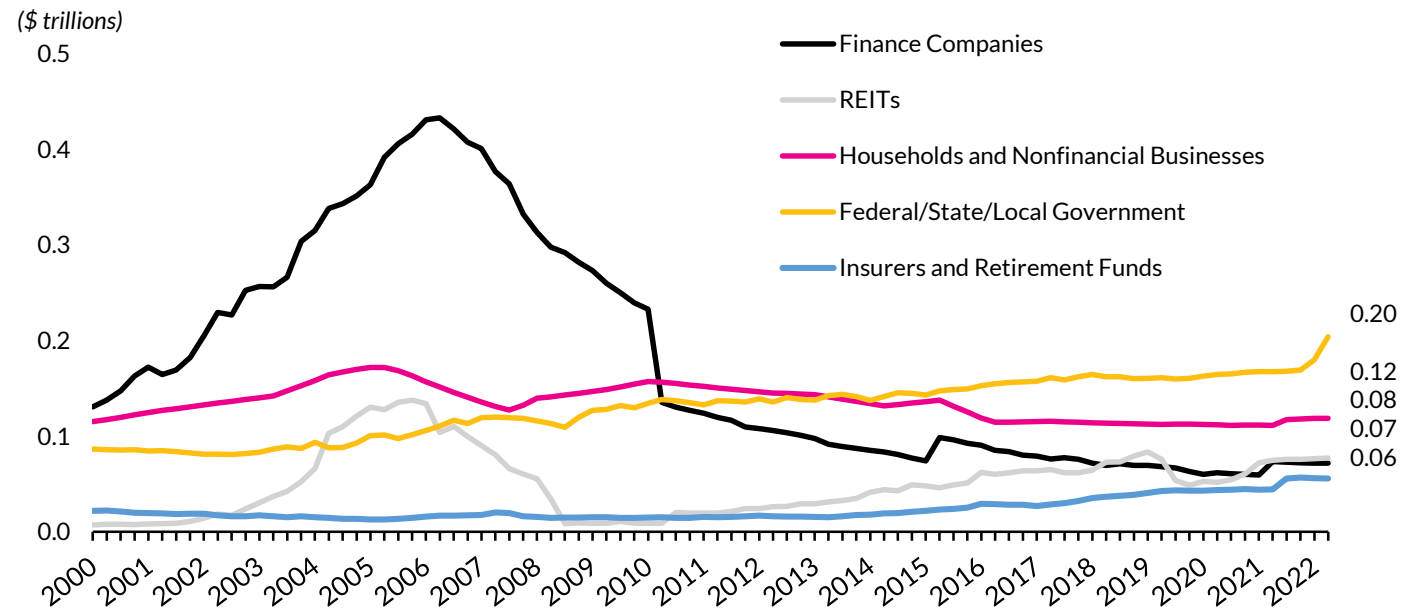
Notes: Unsecuritized First Liens (Other) includes mortgages not held on bank balance sheets.

OVERVIEW

MARKET SIZE OVERVIEW

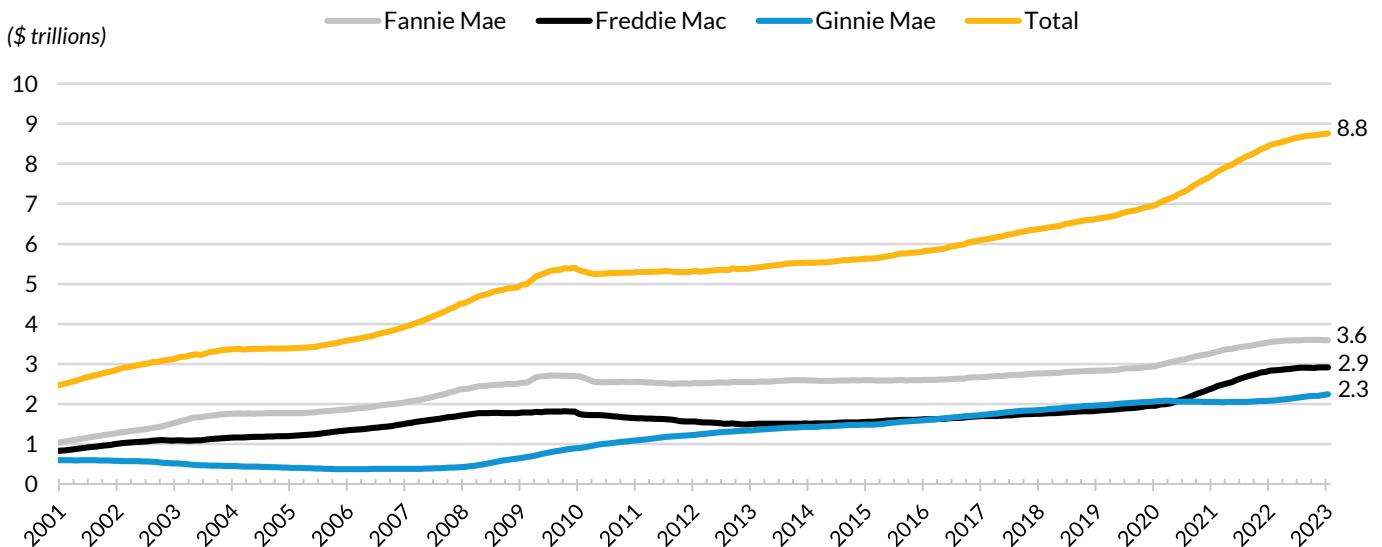
As of Q4 2022, unsecuritized first liens held outside banks and credit unions totaled \$ 0.53 trillion, 11.8 percent higher than its volume in Q4 2021. Amid higher interest rates, holdings by federal/state/local governments, the largest holders of these unsecuritized first liens, grew by 21.8% over the year. By March 2023, outstanding securities in the agency market totaled \$8.8 trillion, 41.1 percent (\$3.6 trillion) of which was Fannie Mae, 33.3 percent (\$2.9 trillion) Freddie Mac, and 25.6 percent (\$2.3 trillion) Ginnie Mae. After closing the gap in securitizations with Freddie Mac in the aftermath of the Great Recession, Ginnie securitizations again lag.

Unsecuritized 1st Liens Held by Non-Depositories



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

Agency Mortgage-Backed Securities

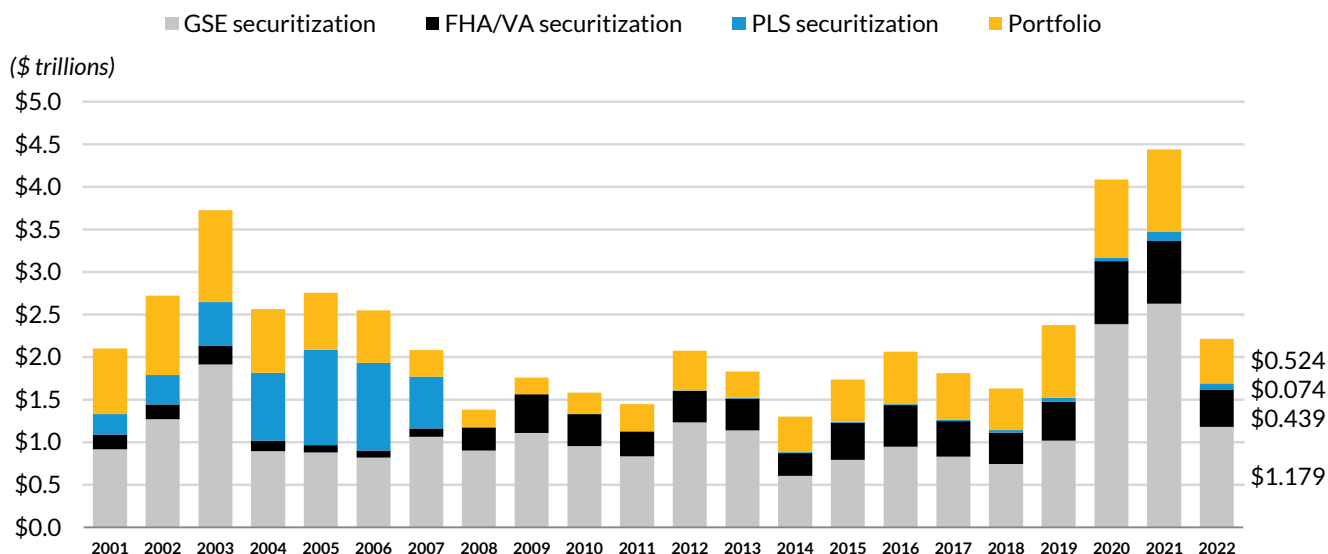


Sources: eMBS and Urban Institute.

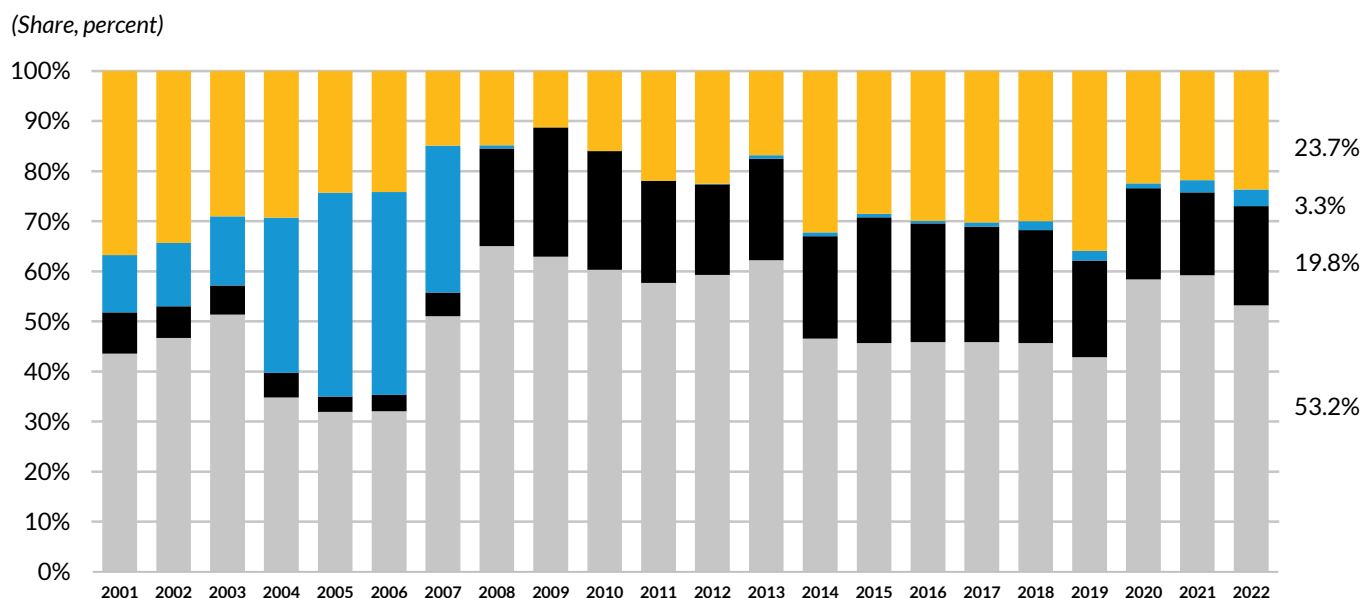
ORIGINATION VOLUME AND COMPOSITION

First Lien Origination Volume

Mortgage origination volume totaled \$2.215 trillion for full year 2022, versus \$4.438 trillion for full year 2021, this represents a 50 percent reduction in volume. The share of portfolio originations was 23.7 percent in 2022, a slight increase compared to the 21.8 percent share in 2021, but the amount was lower by nearly \$4 billion year over year. The GSE share was lower in 2022 at 53.2 percent, compared to 59.2 percent in 2021. The lower GSE share in 2022 reflects substantial slowdown of the refinance wave, which boosted GSE purchases in 2021. The FHA/VA share in 2022 stood at 19.8 percent, up from 16.5 percent in 2021. The PLS share was up in 2022 at 3.3 percent, compared to 2.4 percent in 2021.



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



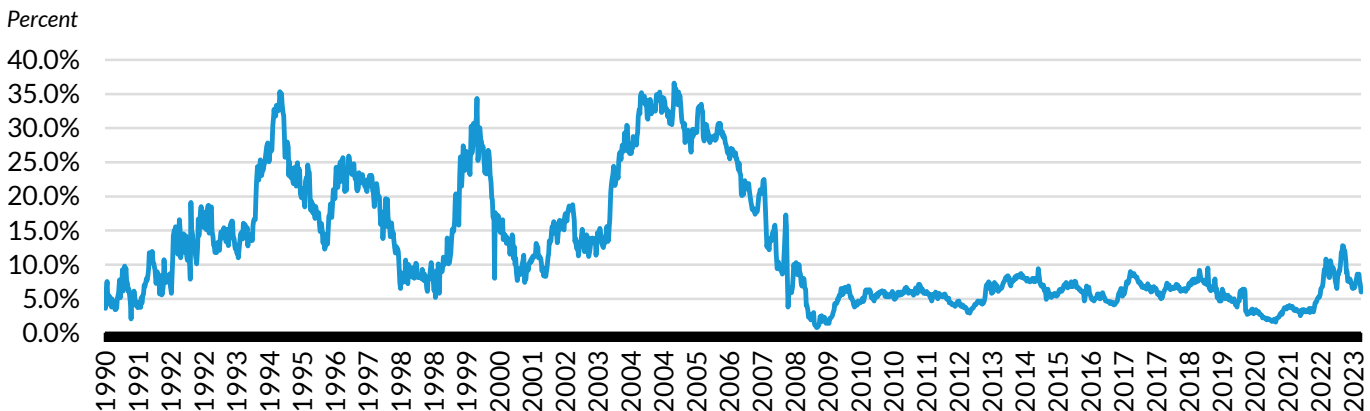
Sources: Inside Mortgage Finance and Urban Institute. Last updated February 2023.

OVERVIEW

PRODUCT COMPOSITION AND REFINANCE SHARE

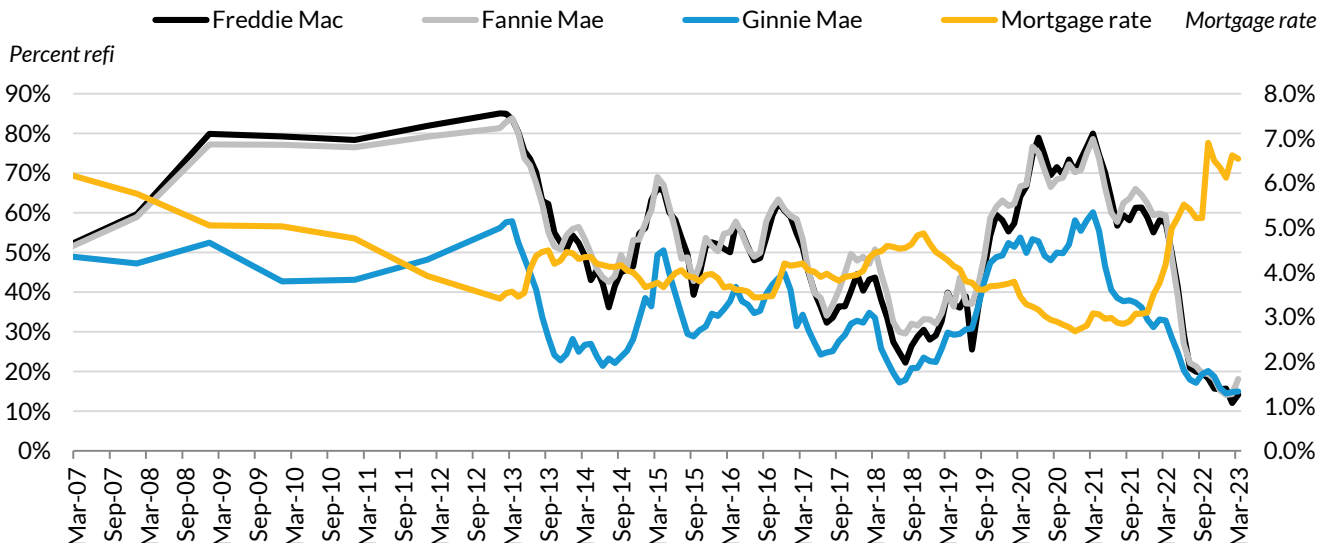
The adjustable-rate share of weekly mortgage applications varied widely in the 1990s and the early to mid-2000s, ranging from a low of 5 percent to a high of over 35 percent. From 2009 to early 2022, the ARM share remained very low, generally between 5 to 8 percent, as ultra-low rates persisted, and 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. Since then, the share has broadly decreased to 6.0 percent by the week ending April 7, 2023.

Adjustable-Rate Mortgage Share of Applications



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. Since April 2021, and in reaction to higher interest rates, the refi share has declined significantly. In March 2023, the Fannie Mae refi share is 18.1 percent and the Ginnie Mae refi share is 15.0 percent. Meanwhile, the Freddie Mac refi share is 14.2 percent, up from a series low the previous month. The refi share across the GSEs have 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.

Percent Refi at Issuance



Sources: eMBS and Urban Institute.

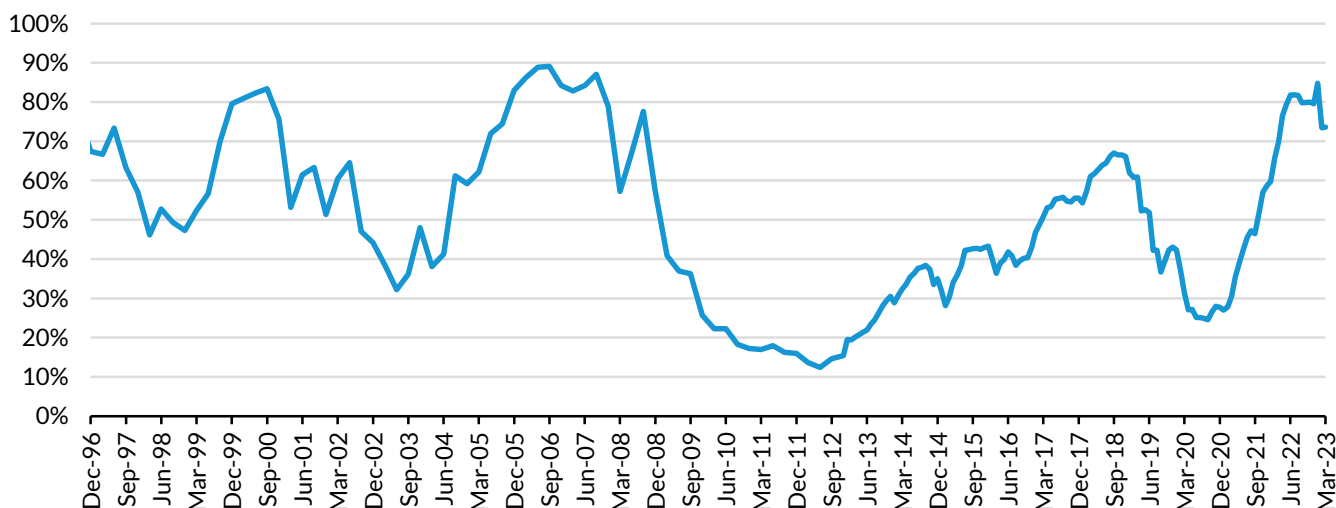
Note: Based on at-issuance balance. Figure based on data from March 2023.

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 73.6 percent as of March. Despite the higher cash-out share, the absolute volume of cash-out refinances has come down sharply since the spring of 2021, when mortgage rates began to rise. Note that the decline in the cash-out refi share is far less at FHA than at VA or the GSEs. 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.

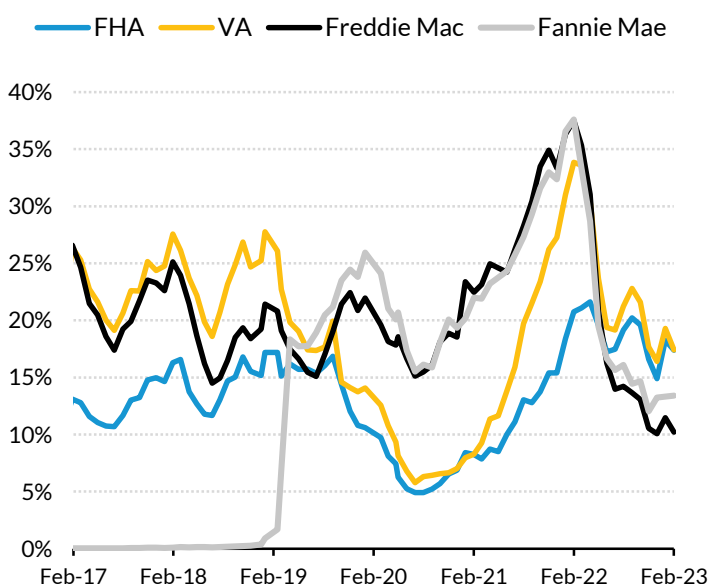
Cash-out Share of Conventional Refinances



Sources: Freddie Mac, eMBS and Urban Institute.

Note: The cashout 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 March 2023.

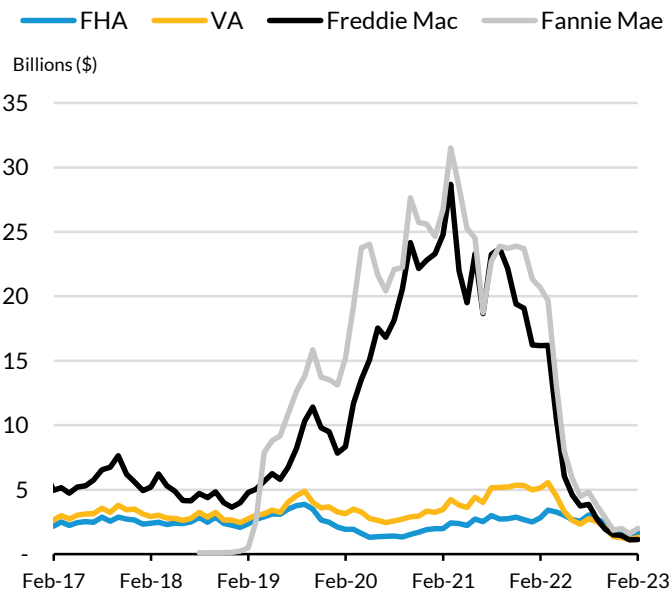
Cash-out Refi Share of All Originations



Sources: eMBS and Urban Institute.

Note: Data as of February 2023.

Cash-out Refinance Volume by Agency



Sources: eMBS and Urban Institute

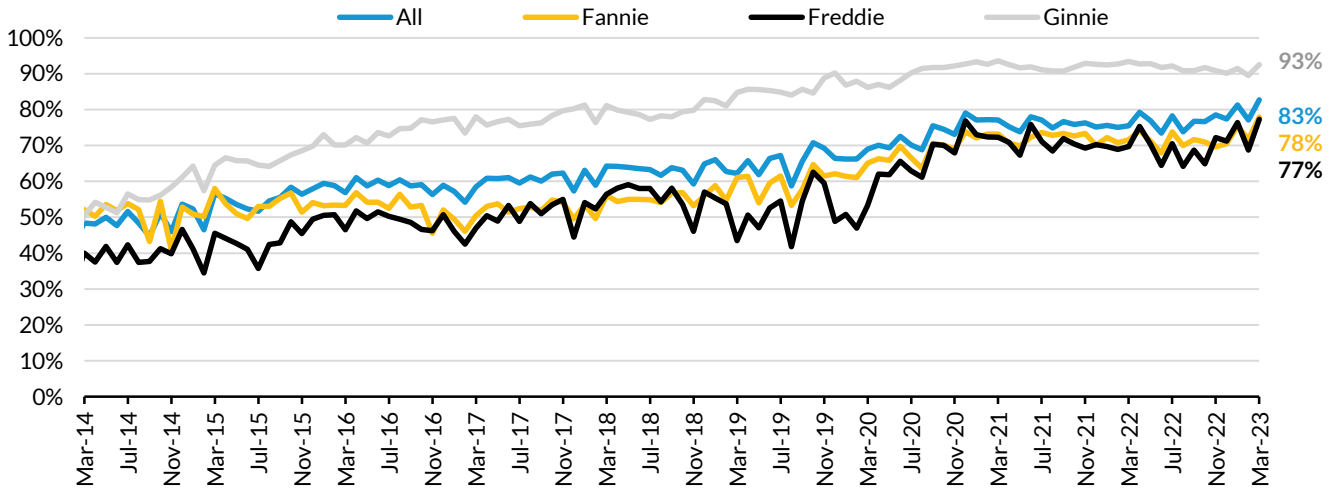
Note: Data as of February 2023.

OVERVIEW

AGENCY NONBANK ORIGINATION SHARE

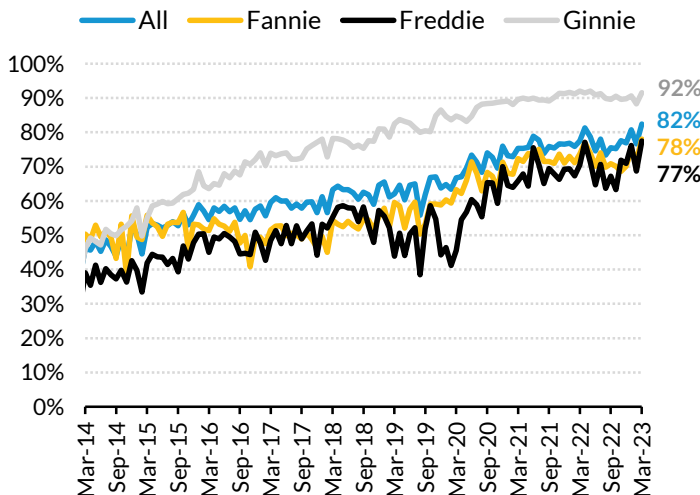
The nonbank share for agency originations has been rising steadily since 2013, standing at 83 percent in March 2023. The Ginnie Mae nonbank share has been consistently higher than the GSEs, standing at 93 percent in March 2023. Fannie and Freddie had nonbank shares of 78 percent and 77 percent respectively in March 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 March 2023.

Nonbank Origination Share: All Loans



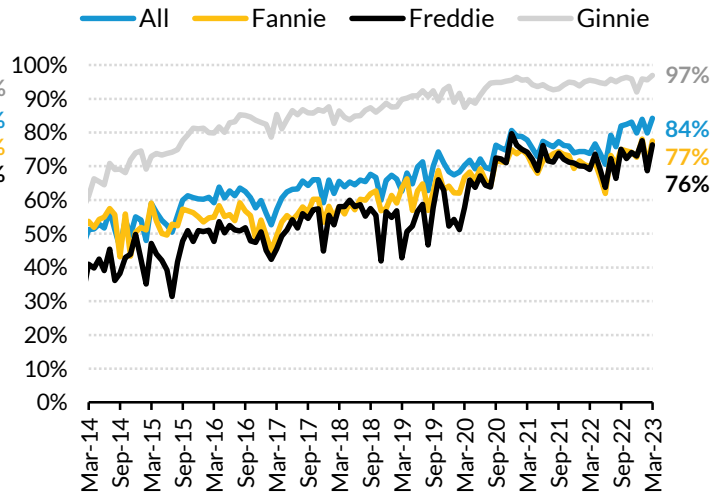
Sources: eMBS and Urban Institute.

Nonbank Origination Share: Purchase Loans



Sources: eMBS and Urban Institute.

Nonbank Origination Share: Refi Loans



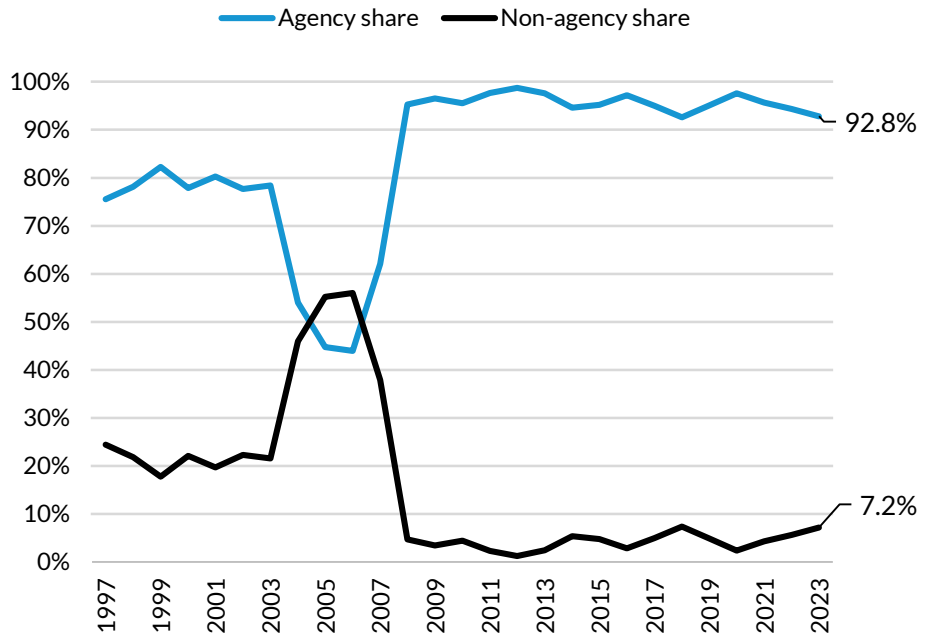
Sources: eMBS and Urban Institute.

OVERVIEW

SECURITIZATION VOLUME AND COMPOSITION

Agency/Non-Agency Share of Residential MBS Issuance

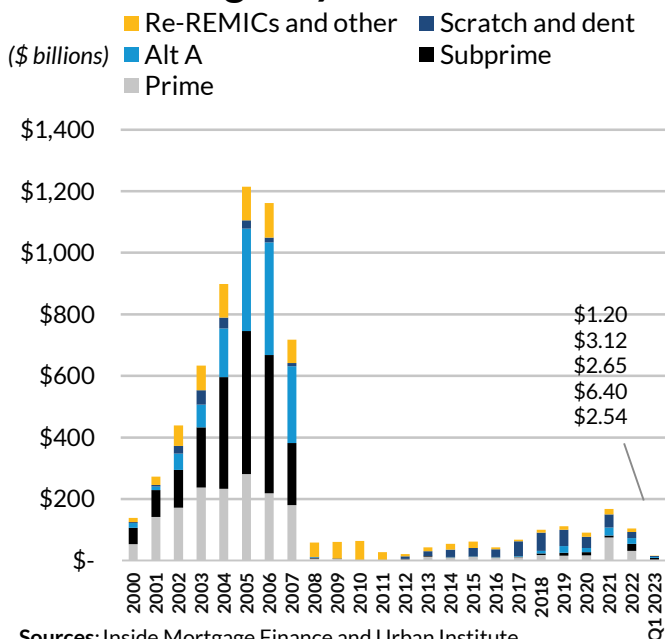
The non-agency share of mortgage securitizations increased gradually from 1.23 percent in 2012 to 7.42 percent in 2018. In 2020, the non-agency share dropped to 2.41 percent, reflecting increased agency refinances and less non-agency production due to COVID-19. The non-agency share has risen modestly since 2020, rising to 7.21 percent by March 2023, near 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 \$6.4 billion in February 2023, its fourth consecutive monthly increase. However, 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 March 2023. Monthly non-agency volume is subject to revision.

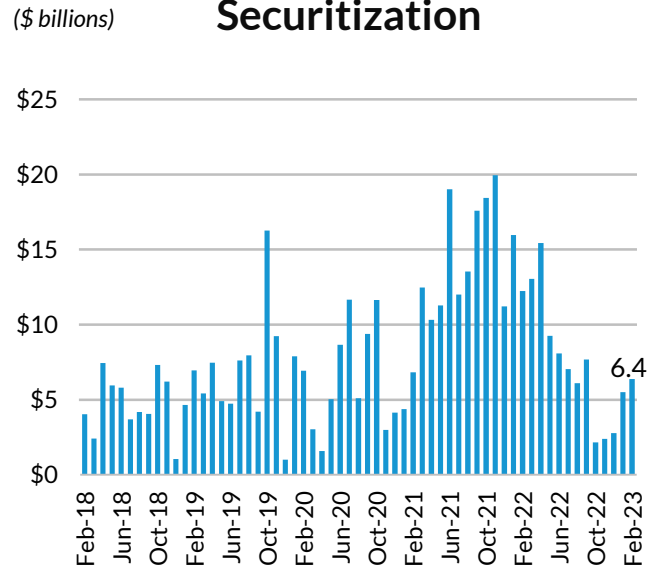
Non-Agency MBS Issuance



Sources: Inside Mortgage Finance and Urban Institute.

Note: Data through Q1 2023.

Monthly Non-Agency Securitization



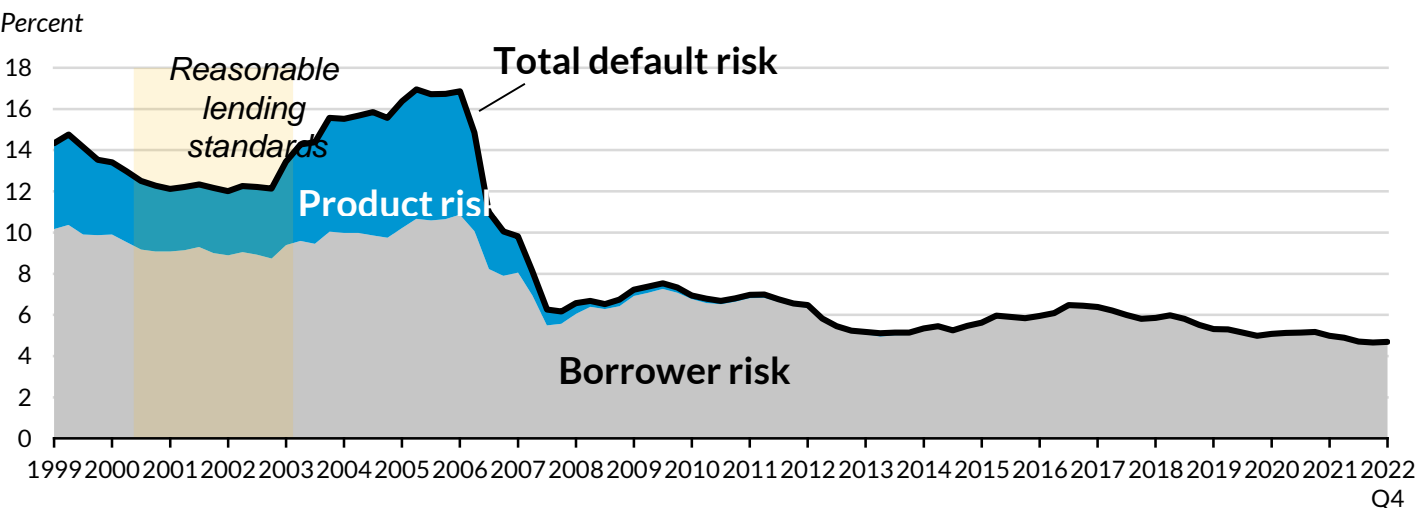
Sources: Inside Mortgage Finance and Urban Institute.

CREDIT BOX

HOUSING CREDIT AVAILABILITY INDEX

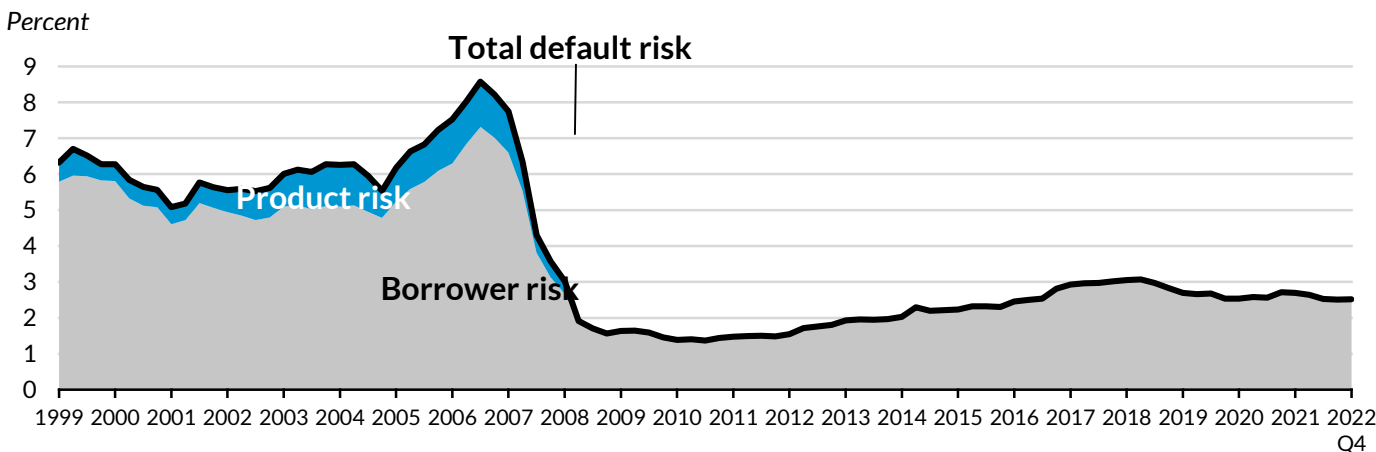
The Urban Institute's Housing Credit Availability Index (HCAI) assesses lenders' tolerance for both borrower risk and product risk, calculating the share of owner-occupied purchase loans that are likely to go 90+ days delinquent over the life of the loan. The HCAI stood at 4.7 percent in Q4 2022, remaining 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.



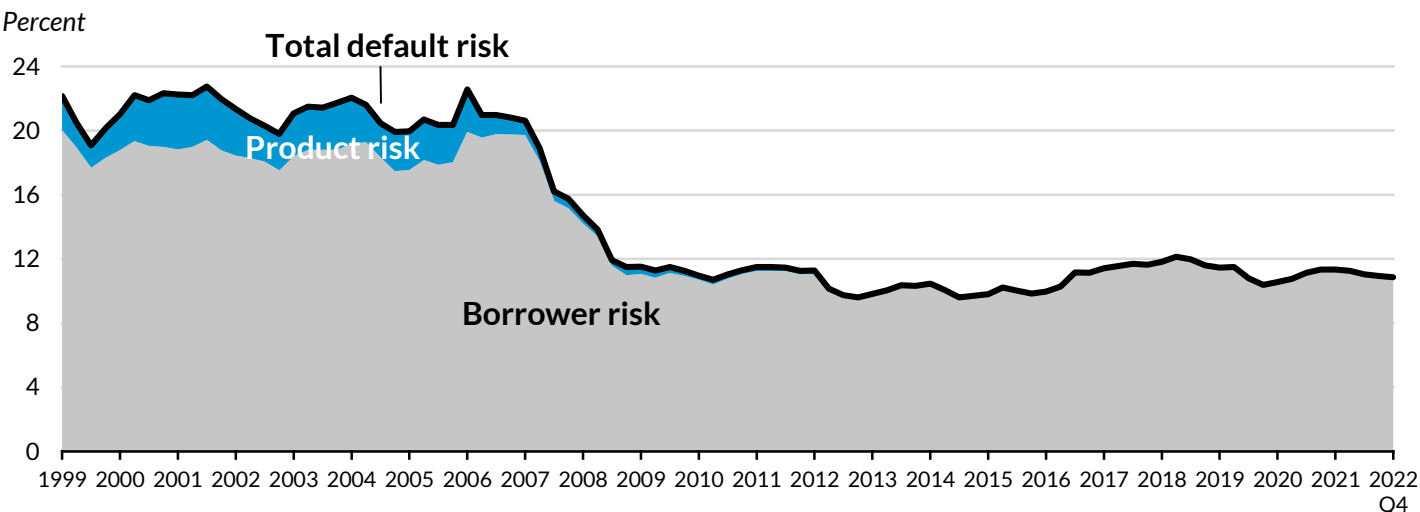
Sources: eMBS, CoreLogic, HMDA, IMF, and Urban Institute.

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

HOUSING CREDIT AVAILABILITY INDEX

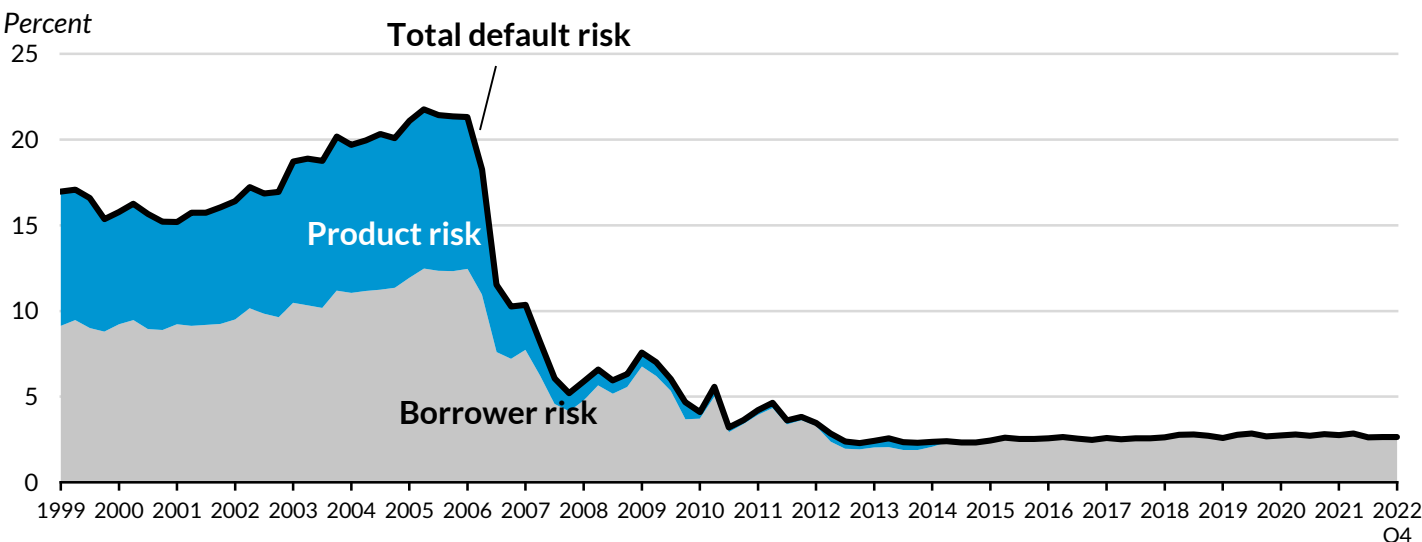
Government Channel

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.

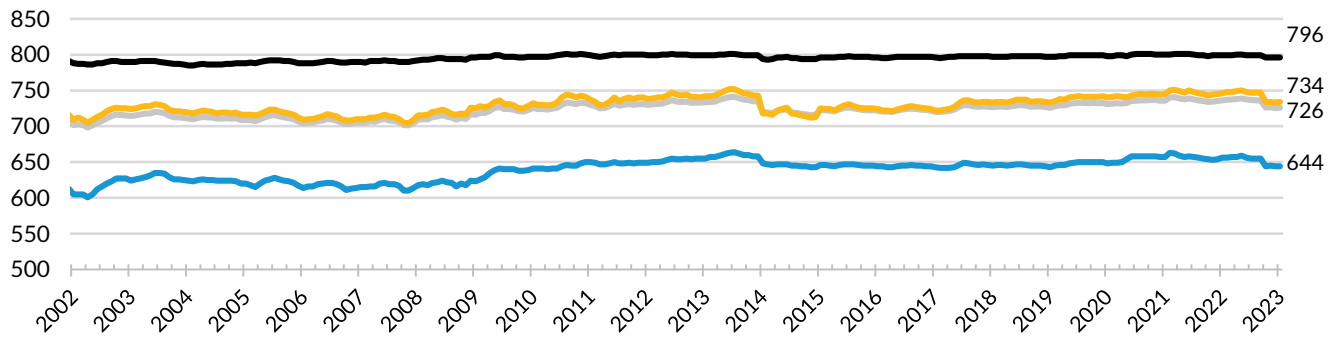
CREDIT AVAILABILITY FOR PURCHASE LOANS

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 12 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 644 in January 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 in January 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

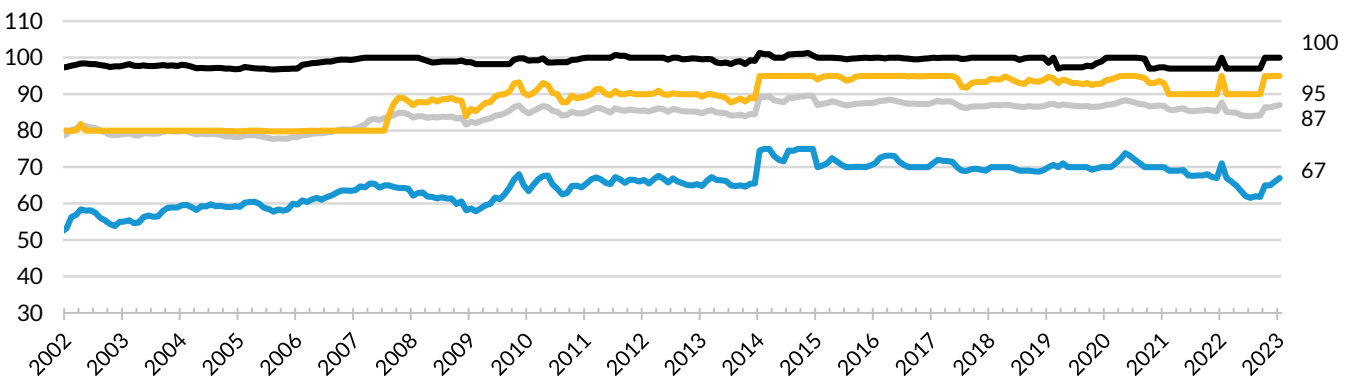
Borrower FICO Score at Origination

FICO Score



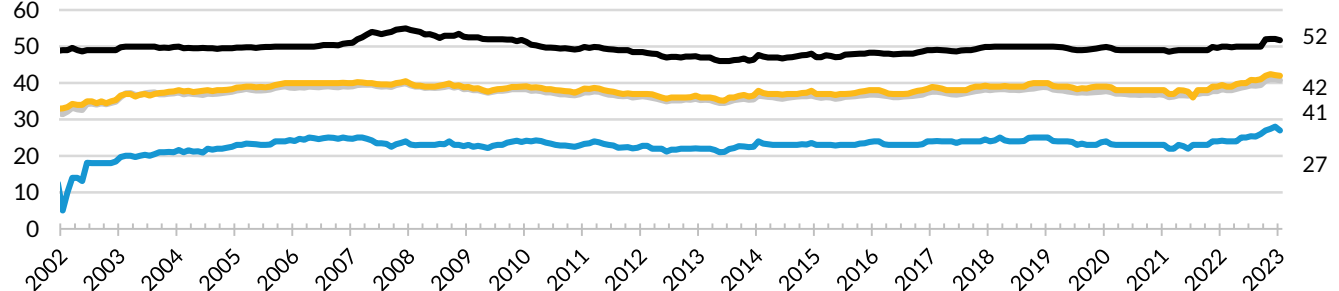
Combined LTV at Origination

LTV



DTI at Origination

DTI



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

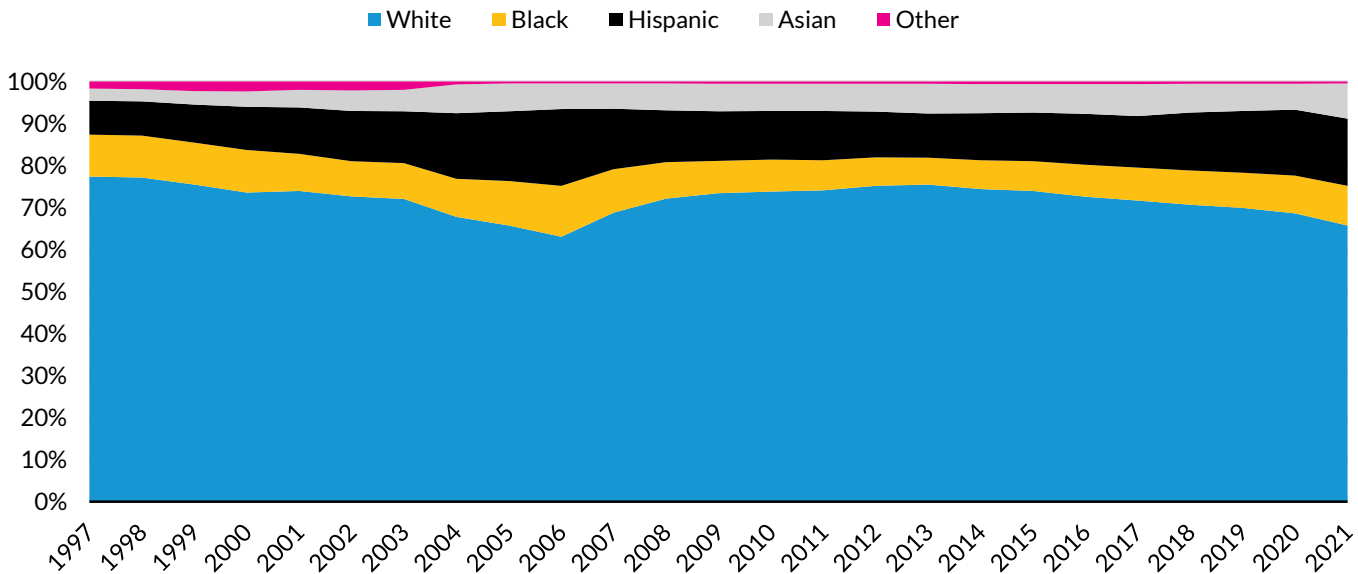
Note: Includes owner-occupied purchase loans only. DTI data prior to April 2018 is from CoreLogic; after that date, it is from Black Knight. A back-update to the Black Knight historical series was made in September 2021 for data starting from 2001 onward. Data as of January 2023.

OVERVIEW

RACIAL & ETHNIC COMPOSITION

Across all channels, the share of purchase lending to minorities reached a peak of 37.0% in 2006. Following the Great Recession and amidst a period of very tight credit, the minority share of purchase lending declined to a low of 24.5% in 2013. Since then, it has slowly recovered – it stood at 34.3% in 2021, up from 31.4% in 2020. The share of purchase lending to Black borrowers varied widely by channel in 2021. 18.8 percent of FHA loans were originated to Black borrowers compared with 13.7 percent of VA loans, 5.3 percent for GSEs and 4.4 percent of portfolio loans. Similarly, 27.5 percent of FHA purchase loans were originated to Hispanic borrowers in 2021 compared to 13.9 percent of VA loans, 12.4 percent for GSEs, and 11.3 percent of portfolio loans.

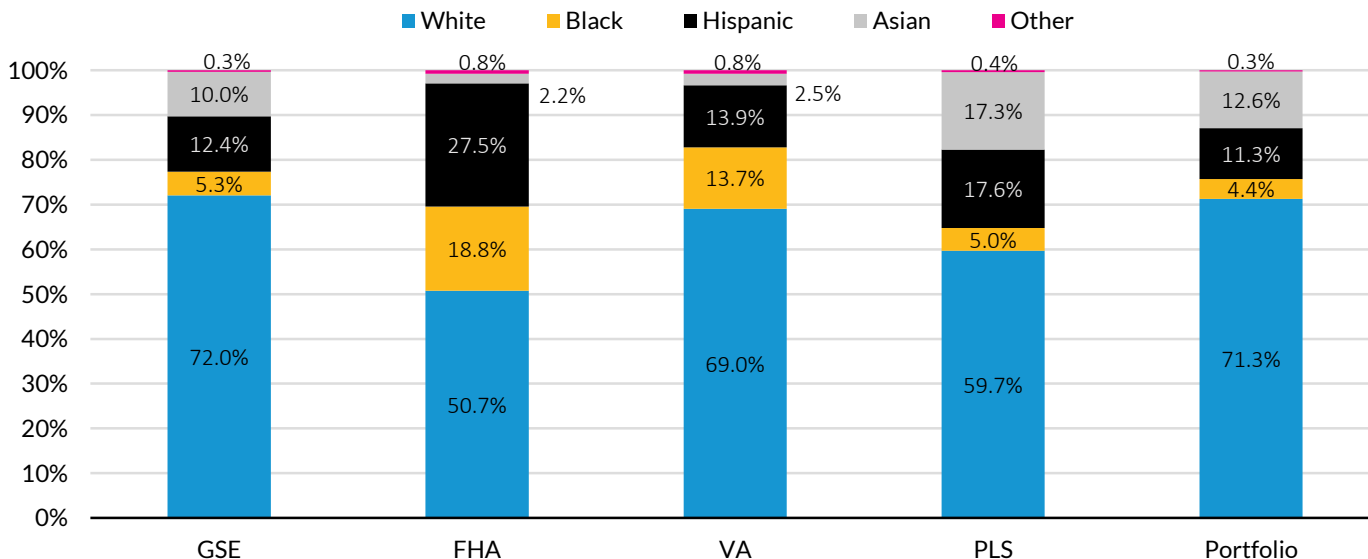
2021 Purchase Loan Shares by Race



Source: 1997 to 2021 Home Mortgage Disclosure Act (HMDA).

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

2021 Purchase Loan Channel Shares by Race



Source: 1997 to 2021 Home Mortgage Disclosure Act (HMDA).

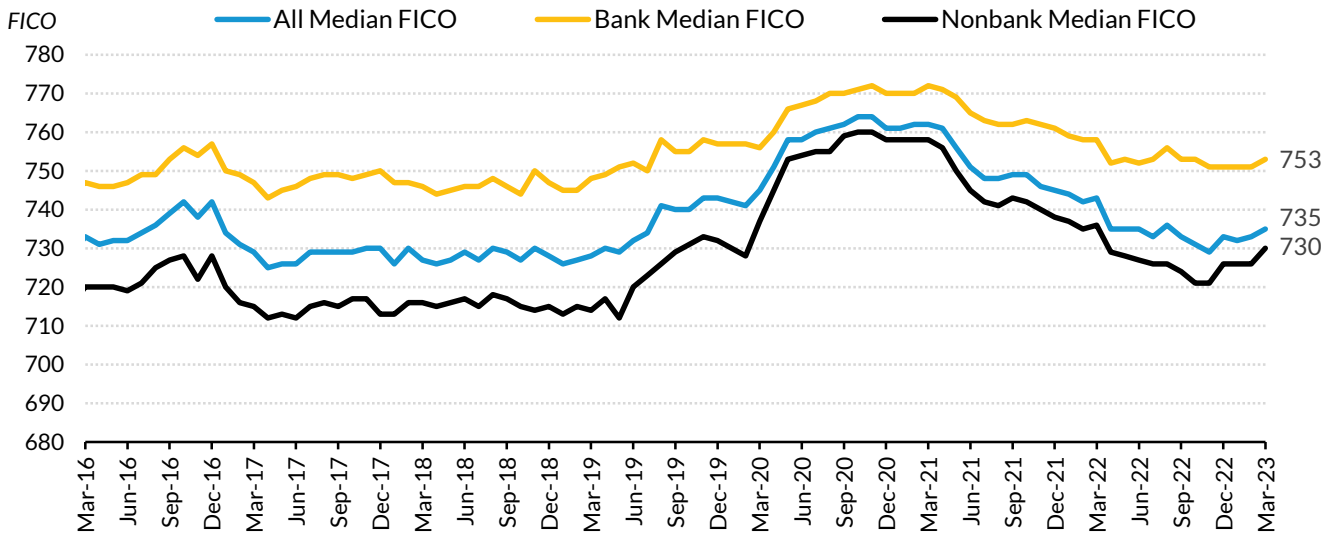
Note: Includes purchase loans only. Shares based on loan counts

CREDIT BOX

AGENCY NONBANK CREDIT BOX

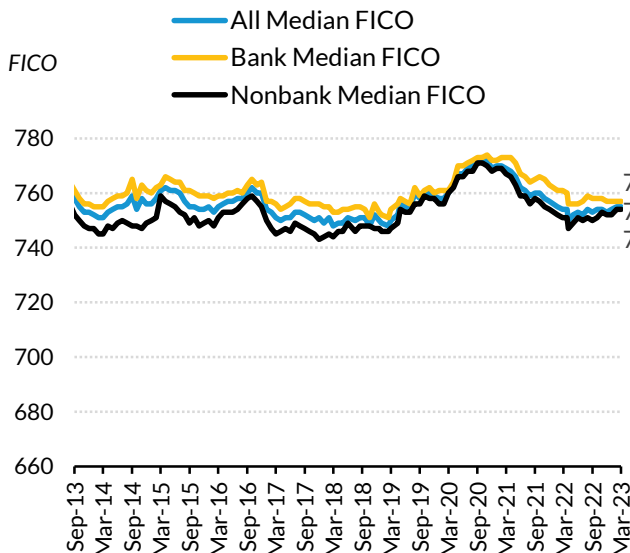
FICO scores for banks and nonbanks, in both the Ginnie Mae and GSE arenas, dipped in 2021 and most of 2022, but the gap between agency bank and nonbank FICO scores widened to 23 points in March 2023 from 14 points in March 2021. The difference between the FICO scores on bank and non-bank GSE loans stood at 3 points in March 2023, compared to 6 points in March 2021. Across Ginnie Mae loans, the gap currently sits at 22 points, up from 13 points in March 2021. 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. Because borrowers of refi loans typically have higher FICO scores than borrowers of purchase loans, FICO scores are now declining as the refi wave wanes and interest rates are higher. Note that there has 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.

Agency FICO: Bank vs. Nonbank



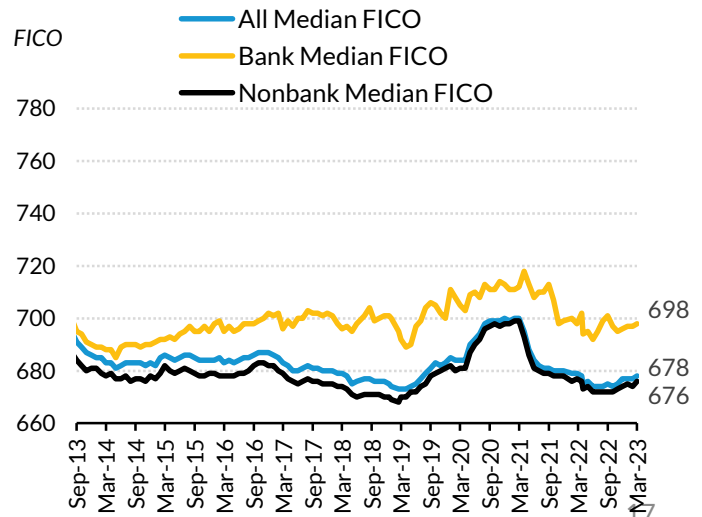
Sources: eMBS and Urban Institute.

GSE FICO: Bank vs. Nonbank



Sources: eMBS and Urban Institute.

Ginnie Mae FICO: Bank vs.



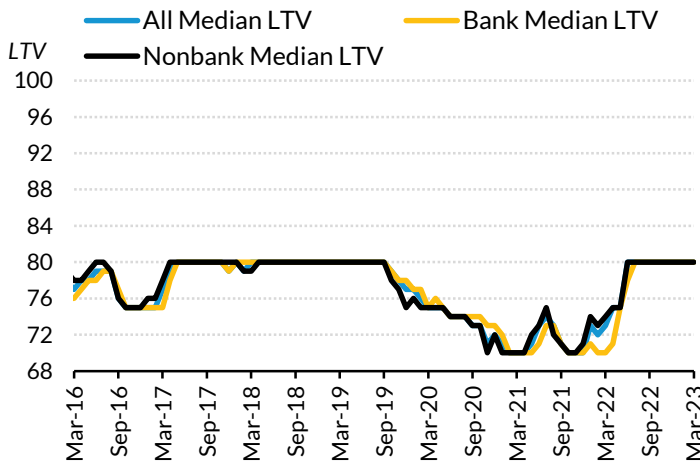
Sources: eMBS and Urban Institute.

CREDIT BOX

AGENCY NONBANK CREDIT BOX

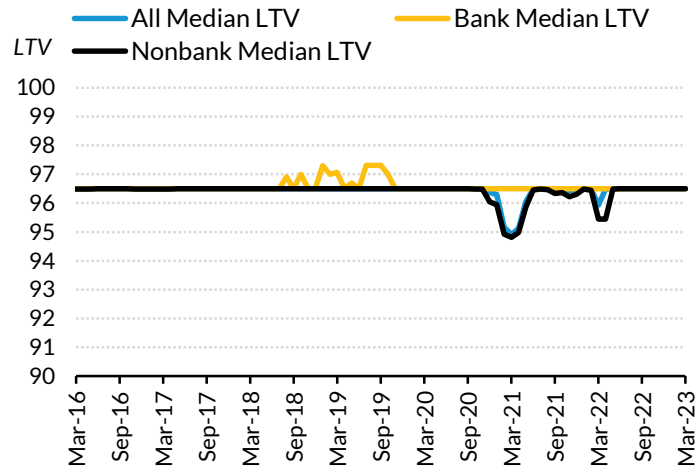
Nonbanks are more expansive in their lending than their bank counterparts, as indicated by higher back-end DTIs in both GSE and Ginnie Mae markets. From early 2017 to early 2019, there was a sustained increase in DTIs, which has reversed beginning in the spring of 2019. This is true for both Ginnie Mae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

GSE LTV: Bank vs. Nonbank



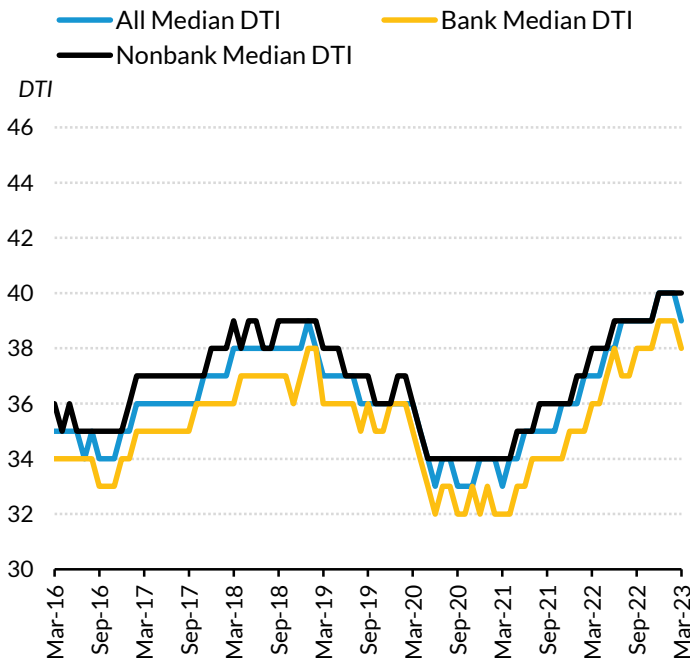
Sources: eMBS and Urban Institute.

Ginnie Mae LTV: Bank vs. Nonbank



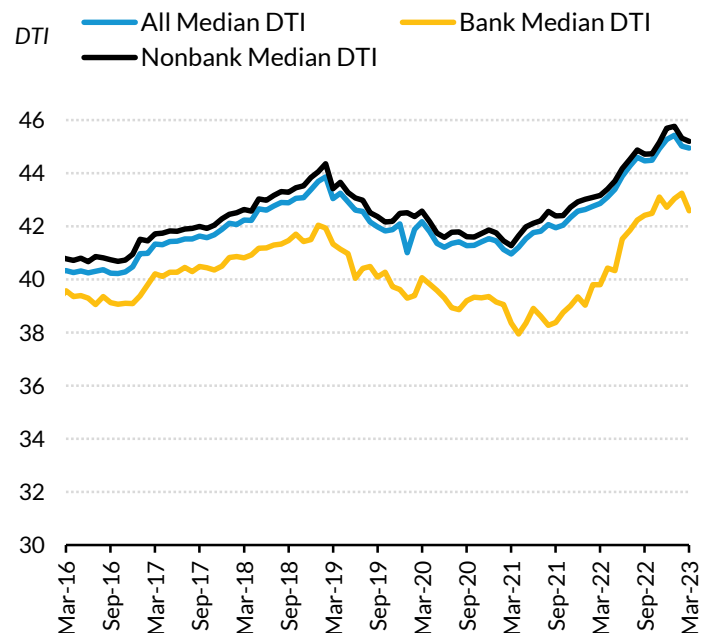
Sources: eMBS and Urban Institute.

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

MORTGAGE ORIGINATION PROJECTIONS

Fannie Mae, Freddie Mac and the MBA estimated 2022 origination volume was between \$2.24 and \$2.60 trillion, down from \$4.43 to \$4.84 trillion in 2021. The very robust origination volume in 2020 and 2021 was led by very strong refinance activity which was significantly curtailed in 2022 by higher interest rates. Home sales were also lower in 2022 due to the reduced affordability. On an annual basis, Fannie Mae, Freddie Mac and the MBA all expect lower mortgage origination volume in 2023 relative to 2022, driven by fewer refinances.

Total Originations and Refinance Shares

Period	Originations (\$ billions)			Refi Share (percent)		
	Total, FNMA estimate	Total, FHLMC estimate	Total, MBA estimate	FNMA estimate	FHLMC estimate	MBA estimate
2022 Q1	753	847	689	48	50	48
2022 Q2	678	744	678	26	28	33
2022 Q3	534	551	480	19	11	22
2022 Q4	393	453	398	16	12	19
2023 Q1	296	406	333	19	17	22
2023 Q2	415	525	461	17	14	23
2023 Q3	435	538	509	20	15	28
2023 Q4	404	474	541	24	18	30
2017	1826	1810	1760	36	37	35
2018	1766	1700	1677	30	32	28
2019	2462	2432	2253	46	46	44
2020	4374	4441	4108	64	64	64
2021	4570	4838	4436	58	58	62
2022	2358	2595	2245	30	29	33
2023	1550	1942	1844	20	16	26

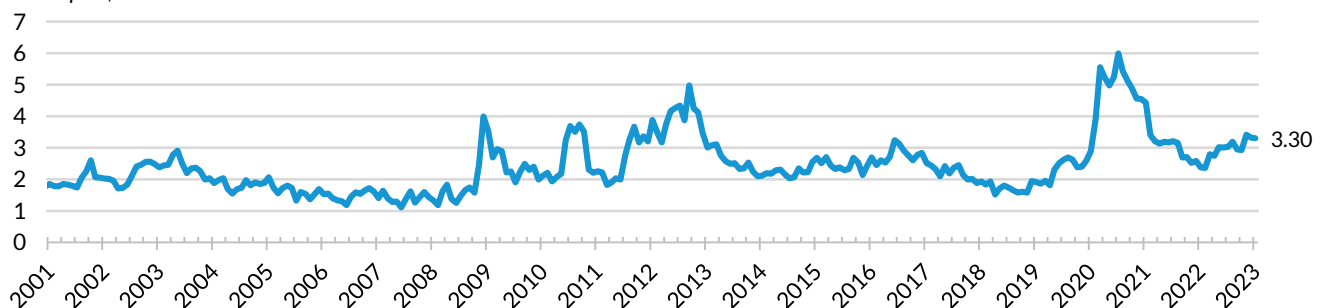
Sources: Fannie Mae, Freddie Mac, Mortgage Bankers Association and Urban Institute.

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 respective projections for Fannie, Freddie, and MBA are 5.0, 4.6, and 5.5 percent. Freddie Mac forecasts are now released quarterly, last updated October 2022.

Originator Profitability and Unmeasured Costs

In February 2023, Originator Profitability and Unmeasured Costs (OPUC) stood at \$3.30 per \$100 loan, up from \$2.90 per \$100 loan in February 2020. Increased profitability 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.

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 February 2023.

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

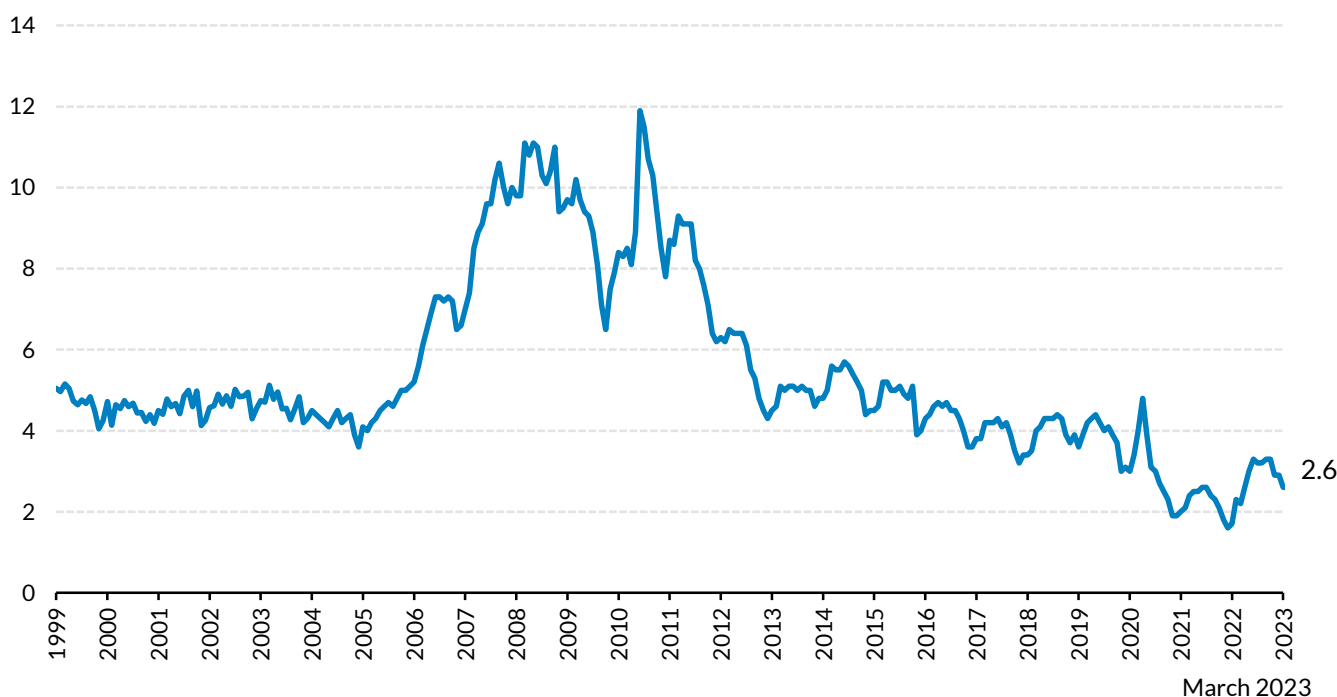
STATE OF THE MARKET

HOUSING SUPPLY

Months' supply of existing homes, single-family and condos/co-ops, was 2.6 in March 2023, unchanged from February 2023, but up from a near record low of 1.7 in February 2022. Months' supply increased over much of 2022, reflecting some seasonality and coinciding with rising interest rates over most of the year, but it has declined over the first quarter of 2023 entering the Spring buying season. Fannie Mae, the MBA, and the NAHB forecast 2023 housing starts to be between 1.15 and 1.40 million units. Fannie Mae, Freddie Mac, the MBA, and the NAHB predict total home sales in 2023 ranging between 4.22 to 5.10 million units inclusive. Both housing starts and home sales forecasts for 2023 are below their respective 2022 estimates of housing market activity.

Months' Supply

Months



Source: National Association of Realtors and Urban Institute. Data as of March 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, FHLMC estimate	Total, MBA estimate	Total, NAHB estimate*
2017	1203	1208	1205	6123	6120	6158	5520
2018	1250	1250	1247	5957	5960	5956	5350
2019	1290	1295	1291	6023	6000	6016	5429
2020	1380	1397	1395	6462	6500	6506	5888
2021	1601	1605	1605	6891	6900	6896	6189
2022	1553	1556	1554	5671	5800	5094	5171
2023	1155	1398	1241	4627	5100	4221	4577

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

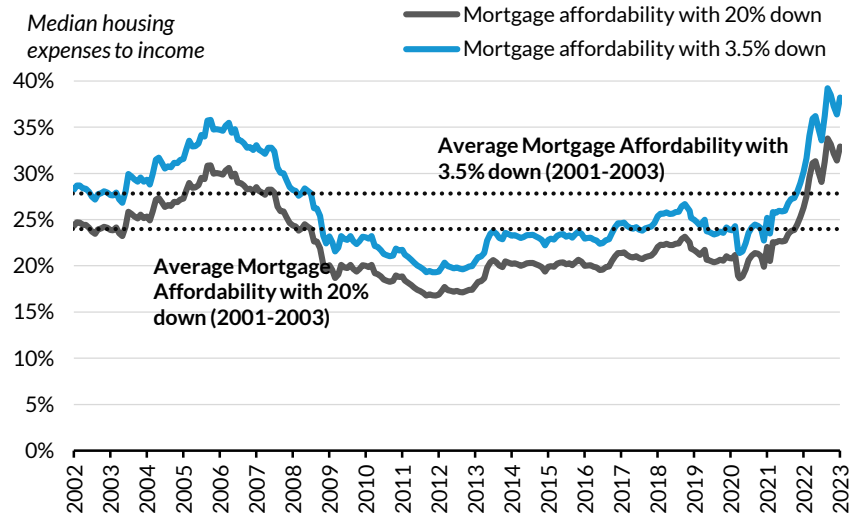
Note: Shaded boxes indicate forecasted figures; column labels indicate source of estimate. Freddie Mac home sales are now updated quarterly instead of monthly, with the last update in October 2022. The NAHB home sales also excludes existing condos and co-ops reported by NAR.

STATE OF THE MARKET

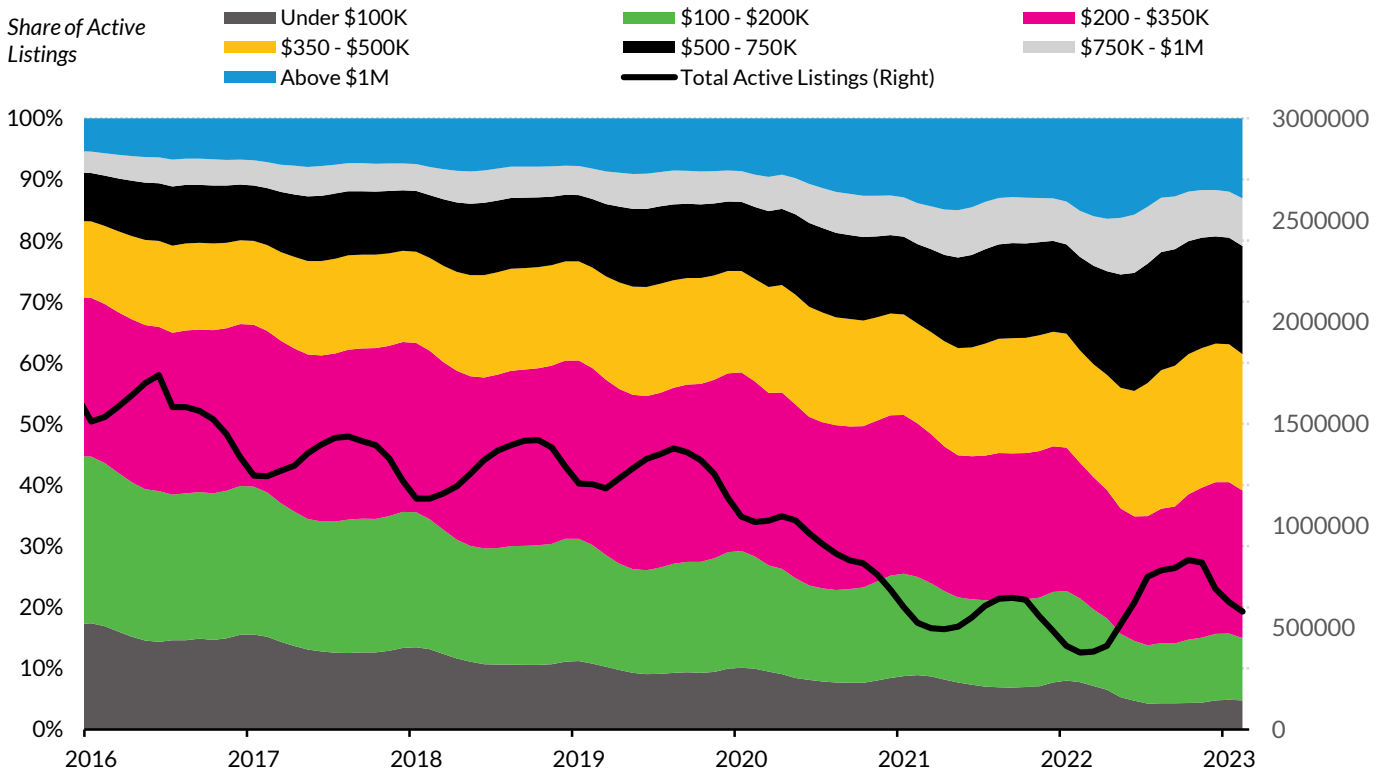
HOUSING AFFORDABILITY

National Mortgage Affordability Over Time

After some modest relief in December and January, mortgage affordability worsened in February. As of February 2023, with a 20 percent down payment, the share of median income needed for the monthly mortgage payment stood at 32.9 percent, slightly higher than the 30.9 percent at the peak of the housing bubble in November 2005; with 3.5 percent down it is 38.2 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



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.

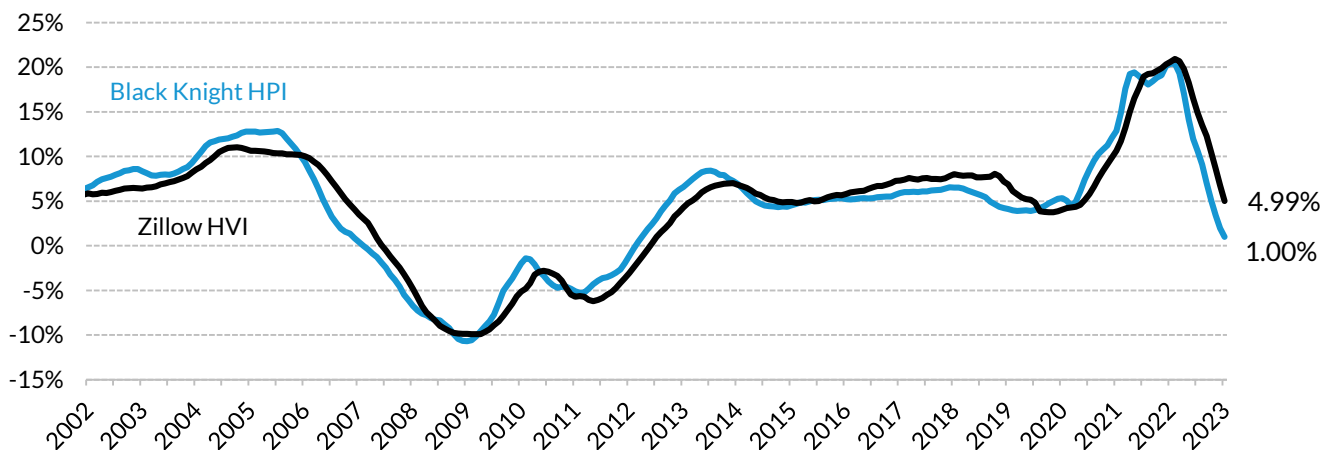
Note: Mortgage affordability is the share of median family income devoted to the monthly principal, interest, taxes, and insurance payment required to buy the median home at the Freddie Mac prevailing rate for a 30-year fixed-rate mortgage and property tax and insurance at 1.75 percent of the housing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

HOME PRICE INDICES

National Year-Over-Year HPI Growth

According to Black Knight's updated repeat sales index, year-over-year home price appreciation slowed to 1.00 percent in March 2023, compared to 1.94 percent in February 2023. Year-over-year home price appreciation as measured by Zillow's hedonic home value index was 4.99 percent in February 2023, down from 6.76 percent in February 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

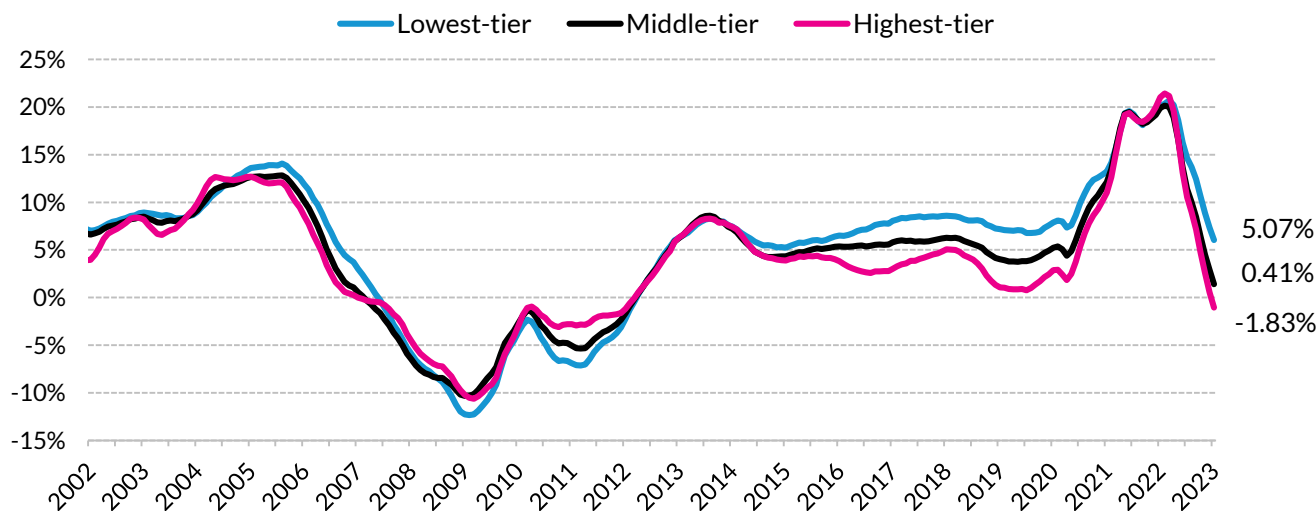


Sources: Black Knight, Zillow, and Urban Institute.

Note: Black Knight modified the methodology behind their HPI in February 2021, resulting in changes to historic price estimates. Data as of March 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, with the impact most noticeable at the highest price tier. The sharp deceleration in year-over-year growth reflects monthly declines in house prices since their mid-2022 peak. Within the highest-tier homes, prices in March 2023 were slightly lower than they were 12 months ago, decreasing by 1.83 percent over the year.



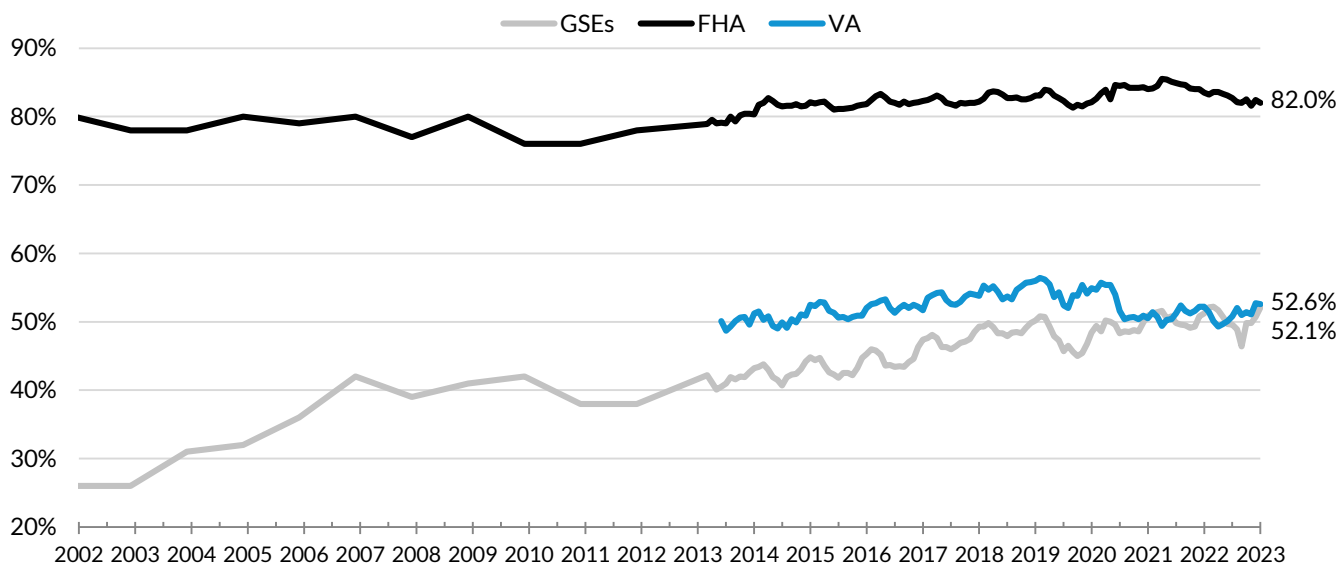
Sources: Black Knight and Urban Institute. Note: Black Knight modified the methodology behind their HPI in February 2021, resulting in changes to historic price estimates. Data as of March 2023.

STATE OF THE MARKET

FIRST-TIME HOMEBUYERS

First-Time Homebuyer Share

In February 2023, the FTHB share for FHA, which has always been more focused on first time homebuyers, was 82.0 percent. The FTHB share of GSE lending in November was 52.1 percent; the VA share was 52.6 percent. The bottom table shows that based on mortgages originated in February 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. These differences are smaller for FHA loans than for GSE loans.



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

February 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 (\$)	324,762	340,795	285,361	299,209	312,046	343,279
Credit Score	745	756	676	672	717	740
LTV (%)	86	76	95	92	90	81
DTI (%)	38	38	45	47	41	41
Loan Rate (%)	6.43	6.40	6.36	6.32	6.40	6.35

Sources: eMBS and Urban Institute.

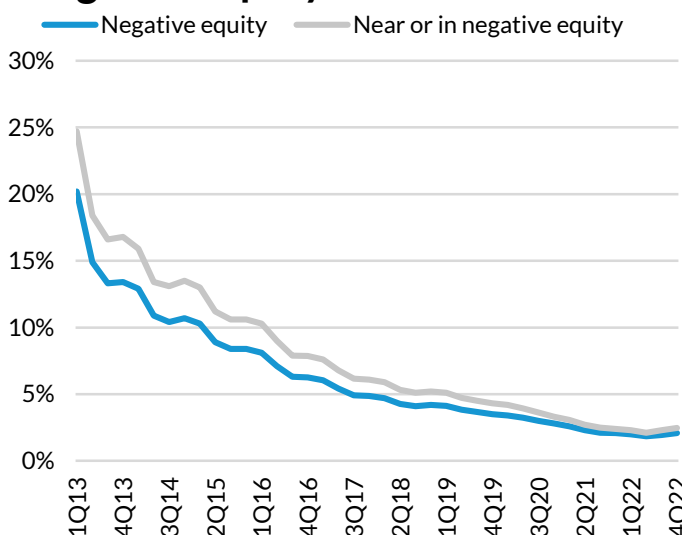
Note: Based on owner-occupied purchase mortgages originated in February 2023.

STATE OF THE MARKET

DELINQUENCIES AND LOSS MITIGATION ACTIVITY

Loans in and near negative equity increased marginally from 2.3 percent in Q3 2022 to 2.5 percent in Q4 2022. The share of loans in or near negative equity in Q4 2022 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 declined by 16 basis points, from 1.90 percent in Q3 2022 to 1.74 percent in Q4 2022, nearing the pre-pandemic level of 1.67 percent. This number includes loans where borrowers have missed their payments, including loans in COVID-19 forbearance. However, the share of loans in forbearance has ticked up from very low levels. 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 decreasing 5 bp to 0.55 percent as of March 31, 2023. GSE loans have consistently had the lowest forbearance rates, standing at 0.26 percent at the end of March. The most recent forbearance rate for other (e.g., portfolio and PLS) loans was 0.68 percent; Ginnie Mae loans had the highest forbearance rate at 1.18 percent.

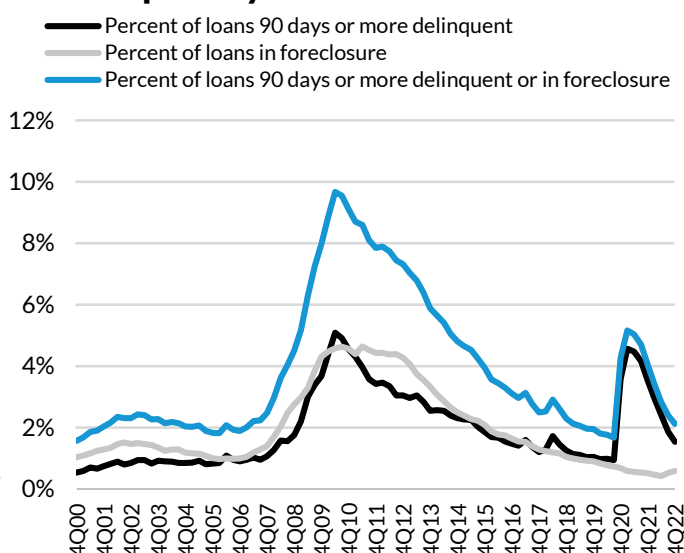
Negative Equity Share



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 March 2023.

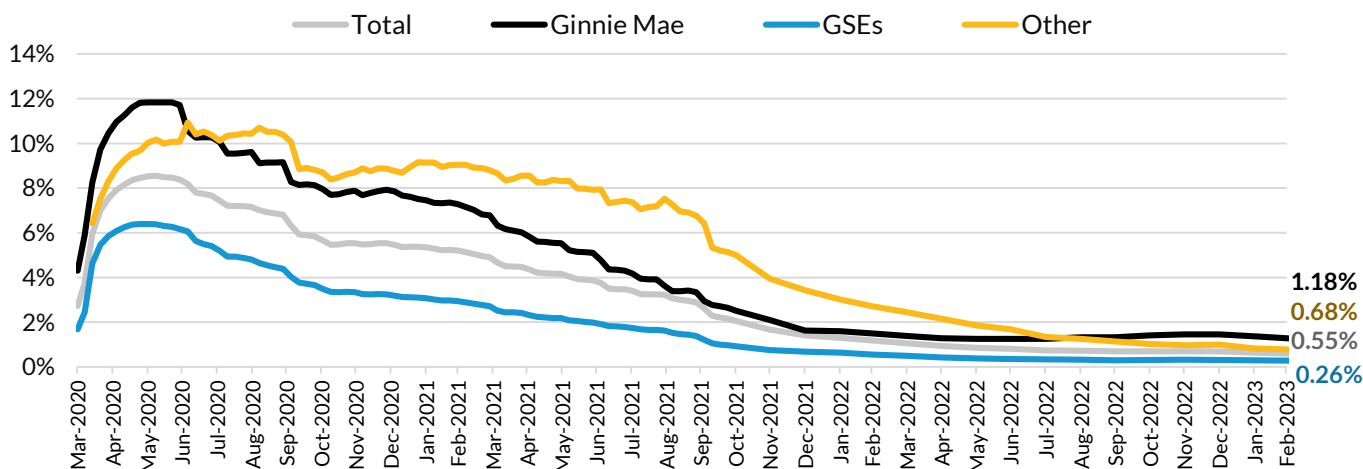
Loans in Serious Delinquency/Foreclosure



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

Q4 2022

Forbearance Rates by Channel



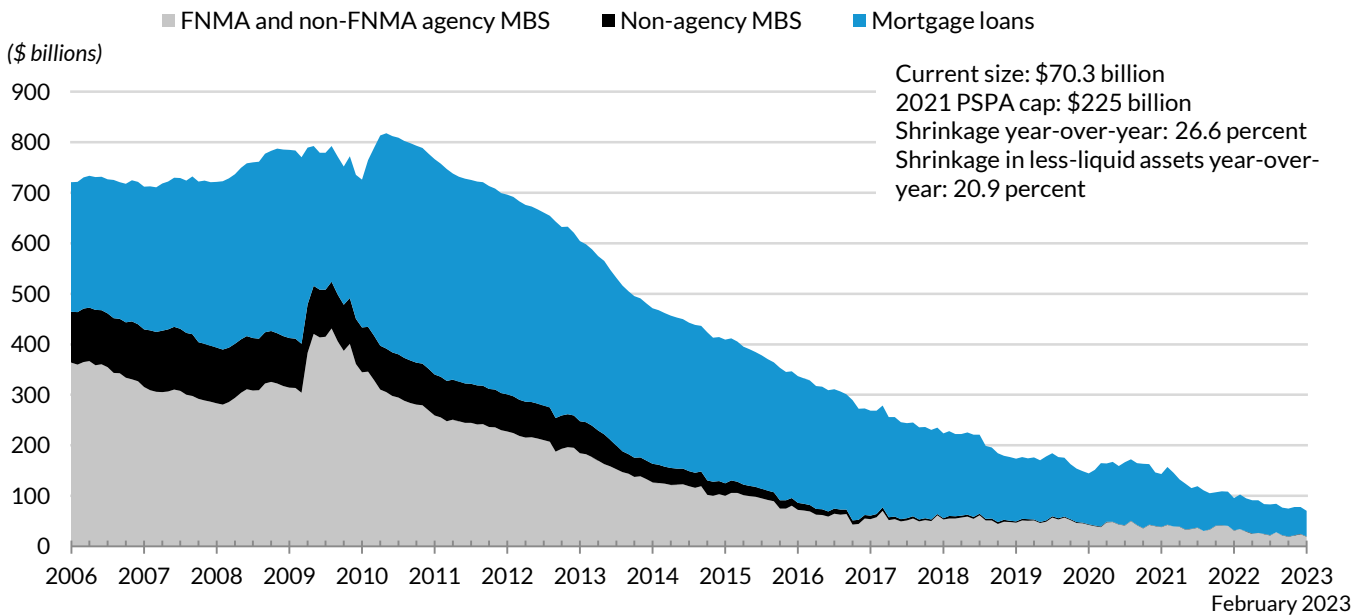
Source: MBA Weekly Forbearance and Call Volume Survey. Forbearance rates as of March 31st, 2023

GSES UNDER CONSERVATORSHIP

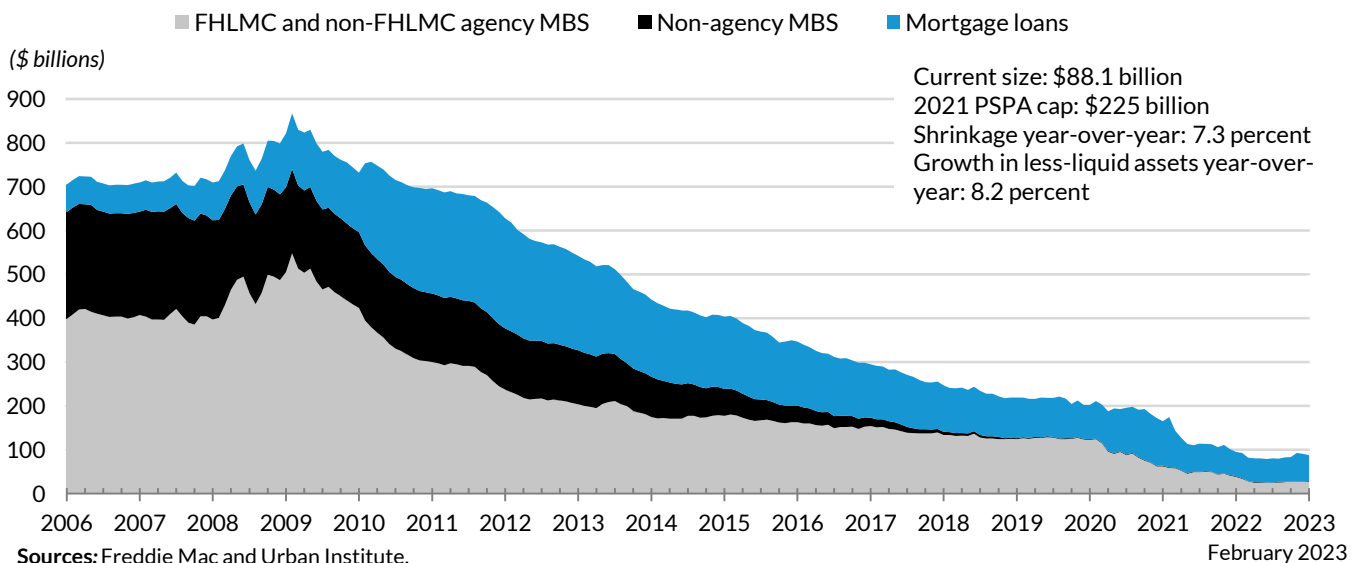
GSE PORTFOLIO WIND-DOWN

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 February 2022 to February 2023, the Fannie portfolio contracted year-over-year by 26.6 percent, and the Freddie portfolio contracted by 7.3 percent. Within the portfolio, Fannie Mae contracted their less-liquid assets (mortgage loans, non-agency MBS), by 20.9 percent and Freddie Mac increased their less-liquid assets by 8.2 percent, over the same 12 month period.

Fannie Mae Mortgage-Related Investment Portfolio Composition



Freddie Mac Mortgage-Related Investment Portfolio Composition



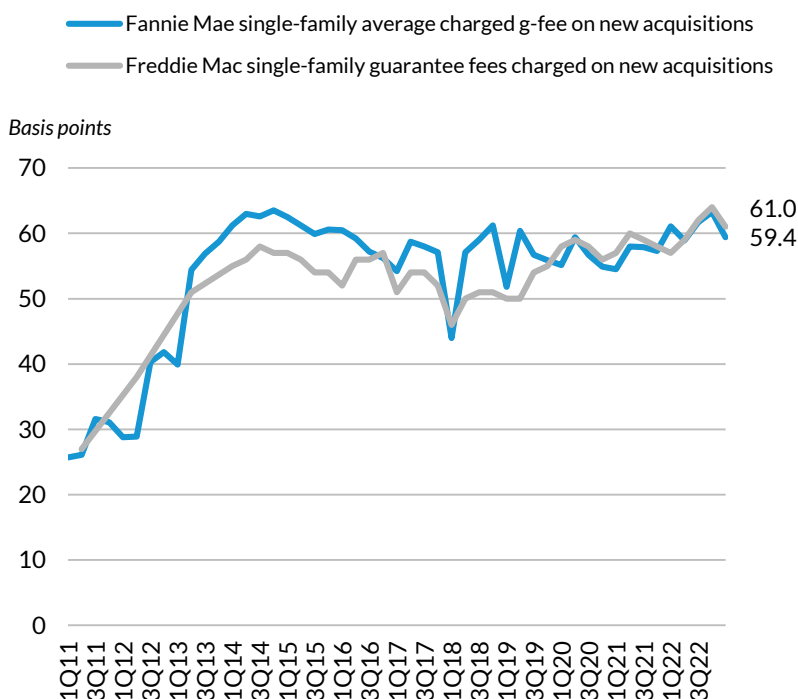
Note: Effective March 2021, Freddie Mac doesn't provide FHLMC/non-FHLMC breakout of agency MBS. The above charts were updated in May 2021 to reflect this.

GSES UNDER CONSERVATORSHIP

EFFECTIVE GUARANTEE FEES

Guarantee Fees Charged on New Acquisitions

Fannie Mae and Freddie Mac's average g-fees charged have largely converged since the first quarter of 2020. Fannie Mae's average g-fees charged on new acquisitions decreased from 63.3 bps in Q3 2022 to 59.4 bps in Q4 2022. Freddie's decreased from 64.0 bps in Q3 2022 to 61 bps in Q4 2022. The gap between the two g-fees was 1.6 bps in Q4 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 changes 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 February 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. Historically, 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 repropoed 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
February 2022	CAS 2022 – R02	\$44,278	\$1,241	2.8
March 2022	CAS 2022 – R03	\$44,382	\$1,242	2.8
April 2022	CAS 2022 – R04	\$36,440	\$1,142	3.1
May 2022	CAS 2022 – R05	\$39,341	\$952	2.4
June 2022	CAS 2022 – R06	\$25,539	\$754	3.0
June 2022	CAS 2022 – R07	\$31,176	\$866	2.8
August 2022	CAS 2022 – R08	\$20,733	\$626	3.2
September 2022	CAS 2022 – R09	\$29,965	\$591	2.0
January 2023	CAS 2023 – R01	\$23,101	\$731	3.2
February 2023	CAS 2023 – R02	\$20,647	\$709	3.4
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
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
January 2022	STACR Series 2022 – DNA1	\$33,573	\$1,353	4.0
February 2022	STACR Series 2022 – DNA2	\$44,961	\$1,919	4.3
March 2022	STACR Series 2022 – HQA1	\$45,831	\$1,816	4.0
April 2022	STACR Series 2022 – DNA3	\$42,886	\$1,842	4.3
May 2022	STACR Series 2022 – DNA4	\$35,369	\$1,519	4.3
June 2022	STACR Series 2022 – DNA5	\$33,545	\$1,422	4.2
July 2022	STACR Series 2022 – HQA2	\$19,741	\$627	3.2
August 2022	STACR Series 2022 – HQA3	\$15,433	\$540	3.5
September 2022	STACR Series 2022 – DNA6	\$36,144	\$1,165	3.2
October 2022	STACR Series 2022 – DNA7	\$20,290	\$517	2.6
March 2023	STACR Series 2023 – DNA1	\$15,167	\$611	4.0
April 2023	STACR Series 2021 – DNA2	\$18,242	\$762	4.2
Total		\$2,694,248	\$71,399	2.7

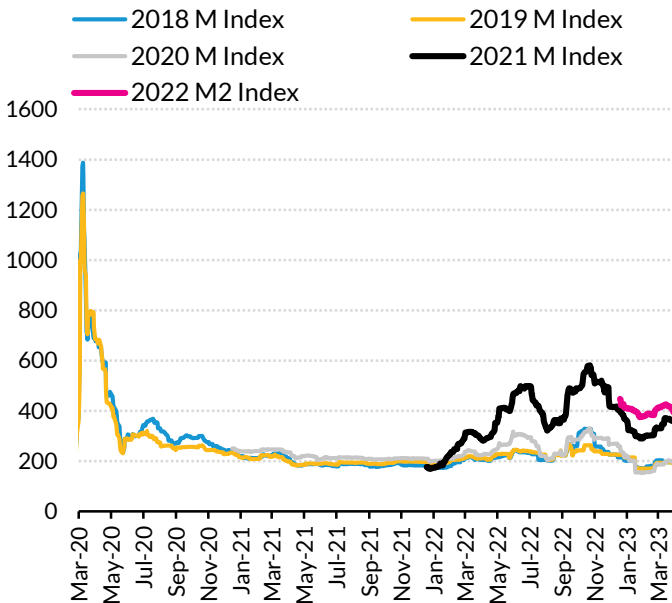
Sources: Fannie Mae, Freddie Mac and Urban Institute. **Note:** Classes A-H, M-1H, M-2H, and B-H are reference tranches only. These classes are not issued or sold. The risk is retained by Fannie Mae and Freddie Mac. "CE" = credit enhancement.

GSES UNDER CONSERVATORSHIP

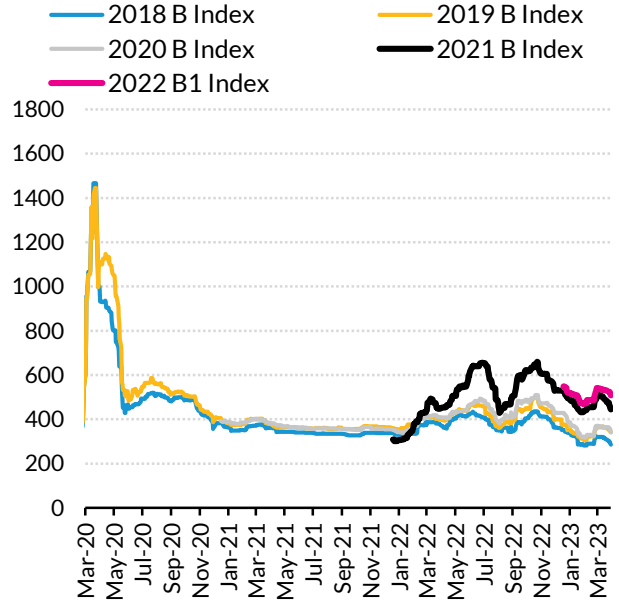
GSE RISK-SHARING INDICES

The figures below show the spreads on 2018, 2019, 2020, 2021 and 2022 indices, as priced by dealers. 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 indices due to less embedded home price appreciation, recent price declines in some market and a growing risk of a recession. Spreads have largely declined over the last 5 months amid greater comfort with the broader housing and macro-outlook, but the small uptick in the most recent period may reflect emerging concerns over banking stability. 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.

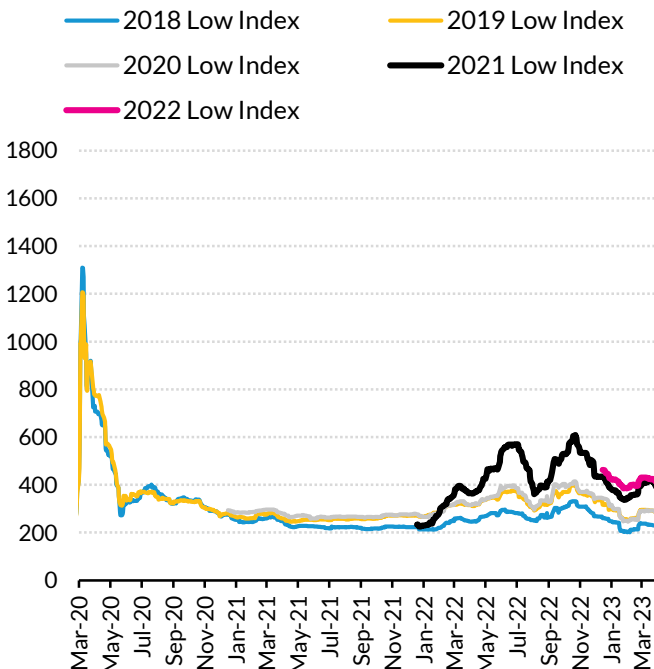
M Indices



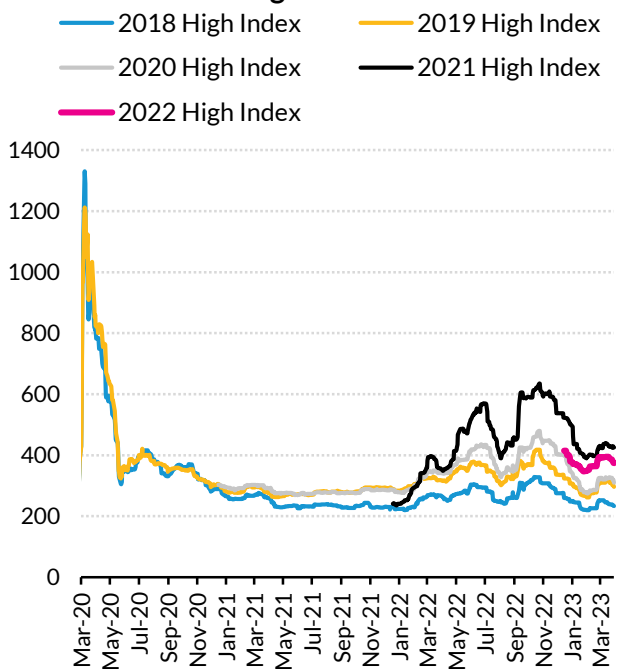
B Indices



Low Indices



High Indices



Sources: Vista Data Services and Urban Institute.

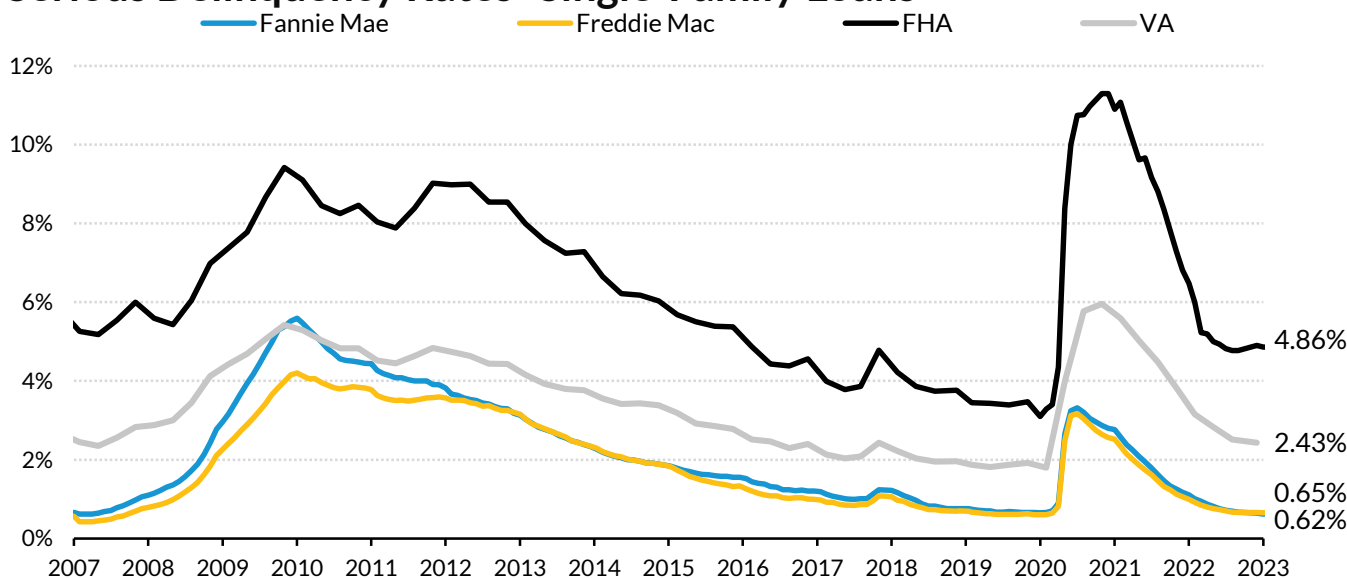
Note: Data as of April 14, 2023.

GSES UNDER CONSERVATORSHIP

SERIOUS DELINQUENCY RATES

Serious delinquency rates for Fannie Mae single-family loans decreased slightly to 0.62 percent in February 2023 from 0.64 percent in January 2023, the serious delinquency rate among Freddie Mac loans likewise decreased slightly to 0.65 percent in February from 0.66 percent in January. Serious delinquency rates for FHA loans decreased to 4.86 percent in February from 4.90 percent in January. 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 multifamily delinquencies increased to 0.35 percent in February from 0.24 percent in January and Freddie multifamily delinquencies saw a more modest increase to 0.13 percent in February from 0.12 percent in January.

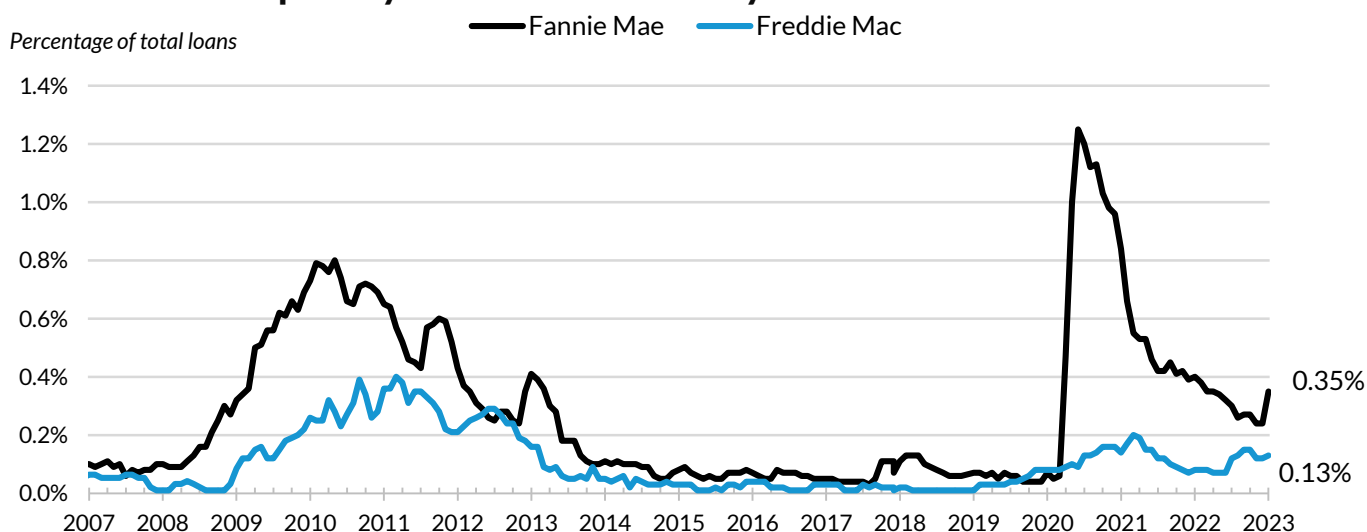
Serious Delinquency Rates–Single-Family Loans



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 Q3 2022. GSE and FHA delinquencies are reported monthly, last updated for February 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.

February 2023

AGENCY GROSS AND NET ISSUANCE

Agency gross issuance totaled \$208.9 billion over the first three months of 2023, \$131.3 billion by the GSEs and \$77.6 billion by Ginnie Mae. These levels lag 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 \$36.3 billion issued through March exceeds the \$20.6 billion issued over the same period in 2022.

Agency Gross Issuance

Issuance Year	GSEs	Ginnie Mae	Total
2002	\$1,238.9	\$169.0	\$1,407.9
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 YTD	\$131.3	\$77.6	\$208.9
YTD 2023 % Change Over 2022	-71.7%	-51.4%	-66.5%
2023 Annualized	\$525.0	\$310.44	\$835.48

Agency Net Issuance

Issuance Year	GSEs	Ginnie Mae	Total
2002	\$357.20	-\$51.20	\$306.10
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 YTD	\$13.7	\$36.3	\$50.0
YTD 2023 % Change Over 2022	-91.3%	76.4%	-72.0%
2023 Annualized	\$54.8	\$145.3	\$200.1

Sources: eMBS and Urban Institute.

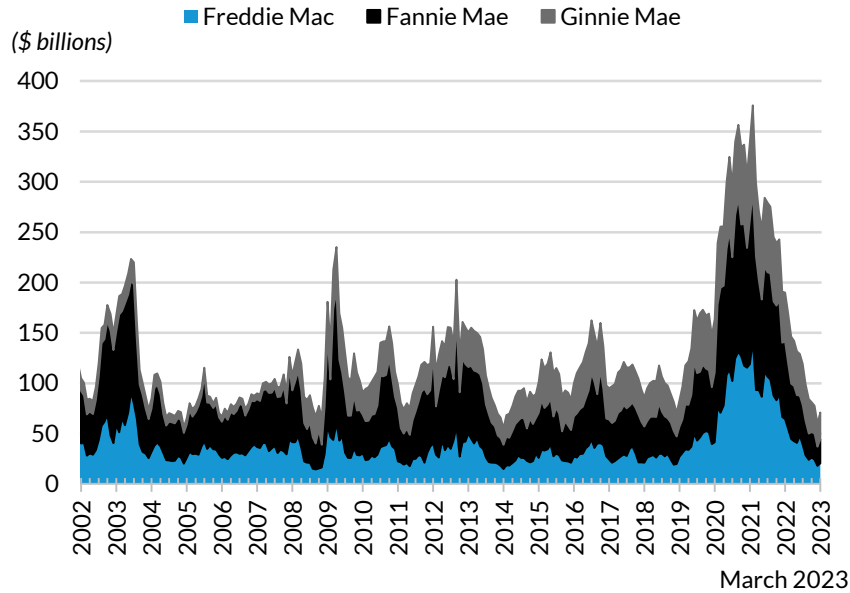
Note: Dollar amounts are in billions. Data as of March 2023.

AGENCY ISSUANCE

AGENCY GROSS ISSUANCE & FED PURCHASES

Monthly Gross Issuance

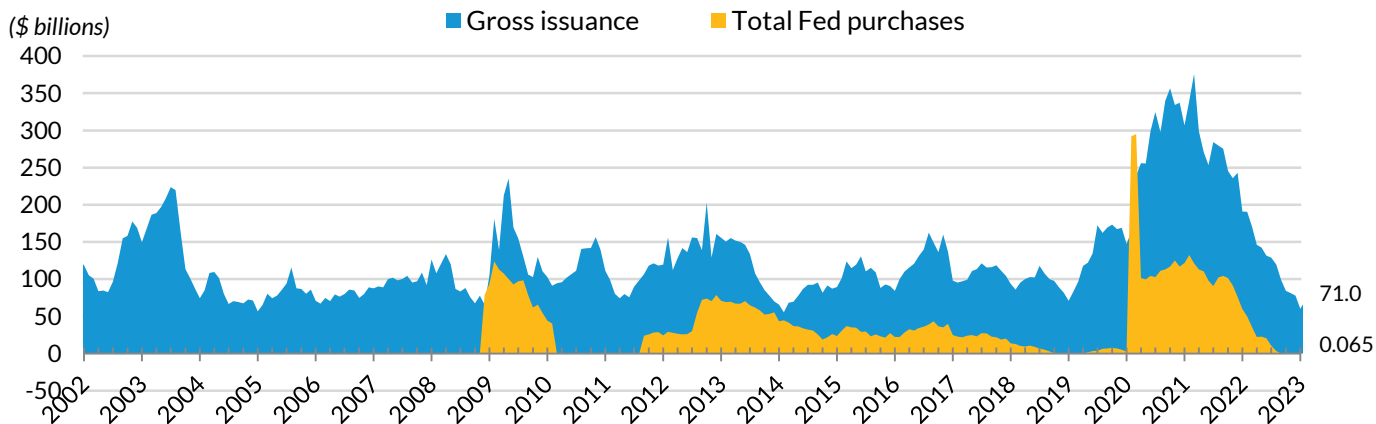
While FHA, VA and GSE lending have dominated the mortgage market since the 2008 housing crisis, there has been a change in the mix. The Ginnie Mae share of new issuances has risen from a pre-crisis level of 10-12 percent to 34.8 percent in February 2020, reflecting gains in both purchase and refinance 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. As the refi share is currently low, the Ginnie share in February 2023 remains high at 37.6 percent.



Source: eMBS and Urban Institute Calculations

Fed Absorption of Agency Gross Issuance

Agency MBS on the Federal Reserve's balance sheet totaled \$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 the Fed's 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.



March 2023

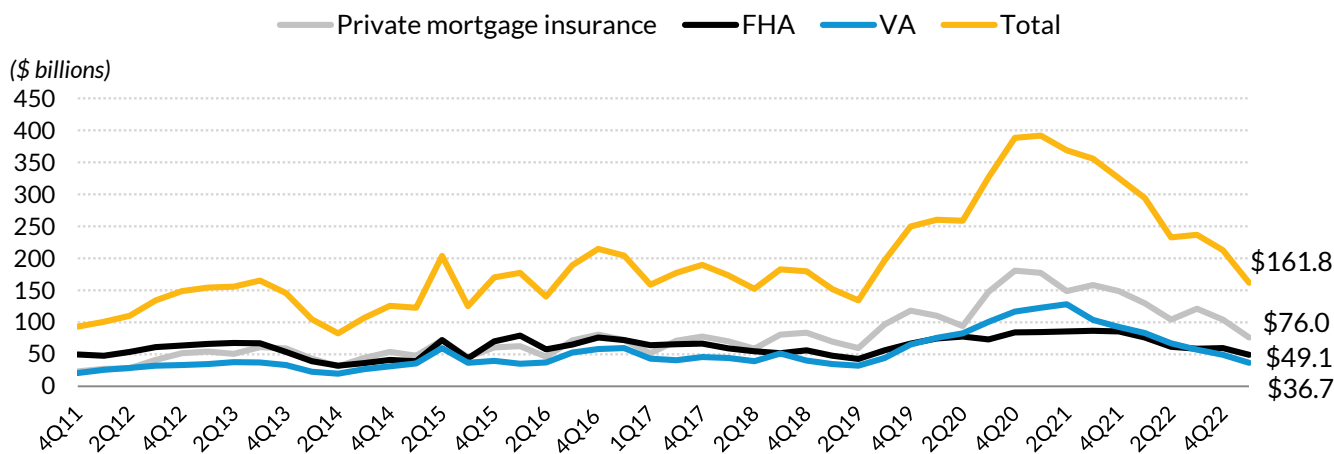
Sources: eMBS, Federal Reserve Bank of New York and Urban Institute.

AGENCY ISSUANCE

MORTGAGE INSURANCE ACTIVITY

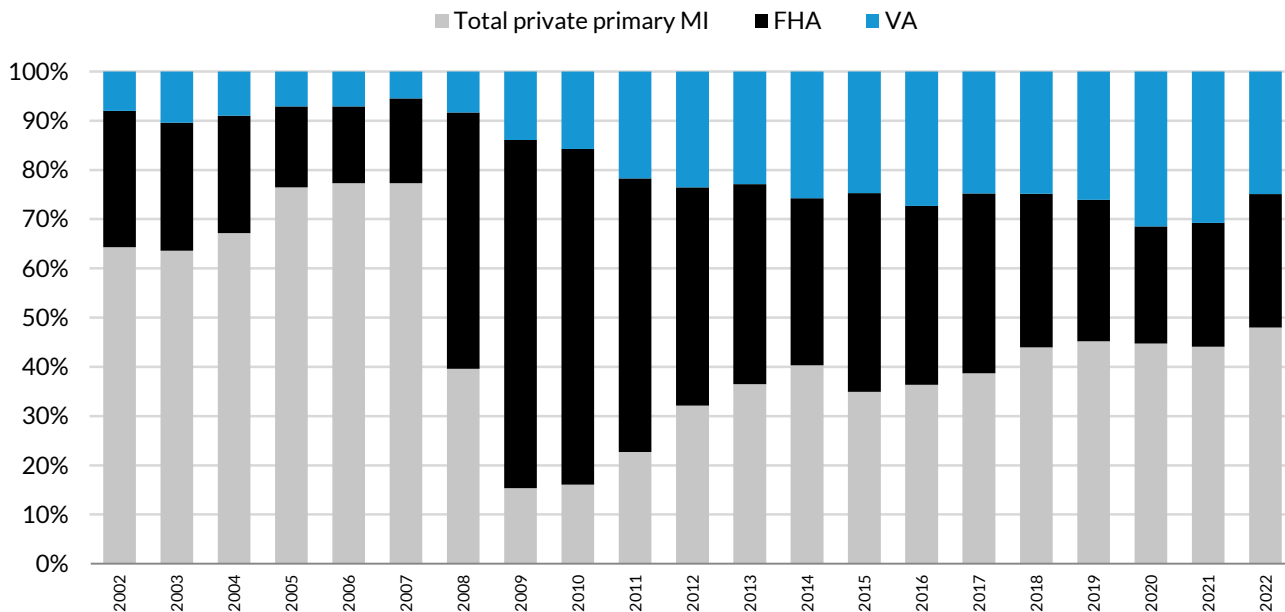
MI Activity

In the fourth quarter of 2022, private mortgage insurance written decreased by \$53.4 billion, FHA decreased by \$26.8 billion, and VA decreased by \$46.6 billion relative to Q4 2021. Over the same period (i.e. from Q4 2021 to Q4 2022), the private mortgage insurers share increased from 43.9 to 47.0 percent, FHA's share increased from 25.8 to 30.3 percent, and VA's share decreased from 28.3 to 22.7 percent.



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

MI Market Share



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

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 bps cut in annual insurance premiums. In February 2023, Vice president Harris announced another 30 bps 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 720 will currently find FHA financing to be more financially attractive, borrowers with FICO's of 720 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	6.42								
FHA Base Rate	6.47								
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	\$1,989	\$1,989	\$1,989	\$1,989	\$1,989	\$1,989	\$1,989	\$1,989	\$1,989
GSE plus PMI	\$2,176	\$2,130	\$2,111	\$2,051	\$2,005	\$1,983	\$1,954	\$1,925	
GSE plus PMI Advantage	-\$187	-\$141	-\$122	-\$62	-\$16	\$6	\$35	\$64	

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

Note: Rates as of April 7, 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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[The Mortgage Servicing Collaborative](#)

[Housing Credit Availability Index \(HCAI\)](#)

[Home Mortgage Disclosure Act Projects](#)

[Mortgage Markets COVID-19 Collaborative](#)

[Reducing the Racial Homeownership Gap](#)

Data Tools Available Online

[Tracking Rent Payments to Mom-and-Pop Landlords](#)

[Tracking Homeownership Wealth Gaps](#)

Publications

[Comment Letter on Notice of Proposed Rulemaking on Affirmatively Furthering Fair Housing](#)

Authors: Kathryn Reynolds, Yonah Freemark, Susan J. Popkin, Kathryn L.S. Pettit, Michael Stegman, Janneke Ratcliffe, Anne N. Junod, Sara McTarnaghan, Katharine Elder
Date: April 21, 2023

[An Assessment of Lending to LMI and Minority Neighborhoods and Borrowers](#)

Authors: Laurie Goodman, Linna Zhu, Katie Visalli, Ellen Seidman, Jun Zhu
Date: April 17, 2023

[How Do We Rehabilitate the FHA's 203\(k\) Rehabilitation Program?](#)

Authors: Laurie Goodman, Ted Tozer, Michael Neal
Date: April 14, 2023

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Authors: Laurie Goodman, Amalie Zinn, Kathryn Reynolds, Eleanor Noble
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Authors: Laurie Goodman, Michael Neal
Date: March 29, 2023

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Authors: Laurie Goodman, Janneke Ratcliffe
Date: March 24, 2023

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Authors: Amalie Zinn, Jung Hyun Choi

Date: February 7, 2023

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Authors: Laurie Goodman, Karan Kaul, Ted Tozer

Date: January 25, 2023

[Renters Have Weathered the Pandemic Better Than Expected, But Situations Are Worsening for Those with Low Incomes](#)

Authors: Laurie Goodman, Jung Hyun Choi, Daniel Pang

Date: January 13, 2023

[Incorporating Two Alternative Types of Data into Mortgage Underwriting Could Make the Process More Equitable](#)

Author: Daniel Pang

Date: January 4, 2023

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