



# HOUSING FINANCE AT A GLANCE

A MONTHLY CHARTBOOK

March 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](mailto:ataglance@urban.org).

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# INTRODUCTION

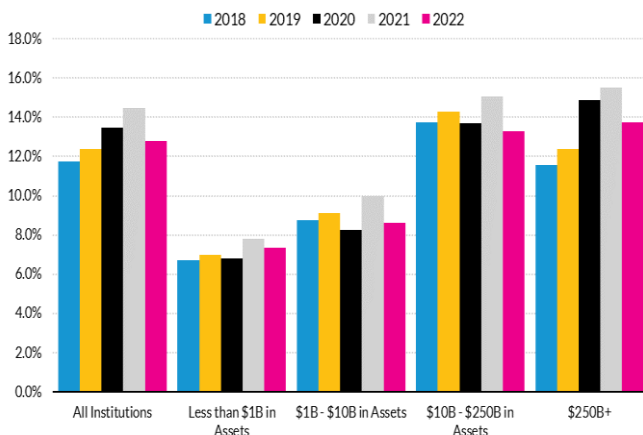
## The Mortgage Industry and Financial Stability Risk

Over 2022, the Federal Reserve Board tightened monetary policy aggressively to meet one of its Congressional mandates—ensuring price stability. In response to higher rates and higher house prices, affordability was significantly reduced. As a result, new and existing home sales declined significantly and with the attractiveness of rate-term refinancing diminished, mortgage originations over the year fell from their 2021 and 2022 highs.

The impact of higher interest rates was not contained to the primary market. It has also impacted the secondary market as well where mortgage-backed securities (MBS) are traded. In fixed income mathematics, prices and yields are inversely related to each other. When rates are higher fixed income prices are lower (and vice versa). And MBS prices are especially [sensitive](#) to interest rate rises because refinances are choked off and hence the mortgages are outstanding longer, increasing their interest rate sensitivity.

Banks can decide whether to classify their investment securities as available for sale or held to maturity, depending on their holding period. Banks only have to report unrealized losses on available for sale assets, not on held to maturity assets. Large outflows can cause a change in intent, forcing the sale of assets that were thought to be held to maturity. And for a bank like Silicon Valley Bank (SVB), which held a purported [44 percent](#) of its asset in MBS, the losses could quickly have a material impact on its operations.

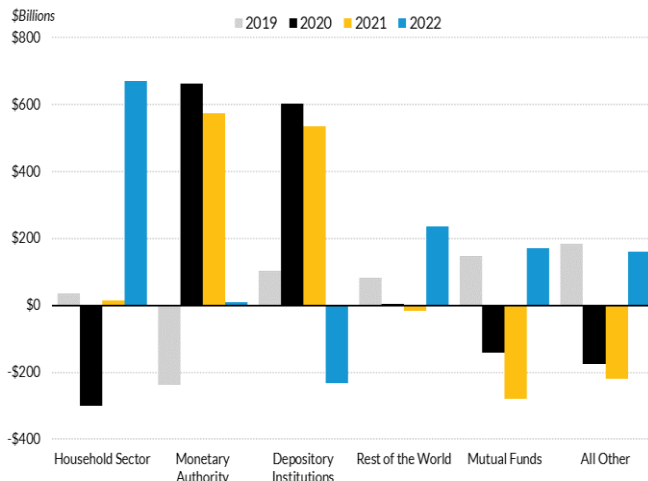
### Agency MBS Share of Assets, by Year and Bank Size



**Notes:** Agency MBS includes Residential Mortgage Backed: Pass-Through Issued by FNMA and FHLMC and GNMA, Collateralized Mortgage Obligations (CMOs) and REMICS Issued by U.S. Government Agencies or Sponsored Agencies, Commercial Mortgage-Backed Pass-Through Securities Issued or Guaranteed by FNMA, FHLMC, or GNMA and Commercial Mortgage-Backed Other Securities Issued or Guaranteed by U.S. Government Agencies or Sponsored Agencies.  
**Source:** FDIC.

The holdings of SVB suggest wide [variation](#) in agency the MBS share across the industry. Calculations using FDIC data indicate that the agency MBS share of total assets across FDIC-insured banks were rising in recent years, reaching 14.5 percent in 2021. However, in 2022, the agency MBS share fell to 12.8 percent. Across the largest banks (those over \$250 billion), the agency MBS share was 11.6 percent in 2018, less than the share across banks with assets between \$10 billion and \$250 billion. But by 2021, the agency MBS share across the largest banks rose to 15.5 percent, the largest share across these four bank categories.

### Net Purchases of Agency and GSE-Backed Securities, by Asset Holders



**Notes:** Net purchases includes budget agencies, government-sponsored enterprises and agency- and GSE-backed mortgage pools. All Other includes nonfinancial corporate business, federal government, state/local governments, foreign banking offices in the US, banks in US affiliated areas, credit unions, p/c insurance companies, life insurance companies, private pension funds, federal/state/local govt retirement funds, money market funds, GSEs, ABS issueRs, REITS, holding companies.  
**Source:** Federal Reserve Board, Urban Institute calculations.

Data from the Financial Accounts of the United States suggests that the decline in the agency MBS share across FDIC-insured banks in 2022 reflected net selling by the industry. This was joined by a significant drop in net purchasing by the Federal Reserve, who had rapidly re-deployed its large-scale asset purchases (LSAPs) in 2020 amid the pandemic, before stopping its purchases in 2022. These two market actors accounted for virtually all of the net purchases of agency- and GSE-backed securities in 2020 and 2021. With the departure, the gap was filled by other investors, including the household sector, which is an arithmetic residual, the rest of the world and mutual funds.

As higher rates having reduced the value of agency MBS, and with banks sensitized to the implications for greater financial instability, lending activity could be curtailed on lines such business loans ([C&I](#)), [multifamily permanent loans](#) and even household loans such as [credit cards](#) and [auto loans](#). Although IMBs originate the majority of mortgages (p. 11 of our chartbook), a deterioration in secondary mortgage pricing could shrink bank warehouse lending; the banks may also tighten [credit standards](#) on mortgage portfolio loans, and place credit overlays on both the agency loans they originate and on the loans accepted on their warehouse line just as the housing market enters its Spring buying season.

### INSIDE THIS ISSUE

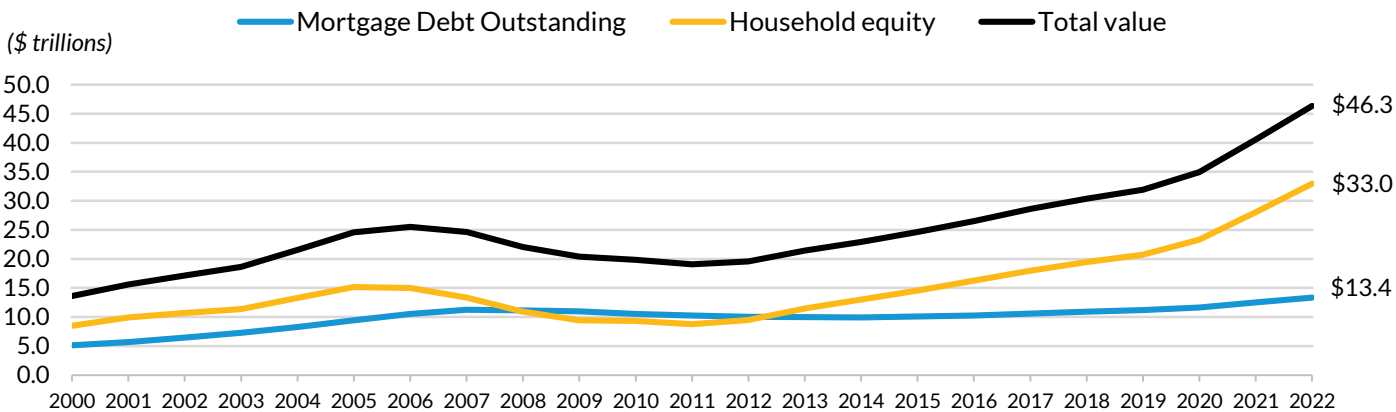
- The total value of the single-family housing market expanded in Q4 2022, despite the quarterly decline experienced among homes owned by households (Page 6).
- Freddie Mac's refi share fell 12.1 percent, its lowest level in series history dating back to 2007 (Page 9).
- Freddie Mac's less-liquid assets increased year-over-year for the first time since March 2021 (Page 25).

## 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 65.6 (\$8.8 trillion) percent of the total mortgage debt outstanding while private-label securities and home equity loans make up 3.1 (\$4.19 billion) and 3.2 (\$4.34 billion) percent, respectively. Unsecuritized first liens comprise the remaining 17.2 (\$2.3 trillion) percent with banks making up 17.5 (1.1 trillion) percent, credit unions 4.3 percent (\$5.6 billion), and other non-depositories accounting for 3.9 (\$5.1 billion) percent of the total.

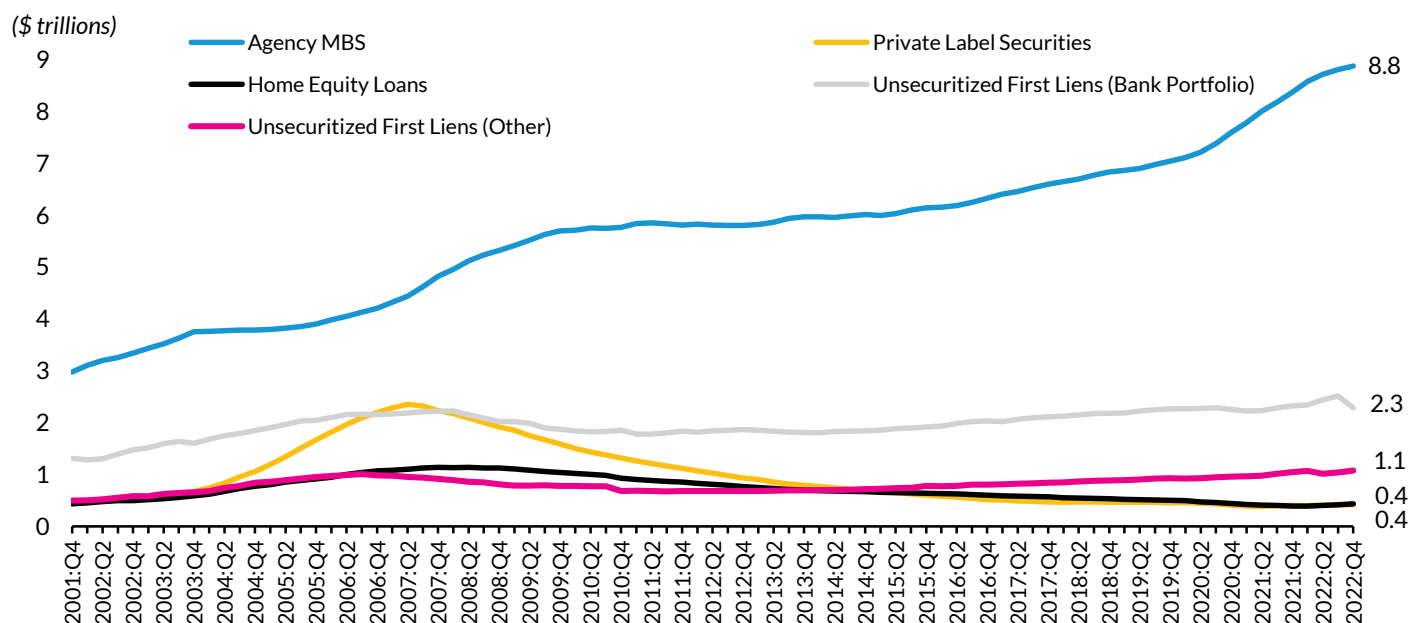
## Value of the US Single Family Housing Market



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.

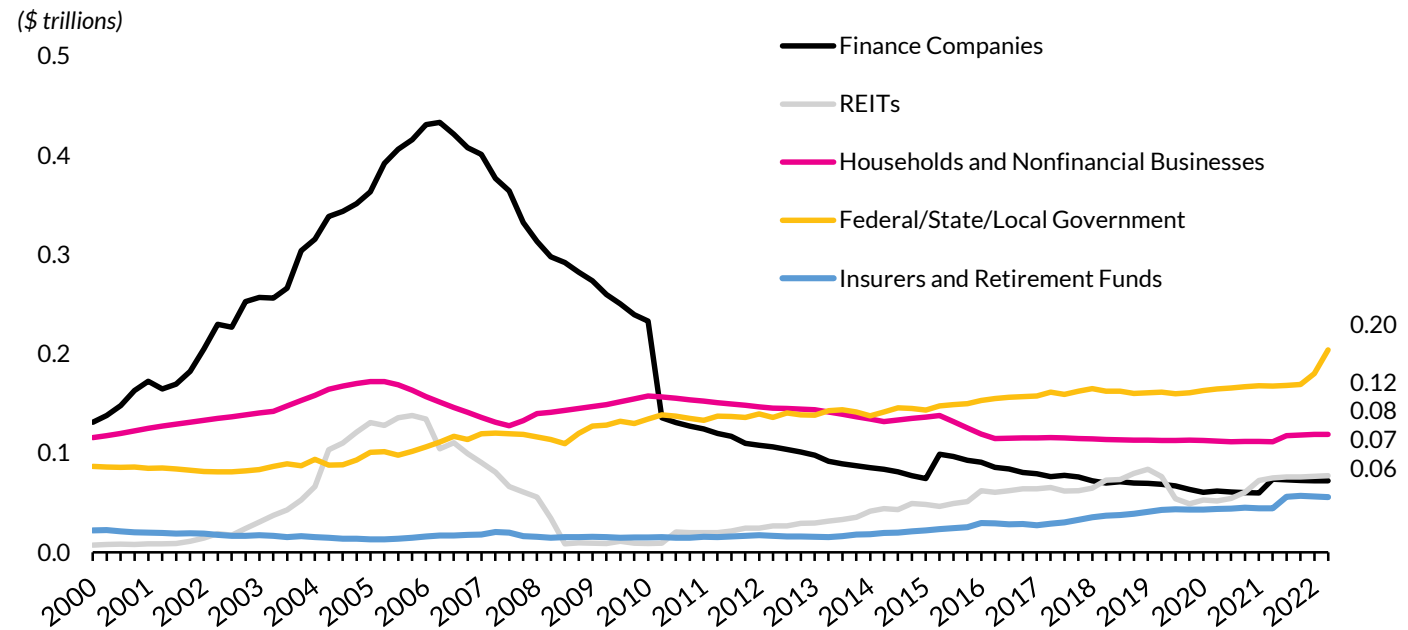
Notes: Unsecuritized First Liens (Other) includes mortgages not held on bank balance sheets.

## OVERVIEW

# MARKET SIZE OVERVIEW

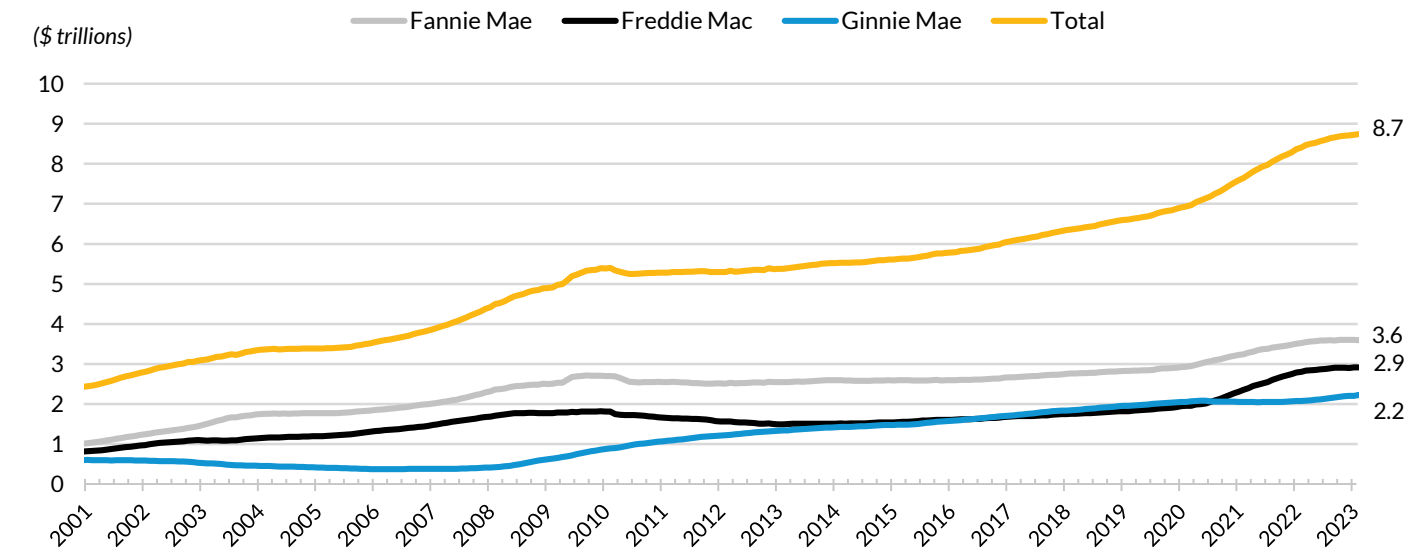
As of Q4 2022, unsecuritized first liens held outside banks and credit unions totaled \$0.53 trillion. In this space, REITs as well as insurers and retirements funds have experienced particularly robust percentage increases over the last decade, though starting from very low levels. By February 2023, outstanding securities in the agency market totaled \$8.7 trillion, 41.1 percent (\$3.6 trillion) of which was Fannie Mae, 33.4 percent (\$2.2 trillion) Freddie Mac, and 25.5 percent (\$2.2 trillion) Ginnie Mae.

## 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

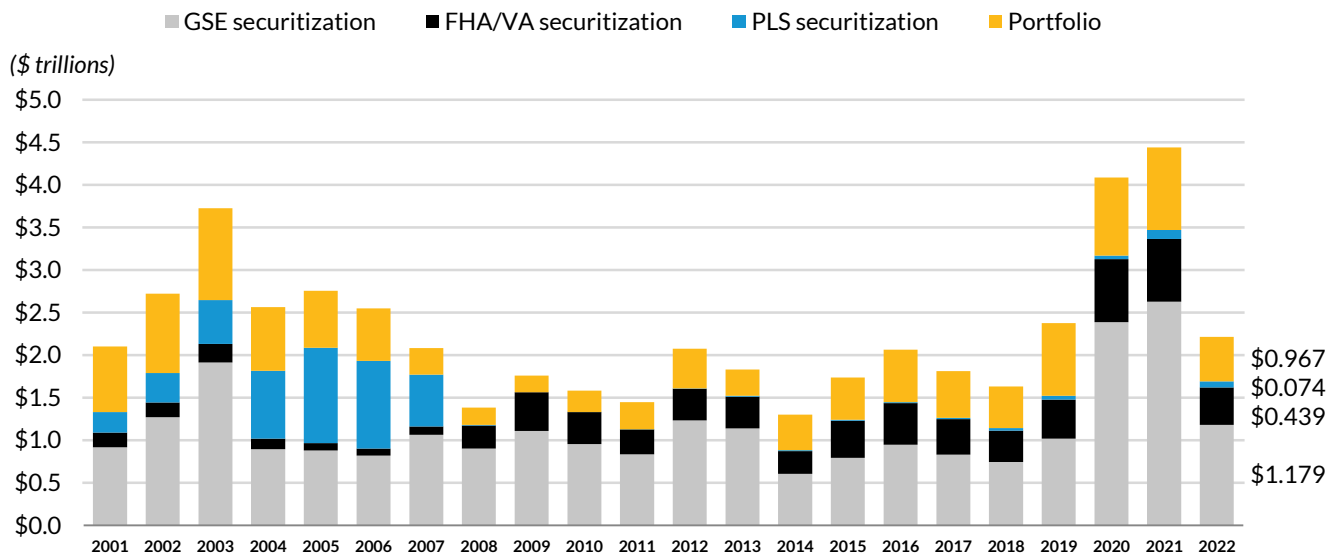


Sources: eMBS and Urban Institute.

# ORIGINATION VOLUME AND COMPOSITION

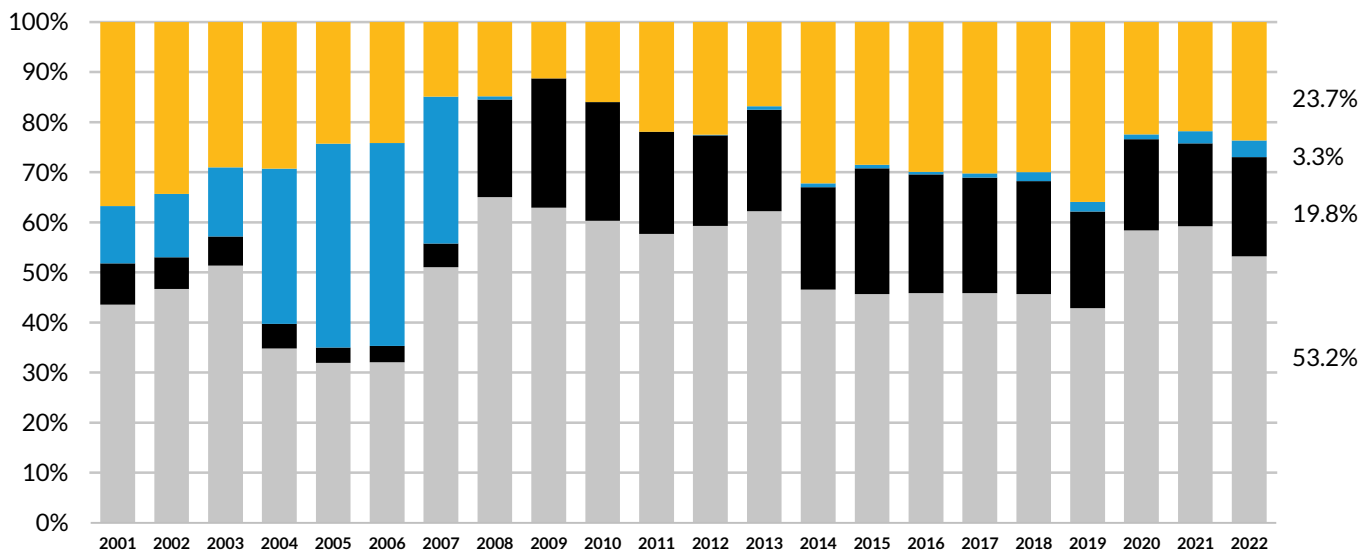
## First Lien Origination Volume

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.

(Share, percent)



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

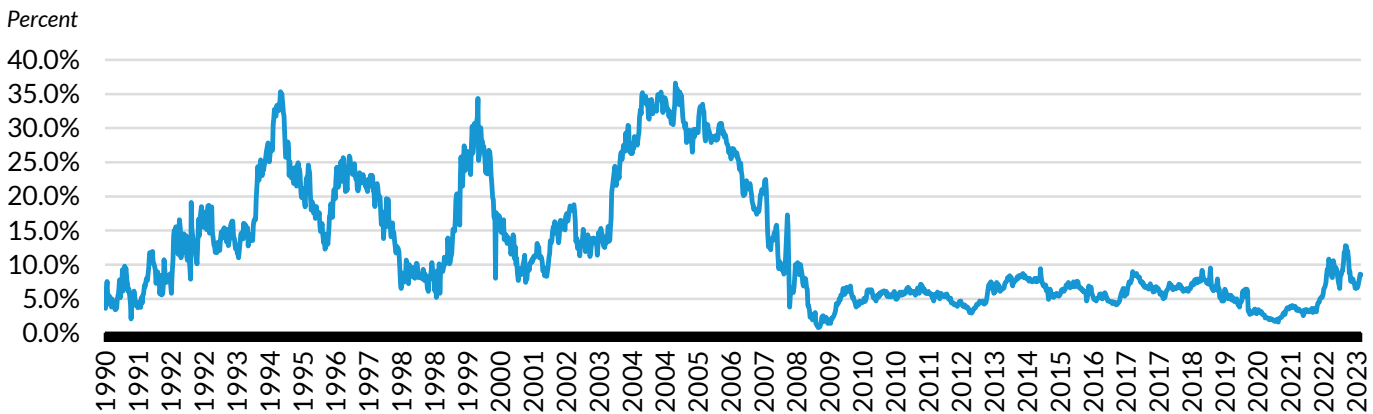


## OVERVIEW

# 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 8.5 percent by the week ending March 10, 2023.

## Adjustable-Rate Mortgage Share of Applications

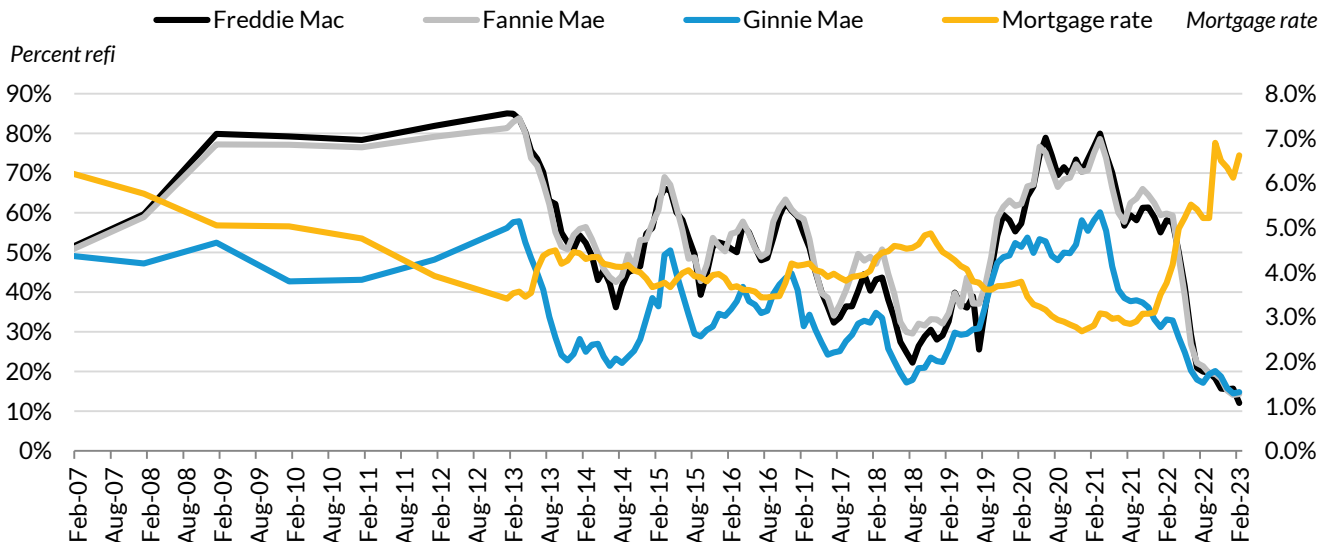


Source: Mortgage Bankers Association (MBA) Weekly Mortgage Applications Survey.

Note: Includes purchase and refinance applications. Data updated through March 10, 2023.

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 February 2023, the Fannie Mae refi share is 14.3 percent and the Ginnie Mae refi share is 14.8 percent. Meanwhile, the Freddie Mac refi share is 12.1 percent, a series low. 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.

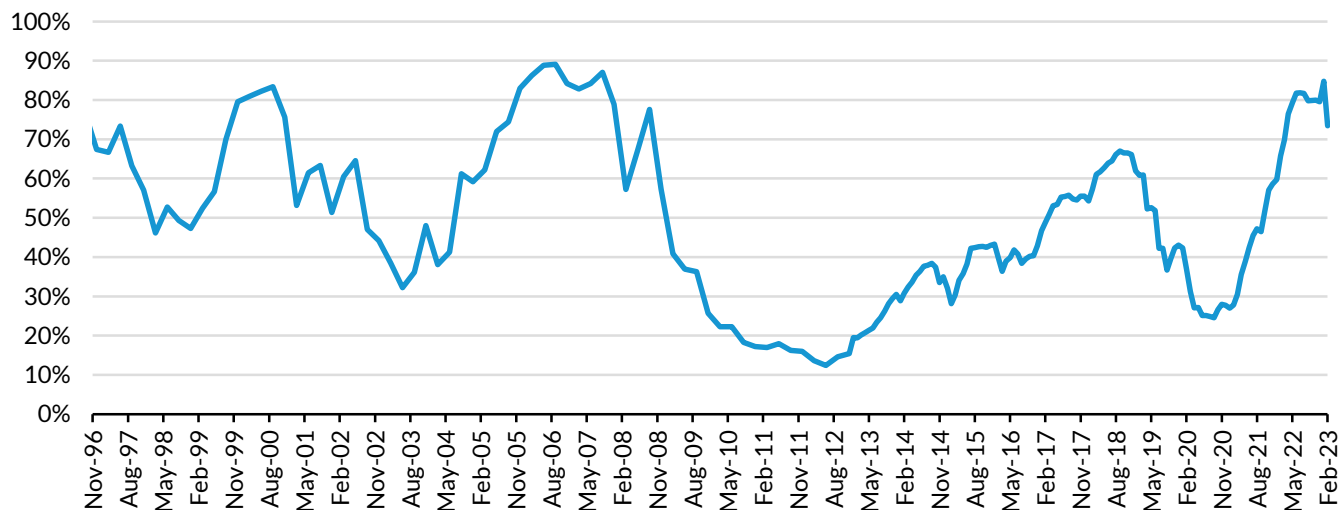
Note: Based on at-issuance balance. Figure based on data from February 2023.

## 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 73.4 percent as of February. 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 lower credit borrowers to extract cash from their homes.

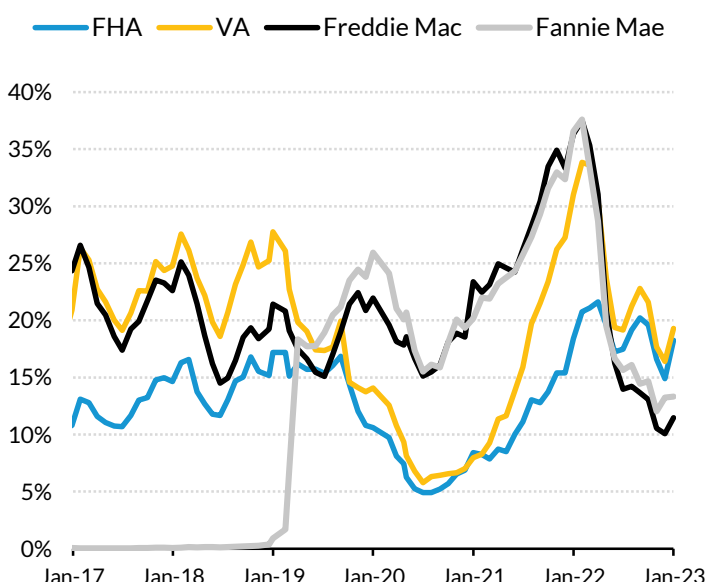
## Cash-out Share of Conventional Refinances



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 February 2023.

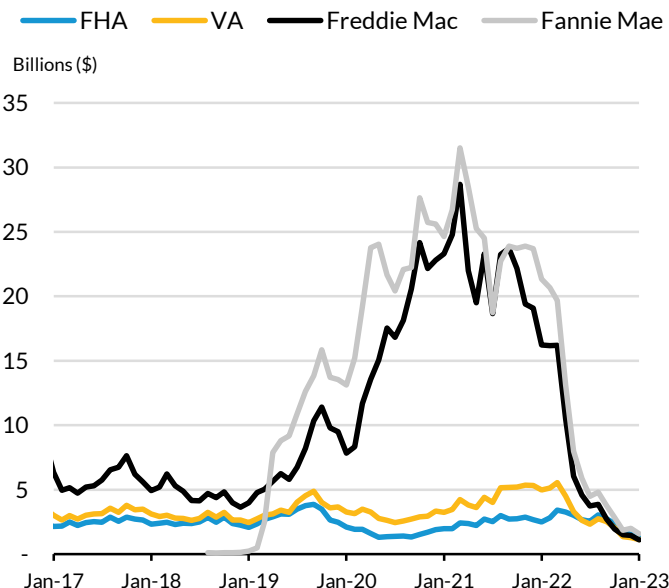
## Cash-out Refi Share of All Originations



Sources: eMBS and Urban Institute.

Note: Data as of January 2023.

## Cash-out Refinance Volume by Agency



Sources: eMBS and Urban Institute

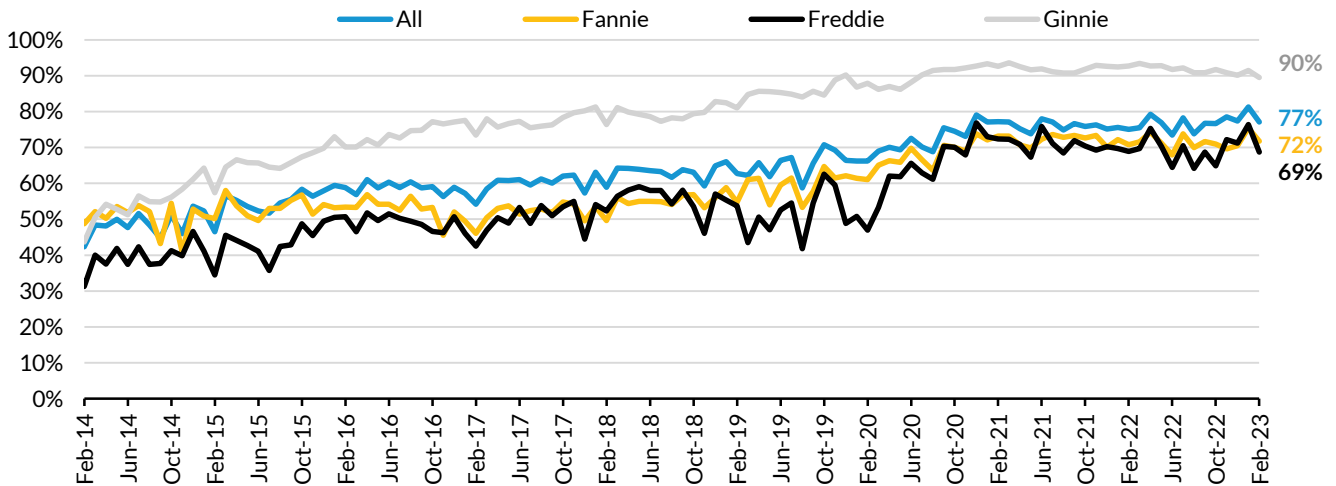
Note: Data as of January 2023.

## OVERVIEW

# AGENCY NONBANK ORIGINATION SHARE

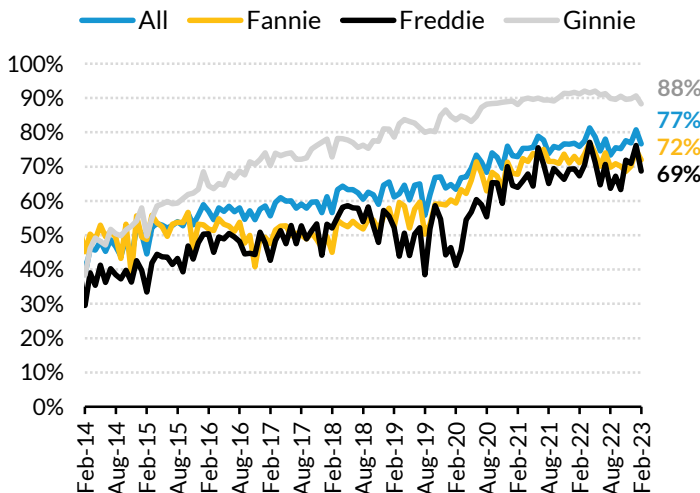
The nonbank share for agency originations has been rising steadily since 2013, standing at 77 percent in February 2023. The Ginnie Mae nonbank share has been consistently higher than the GSEs, standing at 90 percent in February 2023. Fannie and Freddie had nonbank shares of 72 percent and 69 percent respectively in February 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 Fannie purchase loans relative to Fannie refi loans while the nonbank share among Freddie purchase and refi loans were similar in February 2023.

## Nonbank Origination Share: All Loans



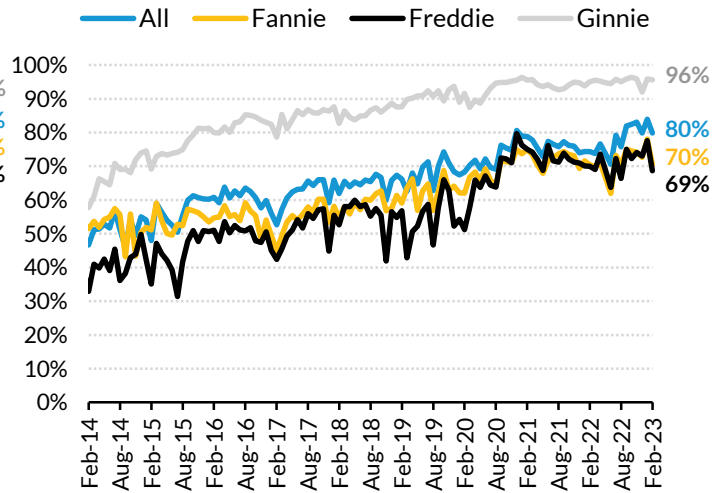
Sources: eMBS and Urban Institute.

## Nonbank Origination Share: Purchase Loans



Sources: eMBS and Urban Institute.

## Nonbank Origination Share: Refi Loans



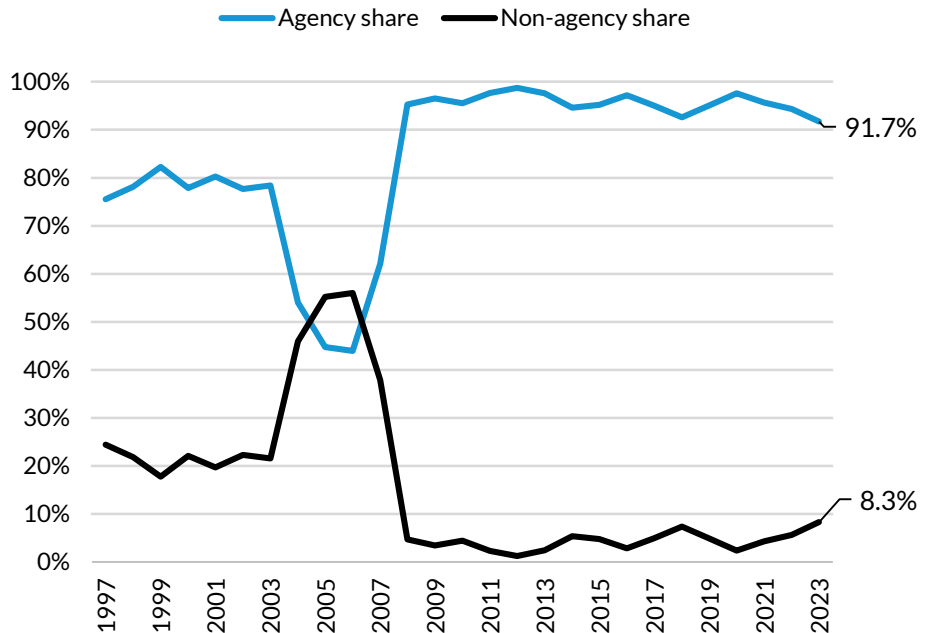
Sources: eMBS and Urban Institute.

## OVERVIEW

# SECURITIZATION VOLUME AND COMPOSITION

## Agency/Non-Agency Share of Residential MBS Issuance

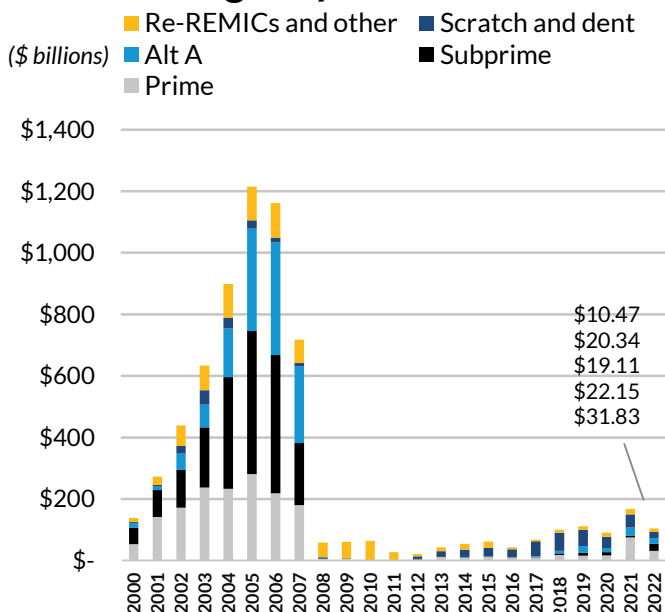
The non-agency share of mortgage securitizations increased gradually from 1.23 percent in 2012 to 4.96 percent in 2019. In 2020, the non-agency share dropped to 2.41 percent, reflecting increased agency refinances and less non-agency production due to COVID-19. The market improved through 2021, 2022, and through February 2023, with the nonagency share rising to 8.3 percent over this time period its highest level since 2007. In dollar terms, non-agency issuance reached \$103.91 billion in 2022, a decrease relative to the \$167.62 billion in 2021, reflecting both a broader slowdown in originations amidst higher rates as well as wider spreads. 2021 was the largest year of non-agency securitization, as measured by dollar volume, since 2008. Non-agency securitization totaled \$5.51 billion in January 2023. These numbers remain small compared to pre-housing market crisis levels.



Sources: Inside Mortgage Finance and Urban Institute.

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

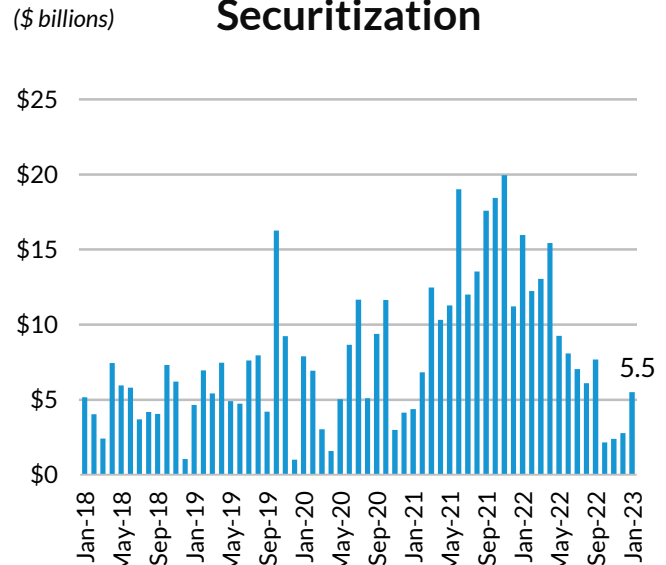
## Non-Agency MBS Issuance



Sources: Inside Mortgage Finance and Urban Institute.

Note: Data in 2022 is through Q4.

## Monthly Non-Agency Securitization



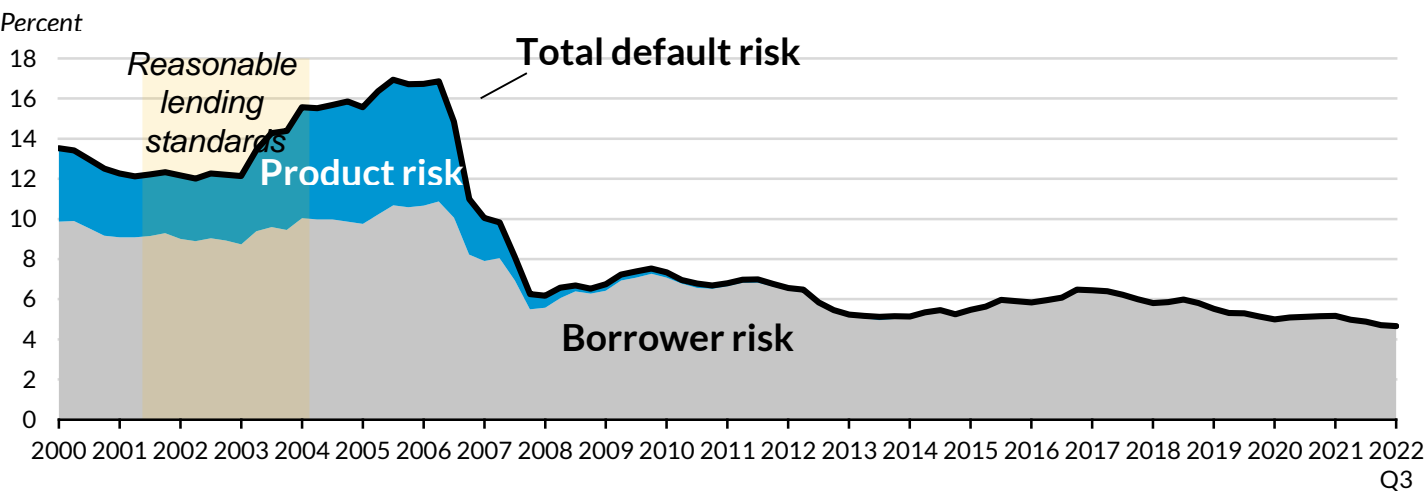
Sources: Inside Mortgage Finance and Urban Institute.

# CREDIT BOX

## HOUSING CREDIT AVAILABILITY INDEX

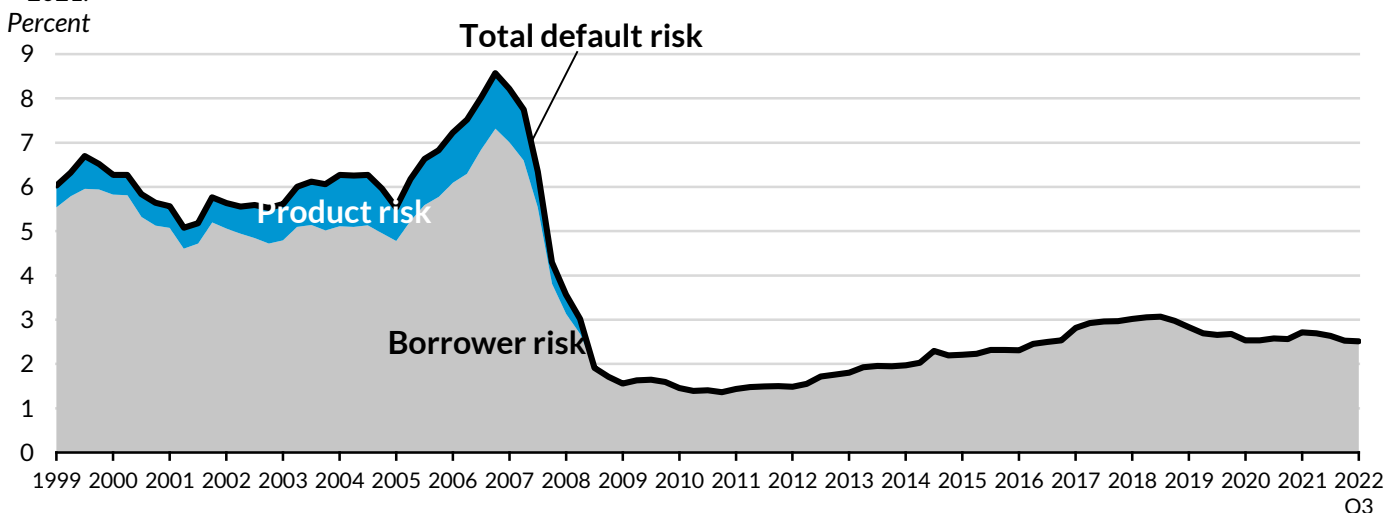
The Urban Institute's Housing Credit Availability Index (HCAI) assesses lenders' tolerance for both borrower risk and product risk, calculating the share of owner-occupied purchase loans that are likely to go 90+ days delinquent over the life of the loan. The HCAI stood at 4.7 percent in Q3 2022, remaining flat from Q2 2022 and lower from Q3 2021. The tightening from Q3 2021 to Q3 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 doubled, from 1.4 percent to 3.07 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 2022, credit availability stood at 2.51 percent, slightly down from 2.53 percent in Q2 2022 and 2.71 percent in Q3 2021.



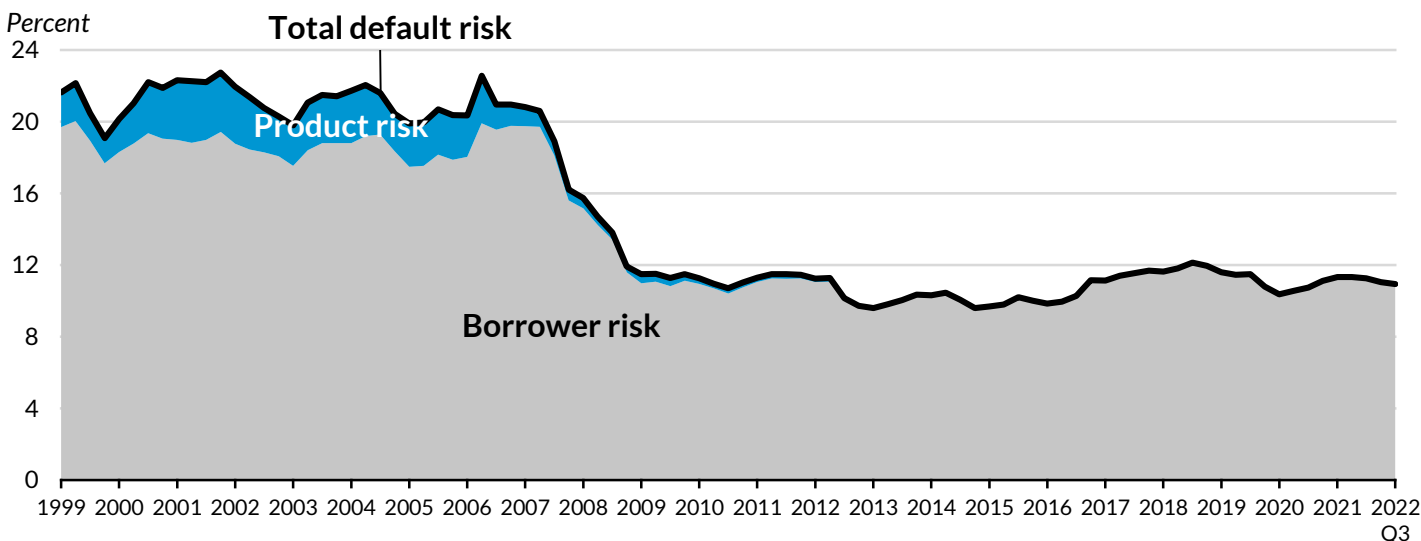
Sources: eMBS, CoreLogic, HMDA, IMF, and Urban Institute.

Note: Default is defined as 90 days or more delinquent at any point. Last updated December 2022.

# HOUSING CREDIT AVAILABILITY INDEX

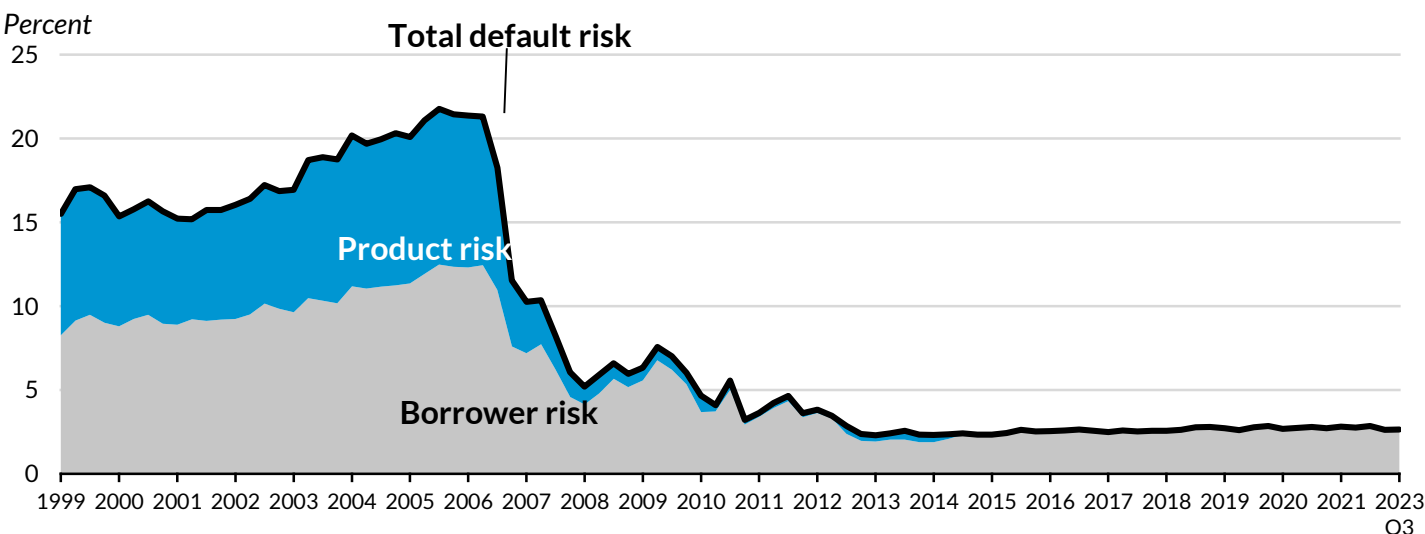
## Government Channel

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 11.0 percent in Q3 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 2.7 percent in Q3 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 December 2022.

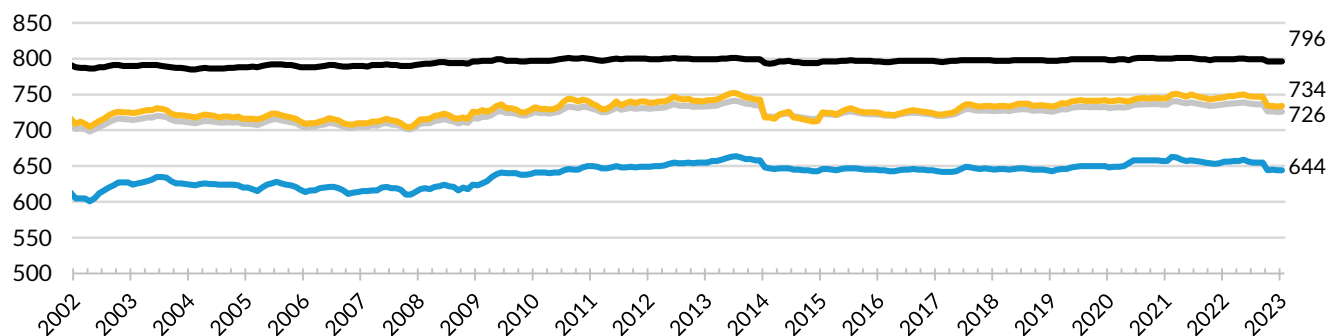
# CREDIT AVAILABILITY FOR PURCHASE LOANS

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 in January. Origination DTIs trended modestly lower over the course of 2020 and early 2021, reflecting the sharp decline in mortgage rates; the DTI trend reversed as mortgage rates rose. The median LTV at origination of 95 percent also remains high, reflecting the rise of FHA and VA lending.

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

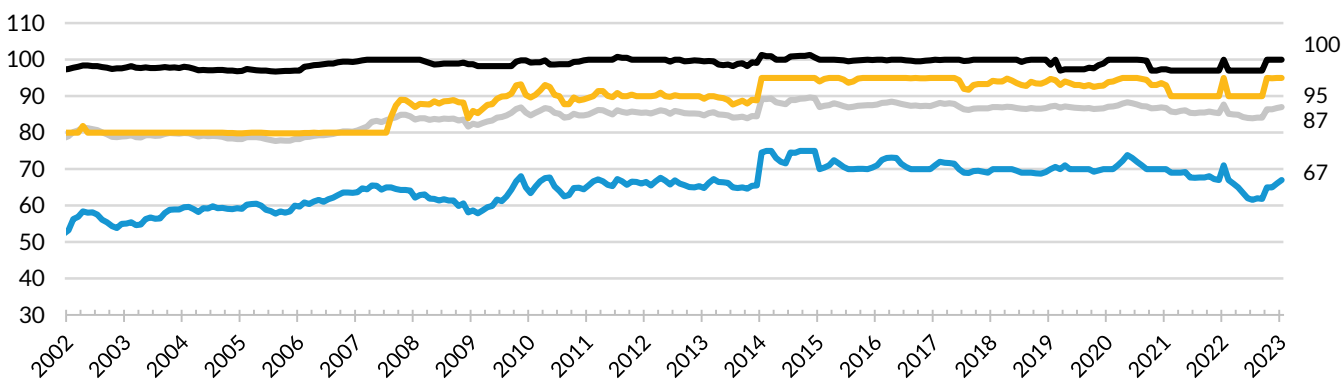
## Borrower FICO Score at Origination

FICO Score



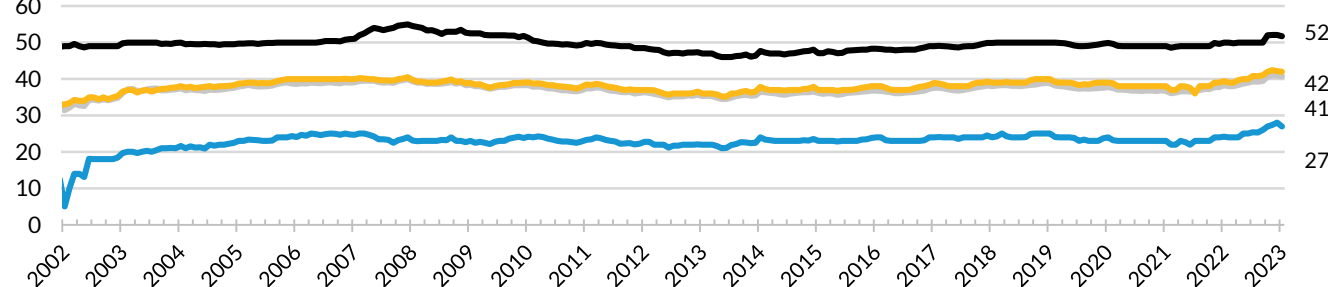
## Combined LTV at Origination

LTV



## DTI at Origination

DTI



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

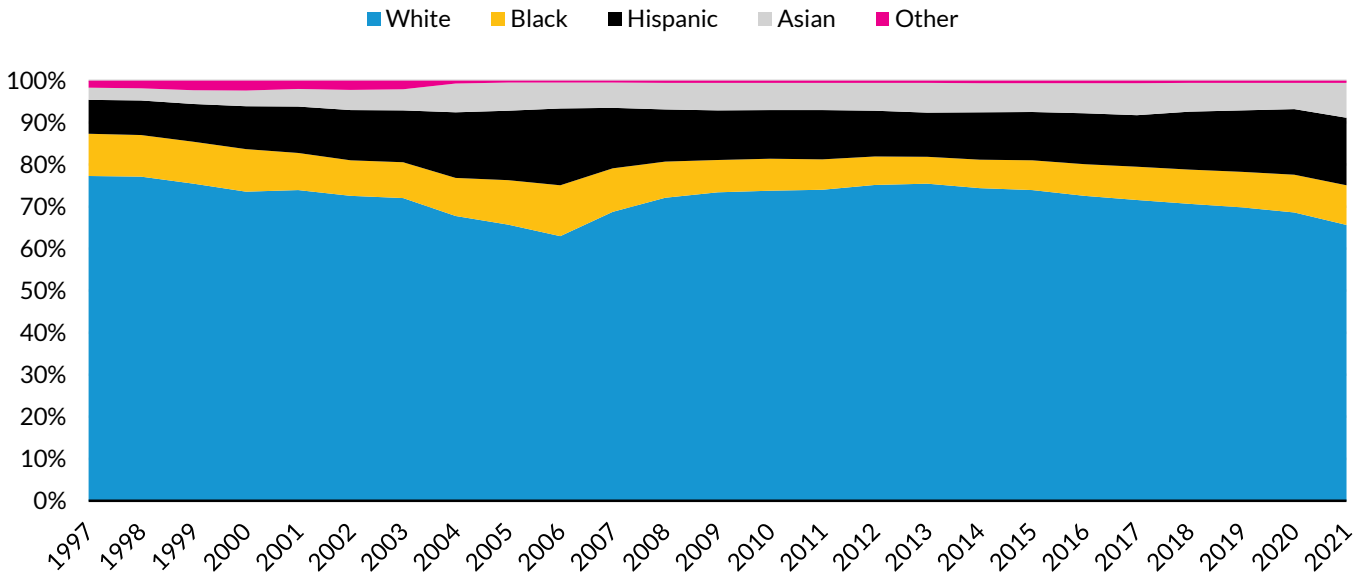
Note: Includes owner-occupied purchase loans only. DTI data prior to April 2018 is from CoreLogic; after that date, it is from Black Knight. A back-update to the Black Knight historical series was made in September 2021 for data starting from 2001 onward. Data as of January 2023.

## 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.

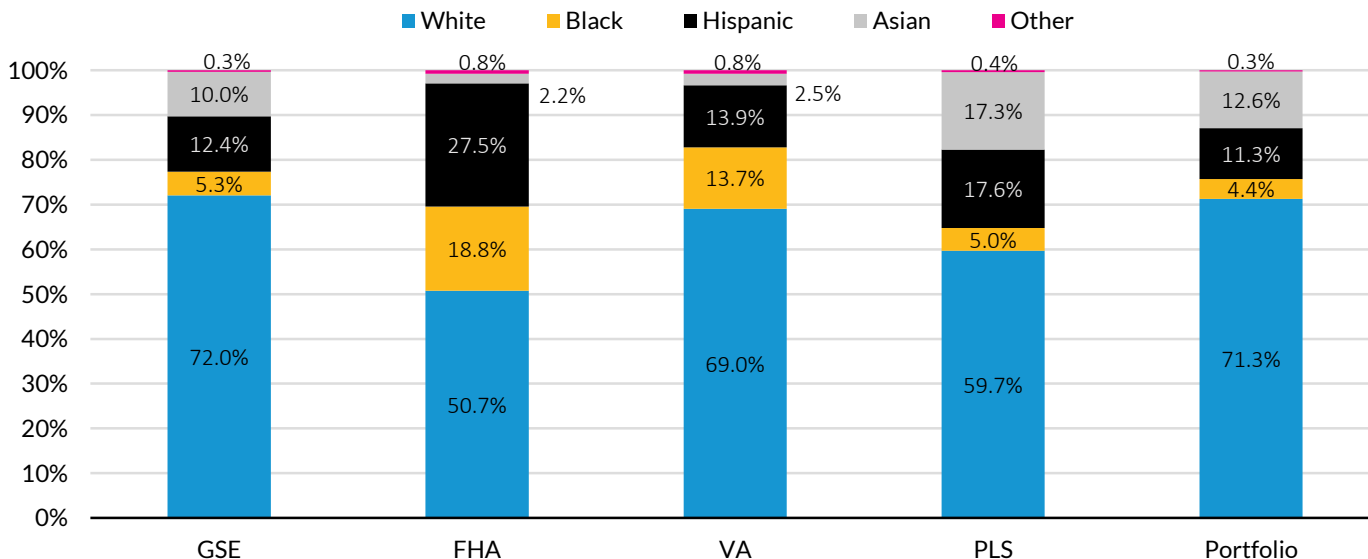
## 2021 Purchase Loan Shares by Race



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).

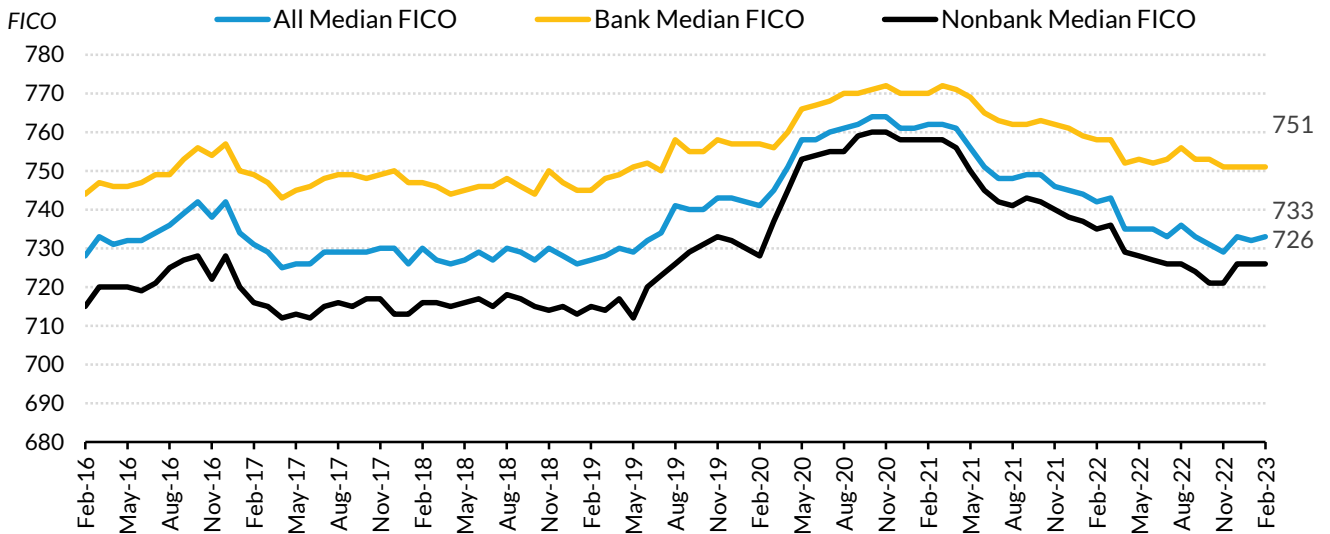
Note: Includes purchase loans only. Shares based on loan counts



# AGENCY NONBANK CREDIT BOX

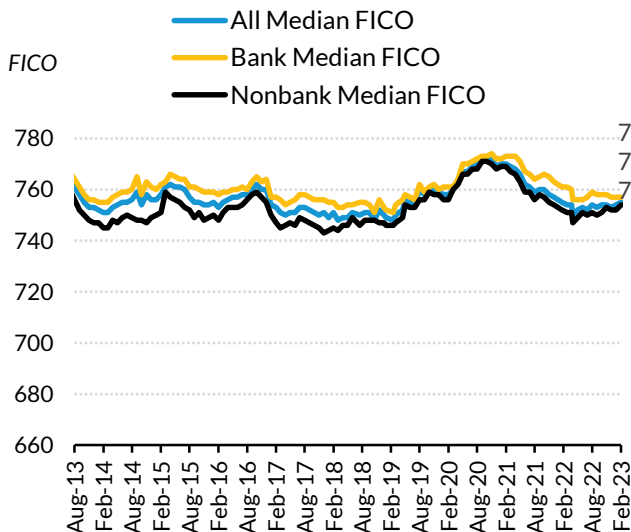
FICO scores for banks and nonbanks, in both the Ginnie Mae and GSE arenas, dipped in 2021 and 2022, but the gap between agency bank and nonbank FICOs widened to 25 points in February 2023 from 12 points in February 2021. The difference between the FICOs on bank and non-bank GSE loans stood at 3 points in February 2023, compared to 4 points in February 2021. Across Ginnie Mae loans, the gap currently sits at 23 points, up from 12 points in February 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 9 percent of Ginnie Mae originations.

## Agency FICO: Bank vs. Nonbank



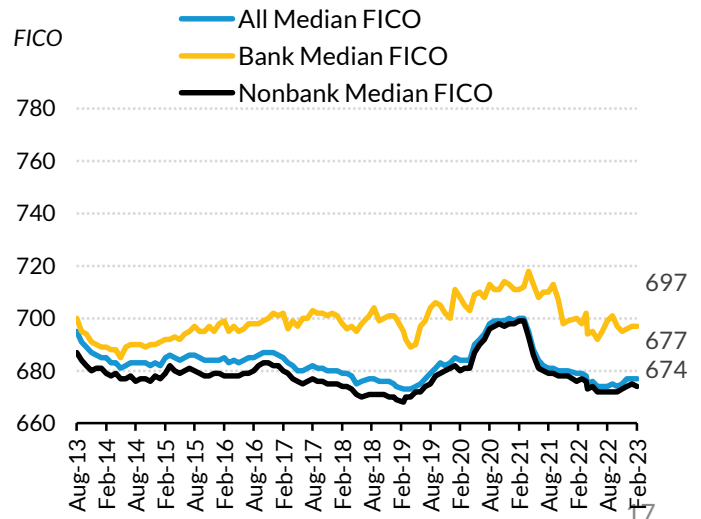
Sources: eMBS and Urban Institute.

## GSE FICO: Bank vs. Nonbank



Sources: eMBS and Urban Institute.

## Ginnie Mae FICO: Bank vs.



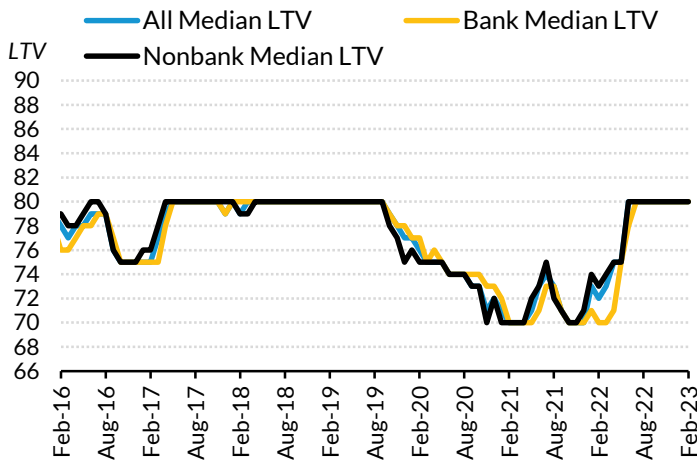
Sources: eMBS and Urban Institute.

# CREDIT BOX

## AGENCY NONBANK CREDIT BOX

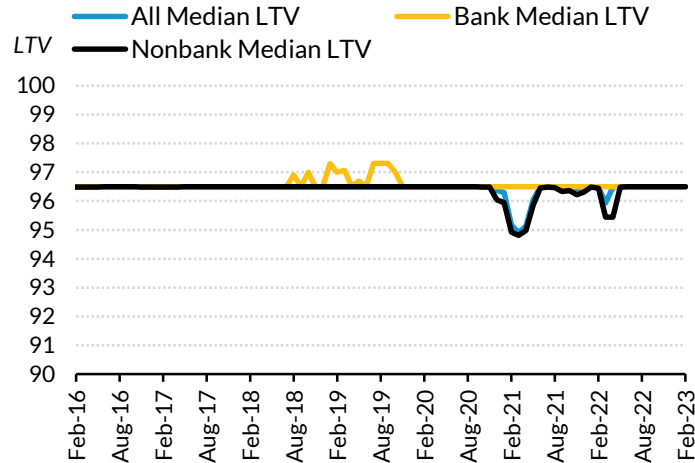
Nonbanks are more expansive in their lending than their bank counterparts, as indicated by higher back-end DTIs in both GSE and Ginnie Mae markets. From early 2017 to early 2019, there was a sustained increase in DTIs, which has reversed beginning in the spring of 2019. This is true for both Ginnie Mae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



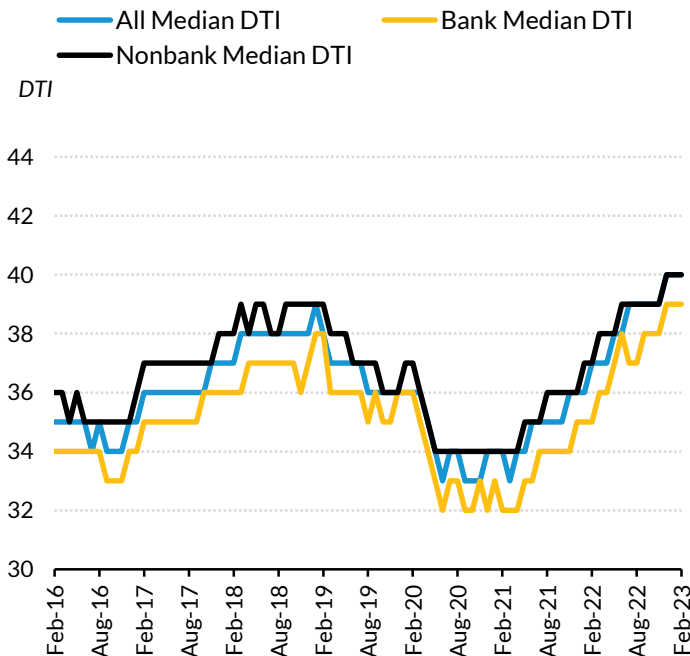
Sources: eMBS and Urban Institute.

### Ginnie Mae LTV: Bank vs. Nonbank



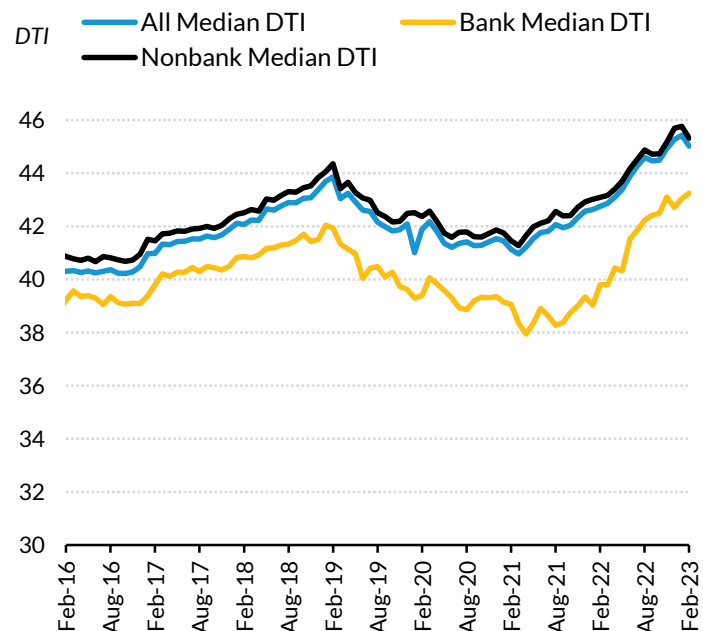
Sources: eMBS and Urban Institute.

### 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 (29 – 33 percent), down from \$4.44 to \$4.84 trillion (58 – 62%) in 2021, representing declines of \$2.19 to \$2.24 trillion (29 percentage points). The very robust origination volume in 2020 and 2021 was due to very strong refinance activity which was significantly curtailed in 2022 by higher interest rates. On an annual basis, Fannie, Freddie and the MBA all expect mortgage originations to fall driven by fewer refinances and reflected in lower refi share estimates over 2023 from full year 2022.

## 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	745	847	689	47	50	48
2022 Q2	676	744	678	25	28	33
2022 Q3	530	551	480	18	11	22
2022 Q4	393	453	398	16	12	19
2023 Q1	296	406	333	23	17	22
2023 Q2	415	525	461	20	14	23
2023 Q3	435	538	509	21	15	28
2023 Q4	404	474	541	23	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	1899	20	16	26

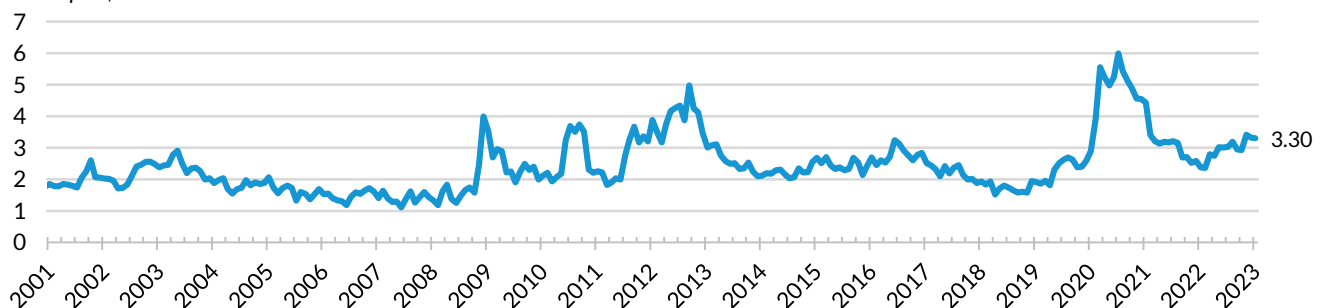
Sources: Fannie Mae, Freddie Mac, Mortgage Bankers Association and Urban Institute.

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. \(2013\)](#).

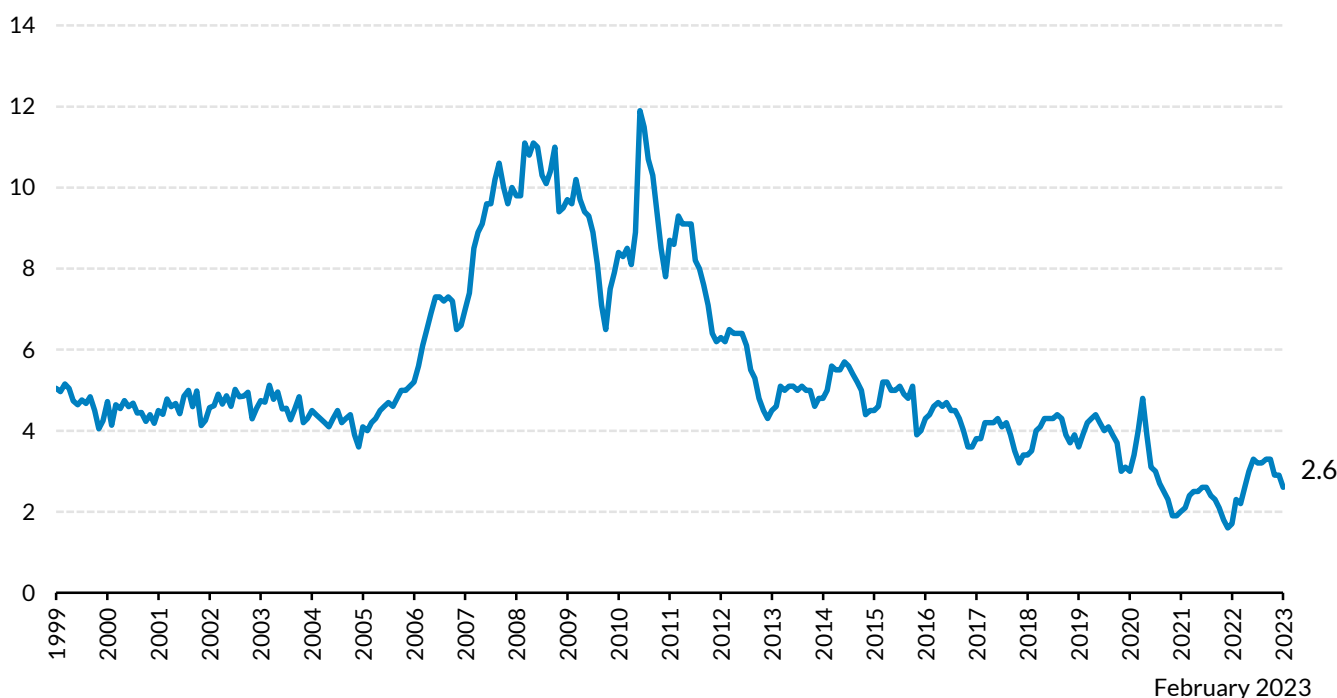
# STATE OF THE MARKET

## HOUSING SUPPLY

Months' supply of existing homes, single-family and condos/co-ops, was 2.6 in February 2023, down from January 2023, but up from a near record low of 1.7 in February 2022. While months' supply remains low by historical standards, it increased over much of 2022, reflecting some seasonality and coinciding with rising interest rates over most of the year. Fannie Mae, the MBA, and the NAHB forecast 2023 housing starts to be between 1.14 and 1.40 million units. Fannie Mae, Freddie Mac, the MBA, and the NAHB predict total home sales in 2023 ranging between 4.33 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 February 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	5890
2021	1601	1605	1605	6891	6900	6896	6188
2022	1553	1556	1555	5670	5800	5094	5182
2023	1155	1398	1173	4669	5100	4221	4408

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

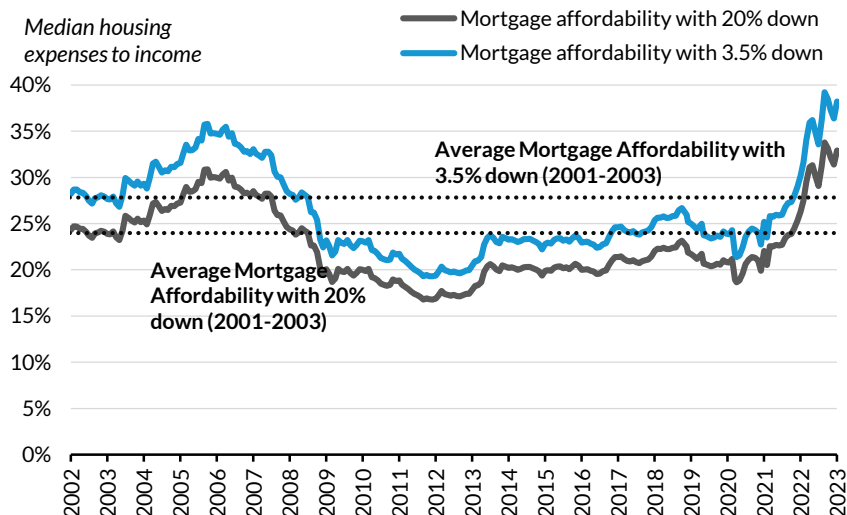
Note: Shaded boxes indicate forecasted figures; column labels indicate source of estimate. Freddie Mac home sales are now updated quarterly instead of monthly, with the last update in October 2022. The NAHB home sales also excludes existing condos and co-ops reported by NAR.

# STATE OF THE MARKET

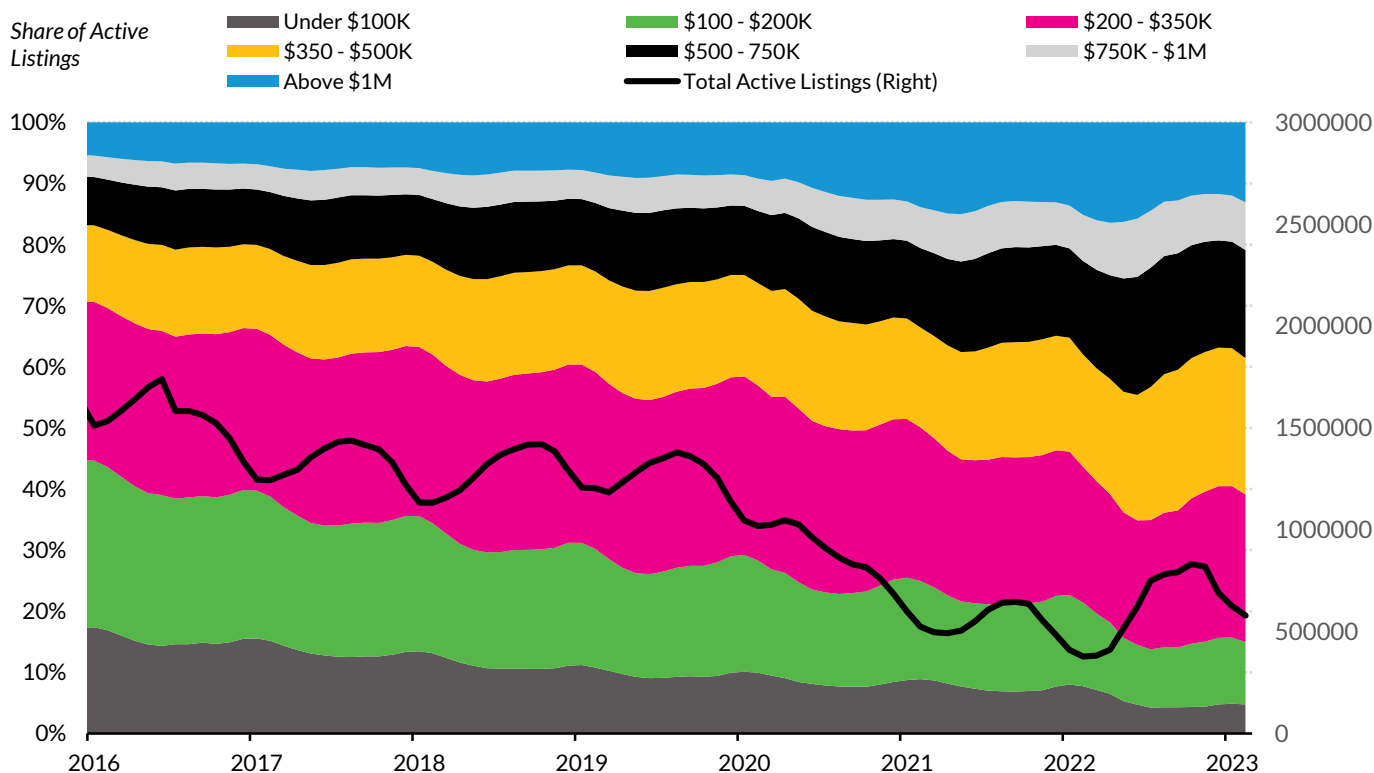
## HOUSING AFFORDABILITY

### 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.

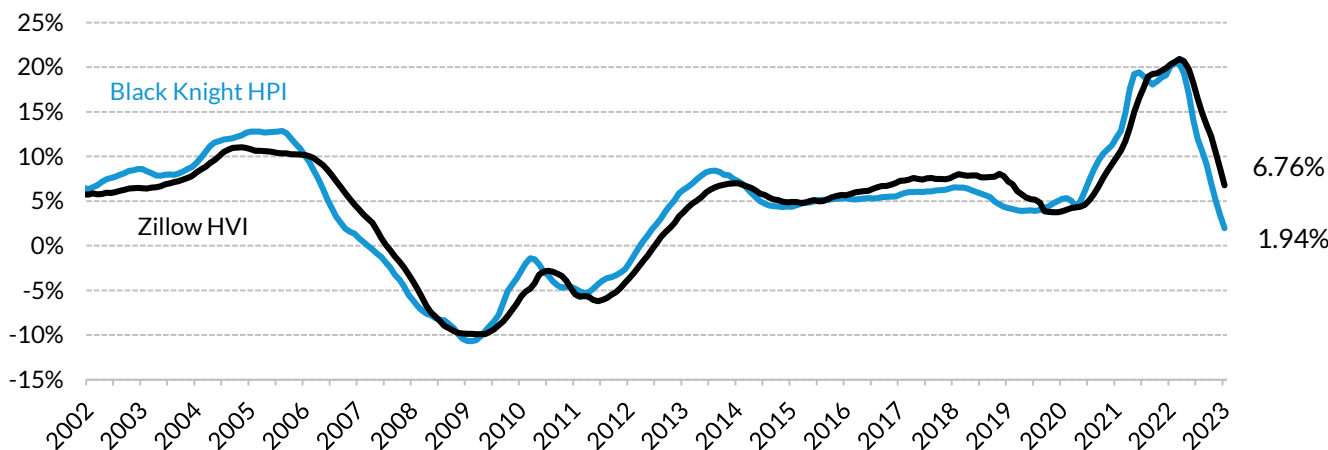
**Note:** Mortgage affordability is the share of median family income devoted to the monthly principal, interest, taxes, and insurance payment required to buy the median home at the Freddie Mac prevailing rate for a 30-year fixed-rate mortgage and property tax and insurance at 1.75 percent of the housing 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 1.94 percent in February 2023, compared to 3.43 percent in January 2023. Year-over-year home price appreciation as measured by Zillow's hedonic home value index was 6.76 percent in February 2023, down from 8.66 percent in January 2023. Home price appreciation has continued to slow since March; 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

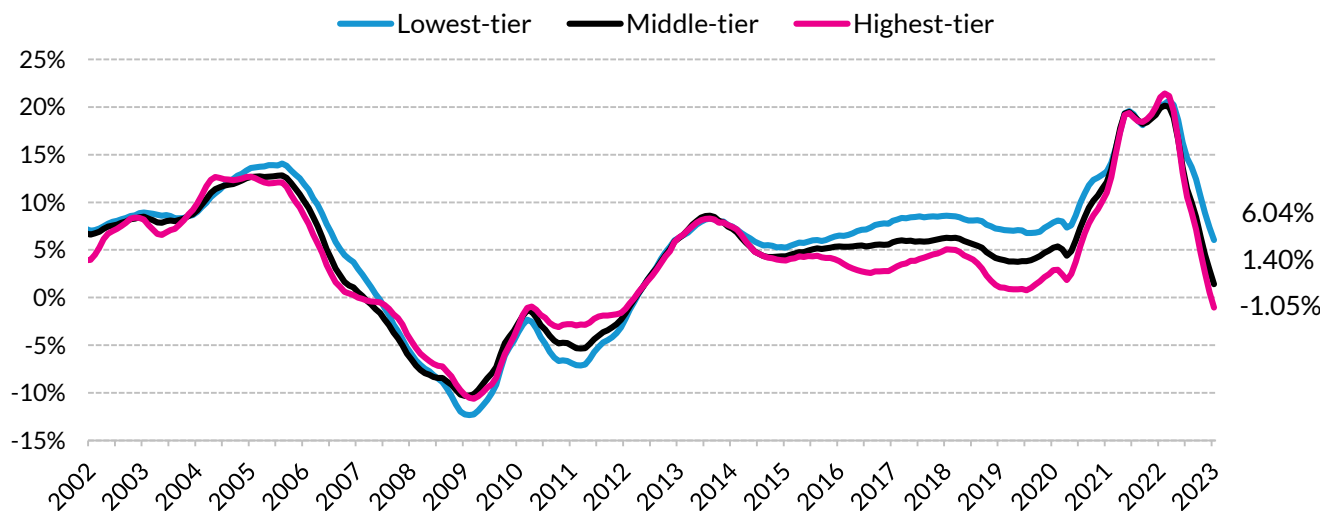


Sources: Black Knight, Zillow, and Urban Institute.

Note: Black Knight modified the methodology behind their HPI in February 2021, resulting in changes to historic price estimates. Data as of February 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 February 2023 were slightly lower than they were 12 months ago, decreasing by 1.05 percent over the year.



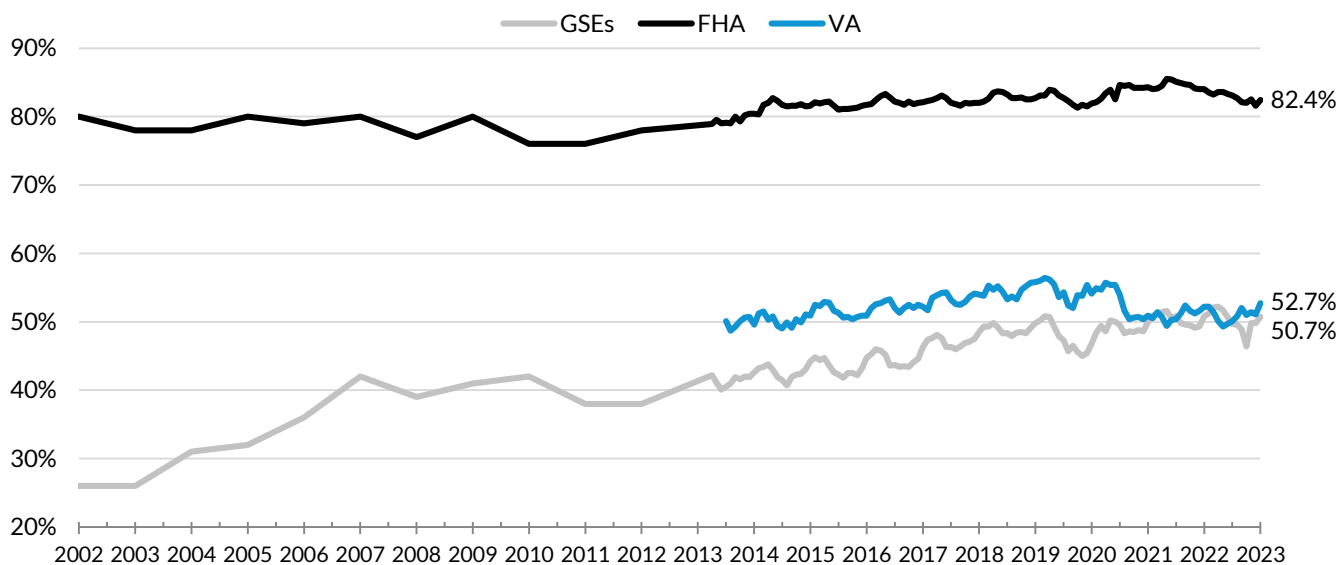
Sources: Black Knight and Urban Institute. Note: Black Knight modified the methodology behind their HPI in February 2021, resulting in changes to historic price estimates. Data as of February 2023.

## STATE OF THE MARKET

# FIRST-TIME HOMEBUYERS

## First-Time Homebuyer Share

In January 2023, the FTHB share for FHA, which has always been more focused on first time homebuyers, was 82.4 percent. The FTHB share of GSE lending in November was 50.7 percent; the VA share was 52.7 percent. The bottom table shows that based on mortgages originated in January 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.

January 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 (\$)	321,234	334,608	282,924	295,732	309,340	337,674
Credit Score	746	756	675	671	718	740
LTV (%)	85	75	95	92	90	81
DTI (%)	38	39	45	47	41	41
Loan Rate (%)	6.60	6.53	6.42	6.39	6.51	6.46

Sources: eMBS and Urban Institute.

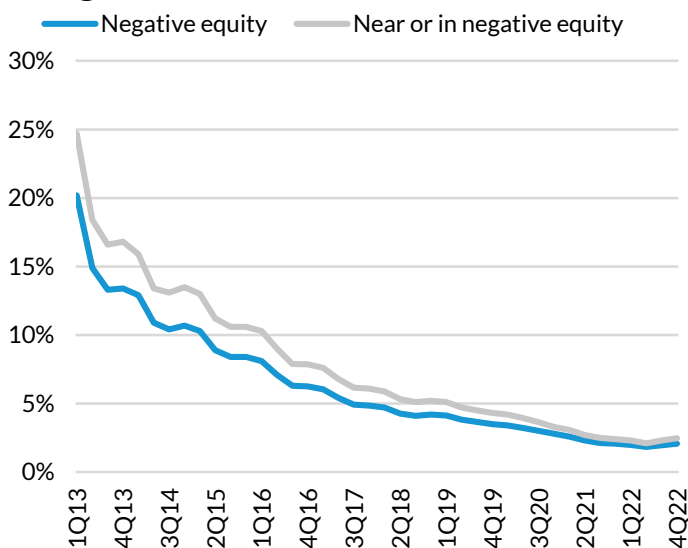
Note: Based on owner-occupied purchase mortgages originated in January 2023.

## 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 less than 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. 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 4 bp to 0.60 percent as of February 28, 2023. GSE loans have consistently had the lowest forbearance rates, standing at 0.28 percent at the end of February. The most recent forbearance rate for other (e.g., portfolio and PLS) loans was 0.78 percent; Ginnie Mae loans had the highest forbearance rate at 1.28 percent.

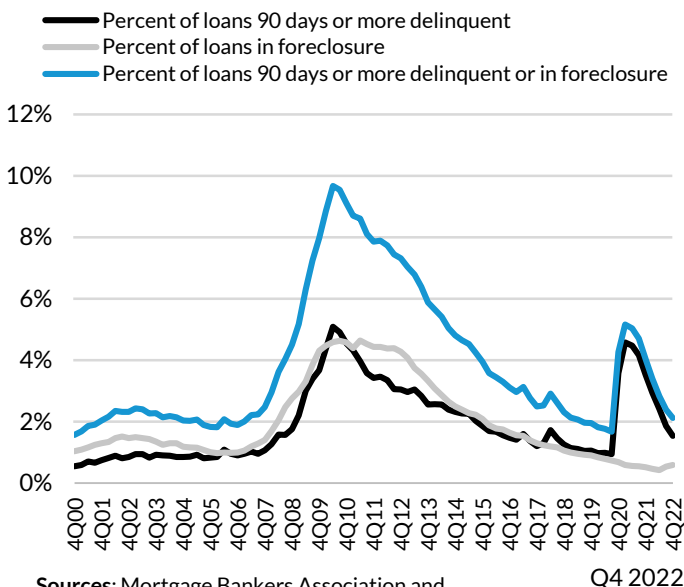
## Negative Equity Share



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.

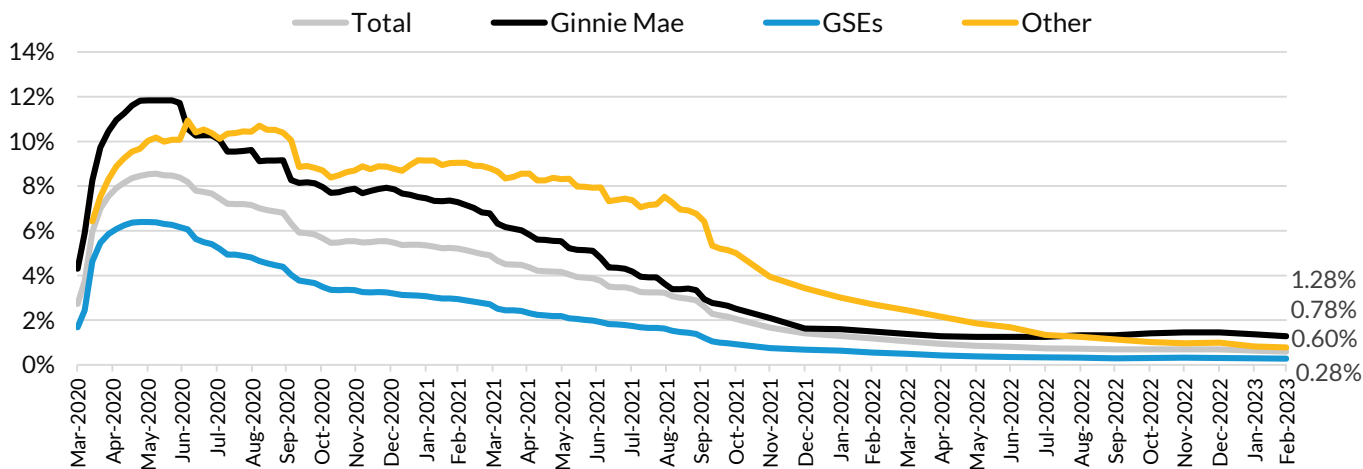
## Loans in Serious Delinquency/Foreclosure



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 February 28th, 2023

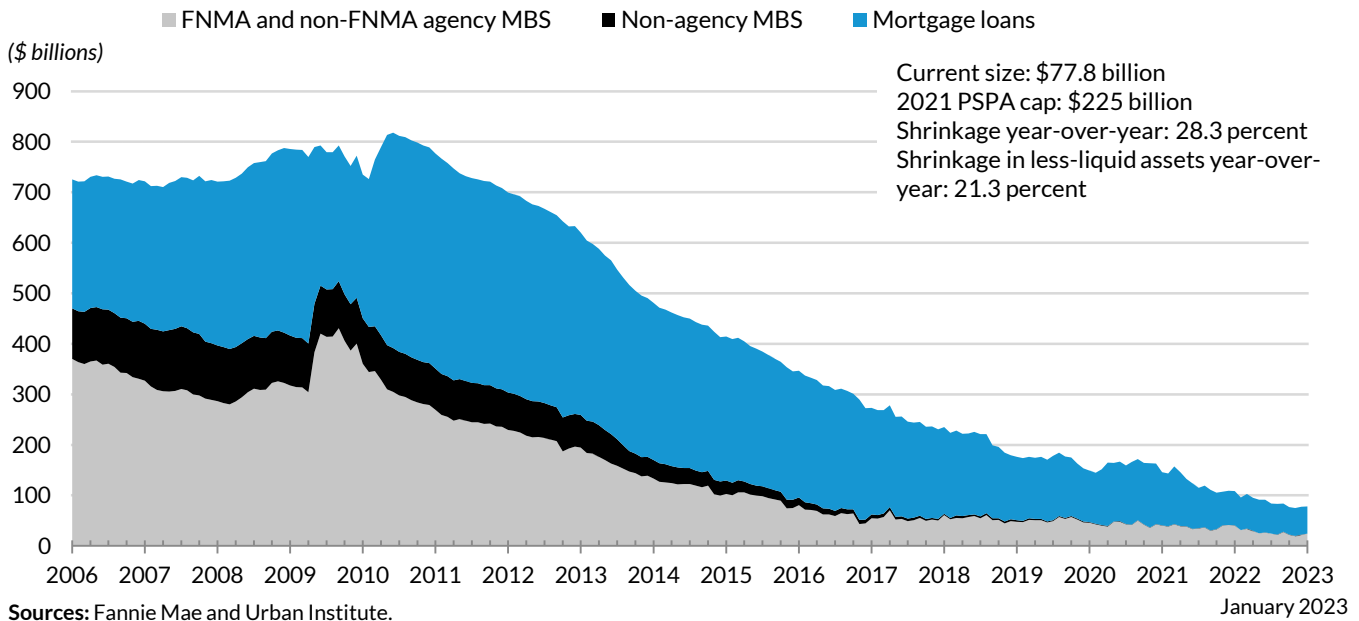


## GSES UNDER CONSERVATORSHIP

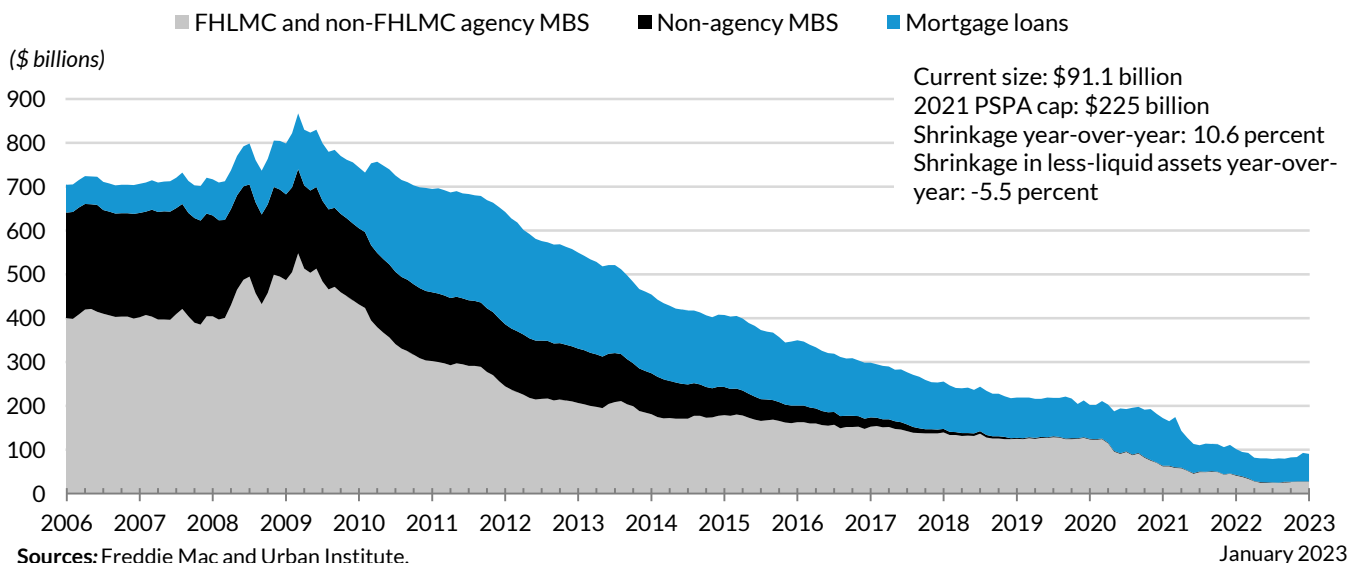
# GSE PORTFOLIO WIND-DOWN

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 January 2022 to January 2023, the Fannie portfolio contracted year-over-year by 28.3 percent, and the Freddie portfolio contracted by 10.6 percent. Within the portfolio, Fannie Mae contracted their less-liquid assets (mortgage loans, non-agency MBS), by 21.3 percent and Freddie Mac increased their less-liquid assets by 5.5 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.

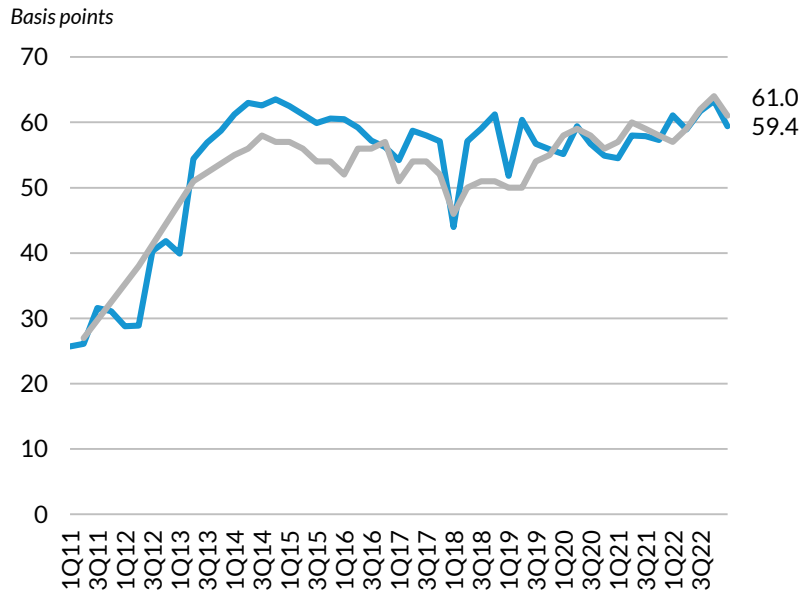
## GSES UNDER CONSERVATORSHIP

# 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.

— Fannie Mae single-family average charged g-fee on new acquisitions  
— Freddie Mac single-family guarantee fees charged on new acquisitions



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 \$2.12 trillion; Freddie's STACR totals \$2.62 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
<b>Total</b>		<b>\$2,159,123</b>	<b>\$57,349</b>	<b>2.7</b>

### Freddie Mac – Structured Agency Credit Risk (STACR)

Date	Transaction	Reference Pool Size (\$ m)	Amount Issued (\$m)	% of Reference Pool Covered
2015	STACR 2015 deals	\$209,521	\$6,658	3.2
2016	STACR 2016 deals	\$183,421	\$5,541	2.8
2017	STACR 2017 deals	\$248,821	\$5,663	2.3
2018	STACR 2018 deals	\$216,581	\$6,055	2.8
2019	STACR 2019 deals	\$271,105	\$5,947	2.2
2020	STACR 2020 deals	\$403,591	\$10,372	2.6
2021	STACR 2021 deals	\$574,706	\$11,024	1.9
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
<b>Total</b>		<b>\$2,676,006</b>	<b>\$70,637</b>	<b>2.6</b>

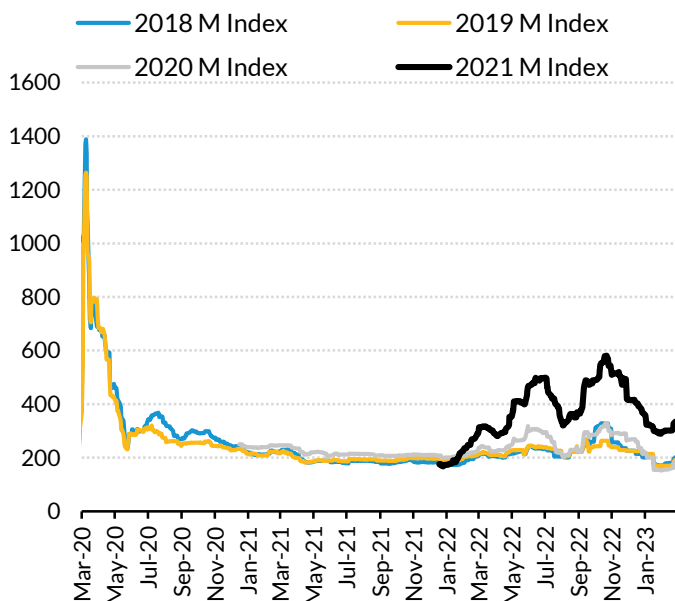
Sources: Fannie Mae, Freddie Mac and Urban Institute. Note: Classes A-H, M-1H, M-2H, and B-H are reference tranches only. These classes are not issued or sold. The risk is retained by Fannie Mae and Freddie Mac. "CE" = credit enhancement.

# GSES UNDER CONSERVATORSHIP

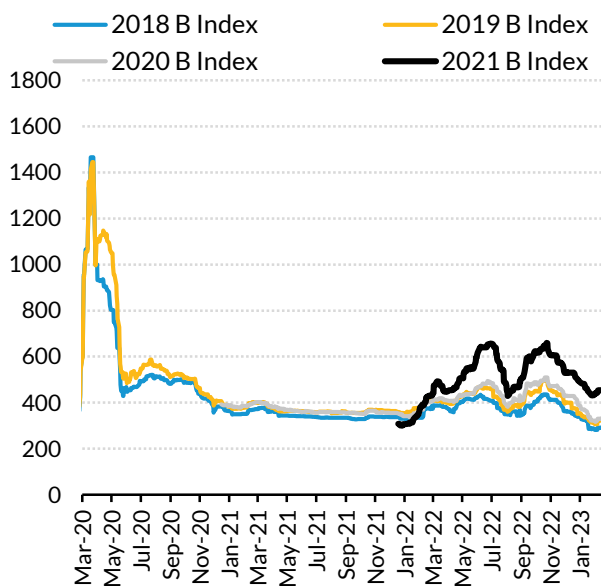
## GSE RISK-SHARING INDICES

The figures below show the spreads on 2018, 2019, 2020 and 2021 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 3 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 new deals from Q2 2020 to Q4 2021.

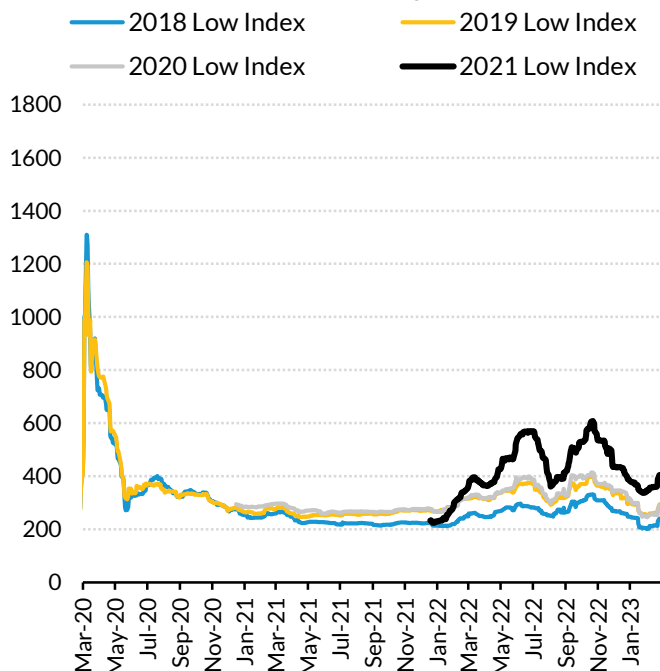
**M Indices**



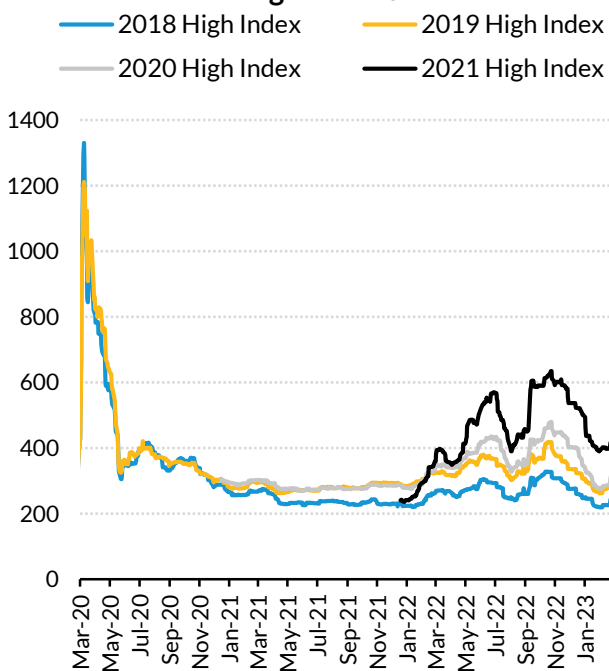
**B Indices**



**Low Indices**



**High Indices**



Sources: Vista Data Services and Urban Institute.

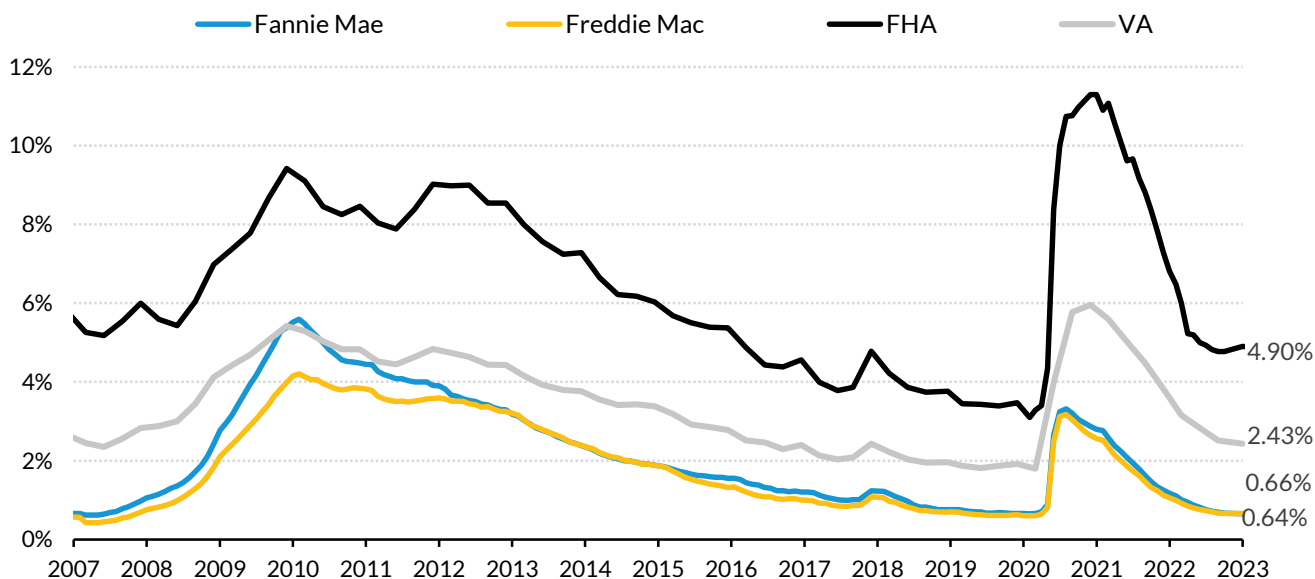
Note: Data as of March 15, 2023.

# GSES UNDER CONSERVATORSHIP

## SERIOUS DELINQUENCY RATES

Serious delinquency rates for Fannie Mae single-family loans decreased slightly to 0.64 percent in January 2023 from 0.65 percent in December 2022, while the serious delinquency rate among Freddie Mac loans held steady over January at 0.66 percent. Serious delinquency rates for FHA loans decreased to 4.90 percent in January from 4.91 percent in December. In Q4 2022, VA serious delinquency rates declined to 2.43 percent from 2.51 percent in Q3. Note that loans that are in forbearance are counted as delinquent for the purpose of measuring delinquency rates. Fannie and Freddie multifamily delinquencies in January remained at 0.24 percent, and 0.12 percent, respectively.

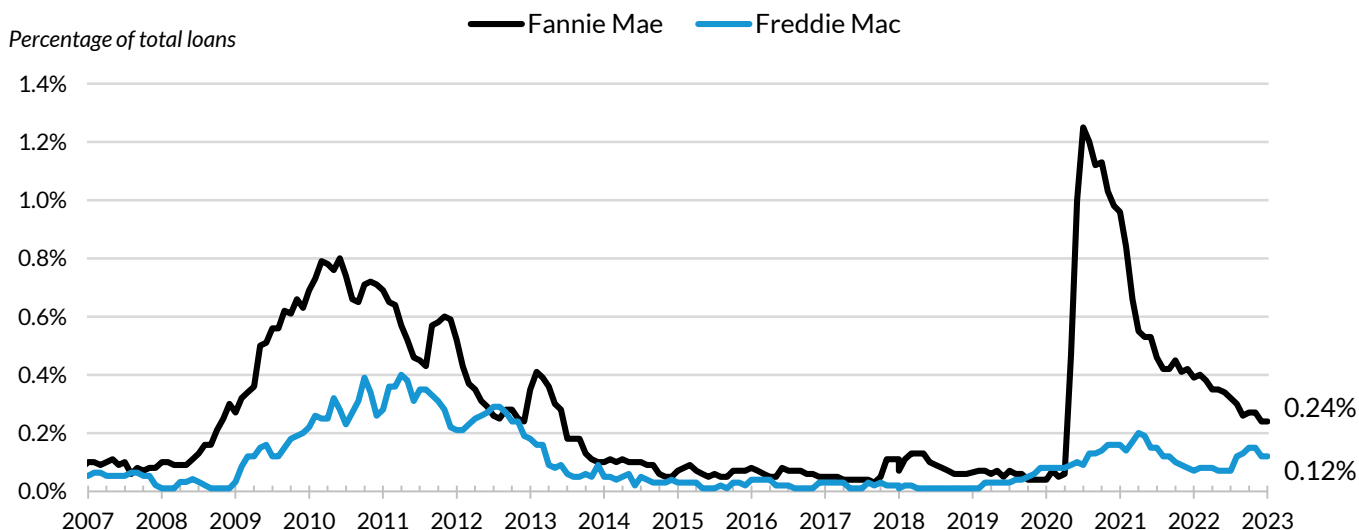
### Serious Delinquency Rates–Single-Family Loans



**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 January 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.

January 2023

# AGENCY GROSS AND NET ISSUANCE

Agency gross issuance totaled \$137.9 billion over the first two months of 2023, \$87.0 billion by the GSEs and \$50.9 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 \$24 billion issued through February exceeds the \$12.3 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	\$87.0	\$50.9	\$137.9
YTD 2023 % Change Over 2022	-73.0%	-54.1%	-68.2%
2023 Annualized	\$522.0	\$305.52	\$827.52

## 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	\$13	\$24	\$37
YTD 2023 % Change Over 2022	-87.8%	95.9%	-68.8%
2023 Annualized	\$78	\$144	\$222

Sources: eMBS and Urban Institute.

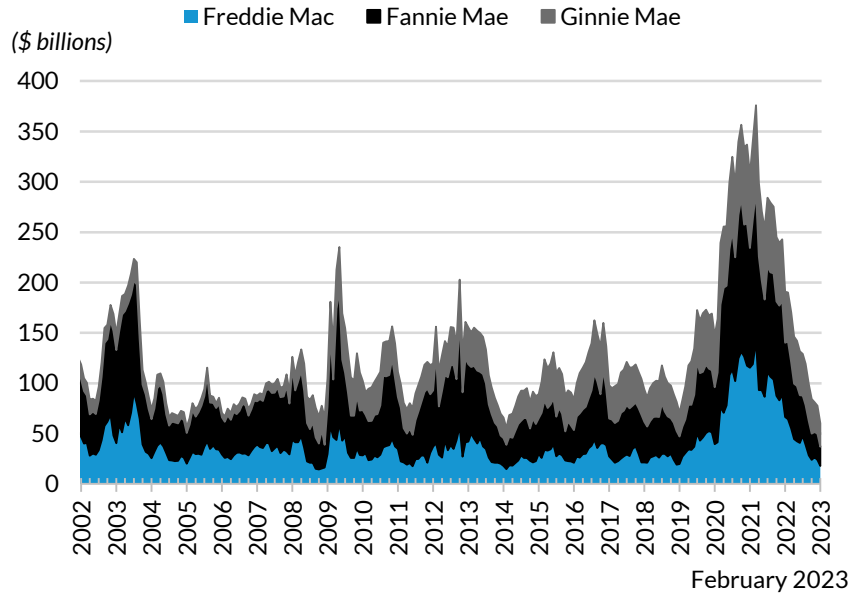
Note: Dollar amounts are in billions. Data as of February 2023.

## AGENCY ISSUANCE

# AGENCY GROSS ISSUANCE & FED PURCHASES

## Monthly Gross Issuance

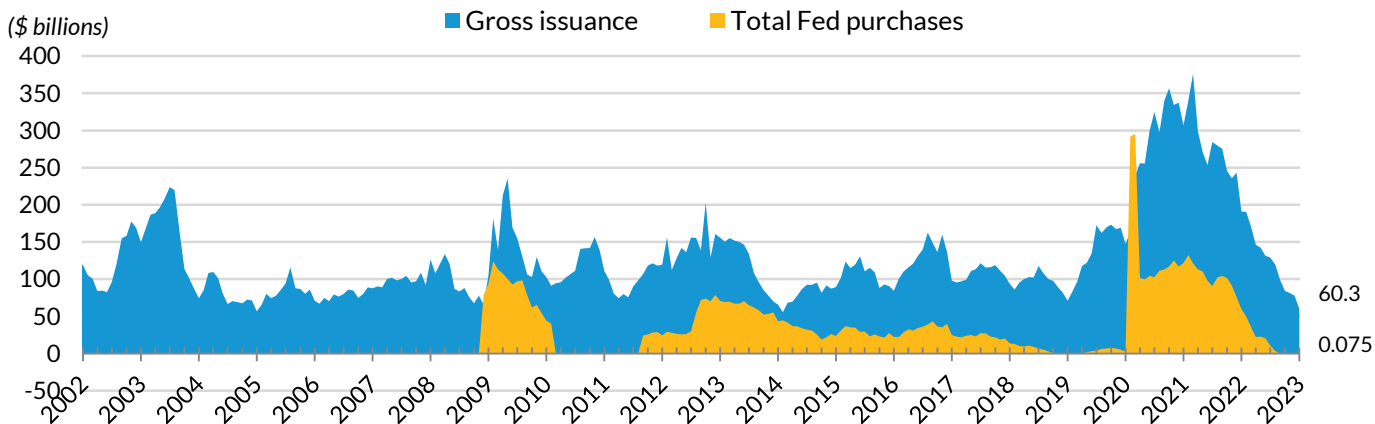
While FHA, VA and GSE lending have dominated the mortgage market since the 2008 housing crisis, there has been a change in the mix. The Ginnie Mae share of new issuances has risen from a pre-crisis level of 10-12 percent to 34.8 percent in February 2020, reflecting gains in both purchase and refinance 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 38.5 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.



February 2023

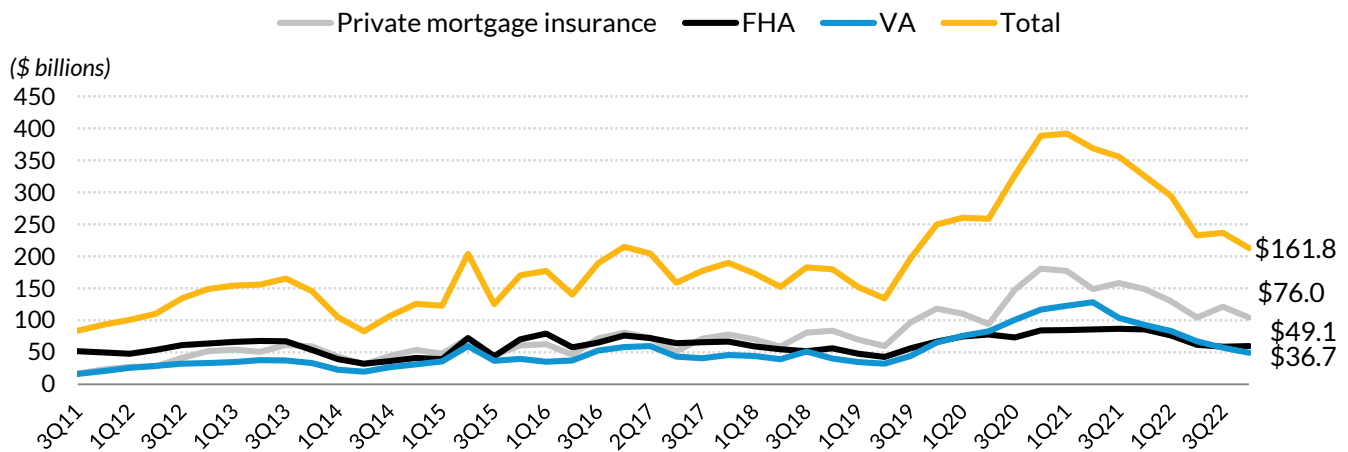
Sources: eMBS, Federal Reserve Bank of New York and Urban Institute.

## AGENCY ISSUANCE

# MORTGAGE INSURANCE ACTIVITY

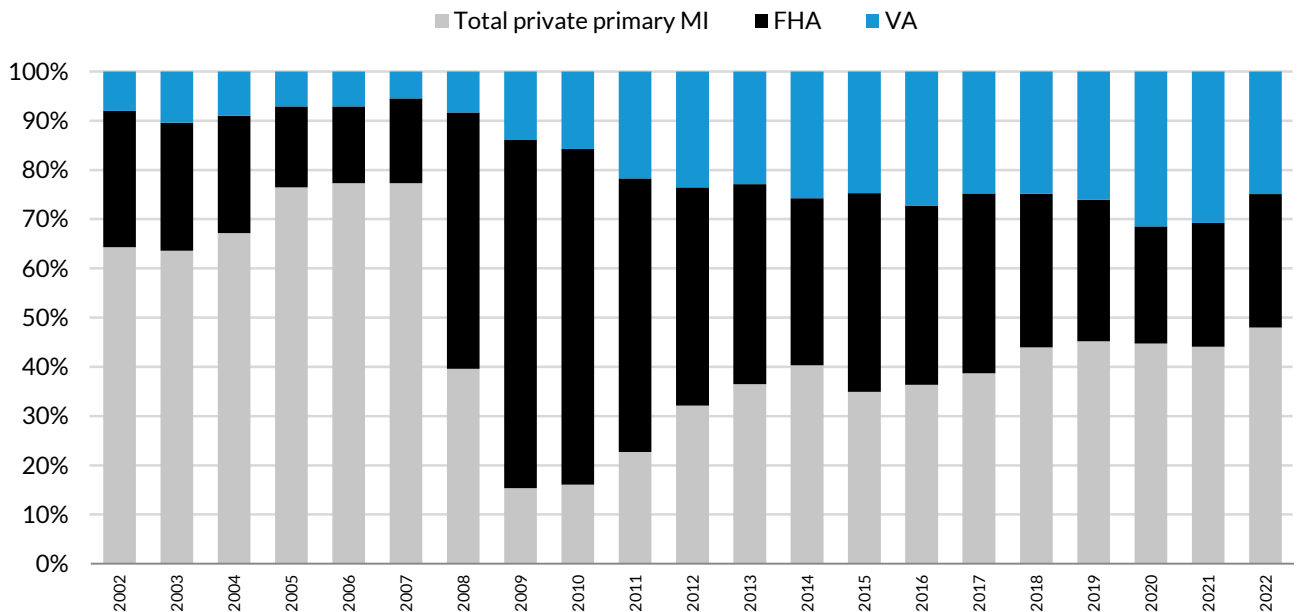
## MI Activity

In the third quarter of 2022, private mortgage insurance written decreased by \$44.7 billion, FHA decreased by \$26.2 billion, and VA decreased by \$43.3 billion relative to Q3 2021. Over the same period (i.e. from Q3 2021 to Q3 2022), the private mortgage insurers share increased from 45.5 to 48.9 percent, FHA's share slightly increased from 26.2 to 28.0 percent, and VA's share decreased from 28.3 to 23.1 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 <sup>a</sup>	175	125
4/1/2013 - 1/25/2015 <sup>b</sup>	175	135
1/26/2015 - 3/19/2023 <sup>c</sup>	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.

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

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

<sup>c</sup> 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	6.61								
FHA Base Rate	6.53								
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	\$2,001	\$2,001	\$2,001	\$2,001	\$2,001	\$2,001	\$2,001	\$2,001	\$2,001
GSE plus PMI	\$2,213	\$2,167	\$2,148	\$2,088	\$2,042	\$2,020	\$1,991	\$1,962	
GSE plus PMI Advantage	-\$212	-\$166	-\$147	-\$86	-\$41	-\$19	\$10	\$39	

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 17, 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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