

# ***GLOBAL MARKETS ANALYSIS REPORT***

A Monthly Publication of Ginnie Mae's  
Office of Capital Markets



**May 2024**

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## Inside this Month's Global Market Analysis Report...

The May 2024 *Highlights* discusses the Department of Veterans Affairs (VA) mortgage loan program and the benefits it provides borrowers. Specifically, it highlights the interest rate reduction refinance loan program (IRRRL) and its benefits to VA borrowers looking to refinance. The *Highlights* provides recent trends seen in prepayment speeds across FHA, VA, and conventional loans and explains how and why these speeds may differ in the current environment.

Notable insights in this month's Global Market Analysis Report include the following:

- The [Fixed Income Product Performance Comparisons](#) section shows that Ginnie Mae MBS continue to offer attractive yields relative to sovereigns with comparable durations globally.
- The [Single-Family MBS Pass-Through Issuance](#) section captures the leading role government lending/mortgage insurance programs are playing in the post-pandemic mortgage market. Gross and net issuance of Single-Family Ginnie Mae pass-throughs exceeds that of both Fannie Mae and Freddie Mac.
- The [SOMA Holdings](#) section captures FED Chair Jerome Powell's comments regarding the FED's decision to keep the policy rate unchanged and includes changes to the Fed's Quantitative Tightening program set to take place in June.
- The [Housing Affordability - Affordability Index](#) section shows how homebuyer affordability has decreased for families purchasing median priced homes. Accordingly, the new homebuyer monthly payment figure shows how monthly payments have been increasing for first-time homebuyers.



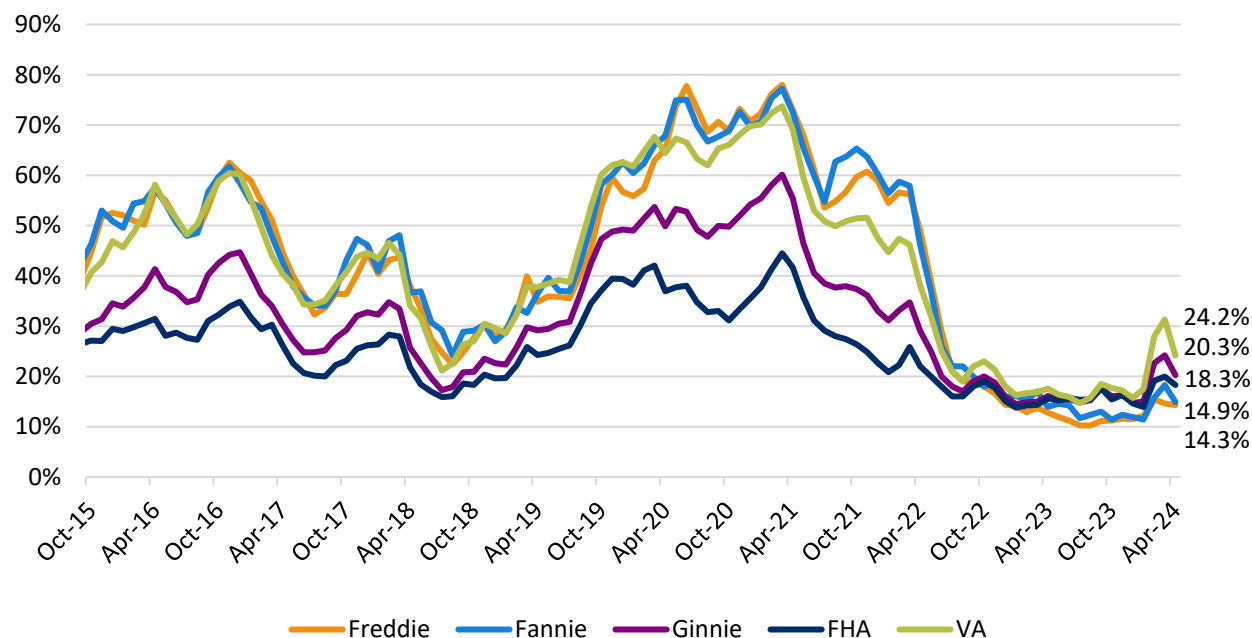
## Highlights

The Department of Veterans Affairs (VA) mortgage loan program provides a multitude of benefits to veterans and their spouses in the process of becoming homeowners. VA home loans are originated by private lenders, such as banks and mortgage companies. The VA guarantees a portion of these loans, enabling the lender to provide veterans with more favorable terms. Some benefits of this program include no downpayment required, limited closing costs, lower interest rates, and no private mortgage insurance required. The VA home loan is a lifetime benefit and can be used multiple times.

Some of the loan types offered by the VA include purchase loans, interest rate reduction refinance loans (IRRRL), cash-out refinance loans, and a Native American Direct Loan (NADL) program. The IRRRL refinances an existing VA-backed home loan into a loan with a lower interest rate which in turn lowers a borrower's monthly mortgage payment. The new loan must provide a clear financial benefit to the borrower, and the time to recoup costs and fees must be 36 months or less. The general rule of thumb for a refinance to be beneficial to the borrower is if the refinanced rate is at least 1% lower than the borrower's current rate.

Given these features, VA mortgages have historically been more susceptible to higher prepayment speeds. **Figure 1, Percent Refinance at Issuance: Single-Family**, below, illustrates the uptick in VA loan prepayments YTD compared to FHA and conventional mortgages, which have also experienced faster prepays. As this figure shows, despite the recent uptick, refinance rates, including for VA, remain well below historical levels over the last decade.

**Figure 1. Percent Refinance at Issuance: Single-Family**



The uptick in refinances comes on the heels of a decline in mortgage rates from their peak level last fall. 30-year fixed-rate mortgage rates hit a cycle high in October of last year, near 7.80%<sup>1</sup>, and are roughly 80 basis points lower as of May 16, 2024. Loans originated at or close to peak levels are likely to be in-the-money to refinance in the current rate environment. VA loans generally become eligible to refinance 210 days after the first mortgage payment is due, as long as the borrower makes 6 on-time monthly payments after origination. Many VA loans originated late last year have already met their seasoning requirement or soon will.

Other attributes that are likely driving faster speeds include appraisal flexibilities, less required documentation, a streamlined process for IRRRLs, lower closing costs and the ability to finance refinance costs over time. Additionally, VA refinance rates are substantially lower than VA purchase rates, partly due to the IRRRL program efficiencies that include no appraisal, very limited documentation, and generally no credit underwriting. This incentivizes VA borrowers to refinance at the earliest date allowed provided they can reduce their monthly payment. This incentive is unique to VA as purchase rates are lower than refinance rates for FHA borrowers and are not meaningfully different for conventional borrowers. This difference in purchase and refinance rates as of April 2024, is shown in the figure below.

**Figure 2. VA Mortgage Rates**

VA Borrowers Offered Lower Rates for Refis

April 2024 30YR Fixed Generic (W2D) Origination			
Weighted Average Coupon (WAC)			
	Purchase	Non-Cashout Refi	Cashout Refi
VA	6.23	5.89	6.34
FHA	5.94	6.15	6.24
GSE	6.69	6.67	6.97

Source: Bloomberg Intelligence, CPR <GO> Bloomberg Intelligence BT

While this dynamic has led to faster prepayment speeds for Ginnie Mae securities, overall speeds remain muted relative the historical levels. The Ginnie Mae MBS securities included in the Bloomberg Agency MBS index and the Ginnie Mae sub-index are primarily generic single-family multi-issuer pools, of which more than 40% are made up of VA loans. The VA share has gradually risen from roughly 25% a decade ago as the VA lending program has grown. [Section 4, Prepayments](#), shows that aggregate prepayment speeds remain below where they were pre-pandemic.

Sources: Bloomberg Intelligence: Rising Risks From GNMA Refinancings, Erica Adelberg, U.S. Department of Veterans Affairs, Recursion

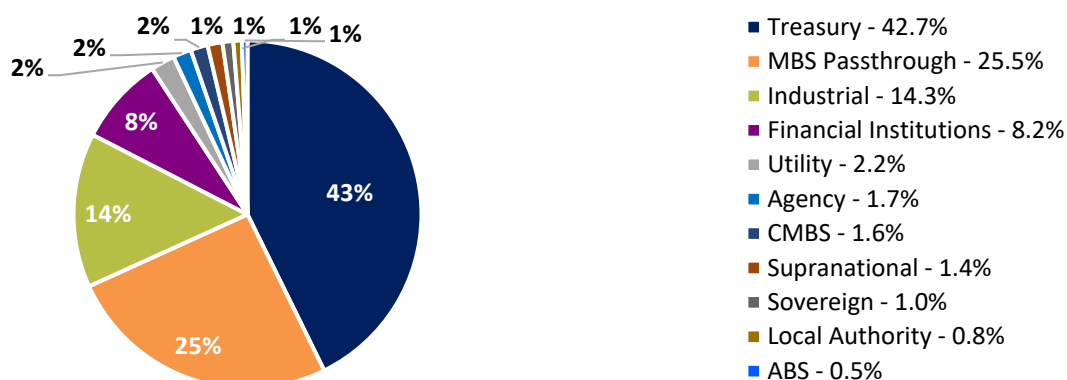
<sup>1</sup> FRED: 30-Year Fixed Rate Mortgage Average in the United States

## 1 US AGGREGATE AND GLOBAL INDICES

### 1.1 Bloomberg US Aggregate and Global Indices

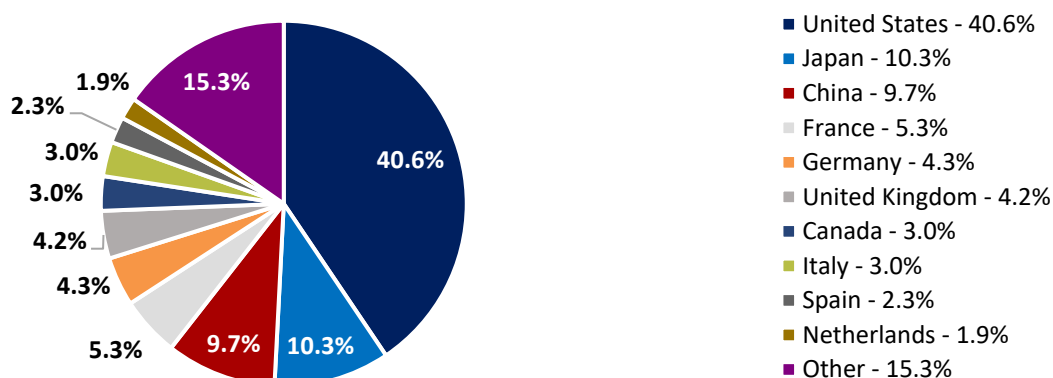
At month-end April, U.S. Treasuries contributed 42.7% to the Bloomberg U.S. Aggregate Index, up approximately 0.8% from the prior month. U.S. Agency MBS Passthrough (Ginnie Mae, Fannie Mae, and Freddie Mac) contributed 25.5%, down 0.5% from the month prior. Industrials represented 14.3% of the index as of month-end April, decreasing approximately 0.3% from the month prior. All other changes in the U.S. Aggregate Index were no larger than 0.1%.

**Figure 3. Bloomberg U.S. Aggregate Index**



In the Bloomberg Global Aggregate Index by Country, the U.S. share of fixed income remained the largest share of total outstanding issuance, representing 40.6% of the total index, up approximately 0.1% from the prior month. Japan's share of fixed income was the second largest at 10.3%, decreasing 0.3% from the prior month. China's share of fixed income represented the third largest share of the index at 9.7%, increasing 0.2% from the prior month. Canada, along with the countries grouped into "Other", saw the largest change in weight month to month. Canada's share fell approximately 0.5% while "Others" increased 0.5% as of month end April 2024. All other countries listed remained stable compared to the prior month with no changes larger than 0.1%.

**Figure 4. Bloomberg Global Aggregate Index by Country**



Source: Bloomberg [both charts]. Note: Data as of April 2024. Figures in charts may not add to 100% due to rounding.

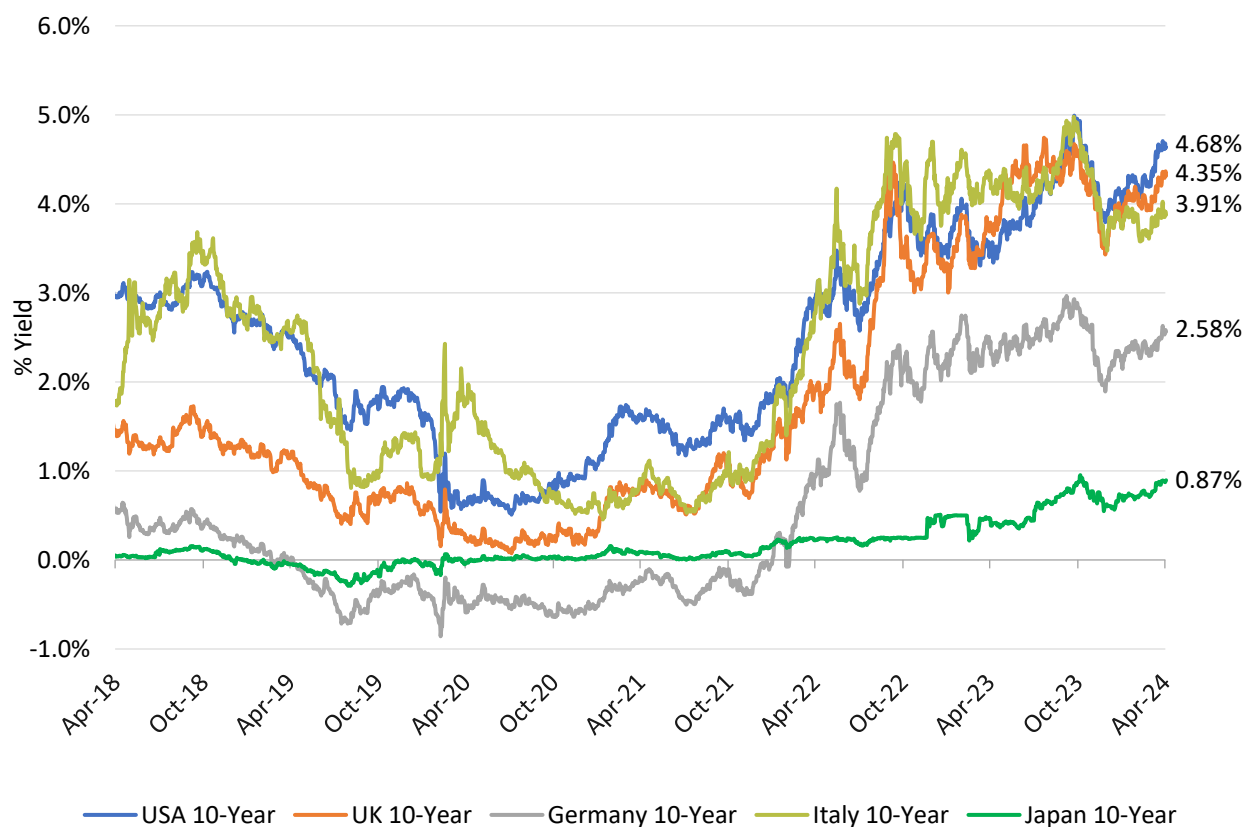
## 2 SOVEREIGN DEBT PRODUCT PERFORMANCE COMPARISONS

### 2.1 Global 10-Year Treasury Yields (Unhedged)

The U.S. 10-year Treasury yield moved to 4.68% at month-end April 2024, a MoM increase of 48 bps. Since October 2023, U.S. 10-year Treasury note rates have marked the highest government yield amongst the countries listed below. All month-end yields listed have increased from the previous month.

- The yield on the UK 10-year note increased to 4.35% at month-end April, a MoM increase of 42 bps.
- The yield on the German 10-year note increased to 2.58% at month-end April, a MoM increase of 28 bps.
- The yield on the Italian 10-year note increased to 3.91% at month-end April, a MoM increase of 23 bps.
- The yield on the Japanese 10-year note increased to 0.87% at month-end April, a MoM increase of 15 bps.

**Figure 5. Global 10-Year Treasury Yields**



Source: Bloomberg. Note: Data as of April 2024.

## 2.2 U.S. Treasury Hedged Yields

The yield for the 10-year Treasury, hedged in Japanese Yen (JPY) stood at -0.42% at month-end April, a 34 bp increase from month-end March.

The yield for the 10-year Treasury, hedged in Euros (EUR) stood at 2.92% at month-end April, a 36 bp increase from month-end March.

**Figure 6. U.S. 10yr Total Return Hedged, 1 yr. JPY**



**Figure 7. U.S. 10yr Total Return Hedged, 1 yr. EUR**



Source: Bloomberg. Notes: Data as of April 2024. The 10yr Total Return Hedged Yields are calculated by taking the 10yr treasury yield and subtracting the 1yr hedge cost for JPY and EUR.



## SECONDARY MORTGAGE MARKET

### 3 FIXED INCOME PRODUCT PERFORMANCE COMPARISONS

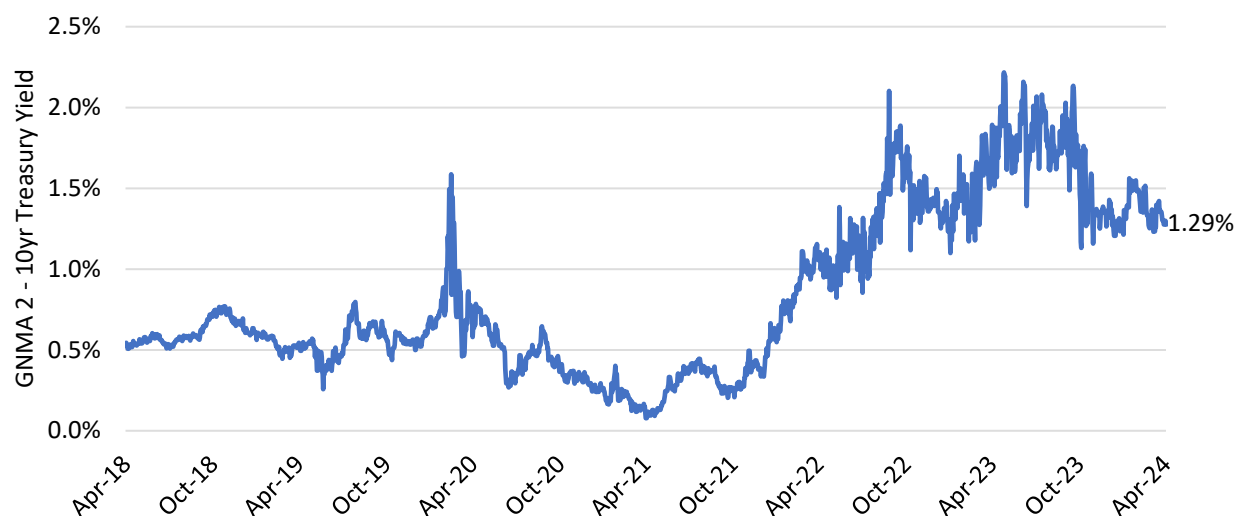
#### 3.1 Ginnie Mae Yields – USD

Ginnie Mae II yields were 5.73% at month-end February, decreased 24 bp to 5.49% at month-end March, then increased 49 bps to 5.98% at month-end April. The Ginnie Mae II spread over the U.S. 10-year Treasury yield decreased 60 bps from 189 bps in April 2023 to 129 bps over the U.S. 10-year Treasury yield as of month-end April 2024.

**Figure 8. Ginnie Mae II SF Yield, USD**



**Figure 9. Ginnie Mae II SF Yield – U.S. 10yr Treasury Yield**



Source: Bloomberg. Note: Data as of April 2024.

### 3.2 Ginnie Mae Hedged Yields

The yield for Ginnie Mae II's, hedged in Japanese Yen stood at 0.88% at month-end April, a 36 bp increase from month-end March.

The yield for Ginnie Mae II's, hedged in Euros stood at 4.21% at month-end April, a 37 bp increase from month-end March.

**Figure 10. Ginnie Mae II Hedged, 1 yr. JPY**



**Figure 11. Ginnie Mae II Hedged, 1 yr. EUR**

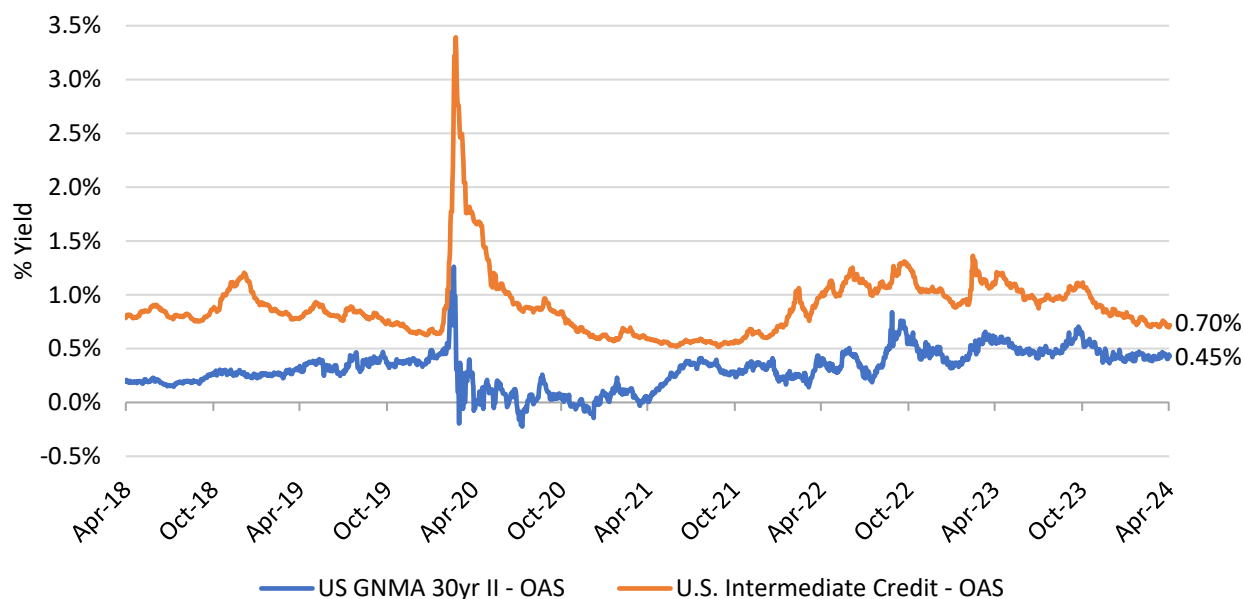


Source: Bloomberg. Notes: Data as of April 2024. The Ginnie Mae II Hedged Yields are calculated by taking the Ginnie Mae II Yield and subtracting the 1yr hedge cost for JPY and EUR.

### 3.3 Ginnie Mae Yield Spreads – Intermediate Credit

The GNMA II 30-year OAS increased 2 bps MoM, to 0.45%, as of month-end April. The U.S. Intermediate Credit OAS decreased 2 bps to 0.70% from month-end March to month-end April. The yield differential between U.S. Intermediate Credit and GNMA II 30-year OAS decreased 4 bps to 0.25% at month-end April.

**Figure 12. U.S. GNMA II 30yr MBS OAS versus U.S. Intermediate Credit OAS**



**Figure 13. Spread between U.S. Intermediate Credit and U.S. GNMA II 30yr MBS OAS**

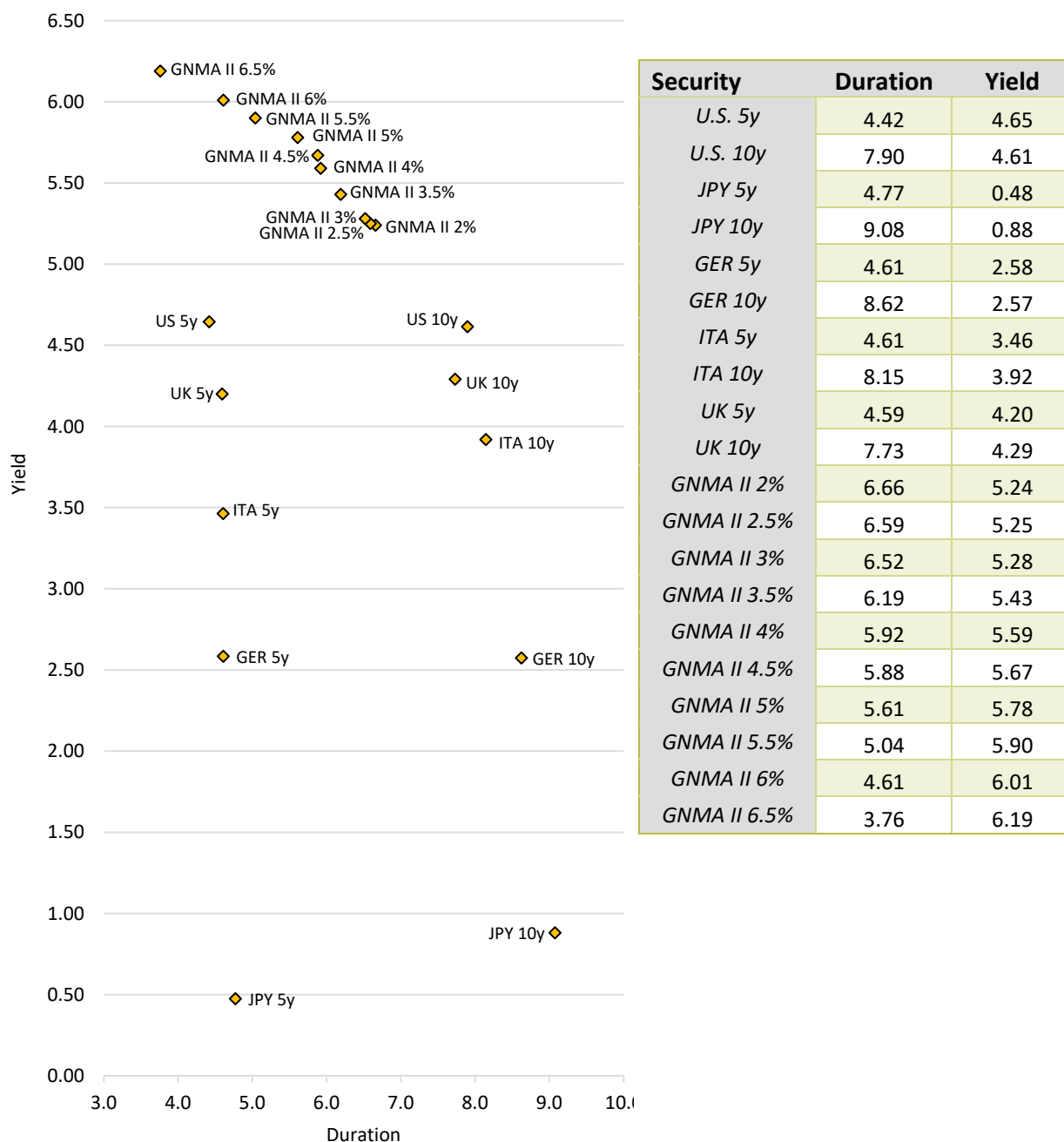


Source: Bloomberg. Note: Data as of April 2024.

### 3.4 Global Treasury Yield Per Duration

GNMA MBS continues to offer a higher yield in comparison to other government fixed income securities of various tenors with similar or longer duration. Prepayment risk is a feature of MBS.

**Figure 14. Yield vs. Duration**



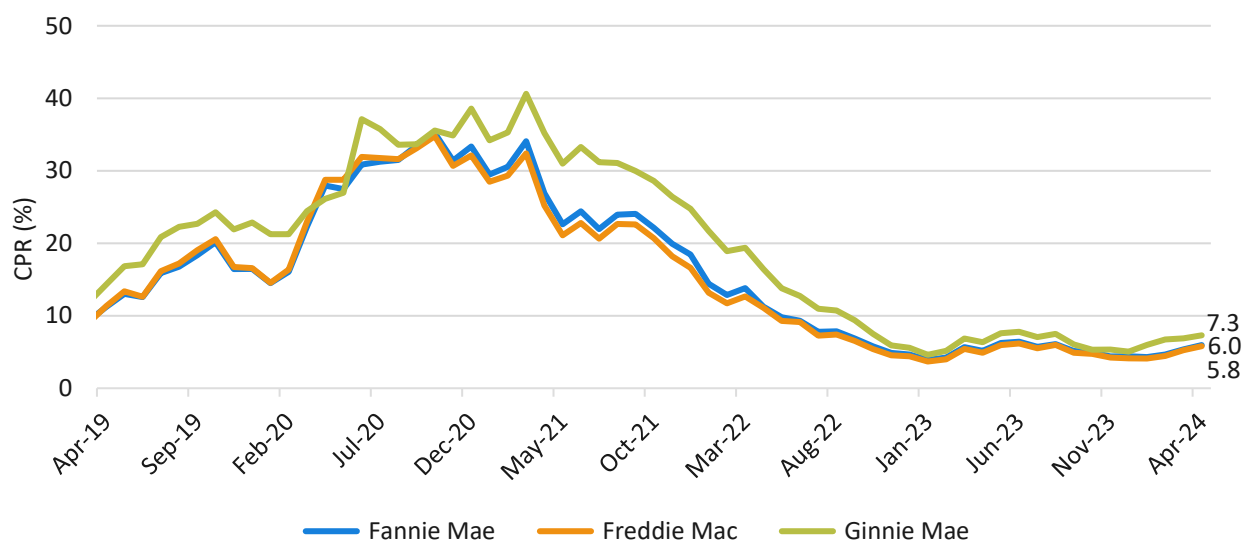
Source: Bloomberg. Note: Yield and modified duration for GNMA II securities is based on median prepayment assumptions from surveyed Bloomberg participants. All data is as of April 2024. Yields are in base currency of security and unhedged.

## 4 PREPAYMENTS

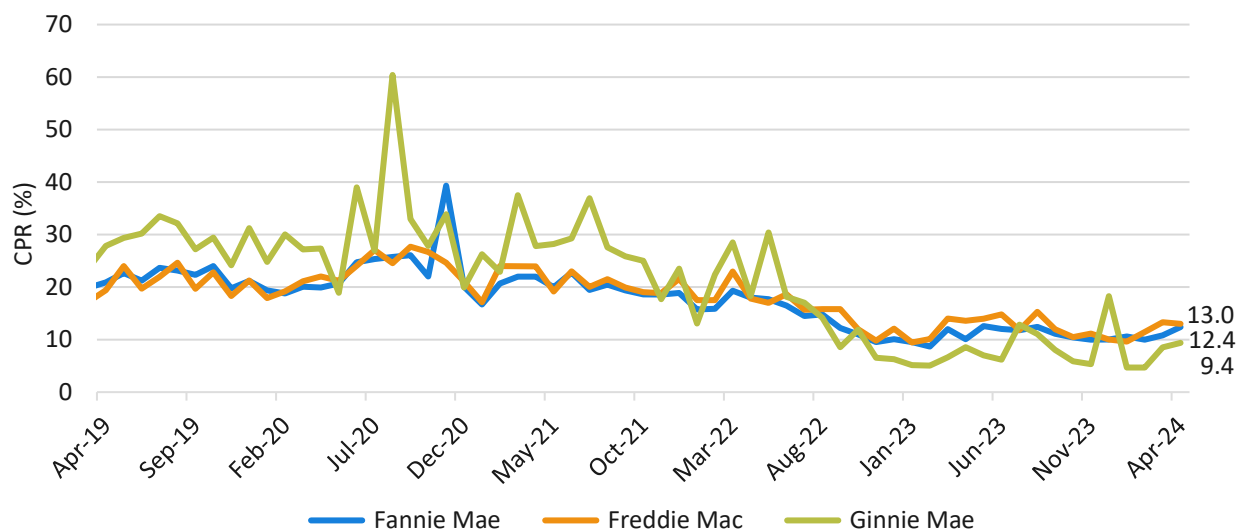
### 4.1 Aggregate Prepayments (CPR)

Freddie Mac fixed rate aggregate prepayment speeds increased by 0.6% from March 2024 to April 2024. Similarly, Fannie Mae CPRs increased by 0.6% and Ginnie Mae CPRs increased by 0.4% from March 2024 to April 2024. ARM prepayments decreased 0.3% for Freddie Mac, increased 1.6% for Fannie Mae, and increased 0.9% for Ginnie Mae.

**Figure 15. Fixed Rate Aggregate 1-Month CPR**



**Figure 16. ARM Aggregate 1-Month CPR**



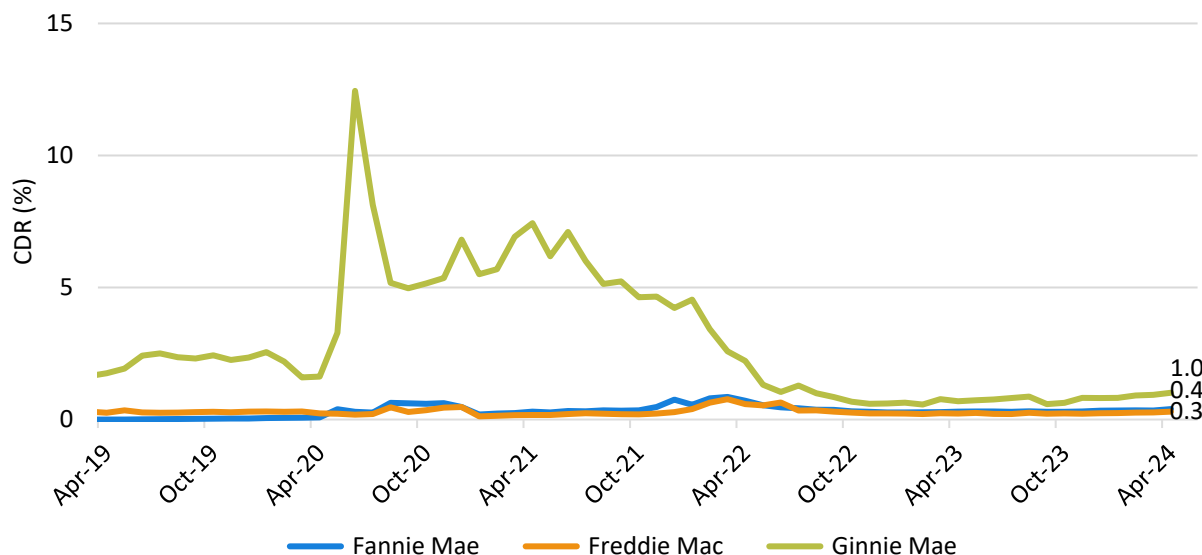
Source: Recursion. Note: Data as of April 2024.



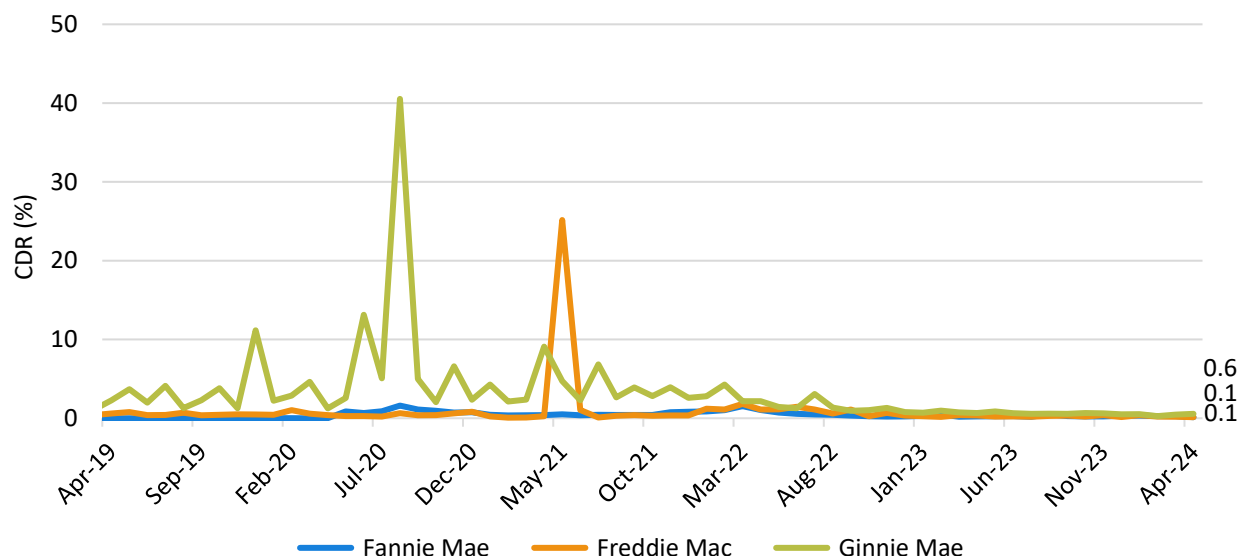
## 4.2 Involuntary Prepayments (CDR)

Fixed rate involuntary prepayments (CDR) remained higher for Ginnie Mae than for the GSEs. The spread in prepayment speeds between Ginnie Mae and GSE prepayments has converged significantly since Ginnie Mae's peak of 12.4 CDR in June 2020. ARM CDRs for Freddie Mac continued to remain below Ginnie Mae as of month-end April 2024 after slightly overtaking Ginnie Mae in September 2022.

**Figure 17. Fixed Rate Aggregate CDR**



**Figure 18. ARM Aggregate CDR**

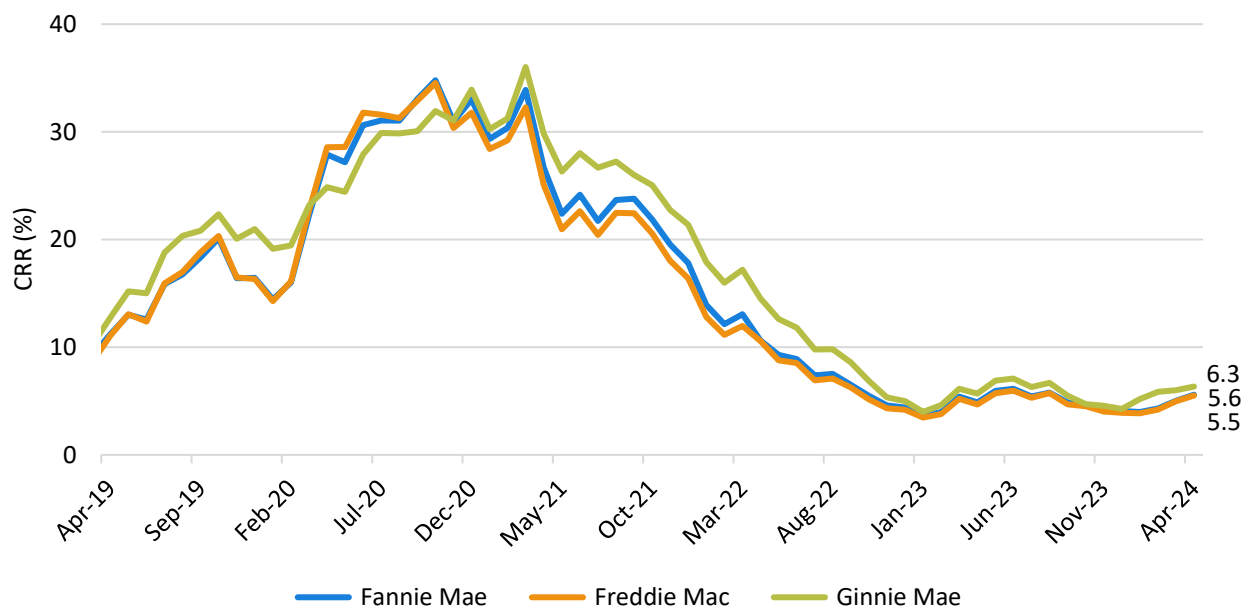


Source: Recursion. Note: Data as of April 2024.

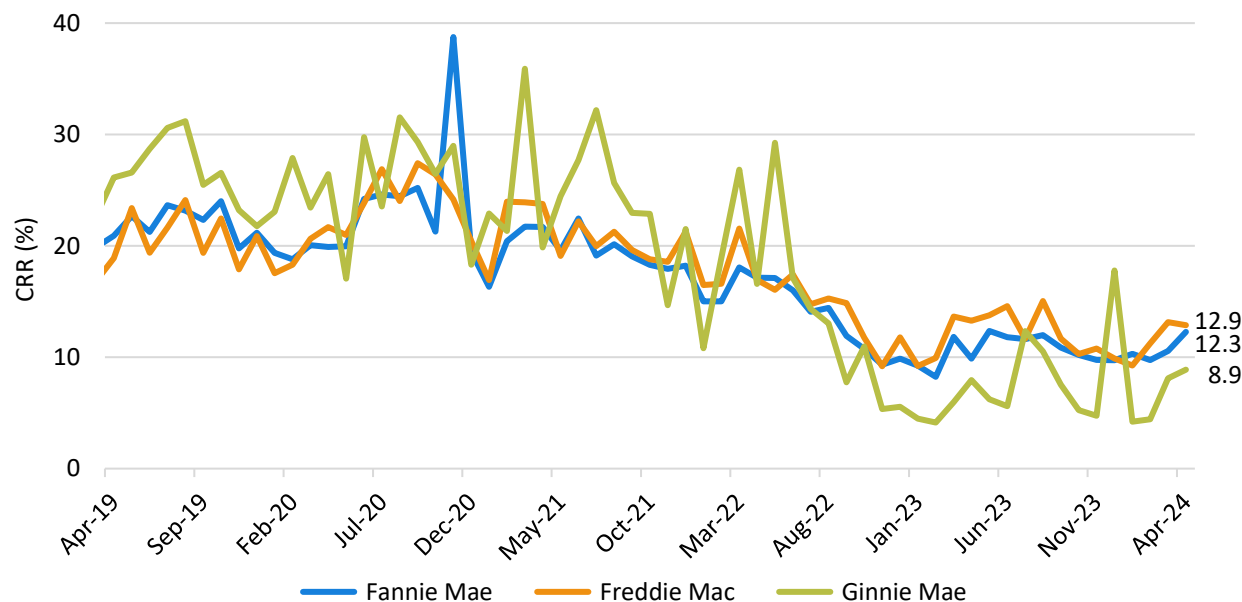
### 4.3 Voluntary Prepayment Rates (CRR)

Fixed rate voluntary prepayments were higher for Ginnie Mae than Fannie Mae and Freddie Mac. Fannie Mae and Freddie Mac saw increases of 0.6% and 0.5%, respectively, in fixed rate aggregate CRR. Freddie Mac saw a 0.3% decrease in ARM aggregate CRR while Fannie Mae saw a 1.7% increase. Ginnie Mae fixed rate aggregate CRR increased by 0.3% and ARM aggregate CRR increased by 0.8%.

**Figure 19. Fixed Rate Aggregate CRR**



**Figure 20. ARM Aggregate CRR**



Source: Recursion. Note: Data as of April 2024.

## 5 SINGLE-FAMILY MBS PASS-THROUGH ISSUANCE

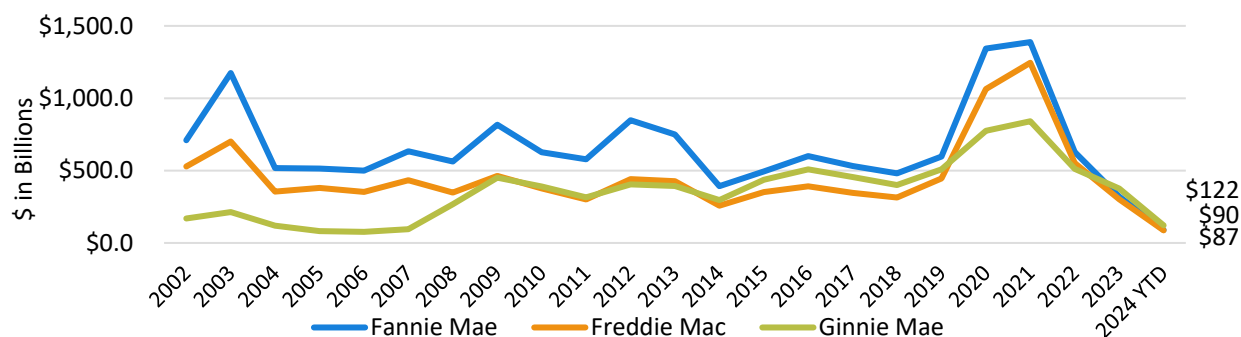
### 5.1 Gross Issuance of Agency MBS

In April 2024, total gross MBS issuance increased by approximately \$7.4 billion MoM. Freddie Mac and Fannie Mae saw MoM increases of \$1.1 billion and \$3.7 billion, respectively. Ginnie Mae saw a \$2.6 billion MoM increase in gross issuance.

**Table 1. Agency Gross Issuance (\$ in billions)**

Issuance Year	Fannie Mae	Freddie Mac	GSE Total	Ginnie Mae	Total
2002	\$710.0	\$529.0	\$1,238.9	\$169.0	\$1,407.9
2003	\$1,174.4	\$700.5	\$1,874.9	\$213.1	\$2,088.0
2004	\$517.5	\$355.2	\$872.6	\$119.2	\$991.9
2005	\$514.1	\$379.9	\$894.0	\$81.4	\$975.3
2006	\$500.2	\$352.9	\$853.0	\$76.7	\$929.7
2007	\$633.0	\$433.3	\$1,066.2	\$94.9	\$1,161.1
2008	\$562.7	\$348.7	\$911.4	\$267.6	\$1,179.0
2009	\$817.1	\$462.9	\$1,280.0	\$451.3	\$1,731.3
2010	\$626.6	\$377.0	\$1,003.5	\$390.7	\$1,394.3
2011	\$578.2	\$301.2	\$879.3	\$315.3	\$1,194.7
2012	\$847.6	\$441.3	\$1,288.8	\$405.0	\$1,693.8
2013	\$749.9	\$426.7	\$1,176.6	\$393.6	\$1,570.2
2014	\$392.9	\$258.0	\$650.9	\$296.3	\$947.2
2015	\$493.9	\$351.9	\$845.7	\$436.3	\$1,282.0
2016	\$600.5	\$391.1	\$991.6	\$508.2	\$1,499.8
2017	\$531.3	\$345.9	\$877.3	\$455.6	\$1,332.9
2018	\$480.9	\$314.1	\$795.0	\$400.6	\$1,195.6
2019	\$597.4	\$445.2	\$1,042.6	\$508.6	\$1,551.2
2020	\$1,343.4	\$1,064.1	\$2,407.5	\$775.4	\$3,182.9
2021	\$1,388.0	\$1,245.1	\$2,633.1	\$840.9	\$3,474.0
2022	\$628.3	\$551.6	\$1,179.9	\$512.3	\$1,692.2
2023	\$320.3	\$301.4	\$621.8	\$375.5	\$997.3
2024 YTD	\$90.2	\$87.0	\$177.2	\$121.7	\$298.9

**Figure 21. Agency Gross Issuance**

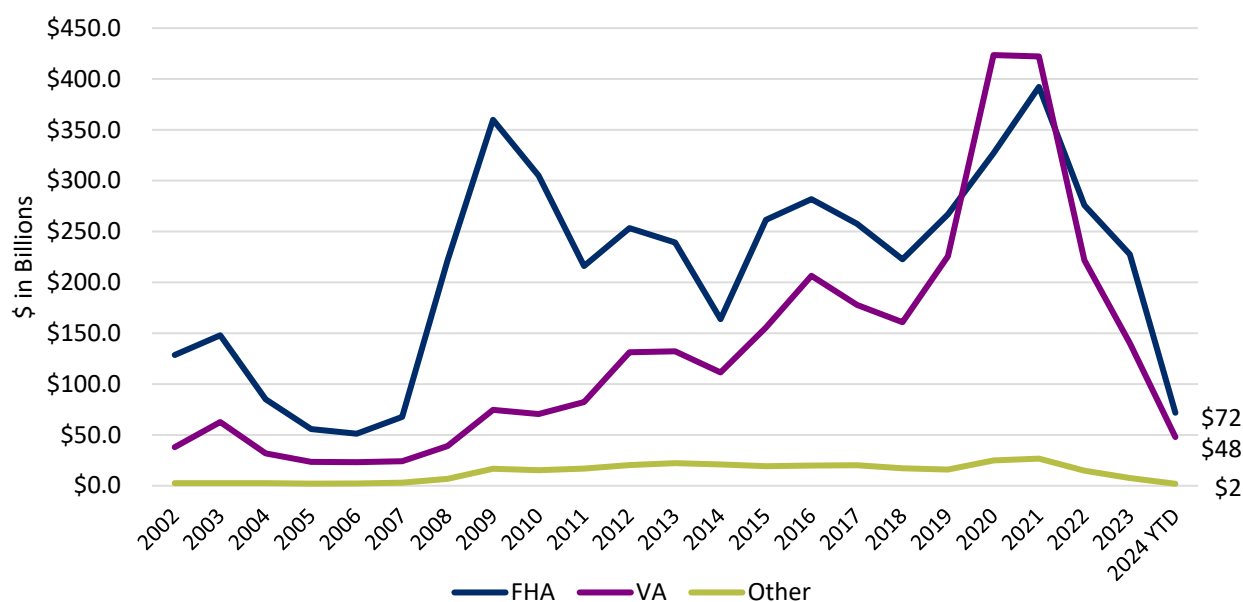


Source: Recursion. Note: Numbers are rounded to the nearest hundred million. For sums, like "GSE Total", the values are rounded after the exact underlying values are summed. As a result, some sums may not appear to match the sum of their rounded component values.

**Table 2. Ginnie Mae Gross Issuance Collateral Composition (\$ in billions)**

Issuance Year	FHA	VA	Other	Total
2002	\$128.6	\$37.9	\$2.5	\$169.0
2003	\$147.9	\$62.7	\$2.5	\$213.1
2004	\$85.0	\$31.8	\$2.5	\$119.2
2005	\$55.7	\$23.5	\$2.1	\$81.4
2006	\$51.2	\$23.2	\$2.3	\$76.7
2007	\$67.7	\$24.2	\$3.0	\$94.9
2008	\$221.7	\$39.0	\$6.9	\$267.6
2009	\$359.9	\$74.6	\$16.8	\$451.3
2010	\$304.9	\$70.6	\$15.3	\$390.7
2011	\$216.1	\$82.3	\$16.9	\$315.3
2012	\$253.4	\$131.3	\$20.3	\$405.0
2013	\$239.2	\$132.2	\$22.2	\$393.6
2014	\$163.9	\$111.4	\$21.0	\$296.3
2015	\$261.5	\$155.6	\$19.2	\$436.3
2016	\$281.8	\$206.5	\$19.9	\$508.2
2017	\$257.6	\$177.8	\$20.2	\$455.6
2018	\$222.6	\$160.8	\$17.2	\$400.6
2019	\$266.9	\$225.7	\$16.0	\$508.6
2020	\$327.0	\$423.5	\$24.9	\$775.4
2021	\$392.2	\$422.1	\$26.7	\$840.9
2022	\$275.8	\$221.7	\$14.8	\$512.3
2023	\$227.6	\$140.3	\$7.7	\$375.5
2024 YTD	\$71.8	\$47.9	\$2.0	\$121.7

**Figure 22. Ginnie Mae Gross Issuance**



Source: Recursion. Note: Numbers are rounded to the nearest hundred million. For sums, like "GSE Total", the values are rounded after the exact underlying values are summed. As a result, some sums may not appear to match the sum of their rounded component values.

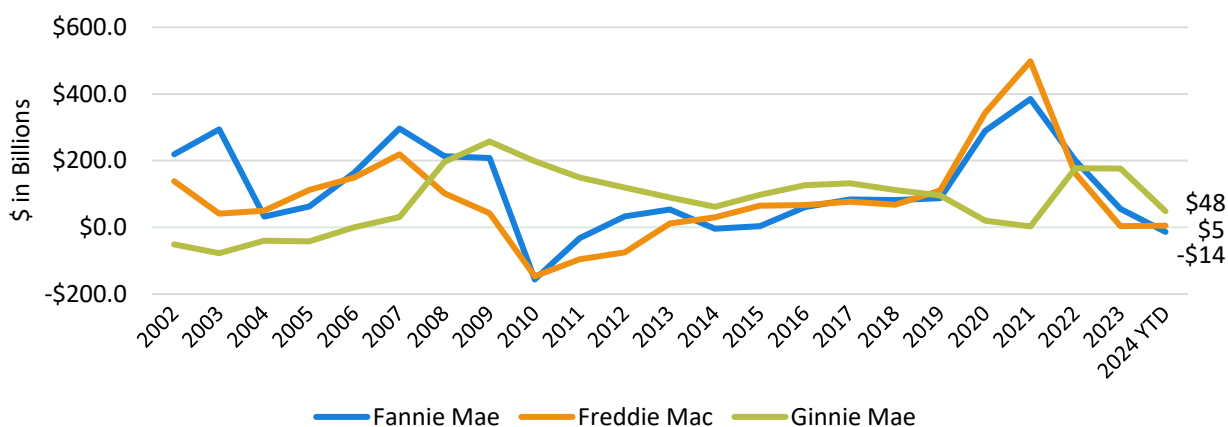
## 5.2 Net Issuance of Agency MBS

Agency Net Issuance as of month-end April was \$39.5 billion for 2024 YTD, shown in **Table 3**. Ginnie Mae has the largest net issuance YTD, totaling \$48.2 billion as of month-end April 2024. Since 2022, FHA net issuance has outpaced VA net issuance, as shown in **Table 4 and Figure 24**.

**Table 3. Agency Net Issuance (\$ in billions)**

Issuance Year	Fannie Mae	Freddie Mac	GSE	Ginnie Mae	Total
2002	\$218.9	\$138.3	\$357.2	-\$51.2	\$306.1
2003	\$293.7	\$41.1	\$334.9	-\$77.6	\$257.3
2004	\$32.3	\$50.2	\$82.5	-\$40.1	\$42.4
2005	\$62.5	\$111.7	\$174.2	-\$42.2	\$132.0
2006	\$164.3	\$149.3	\$313.6	\$0.2	\$313.8
2007	\$296.1	\$218.8	\$514.9	\$30.9	\$545.7
2008	\$213.0	\$101.8	\$314.8	\$196.4	\$511.3
2009	\$208.1	\$42.5	\$250.6	\$257.4	\$508.0
2010	-\$156.4	-\$146.8	-\$303.2	\$198.3	-\$105.0
2011	-\$32.6	-\$95.8	-\$128.4	\$149.6	\$21.2
2012	\$32.9	-\$75.3	-\$42.4	\$119.1	\$76.8
2013	\$53.5	\$11.8	\$65.3	\$89.6	\$154.9
2014	\$-4.0	\$30.0	\$26.0	\$61.6	\$87.7
2015	\$3.5	\$65.0	\$68.4	\$97.3	\$165.7
2016	\$60.5	\$66.8	\$127.4	\$126.1	\$253.5
2017	\$83.7	\$77.0	\$160.7	\$132.3	\$293.0
2018	\$81.9	\$67.6	\$149.4	\$112.0	\$261.5
2019	\$87.4	\$110.3	\$197.7	\$95.7	\$293.5
2020	\$289.3	\$343.5	\$632.8	\$19.9	\$652.7
2021	\$384.9	\$498.0	\$882.9	\$2.7	\$885.6
2022	\$200.4	\$161.5	\$361.9	\$177.4	\$539.4
2023	\$55.3	\$3.3	\$58.6	\$176.3	\$235.0
2024 YTD	-\$13.7	\$5.0	-\$8.7	\$48.2	\$39.5

**Figure 23. Agency Net Issuance**



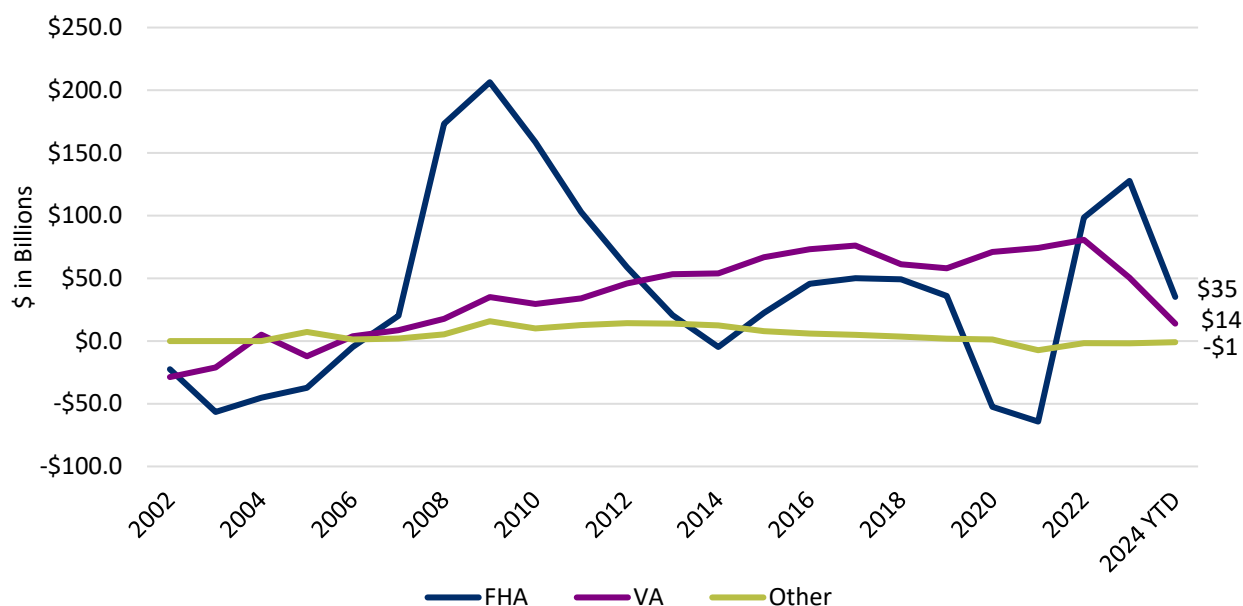
Source: Recursion. Note: Numbers are rounded to the nearest hundred million. For sums, like "GSE Total", the values are rounded after the exact underlying values are summed. As a result, some sums may not appear to match the sum of their rounded component values.



**Table 4. Ginnie Mae Net Issuance Collateral Composition (\$ in billions)**

Issuance Year	FHA	VA	Other	Total
2002	-\$22.5	-\$28.7	\$0.0	-\$51.2
2003	-\$56.5	-\$21.1	\$0.0	-\$77.6
2004	-\$45.2	\$5.1	\$0.0	-\$40.1
2005	-\$37.3	-\$12.1	\$7.2	-\$42.2
2006	-\$4.7	\$3.8	\$1.2	\$0.2
2007	\$20.2	\$8.7	\$2.0	\$30.9
2008	\$173.3	\$17.7	\$5.4	\$196.4
2009	\$206.4	\$35.1	\$15.8	\$257.4
2010	\$158.6	\$29.6	\$10.0	\$198.3
2011	\$102.8	\$34.0	\$12.8	\$149.6
2012	\$58.9	\$45.9	\$14.3	\$119.1
2013	\$20.7	\$53.3	\$13.9	\$87.9
2014	-\$4.8	\$53.9	\$12.5	\$61.6
2015	\$22.5	\$66.9	\$7.9	\$97.3
2016	\$45.6	\$73.2	\$6.0	\$124.9
2017	\$50.1	\$76.1	\$5.0	\$131.2
2018	\$49.2	\$61.2	\$3.5	\$113.9
2019	\$35.9	\$58.0	\$1.9	\$95.7
2020	-\$52.5	\$71.0	\$1.3	\$19.9
2021	-\$64.2	\$74.2	-\$7.3	\$2.7
2022	\$98.5	\$80.7	-\$1.7	\$177.4
2023	\$127.7	\$50.4	-\$1.8	\$176.3
2024 YTD	\$35.2	\$13.9	-\$0.9	\$48.2

**Figure 24. Ginnie Mae Net Issuance**



Source: Recursion. Note: Numbers are rounded to the nearest hundred million. For sums, like "GSE Total", the values are rounded after the exact underlying values are summed. As a result, some sums may not appear to match the sum of their rounded component values.

### 5.3 Monthly Issuance Breakdown

Agency net issuance for the month of April was approximately \$13.8 billion, which represents an approximate \$3.1 billion increase MoM. Ginnie Mae net issuance was \$14.1 billion in April, a \$1.7 billion increase from March. Ginnie Mae's \$33.8 billion of gross issuance in April, seen in **Table 5**, was approximately \$2.5 billion above the average monthly issuance in 2023.

**Table 5. Agency Issuance (\$ in billions)**

Month	Agency Gross Issuance Amount (in \$ Billions)					Agency Net Issuance Amount (in \$ Billions)				
	Fannie Mae	Freddie Mac	Ginnie Mae	GSEs	Total	Fannie Mae	Freddie Mac	Ginnie Mae	GSEs	Total
Mar-21	\$143.9	\$118.9	\$76.9	\$262.8	\$339.7	\$37.6	\$44.0	\$1.0	\$81.6	\$82.6
Apr-21	\$148.0	\$142.3	\$85.6	\$290.3	\$375.9	\$26.2	\$57.0	-\$4.2	\$83.3	\$79.0
May-21	\$132.3	\$91.4	\$71.7	\$223.7	\$295.4	\$64.9	\$38.8	-\$3.1	\$103.7	\$100.6
Jun-21	\$108.5	\$91.2	\$67.7	\$199.7	\$267.4	\$34.0	\$33.7	\$2.6	\$67.8	\$70.4
Jul-21	\$95.4	\$84.6	\$69.0	\$180.0	\$249.0	\$27.6	\$31.9	-\$1.4	\$59.5	\$58.0
Aug-21	\$104.8	\$109.3	\$66.6	\$214.1	\$280.8	\$27.5	\$48.5	\$1.4	\$76.1	\$77.4
Sep-21	\$102.9	\$105.3	\$68.0	\$208.3	\$276.3	\$26.4	\$45.6	\$3.1	\$72.0	\$75.1
Oct-21	\$105.1	\$102.7	\$62.5	\$207.8	\$270.3	\$34.6	\$46.9	\$1.9	\$81.5	\$83.4
Nov-21	\$93.6	\$81.1	\$60.8	\$174.7	\$235.5	\$29.5	\$34.9	\$3.1	\$64.4	\$67.6
Dec-21	\$93.7	\$85.4	\$58.9	\$179.1	\$238.0	\$33.8	\$34.4	\$5.7	\$68.3	\$73.9
Jan-22	\$93.1	\$85.9	\$59.0	\$179.0	\$238.0	\$45.6	\$37.6	\$14.0	\$83.2	\$97.3
Feb-22	\$73.3	\$64.6	\$49.0	\$137.9	\$186.9	\$27.8	\$22.7	\$9.7	\$50.5	\$60.2
Mar-22	\$76.8	\$62.9	\$47.4	\$139.7	\$187.1	\$22.6	\$23.1	\$6.9	\$45.7	\$52.6
Apr-22	\$65.3	\$53.5	\$47.8	\$118.8	\$166.6	\$19.5	\$17.7	\$13.2	\$37.2	\$50.4
May-22	\$54.7	\$43.7	\$45.0	\$98.4	\$143.4	\$13.6	\$12.5	\$15.5	\$26.1	\$41.6
Jun-22	\$54.5	\$42.0	\$43.6	\$96.5	\$140.1	\$14.8	\$10.7	\$16.0	\$25.5	\$41.5
Jul-22	\$46.8	\$40.3	\$42.4	\$87.1	\$129.5	\$12.1	\$14.4	\$18.0	\$26.5	\$44.5
Aug-22	\$39.8	\$46.3	\$40.3	\$86.1	\$126.4	\$4.8	\$19.8	\$16.2	\$24.6	\$40.8
Sep-22	\$39.3	\$38.2	\$39.9	\$77.5	\$117.4	\$7.6	\$13.9	\$18.3	\$21.5	\$39.8
Oct-22	\$34.1	\$26.1	\$35.5	\$60.2	\$95.7	\$5.8	\$4.7	\$17.3	\$10.5	\$27.8
Nov-22	\$25.7	\$22.7	\$33.6	\$48.4	\$82.0	\$0.3	\$3.5	\$18.3	\$3.8	\$22.1
Dec-22	\$24.9	\$25.5	\$28.8	\$50.4	\$79.2	\$0.2	\$6.6	\$14.0	\$6.8	\$20.8
Jan-23	\$25.7	\$22.4	\$27.1	\$48.1	\$75.2	\$3.4	\$5.3	\$14.1	\$8.7	\$22.8
Feb-23	\$18.9	\$16.5	\$22.7	\$35.4	\$58.1	-\$4.4	-\$1.4	\$8.6	-\$5.8	\$2.8
Mar-23	\$23.6	\$19.2	\$26.2	\$42.8	\$69.0	-\$4.4	-\$2.4	\$8.7	-\$6.8	\$1.9
Apr-23	\$27.7	\$21.0	\$31.6	\$48.7	\$80.3	\$1.4	\$0.6	\$15.0	\$2.0	\$17.0
May-23	\$30.4	\$29.0	\$32.6	\$59.4	\$92.0	\$0.6	\$6.0	\$13.5	\$6.6	\$20.1
Jun-23	\$33.5	\$32.9	\$37.5	\$66.4	\$103.9	\$3.1	\$9.3	\$17.8	\$12.4	\$30.2
Jul-23	\$31.7	\$27.9	\$36.3	\$59.6	\$95.9	\$3.6	\$5.9	\$18.0	\$9.5	\$27.5
Aug-23	\$27.8	\$27.9	\$36.5	\$55.7	\$92.2	-\$1.5	\$4.8	\$17.2	\$3.3	\$20.5
Sep-23	\$28.1	\$31.1	\$35.1	\$59.2	\$94.3	\$1.9	\$10.7	\$18.6	\$12.6	\$31.2
Oct-23	\$28.2	\$24.5	\$32.1	\$52.7	\$84.8	\$2.6	\$4.5	\$17.0	\$7.1	\$24.1
Nov-23	\$23.8	\$25.3	\$30.5	\$49.1	\$79.5	-\$0.1	\$6.5	\$15.2	\$6.4	\$21.6
Dec-23	\$20.9	\$23.9	\$27.3	\$44.8	\$72.1	-\$2.9	\$5.4	\$12.6	\$2.5	\$15.0
Jan-24	\$23.3	\$17.7	\$27.1	\$41.1	\$68.2	-\$0.3	-\$0.6	\$10.4	-\$0.9	\$9.5
Feb-24	\$20.5	\$17.7	\$29.6	\$38.1	\$67.7	-\$4.2	-\$1.7	\$11.3	-\$5.9	\$5.5
Mar-24	\$21.3	\$25.3	\$31.2	\$46.6	\$77.8	-\$5.5	\$3.9	\$12.4	-\$1.7	\$10.7
Apr-24	\$25.0	\$26.3	\$33.8	\$51.4	\$85.2	-\$3.8	\$3.4	\$14.1	-\$0.3	\$13.8

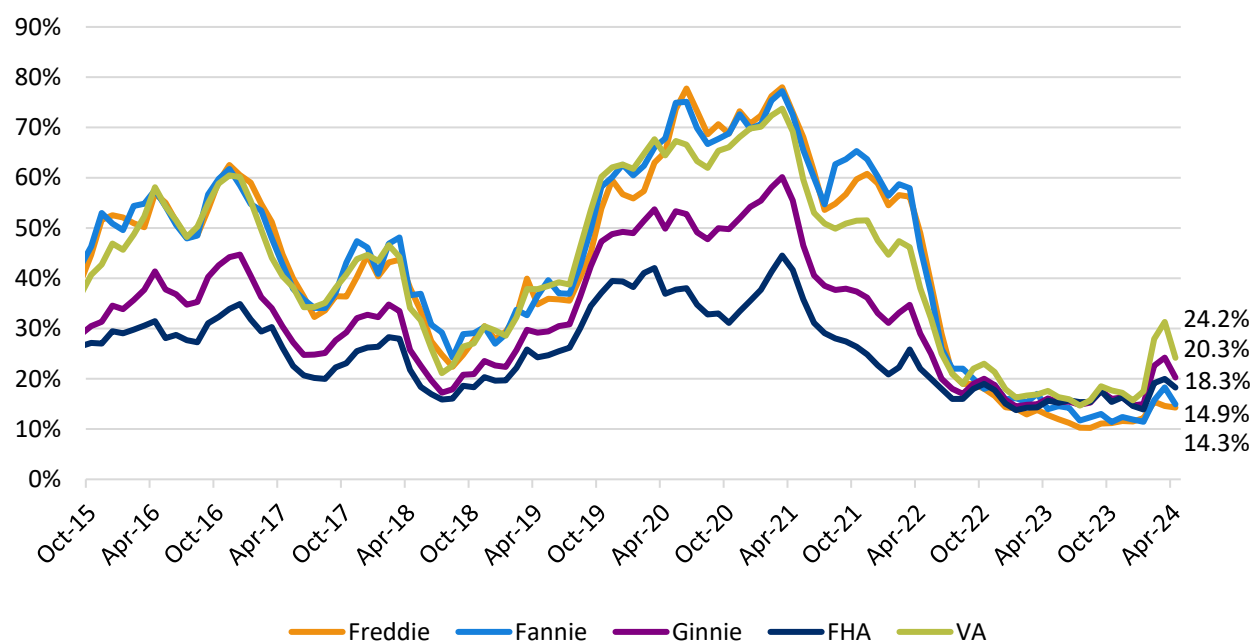
Sources: Beginning May 2021, data for Gross and Net Issuance was sourced from Fannie Mae, Freddie Mac, and Ginnie Mae loan level disclosure files. Net issuance is defined here as the difference between prior period UPB and current period UPB. Data as of April 2024. Beginning with the October 2021 GMAR, the Fannie Mae and Freddie Mac net issuance data have been updated to reflect the current UPB of the portfolios. July 2021 through May 2024 GMAR net issuance data reflect the UPB at security issuance for Fannie Mae and Freddie Mac. Note: Numbers are rounded to the nearest hundred million.

## 5.4 Percent Refi at Issuance – Single-Family

Refinance activity decreased by approximately 16.3% MoM for Ginnie Mae as of month-end April 2024.

- Freddie Mac's refinance percentage decreased to 14.3% in April, down from 14.6% in March.
- Fannie Mae's refinance percentage decreased to 14.9% in April, down from 18.3% in March.
- Ginnie Mae's refinance percentage decreased to 20.3% in April, down from 24.2% in March.
- FHA's refinance percentage decreased to 18.3% in April, down from 20.0% in March.
- VA's refinance percentage decreased to 24.2% in April, down from 31.3% in March.

**Figure 25. Percent Refinance at Issuance – Single-Family**



Source: Recursion. Note: Data as of April 2024.

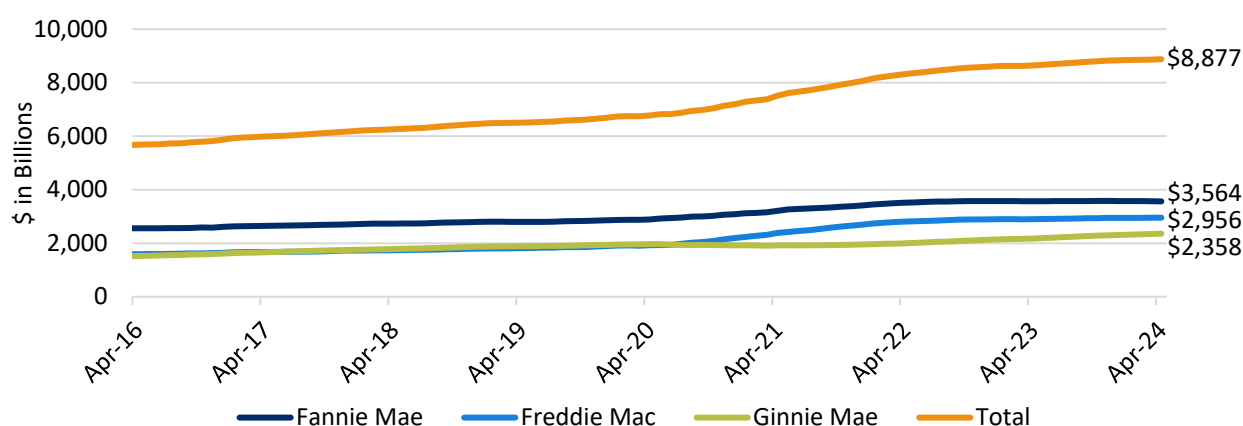
## 6 AGENCY SINGLE-FAMILY MBS OUTSTANDING

### 6.1 Outstanding Single-Family Agency MBS

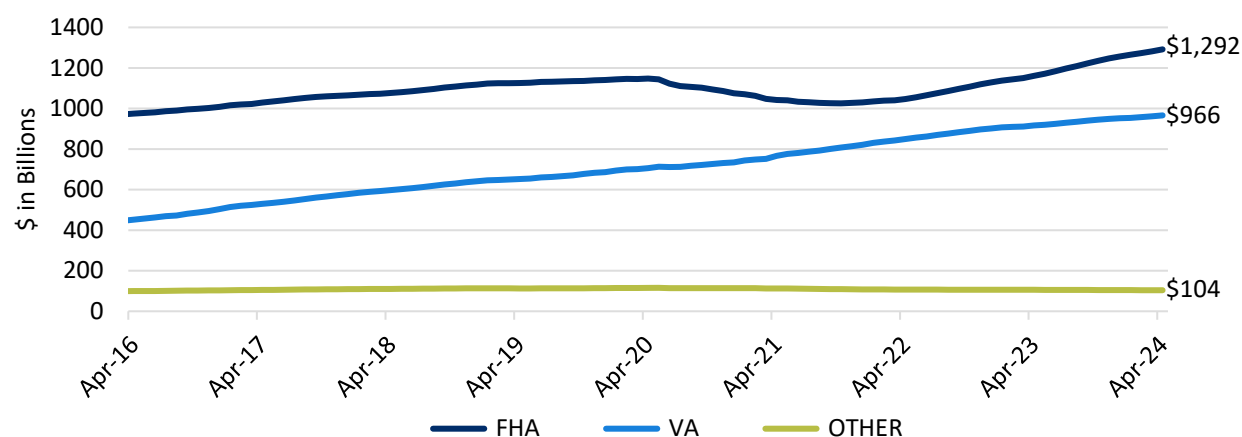
As of month-end April 2024, outstanding Single-Family MBS in the Agency market totaled \$8.877 trillion: 40.1% Fannie Mae, 33.3% Freddie Mac, and 26.6% Ginnie Mae MBS. Over the past twelve months, Freddie Mac's and Ginnie Mae's total outstanding MBS increased by approximately 2.0% and 8.2%, respectively, while Fannie Mae's total outstanding MBS has decreased by 0.2%. Fannie Mae outstanding MBS remains larger than Freddie Mac's and Ginnie Mae's by approximately \$608 billion and \$1.2 trillion, respectively.

Ginnie Mae's MBS collateral composition has changed over time as shown in **Figure 27**. In April 2019, 59.5% of Ginnie Mae's outstanding collateral was FHA and 34.5% was VA. As of month-end April 2024, FHA collateral comprised 54.7% of Ginnie Mae MBS outstanding, and VA collateral comprised 40.9% of Ginnie Mae MBS outstanding.

**Figure 26. Outstanding Agency Mortgage-Backed Securities**



**Figure 27. Composition of Outstanding Ginnie Mae Mortgage-Backed Securities**

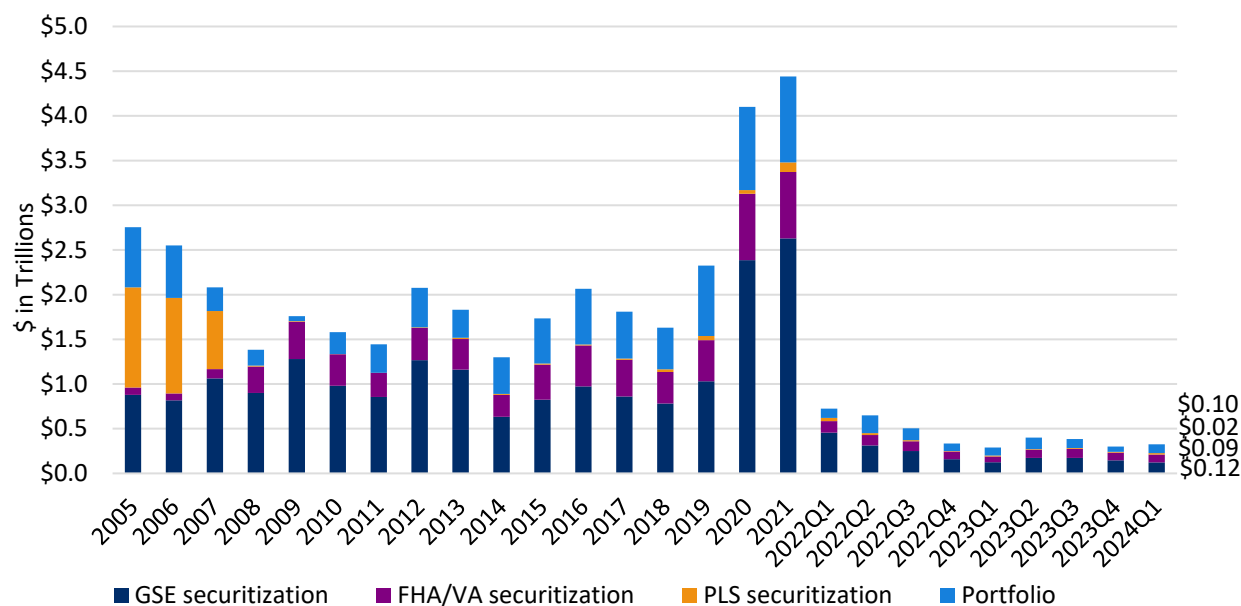


Source: Recursion. Note: Data as of April 2024. Note: Data rounded to nearest billion; GNMA composition may not add up to total outstanding amount due to rounding.

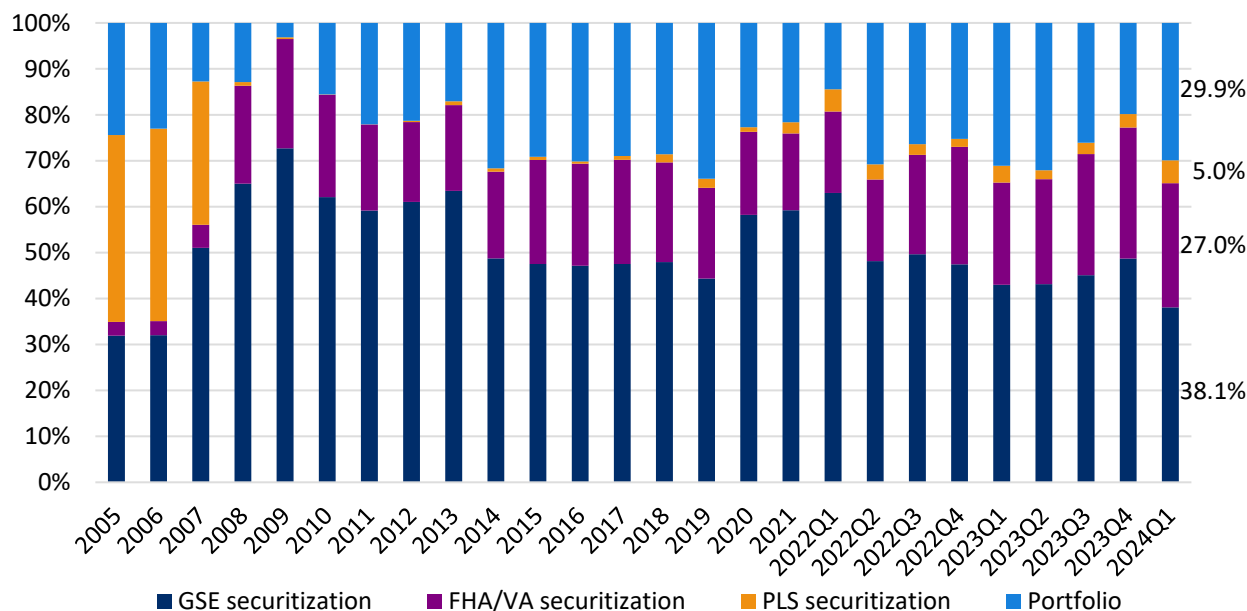
## 6.2 Origination Volume and Share Over Time

First lien origination volume increased in Q1 2024, with approximately \$325 billion in originations, which represents an increase in issuance of 8.3% from Q4 2023. Ginnie Mae's share of total origination decreased from 28.5% to 27.0% in Q1 2024, while portfolio origination increased from 19.8% to 29.9%.

**Figure 28. First Lien Origination Volume**



**Figure 29. First Lien Origination Share**



Source: Inside Mortgage Finance. Note: Data as of Q1 2024.



### 6.3 Agency Issuance and Agency Outstanding by State

Ginnie Mae MBS represents approximately 38% of new agency issuance over the past year, roughly 11% higher than Ginnie Mae's 27% share of agency outstanding. The share of Ginnie Mae's new agency issuance varies across states, with the largest share by UPB being in both Mississippi and Alaska (60%) and the smallest in the District of Columbia (22%). The highest Ginnie Mae outstanding share is in Mississippi (50%) and the lowest in the District of Columbia (14%).

**Table 6. Agency Issuance Breakdown by State**

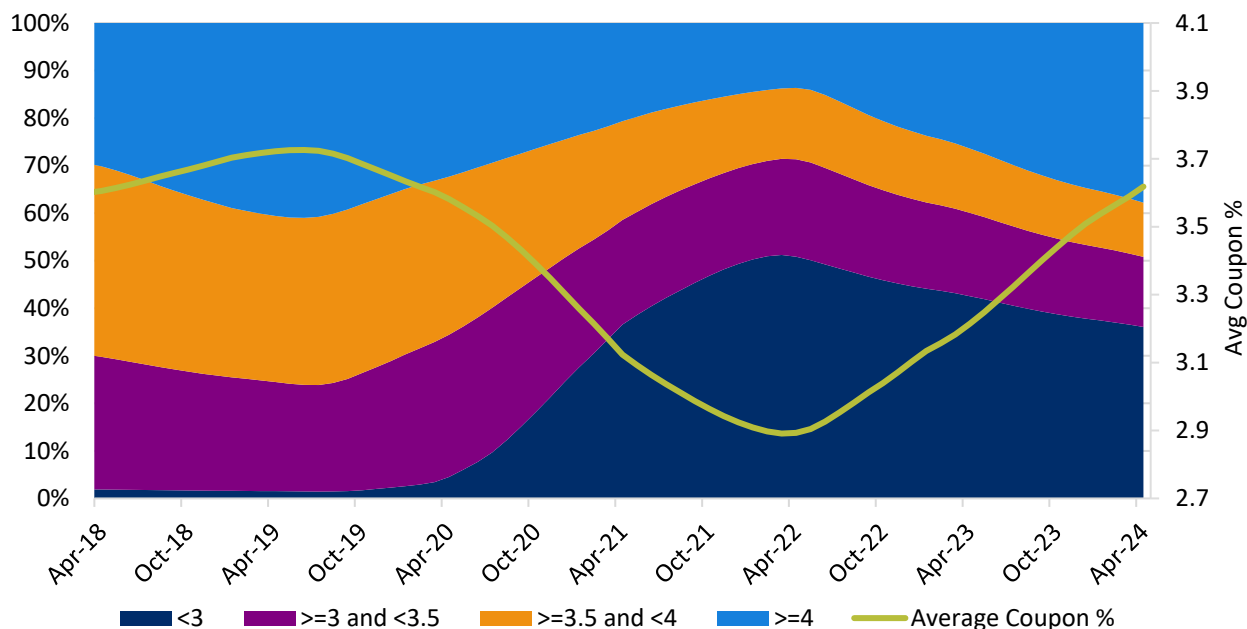
National	Agency Issuance (past 1 year)				Agency Outstanding (past 1 year)			
	GNMA Share by UPB	GNMA Loan Count	GNMA Avg. Loan Size (000)	GSE Avg. Loan Size (000)	GNMA Share by UPB	GNMA Loan Count	GNMA Avg. Loan Size (000)	GSE Avg. Loan Size (000)
	<b>38%</b>	<b>1,483,389</b>	<b>306.10</b>	<b>308.28</b>	<b>27%</b>	<b>11,275,395</b>	<b>212.22</b>	<b>211.39</b>
AK	60%	3,770	363.33	311.39	49%	37,956	264.59	218.91
AL	54%	36,563	240.40	248.15	42%	250,007	165.05	178.50
AR	47%	18,808	207.10	239.22	40%	142,256	138.63	162.87
AZ	41%	46,275	347.14	346.20	27%	295,867	233.96	228.48
CA	34%	85,698	484.37	478.35	18%	723,361	338.02	317.90
CO	36%	31,307	427.18	414.01	25%	224,926	304.18	279.30
CT	32%	10,968	289.62	297.84	26%	109,251	205.90	208.54
DC	22%	1,033	525.63	446.00	14%	9,394	392.03	345.57
DE	39%	6,328	295.12	311.49	32%	54,381	209.33	212.47
FL	43%	146,497	327.77	322.39	34%	915,166	225.84	216.34
GA	46%	79,853	285.22	313.84	35%	524,922	191.48	210.27
HI	46%	3,400	643.51	532.77	33%	34,670	474.06	356.23
IA	32%	11,071	200.96	207.85	23%	86,081	139.25	148.01
ID	36%	9,410	352.22	334.22	25%	67,505	232.30	225.14
IL	29%	43,776	224.95	256.94	23%	382,027	163.70	178.99
IN	39%	39,220	210.17	223.20	31%	290,896	141.10	152.79
KS	39%	12,819	210.54	233.42	30%	99,050	145.49	164.35
KY	48%	24,251	214.68	226.22	36%	173,102	149.83	156.40
LA	54%	26,205	214.67	238.65	42%	211,858	160.97	176.19
MA	28%	13,403	406.46	404.06	17%	118,994	292.28	266.94
MD	45%	33,610	364.08	349.90	35%	303,954	269.82	248.38
ME	35%	4,568	272.46	290.77	27%	39,146	183.98	192.96
MI	28%	33,840	203.18	225.94	21%	285,084	138.33	156.76
MN	24%	16,731	271.42	287.65	18%	163,252	187.07	198.34
MO	39%	32,259	216.85	232.97	30%	252,641	147.90	162.81
MS	60%	17,177	217.12	225.94	50%	128,529	149.86	161.34
MT	34%	3,787	341.06	330.29	24%	33,051	218.05	217.64
NC	41%	65,831	280.85	307.26	30%	436,671	187.03	205.33
ND	37%	2,009	259.16	252.73	25%	17,408	196.01	182.05
NE	37%	7,998	240.48	238.44	27%	66,588	156.42	161.68
NH	29%	4,243	345.48	334.79	23%	39,243	233.11	216.51
NJ	30%	26,914	353.78	369.76	22%	240,375	247.84	254.28
NM	50%	12,453	266.39	277.56	40%	99,258	174.58	179.97
NV	45%	20,482	371.20	349.86	32%	142,263	259.97	237.77
NY	27%	29,814	322.13	348.86	21%	315,464	216.50	248.43
OH	37%	53,815	204.26	214.37	30%	439,212	135.78	150.20
OK	50%	24,954	219.23	231.40	43%	195,712	147.45	163.95
OR	30%	13,825	374.61	380.45	20%	115,709	262.44	254.08
PA	31%	41,521	218.52	260.64	26%	399,481	152.20	182.37
RI	44%	4,243	363.46	329.13	32%	37,439	243.33	212.99
SC	46%	40,476	276.74	277.79	36%	251,981	193.51	194.47
SD	43%	3,935	261.98	252.58	31%	30,356	179.90	177.17
TN	43%	42,812	287.08	302.33	33%	282,119	187.86	207.99
TX	41%	171,081	294.85	324.45	33%	1,174,722	195.00	217.41
UT	35%	15,650	407.63	402.93	20%	102,701	277.41	265.90
VA	48%	52,930	355.82	348.85	37%	460,786	262.43	249.26
VI	24%	68	427.01	458.88	24%	798	262.95	307.39
VT	24%	1,244	267.97	280.15	19%	12,464	184.48	181.38
WA	32%	28,146	427.21	435.24	22%	241,004	294.68	290.47
WI	27%	15,174	230.08	242.02	18%	127,766	161.26	162.74
WV	55%	7,942	210.58	198.74	45%	62,884	148.67	144.90
WY	48%	3,202	293.37	281.49	36%	25,664	211.34	201.18

Source: Recursion. Note: Outstanding balance based on loan balance as of April 2024. Values above are based on loan level disclosure data, thus excluding loan balances for first 6 months that loans are in a pool. This accounts for the difference in share of outstanding MBS represented above & in [Outstanding Single-Family Agency MBS](#).

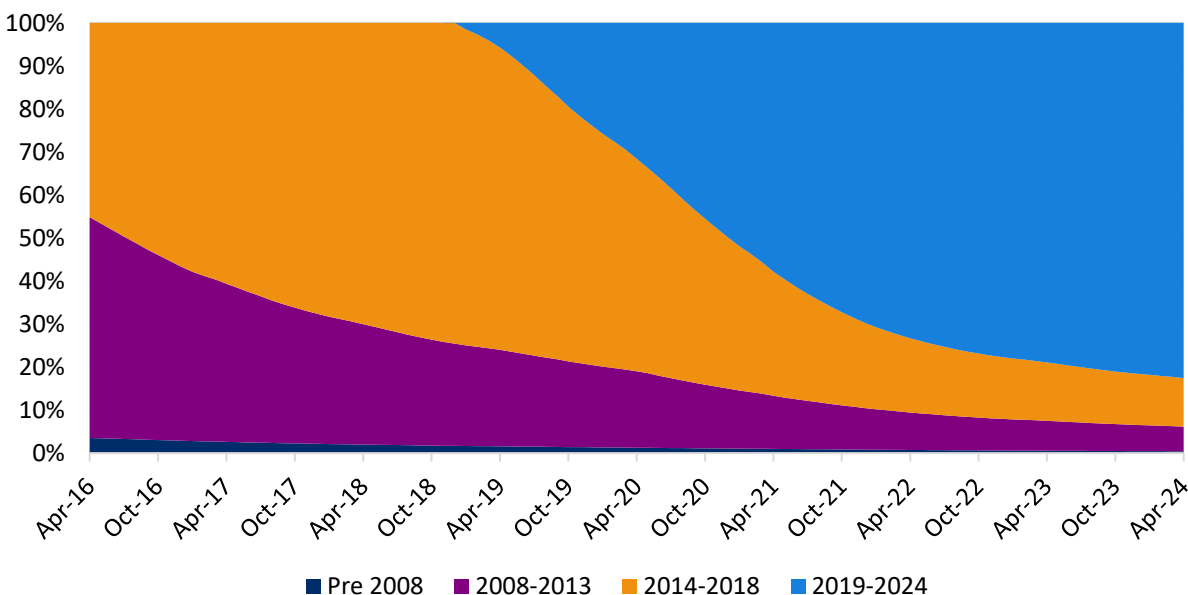
## 6.4 Outstanding Ginnie Mae MBS Volume by Coupon and Vintage Over Time

As of month-end April 2024, the weighted average coupon (WAC) on outstanding Ginnie Mae MBS increased slightly from 3.59% in March 2024 to 3.62% as seen in **Figure 30**. **Figure 31** illustrates that loans originated since 2019 account for approximately 83% of Ginnie Mae MBS collateral outstanding.

**Figure 30. Outstanding Ginnie Mae MBS Balance, by Coupon**



**Figure 31. Outstanding Ginnie Mae MBS Balance, by Vintage**



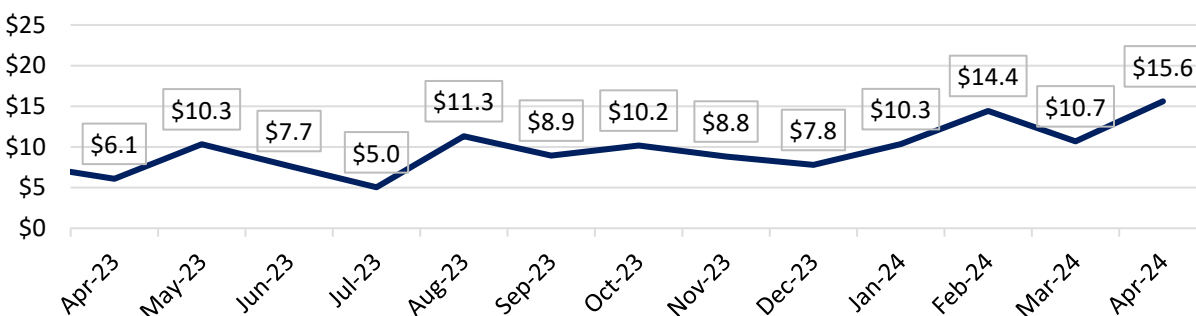
Source: Recursion. Note: April 2024 data points reflect the current composition of balances by coupon and vintage; factor data is not applied to prior date balance compositions. Average coupon is weighted by remaining principal balance.

## 7 AGENCY REMIC SECURITIES

### 7.1 Monthly REMIC Demand for Ginnie Mae MBS

Ginnie Mae Real Estate Mortgage Investment Conduit (REMIC) issuance volume for the month of April was approximately \$15.6 billion. This represents a 45.9% MoM increase from \$10.7 billion in March 2024, and a 156.6% increase YoY from \$6.1 billion in April 2023. Approximately \$644.2 million of the April 2024 issuance volume were Multifamily MBS having coupons over 5.0%, and approximately \$5.4 billion were Single-Family MBS having coupons over 6.0%. Roughly \$279.4 million of previously securitized REMICs were re-securitized into new REMIC deals in April.

**Figure 32. Ginnie Mae Single-Family and Multifamily REMIC Issuance**



**Table 7. April 2024 REMIC Collateral Coupon Distribution**

Net Coupon (%)	Approx. Ginnie Mae MBS amount securitized into REMIC Deals (\$MM)	% Breakdown of REMIC Collateral by coupon
<b>Multifamily</b>		
3.501-4.001	287.2	27.9%
4.501-5.001	99.8	9.7%
5.001-5.501	418.2	40.5%
5.501-6.001	226.0	21.9%
<b>Subtotal</b>	<b>1,031.1</b>	<b>100.0%</b>
<b>Single-Family</b>		
ReREMIC	279.4	1.9%
2.001-2.500	32.5	0.2%
3.001-3.501	69.8	0.5%
3.501-4.001	99.8	0.7%
4.001-4.501	22.4	0.2%
4.501-5.001	110.6	0.8%
5.001-5.501	777.0	5.3%
5.501-6.001	7,748.1	53.2%
6.001-6.501	3,504.9	24.0%
6.501-7.001	1,606.0	11.0%
>7.001	324.9	2.2%
<b>Subtotal</b>	<b>14,575.4</b>	<b>100.0%</b>
<b>Grand Total <sup>2</sup></b>	<b>15,606.5</b>	<b>100.0%</b>

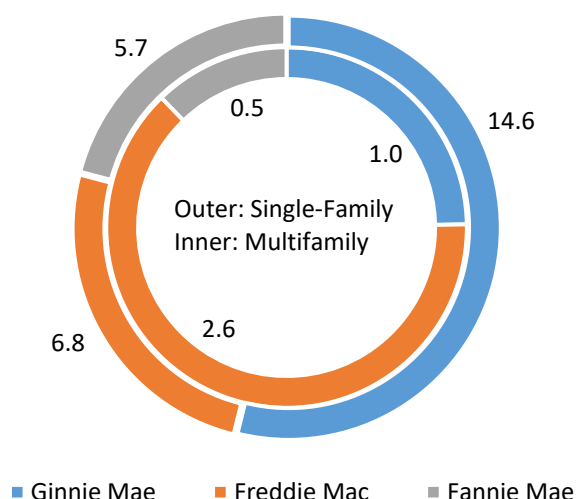
Source: Ginnie Mae Disclosure Files

<sup>2</sup> Totals may not sum due to rounding.

## 7.2 REMIC Market Snapshot

- In April 2024, Ginnie Mae and Freddie Mac saw increases in their single-family REMIC issuance collateral coupon of 23 basis points and 2 basis points, respectively. Fannie Mae saw a decrease of 40 basis points in their single-family REMIC issuance collateral coupon.
- In April 2024, Ginnie Mae, Freddie Mac, and Fannie Mae saw increases of 30 basis points, 83 basis points, and 27 basis points, respectively, in their multifamily REMIC issuance collateral coupon.
- In April 2024, Ginnie Mae's total single-family, multifamily, and HMBS REMIC issuance totaled \$16.40 billion, a 44.7% or \$5.07 billion increase month-over-month. Ginnie Mae's total REMIC issuance in April marked the highest issuance since February 2022.
- In April 2024, total single-family and multifamily issuance across the three Agencies increased 48.5% or \$10.20 billion from March.

**Figure 33. April 2024 REMIC Issuance by Agency (\$B)**



**Table 8. Monthly REMIC Issuance by Agency**

	<i>SF REMIC Issuance Volume (\$B)</i>	<i>% of SF REMIC Issuance Volume</i>	<i>Number of SF REMIC Transactions</i>	<i>MF REMIC Issuance Volume (\$B)</i>	<i>% of MF REMIC Issuance Volume</i>	<i>Number of MF REMIC Transactions</i>
<b>Ginnie Mae</b>	\$14.58	53.9%	12	\$1.03	24.7%	7
<b>Freddie Mac</b>	\$6.82	25.2%	10	\$2.63	63.1%	5
<b>Fannie Mae</b>	\$5.65	20.9%	10	\$0.51	12.2%	1
<b>Total <sup>3</sup></b>	<b>\$16.51</b>	<b>100%</b>	<b>32</b>	<b>\$4.51</b>	<b>100%</b>	<b>13</b>

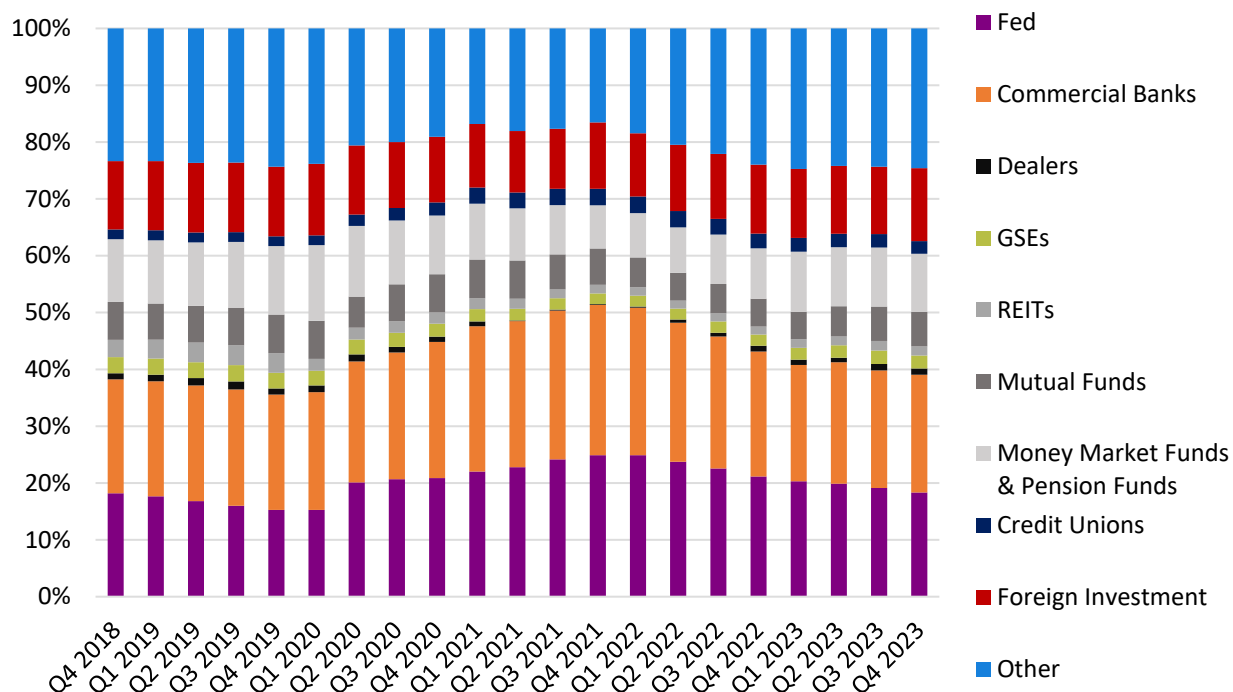
Source: Ginnie Mae Disclosure Files

<sup>3</sup> Totals may not sum due to rounding.

## 8 MBS OWNERSHIP

As of Q4 2023, the largest holders of agency debt (agency MBS + agency notes and bonds) included commercial banks (21%), the Federal Reserve (18%), and foreign investors (13%). The Federal Reserve's share decreased by 1% QoQ. Out of the approximately \$2.53 trillion in holdings as of the end of April 2024, roughly \$1.91 trillion was held by the top 25 domestic banks per **Table 9** below.

**Figure 34. Who Owns Total Agency Debt?**



Source: Federal Reserve Flow of Funds. Note: The "other" category includes primarily life insurance companies, state and local governments, households, and nonprofits. Data as of Q4 2023.

### 8.1 Commercial Bank Holdings of Agency MBS

**Table 9. Commercial Bank Holdings of Agency MBS**

	Commercial Bank Holdings (\$Billions)								
	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24
Largest 25 Domestic Banks	1,944.4	1,940.1	1,921.3	1,927.7	1,907.9	1,915.6	1,920.4	1,919.6	1,912.7
Small Domestic Banks	602.0	587.2	578.1	572.8	581.8	581.0	579.4	583.4	591.3
Foreign Related Banks	23.2	25.9	26.7	30.1	27.6	29.1	34.1	30.7	29.5
<b>Total, Seasonally Adjusted</b>	<b>2,569.6</b>	<b>2,553.2</b>	<b>2,526.1</b>	<b>2,530.6</b>	<b>2,517.3</b>	<b>2,525.7</b>	<b>2,533.9</b>	<b>2,533.7</b>	<b>2,533.5</b>

Source: Federal Reserve Bank. Note: Small domestic banks include all domestically chartered commercial banks not included in the top 25. Data as of April 2024.

## 8.2 Bank and Thrift Residential MBS Holdings

Total MBS holdings at banks and thrifts decreased approximately 1.3% from Q4 2023 to Q1 2024. Although total MBS holdings at banks and thrifts decreased in Q1 2024, GNMA PT and Agency CMO holdings increased 1.4% QoQ. GNMA PT holdings also marked the largest increase over the past year, increasing 8.7% from Q1 of 2023. Out of the \$2.23 trillion in MBS holdings at banks and thrifts as of Q1 2024, \$1.31 trillion were GSE pass-throughs and \$420 billion were Ginnie Mae pass-throughs. Private MBS holdings showed the largest percentage decrease of 26.5% from Q4 2023 to Q1 2024 and 47.7% from Q1 2023 to Q1 2024.

**Table 10. Bank and Thrift Residential MBS Holdings**

Year	All Banks & Thrifts (\$ in billions)						All MBS (\$ in billions)	
	Total	GSE PT	GNMA PT	Private MBS	Agency CMO	Private CMO	Banks	Thrifts
2002	\$832.5	\$376.1	\$101.5	\$20.1	\$245.0	\$89.9	\$702.4	\$209.7
2003	\$899.9	\$461.7	\$75.1	\$19.4	\$236.8	\$106.9	\$775.7	\$206.5
2004	\$1,011.0	\$572.4	\$49.3	\$20.5	\$208.2	\$160.6	\$879.8	\$234.3
2005	\$1,033.8	\$566.8	\$35.9	\$29.1	\$190.7	\$211.2	\$897.1	\$242.7
2006	\$1,124.5	\$628.5	\$31.1	\$42.3	\$179.2	\$243.3	\$983.5	\$223.4
2007	\$1,149.1	\$559.8	\$31.6	\$26.3	\$174.3	\$357.2	\$971.4	\$264.6
2008	\$1,218.8	\$638.8	\$100.4	\$12.9	\$207.7	\$259.0	\$1,088.0	\$211.7
2009	\$1,275.5	\$629.2	\$155.0	\$7.5	\$271.2	\$212.6	\$1,161.7	\$184.1
2010	\$1,433.4	\$600.8	\$163.1	\$7.3	\$397.3	\$181.6	\$1,233.3	\$200.1
2011	\$1,566.9	\$627.4	\$214.8	\$3.3	\$478.8	\$167.7	\$1,359.2	\$207.6
2012	\$1,578.9	\$707.9	\$242.5	\$17.2	\$469.3	\$138.7	\$1,430.6	\$148.2
2013	\$1,506.6	\$706.0	\$231.9	\$26.1	\$432.6	\$114.2	\$1,363.7	\$142.9
2014	\$1,539.3	\$733.7	\$230.5	\$20.3	\$449.9	\$104.9	\$1,409.8	\$129.5
2015	\$1,643.6	\$823.1	\$292.3	\$11.1	\$445.4	\$71.6	\$1,512.7	\$130.9
2016	\$1,736.9	\$930.7	\$323.5	\$7.4	\$419.8	\$55.6	\$1,576.1	\$160.9
2017	\$1,844.1	\$1,010.8	\$367.7	\$4.6	\$414.0	\$47.0	\$1,672.9	\$171.2
2018	\$1,815.0	\$980.6	\$380.4	\$2.7	\$416.6	\$34.7	\$1,635.0	\$180.0
1Q19	\$1,845.0	\$1,001.6	\$383.5	\$3.1	\$422.2	\$34.7	\$1,673.4	\$171.6
2Q19	\$1,907.1	\$1,037.9	\$408.0	\$2.9	\$421.6	\$36.8	\$1,727.7	\$179.5
3Q19	\$1,975.8	\$1,079.8	\$427.1	\$4.7	\$428.7	\$35.4	\$1,786.7	\$189.0
2019	\$1,985.4	\$1,089.4	\$426.9	\$4.6	\$429.0	\$35.5	\$1,796.3	\$189.1
1Q20	\$2,107.7	\$1,173.4	\$448.3	\$4.7	\$443.7	\$37.6	\$1,907.0	\$200.6
2Q20	\$2,195.2	\$1,228.9	\$441.1	\$5.0	\$478.1	\$42.1	\$1,946.4	\$248.8
3Q20	\$2,310.4	\$1,349.5	\$415.2	\$4.4	\$499.5	\$41.8	\$2,040.6	\$269.8
4Q20	\$2,520.9	\$1,537.5	\$390.7	\$3.9	\$548.7	\$40.1	\$2,210.2	\$310.7
1Q21	\$2,690.9	\$1,713.8	\$374.6	\$4.9	\$555.4	\$42.3	\$2,350.9	\$340.0
2Q21	\$2,781.9	\$1,825.8	\$352.8	\$4.8	\$555.5	\$43.1	\$2,431.8	\$350.2
3Q21	\$2,858.6	\$1,886.8	\$353.1	\$4.2	\$565.5	\$49.0	\$2,487.3	\$371.3
4Q21	\$2,906.0	\$1,915.5	\$352.7	\$4.4	\$578.0	\$55.4	\$2,529.8	\$376.3
1Q22	\$2,799.2	\$1,817.7	\$368.4	\$4.0	\$548.6	\$60.4	\$2,476.1	\$323.1
2Q22	\$2,623.8	\$1,665.9	\$369.2	\$3.8	\$523.0	\$61.8	\$2,321.2	\$302.6
3Q22	\$2,431.6	\$1,520.2	\$352.0	\$3.3	\$496.7	\$59.3	\$2,156.2	\$275.4
4Q22	\$2,423.9	\$1,505.6	\$371.9	\$4.0	\$481.7	\$60.6	\$2,154.5	\$269.4
1Q23	\$2,356.9	\$1,441.2	\$386.3	\$4.1	\$465.2	\$60.1	\$2,088.3	\$268.7
2Q23	\$2,280.4	\$1,389.4	\$383.5	\$3.0	\$446.2	\$58.3	\$2,022.5	\$257.9
3Q23	\$2,137.4	\$1,289.3	\$372.7	\$2.6	\$416.8	\$55.9	\$1,892.9	\$244.4
4Q23	\$2,260.5	\$1,351.1	\$414.2	\$2.9	\$434.9	\$57.3	\$2,008.9	\$251.6
1Q24	\$2,231.8	\$1,312.1	\$420.0	\$2.2	\$440.8	\$56.7	\$1,985.1	\$246.7
<b>Change:</b>								
4Q23-1Q24	-1.3%	-2.9%	1.4%	-26.5%	1.4%	-1.1%	-1.2%	-1.9%
1Q23-1Q24	-5.3%	-9.0%	8.7%	-47.7%	-5.2%	-5.6%	-4.9%	-8.2%

Note: Data represent fair value of assets in held-to-maturity and available-for-sale account. Thrift MBS holdings prior to June 2009 include commercial MBS. Source: Inside Mortgage Finance. Notes: Data as of Q1 2024.

**Table 11. Top 20 Bank and Thrift Residential MBS Investors (\$ in millions)**

<i>Rank</i>	<i>Institution</i>	<i>Total</i>	<i>GSE PT</i>	<i>GNMA PT</i>	<i>Agency CMO</i>	<i>Non-Agency</i>	<i>Share</i>
<b>1</b>	BANK OF AMERICA CORPORATION	\$410,443	\$337,753	\$66,098	\$6,373	\$219	18.39%
<b>2</b>	WELLS FARGO & COMPANY	\$242,951	\$147,399	\$93,270	\$2,222	\$60	10.89%
<b>3</b>	JPMORGAN CHASE & CO.	\$143,559	\$67,995	\$63,692	\$483	\$11,389	6.43%
<b>4</b>	CHARLES SCHWAB	\$142,034	\$79,670	\$5,091	\$57,273	\$0	6.36%
<b>5</b>	Truist Bank	\$97,070	\$47,997	\$12,720	\$33,469	\$2,884	4.35%
<b>6</b>	U.S. BANCORP	\$95,518	\$58,540	\$26,758	\$10,221	\$0	4.28%
<b>7</b>	CITIGROUP INC.	\$94,080	\$63,385	\$27,966	\$2,029	\$700	4.22%
<b>8</b>	PNC Bank, National Association	\$66,248	\$56,201	\$3,706	\$5,438	\$903	2.97%
<b>9</b>	CAPITAL ONE FINANCIAL CORPORATION	\$62,033	\$29,155	\$14,150	\$18,415	\$312	2.78%
<b>10</b>	MORGAN STANLEY	\$48,290	\$29,424	\$7,366	\$11,422	\$78	2.16%
<b>11</b>	BANK OF NEW YORK MELLON CORP	\$43,360	\$27,838	\$4,297	\$9,497	\$1,728	1.94%
<b>12</b>	State Street Bank and Trust Company	\$36,287	\$12,659	\$9,487	\$12,158	\$1,983	1.63%
<b>13</b>	USAA Federal Savings Bank	\$35,354	\$29,811	\$1,719	\$3,824	\$0	1.58%
<b>14</b>	Citizens Bank, National Association	\$28,292	\$12,413	\$6,503	\$9,375	\$0	1.27%
<b>15</b>	BMO Harris Bank National Association	\$27,814	\$3,806	\$5,723	\$18,284	\$0	1.25%
<b>16</b>	The Huntington National Bank	\$25,954	\$10,330	\$8,473	\$7,034	\$116	1.16%
<b>17</b>	TD Bank USA/TD Bank NA	\$25,099	\$1,391	\$71	\$23,613	\$24	1.12%
<b>18</b>	KeyBank National Association	\$23,998	\$3,439	\$156	\$20,402	\$0	1.08%
<b>19</b>	HSBC Bank USA, National Association	\$23,838	\$3,709	\$15,259	\$4,870	\$1	1.07%
<b>20</b>	Regions Bank	\$18,561	\$13,792	\$2,588	\$2,181	\$0	0.83%
<b>Total</b>	<b>Top 20</b>	<b>\$1,690,783</b>	<b>\$1,036,708</b>	<b>\$375,093</b>	<b>\$258,584</b>	<b>\$20,397</b>	<b>75.8%</b>

Source: Inside Mortgage Finance. Notes: Data as of Q1 2024.

## 8.3 SOMA Holdings

### FOMC and Economic Highlights:

- Federal Open Market Committee Meeting 5/1/2024 Press Release:
  - *"The Committee decided to maintain the target range for the federal funds rate at 5-1/4 to 5-1/2 percent."*
  - *"Inflation has eased over the past year but remains elevated. In recent months, there has been a lack of further progress toward the Committee's 2% inflation objective."*
  - *"The Committee does not expect it will be appropriate to reduce the target range until it has gained greater confidence that inflation is moving sustainably toward 2 percent."*
  - *"Beginning in June, the Committee will slow the pace of decline of its securities holdings by reducing the monthly redemption cap on Treasury securities from \$60 billion to \$25 billion. The Committee will maintain the monthly redemption cap on agency debt and agency mortgage-backed securities at \$35 billion and will reinvest any principal payments in excess of this cap into Treasury securities."*
- Powell indicated in his press conference that:
  - *"I think it's unlikely that the next policy rate move will be a hike. I'd say it's unlikely."*
  - *"Policy is well positioned to deal with the risks and uncertainties that we face in pursuing both sides of our dual mandate."*
  - *"The decision to slow the pace of runoff does not mean that our balance sheet will ultimately shrink by less than it would otherwise, but rather allows us to approach its ultimate level more gradually."*

### SOMA Portfolio Highlights (March 27, 2024 vs. April 24, 2024)

- SOMA holdings of domestic securities totaled \$6.8 trillion on Apr 27 (a decrease of \$82.3 billion or -1.19% from Mar 27). \$78.6 billion (96% of the total decrease) was in U.S. Treasury holdings and \$3.7 billion (4% of the total decrease) was in Agency MBS.
- Since the institution of redemption caps in June 2022, SOMA holdings have decreased by \$1.579 trillion. The total reduction of holdings of U.S. Treasuries was \$1.256 trillion and \$0.322 trillion for Agency MBS. This represents 93.0% and 40.9% of the total redemption cap over the period for U.S. Treasuries and Agency MBS, respectively.
- Agency MBS comprise about 34% of the total SOMA portfolio. The \$3.7 billion monthly decrease was primarily due to MBS principal repayments rather than outright sales and was comprised of a \$0.1 billion decrease in Fannie Mae holdings, no decrease in Freddie Mac holdings, and a \$3.6 billion decrease in Ginnie Mae holdings. Since the Fed's QT program began in June 2022, there have only been 20 outright sales of Agency MBS specified pools, totaling \$619 million (See Table 4).
- Over 99% of SOMA Agency MBS holdings have coupons of 4.5% or lower with an average WAC of 2.506%.
- The redemption cap for SOMA's Agency MBS holdings is set at \$35 billion per month. The reduction of \$3.7 billion in Agency MBS represents 11% of the monthly liquidation cap.



**Table 12. SOMA Holdings as of March 27, 2024 and April 24, 2024 (\$ Billions)**

Holdings by Security Type	March 27, 2024		April 24, 2024		Month-Over-Month	
	SOMA Holdings	% Share	SOMA Holdings	% Share	\$ Change	% Change <sup>4</sup>
U.S. Treasuries	\$4,505.1	65.33%	\$4,426.5	64.97%	-\$78.6	-1.74%
Federal Agency Debt	\$2.3	0.03%	\$2.3	0.03%	\$0.0	0.00%
Agency MBS	\$2,380.2	34.52%	\$2,376.5	34.88%	-\$3.7	-0.16%
Agency Commercial MBS	\$8.2	0.12%	\$8.2	0.12%	\$0.0	-0.15%
<b>Total SOMA Holdings</b>	<b>\$6,895.8</b>	<b>100.0%</b>	<b>\$6,813.6</b>	<b>100.0%</b>	<b>-\$60.2</b>	<b>-1.19%</b>

**Table 13. SOMA Agency MBS Holdings Distribution (\$ Billions)**

Agency	Singly-Family AMBS Outstanding April 1, 2024	% AMBS Outstanding	SOMA AMBS Holdings March 27, 2024	% SOMA Holdings	SOMA AMBS Holdings April 24, 2024	% SOMA Holdings
<b>Fannie Mae</b>	\$3,567.5	40.2%	\$979.6	41.2%	\$979.5	41.2%
<b>Freddie Mac</b>	\$2,9452.3	33.3%	\$910.4	38.2%	\$910.4	38.3%
<b>Ginnie Mae</b>	\$2,343.6	26.4%	\$490.3	20.6%	\$486.7	20.5%
<b>Total</b>	<b>\$8,863.5</b>	<b>100.0%</b>	<b>\$2,380.2</b>	<b>100.0%</b>	<b>\$2,380.2</b>	<b>100.0%</b>

**Table 14. SOMA Agency MBS Liquidations from March 27, 2024 to April 24, 2024 (\$ Billions)**

	MBS Holdings 3.27.24	MBS Holdings 4.24.24	Liquidated Amount	Liquidation Cap <sup>5</sup>	% of Liquidation Cap
<b>Total</b>	\$2,380.2	\$2,376.5	\$3.7	\$35.0	11%

Source: New York FED SOMA Holdings <https://www.newyorkfed.org/markets/soma-holdings> as of April 2024. Notes: The liquidation cap is per calendar month. Our analysis here instead covers a four-week period to maintain consistency with other analyses in this report.

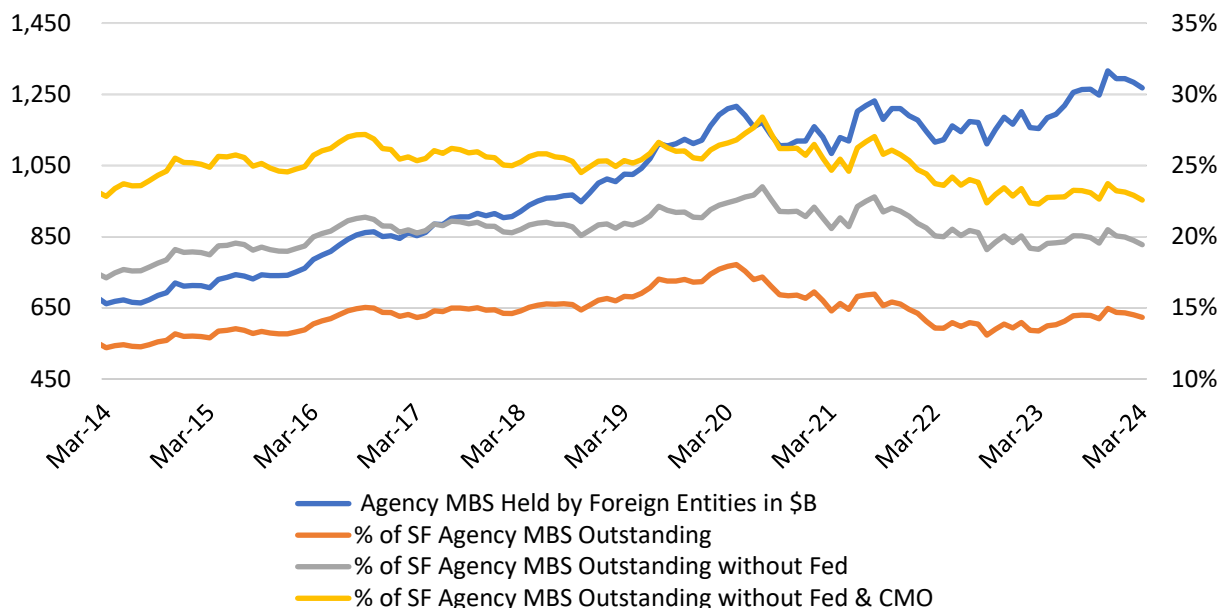
<sup>4</sup> Table 14 illustrates figures in \$ billions, any change less than \$50 million will be expressed as a "\$0.0" change in the "\$ Change" column.

<sup>5</sup> The Liquidation cap is per calendar month. Our analysis here instead covers a four-week period to maintain consistency with other analyses in this report.

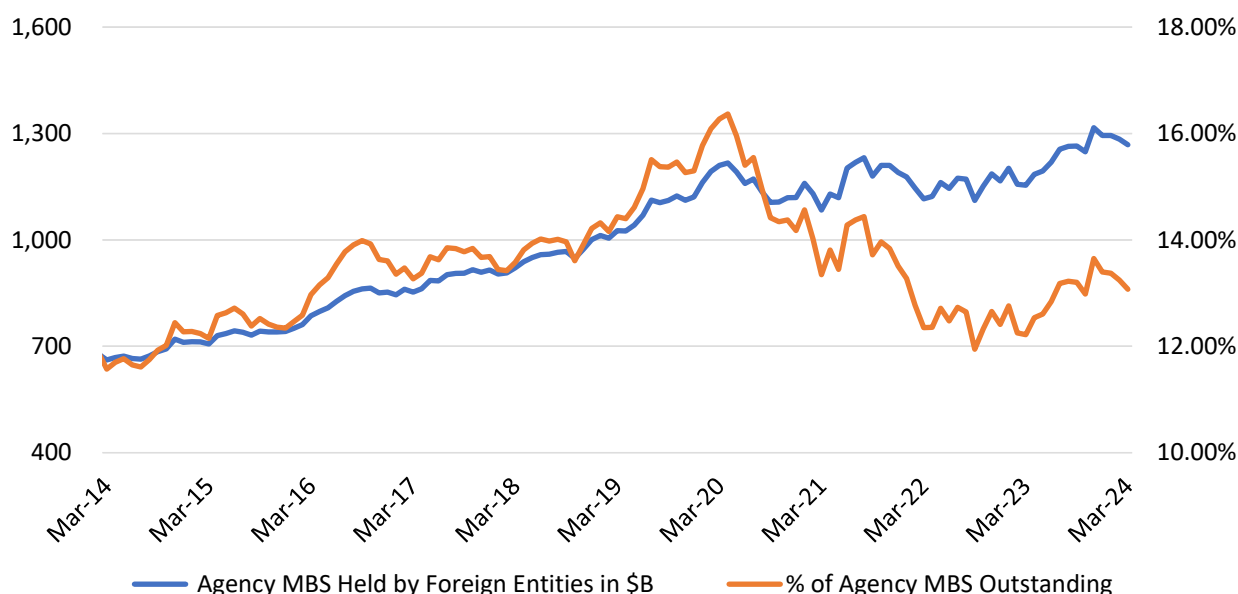
## 8.4 Foreign Ownership of MBS

As of month-end March 2024, foreign ownership of MBS represented approximately \$1.27 trillion in Agency MBS, up approximately \$114 billion from March 2023. Total foreign ownership of Agency MBS represents roughly 13% of total Agency MBS outstanding. Total foreign ownership excluding Fed Holdings and CMO's represents roughly 23% of total Agency MBS available.

**Figure 35. Agency MBS Owned by Foreign Entities Ex-Fed Holdings and CMO's (USD Billions)**



**Figure 36. Agency MBS Owned by Foreign Entities (USD Billions)**



Sources: TIC and Recursion, as of March 2024.

## 8.5 Foreign Ownership of Agency Debt and Agency MBS

The largest holders of Agency MBS were China, Japan, and Taiwan. As of December 2023, these three owned roughly 52% of all foreign owned Agency MBS. Between December 2022 and December 2023, China and Taiwan increased their Agency MBS holdings while Japan's holdings decreased. China's holdings increased by \$19.9 billion, Taiwan's holdings increased by \$1.3 billion, and Japan's holdings decreased by \$19.0 billion.

**Table 15. All Agency Debt (QoQ)**

Country	Level of Holdings (\$ Millions)				Change in Holdings (\$ Millions)			
	3/1/2023	6/1/2023	9/1/2023	12/1/2023	Q1 2023	Q2 2023	Q3 2023	Q4 2023
China	263,892	269,980	255,110	271,478	12,300	6,088	-14,870	16,368
Japan	287,051	253,357	252,463	259,059	8,982	-33,694	-894	6,596
Taiwan	212,533	208,226	201,010	211,610	2,224	-4,307	-7,216	10,600
Canada	105,527	105,330	116,642	133,725	8,293	-197	11,312	17,083
United Kingdom	41,101	55,682	90,017	120,148	-20,292	14,581	34,335	30,131
Luxembourg	51,202	40,971	42,656	46,054	3,962	-10,231	1,685	3,398
Cayman Islands	29,485	30,398	37,089	42,342	-1,456	913	6,691	5,253
Ireland	25,099	36,766	39,697	39,543	2,621	11,667	2,931	-154
South Korea	38,131	36,737	36,508	38,381	1,894	-1,394	-229	1,873
France	22,578	20,411	24,287	25,301	2,969	-2,167	3,876	1,014
Other	196,641	208,190	218,177	235,604	-28,825	11,549	9,987	17,427
<b>Total</b>	<b>1,273,240</b>	<b>1,266,048</b>	<b>1,313,656</b>	<b>1,423,245</b>	<b>-7,328</b>	<b>-7,192</b>	<b>47,608</b>	<b>109,589</b>

**Table 16. All Agency Debt (YoY)**

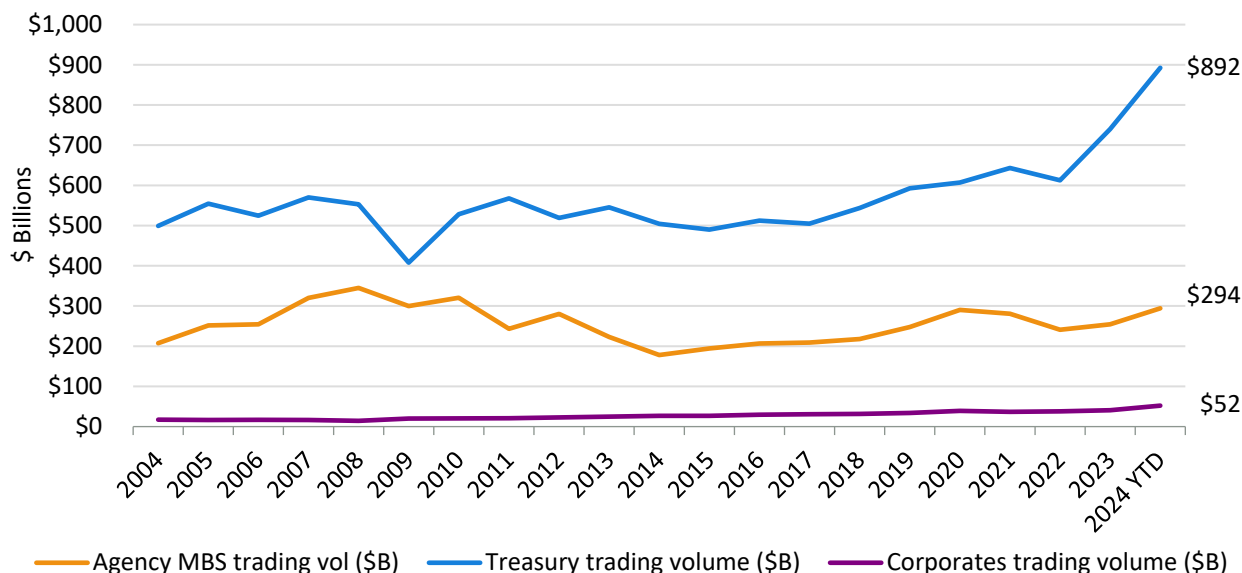
Country	Level of Holdings (\$ Millions)		YoY Change in Holdings (\$ Millions)
	12/1/2022	12/1/2023	
China	251,592	271,478	19,886
Japan	278,069	259,059	-19,010
Taiwan	210,309	211,610	1,301
Canada	97,234	133,725	36,491
United Kingdom	61,393	120,148	58,755
Luxembourg	47,240	46,054	-1,186
Cayman Islands	30,941	42,342	11,401
Ireland	22,478	39,543	17,065
South Korea	36,237	38,381	2,144
France	19,609	25,301	5,692
Other	225,466	235,604	10,138
<b>Total</b>	<b>1,280,568</b>	<b>1,423,245</b>	<b>142,677</b>

Source: Treasury International Capital (TIC). Note: Level of agency debt Holdings by month data as of Q4 2023. Agency MBS as of December 2023. Table 16 includes the top 10 holders of agency debt listed as of December 2023.

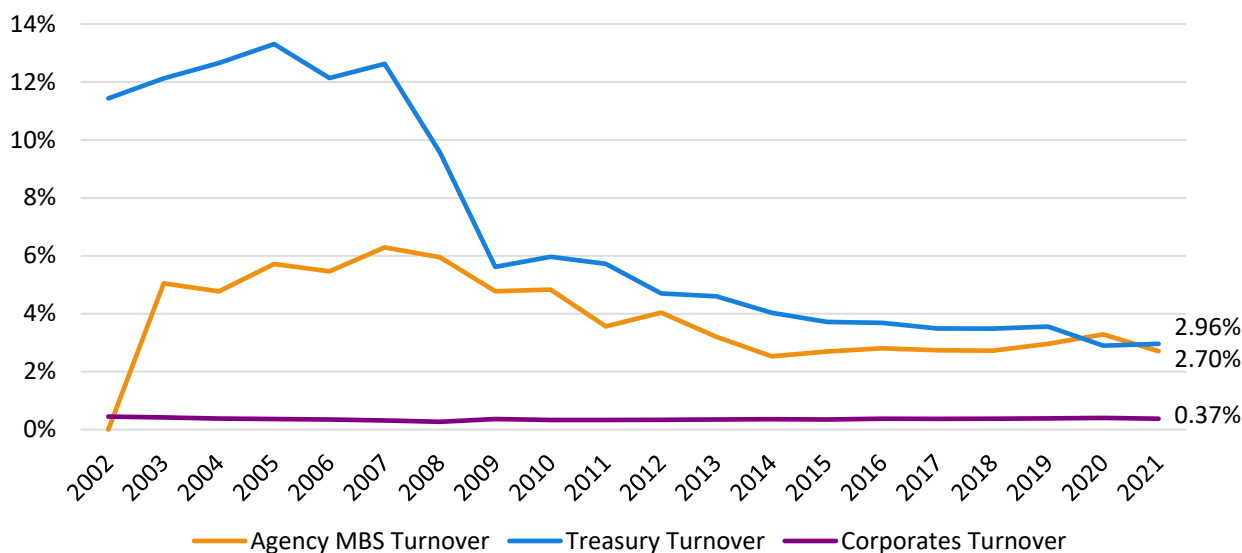
## 9 FIXED INCOME LIQUIDITY INDICATORS

The Agency MBS average daily trading volume YTD as of month-end April 2024 was \$294 billion, which was up from a monthly average of \$255 billion for calendar year 2023. As of month-end April 2024, Agency MBS average daily trading volume increased 1.1% MoM. See footnote below for update on “Average Daily Turnover by Sector” data.

**Figure 37. Average Daily Trading Volume by Sector**



**Figure 38. Average Daily Turnover by Sector**



Source: SIFMA. Note: Data as of April 2024 for Average Daily Trading Volume by Sector and as of December 2021 for Agency MBS in Average Daily Turnover by Sector. The MBS outstanding database for Turnover by Sector is under maintenance and is not updated in this report.

## PRIMARY MORTGAGE MARKET

### 10 AGENCY CREDIT BREAKDOWN

Tables 17, 18, and 19 below outline the population distributions of FICO, DTIs, and LTVs between the agencies and between FHA, VA, and other Ginnie Mae loan sources as of month-end April 2024. The distribution statistics capture some key differences in the populations served by the agencies.

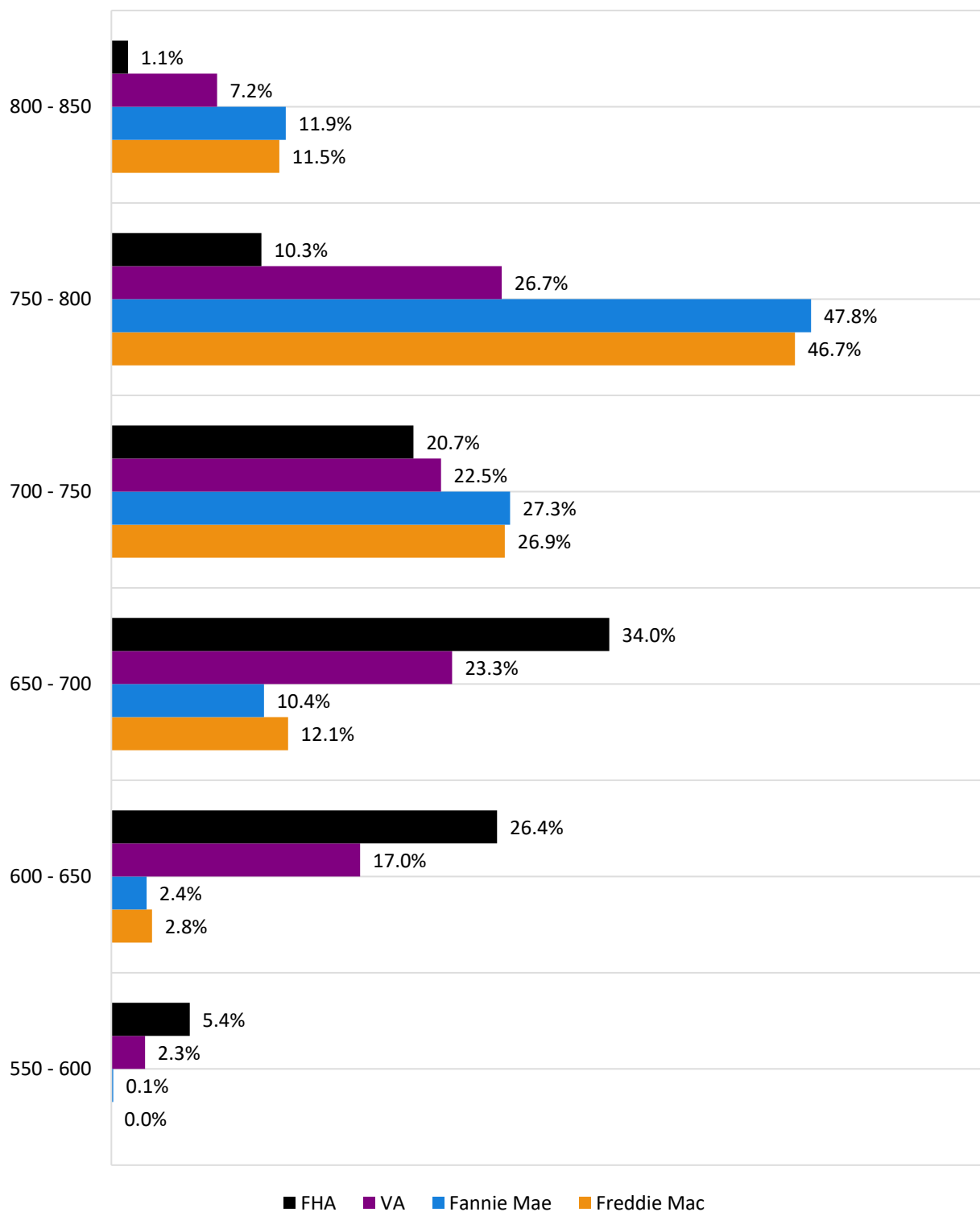
#### 10.1 Credit Scores

**Table 17. Share of Loans by FICO Score**

<b>Purchase FICO</b>							
<b>Names</b>	<b>Number of Loans</b>	<b>P10</b>	<b>P25</b>	<b>Median</b>	<b>P75</b>	<b>P90</b>	<b>Mean</b>
All	199,294	653	697	747	782	800	736
Fannie	59,369	703	734	767	790	803	759
Freddie	64,653	692	729	765	790	802	755
Ginnie	75,272	627	655	697	748	784	701
<b>Refi FICO</b>							
<b>Names</b>	<b>Number of Loans</b>	<b>P10</b>	<b>P25</b>	<b>Median</b>	<b>P75</b>	<b>P90</b>	<b>Mean</b>
All	51,131	624	658	706	758	789	705
Fannie	14,797	658	694	739	777	798	733
Freddie	14,584	665	700	742	777	797	736
Ginnie	21,750	597	629	663	702	744	666
<b>All FICO</b>							
<b>Names</b>	<b>Number of Loans</b>	<b>P10</b>	<b>P25</b>	<b>Median</b>	<b>P75</b>	<b>P90</b>	<b>Mean</b>
All	250,425	645	687	740	779	798	730
Fannie	74,166	691	727	763	789	802	754
Freddie	79,237	686	723	761	788	802	752
Ginnie	97,022	621	648	688	739	779	693
<b>Purchase FICO: Ginnie Mae Breakdown by Source</b>							
<b>Names</b>	<b>Number of Loans</b>	<b>P10</b>	<b>P25</b>	<b>Median</b>	<b>P75</b>	<b>P90</b>	<b>Mean</b>
All	75,272	627	655	697	748	784	701
FHA	47,122	624	649	684	727	764	689
VA	25,524	635	675	733	778	799	724
Other	2,626	632	658	700	738	770	700
<b>Refi FICO: Ginnie Mae Breakdown by Source</b>							
<b>Names</b>	<b>Number of Loans</b>	<b>P10</b>	<b>P25</b>	<b>Median</b>	<b>P75</b>	<b>P90</b>	<b>Mean</b>
All	21,750	597	629	663	702	744	666
FHA	13,707	590	623	654	688	723	655
VA	8,029	612	643	681	728	768	684
Other	14	648	701	735	757	781	724
<b>All FICO: Ginnie Mae Breakdown by Source</b>							
<b>Names</b>	<b>Number of Loans</b>	<b>P10</b>	<b>P25</b>	<b>Median</b>	<b>P75</b>	<b>P90</b>	<b>Mean</b>
All	97,022	621	648	688	739	779	693
FHA	60,829	616	643	677	719	758	681
VA	33,553	627	664	718	770	797	714
Other	2,640	632	658	701	738	770	700

Sources: Fannie Mae, Freddie Mac, and Ginnie Mae disclosure files. Note: All averages are rounded to the nearest whole number.

**Figure 39. FICO Distributions by Agency**



Sources: Fannie Mae, Freddie Mac, and Ginnie Mae disclosure files.

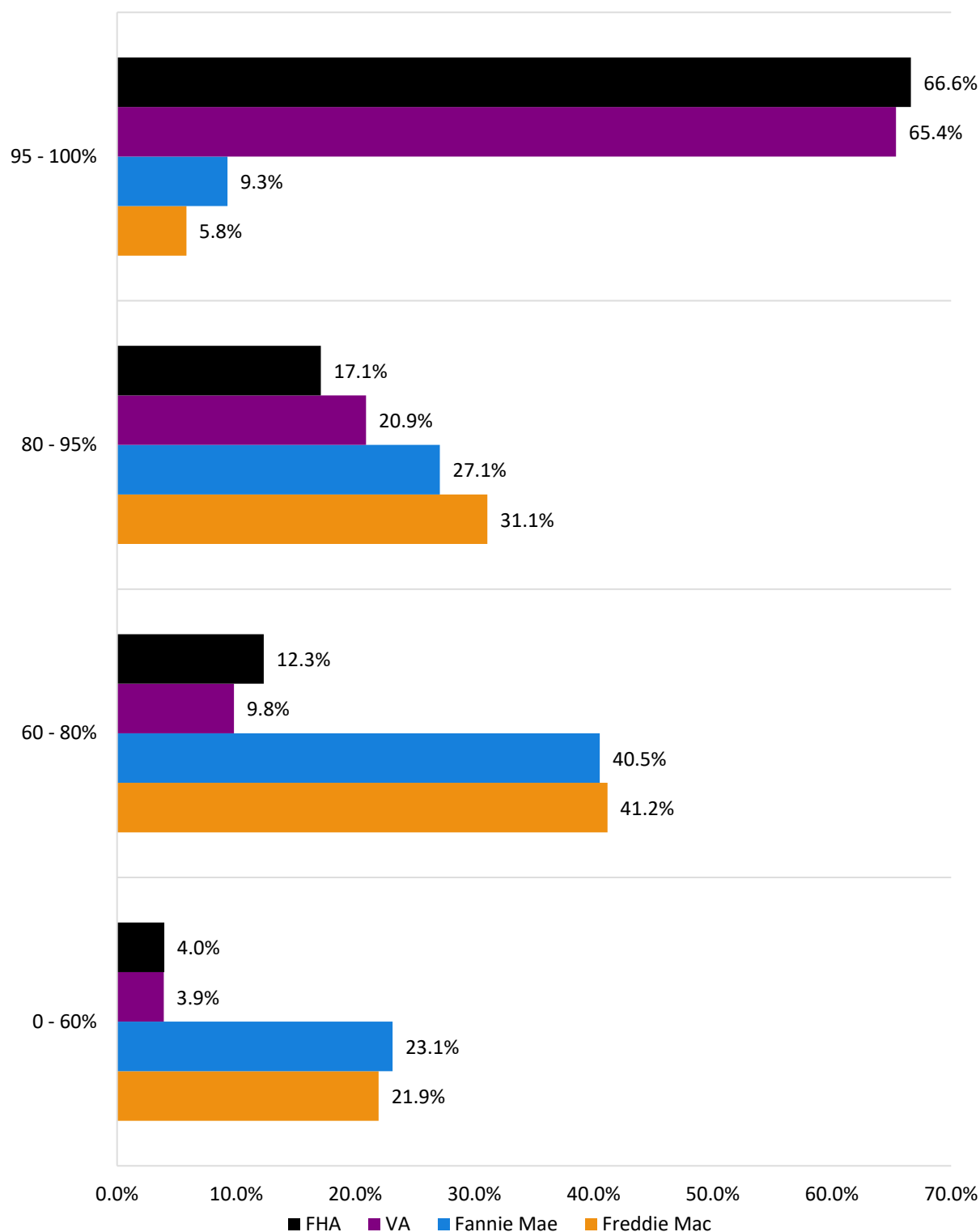
## 10.2 Loan-to-Value (LTV)

**Table 18. Share of Loans by LTV**

<i>Purchase LTV</i>							
<i>Names</i>	<b>Number of Loans</b>	<b>P10</b>	<b>P25</b>	<b>Median</b>	<b>P75</b>	<b>P90</b>	<b>Mean</b>
All	199,548	63	80	93	98	100	86
Fannie	59,452	55	75	80	95	97	79
Freddie	64,671	54	75	80	95	95	79
Ginnie	75,425	91	97	98	100	100	96
<i>Refi LTV</i>							
<i>Names</i>	<b>Number of Loans</b>	<b>P10</b>	<b>P25</b>	<b>Median</b>	<b>P75</b>	<b>P90</b>	<b>Mean</b>
All	53,254	34	52	70	81	94	66
Fannie	14,809	27	41	58	70	78	55
Freddie	14,584	28	42	60	72	80	57
Ginnie	23,861	58	71	81	90	100	79
<i>All LTV</i>							
<i>Names</i>	<b>Number of Loans</b>	<b>P10</b>	<b>P25</b>	<b>Median</b>	<b>P75</b>	<b>P90</b>	<b>Mean</b>
All	252,802	52	74	88	97	99	82
Fannie	74,261	44	64	80	90	95	74
Freddie	79,255	45	65	80	90	95	75
Ginnie	99,286	76	90	98	99	100	92
<i>Purchase LTV: Ginnie Mae Breakdown by Source</i>							
<i>Names</i>	<b>Number of Loans</b>	<b>P10</b>	<b>P25</b>	<b>Median</b>	<b>P75</b>	<b>P90</b>	<b>Mean</b>
All	75,425	91	97	98	100	100	96
FHA	47,185	92	97	98	98	98	96
VA	25,571	85	100	100	100	102	96
Other	2,669	94	98	101	101	101	98
<i>Refi LTV: Ginnie Mae Breakdown by Source</i>							
<i>Names</i>	<b>Number of Loans</b>	<b>P10</b>	<b>P25</b>	<b>Median</b>	<b>P75</b>	<b>P90</b>	<b>Mean</b>
All	23,861	58	71	81	90	100	79
FHA	14,458	53	67	78	81	84	73
VA	9,387	67	81	90	100	102	88
Other	16	53	70	85	97	98	78
<i>All LTV: Ginnie Mae Breakdown by Source</i>							
<i>Names</i>	<b>Number of Loans</b>	<b>P10</b>	<b>P25</b>	<b>Median</b>	<b>P75</b>	<b>P90</b>	<b>Mean</b>
All	99,286	76	90	98	99	100	92
FHA	61,643	74	86	97	98	98	91
VA	34,958	79	91	100	100	102	94
Other	2,685	94	98	101	101	101	98

Sources: Fannie Mae, Freddie Mac, and Ginnie Mae disclosure files. Note: All averages are rounded to the nearest whole number.

**Figure 40. Loan-to Value by Agency**



Sources: Fannie Mae, Freddie Mac, and Ginnie Mae disclosure files.



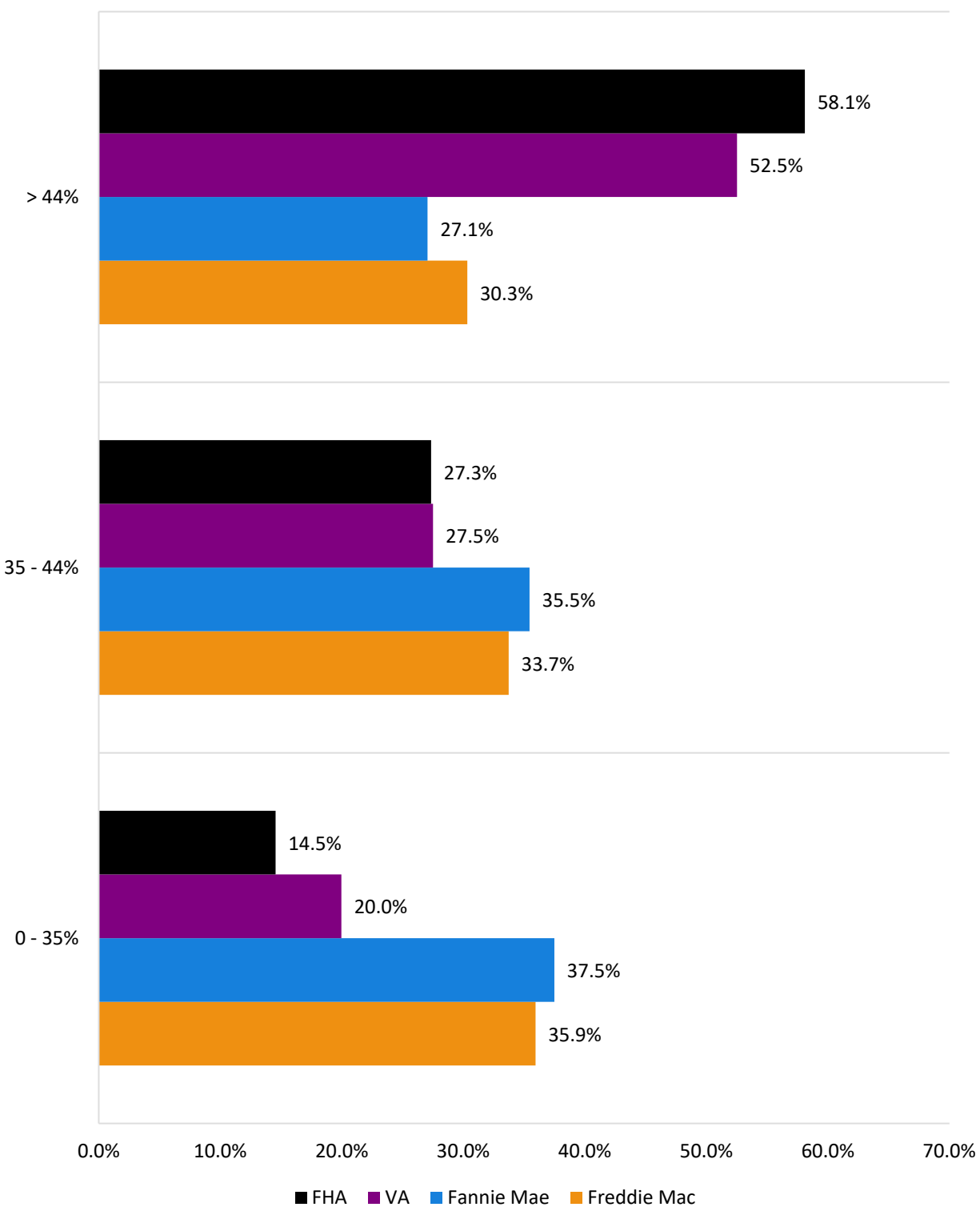
## 10.3 Debt-to-Income (DTI)

**Table 19. Share of Loans by DTI**

<i>Purchase DTI</i>							
<i>Names</i>	<i>Number of Loans</i>	<i>P10</i>	<i>P25</i>	<i>Median</i>	<i>P75</i>	<i>P90</i>	<i>Mean</i>
All	199,246	27	34	42	48	51	40
Fannie	59,452	24	32	39	45	49	38
Freddie	64,671	24	32	40	46	49	38
Ginnie	75,123	32	39	46	51	55	45
<i>Refi DTI</i>							
<i>Names</i>	<i>Number of Loans</i>	<i>P10</i>	<i>P25</i>	<i>Median</i>	<i>P75</i>	<i>P90</i>	<i>Mean</i>
All	48,732	25	33	41	47	50	40
Fannie	14,809	23	30	38	44	47	37
Freddie	14,584	24	31	40	46	49	38
Ginnie	19,339	29	36	44	50	55	43
<i>All DTI</i>							
<i>Names</i>	<i>Number of Loans</i>	<i>P10</i>	<i>P25</i>	<i>Median</i>	<i>P75</i>	<i>P90</i>	<i>Mean</i>
All	247,978	26	34	42	48	51	40
Fannie	74,261	24	31	39	45	48	38
Freddie	79,255	24	32	40	46	49	38
Ginnie	94,462	31	38	45	51	55	44
<i>Purchase DTI: Ginnie Mae Breakdown by Source</i>							
<i>Names</i>	<i>Number of Loans</i>	<i>P10</i>	<i>P25</i>	<i>Median</i>	<i>P75</i>	<i>P90</i>	<i>Mean</i>
All	75,123	32	39	46	51	55	45
FHA	47,177	34	40	47	52	55	45
VA	25,277	30	37	45	51	56	44
Other	2,669	27	32	36	40	42	35
<i>Refi DTI: Ginnie Mae Breakdown by Source</i>							
<i>Names</i>	<i>Number of Loans</i>	<i>P10</i>	<i>P25</i>	<i>Median</i>	<i>P75</i>	<i>P90</i>	<i>Mean</i>
All	19,339	29	36	44	50	55	43
FHA	13,184	29	36	44	50	55	43
VA	6,141	28	35	43	50	55	42
Other	14	21	29	38	41	41	34
<i>All DTI: Ginnie Mae Breakdown by Source</i>							
<i>Names</i>	<i>Number of Loans</i>	<i>P10</i>	<i>P25</i>	<i>Median</i>	<i>P75</i>	<i>P90</i>	<i>Mean</i>
All	94,462	31	38	45	51	55	44
FHA	60,361	33	39	46	52	55	45
VA	31,418	30	37	45	51	56	44
Other	2,683	27	32	36	40	42	35

Sources: Fannie Mae, Freddie Mac, and Ginnie Mae disclosure files. Note: All averages are rounded to the nearest whole number.

**Figure 41. Debt-to Income by Agency**



Sources: Fannie Mae, Freddie Mac, and Ginnie Mae disclosure files.

## 10.4 High LTV Loans: Ginnie Mae vs. GSEs

Comparing the three-month range of February 2023 – April 2023 to the three-month range of February 2024 – April 2024, the share of high-LTV agency loans with:

- FICO scores above 750 increased by approximately 11.1%.
- DTIs below 35% decreased by approximately 9.7%.

Ginnie Mae maintains its key role of expanding credit access to low-to-moderate income borrowers as it continues to dominate high-LTV lending, with 71.08% of its issuances between February 2024 – April 2024 having LTVs of 95 or above, compared to 22.18% for the GSEs.

**Table 20. Share of Loans with LTV > 95**

	<i>Ginnie Mae</i>	<i>GSE</i>	<i>All</i>
<b>Feb 2023 - Apr 2023</b>	71.04%	24.85%	42.78%
<b>Feb 2024 - Apr 2024</b>	71.08%	22.18%	42.23%

**Table 21. Agency Market Share by DTI and FICO for Loans with LTV > 95 (Feb 2023 – Apr 2023)**

<i>FICO</i>						
<i>DTI</i>	<650	650-700	700-750	≥750	NA	All
<b>&lt;35</b>	2.13%	3.08%	4.30%	6.63%	0.06%	16.20%
<b>35-45</b>	5.96%	8.64%	10.28%	11.46%	0.06%	36.40%
<b>≥45</b>	8.21%	13.47%	12.71%	11.35%	0.05%	45.80%
<b>NA</b>	0.32%	0.22%	0.15%	0.19%	0.71%	1.59%
<b>All</b>	16.63%	25.42%	27.44%	29.63%	0.88%	100.00%

**Table 22. Agency Market Share by DTI and FICO for Loans with LTV > 95 (Feb 2024 - Apr 2024)**

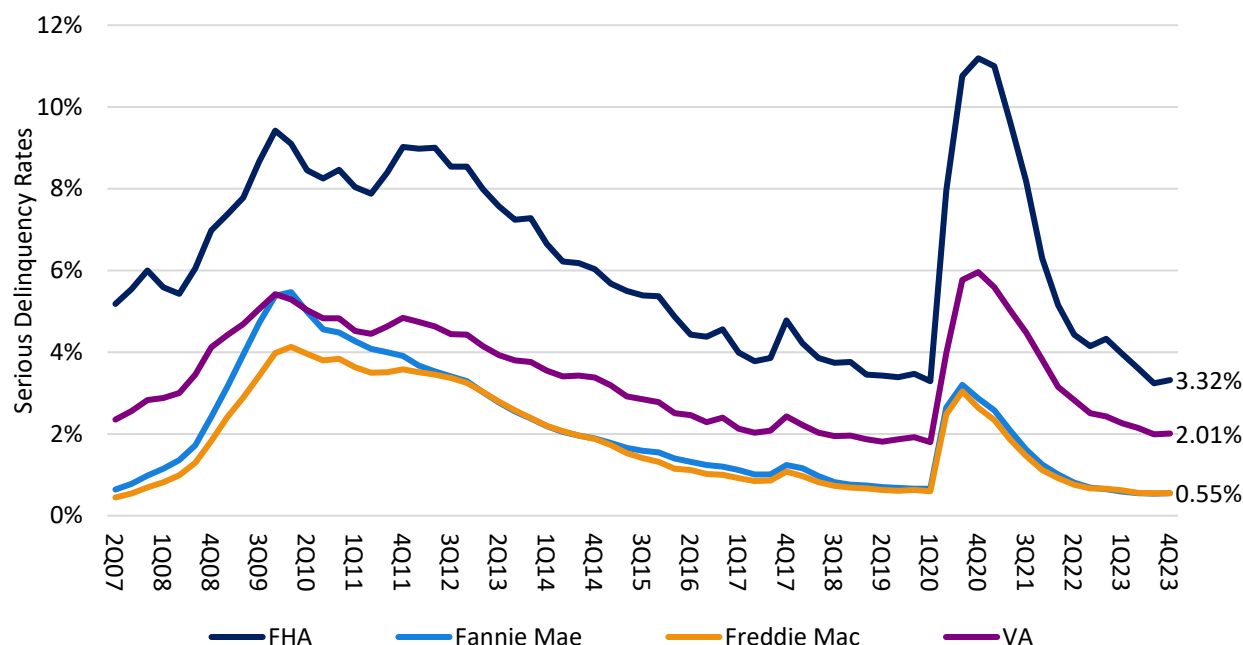
<i>FICO</i>						
<i>DTI</i>	<650	650-700	700-750	≥750	NA	All
<b>&lt;35</b>	1.59%	2.44%	3.73%	6.78%	0.08%	14.62%
<b>35-45</b>	4.94%	7.14%	9.32%	12.17%	0.06%	33.63%
<b>≥45</b>	7.15%	12.38%	13.46%	13.40%	0.08%	46.48%
<b>NA</b>	0.86%	0.85%	0.63%	0.57%	2.37%	5.27%
<b>All</b>	14.54%	22.80%	27.14%	32.92%	2.59%	100.00%

Sources: Recursion and Ginnie Mae. Data as of April 2024.

## 10.5 Serious Delinquency Rates

Serious delinquency rates for Single-Family VA and FHA loans rose in Q4 2023. From Q3 2023 to Q4 2023, FHA's serious delinquencies rose 8 bps to 3.32% while VA's delinquency rates saw a 2 bp increase to 2.01%. Fannie and Freddie's serious delinquencies saw less movement than FHA and VA in Q4 2023. Fannie Mae's serious delinquency rate increased 1 bp and Freddie's rate remained constant from Q3 2023 to Q4 2023, both sitting at 0.55%. The trend in serious delinquency rates is consistent with the decrease in the number of loans in forbearance captured in [Section 11](#).

**Figure 42. Serious Delinquency Rates: Single-Family Loans**



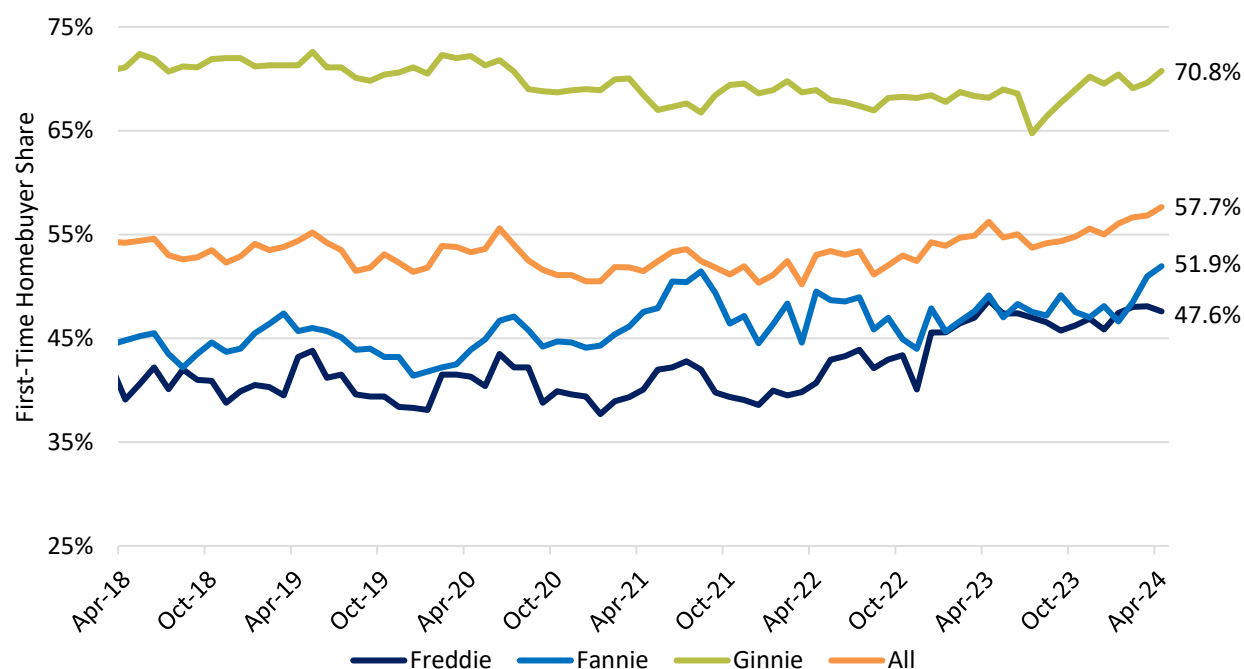
Sources: Fannie Mae and Freddie Mac Monthly Summary Reports. MBA Delinquency Survey

Note: Serious delinquency is defined as 90 days or more past due or in the foreclosure process. Data as of Q4 2023.

## 10.6 Credit Box

The first-time homebuyer share for agency purchase loans was 57.7% as of month-end April 2024, an increase from 56.8% in March 2024 and up from 56.2% in April 2023. Ginnie Mae's first-time homebuyer share, 70.8% as of month-end April 2024, increased 3.8% YoY. Freddie Mac and Fannie Mae's first-time homebuyer shares were 47.6% and 51.9%, respectively, as of month-end April 2024. Freddie Mac's share of first-time borrowers decreased 2.1% and Fannie Mae's increased 5.7% YoY. **Table 23** shows that based on mortgages originated as of month-end April 2024 the average GSE first-time homebuyer was more likely to have a higher credit score, lower LTV, and higher interest rate compared to an average Ginnie Mae first-time homebuyer. Ginnie Mae's first-time homebuyers were more likely to have lower loan amounts and lower credit scores, while having slightly higher mortgage rates than Ginnie Mae repeat buyers.

**Figure 43. First-Time Homebuyer Share: Purchase Only Loans**



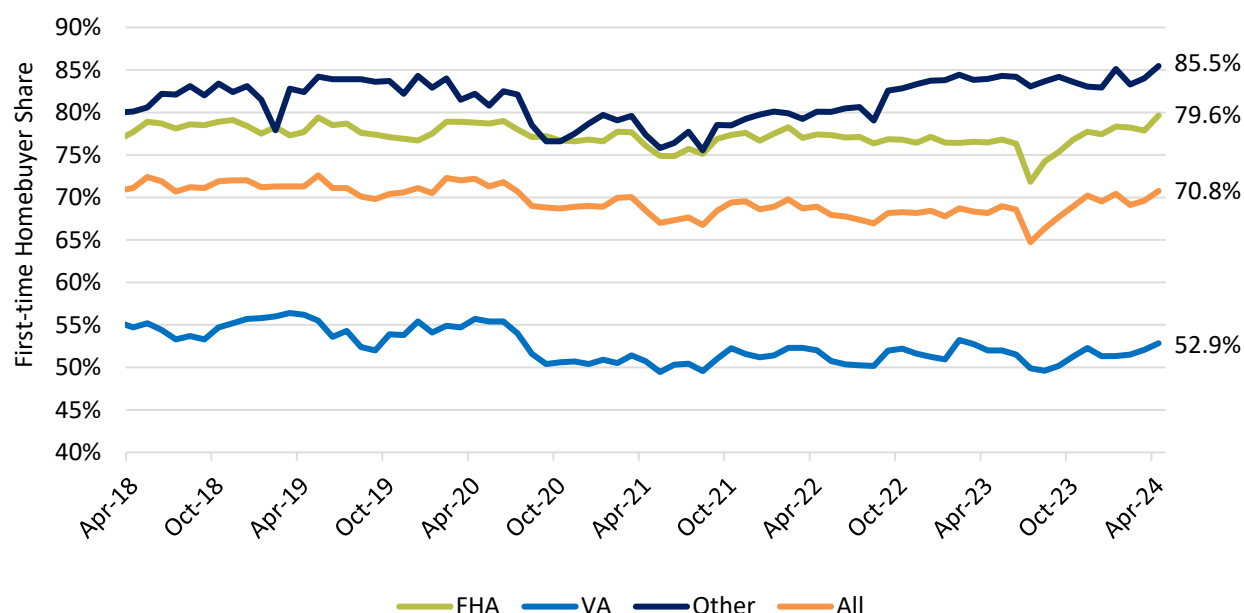
**Table 23. Agency First-Time Homebuyer Share Summary**

	Fannie Mae		Freddie Mac		Ginnie Mae		All	
	First-Time	Repeat	First-Time	Repeat	First-Time	Repeat	First-Time	Repeat
<b>Loan Amount \$</b>	\$332,852	\$341,900	\$336,879	\$353,603	\$319,282	\$375,052	\$327,633	\$355,245
<b>Credit Score</b>	753	765	748	762	695	717	725	751
<b>LTV (%)</b>	84.7%	73.8%	84.0%	74.6%	97.1%	94.2%	90.3%	79.4%
<b>DTI (%)</b>	37.6%	37.8%	37.7%	38.2%	44.1%	45.4%	40.7%	39.9%
<b>Loan Rate (%)</b>	6.6%	6.7%	6.7%	6.8%	6.4%	6.3%	6.5%	6.6%

Sources: Fannie Mae, Freddie Mac, and Ginnie Mae disclosure files as of April 2024

In the Ginnie Mae purchase market, 79.6% of FHA loans, 52.9% of VA loans, and 85.5% of “Other” loans provided financing for first-time home buyers as of month-end April 2024. The share of first-time home buyers in the Ginnie Mae purchase market increased MoM for all loan types. **Table 24** shows that based on mortgages originated as of month-end April 2024; the credit profile of the average VA first-time homebuyer differed from the average VA repeat buyer. The average VA first-time homebuyer took out 16.7% smaller loans, had a 27-point lower credit score, and a 4.4% higher LTV than VA repeat buyers. VA repeat buyers faced a slightly lower interest rate than VA first-time homebuyers. FHA’s first-time homebuyers are much more like their repeat buyers, with only 4.8% smaller loans and 2.4% higher LTVs. Because FHA provides one of few credit options for borrowers with lower credit scores, repeat borrowers with weaker credit profiles are often limited to FHA financing; FHA’s repeat buyers have similar credit scores compared to their first-time home buyers.

**Figure 44. First-time Homebuyer Share: Ginnie Mae Breakdown**



**Table 24. Ginnie Mae First-Time Homebuyer Share Breakdown Summary**

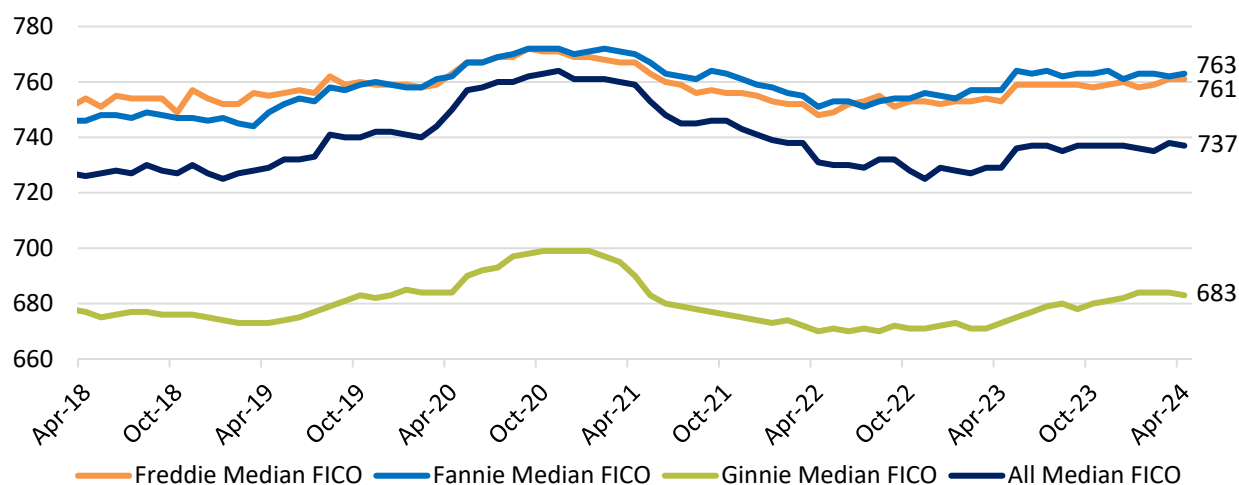
	FHA		VA		Other		Total	
	First-Time	Repeat	First-Time	Repeat	First-Time	Repeat	First-Time	Repeat
<b>Loan Amount \$</b>	\$317,795	\$333,813	\$344,372	\$413,471	\$195,118	\$202,518	\$319,282	\$375,052
<b>Credit Score</b>	688	691	711	738	699	705	695	717
<b>LTV (%)</b>	96.5%	94.1%	98.5%	94.1%	98.2%	98.0%	97.1%	94.2%
<b>DTI (%)</b>	45.0%	46.6%	43.3%	44.9%	35.4%	35.5%	44.1%	45.4%
<b>Loan Rate (%)</b>	6.4%	6.3%	6.3%	6.2%	6.5%	6.5%	6.4%	6.3%

Sources: Fannie Mae, Freddie Mac, and Ginnie Mae disclosure files as of April 2024. Note: LTV, DTI, and Loan Rate are rounded to nearest tenth.

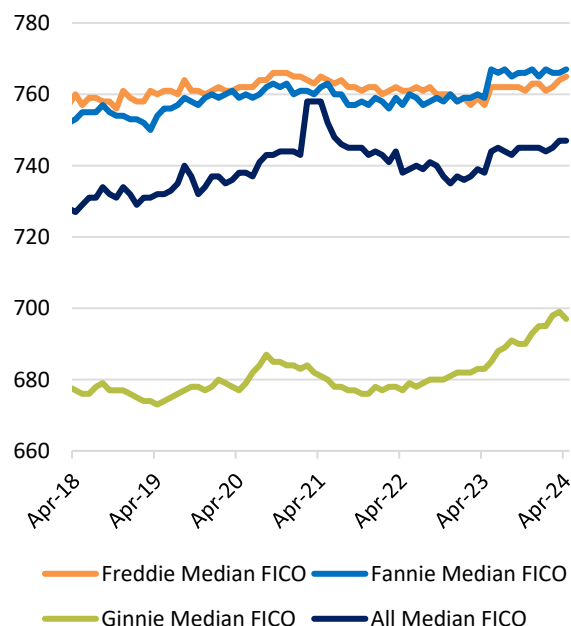
## 10.7 Credit Box: Historical

The median FICO score for all agency loans originated as of month-end April 2024 was 737, which represents an 8-point increase from April 2023. Ginnie Mae median FICO scores increased 10 points from 673 in April 2023 to 683 as of month-end April 2024. As of month-end April 2024, average FICO scores for refinances increased for Ginnie Mae and Freddie Mac borrowers by 6 and 17 points YoY, respectively.

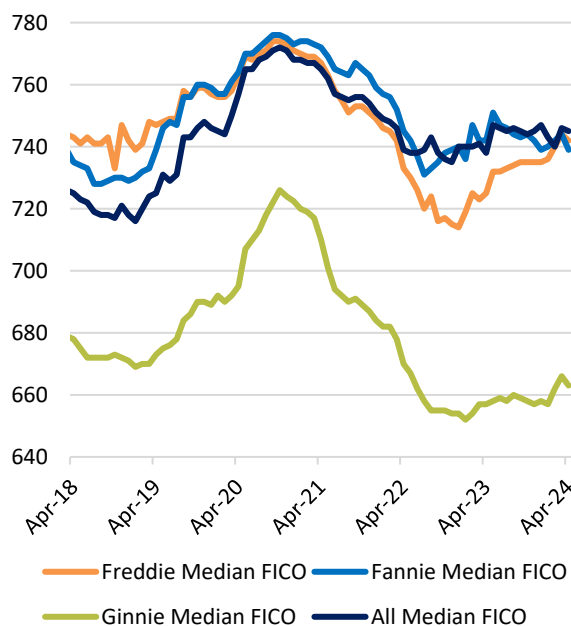
**Figure 45. FICO Scores for All Loans**



**Figure 46. FICO Scores for Purchase Loans**



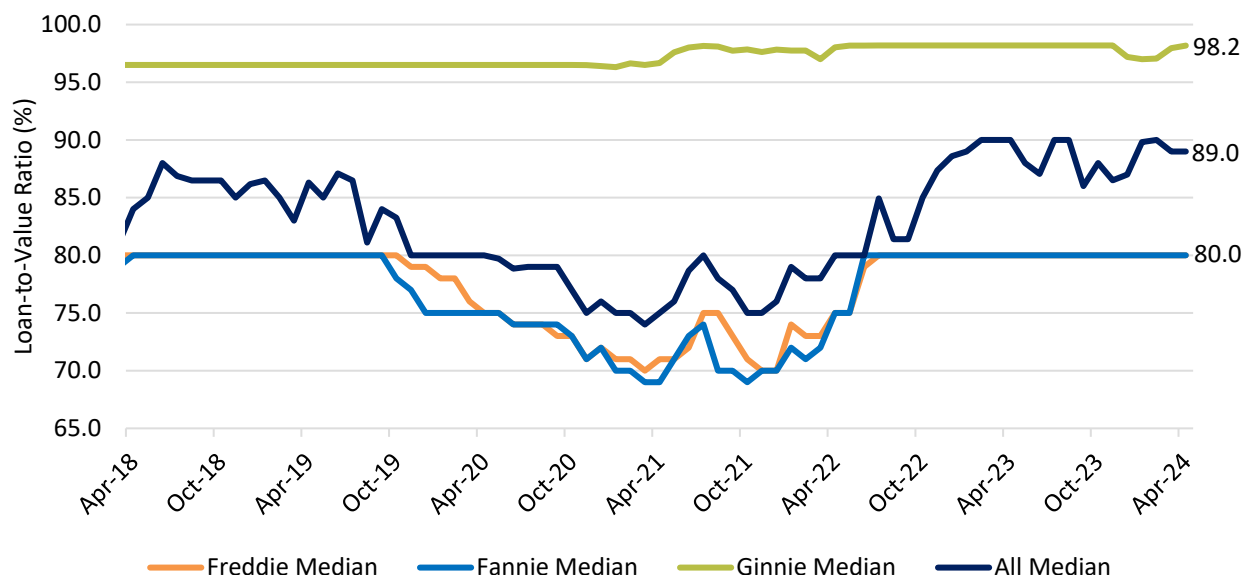
**Figure 47. FICO Scores for Refinance Loans**



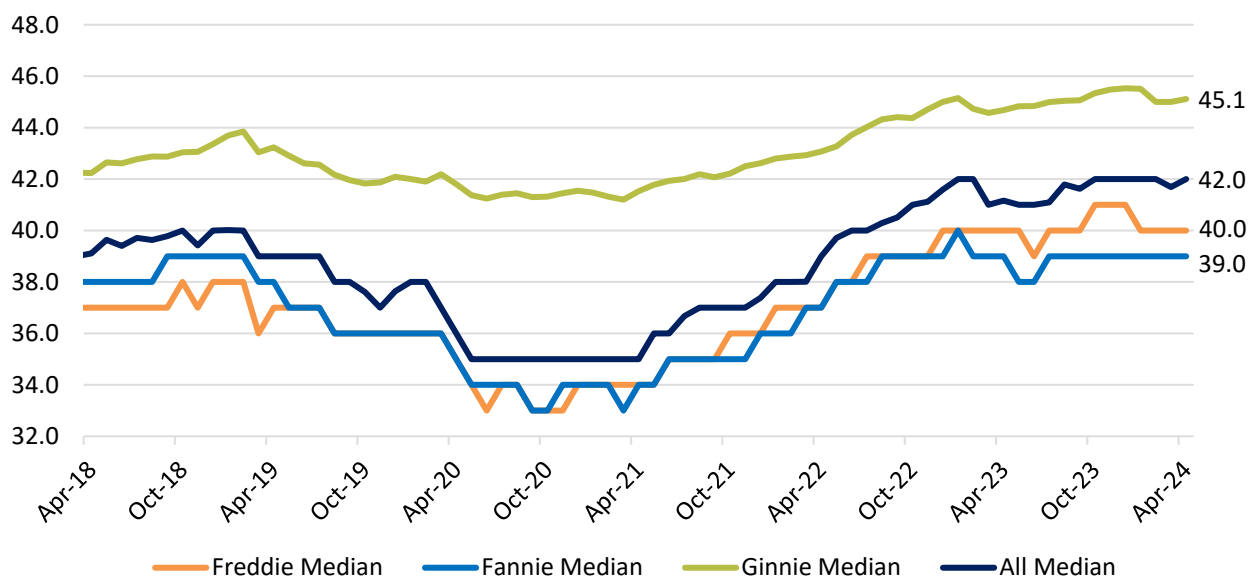
Sources: Fannie Mae, Freddie Mac, and Ginnie Mae disclosure files

In April 2024, the median LTV for Ginnie Mae loans was 98.2% compared to 80.0% for Fannie Mae and Freddie Mac, owing primarily to the lower down-payment requirements for government loan programs. Fannie Mae, Freddie Mac, and Ginnie Mae all saw their LTV ratios remain flat YoY from April 2023 to April 2024. In April 2024, median DTIs for Ginnie Mae, Freddie Mac, and Fannie Mae were 45.0%, 40.0%, and 39.0%, respectively. In April 2023, median DTIs for Ginnie Mae, Freddie Mac, and Fannie Mae were 44.6%, 39.0%, and 40.0%, respectively.

**Figure 48. LTV Ratio for All Loans**



**Figure 49. DTI Ratio for All Loans**



Sources: Fannie Mae, Freddie Mac, and Ginnie Mae disclosure files.



## 11 FORBEARANCE TRENDS

At the end of April 2024, 27,318 Ginnie Mae loans were in forbearance. The number of loans in forbearance removed from MBS pools in April was 120 while 27,198 loans in forbearance remained in pools. This represents a decrease in all categories for Ginnie Mae loans from the prior month. The median current principal balance for Ginnie Mae, FHA, and VA was higher for loans in forbearance originated by nonbanks than banks in all subsets.

**Tables 25-27. Forbearance Snapshot**

<i>All Loans in Forbearance – April 2024</i>						
	FICO Score*	Note Rate (%) *	Current Principal Balance Median	First Time Homebuyer Share (%)	Purchase Share (%)	Loan Count
<b>Ginnie</b>	649	4.4	201,428	75.1	76.1	27,318
<b>Bank</b>	669	4.4	161,000	81.8	90.4	4,387
<b>Nonbank</b>	647	4.4	210,063	74.0	74.0	22,889
<b>FHA</b>	649	4.4	195,184	77.4	77.8	23,697
<b>Bank</b>	668	4.5	160,015	83.6	90.8	4,071
<b>Nonbank</b>	646	4.4	202,713	76.3	75.6	19,588
<b>VA</b>	651	4.5	293,484	59.3	64.8	2,800
<b>Bank</b>	678	3.9	249,778	54.8	81.3	169
<b>Nonbank</b>	649	4.5	295,948	59.6	63.8	2,628

<i>Loans in Forbearance and Removed from Pools – April 2024</i>						
	FICO Score*	Note Rate (%) *	Current Principal Balance Median	First Time Homebuyer Share (%)	Purchase Share (%)	Loan Count
<b>Ginnie</b>	645	5.2	200,069	75.6	78.4	120
<b>Bank</b>	668	5.7	104,001	58.8	74.1	23
<b>Nonbank</b>	643	5.1	249,000	77.1	78.8	97
<b>FHA</b>	637	5.6	184,365	78.9	87.3	102
<b>Bank</b>	663	5.9	91,190	68.1	71.1	21
<b>Nonbank</b>	635	5.6	220,142	79.9	89.0	81
<b>VA</b>	679	3.7	333,644	50.8	44.0	14
<b>Bank</b>	727	3.8	117,677	0.0	100.0	1
<b>Nonbank</b>	678	3.7	343,082	53.4	42.7	13

<i>Loans in Forbearance that Remain in Pools – April 2024</i>						
	FICO Score*	Note Rate (%) *	Current Principal Balance Median	First Time Homebuyer Share (%)	Purchase Share (%)	Loan Count
<b>Ginnie</b>	649	4.4	201,435	75.1	76.1	27,198
<b>Bank</b>	669	4.4	161,356	81.9	90.4	4,364
<b>Nonbank</b>	647	4.4	209,989	73.9	74.0	22,792
<b>FHA</b>	649	4.4	195,203	77.4	77.7	23,595
<b>Bank</b>	668	4.5	160,596	83.7	90.9	4,050
<b>Nonbank</b>	646	4.4	202,699	76.3	75.5	19,507
<b>VA</b>	651	4.5	293,131	59.4	65.0	2,786
<b>Bank</b>	678	3.9	251,792	55.0	81.3	168
<b>Nonbank</b>	649	4.5	295,618	59.6	64.0	2,615

Sources: Ginnie Mae loan level MBS disclosure and forbearance file and Ginnie Mae Issuer Operational Performance Profile (IOPP) -Peer Group Listings. Notes: Data as of April 2024; \*Averages weighted by remaining principal balance of the loans. Rounded to nearest tenth.

## 12 HOLDERS OF GINNIE MAE MORTGAGE SERVICING RIGHTS

The 30 largest owners of mortgage servicing rights (MSR) by UPB for loans collateralizing Ginnie Mae MBS are shown in **Table 28**. The top 30 firms collectively own 87.8% of Ginnie Mae MSRs (see Cumulative Share). Twenty-one of these top 30 are non-depository institutions, the remaining nine are depository institutions. As of April 2024, over half (54.4%) of the Ginnie Mae MSRs are owned by the top six firms.

**Table 28. Top 30 Holders of Ginnie Mae Mortgage Servicing Rights (MSRs), by UPB**

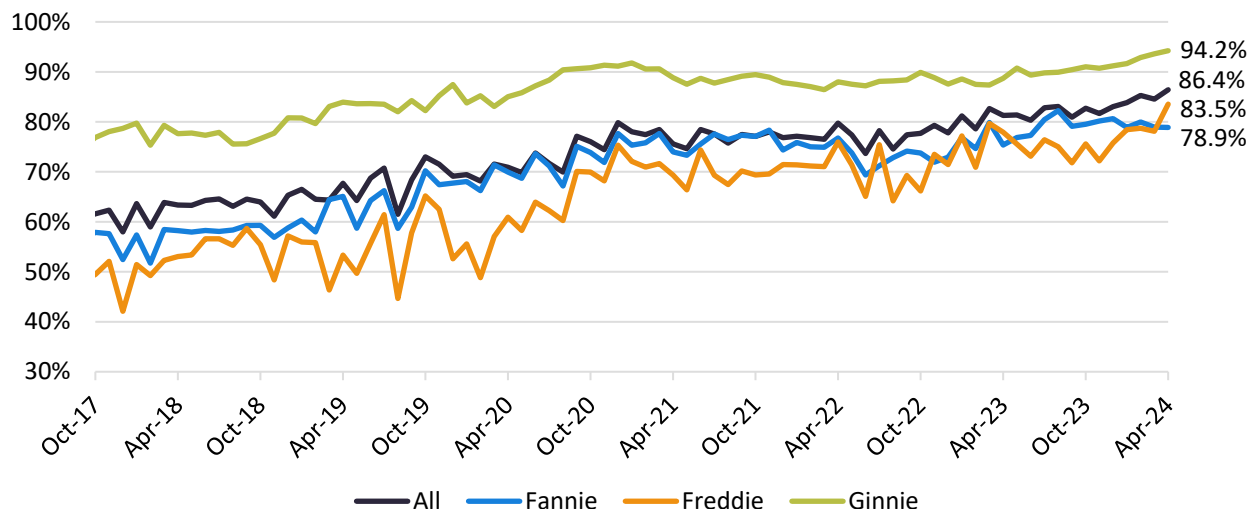
MSR Holder	Current	Rank Year prior	Change	UPB (\$)	Share	Cumulative Share	CPR	CDR
Lakeview Loan Servicing	1	1	↔	\$334,304,234,979	14.2%	14.2%	7.41%	1.64%
DBA Freedom Mortgage	2	2	↔	\$303,694,036,753	12.9%	27.0%	7.35%	0.71%
PennyMac Loan Service	3	3	↔	\$277,227,731,697	11.7%	38.8%	7.26%	1.23%
Newrez LLC	4	5	↑	\$130,612,761,135	5.5%	44.3%	6.66%	0.83%
Mr. Cooper (Nationstar)	5	4	↓	\$126,481,972,402	5.4%	49.6%	7.40%	1.29%
Carrington Mortgage	6	8	↑	\$113,298,466,875	4.8%	54.4%	6.86%	0.79%
Rocket Mortgage	7	7	↔	\$111,437,611,049	4.7%	59.2%	9.46%	0.39%
Wells Fargo Bank	8	6	↓	\$96,016,870,277	4.1%	63.2%	6.01%	0.24%
Planet Home Lending	9	10	↑	\$71,035,057,297	3.0%	66.2%	7.25%	0.41%
U.S. Bank	10	9	↓	\$56,720,398,746	2.4%	68.6%	5.65%	0.66%
United Wholesale Mortgage	11	11	↔	\$54,008,707,799	2.3%	70.9%	8.22%	1.32%
LoanDepot	12	12	↔	\$37,859,602,020	1.6%	72.5%	8.36%	1.16%
Navy Federal Credit Union	13	15	↑	\$32,400,113,459	1.4%	73.9%	5.47%	0.14%
Mortgage Research Center	14	14	↔	\$29,417,213,615	1.2%	75.1%	10.35%	0.80%
M&T Bank	15	N/R	↑	\$26,709,974,017	1.1%	76.3%	5.53%	0.55%
Guild Mortgage Company	16	16	↔	\$24,817,084,145	1.1%	77.3%	5.79%	0.44%
AmeriHome Mortgage	17	13	↓	\$23,355,766,375	1.0%	78.3%	8.88%	1.79%
The Money Source	18	17	↑	\$22,814,084,094	1.0%	79.3%	7.43%	0.89%
CrossCountry Mortgage	19	19	↔	\$22,264,366,137	0.9%	80.2%	8.77%	2.29%
Movement Mortgage	20	22	↑	\$21,716,575,331	0.9%	81.1%	7.40%	0.89%
New American Funding	21	20	↓	\$20,986,214,937	0.9%	82.0%	6.56%	0.75%
Truist Bank	22	18	↓	\$20,361,529,655	0.9%	82.9%	7.35%	1.09%
PHH Mortgage Corporation	23	25	↑	\$19,966,950,382	0.8%	83.7%	6.37%	1.00%
CMG Mortgage	24	23	↓	\$19,769,042,954	0.8%	84.6%	7.65%	1.75%
Idaho Housing and Finance	25	24	↓	\$18,309,356,531	0.8%	85.4%	4.52%	0.68%
Village Capital and Investment	26	21	↓	\$16,452,682,499	0.7%	86.1%	19.73%	3.63%
Citizens Bank	27	26	↓	\$13,866,929,094	0.6%	86.6%	6.58%	0.39%
MidFirst Bank	28	27	↓	\$11,295,000,663	0.5%	87.1%	8.23%	2.30%
JP Morgan Chase Bank	29	29	↔	\$10,075,887,995	0.4%	87.5%	5.88%	1.13%
PNC Bank	30	N/R	↑	\$6,409,211,270	0.3%	87.8%	6.55%	0.90%

Sources: Deloitte, Recursion. Notes: Data as of April 2024.

## 13 AGENCY NONBANK ORIGINATORS

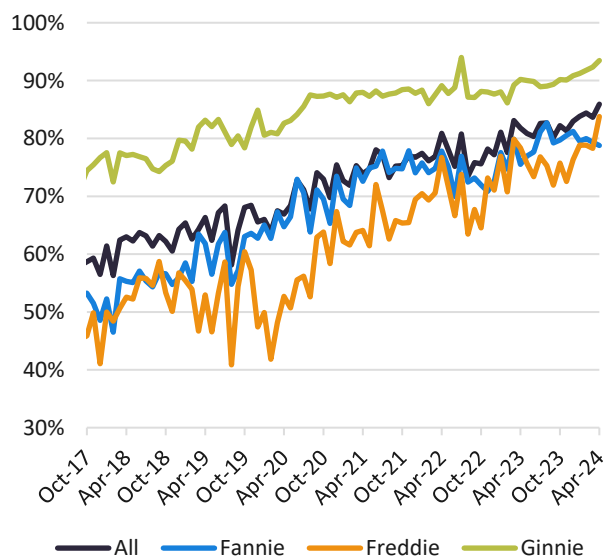
Total agency nonbank origination shares increased as of month-end April 2024 by approximately 2.2% MoM. The increase in nonbank origination share was driven by an increase in Freddie Mac, up 6.9% MoM, while Fannie Mae remained relatively stable. The Ginnie Mae nonbank share rose to 94.2% as of April 2024 and has remained consistently higher than the GSEs.

**Figure 50. Agency Nonbank Originator Share (All, Purchase, Refi)**



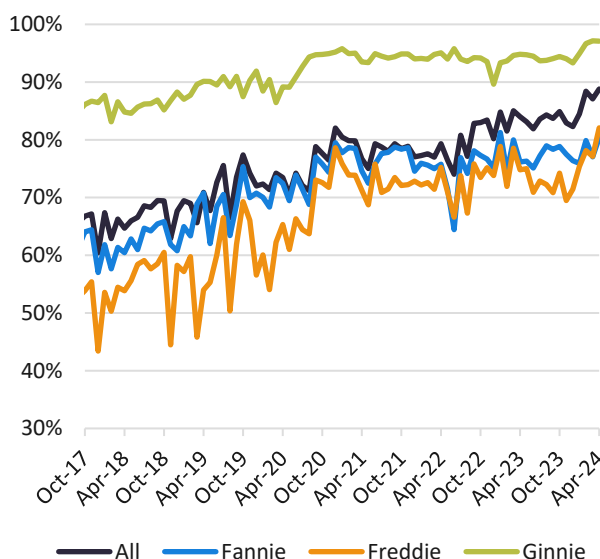
**Figure 51. Nonbank Origination Share:**

### Purchase Loans



**Figure 52. Nonbank Origination Share:**

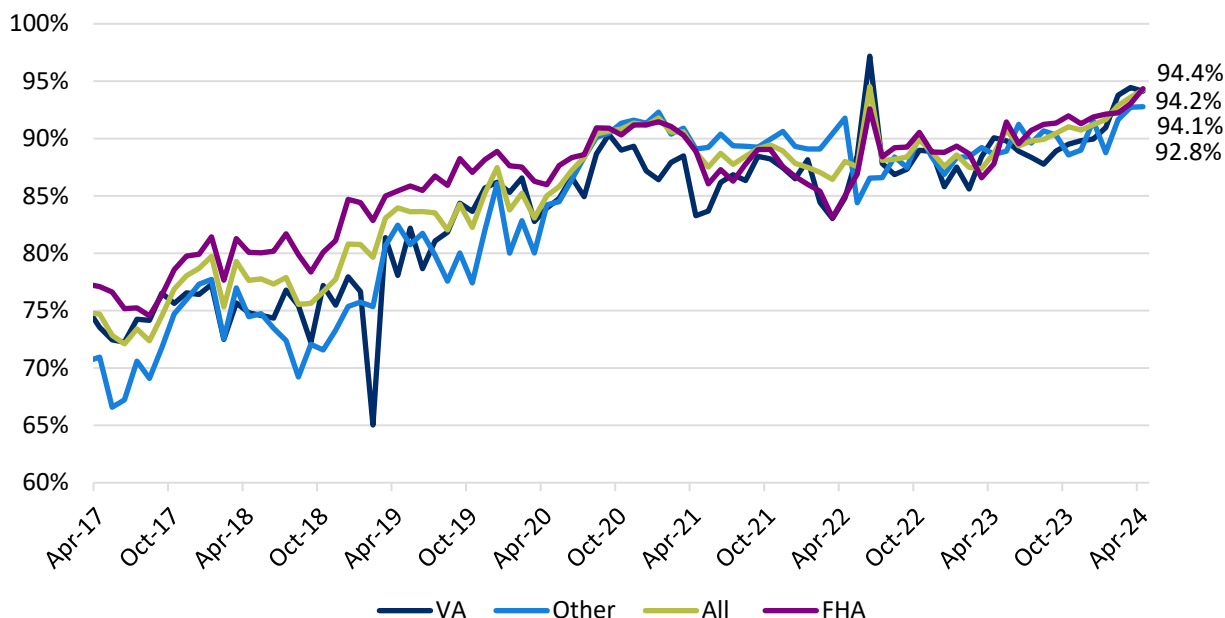
### Refi Loans



Source: Recursion. Notes: Data as of April 2024.

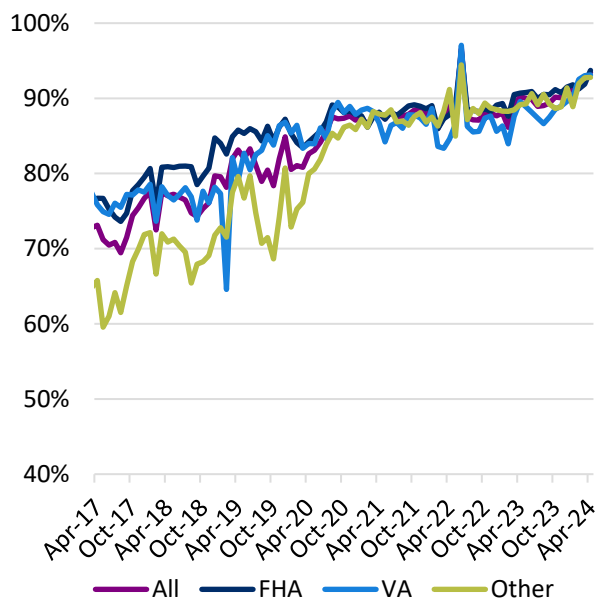
Ginnie Mae's total nonbank originator share remained relatively stable as of month-end April 2024. Ginnie Mae continues to have a high proportion of nonbank originations, with a rate of 94.2% in April 2024. The percentage of Ginnie Mae's "Other" nonbank refinanced loans decreased to 87.3% in April 2024.

**Figure 53. Ginnie Mae Nonbank Originator Share (All, Purchase, Refi)**



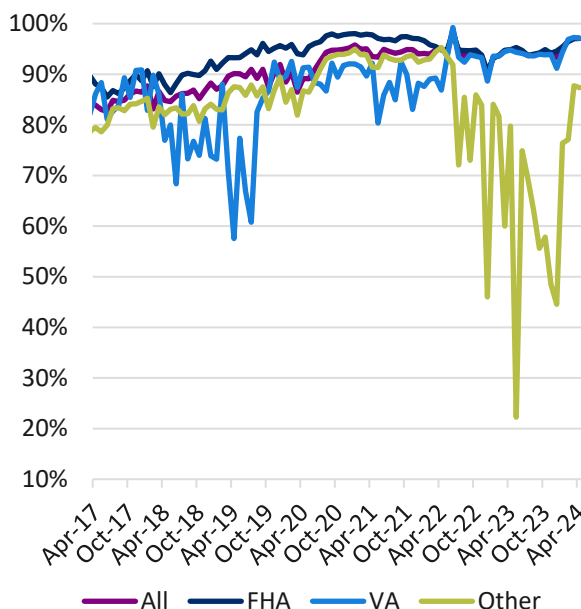
**Figure 54. Ginnie Mae Nonbank Share:**

**Purchase Loans**



**Figure 55. Ginnie Mae Nonbank Share:**

**Refi Loans**



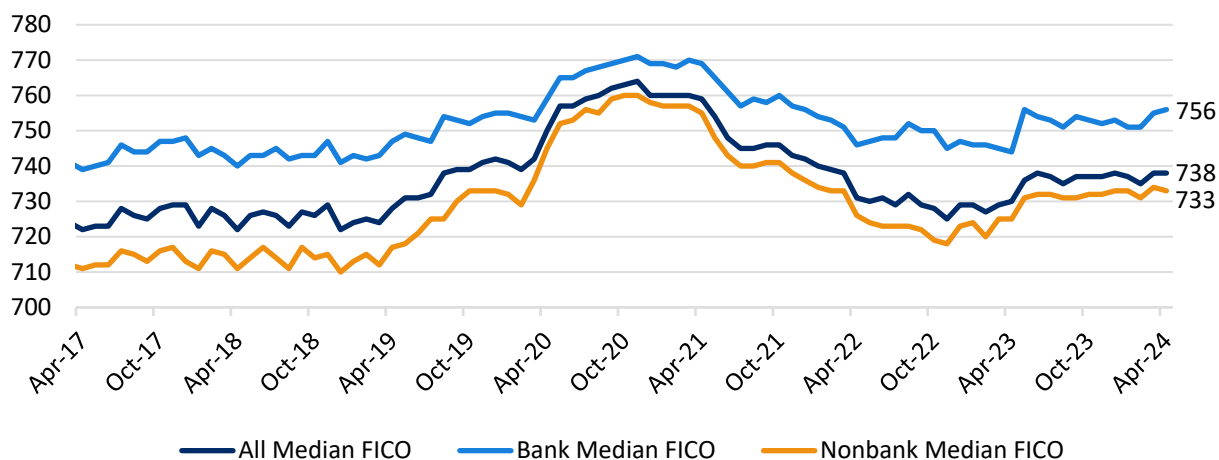
Source: Recursion. Notes: Data as of April 2024.

## 14 BANK VS. NONBANK ORIGINATORS HISTORICAL CREDIT BOX, GINNIE MAE VS. GSE

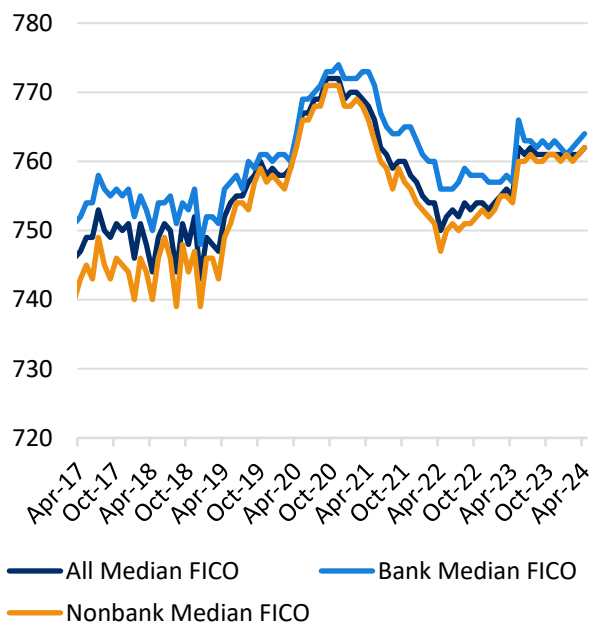
### 14.1.1 (FICO, LTV, DTI)

The mortgage loan originations of nonbanks continued to have a consistently lower median FICO score than their bank counterparts across all Agencies. The spread between nonbank and bank FICO scores increased to 23 from 21 bps between March 2024 to April 2024. The agency median FICO score remained stable at 738 in April 2024.

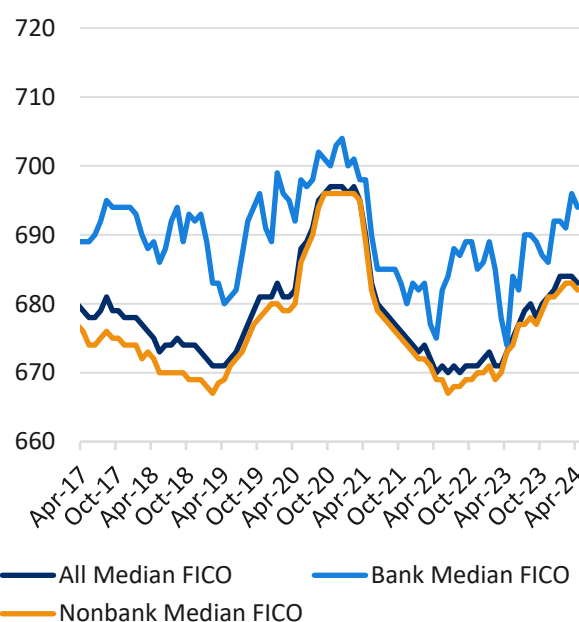
**Figure 56. Agency FICO: Bank vs. Nonbank**



**Figure 57. GSE FICO: Bank vs. Nonbank**



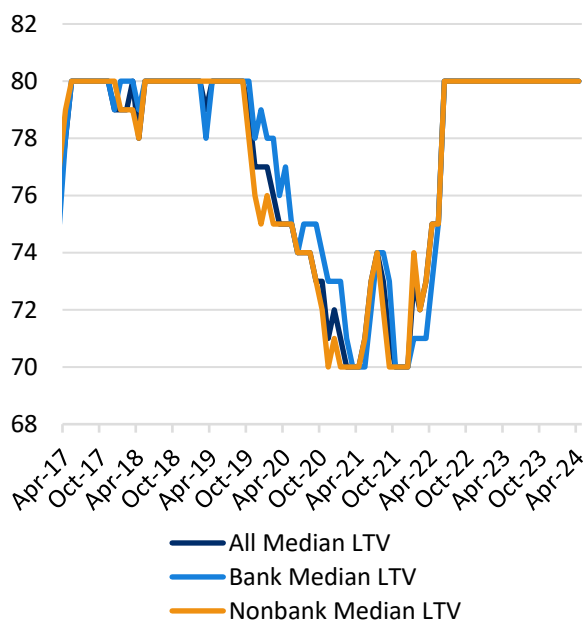
**Figure 58. Ginnie Mae FICO: Bank vs. Nonbank**



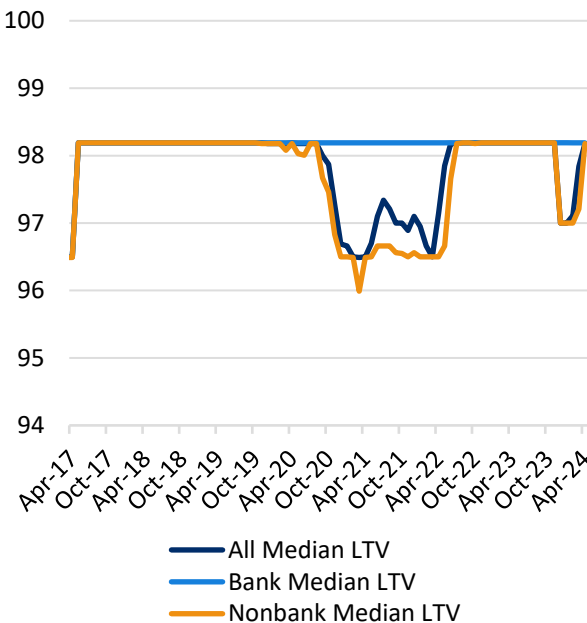
Source: Recursion; Notes: Data as of April 2024.

The median LTV for all GSE originators remained the same as of month-end April 2024 at 80.0%. Ginnie Mae median bank LTV remained flat at 98.2%, while nonbank LTV increased slightly to 98.2% as of month-end April 2024. Ginnie Mae median DTI also increased slightly to 45.3% through April 2024 in nonbank originations.

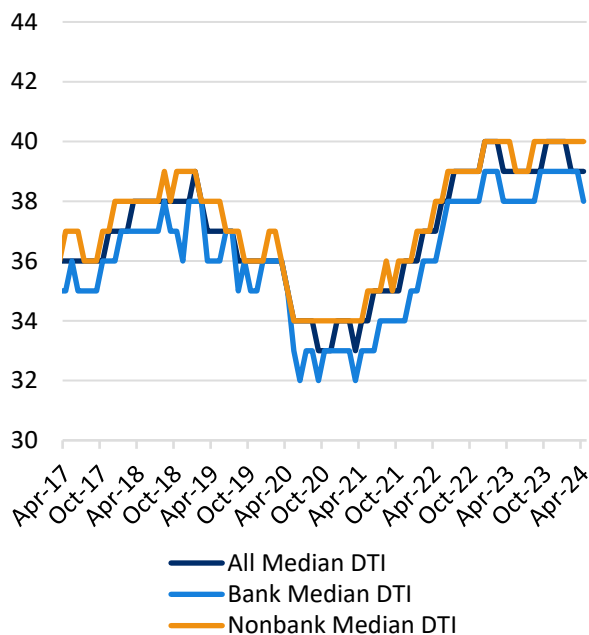
**Figure 59. GSE LTV: Bank vs. Nonbank**



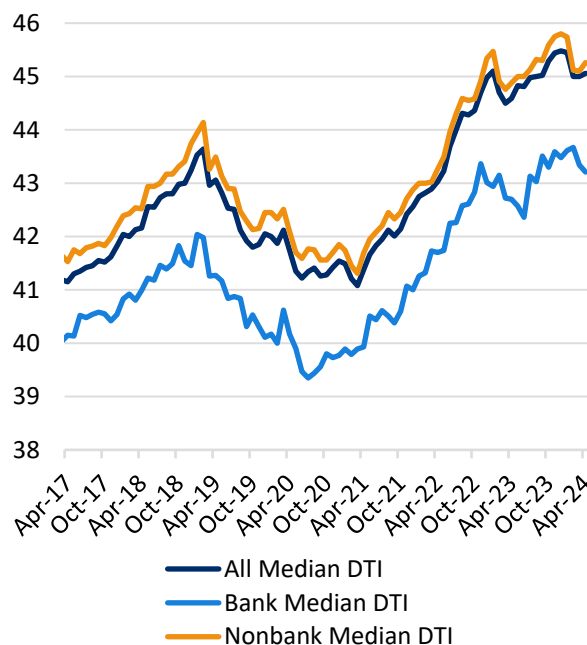
**Figure 60. Ginnie Mae LTV: Bank vs. Nonbank**



**Figure 61. GSE DTI: Bank vs. Nonbank**



**Figure 62. Ginnie Mae DTI: Bank vs. Nonbank**

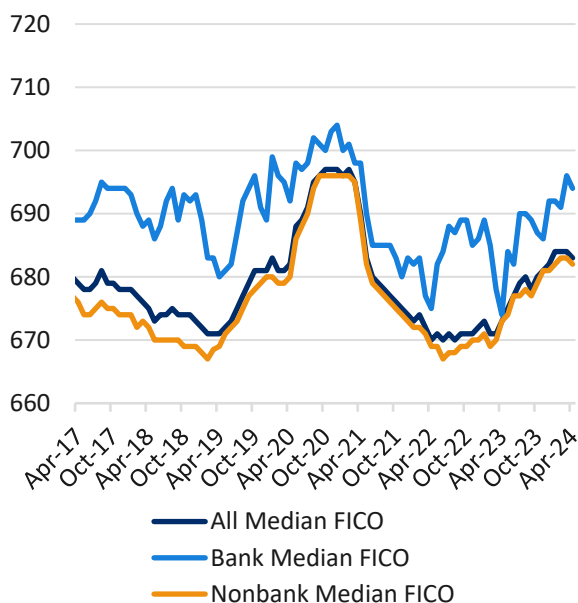


Source: Recursion. Notes: Data as of April 2024.

As of month-end April 2024, the median FICO score for Ginnie Mae bank originations decreased 2 points to 694 and nonbank decreased to 682. The median FICO score for all Ginnie originations fell to 683. The gap between banks and nonbanks is most apparent in “Other” lending (26-point spread).

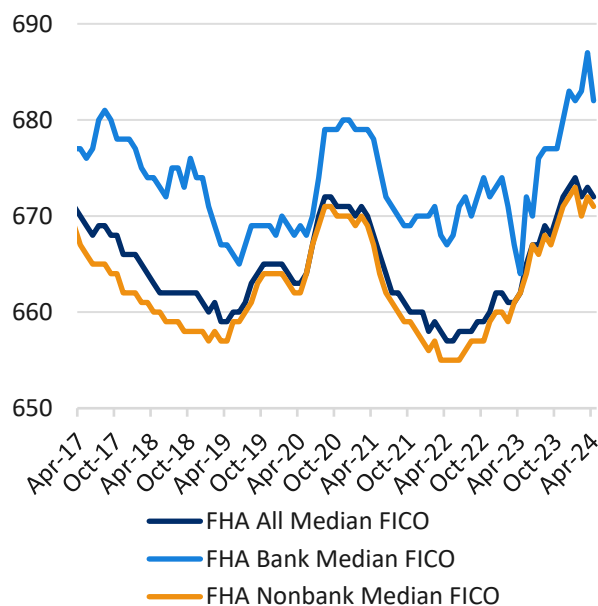
**Figure 63. Ginnie Mae FICO Score:**

**Bank vs. Nonbank**



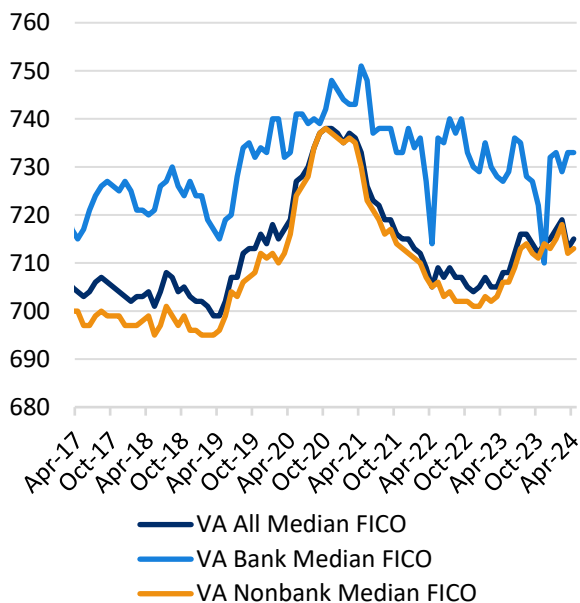
**Figure 64. Ginnie Mae FHA FICO Score:**

**Bank vs. Nonbank**



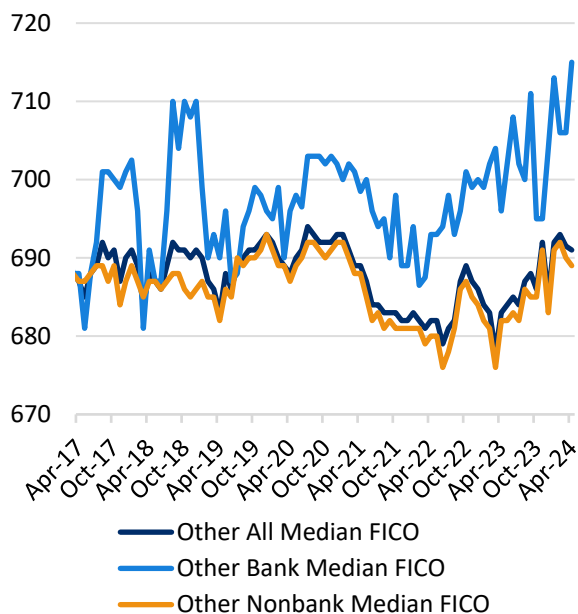
**Figure 65. Ginnie Mae VA FICO Score:**

**Bank vs. Nonbank**



**Figure 66. Ginnie Mae Other FICO Score:**

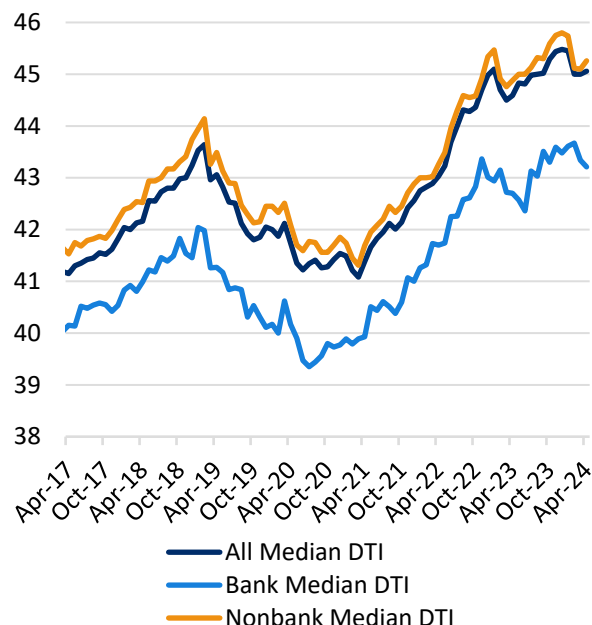
**Bank vs. Nonbank**



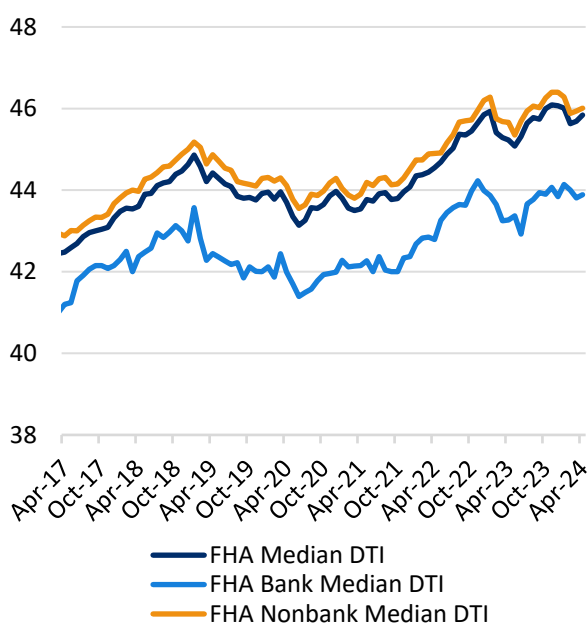
Source: Recursion. Notes: Data as of April 2024.

Median DTI for Ginnie Mae nonbank originations has been consistently higher than the median DTI for Ginnie Mae bank originations. This is a trend evident for all Ginnie Mae-eligible loan types except for the “Other” category, where the spread between median bank and nonbank DTI is relatively small.

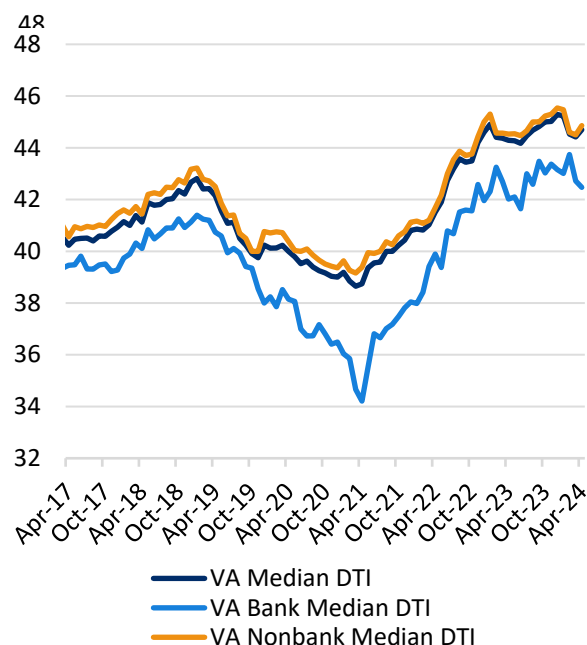
**Figure 67. Ginnie Mae DTI: Bank vs. Nonbank**



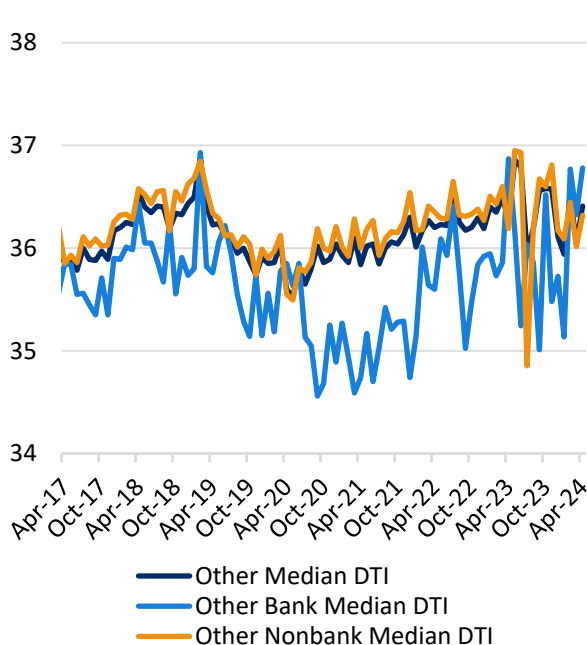
**Figure 68. Ginnie Mae FHA DTI: Bank vs. Nonbank**



**Figure 69. VA DTI: Bank vs. Nonbank**



**Figure 70. Other DTI: Bank vs. Nonbank**



Source: Recursion. Notes: Data as of April 2024.



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## 15 ENVIRONMENTAL, SOCIAL, AND GOVERNANCE

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Ginnie Mae Mortgage-Backed Securities are collateralized by loans that facilitate homeownership for low-to-moderate income (LMI) borrowers, veterans, rural borrowers, and others that traditionally experience challenges in their efforts to achieve homeownership or obtain housing. Ginnie Mae is enhancing their disclosures to provide insight into the extent that the securities they guarantee support meaningful environmental and social goals. The timeline below captures the efforts Ginnie Mae has taken to produce ESG disclosures in recent years.

May 2021	LMI “Social” Disclosures (% of loans in LMI Areas)
June 2021	Disclosures reveal approximately \$259 billion of Outstanding Ginnie Mae MBS categorized as LMI area loans as defined by HUD’s CDBG Program.
November 2021	Green “Environmental” Status Disclosures Announced identifies Green properties within Multifamily Pools.
March 2022	Full implementation of Green Status Field into Multifamily Disclosures
April 2022	Introduction of Affordable Status Disclosure for Multifamily properties
February 2023	Low-Moderate Income Borrower (LMIB) Disclosure Announced
September 2023	Social Bond Program Introduced
December 2023	ESG Page Enhancement for Platinum Pool Search Results

### 15.1 Environmental, Social, and Governance: A Summary

Ginnie Mae's guaranty of the securities provides a connection between the primary and secondary mortgage markets that promote access to mortgage credit throughout the Nation for residential and multifamily properties. The table below captures the outcomes Ginnie Mae has seen, both socially and environmentally, through its guaranty program.

**Table 29. ESG Metrics – MBS Portfolio (April 2024)**

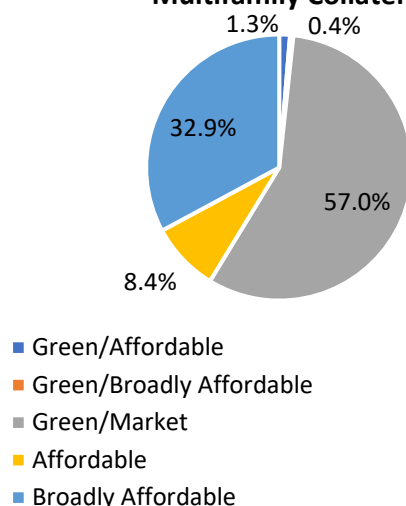
<b>Ginnie Mae's ESG Metrics – MBS Portfolio as of April 2024</b>			
	<b>Targeted Population</b>	<b>Positive Outcomes</b>	<b>Our Commitment</b>
<b>Social - Affordable</b>	FHA Borrowers – 6,978,859 VA Borrowers – 3,628,541 RHS Borrowers – 778,926 PIH Borrowers – 23,812	Loans under \$200K 6,515,092 Loans  First-Time Home Buyers 4,305,042 Loans  Down Payment Assistance 697,790 Loans	Ginnie Mae was established by Congress in 1968 to offer broad access to credit nationwide with a special emphasis on low- and moderate-income borrowers, and rural, inner-city, and underserved communities.  Ginnie Mae securitization provides a unique and sustainable service in making home ownership more affordable, accessible, and equitable for our nation. The proceeds from the sale of Ginnie Mae Primary Issuance MBS are a source of capital to finance the specific residential mortgage loans collateralizing the Ginnie Mae MBS.
	Low-to-Moderate Income Borrowers (LMI)	3,255,837 Loans	Ginnie Mae securitization collateral selection is restricted to agency insured mortgages from the following United States Government Agencies. These agencies are the: Federal Housing Administration (FHA), Department of Veterans Affairs (VA), United States Department of Agriculture's Rural Housing Service (USDA-RHS), and HUD Public and Indian Housing (PIH). The combination of these insuring agency programs and Ginnie Mae's guaranty enable housing outcomes for households who might otherwise not be able to obtain mortgage access.
	LMI Majority Census Tract Loans	1,745,900 Loans	
	Borrowers Facing Difficulties	791,569 modifications with over 749,324 in partial claims	Ginnie Mae has been integral to the federal actions to prevent foreclosure for homeowners experiencing financial hardship.
	Senior Citizens Aging in Place	275,950 Home Equity Convertible Mortgages (HECM) or Reverse	Ginnie Mae has developed the securities market for the FHA HECM (Reverse Mortgage) program which provides senior citizens a vehicle for accessing the equity in their homes.
	Multifamily Housing (MF)	1.316 million apartment homes 491,936 healthcare living units	Affordable rental housing is in critically short supply. Government lending and subsidy programs support preservation and creation of new affordable housing units nationwide.
	MF Affordable	5,000 MF loans are either Green, Affordable, or both	Ginnie Mae provides information to investors via its monthly bond disclosure on multifamily investments that meet FHA's MF Green Mortgage Insurance Premium (MIP) Discount Qualified Mortgages and those loans meeting FHA's MF Broadly Affordable and Affordable requirements.
	MF Green		
<b>Green</b>			

## 15.2 Environmental

**Table 30. UPB by ESG Status**

ESG Status	UPB	%
Green/Affordable	1,117,541,980	0.7%
Green/Broadly Affordable	345,314,234	0.2%
Green/Market	48,101,130,747	31.8%
Green Total	49,563,986,961	32.7%
Affordable <sup>6</sup>	7,052,396,292	4.7%
Broadly Affordable <sup>6</sup>	27,821,934,902	18.4%
Affordable Total	36,337,187,409	24.0%
ESG Total	84,438,318,155	55.7%
<b>Total</b>	<b>151,459,158,922</b>	<b>100.0%</b>

**Figure 71. Composition of Ginnie Mae Green Status and Affordable Multifamily Collateral**



Much of Ginnie Mae’s environmental impact is made through its Multifamily programs. Approximately 32% of Ginnie Mae collateral are “Green”-certified, as defined by the multiple organizations that sponsor and maintain green building certifications, including the U.S. Green Building Council, Energy Star, Greenpoint, and the National Green Building Standard, just to name a few. Additionally, roughly 24% of Ginnie Mae Multifamily collateral is “Affordable” or “Broadly Affordable”. In total 55.7% of Ginnie Mae’s Multifamily collateral is considered ESG.

## 15.3 Social

With the introduction of Ginnie Mae’s new social disclosures, investors can now identify the number of underlying loans made to LMI borrowers, the percentage of LMI loan count out of total loan count, the unpaid principal balance (UPB) of LMI loans in the MBS, and the percentage of LMI UPB out of total MBS UPB. The borrower household income and address data, received from the government’s insuring and guarantying agencies, is compared against the appropriate Federal Financial Institution’s Examination Council (FFIEC) Area Median Income (AMI) database by loan origination year. If the borrower income is less than 80% of the AMI value in the associated census tract, their mortgage will be flagged as an LMI loan. In September 2023, Ginnie Mae launched its Social Bond update to its Single-Family Forward MBS program and its Social Impact and Sustainability Framework. These enhancements highlight the structural aspects of Ginnie Mae’s mission and program to expand broader access to mortgage financing, affordable homeownership, and rental opportunities for historically underserved communities. In December 2023, Ginnie Mae added Low/Moderate Geographic Area Values and Low/Moderate Borrower Income Values to its Platinum pool securities including UPB amount and UPB percentage.

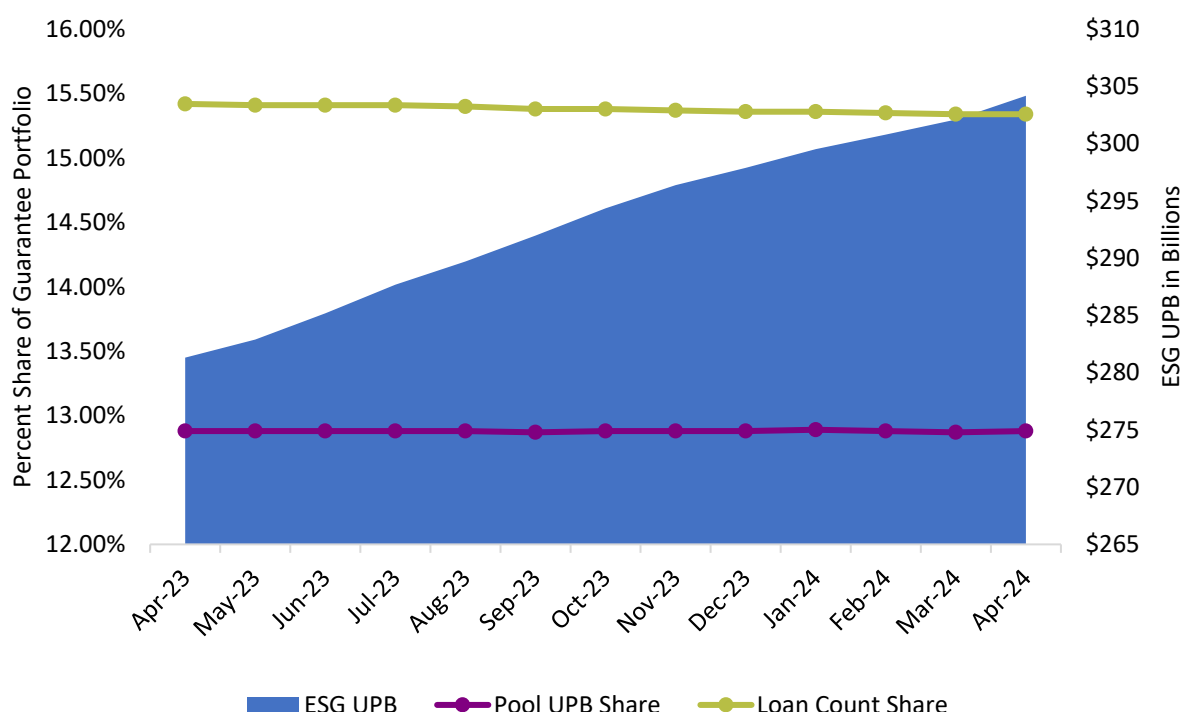
Sources: Ginnie Mae Disclosures as of April 2024, [https://www.hud.gov/program\\_offices/housing/mfh/green](https://www.hud.gov/program_offices/housing/mfh/green)

<sup>6</sup> “Affordable” and “Broadly Affordable” removes “Green/Affordable” and “Green/Broadly Affordable” from the UPB total.

### 15.3.1 LOW-TO-MODERATE INCOME BORROWERS

Roughly \$304 billion of Ginnie Mae Single-Family collateral and over 1.7 million loans outstanding have been issued to low to moderate income borrowers. Total ESG UPB increased by approximately \$23 billion YoY.

**Figure 72. ESG Share of the Outstanding SF Portfolio**



Source: Ginnie Mae Disclosures as of April 2024

The UPB of pools that are made up of 20% or more LMI loans make up over 9% of total pool UPB. These pools have slightly higher LTV's, marginally lower FICO scores, and substantially lower loan sizes than pools made up of less than 20% LMI loans. The UPB of pools that are made up of less than 20% LMI loans make up roughly 91% of total UPB.

**Table 31. Percent LMI by Pool Share**

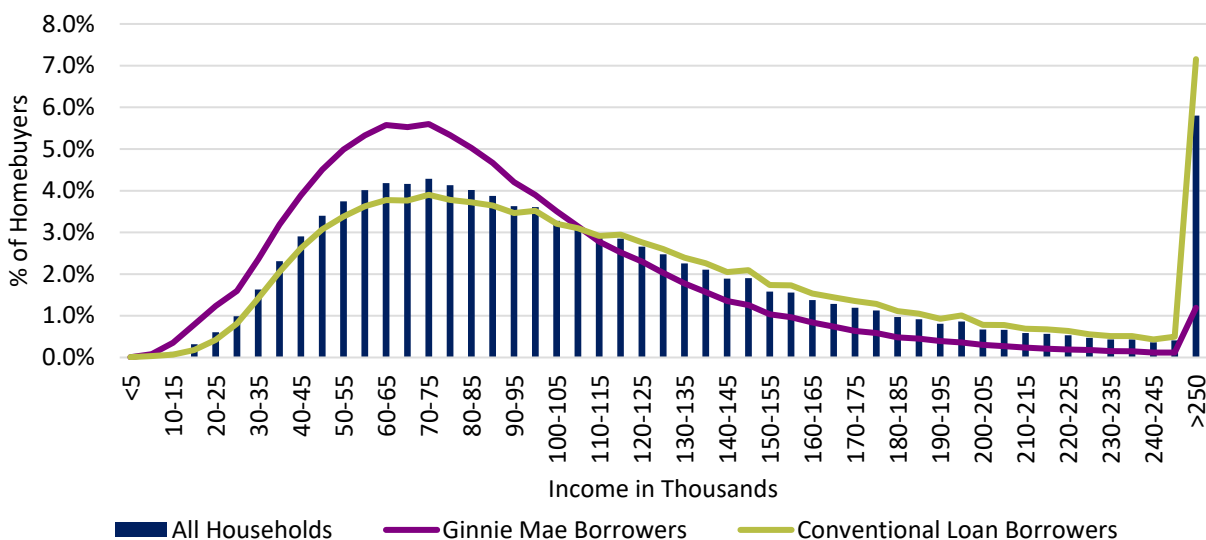
Metric	LMI Pool Share >50%	LMI Pool Share 20% - 50%	LMI Share < 20%	All Pools
Total UPB (\$ billions)	\$8.6	\$206.9	\$2,094.2	\$2,309.7
Average Original Loan Size	\$180,042	\$195,692	\$341,663	\$327,985
Credit Score (Median)	674	675	679	677
DTI (Median)	41%	40%	41%	41%
LTV (Median)	97%	96%	95%	96%
Interest Rate (WA)	4.84%	4.71%	3.99%	4.06%

Source: Ginnie Mae Disclosures as of April 2024

### 15.3.2 PURCHASE AND REFINANCE ORIGINATION BY INCOME BRACKET

Over 18% of all purchase and refinance loan originations guaranteed by Ginnie Mae are to households with income less than \$50,000 compared to 10.7% of the Government Sponsored Entities (GSE's) Single-Family guarantee portfolio. Additionally, over 68% of these loan originations guaranteed by Ginnie Mae are to households with income less than \$100,000 compared to 47.3% at the GSE's.

**Figure 73. Income Distribution of Homebuyers Served Under Ginnie Mae Program**



Source: Home Mortgage Disclosure Act (HMDA) data as of 2022

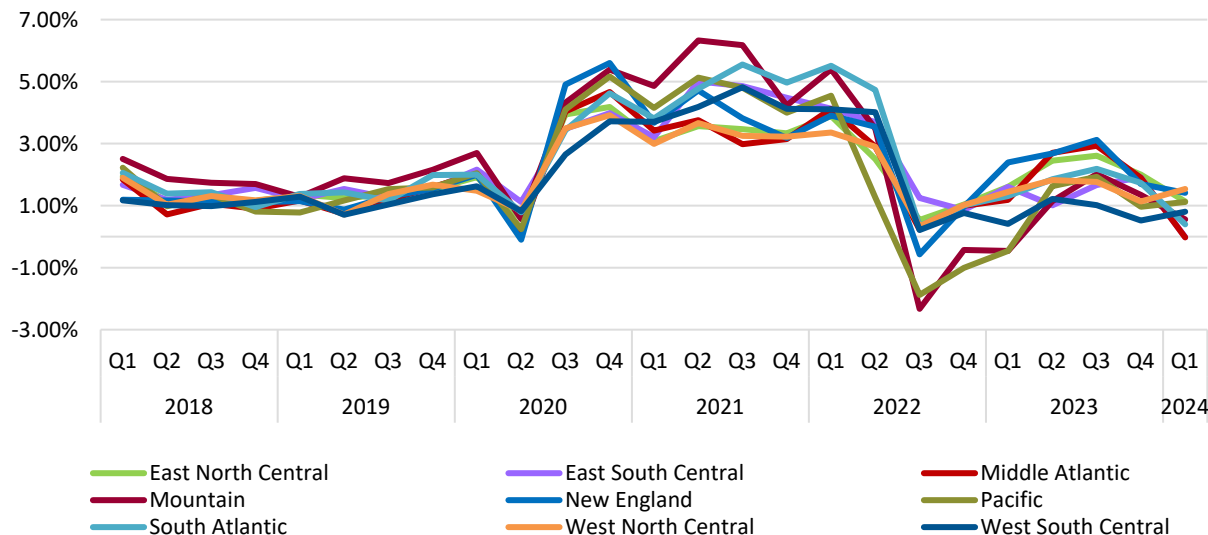
## U.S. HOUSING MARKET

### 16 HOUSING AFFORDABILITY

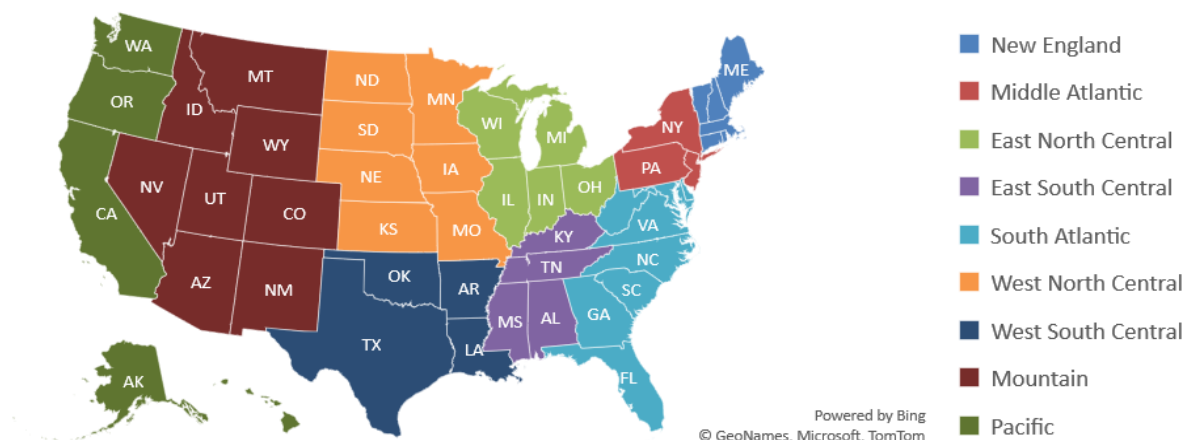
#### 16.1 Housing Affordability – Home Price Appreciation

Quarterly home prices increased in seven of the nine regions in Q1 2024. The New England and West North Central regions saw the largest quarterly appreciation in the home price index (HPI) of 1.54% and 1.41%, respectively. The East South Central and Middle Atlantic regions saw a QoQ decrease in HPI of around 0.02% each. The New England region has appreciated more than any other region over the past year, increasing by 9.21% from Q1 2023 to Q1 2024. The United States collectively saw a 6.6% rise in HPI YoY; up from a 4.63% YoY HPI in Q1 2023.

**Figure 74. Regional HPI Trend Analysis Q/Q**



**Figure 75. FHFA U.S. Census Subregions as defined by the U.S. Census Bureau**

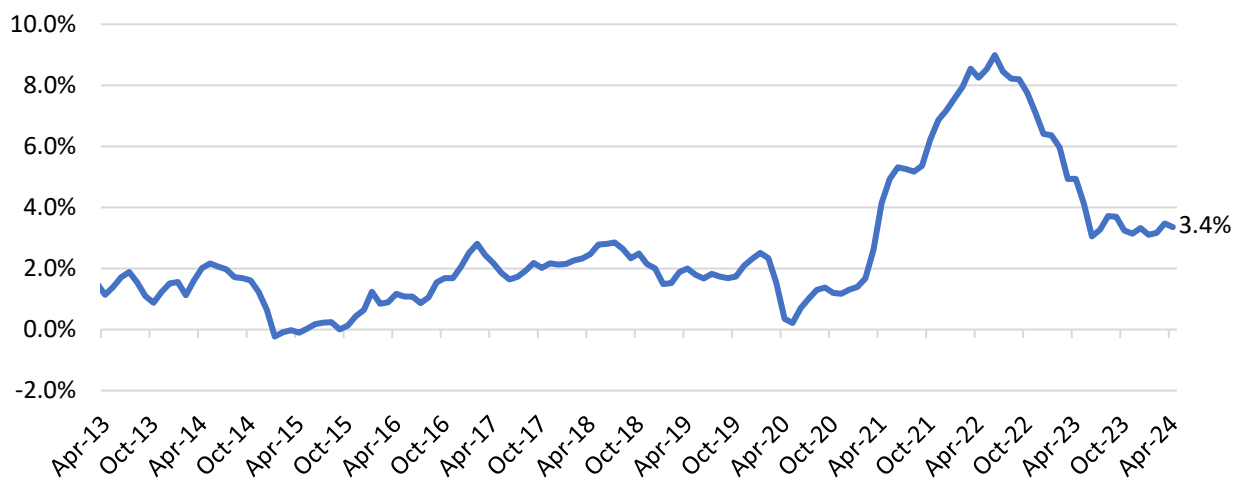


Source: HPI data from FHFA and is seasonally adjusted. U.S. Census Subregions as defined by the U.S. Census Bureau.

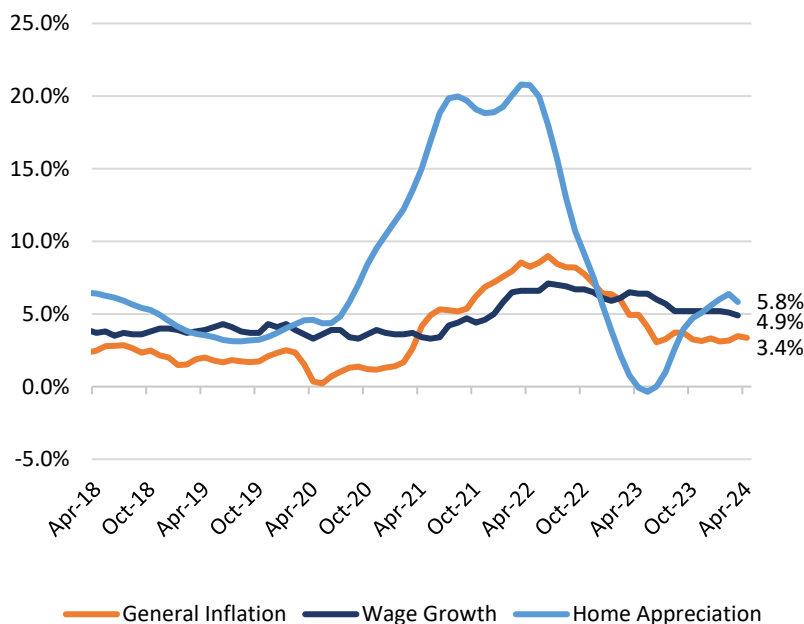
## 16.2 Housing Affordability – Inflation, Wages, and the Price of Real Estate

As of month-end April 2024, YoY inflation was 3.4%, decreasing from 3.5% in the month prior. Nationally, rents are up 0.77% YoY as of month-end March 2024. The MoM change in rents from February 2024 to March 2024 increased by 0.30%. YoY change in wage growth declined for the second consecutive month, printing at 4.9% at month-end March 2024. Month-end March 2024 reporting data shows YoY home price appreciation increased to 5.8% from a 0.8% YoY change in March 2023.

**Figure 76. Inflation | 12-Month Percent Change in CPI**



**Figure 77. Asset Price Appreciation vs. Wage Increases**



Metric	Statistic
General Inflation	3.4%
Home Price Appreciation (YoY)	5.8%
Rental Price Appreciation (Median Rent Change YoY)	0.77%
Wage Growth	4.9%

Sources: Bureau of Labor Statistics – Consumer Price Index; Federal Reserve Bank of Atlanta, Research and Data – Wage-Growth Data; Rent.com – Rental Price Appreciation; S&P/Case-Schiller U.S. National Home Price Index – Home Price Appreciation.

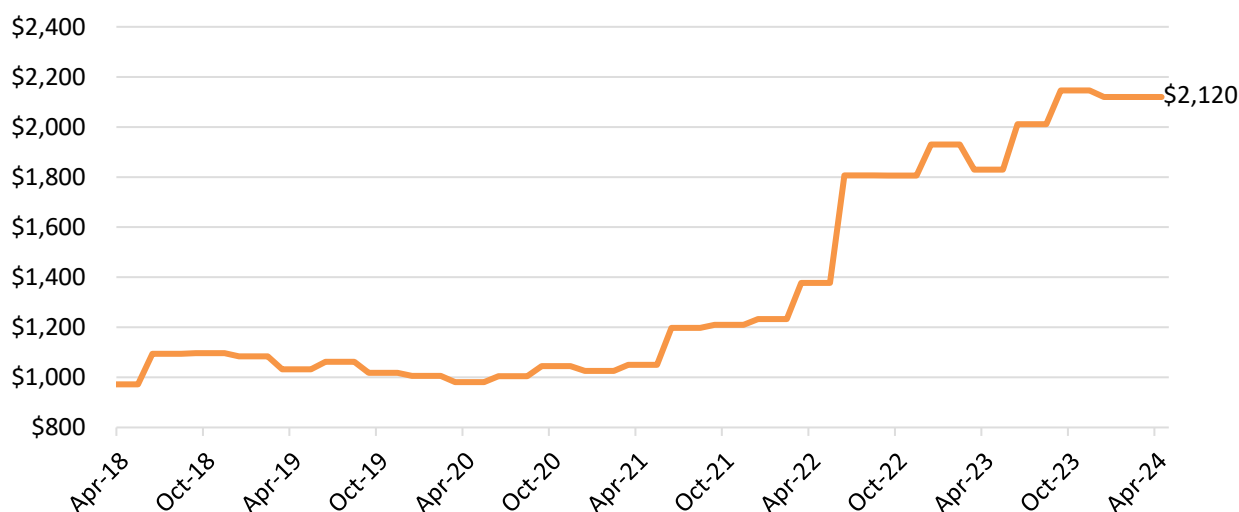
### 16.2.1 HOUSING AFFORDABILITY – AFFORDABILITY INDEX

As of month-end April 2024, the Homebuyer Affordability Fixed Mortgage Index (HAFM) was 103.0 and the First-Time Homebuyer Monthly Payment (FTMP), which represents the median payment for first-time homebuyers, was \$2,120. The Homebuyer Affordability Fixed Mortgage Index indicated no YoY change from its value of 103.0 in April 2023, while the monthly payments for first-time homebuyers increased approximately 15.9% YoY. HAFM has decreased 45.2% and FTMP has increased 106.6% since January 2021.

**Figure 78. Homebuyer Affordability Index**



**Figure 79. First-Time Homebuyer Monthly Payment**



Source: Bloomberg as of April 2024. Note: Housing Affordability Index: Value of 100 means that a family with the median income has exactly enough income to qualify for a mortgage on a median-priced home. An index above 100 signifies that a family earning the median income has more than enough income to qualify for a mortgage loan on a median-priced home, assuming a 20 percent down payment. This index is calculated for fixed rate mortgages.



## 16.2.2 HOUSING AFFORDABILITY – MORTGAGE RATE TRENDS

The Federal Reserve maintained the Federal Funds target rate on May 1, 2024, at a range of 5.25% and 5.50% per the FOMC<sup>7</sup>. As of May 16, 2024, the average 30-year and 15-year fixed rate mortgage rates were 7.02% and 6.28%, respectively. The average 30-year fixed rate mortgage rate decreased 8 bps and the average 15-year fixed rate mortgage rate decreased 11 bps from April 14, 2024.

**Figure 80. Average Fixed Rate Mortgage Rates**



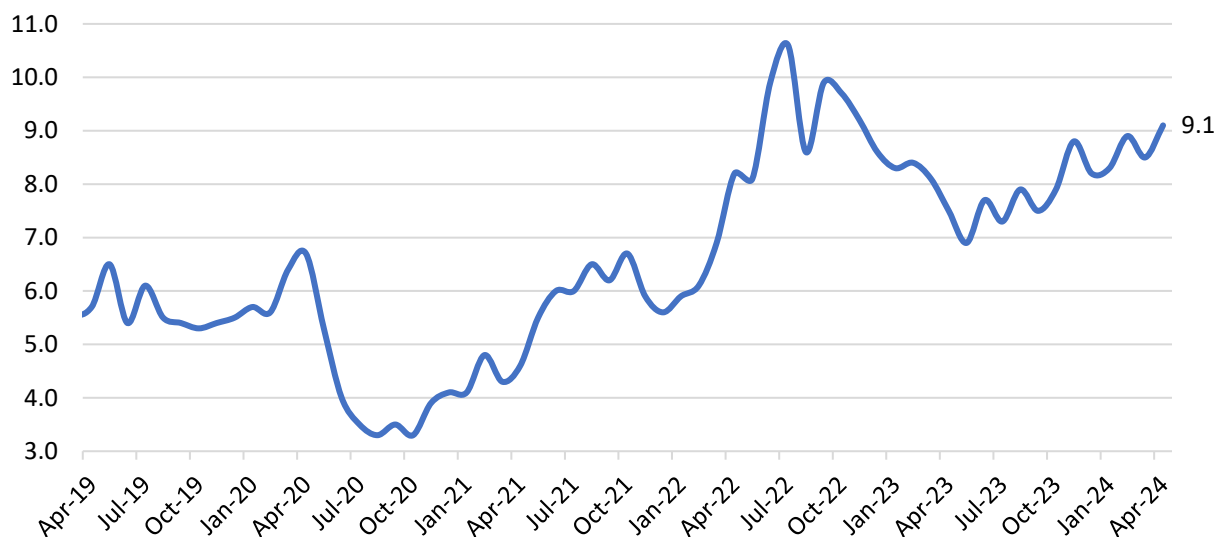
Source: FRED data as of May 2024

<sup>7</sup>[Federal Reserve Board - Federal Reserve issues FOMC statement](#)

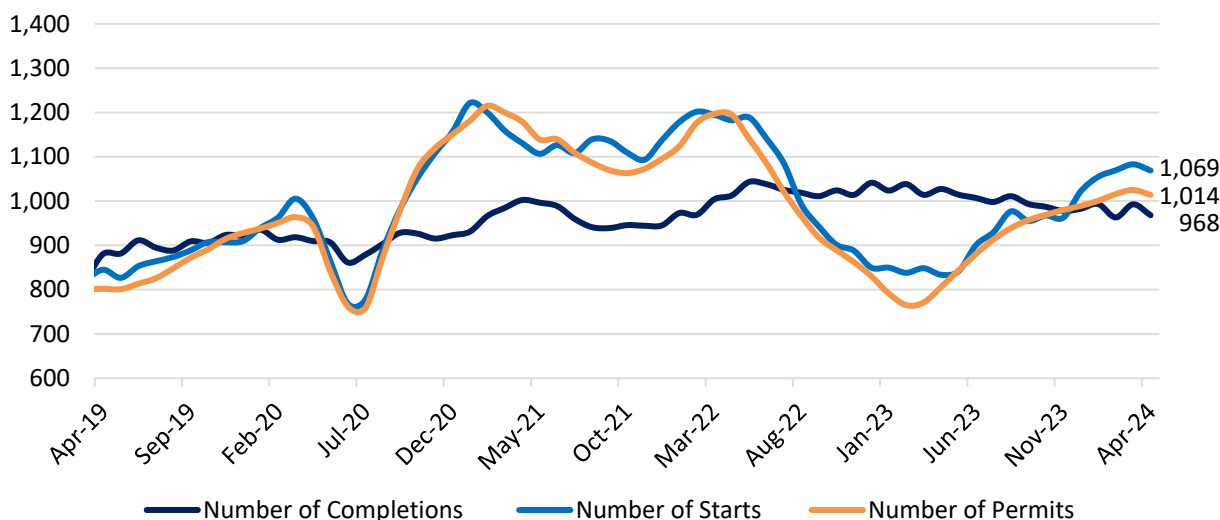
## 16.3 Housing Inventory

As of April 2024, there were 9.1 months of housing inventory on the market, increasing 7.1% MoM from an adjusted 8.5 months in March 2024. As housing affordability continues to remain low (See above [Section 16.2.1](#)) Single-Family home sales are unlikely to play a large role in the resolution of the housing shortfall. **Figures 82 and 83** show Single-Family and Multifamily Housing metrics, including the number of permits, starts, and completions. From April 2023 to April 2024, the number of Single-Family completions fell 5.8%, while the number of starts and permits increased 28.2% and 25.8%, respectively. Multifamily metrics show that from April 2023 to April 2024, the number of completions increased 26.2%, while the number of starts and permits decreased 38.2% and 29.2%, respectively.

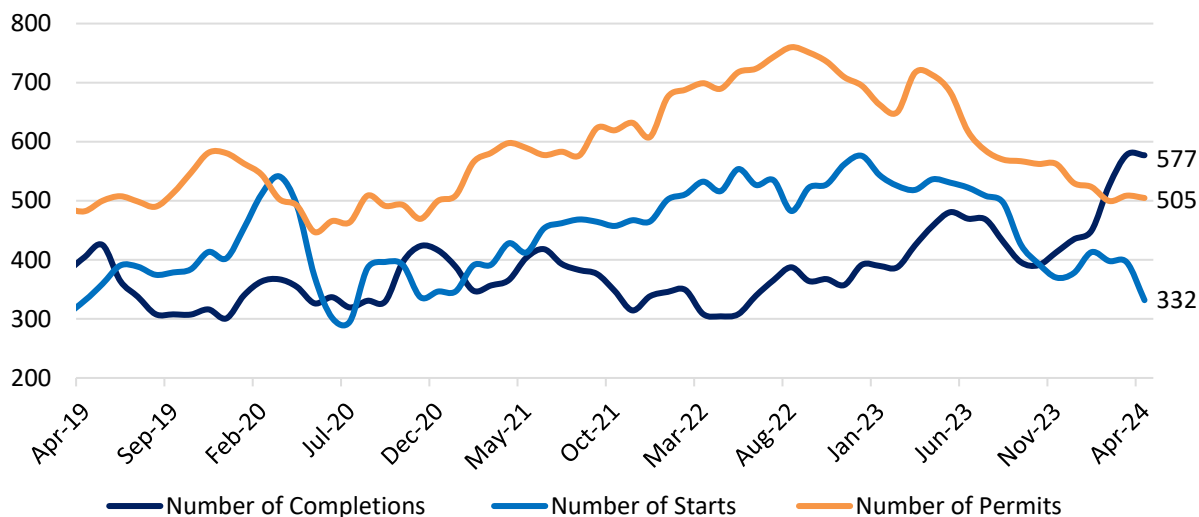
**Figure 81. Single-Family Housing Inventory**



**Figure 82. Single-Family Construction Metrics: Permits, Starts, Completions**



**Figure 83. Multifamily Constructions Metrics: Permits, Starts, Completions**

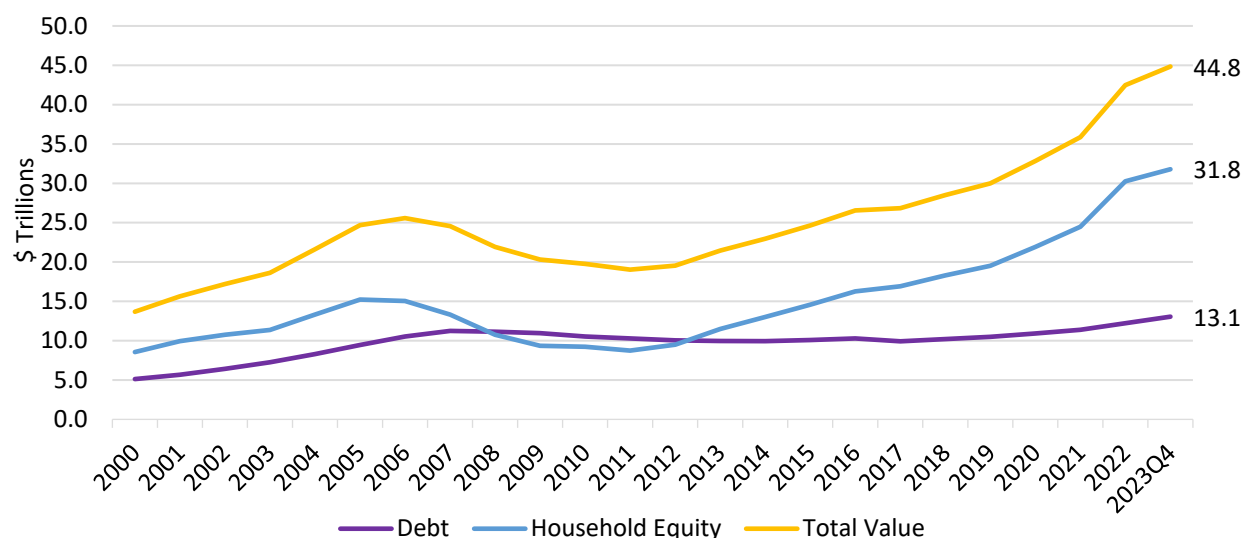


Source: FRED. Figure 80: data as of April 2024. New Residential Construction, U.S. Census Bureau. Figure 82 & 83: data as of April 2024. Note: Figures 82 & 83 are calculated using a 3-month moving average to identify underlying trends in construction metrics.

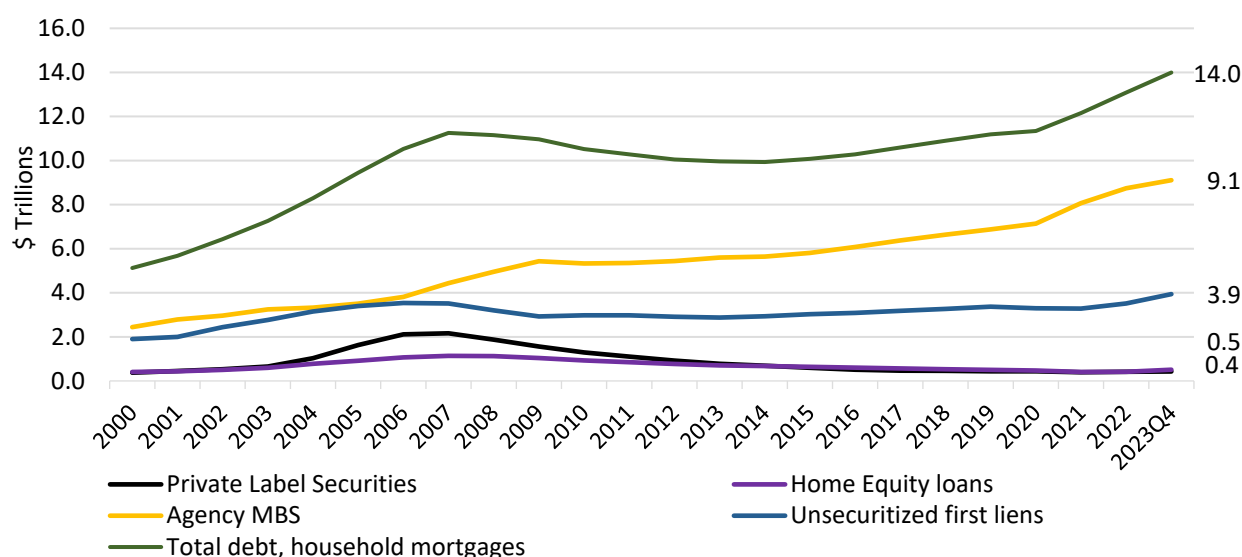
## 16.4 Size and Value of the U.S. Housing Market

The total value of the Single-Family housing market decreased from \$45.5 trillion in Q3 2023 to \$44.8 trillion in Q4 2023. The total value of the US housing market is up approximately 136% from its trough in 2011. From Q4 2022 to Q4 2023 mortgage debt outstanding increased from \$12.5 trillion to \$13.1 trillion and household equity increased from \$30.9 trillion to \$31.8 trillion. Agency Single-Family MBS continues to account for a growing percentage of the total mortgage debt outstanding, at roughly \$9.1 trillion in Q4 2023 it represents more than 65% of total mortgage debt, up from just 52% in 2011.

**Figure 84. Value of the U.S. Housing Market**



**Figure 85. Size of the U.S. Residential Mortgage Market**



Source: Federal Reserve Flow of Funds Data as of Q4 2023. Total debt in figure 85 includes additional Nonfinancial corporate/noncorporate business mortgages which is not included in the calculation for "debt" for figure 84.

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## 17 DISCLOSURE

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