

# ***GLOBAL MARKETS ANALYSIS REPORT***

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



**September 2024**

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

The September 2024 *Highlights* cover the Federal Open Market Committee's (FOMC) September meeting decision to lower their target rate range for the first time in several years. The Highlights explore key developments in the market resulting from the decision, as well as insights into how market participants can further influence fixed income product yields from evolving expectations in the mortgage market. Lastly, the *Highlights* touch on the broader mortgage market, such as trends in fixed-mortgage rates for different terms and refinance activity.

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

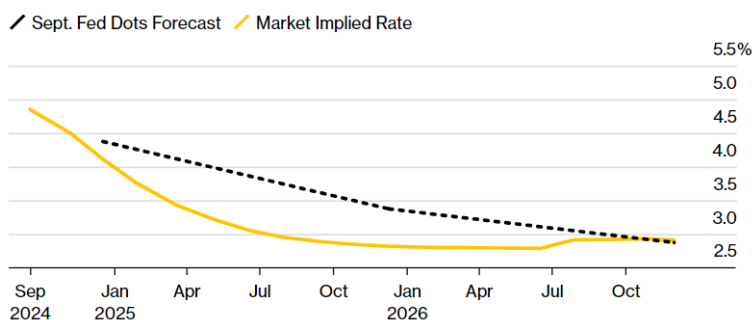
- The [Fixed Income Product Performance Comparisons](#) section shows that Ginnie Mae mortgage-backed securities (MBS) continue to offer attractive yields relative to sovereigns with comparable durations globally.
- The [Single-Family MBS Pass-Through Issuance](#) section captures the leading role government 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 the Federal Reserve's (Fed) Chairman Jerome Powell's comments regarding the Fed's decision to lower the policy rate as well as activity in the Systems Open Market Account portfolio.
- 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 increased for first-time homebuyers.

## Highlights

On September 18, 2024, the FOMC held its sixth meeting of the year to evaluate prevailing economic and financial conditions and set the course for monetary policy. This meeting, accompanied by the release of the Summary of Economic Projections, was widely anticipated, with many expecting the Fed to lower the target federal funds rate to facilitate a "soft landing" for the economy.

The Board of Governors (Board) voted unanimously to reduce the interest paid on reserve balances from 5.4% to 4.9%. Additionally, the Board directed the Open Market Desk to "undertake open market operations as necessary to maintain the federal funds rate within a target range of 4.75% to 5.00%."<sup>1</sup> This 50-basis-point (bp) cut reflected the Fed's intention to enact more sizable policy adjustments to compensate for what some view as a delayed start in reducing rates compared to other global central banks.

**Figure 1. Market Implied Rates vs. Policy Maker Forecast**



Source: Bloomberg  
Note: Change in Fed's interest-rate target implied by overnight index swaps and SOFR futures. Fed dots use interpolation.

Following the FOMC's decision, market participants quickly adjusted their expectations for future rate cuts to incorporate expectations regarding the schedule discussed by Chairman Powell. Markets are now pricing in an estimated 70 basis points of further reductions across the remaining two Fed meetings in 2024, signaling a more aggressive stance than the Fed's projection of a half-point cut by year-end.<sup>2</sup> The gap between market forecasts and the Fed's guidance is shown to widen into 2025 and converge in late 2026.

While the Fed's policy shift may influence Treasury yields, a significant concern is the potential for yield volatility to be magnified by convexity hedging in the mortgage market. Convexity hedging can lead to an effect on Treasury yields, as money managers increase their bond purchases to hedge the duration of MBS in anticipation of higher prepayment rates. This dynamic was most recently observed in 2019. However, many portfolio managers believe the current mortgage market is less vulnerable to such risks. Priya Misra, a portfolio manager at JPMorgan Asset Management, commented, "While some money managers may hedge their high-coupon MBS holdings, these represent a relatively small share of the overall market."<sup>3</sup>

<sup>1</sup> [Federal Reserve Board - Implementation Note issued September 18, 2024](#)

<sup>2</sup> [Fed Interest Rate Decision: Traders Bet on More Easing After Half-Point Cut - Bloomberg](#)

<sup>3</sup> [Mortgage Market's Sway Dulled as Fed Readies to Cut Rates - Bloomberg](#)

In the broader mortgage market, [U.S. mortgage rates](#) have declined to their lowest levels since September 2022. From August 15<sup>th</sup> to September 19<sup>th</sup>, the 30-year fixed mortgage rate dropped by 40 basis points to 6.09% and the 15-year fixed rate fell by 51 basis points to 5.15%. According to the Mortgage Bankers Association (MBA) Weekly Applications Survey for the week ending September 13<sup>th</sup>, the Market Composite Index, which tracks mortgage application volume, increased by 14.2% on a seasonally adjusted basis compared to the previous week. The Refinance Index rose 24%, up 127% from the same week a year prior, while the seasonally adjusted Purchase Index increased 5%. Refinance activity now accounts for 51.2% of total mortgage applications, up from 46.7% the previous week. The MBA projects refinance mortgage origination volume to increase year-over-year (YoY) by \$160 billion in 2025.<sup>4</sup>

As the Fed continues its monetary easing, the evolving mortgage rate environment warrants close observation, especially given changes in the shape of the yield curve. However, it is crucial to recognize that a substantial portion of U.S. homeowners remain locked into historically low mortgage rates secured during the pandemic. Approximately 64% of single-family mortgages carry rates of 4% or lower, and even if rates were to drop to 4.5%, only around 20% of borrowers would find refinancing financially advantageous.<sup>5</sup> While lower mortgage rates are likely to stimulate prepayment activity, the overall impact on the secondary market may be moderated due to the large number of homeowners with "locked-in" rates. For more information on evolving prepayment trends among the Agency MBS, please refer to [Section 4 - Prepayments](#).

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<sup>4</sup> [Mortgage Applications Increase in Latest MBA Weekly Survey | MBA](#)

<sup>5</sup> [Mortgage Market's Sway Dulled as Fed Readies to Cut Rates - Bloomberg](#)

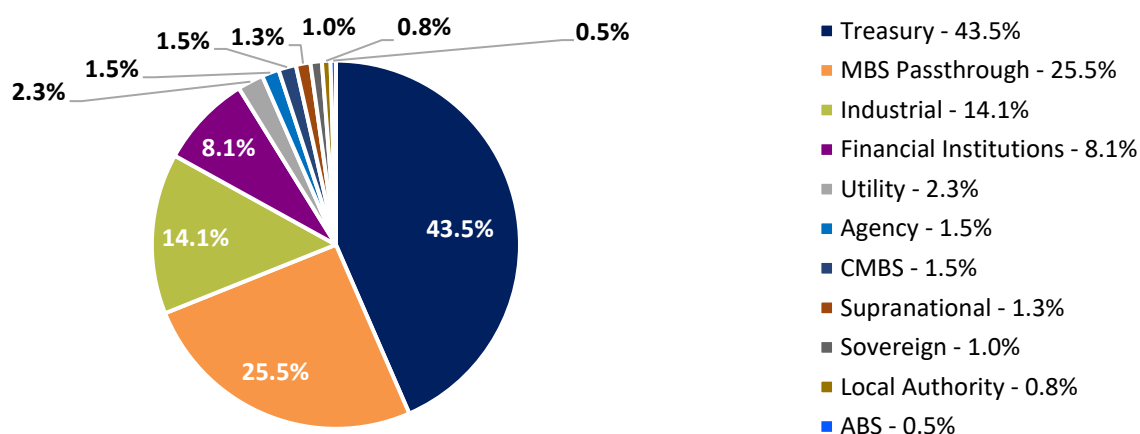


## 1 US AGGREGATE AND GLOBAL INDICES

### 1.1 Bloomberg US Aggregate and Global Indices

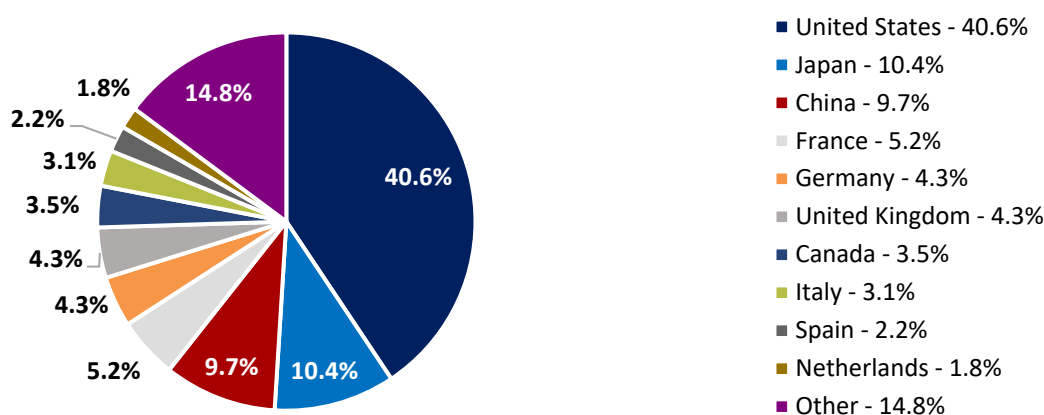
At month-end August, U.S. Treasuries contributed 43.5% to the Bloomberg U.S. Aggregate Index, staying constant from the prior month. U.S. Agency MBS Passthrough (Ginnie Mae, Fannie Mae, and Freddie Mac) contributed 25.5%, increasing approximately 0.1% from the prior month. Industrials represented 14.1% of the index as of month-end August, remaining constant from the prior month. All other changes in the U.S. Aggregate Index were no larger than 0.1%.

**Figure 2. 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, decreasing approximately 0.4% from the prior month. Japan's share of fixed income was the second largest with 10.4% at month end of August 2024. China's share was the third largest at 9.7% as of month end August 2024. Japan's share of fixed income increased approximately 0.3% while China's stayed constant from the prior month. All other countries listed remained stable compared to the prior month with no changes larger than 0.1%.

**Figure 3. Bloomberg Global Aggregate Index by Country**



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

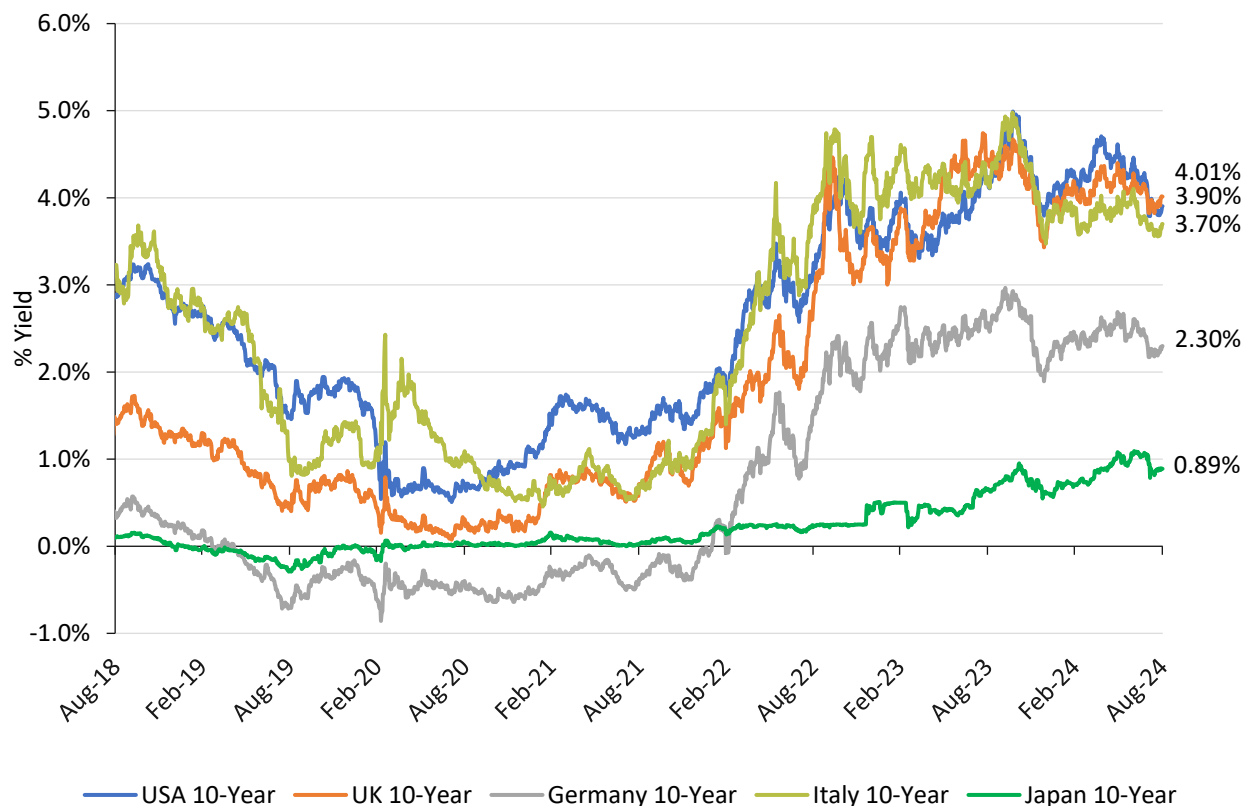
## 2 SOVEREIGN DEBT PRODUCT PERFORMANCE COMPARISONS

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

The U.S. 10-year Treasury yield moved to 3.90% at month-end August 2024, a month to month (MtM) decrease of 13 bps. In August 2024, U.S. 10-year Treasury note rates dropped below UK 10-year note rates, marking the first time since October of 2023 that U.S. 10-year was not the highest government yield amongst the countries listed below. UK and Italian month-end yields increased from the previous month, the Japanese yield decreased, and the German yield stayed the same.

- The yield on the UK 10-year note increased to 4.01% at month-end August, a MtM increase of 5 bps.
- The yield on the German 10-year note stayed constant at 2.30% at month-end August.
- The yield on the Italian 10-year note increased to 3.70% at month-end August, a MtM increase of 5 bps.
- The yield on the Japanese 10-year note decreased to 0.89% at month-end August, a MtM decrease of 16 bps.

**Figure 4. Global 10-Year Treasury Yields**



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

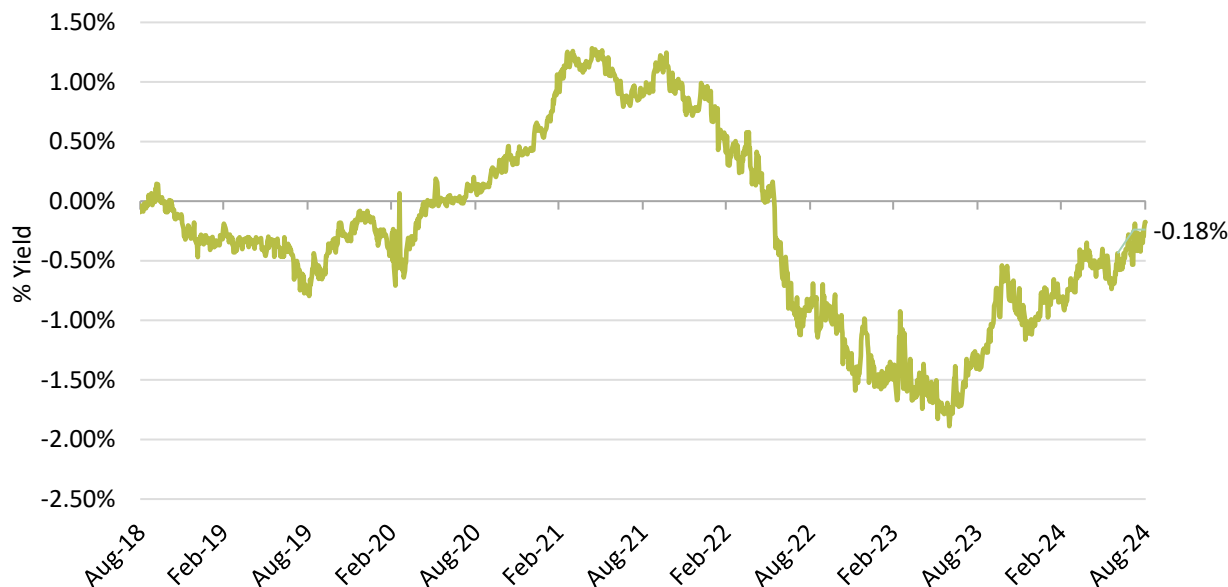


## 2.2 U.S. Treasury Hedged Yields

The yield for the 10-year Treasury, hedged in Japanese Yen (JPY) stood at -0.18% at month-end August, a 26 bp increase from month-end July.

The yield for the 10-year Treasury, hedged in Euros (EUR) stood at 2.50% at month-end August, a 11 bp increase from month-end July.

**Figure 5. U.S. 10 yr Total Return Hedged, 1 yr JPY**



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



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

## SECONDARY MORTGAGE MARKET

### 3 FIXED INCOME PRODUCT PERFORMANCE COMPARISONS

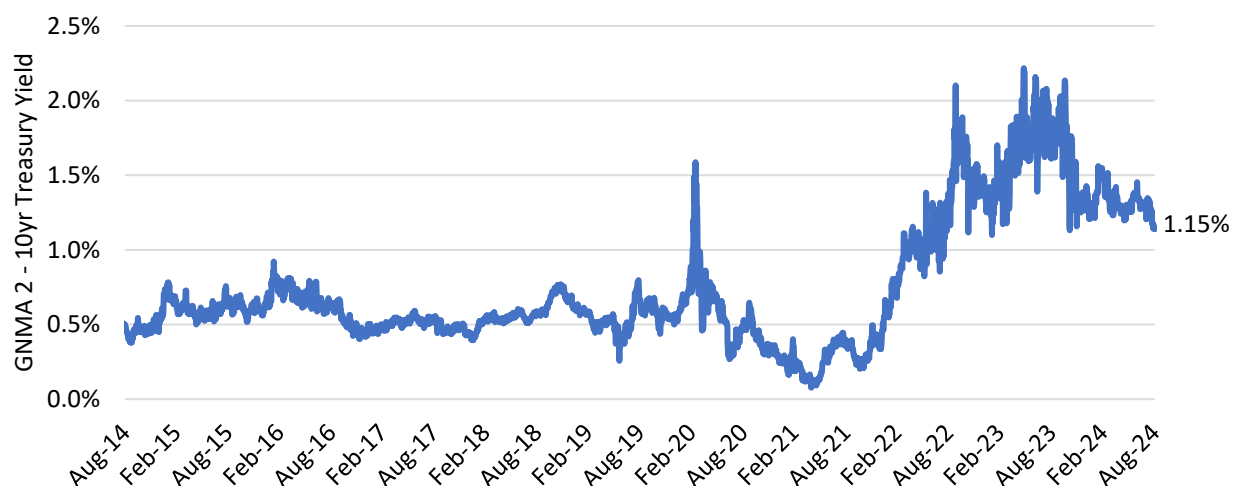
#### 3.1 Ginnie Mae Yields – USD

Ginnie Mae II yields were 5.92% at month-end June, then decreased 64 bps to 5.28% at month-end July, then decreased 23 bps to 5.05% at month end August. The Ginnie Mae II spread over the U.S. 10-year Treasury yield decreased 49 bps from 164 bps in August 2023 to 115 bps over the U.S. 10-year Treasury yield as of month-end August 2024.

**Figure 7. Ginnie Mae II SF Yield, USD**



**Figure 8. Ginnie Mae II SF Yield – U.S. 10yr Treasury Yield**



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

## 3.2 Ginnie Mae Hedged Yields

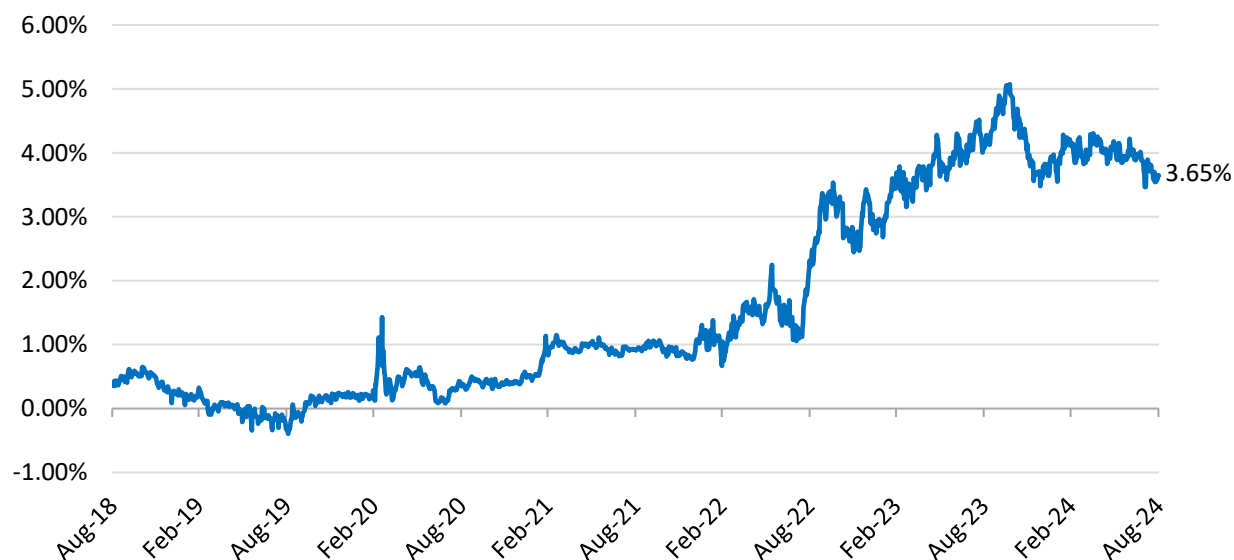
The yield for Ginnie Mae II's hedged in Japanese Yen stood at 0.97% at month-end August, a 9 bp increase from month-end July. The hedged yield is approximately 8 bps higher than the Japanese 10-year yield as of month-end August 2024.

The yield for Ginnie Mae II's, hedged in Euros stood at 3.65% at month-end August, a 5 bp decrease from month-end July. The hedged yield is approximately 135 bps higher than the German 10-year yield, and 5 bps lower than the Italian 10-year yield as of month-end August.

**Figure 9. Ginnie Mae II Hedged, 1 yr. JPY**



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

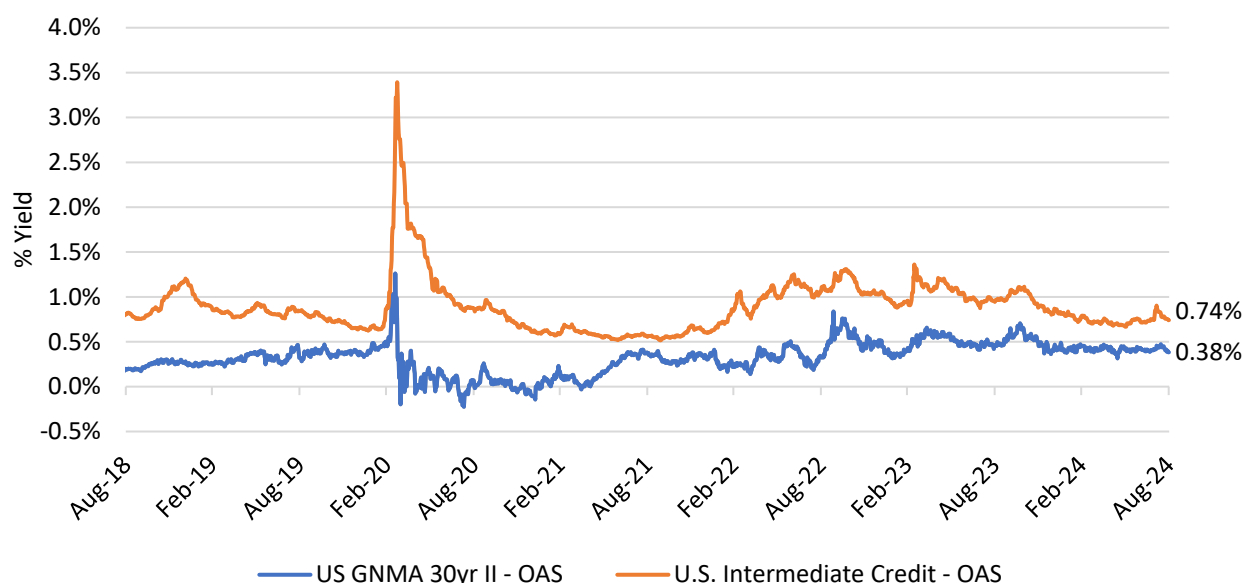


Source: Bloomberg. Notes: Data as of August 2024. The Ginnie Mae II Hedged Yields are calculated by taking the Ginnie Mae II Yield and subtracting the 1yr hedge cost for JPY and EUR.

### 3.3 Ginnie Mae Yield Spreads – Intermediate Credit

The GNMA II 30-year OAS decreased 4 bps to 0.38%, as of month-end August. The U.S. Intermediate Credit OAS decreased 1 bps to 0.74% from month-end July to month-end August. The yield differential between U.S. Intermediate Credit and GNMA II 30-year OAS increased 3 bps to 0.36% at month-end August.

**Figure 11. U.S. GNMA II 30yr MBS OAS versus U.S. Intermediate Credit OAS**



**Figure 12. Spread between U.S. Intermediate Credit and U.S. GNMA II 30yr MBS OAS**

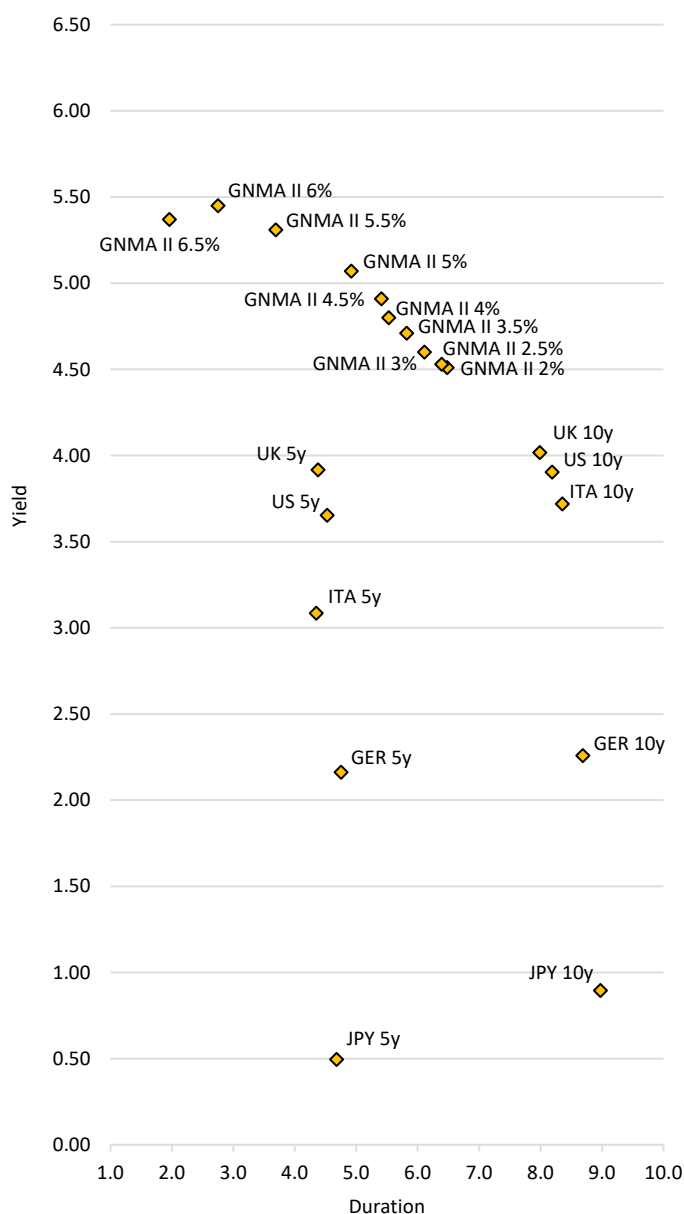


Source: Bloomberg. Note: Data as of August 2024.

### 3.4 Global Treasury Yield Per Duration

Ginnie Mae MBS continues to offer a higher yield in comparison to other government fixed income securities of various tenors with similar or longer duration.

**Figure 13. Yield vs. Duration**



Security	Duration	Yield (%)
U.S. 5y	4.53	3.65
U.S. 10y	8.19	3.90
JPY 5y	4.68	0.50
JPY 10y	8.97	0.90
GER 5y	4.75	2.16
GER 10y	8.69	2.26
ITA 5y	4.35	3.08
ITA 10y	8.35	3.72
UK 5y	4.38	3.92
UK 10y	7.99	4.02
GNMA II 2%	6.48	4.51
GNMA II 2.5%	6.39	4.53
GNMA II 3%	6.11	4.60
GNMA II 3.5%	5.82	4.71
GNMA II 4%	5.53	4.80
GNMA II 4.5%	5.41	4.91
GNMA II 5%	4.92	5.07
GNMA II 5.5%	3.69	5.31
GNMA II 6%	2.75	5.45
GNMA II 6.5%	1.96	5.37

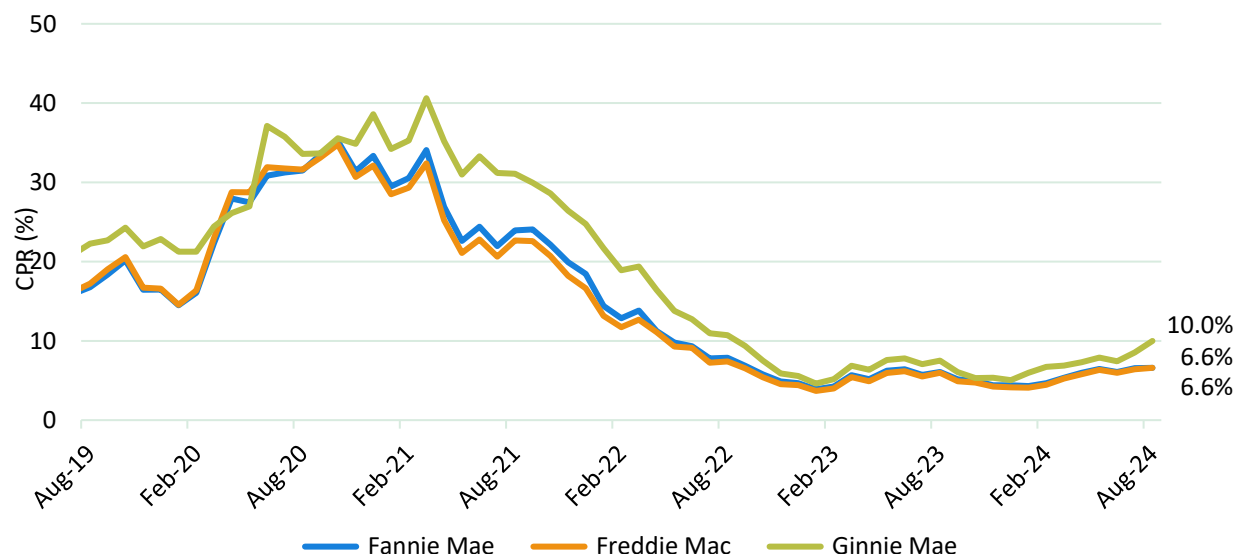
Source: Bloomberg. Note: Yield and modified duration for GNMA II securities is based on median prepayment assumptions from surveyed Bloomberg participants. All data is as of August 2024. Yields are in base currency of security, unhedged and rounded to nearest bp.

## 4 PREPAYMENTS

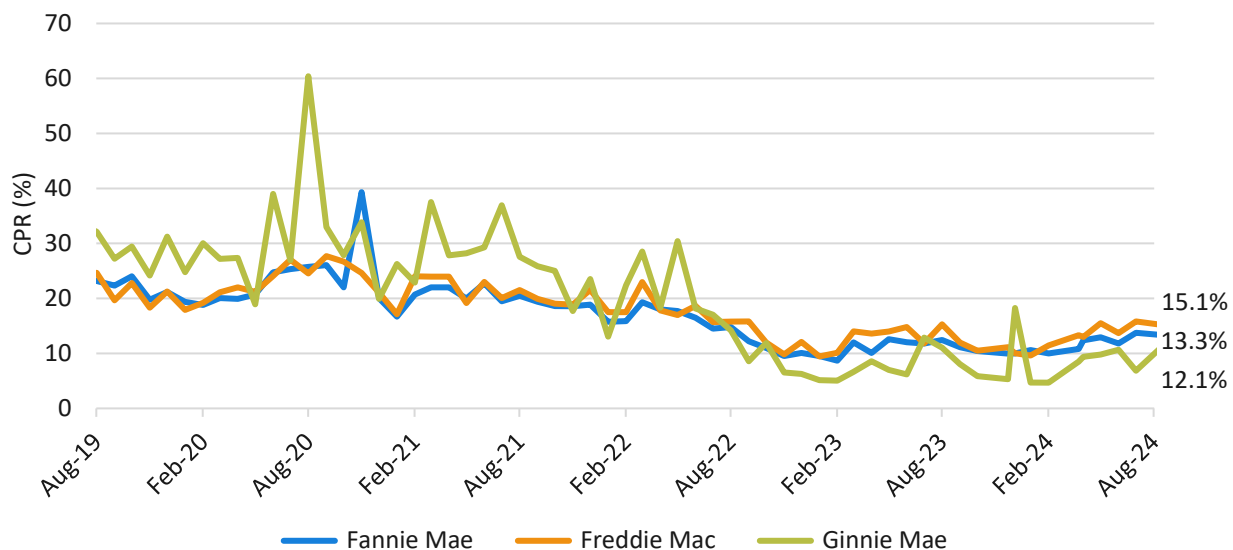
### 4.1 Aggregate Prepayments (CPR)

Freddie Mac's fixed rate aggregate prepayment speeds increased by 0.2% MtM from July 2024 to August 2024. Similarly, Fannie Mae CPRs increased slightly by 0.05% MtM and Ginnie Mae CPRs increased by 1.5% MtM. ARM prepayments saw decreases of 0.8% MtM for Freddie Mac and 0.5% MtM for Fannie Mae, while Ginnie Mae saw an increase of 5.2%.

**Figure 14. Fixed Rate Aggregate 1-Month CPR**



**Figure 15. ARM Aggregate 1-Month CPR**



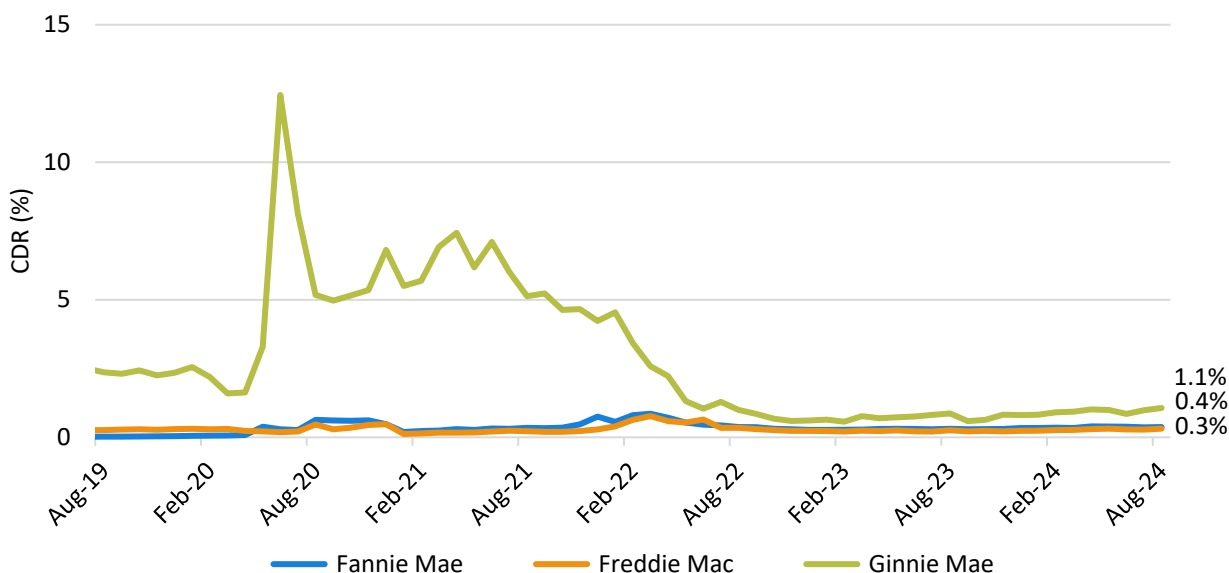
Source: Recursion. Note: Data as of August 2024.



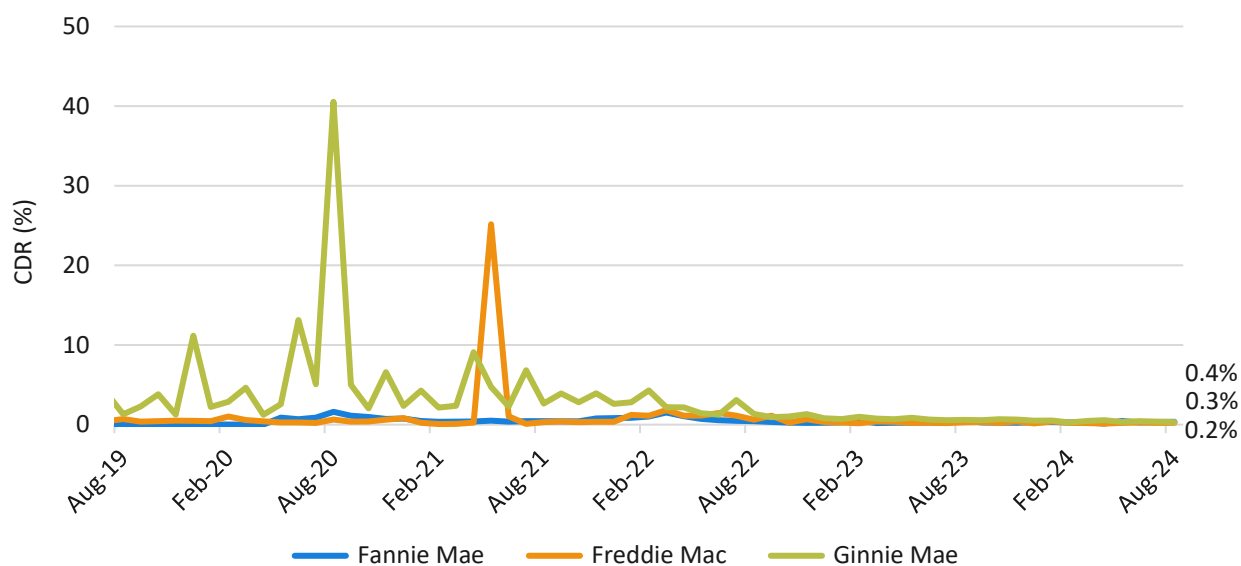
## 4.2 Involuntary Prepayments (CDR)

Fixed rate involuntary prepayments 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 August 2024 after slightly overtaking Ginnie Mae in September 2022.

**Figure 16. Fixed Rate Aggregate CDR**



**Figure 17. ARM Aggregate CDR**

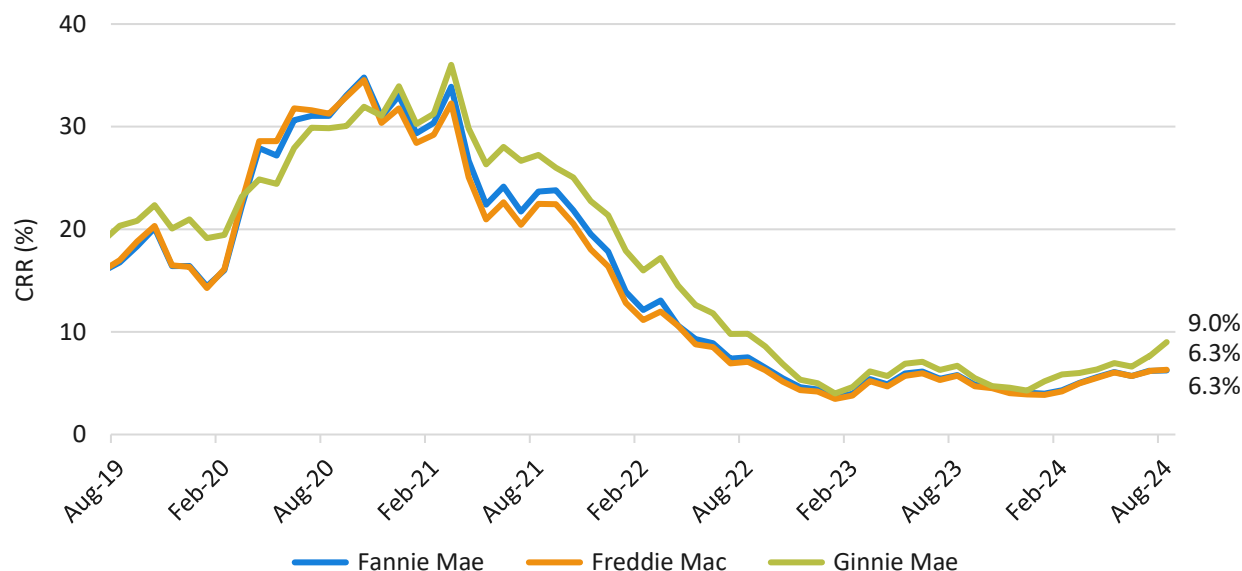


Source: Recursion. Note: Data as of August 2024.

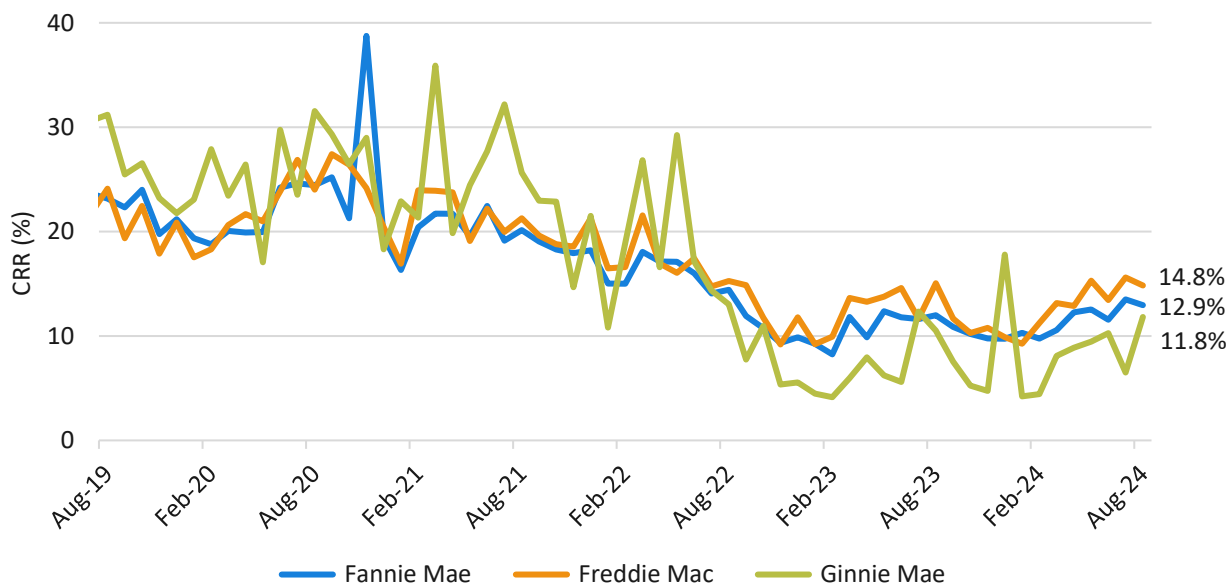
### 4.3 Voluntary Prepayment Rates (CRR)

Fixed rate voluntary prepayments were higher for Ginnie Mae than Fannie Mae and Freddie Mac. Fannie Mae saw a slight increase of 0.04% MtM and Freddie Mac saw an increase of 0.2% MtM in fixed rate aggregate CRR. Freddie Mac saw a 0.8% decrease MtM in ARM aggregate CRR, and Fannie Mae saw a 0.5% decrease MtM. Ginnie Mae's fixed rate aggregate CRR increased by 1.4% MtM while ARM aggregate CRR increased by 5.3% MtM.

**Figure 18. Fixed Rate Aggregate CRR**



**Figure 19. ARM Aggregate CRR**



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

## 5 SINGLE-FAMILY MBS PASS-THROUGH ISSUANCE

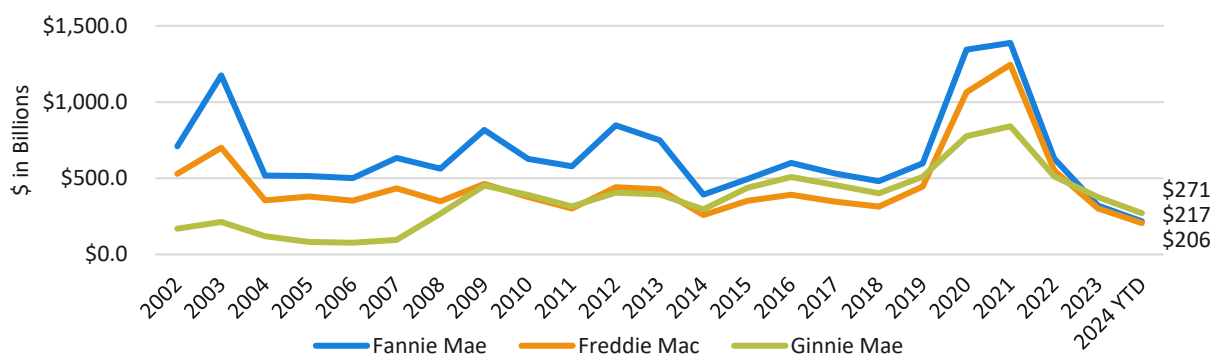
### 5.1 Gross Issuance of Agency MBS

In August 2024, total gross MBS issuance increased by approximately \$12.4 billion MtM. Freddie Mac increased \$9.1 billion MtM, and Fannie Mae increased \$1.8 billion MtM. Ginnie Mae saw a \$1.6 billion MtM 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	\$217.1	\$205.5	\$422.6	\$270.7	\$693.3

**Figure 20. Agency Gross Issuance**

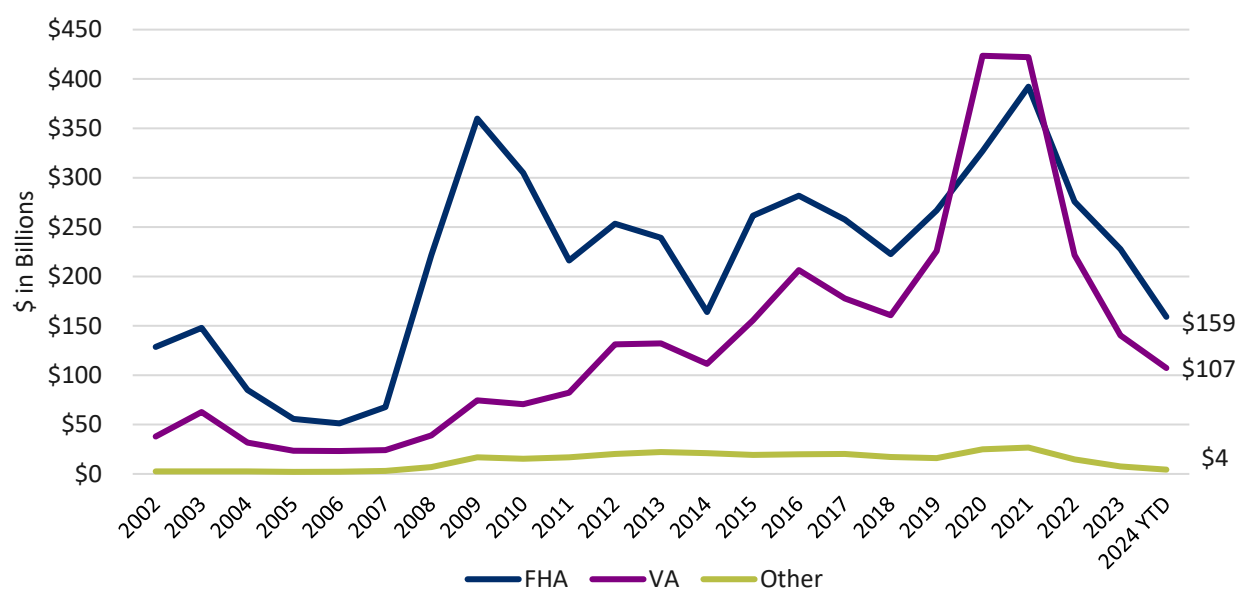


Source: Recursion. Note: Numbers are rounded to the nearest hundred million. For sums, like "GSE Total", the values are rounded after the exact underlying values are summed. As a result, some sums may not appear to match the sum of their rounded component values.

**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	\$159.1	\$107.2	\$4.4	\$270.7

**Figure 21. Ginnie Mae Gross Issuance**



Source: Recursion. Note: Numbers are rounded to the nearest hundred million. For sums, like "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.

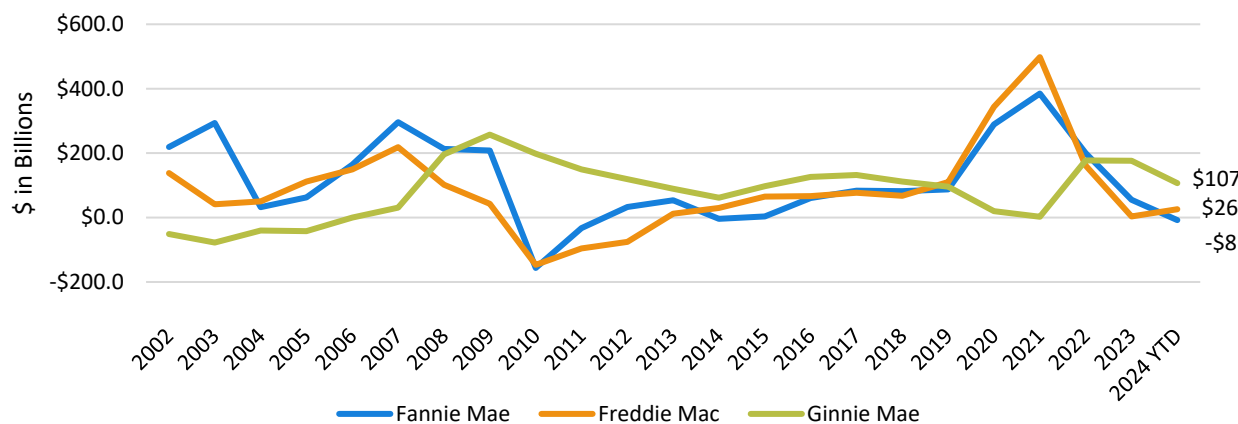
## 5.2 Net Issuance of Agency MBS

Agency Net Issuance as of month-end August was \$124.7 billion for 2024 YTD, as shown in **Table 3**. Ginnie Mae has the largest net issuance YTD, totaling \$106.7 billion as of month-end August 2024. Since 2022, FHA net issuance has outpaced VA net issuance, as shown in **Table 4** and **Figure 23**.

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

Issuance Year	Fannie Mae	Freddie Mac	GSE Total	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	-\$7.8	\$25.9	\$18.0	\$106.7	\$124.7

**Figure 22. Agency Net Issuance**

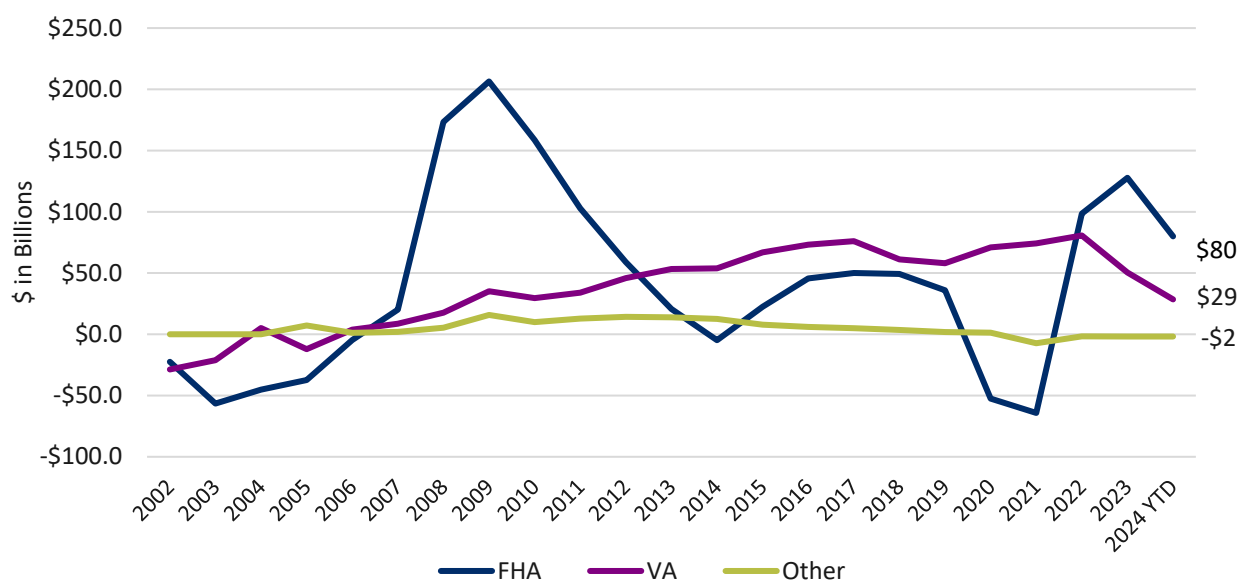


Source: Recursion. Note: Numbers are rounded to the nearest hundred million. For sums, like "GSE Total", the values are rounded after the exact underlying values are summed. As a result, some sums may not appear to match the sum of their rounded component values.

**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	\$79.9	\$28.6	-\$1.8	\$106.7

**Figure 23. Ginnie Mae Net Issuance**



Source: Recursion. Note: Numbers are rounded to the nearest hundred million. For sums, like "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 August was approximately \$27.6 billion, which represents an approximate \$8.3 billion increase MtM. Ginnie Mae net issuance was \$13.6 billion in August, a \$1.8 billion decrease from July. Ginnie Mae's \$39.8 billion of gross issuance in August, seen in **Table 5**, was approximately \$8.5 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
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
May-24	\$26.6	\$29.0	\$35.7	\$55.6	\$91.4	-\$3.7	\$4.5	\$14.5	\$0.7	\$15.3
Jun-24	\$33.3	\$27.3	\$35.3	\$60.6	\$95.9	\$4.2	\$3.9	\$15.0	\$8.1	\$23.1
Jul-24	\$32.6	\$26.6	\$38.2	\$59.2	\$97.4	\$1.9	\$2.0	\$15.4	\$3.9	\$19.3
Aug-24	\$34.4	\$35.7	\$39.8	\$70.0	\$109.8	\$3.5	\$10.5	\$13.6	\$14.0	\$27.6

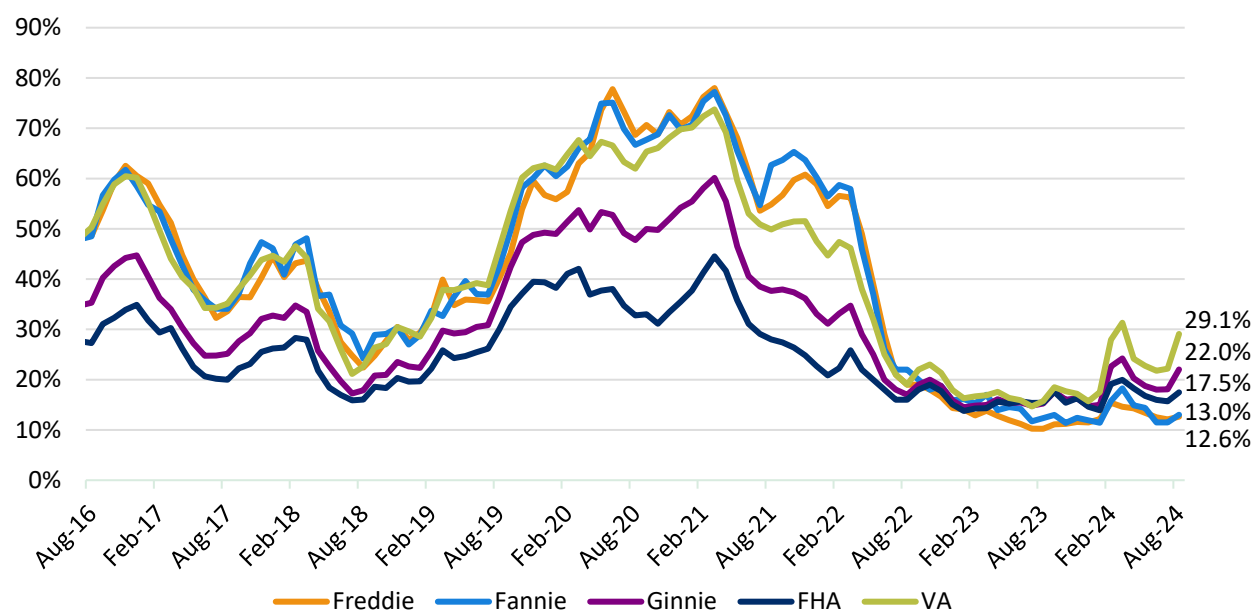
Sources: Beginning May 2021, data for Gross and Net Issuance was sourced from Fannie Mae, Freddie Mac, and Ginnie Mae loan level disclosure files. Net issuance is defined here as the difference between prior period UPB and current period UPB. Data as of August 2024. Beginning with the October 2021 GMAR, the Fannie Mae and Freddie Mac net issuance data is updated to reflect the current UPB of the portfolios. August 2021 through August 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 increased by approximately 21.9% MoM for Ginnie Mae as of month-end August 2024.

- Freddie Mac's refinance percentage increased to 12.6% in August, up from 12.1% in July.
- Fannie Mae's refinance percentage increased to 13.0% in August, up from 11.5% in July.
- Ginnie Mae's refinance percentage increased to 22.0% in August, up from 18.1% in July.
- FHA's refinance percentage increased to 17.5% in August, up from 15.7% in July.
- VA's refinance percentage increased to 29.1% in August, up from 22.2% in July.

**Figure 24. Percent Refinance at Issuance – Single-Family**



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

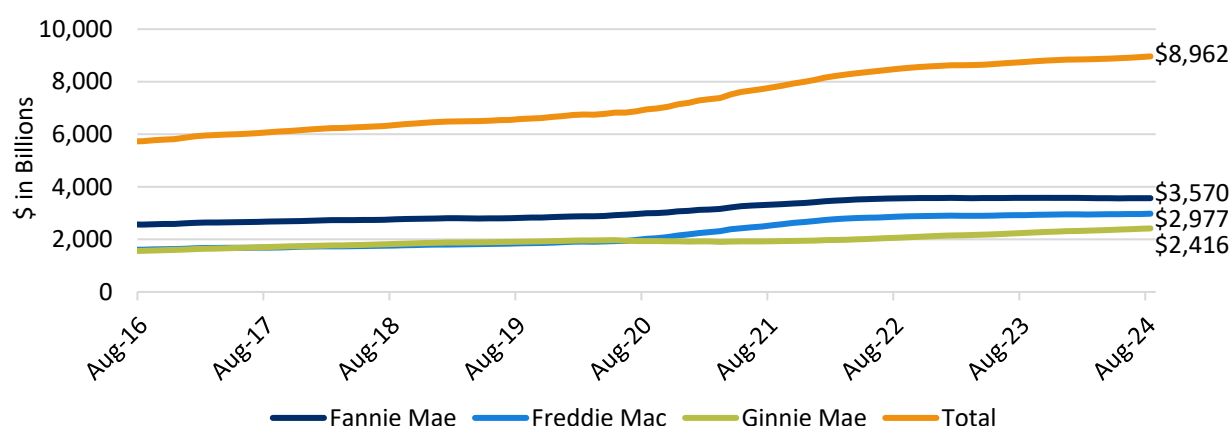
## 6 AGENCY SINGLE-FAMILY MBS OUTSTANDING

### 6.1 Outstanding Single-Family Agency MBS

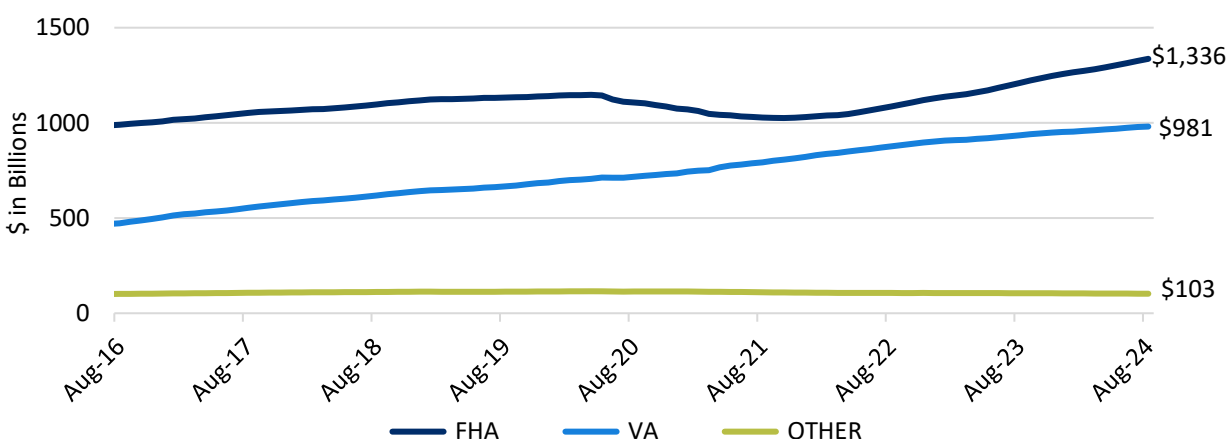
As of month-end August 2024, outstanding Single-Family MBS in the Agency market totaled \$8.962 trillion: 39.8% Fannie Mae, 33.2% Freddie Mac, and 27.0% Ginnie Mae MBS. Over the past twelve months, Freddie Mac's total outstanding MBS increased by approximately 1.8%, and Ginnie Mae's increased by 7.6%. Fannie Mae's total outstanding MBS decreased by 0.2%. Fannie Mae's outstanding MBS remains larger than Freddie Mac's and Ginnie Mae's outstanding MBS by approximately \$593 billion and \$1.2 trillion, respectively.

Ginnie Mae's MBS collateral composition has changed over time as shown in **Figure 26**. In August 2019, 59.3% of Ginnie Mae's outstanding collateral was FHA and 34.8% was VA. As of month-end August 2024, FHA collateral comprised 55.2% of Ginnie Mae MBS outstanding, and VA collateral comprised 40.5% of Ginnie Mae MBS outstanding.

**Figure 25. Outstanding Agency Mortgage-Backed Securities**



**Figure 26. Composition of Outstanding Ginnie Mae Mortgage-Backed Securities**

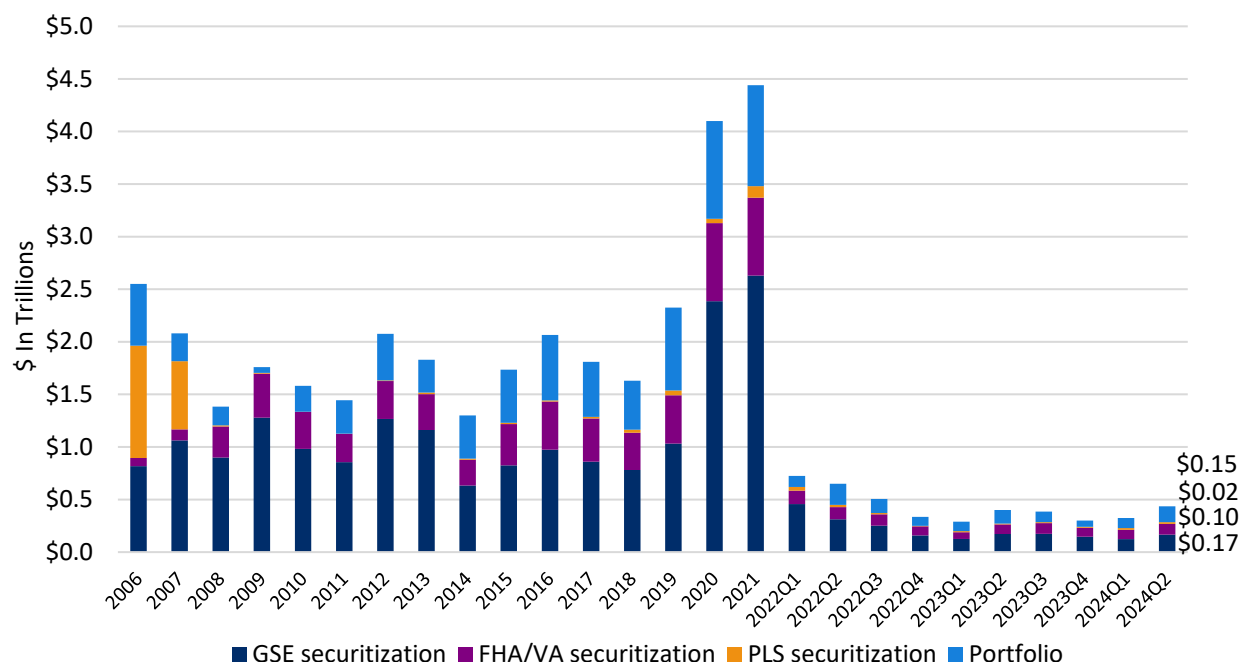


Source: Recursion. Note: Data as of August 2024. Note: Data rounded to nearest billion; GNMA composition may not add up to total outstanding amount due to rounding.

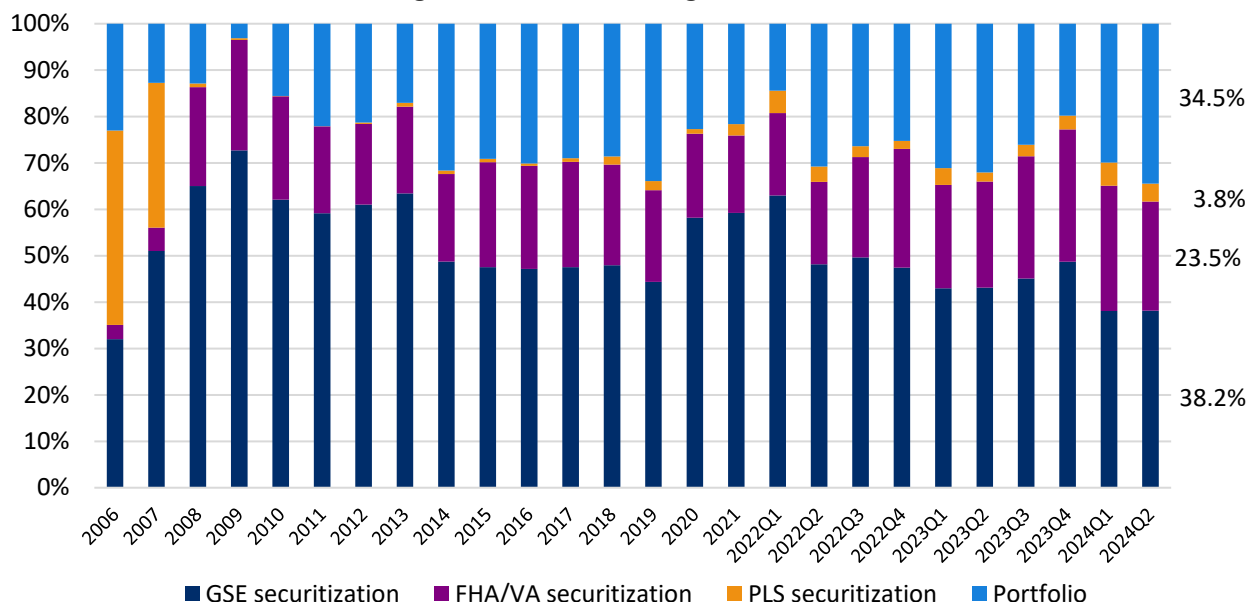
## 6.2 Origination Volume and Share Over Time

First lien origination volume increased in Q2 2024, with approximately \$435 billion in originations, which represents an increase in issuance of 33.8% from Q1 2024. Ginnie Mae's share of total origination decreased from 27.0% to 23.5% in Q2 2024, while portfolio origination increased from 29.9% to 34.5%.

**Figure 27. First Lien Origination Volume**



**Figure 28. First Lien Origination Share**



Source: Inside Mortgage Finance. Note: Data as of Q2 2024.

### 6.3 Agency Issuance and Agency Outstanding by State

Ginnie Mae MBS represents approximately 39% of new Agency issuance over the past year, roughly 12% 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 Mississippi (61%) and the smallest in the District of Columbia (21%). 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**

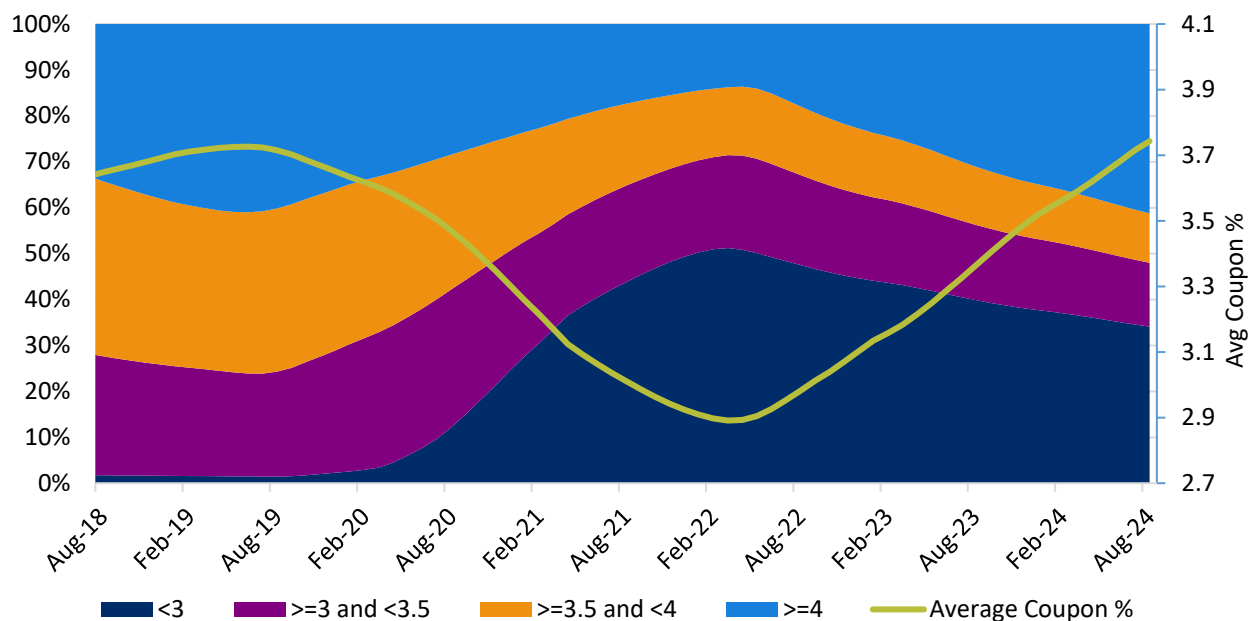
National	Agency Issuance (past 1 year)				Agency Outstanding (past 1 year)			
	GNMA Share by UPB	GNMA Loan Count	GNMA Avg. Loan Size (000)	GSE Avg. Loan Size (000)	GNMA Share by UPB	GNMA Loan Count	GNMA Avg. Loan Size (000)	GSE Avg. Loan Size (000)
	<b>39%</b>	<b>1,502,688</b>	<b>316.49</b>	<b>314.84</b>	<b>27%</b>	<b>11,409,702</b>	<b>214.59</b>	<b>212.09</b>
AK	60%	3,798	372.74	316.60	49%	37,793	265.44	218.61
AL	55%	37,527	247.85	250.86	43%	254,104	167.82	179.10
AR	48%	19,520	214.70	243.98	40%	143,983	140.80	164.08
AZ	42%	47,679	355.15	351.50	27%	302,791	238.36	229.34
CA	34%	87,178	497.23	488.55	18%	732,502	340.72	317.52
CO	37%	31,967	436.09	418.46	25%	227,805	307.77	280.21
CT	30%	10,433	304.29	311.72	26%	109,211	206.92	209.12
DC	21%	973	553.23	463.35	14%	9,503	396.14	345.25
DE	39%	6,306	303.83	316.73	32%	54,947	210.90	213.16
FL	45%	149,068	335.51	327.59	34%	935,393	229.87	217.80
GA	46%	78,837	294.16	321.24	36%	531,667	194.63	211.72
HI	45%	3,345	658.30	541.69	33%	34,953	474.64	356.24
IA	32%	11,454	208.26	212.45	24%	86,930	141.05	148.47
ID	38%	9,878	362.03	339.03	26%	68,739	236.71	226.30
IL	27%	42,805	233.95	265.35	23%	383,779	164.65	179.91
IN	39%	39,634	219.68	226.19	32%	293,384	143.43	153.72
KS	39%	13,253	219.63	236.71	30%	99,662	147.60	165.00
KY	48%	24,886	222.31	230.28	37%	175,126	151.81	157.10
LA	55%	26,055	220.88	240.51	42%	214,796	162.20	175.98
MA	26%	13,482	425.59	422.23	17%	119,696	294.49	267.65
MD	45%	33,938	378.46	360.88	35%	306,317	271.29	248.72
ME	34%	4,741	282.82	299.29	27%	39,311	185.66	193.81
MI	27%	33,335	212.40	232.55	21%	286,209	139.73	157.18
MN	24%	17,289	280.50	292.80	18%	163,645	188.61	198.99
MO	38%	32,876	225.56	239.26	30%	254,239	149.77	163.62
MS	61%	17,382	223.06	227.78	50%	130,337	151.74	161.64
MT	35%	3,958	356.84	336.79	25%	33,210	221.39	218.58
NC	41%	67,823	288.76	312.59	31%	442,677	190.19	206.73
ND	37%	2,171	266.00	259.94	25%	17,483	197.38	182.01
NE	36%	8,343	249.79	242.81	28%	66,863	158.82	162.45
NH	28%	4,295	359.54	346.86	23%	39,187	235.02	217.96
NJ	29%	26,310	370.44	386.05	22%	241,196	249.92	255.22
NM	50%	12,416	276.57	284.04	40%	100,025	177.07	180.95
NV	45%	20,624	382.26	356.17	32%	144,750	263.52	238.83
NY	26%	28,371	337.58	355.15	21%	315,960	218.45	248.84
OH	36%	53,671	214.22	221.15	30%	441,323	137.52	151.21
OK	51%	25,758	226.58	232.51	43%	197,719	149.65	164.58
OR	31%	14,537	383.39	387.41	21%	117,383	265.38	254.89
PA	29%	40,277	228.27	268.75	26%	400,845	153.18	183.15
RI	43%	4,297	379.73	343.36	32%	37,710	246.17	213.76
SC	47%	41,607	284.04	281.85	37%	256,915	196.38	195.39
SD	43%	4,223	272.14	257.77	31%	30,582	182.76	177.74
TN	43%	44,163	296.92	307.39	33%	286,066	191.68	209.54
TX	42%	174,389	302.31	327.45	34%	1,200,963	198.51	218.91
UT	36%	16,421	415.05	408.77	21%	104,975	282.41	266.77
VA	48%	53,577	369.47	359.70	37%	463,243	264.40	250.00
VI	23%	62	426.20	443.44	24%	807	266.28	306.98
VT	23%	1,262	278.01	290.56	19%	12,436	185.30	182.15
WA	33%	29,214	436.98	442.85	23%	243,025	297.48	291.41
WI	26%	15,703	242.92	249.83	18%	128,078	162.92	163.25
WV	55%	8,080	219.66	203.02	46%	63,595	150.19	145.34
WY	49%	3,497	305.37	288.01	36%	25,864	213.72	201.63

Source: Recursion. Note: Outstanding balance based on loan balance as of August 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](#).

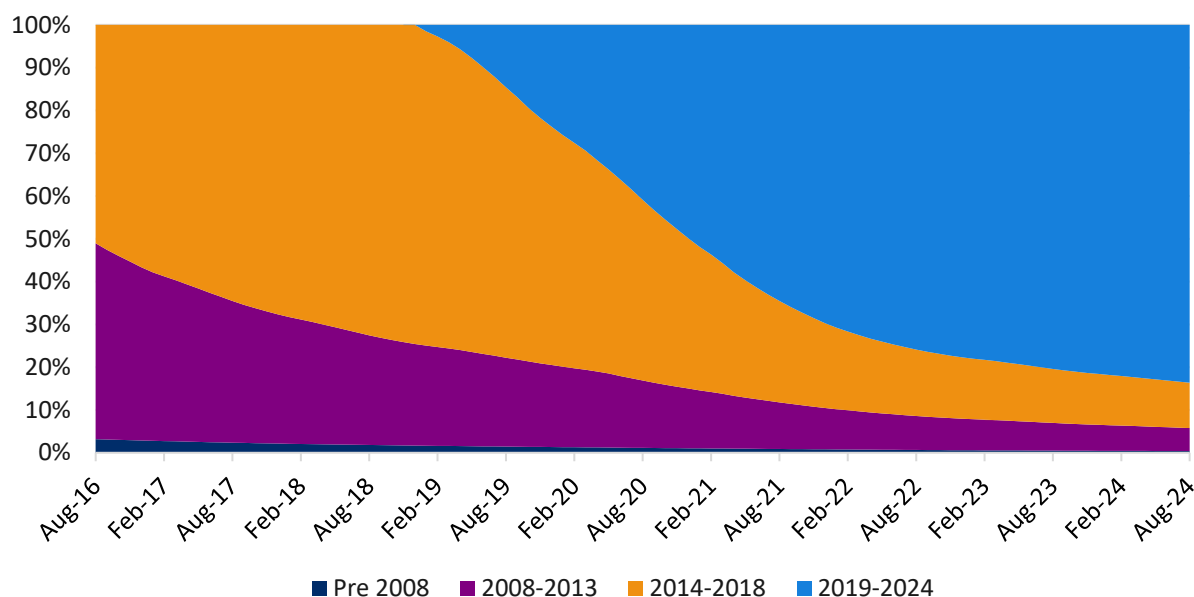
## 6.4 Outstanding Ginnie Mae MBS Volume by Coupon and Vintage Over Time

As of month-end August 2024, the weighted average coupon (WAC) on outstanding Ginnie Mae MBS increased from 3.72% in July 2024 to 3.74% as seen in **Figure 29**. **Figure 30** illustrates that loans originated since 2019 account for approximately 84% of Ginnie Mae MBS collateral outstanding.

**Figure 29. Outstanding Ginnie Mae MBS Balance, by Coupon**



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



Source: Recursion. Note: August 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.

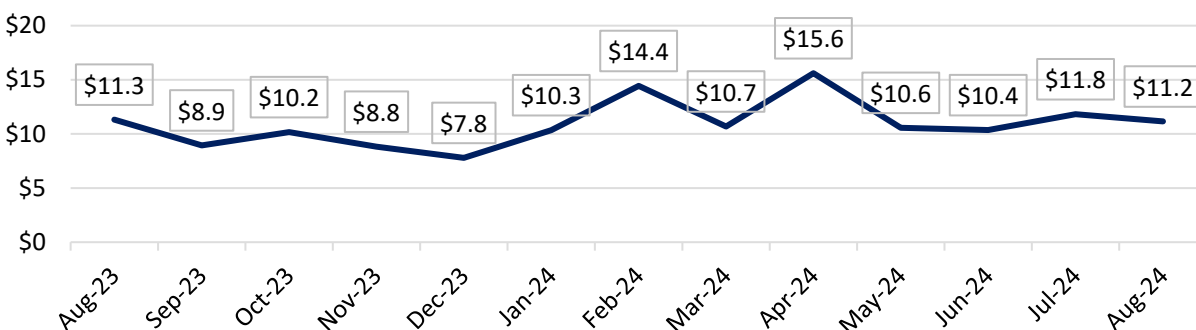


## 7 AGENCY REMIC SECURITIES

### 7.1 Monthly REMIC Demand for Ginnie Mae MBS

Ginnie Mae Real Estate Mortgage Investment Conduit (REMIC) issuance volume for the month of August was approximately \$11.2 billion. This represents a 5.67% MoM decrease from \$11.8 billion in July 2024, and a 1.52% decrease YoY from \$11.3 billion in August 2023. Approximately \$422.2 million of the August 2024 issuance volume were Multifamily MBS having coupons over 5.0%, and approximately \$8.9 billion were Single-Family MBS having coupons over 5.5%. Roughly \$460.9 million of previously securitized REMICs were re-securitized into new REMIC deals in August.

**Figure 31. Ginnie Mae Single-Family and Multifamily REMIC Issuance (\$B)**



**Table 7. August 2024 REMIC Issuance Breakdown**

Net Coupon (%)	Principal (\$MM) for MBS Deals	Principal (\$MM) for Re-REMIC Deals	Principal % for MBS Deals	Principal % for Re-REMIC Deals
<b>Multifamily</b>				
<2.01	-	\$3.0	-	0.4%
3.01-4.01	\$161.4	-	22.0%	-
4.01-5.01	\$145.5	-	19.9%	-
5.01-6.01	\$422.2	-	57.7%	-
<b>Subtotal</b>	<b>\$729.0</b>	<b>3.0</b>	<b>99.6%</b>	<b>0.4%</b>
<b>Single-Family</b>				
<2.01	-	\$113.5	-	1.1%
2.01-2.51	\$104.2	\$255.5	1.0%	2.5%
2.51-3.01	\$27.3	-	0.3%	-
4.51-5.01	\$36.1	\$15.0	0.3%	0.1%
5.01-5.51	\$901.0	\$6.1	8.6%	0.1%
5.51-6.01	\$4,410.2	\$34.6	42.3%	0.3%
6.01-6.51	\$3,165.4	-	30.4%	-
6.51-7.01	\$1,008.0	\$33.2	9.7%	0.3%
>7.01	\$314.3	-	3.0%	-
<b>Subtotal</b>	<b>\$9,966.5</b>	<b>\$457.9</b>	<b>95.6%</b>	<b>4.4%</b>
<b>Grand Total <sup>6</sup></b>	<b>\$10,695.6</b>	<b>\$460.9</b>	<b>95.9%</b>	<b>4.1%</b>

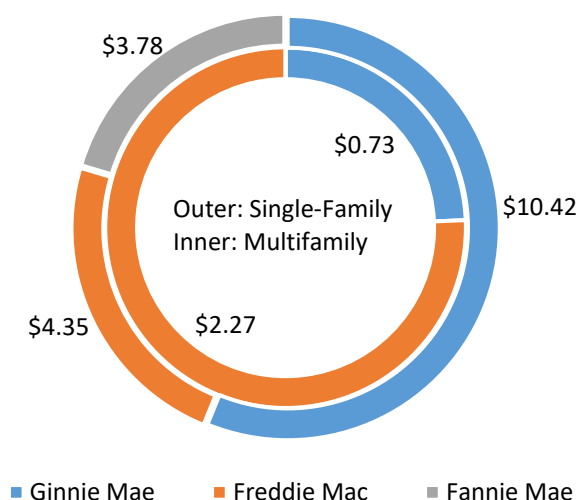
Source: Ginnie Mae Disclosure Files

<sup>6</sup> Totals may not sum due to rounding. Percents calculated using weighted average.

## 7.2 REMIC Market Snapshot

- In August 2024, Ginnie Mae's total Single-Family, Multifamily, and HMBS REMIC issuance totaled \$12.1 billion, a 2.7% or \$330 million decrease month-over-month.
- In August 2024, total Single-Family and Multifamily issuance across the three Agencies increased 20.7% or \$5.6 billion relative to July.
- In August 2024, Ginnie Mae, Fannie Mae, and Freddie Mac all saw decreases in their Single-Family REMIC issuance collateral coupon of 15, 36, and 21 bps, respectively.
- In August 2024, Freddie Mac and Ginnie Mae saw decreases in their Multifamily REMIC issuance collateral coupon of 52 bps and 40 bps. Fannie Mae has not issued a Multifamily REMIC since April of 2024.

**Figure 32. August 2024 REMIC Issuance by Agency (\$B)**



**Table 8. August 2024 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>	\$10.42	56.2%	11	\$0.73	24.3%	6
<b>Freddie Mac</b>	\$4.35	23.5%	9	\$2.27	75.7%	4
<b>Fannie Mae</b>	\$3.78	20.4%	10	-	-	0
<b>Total <sup>7</sup></b>	<b>\$18.55</b>	<b>100.0%</b>	<b>30</b>	<b>\$3.00</b>	<b>100.0%</b>	<b>10</b>

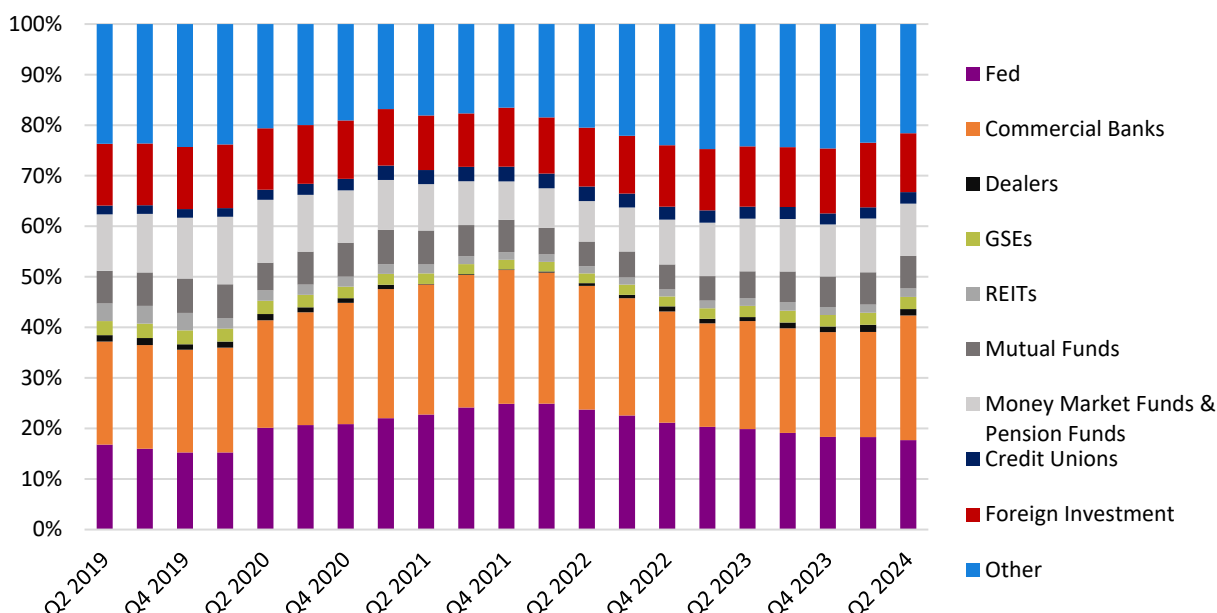
Source: Relay & FDS files posted to Ginnie Mae, Fannie Mae, and Freddie Mac

<sup>7</sup> Totals may not sum due to rounding.

## 8 MBS OWNERSHIP

In Q2 2024, the largest holders of Agency debt (Agency MBS plus Agency notes and bonds) included commercial banks (25%), the Federal Reserve (18%), and foreign investors (12%). The Federal Reserve's share roughly held even quarter over quarter (QoQ). Out of the approximately \$2.61 trillion in holdings as of the end of August 2024, roughly \$1.98 trillion was held by the top 25 domestic banks per **Table 9** below.

**Figure 33. 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 Q2 2024.

### 8.1 Commercial Bank Holdings of Agency MBS

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

	Commercial Bank Holdings (\$Billions)								
	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24
Largest 25 Domestic Banks	\$1,907.9	\$1,915.6	\$1,920.4	\$1,919.6	\$1,912.7	\$1,913.1	\$1,946.1	\$1,957.4	\$1,975.1
Small Domestic Banks	\$581.8	\$581.0	\$579.4	\$583.4	\$591.3	\$586.6	\$591.0	\$596.1	\$601.1
Foreign Related Banks	\$27.6	\$29.1	\$34.1	\$30.7	\$29.5	\$30.4	\$31.2	\$30.6	\$33.9
<b>Total, Seasonally Adjusted</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>	<b>\$2,530.1</b>	<b>\$2,568.3</b>	<b>\$2,584.1</b>	<b>\$2,610.1</b>

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

## 8.2 Bank and Thrift Residential MBS Holdings

Total MBS holdings at banks and thrifts decreased approximately 0.4% from Q1 2024 to Q2 2024. Although total MBS holdings at banks and thrifts decreased in Q2 2024, Ginnie Mae PT and Agency CMO holdings increased 4.3% and 1.6% QoQ, respectively. Ginnie Mae PT holdings also marked the largest increase over the past year, increasing 14.3% from Q2 of 2023. Out of the \$2.22 trillion in MBS holdings at banks and thrifts as of Q2 2024, \$1.28 trillion were GSE pass-throughs and \$438 billion were Ginnie Mae pass-throughs. Private MBS holdings showed the largest percentage decrease of 29.0% from Q2 2023 to Q2 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
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
2Q24	\$2,222.6	\$1,281.3	\$438.2	\$2.2	\$448.2	\$52.7	\$1,980.3	\$242.0
<b>Change:</b>								
1Q24-2Q24	-0.4%	-2.3%	4.3%	-0.1%	1.6%	-7.1%	-0.2%	-1.9%
2Q23-2Q24	-2.5%	-7.8%	14.3%	-29.0%	0.4%	-9.6%	-2.1%	-6.2%

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. Totals may not sum due to rounding. Source: Inside Mortgage Finance. Notes: Data as of Q2 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	\$405,363	\$328,072	\$63,847	\$13,250	\$194	18.24%
<b>2</b>	Wells Fargo & Company	\$253,562	\$147,224	\$104,132	\$2,147	\$59	11.41%
<b>3</b>	JPMorgan Chase & Co.	\$145,081	\$79,058	\$54,416	\$470	\$11,137	6.53%
<b>4</b>	Charles Schwab	\$135,802	\$76,179	\$4,887	\$54,736	\$0	6.11%
<b>5</b>	U.S. Bancorp	\$94,144	\$56,825	\$27,457	\$9,862	\$0	4.24%
<b>6</b>	Citigroup Inc.	\$91,714	\$61,234	\$27,811	\$1,953	\$716	4.13%
<b>7</b>	Truist Bank	\$82,781	\$31,967	\$22,562	\$28,252	\$0	3.73%
<b>8</b>	PNC Bank, National Association	\$65,996	\$53,784	\$3,580	\$7,782	\$850	2.97%
<b>9</b>	Capital One Financial Corporation	\$62,120	\$29,290	\$13,663	\$18,864	\$303	2.80%
<b>10</b>	Morgan Stanley	\$47,903	\$28,525	\$8,232	\$11,026	\$120	2.16%
<b>11</b>	Bank Of New York Mellon Corp	\$42,550	\$27,046	\$4,448	\$9,386	\$1,670	1.91%
<b>12</b>	State Street Bank and Trust Company	\$35,827	\$12,229	\$9,451	\$11,769	\$2,378	1.61%
<b>13</b>	USAA Federal Savings Bank	\$34,269	\$28,851	\$1,656	\$3,762	\$0	1.54%
<b>14</b>	Citizens Bank, National Association	\$28,662	\$12,615	\$6,757	\$9,289	\$0	1.29%
<b>15</b>	BMO Harris Bank National Association	\$26,829	\$3,659	\$5,527	\$17,643	\$0	1.21%
<b>16</b>	The Huntington National Bank	\$25,160	\$10,052	\$8,174	\$6,821	\$113	1.13%
<b>17</b>	KeyBank National Association	\$24,183	\$3,338	\$1,045	\$19,800	\$0	1.09%
<b>18</b>	TD Bank USA/TD Bank NA	\$24,075	\$1,334	\$68	\$22,673	\$0	1.08%
<b>19</b>	HSBC Bank USA, National Association	\$23,199	\$3,587	\$14,913	\$4,699	\$1	1.04%
<b>20</b>	Regions Bank	\$20,033	\$14,982	\$2,948	\$2,103	\$0	0.90%
<b>Total</b>	<b>Top 20</b>	<b>\$1,669,252</b>	<b>\$1,009,850</b>	<b>\$385,574</b>	<b>\$256,287</b>	<b>\$17,541</b>	<b>75.1%</b>

Source: Inside Mortgage Finance. Totals may not sum due to rounding. Notes: Data as of Q2 2024.

### 8.3 SOMA Holdings

#### FOMC and Economic Highlights:

■ FOMC Meeting 9/18/2024 Press Release:

- *"In light of the progress on inflation and the balance of risks, the Committee decided to lower the target range for the federal funds rate by 1/2 percentage point to 4-3/4 to 5 percent."*
- *"Recent indicators suggest that economic activity has continued to expand at a solid pace. Job gains have slowed, and the unemployment rate has moved up but remains low. Inflation has made further progress toward the Committee's 2 percent objective but remains somewhat elevated."*
- *"The Committee has gained greater confidence that inflation is moving sustainably toward 2 percent and that the risks to achieving its employment and inflation goals are roughly in balance. The economic outlook is uncertain, and the Committee is attentive to the risks to both sides of its dual mandate."*

■ In his remarks during his Post-meeting Press Conference on 9/18/2024, Fed Chairman Powell discussed the rate cut decision, the approach to considering further rate cuts, and outlook for the economy/inflation:

- *"This [1/2 percentage point] decision reflects our growing confidence that, with an appropriate recalibration of our policy stance, strength in the labor market can be maintained in a context of moderate growth and inflation moving sustainably down to 2 percent. We also decided to continue to reduce our securities holdings."*
- *"...committee participants generally expect GDP growth to remain solid, with a median projection of 2 percent over the next few years. In the labor market, conditions have continued to cool...The unemployment rate has moved up but remains low at 4.2 percent. The median projection for the unemployment rate in the SEP is 4.4 percent at the end of this year, four-tenths higher than projected in June."*
- *"The median projection in the SEP for total PCE inflation is 2.3 percent this year and 2.1 percent next year, somewhat lower than projected in June. Thereafter, the median projection is 2 percent."*
- *"...the median participant projects that the appropriate level of the federal funds rate will be 4.4 percent at the end of this year and 3.4 percent at the end of 2025."*
- *"We are not on any preset course. We will continue to make our decisions meeting by meeting."*
- *In response to a question regarding the cessation of balance sheet runoff with rate cuts, Chairman Powell said, "...reserves are still abundant, and expected to remain so for some time....we're not thinking about stopping runoff because of this at all...And so for a time you can have the balance sheet shrinking, but also be cutting rates."*
- *"...we don't think we need to see further loosening in labor market conditions to get inflation down to 2 percent...We're trying to achieve a situation where we restore price stability without the kind of painful increase in unemployment that has come sometimes with disinflation."*
- *With respect to inflation, Chairman Powell indicated that they are not declaring "mission accomplished" but "we're encouraged by the progress that we have made."*
- *"So, housing inflation ...is the one piece that is kind of dragging a bit...But, you know, the direction of travel is clear...The housing market is in part frozen because of the lock-in with low rates. As rates come down people will start to move more...the real issue with housing is*



*that we have had and are on track to continue to have not enough housing...And this is not something that the Fed can really fix...as we normalize rates, you'll see the housing market normalize...And then the supply question will have to be dealt with by the market and also by government."*

- *In response to a question asking if the economy is more vulnerable to a recession. Chairman Powell said, "I don't think so...I don't see anything in the economy right now that suggests the likelihood of a...downturn is elevated...you see growth at a solid rate. You see inflation coming down. And you see a labor market that's still at very solid levels. So I don't really see that, no."*
- The next FOMC meetings are scheduled for November 6 – November 7 and December 17 and 18.
- On September 18, 2024, the UST 10YR yield closed at 3.73%, while the Ginnie Mae II 30-year 4.5% coupon yield closed at 4.60% and the 5.0% coupon yield closed at 4.90%, a spread of 87 bps and 117 bps, respectively.
- Core PCE inflation, which is the Fed benchmark, remained steady at +2.6% in July 2024, per the August 30, 2024 Core PCE report (refer to **Table 12**).
- Per the September 6, 2024 jobs report, 142,000 new jobs were created and the unemployment rate decreased to 4.2% in August 2024. Jobs added in June were revised down to 118,000 from 179,000 and July's were revised down to 89,000 from 114,000. The unemployment rate and the downward revisions in jobs are indications that the economy is continuing to normalize.

#### **SOMA Portfolio Highlights (Aug 21, 2024 vs. Sep 18, 2024)**

- SOMA holdings of domestic securities totaled \$6.6 trillion on September 18<sup>th</sup> (a decrease of \$29.5 billion or -0.45% from August 21<sup>st</sup>). \$15.1 billion (51% of the total decrease) was in U.S. Treasury holdings and \$14.3 billion (49% of the total decrease) was in Agency MBS.
- Since the institution of redemption caps in June 2022, SOMA holdings have decreased by \$1.823 trillion. The total reduction of holdings of U.S. Treasuries was \$1.415 trillion and \$0.407 trillion for Agency MBS. This represents 95.3% and 43.9% of the total redemption cap over the period for U.S. Treasuries and Agency MBS, respectively. Beginning in June 2024, the Fed reduced its redemption cap for U.S. Treasuries from \$60 billion to \$25 billion per month. The cap will remain unchanged for Agency MBS.
- Agency MBS comprise about 35% of the total SOMA portfolio. The \$18.4 billion monthly decrease was primarily due to MBS principal repayments rather than outright sales and was comprised of a \$7.6 billion decrease in Fannie Mae holdings, a \$6.5 billion decrease in Freddie Mac holdings, and a \$0.1 billion decrease in Ginnie Mae holdings. Since the Fed's QT program began in June 2022, there have only been 27 outright sales of Agency MBS specified pools, totaling \$877 million (See Table 4).
- Over 99% of SOMA Agency MBS holdings have coupons of 4.5% or lower with an average WAC of 2.504%.
- The redemption cap for SOMA's Agency MBS holdings is set at \$35 billion per month. The reduction of \$14.3 billion in Agency MBS represents 41% of the monthly liquidation cap.

**Table 12. SOMA Holdings as of August 21, 2024 and September 18, 2024 (\$ Billions)**

Holdings by Security Type	August 21, 2024		September 18, 2024		Month-Over-Month	
	SOMA Holdings	% Share	SOMA Holdings	% Share	\$ Change	% Change <sup>8</sup>
<b>U.S. Treasuries</b>	\$4,281.8	64.89%	\$4,266.7	64.95%	-\$15.1	-0.35%
<b>Federal Agency Debt</b>	\$2.3	0.04%	\$2.3	0.04%	\$0.0	0.00%
<b>Agency MBS</b>	\$2,306.0	34.95%	\$2,291.6	34.89%	-\$14.3	-0.62%
<b>Agency Commercial MBS</b>	\$8.1	0.12%	\$8.1	0.12%	\$0.0	-0.10%
<b>Total SOMA Holdings</b>	<b>\$6,598.2</b>	<b>100.0%</b>	<b>\$6,568.7</b>	<b>100.0%</b>	<b>-\$29.4</b>	<b>-0.45%</b>

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

Agency	August 1, 2024		August 21, 2024		September 18, 2024	
	Singly-Family AMBS Outstanding	% AMBS Outstanding	SOMA AMBS Holdings	% SOMA Holdings	SOMA AMBS Holdings	% SOMA Holdings
<b>Fannie Mae</b>	\$3,569.7	39.8%	\$950.2	41.2%	\$942.6	41.1%
<b>Freddie Mac</b>	\$2,976.7	33.2%	\$884.8	38.4%	\$878.1	38.3%
<b>Ginnie Mae</b>	\$2,416.2	27.0%	\$471.0	20.4%	\$470.9	20.5%
<b>Total</b>	<b>\$8,962.6</b>	<b>100.0%</b>	<b>\$2,306.0</b>	<b>100.0%</b>	<b>\$2,291.6</b>	<b>100.0%</b>

**Table 14. SOMA Agency MBS Liquidations from August 21, 2024 to September 18, 2024 (\$ Billions)**

	MBS Holdings August 21, 2024	MBS Holdings September 18, 2024	Liquidated Amount	Liquidation Cap <sup>9</sup>	% of Liquidation Cap
<b>Total</b>	\$2,306.0	\$2,291.6	\$14.3	\$35.0	41%

Source: New York FED SOMA Holdings <https://www.newyorkfed.org/markets/soma-holdings> as of September 18, 2024.

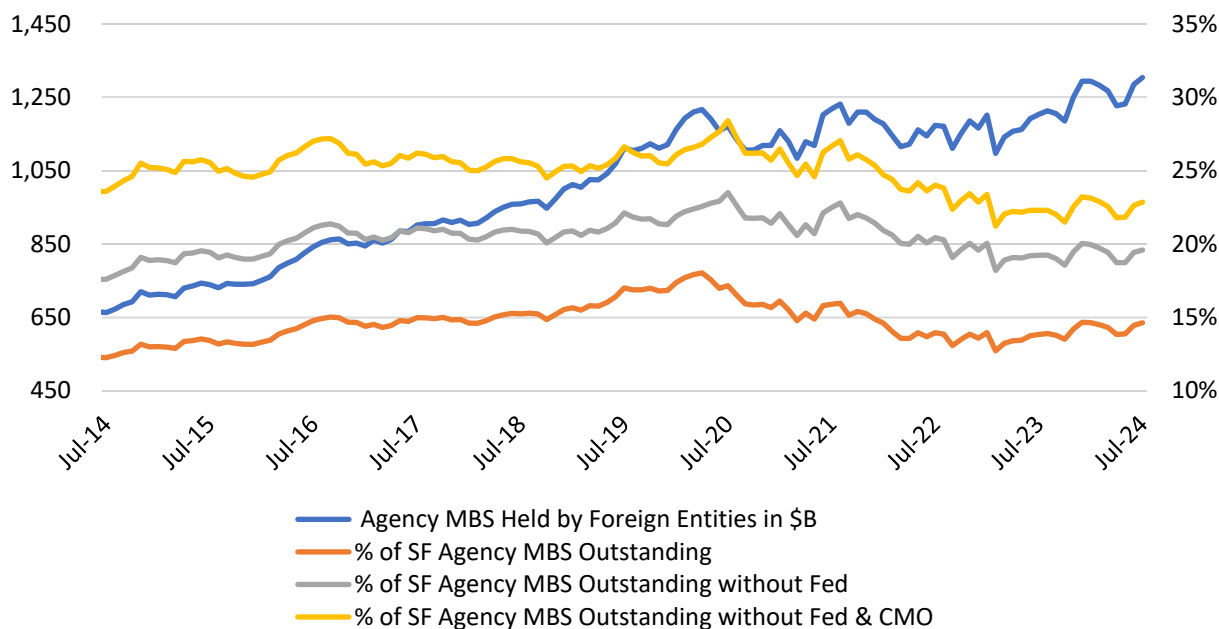
<sup>8</sup> Figures in \$ billions, any change less than \$50 million will be expressed as a "\$0.0" change in the "\$ Change" column.

<sup>9</sup> The Liquidation cap is per calendar month. This analysis covers a four-week period to maintain consistency with other analyses in this report.

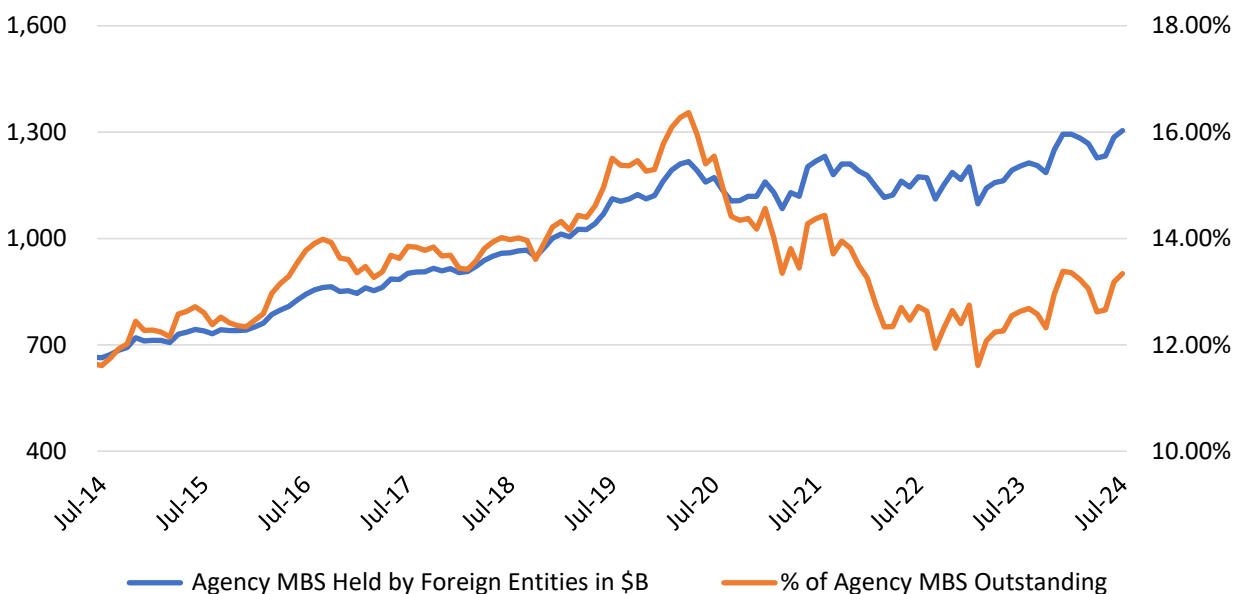
## 8.4 Foreign Ownership of MBS

As of month-end July 2024, foreign ownership of MBS represented approximately \$1.304 trillion in Agency MBS, up approximately \$100 billion from July 2023. Total foreign ownership of Agency MBS represents roughly 15% of total Agency MBS outstanding. Total foreign ownership excluding Fed Holdings and CMOs represents roughly 23% of total Agency MBS available.

**Figure 34. Agency MBS Owned by Foreign Entities Ex-Fed Holdings and CMO's (USD Billions)**



**Figure 35. Agency MBS Owned by Foreign Entities (USD Billions)**



Sources: TIC and Recursion, as of July 2024.

## 8.5 Foreign Ownership of Agency Debt

The largest holders of Agency Debt were Japan, China, and Taiwan. As of June 2024, these three owned roughly 51% of all foreign owned Agency Debt. Between June 2023 and June 2024, Japan, China, and Taiwan decreased their Agency Debt holdings. Japan's holdings decreased by \$9.4 billion, China's holdings decreased by \$36.0 billion, and Taiwan's holdings decreased by \$14.0 billion.

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

Country	Level of Holdings (\$ Millions)				Change in Holdings (\$ Millions)			
	9/1/2023	12/1/2023	3/1/2024	6/1/2024	Q3 2023	Q4 2023	Q1 2024	Q2 2024
Japan	\$252,463	\$259,059	\$248,603	\$244,007	(\$894)	\$6,596	(\$10,456)	(\$4,596)
China	\$255,110	\$271,478	\$255,977	\$233,934	(\$14,870)	\$16,368	(\$15,501)	(\$22,043)
Taiwan	\$201,010	\$211,610	\$199,560	\$194,253	(\$7,216)	\$10,600	(\$12,050)	(\$5,307)
Canada	\$116,642	\$133,725	\$129,900	\$157,880	\$11,312	\$17,083	(\$3,825)	\$27,980
Luxembourg	\$42,656	\$46,054	\$48,677	\$52,756	\$1,685	\$3,398	\$2,623	\$4,079
United Kingdom	\$90,017	\$120,148	\$39,768	\$47,710	\$34,335	\$30,131	(\$80,380)	\$7,942
Cayman Islands	\$37,089	\$42,342	\$41,961	\$40,740	\$6,691	\$5,253	(\$381)	(\$1,221)
Ireland	\$39,697	\$39,543	\$41,497	\$37,289	\$2,931	(\$154)	\$1,954	(\$4,208)
South Korea	\$36,508	\$38,381	\$36,519	\$36,129	(\$229)	\$1,873	(\$1,862)	(\$390)
France	\$23,557	\$24,713	\$24,154	\$27,183	\$3,887	\$1,156	(\$559)	\$3,029
Other	\$218,907	\$236,192	\$244,081	\$254,793	\$9,976	\$17,285	(7,889)	\$10,712
<b>Total</b>	<b>\$1,313,656</b>	<b>\$1,423,245</b>	<b>\$1,310,697</b>	<b>\$1,326,674</b>	<b>\$47,608</b>	<b>\$109,589</b>	<b>(\$112,548)</b>	<b>\$15,977</b>

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

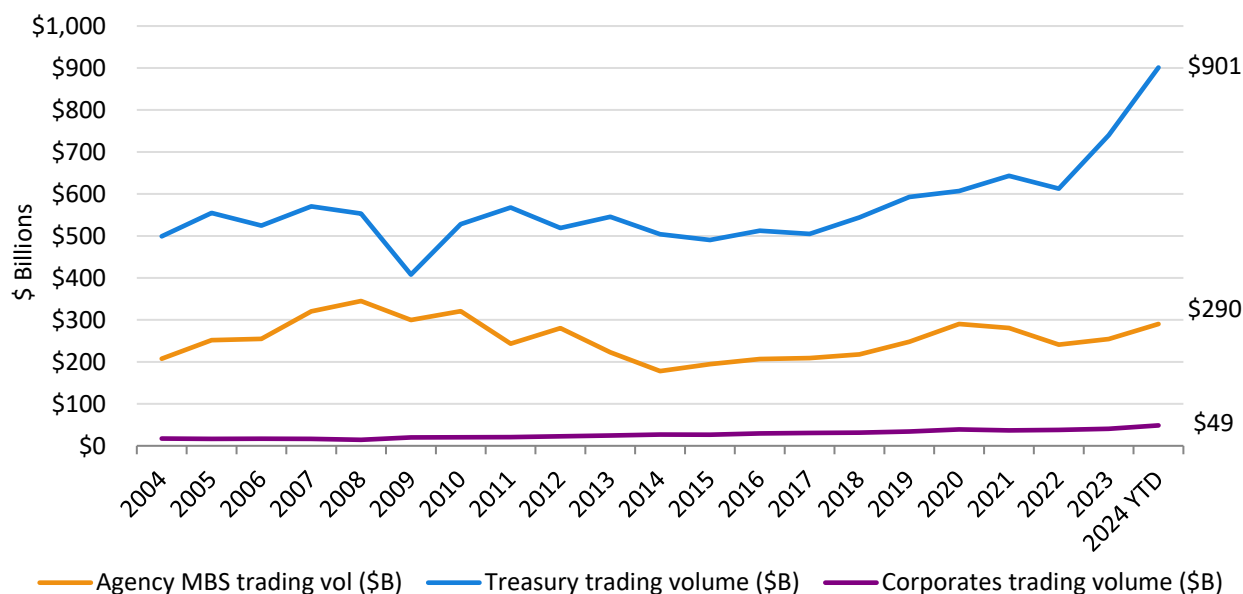
Country	Level of Holdings (\$ Millions)		
	6/1/2023	6/1/2024	YoY Change in Holdings (\$ Millions)
Japan	\$253,357	\$244,007	(\$9,350)
China	\$269,980	\$233,934	(\$36,046)
Taiwan	\$208,226	\$194,253	(\$13,973)
Canada	\$105,330	\$157,880	\$52,550
Luxembourg	\$40,971	\$52,756	\$11,785
United Kingdom	\$55,682	\$47,710	(\$7,972)
Cayman Islands	\$30,398	\$40,740	\$10,342
Ireland	\$36,766	\$37,289	\$523
South Korea	\$36,737	\$36,129	(\$608)
France	\$19,670	\$27,183	\$7,513
Other	\$208,931	\$254,793	\$45,862
<b>Total</b>	<b>\$1,266,048</b>	<b>\$1,326,674</b>	<b>\$60,626</b>

Source: Treasury International Capital (TIC). Note: Level of agency debt Holdings by month data as of Q2 2024. Table 15 includes the top 10 holders of Agency Debt listed as of June 2024.

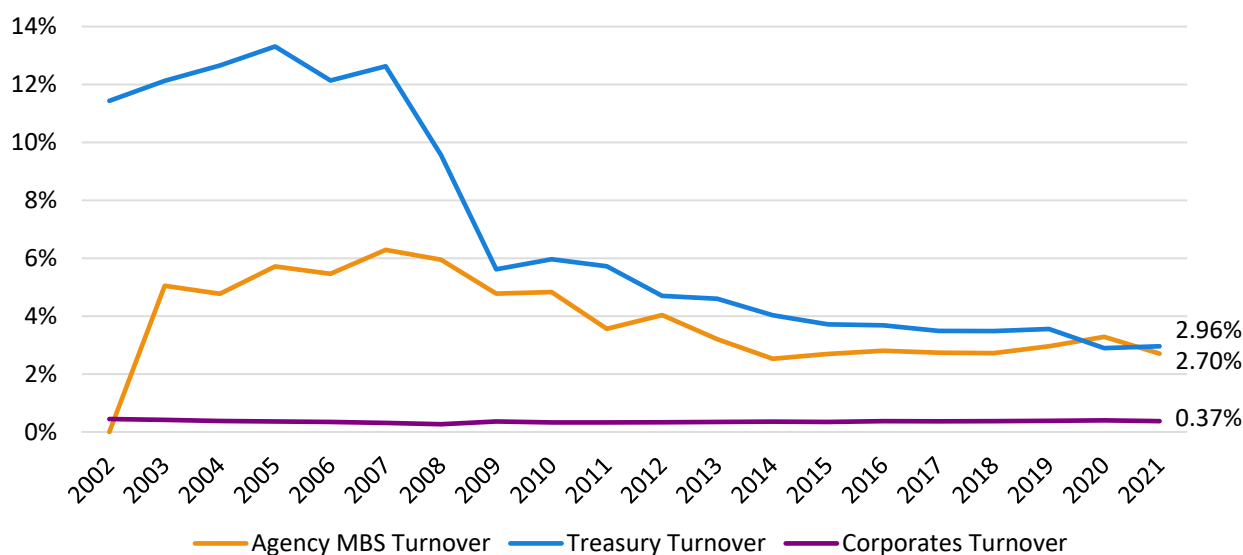
## 9 FIXED INCOME LIQUIDITY INDICATORS

YTD average daily trading volume for Agency MBS was \$290 billion as of month-end August 2024, which indicates an increase from the daily average of \$255 billion for calendar year 2023. On a monthly basis, Agency MBS average daily trading volume stayed the same MoM from July 2024 at \$279 billion in August 2024. See footnote below for update on “Average Daily Turnover by Sector” data.

**Figure 36. Average Daily Trading Volume by Sector**



**Figure 37. Average Daily Turnover by Sector**



Source: SIFMA. Note: Data as of August 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 August 2024. The distribution statistics capture some key differences in the populations served by the agencies.

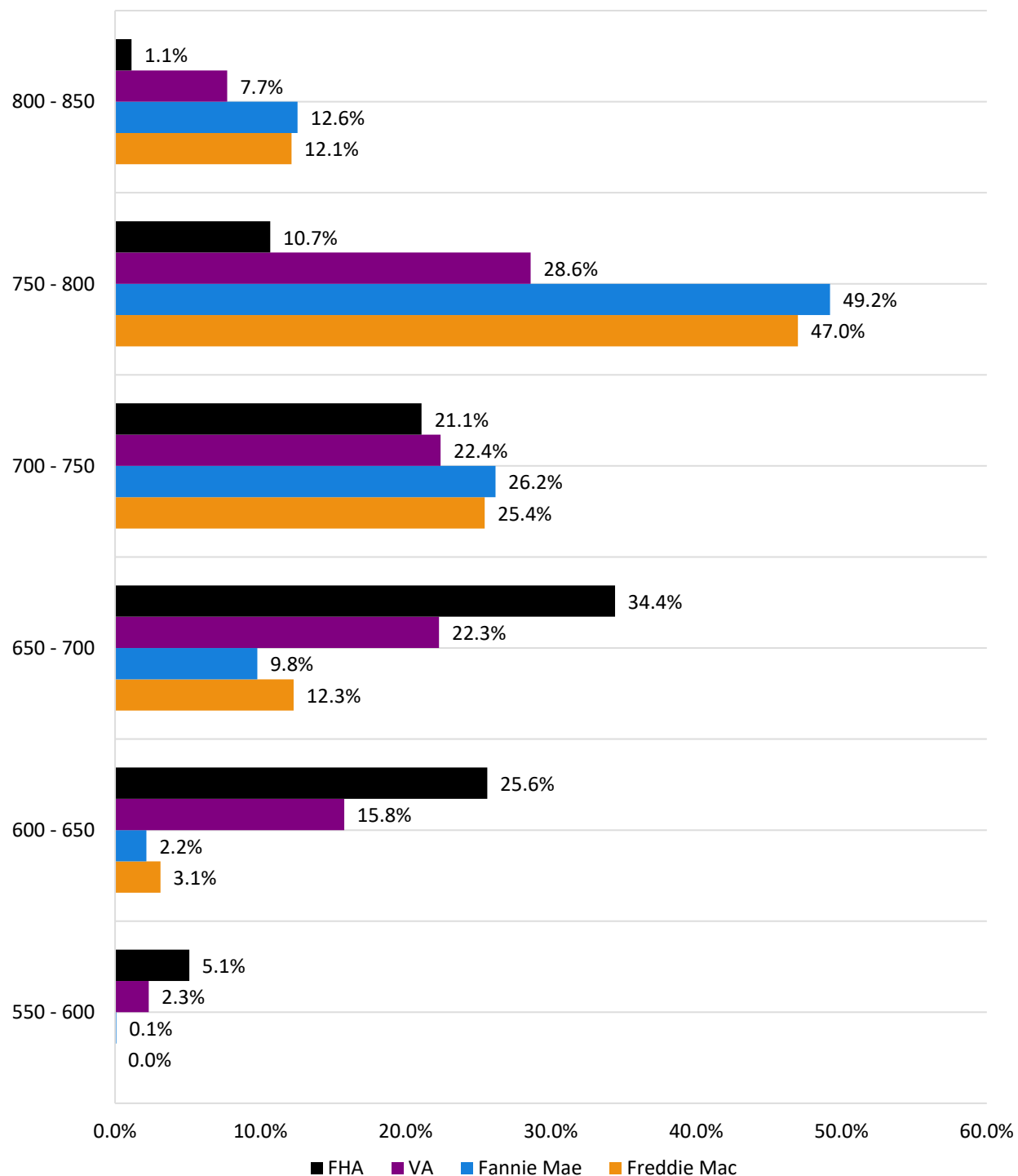
#### 10.1 Credit Scores

**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	256,693	656	701	751	785	801	739
Fannie	84,381	703	736	768	791	803	760
Freddie	86,381	690	728	766	790	803	755
Ginnie	85,931	628	656	698	749	786	702
<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	57,774	625	660	709	762	791	707
Fannie	16,735	660	697	742	778	798	735
Freddie	16,947	663	698	743	779	799	736
Ginnie	24,092	596	629	664	705	752	668
<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	320,723	645	689	743	781	799	731
Fannie	101,116	694	730	765	790	803	756
Freddie	103,328	684	723	763	789	802	752
Ginnie	116,279	617	647	686	739	780	691
<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	85,931	628	656	698	749	786	702
FHA	54,470	624	649	684	727	764	689
VA	28,776	639	679	738	781	800	727
Other	2,685	635	663	703	740	771	702
<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	24,092	596	629	664	705	752	668
FHA	13,874	589	622	654	687	722	654
VA	10,205	611	645	684	733	774	687
Other	13	650	670	731	762	786	723
<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	116,279	617	647	686	739	780	691
FHA	73,493	611	640	674	717	756	678
VA	39,803	627	664	720	772	797	715
Other	2,983	632	657	698	737	769	698

Data as of August 2024. Sources: Fannie Mae, Freddie Mac, and Ginnie Mae disclosure files. Note: All averages are rounded to the nearest whole number.

**Figure 38. FICO Distributions by Agency**



Data as of August 2024. Sources: Fannie Mae, Freddie Mac, and Ginnie Mae disclosure files.

## 10.2 Loan-to-Value (LTV)

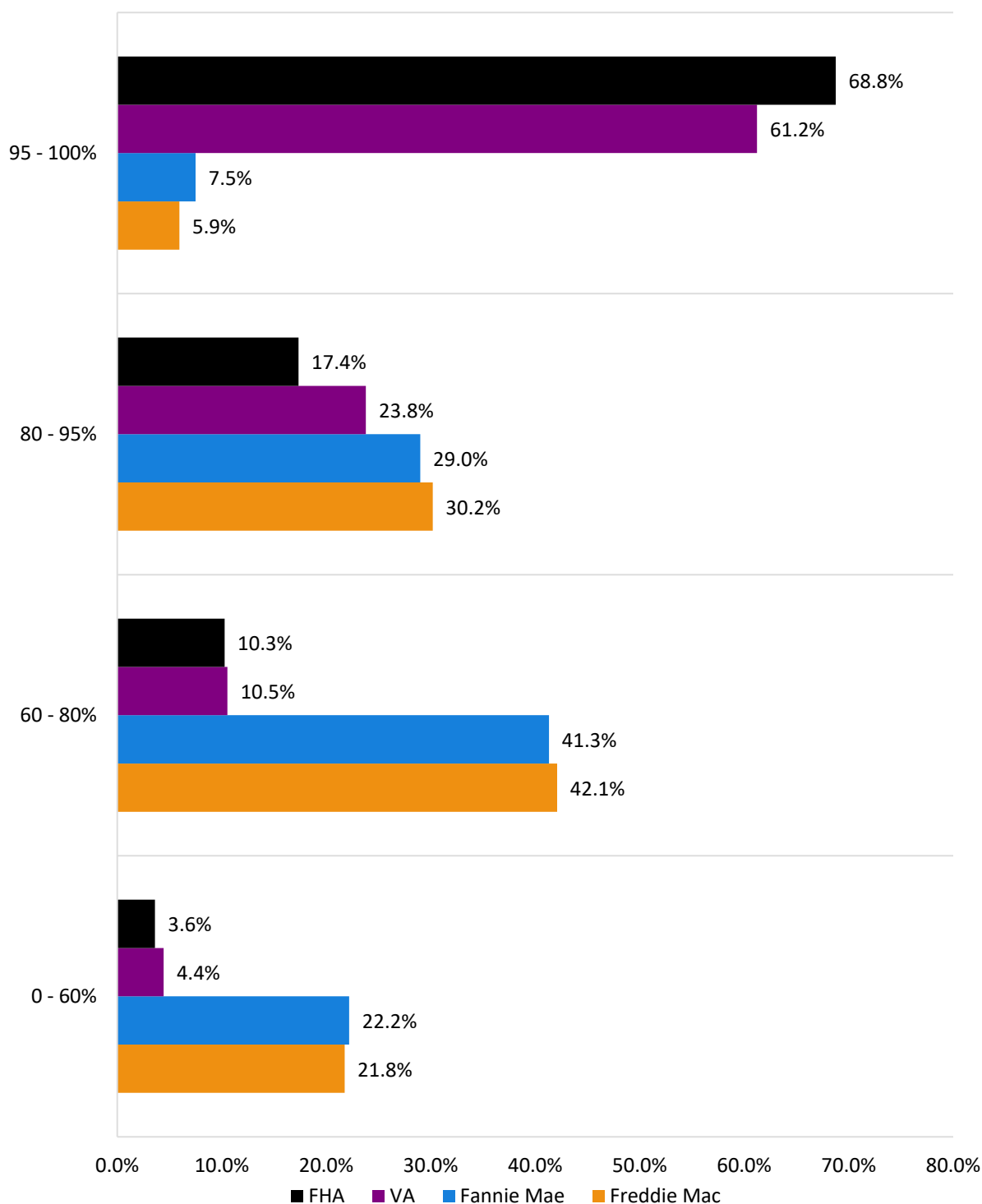
**Table 18. Share of Loans by LTV**

<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	257,286	60	80	90	97	99	85
Fannie	84,459	54	74	80	94	95	79
Freddie	86,415	52	72	80	95	95	78
Ginnie	86,412	90	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	61,425	35	53	70	81	98	68
Fannie	16,738	28	42	58	70	78	55
Freddie	16,949	28	43	60	72	80	57
Ginnie	27,738	60	74	81	97	100	82
<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	325,864	53	74	86	97	99	82
Fannie	101,197	46	65	80	90	95	75
Freddie	103,364	45	65	80	90	95	75
Ginnie	121,303	77	91	98	99	100	93
<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	86,412	90	97	98	100	100	96
FHA	54,873	92	97	98	98	98	96
VA	28,814	81	99	100	100	102	96
Other	2,725	92	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	27,738	60	74	81	97	100	82
FHA	14,630	54	69	79	81	93	74
VA	13,095	70	84	94	100	103	90
Other	13	73	82	93	95	98	86
<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	121,303	77	91	98	99	100	93
FHA	75,267	76	90	98	98	98	92
VA	42,997	78	90	100	100	102	94
Other	3,039	92	98	101	101	101	98

Data as of August 2024. Sources: Fannie Mae, Freddie Mac, and Ginnie Mae disclosure files. Note: All averages are rounded to the nearest whole number.



**Figure 39. Loan-to Value by Agency**



Data as of August 2024. Sources: Fannie Mae, Freddie Mac, and Ginnie Mae disclosure files.

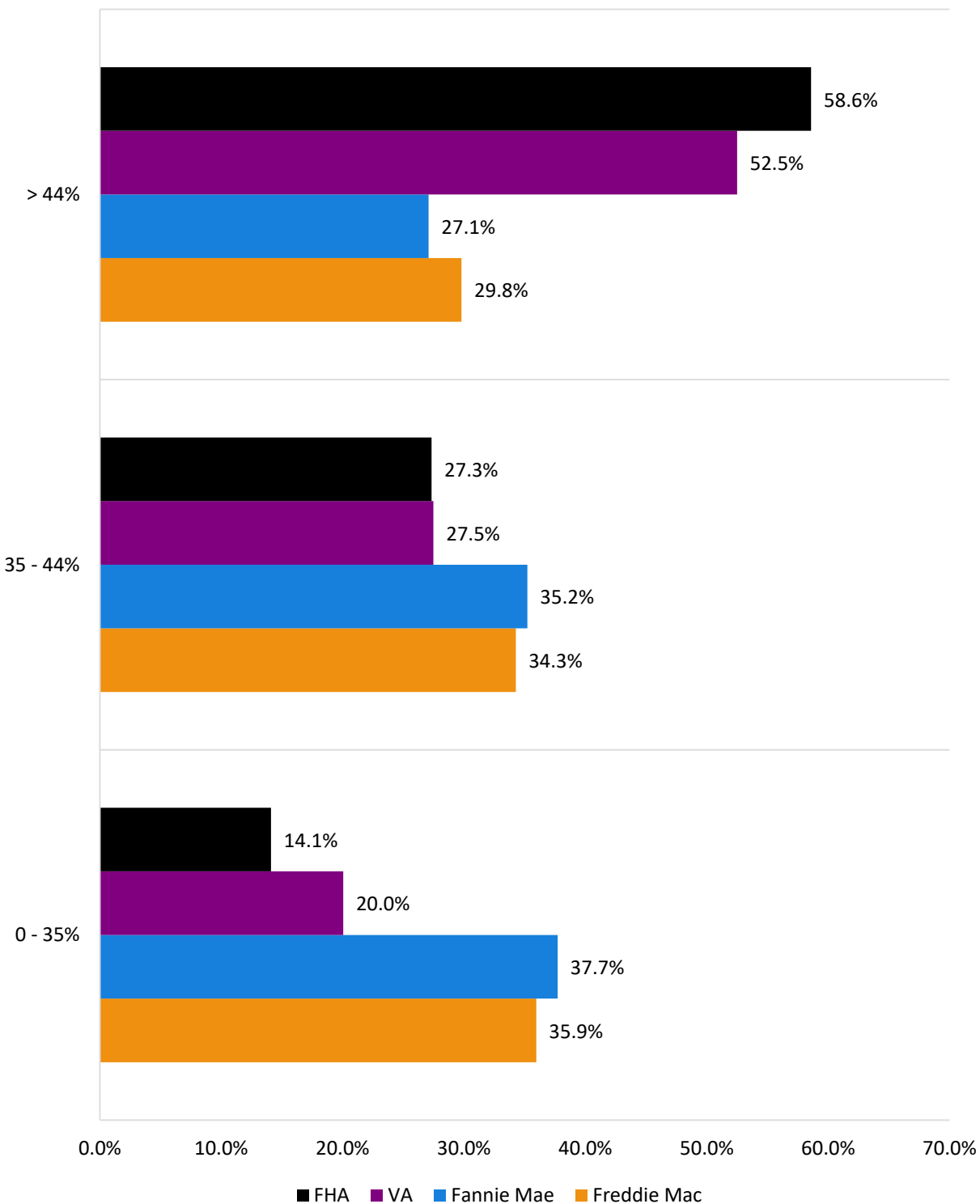
## 10.3 Debt-to-Income (DTI)

**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	256,894	26	34	42	47	50	40
Fannie	84,459	24	31	39	45	49	38
Freddie	86,415	25	32	40	46	49	38
Ginnie	86,020	32	39	46	52	56	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	53,137	25	32	40	46	50	39
Fannie	16,738	23	30	38	44	47	36
Freddie	16,949	24	31	39	45	48	37
Ginnie	19,450	28	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	315,957	26	34	41	47	50	40
Fannie	101,197	24	31	39	45	48	37
Freddie	103,364	24	32	40	45	49	38
Ginnie	111,396	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	86,020	32	39	46	52	56	45
FHA	54,850	34	40	46	52	55	45
VA	28,447	30	37	45	51	56	44
Other	2,723	28	31	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	19,450	28	36	44	50	55	43
FHA	12,884	29	37	44	50	55	43
VA	6,553	28	35	43	50	55	42
Other	13	23	29	33	40	42	33
<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	111,396	31	38	45	51	55	44
FHA	72,776	33	39	46	52	55	45
VA	35,659	30	37	45	51	56	44
Other	2,961	28	31	36	40	42	35

Data as of August 2024. Sources: Fannie Mae, Freddie Mac, and Ginnie Mae disclosure files. Note: All averages are rounded to the nearest whole number.

**Figure 40. Debt-to Income by Agency**



Data as of August 2024. 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 June 2023 – August 2023 to the three-month range of June 2024 – August 2024, the share of high-LTV agency loans with:

- FICO scores above 750 increased by approximately 5.5%.
- DTIs below 35% decreased by approximately 10.9%.

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 72.04% of its issuances between June 2024 – August 2024 having LTVs of 95 or above, compared to 21.67% for the GSEs.

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

	<i>Ginnie Mae</i>	<i>GSE</i>	<i>All</i>
Jun 2023 – Aug 2023	71.29%	23.00%	41.25%
Jun 2024 – Aug 2024	72.04%	21.67%	40.50%

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

<i>FICO</i>						
<i>DTI</i>	<650	650-700	700-750	≥750	NA	All
<35	1.80%	2.89%	4.19%	7.44%	0.05%	16.37%
35-45	5.27%	8.00%	9.96%	12.25%	0.04%	35.52%
≥45	7.73%	13.21%	13.49%	12.44%	0.11%	46.98%
NA	0.24%	0.20%	0.13%	0.19%	0.37%	1.13%
All	15.04%	24.30%	27.77%	32.32%	0.57%	100.00%

**Table 22. Agency Market Share by DTI and FICO for Loans with LTV > 95 (Jun 2024 – Aug 2024)**

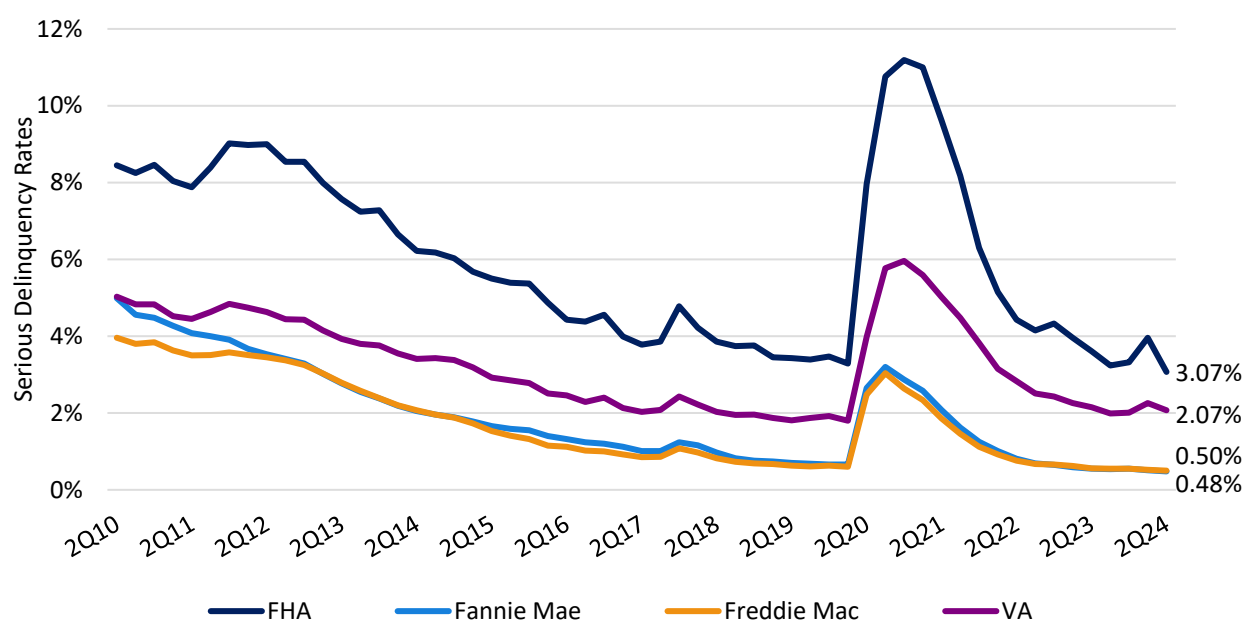
<i>FICO</i>						
<i>DTI</i>	<650	650-700	700-750	≥750	NA	All
<35	1.53%	2.32%	3.66%	7.01%	0.07%	14.59%
35-45	4.68%	6.90%	9.39%	12.69%	0.08%	33.73%
≥45	7.24%	12.41%	13.75%	13.87%	0.17%	47.45%
NA	0.54%	0.59%	0.49%	0.54%	2.08%	4.23%
All	13.99%	22.22%	27.29%	34.10%	2.39%	100.00%

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

## 10.5 Serious Delinquency Rates

Serious delinquency rates for Single-Family VA and FHA loans fell in Q2 2024. From Q1 2024 to Q2 2024, FHA's serious delinquencies fell 89 bps to 3.07% and VA's delinquency rates saw a 19 bp decrease to 2.07%. Fannie and Freddie's serious delinquencies saw less movement than FHA and VA in Q2 2024. Fannie Mae's serious delinquency rate decreased 3 bps and Freddie Mac's rate decreased 2 bps from Q1 2024 to Q2 2024, sitting at 0.50% and 0.48%, respectively. The trend in serious delinquency rates is consistent with the decrease in the number of loans in forbearance since the 2020 pandemic.

**Figure 41. Serious Delinquency Rates: Single-Family Loans**



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

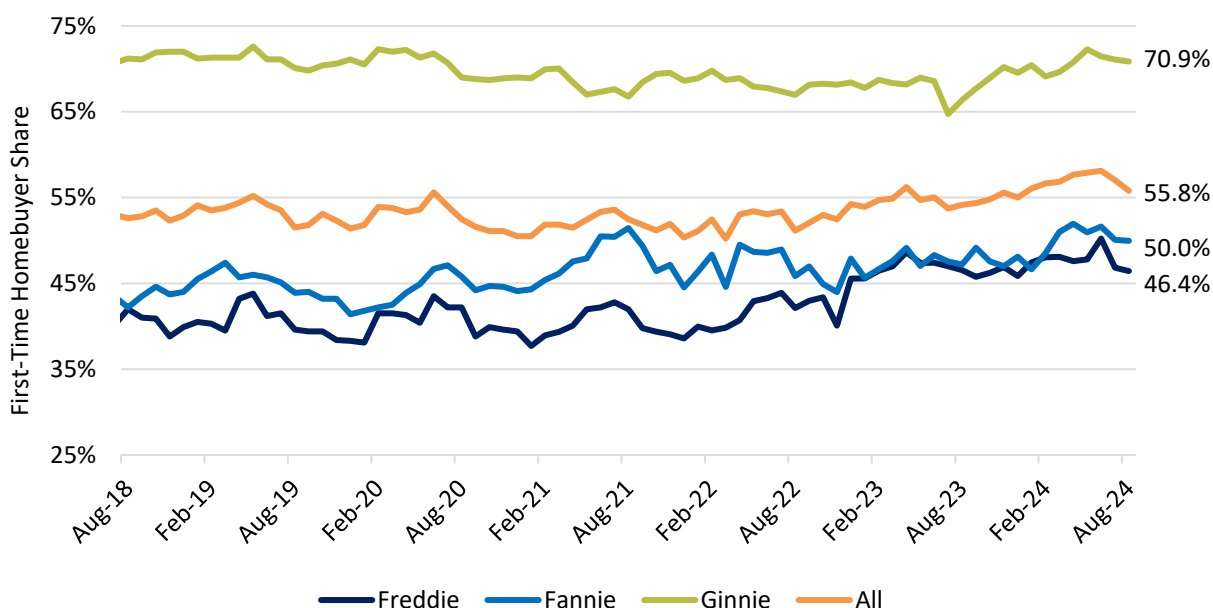
Note: Serious delinquency is defined as 90 days or more past due or in the foreclosure process. Data as of Q2 2024.

## 10.6 Credit Box

The first-time homebuyer shares for agency purchase loans was 55.8% as of month-end August 2024, a decrease from 57.0% in July 2024 and up from 54.2% in August 2023. Ginnie Mae's first-time homebuyer share, 70.9% as of month-end July 2024, increased 9.8% YoY. Freddie Mac and Fannie Mae's first-time homebuyer shares were 46.4% and 50%, respectively, as of month-end August 2024. Freddie Mac's share of first-time borrowers decreased 0.1% and Fannie Mae's increased 2.8% YoY.

**Table 23** shows that based on mortgages originated as of month-end August 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 42. First-Time Homebuyer Share: Purchase Only Loans**



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

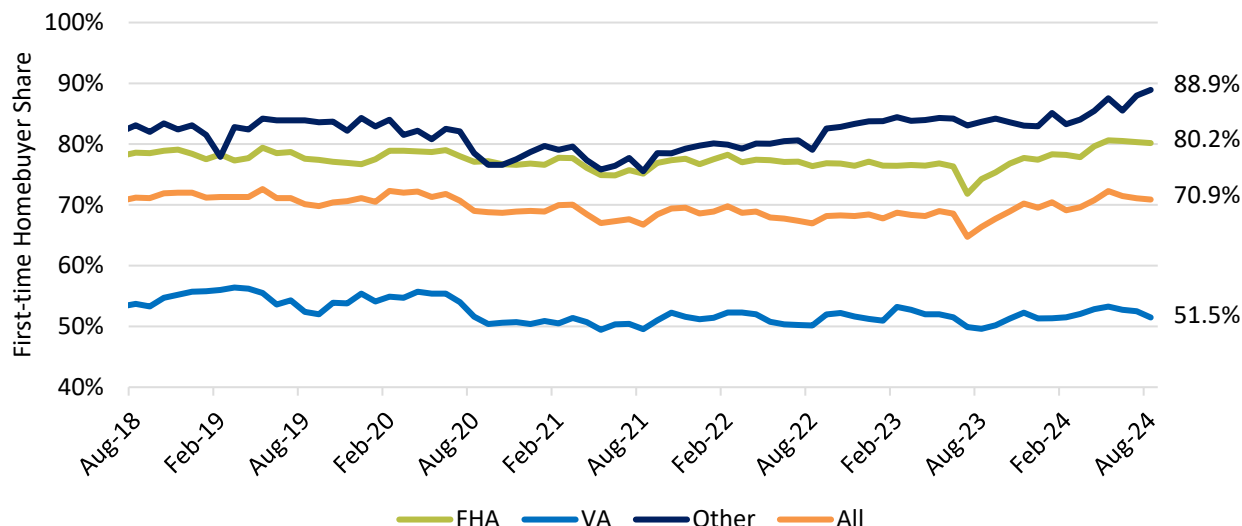
	Fannie Mae		Freddie Mac		Ginnie Mae		All	
	First-Time	Repeat	First-Time	Repeat	First-Time	Repeat	First-Time	Repeat
<b>Loan Amount \$</b>	\$347,362	\$361,938	\$344,839	\$369,292	\$323,448	\$386,519	\$336,454	\$370,373
<b>Credit Score</b>	755	765	747	763	695	719	727	754
<b>LTV (%)</b>	84.3	73.9	83.5	73.9	97.2	93.5	89.6	78.2
<b>DTI (%)</b>	37.4	37.9	37.9	38.2	44.2	45.5	40.5	39.7
<b>Loan Rate (%)</b>	6.8	6.9	6.9	6.9	6.5	6.4	6.7	6.8

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

In the Ginnie Mae purchase market, 80.2% of FHA loans, 51.5% of VA loans, and 88.9% of “Other” loans provided financing for first-time home buyers as of month-end August 2024. The share of first-time home buyers in the Ginnie Mae purchase market decreased MtM for FHA and VA loan types and increased 0.9% for “Other” loans.

**Table 24** shows that based on mortgages originated as of month-end August 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 16.5% smaller loans, had a 27.3-point lower credit score, and a 5.3% 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 5.2% smaller loans and 2.8% 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 43. First-time Homebuyer Share: Ginnie Mae Breakdown**



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

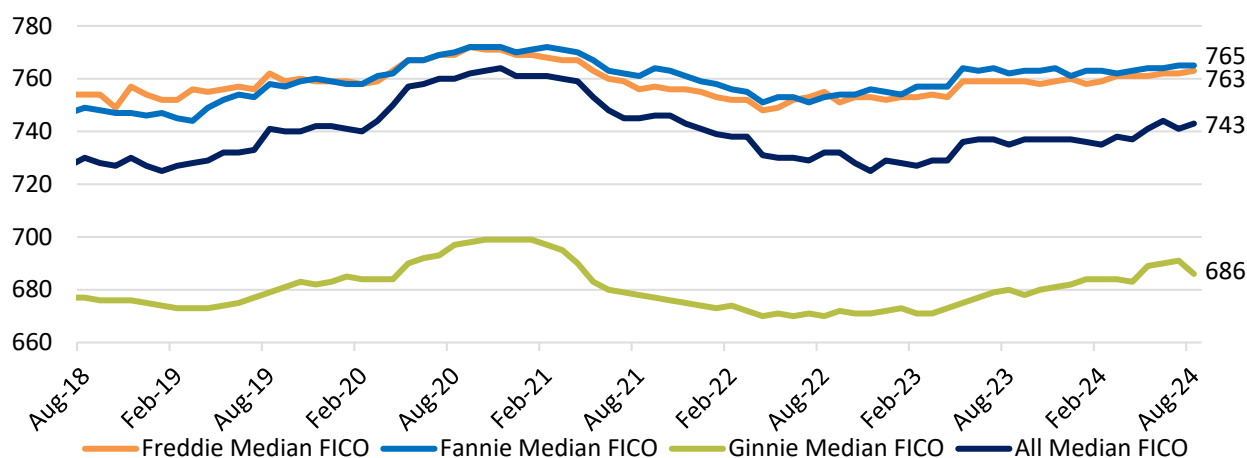
	FHA		VA		Other		Total	
	First-Time	Repeat	First-Time	Repeat	First-Time	Repeat	First-Time	Repeat
<b>Loan Amount \$</b>	\$318,652	\$336,215	\$358,610	\$429,452	\$195,318	\$212,096	\$323,448	\$386,519
<b>Credit Score</b>	688	690	714	741	701	714	695	719
<b>LTV (%)</b>	96.7	94.0	98.3	93.1	97.9	97.6	97.2	93.5
<b>DTI (%)</b>	45.0	46.7	43.4	44.8	35.2	35.4	44.2	45.5
<b>Loan Rate (%)</b>	6.5	6.4	6.5	6.4	6.6	6.5	6.5	6.4

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

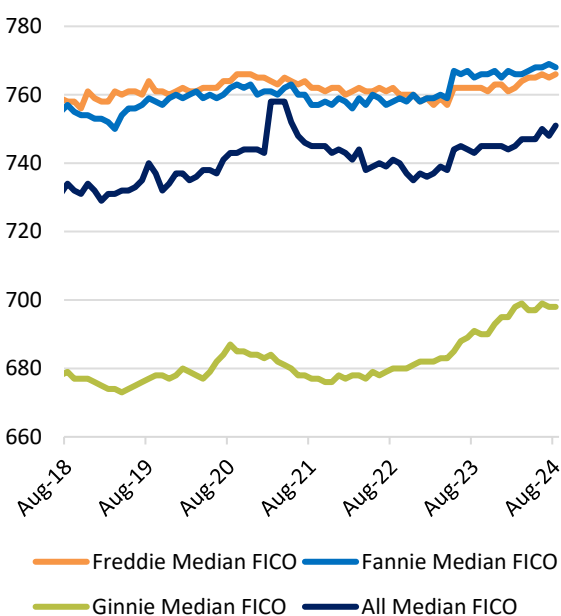
## 10.7 Credit Box: Historical

The median FICO score for all Agency loans originated as of month-end August 2024 was 743, which represents an 8-point increase from August 2023. Ginnie Mae median FICO scores increased 6 points from 680 in August 2023 to 686 as of month-end August 2024. As of month-end August 2024, average FICO scores for refinances increased for Ginnie Mae and Freddie Mac borrowers by 4 and 9 points YoY, respectively. Average FICO scores for Fannie refinances decreased 2 points from August 2023 to August 2024.

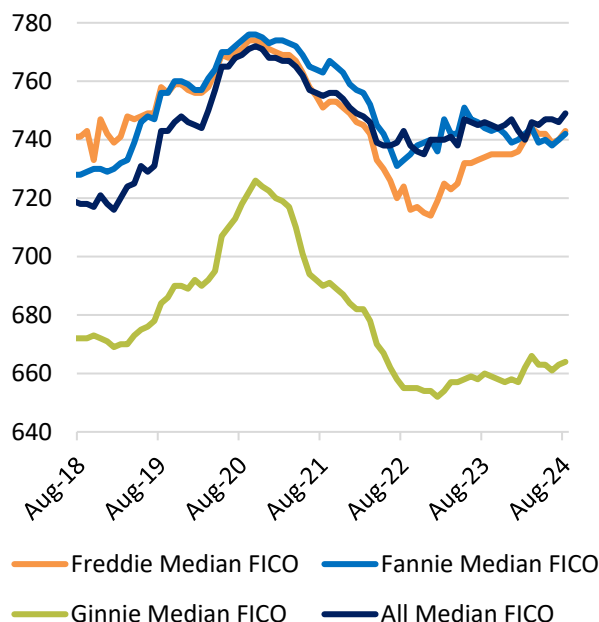
**Figure 44. FICO Scores for All Loans**



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



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

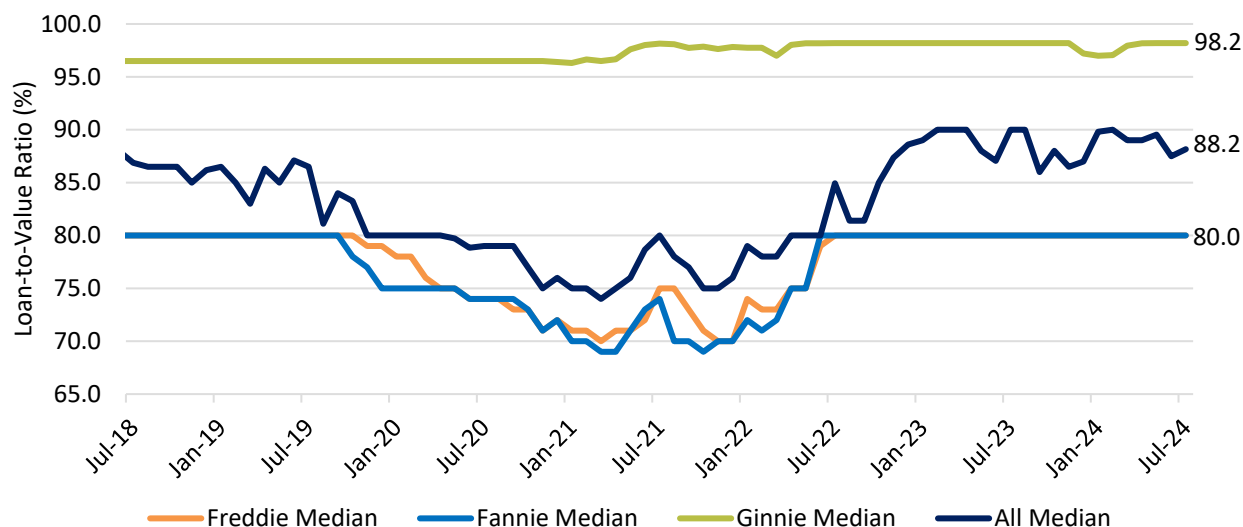


Sources: Fannie Mae, Freddie Mac, and Ginnie Mae disclosure files

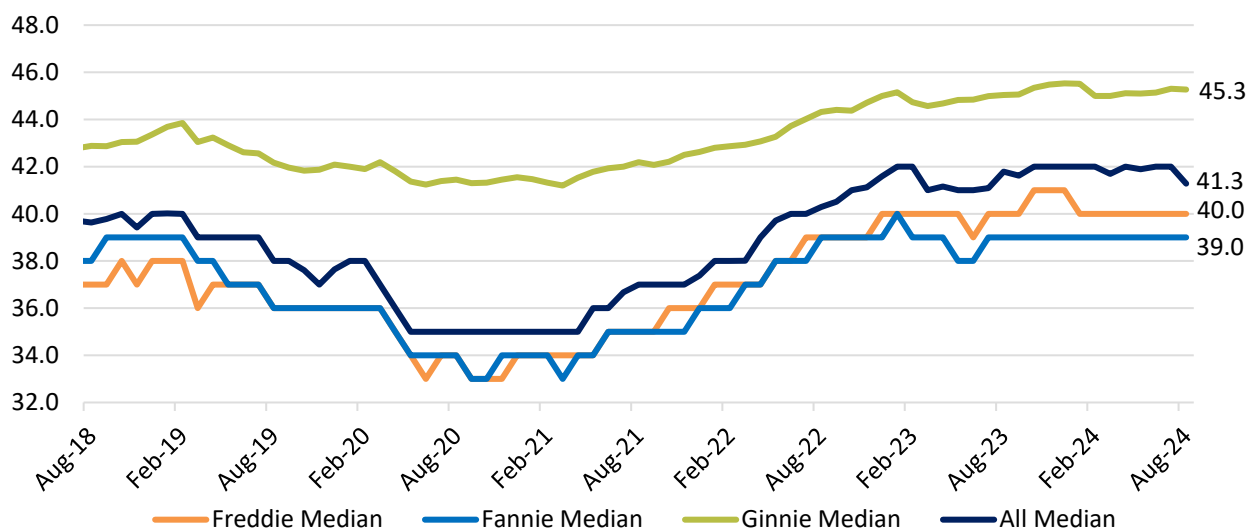


In August 2024, the median LTV for Ginnie Mae loans was 98.2% compared to 80.0% for Fannie Mae and Freddie Mac, owing primarily to the lower down-payment requirements for government loan programs. Fannie Mae, Freddie Mac, and Ginnie Mae noted their LTV ratios remain flat YoY from August 2023 to August 2024. In August 2024, median DTIs for Ginnie Mae, Freddie Mac, and Fannie Mae were 45.3%, 40.0%, and 39.0%, respectively. In August 2023, median DTIs for Ginnie Mae, Freddie Mac, and Fannie Mae were 45.0%, 40.0%, and 39.0%, respectively.

**Figure 47. LTV Ratio for All Loans**



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



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

## 11 FORBEARANCE TRENDS

At the end of August 2024, 49,445 Ginnie Mae loans were in forbearance. The number of loans in forbearance removed from MBS pools in August 2024 was 195 while 49,250 loans in forbearance remained in pools. The number of loans in forbearance, both the number of loans that remained in pools, and the number of loans removed from MBS pools increased for Ginnie Mae. 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**

<b>All Loans in Forbearance – August 2024</b>						
	<b>FICO Score*</b>	<b>Note Rate (%) *</b>	<b>Current Principal Balance Median</b>	<b>First Time Homebuyer Share (%)</b>	<b>Purchase Share (%)</b>	<b>Loan Count</b>
<b>Ginnie</b>	652	4.5	207,924	73.5	75.1	49,445
<b>Bank</b>	671	4.5	158,775	83.7	89.1	6,672
<b>Nonbank</b>	650	4.5	215,866	72.2	73.5	42,744
<b>FHA</b>	651	4.5	199,590	77.0	78.0	40,902
<b>Bank</b>	670	4.5	158,395	85.8	89.5	6,241
<b>Nonbank</b>	648	4.5	207,415	75.6	76.4	34,635
<b>VA</b>	657	4.3	271,379	56.1	62.8	7,492
<b>Bank</b>	679	4.3	232,821	52.7	82.3	279
<b>Nonbank</b>	656	4.3	272,763	56.2	62.1	7,211

<b>Loans in Forbearance and Removed from Pools – August 2024</b>						
	<b>FICO Score*</b>	<b>Note Rate (%) *</b>	<b>Current Principal Balance Median</b>	<b>First Time Homebuyer Share (%)</b>	<b>Purchase Share (%)</b>	<b>Loan Count</b>
<b>Ginnie</b>	636	5.2	191,339	67.2	66.4	195
<b>Bank</b>	650	5.6	84,180	71.5	48.5	29
<b>Nonbank</b>	635	5.1	215,247	67.0	67.9	166
<b>FHA</b>	631	5.5	182,100	66.9	69.4	172
<b>Bank</b>	651	5.8	80,926	67.0	44.4	28
<b>Nonbank</b>	629	5.4	194,875	66.9	71.8	144
<b>VA</b>	660	4.0	336,560	64.1	48.7	20
<b>Bank</b>	632	2.8	212,781	100.0	100.0	1
<b>Nonbank</b>	661	4.1	336,738	61.3	46.8	19

<b>Loans in Forbearance that Remain in Pools – August 2024</b>						
	<b>FICO Score*</b>	<b>Note Rate (%) *</b>	<b>Current Principal Balance Median</b>	<b>First Time Homebuyer Share (%)</b>	<b>Purchase Share (%)</b>	<b>Loan Count</b>
<b>Ginnie</b>	653	4.5	207,982	73.6	75.2	49,250
<b>Bank</b>	671	4.5	158,922	83.7	89.2	6,643
<b>Nonbank</b>	650	4.5	215,866	72.2	73.5	42,578
<b>FHA</b>	651	4.5	199,649	77.0	78.0	40,730
<b>Bank</b>	670	4.5	158,577	85.8	89.6	6,213
<b>Nonbank</b>	648	4.5	207,420	75.7	76.4	34,491
<b>VA</b>	657	4.3	271,320	56.1	62.9	7,472
<b>Bank</b>	679	4.3	233,431	52.5	82.3	278
<b>Nonbank</b>	656	4.3	272,473	56.2	62.1	7,192

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 August 2024; \*Averages weighted by remaining principal balance of the loans.

## 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 88.82% of Ginnie Mae MSRs (see Cumulative Share). Twenty-two of these top 30 are non-depository institutions, the remaining eight are depository institutions. As of August 2024, over half (52.10%) of the Ginnie Mae MSRs are owned by the top five firms.

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

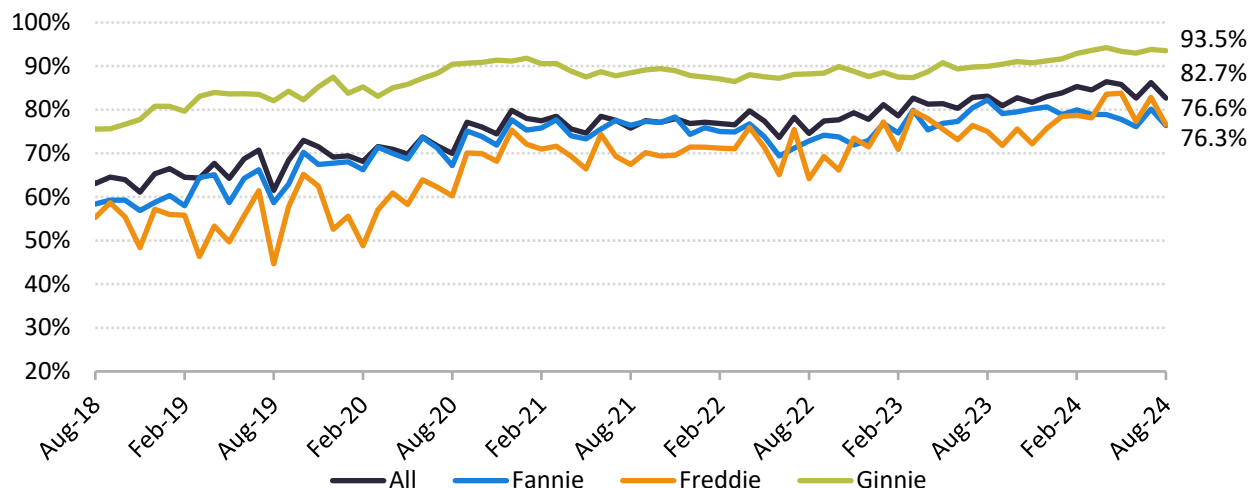
MSR Holder	Current	Rank Year prior	Change	UPB (\$)	Share	Cumulative Share	CPR	CDR
Lakeview Loan Servicing	1	1	↔	\$373,260,050,104	15.4%	15.43%	10.70%	1.25%
DBA Freedom Mortgage	2	2	↔	\$342,890,526,294	14.2%	29.60%	10.04%	0.72%
PennyMac Loan Service	3	3	↔	\$284,919,877,032	11.8%	41.37%	10.02%	1.37%
Newrez LLC	4	5	↑	\$133,800,271,210	5.5%	46.90%	10.46%	0.89%
Mr. Cooper (Nationstar)	5	4	↓	\$125,691,071,227	5.2%	52.10%	9.42%	1.45%
Carrington Mortgage	6	7	↑	\$115,486,125,023	4.8%	56.87%	11.13%	0.27%
Rocket Mortgage	7	6	↓	\$113,197,777,895	4.7%	61.55%	7.68%	0.75%
Wells Fargo Bank	8	8	↔	\$91,924,092,681	3.8%	65.35%	7.27%	0.36%
Planet Home Lending	9	9	↔	\$73,230,002,729	3.0%	68.37%	11.91%	0.69%
U.S. Bank	10	10	↔	\$57,121,036,528	2.4%	70.73%	6.50%	0.63%
LoanDepot	11	12	↑	\$38,584,647,590	1.6%	72.33%	16.69%	1.11%
Navy Federal Credit Union	12	13	↑	\$32,941,555,908	1.4%	73.69%	11.71%	2.14%
Mortgage Research Center	13	15	↑	\$31,416,138,841	1.3%	74.99%	9.44%	0.30%
United Wholesale Mortgage	14	11	↓	\$29,857,148,095	1.2%	76.22%	18.70%	0.72%
M&T Bank	15	14	↓	\$25,999,457,871	1.1%	77.30%	6.14%	0.48%
Guild Mortgage Company	16	16	↔	\$25,472,644,354	1.1%	78.35%	8.03%	0.33%
CrossCountry Mortgage	17	19	↑	\$23,805,745,054	1.0%	79.33%	12.60%	2.44%
The Money Source	18	18	↔	\$22,728,265,313	0.9%	80.27%	8.53%	1.02%
New American Funding	19	21	↑	\$21,567,112,868	0.9%	81.16%	10.10%	2.28%
CMG Mortgage	20	23	↑	\$21,381,367,975	0.9%	82.05%	9.09%	1.45%
Truist Bank	21	20	↓	\$20,033,487,865	0.8%	82.88%	8.43%	1.68%
Movement Mortgage	22	22	↔	\$19,890,589,948	0.8%	83.70%	13.42%	0.91%
Village Capital & Investment	23	30	↑	\$19,637,464,070	0.8%	84.51%	36.34%	6.97%
AmeriHome Mortgage	24	17	↓	\$19,560,765,029	0.8%	85.32%	4.91%	0.86%
Idaho Housing and Finance	25	24	↓	\$19,171,075,083	0.8%	86.11%	15.41%	2.40%
PHH Mortgage Corporation	26	25	↓	\$17,878,610,777	0.7%	86.85%	7.75%	0.87%
Citizens Bank, N.A.	27	26	↓	\$13,609,554,031	0.6%	87.41%	7.70%	0.33%
Flagstar Bank, N.A.	28	27	↓	\$12,721,381,032	0.5%	87.94%	9.73%	0.90%
MidFirst Bank	29	28	↓	\$10,810,525,110	0.4%	88.38%	9.33%	3.48%
Sun West Mortgage Co	30	NR	↑	\$10,572,042,592	0.4%	88.82%	9.67%	0.36%

Sources: Ginnie Mae, Recursion. Notes: Data as of August 2024.

### 13 AGENCY NONBANK ORIGINATORS

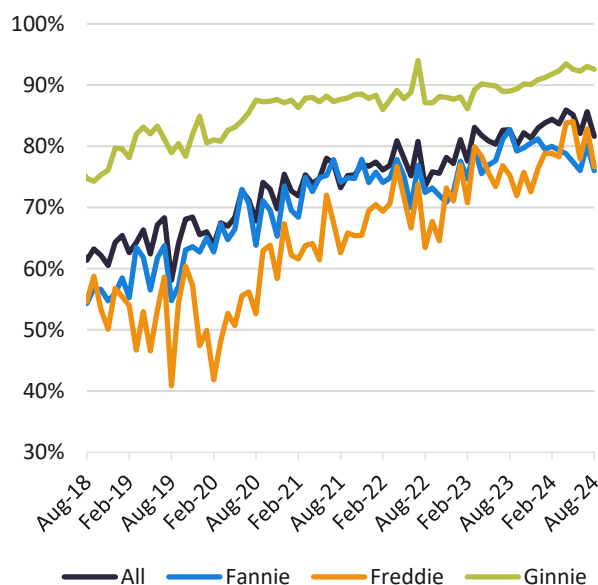
Total Agency nonbank origination shares decreased as of month-end August 2024 by approximately 4.1% MoM. The decrease in nonbank origination share was driven by decreases in Freddie Mac, down 7.5% MoM, and Fannie Mae, down 4.7% MoM. The Ginnie Mae nonbank share fell slightly to 93.5% as of August 2024 and has remained consistently higher than the GSEs.

**Figure 49. Agency Nonbank Origination Share (All, Purchase, Refi)**



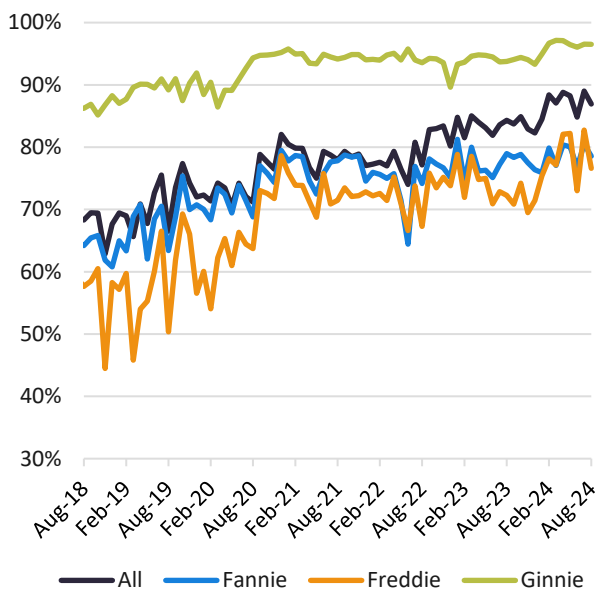
**Figure 50. Nonbank Origination Share:**

#### Purchase Loans



**Figure 51. Nonbank Origination Share:**

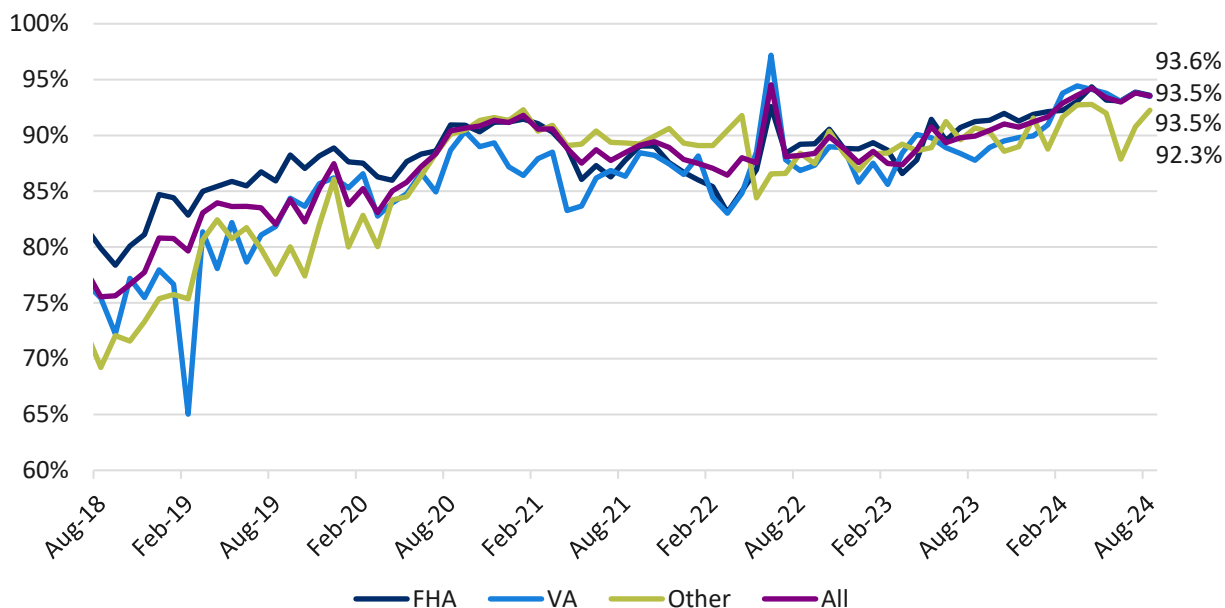
#### Refi Loans



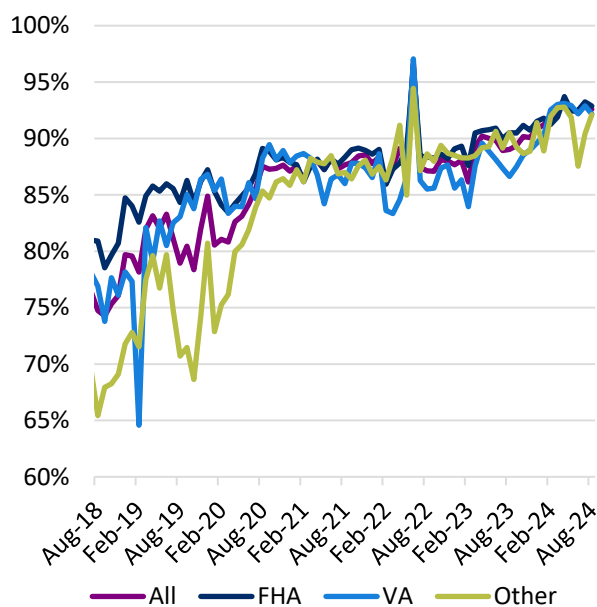
Source: Recursion. Notes: Data as of August 2024.

Ginnie Mae's total nonbank originator share remained relatively stable as of month-end August 2024. Ginnie Mae continues to have a high proportion of nonbank originations, with a rate of 93.5% in August 2024. The percentage of Ginnie Mae's "Other" nonbank refinanced loans increased to 87.2% in August 2024.

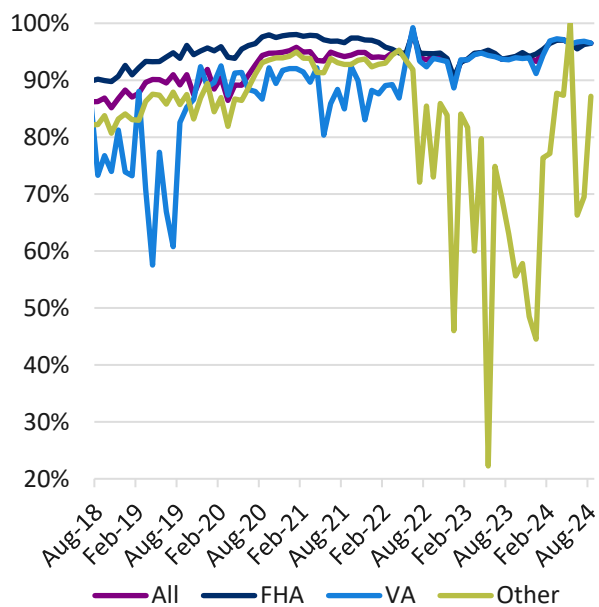
**Figure 52. Ginnie Mae Nonbank Origination Share by Product (All, Purchase, Refi)**



**Figure 53. Ginnie Mae Nonbank Share: Purchase Loans**



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



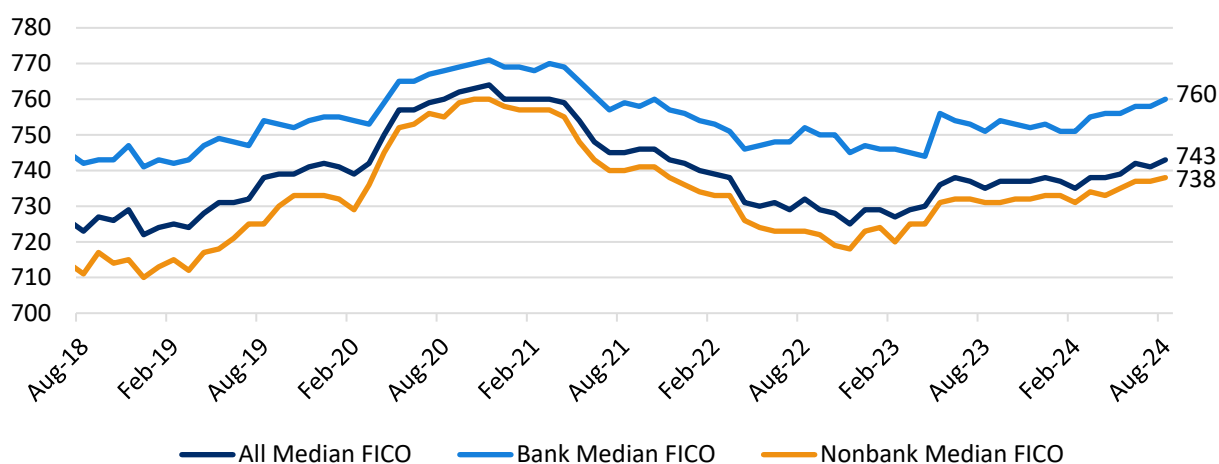
Source: Recursion. Notes: Data as of August 2024.

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

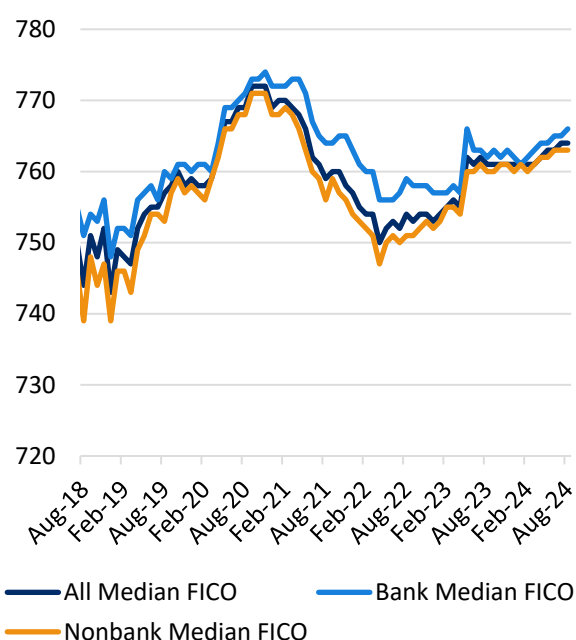
### 14.1.1 (FICO, LTV, DTI)

The mortgage loan originations of nonbanks continue to have a consistently lower median FICO score than their bank counterparts across all Agencies. The spread between nonbank and bank FICO scores increased 1 point from 21 to 22 points from July 2024 to August 2024. The agency median FICO score increased to 743 in August 2024.

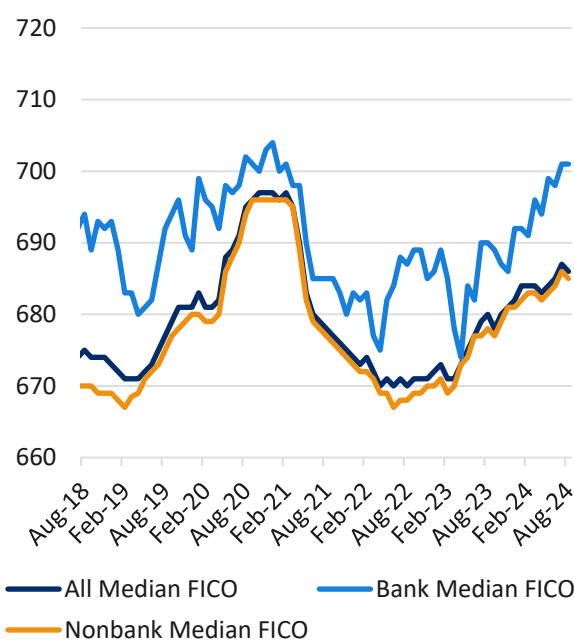
**Figure 55. Agency FICO: Bank vs. Nonbank**



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



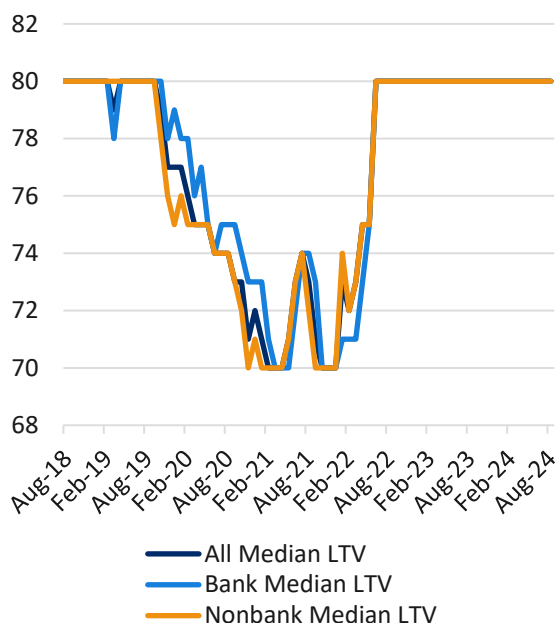
**Figure 57. Ginnie Mae FICO: Bank vs. Nonbank**



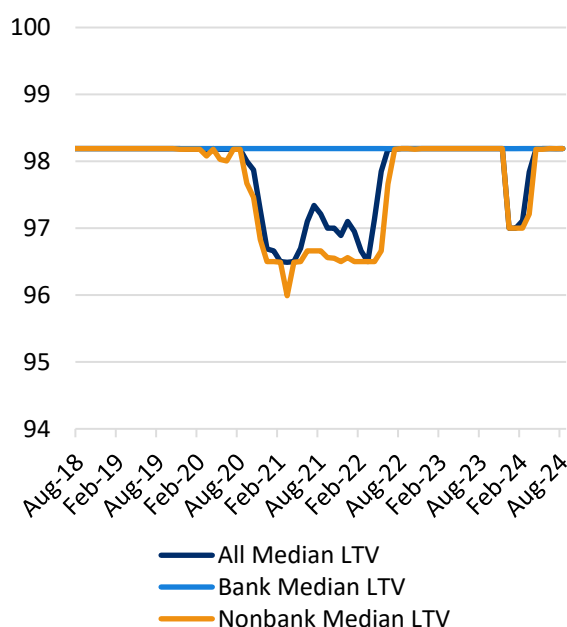
Source: Recursion: Notes: Data as of August 2024.

The median LTV for all GSE originators remained the same as of month-end August 2024 at 80.0%. Ginnie Mae's median bank and nonbank LTV remained flat at 98.2% as of month-end August 2024. Ginnie Mae's median DTI stayed at 45.5% in August 2024 in nonbank originations.

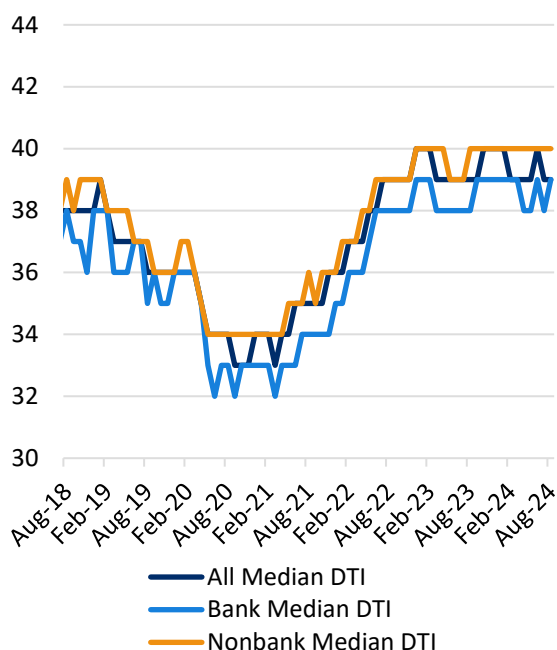
**Figure 58. GSE LTV: Bank vs. Nonbank**



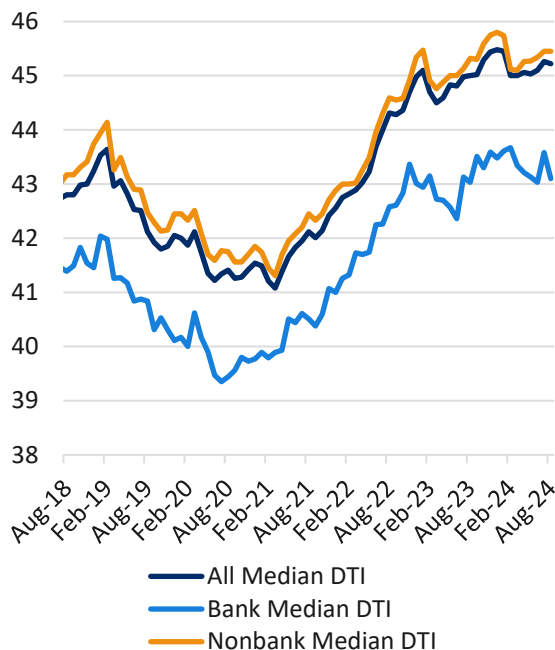
**Figure 59. Ginnie Mae LTV: Bank vs. Nonbank**



**Figure 60. GSE DTI: Bank vs. Nonbank**



**Figure 61. Ginnie Mae DTI: Bank vs. Nonbank**

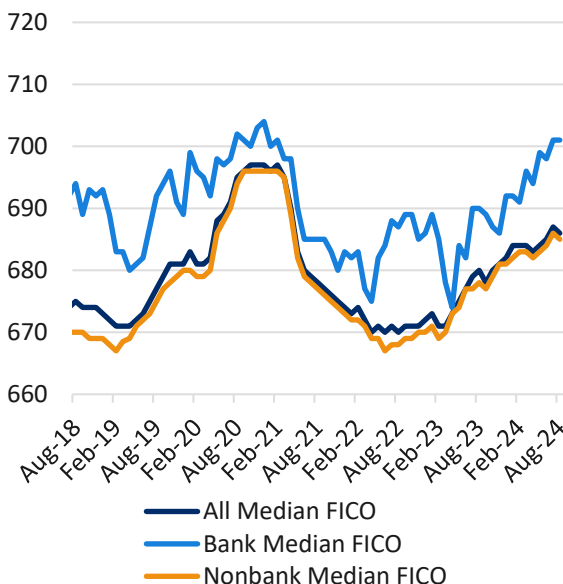


Source: Recursion. Notes: Data as of August 2024.

As of month-end August 2024, the median FICO score for Ginnie Mae bank originations stayed the same at 701 points MtM and nonbank decreased 1-point MtM to 685. The median FICO score for all Ginnie originations decreased to 686. The gap between banks and nonbanks is most apparent in “VA” lending (25-point spread).

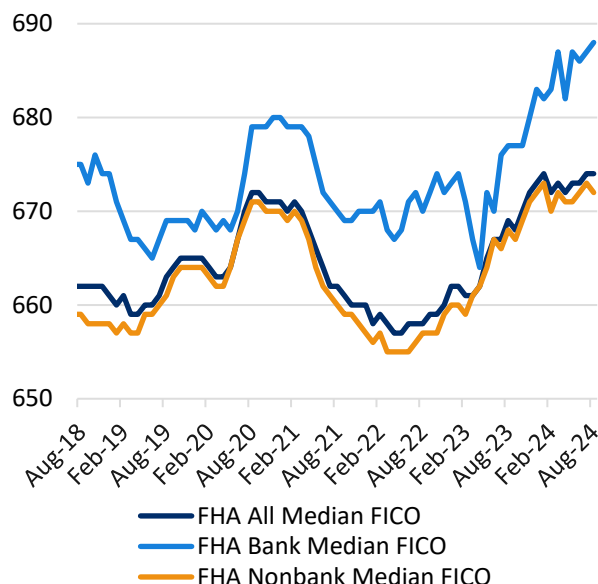
**Figure 62. Ginnie Mae FICO Score:**

**Bank vs. Nonbank**



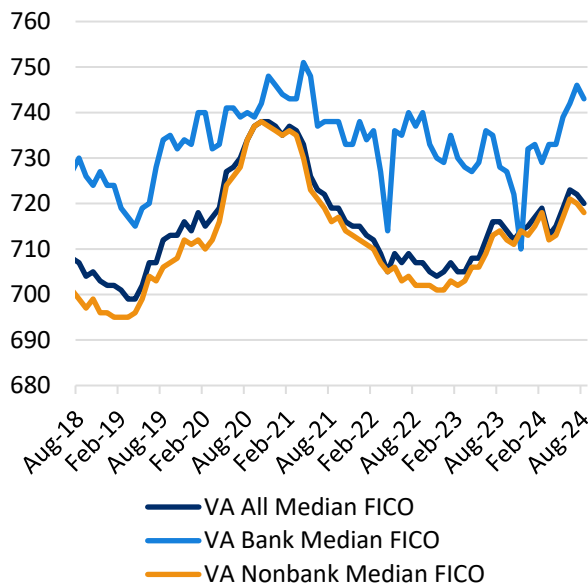
**Figure 63. Ginnie Mae FHA FICO Score:**

**Bank vs. Nonbank**



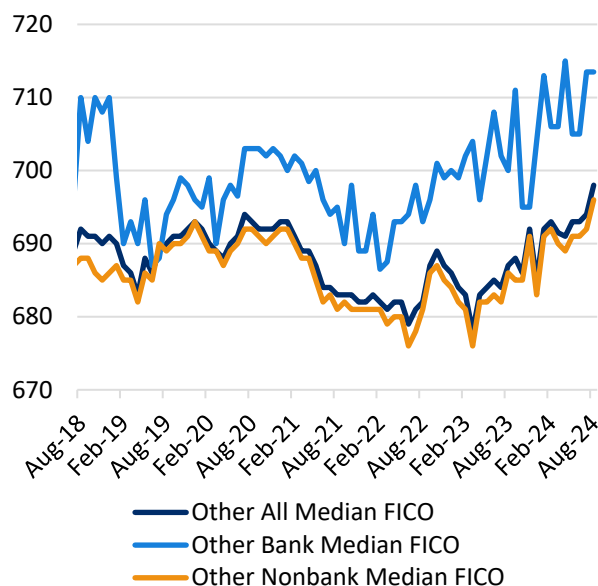
**Figure 64. Ginnie Mae VA FICO Score:**

**Bank vs. Nonbank**



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

**Bank vs. Nonbank**

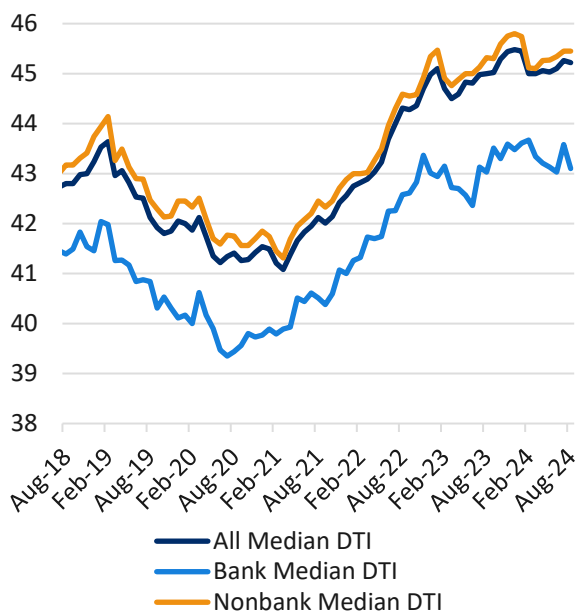


Source: Recursion. Notes: Data as of August 2024.

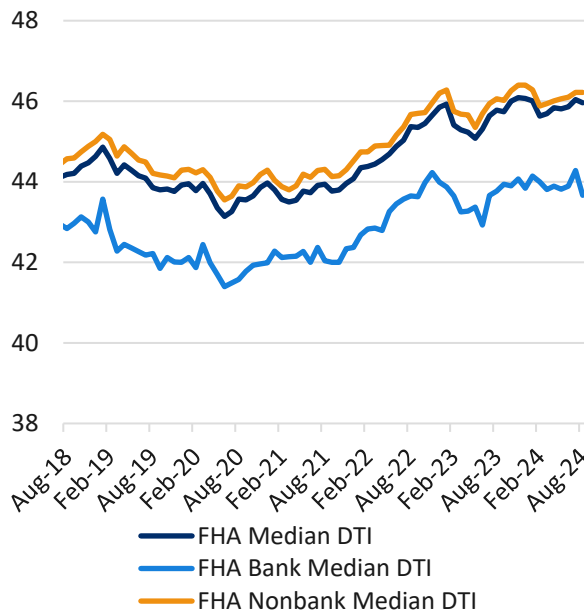


Median DTI for Ginnie Mae's nonbank originations has been consistently higher than the median DTI for Ginnie Mae bank originations. This is a trend evident for all Ginnie Mae-eligible loan types except for the "Other" category, where the spread between median bank and nonbank DTI is relatively small.

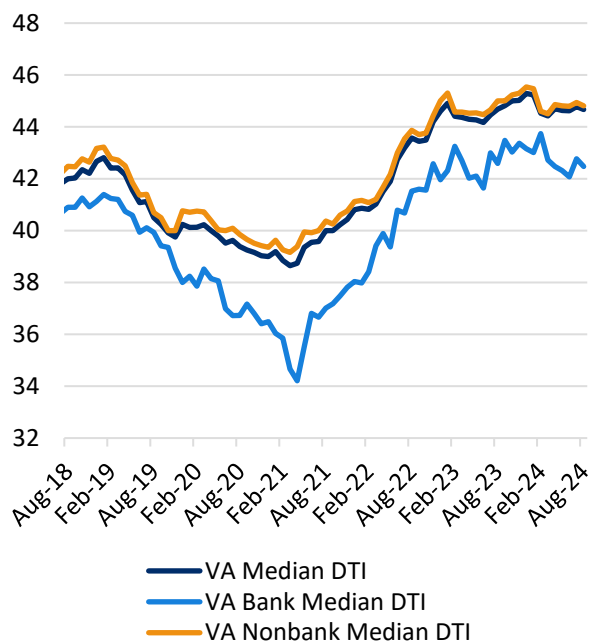
**Figure 66. Ginnie Mae DTI: Bank vs. Nonbank**



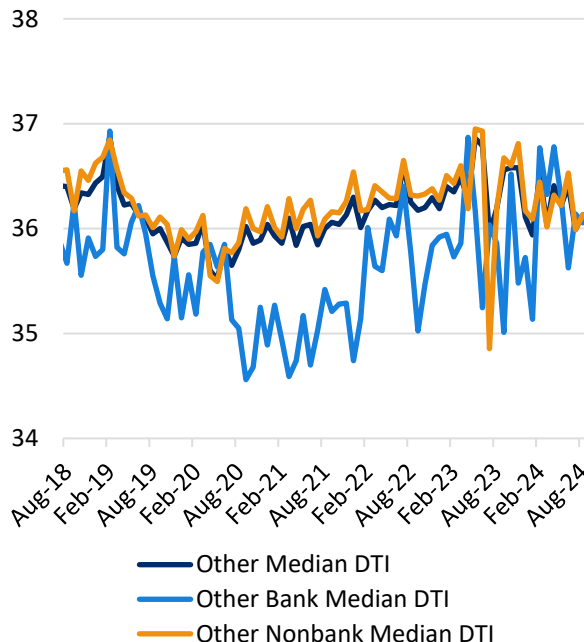
**Figure 67. Ginnie Mae FHA DTI: Bank vs. Nonbank**



**Figure 68. VA DTI: Bank vs. Nonbank**



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



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

## 15 ENVIRONMENTAL, SOCIAL, AND GOVERNANCE

Ginnie Mae MBS 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 revealed approximately \$259 billion of Outstanding Ginnie Mae MBS categorized as LMI area loans as defined by HUD’s CDBG
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
August 2024	LMIB Disclosure charts added to ESG.

## 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 (August 2024)**

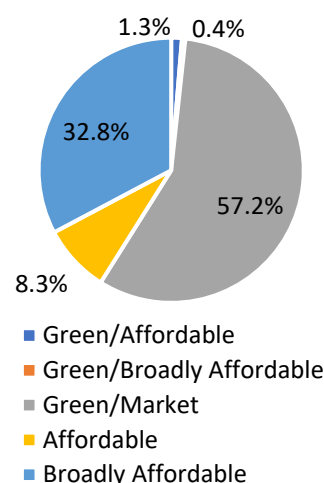
<b>Ginnie Mae's ESG Metrics – MBS Portfolio as of August 2024</b>			
	<b>Targeted Population</b>	<b>Positive Outcomes</b>	<b>Our Commitment</b>
<b>Social - Affordable</b>	FHA Borrowers – 7,092,378 VA Borrowers – 3,655,552 RHS Borrowers – 772,793 PIH Borrowers – 23,797	Loans under \$200K 6,492,450 Loans  First-Time Home Buyers 4,443,670 Loans  Down Payment Assistance 701,846 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)	3,285,855 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	1,769,348 Loans	
	Borrowers Facing Difficulties	789,015 modifications with over 789,766 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	269,358 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)	1.320 million apartment homes 492,335 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	5,060 MF loans are either Green, Affordable, or both	
<b>Green</b>	MF Green		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.

## 15.2 Environmental

**Table 30. UPB by ESG Status – Multifamily Portfolio**

ESG Status	UPB	%
<b>Green/Affordable</b>	\$1,115,577,234	0.7%
<b>Green/Broadly Affordable</b>	\$353,644,655	0.2%
<b>Green/Market</b>	\$48,982,362,903	32.0%
<b>Green Total</b>	\$50,451,584,792	33.0%
<b>Affordable<sup>10</sup></b>	\$7,112,518,532	4.6%
<b>Broadly Affordable<sup>9</sup></b>	\$28,041,678,885	18.3%
<b>Affordable Total</b>	\$36,623,419,306	23.9%
<b>ESG Total<sup>11</sup></b>	\$85,605,782,209	55.9%
<b>Grand Total</b>	<b>\$153,078,858,298</b>	<b>100.0%</b>

**Figure 70. Composition of Ginnie Mae Green Status and Affordable Multifamily Collateral**



Much of Ginnie Mae’s environmental impact is made through its Multifamily programs. Around 33.0% 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 23.9% of Ginnie Mae Multifamily collateral is “Affordable” or “Broadly Affordable”. In total 55.9% 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 July 2024, [https://www.hud.gov/program\\_offices/housing/mfh/green](https://www.hud.gov/program_offices/housing/mfh/green)

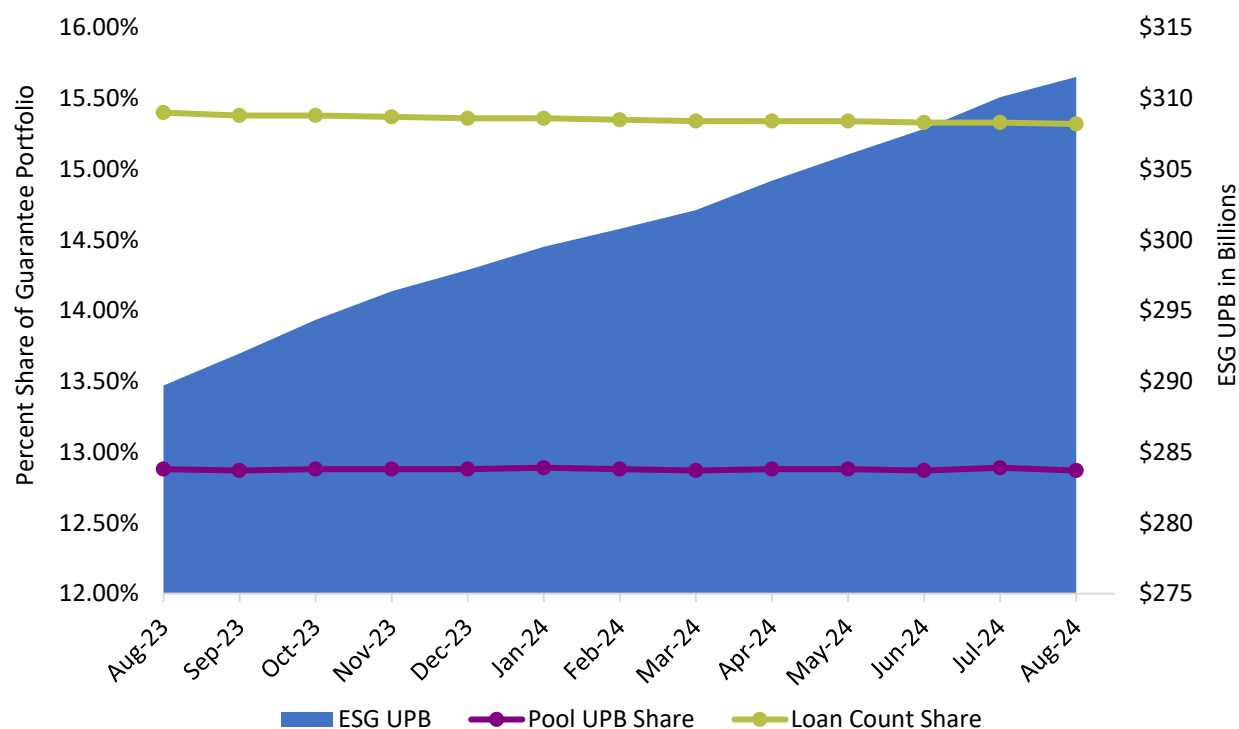
<sup>10</sup> “Affordable” and “Broadly Affordable” removes “Green/Affordable” and “Green/Broadly Affordable” from the UPB total. Affordable total includes both Green and Not Green.

<sup>11</sup> ESG Total includes Green/Market & Affordable Total.

### 15.3.1 LOW-TO-MODERATE INCOME BORROWERS

Roughly \$311 billion of Ginnie Mae Single-Family collateral and over 1.76 million loans outstanding have been issued to LMI borrowers. Total ESG UPB increased by approximately \$22 billion YoY.

**Figure 71. ESG Share of the Outstanding SF Portfolio**



Source: Ginnie Mae Disclosures as of August 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, 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**

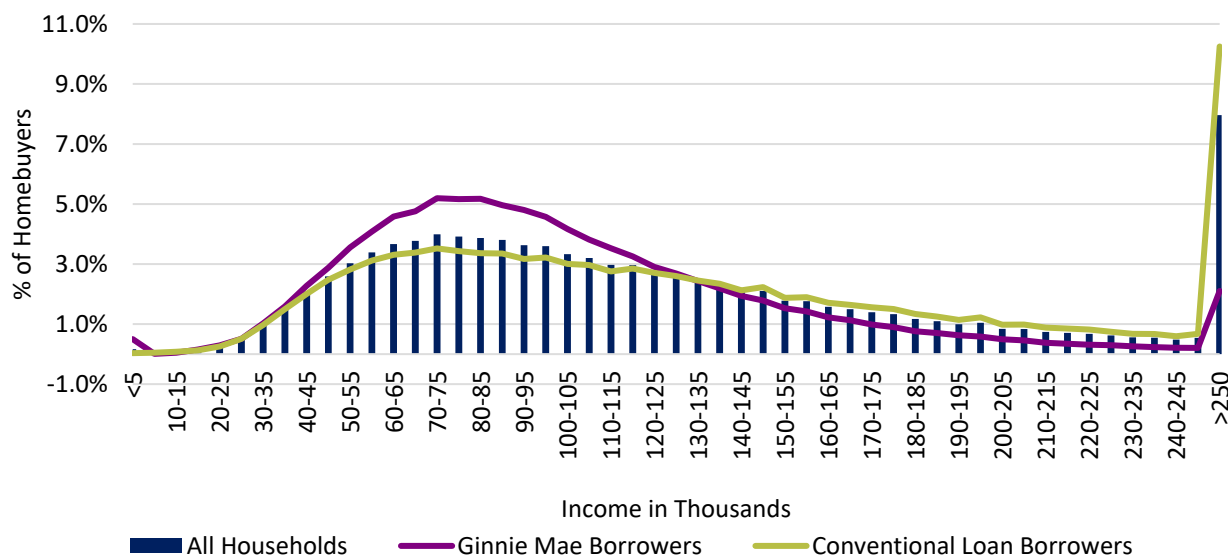
Metric	LMI Pool Share >50%	LMI Pool Share 20% - 50%	LMI Share < 20%	All Pools
Total UPB (\$ billions)	\$9.02	\$212.57	\$2,142.51	\$2,364.11
Average Original Loan Size	\$186,316	\$200,821	\$346,598	\$332,878
Credit Score (Median)	674	675	679	677
DTI (Median)	41%	41%	41%	41%
LTV (Median)	97%	96%	95%	96%
Interest Rate (WA)	4.94%	4.83%	4.12%	4.19%

Source: Ginnie Mae Disclosures as of August 2024

### 15.3.2 PURCHASE AND REFINANCE ORIGINATION BY INCOME BRACKET

Over 36.6% of all purchase and refinance loan originations guaranteed by Ginnie Mae are to households with income less than \$80,000 compared to 27.6% of the GSE's Single-Family guarantee portfolio. Additionally, around 73.8% of these loan originations guaranteed by Ginnie Mae are to households with income less than \$125,000 compared to 55.0% at the GSEs.

**Figure 72. Income Distribution of Homebuyers Served Under Ginnie Mae Program**



Source: Home Mortgage Disclosure Act (HMDA) data as of 2023

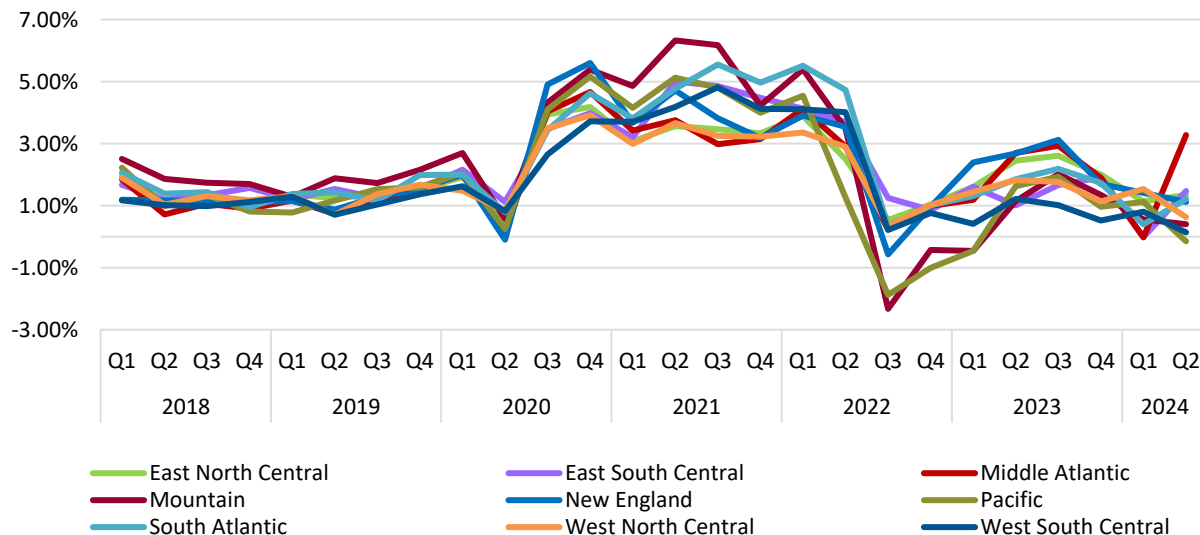
## U.S. HOUSING MARKET

### 16 HOUSING AFFORDABILITY

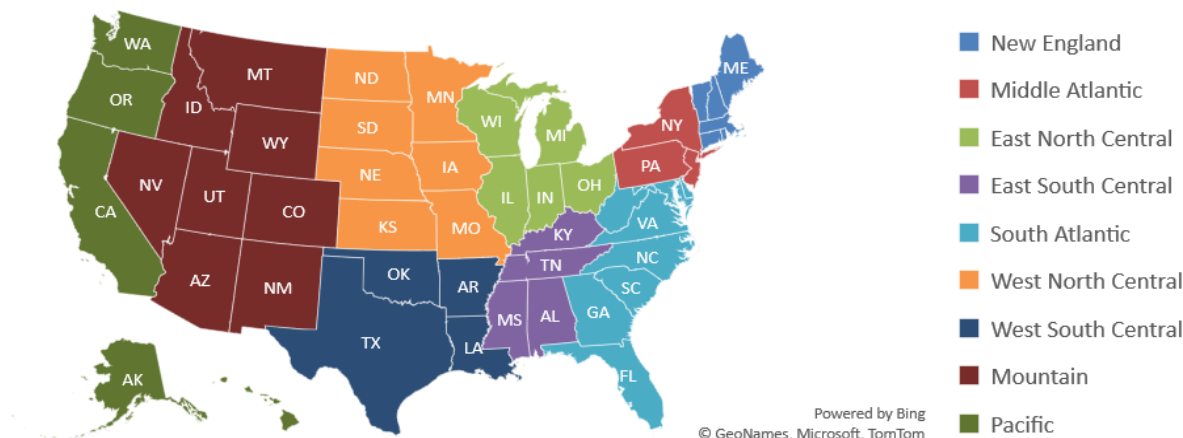
#### 16.1 Housing Affordability – Home Price Appreciation

Quarterly home prices increased in eight of the nine regions in Q2 2024. The Middle Atlantic region saw the largest quarterly appreciation in the home price index (HPI) of 3.28% from Q1 to Q2 2024. The Pacific region saw the only QoQ decrease in HPI of around 0.15%. The Middle Atlantic region has appreciated more than any other region over the past year, increasing by 8.30% from Q2 2023 to Q2 2024. The United States collectively saw a 5.70% increase in HPI from 2023 Q2 to 2024 Q2; up from a 3.16% YoY HPI in Q2 2023.

**Figure 73. Regional HPI Trend Analysis QoQ**



**Figure 74. FHFA U.S. Census Subregions as defined by the U.S. Census Bureau**

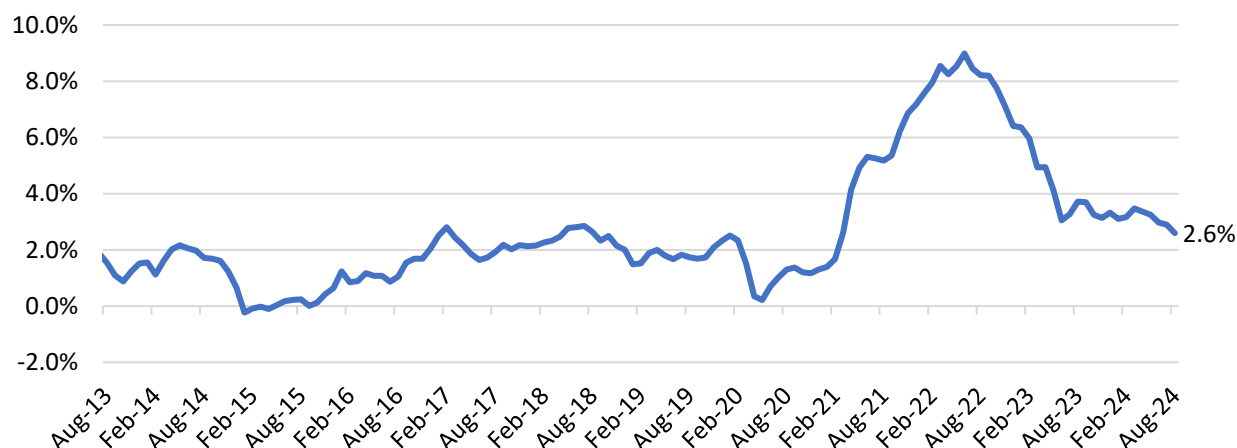


Source: HPI data from FHFA and is seasonally adjusted. U.S. Census Subregions as defined by the U.S. Census Bureau.

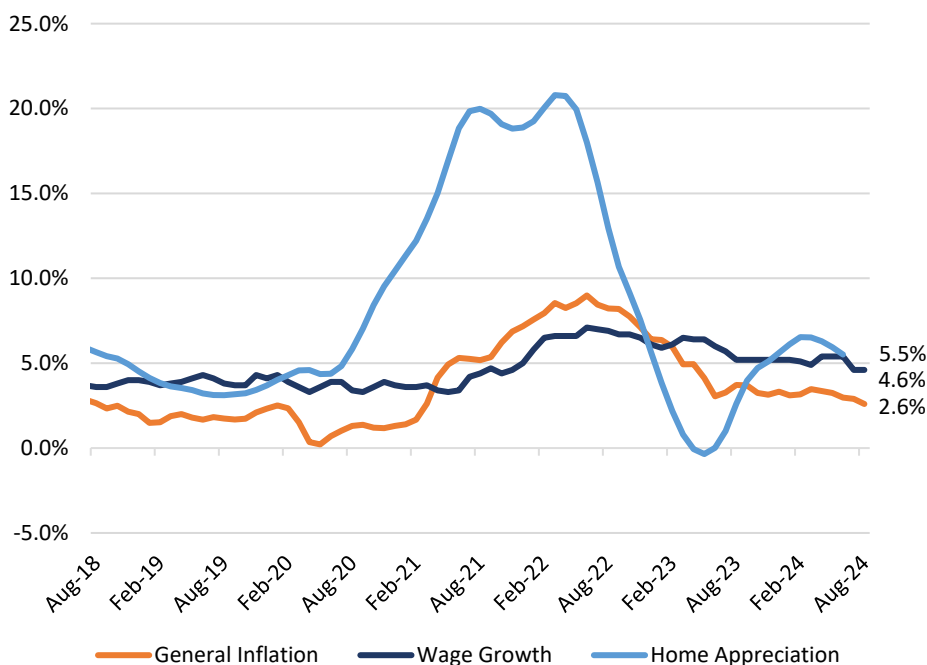
## 16.2 Housing Affordability – Inflation, Wages, and the Price of Real Estate

As of month-end August 2024, YoY CPI inflation was 2.6%, decreasing from 2.9% in the month prior. Nationally, rents are up 0.90% YoY as of month-end August 2024 and the MoM change in median rents increased by 0.10%. YoY change in wage growth remained flat for the second consecutive month, printing at 4.6% at month-end August 2024. Month-end June 2024 adjusted reporting data shows home price appreciation increased 5.5% YoY.

**Figure 75. Inflation | 12-Month Percent Change in CPI**



**Figure 76. Asset Price Appreciation vs. Wage Increases**



Metric	Statistic
General Inflation	2.6%
Home Price Appreciation (YoY)	5.5%
Rental Price Appreciation (Median Rent Change YoY)	0.9%
Wage Growth	4.6%

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



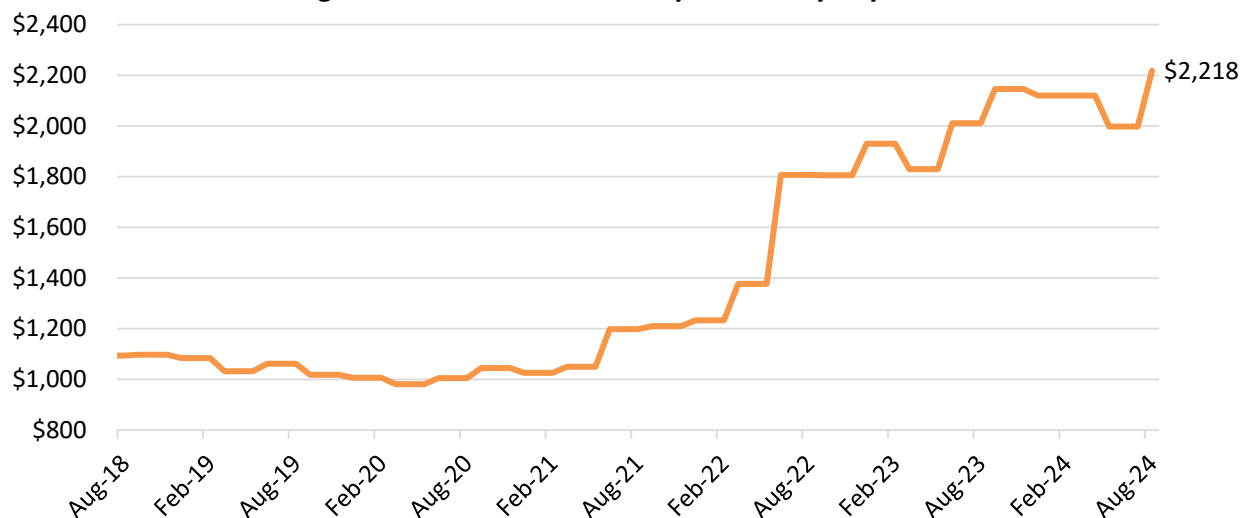
### 16.2.1 HOUSING AFFORDABILITY – AFFORDABILITY INDEX

As of month-end August 2024, the Homebuyer Affordability Fixed Mortgage (HAFM) Index was 93.3 and the First-Time Homebuyer Monthly Payment (FTMP), which represents the median payment for first-time homebuyers, was \$2,219. The HAFM Index increased 1.74% YoY and monthly payments for first-time homebuyers increased approximately 10.29% YoY. HAFM has decreased 50.3% and FTMP has increased 116.2% since January 2021.

**Figure 77. Homebuyer Affordability Fixed Mortgage Index**



**Figure 78. First-Time Homebuyer Monthly Payment**

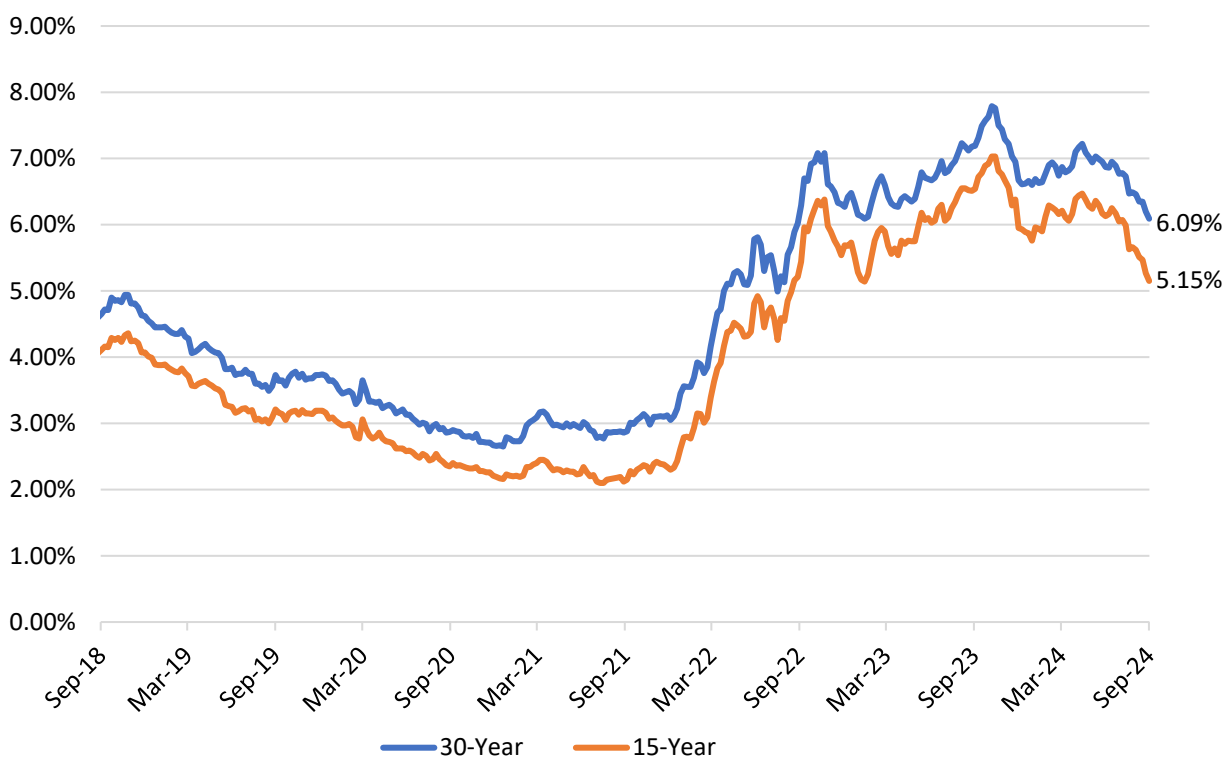


Source: Bloomberg as of August 2024. Note: Housing Affordability Index: Value of 100 means that a family with the median income has exactly enough income to qualify for a mortgage on a median-priced home. An index above 100 signifies that a family earning the median income has more than enough income 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 Fed lowered the Federal Funds target rate on September 18, 2024, to a range of 4.75% and 5.00% per the FOMC<sup>12</sup>. As of September 19, 2024, the average 30-year and 15-year fixed rate mortgage rates were 6.09% and 5.15%, respectively. The average 30-year fixed rate mortgage rate decreased 40 bps and the average 15-year fixed rate mortgage rate decreased 51 bps from August 15, 2024.

**Figure 79. Average Fixed Rate Mortgage Rates**



Source: FRED data as of September 2024

<sup>12</sup>[Federal Reserve Board - Federal Reserve issues FOMC statement](#)

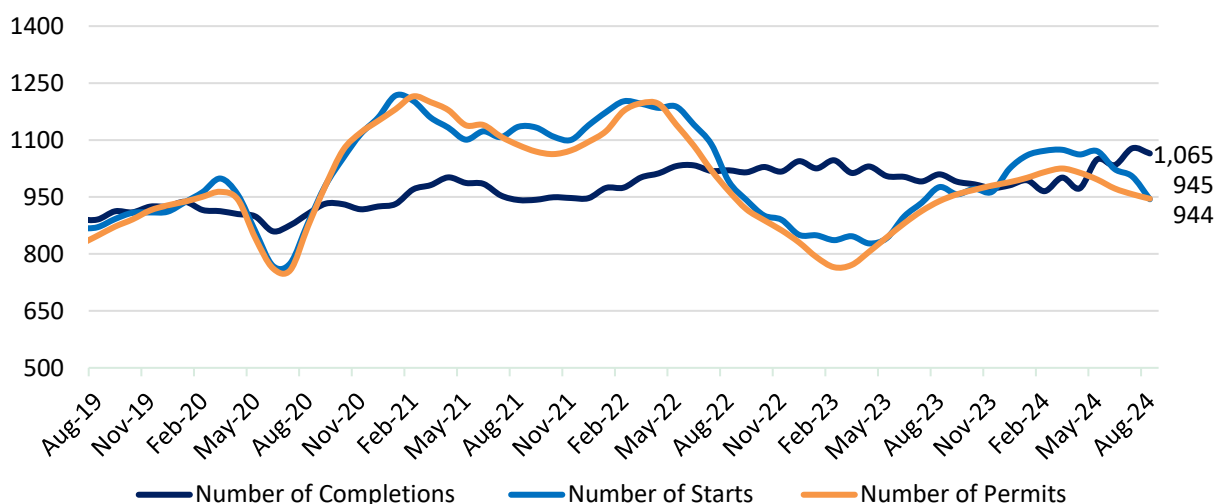
## 16.3 Housing Inventory

As of August 2024, there were 7.8 months of new housing inventory on the market, increasing 6.8% MoM from an adjusted 7.3 months in July 2024. **Figures 81 and 82** show Single-Family and Multifamily annualized housing metrics, including the number of permits, starts, and completions. From August 2023 to August 2024, the number of Single-Family completions and permits rose approximately 5.4% and 0.7%, respectively, while the number of starts declined 3.3%. Multifamily metrics show that from August 2023 to August 2024, the number of completions rose 33.9%, while the number of starts and permits decreased 34.3% and 16.7%, respectively.

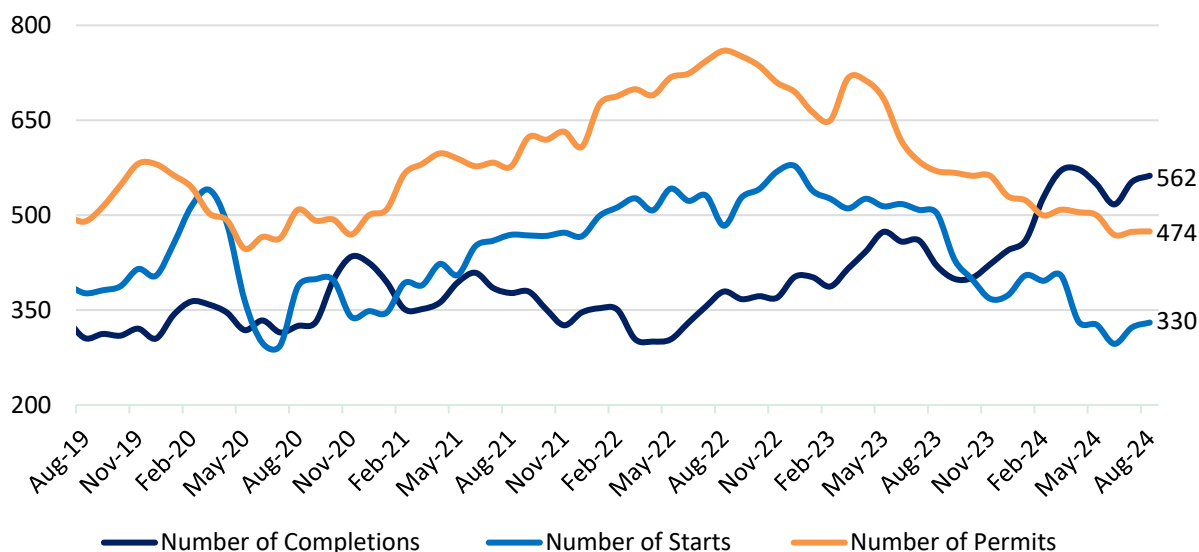
**Figure 80. Single-Family Housing Inventory**



**Figure 81. Single-Family Construction Metrics: Permits, Starts, Completions**



**Figure 82. Multifamily Constructions Metrics: Permits, Starts, Completions**

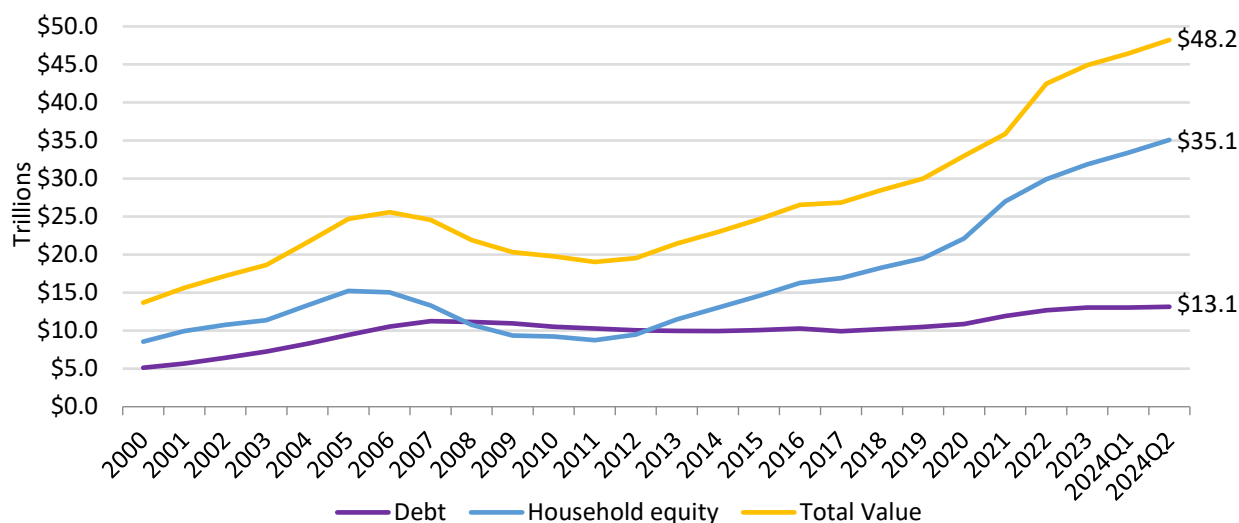


Source: Figure 79: FRED. Figure 80: data as of August 2024. New Residential Construction, U.S. Census Bureau. Figures 81 & 82: data as of August 2024. Note: Figures 81 & 82 are calculated using a 3-month moving average to identify underlying trends in construction metrics, in thousands of units.

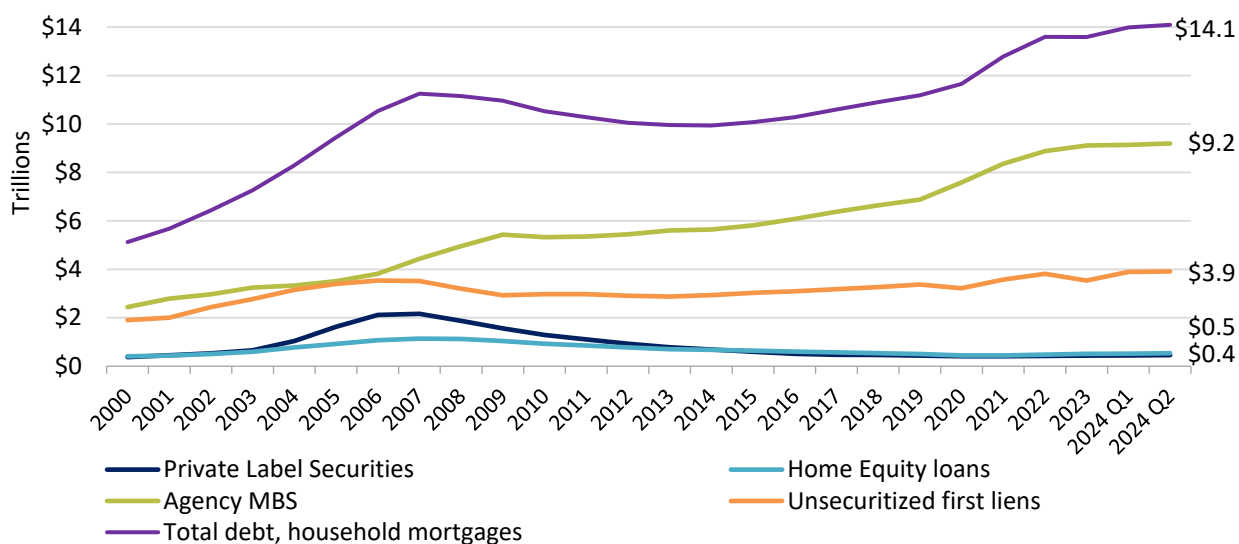
## 16.4 Size and Value of the U.S. Housing Market

The total value of the Single-Family housing market increased from \$46.4 trillion in Q1 2024 to \$48.2 trillion in Q2 2024. The total value of the US housing market is up approximately 153% from its low in 2011. From Q2 2023 to Q2 2024 mortgage debt outstanding increased from approximately \$12.9 trillion to \$13.1 trillion and household equity increased from \$31.6 trillion to \$35.1 trillion. Agency Single-Family MBS continues to account for a growing percentage of the total mortgage debt outstanding, at roughly \$9.2 trillion in Q2 2024 it represents more than 65% of total mortgage debt, up from just 52% in 2011.

**Figure 83. Value of the U.S. Housing Market**



**Figure 84. Size of the U.S. Residential Mortgage Market**



Source: Federal Reserve Flow of Funds Data as of Q2 2024. Total debt in figure 84 includes additional Nonfinancial corporate/noncorporate business mortgages which is not included in the calculation for "debt" for figure 83. Figures are rounded to nearest hundred billion.

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## 17 DISCLOSURE

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