

GLOBAL MARKETS ANALYSIS REPORT

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



October 2024

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

The October 2024 *Highlights* cover a series of questions posed to BMO Capital Markets. The questions were centered around gaining insights into the current mortgage-backed securities (MBS) activity of some East Asian fixed income investors. China, Taiwan, and Japan account for more than half of all foreign Agency MBS holdings.¹

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

- The [Fixed Income Product Performance Comparisons](#) section shows that Ginnie Mae's 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 exceed 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 recent 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.

¹ Treasury International Capital (TIC) as of July 2024

Highlights

For the *Global Market Analysis Report's* October 2024 publication, a series of questions were posed to BMO Capital Markets in East Asia. The questions focused on China, Japan, and Taiwan, given they are the three largest foreign holders of Agency MBS. The responses provided by BMO Capital Markets are edited for readability.

1. Ginnie Mae's largest overseas investor base is in East Asia. Broadly speaking, are there significant differences in investor preference for Agency MBS from institutional investors in different East Asian countries?

In general, there are subtle differences amongst existing client activity but there is also some entirely new activity appearing across Asia. Our assumption is that Agency MBS has become a more popular asset class to trade, either by virtue of its spread to US rates or Ginnie Mae's explicit government guarantee. The sophistication of the investor base has grown with it, thus their confidence to venture into other products is greater, moving from TBA [To Be Announced] to CMO [Collateralized Mortgage Obligation], or even LCF [Local Currency Facility]. We see this as an important step to seeing much more consistent activity span [across] Asia in Agency MBS. In addition, the return of Agency MBS as a spread to UST [US Treasuries] and its positive carry out of other Asian currencies has led to new entrants into the market, particularly China.

2. Ginnie Mae's monthly issuance of MBS exceeded \$40 billion in August 2024, the first time that has happened since September 2022. Given the increase in MBS production volume and changes in the interest rate environment in 2024, has there also been a change in the institutional investor base activity in East Asia for Agency MBS?

Yes, we have seen an increase in demands for Agency MBS, particularly Ginnie Mae, across Asia. Even though MBS has tightened back from the wides since mid 2023s, MBS spreads are still 1 to 1.5 standard deviations wide to volume adjusted 10-year historical levels.

3. Are buy and hold or are trading strategies more important to East Asian fixed income investors who are active in the Agency MBS market?

In respect of our earlier point, the increased sophistication of Asian investors has led to more diverse strategies, however it is still fair to say the most popular is still buy and hold. Liquidity is playing an increasingly more important role for Asian clients, especially Japan, as some investors now use MBS as a trading instrument, in particular multi-pools for those liquidity reasons.

4. Do East Asian Agency MBS investors who buy and sell Ginnie Mae products focus more on the market for TBAs or Custom pools?

For the more active investors who buy and sell Ginnie Mae products, they typically prefer current coupon, or a slight discount multi pools for liquidity reasons. Custom pools are typically purchased by investors who plan to hold the pools for the medium/long term.

5. Are Ginnie Mae REMIC products attractive to East Asian institutional investors? If so, why and if not, why not?

Yes, Ginnie Mae REMIC products are attractive to East Asian institutional investors because of the flexibility of structuring. At the beginning of this year, many Asia investors preferred shorter

duration and positive carry, hence CMO floaters popularity. When the Federal Reserve signalled rate cuts, investors gradually switched from floaters to fixed rates, whether in pool form or CMO form. Furthermore, different types of investors have different preferences. For instance, banks like shorter cashflows, whereas insurance companies like longer duration, so sequential structures in REMICS are more attractive. Last but not least, it is important to remember many investors like a par-handle price, so REMIC's flexibility in adjusting its coupon is an important feature.

6. Are you bullish about the prospects for Agency MBS investment from East Asian institutional investors? If so, why?

Yes for a few reasons, but mainly the increased frequency and sophistication in how Asian investors trade Agency MBS give us the most confidence of its long-term prospects in Asia. Very similar to the development of the SSA [Sovereign, Supranational, Agency] or IG [Investment Grade] markets in Asia, the Agency MBS market has moved away from being a classic "spread" buy to hold product only to be invested only when meeting certain return horizons, to one that's now more actively tradeable due to its liquidity, diversity, and credit quality.

Agency MBS offers something unique that complements the depth of the "spread product" universe which can only be of value to all investors. For example, Agency MBS spreads are still 30-40 bps above their 10 year average with current coupon MBS at around a 140-150 bps spread. If you consider the spread and explicit guarantee specifically offered by Ginnie Mae, you can see why this is as beneficial for our clients to view Agency MBS as another asset class in its own right.

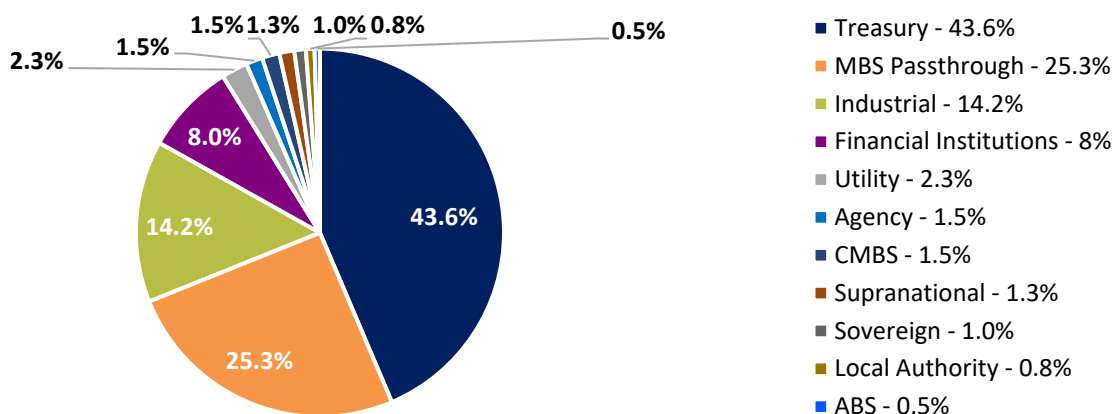
Note: BMO Capital Markets is not providing investment advice or recommendation and does not represent that any investment or strategy is suitable or appropriate to individual circumstances. The views expressed above are the views of the Sales and Trading Desk, which may differ from those of the Research Department.

1 US AGGREGATE AND GLOBAL INDICES

1.1 Bloomberg US Aggregate and Global Indices

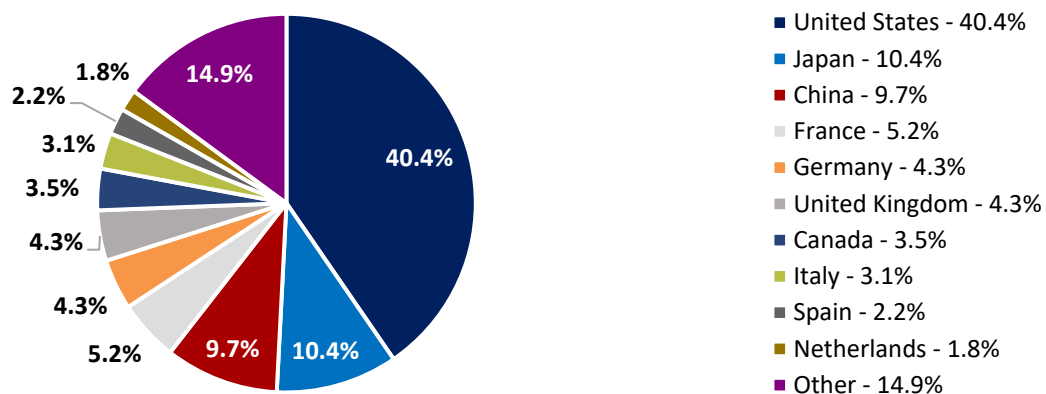
At month-end September, U.S. Treasuries contributed 43.6% to the Bloomberg U.S. Aggregate Index, increasing approximately 0.1% from the prior month. U.S. Agency MBS Passthrough (Ginnie Mae, Fannie Mae, and Freddie Mac) contributed 25.3%, decreasing approximately 0.2% from the prior month. Industrials represented 14.2% of the index as of month-end September, increasing approximately 0.1% from the prior month. All other changes in the U.S. Aggregate Index were no larger than 0.1%.

Figure 1. 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 40.4% of the total index, decreasing approximately 0.2% from the prior month. Japan’s share of fixed income was the second largest with 10.4% at month end of September 2024. China’s share was the third largest at 9.7% as of month end September 2024. Japan’s and China’s share of fixed income 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 2. Bloomberg Global Aggregate Index by Country



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

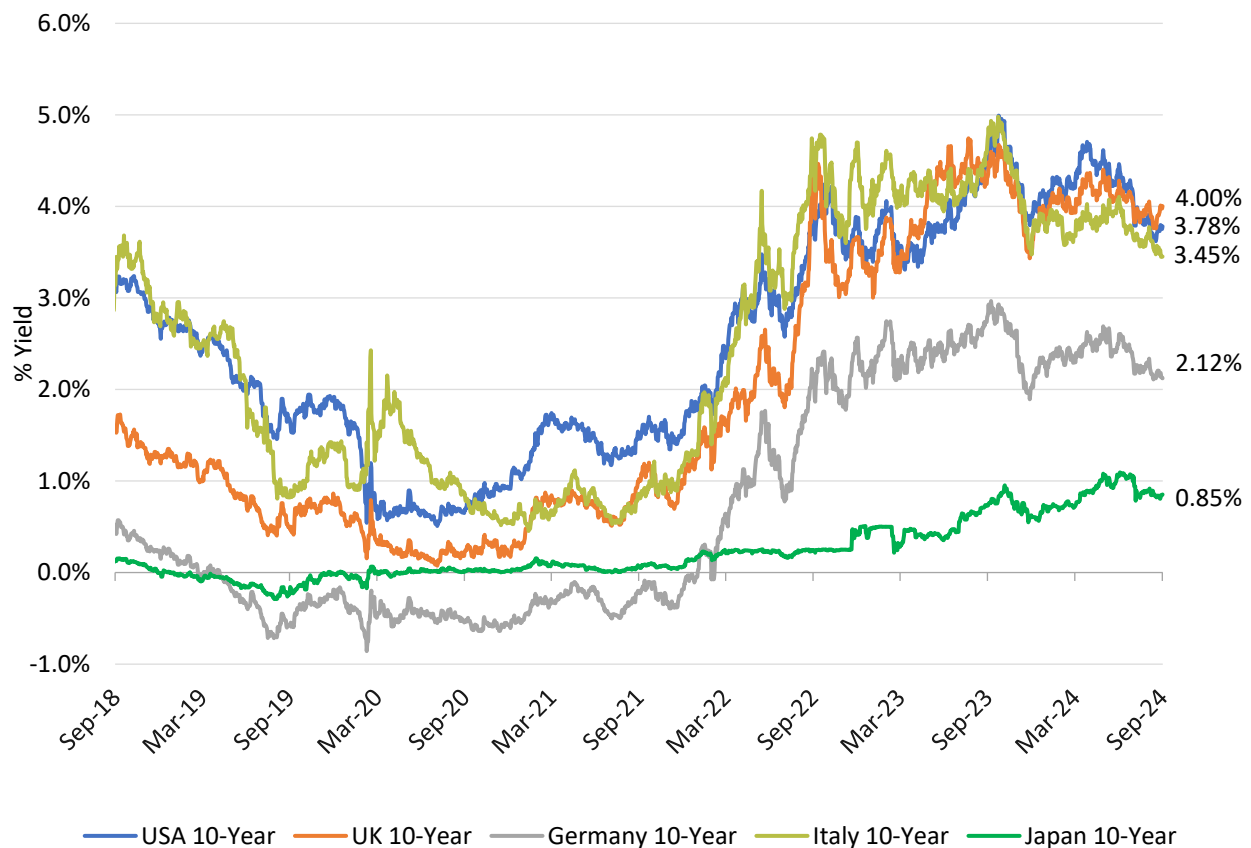
2 SOVEREIGN DEBT PRODUCT PERFORMANCE COMPARISONS

2.1 Global 10-Year Treasury Yields (Unhedged)

The U.S. 10-year Treasury yield moved to 3.78% at month-end September 2024, a month to month (MtM) decrease of 12 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. The UK, German, Italian and Japanese month-end yields all decreased from the previous month.

- The yield on the UK 10-year note decreased to 4.00% at month-end September, a MtM decrease of 1 bps.
- The yield on the German 10-year note decreased to 2.12% at month-end September, a MtM decrease of 18 bps.
- The yield on the Italian 10-year note decreased to 3.45% at month-end September, a MtM decrease of 25 bps.
- The yield on the Japanese 10-year note decreased to 0.85% at month-end September, a MtM decrease of 4 bps.

Figure 3. Global 10-Year Treasury Yields



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

2.2 U.S. Treasury Hedged Yields

- The yield for the 10-year Treasury, hedged in Japanese Yen (JPY) stood at 0.09% at month-end September, a 27 bp increase from month-end August.
- The yield for the 10-year Treasury, hedged in Euros (EUR) stood at 2.48% at month-end September, a 2 bp decrease from month-end August.

Figure 4. U.S. 10 yr Total Return Hedged, 1 yr JPY

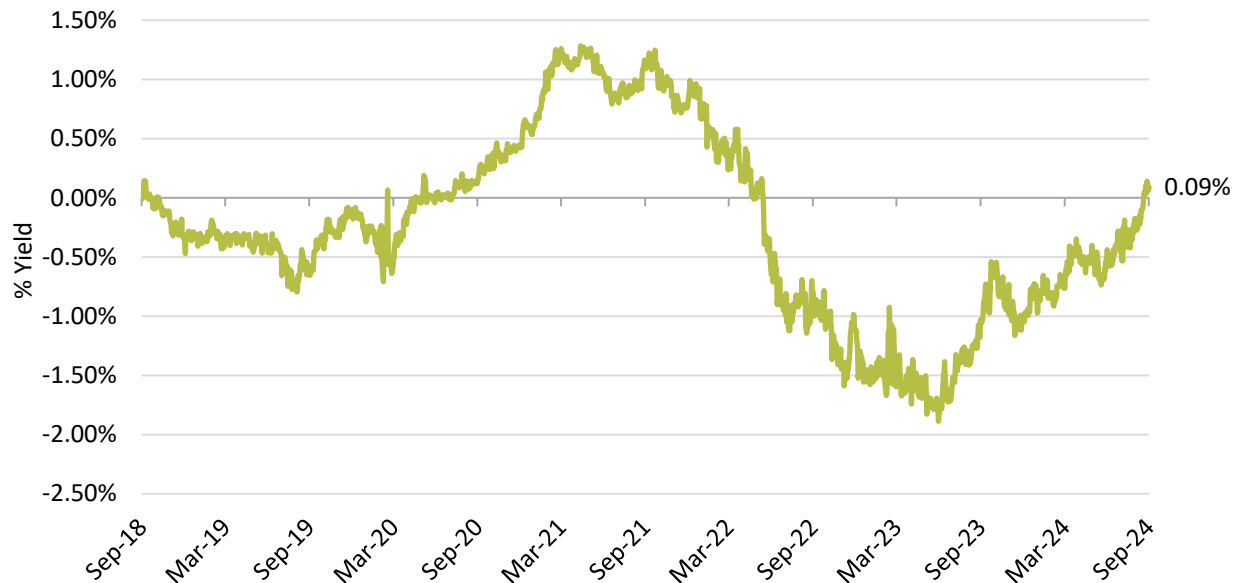
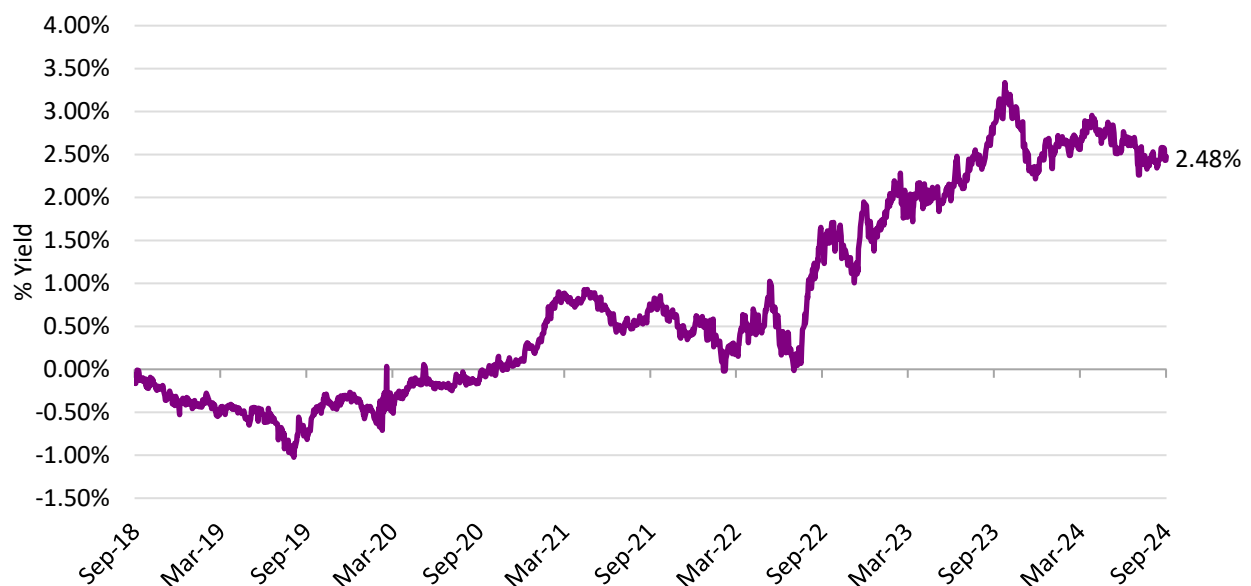


Figure 5. U.S. 10 yr Total Return Hedged, 1 yr EUR



Source: Bloomberg. Notes: Data as of September 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 5.28% at month-end July, then decreased 23 bps to 5.05% at month end August, then decreased 21 bps to 4.84% at month end September. The Ginnie Mae II spread over the U.S. 10-year Treasury yield decreased 64 bps from 1.75% in September 2023 to 1.11% over the U.S. 10-year Treasury yield as of month-end September 2024.

Figure 6. Ginnie Mae II SF Yield, USD



Figure 7. Ginnie Mae II SF Yield – U.S. 10yr Treasury Yield



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

3.2 Ginnie Mae Hedged Yields

The yield for Ginnie Mae II's hedged in Japanese Yen stood at 1.22% at month-end September, a 25 bp increase from month-end August. The hedged yield is approximately 37 bps higher than the Japanese 10-year yield as of month-end September 2024.

The yield for Ginnie Mae II's, hedged in Euros stood at 3.61% at month-end September, a 4 bp decrease from month-end August. The hedged yield is approximately 149 bps higher than the German 10-year yield, and 15 bps higher than the Italian 10-year yield as of month-end September.

Figure 8. Ginnie Mae II Hedged, 1 yr. JPY



Figure 9. Ginnie Mae II Hedged, 1 yr. EUR



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

3.3 Ginnie Mae Yield Spreads – Intermediate Credit

The GNMA II 30-year OAS increased 8 bps to 0.46%, as of month-end September. The U.S. Intermediate Credit OAS decreased 2 bps to 0.72% from month-end August to month-end September. The yield differential between U.S. Intermediate Credit and GNMA II 30-year OAS increased 10 bps to 0.26% at month-end September.

Figure 10. U.S. GNMA II 30yr MBS OAS versus U.S. Intermediate Credit OAS

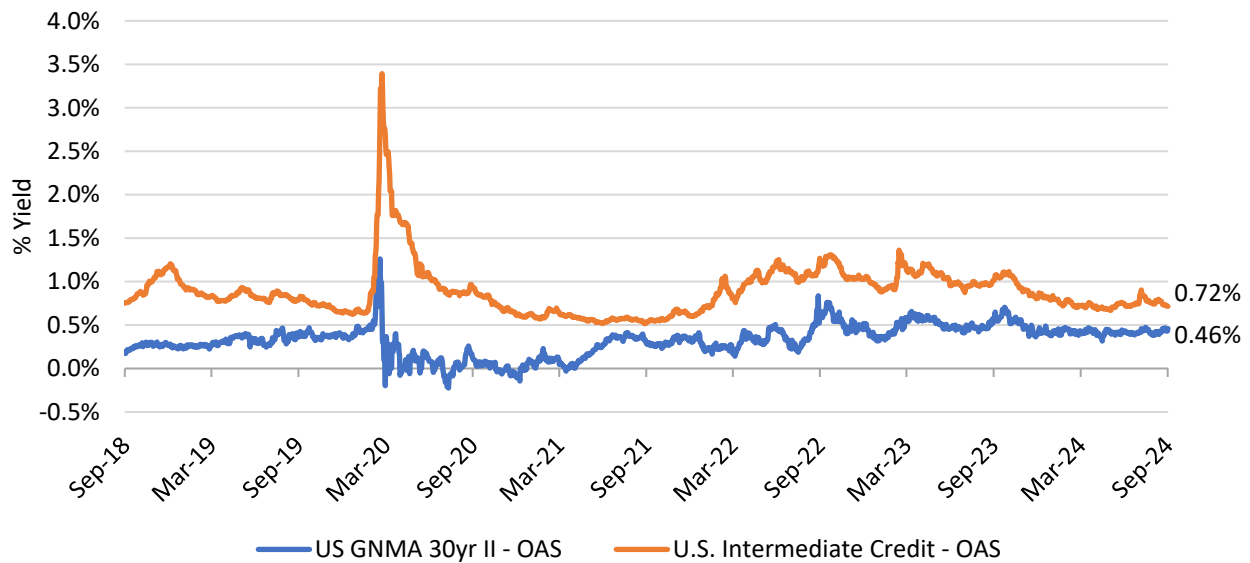


Figure 11. Spread between U.S. Intermediate Credit and U.S. GNMA II 30yr MBS OAS

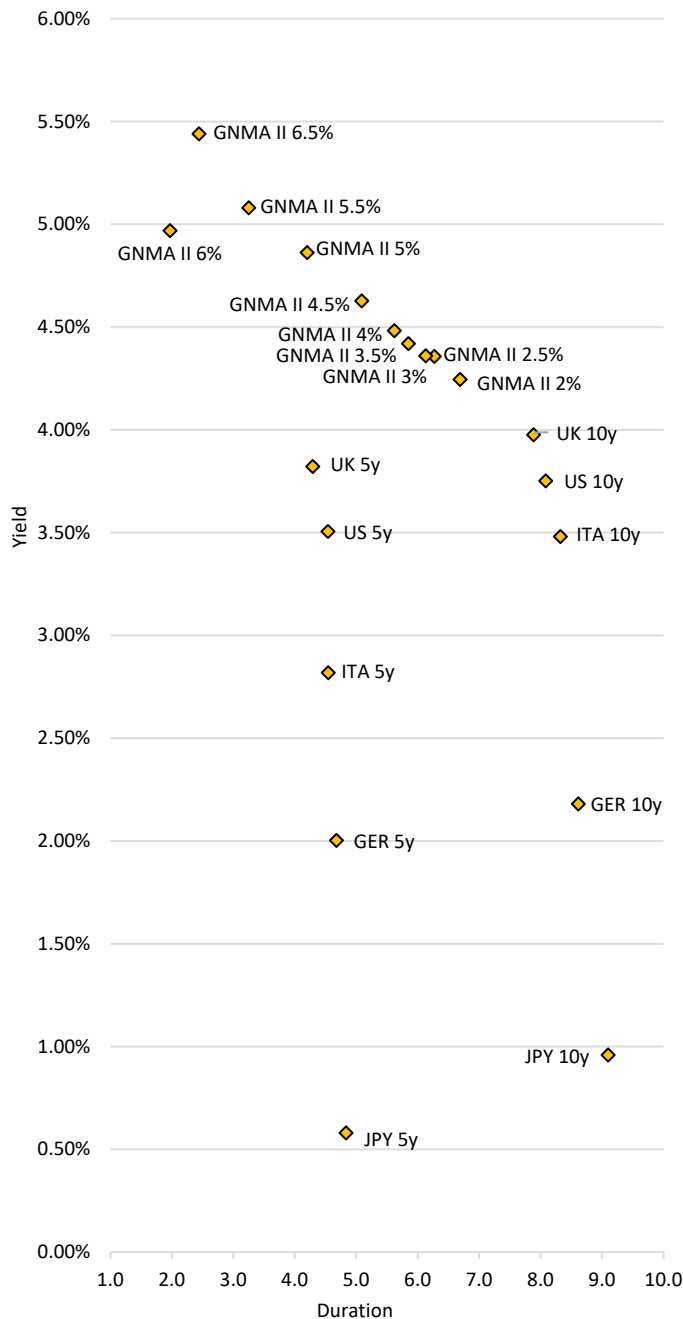


Source: Bloomberg. Note: Data as of September 2024.

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 12. Yield vs. Duration



Security	Duration	Yield (%)
U.S. 5y	4.54	3.51
U.S. 10y	8.08	3.75
JPY 5y	4.83	0.58
JPY 10y	9.10	0.96
GER 5y	4.68	2.00
GER 10y	8.61	2.18
ITA 5y	4.54	2.82
ITA 10y	8.32	3.48
UK 5y	4.29	3.82
UK 10y	7.88	3.98
GNMA II 2%	6.69	4.25
GNMA II 2.5%	6.27	4.36
GNMA II 3%	6.13	4.36
GNMA II 3.5%	5.85	4.42
GNMA II 4%	5.62	4.48
GNMA II 4.5%	5.09	4.63
GNMA II 5%	4.20	4.86
GNMA II 5.5%	3.25	5.08
GNMA II 6%	1.97	4.97
GNMA II 6.5%	2.44	5.44

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 September 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 decreased by 0.1% MtM from August 2024 to September 2024. Similarly, Fannie Mae CPRs decreased by 0.3% MtM and Ginnie Mae CPRs increased by 0.8% MtM. ARM prepayments saw decreases of 4.0% MtM for Freddie Mac, 1.9% MtM for Fannie Mae, and 5.0% MtM for Ginnie Mae.

Figure 13. Fixed Rate Aggregate 1-Month CPR

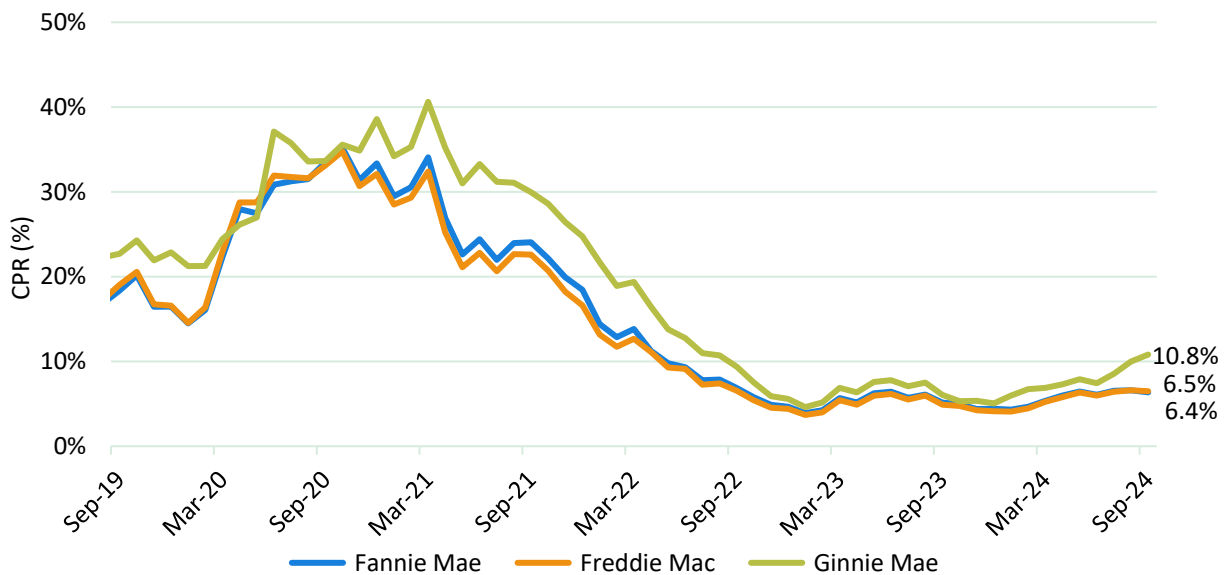
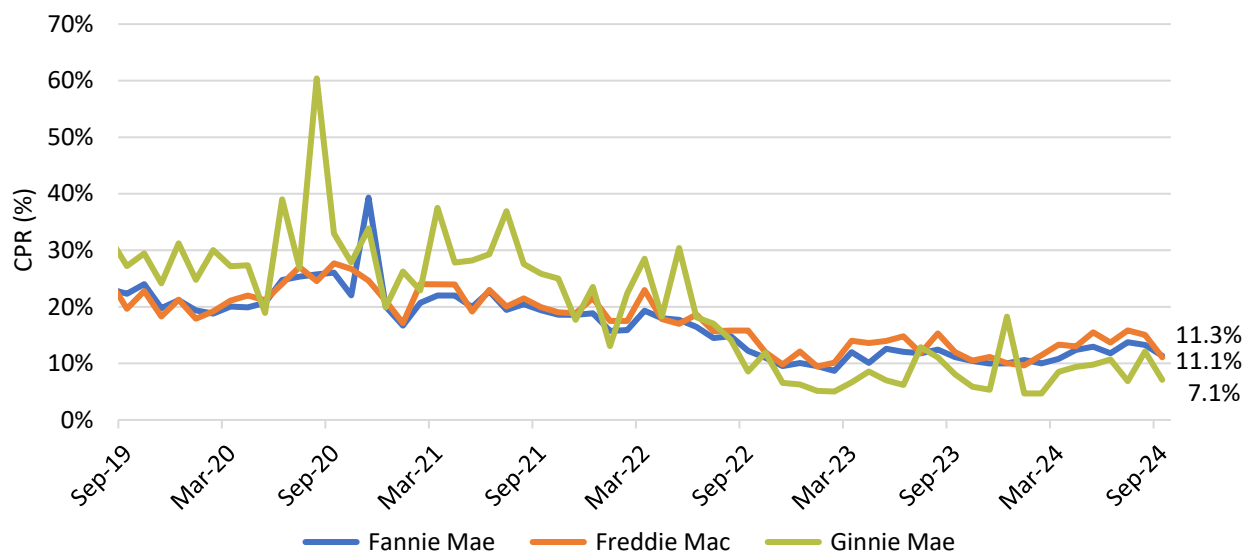


Figure 14. ARM Aggregate 1-Month CPR



Source: Recursion. Note: Data as of September 2024. Figures are rounded to the nearest tenth BPs.

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 September 2024 after slightly overtaking Ginnie Mae in September 2022.

Figure 15. Fixed Rate Aggregate CDR

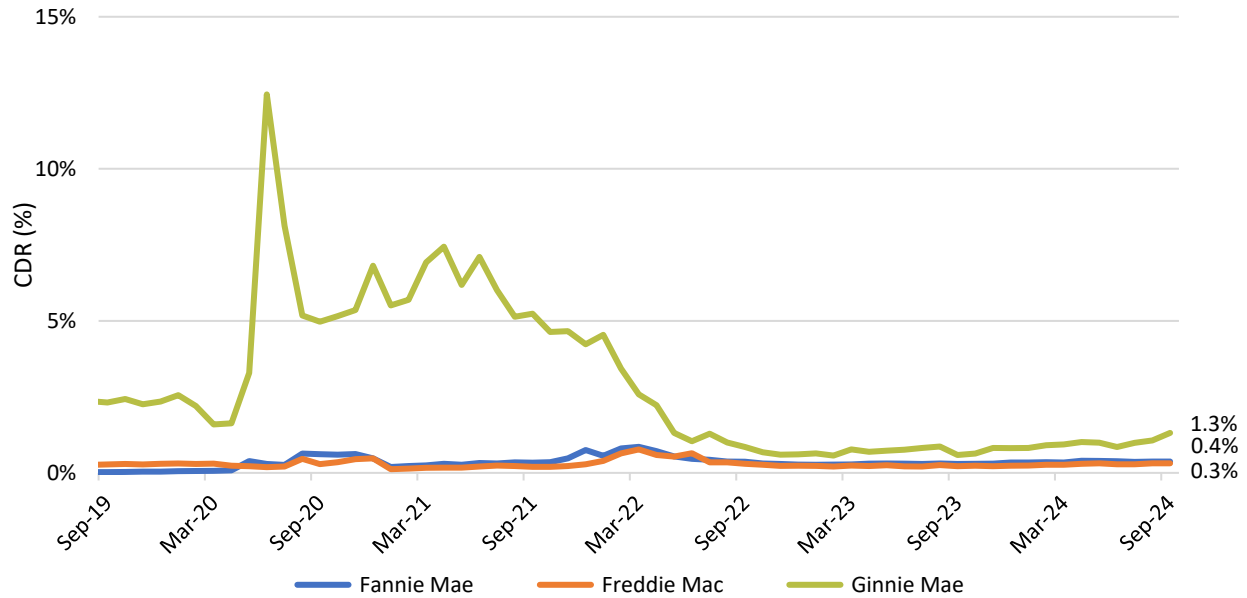
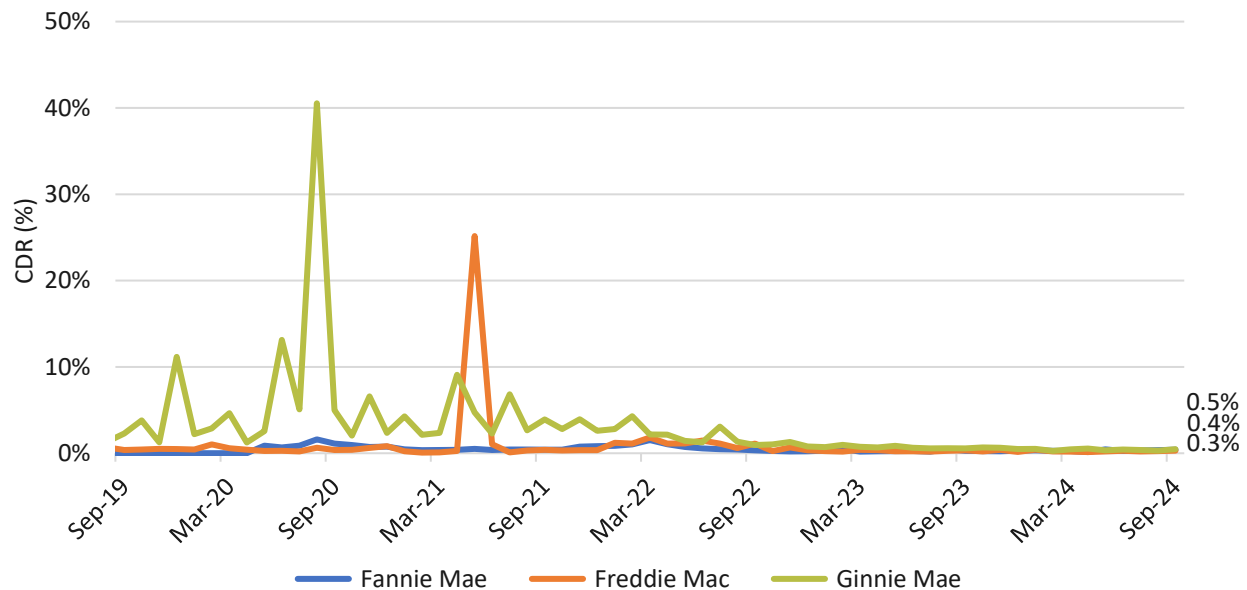


Figure 16. ARM Aggregate CDR



Source: Recursion. Note: Data as of September 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 decrease of 0.3% MtM and Freddie Mac saw a decrease of 0.1% MtM in fixed rate aggregate CRR. Freddie Mac saw a 4.0% decrease MtM in ARM aggregate CRR, and Fannie Mae saw a 2.0% decrease MtM. Ginnie Mae’s fixed rate aggregate CRR increased by 0.6% MtM while ARM aggregate CRR decreased by 5.2% MtM.

Figure 17. Fixed Rate Aggregate CRR

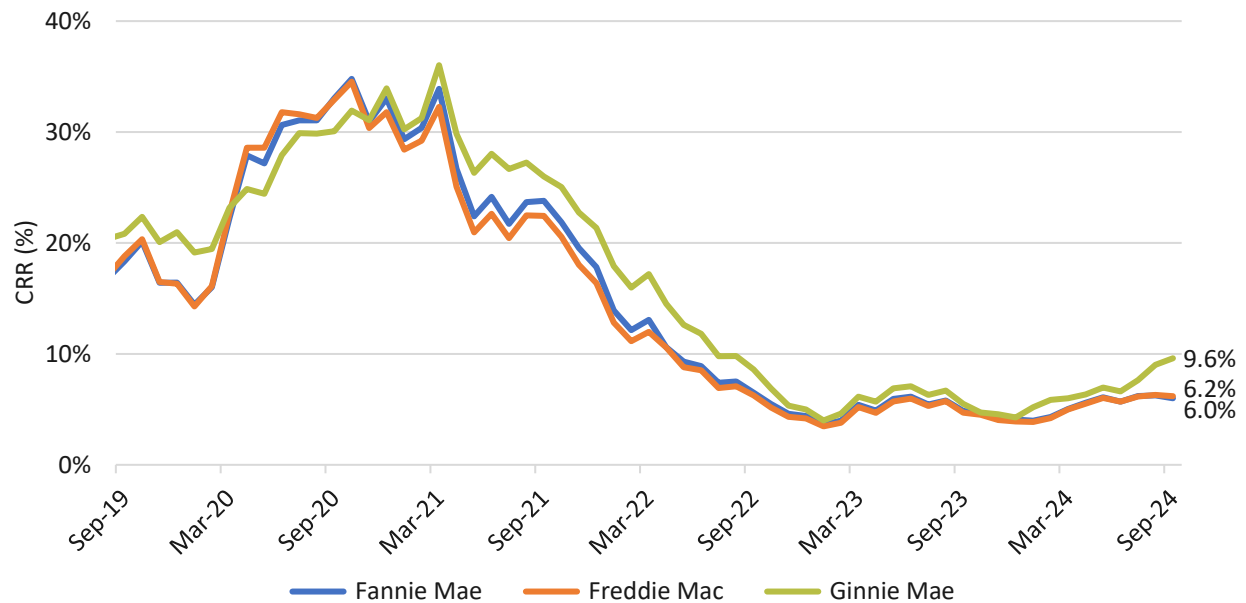
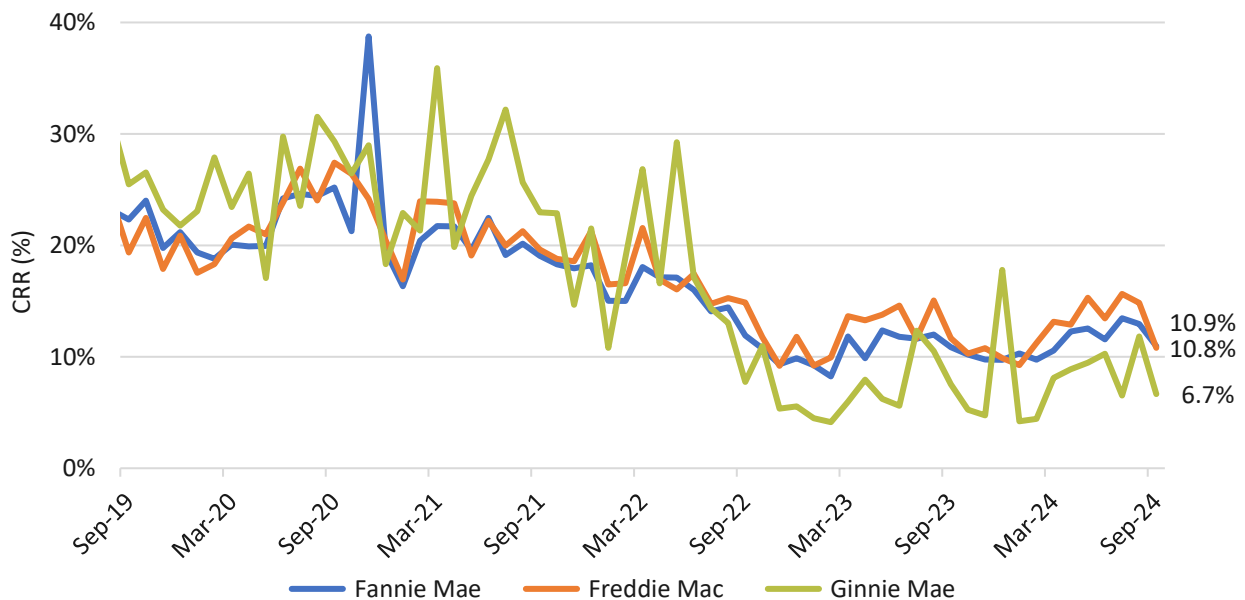


Figure 18. ARM Aggregate CRR



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

5 SINGLE-FAMILY MBS PASS-THROUGH ISSUANCE

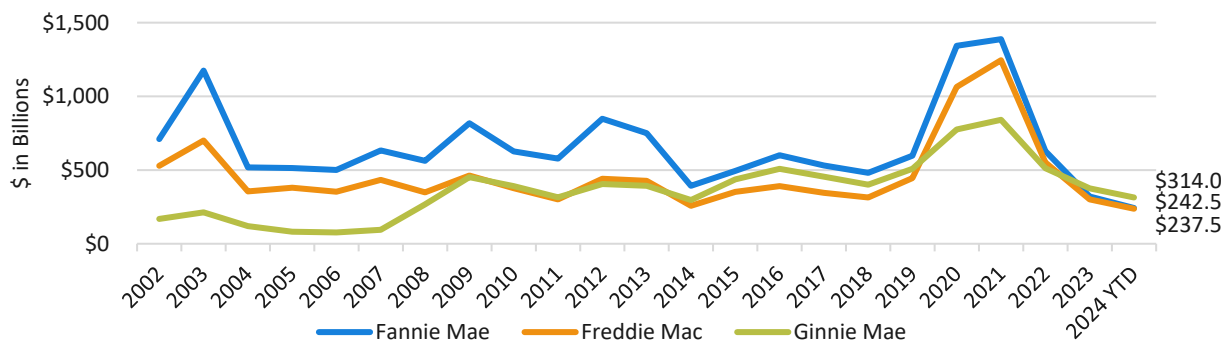
5.1 Gross Issuance of Agency MBS

In September 2024, total gross MBS issuance was approximately \$100.6 billion. Of the \$100.6 total gross issuance in September, Freddie Mac and Fannie Mae issued \$25.4 and \$31.9 billion, respectively. Ginnie Mae’s gross issuance for September was \$43.3 billion. Ginnie Mae’s September YTD and monthly gross issuance exceeded that of both Fannie and Freddie.

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	\$242.5	\$237.5	\$479.9	\$314.0	\$793.9

Figure 19. Agency Gross Issuance

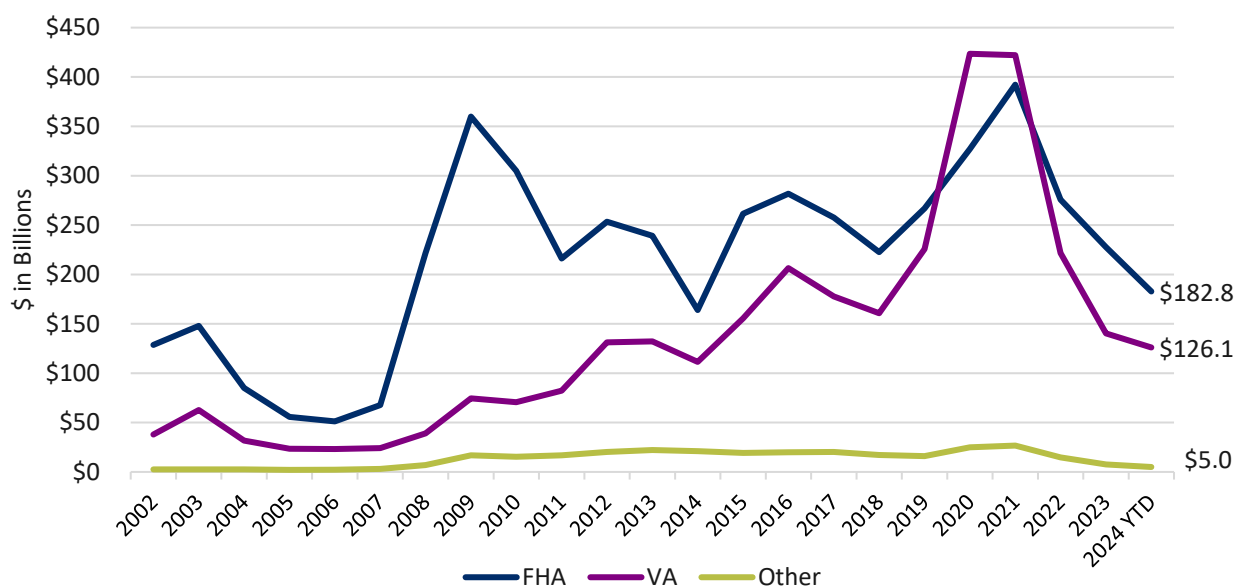


Source: Recursion. Note: Numbers are rounded to the nearest hundred million. For sums, like “GSE Total”, the values are rounded after the exact underlying values are summed. As a result, some sums may not appear to match the sum of their rounded component values.

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	\$182.8	\$126.1	\$5.0	\$314.0

Figure 20. 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.

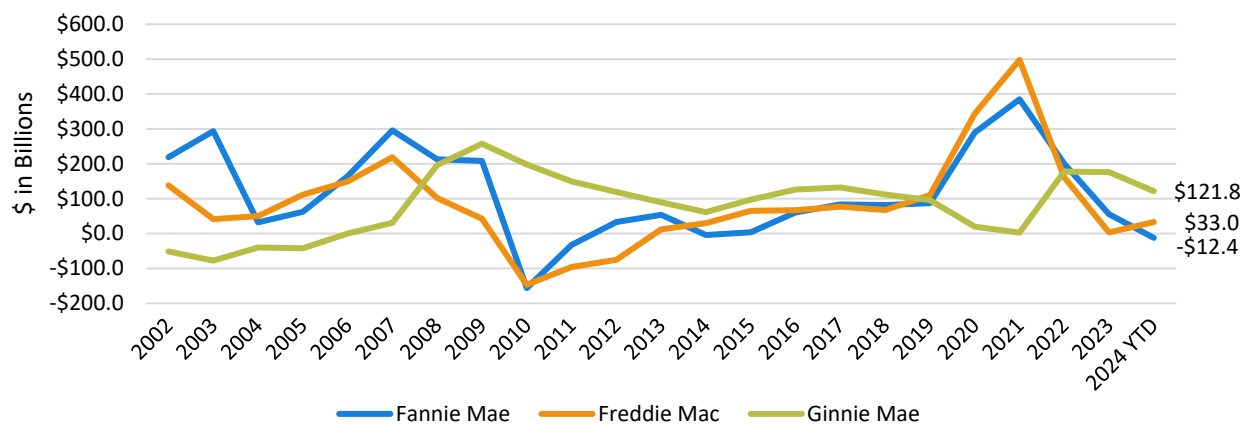
5.2 Net Issuance of Agency MBS

Agency Net Issuance as of month-end September was \$142.3 billion for 2024 YTD, as shown in **Table 3**. Ginnie Mae has the largest net issuance YTD, totaling \$121.8 billion as of month-end September 2024. Since 2022, FHA net issuance has outpaced VA net issuance, as shown in **Table 4 and Figure 22**.

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	-\$12.4	\$33.0	\$20.5	\$121.8	\$142.3

Figure 21. Agency Net Issuance

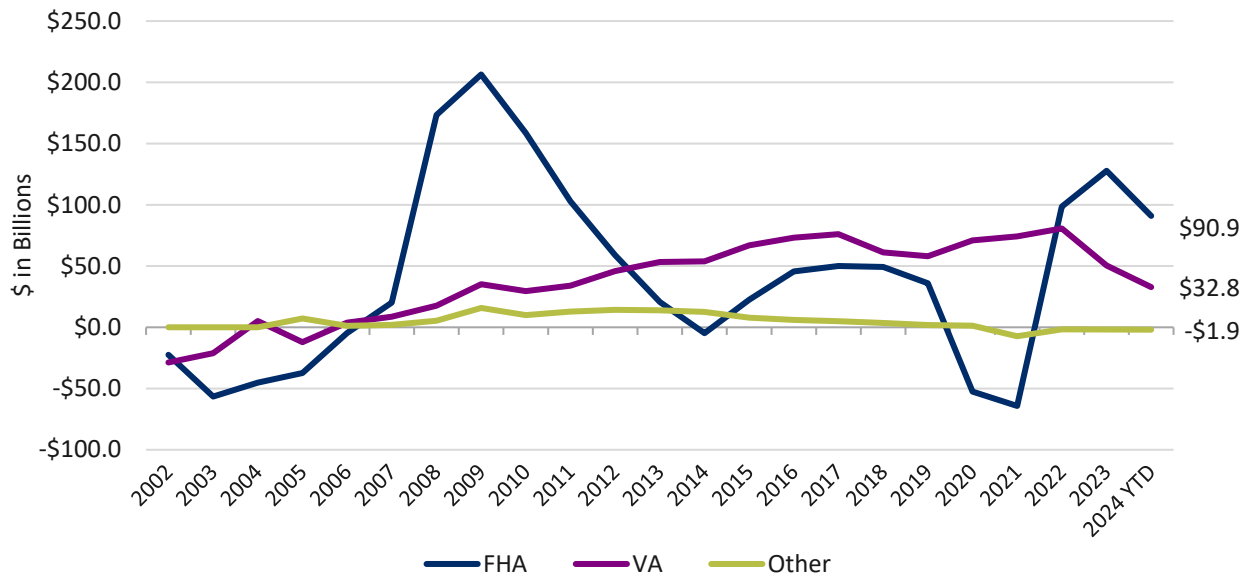


Source: Recursion. Note: Numbers are rounded to the nearest hundred million. For sums, like "GSE Total", the values are rounded after the exact underlying values are summed. As a result, some sums may not appear to match the sum of their rounded component values.

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	\$90.9	\$32.8	-\$1.9	\$121.8

Figure 22. 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 September was approximately \$17.6 billion, which represents an approximate \$10.0 billion decrease MtM. Ginnie Mae net issuance was \$15.1 billion in September, a \$1.5 billion increase from August. Ginnie Mae’s \$43.3 billion of gross issuance in September, seen in **Table 5**, was approximately \$12.0 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
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
Sep-24	\$25.4	\$31.9	\$43.3	\$57.3	\$100.6	-\$4.6	\$7.1	\$15.1	\$2.5	\$17.6

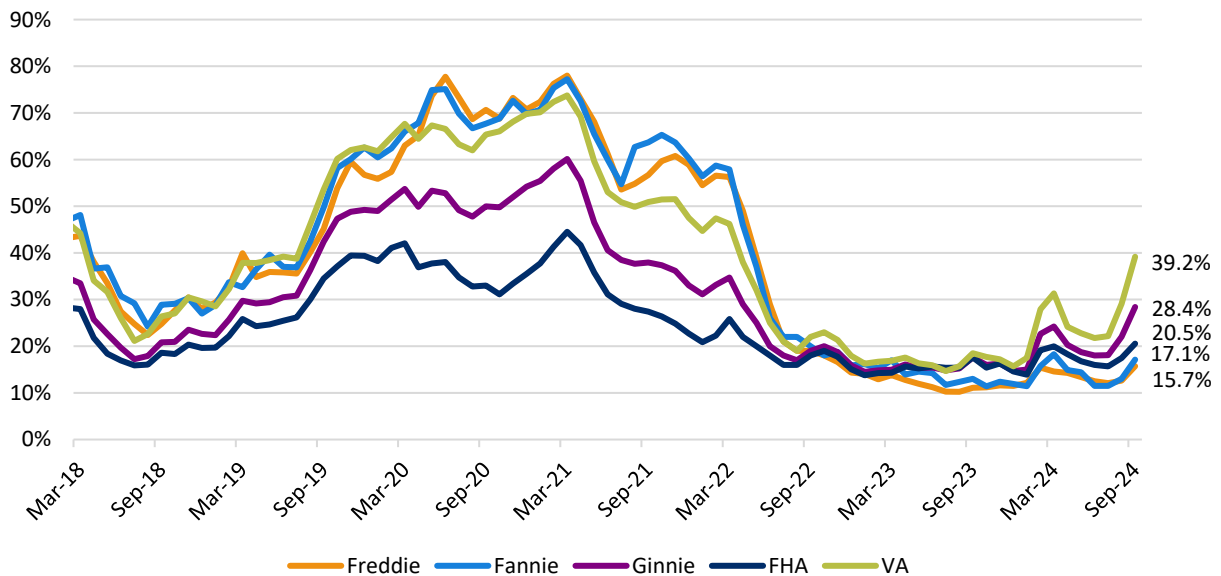
Sources: Beginning May 2021, data for Gross and Net Issuance was sourced from Fannie Mae, Freddie Mac, and Ginnie Mae loan level disclosure files. Net issuance is defined here as the difference between prior period UPB and current period UPB. Data as of September 2024. Beginning with the October 2021 GMAR, the Fannie Mae and Freddie Mac net issuance data is updated to reflect the current UPB of the portfolios. September 2021 through September 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 28.9% MoM for Ginnie Mae as of month-end September 2024.

- Freddie Mac’s refinance percentage increased to 15.7% in September, up from 12.6% in August.
- Fannie Mae’s refinance percentage increased to 17.1% in September, up from 13.0% in August.
- Ginnie Mae’s refinance percentage increased to 28.4% in September, up from 22.0% in August.
- FHA’s refinance percentage increased to 20.5% in September, up from 17.5% in August.
- VA’s refinance percentage increased to 39.2% in September, up from 29.1% in August.

Figure 23. Percent Refinance at Issuance – Single-Family



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

6 AGENCY SINGLE-FAMILY MBS OUTSTANDING

6.1 Outstanding Single-Family Agency MBS

As of month-end September 2024, outstanding Single-Family MBS in the Agency market totaled \$8.98 trillion: 39.7% Fannie Mae, 33.2% Freddie Mac, and 27.1% Ginnie Mae MBS. Over the past twelve months, Freddie Mac’s total outstanding MBS increased by approximately 1.7%, and Ginnie Mae’s increased by 7.4%. Fannie Mae’s total outstanding MBS decreased by 0.4%. Fannie Mae’s outstanding MBS remains larger than Freddie Mac’s and Ginnie Mae’s outstanding MBS by approximately \$581 billion and \$1.1 trillion, respectively.

Ginnie Mae’s MBS collateral composition has changed over time as shown in **Figure 25**. In September 2019, 59.1% of Ginnie Mae’s outstanding collateral was FHA and 35.0% was VA. As of month-end September 2024, FHA collateral comprised 55.3% of Ginnie Mae MBS outstanding, and VA collateral comprised 40.5% of Ginnie Mae MBS outstanding.

Figure 24. Outstanding Agency Mortgage-Backed Securities

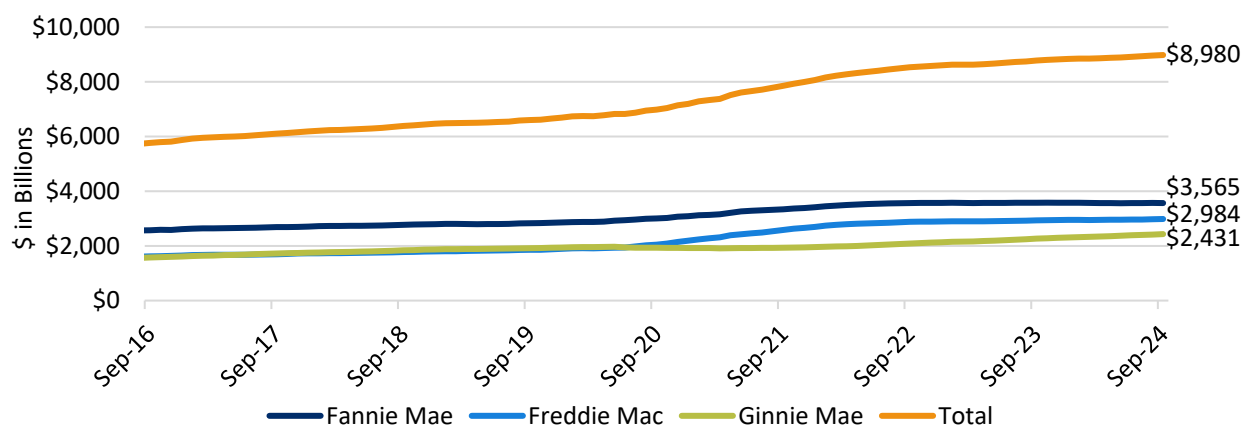
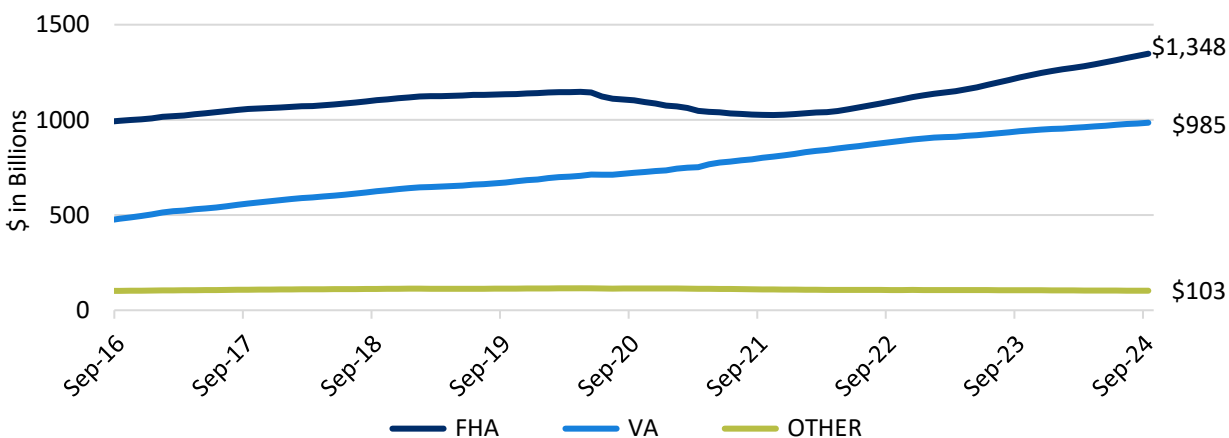


Figure 25. Composition of Outstanding Ginnie Mae Mortgage-Backed Securities



Source: Recursion. Note: Data as of September 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 26. First Lien Origination Volume

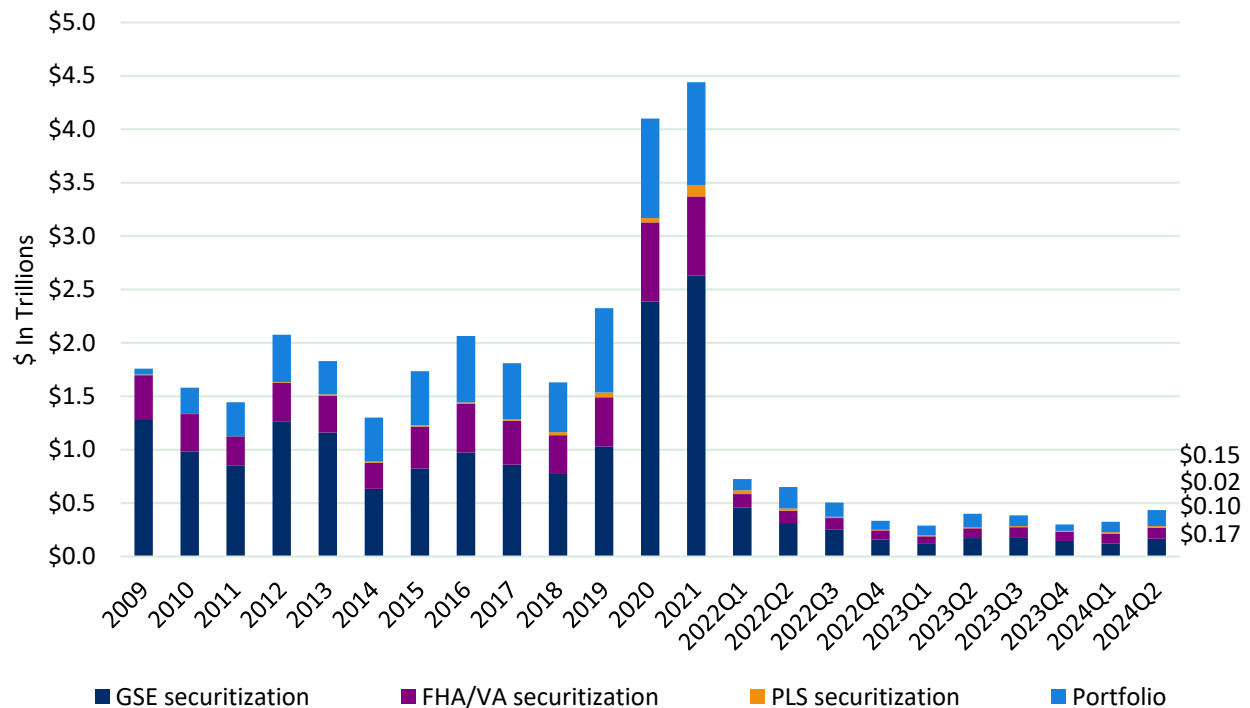
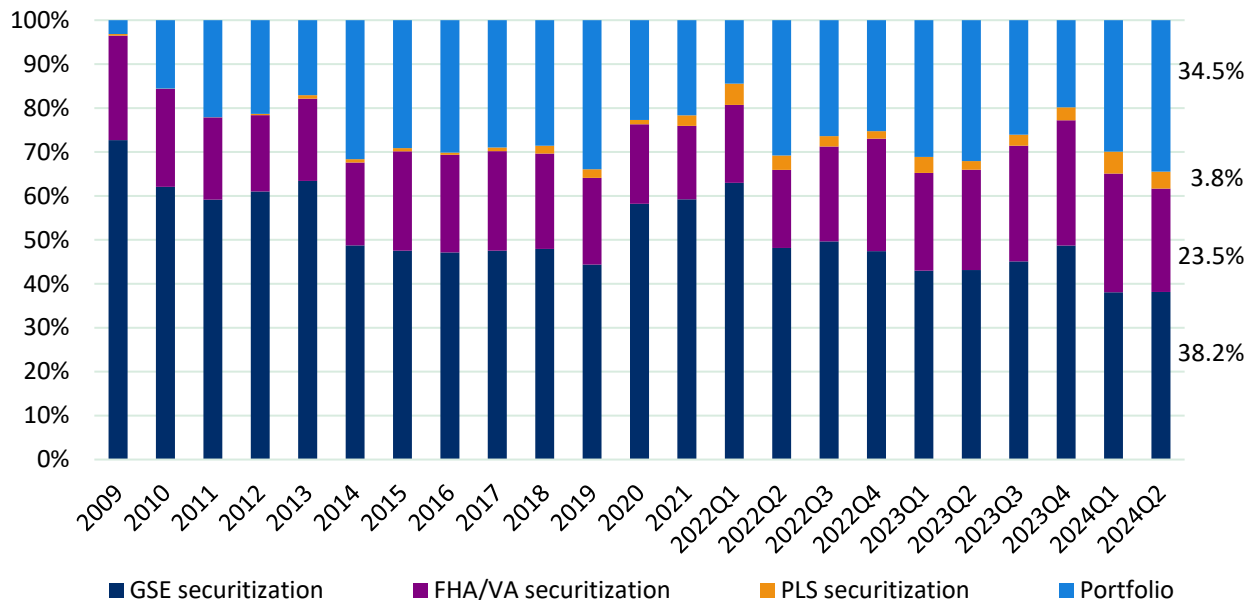


Figure 27. First Lien Origination Share



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 11% higher than Ginnie Mae’s 28% 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 and Vermont (22%). The highest Ginnie Mae outstanding share is in Mississippi (50%) and the lowest in the District of Columbia (14%).

Table 6. Agency Issuance Breakdown by State

	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)
National	39%	1,515,140	318.03	315.55	28%	11,443,992	215.23	212.19
AK	60%	3,859	373.18	317.92	49%	37,836	265.96	218.72
AL	55%	37,868	249.11	250.57	43%	255,017	168.47	179.20
AR	48%	19,750	216.78	243.95	41%	144,406	141.46	164.22
AZ	43%	47,924	355.85	351.72	27%	304,144	239.23	229.35
CA	34%	88,819	499.84	490.48	18%	735,088	341.59	317.29
CO	38%	32,290	437.35	418.45	25%	228,437	308.72	280.22
CT	30%	10,529	307.25	312.88	26%	109,296	207.40	209.27
DC	22%	973	554.72	467.34	14%	9,527	396.67	345.08
DE	39%	6,364	305.46	316.83	32%	55,059	211.34	213.23
FL	46%	149,606	336.82	328.16	34%	940,476	230.85	217.98
GA	47%	79,366	295.44	321.47	36%	533,287	195.38	211.83
HI	45%	3,388	658.02	546.10	33%	34,964	474.81	356.14
IA	32%	11,438	209.03	212.07	24%	87,041	141.46	148.50
ID	38%	10,165	363.48	338.68	26%	69,071	237.93	226.55
IL	27%	42,696	235.70	265.92	23%	384,034	165.05	179.94
IN	39%	39,957	221.16	226.29	32%	294,018	144.08	153.89
KS	39%	13,197	220.84	236.33	30%	99,764	148.08	164.99
KY	48%	25,162	223.92	230.50	37%	175,645	152.42	157.19
LA	55%	26,221	221.46	240.28	43%	215,499	162.48	175.86
MA	26%	13,508	427.77	424.60	17%	119,961	295.28	267.75
MD	46%	34,222	380.89	361.03	35%	306,950	271.81	248.58
ME	35%	4,841	283.65	299.97	27%	39,373	186.27	194.09
MI	27%	33,511	214.49	233.36	21%	286,285	140.13	157.23
MN	24%	17,298	281.85	292.45	18%	163,765	189.08	199.04
MO	39%	33,227	227.29	239.70	30%	254,784	150.33	163.69
MS	61%	17,542	223.76	227.66	50%	130,810	152.22	161.67
MT	36%	4,011	359.59	335.50	25%	33,290	222.65	218.61
NC	42%	68,770	290.29	312.37	31%	444,410	191.11	206.85
ND	37%	2,171	267.84	259.64	25%	17,510	197.82	181.99
NE	37%	8,396	251.07	242.41	28%	67,013	159.54	162.51
NH	28%	4,363	363.89	349.31	23%	39,231	235.83	218.35
NJ	29%	26,425	374.01	388.53	22%	241,370	250.64	255.43
NM	51%	12,574	278.48	284.14	40%	100,291	177.68	181.09
NV	46%	20,835	383.85	356.58	33%	145,441	264.43	238.91
NY	25%	28,201	340.20	356.48	21%	316,043	219.03	249.05
OH	36%	54,104	216.15	222.17	30%	442,077	138.10	151.40
OK	51%	25,933	228.06	231.95	43%	198,309	150.24	164.73
OR	32%	14,874	384.59	387.79	21%	117,914	266.28	254.93
PA	30%	40,273	230.11	269.02	26%	401,126	153.49	183.30
RI	44%	4,410	382.36	345.70	32%	37,796	247.10	213.98
SC	48%	41,933	285.47	282.00	37%	258,131	197.10	195.50
SD	43%	4,308	273.26	256.56	31%	30,704	183.59	177.81
TN	44%	44,752	297.89	307.26	33%	286,991	192.70	209.77
TX	43%	175,473	303.30	327.49	34%	1,207,579	199.35	219.11
UT	37%	16,751	416.11	409.40	21%	105,587	283.70	266.81
VA	48%	54,373	371.15	360.55	37%	464,051	264.94	249.97
VI	23%	62	424.53	453.63	24%	803	266.73	308.39
VT	22%	1,224	277.38	291.79	19%	12,382	185.07	182.44
WA	34%	29,715	438.05	443.16	23%	243,590	298.19	291.43
WI	26%	15,777	245.26	250.77	18%	128,129	163.43	163.32
WV	55%	8,202	222.26	203.38	46%	63,800	150.75	145.44
WY	49%	3,509	307.24	286.31	37%	25,887	214.17	201.63

Source: Recursion. Note: Outstanding balance based on loan balance as of September 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 September 2024, the weighted average coupon (WAC) on outstanding Ginnie Mae MBS increased from 3.74% in August 2024 to 3.77% as seen in **Figure 28**. **Figure 29** illustrates that loans originated since 2019 account for approximately 84% of Ginnie Mae MBS collateral outstanding.

Figure 28. Outstanding Ginnie Mae MBS Balance, by Coupon

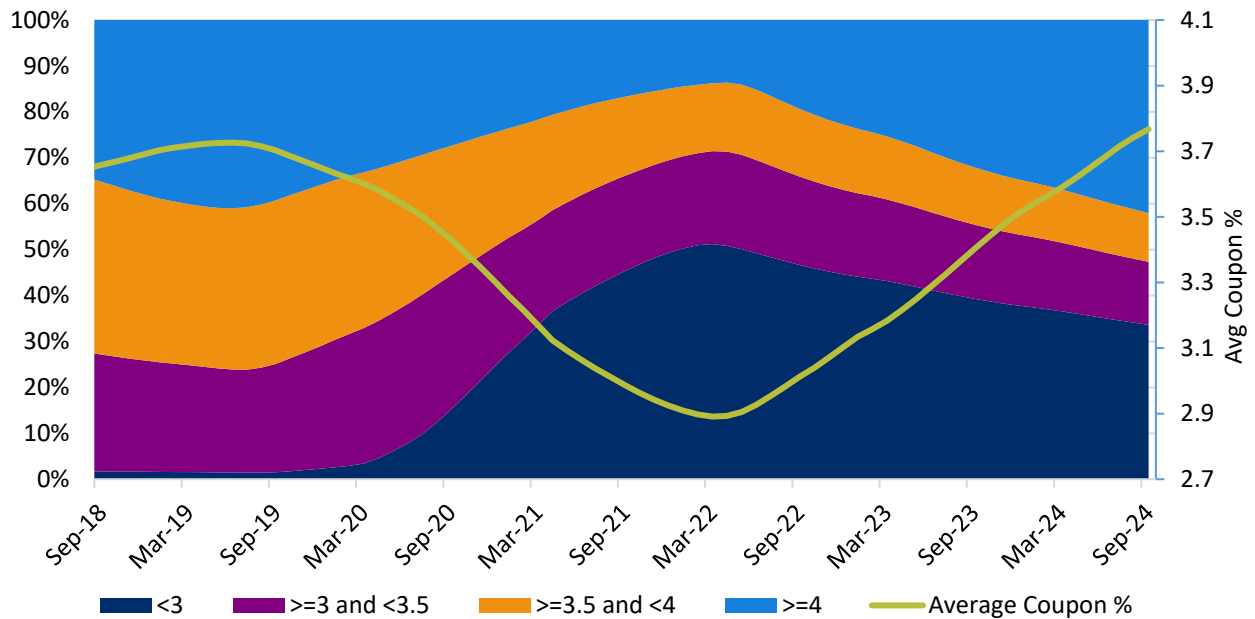
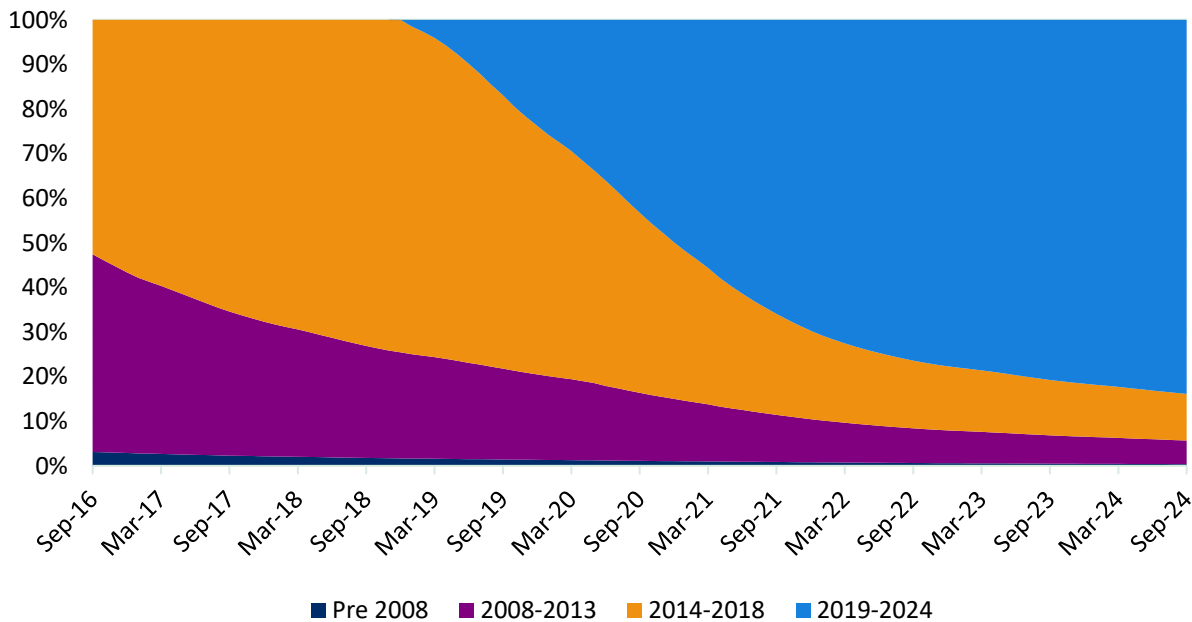


Figure 29. Outstanding Ginnie Mae MBS Balance, by Vintage



Source: Recursion. Note: September 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 September was approximately \$11.1 billion. This represents a 0.74% MoM decrease from \$11.2 billion in August 2024, and a 23.78% increase YoY from \$8.9 billion in September 2023. Approximately \$698.5 million of the September 2024 issuance volume were Multifamily MBS having coupons over 5.0%, and approximately \$9.7 billion were Single-Family MBS having coupons over 5.0%. Roughly \$344.7 million of previously securitized REMICs were re-securitized into new REMIC deals in September.

Figure 30. Ginnie Mae Single-Family and Multifamily REMIC Issuance (\$B)

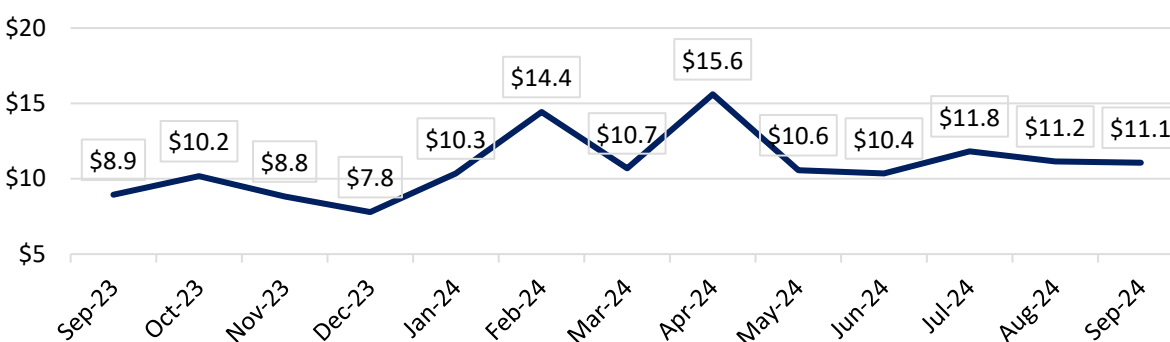


Table 7. September 2024 REMIC Issuance Breakdown

Net Coupon (%)	Principal (\$MM) for MBS Deals	Principal (\$MM) for Re-REMIC Deals	Principal % for MBS Deals	Principal % for Re-REMIC Deals
Multifamily				
3.01-4.01	\$35.5	-	4.8%	-
5.01-6.01	\$698.5	-	95.2%	-
Subtotal	\$734.0	0.0	100.0%	0.0%
Single-Family				
<2.01	-	\$119.9	-	1.2%
2.01-2.51	\$100.0	-	1.0%	-
3.01-3.51	\$108.9	-	1.1%	-
3.51-4.01	\$113.0	-	1.1%	-
4.01-4.51	\$0.1	\$107.5	0.0%	1.0%
4.51-5.01	-	\$47.9	-	0.5%
5.01-5.51	\$2,511.2	\$69.4	24.3%	0.7%
5.51-6.01	\$4,675.4	-	45.2%	-
6.01-6.51	\$2,044.3	-	19.8%	-
6.51-7.01	\$435.2	-	4.2%	-
>7.01	\$0.8	-	0.0%	-
Subtotal	\$9,988.9	\$344.7	96.7%	3.3%
Grand Total ²	\$10,722.9	\$344.6	96.9%	3.1%

Source: Ginnie Mae Disclosure Files

² Totals may not sum due to rounding. Percents calculated using weighted average.

7.2 REMIC Market Snapshot

- In September 2024, Ginnie Mae’s total Single-Family, Multifamily, and HMBS REMIC issuance totaled \$11.7 billion, a 3.2% or \$386 million decrease MoM.
- In September 2024, total Single-Family and Multifamily issuance across the three Agencies increased 14.5% or \$3.1 billion MoM.
- In September 2024, Ginnie Mae, Fannie Mae, and Freddie Mac all saw decreases in their Single-Family REMIC issuance collateral coupon of 20, 38, and 40 bps, respectively.
- In September 2024, Freddie Mac saw a decrease in their Multifamily REMIC issuance collateral coupon of 51 bps. Ginnie Mae saw an increase of 66 bps in their Multifamily REMIC issuance collateral coupon. Fannie Mae has not issued a Multifamily REMIC since April of 2024.

Figure 31. September 2024 REMIC Issuance by Agency (\$B)

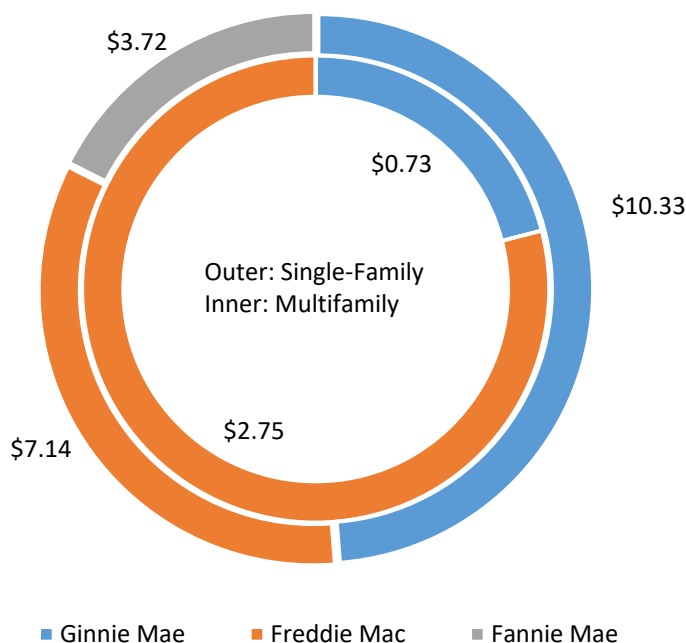


Table 8. September 2024 REMIC Issuance by Agency

	<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>
Ginnie Mae	\$10.33	49%	11	\$0.73	21%	6
Freddie Mac	\$7.14	34%	11	\$2.75	79%	6
Fannie Mae	\$3.72	18%	7	\$0.00	0%	0
Total ³	\$21.19	100%	29	\$3.48	100%	12

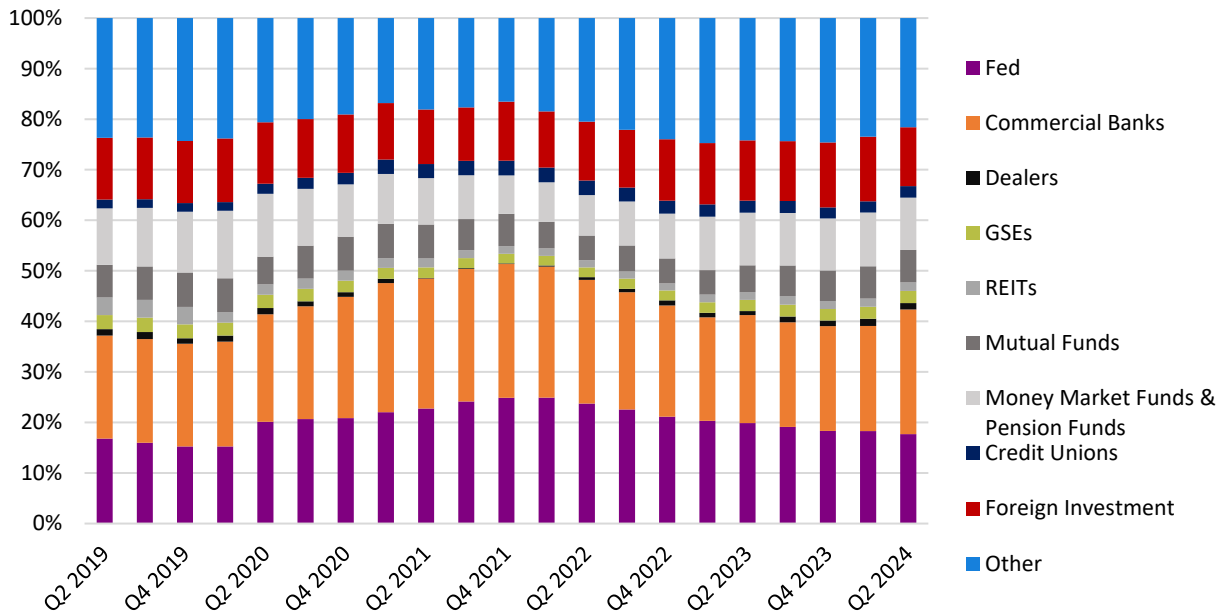
Source: Relay & FDS files posted to Ginnie Mae, Fannie Mae, and Freddie Mac

³ 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 \$2.20 trillion in holdings as of the end of September 2024, roughly \$1.55 trillion was held by the top 25 domestic banks per **Table 9** below.

Figure 32. 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)								
	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24
Largest 25 Domestic Banks	\$1,915.6	\$1,920.4	\$1,919.6	\$1,912.7	\$1,913.1	\$1,946.1	\$1,957.4	\$1,975.1	\$1,549.5
Small Domestic Banks	\$581.0	\$579.4	\$583.4	\$591.3	\$586.6	\$591.0	\$596.1	\$601.1	\$612.9
Foreign Related Banks	\$29.1	\$34.1	\$30.7	\$29.5	\$30.4	\$31.2	\$30.6	\$33.9	\$36.3
Total, Seasonally Adjusted	\$2,525.7	\$2,533.9	\$2,533.7	\$2,533.5	\$2,530.1	\$2,568.3	\$2,584.1	\$2,610.1	\$2,198.7

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

Rank	Institution	Total	GSE PT	GNMA PT	Agency CMO	Non-Agency	Share
1	Bank of America Corporation	\$405,363	\$328,072	\$63,847	\$13,250	\$194	18.24%
2	Wells Fargo & Company	\$253,562	\$147,224	\$104,132	\$2,147	\$59	11.41%
3	JPMorgan Chase & Co.	\$145,081	\$79,058	\$54,416	\$470	\$11,137	6.53%
4	Charles Schwab	\$135,802	\$76,179	\$4,887	\$54,736	\$0	6.11%
5	U.S. Bancorp	\$94,144	\$56,825	\$27,457	\$9,862	\$0	4.24%
6	Citigroup Inc.	\$91,714	\$61,234	\$27,811	\$1,953	\$716	4.13%
7	Truist Bank	\$82,781	\$31,967	\$22,562	\$28,252	\$0	3.73%
8	PNC Bank, National Association	\$65,996	\$53,784	\$3,580	\$7,782	\$850	2.97%
9	Capital One Financial Corporation	\$62,120	\$29,290	\$13,663	\$18,864	\$303	2.80%
10	Morgan Stanley	\$47,903	\$28,525	\$8,232	\$11,026	\$120	2.16%
11	Bank Of New York Mellon Corp	\$42,550	\$27,046	\$4,448	\$9,386	\$1,670	1.91%
12	State Street Bank and Trust Company	\$35,827	\$12,229	\$9,451	\$11,769	\$2,378	1.61%
13	USAA Federal Savings Bank	\$34,269	\$28,851	\$1,656	\$3,762	\$0	1.54%
14	Citizens Bank, National Association	\$28,662	\$12,615	\$6,757	\$9,289	\$0	1.29%
15	BMO Harris Bank National Association	\$26,829	\$3,659	\$5,527	\$17,643	\$0	1.21%
16	The Huntington National Bank	\$25,160	\$10,052	\$8,174	\$6,821	\$113	1.13%
17	KeyBank National Association	\$24,183	\$3,338	\$1,045	\$19,800	\$0	1.09%
18	TD Bank USA/TD Bank NA	\$24,075	\$1,334	\$68	\$22,673	\$0	1.08%
19	HSBC Bank USA, National Association	\$23,199	\$3,587	\$14,913	\$4,699	\$1	1.04%
20	Regions Bank	\$20,033	\$14,982	\$2,948	\$2,103	\$0	0.90%
Total	Top 20	\$1,669,252	\$1,009,850	\$385,574	\$256,287	\$17,541	75.1%

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 September 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 September 18th, 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.”*
 - *“...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.”*
 - *“...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.”*
- The next FOMC meetings are scheduled for November 6 – November 7 and December 17 - 18.
 - *On 10/9/24, the UST 10YR yield closed at 4.067%, while the Ginnie Mae II 30-year 4.5% coupon yield closed at 4.98% and the 5.0% coupon yield closed at 5.20%, a spread of 91 bps and 113 bps, respectively.*
 - *PCE inflation decreased to +2.2% and core PCE inflation, which is the Fed benchmark, increased slightly to +2.7% in August 2024, per the September 27, 2024 Core PCE report.*

SOMA Portfolio Highlights (September 11, 2024 versus October 9, 2024)

- SOMA holdings of domestic securities totaled \$6.5 trillion on Oct 9th (a decrease of \$42.7 billion or -0.65% from Sep 11). \$25.0 billion (59% of the total decrease) was in U.S. Treasury holdings and \$17.7 billion (41% of the total decrease) was in Agency MBS.
- Since the institution of redemption caps in June 2022, SOMA holdings have decreased by \$1.841 trillion. The total reduction of holdings of U.S. Treasuries was \$1.416 trillion and \$0.425 trillion for Agency MBS. This represents 95.3% and 45.8% 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 \$17.7 billion monthly decrease was primarily due to MBS principal repayments rather than outright sales and was comprised of a \$7.4 billion decrease in Fannie Mae holdings, a \$6.5 billion decrease in Freddie Mac holdings, and a \$3.8 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 .
- 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 \$17.7 billion in Agency MBS represents 51% of the monthly liquidation cap.

Table 12. SOMA Holdings as of September 11, 2024 and October 9, 2024 (\$ Billions)

Holdings by Security Type	September 11, 2024		October 9, 2024		Month-Over-Month	
	SOMA Holdings	% Share	SOMA Holdings	% Share	\$ Change	% Change ⁴
U.S. Treasuries	\$4,271.8	64.98%	\$4,246.8	65.02%	-\$25.0	-0.59%
Federal Agency Debt	\$2.3	0.04%	\$2.3	0.04%	\$0.0	0.00%
Agency MBS	\$2,291.7	34.86%	\$2,274.0	34.82%	-\$17.7	-0.77%
Agency Commercial MBS	\$8.1	0.12%	\$8.1	0.12%	\$0.0	-0.18%
Total SOMA Holdings	\$6,574.0	100.0%	\$6,531.2	100.0%	-\$42.7	-0.65%

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

Agency	October 1, 2024		September 11, 2024		October 9, 2024	
	Singly-Family AMBS Outstanding	% AMBS Outstanding	SOMA AMBS Holdings	% SOMA Holdings	SOMA AMBS Holdings	% SOMA Holdings
Fannie Mae	\$3,565.1	39.7%	\$942.6	41.1%	\$935.2	41.1%
Freddie Mac	\$2,983.7	33.2%	\$878.1	38.3%	\$871.6	38.3%
Ginnie Mae	\$2,431.3	27.1%	\$471.0	20.6%	\$467.2	20.5%
Total	\$8,980.1	100.0%	\$2,291.7	100.0%	\$2,274.0	100.0%

Table 14. SOMA Agency MBS Liquidations from September 11, 2024 to October 9, 2024 (\$ Billions)

	MBS Holdings September 11, 2024	MBS Holdings October 9, 2024	Liquidated Amount	Liquidation Cap ⁵	% of Liquidation Cap
Total	\$2,291.7	\$2,274.0	\$17.7	\$35.0	51%

Source: New York FED SOMA Holdings <https://www.newyorkfed.org/markets/soma-holdings> as of October 9, 2024.

⁴ Figures in \$ billions, any change less than \$50 million will be expressed as a "\$0.0" change in the "\$ Change" column.

⁵ 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 33. Agency MBS Owned by Foreign Entities Ex-Fed Holdings and CMO's (USD Billions)

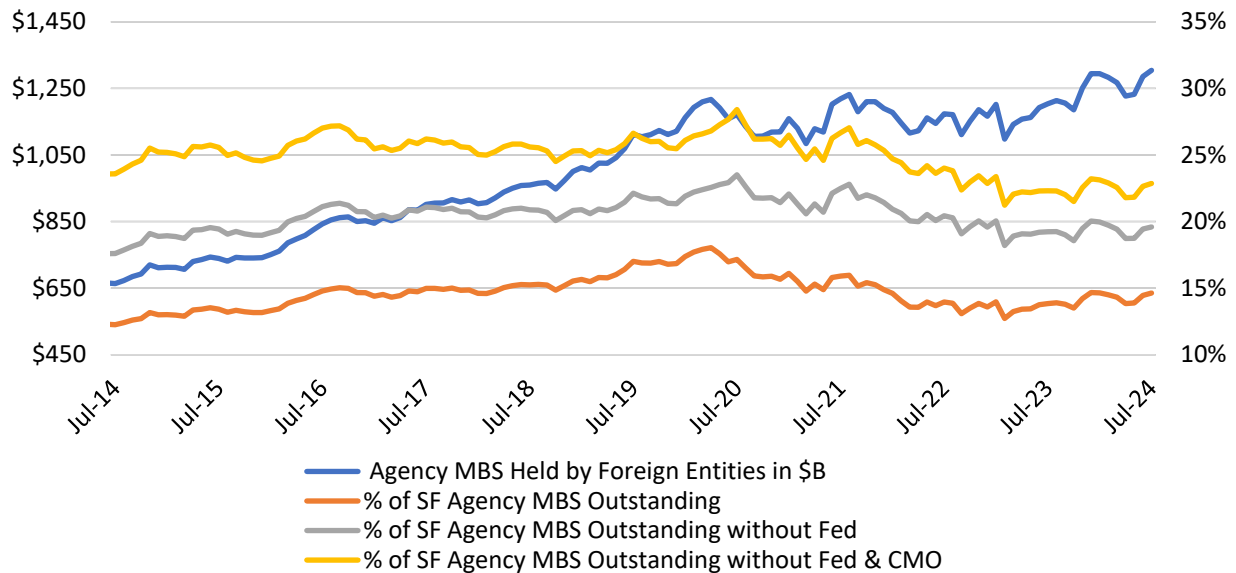
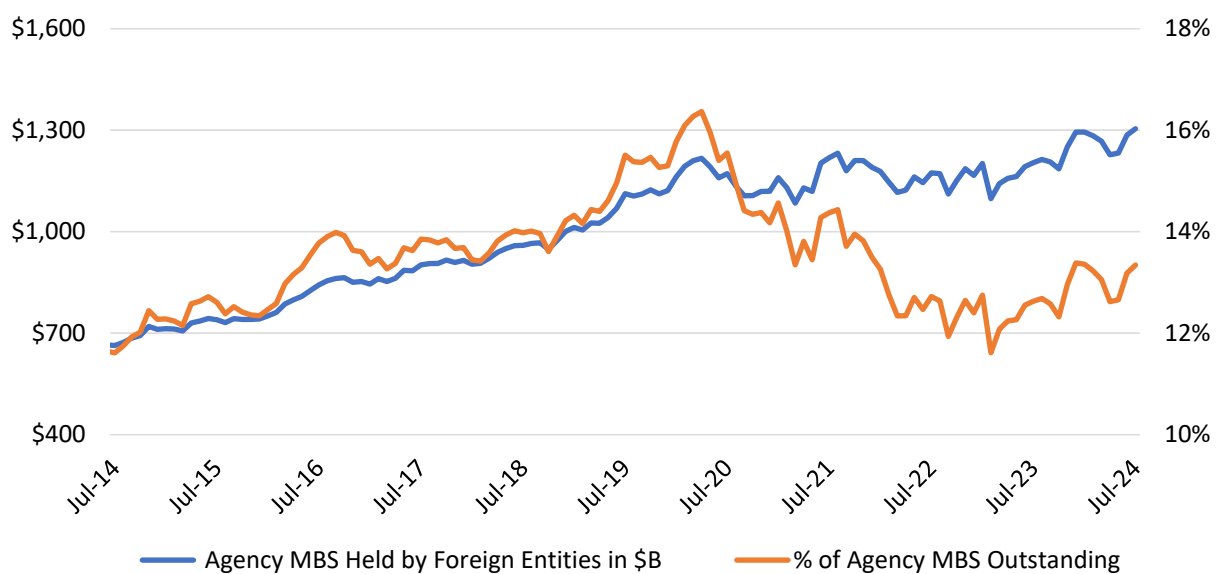


Figure 34. Agency MBS Owned by Foreign Entities (USD Billions)



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
Total	\$1,313,656	\$1,423,245	\$1,310,697	\$1,326,674	\$47,608	\$109,589	(\$112,548)	\$15,977

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
Total	\$1,266,048	\$1,326,674	\$60,626

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 \$297 billion as of month-end September 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 increased from \$279 billion in August 2024 to \$353 billion in September 2024. See footnote below for update on “Average Daily Turnover by Sector” data.

Figure 35. Average Daily Trading Volume by Sector

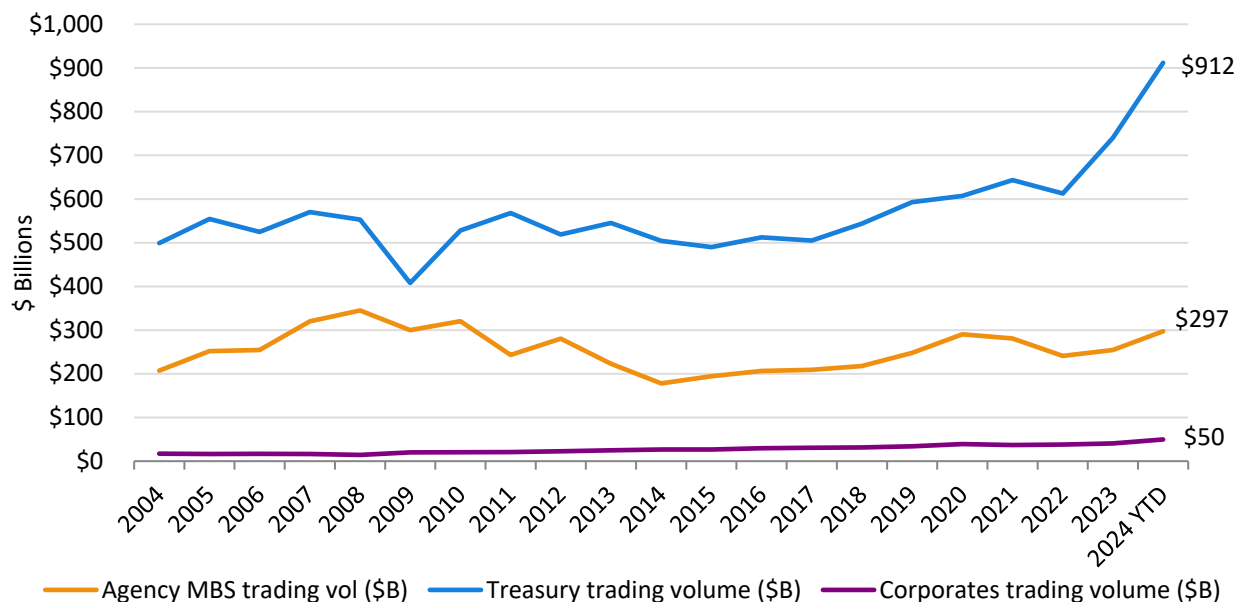
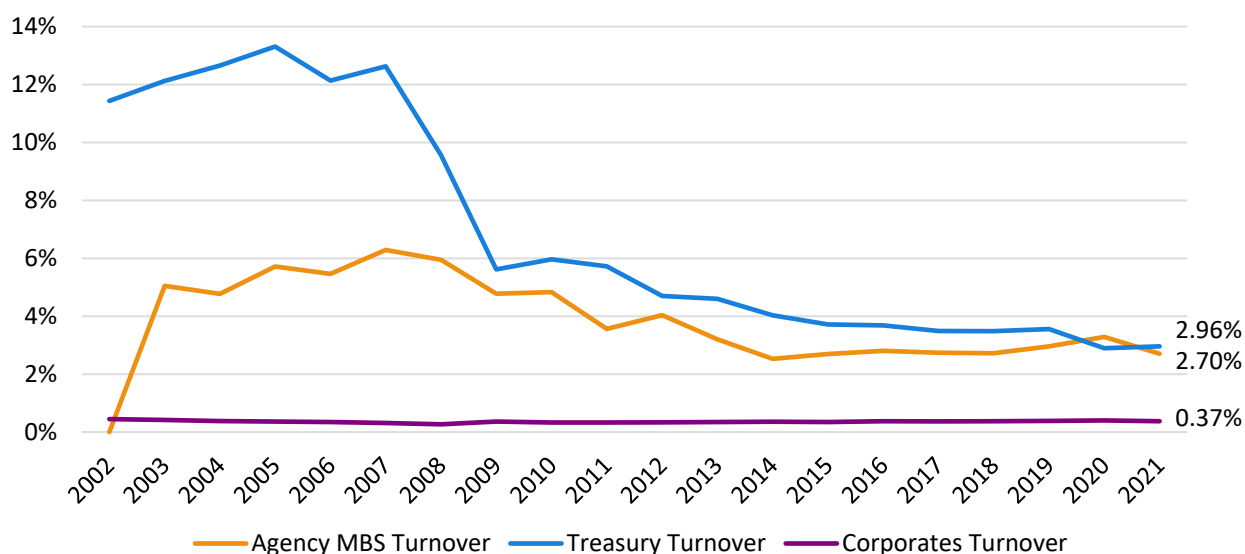


Figure 36. Average Daily Turnover by Sector



Source: SIFMA. Note: Data as of September 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 FICOs, DTIs, and LTVs between the Agencies and between FHA, VA, and other Ginnie Mae loan sources as of month-end September 2024. The distribution statistics capture some key differences in the populations served by the agencies.

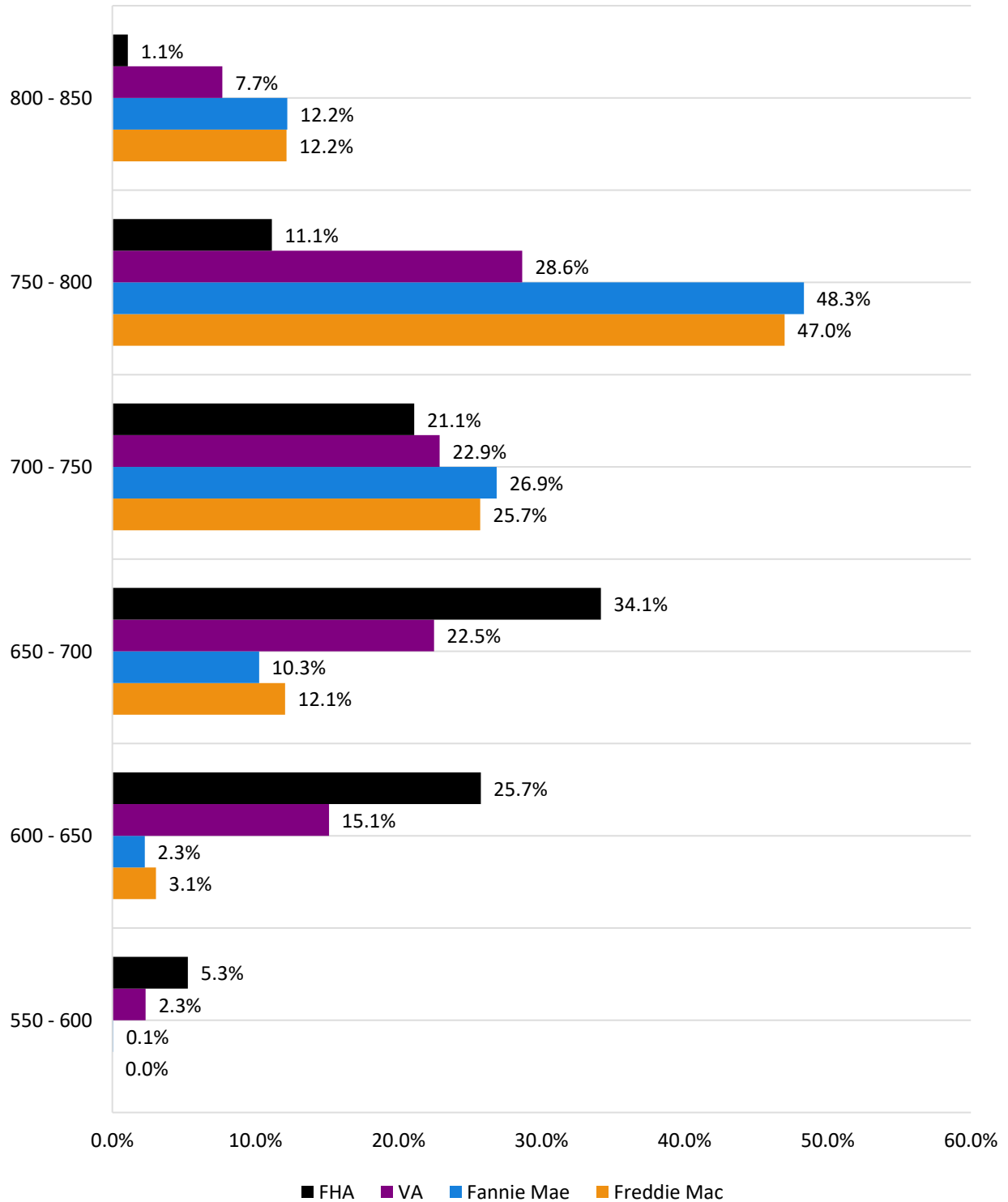
10.1 Credit Scores

Table 17. Share of Loans by FICO Score

Purchase FICO							
Names	Number of Loans	P10	P25	Median	P75	P90	Mean
All	223,388	653	697	748	783	800	736
Fannie	62,934	702	735	767	791	803	759
Freddie	74,767	691	728	765	790	803	755
Ginnie	85,687	628	657	699	750	786	703
Refi FICO							
Names	Number of Loans	P10	P25	Median	P75	P90	Mean
All	64,232	625	661	712	763	791	709
Fannie	16,354	663	701	745	780	799	738
Freddie	17,432	666	702	747	781	799	739
Ginnie	30,446	602	635	672	719	764	677
All FICO							
Names	Number of Loans	P10	P25	Median	P75	P90	Mean
All	293,985	642	684	739	779	799	728
Fannie	79,288	692	728	764	789	802	755
Freddie	92,199	685	723	762	789	802	752
Ginnie	122,498	618	647	688	740	780	692
Purchase FICO: Ginnie Mae Breakdown by Source							
Names	Number of Loans	P10	P25	Median	P75	P90	Mean
All	85,687	628	657	699	750	786	703
FHA	54,271	624	649	684	728	765	689
VA	28,582	640	681	739	781	801	728
Other	2,834	635	663	703	740	770	702
Refi FICO: Ginnie Mae Breakdown by Source							
Names	Number of Loans	P10	P25	Median	P75	P90	Mean
All	30,446	602	635	672	719	764	677
FHA	15,699	592	624	657	691	731	659
VA	14,735	617	650	694	747	781	696
Other	12	656	672	696	717	734	697
All FICO: Ginnie Mae Breakdown by Source							
Names	Number of Loans	P10	P25	Median	P75	P90	Mean
All	122,498	618	647	688	740	780	692
FHA	75,207	612	640	674	717	758	679
VA	44,110	629	666	721	772	797	716
Other	3,181	630	656	697	736	767	696

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

Figure 37. FICO Distributions by Agency



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

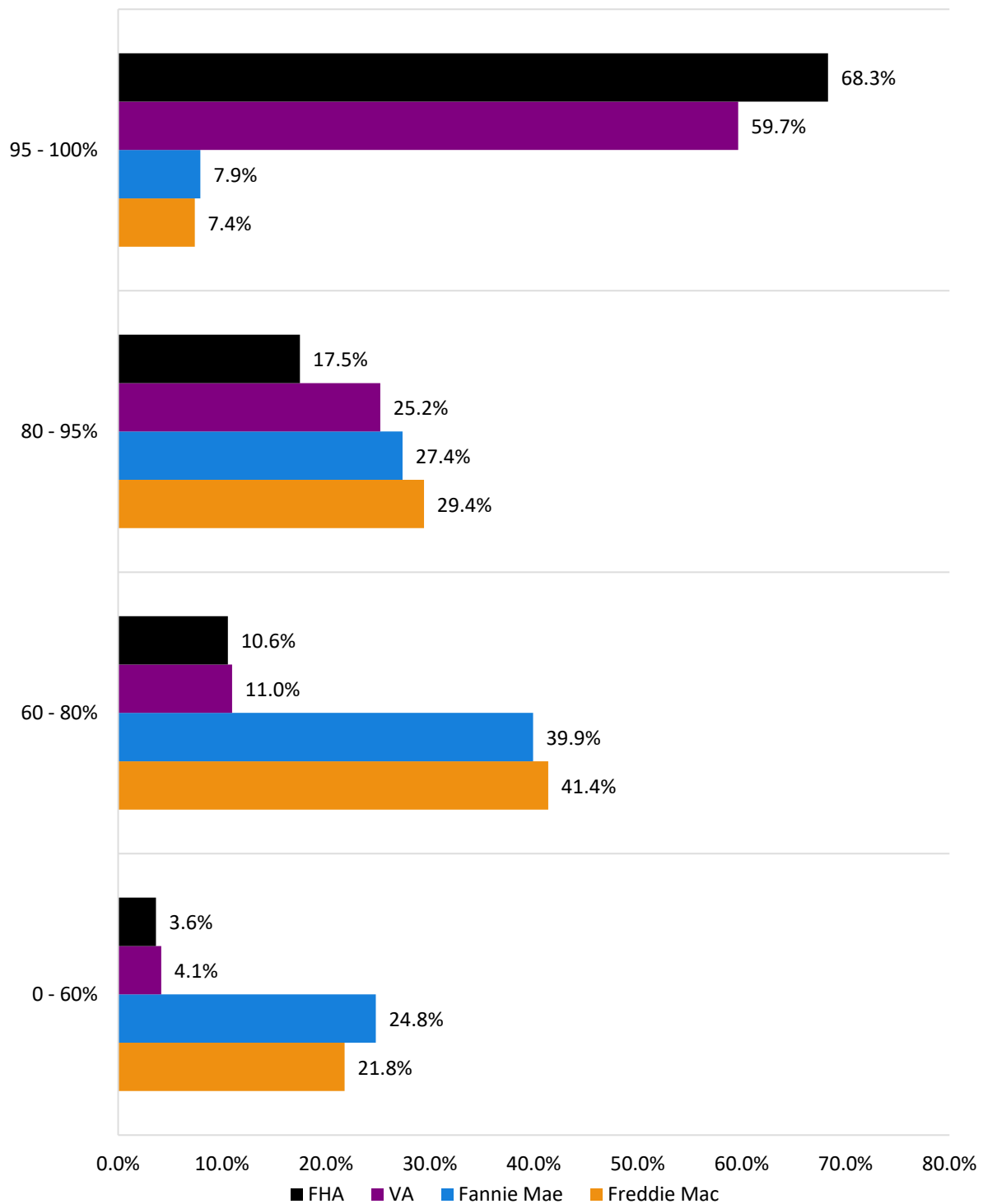
10.2 Loan-to-Value (LTV)

Table 18. Share of Loans by LTV

<i>Purchase LTV</i>							
<i>Names</i>	<i>Number of Loans</i>	<i>P10</i>	<i>P25</i>	<i>Median</i>	<i>P75</i>	<i>P90</i>	<i>Mean</i>
All	223,830	60	80	93	98	100	85
Fannie	63,013	51	71	80	95	95	78
Freddie	74,813	52	73	80	95	95	79
Ginnie	86,004	90	97	98	100	100	96
<i>Refi LTV</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	69,288	38	57	75	88	100	71
Fannie	16,357	28	42	58	70	80	56
Freddie	17,435	30	46	61	75	80	59
Ginnie	35,496	63	76	84	98	101	84
<i>All LTV</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	300,424	53	75	90	98	100	82
Fannie	79,370	43	61	80	90	95	74
Freddie	92,248	45	65	80	90	95	75
Ginnie	128,806	77	90	98	99	100	93
<i>Purchase LTV: 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	86,004	90	97	98	100	100	96
FHA	54,519	92	97	98	98	98	96
VA	28,622	82	99	100	100	102	96
Other	2,863	93	98	101	101	101	98
<i>Refi LTV: 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	35,496	63	76	84	98	101	84
FHA	16,023	55	69	80	81	97	75
VA	19,459	73	86	96	100	103	91
Other	14	73	83	93	98	100	88
<i>All LTV: 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	128,806	77	90	98	99	100	93
FHA	76,515	75	89	98	98	98	91
VA	49,067	78	90	100	100	102	94
Other	3,224	93	98	101	101	101	98

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

Figure 38. Loan-to Value by Agency



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

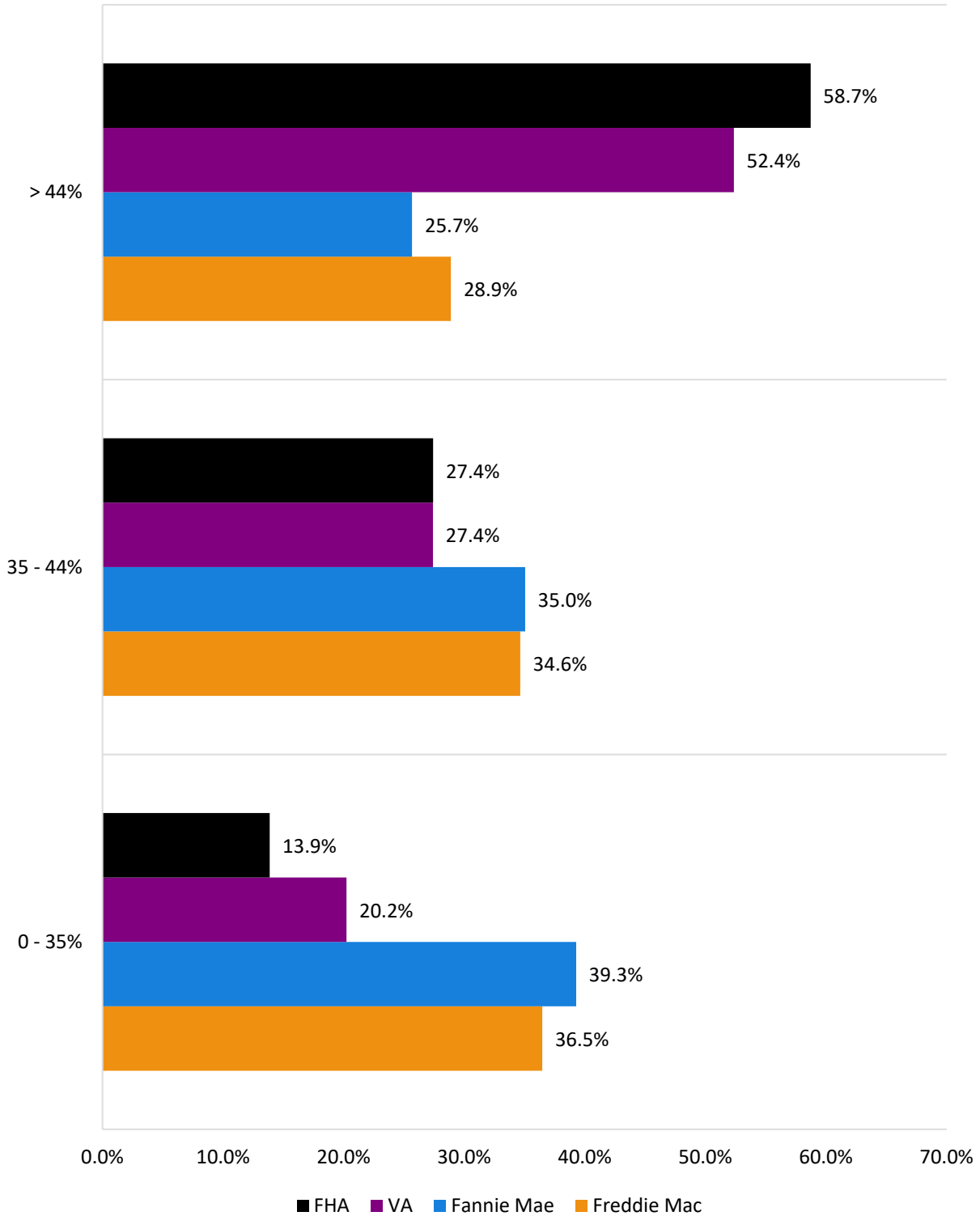
10.3 Debt-to-Income (DTI)

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	223,438	27	34	42	48	51	40
Fannie	63,013	24	31	39	45	49	37
Freddie	74,813	25	32	40	46	49	38
Ginnie	85,612	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	54,281	25	32	40	46	50	39
Fannie	16,357	22	30	37	43	47	36
Freddie	17,435	23	30	38	44	48	37
Ginnie	20,489	29	36	44	50	55	43
<i>All DTI</i>							
<i>Names</i>	<i>Number of Loans</i>	<i>P10</i>	<i>P25</i>	<i>Median</i>	<i>P75</i>	<i>P90</i>	<i>Mean</i>
All	283,629	26	34	41	47	51	40
Fannie	79,370	24	31	39	45	48	37
Freddie	92,248	24	32	39	45	49	38
Ginnie	112,011	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	85,612	32	39	46	52	56	45
FHA	54,517	34	40	46	52	55	45
VA	28,232	30	37	45	51	56	44
Other	2,863	27	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	20,489	29	36	44	50	55	43
FHA	13,619	29	37	44	51	55	43
VA	6,858	27	35	43	50	55	42
Other	12	25	28	35	39	40	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	112,011	31	38	45	51	55	44
FHA	73,103	33	40	46	52	55	45
VA	35,738	30	37	45	51	56	44
Other	3,170	27	31	36	40	42	35

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

Figure 39. Debt-to Income by Agency



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

- FICO scores above 750 increased by approximately 3.6%.
- DTIs below 35% decreased by approximately 8.5%.

Ginnie Mae maintains its key role of expanding credit access to low-to-moderate income borrowers as it continues to dominate high-LTV lending, with 71.13% of its issuances between July 2024 – September 2024 having LTVs of 95 or above, compared to 21.52% for the GSEs.

Table 20. Share of Loans with LTV > 95

	<i>Ginnie Mae</i>	<i>GSE</i>	<i>All</i>
Jul 2023 – Sep 2023	70.87%	23.08%	41.34%
Jul 2024 – Sep 2024	71.13%	21.52%	41.06%

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

		<i>FICO</i>					
<i>DTI</i>		<650	650-700	700-750	≥750	<i>NA</i>	<i>All</i>
<35		1.74%	2.75%	4.03%	7.01%	0.05%	15.58%
35-45		5.21%	7.95%	9.93%	12.16%	0.04%	35.29%
≥45		7.77%	13.40%	13.87%	12.76%	0.11%	47.92%
<i>NA</i>		0.26%	0.23%	0.15%	0.21%	0.36%	1.21%
<i>All</i>		14.99%	24.33%	27.98%	32.14%	0.56%	100.00%

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

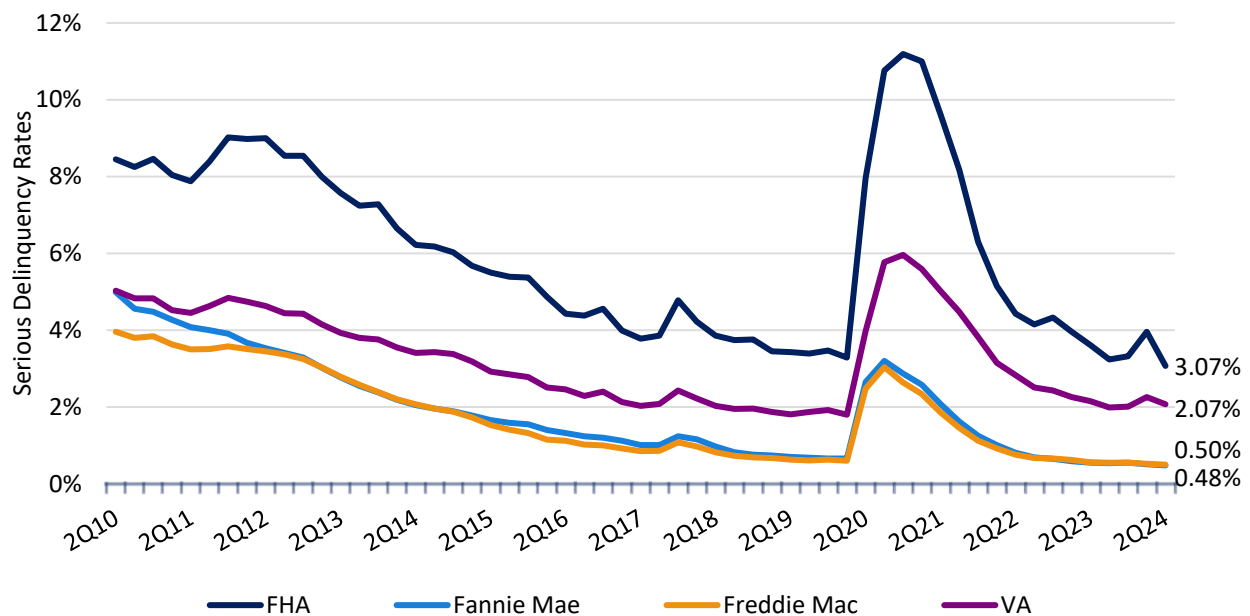
		<i>FICO</i>					
<i>DTI</i>		<650	650-700	700-750	≥750	<i>NA</i>	<i>All</i>
<35		1.50%	2.31%	3.57%	6.82%	0.07%	14.25%
35-45		4.65%	6.85%	9.11%	12.24%	0.08%	32.94%
≥45		7.17%	12.35%	13.48%	13.33%	0.19%	46.51%
<i>NA</i>		0.81%	0.87%	0.83%	0.91%	2.89%	6.30%
<i>All</i>		14.13%	22.37%	26.98%	33.30%	3.22%	100.00%

Sources: Recursion and Ginnie Mae. Data as of September 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 0.48% and 0.50%, respectively. The trend in serious delinquency rates is consistent with the decrease in the number of loans in forbearance since the 2020 pandemic.

Figure 40. 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 57.9% as of month-end September 2024, an increase from 55.8% in September 2024 and up from 54.4% in September 2023. Ginnie Mae’s first-time homebuyer share, 71.0% as of month-end September 2024, increased 3.3% YoY. Freddie Mac and Fannie Mae’s first-time homebuyer shares were 48.1% and 51.5%, respectively, as of month-end September 2024. Freddie Mac’s share of first-time borrowers increased 2.4% and Fannie Mae’s increased 2.4% YoY.

Table 23 shows that based on mortgages originated as of month-end September 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 41. First-Time Homebuyer Share: Purchase Only Loans

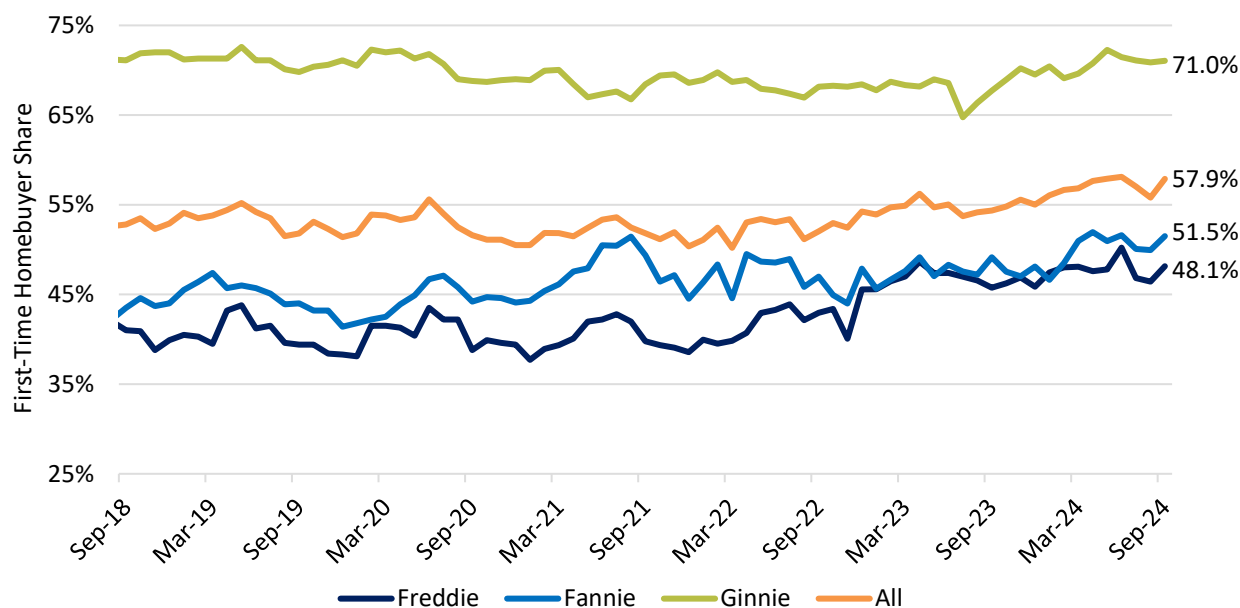


Table 23. Agency First-Time Homebuyer Share Summary

	Fannie Mae		Freddie Mac		Ginnie Mae		All	
	First-Time	Repeat	First-Time	Repeat	First-Time	Repeat	First-Time	Repeat
Loan Amount \$	\$328,631	\$341,254	\$347,427	\$365,030	\$324,260	\$387,551	\$331,793	\$363,273
Credit Score	753	765	747	763	696	719	725	752
LTV (%)	83.8	72.5	84.2	73.8	97.2	93.5	90.2	78.6
DTI (%)	37.2	37.4	38.0	38.0	44.2	45.6	40.7	39.8
Loan Rate (%)	6.6	6.6	6.7	6.7	6.4	6.3	6.5	6.6

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

In the Ginnie Mae purchase market, 80.2% of FHA loans, 51.9% of VA loans, and 87.5% of “Other” loans provided financing for first-time home buyers as of month-end September 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 September 2024 the credit profile of the average VA first-time homebuyer differed from the average VA repeat buyer. The average VA first-time homebuyer took out 16.7% smaller loans, had a 25.7-point lower credit score, and a 5.2% 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 5.8% smaller loans and 2.9% 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 42. First-time Homebuyer Share: Ginnie Mae Breakdown

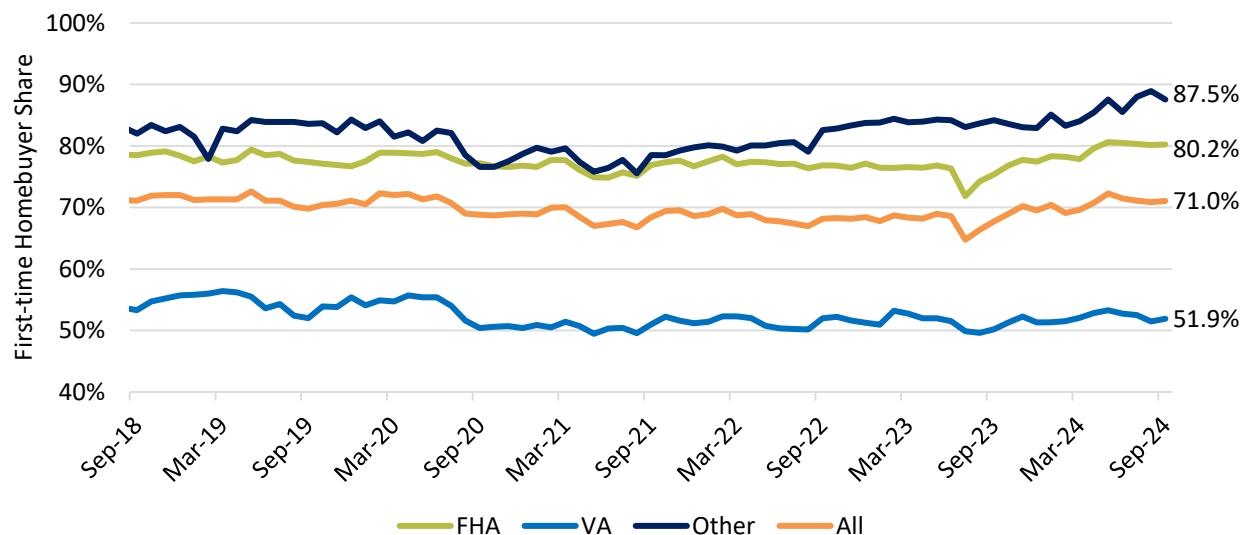


Table 24. Ginnie Mae First-Time Homebuyer Share Breakdown Summary

	FHA		VA		Other		Total	
	First-Time	Repeat	First-Time	Repeat	First-Time	Repeat	First-Time	Repeat
Loan Amount \$	\$320,537	\$340,443	\$357,354	\$428,876	\$193,076	\$217,479	\$324,260	\$387,551
Credit Score	689	690	716	742	700	714	696	719
LTV (%)	96.7	93.8	98.3	93.1	98.1	98.1	97.2	93.5
DTI (%)	45.0	46.8	43.3	44.9	35.0	36.1	44.2	45.6
Loan Rate (%)	6.4	6.3	6.3	6.2	6.5	6.4	6.4	6.3

Sources: Fannie Mae, Freddie Mac, and Ginnie Mae disclosure files as of September 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 September 2024 was 739, which represents a 2-point increase from September 2023. Ginnie Mae median FICO scores increased 10 points from 678 in September 2023 to 688 as of month-end September 2024. As of month-end September 2024, median FICO scores for refinances increased for Ginnie Mae and Freddie Mac borrowers by 13 and 12 points YoY, respectively. Median FICO scores for Fannie refinances only increased 2 points from September 2023 to September 2024.

Figure 43. FICO Scores for All Loans

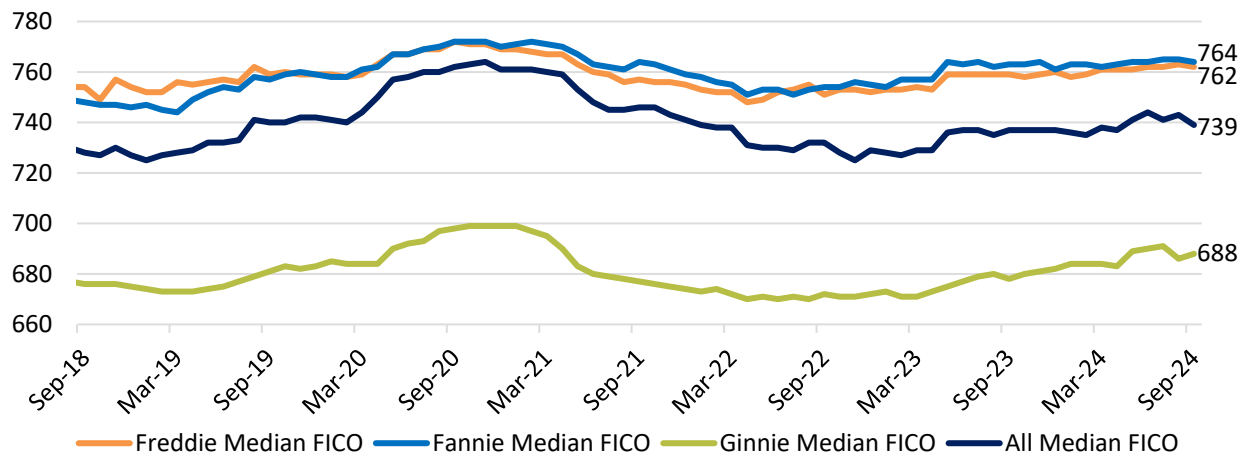


Figure 44. FICO Scores for Purchase Loans

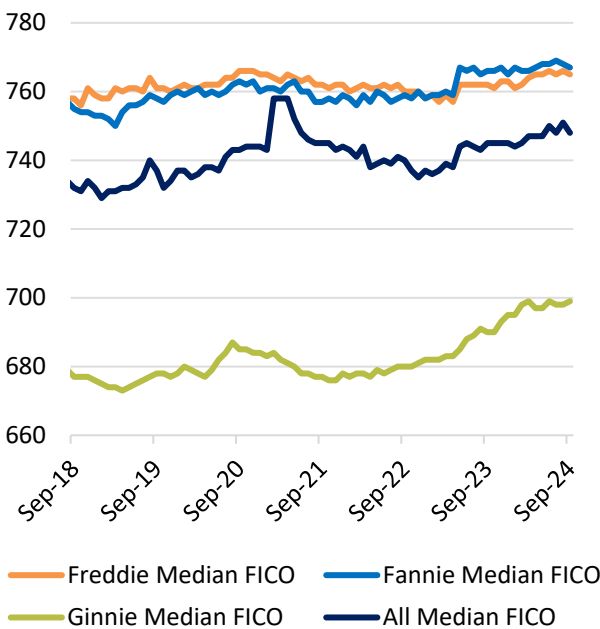
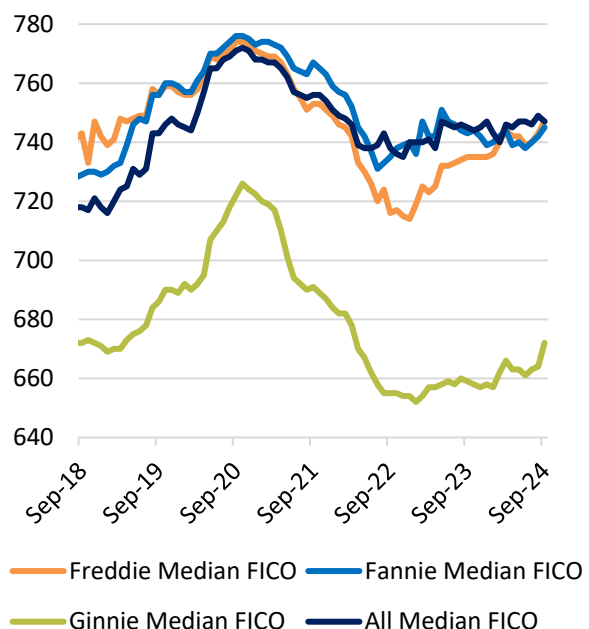


Figure 45. FICO Scores for Refinance Loans



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

In September 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 September 2023 to September 2024. In September 2024, median DTIs for Ginnie Mae, Freddie Mac, and Fannie Mae were 45.3%, 39.0%, and 39.0%, respectively. In September 2023, median DTIs for Ginnie Mae, Freddie Mac, and Fannie Mae were 45.1%, 40.0%, and 39.0%, respectively.

Figure 46. LTV Ratio for All Loans

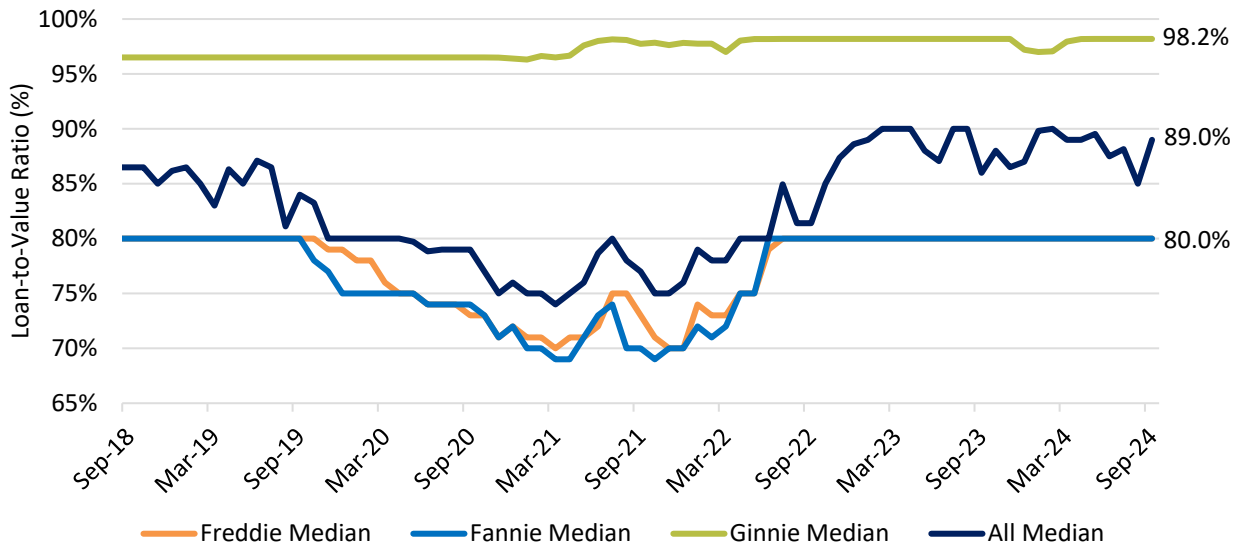
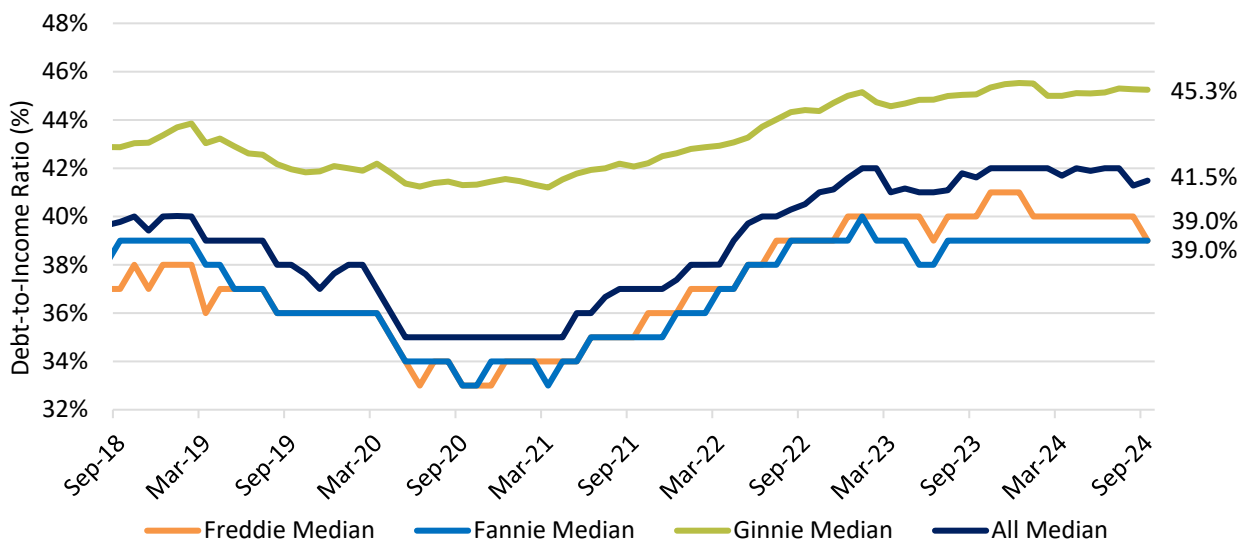


Figure 47. DTI Ratio for All Loans



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

11 FORBEARANCE TRENDS

At the end of September 2024, 57,586 Ginnie Mae loans were in forbearance. The number of loans in forbearance removed from MBS pools in September 2024 was 352 while 57,234 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 nearly all subsets.

Tables 25-27. Forbearance Snapshot

All Loans in Forbearance – September 2024						
	FICO Score*	Note Rate (%) *	Current Principal Balance Median	First Time Homebuyer Share (%)	Purchase Share (%)	Loan Count
Ginnie	653	4.5	\$211,095	72.9	73.7	57,586
Bank	672	4.5	\$160,232	84.1	90.1	7,385
Nonbank	651	4.4	\$219,208	71.3	71.9	50,163
FHA	651	4.5	\$198,747	77.1	78.0	44,708
Bank	671	4.5	\$159,733	86.4	90.5	6,924
Nonbank	648	4.5	\$206,380	75.6	76.3	37,750
VA	658	4.3	\$271,797	57.3	60.8	11,711
Bank	685	4.4	\$224,181	49.9	83.9	305
Nonbank	658	4.3	\$272,645	57.5	60.2	11,404

Loans in Forbearance and Removed from Pools – September 2024						
	FICO Score*	Note Rate (%) *	Current Principal Balance Median	First Time Homebuyer Share (%)	Purchase Share (%)	Loan Count
Ginnie	643	5.4	\$172,379	56.5	71.9	352
Bank	656	4.7	\$140,373	76.2	78.6	47
Nonbank	642	5.5	\$179,803	54.8	71.4	305
FHA	639	5.7	\$169,373	57.5	73.9	303
Bank	649	4.7	\$141,233	80.8	73.6	42
Nonbank	638	5.9	\$171,150	55.8	73.9	261
VA	662	4.1	\$228,739	49.0	61.7	45
Bank	695	4.4	\$304,688	61.2	95.7	3
Nonbank	660	4.1	\$228,576	47.5	59.0	42

Loans in Forbearance that Remain in Pools – September 2024						
	FICO Score*	Note Rate (%) *	Current Principal Balance Median	First Time Homebuyer Share (%)	Purchase Share (%)	Loan Count
Ginnie	653	4.5	\$211,302	72.9	73.7	57,234
Bank	672	4.5	\$160,309	84.1	90.2	7,338
Nonbank	651	4.4	\$219,408	71.4	71.9	49,858
FHA	651	4.5	\$198,957	77.2	78.0	44,405
Bank	671	4.5	\$159,765	86.4	90.6	6,882
Nonbank	648	4.5	\$206,576	75.7	76.3	37,489
VA	658	4.3	\$271,893	57.3	60.8	11,666
Bank	685	4.4	\$223,732	49.8	83.8	302
Nonbank	658	4.3	\$272,809	57.6	60.2	11,362

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 September 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 88.60% of Ginnie Mae MSRs (see Cumulative Share). Twenty-one of these top 30 are non-depository institutions, the remaining nine are depository institutions. As of September 2024, over half (52.08%) 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	↔	\$370,184,847,675	15.2%	15.20%	12.81%	1.82%
DBA Freedom Mortgage	2	2	↔	\$351,826,336,810	14.4%	29.65%	9.94%	0.66%
PennyMac Loan Service	3	3	↔	\$286,245,473,482	11.8%	41.40%	10.95%	1.97%
Newrez LLC	4	5	↑	\$134,295,418,934	5.5%	46.92%	10.77%	0.81%
Mr. Cooper (Nationstar)	5	4	↓	\$125,759,863,654	5.2%	52.08%	8.43%	1.70%
Carrington Mortgage	6	7	↑	\$115,163,659,663	4.7%	56.81%	7.39%	0.86%
Rocket Mortgage	7	6	↓	\$114,054,676,684	4.7%	61.50%	13.41%	0.23%
Wells Fargo Bank	8	8	↔	\$91,189,438,250	3.7%	65.24%	5.89%	0.37%
Planet Home Lending	9	9	↔	\$73,995,500,171	3.0%	68.28%	12.62%	0.62%
U.S. Bank	10	10	↔	\$57,250,892,291	2.4%	70.63%	6.54%	0.72%
LoanDepot	11	12	↑	\$38,714,581,179	1.6%	72.22%	11.06%	2.00%
United Wholesale Mortgage	12	11	↓	\$35,435,422,018	1.5%	73.68%	4.81%	1.07%
Navy Federal Credit Union	13	13	↔	\$33,058,667,811	1.4%	75.03%	6.55%	0.29%
Mortgage Research Center	14	15	↑	\$32,331,466,790	1.3%	76.36%	21.60%	0.34%
M&T Bank	15	14	↓	\$25,821,157,084	1.1%	77.42%	6.81%	1.88%
Guild Mortgage Company	16	16	↔	\$25,583,426,191	1.1%	78.47%	9.52%	0.59%
CrossCountry Mortgage	17	18	↑	\$24,358,876,309	1.0%	79.47%	14.80%	1.69%
The Money Source	18	17	↓	\$22,759,787,147	0.9%	80.41%	9.57%	2.72%
CMG Mortgage	19	22	↑	\$21,879,106,005	0.9%	81.30%	9.59%	1.52%
New American Funding	20	21	↑	\$21,648,378,870	0.9%	82.19%	12.55%	3.11%
Village Capital & Investment	21	28	↑	\$20,271,693,872	0.8%	83.03%	36.63%	6.57%
Movement Mortgage	22	20	↓	\$20,100,045,688	0.8%	83.85%	16.38%	1.03%
Truist Bank	23	19	↓	\$19,941,838,759	0.8%	84.67%	7.55%	1.27%
Idaho Housing and Finance	24	24	↔	\$19,443,057,261	0.8%	85.47%	4.59%	0.77%
PHH Mortgage Corporation	25	23	↓	\$17,988,401,525	0.7%	86.21%	9.44%	0.68%
AmeriHome Mortgage	26	25	↓	\$17,902,200,878	0.7%	86.94%	16.02%	2.28%
Citizens Bank	27	26	↓	\$13,566,014,499	0.6%	87.50%	6.68%	0.38%
MidFirst Bank	28	29	↑	\$10,697,075,199	0.4%	87.94%	8.20%	2.92%
JP Morgan Chase Bank	29	NR	↑	\$9,981,027,515	0.4%	88.35%	7.65%	1.70%
PNC Bank	30	NR	↑	\$6,205,740,160	0.3%	88.60%	6.78%	1.70%

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

13 AGENCY NONBANK ORIGINATORS

Total Agency nonbank origination shares increased as of month-end September 2024 by approximately 3.1% MoM. The increase in nonbank origination share was driven by increases in Freddie Mac, up 4.7% MoM, and Ginnie Mae, up 0.8% MoM. Fannie Mae nonbank share decreased 0.5% MoM. The Ginnie Mae nonbank share increased to 94.3% as of September 2024 and has remained consistently higher than the GSEs.

Figure 48. Agency Nonbank Origination Share (All, Purchase, Refi)

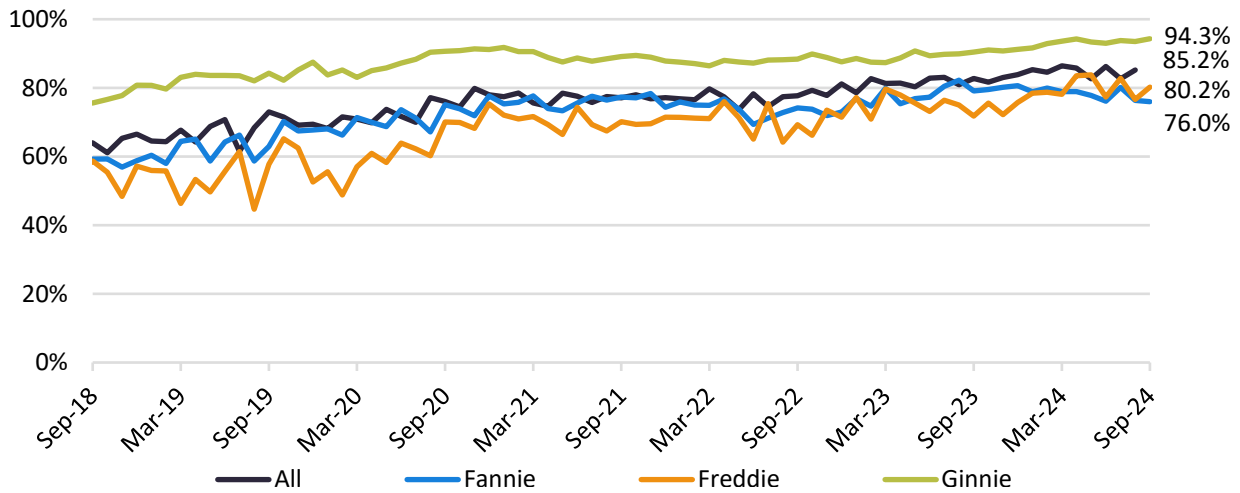


Figure 49. Nonbank Origination Share:

Purchase Loans

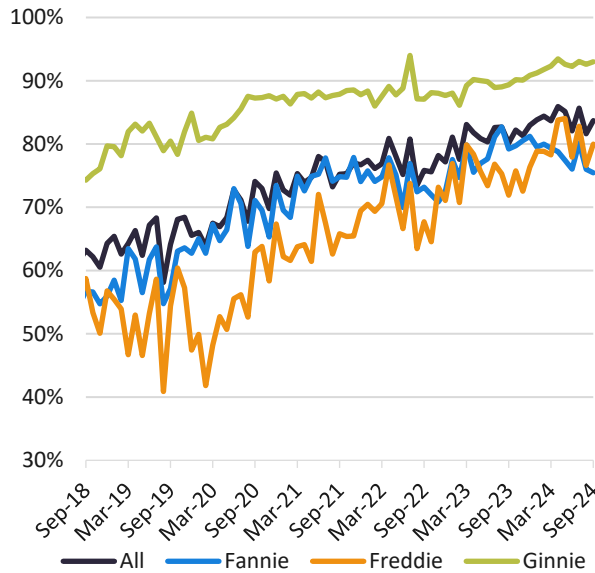
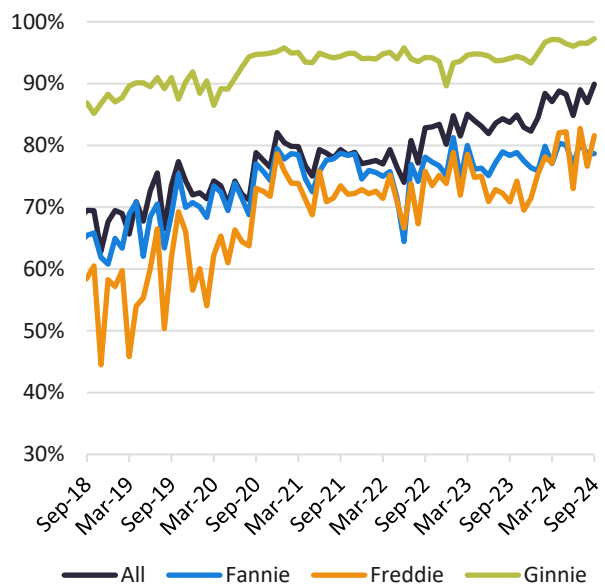


Figure 50. Nonbank Origination Share:

Refi Loans



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

Ginnie Mae’s total nonbank originator share remained relatively stable as of month-end September 2024. Ginnie Mae continues to have a high proportion of nonbank originations, with a rate of 94.3% in September 2024. The percentage of Ginnie Mae’s “Other” nonbank refinanced loans decreased to 78.8% in September 2024.

Figure 51. Ginnie Mae Nonbank Origination Share by Product (All, Purchase, Refi)

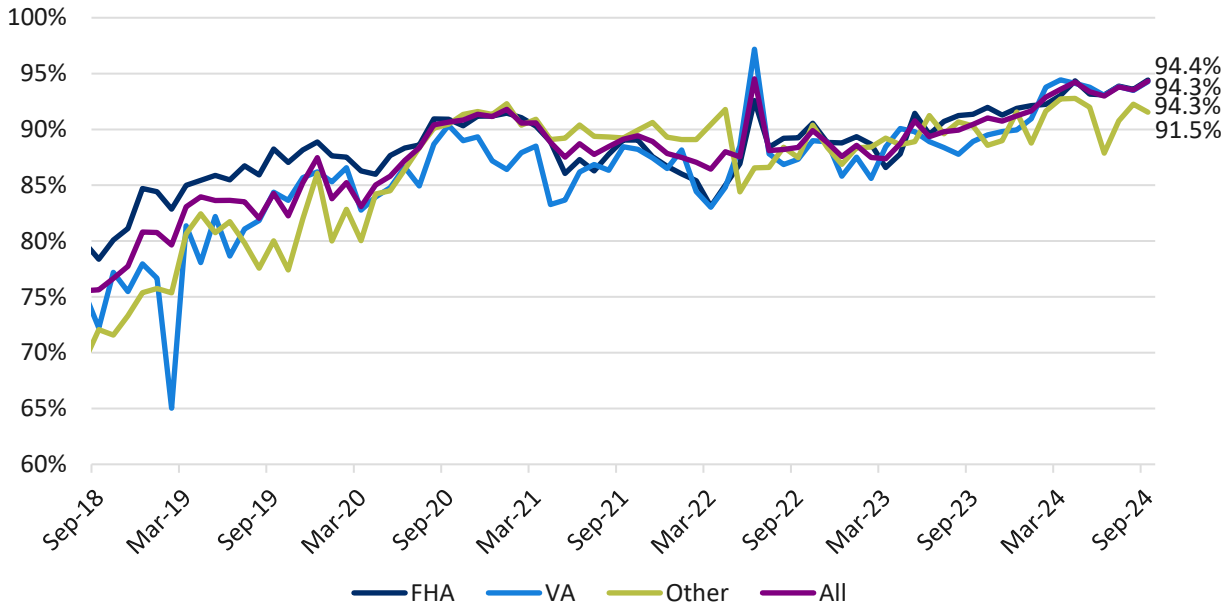


Figure 52. Ginnie Mae Nonbank Share: Purchase Loans

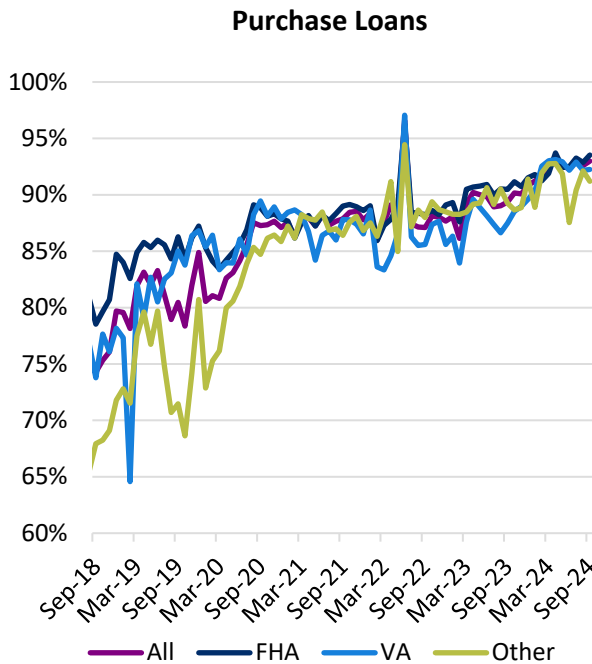
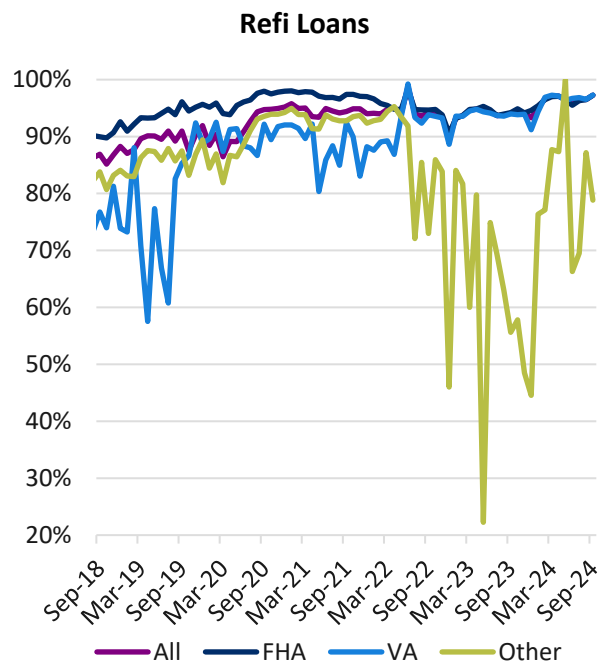


Figure 53. Ginnie Mae Nonbank Share: Refi Loans



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

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

14.1 (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 3 points from 22 to 25 points from August 2024 to September 2024. The agency median FICO score decreased to 739 in September 2024.

Figure 54. Agency FICO: Bank vs. Nonbank

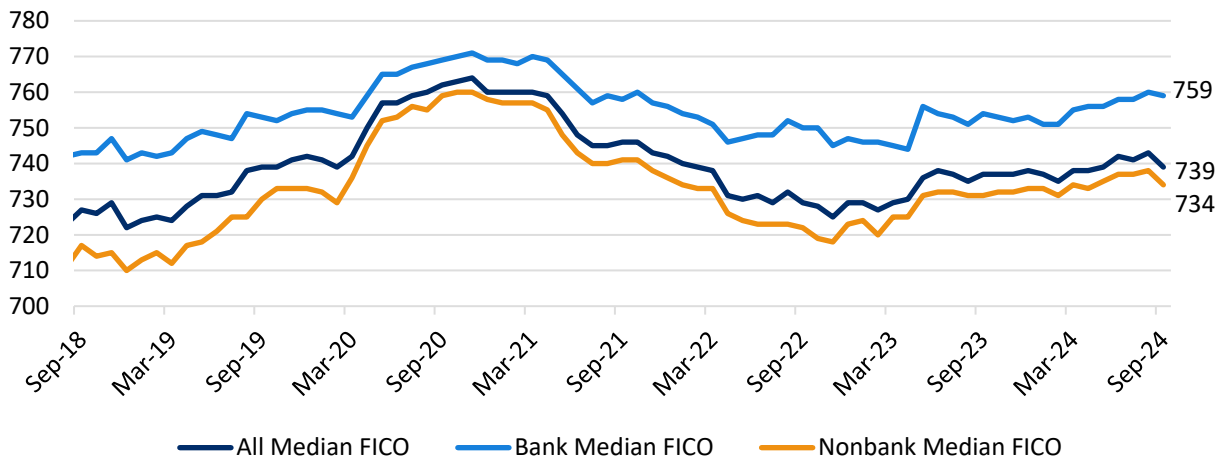


Figure 55. GSE FICO: Bank vs. Nonbank

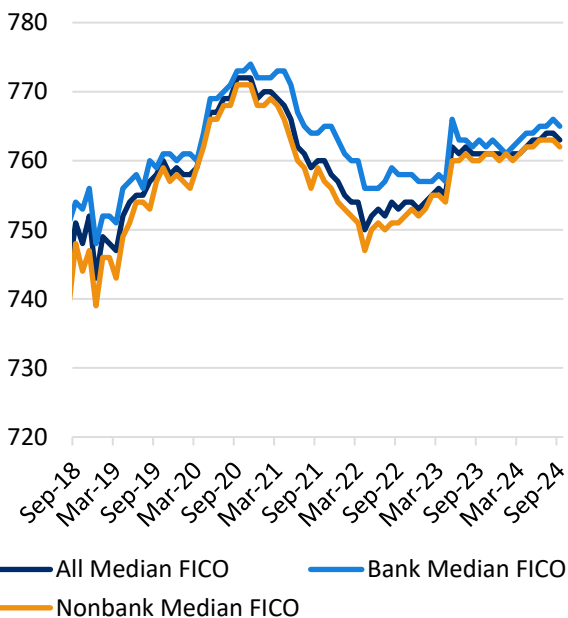
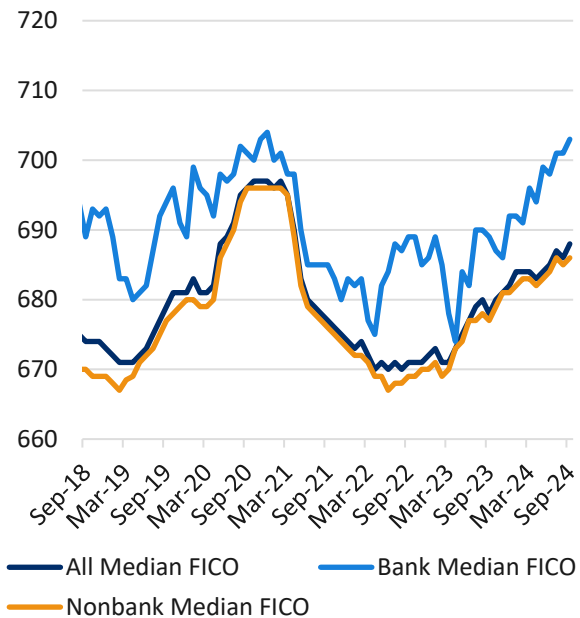


Figure 56. Ginnie Mae FICO: Bank vs. Nonbank



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

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

Figure 57. GSE LTV: Bank vs. Nonbank

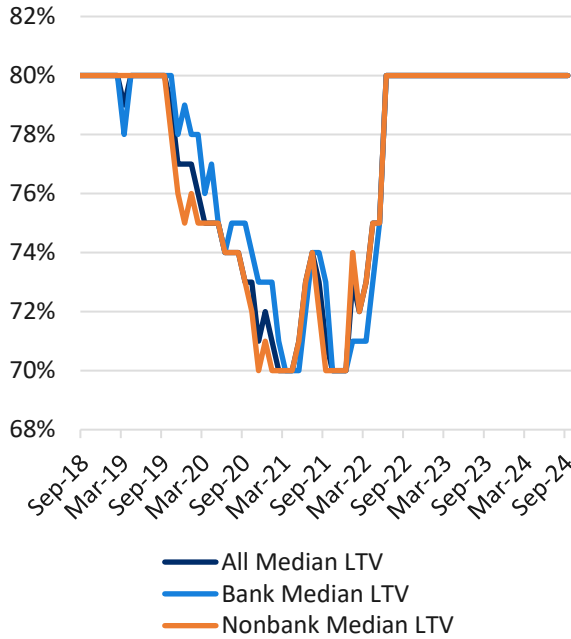


Figure 58. Ginnie Mae LTV: Bank vs. Nonbank

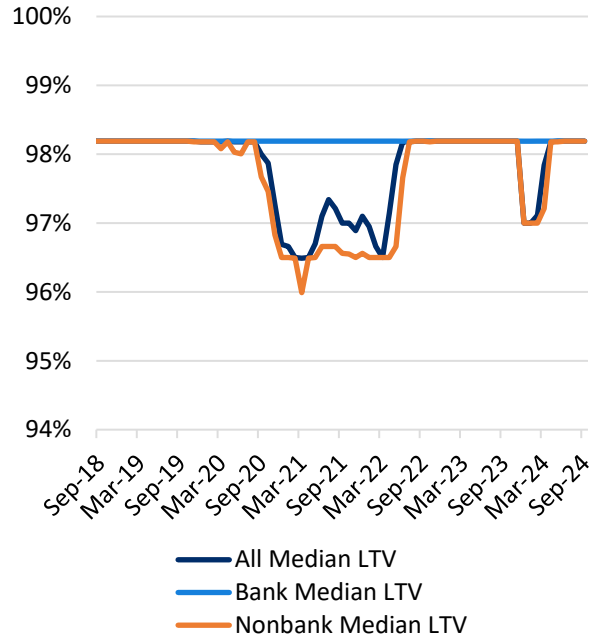


Figure 59. GSE DTI: Bank vs. Nonbank

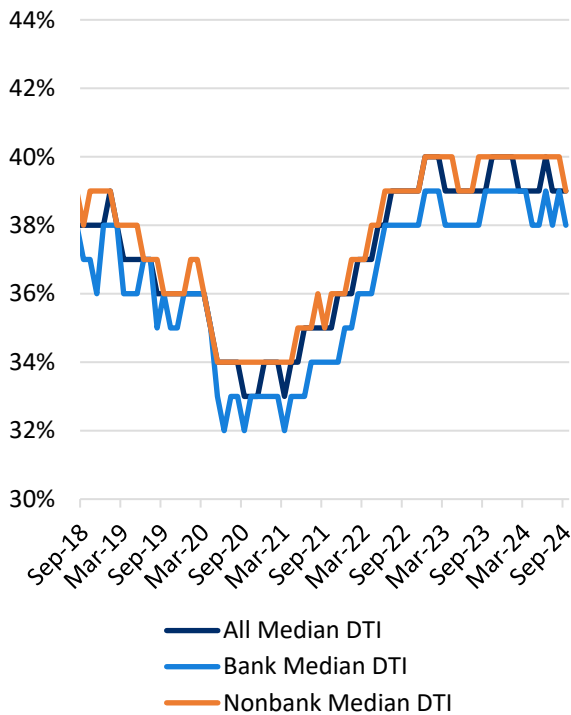
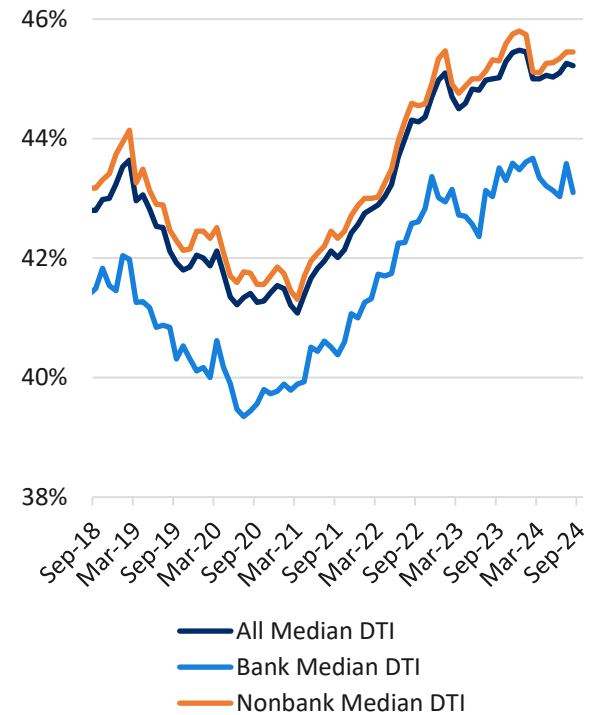


Figure 60. Ginnie Mae DTI: Bank vs. Nonbank



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

As of month-end September 2024, the median FICO score for Ginnie Mae bank originations increased 2 points to 703 points MtM and nonbank increased 1 point to 686 MtM. The median FICO score for all Ginnie originations increased to 688. The gap between banks and nonbanks is most apparent in “VA” lending (24-point spread).

Figure 61. Ginnie Mae FICO Score:
Bank vs. Nonbank

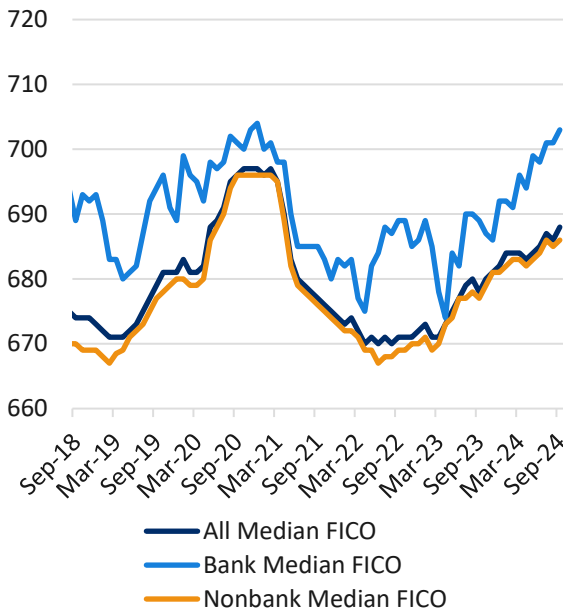


Figure 62. Ginnie Mae FHA FICO Score:
Bank vs. Nonbank

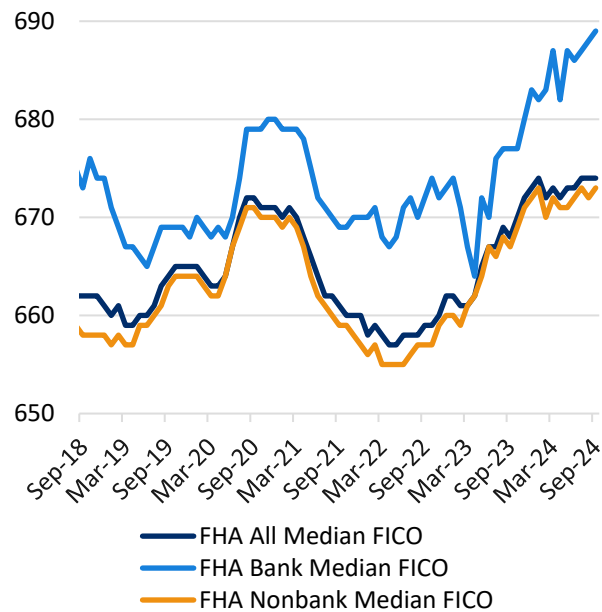


Figure 63. Ginnie Mae VA FICO Score:
Bank vs. Nonbank

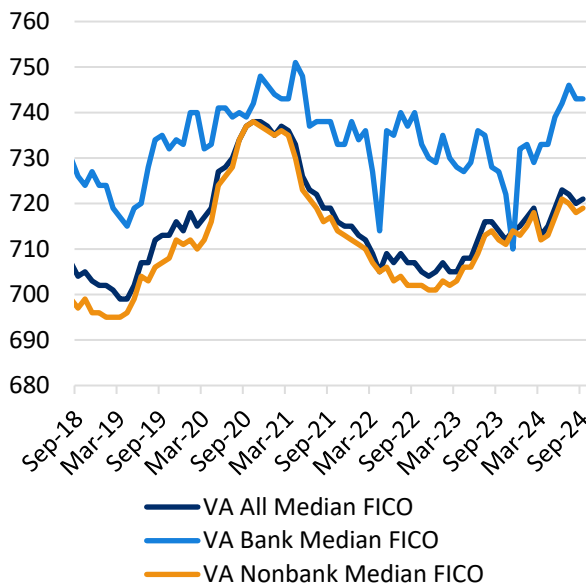
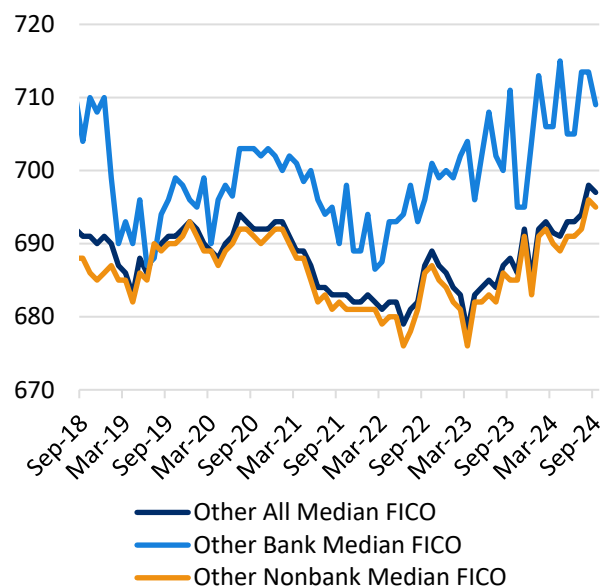


Figure 64. Ginnie Mae Other FICO Score:
Bank vs. Nonbank



Source: Recursion. Notes: Data as of September 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 65. Ginnie Mae DTI: Bank vs. Nonbank

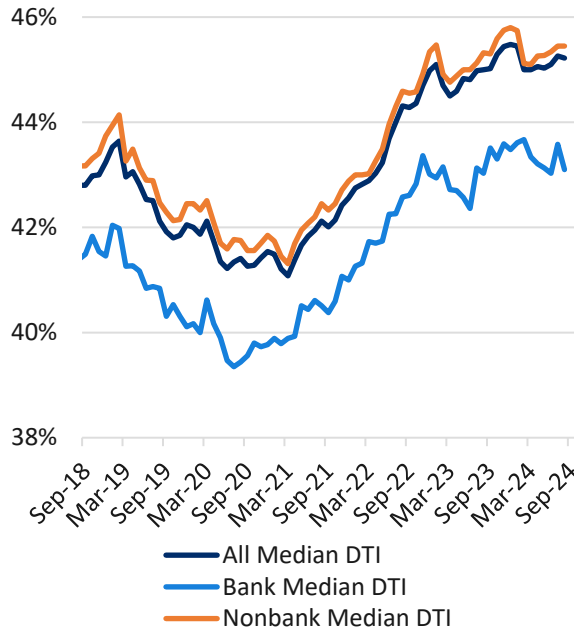


Figure 66. Ginnie Mae FHA DTI: Bank vs. Nonbank

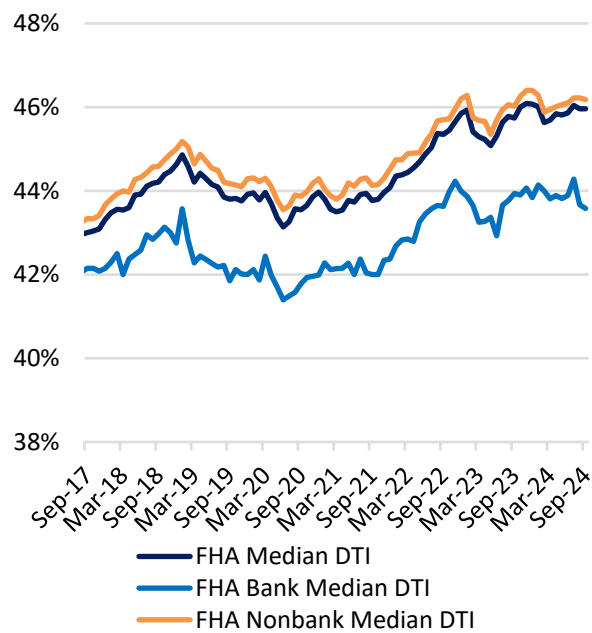


Figure 67. VA DTI: Bank vs. Nonbank

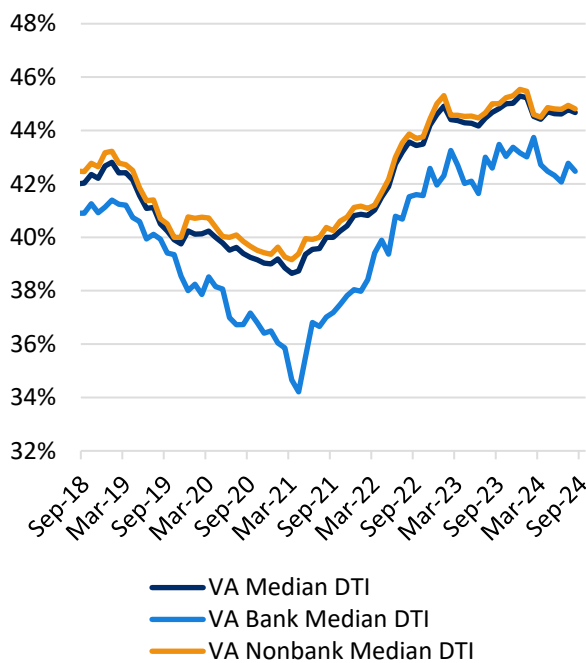
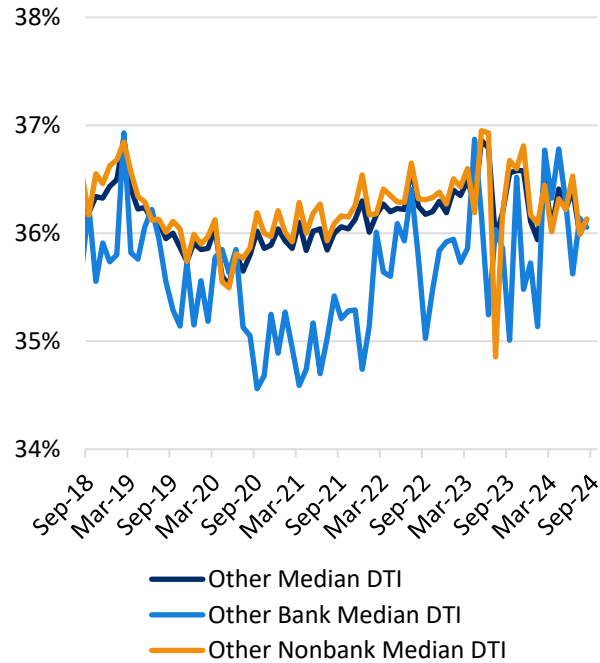


Figure 68. Other DTI: Bank vs. Nonbank



Source: Recursion. Notes: Data as of September 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 (September 2024)

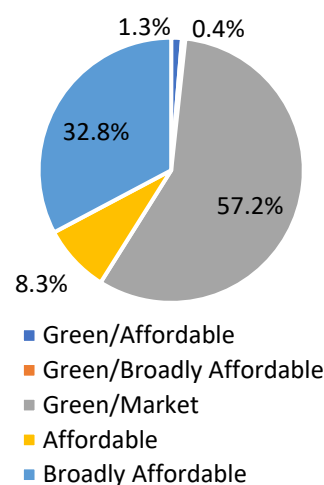
Ginnie Mae's ESG Metrics – MBS Portfolio as of September 2024			
	Targeted Population	Positive Outcomes	Our Commitment
Social - Affordable	FHA Borrowers – 7,119,472 VA Borrowers – 3,663,910 RHS Borrowers – 771,587 PIH Borrowers – 23,820	Loans under \$200K 6,485,779 Loans First-Time Home Buyers 4,473,215 Loans Down Payment Assistance 702,121 Loans Rural Single Family – 1,752,223 Loans HECM – 34,765 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. 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.
	Low-to-Moderate Income Borrowers (LMI)	3,289,758 Loans	
	LMI Majority Census Tract Loans	1,772,803 Loans	
	Borrowers Facing Difficulties	787,287 modifications with over 789, 532 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	268,096 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)	1.322 million apartment homes 495,142 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	5,080 MF loans are either Green, Affordable, or both	Ginnie Mae provides information to investors via its monthly bond disclosure on multifamily investments that meet FHA’s MF Green Mortgage Insurance Premium (MIP) Discount Qualified Mortgages and those loans meeting FHA’s MF Broadly Affordable and Affordable requirements.
MF Green			
Green			

15.2 Environmental

Table 30. UPB by ESG Status – Multifamily Portfolio

ESG Status	UPB	%
Green/Affordable	\$1,117,893,877	0.7%
Green/Broadly Affordable	\$353,294,365	0.2%
Green/Market	\$49,171,067,438	32.0%
Green Total	\$50,642,255,680	32.9%
Affordable ⁶	\$7,123,255,910	4.6%
Broadly Affordable ⁹	\$28,161,791,026	18.3%
Affordable Total	\$36,756,235,178	23.9%
ESG Total⁷	\$85,927,302,616	55.9%
Grand Total	\$153,754,952,025	100.0%

Figure 69. 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 September 2024, https://www.hud.gov/program_offices/housing/mfh/green

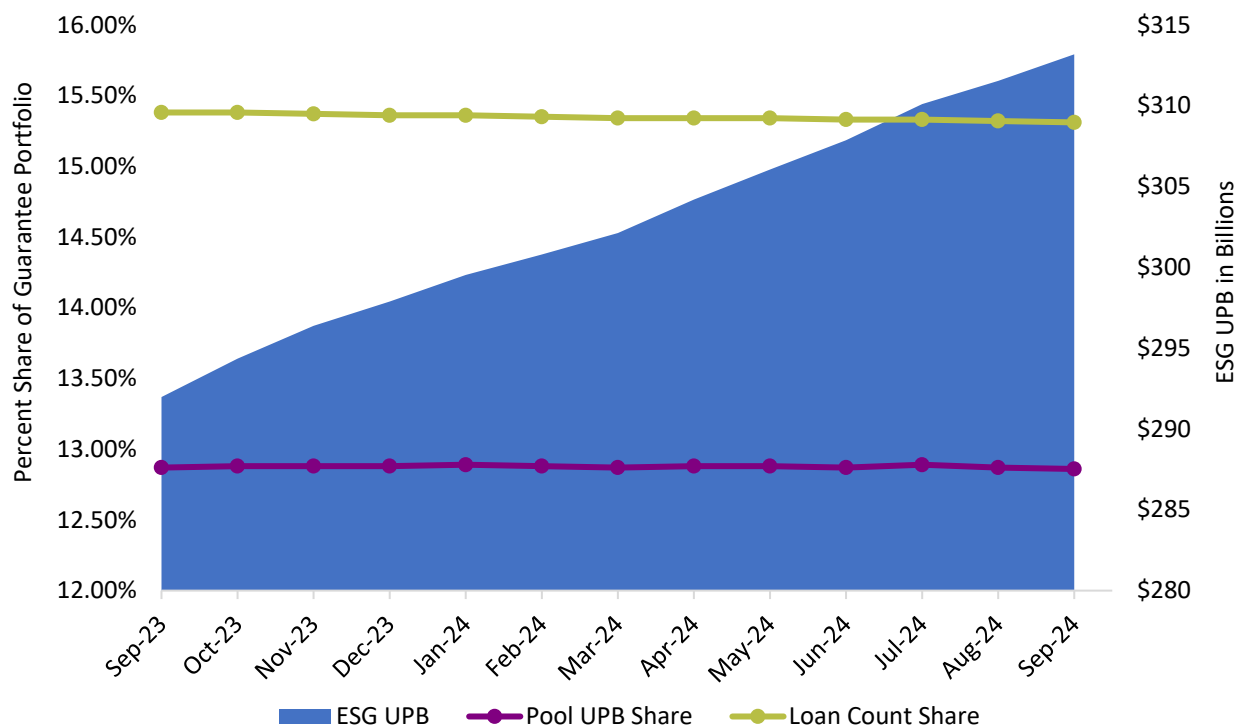
⁶ “Affordable” and “Broadly Affordable” removes “Green/Affordable” and “Green/Broadly Affordable” from the UPB total. Affordable total includes both Green and Not Green.

⁷ ESG Total includes Green/Market & Affordable Total.

15.3.1 LOW-TO-MODERATE INCOME BORROWERS

Roughly \$313 billion of Ginnie Mae Single-Family collateral and over 1.77 million loans outstanding have been issued to LMI borrowers. Total ESG UPB increased by approximately \$21 billion YoY.

Figure 70. ESG Share of the Outstanding SF Portfolio



Source: Ginnie Mae Disclosures as of September 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

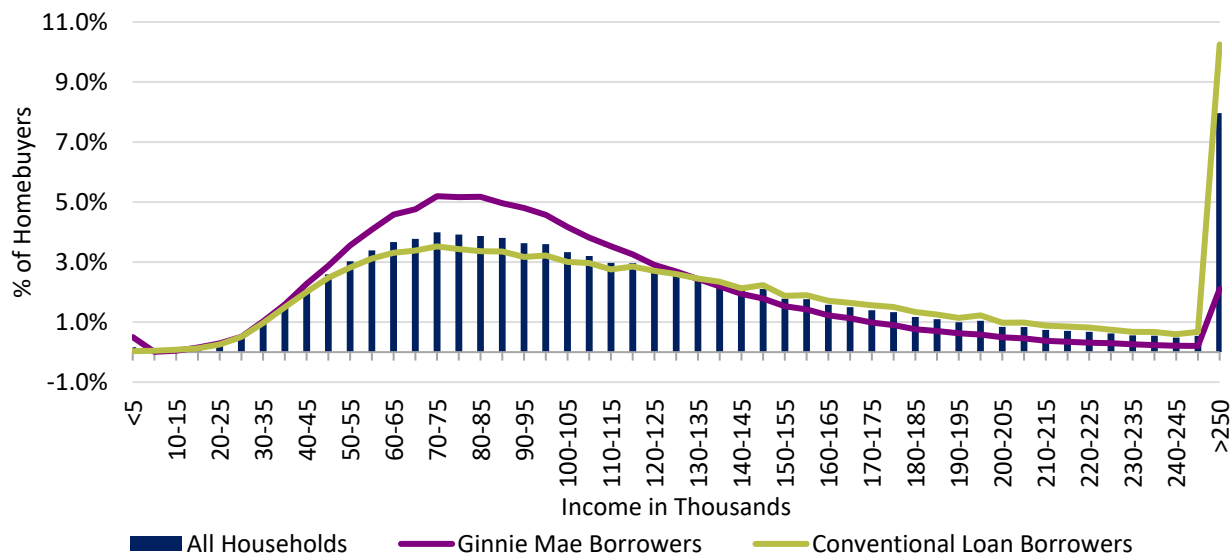
Metric	LMI Pool Share >50%	LMI Pool Share 20% - 50%	LMI Share < 20%	All Pools
Total UPB (\$ billions)	\$9.1	\$214.6	\$2,154.6	\$2,378.4
Average Original Loan Size	\$187,849	\$201,906	\$347,942	\$334,152
Credit Score (Median)	674	675	679	677
DTI (Median)	41%	41%	41%	41%
LTV (Median)	97%	96%	95%	96%
Interest Rate (WA)	4.97%	4.85%	4.15%	4.21%

Source: Ginnie Mae Disclosures as of September 2024

15.3.2 PURCHASE AND REFINANCE ORIENTATION 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 71. 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 72. Regional HPI Trend Analysis QoQ

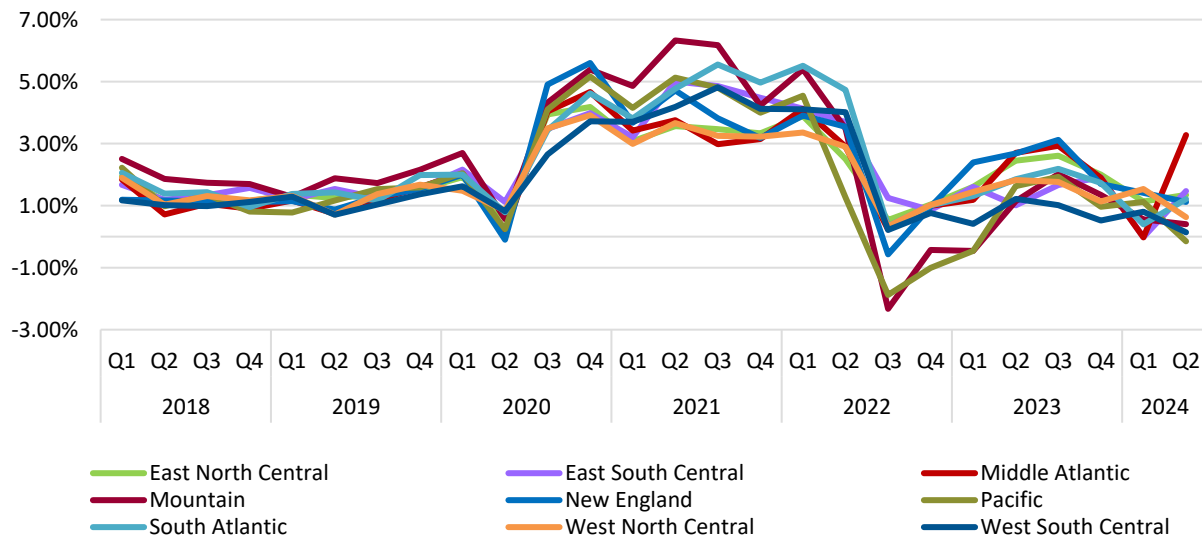
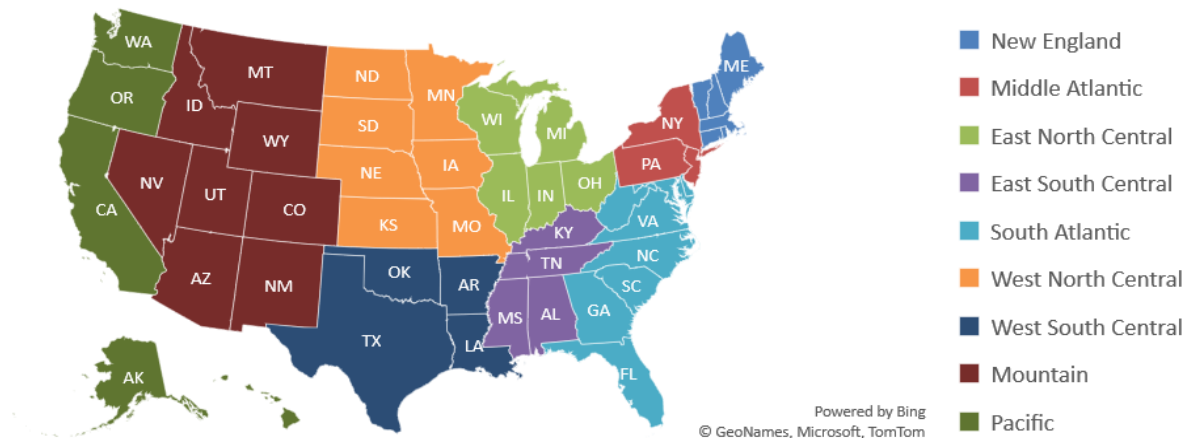


Figure 73. FHFA U.S. Census Subregions as defined by the U.S. Census Bureau



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 September 2024, YoY CPI inflation was 2.4%, decreasing from 2.6% in the month prior. Nationally, rents are up 0.60% YoY as of month-end September 2024 while the MoM change in median rents decreased by 0.10%. YoY change in wage growth in September increased to 4.7% following a 4.6% YoY increase in the month prior. Month-end July 2024 adjusted reporting data shows home price appreciation increased 5.0% YoY.

Figure 74. Inflation | 12-Month Percent Change in CPI

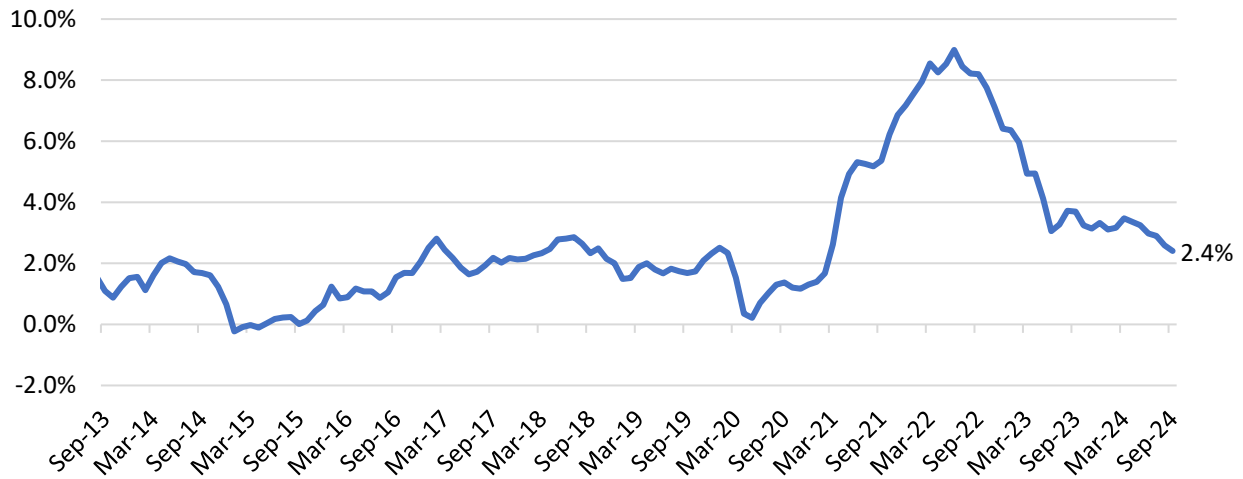
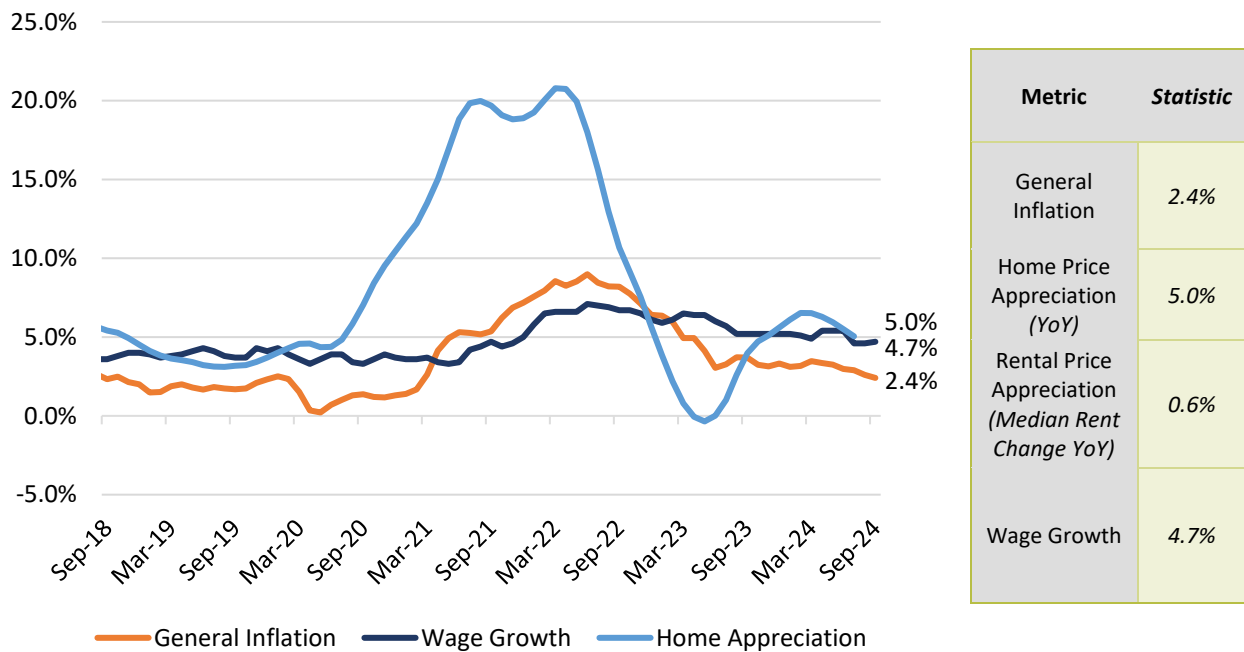


Figure 75. Asset Price Appreciation vs. Wage Increases



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 September 2024, the Homebuyer Affordability Fixed Mortgage Index (HAFM) was 98.6 and the First-Time Homebuyer Monthly Payment (FTMP), which represents the median payment for first-time homebuyers, was \$2,218. The HAFM Index increased 7.52% YoY and monthly payments for first-time homebuyers increased approximately 3.36% YoY. HAFM has decreased 47.5% and FTMP has increased 116.2% since January 2021.

Figure 76. Homebuyer Affordability Fixed Mortgage Index

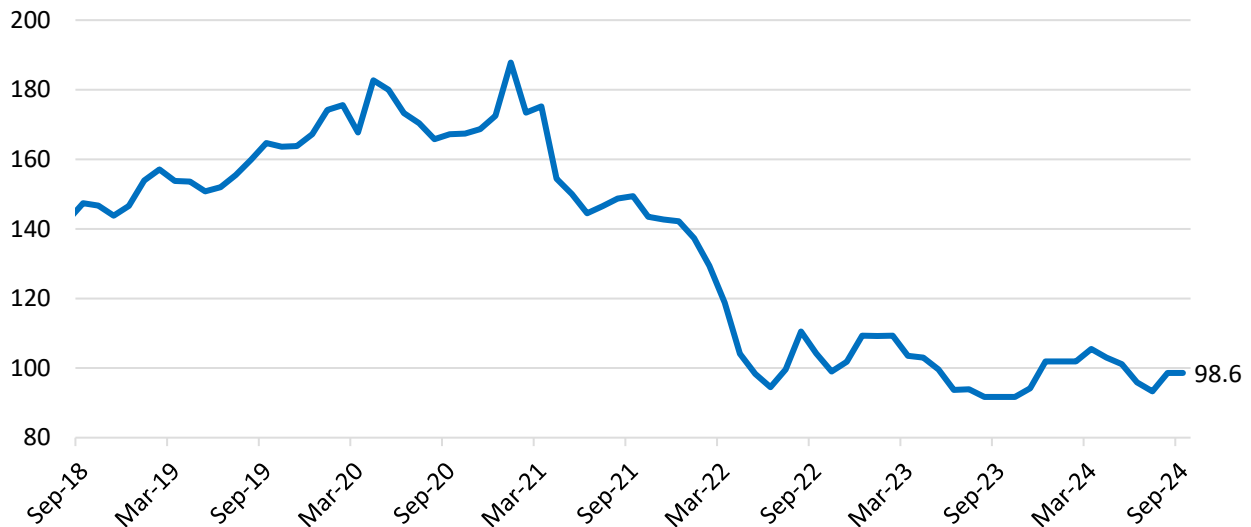
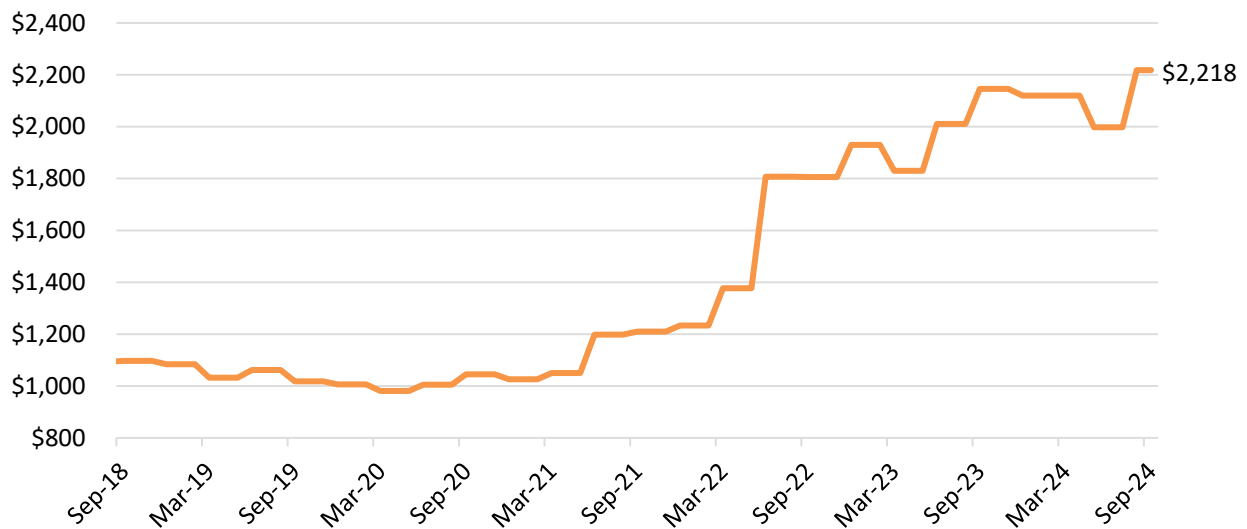


Figure 77. First-Time Homebuyer Monthly Payment

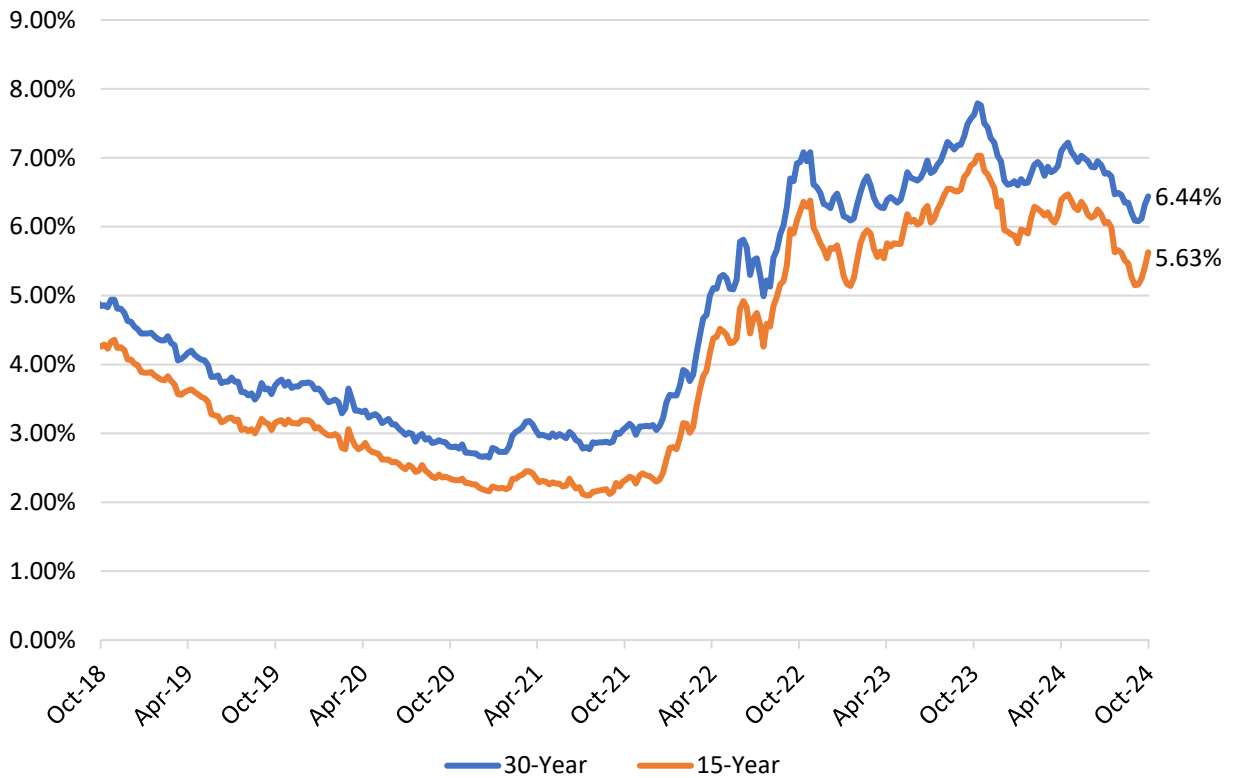


Source: Bloomberg as of September 2024. Note: Housing Affordability Index: Value of 100 means that a family with the median income has exactly enough income to qualify for a mortgage on a median-priced home. An index above 100 signifies that a family earning the median income has more than enough income 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 FOMC⁸. As of October 17, 2024, the average 30-year and 15-year fixed rate mortgage rates were 6.44% and 5.63%, respectively. The average 30-year fixed rate mortgage rate increased 35 bps and the average 15-year fixed rate mortgage rate decreased 48 bps from September 19, 2024.

Figure 78. Average Fixed Rate Mortgage Rates



Source: FRED data as of October 2024

⁸Federal Reserve Board - Federal Reserve issues FOMC statement

16.3 Housing Inventory

As of September 2024, there were 7.6 months of new housing inventory on the market, decreasing 3.8% MoM from an adjusted 7.9 months in August 2024. **Figures 80 and 81** show Single-Family and Multifamily annualized housing metrics, including the number of permits, starts, and completions. From September 2023 to September 2024, the number of Single-Family completions rose approximately 7.6% while the number of starts and permits declined 1.0% and 0.8%, respectively. Multifamily metrics show that from September 2023 to September 2024, the number of completions rose 58.9%, while the number of starts and permits decreased 19.6% and 12.8%, respectively.

Figure 79. Single-Family Housing Inventory



Figure 80. Single-Family Construction Metrics: Permits, Starts, Completions

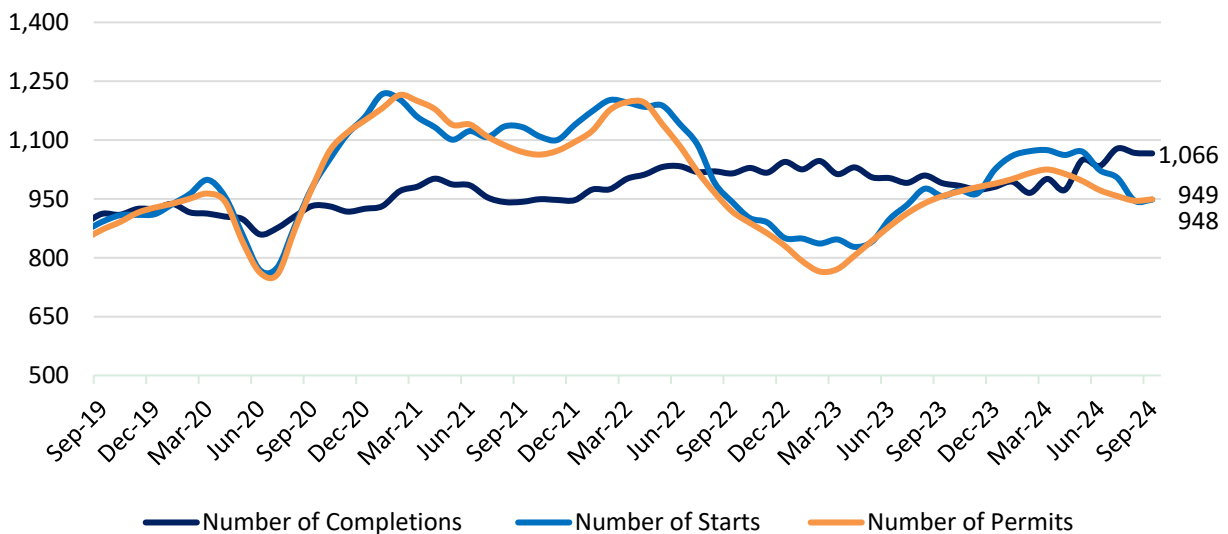
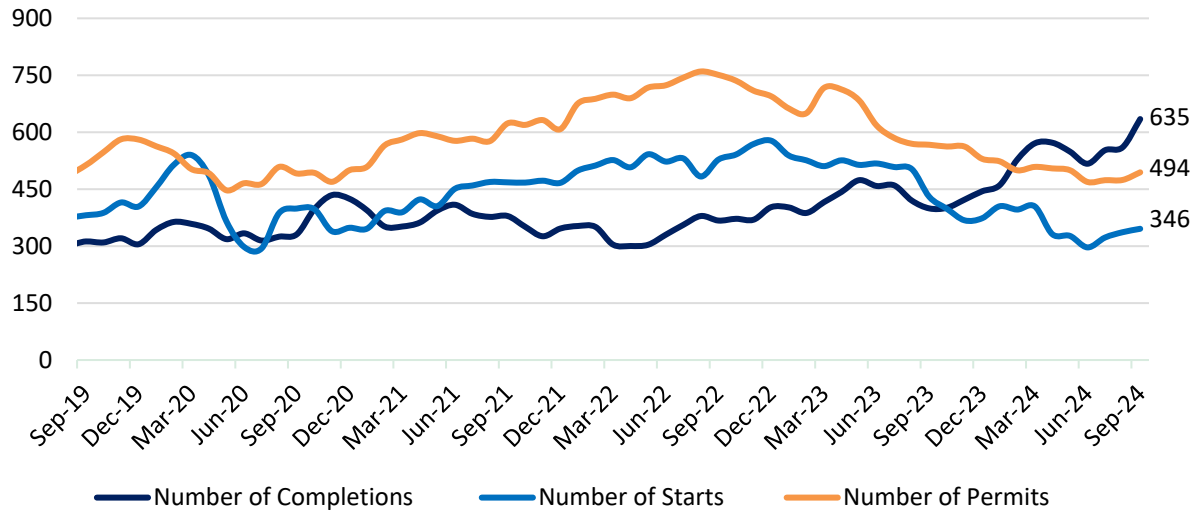


Figure 81. Multifamily Constructions Metrics: Permits, Starts, Completions



Source: Figure 79 FRED as of September 2024. Figures 80 & 81: New Residential Construction, U.S. Census Bureau data as of September 2024.
Note: Figures 80 & 81 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 82. Value of the U.S. Housing Market

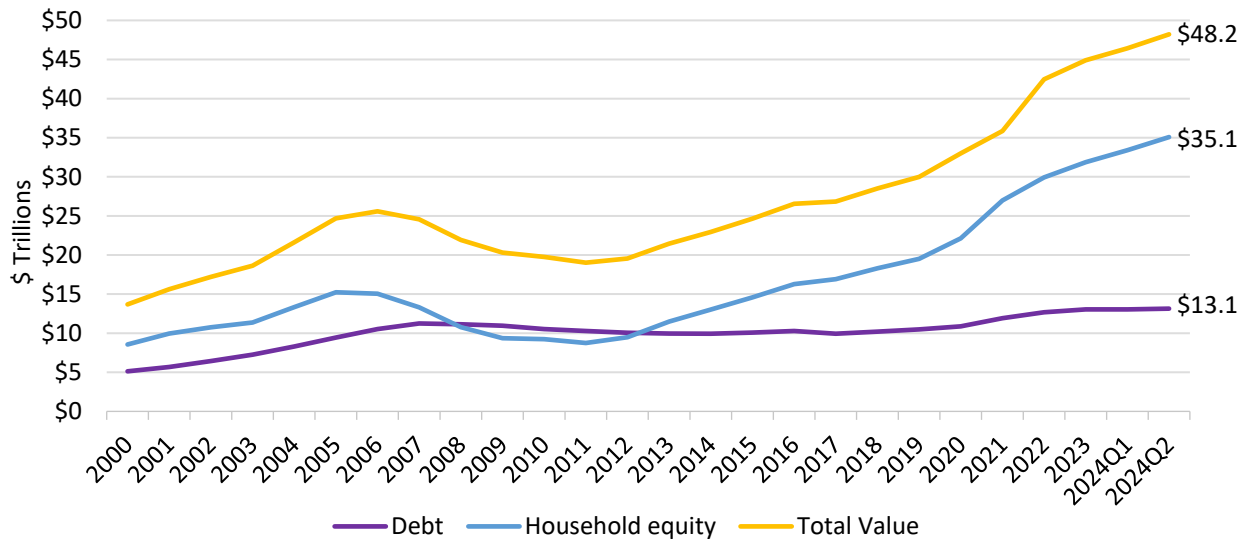
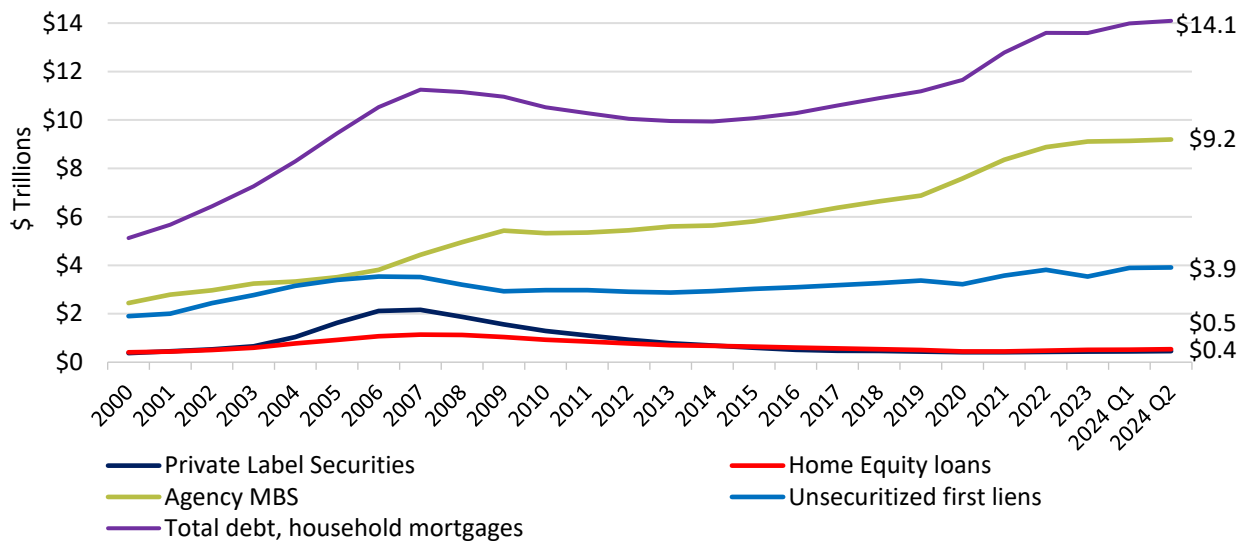


Figure 83. Size of the U.S. Residential Mortgage Market



Source: Federal Reserve Flow of Funds Data as of Q2 2024. Total debt in figure 83 includes additional Nonfinancial corporate/noncorporate business mortgages which is not included in the calculation for “debt” for figure 82. Figures are rounded to nearest hundred billion.

17 DISCLOSURE

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