

GLOBAL MARKETS ANALYSIS REPORT

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



February 2024

Table of Contents

Inside this Month’s Global Market Analysis Report...	1
Highlights	2
1 US Aggregate and Global Indices	4
1.1 Bloomberg US Aggregate and Global Indices	4
2 Sovereign Debt Product Performance Comparisons	5
2.1 Global 10-Year Treasury Yields (Unhedged)	5
2.2 U.S. Treasury Hedged Yields	6
SECONDARY MORTGAGE MARKET	7
3 Fixed Income Product Performance Comparisons	7
3.1 Ginnie Mae Yields – USD	7
3.2 Ginnie Mae Hedged Yields	8
3.3 Ginnie Mae Yield Spreads – Intermediate Credit	9
3.4 Global Treasury Yield Per Duration	10
4 Prepayments	11
4.1 Aggregate Prepayments (CPR)	11
4.2 Involuntary Prepayments (CDR)	12
4.3 Voluntary Prepayment Rates (CRR)	13
5 Single-Family MBS Pass-Through Issuance	14
5.1 Gross Issuance of Agency MBS	14
5.2 Net Issuance of Agency MBS	16
5.3 Monthly Issuance Breakdown	18
5.4 Percent Refi at Issuance – Single-Family	19
6 Agency Single-Family MBS Outstanding	20
6.1 Outstanding Single-Family Agency MBS	20
6.2 Origination Volume and Share Over Time	21
6.3 Agency Issuance and Agency Outstanding by State	22
6.4 Outstanding Ginnie Mae MBS Volume by Coupon and Vintage Over Time	23
7 Agency REMIC Securities	24
7.1 Monthly REMIC Demand for Ginnie Mae MBS	24
7.2 REMIC Market Snapshot	25
8 MBS Ownership	26
8.1 Commercial Bank Holdings of Agency MBS	26
8.2 Bank and Thrift Residential MBS Holdings	27

8.3	SOMA Holdings	29
8.4	Foreign Ownership of MBS	31
8.5	Foreign Ownership of Agency Debt and Agency MBS	32
9	Fixed Income Liquidity Indicators	33
	PRIMARY MORTGAGE MARKET	34
10	Agency Credit Breakdown	34
10.1	Credit Scores	34
10.2	Loan-to-Value (LTV).....	36
10.3	Debt-to-Income (DTI)	38
10.4	High LTV Loans: Ginnie Mae vs. GSEs.....	40
10.5	Serious Delinquency Rates.....	41
10.6	Credit Box.....	42
10.7	Credit Box: Historical.....	44
11	Forbearance Trends	46
12	Holders of Ginnie Mae Mortgage Servicing Rights	47
13	Agency Nonbank Originators.....	48
14	Bank vs. Nonbank Originators Historical Credit Box, Ginnie Mae vs. GSE	50
14.1.1	(FICO, LTV, DTI)	50
15	Environmental, Social, and Governance.....	54
15.1	Environmental, Social, and Governance: A Summary.....	54
15.2	Environmental.....	55
15.3	Social.....	55
15.3.1	Low-to-Moderate Income Borrowers	56
15.3.2	Purchase and Refinance Origination by Income Bracket.....	57
	U.S. HOUSING MARKET	58
16	Housing Affordability	58
16.1	Housing Affordability – Home Price Appreciation	58
16.2	Housing Affordability – Inflation, Wages, and the Price of Real Estate	59
16.2.1	Housing Affordability – Affordability Index.....	60
16.2.2	Housing Affordability – Mortgage Rate Trends	61
16.3	Housing Inventory	62
16.4	Size and Value of the U.S. Housing Market.....	64
17	Disclosure.....	65

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

In this month's edition, the *Highlights* section discusses the factors driving the variability in mortgage origination volume throughout recent years. Trends in refinance and new purchase loans are discussed as they relate to shifts in monetary policy and resulting interest rates. The path of forward interest rate expectations as a function of inflation and monetary policy provides the basis to understand the outlook and composition of mortgage originations in 2024.

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

- The new [Housing Affordability - Affordability Index](#) section shows how homebuyer affordability has declined for families purchasing median priced homes. Accordingly, the new homebuyer monthly payment figure shows how monthly payments have increased for first-time homebuyers.
- New figures in the [Housing Inventory](#) section show trends in Single-Family and Multifamily construction metrics.
- The [Fixed Income Product Performance Comparisons](#) section shows that Ginnie Mae MBS continue to offer attractive yields relative to sovereigns with comparable durations globally.
- The [Single-Family MBS Pass-Through Issuance](#) section captures the dominant role government lending/mortgage insurance programs are playing in the post-pandemic mortgage market. Gross and net issuance of Single-Family Ginnie Mae pass-throughs exceeds that of both Fannie Mae and Freddie Mac.
- The [SOMA Holdings](#) section captures FED Chair Jerome Powell's comments regarding the FED's decision to keep the policy rate unchanged and includes the composition of the FED's Agency MBS portfolio run-off.

Highlights

Mortgage originations, new purchase and refinance, have decreased steadily since 2021's record breaking volume of \$4.436 billion. The volume seen in 2021, a function of extremely accommodative monetary policy and a proceeding low-rate environment, benefited from a much greater share of refinance originations versus new purchase originations, \$2.574 billion and \$1.863 billion, respectively. Throughout 2021, the Federal Reserve stayed committed to their accommodative policy with quantitative easing and a target policy rate of 0.0% - 0.25%. Mortgage originations in 2022 saw a precipitous decline in refinances over new purchase, \$686 million and \$1,619 billion, respectively. Beginning in 2022, the mortgage origination paradigm shifted as a result of macroeconomic overheating and inflationary pressures, which forced the Fed to maneuver from an accommodative policy to a more restrictive monetary policy. As a result of the Fed's interest rate hikes, average 30-year fixed mortgage rates increased to 6.6% in Q4 2022 from 3.1% in Q4 2021. The pace and magnitude of these rate increases decreased mortgage originations in 2022 by \$2.131 billion to \$2.305 billion. Not only did the macroenvironment have a significant impact on origination volumes, but it also shifted the makeup of originations from predominantly refinance in 2020 and 2021 to predominantly new purchase in 2022, \$686 billion and \$1.619 billion, respectively.

The downward trend in origination volume continued in 2023 as mortgage originations fell substantially from 2022 levels as monetary policy continued to stay restrictive and interest rates climbed even higher throughout the year. The average 30-year fixed mortgage rate increased from 6.6% in Q4 2022 to 7.3% in Q4 2023. Mortgage originations totaled \$1,639 billion in 2023, of which \$1,325 billion were new purchase originations and \$314 billion were refinance originations.

As interest rates, starting with the Fed's monetary policy, increase, the share of refinance originations to total mortgage originations tends to fall. The share of refinance originations in 2023 fell to 23% from a 2020 cycle high of 63.9%. However, the Mortgage Bankers Association's (MBA) mortgage finance forecast predicts that this ratio will increase to 28% in 2024, subsequently, resulting in an increase in total mortgage origination volumes.

Figure 1, 2024 MBA Mortgage Finance Forecast, below shows that the MBA sees mortgage originations increasing 22.1% YoY from \$1,639 billion in 2023 to \$2,001 billion in 2024. The MBA forecasts YoY increases in refinance and new purchase originations of 50.0% and 15.5%, respectively.

Figure 1: 2024 MBA Mortgage Finance Forecast

	2023				2024				2025				2023	2024	2025	2026
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
Housing Measures																
Housing Starts (SAAR, Thous)	1,385	1,450	1,371	1,454	1,433	1,418	1,418	1,425	1,427	1,458	1,479	1,505	1,415	1,424	1,467	1,472
Single-Family	834	930	967	1,042	1,025	1,042	1,056	1,079	1,103	1,136	1,162	1,190	943	1,051	1,148	1,162
Two or More	552	520	403	412	408	376	362	346	324	322	317	315	472	373	320	310
Home Sales (SAAR, Thous)																
Total Existing Homes	4,327	4,250	4,020	3,797	3,974	4,237	4,424	4,609	4,714	4,860	4,900	4,907	4,099	4,311	4,845	4,993
New Homes	638	691	703	652	721	760	768	774	782	799	804	812	671	755	799	801
FHA US House Price Index (YOY % Change)	4.6	3.3	5.5	5.7	5.7	5.3	4.7	4.1	3.6	3.4	3.2	3.3	5.7	4.1	3.3	3.9
Median Price of Total Existing Homes (Thous \$)	366.7	397.5	400.9	387.3	383.5	396.6	392.6	389.1	388.4	398.2	395.6	391.7	388.1	390.5	393.5	393.6
Median Price of New Homes (Thous \$)	434.8	418.7	434.3	417.9	427.4	438.0	433.5	430.9	432.1	441.2	437.5	431.5	426.4	432.5	435.6	430.7
Interest Rates																
30-Year Fixed Rate Mortgage (%)	6.4	6.5	7.0	7.3	6.9	6.6	6.3	6.1	5.9	5.8	5.7	5.5	7.3	6.1	5.5	5.4
10-Year Treasury Yield (%)	3.6	3.6	4.2	4.4	4.2	4.1	3.9	3.8	3.8	3.8	3.7	3.7	4.4	3.8	3.7	3.6
Mortgage Originations																
Total 1- to 4-Family (Bill \$)	333	463	444	399	390	494	563	554	501	619	620	598	1,639	2,001	2,339	2,436
Purchase	267	371	363	324	304	384	428	414	346	461	456	436	1,325	1,530	1,699	1,782
Refinance	66	92	81	75	86	110	135	140	155	158	164	162	314	471	639	654
Refinance Share (%)	20	20	18	19	22	22	24	25	31	26	27	27	19	24	27	27
FHA Originations (Bill \$)													198	213	213	204
Total 1- to 4-Family (000s loans)	895	1,239	1,165	1,034	1,003	1,255	1,419	1,388	1,258	1,524	1,517	1,455	4,333	5,064	5,754	5,790
Purchase	686	948	913	804	743	926	1,021	977	810	1,070	1,049	996	3,350	3,667	3,926	3,981
Refinance	210	291	252	230	260	328	398	410	448	454	468	459	983	1,397	1,829	1,809
Refinance Share (%)	23	23	22	22	26	26	28	30	36	30	31	32	23	28	32	31
Mortgage Debt Outstanding																
1- to 4-Family (Bill \$)	13,676	13,774	13,864	13,955	14,027	14,103	14,207	14,314	14,410	14,521	14,628	14,729	13,955	14,314	14,729	15,127

Mortgage origination forecasts, specifically refinance originations, are in part a function of forward interest rate expectations. The Fed announced in their quarterly Statement of Economic Projections (SEP) that the central bank forecasts three policy rate cuts in 2024 as inflation approaches the Fed's target of 2%. Further increases in the Fed's forecast of rate cuts for 2024 should be bullish for US Treasury yields and therefore the 30-year fixed mortgage rate. Additionally, any macroeconomic data print, such as inflation and payrolls, that the market deems beneficial in the Fed's efforts of reaching its inflation target will also directly impact spot and forward interest rates, possibly resulting in an increase in refinance originations.

In the current primary mortgage environment, most mortgage borrowers are out of the money to refinance, or simply said most borrowers have a mortgage rate lower than the current 30-year fixed mortgage rate, as many pre-existing homeowners refinanced during the cycle lows. However, there is a portion of the market, especially the new purchase market from end of year 2022 and 2023, that have mortgage rates slightly below and even above the current market rate and are waiting for any marginal decrease in the market rate to refinance. These borrowers will likely drive the majority of refinances realized in 2024 and influence the MBA's refinance forecast alongside Fed guidance and the future path of interest rates.

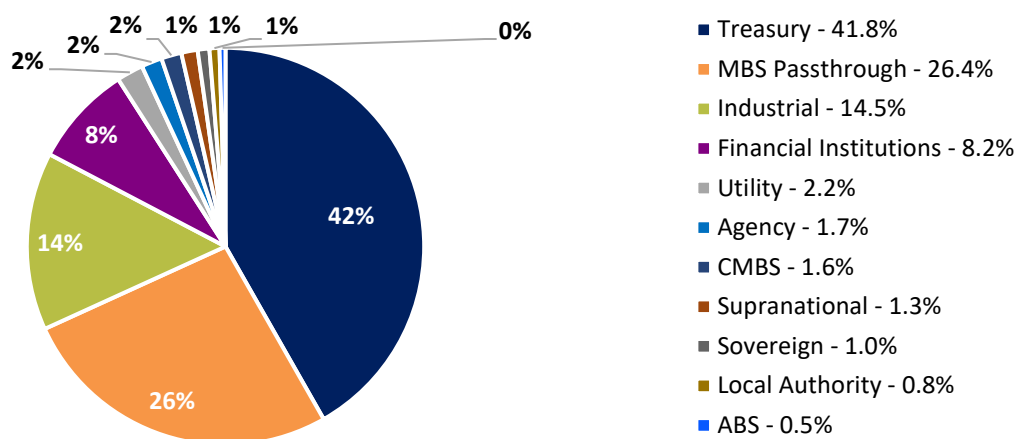
Sources: [October 2022 Mortgage Finance Forecast](#), [October 2023 Mortgage Finance Forecast](#), and [February 2024 Mortgage Finance Forecast](#)

1 US AGGREGATE AND GLOBAL INDICES

1.1 Bloomberg US Aggregate and Global Indices

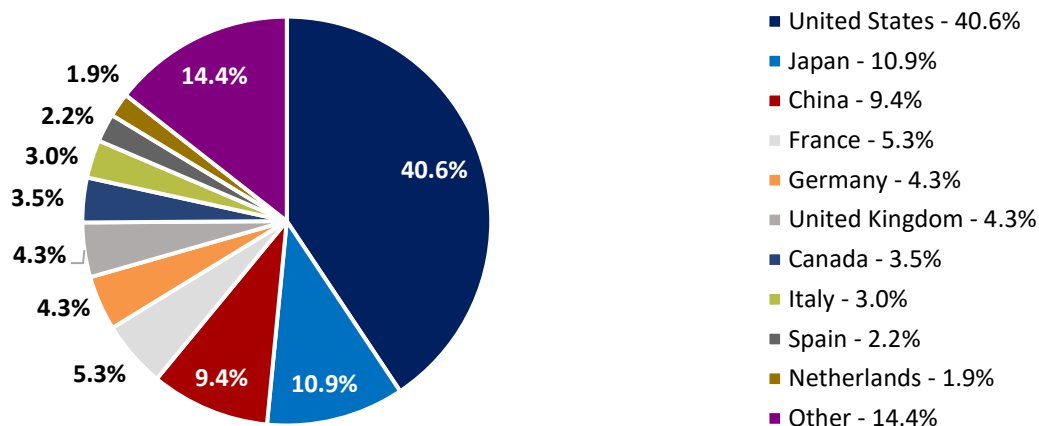
At month-end January, U.S. Treasuries contributed 41.8% to the Bloomberg U.S. Aggregate Index, up approximately 0.4% from the prior month. U.S. Agency MBS (Ginnie Mae, Fannie Mae, and Freddie Mac) contributed 26.4%, down 0.1% from the month prior. For the U.S. Aggregate Index, all other changes to the index components were no larger than 0.1%.

Figure 2. Bloomberg U.S. Aggregate Index



In the Bloomberg Global Aggregate Index by Country, the U.S. share of fixed income remained the largest share of total outstanding issuance, representing 40.6% of the total Bloomberg Global Aggregate Index, up 0.6% from the prior month. Japan’s share of fixed income was the second largest at 10.9%, decreasing approximately 0.4% from the prior month. “Other” countries share decreased from the prior month by approximately 0.2%, from 14.6% to 14.4%. All other countries listed remained stable compared to the prior month with no changes larger than 0.1%.

Figure 3. Bloomberg Global Aggregate Index by Country



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

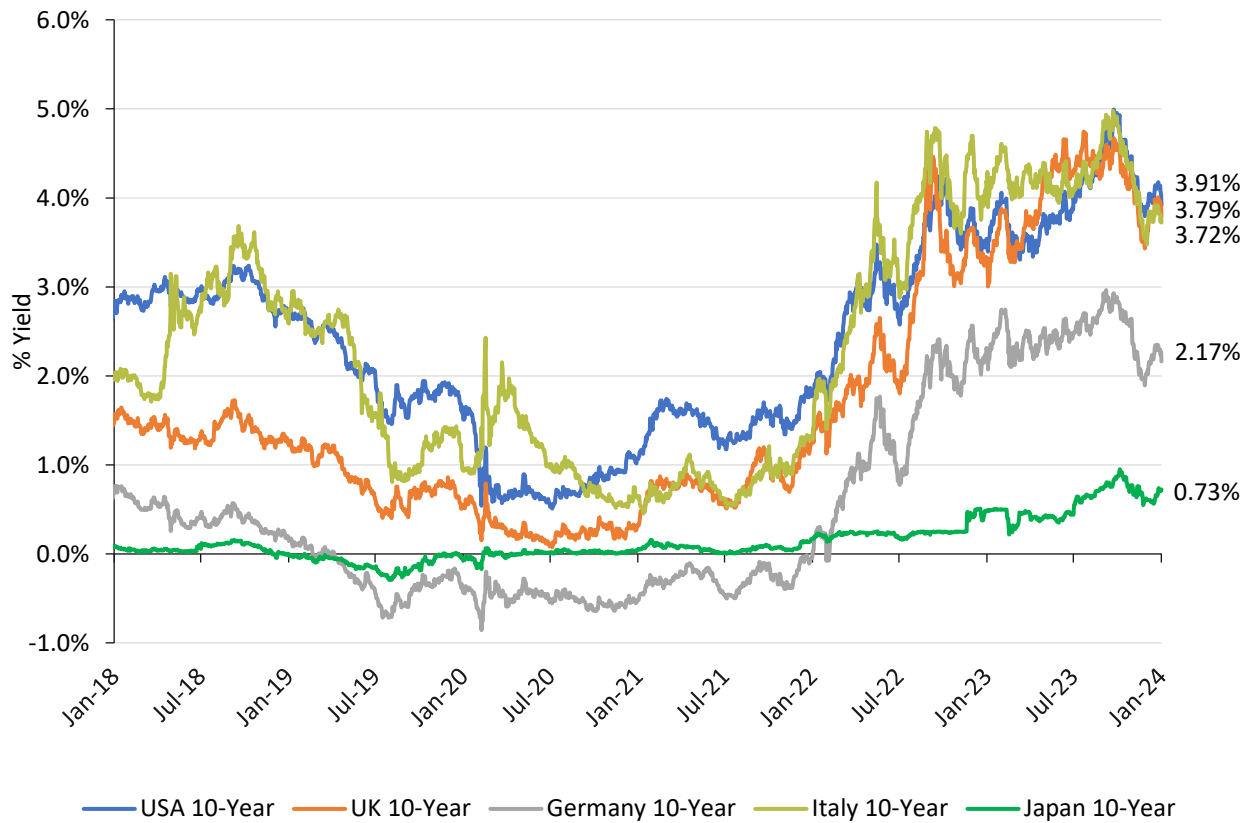
2 SOVEREIGN DEBT PRODUCT PERFORMANCE COMPARISONS

2.1 Global 10-Year Treasury Yields (Unhedged)

The U.S. 10-year Treasury yield moved to 3.91% at month-end January 2024, a MoM increase of 3 bps. Since October 2023, month end U.S. 10-year Treasury note rates have marked the highest government yield amongst the countries listed below. All month-end yields listed have increased MoM from December 2023 to January 2024.

- The yield on the UK 10-year note increased to 3.79% at month-end January, a MoM increase of 26 bps.
- The yield on the German 10-year note increased to 2.17% at month-end January, a MoM increase of 15 bps.
- The yield on the Italian 10-year note increased to 3.72% at month-end January, a MoM increase of 25 bps.
- The yield on the Japanese 10-year note increased to 0.73% at month-end January, a MoM increase of 13 bps.

Figure 4. Global 10-Year Treasury Yields



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

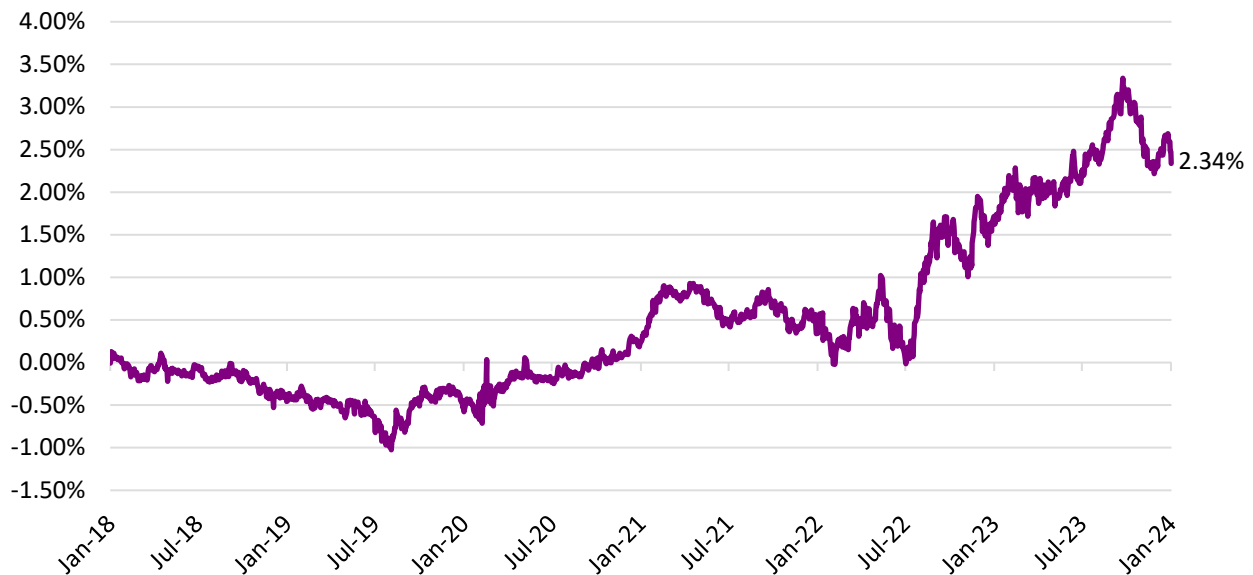
2.2 U.S. Treasury Hedged Yields

- The yield for the 10-year Treasury, hedged in Japanese Yen (JPY) stood at -0.98% at month-end January, a 7 bp increase from month-end December.
- The yield for the 10-year Treasury, hedged in Euros (EUR) stood at 2.34% at month-end January, a 6 bp increase from month-end December.

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



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



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

SECONDARY MORTGAGE MARKET

3 FIXED INCOME PRODUCT PERFORMANCE COMPARISONS

3.1 Ginnie Mae Yields – USD

Ginnie Mae II yields were 5.72% at month-end November, decreased 52 bps to 5.20% at month-end December, then decreased 1 bps to 5.19% at month-end January. The Ginnie Mae II spread over the U.S. 10-year Treasury yield increased 8 bps YoY to 128 bps over the U.S. 10-year Treasury yield as of month-end January 2024.

Figure 7. Ginnie Mae II SF Yield, USD



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



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

3.2 Ginnie Mae Hedged Yields

- The yield for Ginnie Mae II's, hedged in Japanese Yen stood at 0.31% at month-end January, a 4 bp increase from month-end December.
- The yield for Ginnie Mae II's, hedged in Euros stood at 3.62% at month-end January, a 2 bp increase from month-end December.

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



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



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

3.3 Ginnie Mae Yield Spreads – Intermediate Credit

The GNMA II 30-year OAS decreased 1 bp MoM, to 0.39%, as of month-end January. The U.S. Intermediate Credit OAS remained 0.81% from month-end December to month-end January. The yield differential between U.S. Intermediate Credit and GNMA II 30-year OAS increased 1 bp to 0.42% at month-end January.

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

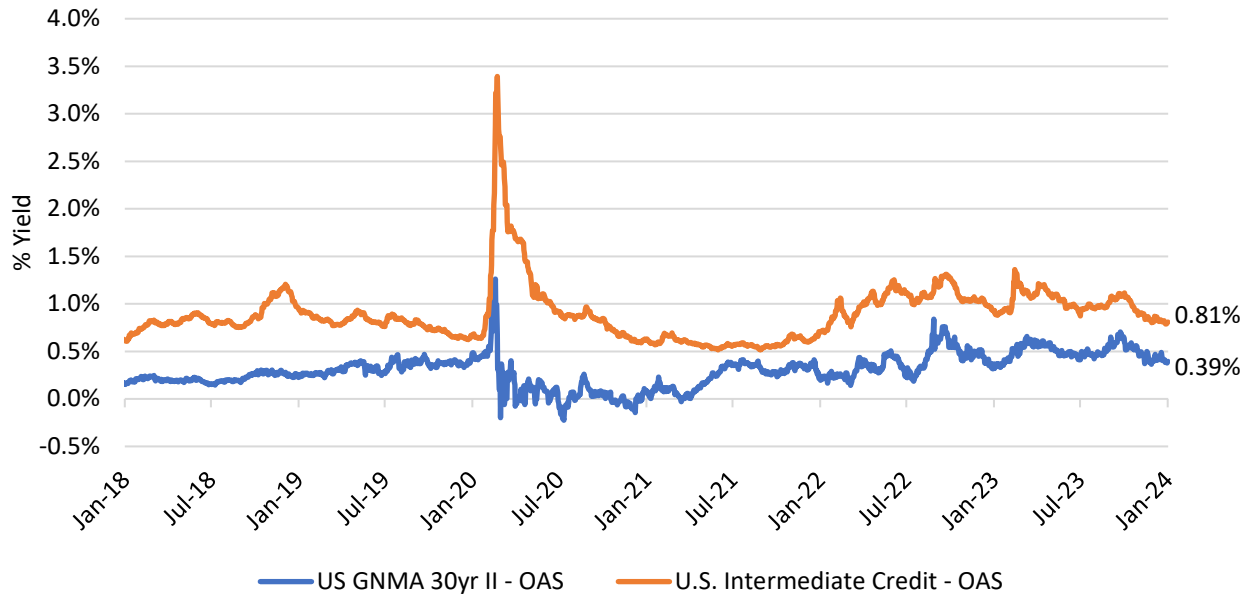


Figure 12. Spread between U.S. Intermediate Credit and U.S. GNMA II 30yr MBS OAS

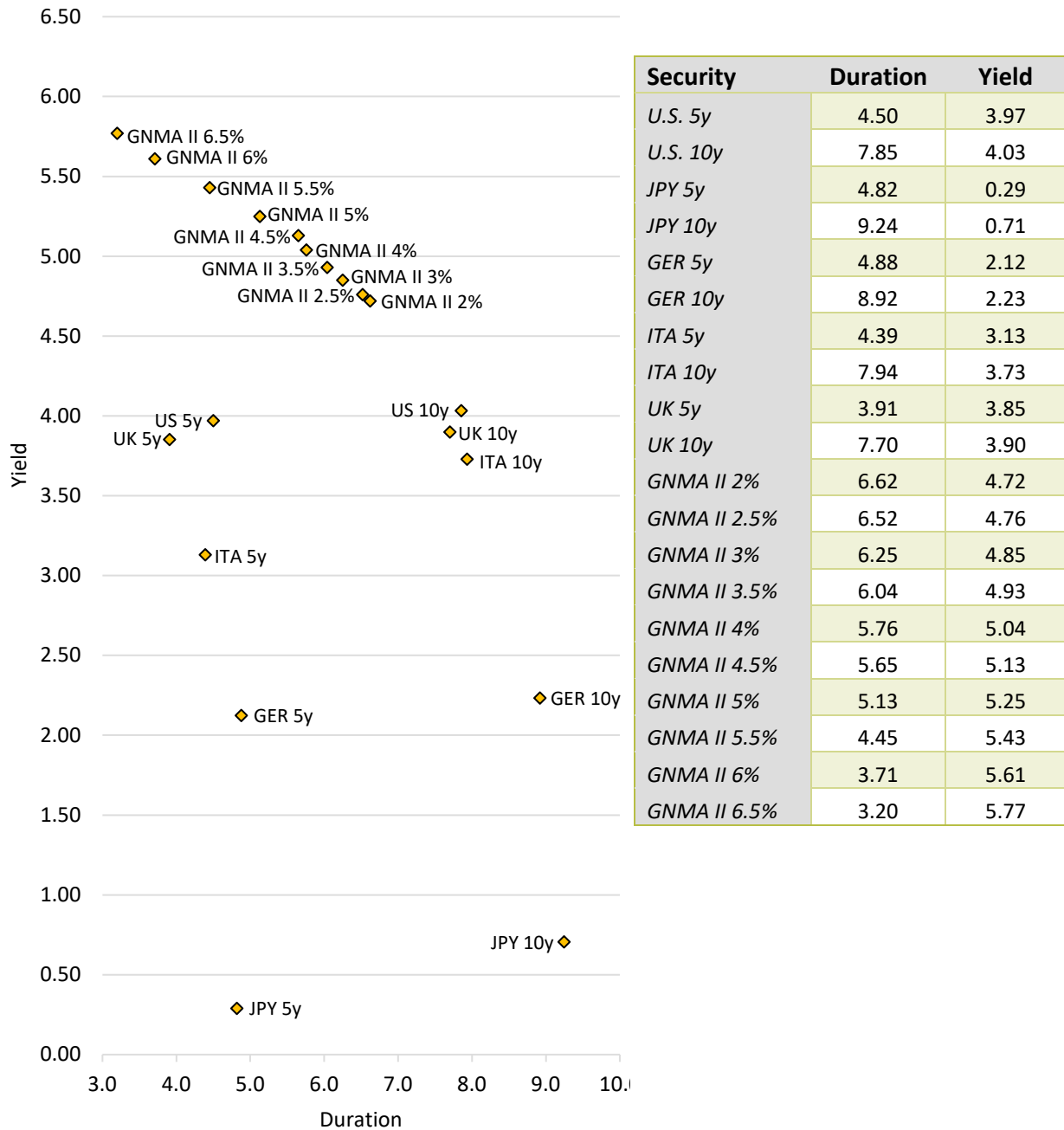


Source: Bloomberg. Note: Data as of January 2024.

3.4 Global Treasury Yield Per Duration

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

Figure 13. Yield vs. Duration



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

4 PREPAYMENTS

4.1 Aggregate Prepayments (CPR)

Freddie Mac fixed rate aggregate prepayment speeds remained at 4.1% from December 2023 to January 2024. Contrarily, Fannie Mae CPRs decreased by 0.1% and Ginnie Mae CPRs increased by 0.9% from December 2023 to January 2024. ARM prepayments decreased 0.4% and 13.6% for Freddie Mac and Ginnie Mae, respectively, and increased 0.6% for Fannie Mae.

Figure 14. Fixed Rate Aggregate 1-Month CPR

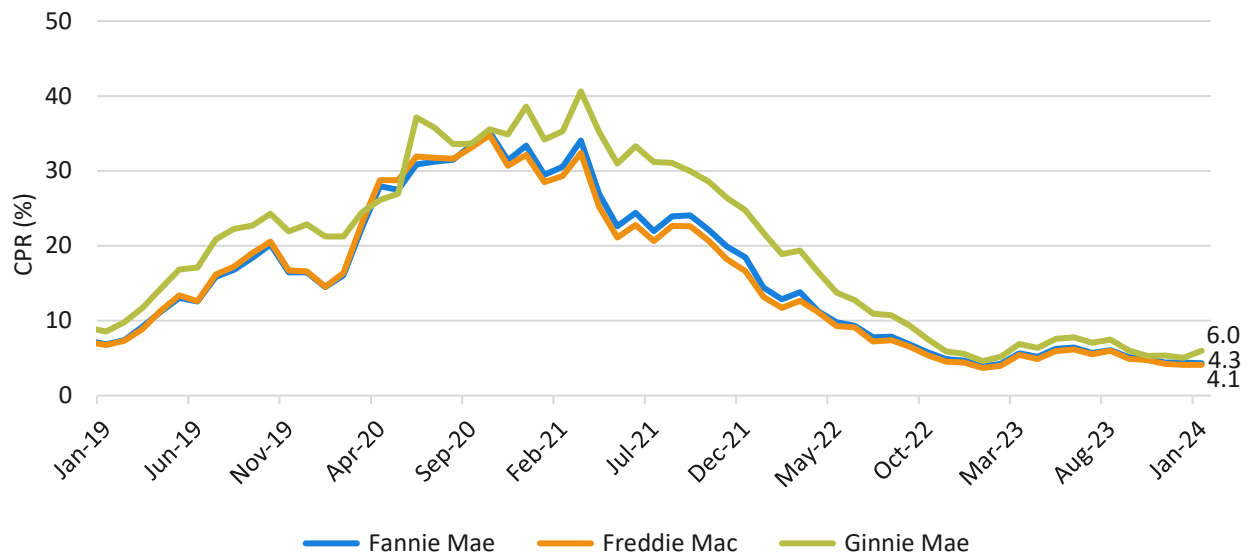
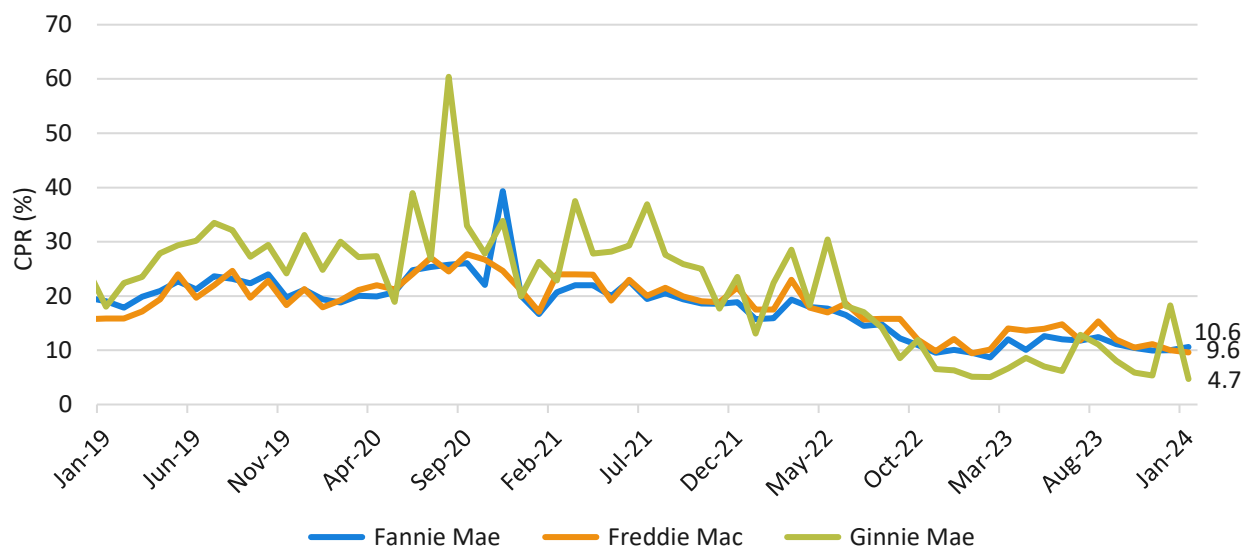


Figure 15. ARM Aggregate 1-Month CPR



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

4.2 Involuntary Prepayments (CDR)

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

Figure 16. Fixed Rate Aggregate CDR

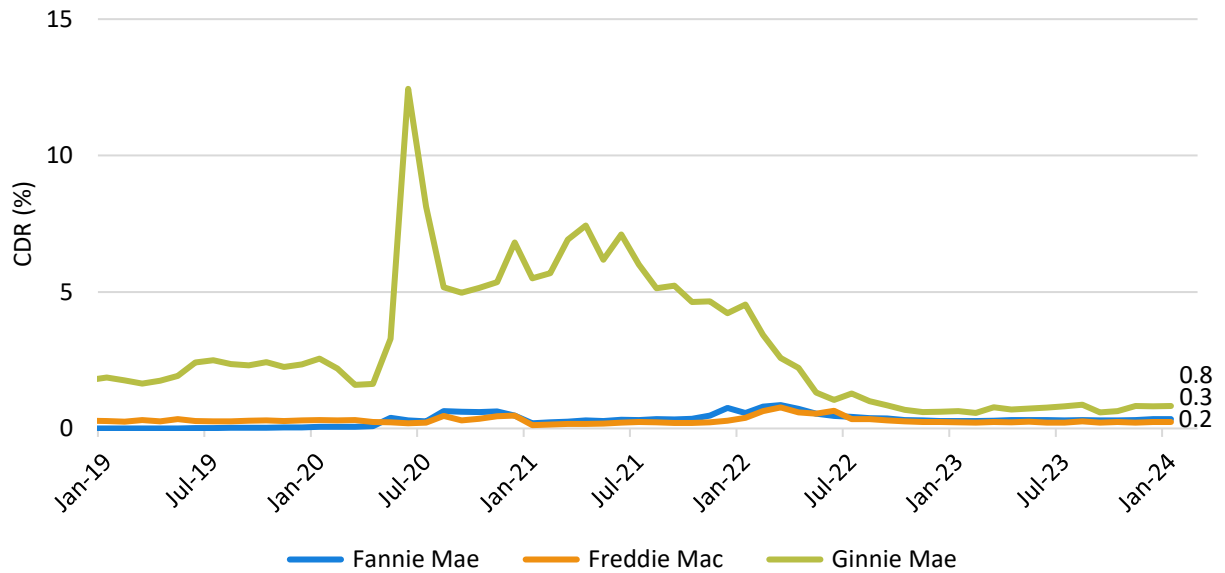
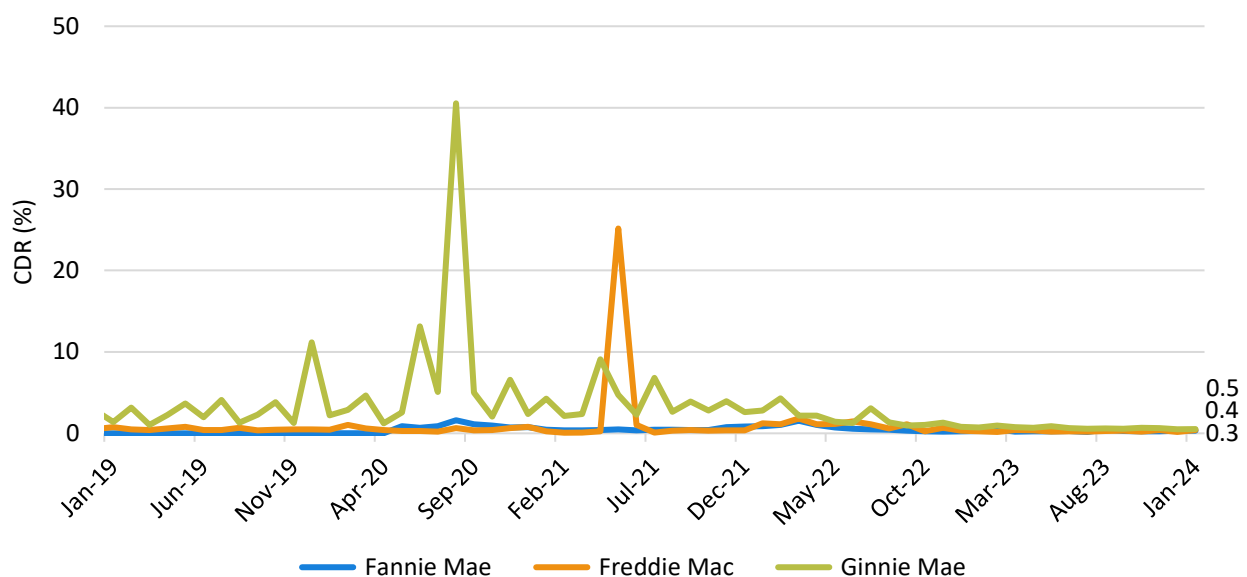


Figure 17. ARM Aggregate CDR



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

4.3 Voluntary Prepayment Rates (CRR)

Fixed rate voluntary prepayments were higher for Ginnie Mae and Fannie Mae than Freddie Mac. Fannie Mae saw a decrease of 0.1% in fixed rate aggregate CRR while Freddie Mac remained at 3.9%. Freddie Mac saw a 0.6% decrease in ARM aggregate CRR while Fannie Mae saw 0.6% increase. Ginnie Mae fixed rate aggregate CRR increased by 0.9% and ARM aggregate CRR decreased by 13.6%.

Figure 18. Fixed Rate Aggregate CRR

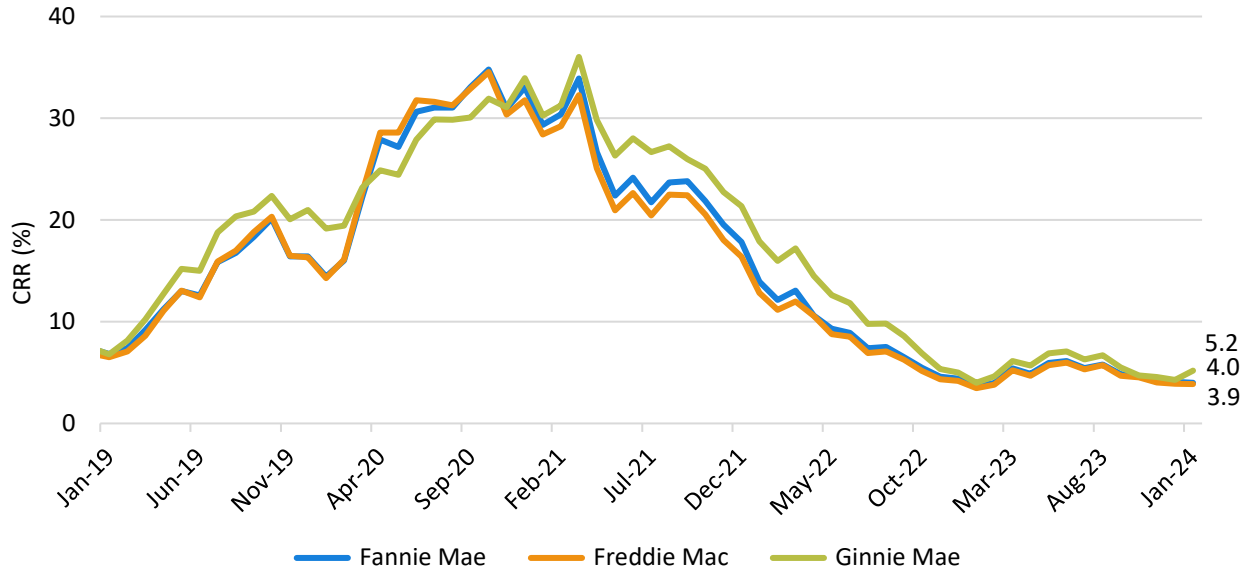
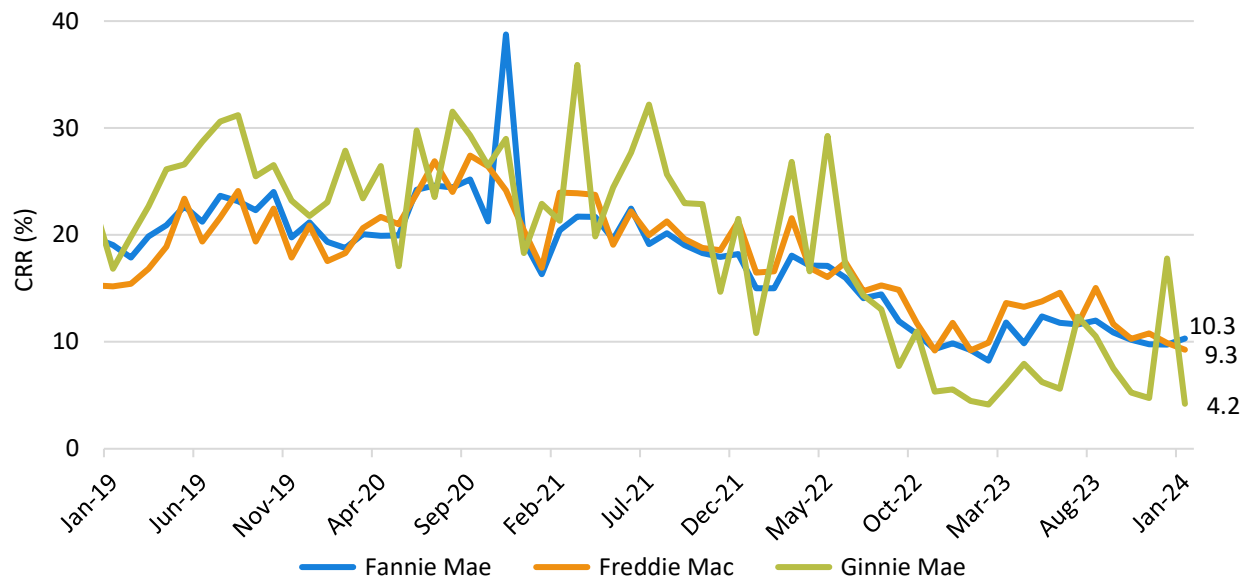


Figure 19. ARM Aggregate CRR



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

5 SINGLE-FAMILY MBS PASS-THROUGH ISSUANCE

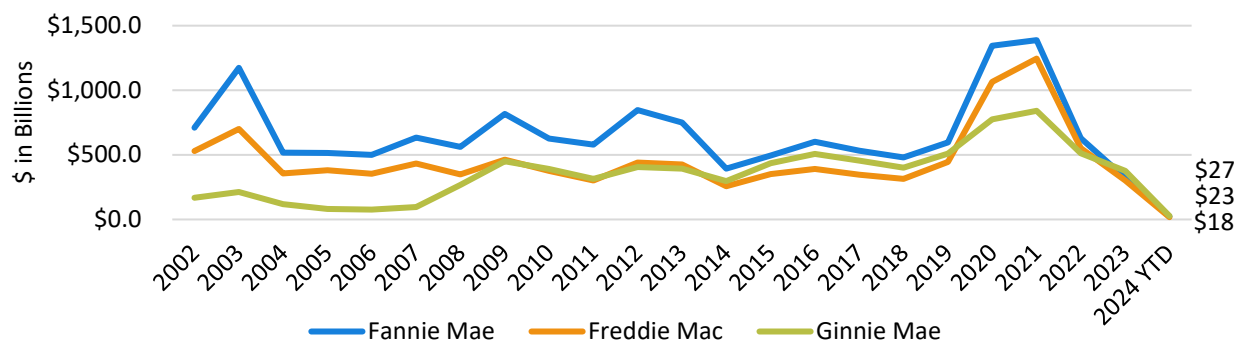
5.1 Gross Issuance of Agency MBS

In January 2024, total gross MBS issuance decreased by approximately \$3.9 billion MoM. Freddie Mac saw a MoM decrease of \$6.1 billion and Fannie Mae saw a MoM increase of \$2.4 billion. Ginnie Mae saw a \$0.2 billion MoM decrease in gross issuance.

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

Issuance Year	Fannie Mae	Freddie Mac	GSE Total	Ginnie Mae	Total
2002	\$710.0	\$529.0	\$1,238.9	\$169.0	\$1,407.9
2003	\$1,174.4	\$700.5	\$1,874.9	\$213.1	\$2,088.0
2004	\$517.5	\$355.2	\$872.6	\$119.2	\$991.9
2005	\$514.1	\$379.9	\$894.0	\$81.4	\$975.3
2006	\$500.2	\$352.9	\$853.0	\$76.7	\$929.7
2007	\$633.0	\$433.3	\$1,066.2	\$94.9	\$1,161.1
2008	\$562.7	\$348.7	\$911.4	\$267.6	\$1,179.0
2009	\$817.1	\$462.9	\$1,280.0	\$451.3	\$1,731.3
2010	\$626.6	\$377.0	\$1,003.5	\$390.7	\$1,394.3
2011	\$578.2	\$301.2	\$879.3	\$315.3	\$1,194.7
2012	\$847.6	\$441.3	\$1,288.8	\$405.0	\$1,693.8
2013	\$749.9	\$426.7	\$1,176.6	\$393.6	\$1,570.2
2014	\$392.9	\$258.0	\$650.9	\$296.3	\$947.2
2015	\$493.9	\$351.9	\$845.7	\$436.3	\$1,282.0
2016	\$600.5	\$391.1	\$991.6	\$508.2	\$1,499.8
2017	\$531.3	\$345.9	\$877.3	\$455.6	\$1,332.9
2018	\$480.9	\$314.1	\$795.0	\$400.6	\$1,195.6
2019	\$597.4	\$445.2	\$1,042.6	\$508.6	\$1,551.2
2020	\$1,343.4	\$1,064.1	\$2,407.5	\$775.4	\$3,182.9
2021	\$1,388.0	\$1,245.1	\$2,633.1	\$840.9	\$3,474.0
2022	\$628.3	\$551.6	\$1,179.9	\$512.3	\$1,692.2
2023	\$320.3	\$301.4	\$621.8	\$375.5	\$997.3
2024 YTD	\$23.3	\$17.7	\$41.1	\$27.1	\$68.2

Figure 20. Agency Gross Issuance

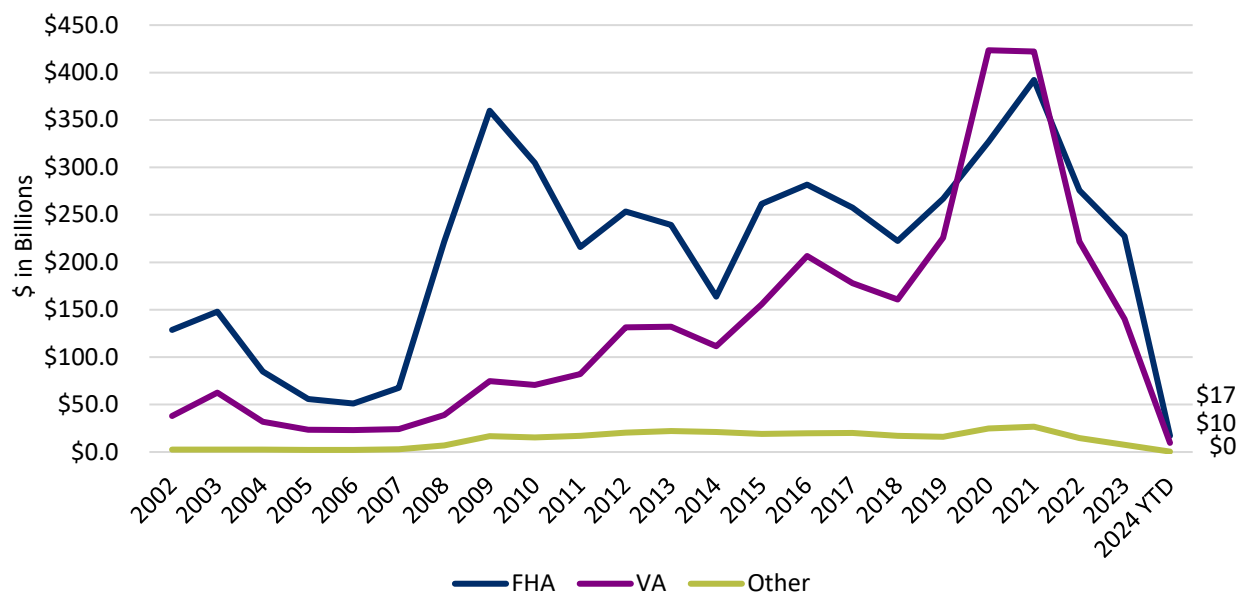


Source: Recursion. Note: Numbers are rounded to the nearest hundred million. For sums, like "GSE Total", the values are rounded after the exact underlying values are summed. As a result, some sums may not appear to match the sum of their rounded component values.

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

Issuance Year	FHA	VA	Other	Total
2002	\$128.6	\$37.9	\$2.5	\$169.0
2003	\$147.9	\$62.7	\$2.5	\$213.1
2004	\$85.0	\$31.8	\$2.5	\$119.2
2005	\$55.7	\$23.5	\$2.1	\$81.4
2006	\$51.2	\$23.2	\$2.3	\$76.7
2007	\$67.7	\$24.2	\$3.0	\$94.9
2008	\$221.7	\$39.0	\$6.9	\$267.6
2009	\$359.9	\$74.6	\$16.8	\$451.3
2010	\$304.9	\$70.6	\$15.3	\$390.7
2011	\$216.1	\$82.3	\$16.9	\$315.3
2012	\$253.4	\$131.3	\$20.3	\$405.0
2013	\$239.2	\$132.2	\$22.2	\$393.6
2014	\$163.9	\$111.4	\$21.0	\$296.3
2015	\$261.5	\$155.6	\$19.2	\$436.3
2016	\$281.8	\$206.5	\$19.9	\$508.2
2017	\$257.6	\$177.8	\$20.2	\$455.6
2018	\$222.6	\$160.8	\$17.2	\$400.6
2019	\$266.9	\$225.7	\$16.0	\$508.6
2020	\$327.0	\$423.5	\$24.9	\$775.4
2021	\$392.2	\$422.1	\$26.7	\$840.9
2022	\$275.8	\$221.7	\$14.8	\$512.3
2023	\$227.6	\$140.3	\$7.7	\$375.5
2024 YTD	\$17.1	\$9.6	\$0.4	\$27.1

Figure 21. Ginnie Mae Gross Issuance



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

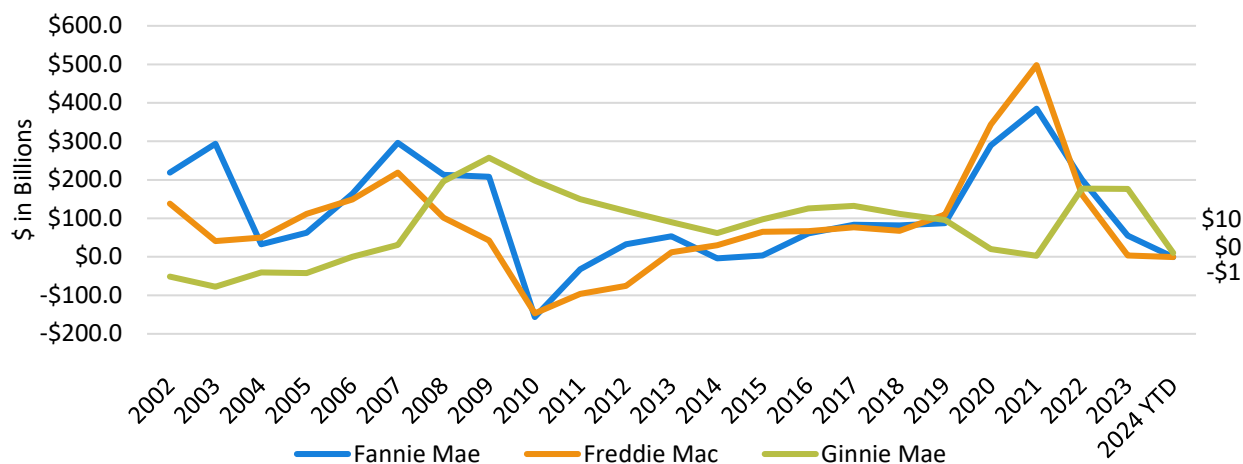
5.2 Net Issuance of Agency MBS

Agency Net Issuance as of month-end January was \$9.5 billion for 2024 YTD, shown in **Table 3**. Since 2022, FHA net issuance has outpaced VA net issuance, as shown in **Table 4** and **Figure 23**.

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

Issuance Year	Fannie Mae	Freddie Mac	GSE	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	-\$0.3	-\$0.6	-\$0.9	\$10.4	\$9.5

Figure 22. Agency Net Issuance

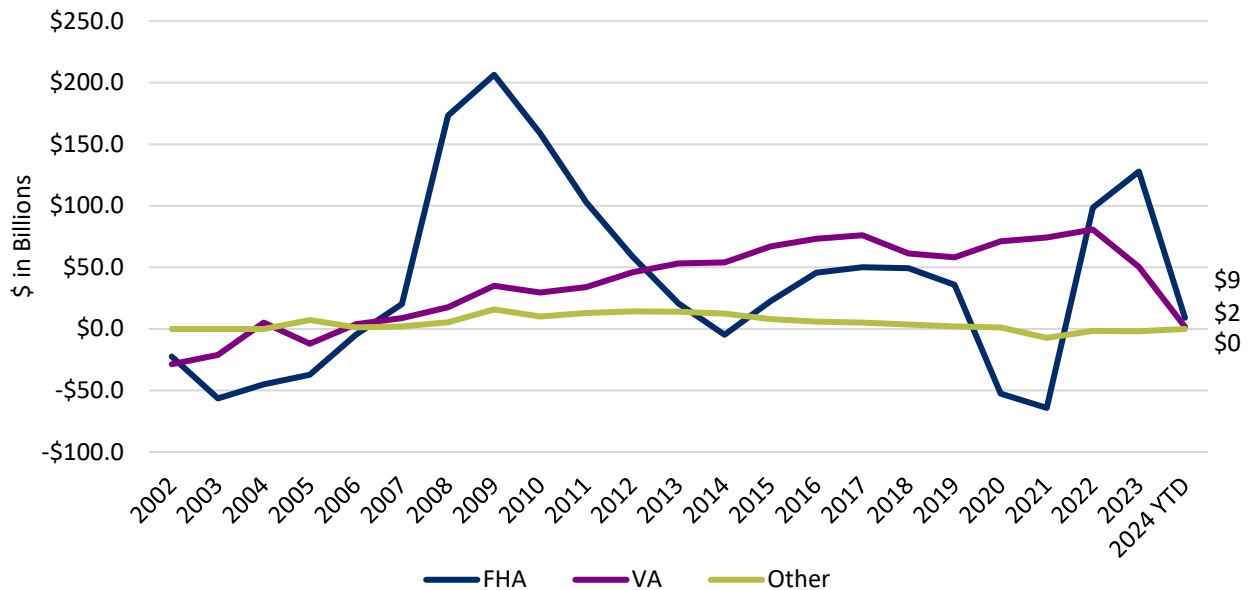


Source: Recursion. Note: Numbers are rounded to the nearest hundred million. For sums, like "GSE Total", the values are rounded after the exact underlying values are summed. As a result, some sums may not appear to match the sum of their rounded component values.

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

Issuance Year	FHA	VA	Other	Total
2002	-\$22.5	-\$28.7	\$0.0	-\$51.2
2003	-\$56.5	-\$21.1	\$0.0	-\$77.6
2004	-\$45.2	\$5.1	\$0.0	-\$40.1
2005	-\$37.3	-\$12.1	\$7.2	-\$42.2
2006	-\$4.7	\$3.8	\$1.2	\$0.2
2007	\$20.2	\$8.7	\$2.0	\$30.9
2008	\$173.3	\$17.7	\$5.4	\$196.4
2009	\$206.4	\$35.1	\$15.8	\$257.4
2010	\$158.6	\$29.6	\$10.0	\$198.3
2011	\$102.8	\$34.0	\$12.8	\$149.6
2012	\$58.9	\$45.9	\$14.3	\$119.1
2013	\$20.7	\$53.3	\$13.9	\$87.9
2014	-\$4.8	\$53.9	\$12.5	\$61.6
2015	\$22.5	\$66.9	\$7.9	\$97.3
2016	\$45.6	\$73.2	\$6.0	\$124.9
2017	\$50.1	\$76.1	\$5.0	\$131.2
2018	\$49.2	\$61.2	\$3.5	\$113.9
2019	\$35.9	\$58.0	\$1.9	\$95.7
2020	-\$52.5	\$71.0	\$1.3	\$19.9
2021	-\$64.2	\$74.2	-\$7.3	\$2.7
2022	\$98.5	\$80.7	-\$1.7	\$177.4
2023	\$127.7	\$50.4	-\$1.8	\$176.3
2024 YTD	\$8.9	\$1.7	-\$0.2	\$10.4

Figure 23. Ginnie Mae Net Issuance



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

5.3 Monthly Issuance Breakdown

Agency net issuance for the month of January was approximately \$9.5 billion, which represents a \$5.5 billion decrease MoM. Ginnie Mae net issuance was \$10.4 billion in January, a \$2.2 billion decrease from December 2023. Ginnie Mae’s \$27.1 billion of gross issuance in January, seen in **Table 5**, was approximately \$4.2 billion below 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
Jan-21	\$141.6	\$117.3	\$78.2	\$258.9	\$337.1	\$25.9	\$37.9	-\$6.5	\$63.8	\$57.3
Feb-21	\$118.8	\$115.5	\$72.3	\$234.3	\$306.6	\$16.8	\$44.3	-\$0.9	\$61.1	\$60.2
Mar-21	\$143.9	\$118.9	\$76.9	\$262.8	\$339.7	\$37.6	\$44.0	\$1.0	\$81.6	\$82.6
Apr-21	\$148.0	\$142.3	\$85.6	\$290.3	\$375.9	\$26.2	\$57.0	-\$4.2	\$83.3	\$79.0
May-21	\$132.3	\$91.4	\$71.7	\$223.7	\$295.4	\$64.9	\$38.8	-\$3.1	\$103.7	\$100.6
Jun-21	\$108.5	\$91.2	\$67.7	\$199.7	\$267.4	\$34.0	\$33.7	\$2.6	\$67.8	\$70.4
Jul-21	\$95.4	\$84.6	\$69.0	\$180.0	\$249.0	\$27.6	\$31.9	-\$1.4	\$59.5	\$58.0
Aug-21	\$104.8	\$109.3	\$66.6	\$214.1	\$280.8	\$27.5	\$48.5	\$1.4	\$76.1	\$77.4
Sep-21	\$102.9	\$105.3	\$68.0	\$208.3	\$276.3	\$26.4	\$45.6	\$3.1	\$72.0	\$75.1
Oct-21	\$105.1	\$102.7	\$62.5	\$207.8	\$270.3	\$34.6	\$46.9	\$1.9	\$81.5	\$83.4
Nov-21	\$93.6	\$81.1	\$60.8	\$174.7	\$235.5	\$29.5	\$34.9	\$3.1	\$64.4	\$67.6
Dec-21	\$93.7	\$85.4	\$58.9	\$179.1	\$238.0	\$33.8	\$34.4	\$5.7	\$68.3	\$73.9
Jan-22	\$93.1	\$85.9	\$59.0	\$179.0	\$238.0	\$45.6	\$37.6	\$14.0	\$83.2	\$97.3
Feb-22	\$73.3	\$64.6	\$49.0	\$137.9	\$186.9	\$27.8	\$22.7	\$9.7	\$50.5	\$60.2
Mar-22	\$76.8	\$62.9	\$47.4	\$139.7	\$187.1	\$22.6	\$23.1	\$6.9	\$45.7	\$52.6
Apr-22	\$65.3	\$53.5	\$47.8	\$118.8	\$166.6	\$19.5	\$17.7	\$13.2	\$37.2	\$50.4
May-22	\$54.7	\$43.7	\$45.0	\$98.4	\$143.4	\$13.6	\$12.5	\$15.5	\$26.1	\$41.6
Jun-22	\$54.5	\$42.0	\$43.6	\$96.5	\$140.1	\$14.8	\$10.7	\$16.0	\$25.5	\$41.5
Jul-22	\$46.8	\$40.3	\$42.4	\$87.1	\$129.5	\$12.1	\$14.4	\$18.0	\$26.5	\$44.5
Aug-22	\$39.8	\$46.3	\$40.3	\$86.1	\$126.4	\$4.8	\$19.8	\$16.2	\$24.6	\$40.8
Sep-22	\$39.3	\$38.2	\$39.9	\$77.5	\$117.4	\$7.6	\$13.9	\$18.3	\$21.5	\$39.8
Oct-22	\$34.1	\$26.1	\$35.5	\$60.2	\$95.7	\$5.8	\$4.7	\$17.3	\$10.5	\$27.8
Nov-22	\$25.7	\$22.7	\$33.6	\$48.4	\$82.0	\$0.3	\$3.5	\$18.3	\$3.8	\$22.1
Dec-22	\$24.9	\$25.5	\$28.8	\$50.4	\$79.2	\$0.2	\$6.6	\$14.0	\$6.8	\$20.8
Jan-23	\$25.7	\$22.4	\$27.1	\$48.1	\$75.2	\$3.4	\$5.3	\$14.1	\$8.7	\$22.8
Feb-23	\$18.9	\$16.5	\$22.7	\$35.4	\$58.1	-\$4.4	-\$1.4	\$8.6	-\$5.8	\$2.8
Mar-23	\$23.6	\$19.2	\$26.2	\$42.8	\$69.0	-\$4.4	-\$2.4	\$8.7	-\$6.8	\$1.9
Apr-23	\$27.7	\$21.0	\$31.6	\$48.7	\$80.3	\$1.4	\$0.6	\$15.0	\$2.0	\$17.0
May-23	\$30.4	\$29.0	\$32.6	\$59.4	\$92.0	\$0.6	\$6.0	\$13.5	\$6.6	\$20.1
Jun-23	\$33.5	\$32.9	\$37.5	\$66.4	\$103.9	\$3.1	\$9.3	\$17.8	\$12.4	\$30.2
Jul-23	\$31.7	\$27.9	\$36.3	\$59.6	\$95.9	\$3.6	\$5.9	\$18.0	\$9.5	\$27.5
Aug-23	\$27.8	\$27.9	\$36.5	\$55.7	\$92.2	-\$1.5	\$4.8	\$17.2	\$3.3	\$20.5
Sep-23	\$28.1	\$31.1	\$35.1	\$59.2	\$94.3	\$1.9	\$10.7	\$18.6	\$12.6	\$31.2
Oct-23	\$28.2	\$24.5	\$32.1	\$52.7	\$84.8	\$2.6	\$4.5	\$17.0	\$7.1	\$24.1
Nov-23	\$23.8	\$25.3	\$30.5	\$49.1	\$79.5	-\$0.1	\$6.5	\$15.2	\$6.4	\$21.6
Dec-23	\$20.9	\$23.9	\$27.3	\$44.8	\$72.1	-\$2.9	\$5.4	\$12.6	\$2.5	\$15.0
Jan-24	\$23.3	\$17.7	\$27.1	\$41.1	\$68.2	-\$0.3	-\$0.6	\$10.4	-\$0.9	\$9.5

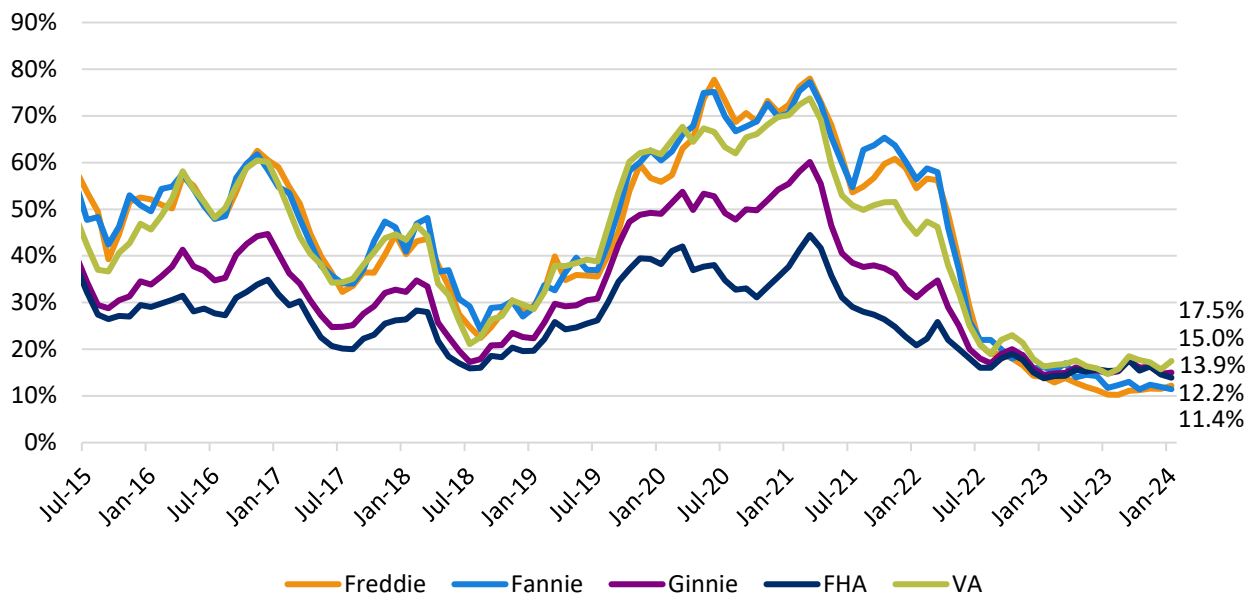
Sources: Beginning May 2021, data for Gross and Net Issuance was sourced from Fannie Mae, Freddie Mac, and Ginnie Mae loan level disclosure files. Net issuance is defined here as the difference between prior period UPB and current period UPB. Data as of January 2024. Beginning with the October 2021 GMAR, the Fannie Mae and Freddie Mac net issuance data have been updated to reflect the current UPB of the portfolios. July 2021 through January 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 1.9% MoM for Ginnie Mae as of month-end January 2024.

- Freddie Mac’s refinance percentage increased to 12.2% in January, up from 11.5% in December.
- Fannie Mae’s refinance percentage decreased to 11.4% in January, down from 11.9% in December.
- Ginnie Mae’s refinance percentage increased to 15.0% in January, up from 14.7% in December.
- FHA’s refinance percentage decreased to 13.9% in January, down from 14.6% in December.
- VA’s refinance percentage increased to 17.5% in January, up from 15.7% in December.

Figure 24. Percent Refinance at Issuance – Single-Family



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

6 AGENCY SINGLE-FAMILY MBS OUTSTANDING

6.1 Outstanding Single-Family Agency MBS

As of month-end January 2024, outstanding Single-Family MBS in the agency market totaled \$8.847 trillion: 40.4% Fannie Mae, 33.3% Freddie Mac, and 26.2% Ginnie Mae MBS. Over the past twelve months, Freddie Mac’s and Ginnie Mae’s total outstanding MBS increased by approximately 1.7% and 8.0%, respectively, while Fannie Mae’s total outstanding MBS stayed relatively flat. Fannie Mae outstanding MBS remains larger than Freddie Mac’s and Ginnie Mae’s by approximately \$627 billion and \$1.3 trillion, respectively.

Ginnie Mae’s MBS collateral composition has changed over time as shown in **Figure 26**. In January 2019, 59.7% of Ginnie Mae outstanding collateral was FHA and 34.3% was VA. As of month-end January 2024, FHA collateral comprised 54.5% of Ginnie Mae MBS outstanding, and VA collateral comprised 41.1% of Ginnie Mae MBS outstanding.

Figure 25. Outstanding Agency Mortgage-Backed Securities

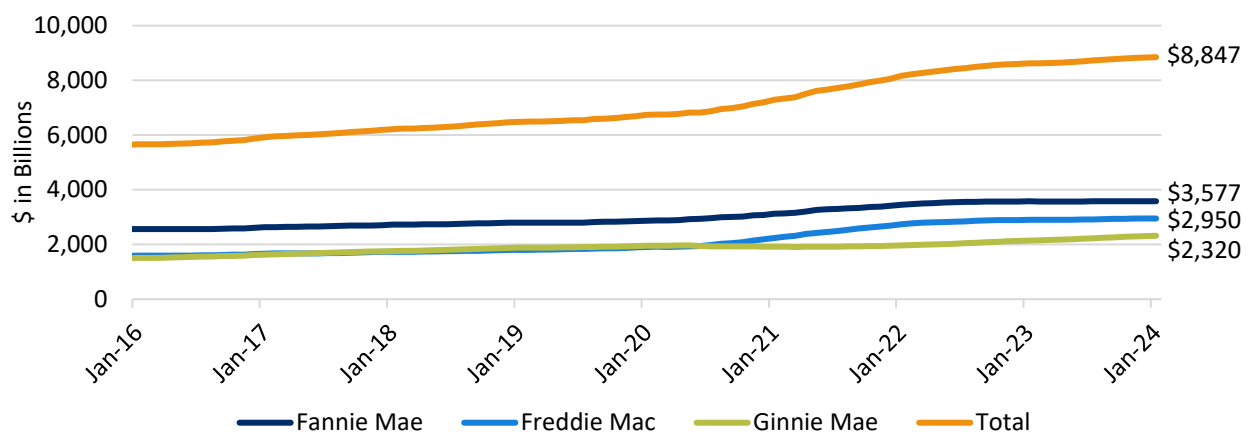
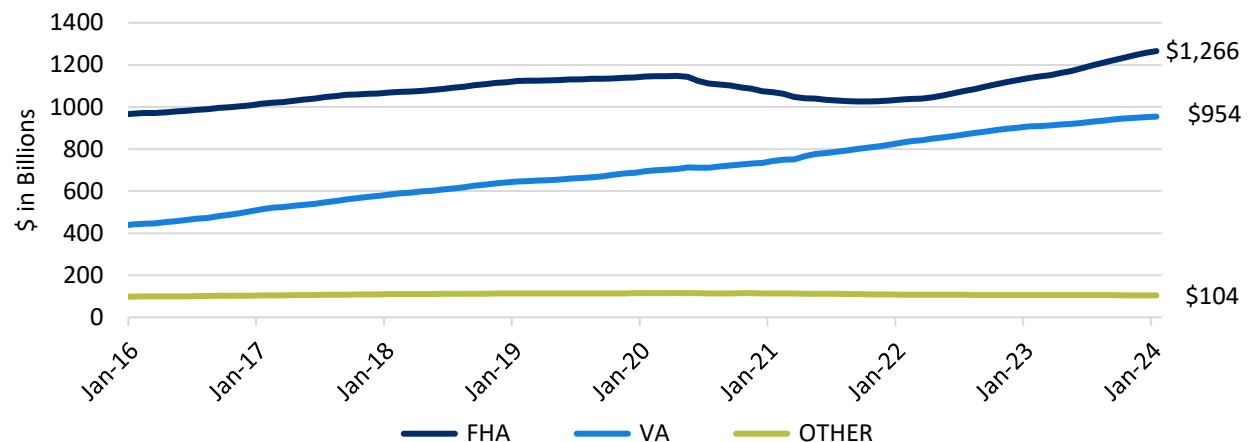


Figure 26. Composition of Outstanding Ginnie Mae Mortgage-Backed Securities



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

6.2 Origination Volume and Share Over Time

First lien origination volume decreased in Q4 2023, with approximately \$300 billion in originations, which represents a decrease in issuance of 22.1% from Q3 2023. Ginnie Mae’s share of total origination increased from 26.4% to 28.5% in Q4 2023, while portfolio origination decreased from 26.1% to 19.8%.

Figure 27. First Lien Origination Volume

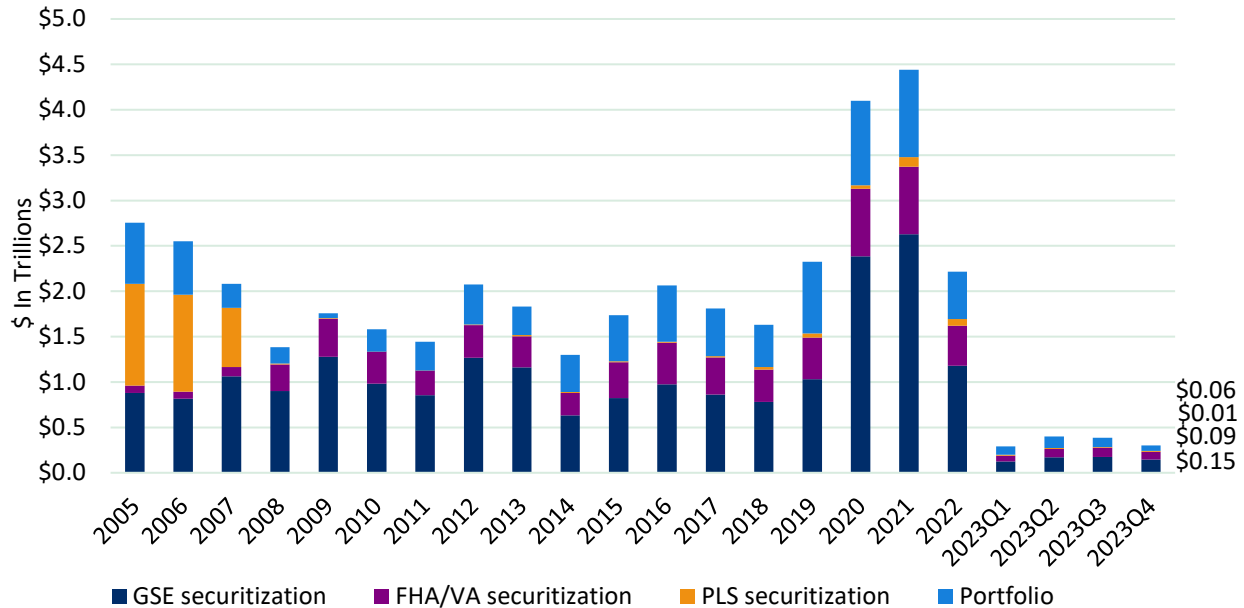
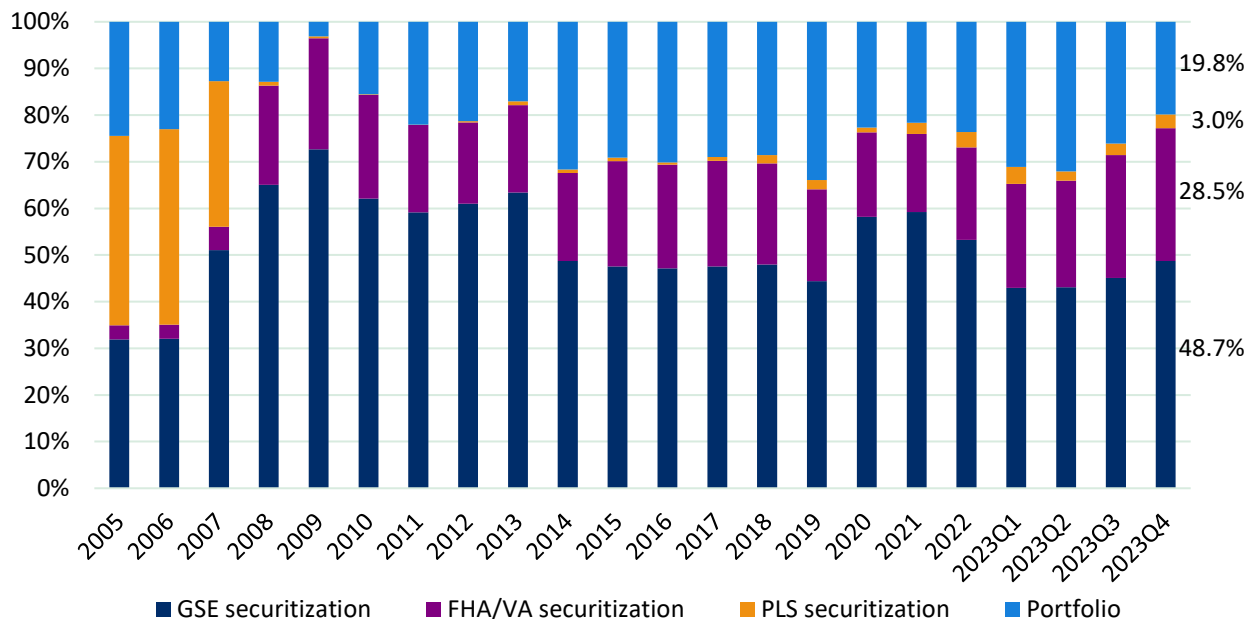


Figure 28. First Lien Origination Share



Source: Inside Mortgage Finance. Note: Data as of Q4 2023.

6.3 Agency Issuance and Agency Outstanding by State

Ginnie Mae MBS represents approximately 38% of new agency issuance over the past year, roughly 11% higher than Ginnie Mae’s 27% share of agency outstanding. The share of Ginnie Mae’s new agency issuance varies across states, with the highest Ginnie Mae share being Alaska (60%) and the lowest in the District of Columbia (22%). The highest Ginnie Mae outstanding share is in Mississippi and Alaska (49%) and the lowest in the District of Columbia (14%).

Table 6. Agency Issuance Breakdown by State

National	Agency Issuance (past 1 year)				Agency Outstanding (past 1 year)			
	GNMA Share by UPB	GNMA Loan Count	GNMA Avg. Loan Size (000)	GSE Avg. Loan Size (000)	GNMA Share by UPB	GNMA Loan Count	GNMA Avg. Loan Size (000)	GSE Avg. Loan Size (000)
	38%	1,463,311	298.53	303.62	27%	11,183,658	210.88	211.51
AK	60%	3,881	354.85	308.34	49%	37,918	263.73	220.30
AL	53%	35,376	235.13	246.72	42%	247,749	163.47	178.58
AR	47%	18,384	202.24	235.40	40%	141,374	137.22	162.82
AZ	39%	44,444	338.93	342.58	26%	291,507	231.21	228.08
CA	33%	83,980	473.48	471.02	17%	716,160	336.52	319.77
CO	35%	30,681	420.34	411.28	24%	223,022	302.21	280.01
CT	33%	11,551	281.55	290.80	26%	108,808	204.95	208.67
DC	22%	1,026	516.74	437.32	14%	9,316	390.73	347.42
DE	38%	6,483	287.61	308.85	32%	54,052	209.06	212.35
FL	42%	142,299	321.46	317.38	33%	903,485	223.58	215.95
GA	45%	78,911	278.56	309.01	35%	520,684	189.37	209.96
HI	46%	3,340	629.86	523.93	33%	34,466	472.93	356.68
IA	33%	11,152	194.23	204.06	23%	85,600	137.85	148.20
ID	35%	8,984	344.44	333.00	25%	66,770	229.14	224.96
IL	29%	45,136	220.34	251.46	23%	380,311	163.29	179.22
IN	38%	38,963	204.18	221.59	31%	289,021	139.78	152.55
KS	38%	12,683	205.71	231.32	30%	98,642	144.97	164.36
KY	47%	23,781	208.65	223.88	36%	171,779	148.45	156.43
LA	53%	25,852	211.16	238.25	41%	210,108	160.39	176.84
MA	29%	13,552	398.80	393.59	17%	118,225	290.97	267.22
MD	44%	33,361	355.08	345.10	34%	301,916	268.95	248.19
ME	34%	4,632	264.61	284.96	26%	38,924	182.92	193.08
MI	28%	34,620	197.35	222.58	21%	283,926	137.71	156.83
MN	24%	16,910	264.67	284.75	18%	162,713	186.22	198.89
MO	38%	32,058	210.53	230.53	30%	251,372	146.79	163.01
MS	59%	16,912	212.31	225.33	49%	127,480	149.04	161.52
MT	33%	3,721	332.05	325.78	24%	32,971	216.55	217.84
NC	40%	63,810	273.59	303.20	30%	432,230	184.86	205.32
ND	35%	1,950	250.46	247.92	25%	17,343	195.47	183.10
NE	36%	7,905	233.80	234.86	27%	66,302	155.35	161.78
NH	29%	4,321	337.51	328.44	23%	39,094	232.00	216.50
NJ	31%	27,634	346.20	359.92	22%	239,344	246.92	254.34
NM	48%	12,231	259.00	272.07	39%	98,540	172.52	179.73
NV	43%	19,614	363.47	347.01	32%	140,481	257.69	237.49
NY	27%	31,306	313.19	344.38	20%	314,373	215.35	248.76
OH	37%	53,882	198.34	210.70	30%	436,945	134.80	150.27
OK	49%	24,536	214.08	230.89	43%	194,623	146.44	164.03
OR	29%	13,321	367.26	376.08	20%	114,764	260.53	253.69
PA	31%	42,621	212.95	257.38	26%	398,164	151.70	182.58
RI	45%	4,383	353.83	320.75	31%	37,198	241.95	212.86
SC	45%	39,031	271.15	274.16	36%	248,738	191.77	194.30
SD	42%	3,874	256.73	252.43	31%	30,167	179.00	177.68
TN	41%	41,129	278.90	298.05	32%	279,921	185.41	206.54
TX	40%	166,759	289.21	321.53	33%	1,159,573	192.31	216.79
UT	33%	14,480	399.55	399.40	20%	101,021	274.20	266.51
VA	48%	52,757	345.90	342.25	37%	458,706	261.61	249.23
VI	26%	79	406.25	428.30	24%	804	262.44	305.42
VT	24%	1,309	256.60	276.91	19%	12,410	183.72	181.39
WA	32%	27,381	417.77	429.24	22%	239,408	293.22	290.21
WI	27%	15,169	223.52	238.07	18%	127,230	160.34	163.03
WV	54%	8,073	204.62	198.18	45%	62,443	147.81	145.51
WY	46%	3,083	284.94	277.55	36%	25,537	210.28	201.54

Source: Recursion. Note: Outstanding balance based on loan balance as of January 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 January 2024, the weighted average coupon (WAC) on outstanding Ginnie Mae MBS increased slightly from 3.51% in December 2023 to 3.54% as seen in **Figure 29**. **Figure 30** illustrates that loans originated since 2019 account for approximately 81% of Ginnie Mae MBS collateral outstanding.

Figure 29. Outstanding Ginnie Mae MBS Balance, by Coupon

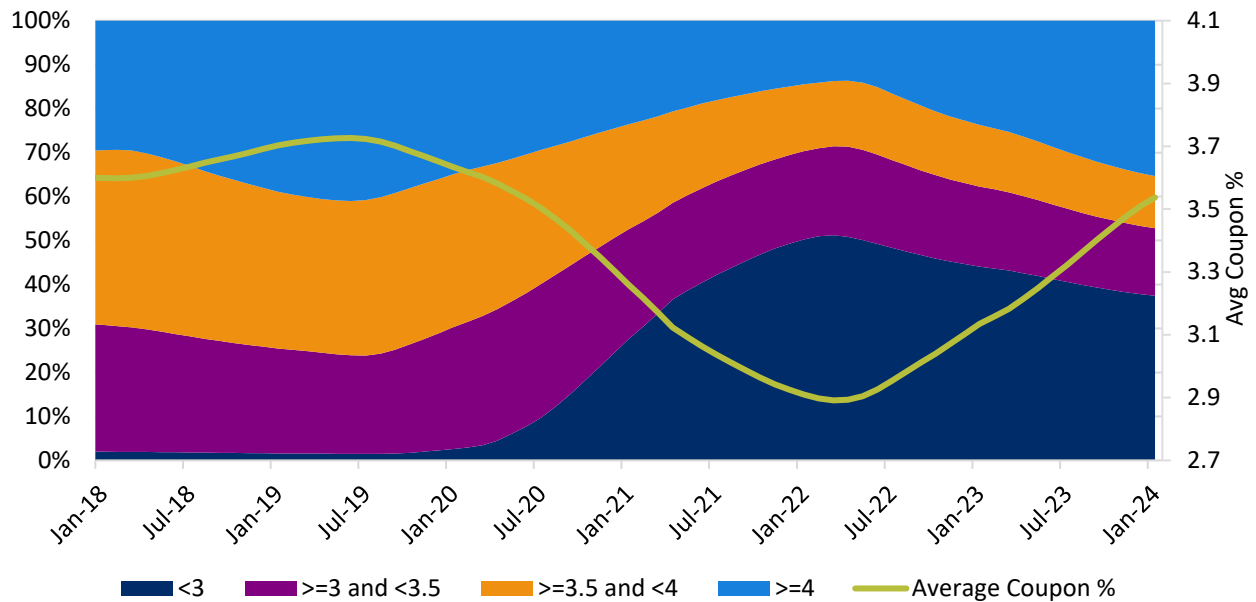
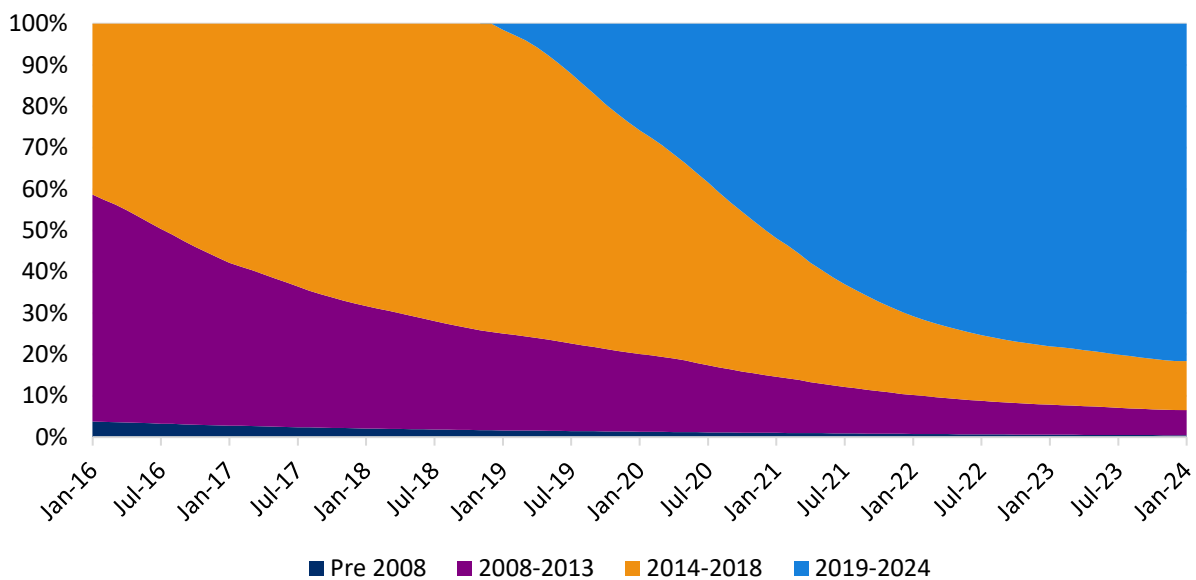


Figure 30. Outstanding Ginnie Mae MBS Balance, by Vintage



Source: Recursion. Note: January 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 January was approximately \$10.3 billion. This represents a 32.86% MoM increase from \$7.8 billion in December 2023, and a 36.56% increase YoY from \$7.6 billion in January 2023. Approximately \$485.2 million of the January 2024 issuance volume were Multifamily MBS having coupons over 5.0% and approximately \$4.5 billion were Single-Family MBS having coupons over 6.0%. Roughly \$1.0 billion of previously securitized REMICs were re-securitized into new REMIC deals in January.

Figure 31. Ginnie Mae Single-Family and Multifamily REMIC Issuance

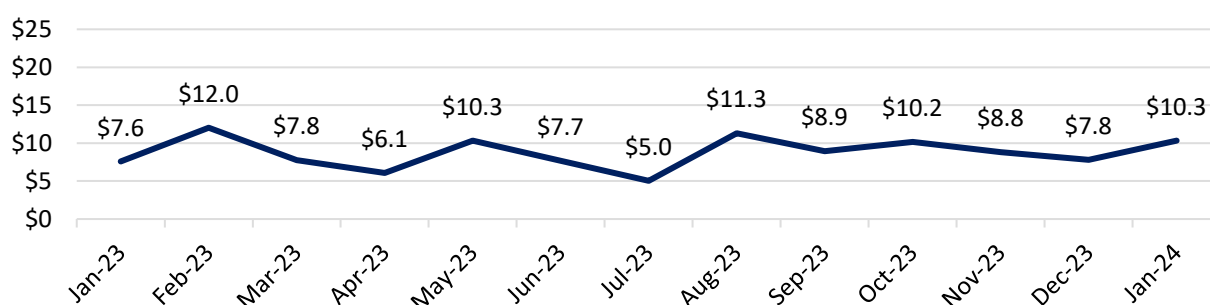


Table 7. January 2024 REMIC Collateral Coupon Distribution

Net Coupon (%)	Approx. Ginnie Mae MBS amount securitized into REMIC Deals (\$MM) ¹	% Breakdown of REMIC Collateral by coupon
Multifamily		
3.501-4.000	98.6	11.5%
4.001-4.501	276.5	32.1%
5.001-5.501	365.0	42.4%
5.501-6.000	120.3	14.0%
Subtotal	860.3	100.0%
Single-Family		
ReREMIC	1,038.3	10.9%
2.501-3.001	181.3	1.9%
3.001-3.501	440.4	4.6%
4.501-5.001	63.8	0.7%
5.001-5.501	268.0	2.8%
5.501-6.001	2,955.3	31.1%
6.001-6.501	2,543.3	26.8%
6.501-7.001	1,718.7	18.1%
>7.001	279.2	2.9%
Subtotal	9,488.4	100.0%
Grand Total	10,348.7	100.0%

Source: Ginnie Mae Disclosure Files

¹Totals may not sum due to rounding.

7.2 REMIC Market Snapshot

- In January 2024, Ginnie Mae, Freddie Mac, and Fannie Mae saw decreases in their single-family REMIC issuance collateral coupon of 48 basis points, 44 basis points, and 3 basis points, respectively.
- In January 2024, Ginnie Mae and Freddie Mac saw increases of 52 basis points and 63 basis points, respectively, in their multifamily REMIC issuance collateral coupon. Fannie Mae issued one multifamily REMIC deal in January with a multifamily REMIC issuance collateral coupon of 4.50%.
- In January 2024, Freddie Mac and Fannie Mae issued 13 deals and 5 deals, respectively, across SF and MF. That was a decrease of 7 deals and 1 deal, respectively. Ginnie Mae issued 18 deals, across SF and MF, an increase of 2 deals MoM.
- In January 2024, total single-family and multifamily issuance across the three agencies fell 1.5% or \$0.22 billion from December.

Figure 32. January 2024 REMIC Issuance by Agency (\$Billion)

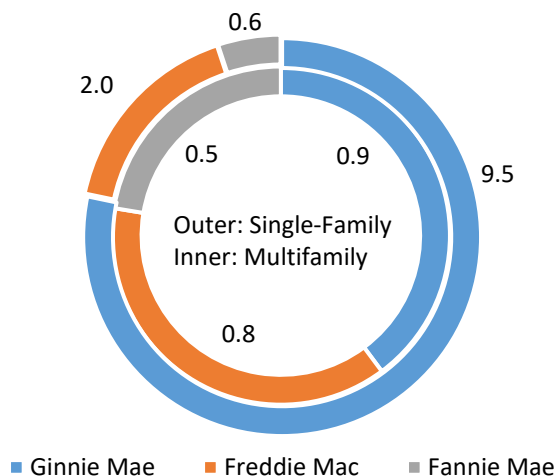


Table 8. Monthly REMIC Issuance by Agency

	SF REMIC Issuance Volume (\$B)	% of SF REMIC Issuance Volume	Number of SF REMIC Transactions	MF REMIC Issuance Volume (\$B)	% of MF REMIC Issuance Volume	Number of MF REMIC Transactions
Ginnie Mae	9.49	78.3%	12	0.86	39.8%	6
Freddie Mac	2.02	16.6%	11	0.82	37.8%	2
Fannie Mae	0.62	5.1%	4	0.48	22.4%	1
Total ²	\$12.12	100%	27	\$2.16	100%	9

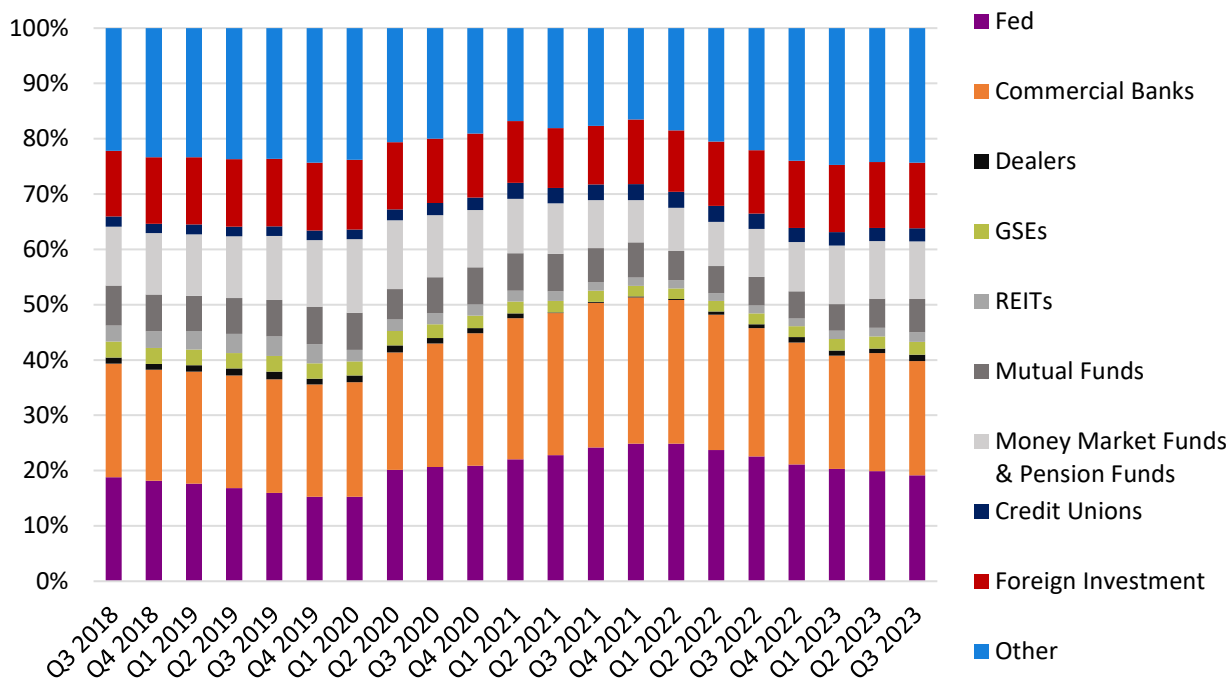
Source: Ginnie Mae Disclosure Files

² Totals may not sum due to rounding.

8 MBS OWNERSHIP

As of Q3 2023, the largest holders of agency debt (agency MBS + agency notes and bonds) included commercial banks (21%), the Federal Reserve (19%), and foreign investors (12%). The Federal Reserve’s share decreased slightly by 1% in the third quarter of 2023 as compared to the second quarter of 2023. Out of the approximately \$2.53 trillion in holdings as of the end of December 2023, roughly \$1.92 trillion was held by the top 25 domestic banks per **Table 9** below.

Figure 33. Who Owns Total Agency Debt?



Source: Federal Reserve Flow of Funds. Note: The “other” category includes primarily life insurance companies, state and local governments, households, and nonprofits. Data as of Q3 2023.

8.1 Commercial Bank Holdings of Agency MBS

Table 9. Commercial Bank Holdings of Agency MBS

	Commercial Bank Holdings (\$Billions)								
	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24
Largest 25 Domestic Banks	1,947.1	1,961.3	1,955.1	1,944.4	1,940.1	1,921.3	1,927.7	1,907.9	1,915.6
Small Domestic Banks	628.4	618.2	610.5	602.0	587.2	578.1	572.8	581.8	581.0
Foreign Related Banks	24.0	26.2	24.3	23.2	25.9	26.7	30.1	27.6	29.1
Total, Seasonally Adjusted	2,599.5	2,605.7	2,589.9	2,569.6	2,553.2	2,526.1	2,530.6	2,517.3	2,525.7

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

8.2 Bank and Thrift Residential MBS Holdings

In Q4 2023, MBS holdings at banks and thrifts increased for the first time since Q4 2021 on a QoQ basis. The increase was mostly driven by GSE pass-throughs, Ginnie Mae pass-throughs, and Agency CMO holdings. Quarterly increases in Private MBS and Private CMO holdings were marginal, \$0.30 billion and \$1.42 billion, respectively. Total bank and thrift MBS holdings decreased by approximately 6.7% from Q4 2022 and increased 5.8% from Q3 2023. Out of the \$2.26 trillion in MBS holdings at banks and thrifts as of Q4 2023, \$1.35 trillion were GSE pass-throughs and \$414 billion were Ginnie Mae pass-throughs.

Table 10. Bank and Thrift Residential MBS Holdings

Year	All Banks & Thrifts (\$ in billions)						All MBS (\$ in billions)	
	Total	GSE PT	GNMA PT	Private MBS	Agency CMO	Private CMO	Banks	Thrifts
2002	\$832.50	\$376.11	\$101.46	\$20.08	\$244.98	\$89.88	\$702.44	\$209.66
2003	\$899.89	\$461.72	\$75.11	\$19.40	\$236.81	\$106.86	\$775.66	\$206.45
2004	\$1,011.01	\$572.40	\$49.33	\$20.55	\$208.18	\$160.55	\$879.75	\$234.31
2005	\$1,033.77	\$566.81	\$35.92	\$29.09	\$190.70	\$211.25	\$897.06	\$242.69
2006	\$1,124.46	\$628.52	\$31.13	\$42.32	\$179.21	\$243.28	\$983.49	\$223.42
2007	\$1,149.10	\$559.75	\$31.58	\$26.26	\$174.27	\$357.24	\$971.42	\$264.59
2008	\$1,218.77	\$638.78	\$100.36	\$12.93	\$207.66	\$259.04	\$1,088.00	\$211.73
2009	\$1,275.52	\$629.19	\$155.00	\$7.53	\$271.17	\$212.64	\$1,161.67	\$184.07
2010	\$1,433.38	\$600.80	\$163.13	\$7.34	\$397.30	\$181.61	\$1,233.28	\$200.09
2011	\$1,566.88	\$627.37	\$214.81	\$3.28	\$478.82	\$167.70	\$1,359.24	\$207.64
2012	\$1,578.86	\$707.87	\$242.54	\$17.16	\$469.27	\$138.67	\$1,430.63	\$148.22
2013	\$1,506.60	\$705.97	\$231.93	\$26.11	\$432.60	\$114.15	\$1,363.65	\$142.94
2014	\$1,539.32	\$733.71	\$230.45	\$20.33	\$449.90	\$104.94	\$1,409.84	\$129.48
2015	\$1,643.56	\$823.10	\$292.30	\$11.14	\$445.39	\$71.63	\$1,512.67	\$130.89
2016	\$1,736.93	\$930.67	\$323.46	\$7.40	\$419.80	\$55.60	\$1,576.07	\$160.86
2017	\$1,844.15	\$1,010.83	\$367.70	\$4.63	\$413.97	\$47.01	\$1,672.93	\$171.22
2018	\$1,814.97	\$980.56	\$380.43	\$2.69	\$416.59	\$34.69	\$1,634.99	\$179.98
1Q19	\$1,844.99	\$1,001.61	\$383.49	\$3.06	\$422.18	\$34.65	\$1,673.40	\$171.59
2Q19	\$1,907.13	\$1,037.93	\$407.97	\$2.90	\$421.56	\$36.76	\$1,727.65	\$179.47
3Q19	\$1,975.78	\$1,079.82	\$427.10	\$4.74	\$428.69	\$35.44	\$1,786.74	\$189.04
2019	\$1,985.38	\$1,089.41	\$426.85	\$4.62	\$428.99	\$35.52	\$1,796.29	\$189.09
1Q20	\$2,107.66	\$1,173.36	\$448.34	\$4.65	\$443.73	\$37.57	\$1,907.02	\$200.64
2Q20	\$2,195.19	\$1,228.87	\$441.06	\$5.00	\$478.11	\$42.14	\$1,946.36	\$248.83
3Q20	\$2,310.42	\$1,349.48	\$415.24	\$4.43	\$499.50	\$41.78	\$2,040.61	\$269.81
4Q20	\$2,520.90	\$1,537.54	\$390.66	\$3.94	\$548.65	\$40.10	\$2,210.22	\$310.68
1Q21	\$2,690.92	\$1,713.78	\$374.63	\$4.88	\$555.35	\$42.28	\$2,350.94	\$339.98
2Q21	\$2,781.91	\$1,825.80	\$352.77	\$4.77	\$555.45	\$43.12	\$2,431.76	\$350.15
3Q21	\$2,858.59	\$1,886.78	\$353.12	\$4.24	\$565.51	\$48.95	\$2,487.32	\$371.27
4Q21	\$2,906.04	\$1,915.48	\$352.71	\$4.45	\$577.98	\$55.42	\$2,529.78	\$376.26
1Q22	\$2,799.22	\$1,817.72	\$368.43	\$4.04	\$548.60	\$60.43	\$2,476.12	\$323.10
2Q22	\$2,623.79	\$1,665.94	\$369.20	\$3.81	\$523.01	\$61.83	\$2,321.17	\$302.62
3Q22	\$2,431.57	\$1,520.24	\$352.02	\$3.29	\$496.72	\$59.30	\$2,156.16	\$275.41
4Q22	\$2,423.87	\$1,505.65	\$371.91	\$3.96	\$481.69	\$60.65	\$2,154.46	\$269.41
1Q23	\$2,356.93	\$1,441.18	\$386.32	\$4.12	\$465.24	\$60.08	\$2,088.27	\$268.65
2Q23	\$2,280.38	\$1,389.37	\$383.52	\$3.03	\$446.19	\$58.27	\$2,022.46	\$257.92
3Q23	\$2,137.37	\$1,289.29	\$372.71	\$2.63	\$416.84	\$55.89	\$1,892.93	\$244.44
4Q23	\$2,260.47	\$1,351.08	\$414.23	\$2.93	\$434.92	\$57.31	\$2,008.88	\$251.58
Change:								
3Q23-4Q23	5.8%	4.8%	11.1%	11.3%	4.3%	2.5%	6.1%	2.9%
4Q22-4Q23	-6.7%	-10.3%	11.4%	-26.0%	-9.7%	-5.5%	-6.8%	-6.6%

Source: Inside Mortgage Finance. Notes: Data as of Q4 2023.

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

<i>Rank</i>	<i>Institution</i>	<i>Total</i>	<i>GSE PT</i>	<i>GNMA PT</i>	<i>Agency CMO</i>	<i>Non-Agency</i>	<i>Share</i>
1	Bank Of America Corporation	\$429,000.0	\$353,435.0	\$68,818.0	\$6,594.0	\$153.0	19.0%
2	Wells Fargo & Company	\$234,985.0	\$149,863.0	\$82,730.0	\$2,330.0	\$62.0	10.4%
3	JPMorgan Chase & Co.	\$161,262.0	\$69,016.0	\$79,365.0	\$498.0	\$12,383.0	7.1%
4	Charles Schwab	\$147,850.0	\$83,326.0	\$5,336.0	\$59,188.0	\$0.0	6.5%
5	Truist Bank	\$98,894.0	\$50,122.0	\$11,231.0	\$34,560.0	\$2,981.0	4.4%
6	U.S. Bancorp	\$97,111.3	\$61,113.2	\$25,499.7	\$10,498.3	\$0.1	4.3%
7	Citigroup Inc.	\$94,672.0	\$66,372.0	\$25,588.0	\$2,097.0	\$615.0	4.2%
8	PNC Bank, National Association	\$68,836.7	\$58,492.9	\$3,870.3	\$5,535.5	\$938.0	3.0%
9	Capital One Financial Corporation	\$63,267.7	\$29,843.1	\$14,746.7	\$18,358.3	\$319.6	2.8%
10	Morgan Stanley	\$49,296.0	\$30,822.0	\$6,751.0	\$11,676.0	\$47.0	2.2%
11	Bank Of New York Mellon Corporation	\$41,122.0	\$26,607.0	\$3,558.0	\$9,191.0	\$1,766.0	1.8%
12	USAA Federal Savings Bank	\$36,810.0	\$31,072.0	\$1,803.0	\$3,935.0	\$0.0	1.6%
13	State Street Bank and Trust Company	\$36,774.3	\$13,208.0	\$9,013.0	\$12,671.3	\$1,882.0	1.6%
14	BMO Harris Bank National Association	\$29,103.4	\$3,977.6	\$5,992.8	\$19,133.0	\$0.0	1.3%
15	Citizens Bank, National Association	\$27,334.7	\$12,202.9	\$5,936.5	\$9,195.3	\$0.0	1.2%
16	The Huntington National Bank	\$27,020.9	\$10,758.6	\$8,847.3	\$7,295.9	\$119.1	1.2%
17	TD Bank USA/TD Bank NA	\$25,435.6	\$1,447.7	\$73.3	\$23,886.4	\$28.1	1.1%
18	HSBC Bank USA, National Association	\$24,277.1	\$3,876.7	\$15,327.1	\$5,072.7	\$0.6	1.1%
19	KeyBank National Association	\$24,113.6	\$3,573.4	\$166.8	\$20,373.4	\$0.0	1.1%
20	Ally Bank	\$19,074.0	\$11,970.0	\$1,750.0	\$1,530.0	\$3,824.0	0.8%
Total	Top 20	\$1,736,240.2	\$1,071,099.1	\$376,403.6	\$263,619.1	\$25,118.5	76.8%

Source: Inside Mortgage Finance. Notes: Data as of Q4 2023.

8.3 SOMA Holdings

FOMC and Economic Highlights:

- *Federal Open Market Committee Meeting 1/31/2024 Press Release:*
 - “The Committee decided to maintain the target range for the federal funds rate at 5-1/4 to 5-1/2 percent.”
 - “The Committee does not expect it will be appropriate to reduce the target range until it has gained greater confidence that inflation is moving sustainably toward 2 percent.”
 - “The Committee is strongly committed to returning inflation to its 2 percent objective.”
 - “The Committee will continue reducing its holdings of Treasury securities and agency debt and agency mortgage-backed securities, as described in its previously announced plans.”
- Powell indicated in his press conference that:
 - “We believe that our policy rate is likely at its peak for this tightening cycle and that, if the economy evolves broadly as expected, it will likely be appropriate to begin dialing back policy restraint at some point this year.”
 - “Growth is solid to strong over the course of last year.”
 - “We’ve had just about two years now of unemployment under 4%. That hasn’t happened in 50 years.”
 - “We’ve got six months of good inflation data and an expectation that there’s more to come.”

SOMA Portfolio Highlights (January 3, 2024 vs. January 31, 2024)

- SOMA holdings of domestic securities totaled \$7.0 trillion on Jan 31 (a decrease of \$72.7 billion or -1.03% from Jan 3). \$58.0 billion (80% of the total decrease) was in U.S. Treasury holdings and \$14.6 billion (20% of the total decrease) was in Agency MBS.
- Since the institution of redemption caps in June 2022, SOMA holdings have decreased by \$1.391 trillion. The total reduction of holdings of U.S. Treasuries was \$1.1 trillion and \$289.6 billion for Agency MBS. This represents 94.1% and 42.4% of the total redemption cap over the period for U.S. Treasuries and Agency MBS, respectively.
- Agency MBS comprise about 34% of the total SOMA portfolio. The \$14.6 billion monthly decrease was primarily due to MBS principal repayments rather than outright sales and was comprised of a \$6.2 billion decrease in Fannie Mae holdings, a \$5.3 billion decrease in Freddie Mac holdings, and a \$3.1 billion decrease in Ginnie Mae holdings. Since the Fed’s QT program began in June 2022, there have only been 19 outright sales of Agency MBS specified pools, totaling \$552 million.
- Over 99% of SOMA Agency MBS holdings have coupons of 4.5% or lower with an average WAC of 2.507%.
- The redemption cap for the SOMA’s Agency MBS holdings is set at \$35 billion per month. The reduction of \$14.6 billion in Agency MBS represents 42% of the monthly liquidation cap.

Table 12. SOMA Holdings as of January 3, 2024 and January 31, 2024 (\$ Billions)

Holdings by Security Type	January 3, 2024		January 31, 2024		Month-Over-Month	
	SOMA Holdings	% Share	SOMA Holdings	% Share	\$ Change	% Change ³
U.S. Treasuries	\$4,639.5	65.59%	\$4,581.5	65.44%	-\$58.0	-1.25%
Federal Agency Debt	\$2.3	0.03%	\$2.3	0.03%	\$0.0	0.00%
Agency MBS	\$2,423.5	34.26%	\$2,408.9	34.41%	-\$14.6	-0.60%
Agency Commercial MBS	\$8.2	0.12%	\$8.2	0.12%	\$0.0	-0.09%
Total SOMA Holdings	\$7,073.6	100.0%	\$7,001.0	100.0%	-\$72.7	-1.03%

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

Agency	Singly-Family AMBS Outstanding January 1, 2024	% AMBS Outstanding	SOMA AMBS Holdings January 3, 2024	% SOMA Holdings	SOMA AMBS Holdings January 31, 2024	% SOMA Holdings
Fannie Mae	\$3,577.5	40.5%	\$997.9	41.2%	\$991.7	41.2%
Freddie Mac	\$2,950.8	33.4%	\$926.0	38.2%	\$920.8	38.2%
Ginnie Mae	\$2,309.5	26.1%	\$499.6	20.6%	\$496.5	20.6%
Total	\$8,837.7	100.0%	\$2,438.8	100.0%	\$2,423.5	100.0%

Table 14. SOMA Agency MBS Liquidations from Jan 3, 2024 to Jan 31, 2024 (\$ Billions)

	MBS Holdings as of 1.03.24	MBS Holdings 1.31.24	Liquidated Amount	Liquidation Cap ⁴	% of Liquidation Cap
Total	\$2,423.5	\$2,408.9	\$14.6	\$35.0	42%

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

³ Table 12 illustrates figures in \$ billions, any change less than \$50 million will be expressed as a "\$0.0" change in the "\$ Change" column.

⁴ The Liquidation cap is per calendar month. Our analysis here instead covers a four-week period to maintain consistency with other analyses in this report.

8.4 Foreign Ownership of MBS

For the month of November 2023, foreign ownership of MBS represented \$1.31 trillion in Agency MBS, up approximately \$124 billion from November 2022. Total foreign ownership of Agency MBS represents roughly 14% of total Agency MBS outstanding. Total foreign ownership excluding Fed Holdings and CMO's represents roughly 24% of total Agency MBS available.

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

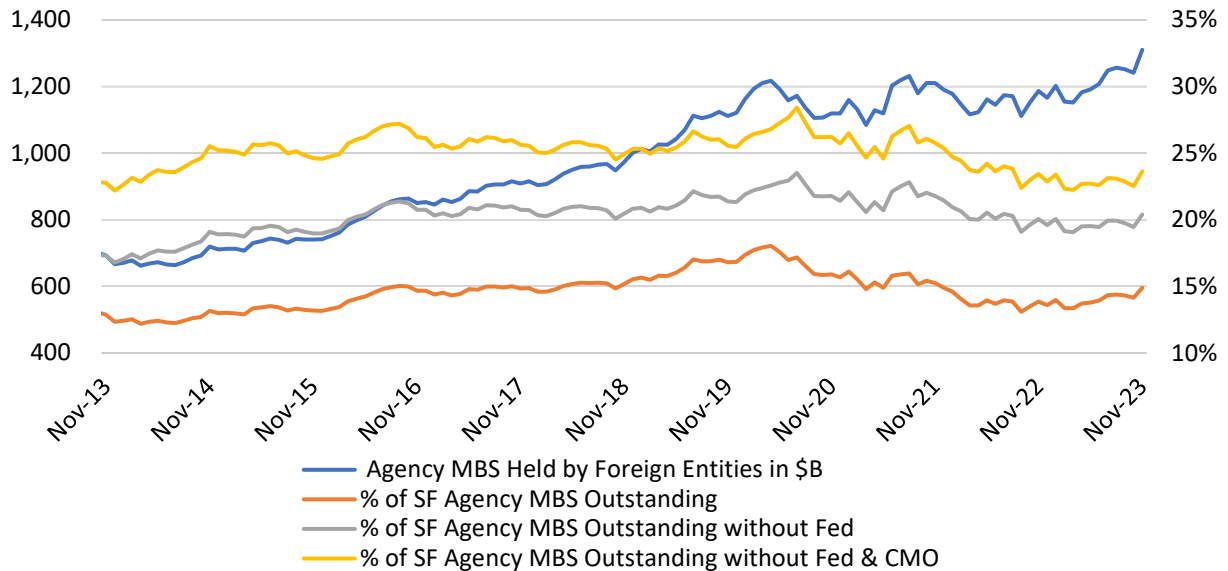
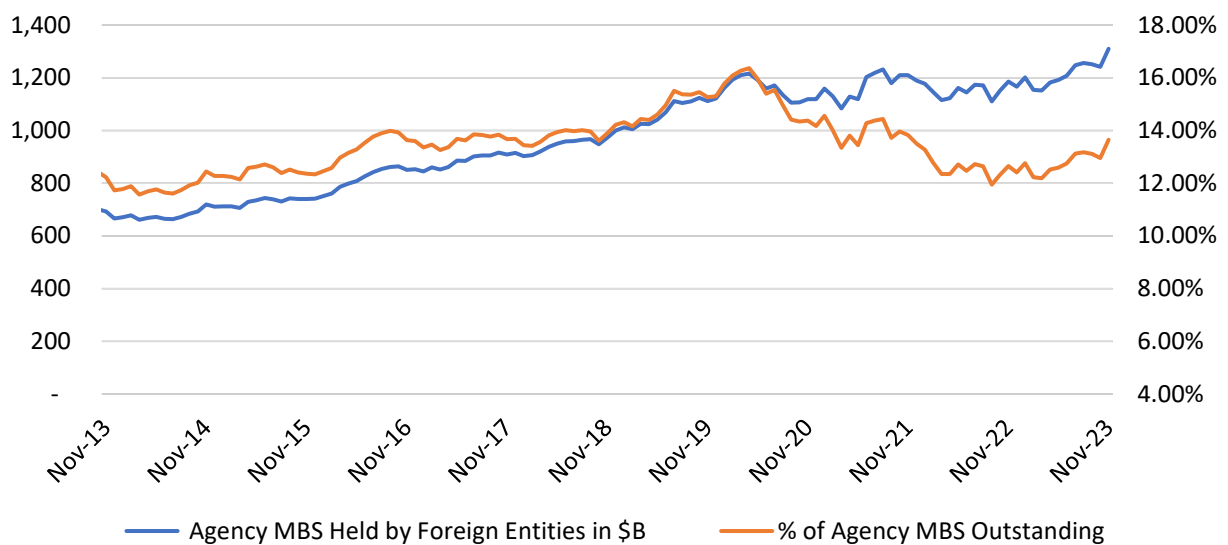


Figure 35. Agency MBS Owned by Foreign Entities (USD Billions)



Sources: TIC and Recursion, as of November 2023.

8.5 Foreign Ownership of Agency Debt and Agency MBS

The largest holders of Agency MBS were China, Japan, and Taiwan. As of September 2023, these three owned roughly 54% of all foreign owned Agency MBS. Between September 2022 and September 2023, China and Japan increased their Agency MBS holdings while Taiwan's holdings decreased. China's holdings increased by \$13.6 billion, Japan's holdings increased by \$19.7 billion, and Taiwan's holdings decreased by \$8.4 billion.

Table 15. All Agency Debt

Country	Level of Holdings (\$ Millions)				Change in Holdings (\$ Millions)			
	12/1/2022	3/1/2023	6/1/2023	9/1/2023	Q4 2022	Q1 2023	Q2 2023	Q3 2023
China	251,592	263,892	269,980	255,110	10,069	12,300	6,088	-14,870
Japan	278,069	287,051	253,357	252,463	45,300	8,982	-33,694	-894
Taiwan	210,309	212,533	208,226	201,010	856	2,224	-4,307	-7,216
Canada	97,234	105,527	105,330	116,642	7,921	8,293	-197	11,312
United Kingdom	61,393	41,101	55,682	90,017	5,045	-20,292	14,581	34,335
Luxembourg	47,240	51,202	40,971	42,656	8,681	3,962	-10,231	1,685
Ireland	22,478	25,099	36,766	39,697	4,786	2,621	11,667	2,931
Cayman Islands	30,941	29,485	30,398	37,089	-4,140	-1,456	913	6,691
South Korea	36,237	38,131	36,737	36,508	594	1,894	-1,394	-229
France	19,609	22,578	20,411	24,287	3,410	2,969	-2,167	3,876
Other	225,466	196,641	208,190	218,177	34,361	-28,825	11,549	9,987
Total	1,280,568	1,273,240	1,266,048	1,313,656	116,883	-7,328	-7,192	47,608

Table 16. Agency MBS

Country	Level of Holdings (\$ Millions)		YoY Change in Holdings (\$ Millions)
	9/1/2022	9/1/2023	
China	241,523	255,110	13,587
Japan	232,769	252,463	19,694
Taiwan	209,453	201,010	-8,443
Canada	89,313	116,642	27,329
United Kingdom	56,348	90,017	33,669
Luxembourg	38,559	42,656	4,097
Ireland	17,692	39,697	22,005
Cayman Islands	35,081	37,089	2,008
South Korea	35,643	36,508	865
France	16,199	24,287	8,088
Other	191,105	218,177	27,072
Total	1,163,685	1,313,656	149,971

Source: Treasury International Capital (TIC). Note: Level of agency debt Holdings by month data as of Q3 2023. Agency MBS as of September 2023. Table 16 includes the top 10 holders of agency debt listed as of September 2023.

9 FIXED INCOME LIQUIDITY INDICATORS

The Agency MBS average daily trading volume YTD as of month-end January 2024 was \$309 billion, which was up from a monthly average of \$255 billion for calendar year 2023. As of month-end January 2024, Agency MBS average daily trading volume increased 22.0% MoM. See footnote below for update on “Average Daily Turnover by Sector” data.

Figure 36. Average Daily Trading Volume by Sector

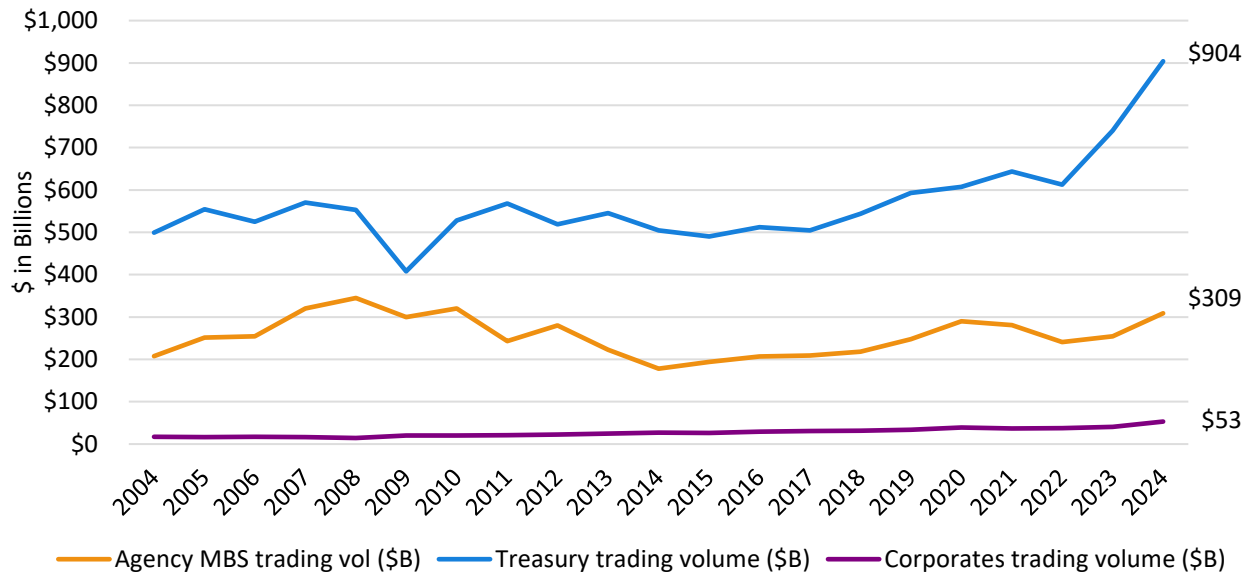
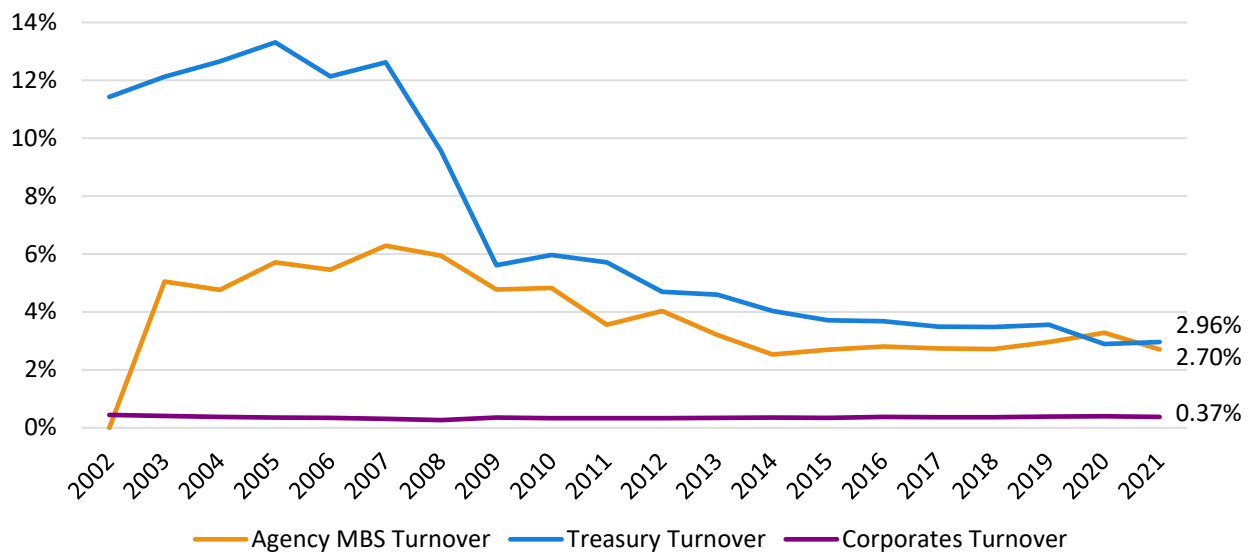


Figure 37. Average Daily Turnover by Sector



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

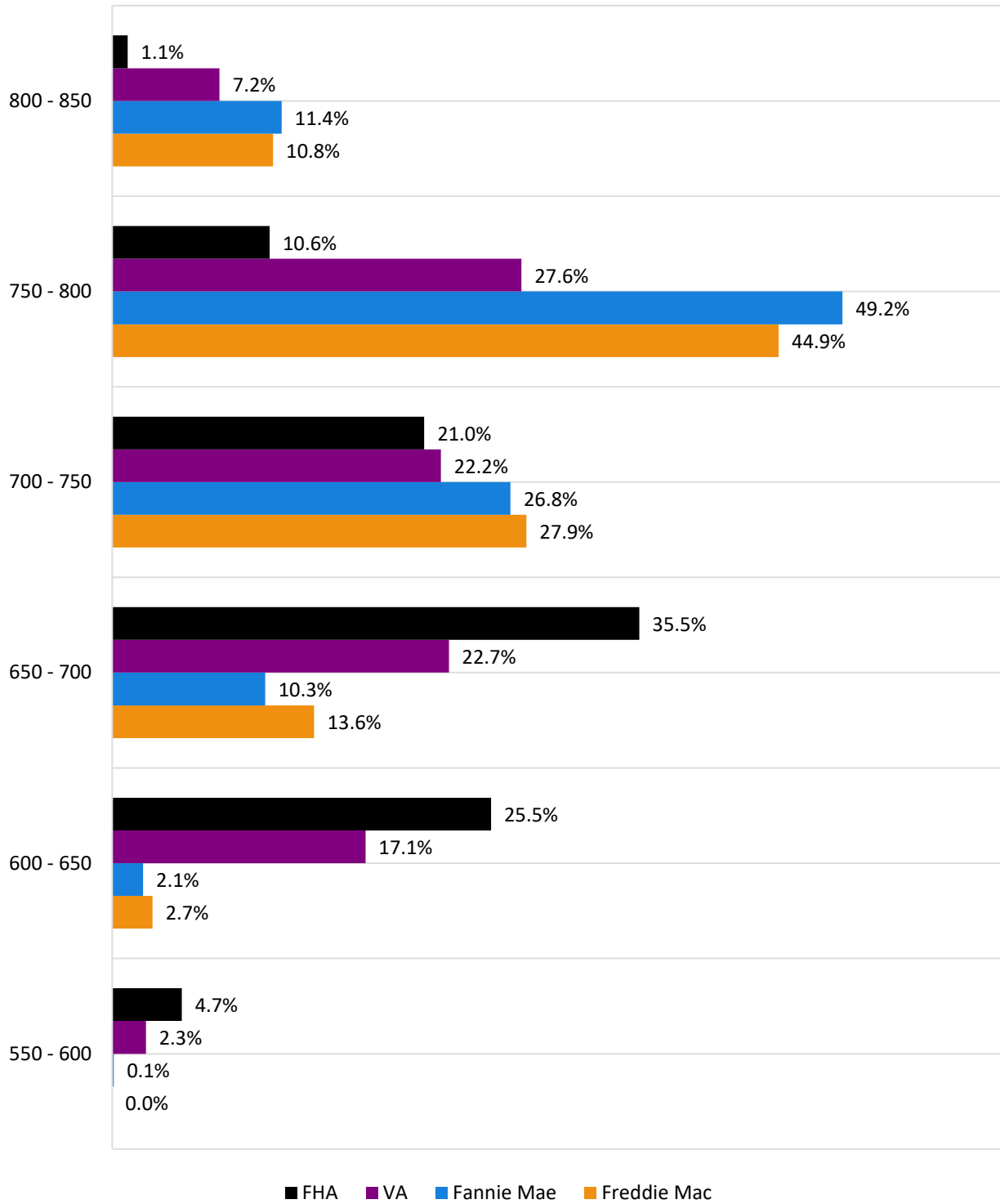
10.1 Credit Scores

Table 17. Share of Loans by FICO Score

Purchase FICO							
Names	Number of Loans	P10	P25	Median	P75	P90	Mean
All	172,079	653	694	745	781	799	734
Fannie	56,790	701	734	767	790	802	758
Freddie	48,850	689	724	761	788	802	753
Ginnie	66,439	629	656	695	745	782	700
Refi FICO							
Names	Number of Loans	P10	P25	Median	P75	P90	Mean
All	33,806	622	654	701	754	787	701
Fannie	10,540	662	698	740	776	798	735
Freddie	8,639	661	693	736	773	795	731
Ginnie	14,627	593	626	657	693	733	660
All FICO							
Names	Number of Loans	P10	P25	Median	P75	P90	Mean
All	205,885	646	686	739	778	798	729
Fannie	67,330	692	728	763	788	802	754
Freddie	57,489	684	719	758	787	801	750
Ginnie	81,066	623	649	688	737	777	693
Purchase FICO: Ginnie Mae Breakdown by Source							
Names	Number of Loans	P10	P25	Median	P75	P90	Mean
All	66,439	629	656	695	745	782	700
FHA	44,343	626	651	684	726	763	689
VA	20,025	637	676	734	778	799	725
Other	2,071	631	658	700	737	766	699
Refi FICO: Ginnie Mae Breakdown by Source							
Names	Number of Loans	P10	P25	Median	P75	P90	Mean
All	14,627	593	626	657	693	733	660
FHA	9,926	587	621	651	683	718	652
VA	4,673	609	639	672	716	758	677
Other	28	666	720	800	800	800	749
All FICO: Ginnie Mae Breakdown by Source							
Names	Number of Loans	P10	P25	Median	P75	P90	Mean
All	81,066	623	649	688	737	777	693
FHA	54,269	620	645	678	720	758	682
VA	24,698	630	664	720	771	797	716
Other	2,099	631	658	700	738	768	699

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

Figure 38. FICO Distributions by Agency



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

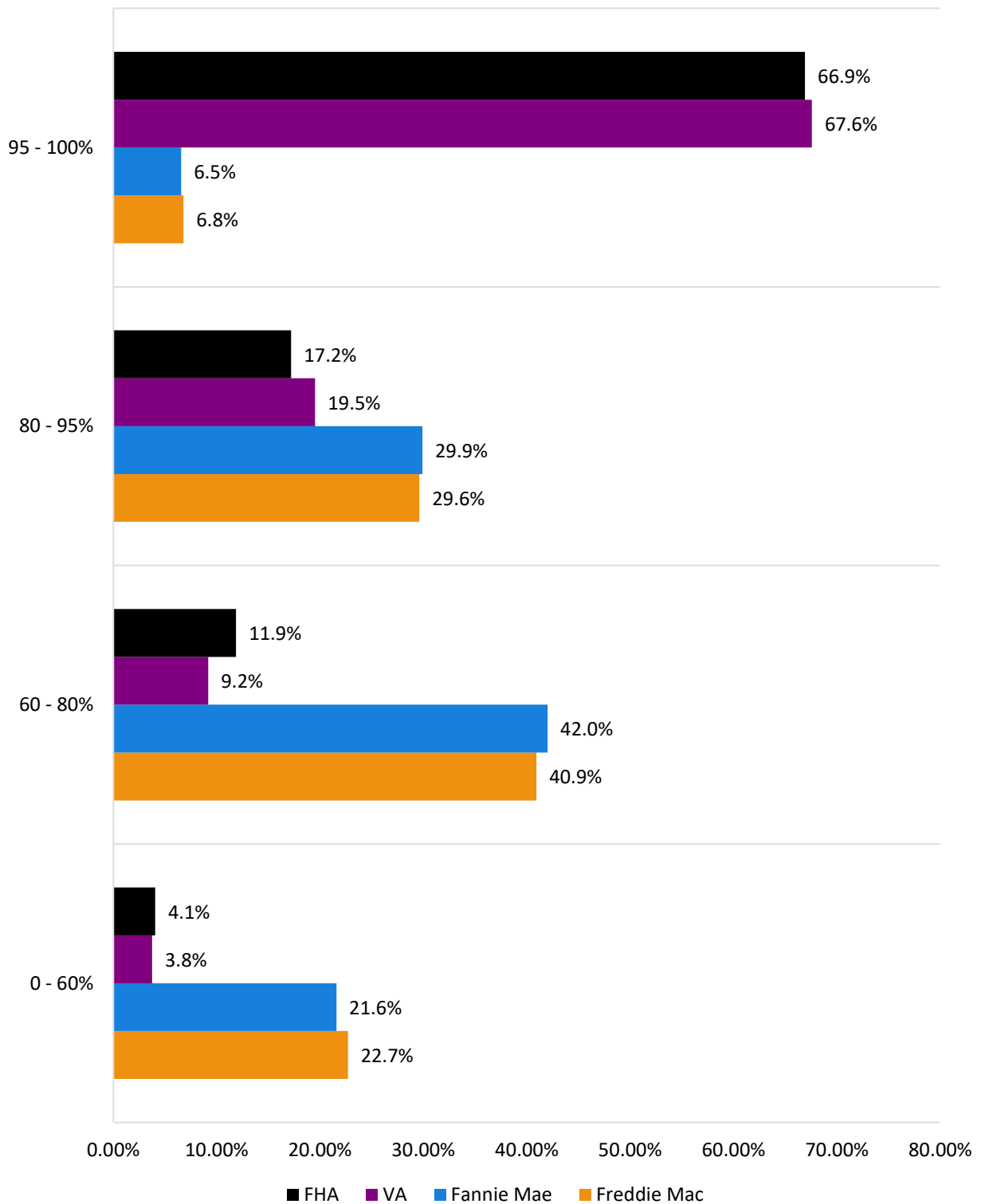
10.2 Loan-to-Value (LTV)

Table 18. Share of Loans by LTV

Purchase LTV							
Names	Number of Loans	P10	P25	Median	P75	P90	Mean
All	172,327	60	80	92	97	99	85
Fannie	56,873	53	74	80	93	95	79
Freddie	48,878	50	70	80	95	95	78
Ginnie	66,576	90	97	98	99	100	96
Refi LTV							
Names	Number of Loans	P10	P25	Median	P75	P90	Mean
All	34,393	34	51	69	80	90	65
Fannie	10,547	28	42	58	70	79	55
Freddie	8,641	29	43	59	70	79	56
Ginnie	15,205	54	69	80	85	98	76
All LTV							
Names	Number of Loans	P10	P25	Median	P75	P90	Mean
All	206,720	53	75	88	97	99	82
Fannie	67,420	46	65	80	90	95	75
Freddie	57,519	44	64	80	90	95	75
Ginnie	81,781	76	91	97	99	100	92
Purchase LTV: Ginnie Mae Breakdown by Source							
Names	Number of Loans	P10	P25	Median	P75	P90	Mean
All	66,576	90	97	98	99	100	96
FHA	44,422	91	97	97	98	98	96
VA	20,040	84	100	100	100	100	96
Other	2,114	93	98	100	101	101	97
Refi LTV: Ginnie Mae Breakdown by Source							
Names	Number of Loans	P10	P25	Median	P75	P90	Mean
All	15,205	54	69	80	85	98	76
FHA	10,088	50	65	76	81	81	71
VA	5,086	65	80	90	100	100	87
Other	31	47	73	73	86	96	73
All LTV: Ginnie Mae Breakdown by Source							
Names	Number of Loans	P10	P25	Median	P75	P90	Mean
All	81,781	76	91	97	99	100	92
FHA	54,510	75	90	97	98	98	91
VA	25,126	79	92	100	100	100	94
Other	2,145	91	98	100	101	101	97

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

Figure 39. Loan-to Value by Agency



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

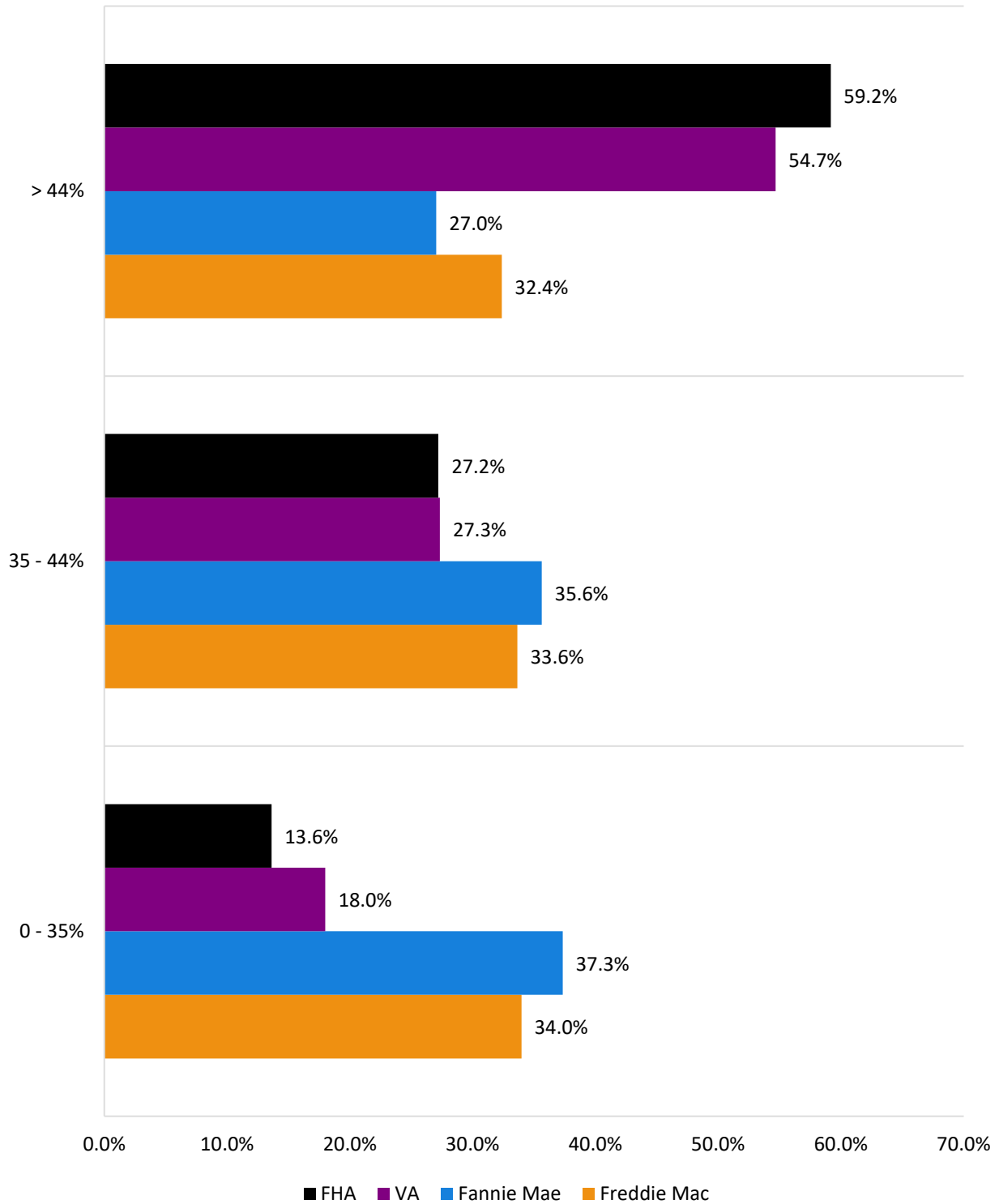
10.3 Debt-to-Income (DTI)

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	172,002	27	35	42	48	51	41
Fannie	56,873	24	32	39	45	49	38
Freddie	48,878	25	32	40	46	49	38
Ginnie	66,251	33	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	33,338	25	33	41	47	51	40
Fannie	10,547	23	30	38	44	47	38
Freddie	8,641	24	32	40	46	49	38
Ginnie	14,150	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	205,340	27	34	42	48	51	41
Fannie	67,420	24	31	39	45	48	38
Freddie	57,519	25	32	40	46	49	38
Ginnie	80,401	32	39	46	51	55	45
<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	66,251	33	39	46	52	56	45
FHA	44,403	34	41	47	52	55	46
VA	19,736	31	38	46	52	57	45
Other	2,112	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	14,150	29	36	44	50	55	43
FHA	9,811	29	36	44	50	55	43
VA	4,322	29	36	44	51	55	43
Other	17	28	31	35	38	40	34
<i>All DTI: Ginnie Mae Breakdown by Source</i>							
<i>Names</i>	<i>Number of Loans</i>	<i>P10</i>	<i>P25</i>	<i>Median</i>	<i>P75</i>	<i>P90</i>	<i>Mean</i>
All	80,401	32	39	46	51	55	45
FHA	54,214	33	40	46	52	55	45
VA	24,058	31	38	45	52	56	44
Other	2,129	27	31	36	40	42	35

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

Figure 40. Debt-to Income by Agency



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

10.4 High LTV Loans: Ginnie Mae vs. GSEs

Comparing the three-month range of November 2022 – January 2023 to the three-month range of November 2023 – January 2024, the share of high-LTV agency loans with:

- FICO scores above 750 increased by approximately 10.6%.
- DTIs below 35% decreased by approximately 15.0%.

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 71.34% of its issuances between November 2023 – January 2024 having LTVs of 95 or above, compared to 21.56% for the GSEs.

Table 20. Share of Loans with LTV > 95

	<i>Ginnie Mae</i>	<i>GSE</i>	<i>All</i>
Nov 2022 - Jan 2023	69.84%	23.37%	40.96%
Nov 2023 - Jan 2024	71.34%	21.56%	40.79%

Table 21. Agency Market Share by DTI and FICO for Loans with LTV > 95 (Nov 2022 - Jan 2023)

<i>FICO</i>						
<i>DTI</i>	<650	650-700	700-750	≥750	<i>NA</i>	<i>All</i>
<35	2.03%	3.13%	4.29%	6.53%	0.05%	16.02%
35-45	5.75%	8.68%	10.29%	11.08%	0.03%	35.84%
≥45	8.38%	14.18%	12.91%	11.33%	0.06%	46.86%
<i>NA</i>	0.27%	0.21%	0.14%	0.18%	0.46%	1.27%
<i>All</i>	16.43%	26.20%	27.63%	29.13%	0.61%	100.00%

Table 22. Agency Market Share by DTI and FICO for Loans with LTV > 95 (Nov 2023 - Jan 2024)

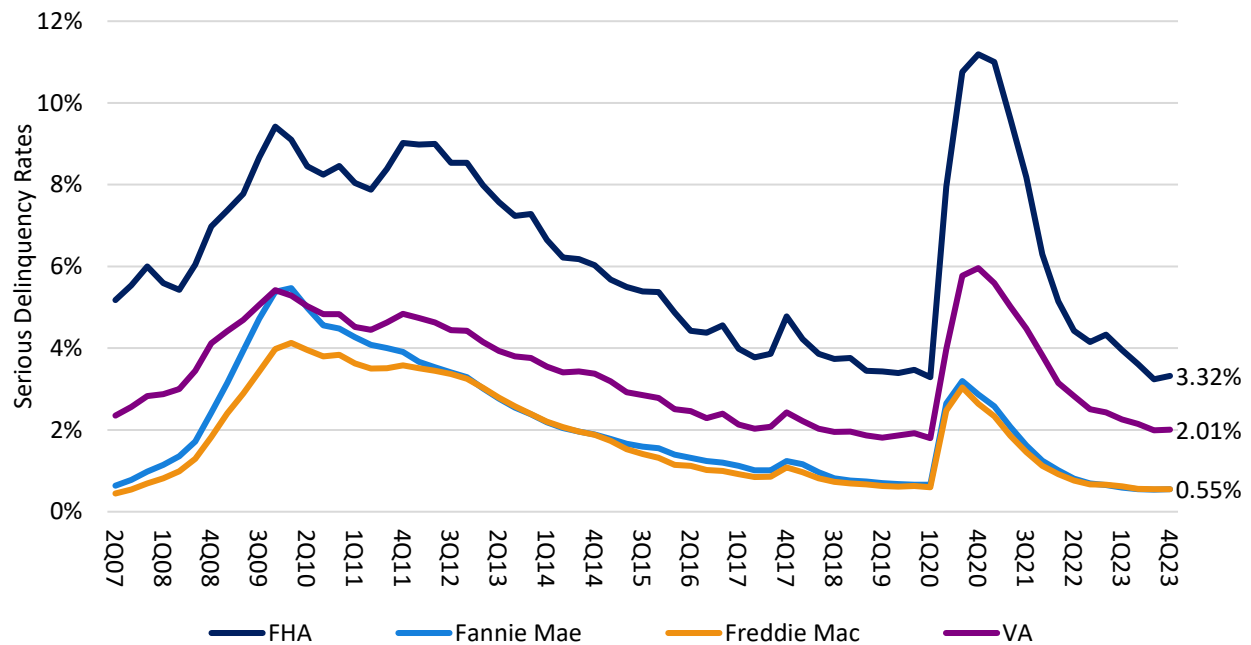
<i>FICO</i>						
<i>DTI</i>	<650	650-700	700-750	≥750	<i>NA</i>	<i>All</i>
<35	1.58%	2.46%	3.52%	6.00%	0.07%	13.62%
35-45	4.94%	7.57%	9.72%	11.97%	0.06%	34.26%
≥45	7.68%	14.05%	15.03%	14.04%	0.10%	50.89%
<i>NA</i>	0.26%	0.21%	0.16%	0.20%	0.39%	1.22%
<i>All</i>	14.47%	24.28%	28.43%	32.21%	0.61%	100.00%

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

10.5 Serious Delinquency Rates

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

Figure 41. Serious Delinquency Rates: Single-Family Loans



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

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

10.6 Credit Box

The first-time homebuyer share for agency purchase loans was 56.1% as of month-end January 2024, an increase from 55.0% in December 2023 and up from 53.9% in January 2023. Freddie Mac and Fannie Mae’s first-time homebuyer shares, 47.4% and 46.6%, respectively, as of month-end January 2024, increased 4.1% and 2.1%, respectively, YoY. Ginnie Mae’s first-time homebuyer share increased 3.9% YoY. **Table 23** shows that based on mortgages originated as of month-end January 2024, the average GSE first-time homebuyer was more likely to have a higher credit score and lower LTV than a 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 higher mortgage rates than Ginnie Mae repeat buyers.

Figure 42. First-Time Homebuyer Share: Purchase Only Loans

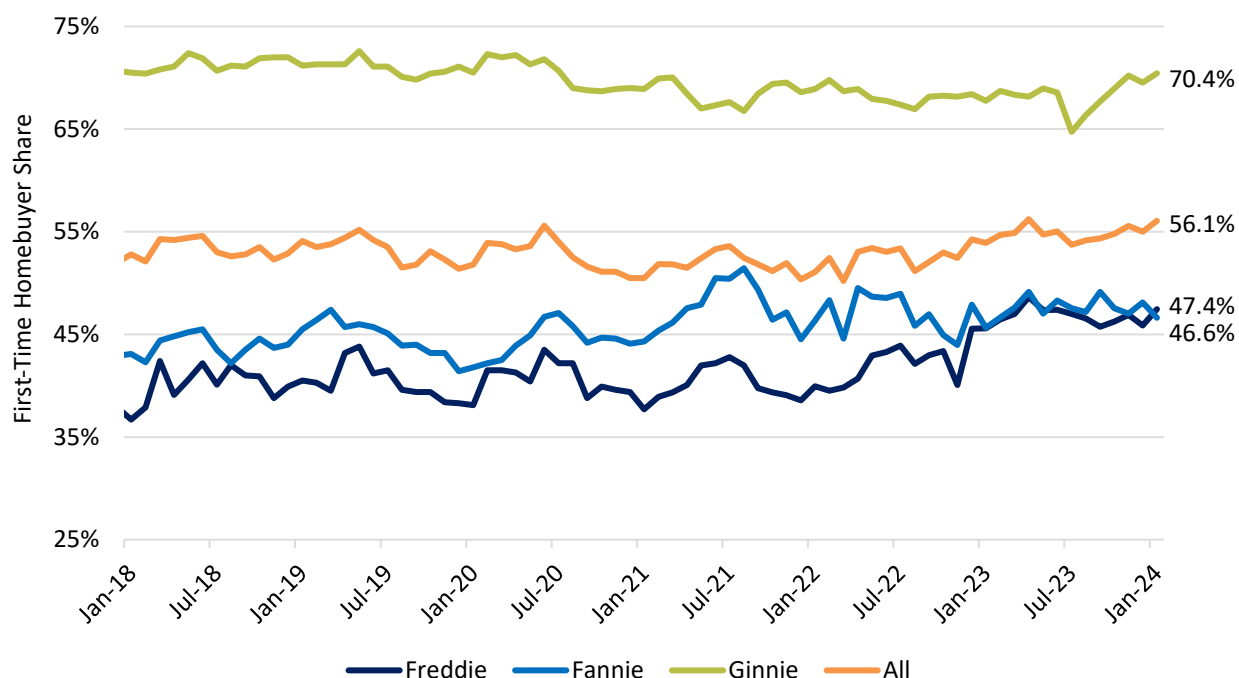


Table 23. Agency First-Time Homebuyer Share Summary

	Fannie Mae		Freddie Mac		Ginnie Mae		All	
	First-Time	Repeat	First-Time	Repeat	First-Time	Repeat	First-Time	Repeat
Loan Amount \$	\$342,959	\$351,240	\$307,760	\$316,958	\$312,140	\$364,576	\$319,549	\$343,080
Credit Score	752	763	745	760	694	715	722	750
LTV (%)	84.0%	74.0%	83.8%	72.6%	96.6%	93.5%	90.1%	78.6%
DTI (%)	37.5%	37.9%	38.6%	38.2%	44.5%	45.9%	41.2%	40.0%
Loan Rate (%)	7.0%	7.1%	7.2%	7.3%	6.9%	6.7%	7.0%	7.1%

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

In the Ginnie Mae purchase market, 78.3% of FHA loans, 51.3% of VA loans, and 85.1% of “Other” loans provided financing for first-time home buyers as of month-end January 2024. The share of first-time home buyers in the Ginnie Mae purchase market increased MoM for FHA and “Other” loans, while holding constant for VA loans. **Table 24** shows that based on mortgages originated as of month-end January 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 15.7% smaller loans, had a 26.6-point lower credit score, 4.7% higher LTV than VA repeat buyers. Both VA first-time buyers and VA repeat buyers faced similar interest rates.

FHA’s first-time homebuyers are much more like their repeat buyers, with only 3.8% smaller loans and 2.8% higher LTVs. Because FHA provides one of few credit options for borrowers with lower credit scores, repeat borrowers with weaker credit profiles are often limited to FHA financing; FHA’s repeat buyers have similar credit scores compared to their first-time home buyers.

Figure 43. First-time Homebuyer Share: Ginnie Mae Breakdown

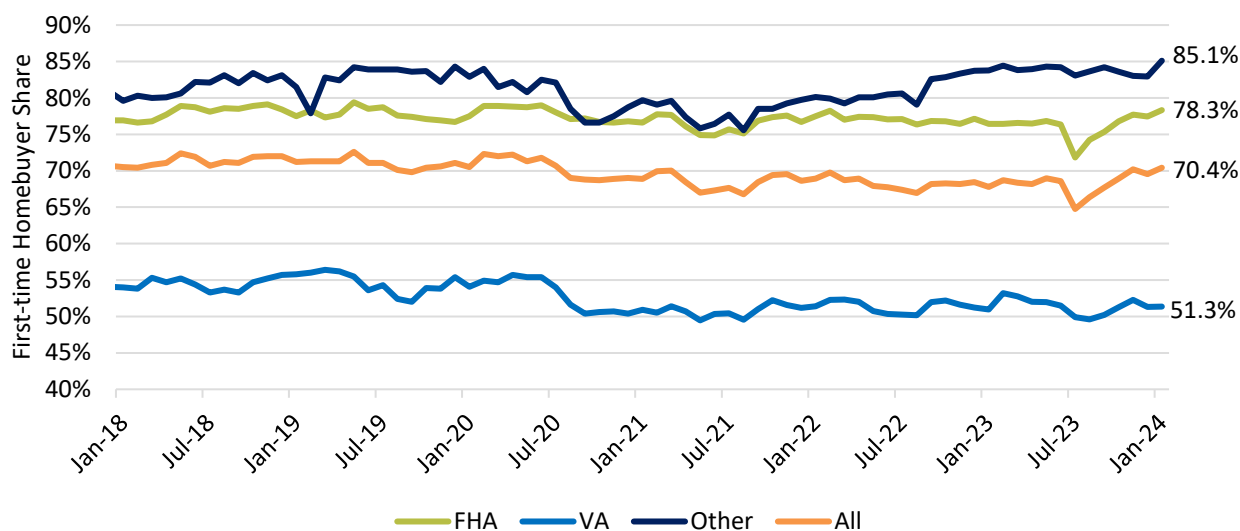


Table 24. Ginnie Mae First-Time Homebuyer Share Breakdown Summary

	FHA		VA		Other		Total	
	First-Time	Repeat	First-Time	Repeat	First-Time	Repeat	First-Time	Repeat
Loan Amount \$	\$308,214	\$320,516	\$348,962	\$413,723	\$177,565	\$189,206	\$312,140	\$364,576
Credit Score	689	691	712	738	698	703	694	715
LTV (%)	96.1%	93.3%	98.2%	93.5%	97.5%	97.4%	96.6%	93.5%
DTI (%)	45.2%	46.7%	44.0%	45.3%	34.8%	36.3%	44.5%	45.9%
Loan Rate (%)	6.9%	6.8%	6.7%	6.7%	7.1%	6.9%	6.9%	6.7%

Sources: Fannie Mae, Freddie Mac, and Ginnie Mae disclosure files as of January 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 January 2024 was 736, which represents an 8-point increase from January 2023. Ginnie Mae median FICO scores increased 11 points from 673 in January 2023 to 684 as of month-end January 2024. As of month-end January 2024, average FICO scores for refinances increased for Ginnie Mae, Fannie Mae, and Freddie Mac borrowers by 5, 4, and 17 points YoY, respectively.

Figure 44. FICO Scores for All Loans

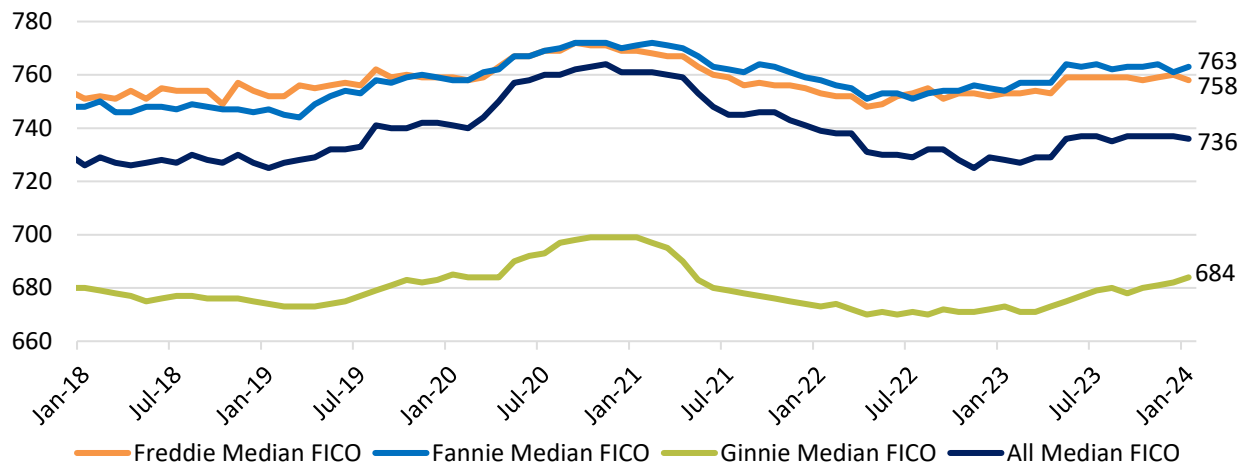


Figure 45. FICO Scores for Purchase Loans

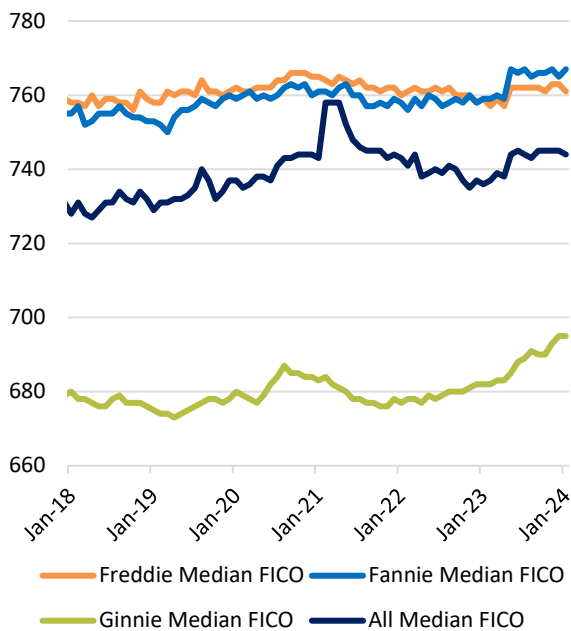
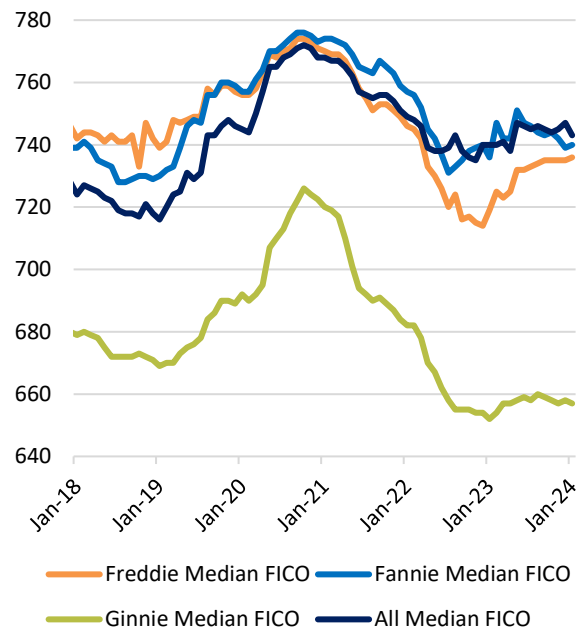


Figure 46. FICO Scores for Refinance Loans



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

In January 2024, the median LTV for Ginnie Mae loans was 97.0% compared to 80% for Fannie Mae and Freddie Mac, owing primarily to the lower down-payment requirements for government loan programs. Fannie Mae and Freddie Mac saw their LTV ratios remain flat YoY, while Ginnie Mae saw a 1.2% decrease in LTV from January 2023 to January 2024. In January 2024, median DTIs for Ginnie Mae, Freddie Mac, and Fannie Mae were 45.5%, 40.0%, and 39.0%, respectively. In January 2023, median DTIs for Ginnie Mae, Freddie Mac, and Fannie Mae were 45.2%, 40.0%, and 40.0%, respectively.

Figure 47. LTV Ratio for All Loans

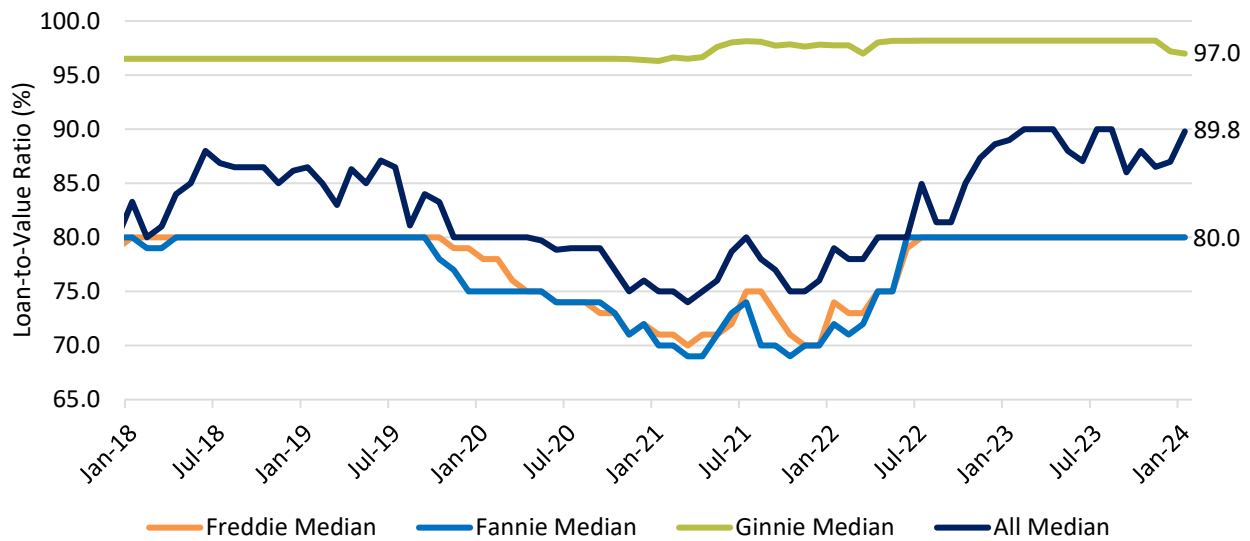
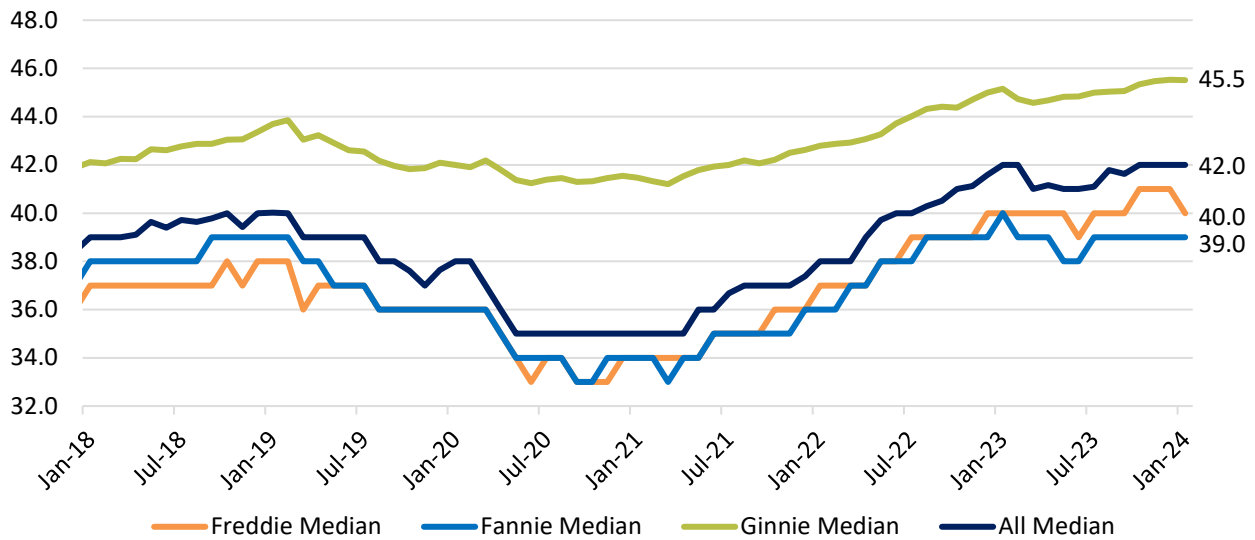


Figure 48. DTI Ratio for All Loans



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

11 FORBEARANCE TRENDS

At the end of January 2024, 30,421 Ginnie Mae loans were in forbearance. The number of loans in forbearance removed from MBS pools in January were 197 while 30,224 loans in forbearance remained in pools. The number of loans in forbearance and loans in forbearance that remained in pools decreased MoM. The median current principal balance for Ginnie Mae, FHA, and VA was higher for loans in forbearance originated by nonbanks than banks in all subsets.

Tables 25-27. Forbearance Snapshot

All Loans in Forbearance – January 2024						
	FICO Score*	Note Rate*	Current Principal Balance Median	First Time Homebuyer Share (%)	Purchase Share (%)	Loan Count
Ginnie	648	4.3	\$185,891	75.0	76.0	30,421
Bank	669	4.1	\$137,387	80.1	83.4	7,166
Nonbank	645	4.3	\$202,923	74.0	74.7	23,204
FHA	648	4.3	\$181,068	76.8	76.8	26,244
Bank	669	4.2	\$135,664	82.2	83.8	6,234
Nonbank	645	4.3	\$196,552	75.8	75.5	19,963
VA	647	4.3	\$267,000	60.7	67.9	3,059
Bank	672	3.6	\$179,907	58.6	77.0	619
Nonbank	644	4.4	\$287,849	60.9	66.9	2,438

Loans in Forbearance and Removed from Pools – January 2024						
	FICO Score*	Note Rate*	Current Principal Balance Median	First Time Homebuyer Share (%)	Purchase Share (%)	Loan Count
Ginnie	638	5.4	\$151,272	75.9	68.6	197
Bank	672	6.0	\$100,047	88.4	86.3	81
Nonbank	630	5.3	\$210,682	71.4	63.6	116
FHA	635	5.6	\$149,372	75.9	70.4	179
Bank	669	6.2	\$93,833	90.2	90.9	73
Nonbank	627	5.4	\$205,206	70.6	64.9	106
VA	657	3.9	\$209,066	88.2	45.2	13
Bank	673	3.5	\$155,480	50.2	43.0	5
Nonbank	652	4.0	\$318,335	100.0	45.9	8

Loans in Forbearance that Remain in Pools – January 2024						
	FICO Score*	Note Rate*	Current Principal Balance Median	First Time Homebuyer Share (%)	Purchase Share (%)	Loan Count
Ginnie	648	4.3	\$186,000	75.0	76.0	30,224
Bank	669	4.1	\$137,859	80.1	83.3	7,085
Nonbank	645	4.3	\$202,916	74.0	74.8	23,088
FHA	648	4.3	\$181,206	76.8	76.8	26,065
Bank	669	4.2	\$135,882	82.2	83.8	6,161
Nonbank	645	4.3	\$196,526	75.8	75.6	19,857
VA	647	4.3	\$267,250	60.6	68.0	3,046
Bank	672	3.6	\$180,288	58.6	77.3	614
Nonbank	644	4.4	\$287,771	60.8	67.0	2,430

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 January 2024; *Averages weighted by remaining principal balance of the loans. Rounded to nearest tenth.

12 HOLDERS OF GINNIE MAE MORTGAGE SERVICING RIGHTS

The 30 largest owners of mortgage servicing rights (MSR) by UPB for loans collateralizing Ginnie Mae MBS is shown in **Table 28**. The top 30 firms collectively own 87.32% of Ginnie Mae MSRs (see Cumulative Share). Twenty of these top 30 are non-depository institutions, the remaining ten are depository institutions. As of January 2024, over half (52.20%) of the Ginnie Mae MSRs are owned by the top six firms.

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

MSR Holder	Current	Rank Year prior	Change	UPB (\$)	Share	Cumulative Share	CPR	CDR
Lakeview Loan Servicing DBA Freedom Mortgage	1	1	↔	\$ 305,693,885,988	13.2%	13.16%	4.87%	0.70%
PennyMac Loan Service	2	2	↔	\$ 296,449,565,333	12.8%	25.91%	6.17%	0.69%
Wells Fargo Bank	3	3	↔	\$ 273,839,783,357	11.8%	37.70%	5.45%	0.88%
Mr. Cooper (Nationstar)	4	6	↑	\$ 98,141,925,891	4.2%	41.92%	4.95%	0.53%
Rocket Mortgage (Quicken Loans)	5	4	↓	\$ 127,150,836,197	5.5%	47.39%	5.27%	1.24%
Carrington Mortgage	6	7	↑	\$ 111,690,539,803	4.8%	52.20%	6.86%	0.36%
Newrez LLC	7	8	↑	\$ 113,697,160,683	4.9%	57.09%	5.55%	0.64%
U.S. Bank	8	5	↓	\$ 127,787,546,933	5.5%	62.59%	6.02%	0.62%
Planet Home Lending	9	9	↔	\$ 56,536,568,108	2.4%	65.02%	4.61%	1.04%
United Wholesale Mortgage	10	11	↑	\$ 68,807,679,727	3.0%	67.98%	6.07%	0.40%
LoanDepot	11	10	↓	\$ 59,450,255,405	2.5%	70.54%	8.96%	1.54%
Truist Bank	12	12	↔	\$ 40,514,818,091	1.7%	72.29%	4.80%	1.47%
Navy Federal Credit Union	13	18	↑	\$ 20,407,927,450	0.9%	73.16%	4.77%	0.70%
M&T Bank	14	15	↑	\$ 29,908,414,725	1.3%	74.45%	4.06%	0.45%
MidFirst Bank	15	N/A	↑	\$ 27,173,555,149	1.2%	75.62%	4.09%	0.30%
The Money Source	16	28	↑	\$ 11,643,285,409	0.5%	76.12%	8.13%	4.22%
Guild Mortgage Company	17	17	↔	\$ 22,675,677,535	1.0%	77.10%	4.90%	0.61%
PHH Mortgage Corporation	18	16	↓	\$ 24,446,747,214	1.1%	78.15%	4.23%	0.31%
J.P. Morgan Chase Bank	19	26	↑	\$ 18,819,783,853	0.8%	78.96%	4.07%	0.56%
Idaho Housing and Finance	20	29	↑	\$ 10,104,694,757	0.4%	79.39%	5.55%	1.60%
Mortgage Research Center	21	24	↑	\$ 17,819,263,996	0.8%	80.16%	3.01%	0.73%
New American Funding	22	13	↓	\$ 27,937,341,907	1.2%	81.36%	18.36%	0.44%
CrossCountry Mortgage	23	20	↓	\$ 20,438,635,745	0.9%	82.24%	6.61%	0.71%
Movement Mortgage	24	19	↓	\$ 21,680,594,949	0.9%	83.18%	5.01%	0.09%
Citizens Banks	25	22	↓	\$ 20,988,166,789	0.9%	84.08%	4.00%	0.21%
AmeriHome Mortgage	26	25	↓	\$ 14,035,620,737	0.6%	84.68%	4.45%	0.42%
CMG Mortgage	27	14	↓	\$ 20,554,457,746	0.9%	85.57%	7.34%	1.60%
PNC Bank	28	23	↓	\$ 19,449,628,613	0.8%	86.40%	5.80%	1.49%
Flagstar Bank	29	N/A	↑	\$ 6,536,953,845	0.3%	86.69%	5.61%	1.34%
	30	27	↓	\$ 14,645,680,066	0.6%	87.32%	6.08%	1.09%

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

13 AGENCY NONBANK ORIGINATORS

Total agency nonbank origination share increased as of month-end January 2024 by approximately 1.0% MoM. The increase in nonbank origination share was driven by an increase in Freddie Mac, up 3.5% MoM. Fannie Mae nonbank origination share saw a decrease of 2.2%. The Ginnie Mae nonbank share rose to 91.7% as of January 2024 and has remained consistently higher than the GSEs, largely driven by origination share of refinance mortgage loans.

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

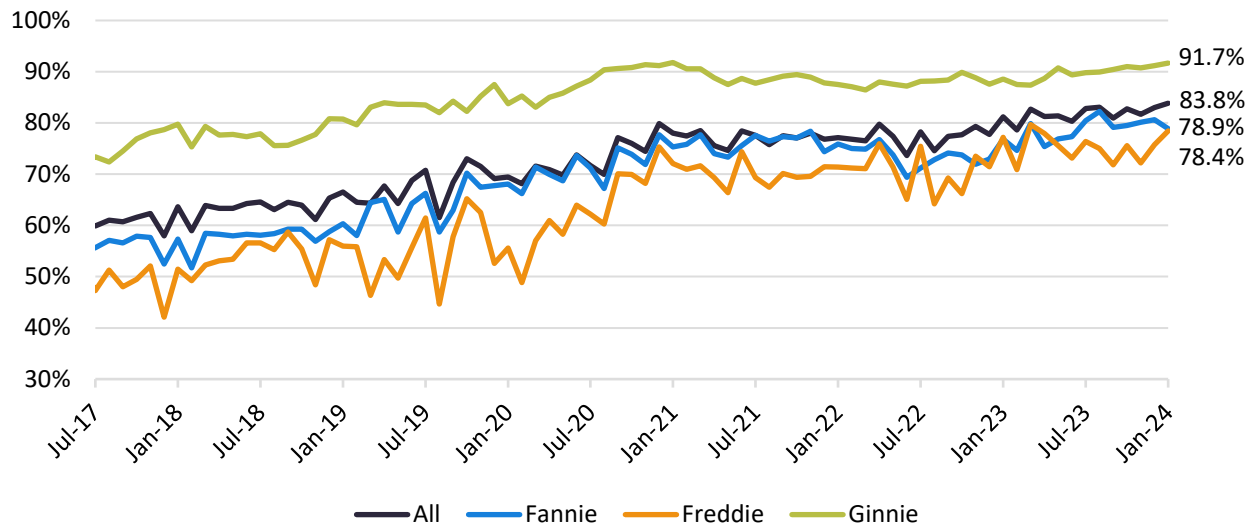


Figure 50. Nonbank Origination Share: Purchase Loans

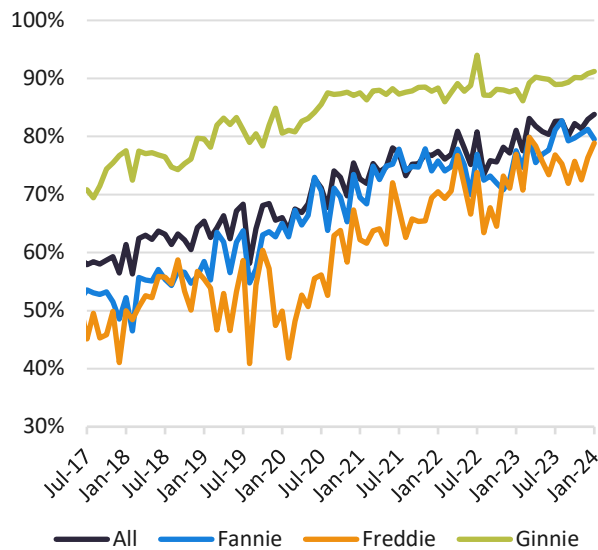
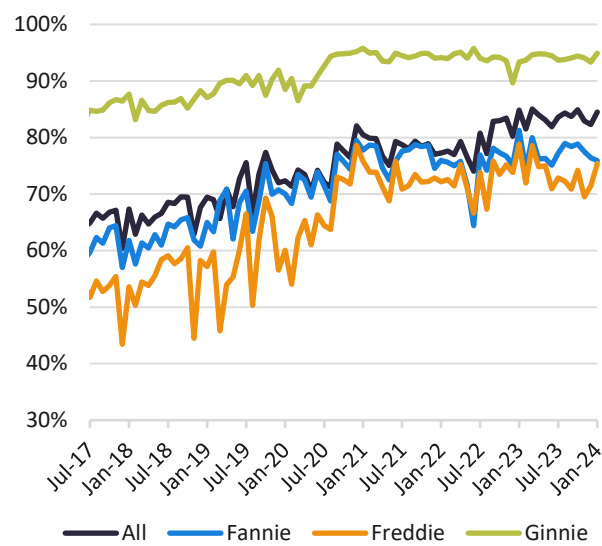


Figure 51. Nonbank Origination Share: Refi Loans



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

Ginnie Mae’s total nonbank originator share remained relatively stable as of month-end January 2024. Ginnie Mae continues to have a high proportion of nonbank originations, with a rate of 91.7% in January 2024. The percentage of Ginnie Mae’s “Other” nonbank refinanced loans increased to 76.4% in January 2024.

Figure 52. Ginnie Mae Nonbank Originator Share (All, Purchase, Refi)

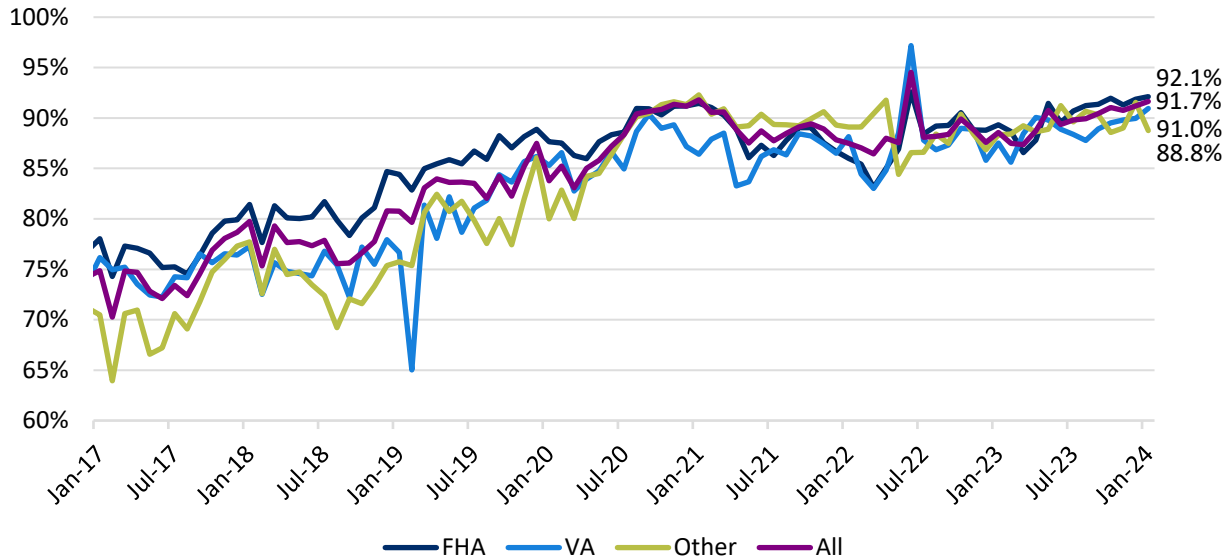


Figure 53. Ginnie Mae Nonbank Share: Purchase Loans

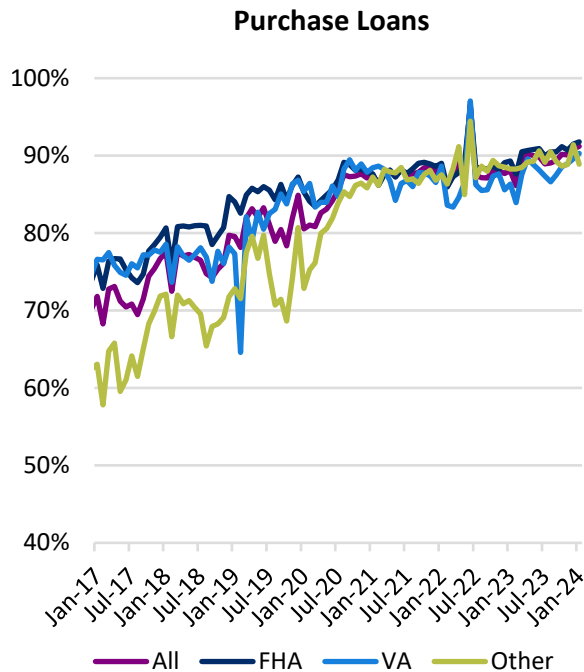
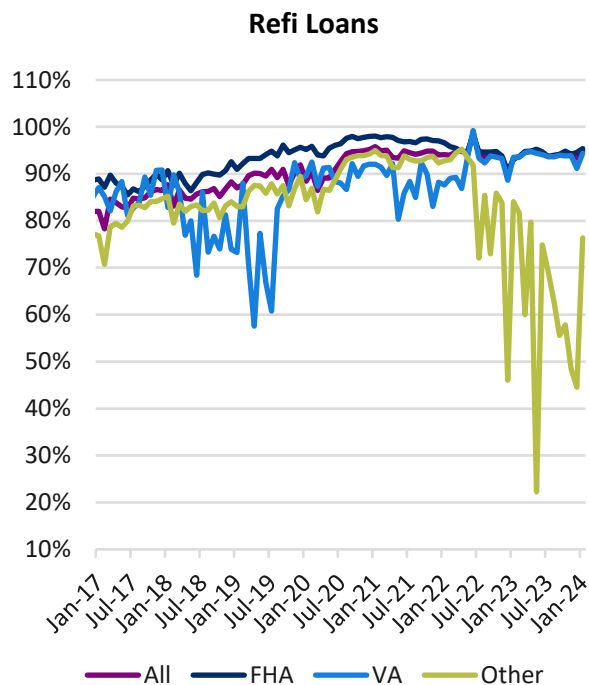


Figure 54. Ginnie Mae Nonbank Share: Refi Loans



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

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

14.1.1 (FICO, LTV, DTI)

The mortgage loan originations of nonbanks continued to have a consistently lower median FICO score than their bank counterparts across all agencies. The spread between nonbank and bank FICO scores decreased to 18 from December 2023 to January 2024. The agency median FICO score decreased to 737 in January 2024.

Figure 55. Agency FICO: Bank vs. Nonbank

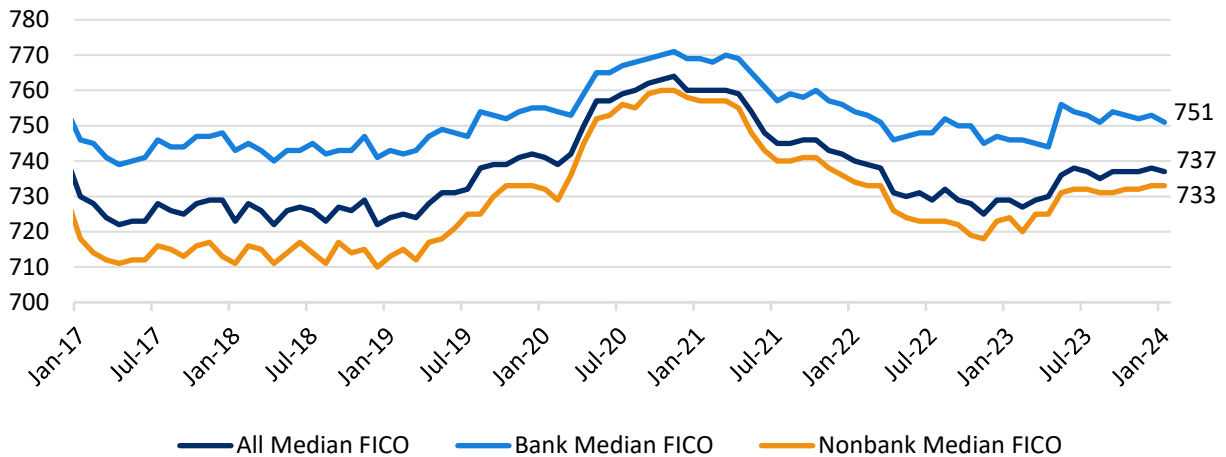


Figure 56. GSE FICO: Bank vs. Nonbank

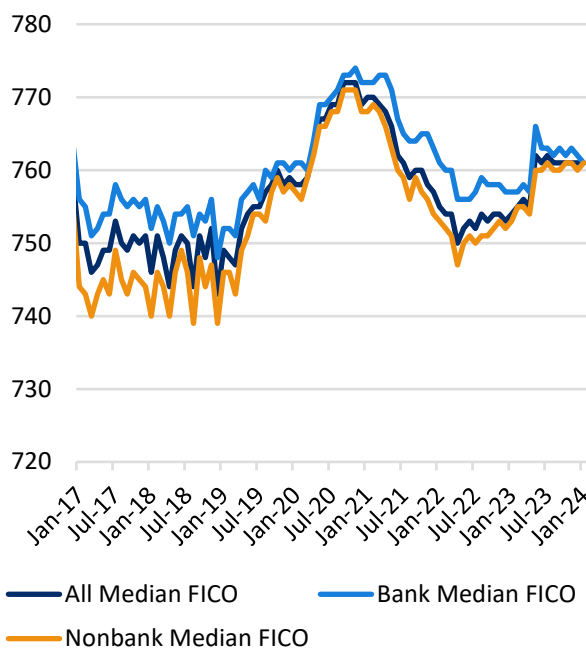
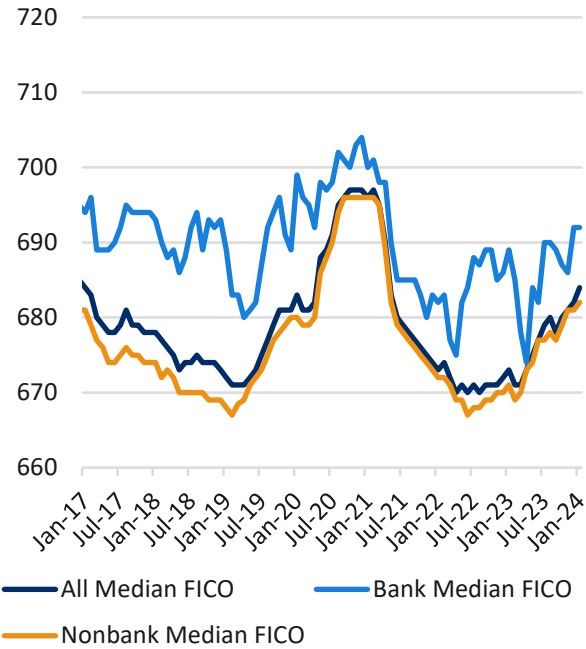


Figure 57. Ginnie Mae FICO: Bank vs. Nonbank



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

The median LTV for all GSE originators remained the same as of month-end January 2024 at 80.0%. Ginnie Mae median bank and nonbank LTV remained flat at 98.2% and 97.0%, respectively. Ginnie Mae median DTI decreased slightly to 45.7% through January 2024 in nonbank originations.

Figure 58. GSE LTV: Bank vs. Nonbank

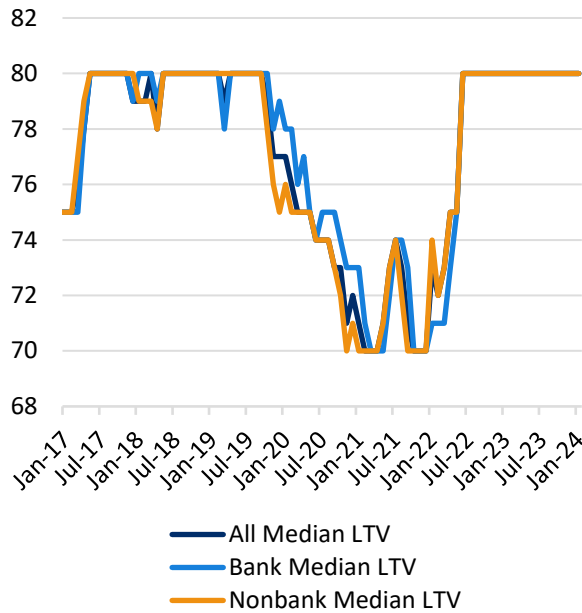


Figure 59. Ginnie Mae LTV: Bank vs. Nonbank

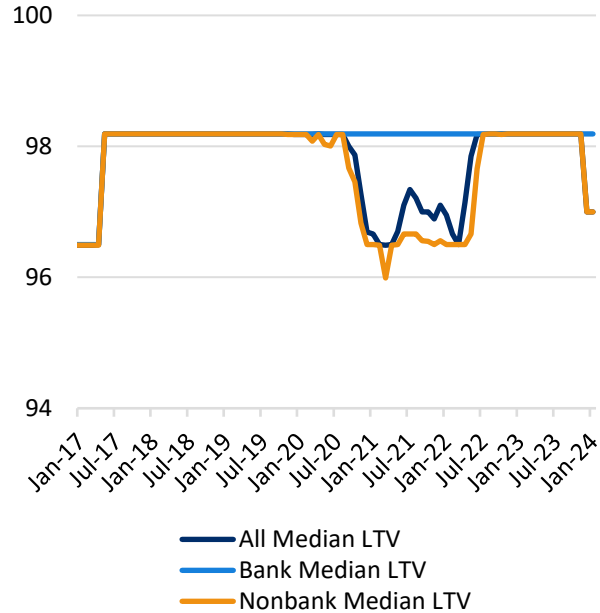


Figure 60. GSE DTI: Bank vs. Nonbank

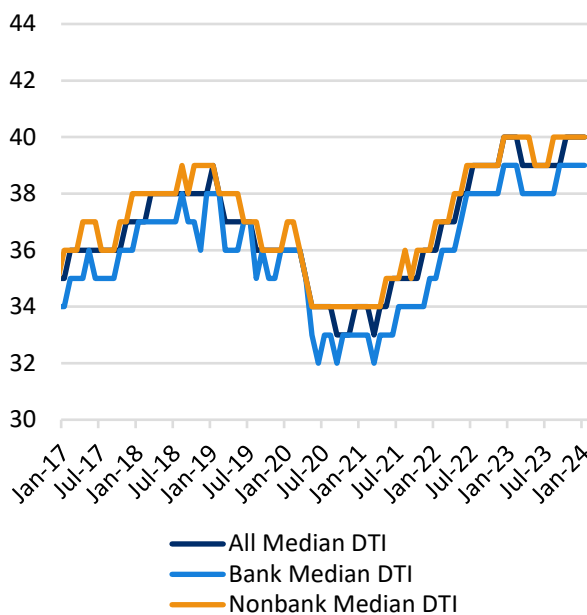
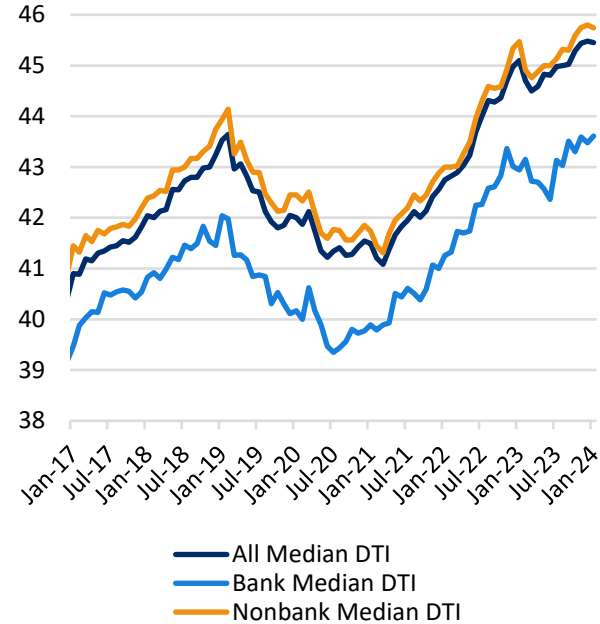


Figure 61. Ginnie Mae DTI: Bank vs. Nonbank



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

As of month-end January 2024, the median FICO score for Ginnie Mae bank remained constant at 692 and nonbank increased 1 point to 682. The median FICO score for all Ginnie originations increased 2 points to 684. The gap between banks and nonbanks is most apparent in “Other” lending (23-point spread).

Figure 62. Ginnie Mae FICO Score:

Bank vs. Nonbank

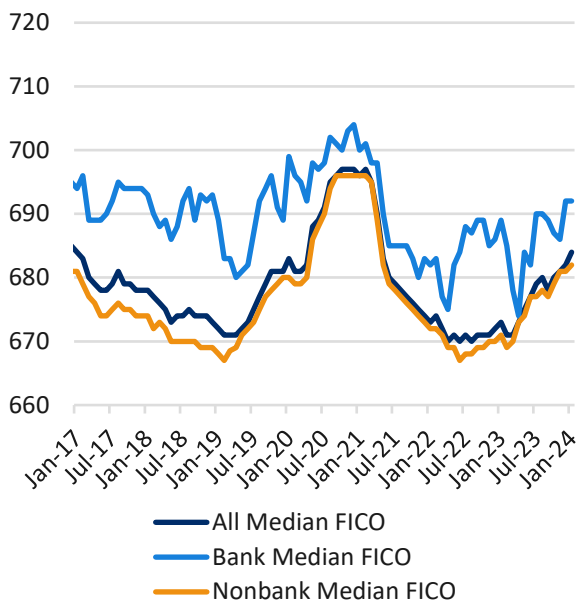


Figure 63. Ginnie Mae FHA FICO Score:

Bank vs. Nonbank

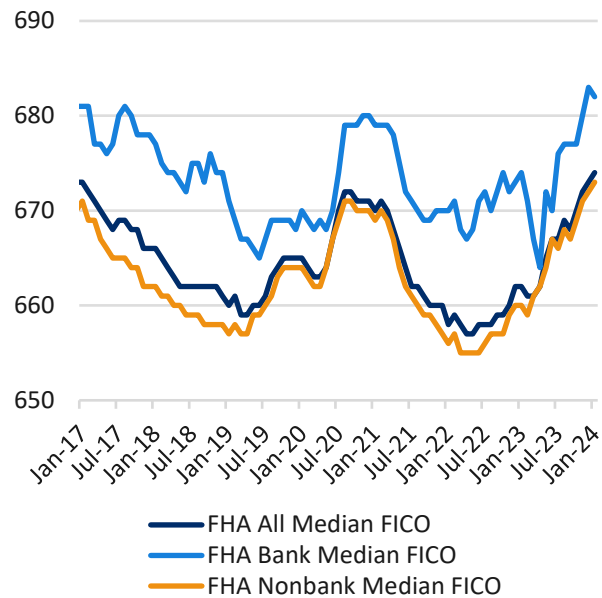


Figure 64. Ginnie Mae VA FICO Score:

Bank vs. Nonbank

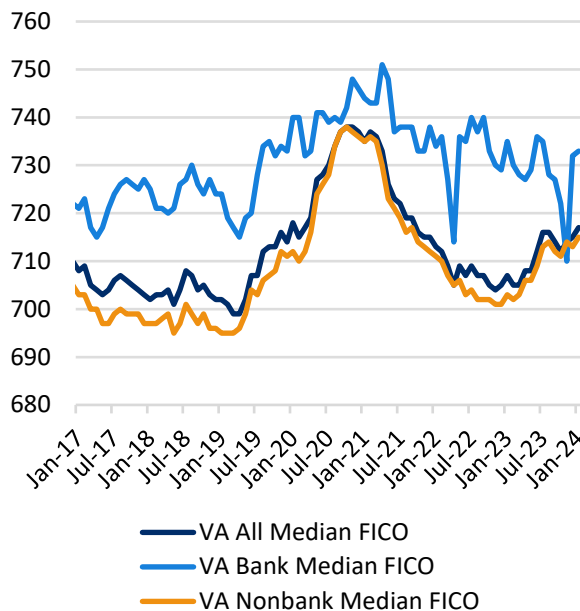
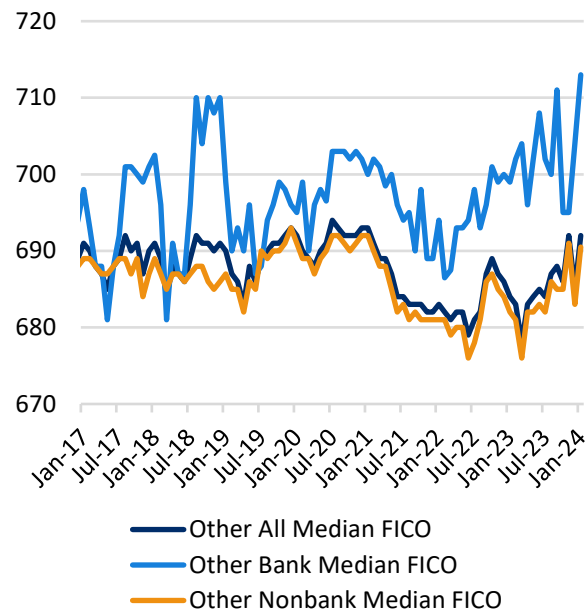


Figure 65. Ginnie Mae Other FICO Score:

Bank vs. Nonbank



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

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

Figure 66. Ginnie Mae DTI: Bank vs. Nonbank

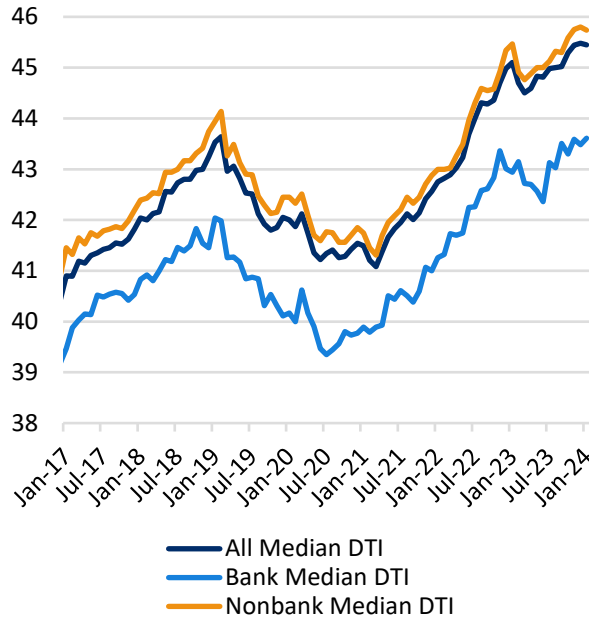


Figure 67. Ginnie Mae FHA DTI: Bank vs. Nonbank

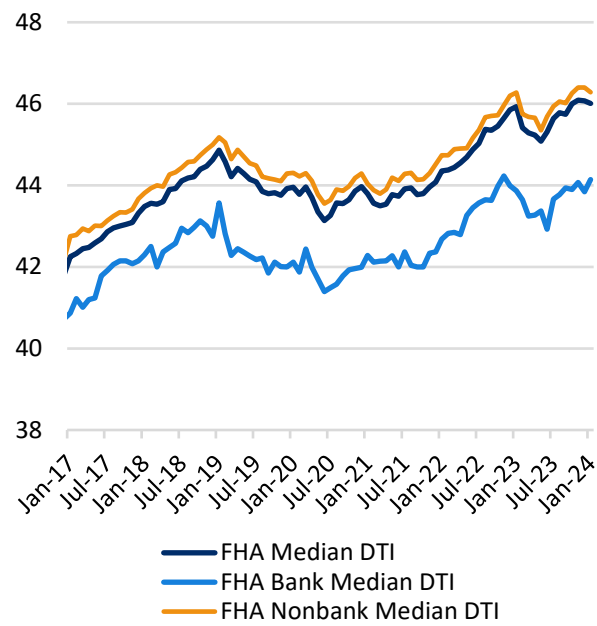


Figure 68. VA DTI: Bank vs. Nonbank

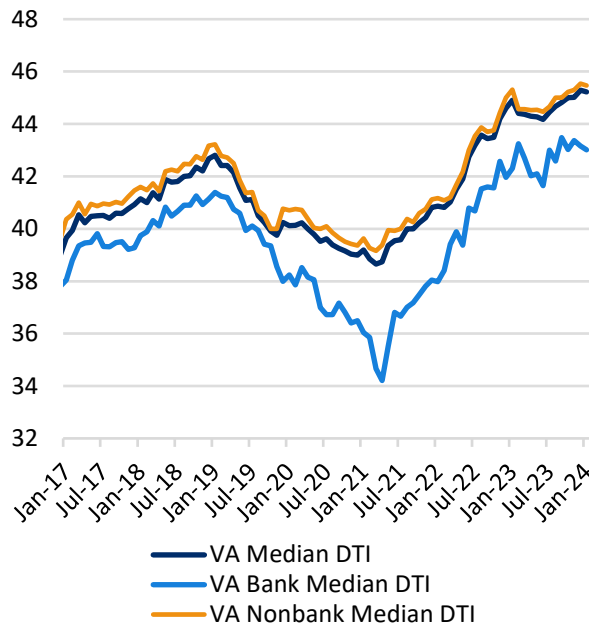
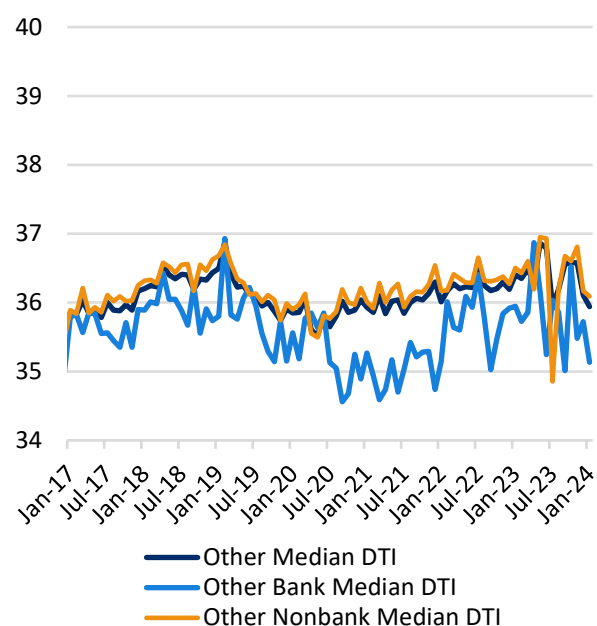


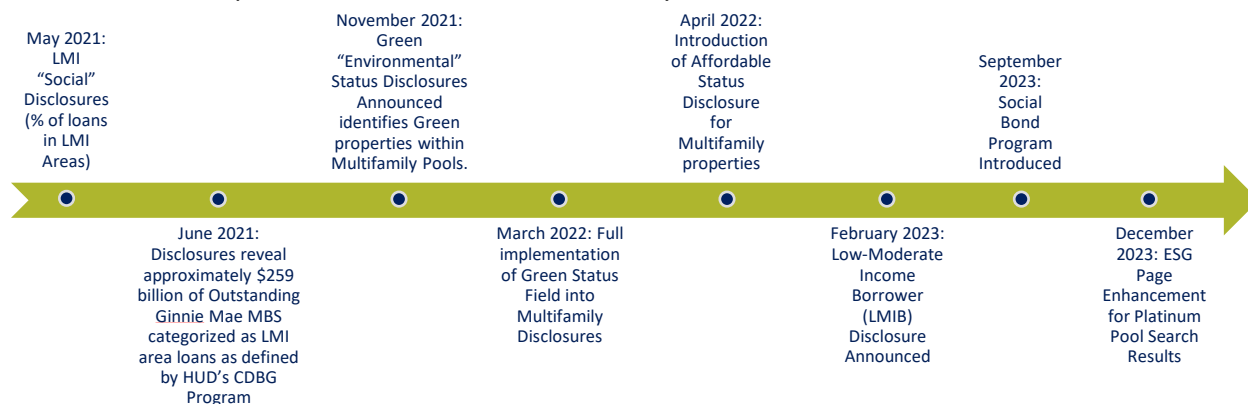
Figure 69. Other DTI: Bank vs. Nonbank



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

15 ENVIRONMENTAL, SOCIAL, AND GOVERNANCE

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



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 (January 2024)

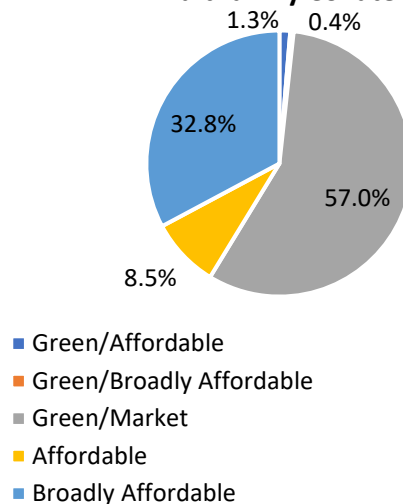
Ginnie Mae's ESG Metrics – MBS Portfolio as of January 2024		
Targeted Population	Positive Outcomes	Our Commitment
FHA Borrowers – 6,910,869 VA Borrowers – 3,600,931 RHS Borrowers – 782,795 PIH Borrowers 782,295	Loans under \$200K 6,521,931 Loans First-Time Home Buyers 4,224,559 Loans Down Payment Assistance 697,464 Loans	Ginnie Mae was established by Congress in 1968 to offer broad access to credit nationwide with a special emphasis on low- and moderate-income borrowers, and rural, inner-city, and underserved communities. Ginnie Mae securitization provides a unique and sustainable service in making home ownership more affordable, accessible, and equitable for our nation. The proceeds from the sale of Ginnie Mae Primary Issuance MBS are a source of capital to finance the specific residential mortgage loans collateralizing the Ginnie Mae MBS.
Low-to-Moderate Income Borrowers (LMI)	3,232,370 Loans	Ginnie Mae securitization collateral selection is restricted to agency insured mortgages from the following United States Government Agencies. These agencies are the: Federal Housing Administration (FHA), Department of Veterans Affairs (VA), United States Department of Agriculture's Rural Housing Service (USDA-RHS), and HUD Public and Indian Housing (PIH). The combination of these insuring agency programs and Ginnie Mae's guaranty enable housing outcomes for households who might otherwise not be able to obtain mortgage access.
LMI Majority Census Tract Loans	1,739,548 Loans	
Borrowers Facing Difficulties	791,488 modifications with over 703,087 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	281,420 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)	1.313 million apartment homes 492,679 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	4,866 MF loans are either Green, Affordable, or both	
MF Green		Ginnie Mae provides information to investors via its monthly bond disclosure on multifamily investments that meet FHA's MF Green Mortgage Insurance Premium (MIP) Discount Qualified Mortgages and those loans meeting FHA's MF Broadly Affordable and Affordable requirements.

15.2 Environmental

Table 30. UPB by ESG Status

ESG Status	UPB	%
Green/Affordable	1,089,480,425	0.7%
Green/Broadly Affordable	342,971,920	0.2%
Green/Market	47,507,019,205	31.5%
Green Total	48,939,471,550	32.5%
Affordable ⁵	7,052,821,984	4.7%
Broadly Affordable	27,336,994,518	18.1%
Affordable Total	35,822,268,847	23.8%
ESG Total	83,329,288,052	55.3%
Total	150,656,268,157	100.0%

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



Much of Ginnie Mae’s environmental impact is made through its Multifamily programs. Approximately 32% of Ginnie Mae collateral are “Green”-certified, as defined by the multiple organizations that sponsor and maintain green building certifications, including the U.S. Green Building Council, Energy Star, Greenpoint, and the National Green Building Standard, just to name a few. Additionally, over 23% of Ginnie Mae Multifamily collateral is “Affordable” or “Broadly Affordable”. In total 55.3% of Ginnie Mae’s Multifamily collateral is considered ESG.

Sources: Ginnie Mae Disclosures as of January 2024, https://www.hud.gov/program_offices/housing/mfh/green

15.3 Social

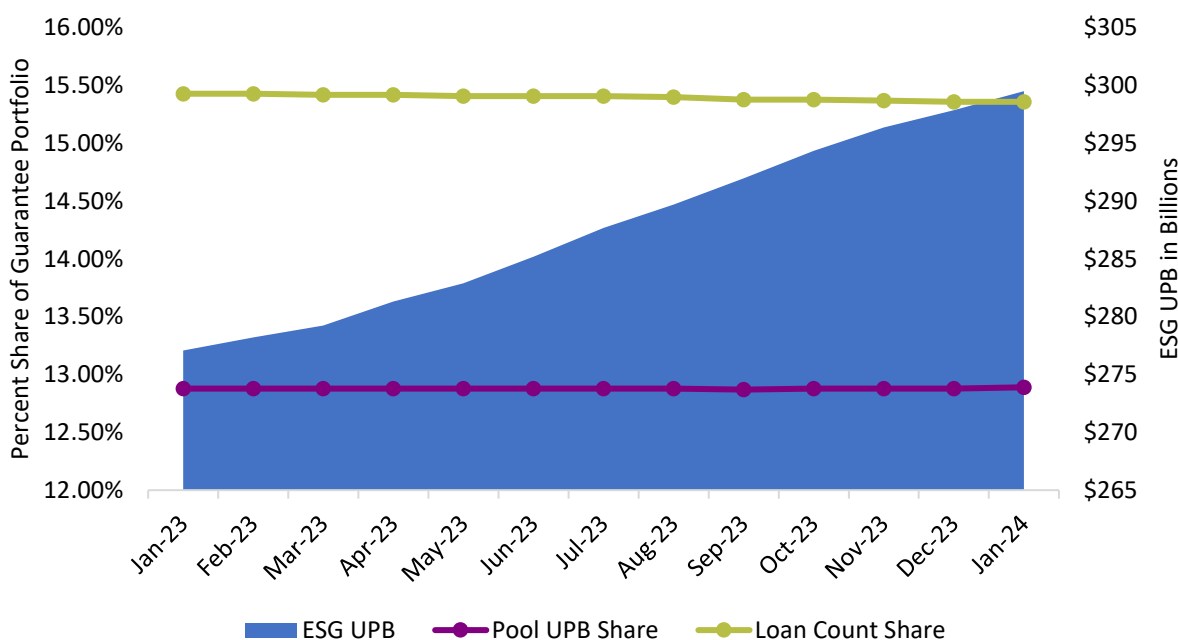
With the introduction of Ginnie Mae’s new social disclosures, investors can now identify the number of underlying loans made to LMI borrowers, the percentage of LMI loan count out of total loan count, the unpaid principal balance (UPB) of LMI loans in the MBS, and the percentage of LMI UPB out of total 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 percent of its respective AMI income 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 which drives 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 their Platinum pool securities including UPB amount and UPB percentage.

⁵ “Affordable” and “Broadly Affordable” removes “Green/Affordable” and “Green/Broadly Affordable” from the UPB total.

15.3.1 LOW-TO-MODERATE INCOME BORROWERS

Roughly \$300 billion of Ginnie Mae Single-Family collateral and over 1.7 million of loans outstanding have been issued too low to moderate income borrowers. Total ESG UPB increased by approximately \$22 billion YoY.

Figure 71. ESG Share of the Outstanding SF Portfolio



Source: Ginnie Mae Disclosures as of January 2024

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

Table 31. Percent LMI by Pool Share

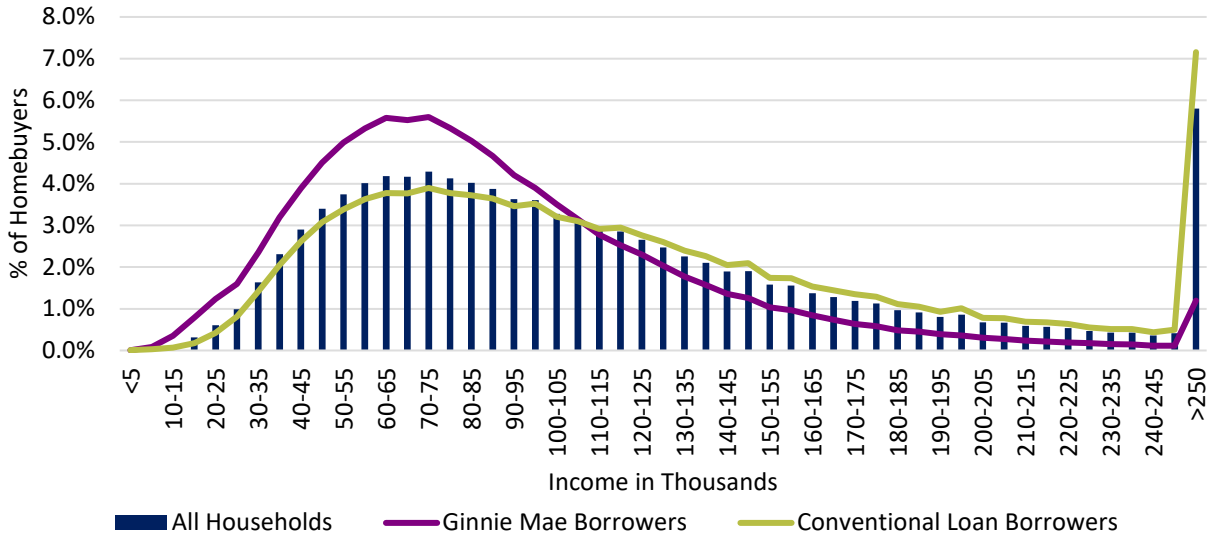
Metric	LMI Pool Share >50%	LMI Pool Share 20% - 50%	LMI Share < 20%	All Pools
Total UPB (\$ billions)	\$8.3	\$203.2	\$2,064.0	\$2,275.5
Average Original Loan Size	\$175,797	\$192,439	\$338,205	\$324,594
Credit Score (Median)	674	675	679	677
DTI (Median)	40%	40%	40%	40%
LTV (Median)	97%	96%	95%	96%
Interest Rate (WA)	4.78%	4.62%	3.91%	3.98%

Source: Ginnie Mae Disclosures as of January 2024

15.3.2 PURCHASE AND REFINANCE ORIGINATION BY INCOME BRACKET

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

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



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

U.S. HOUSING MARKET

16 HOUSING AFFORDABILITY

16.1 Housing Affordability – Home Price Appreciation

Home prices increased in all regions in Q3 2023. Notably, the East North Central, Middle Atlantic, South Atlantic, and New England regions all saw over a 2.00% increase QoQ. The West South Central region saw the smallest QoQ increase in HPI of 1.06%. The New England region has appreciated more than any other region over the past four quarters, appreciating by 9.21% from Q3 2022 to Q3 2023.

Figure 73. Regional HPI Trend Analysis Q/Q

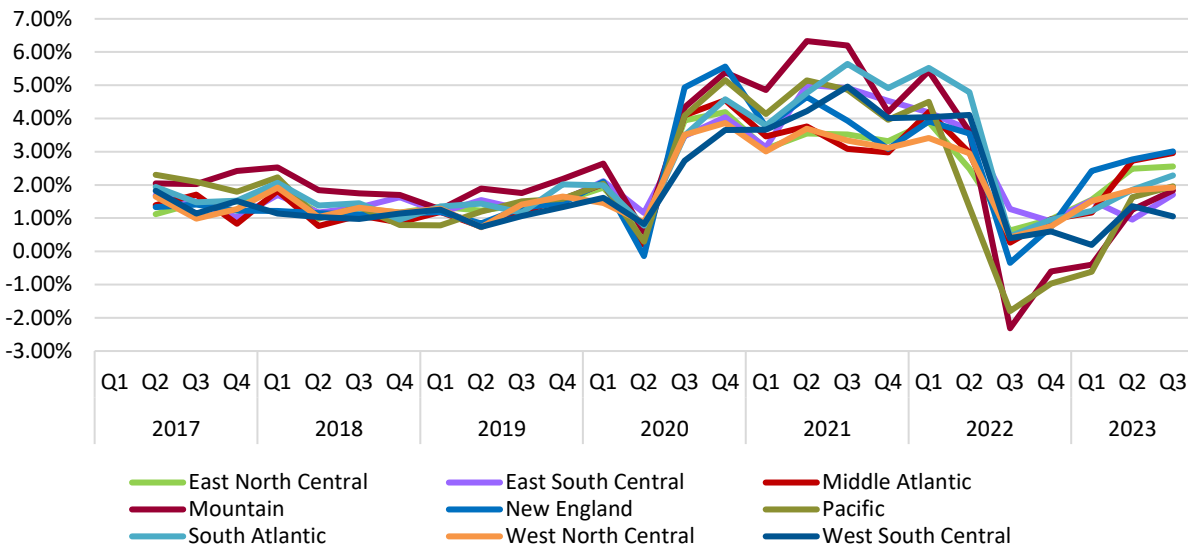
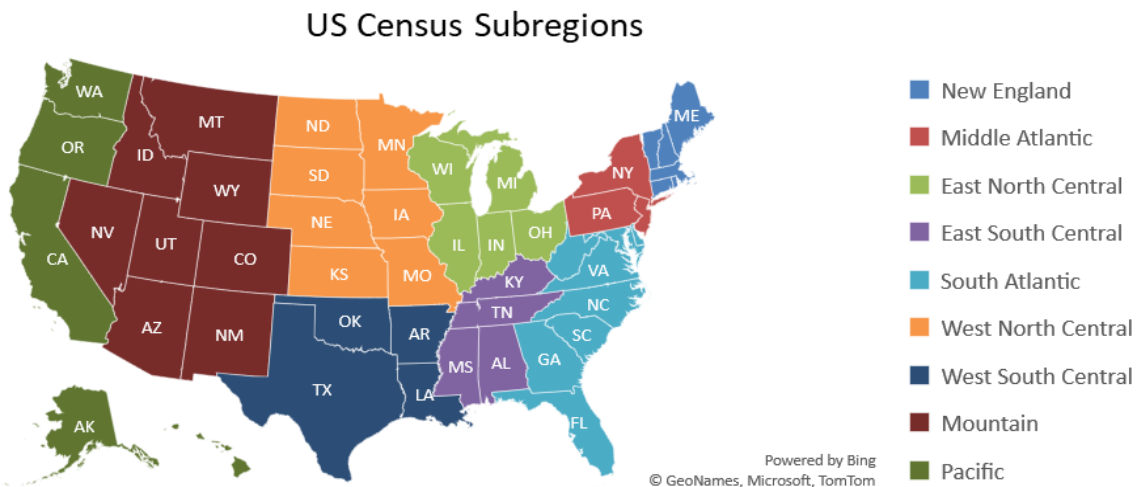


Figure 74. FHFA U.S. Census Subregions as defined by the U.S. Census Bureau



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

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

As of month-end January 2024, YoY inflation was 3.1%, decreasing from 3.3% in the month prior. Nationally, rents are up 1.1% YoY as of month-end January 2024. The MoM change in rents from December 2023 to January 2024 decreased by 0.04%. Wage growth saw no change for the fifth consecutive month, holding at 5.2% at month-end January 2024. Month-end November 2023 reporting data shows YoY home price appreciation decreased to 5.1% from a 7.6% YoY change in November 2022.

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

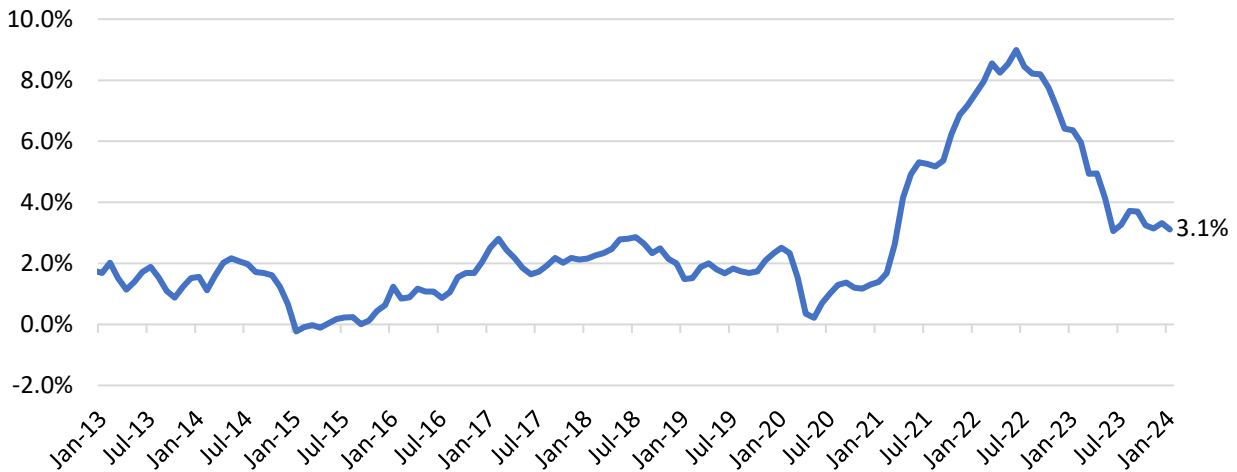
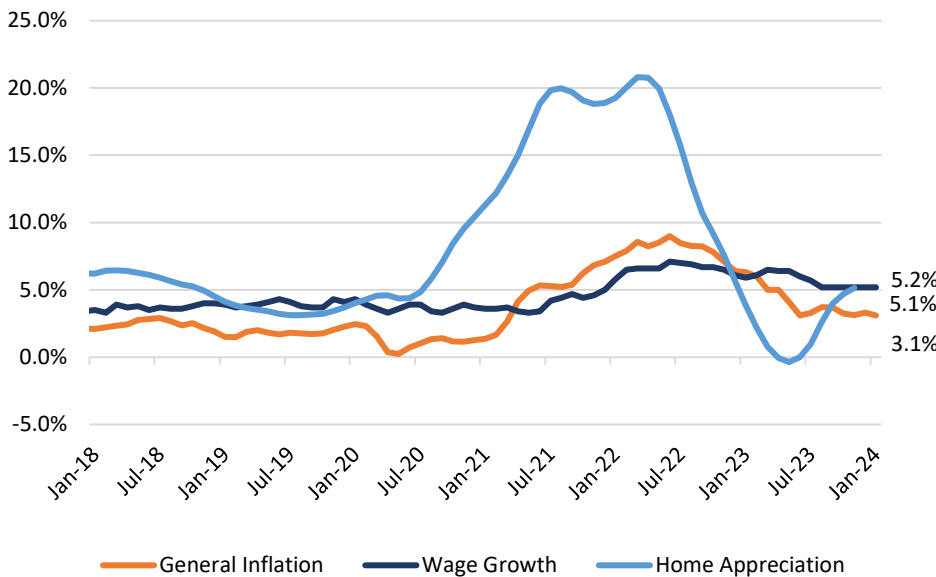


Figure 76. Asset Price Appreciation vs. Wage Increases

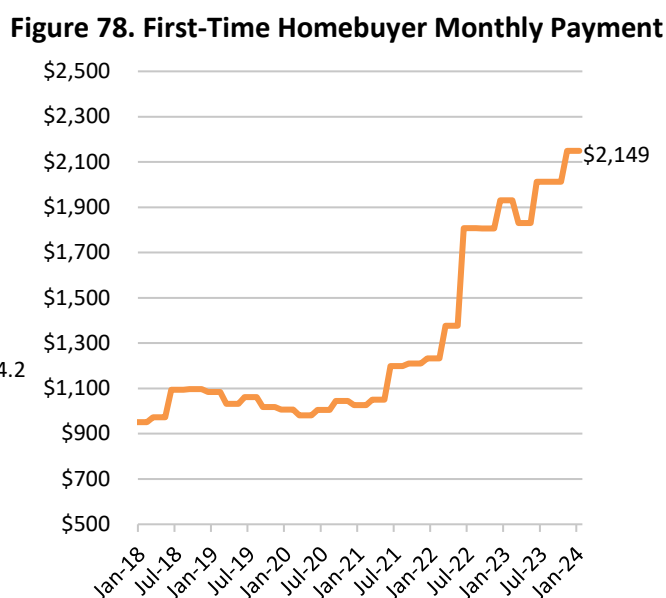
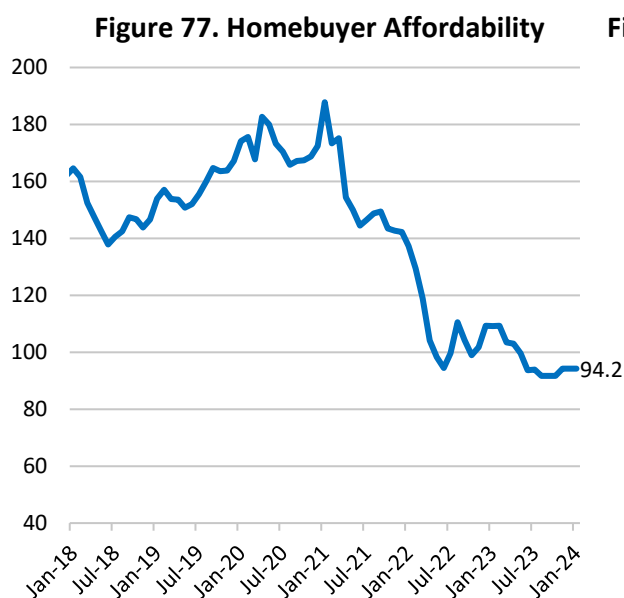


Metric	Statistic
General Inflation	3.1%
Home Price Appreciation (YoY)	5.1%
Rental Price Appreciation (Median Rent Change YoY)	1.1%
Wage Growth	5.2%

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

16.2.1 HOUSING AFFORDABILITY – AFFORDABILITY INDEX

As of month-end January 2024, the Homebuyer Affordability Fixed Mortgage Index (HAFM) was 94.2 and the First-Time Homebuyer Monthly Payment (FTMP), which represents the median payment for first-time homebuyers, was \$2,149. This marks a 13.7% decrease in the Homebuyer Affordability Fixed Mortgage Index and an 11.4% increase in monthly payments for first-time homebuyers from January 2023 to January 2024. HAFM has decreased 49.8% and FTMP has increased 109.5% since January 2021.

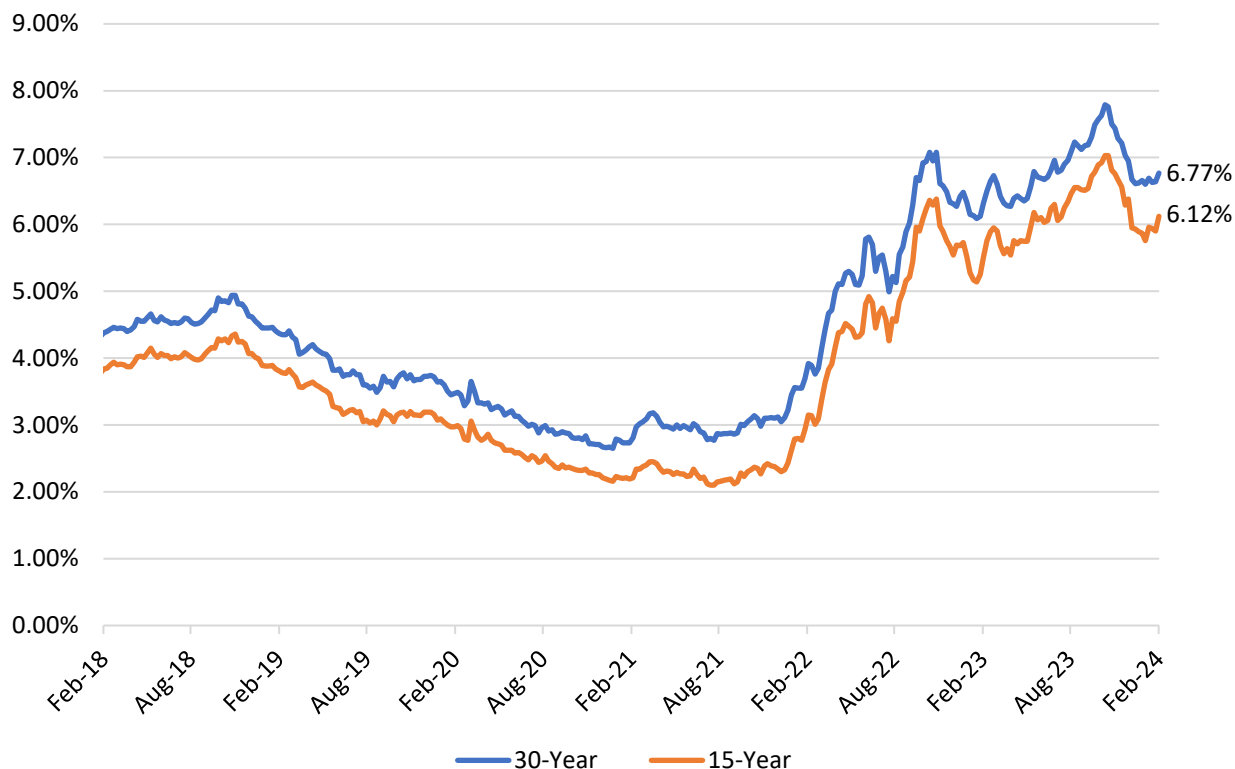


Source: Bloomberg as of January 2024. Note: Housing Affordability Index: Value of 100 means that a family with the median income has exactly enough income to qualify for a mortgage on a median-priced home. An index above 100 signifies that a family earning the median income has more than enough income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

16.2.2 HOUSING AFFORDABILITY – MORTGAGE RATE TRENDS

The Federal Reserve maintained the Federal Funds target range on January 31, 2024, at a range of 5.25% and 5.50% per the FOMC ⁶. As of February 15, 2024, the average 30-year and 15-year fixed rate mortgage rates were 6.77% and 6.12%, respectively. The average 30-year fixed rate mortgage rate increased 17 bps and the average 15-year fixed rate mortgage rate increased 36 bps MoM from January 18, 2024.

Figure 79 Average Fixed Rate Mortgage Rates



Source: FRED data as of February 2024

⁶[Federal Reserve Board - Federal Reserve issues FOMC statement](#)

16.3 Housing Inventory

As of January 2024, there were 8.3 months of housing inventory on the market, remaining constant from a readjusted 8.3 months in December 2023. As housing affordability continues to remain low (See above [Section 16.2](#)) Single-Family home sales are unlikely to play a large role in the resolution of the housing shortfall. **Figures 81 and 82** show Single-Family and Multifamily Housing metrics, including the number of permits, starts, and completions. From January 2023 to January 2024, the number of Single-Family completions fell 2.9%, while the number of starts and permits increased 23.7% and 23.1%, respectively. Multifamily metrics show that from January 2023 to January 2024, the number of completions increased 15.4%, while the number of starts and permits decreased 23.6% and 23.3%, respectively.

Figure 80. Single-Family Housing Inventory

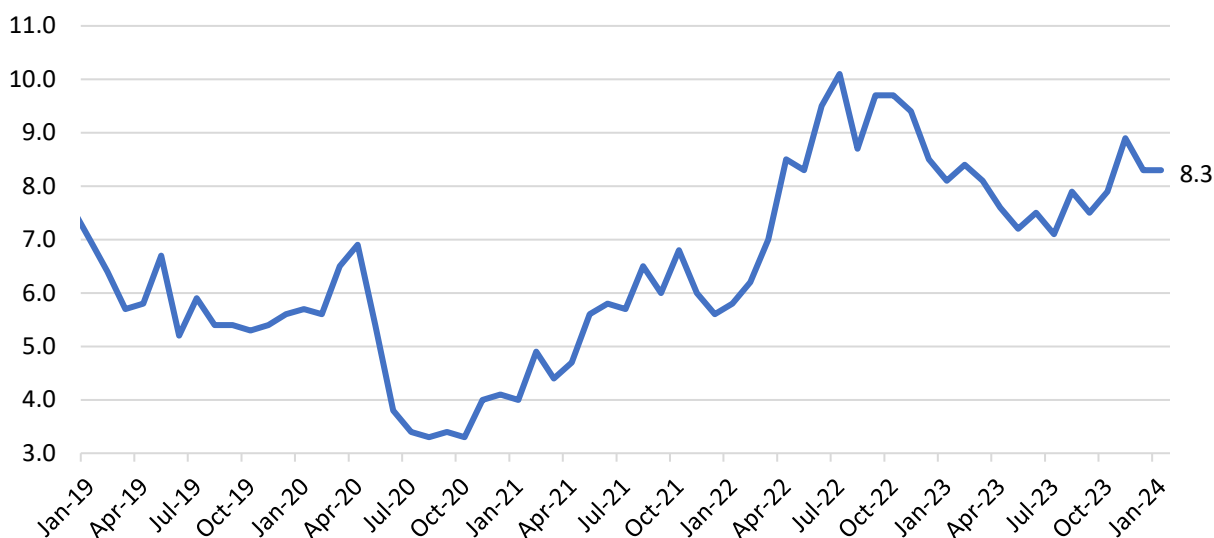


Figure 81. Single-Family Construction Metrics: Permits, Starts, Completions

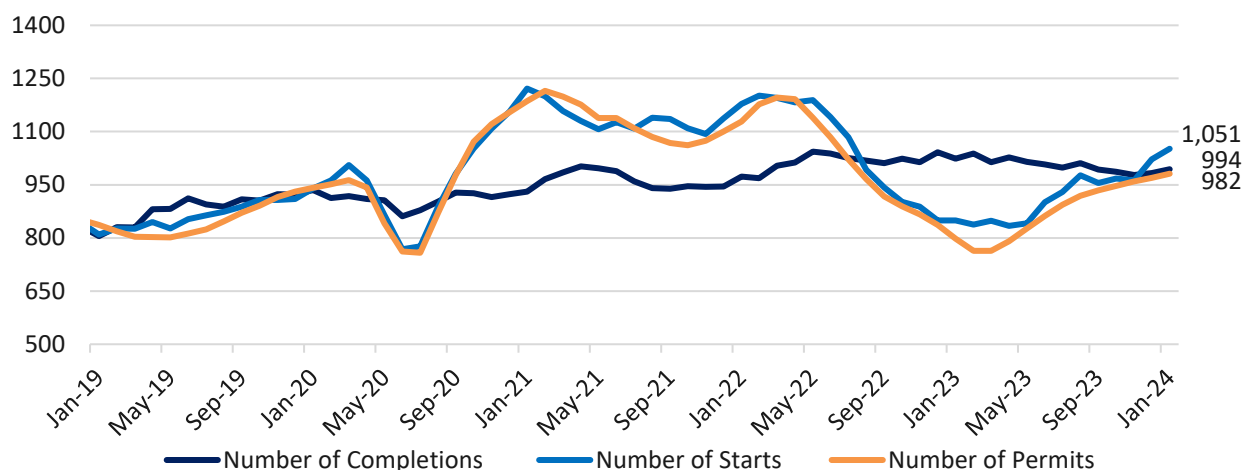
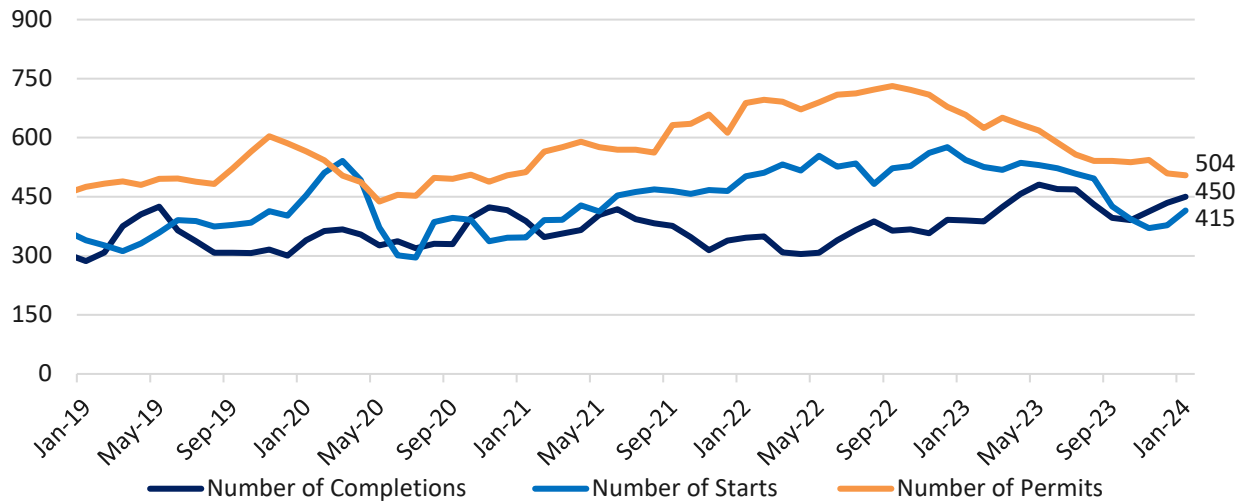


Figure 82. Multifamily Constructions Metrics: Permits, Starts, Completions



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

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

The total value of the Single-Family housing market increased to \$45.5 trillion in Q3 2023. The total value of the US housing market is up approximately 139% from its trough in 2011. From Q3 2022 to Q3 2023 mortgage debt outstanding increased from \$12.3 trillion to \$12.9 trillion and household equity increased from \$31.2 trillion to \$32.6 trillion. At roughly \$9.0 trillion in Q3 2023, Agency Single-Family MBS continues to account for a growing percentage of the total mortgage debt outstanding, up to 65% of total mortgage debt from just 52% in 2011.

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

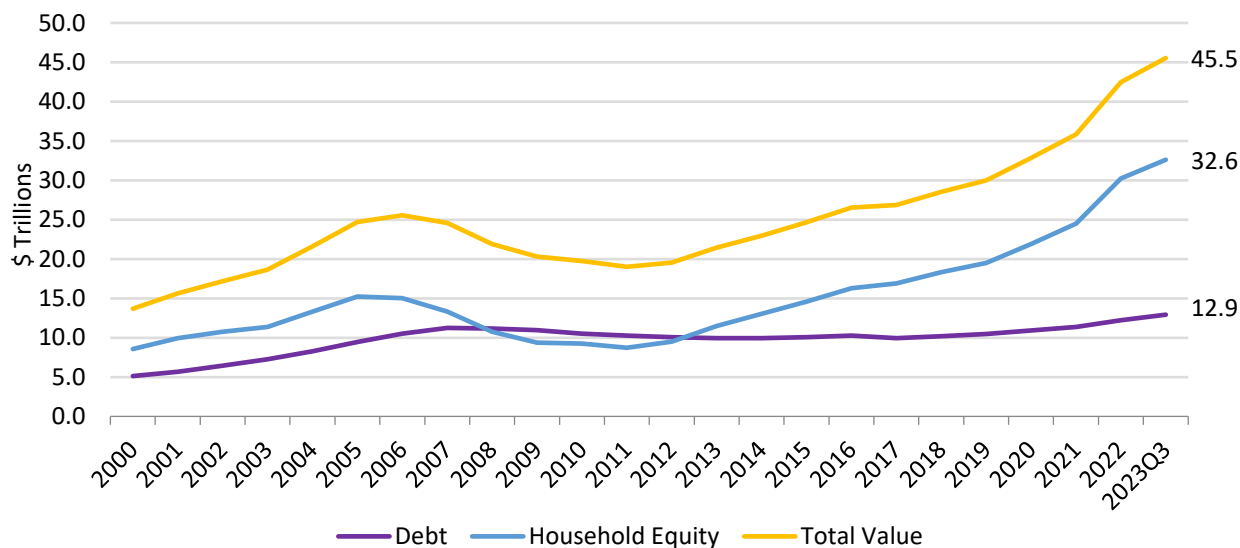
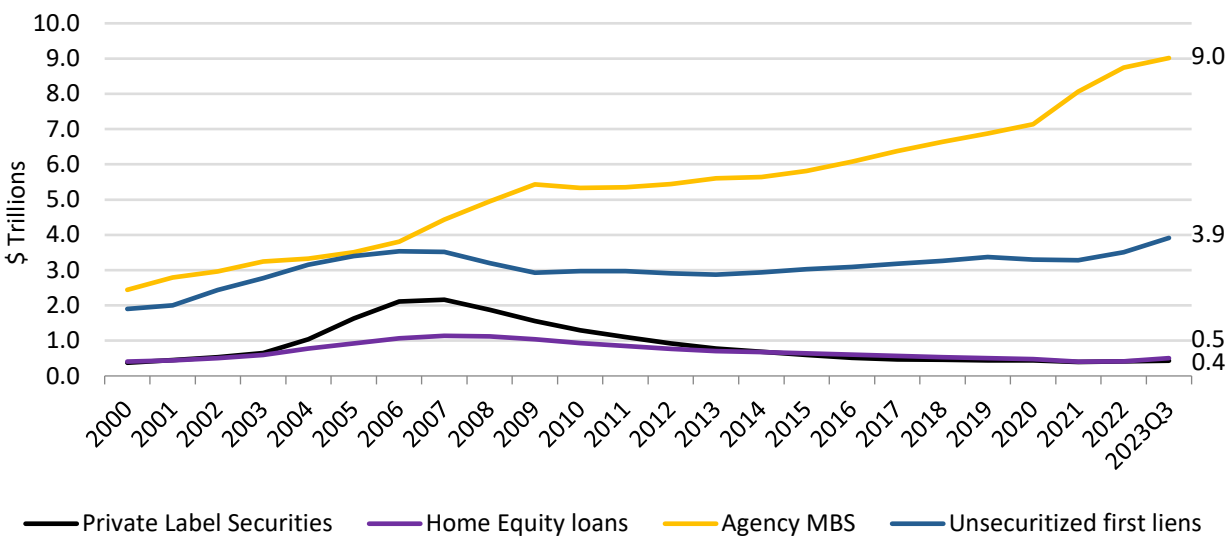


Figure 84. Size of the U.S. Residential Mortgage Market



Source: Federal Reserve Flow of Funds Data as of Q3 2023.

17 DISCLOSURE

“The data provided in the Global Markets Analysis Report (hereinafter, the “report”) should be considered as general information only and is current only as of its specified date, unless otherwise noted. No information contained herein is, and should not be construed to be, investment advice. Nor does any information contained herein constitute an offer to sell, or is a solicitation of an offer to buy, securities.

The information contained herein is based upon information generally available to the public from sources believed to be reliable as of the specified date. The accuracy of the information contained herein is based on the corresponding accuracy of the issuer data as reported to the Government National Mortgage Association (hereinafter, “Ginnie Mae”).

Therefore, if there is insufficient or inaccurate data to support calculations of any specific disclosure information, Ginnie Mae disclaims any and all liability relating to that information, including, without limitation, any express or implied representations or warranties for statements or errors contained in, or omissions from, the report.

The forward-looking statements, and underlying assumptions, speak only as of the date of January 31, 2024. Ginnie Mae expressly disclaims any obligation or undertaking to update or revise any forward-looking statement or underlying assumption contained in the report to reflect any change in its expectations or any change in circumstances upon which such statement is based.

Past performance is not a guarantee of future results. Accordingly, there are no assurances given, nor representations or warranties made, that all estimated returns or projections will be realized, or that actual returns or performance results will not materially differ from those estimated herein.”