CAPITAL MARKETS
Special Report

NAIC
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The NAIC's Capital Markets Bureau monitors developments in the capital markets globally and analyzes their potential impact on the investment portfolios of U.S. insurance companies. Please see the Capital Markets Bureau website at INDEX.

Small Increase in U.S. Insurers' Exposure to Residential Mortgage-Backed Securities in 2022

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Executive Summary

- As of year-end 2022, U.S. insurers' investment in residential mortgage-backed securities (RMBS), including both agency-backed (agency) and private-label, totaled about $341 billion in book/adjusted carrying value (BACV), which was about 4% of total cash and invested assets, a 1.5% increase from 2021.
- For the five years ending in 2022, however, U.S. insurers' exposure to RMBS decreased by 12% due in part to trends in the mortgage market and the negative economic impact and recovery from COVID-19.
- Agency RMBS—i.e., backed by the U.S. government or government-sponsored entities (GSEs)—totaled $237.1 billion, while private label RMBS totaled almost $104 billion BACV at year-end 2022.
- U.S. insurers' exposure to all RMBS mainly carried NAIC 1 Designations, implying the highest credit quality, mitigating concern regarding credit risk.
- More than 90% of U.S. insurers' private-label RMBS and almost half of agency RMBS were with life companies.

Residential mortgage-backed securities (RMBS) are included in U.S. insurers' structured securities investments and may be agency-backed (agency) or non-agency-backed (private-label). For agency RMBS, the underlying mortgage loans are guaranteed or backed by U.S. government-sponsored entities (GSEs), such as Federal Home Loan Mortgage Corporation (FHLMC) or the Federal National Mortgage Association (FNMA), or by the full faith and credit of the U.S. government as issued by the Government National Mortgage Association (GNMA), a wholly owned U.S. government corporation. In contrast, private-label RMBS are neither issued nor guaranteed by a GSE or U.S. government corporation; rather, they are issued by other private, non-government financial institutions, such as banks. As such, private-label RMBS bear the credit risk of underlying mortgage loans as to the timely payment of principal and interest on the securities.

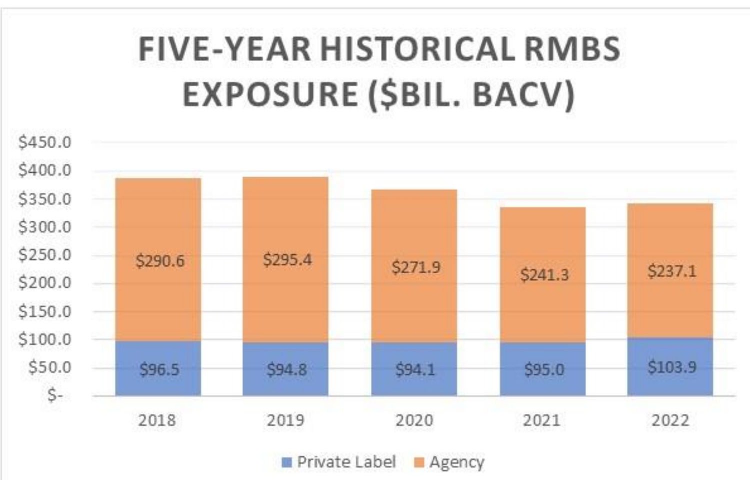
In the lower-for-longer interest rate environment that existed before 2022, similar to other structured securities, RMBS became an attractive alternative to traditional bond investments given their higher yields for comparable ratings, particularly for private-label RMBS.

U.S. Insurers' Historical Residential Mortgage-Backed Securities Exposure

Together, U.S. insurers' exposure to RMBS totaled $341 billion at year-end 2022, which was about 4% of total cash and invested assets. This is only a 1.5% increase from $336.3 billion at year-end 2021 but an approximately 12% decrease from $387.1 billion in 2018. The decrease in overall investment in RMBS is due in part to trends in the mortgage market, particularly as the economy was affected by the COVID-19 pandemic. With regard to the credit risk of the RMBS exposure, on an aggregate basis, 98% of all RMBS held by U.S. insurers carried NAIC 1 Designations at year-end 2022.

As shown in Chart 1, U.S. insurers' exposure to private-label RMBS began to gradually increase after 2020, and it increased by almost 9% year-over-year (YOY) to $103.9 billion at year-end 2022 from $95 billion in 2021. For the five years ending in 2022, U.S. insurer exposure to private-label RMBS increased by almost 8%.

Chart 1:



There was a small decrease, however, in agency RMBS to $237.1 billion at year-end 2022 from $241.3 billion in 2021. In fact, U.S. insurers' exposure to agency RMBS has gradually declined since 2019. For the five years ending in 2022, exposure to agency RMBS decreased by 18%. This may be attributed to the lower yields on government-sponsored bonds being less attractive investments, among other economic and market-related factors.

Private-Label Residential Mortgage-Backed Securities Exposure Mostly Highest Quality and With Life Companies

At year-end 2022, exposure to private-label RMBS was predominantly held by life companies, at about 76% of the industry total, which was a slight decrease from 77% at year-end 2021, even though the book/adjusted carrying value (BACV) experienced a small increase YOY to $78.6 billion from $73 billion (Refer to Table 1). Property/casualty (P/C) companies' exposure increased slightly to 21% of the industry total at year-end 2022 from 20% in 2021, and it also increased in terms of BACV to $22 billion. About 94% of U.S. insurers' private-label RMBS exposure carried NAIC 1 Designations, implying the highest credit quality. The remainder was mostly in securities carrying NAIC 2 Designations, implying high credit quality and mitigating concerns regarding credit risk.

Table 1: U.S. Insurers' Private-Label Residential Mortgage-Backed Securities Exposure, Year-End 2021 and 2022

Industry Type	$bil BACV	% of Total	$bil BACV	% of Total
Life	78.6	76%	73.0	77%
P/C	22.0	21%	19.3	20%
Health	3.4	3%	2.7	3%
Total	**103.9**	**100%**	**95.0**	100%

The majority of U.S. insurers' exposure to private-label RMBS is scheduled to mature in more than 20 years, at 72% of the total (Refer to Table 2), which is not surprising given the long-term nature of the underlying mortgage loans and the asset-liability match for life companies. Overall, 97% of U.S. insurers' private-label RMBS mature in 11 years or more. Note, however, that the average life of these investments may be shorter due in part to prepayments.

Table 2: U.S. Insurers' Private-Label Residential Mortgage-Backed Securities Exposure by Maturity, Year-End 2022

Maturity	$bil. BACV	% of Total
Greater Than 20-Years	74.5	72%
Between 11-Years and 20-Years	26.1	25%
Between 6-Year and 10-Years	1.8	2%
Between 1-Year and 5-Years	1.4	1%
Less Than 1-Year	0.0	0%
Total	**103.9**	**100%**

About Half of Agency Residential Mortgage-Backed Securities Exposure is with Life Companies and Almost All Highest Credit Quality

Almost half of U.S. insurers' exposure to agency RMBS was held by life companies at year-end 2022, a small decrease from 55% at year-end 2021 (Refer to Table 3). Life companies' exposure decreased by almost 14% to $114 billion at year-end 2022 from $132.4 billion at year-end 2021. Countering the decrease in life companies' exposure YOY was an increase in P/C companies' exposure to $96.1 billion in agency RMBS from $88.1 billion at year-end 2021. In addition, health companies' exposure also increased YOY by almost 30% and was almost $26 billion at year-end 2022. Almost all agency RMBS held by U.S. insurers carried NAIC 1 Designations, indicating the highest credit quality. During periods of economic uncertainty, investors, including U.S. insurers, tend to seek investments in government bonds or those backed by the U.S. government, which may be a reason for the YOY increase for P/C and health companies, as agency RMBS may have represented 'safer,' attractive yield opportunities.

Table 3: U.S. Insurers' Agency Residential Mortgage-Backed Securities Exposure, Year-End 2021 and 2022

	Year-End 2022		Year-End 2021	
Industry Type	**$ bil. BACV**	**% of Total**	**$ bil. BACV**	**% of Total**
Life	114.3	48%	132.4	55%
P/C	96.1	41%	88.1	37%
Health	25.8	11%	20.1	8%
Title	0.8	0%	0.6	0%
Total	**237.1**	**100%**	**241.3**	**100%**

In terms of maturity, about 71% of agency RMBS held by U.S. insurers matured in more than 20 years at year-end 2022, and 93% matured in more than 10 years. This trend, in part, is a function of the underlying mortgage loan duration, as well as the asset-liability match for U.S. insurers, particularly for life companies that hold most of the industry's agency RMBS investments.

Table 4: U.S. Insurers' Agency Residential Mortgage-Backed Securities by Maturity, Year-End 2022

Maturity	$bil. BACV	% of Total
Greater Than 20-Years	167.9	71%
Between 11-Years and 20-Years	52.3	22%
Between 6-Year and 10-Years	13.1	6%
Between 1-Year and 5-Years	3.6	2%
Less Than 1-Year	0.2	0%
Total	**237.1**	**100%**

Mortgage Market Trends

The residential mortgage market began 2022 with relatively low mortgage rates and generous home price appreciation. However, in an attempt to combat record-high inflation, the Federal Reserve System (Fed) raised the federal funds rate throughout the year, for a total of 450 basis points on eight separate but consecutive actions, resulting in the highest range since early 2007. In turn, mortgage rates also increased, with the 30-year fixed rate reaching a high of 6.61% in November 2022—the highest in over a decade—and they finished the year even higher at 7.71% in December. As of April 2023, the 30-year fixed mortgage rate was down to 6.43%. The increase in rates by the Fed not only resulted in an increased cost to mortgage borrowers, but it also caused prepayment speeds to slow by 50–75%, according to research by DBRS Morningstar.[1]

In addition to a scarcity of collateral, high interest rates and wide spreads over U.S. Treasuries resulted in increased deal execution costs. As such, mortgage issuance volume contracted, as well as the new issuance of RMBS. In 2022, agency RMBS new issuance totaled about $1.7 trillion, according to the Urban Institute's Housing Finance Policy Center research,[2] which was a 51% decrease from about $3.5 trillion in 2021. In addition, private-label RMBS new issuance decreased by 38% to $103.9 billion in 2022 from $167.6 billion in 2021. According to the Urban Institute, 2021 was the largest year of private-label new issuance for RMBS (in dollar volume) since 2008. Through Q1 2023, new issuance for agency and private-label RMBS was approximately $208 billion and $15.9 billion, respectively. In general, mortgage loan issuance continues to be negatively affected by high inflation, elevated interest rates, and recession fears. On a positive note, delinquencies have been low for quite some time, but an uptick could arise depending on the direction of economic conditions, such as a sharp increase in unemployment, and the consequential impact on mortgage borrowers.

The NAIC Capital Markets Bureau will continue to monitor trends with RMBS and report as appropriate.

Questions and comments are always welcome. Please contact the Capital Markets Bureau at CapitalMarkets@naic.org.

[1] DBRS Morningstar, *U.S. RMBS 2023 Outlook: Down But Not Necessarily Out As Challenging Conditions Persist; While RMBS Credit May Bend, It's Not Likely To Break*, January 2023.
[2] Urban Institute, *Housing Finance: At A Glance Monthly Chartbook*, March 2023.