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A compelling entry point for MBS

Volatility has historically preceded opportunity for mortgage-backed securities

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DEREK WHITE, PH.D., Head of Risk Management, Fixed Income

Key takeaways:

- Mortgage-backed securities (MBS) opened 2022 with drawdowns not seen in 40 years and high volatility that tracked the MOVE Index, a measure of uncertainty in the bond market.
- An analysis of historical MOVE data and MBS performance highlights an intriguing pattern: as the MOVE Index rises, mortgage-backed securities are more likely to experience positive returns. In addition, six-month periods of negative MBS returns typically precede six months of growth.
- This trend suggests that today's market may be a compelling time for investors to enter the asset class, as MBS may provide a degree of stability during an overall economic downturn.

Placing recent MBS volatility in historical context

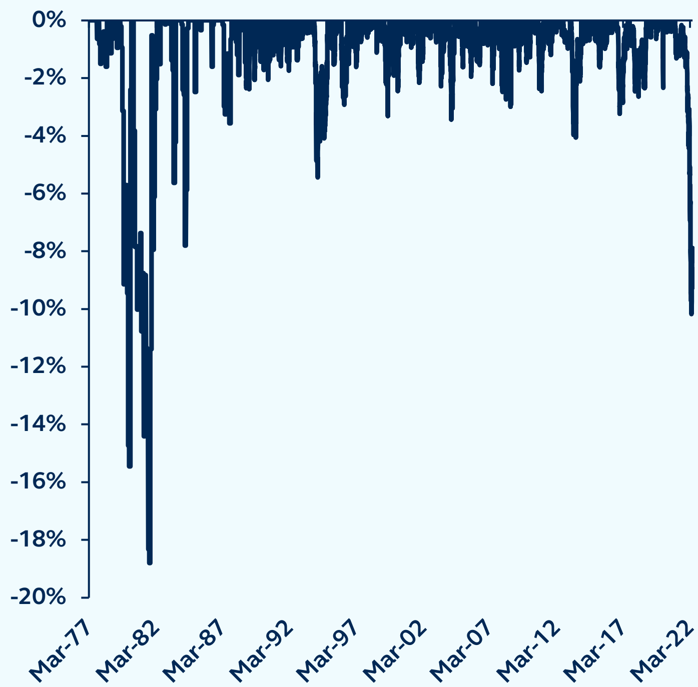
There's no denying that mortgage-backed securities (MBS) have been pressured in 2022. As of May 31, MBS returned -7.30% year to date, as represented by the Bloomberg U.S. MBS Index, and -8.36% from its peak in February 2021. These returns are far worse than even during the Global Financial Crisis, when the asset class was down -2.99%. In fact, MBS has not seen a peak-to-trough drawdown this severe in more than four decades.

At the same time the MBS market was stumbling this year, broad bond markets experienced high levels of volatility, as measured by the Merrill Lynch Option Volatility Estimate, commonly known as the MOVE Index.[1] The MOVE measures implied volatility on one-month U.S. Treasury options, meaning it rises when investors are concerned that rates will increase. On March 7, 2022, the MOVE spiked to 140.03—a high not seen since the chaotic early days of the COVID-19 pandemic in 2020. In fact, the MOVE has only surpassed that level (140.03) 1% of the time since 1980.

Combined, the underperformance of MBS and the uncertainty of broader fixed income may seem to paint a negative picture of the MBS asset class. But the following analysis provides reason for optimism.[2]

Chart 1: MBS market drawdowns

Peak-to-trough, March 1977 – May 2022



Source: Bloomberg U.S. MBS Index, Principal Global Fixed Income. Data as of May 31, 2022.

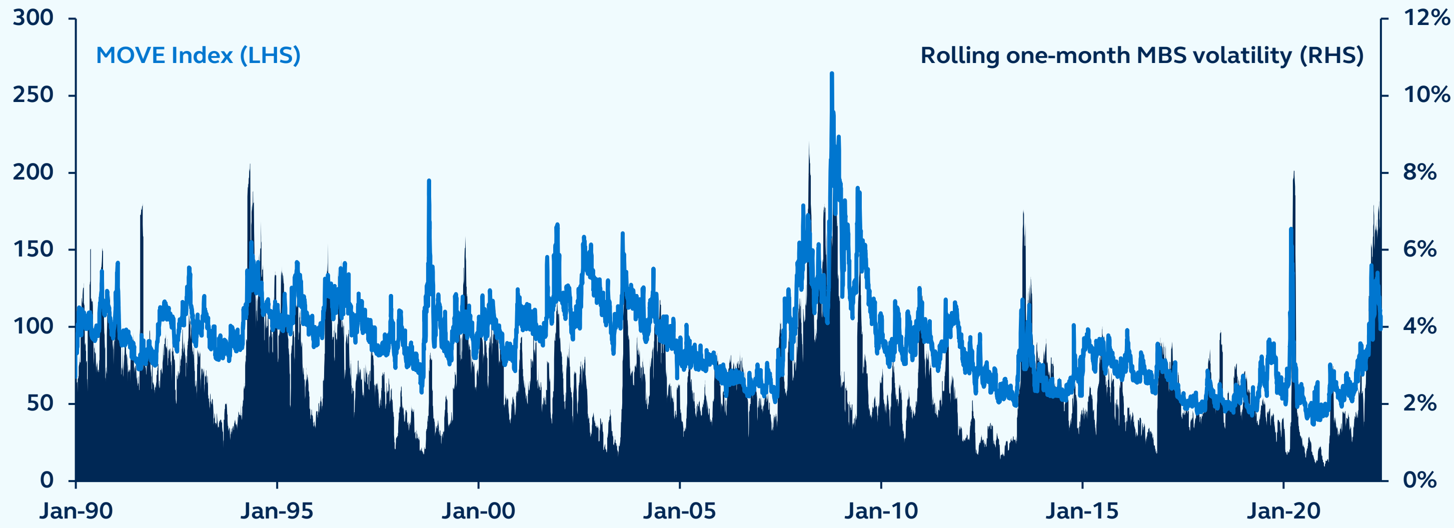
[1] The MOVE Index is fixed income's equivalent to equities' "Fear Index," the VIX (officially the Cboe Volatility Index).
[2] Principal Global Fixed Income's research team determined that the MOVE Index was the most predictive measure of MBS performance. See disclosures for more information.

MBS tends to move with the MOVE

For the past decade, supportive policies from the U.S. Federal Reserve (Fed) have helped to suppress both realized and implied volatility with U.S. Treasurys and mortgage-backed securities. However, as the Fed has begun to withdraw its support and become increasingly hawkish throughout 2022, the MOVE has steadily risen.

Before March 2022, aside from those early days of the coronavirus, the MOVE had not surpassed 120 in more than a decade.[3] But the MOVE surpassed it for the three and a half weeks between April 18 and May 11 of this year. And as the MOVE rose, MBS volatility rose with it, as shown in *Chart 2*.

Chart 2: The MOVE Index and rolling one-month MBS volatility
January 1990 – May 2022



Source: Bloomberg U.S. MBS Index, Principal Global Fixed Income. Data as of May 31, 2022.

Considering the correlation

Looking at the six months preceding and following volatile periods can help clarify the correlation between MBS and the MOVE, and what may be in store for the asset class for the remainder of 2022.

First, investors may find it helpful to compare MBS excess returns with U.S. Treasurys for the six-month periods from April 2001 to November 2021. Examining all these rolling returns shows the consistency of the results—that they weren't simply driven by the 2008 downturn.

Table 1, on the next page, reveals several intriguing patterns:

- As the MOVE Index rises, average excess MBS returns increase over the next six months.
- The probability of subsequent six-month excess returns being positive also increases as the MOVE Index reaches higher levels.
- The white space in the table's lower-right quadrant indicates that the recent high levels of volatility—that is, when the MOVE surpasses 120—are uncommon.

In general, an elevated MOVE Index has historically preceded potentially attractive opportunities within MBS for the next half a year.

[3] The white space in the bottom right corner of Table 1 shows just how infrequent that measure is.

It is also helpful to look forward and consider how MBS has performed when the previous six-month returns were either positive or negative. Again, the 20 years of returns depicted in *Table 2* reveal several intriguing patterns:

- Losses like what MBS has experienced during the past six months are exceedingly rare.
- After six months of negative performance, the next six months of excess returns are often positive.
- After six months of positive performance, the positive momentum typically continues.

Overall, MBS returns exhibit both value and momentum characteristics, making the asset class particularly appealing amid a broader economic downturn.

Table 1: Forward MBS six-month excess rolling returns vs. UST
MOVE Index, April 2001 – November 2021

	< 60	60-80	80-100	100-120	120-140	140-160	>160
Avg.	**-0.12%**	**-0.04%**	**0.11%**	**0.34%**	**0.46%**	**0.85%**	**1.85%**
Prob > 0	**43.58%**	**53.81%**	**60.45%**	**71.09%**	**75.00%**	**76.19%**	**89.66%**
Max loss	**-2.62%**	**-2.49%**	**-2.29%**	**-2.67%**	**-3.60%**	**-2.89%**	**-1.21%**
2001			-0.69%	0.00%	0.97%	1.29%	1.39%
2002			-0.02%	0.32%	0.69%	0.85%	
2003			-1.16%	-0.22%	0.73%	1.17%	1.25%
2004		0.10%	0.58%	0.78%	0.99%		
2005		0.04%	-0.05%	-0.04%			
2006	0.41%	0.34%					
2007	-1.56%	-1.21%	-0.71%	-0.67%	-0.37%	0.06%	
2008				-0.85%	-1.29%	-0.42%	1.57%
2009			0.32%	1.47%	1.99%	2.04%	2.48%
2010		0.61%	0.94%	1.10%	1.18%		
2011		-2.00%	-0.72%	0.73%			
2012	-0.28%	0.11%	0.28%				
2013	0.19%	0.58%	1.07%	1.28%			
2014	-0.05%	-0.05%	-0.08%	0.23%			
2015		-0.02%	0.05%				
2016	-0.61%	-0.00%	0.33%				
2017	0.22%	0.23%					
2018	-0.10%	0.06%					
2019	-0.33%	0.12%	0.15%				
2020	0.16%	-0.03%	0.19%	0.31%	1.13%	1.83%	0.81%
2021	-0.62%	-0.90%	-0.73%				

Table 2: Forward MBS six-month excess rolling returns vs. UST
Prior six-month MBS excess return, April 2001 – November 2021

	< -2%	-2% to -1%	-1% to 0%	0% to 1%	1% to 2%	2% to 3%	> 3%
Avg.	**2.02%**	**0.42%**	**0.15%**	**-0.01%**	**0.04%**	**1.09%**	**2.25%**
Prob > 0	**98.75%**	**69.54%**	**61.35%**	**49.60%**	**67.14%**	**91.43%**	**100.00%**
Max loss	**-0.05%**	**-2.96%**	**-2.89%**	**-3.60%**	**-2.38%**	**-2.03%**	**n.a.**
2001		1.40%	0.29%	-0.61%			
2002		1.21%	0.74%	0.52%	0.20%		
2003		1.01%	0.41%	-0.71%	-1.34%		
2004			0.90%	0.90%	0.22%		
2005			0.26%	-0.30%	-0.15%		
2006			0.47%	0.33%			
2007	0.98%	-0.72%	-1.50%	-1.34%	-0.74%		
2008	2.65%	0.59%	-0.81%	-1.58%	-1.33%	-1.14%	
2009	2.24%	2.45%	2.48%	2.30%	1.71%	1.30%	2.25%
2010			1.85%	1.09%	0.49%		
2011	1.19%	0.68%	-0.25%	-1.41%	-0.99%	-1.46%	
2012		0.20%	0.29%	-0.02%	0.20%		
2013		1.75%	0.86%	0.16%	0.68%		
2014			-0.24%	-0.10%	0.34%	0.05%	
2015			0.02%	0.02%			
2016			0.28%	-0.08%			
2017			0.31%	0.16%			
2018			-0.05%	-0.09%			
2019			0.00%	-0.23%			
2020	2.41%	1.44%	0.27%	-0.02%	0.41%	0.56%	
2021		-0.15%	-0.83%	-0.69%			

Source: Bloomberg, Principal Global Fixed Income. Data as of May 31, 2022.

Poised for opportunity

Investors are understandably skittish after witnessing this recent MBS drawdown, particularly in a climate of potential recession, increasingly unaffordable home prices, and rising mortgage rates. Additionally, the Fed's quantitative tightening, or shrinking of MBS and U.S. Treasury holdings, has caused investors to re-assess the technical supply/demand picture for MBS.

The Fed has made its intentions clear to reduce MBS holdings by up to $35 billion per month, subject to realized cash flows from prepayments and interest. However, this study of the asset class's correlation with the MOVE Index suggests that MBS is now poised for growth. In particular:

- Although high inflation is cutting into consumer spending power, broadly, Americans' savings remain shored up by pandemic subsidies and should provide some cushion against rising prices.
- The housing market is fundamentally strong, and high mortgage rates reduce prepayment risk.
- Given the backing of the U.S. government for securities within the U.S. MBS Index, these securities may provide a measure of safety against any weakness or heightened default risk in the housing market.

If the U.S. economy is indeed headed toward a recession, MBS stands poised for opportunity. The asset class already posted positive returns during May's equity sell-off.

Of course, no one can predict the future, and past performance is no guarantee of future results—but historical patterns may serve as a guide for the asset class. After the recent once-in-a-generation sell-off, MBS investors may be positioned for a once-in-a-generation opportunity.

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[2] From page 1: Principal Global Fixed Income's research team determined that the MOVE Index was the most predictive measure of MBS performance, after considering predictability of total and excess returns to Treasuries; predictability in excess current coupon yield (mortgage current coupon rate less duration-matched Treasuries); predictability of excess yield to duration-matched intermediate-maturity corporate bonds; and predictability of refinancing risk (looking at current 30-year mortgage rates compared with the weighted-average coupon on the MBS Index).

Risk considerations

Investing involves risk, including possible loss of principal. Past performance is no guarantee of future results. Fixed-income investment options are subject to interest rate risk, and their value will decline as interest rates rise. Mortgage-backed securities are subject to credit, prepayment, default , interest rate and risk due to real estate exposure.

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