Milliman has updated product features and assumptions for the Milliman Hedge Cost Index.

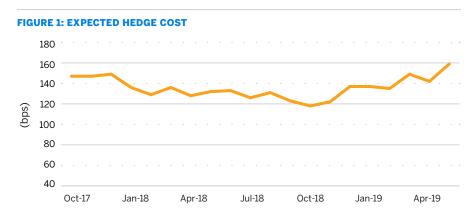
Index stands at 159 basis points

Ram Kelkar, CFA
Daren Lockwood, PhD, FRM
Xiaohong Mo, FSA, MAAA, CFA
Adam Schenck, MS, FRM, CFA



Milliman recently completed a review of the design of the Milliman Hedge Cost Index (MHCI) and implemented some changes to align product features and assumptions with those prevalent in the Variable Annuity (VA) marketplace. Details regarding this update can be found in the Index Methodology¹ document.

The expected hedge cost for a hypothetical Guaranteed Lifetime Withdrawal Benefit (GLWB) block is estimated to be 159 bps as of the end of May 2019, up 17 basis points from the previous month, measured on a consistent basis. The increase in MHCl is driven by a decrease in long-term interest rates. The Index Methodology provides additional details about the assumptions and methodologies underlying the MHCl.



ABOUT THE MILLIMAN HEDGE COST INDEX

The Milliman Hedge Cost Index™ (MHCI) provides the estimated hedging cost for a hypothetical Guaranteed Lifetime Withdrawal Benefit (GLWB) block, based on product specifications and modeling assumptions as described in the MHCI Methodology Document. The expected hedge costs are calculated using product features for a generic GLWB in line with product designs common in the market. Likewise, the modeling assumptions are based on typical actuarial and behavioral assumptions widely used by VA writers in the marketplace.

Milliman conducts annual reviews of the product features and assumptions underlying the MHCI and will implement updates to the assumptions as and when appropriate to keep pace with market trends and industry practice.

The MHCI is calculated each month based on the risk-adjusted Milliman Guaranteed Index volatility assumption and swap interest rates. It also assumes 50% of investment is in a fixed target volatility option as described in the MHCI Methodology Document. As a result, monthly changes in the index are primarily driven by movements in swap interest rates.

FIGURE 2: EXPECTED HEDGE COST (bps of Guaranteed Withdrawal Base)

DATE	EXPECTED HEDGE COST	CHANGE FROM PRIOR MONTH
10/30/17	147	
11/29/17	147	0
12/28/17	149	2
1/30/18	136	(13)
2/27/18	129	(7)
3/28/18	136	7
4/27/18	128	(8)
5/30/18	132	4
6/28/18	133	1
7/30/18	126	(7)
8/30/18	131	5
9/27/18	123	(8)
10/30/18	118	(5)
11/29/18	122	4
12/28/18	137	15
1/30/19	137	0
2/27/19	135	(2)
3/28/19	149	14
4/29/19	142	(7)
5/30/19	159	17

To view the Milliman Hedge Cost Index Methodology, go to: milliman.com/mhci-methodology/

©2019 Milliman, Inc. All Rights Reserved. The materials in this document represent the opinion of the authors and are not representative of the views of Milliman, Inc. Milliman does not certify the information, nor does it guarantee the accuracy and completeness of such information. Use of such information is voluntary and should not be relied upon unless an independent review of its accuracy and completeness has been performed. Users of the Hedge Cost Index should consult their own financial, accounting and other advisors to the extent they consider necessary, and make all decisions solely based upon their own judgment and advice from their advisors. Materials may not be reproduced without the express consent of Milliman.

JUNE 2019 milliman.com