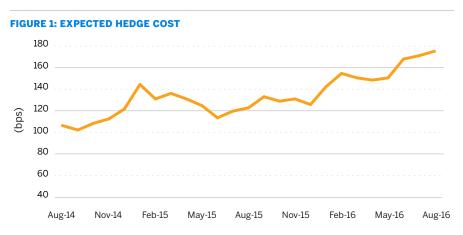
Milliman reports 4 basis point increase in Hedge Cost Index for VA guarantees in August

Index stands at 172 basis points

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

🕻 Milliman

The expected hedge cost for a hypothetical lifetime GMWB block (see Index Methodology¹) is estimated to be 172 bps as of the end of August 2016, up 4 bps from the previous month, driven by a decrease in long-term swap interest rates. The Index Methodology provides additional details about the assumptions and methodologies underlying the Milliman Hedge Cost Index.



ABOUT THE MILLIMAN HEDGE COST INDEX

The Milliman Hedge Cost Index[™] (MHCI) provides the estimated hedging cost for a hypothetical lifetime guaranteed minimum withdrawal benefit (lifetime GMWB) 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 lifetime GMWB 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 Milliman Hedge Cost Index is calculated based on a fixed target volatility assumption and end-of-month swap interest rates as described in the MHCI Methodology Document. As a result, monthly changes in the index are primarily driven by movements in swap interest rates.

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

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

DATE	EXPECTED HEDGE COST	CHANGE FROM PRIOR MONTH
8/28/14	105	
9/29/14	101	(4)
10/30/14	107	6
11/26/14	111	4
12/30/14	120	9
1/29/15	142	22
2/26/15	129	(13)
3/30/15	134	5
4/29/15	129	(5)
5/28/15	123	(6)
6/29/15	112	(11)
7/30/15	118	6
8/28/15	121	3
9/29/15	131	10
10/29/15	127	(4)
11/27/15	129	2
12/30/15	124	(5)
1/28/16	140	16
2/26/16	152	12
3/30/16	148	(4)
4/28/16	146	(2)
5/27/16	148	2
6/29/16	165	17
7/28/16	168	3
8/30/16	172	4

©2016 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 judgement and advice from their advisors. Materials may not be reproduced without the express consent of Milliman.