

## Milliman reports 16 basis point increase in Hedge Cost Index for VA guarantees in January

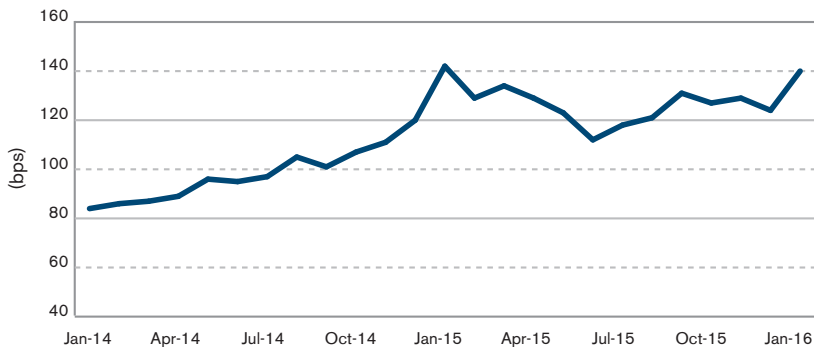
Index stands at 140 basis points

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The expected hedge cost for a hypothetical lifetime GMWB block (see Index Methodology<sup>1</sup>) is estimated to be 140 bps as of the end of January 2016, up 16 bps from the previous month, driven by a sharp decrease in long-term swap interest rates. The Index Methodology provides additional details about the assumptions and methodologies underlying the Milliman Hedge Cost Index.

**FIGURE 1: EXPECTED HEDGE COST**



**FIGURE 2: EXPECTED HEDGE COSTS (BPS OF GUARANTEED WITHDRAWAL BASE)**

DATE	EXPECTED HEDGE COST	CHANGE FROM PRIOR MONTH
1/30/14	84	
2/27/14	86	2
3/28/14	87	1
4/29/14	89	2
5/29/14	96	7
6/27/14	95	(1)
7/30/14	97	2
8/28/14	105	8
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

### 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.

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

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