

# Milliman reports 11 basis point drop in Hedge Cost Index for VA guarantees in October



Index stands at 67 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 67 bps as of October 2009, down 11 bps from the previous month. Swap interest rates at the long end of the curve have increased by around 25-34 bps since the prior month-end, accounting for most of the decrease in the hedge cost index. The Index Methodology provides additional details

about the assumptions and methodologies underlying the Milliman Hedge Cost Index.

Expected hedge costs are trending down from the high levels of late 2008 as swap rates have normalized, but continue to be higher than levels seen in 2006-2007.

FIGURE 1: EXPECTED HEDGE COST (IN BPS OF GUARANTEED WITHDRAWAL BASE - SEE INDEX METHODOLOGY FOR DETAILS)

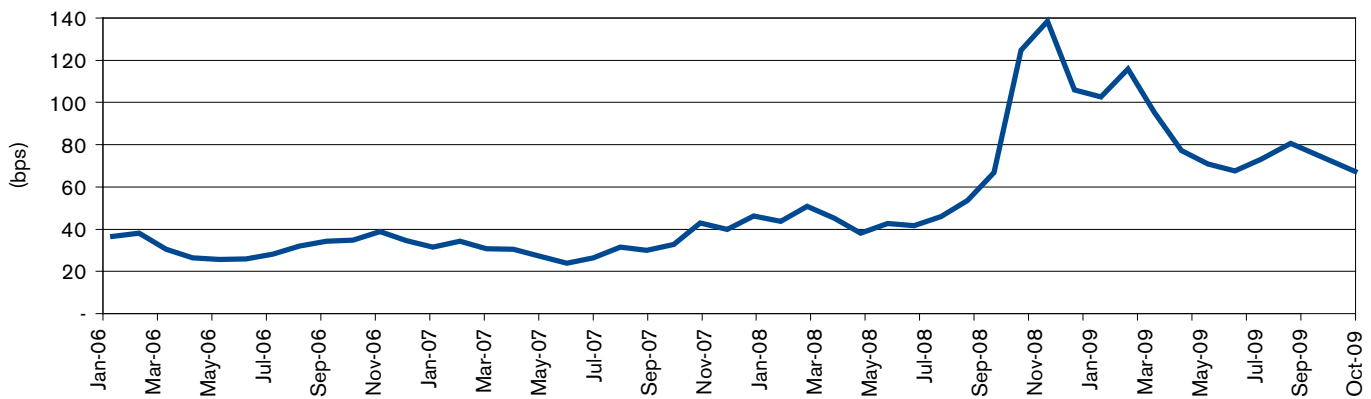
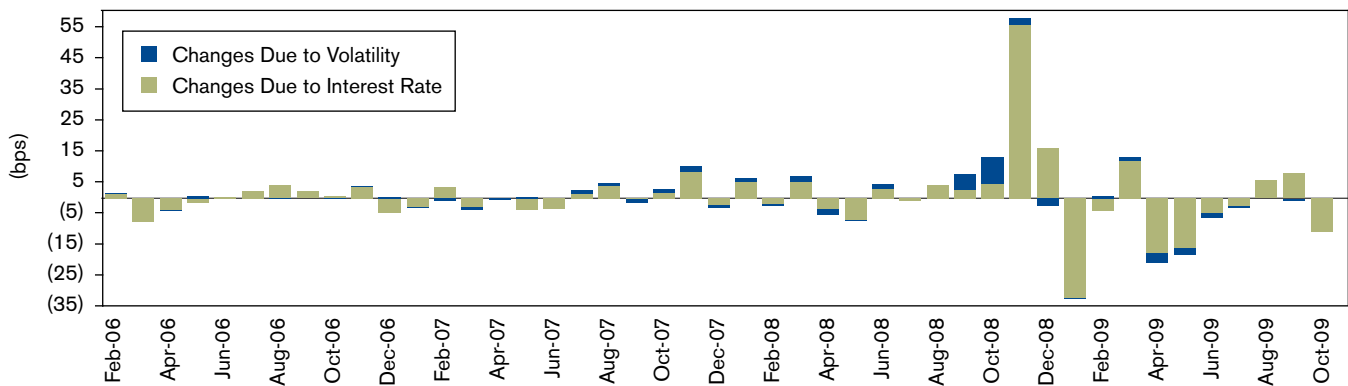


FIGURE 2: CHANGES IN EXPECTED HEDGE COST (IN BPS OF GUARANTEED WITHDRAWAL BASE - SEE INDEX METHODOLOGY FOR DETAILS)



<sup>1</sup> To view the Milliman Hedge Cost Index Methodology, go to <http://www.milliman.com/expertise/life-financial/products-tools/guarantee-index/>.

**ABOUT MILLIMAN COST INDEX**

Milliman publishes an expected cost of hedging indicator as part of the Milliman Guarantee Index report to demonstrate the impact of changes in volatility levels and interest rate assumptions on the cost of hedging VA guarantees. Indicative hedge costs for a hypothetical lifetime guaranteed minimum withdrawal benefit (*lifetime GMWB*) block are calculated using the Milliman Guarantee Index and current swap interest rate levels. Attribution analysis for the results will help Index users better understand the monthly changes in hedge cost based on movements in volatility and risk-free interest rates.

The expected hedging costs are calculated using a generic lifetime GMWB product that is similar to product designs common in the market. The modeling of the guarantee is based on typical actuarial and behavioral assumptions widely used by many variable annuity (VA) writers. Additional details about product design and key assumptions for the hypothetical lifetime GMWB block are provided in the Index Methodology.

**FIGURE 3: HISTORICAL HEDGE COSTS AND ATTRIBUTION ANALYSIS (IN BPS OF GUARANTEED WITHDRAWAL BASE)**

**EXPECTED HEDGE COSTS (BPS OF GUARANTEED WITHDRAWAL BASE)**

CHANGES FROM PRIOR MONTH				EXPECTED	CHANGES FROM PRIOR MONTH				EXPECTED
DATE	DUE TO INT RATES	DUE TO VOL	TOTAL CHANGE	HEDGE COST	DATE	DUE TO INT RATES	DUE TO VOL	TOTAL CHANGE	HEDGE COST
1/31/06	N/A	N/A	N/A	35	12/31/07	(2)	(1)	(3)	38
2/28/06	1	0	1	36	1/31/08	5	1	6	44
3/31/06	(8)	(0)	(8)	29	2/29/08	(2)	(0)	(2)	42
4/30/06	(4)	(0)	(4)	25	3/31/08	5	2	7	49
5/31/06	(1)	1	(1)	24	4/30/08	(4)	(2)	(5)	44
6/30/06	0	(0)	0	24	5/31/08	(7)	(0)	(7)	36
7/31/06	2	(0)	2	26	6/30/08	3	1	5	41
8/31/06	4	(0)	4	30	7/31/08	(1)	(0)	(1)	40
9/30/06	2	0	2	33	8/31/08	4	(0)	4	44
10/31/06	1	(0)	1	33	9/30/08	3	5	8	52
11/30/06	4	0	4	37	10/31/08	5	8	13	65
12/31/06	(5)	0	(4)	33	11/30/08	56	2	58	123
1/31/07	(3)	(0)	(3)	30	12/31/08	16	(3)	14	137
2/28/07	4	(1)	3	33	1/31/09	(32)	(0)	(32)	104
3/31/07	(3)	(1)	(4)	29	2/28/09	(4)	1	(3)	101
4/30/07	0	(0)	(0)	29	3/31/09	12	1	13	114
5/31/07	(4)	0	(3)	25	4/30/09	(18)	(3)	(21)	93
6/30/07	(3)	(0)	(3)	22	5/31/09	(16)	(2)	(18)	75
7/31/07	2	1	3	25	6/30/09	(5)	(1)	(6)	69
8/31/07	4	1	5	30	7/31/09	(3)	(1)	(3)	66
9/30/07	(0)	(1)	(1)	28	8/31/09	6	0	6	71
10/31/07	2	1	3	31	9/30/09	8	(1)	7	78
11/30/07	8	2	10	41	10/31/09	(11)	0	(11)	67

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