

# Milliman reports 14 basis point increase in Hedge Cost Index for VA guarantees in May



Index stands at 76 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 76 bps as of April 2010, up 14 bps from the previous month. The Index Methodology provides additional details about the assumptions and methodologies underlying the Milliman Hedge Cost Index.

Expected hedge costs increased by 14 bps in May due to declines in swap interest rates ranging between 20 and 30 bps at the long end, and an increase in volatility levels. The five bps increase in hedge cost due to a rise in volatility was the largest such increase since October 2008.

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

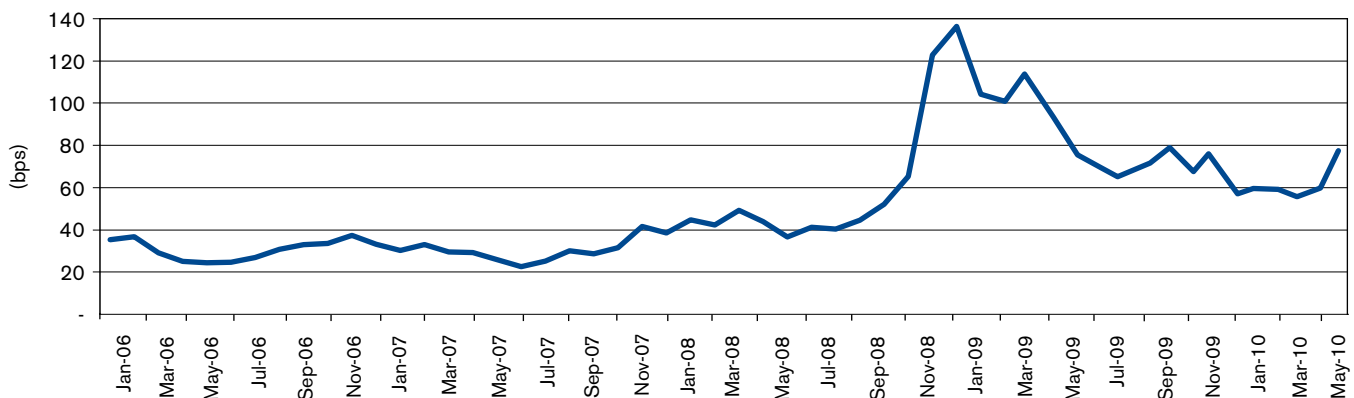
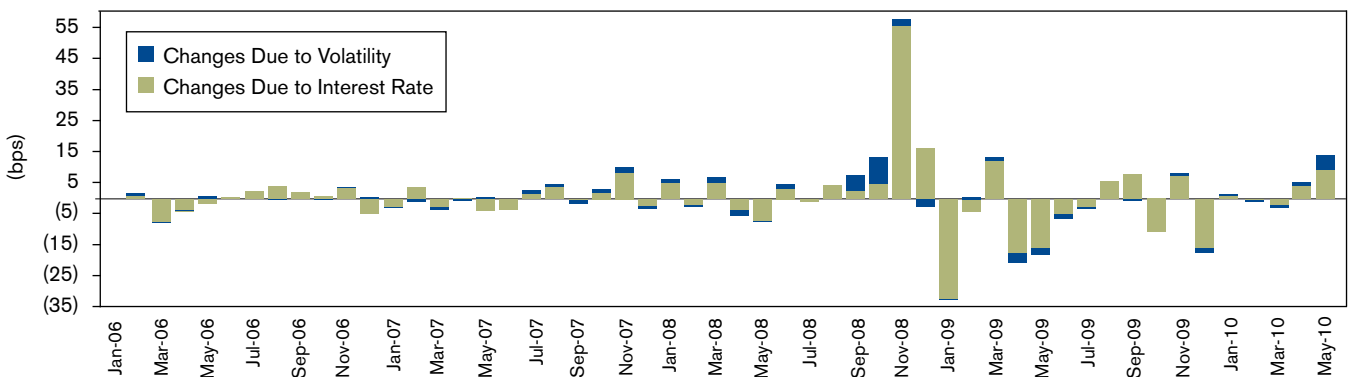


FIGURE 2: CHANGES IN EXPECTED HEDGE COST (IN BPS OF GUARANTEED WITHDRAWAL BASE - SEE INDEX METHODOLOGY FOR DETAILS)



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

### ABOUT THE MILLIMAN HEDGE 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 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	3/31/08	5	2	7	49
2/28/06	1	0	1	36	4/30/08	(4)	(2)	(5)	44
3/31/06	(8)	(0)	(8)	29	5/31/08	(7)	(0)	(7)	36
4/30/06	(4)	(0)	(4)	25	6/30/08	3	1	5	41
5/31/06	(1)	1	(1)	24	7/31/08	(1)	(0)	(1)	40
6/30/06	0	(0)	0	24	8/31/08	4	(0)	4	44
7/31/06	2	(0)	2	26	9/30/08	3	5	8	52
8/31/06	4	(0)	4	30	10/31/08	5	8	13	65
9/30/06	2	0	2	33	11/30/08	56	2	58	123
10/31/06	1	(0)	1	33	12/31/08	16	(3)	14	137
11/30/06	4	0	4	37	1/31/09	(32)	(0)	(32)	104
12/31/06	(5)	0	(4)	33	2/28/09	(4)	1	(3)	101
1/31/07	(3)	(0)	(3)	30	3/31/09	12	1	13	114
2/28/07	4	(1)	3	33	4/30/09	(18)	(3)	(21)	93
3/31/07	(3)	(1)	(4)	29	5/31/09	(16)	(2)	(18)	75
4/30/07	0	(0)	(0)	29	6/30/09	(5)	(1)	(6)	69
5/31/07	(4)	0	(3)	25	7/31/09	(3)	(1)	(3)	66
6/30/07	(3)	(0)	(3)	22	8/31/09	6	0	6	71
7/31/07	2	1	3	25	9/30/09	8	(1)	7	78
8/31/07	4	1	5	30	10/31/09	(11)	0	(11)	67
9/30/07	(0)	(1)	(1)	28	11/30/09	8	1	8	75
10/31/07	2	1	3	31	12/31/09	(16)	(1)	(18)	58
11/30/07	8	2	10	41	1/28/10	2	0	2	60
12/31/07	(2)	(1)	(3)	38	2/25/10	0	(1)	(1)	59
1/31/08	5	1	6	44	3/30/10	(2)	(1)	(3)	56
2/29/08	(2)	(0)	(2)	42	4/29/10	5	1	5	62
					5/27/10	10	5	15	76

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