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# Term Life Insurance Market Update

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In 2017, Milliman conducted a new broad-based survey on term life insurance, capturing historical data for key industry competitors, as well as company perspectives on a range of issues pertaining to these products into the future. Nearly all U.S. life insurance companies offer these products and are impacted by regulatory changes requiring compliance in the next few years (e.g., principle-based reserves and the 2017 Commissioners Standard Ordinary mortality table). The survey is structured similar to Milliman's annual universal life/indexed universal life study covering product and actuarial issues such as sales, profit measures, target surplus, reserves, risk management, underwriting, product design, compensation, and pricing. Forty carriers submitted responses.

In this article, a summary is presented of the trends in the U.S. individual term life insurance marketplace as revealed by survey responses.

## TERM SALES

The graph in Figure 1 illustrates the level premium term period mix for return of premium (ROP) term as reported by survey participants from calendar years 2013 through 2016. Of the 40 survey participants, 13 reported ROP term sales. ROP term sales as a percent of total term sales were 3.6 percent in 2013 and 2014, decreasing to 3.4 percent in 2015, and increasing to 3.9 percent in 2016. ROP term sales were reported for 15-, 20-, 25-, and 30-year level premium term periods, with the majority of sales in the 20- and 30-year terms. The market share for the 30-year term increased year over year for the survey period, at the expense of the 15- and 20-year term.

All 40 survey participants reported non-ROP term sales. Non-ROP term sales as a percent of total term sales were 96.4 percent in 2013 and 2014, slightly increasing to 96.6 percent in 2015, and slightly decreasing to 96.1 percent in 2016. Non-ROP term sales were reported for yearly renewable term (YRT), 5-, 10-, 15-, 20-, 25-, and 30-year level premium term periods, as well as some sales in other level premium term periods. The graph in Figure 2 illustrates the non-ROP term mix by level premium term period as reported by survey participants from 2013



through 2016. The market share by level premium term period was fairly stable for non-ROP term products over the survey period. The market share primarily shifted from the 5-year term (-2.1 percent) to the 10-year term (+2.8 percent).

## PROFIT MEASURES

The predominant profit measure reported by survey participants relative to the pricing of new term sales issued today is an after-tax, after-capital statutory return on investment/internal rate of return (ROI/IRR). The average ROI/IRR target reported by survey participants was 8.9 percent for ROP term products and 9.9 percent for non-ROP term. Profit margin is also a popular profit metric used by survey participants for term insurance. The average profit margin is 6.7 percent for ROP term and 4.5 percent for non-ROP term products.

Figure 3 (page 12) shows the percentage of survey participants reporting that they fell short of, met, or exceeded their profit goals separately for ROP term and non-ROP term products for calendar year 2016. Of note is that none of the participants fell short of their profit goals for ROP term products. The primary reasons reported for not meeting profit goals in 2016 were low interest earnings and higher than targeted expenses.

## PRINCIPLE-BASED RESERVES AND THE 2017 CSO

Implementation of principle-based reserves (PBR) in accordance with the Valuation Manual Chapter 20 (VM-20) was allowed as early as Jan. 1, 2017, subject to a three-year transition period. Five of the 40 participants intended to implement PBR in calendar year 2017. The majority of survey participants (20) plan

Figure 1  
Level Premium Term Period Mix by Year—ROP Term

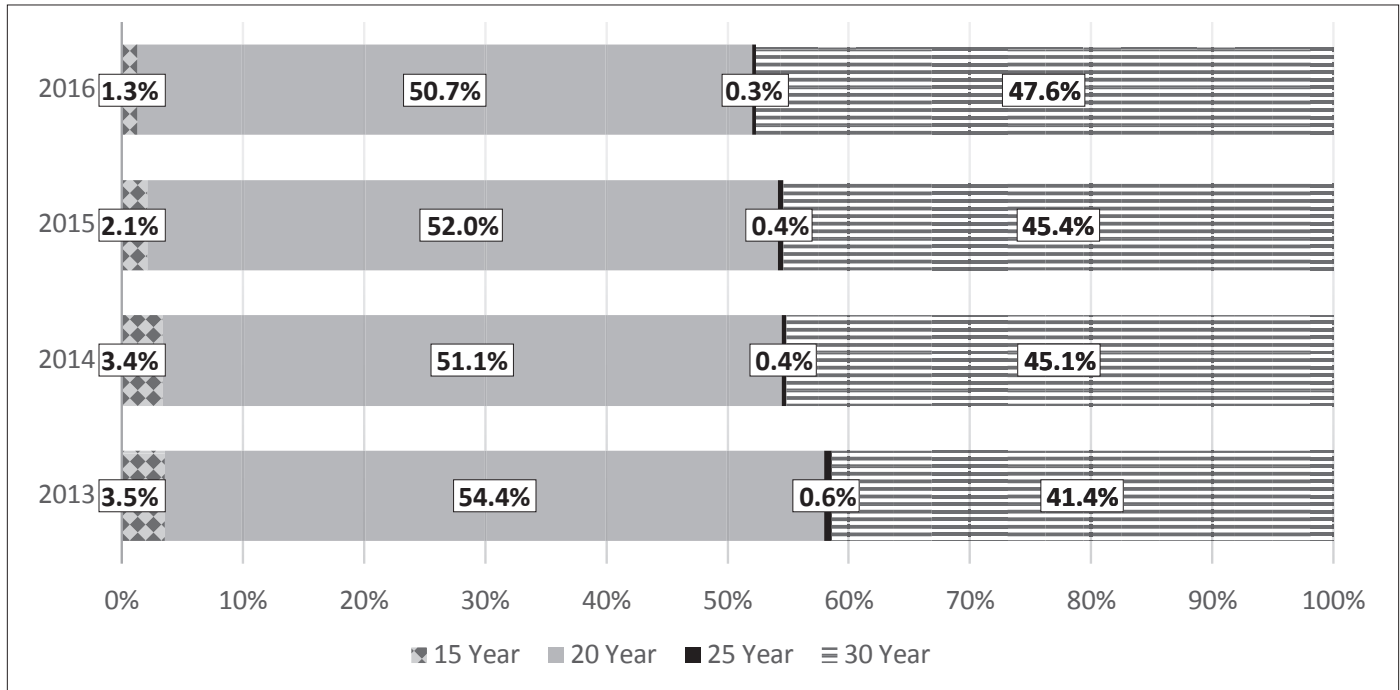


Figure 2  
Level Premium Term Period Mix by Year—Non-ROP Term

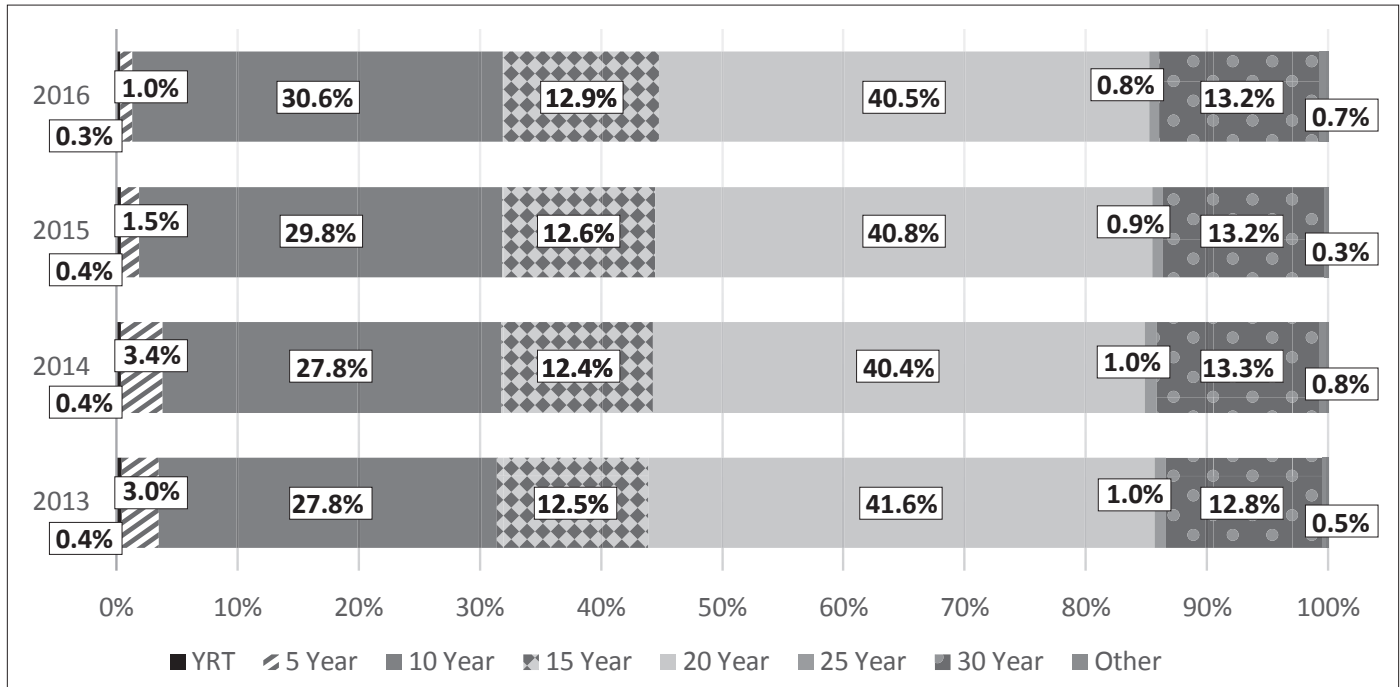
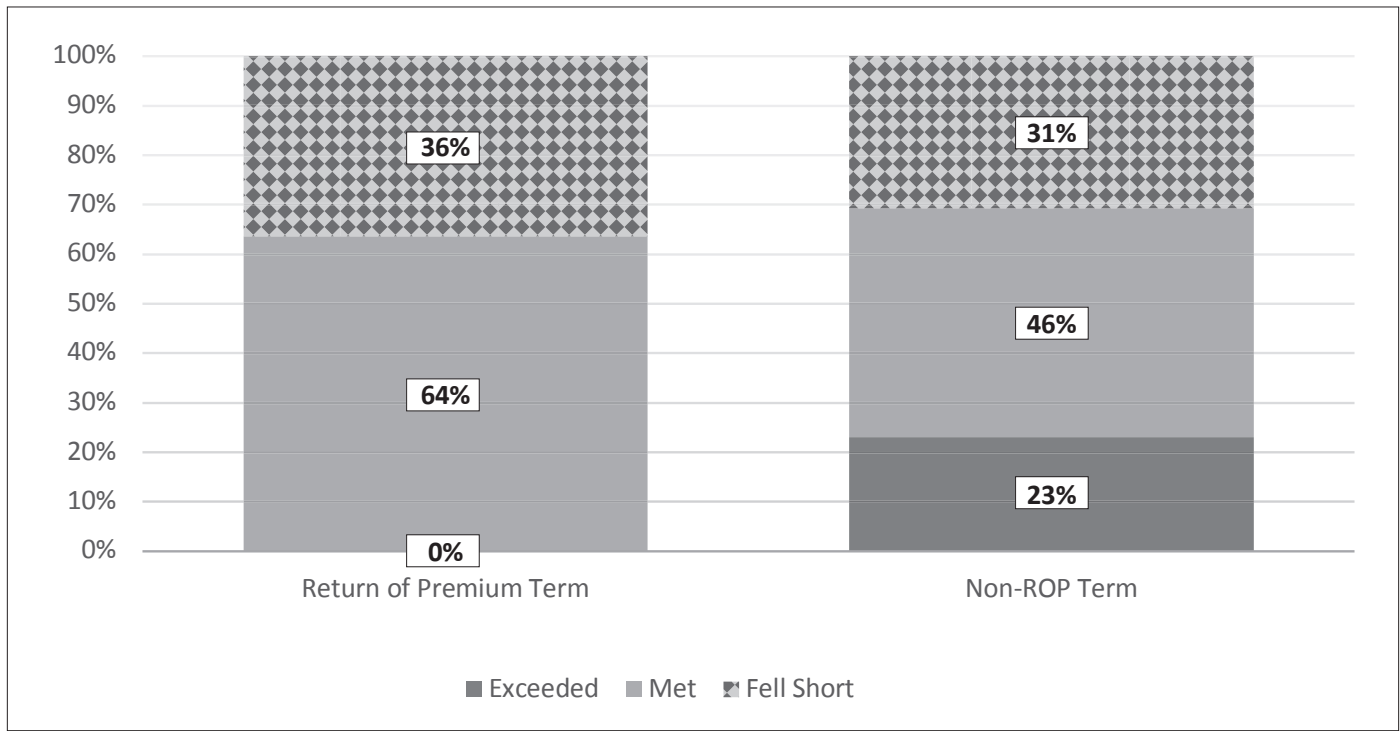


Figure 3  
Actual Results Relative to Profit Goals for 2016



to implement PBR spread over the three-year phase-in period allowed. Three additional participants will implement PBR on Jan. 1, 2020 (the latest date allowed for implementation). Nine participants reported that the timing of PBR implementation is product dependent. The final three participants reported that they are using the small company exemption and are not implementing PBR. Factors impacting the rationale for participants' implementation plans include resource issues, lack of clarity regarding tax reserves, time needed, financial impact/cost/benefits, competitive reasons, awaiting the adoption of PBR by New York, and the advantages of continuing to use Actuarial Guideline 48.

Twenty-eight of the 40 survey participants reported the number of mortality segments being considered in light of VM-20 requirements. As indicated in VM-20, credibility may be determined at either the mortality segment level or at a more aggregate level if the mortality for the sub-classes (mortality segments) was determined using an aggregate level of mortality experience. The Valuation Manual defines a mortality

segment as a subset of policies for which a separate mortality table representing the prudent estimate mortality assumption will be determined. Given the newness of these concepts, survey responders may have varied interpretations of the meaning of mortality segment. The number of segments ranged from one to 120, with an average of 12 and median of five. The most common composition for mortality segments reported by survey participants included only term products, followed by segments whose composition includes term products and universal life (UL) products.

Thirty participants provided a rating of how effective they believe PBR will be in making reserve financing arrangements (e.g., captives) for term insurance obsolete. Ratings are shown in the table in Figure 4. One participant reported that the effectiveness ranges from ineffective to average, therefore 31 responses are shown in the chart. More participants believe PBR will be effective rather than ineffective in making reserve financing arrangements obsolete. Note that this question was part of this term survey, and the responses may not be relevant to other products.

Figure 4  
Effectiveness Ratings of PBR Making Reserve Financing Arrangements Obsolete

Rating	# of Responses
Very Ineffective	None
Ineffective	5
Average	12
Effective	14
Very Effective	none

Figure 5  
Overall Level of Mortality—Aggregate

Aggregate Mortality Rates Were:	# of Participants		
	2014	2015	2016
Close to expected	16	16	14
Lower than expected	10	13	12
Greater than expected	7	4	7

Similar to PBR, the earliest effective date for the use of the 2017 Commissioner’s Standard Ordinary (CSO) mortality table was Jan. 1, 2017, also subject to a three-year phase-in period. Fourteen survey participants reported that they would implement the 2017 CSO spread over the three-year period allowed. Twelve participants intended to implement the 2017 CSO in 2017. The remaining participants noted that implementation would be product-dependent.

#### UNDERWRITING

Of the 39 responses, simplified issue underwriting is being used by 18 participants on some plans, accelerated underwriting by 17 participants, and full underwriting by 38 participants.

The use of predictive modeling in the life insurance industry is becoming more common. Statistical models are utilized in predictive modeling relating outcomes/events to various risk factors/predictors. Scoring models are an example of predictive modeling used relative to life underwriting. Scoring models are being used by 18 survey participants to underwrite their term policies. Nine of the 18 use purely external scoring models and five additional participants use purely internal scoring models.

The remaining four participants reported they use both internal and external scoring models. Eleven of the 18 participants reported using scoring models with automated rules. In total, six participants use lab scoring models, 10 use credit scoring models, 11 use scoring models relative to motor vehicle records, and 14 use prescription history scoring models.

#### PRICING

The overall level of mortality experienced on term insurance relative to that assumed in pricing was reported by survey participants. Figure 5 shows the aggregate mortality levels that were reported by 33 participants for calendar years 2014, 2015, and 2016. The percentage of participants that reported mortality rates were close to or lower than those assumed in pricing was 79 percent in 2014, 88 percent in 2015, and 79 percent in 2016. Note that of the 33 participants reporting aggregate mortality levels, 20 included experience after the level term period.

Similarly, the overall level of lapses experienced on term insurance relative to that assumed in pricing was reported by survey participants. Aggregate lapse rates were reported for calendar years 2014, 2015, and 2016. Actual lapse experience on an aggregate basis was close to or lower than that assumed in pricing for 91 percent of participants in 2014, 90 percent in 2015, and 92 percent in 2016.

#### CONCLUSION

These are interesting times in the term life insurance marketplace. Carriers are dealing with significant regulatory changes, such as PBR and the 2017 CSO. Innovations in underwriting are emerging, such as new underwriting approaches (e.g., accelerated underwriting) and the use of predictive modeling. These recent changes are having a more significant impact on the term life insurance market than has been seen for some time. It is imperative for term writers to stay abreast of these issues and opportunities.

A complimentary copy of the executive summary of the January 2018 Term Life Insurance Issues report may be found at: <http://www.milliman.com/insight/2018/Term-life-insurance-issues/>. ■



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