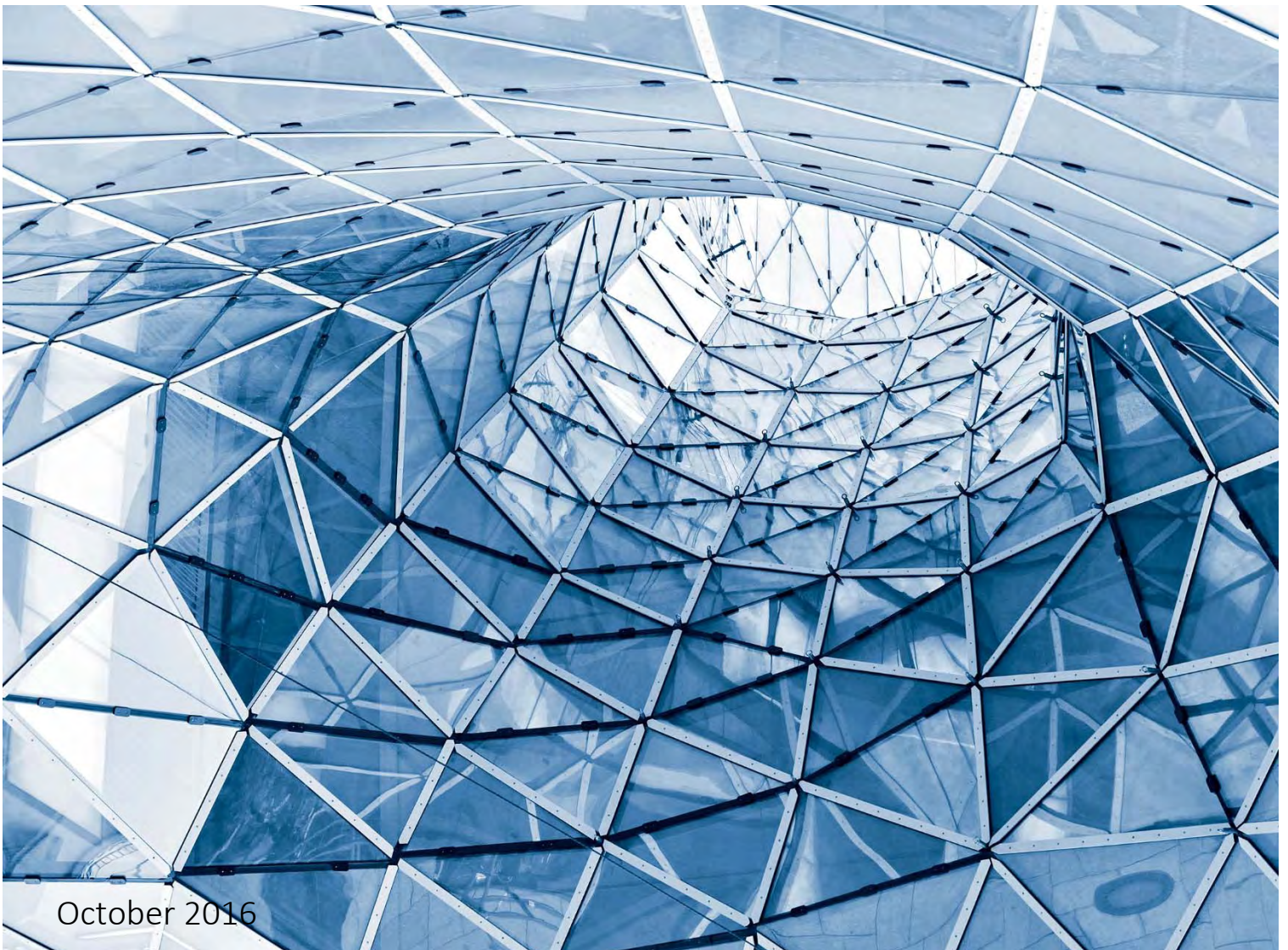


# Report of the Society of Actuaries 2016 Mortality & Other Implications of PBR (VM-20) Survey – Part 2



October 2016



# Mortality and Other Implications of PBR Survey – Part 2

## Caveat and Disclaimer

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## Introduction

This Survey was conducted jointly by the Society of Actuaries' Committee on Life Insurance Mortality and Underwriting Surveys and the National Association of Insurance Commissioners (NAIC) Principle-Based Reserving Implementation (EX) Task Force. It was a follow-up to the Society of Actuaries Mortality and Other Implications of Principle-Based Reserving (PBR) Survey released in June 2015 and was designed to provide a more in-depth assessment of the current state of the industry's preparedness for implementing PBR. It was conducted in July of 2016. We approached the US life insurance companies who were currently selling Term and/or ULSG products and would potentially be early writers of products subject to VM-20. We received 72 responses. Of those 72 responses, 15 indicated they plan to value one or more policies issued in the calendar year 2017 pursuant to VM-20 in the Valuation Manual. Thus, the remaining questions in the Survey were answered by 15 respondents.

## Acknowledgements

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1. The Survey asked respondents if their company plans to value policies issued in 2017 pursuant to VM-20 in the Valuation Manual. There were 72 respondents. Fifteen respondents indicated “Yes” and 57 respondents indicated “No”.
2. The Survey asked those respondents who answered “No” to the above question to indicate the reason(s) for not valuing policies issued in 2017 pursuant to VM-20. A respondent could provide multiple reasons. There were 71 responses.

<b>Reason for Not Valuing Policies Issued in 2017 Pursuant to VM-20</b>	<b># of Responses</b>
Company Elects the 3-Year Transition Period	40 (57%)
Company Meets the Small Company Exemption	11 (15%)
Unsure of Impact to Tax Reserves	11 (15%)
No Products that Fall under VM-20	7 (10%)
Valuing Only under AG-48	2 (3%)
Single State Exemption	0 (0%)
<b>Total # of Responses</b>	<b>71</b>

The most common reason for not valuing business under VM-20 was the election of the 3-Year Transition Period. The Small Company Exemption and Uncertainty of Tax impact were tied with 11 responses each. A number of respondents commented that they were unsure if reserve financing would still be needed once VM-20 is implemented.

Other Comments:

- *Company product development resource constraints*
- *Unsure if reserve financing will still be needed; early indications are that there is no clear advantage to adopting VM-20 for non-guaranteed products (5 responses)*
- *We have not yet decided whether to begin using PBR in 2017 yet.*
- *Company is not issuing new business*
- *Need to upgrade technical platform and upgrade governance framework*
- *As a reinsurer, our business is a combination of YRT, coinsurance and structured transactions. We do not expect to go to PBR for YRT. We expect to make a deal by deal assessment for our structured transactions. We are contemplating whether to use PBR for coinsured business.*

3. The Survey asked respondents to indicate if their company plans to cede life business on or after January 1, 2017 under either an existing or a new captive agreement. If so, the respondents were asked to indicate the product type and the Statutory Valuation Basis (Formulaic, Model Regulation 830, or VM-20). Fifteen respondents indicated that their company plans to cede life business on or after January 1, 2017 under an existing or a new captive.

Product Types	2017 Captive Reinsurance Arrangements	Statutory Valuation Basis		
		Formulaic	Model Regulation 830	VM-20
≤ 20 Year Level Term	14	3	9	2
> 20 Year Level Term	8	3	3	2
Annual Renewable Term	1	0	0	1
Other Term (ROP Term)	0	0	0	0
Universal Life (w/ Secondary Guarantees) (ULSG)	3	2	0	1
Universal Life (w/o Secondary Guarantees)	2	1	1	0
Whole Life	0	0	0	0
Indexed Life	0	0	0	0
Variable Life	0	0	0	0
Other Life (Credit Life)	1	1	0	0

Fourteen respondents reported that their company plans to cede shorter Level Term business (≤ 20 Year) under an existing or a new captive agreement. Most of these respondents indicated that the Valuation Basis would be Model Regulation 830.

For longer Level Term business (>20 Year), eight respondents indicated their company plans to cede their business under an existing or a new captive agreement. The Valuation Basis was approximately evenly divided among the three types.

Three respondents reported their company plans to cede some form of ULSG under an existing or new captive agreement. Two of the respondents indicated Formulaic and one reported VM-20.

Two respondents reported their company plans to cede some form of UL without SG under an existing or new captive agreement. One respondent indicated Formulaic and another reported Model Regulation 830.

4a. Given the new CSO table (2017 CSO) becomes operative on January 1, 2017 for valuation purposes, the Survey asked respondents if their company plans to value any products issued in calendar year 2017 using the new CSO table.

<b>Value products issued in 2017 using 2017 CSO table?</b>	<b># of Respondents</b>
Yes	32 (44%)
No	27 (38%)
Don't Know	13 (18%)
<b>Total # of Respondents</b>	<b>72</b>

Forty-four percent of the 72 respondents stated their company does plan to value products issued in calendar year 2017 using the new 2017 CSO table. This is slightly above the 38% who responded their company does not plan to value 2017 issues under 2017 CSO. An additional 18% did not know if their company would be valuing using 2017 CSO.

4b. Given the new CSO table (2017 CSO) becomes operative on January 1, 2017 for non-forfeiture purposes, the Survey asked respondents if their company plans to determine minimum cash values using the new CSO table on any products issued in calendar year 2017 for which there is a non-zero non-forfeiture value.

<b>Determine minimum cash values for products issued in 2017 using 2017 CSO table?</b>	<b># of Respondents</b>
Yes	19 (26%)
No	39 (54%)
Don't Know	14 (19%)
<b>Total # of Respondents</b>	<b>72</b>

Compared to using 2017 CSO for valuation use, a lower percentage of respondents are planning to use 2017 CSO to determine minimum cash values in 2017. Only 26% of the 72 respondents stated their company plans to use the 2017 CSO table to determine minimum cash values, while 54% stated their company does not plan to use the 2017 CSO table in 2017 for minimum cash values. An additional 19% did not know if the 2017 CSO table would be used.

4c. Given the new CSO table (2017 CSO) becomes available for use on January 1, 2017 for non-forfeiture purposes, the Survey asked respondents if their company plans to develop and file updated forms and non-forfeiture values with the IIPRC in calendar year 2017 using the new CSO table.

<b>Develop and file updated forms and non-forfeiture values with the IIPRC in 2017 using 2017 CSO table?</b>	<b># of Respondents</b>
Yes	24 (33%)
No	34 (47%)
Don't Know	14 (19%)
<b>Total # of Respondents</b>	<b>72</b>

Thirty-three percent of the 72 respondents stated their company plans to develop and file updated forms and non-forfeiture values with the IIPRC in 2017 using the new 2017 CSO table. This compares to 47% of respondents who did not think their company was planning to develop and file forms and non-forfeiture values in 2017. Another 19% of respondents did not know what their company plans to do.

Given the higher number of positive responses to questions 4a, 4b and 4c compared to question 1, it appears more companies are planning to use the 2017 CSO table in 2017, but not necessarily begin valuing using VM-20 in 2017.

5a. The Survey asked respondents who indicated their company was planning to value any policies issued in calendar year 2017 pursuant to VM-20 in the Valuation Manual to provide estimates of in force policy statistics for three specified types of life insurance: Term, ULSG, and Other Whole Life and Endowment policies.

Types of Life Insurance	Average Face Amount for New Business Issued in 2015			# of Respondents
	Under \$200K	\$200-500K	Over \$500K	
Term	1	6	4	11
ULSG	4	2	2	8
Other Whole Life and Endowment	5	2	2	9

Of the 15 respondents who indicated their company was planning to do some form of transition to VM-20, 11 provided information on Term policies. One respondent’s company in this group had an average issue size in 2015 of under \$200,000; for six companies, the average issue sizes ranged from \$200,000 to \$500,000; and the remaining four companies had average issue sizes in excess of \$500,000.

Of the 15 respondents who indicated their company was planning to do some form of transition to VM-20, eight provided information on ULSG policies. Four companies in this group had average issue sizes in 2015 of under \$200,000; two companies had average issue sizes ranging from \$200,000 to \$500,000; and the remaining two companies had average issue sizes in excess of \$500,000.

Of the 15 respondents who indicated their company was planning to do some form of transition to VM-20, nine provided information on Other Whole Life and Endowment policies. Five companies in this group had average issue sizes in 2015 under \$200,000; two companies had average issue sizes ranging from \$200,000 to \$500,000; and the two remaining companies had average issue sizes in excess of \$500,000.

5b. The Survey asked respondents to indicate which product types their company plans to value pursuant to VM-20 in calendar year 2017.

<b>Product Types Valued Pursuant to VM-20 in Calendar Year 2017</b>	<b># of Respondents</b>
≤ 20 Year Level Term	11
> 20 Year Level Term	10
Annual Renewable Term	2
Other Term (ROP Term)	1
Universal Life (w/ Secondary Guarantees) (ULSG)	4
Universal Life (w/o Secondary Guarantees)	3
Whole Life	0
Indexed Life	0
Variable Life	0
Other Life	0
<b>Total # of Respondents</b>	<b>15</b>

All 15 respondents who indicated they expect their company to issue policies subject to VM-20 in 2017 responded to this question. Of the 15 respondents, ten expect to value only term plans. There were four respondents who expect to value only UL plans. Of those four, one expects to value only ULSG, one expects to value only UL without SG, and the remaining two expect to value both ULSG and UL without SG. There was only one company out of the 15 who expects to value both term and UL.

6. The Survey asked those respondents who answered “Yes” to question 1 to indicate whether their company has a regularly updated experience study that could be used for establishing each one of the VM-20 Compliant valuation assumptions listed in the table below. The total number of respondents was 15.

<b>Experience Assumptions</b>	<b>Yes</b>	<b>No</b>
Mortality	15	0
Lapse (without cash value)	15	0
Surrender (with cash value)	12	3
Company Expenses (Issue & Maintenance)	15	0

- All 15 companies who plan to move at least one plan to VM-20 indicated they did have a regularly updated experience study for mortality, lapse (without cash value) and company expenses.
- Only 12 of those 15 companies also have a regularly updated experience study for surrenders (with cash value); that is, three respondents indicated their company did not, and two of those three plan to move only Term products to VM-20 in 2017.



7. For those who answered “Yes” for Mortality in question 6, the respondents were asked to indicate if their company expects to use some credible company mortality experience in the table below for each product type listed. The Survey also asked the respondents to indicate the industry table they expect to use for their company experience where credibility is expected to be less than 100% or they answered “No” for Mortality in question 6, and indicate how frequently their company expects to perform mortality experience studies.

Product Types	Expect to Reflect Some Credible Company Experience	Industry Experience Table	Frequency of Company Experience Studies
≤ 20 Year Level Term	10	2015 VBT (4)	Annually (9) Every 3 years (1)
> 20 Year Level Term	9	2015 VBT (4)	Annually (9)
Annual Renewable Term	2	“No Table Identified”	Annually (1) Every 3 years (1)
Other Term (ROP Term)	1	“No Table Identified”	Annually (1)
Universal Life (w/ Secondary Guarantees) (ULSG)	4	2015 VBT (2)	Annually (3) Every 1-2 years (1)
Universal Life (w/o Secondary Guarantees)	3	“No Table Identified”	Annually (2) Every 1-2 years (1)
Whole Life	0	0	0
Indexed Life	0	0	0
Variable Life	0	0	0
Other Life	0	0	0

- All but one of the 11 companies who plan to move at least one term product (level term, ART or Other) to VM-20 in 2017 plan to use at least some company mortality experience.
- All companies planning to move ULSG or UL without SG to VM-20 in 2017 plan to use at least some company mortality experience.
- For those companies planning to use some company mortality experience for their term products, only four plan to blend this with the 2015 VBT.
- Similarly, for those companies planning to use some company mortality experience for their ULSG or UL without SG products, only two plan to blend this with the 2015 VBT.
- All but two companies plan on performing an annual mortality experience study. For the remaining two, one plans to every three years and the other one every 1 - 2 years.

8. For those who answered “Yes” for Mortality in question 6, if applicable, the respondents were asked to indicate the credibility mortality methodology, Buhlmann or Limited Fluctuation, their company expects to use in the table below for each product type listed. The Survey also asked them to indicate the estimated number of mortality segments the company expects to use.

Product Types	# of Respondents	Credibility Mortality Methodology:		# of Mortality Segments					
		Buhlmann	Limited Fluctuation	1	2	4	10	12	Blank
≤ 20 Year Level Term	10	4	6	1	0	3	1	3	2
> 20 Year Level Term	9	4	5	1	0	3	1	3	1
Annual Renewable Term	2	0	2	1	0	0	0	0	1
Other Term (ROP Term)	1	1	0	0	0	0	0	0	1
Universal Life (w/ Secondary Guarantees) (ULSG)	4	2	1	0	1	0	0	1	2
Universal Life (w/o Secondary Guarantees)	3	1	1	0	0	0	0	0	3
Whole Life	0	0	0	0	0	0	0	0	0
Indexed Life	0	0	0	0	0	0	0	0	0
Variable Life	0	0	0	0	0	0	0	0	0
Other Life	0	0	0	0	0	0	0	0	0

- For those companies answering this question, six of the 10 who plan to move any term product to VM-20 in 2017 plan to use the Limited Fluctuation method.
- Only four of the five unique companies planning on moving ULSG or UL without SG to VM-20 in 2017 answered this question, and there was an even split between Buhlmann and Limited Fluctuation.
- Only eight companies planning to issue some type of VM-20 term in 2017 responded to the question about the number of mortality segments. Three of those eight will use four mortality segments, three will use 12, one will use one and one will use 10.
- Two companies indicated they would use the same mortality segments for ALL level term products, regardless of the level term period.
- Of the two companies planning to issue VM-20 ULSG products in 2017, one plans to use 12 mortality segments and the other will use two.

9. For a company’s underwriting criteria scoring procedure (as described in Section 9.C.3.d of VM-20), the Survey asked respondents to indicate if their company expects to use the Underwriting Criteria Score (UCS) Calculator (as maintained on the Society of Actuaries website) or some Alternative to the Underwriting Criteria Score Calculator for each product type listed below. Note, the UCS is now referred to as the Relative Risk Tool (RR Tool).

Product Types	RR Tool	Alternative, based partly on the RR Tool	Alternative, not based on the RR Tool	Total # of Respondents
≤ 20 Year Level Term	2	1	7	10
> 20 Year Level Term	2	0	7	9
Annual Renewable Term	0	1	1	2
Other Term (ROP Term)	0	0	1	1
Universal Life (w/ Secondary Guarantees) (ULSG)	1	0	2	3
Universal Life (w/o Secondary Guarantees)	0	0	2	2
Whole Life	0	0	0	0
Indexed Life	0	0	0	0
Variable Life	0	0	0	0
Other Life	0	0	0	0

- Thirteen respondents answered this question about their company’s underwriting criteria scoring procedure.
- These respondents stated their company plans to use the Relative Risk Tool (RR Tool) the same way for the following products they are moving to VM-20 in 2017:
  - Term
  - ULSG
  - UL without SG
- The breakdown of how these companies plan to use the RR Tool:
  - Exclusively use the RR Tool: 23% (3 of 13)
  - Use an alternative partly based on the RR Tool: 8% (1 of 13)
  - Use an alternative not based on the RR Tool: 69% (9 of 13)

10. Respondents were asked to list the variables their company plans to model stochastically (other than interest rates and equity returns).

Thirteen respondents answered this question; the same 13 respondents also detailed how they would use the RR Tool for their underwriting criteria scoring procedure. All indicated their company would not be stochastically modeling mortality, persistency or expenses. Of the 13, six also indicated they would not stochastically model "Other," but failed to mention what "Other" represented.

11. The Survey asked respondents to provide their expectation with respect to exclusion testing – deterministic (DET), stochastic (SET) or both. Requirements regarding exclusion testing are found in Section 6 of VM-20. The first part of question 11 asked respondents for their expectation of which exclusion tests will be passed by the products they intend to move to VM-20 on January 1, 2017.

Product Types	Moving to VM-20	Pass DET	Pass SET	Pass Both	Do not expect to pass either
≤ 20 Year Level Term	11	8	1	0	2
> 20 Year Level Term	10	7	1	0	2
Annually Renewable Term	2	1	0	0	1
Other Term (ROP Term)	1	1	0	0	0
Universal Life (w/ Secondary Guarantees) (ULSG)	4	0	0	0	4
Universal Life (w/o Secondary Guarantees)	3	0	1	0	2
Whole Life	0	0	0	0	0
Indexed Life	0	0	0	0	0
Variable Life	0	0	0	0	0
Other Life	0	0	0	0	0

Of note is that VM-20 now requires the Deterministic Reserve to be calculated for all Term Products – VM-20 was amended just weeks before the Survey went out. These results could indicate that although eight of the respondents will need to calculate the deterministic reserve, they believe their Term products would pass the DET if allowed. The responses could also indicate the respondents just weren't aware of the recently adopted amendment.

All seven of the respondents with Term products with greater than 20-year level premium who felt they would pass the DET also had Term products with less than 20-year level premium and felt they would pass the DET.

The second part of question 11 asked respondents for their expectation of which stochastic exclusion tests would be *used* on the products their company intends to move to VM-20 on January 1, 2017.

Product Types	Moving to VM-20	Ratio Test	Demo Test	Group Certification	To Be Determined
≤ 20 Year Level Term	11	1	3	1	5
> 20 Year Level Term	10	1	2	1	4
Annually Renewable Term	2	1	1	0	0
Other Term (ROP Term)	1	0	1	0	0
Universal Life (w/ Secondary Guarantees) (ULSG)	4	0	1	0	0
Universal Life (w/o Secondary Guarantees)	3	0	1	0	0
Whole Life	0	0	0	0	0
Indexed Life	0	0	0	0	0
Variable Life	0	0	0	0	0
Other Life	0	0	0	0	0

Note that from the first part of question 11, only three respondents expected to be excluded from stochastic calculations, however, nearly all respondents provided an expectation of which test they might use.

12. The Survey asked respondents to indicate the number of reinsurance agreements their company expects to use for each product type they intend to move to VM-20 on January 1, 2017. They were also asked to provide their expectation as to whether the agreement will qualify for credit for reinsurance under the NAIC Accounting Practices and Procedures Manual (per Appendix A-785).

Product Types	Moving to VM-20	Respondents with any Agreements*	Distribution of # Reins Agreements							Total Agreements
			1	2	3	4	5	6	13	
≤ 20 Year Level Term	11	10	4	1	1	2	0	1	1	36
> 20 Year Level Term	10	9	3	2	1	1	0	1	1	33
Annually Renewable Term	2	2	1	1	0	0	0	0	0	3
Other Term (ROP Term)	1	1	0	0	1	0	0	0	0	3
Universal Life (w/ Secondary Guarantees) (ULSG)	4	3	1	1	0	0	0	0	1	16
Universal Life (w/o Secondary Guarantees)	3	2	1	0	0	0	1	0	0	6
Whole Life	0	0	0	0	0	0	0	0	0	0
Indexed Life	0	0	0	0	0	0	0	0	0	0
Variable Life	0	0	0	0	0	0	0	0	0	0
Other Life	0	0	0	0	0	0	0	0	0	0

\* For example, of the 11 companies planning to issue “≤ Year Level Term” subject to VM-20 in 2017, 10 of those companies plan to have at least one reinsurance agreement for this product type.

Every company thought a reinsurance agreement they plan to apply to any product would qualify for Credit for Reinsurance (under Stat Accounting rules).

One company had 13 agreements for both Term products over 20 years and under 20 years. Yet, a separate company had 13 agreements for ULSG.

Nearly all the companies planning to value products using VM-20 on January 1, 2017 had one or more reinsurance agreements on those products.

13. The Survey asked respondents to indicate which model documentation elements their company expected to be included in their company’s formal modeling documentation.

<b>Elements of Model Documentation</b>	<b># of Respondents</b>
Control Compliance including key risks, controls and testing processes	13 (93%)
Results review	12 (86%)
Roles and responsibilities	11 (79%)
Model structure	10 (71%)
Narratives	9 (64%)
Model build	8 (57%)
Change logs	8 (57%)
Documentation standards	6 (43%)
Run logs	5 (36%)
Process flow maps	5 (36%)
No formal document available	1 (7%)
<b>Total # of Respondents</b>	<b>14</b>

Out of the 15 respondents who indicated they expect their company to issue policies subject to VM-20 in 2017, there were 14 who checked at least one of the boxes in this question. Of the 14 respondents to this question, four (29%) expect their company to have all ten of the above identified elements of modeling documentation in place by the end of 2017. There was one respondent who indicated that no formal modeling documentation is expected to be available.

14. VM-20 will allow respondents to use simplifications, approximations and modeling efficiency techniques to calculate the net premium reserve, the deterministic reserve and/or the stochastic reserve “if the company can demonstrate that the use of such techniques does not understate the reserve by a material amount and the expected value of the reserve calculated using simplifications, approximations and modeling efficiency techniques is not less than the expected value of the reserve calculated that does not use them.” The Survey asked respondents to indicate if their company expects to apply simplifications, approximations or modeling efficiency techniques by reserve component for the product types that were checked in question 5b.

Product Type*	Moving to VM-20	Net Premium Reserve	Deterministic Reserve	Stochastic Reserve	Did not Respond
≤ 20 Year Level Term	11	0	5	2	5
> 20 Year Level Term	10	0	5	2	4
Annually Renewable Term	2	0	0	0	2
Other Term (ROP Term)	1	0	1	1	0
Universal Life (w/ Secondary Guarantees) (ULSG)	4	1	3	3	1
Universal Life (w/o Secondary Guarantees)	3	0	1	1	2
Whole Life	0	0	0	0	0
Indexed Life	0	0	0	0	0
Variable Life	0	0	0	0	0
Other Life	0	0	0	0	0

\* Note: The totals for a Product Type row may be more than the total planning on issuing that product type subject to VM-20 in 2017 because some respondents plan to use approximation techniques for more than one of the reserves (Net Premium, Deterministic and/or Stochastic) for a specific product type.

- Of the 15 companies who plan to issue policies subject to VM-20 in 2017, only eight responded that they plan to use simplifications, approximations or modeling efficiency techniques.
- The percentage who responded to this question was fairly evenly split between those companies who plan to value only UL products and those who plan to value only term plans.
- Of the four companies who plan to value ULSG products using VM-20 in 2017, all but one indicated that they plan to use simplifications, approximations or modeling efficiency techniques.
- The reported annualized premium for new business issued in 2015 was significantly higher for companies who responded to this question compared to those who did not respond.
- One outlying company reported a much higher amount of premium, but even with this company removed, the average annualized 2015 new business premium for the remaining respondents was \$199 million, compared to an average of \$69 million for those who did not respond.

15. The Survey asked respondents to indicate the number of scenarios their company expects to use for the stochastic reserves for each product type. It also asked respondents to indicate if a scenario reduction technique is expected to be used, and, if applicable, indicate if that scenario reduction technique is expected to satisfy the requirements of Section 7.G.2.c – 7.G.2.e of VM-20.

Only seven of the 15 respondents with companies planning to issue at least one product subject to VM-20 in 2017 answered some portion of this question. The table below indicates the number of respondents for each sub-question by product type.

Product Types	Number of Scenarios				Use Scenario Reduction Technique	Technique Satisfies VM-20, Section 7.G
	1	25	200	1000		
≤ 20 Year Level Term	1	0	0	2	1	1
> 20 Year Level Term	1	0	0	2	1	1
Annually Renewable Term	0	0	0	0	0	0
Other Term (ROP Term)	0	0	0	0	0	0
Universal Life (w/ Secondary Guarantees) (ULSG)	0	0	1	2	1	1
Universal Life (w/o Secondary Guarantees)	0	1	0	1	1	1
Whole Life	0	0	0	0	0	0
Indexed Life	0	0	0	0	0	0
Variable Life	0	0	0	0	0	0
Other Life	0	0	0	0	0	0

- Three respondents answered only for 20-Year Level Term (for both ≤ and > 20 years). Two of those respondents indicated they would use 1,000 scenarios and one indicated one scenario.
- Only three respondents (of the four in total issuing ULSG policies subject to VM-20) answered this question, and none of the three plan to use the same scenario reduction technique for any Term Products.
- Two respondents whose company is planning to issue UL without SG subject to VM-20 in 2017 indicated they would use 1,000 and 25 scenarios.
- Three of the seven responding to this question stated their company plans to use a scenario-reduction technique and indicated this technique satisfies Section 7.G.2.c – 7.G.2.e of VM-20.



16. Respondents of this Survey were asked if their company would aggregate two or more subgroups for the purpose of calculating the Stochastic Reserve. In Section 7.B.3 of VM-20, *“if a company manages the risk of two or more different product types as part of an integrated risk management process, then the products may be combined into the same subgroup.”* *“Aggregating policies into a common subgroup allows the cash flows from the policies for a given stochastic scenario to be netted against each other (i.e., allows risk offsets between policies to be recognized).”*

- Nine of the 15 respondents who indicated their company expects to issue policies subject to VM-20 in 2017 do not plan to aggregate products. Three of those nine only have one product they plan to move to VM-20, so no aggregation is possible.
- Six of the nine respondents who do not plan to aggregate, but do have multiple products moving to VM-20, only plan to move Term Products to VM-20 in 2017.
- All six who responded their company plans to aggregate any term products, plan to aggregate all term products.
- One respondent indicated their company plans to aggregate the following two product types: (1) UL without SG, and (2) Whole Life.
- One respondent indicated their company plans to aggregate Level Term (under 20 years), ULSG and UL without SG. Just weeks before the Survey went out, the Life Actuarial (A) Task Force adopted an amendment prohibiting aggregation of term and ULSG product types.

## About The Society of Actuaries

The Society of Actuaries (SOA), formed in 1949, is one of the largest actuarial professional organizations in the world dedicated to serving 24,000 actuarial members and the public in the United States, Canada and worldwide. In line with the SOA Vision Statement, actuaries act as business leaders who develop and use mathematical models to measure and manage risk in support of financial security for individuals, organizations and the public.

The SOA supports actuaries and advances knowledge through research and education. As part of its work, the SOA seeks to inform public policy development and public understanding through research. The SOA aspires to be a trusted source of objective, data-driven research and analysis with an actuarial perspective for its members, industry, policymakers and the public. This distinct perspective comes from the SOA as an association of actuaries, who have a rigorous formal education and direct experience as practitioners as they perform applied research. The SOA also welcomes the opportunity to partner with other organizations in our work where appropriate.

The SOA has a history of working with public policymakers and regulators in developing historical experience studies and projection techniques as well as individual reports on health care, retirement, and other topics. The SOA's research is intended to aid the work of policymakers and regulators and follow certain core principles:

**Objectivity:** The SOA's research informs and provides analysis that can be relied upon by other individuals or organizations involved in public policy discussions. The SOA does not take advocacy positions or lobby specific policy proposals.

**Quality:** The SOA aspires to the highest ethical and quality standards in all of its research and analysis. Our research process is overseen by experienced actuaries and non-actuaries from a range of industry sectors and organizations. A rigorous peer-review process ensures the quality and integrity of our work.

**Relevance:** The SOA provides timely research on public policy issues. Our research advances actuarial knowledge while providing critical insights on key policy issues, and thereby provides value to stakeholders and decision makers.

**Quantification:** The SOA leverages the diverse skill sets of actuaries to provide research and findings that are driven by the best available data and methods. Actuaries use detailed modeling to analyze financial risk and provide distinct insight and quantification. Further, actuarial standards require transparency and the disclosure of the assumptions and analytic approach underlying the work.

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