

Session 10: SOP 03-1

“Accounting and Reporting by Insurance
Enterprises for Certain Nontraditional Long-
Duration Contracts and for Separate Accounts”

Michael Lockerman



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Background

- Innovative policy design brought inconsistent accounting treatment
- AcSEC charged with providing guidance on existing FASB statements, but had no authority to change or correct anything in original FASB statements
- SOP 03-1 was approved and released on July 7, 2003
- Publications after Release of SOP 03-1
 - FASB Staff Position 97-1 (released June 2004)
 - Technical Practice Aid (released September 2004)



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Topics Addressed by SOP 03-1

- I. Separate Account Considerations
 - ◆ Presentation
 - ◆ Insurance enterprise's interest
- II. Valuation of Liabilities
 - ◆ Accretion Model
 - ◆ Additional Reserves for Mortality and Morbidity Risks
 - ◆ Reserves for Annuitization Features
- III. Sales Inducements to Contract Holders
- IV. Disclosures
- V. Effective Date and Transition



Separate Account Considerations

- Separate Account Criteria
 - “The portion of separate account assets representing contract holder funds should be measured at fair value and reported in the insurance enterprise's financial statements as a summary total, with an equivalent summary total for related liabilities”
 - Must meet four criteria in ¶ 11
 - SA legally recognized
 - SA assets legally insulated from GA liabilities
 - Allocations of SA funds directed by the contract holder
 - Investment performance passed through to the contract holder (net of fees and assessments)



Separate Account Considerations

- New Accounting Implications
 - Some products not eligible for SA treatment – GICs, MVAs
 - If criteria are not met, assets representing contract holder funds under the arrangement are accounted for and recognized as general account assets and follow SFAS 115 requirements.
 - Reserves for minimum guarantees in general account
 - Insurer seed money is reclassified as GA asset
 - Assets transferred between general account and separate account may create gains or losses



Valuation of Liabilities

- Accretion Model
 - Accrued account balance equals
 - Deposits net of withdrawals
 - Plus credited amounts (contractual and additional)
 - Less fees and charges
 - Plus additional interest (persistency bonus)
 - Plus other adjustments (return based on pool of assets)
 - At the rate that would accrue to the balance available in cash, or its equivalent, at the earlier of the reset date or contract maturity
 - When multiple account values exist, use highest account value available in cash or equivalents
 - No reduction for surrender charges or MVA



Valuation of Liabilities

- Accretion Model (continued)
 - If return based on contractually referenced pool of assets (index), then accrued account balance based on fair value of assets (index)
 - Examples
 - Variable Life and Annuities
 - Certain Group Pension participating contracts
 - Certain Group Pension experience-rated contracts
 - For contracts not covered by FAS 133
 - True even if assets not carried at fair value



Valuation of Liabilities

- Determining Significance of Mortality / Morbidity Risk
 - Contracts classified either as “Universal Life type” or “Investment” contracts; no additional liability allowed for investment contracts
 - Significance determined at contract inception (other than transition)
 - Compare PV of excess benefit payments to PV of contract holder assessments
 - In performing the analysis, consider both frequency and severity under a full range of scenarios



Valuation of Liabilities

- Additional Reserves for Mortality / Morbidity Risk
 - Requires a liability in addition to the account value for “Universal Life type” contracts when “amounts assessed for the insurance benefits result in profits followed by losses from the insurance benefit function”
 - “Rebuttable presumption” of significant risk where benefit varies significantly with capital market volatility
 - Excludes benefits already fair-valued under FAS 133
 - Common benefits requiring additional GAAP liability are GMDB, GMIB, and non-forfeiture guarantees for variable and universal life products



Valuation of Liabilities

- No liability for VA GMDB if charge is proportionate to risk
- Additional liability may be required for other products:
 - UL and VUL no lapse (secondary) guarantees
 - UL and VUL products with “reverse select and ultimate cost of insurance charges”

Simplified Example			
Duration	Cost of Insurance	Death Benefits	Profit from Benefit Feature
1	5	2	3
2	5	3	2
3	5	4	1
4	5	5	0
5	5	6	-1



Valuation of Liabilities

- Additional Reserves for Mortality / Morbidity Risk (continued)
 - Additional mortality reserve equals
 - Current benefit ratio × cumulative assessments
 - Less cumulative excess payments and related expenses
 - Plus accreted interest
 - Benefit ratio (determined over the life of the contract) equals

$$\frac{\text{PV of expected excess insurance payments}}{\text{PV of total expected assessments}}$$



Valuation of Liabilities

- Additional Reserves for Mortality / Morbidity Risk (continued)
 - Additional reserves never less than zero
 - Assumptions should be consistent with DAC
 - Use historic experience from issue to valuation date, and expected experience thereafter
 - Expected experience should be based on a range of reasonably possible scenarios
 - Estimates regularly re-evaluated for actual experience
 - Changes to the additional liability reported as a charge or credit to benefit expense – a type of dynamic unlocking
 - EGPs should be adjusted to include change in mortality liability, therefore DAC amortization is affected



Valuation of Liabilities

Four Examples

1. Constant benefits over the life of the contracts (on a decreasing block of policies)
 2. Stochastic benefits
 3. Increasing benefits
 4. Stochastic increasing benefits
- All benefit ratios in the examples are approximately 60%
 - Randomness is much larger than what would be seen in a typically large block of policies for demonstrative purposes



Valuation of Liabilities

Constant

Period	BOP Liability (1)	Assess (2)	Accum (3)	Claims (4)	Interest (5)	EOP Liability (6)	Floored Liab (7)	Total Cost (8)
1	-	100	59	60	(0)	(1)	-	60
2	(1)	105	62	60	0	2	2	62
3	2	110	65	60	0	7	7	66
4	7	115	69	60	1	17	17	69
5	17	121	72	60	2	30	30	73
6	30	127	75	60	3	48	48	78
7	48	133	79	60	4	71	71	83
8	71	139	83	60	6	100	100	89
9	100	119	71	60	7	118	118	78
10	118	112	67	60	9	133	133	75
11	133	106	63	60	9	146	146	72
12	146	100	59	60	10	155	155	69
13	155	94	56	60	11	161	161	66
14	161	88	52	60	11	165	165	64
15	165	83	49	60	11	165	165	61
16	166	78	47	60	11	163	163	58
17	163	74	44	60	11	158	158	55
18	158	69	41	60	10	150	150	52
19	150	65	39	60	10	138	138	49
20	138	62	37	60	9	124	124	45
21	124	58	34	60	8	106	106	42
22	106	55	32	60	6	85	85	39
23	85	51	31	60	5	60	60	35
24	60	48	29	60	3	32	32	32
25	32	46	27	60	1	(0)	-	28



Valuation of Liabilities

Calculation examples

Present value of total assessments (a) = 1,177
 Present value of total claim costs (b) = 699
 Benefit Ratio = (b) / (a) = 59.4%

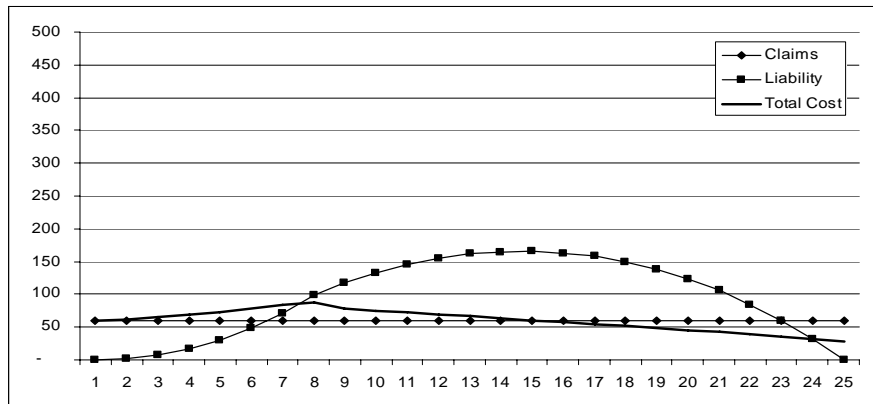
Period 7 accumulation = $133 \times 59.4\%$ = 79

End of Period Liability (6) = (1) + (3) - (4) + (5)
 Total Costs (8) = (4) + (6) - (1)



Valuation of Liabilities

Constant



Valuation of Liabilities

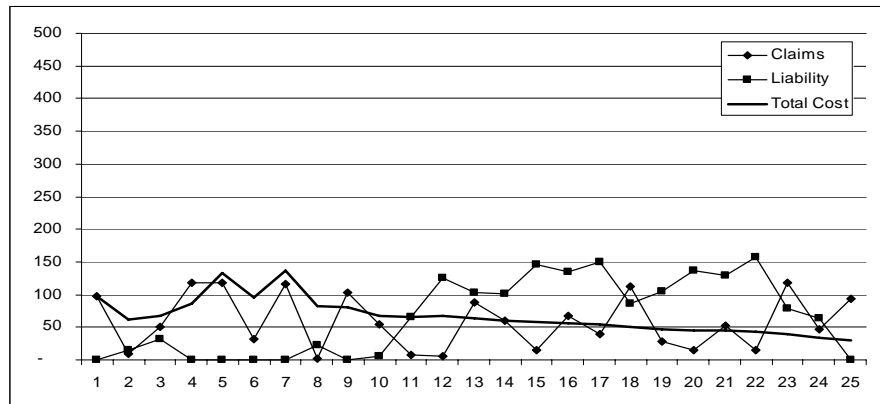
Stochastic

Period	BOP Liability (1)	Assess (2)	Accum (3)	Claims (4)	Interest (5)	EOP Liability (6)	Floored Liab (7)	Total Cost (8)
1	-	100	61	98	(1)	(38)	-	98
2	(38)	105	64	10	(1)	14	14	63
3	14	110	67	51	2	31	31	68
4	31	115	70	118	0	(16)	-	87
5	(16)	121	73	117	(3)	(63)	-	133
6	(63)	127	77	32	(3)	(21)	-	95
7	(21)	133	81	117	(3)	(60)	-	138
8	(60)	139	84	1	(1)	23	23	83
9	23	119	72	103	1	(8)	-	80
10	(8)	112	68	55	(0)	5	5	68
11	5	106	64	7	2	65	65	66
12	65	100	60	5	6	126	126	67
13	126	94	57	89	8	102	102	65
14	102	88	53	61	7	102	102	60
15	102	83	50	15	8	146	146	59
16	146	78	47	67	10	135	135	57
17	135	74	45	40	10	150	150	54
18	150	69	42	113	8	87	87	50
19	87	65	40	28	7	106	106	46
20	106	62	37	14	8	137	137	45
21	137	58	35	52	9	130	130	44
22	130	55	33	15	10	157	157	43
23	157	51	31	118	8	78	78	39
24	78	48	29	48	5	64	64	34
25	64	46	28	94	2	(0)	-	30



Valuation of Liabilities

Stochastic



Valuation of Liabilities

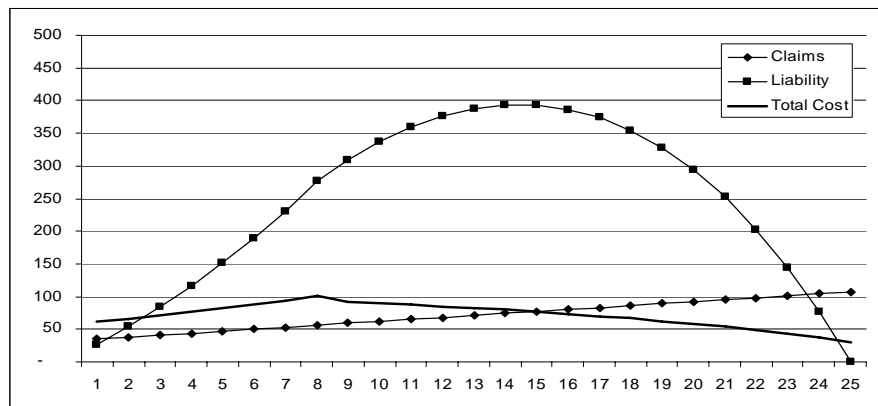
Increasing

Period	BOP Liability (1)	Assess (2)	Accum (3)	Claims (4)	Interest (5)	EOP Liability (6)	Floored Liab (7)	Total Cost (8)
1	-	100	60	35	1	26	26	61
2	26	105	63	38	3	54	54	66
3	54	110	66	41	5	84	84	71
4	84	115	70	44	7	117	117	76
5	117	121	73	47	9	152	152	82
6	152	127	76	50	12	190	190	88
7	190	133	80	53	14	231	231	94
8	231	139	84	56	17	276	276	101
9	276	119	72	59	20	309	309	92
10	309	112	68	62	22	337	337	90
11	337	106	64	65	24	359	359	87
12	359	100	60	68	25	376	376	85
13	376	94	57	71	26	387	387	82
14	387	88	53	74	26	393	393	80
15	393	83	50	77	27	393	393	77
16	393	78	47	80	26	386	386	74
17	386	74	44	83	26	374	374	70
18	374	69	42	86	25	354	354	66
19	354	65	39	89	23	328	328	62
20	328	62	37	92	21	294	294	58
21	294	58	35	95	18	252	252	53
22	252	55	33	98	15	203	203	48
23	203	51	31	101	12	144	144	43
24	144	48	29	104	7	77	77	37
25	77	46	27	107	3	(0)	-	30



Valuation of Liabilities

Increasing



Valuation of Liabilities

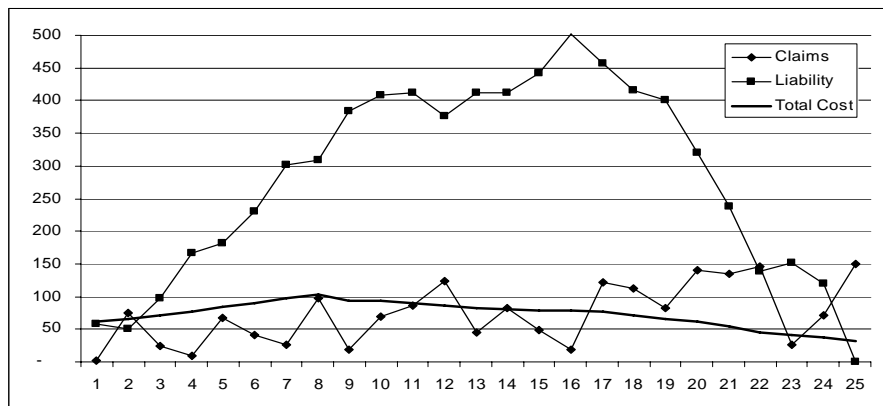
Stochastic Increasing

Period	BOP Liability (1)	Assess (2)	Accum (3)	Claims (4)	Interest (5)	EOP Liability (6)	Floored Liab (7)	Total Cost (8)
1	-	100	59	3	2	59	59	61
2	59	105	62	74	4	51	51	66
3	51	110	65	24	5	98	98	70
4	98	115	69	9	9	166	166	78
5	166	121	72	68	12	182	182	84
6	182	127	75	41	14	231	231	89
7	231	133	79	27	18	301	301	97
8	301	139	83	97	21	308	308	104
9	308	119	71	18	23	384	384	94
10	384	112	67	70	27	408	408	94
11	408	106	63	86	28	413	413	91
12	413	100	59	123	27	376	376	86
13	376	94	56	46	27	413	413	82
14	413	88	53	82	28	411	411	80
15	411	83	49	48	29	442	442	78
16	442	78	47	18	32	502	502	78
17	502	74	44	121	32	457	457	76
18	457	69	41	113	29	415	415	71
19	415	65	39	81	28	400	400	66
20	400	62	37	140	24	321	321	61
21	321	58	34	135	19	239	239	53
22	239	55	32	146	13	138	138	45
23	138	51	31	26	10	152	152	40
24	152	48	29	71	9	119	119	38
25	119	46	27	151	4	0	0	31



Valuation of Liabilities

Stochastic Increasing



Valuation of Liabilities

- Additional Reserves for Mortality / Morbidity Risk –
UL with Secondary Guarantees
 - When secondary guarantees are keeping policies inforce, it is likely that additional reserves will be required
 - Mortality losses will be produced by not having any COIs when account value is less than zero
 - Additional reserves would be calculated in the same fashion as for other mortality risks



Valuation of Liabilities

- Additional Reserves for Mortality / Morbidity Risk –
Reinsurance
 - Assess the significance of mortality and morbidity within the reinsurance contract regardless of whether or not there is an account value
 - Reinsurer may come to a different conclusion than cedant
 - Set up a liability consistent with the additional mortality reserve methodology



Valuation of Liabilities

- Reserves for Annuitization Features
 - Only contract features not valued under FAS 133 are considered
 - PV of expected annuitization payments are compared to expected account balance at an expected annuitization date; if positive – establish additional liability



Valuation of Liabilities

- Reserves for Annuitization Features (continued)
 - Additional annuitization liability equals
 - Current benefit ratio × cumulative assessments
 - Less cumulative excess payments and related expenses
 - Plus accreted interest
 - Benefit ratio equals

$$\frac{\text{PV of expected annuitization payments less expected AV}}{\text{PV of total expected assessments during accumulation phase}}$$

- Additional annuitization liability is never less than zero



Valuation of Liabilities

- Reserves for Annuitization Features (continued)
 - Expected experience based on a range of reasonably possible scenarios
 - Expected utilization of benefit is a key assumption
 - Estimates regularly re-evaluated for actual experience
 - Changes to the additional liability reported as a charge or credit to benefit expense – a type of dynamic unlocking
 - EGPs should be adjusted to include change in annuitization liability; therefore, DAC amortization is affected
 - Excess annuitization considers the present value of the annuity purchased, not the value available to purchase an annuity



Sales Inducements to Contract Holders

- Criteria
 - Insurer must demonstrate that amounts are
 - Incremental to amounts credited on similar contracts without sales inducements, AND
 - Higher than the contract's expected ongoing crediting rates for periods beyond the inducement, as applicable, AND
 - Explicitly identified in contract
 - Examples: Day-one bonus, persistency bonus, enhanced credited rate bonus



Sales Inducements to Contract Holders

- Recognized as part of the liability for policy benefits
 - Deferred and amortized over the period which the policy must remain in force for the inducement (or to the credited date)
 - New item: “Deferred Sales Inducements”
 - Amortization same methodology and assumptions as DAC
 - Amortization a component of benefit expense
 - Cannot reflect lapses in determining amounts to defer



Sales Inducements to Contract Holders

Simplified Example of Persistency Bonus of 3% of Deposits paid at end of 3rd year. 100 policies issued with \$25,000 deposit each. EGPs are 1% of AV. No Interest.

<u>Year</u>	<u>Policies</u>	<u>Liability</u>	<u>Deferrable</u>	<u>EGPs*</u>	<u>Amortization</u>	<u>Asset</u>
1	95	23,750	23,750	25,000	11,638	12,112
2	90	45,000	22,500	23,750	11,056	23,556
3	85	63,750	21,250	22,500	10,474	34,332
4	80	0	0	21,250	9,892	24,440
5	70	0	0	20,000	9,310	15,129
6	60	0	0	17,500	8,147	6,983
7	50	0	0	<u>15,000</u>	6,983	0
			67,500	145,000	Ben. Ratio	46.55%

* May need to be adjusted.



Disclosures

- **Separate Accounts**
 - The general nature of the contracts reported in separate accounts, including the extent and terms of minimum guarantees
 - The basis of presentation for separate account assets and liabilities and related separate account activity
 - The amount of gains and losses recognized on assets transferred to the separate accounts during the period.



Disclosures

- **Additional Reserves**
 - A description of the liability methods and assumptions used in estimating the liabilities for additional insurance benefits and minimum guarantees.
 - Amounts related to minimum guarantees
 - Balances subject to various types of benefits (e.g. MGDB)
 - The reported additional reserve for mortality risks and annuitization features
 - The net amount at risk and average attained age for contracts with additional reserves
 - The aggregate fair value of assets supporting separate accounts with additional insurance benefits and minimum investment return guarantees



Risk is Opportunity.™

SOP 03-1

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Enterprises for Certain Nontraditional Long-
Duration Contracts and for Separate Accounts”**

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