

SOA Data Tables

Simon Hua

9/21/2018

Table 1: Factor Statistics (N=30631099)

	Policies Exposed	Amount Exposed
	Median (IQR)	Median (IQR)
Gender		
Female	1.61 (5.04)	266393.4 (1022575.64)
Male	1.72 (5.68)	392998.06 (1718027.85)
Smoker Status		
NonSmoker	1.83 (6.03)	478082 (1940237.66)
Smoker	1.13 (2.65)	135842.81 (421144.01)
Unknown	2.14 (12.16)	120905.5 (676499.26)
Insurance Plan		
Perm	2.79 (13.45)	258028.23 (1181580.87)
Term	1.7 (5.58)	438356 (2075221.09)
UL	1.6 (4.96)	241510.88 (862123.76)
ULSG	1.25 (2.81)	253551.9 (913979.15)
VL	1.31 (3.33)	315933.79 (969395.33)
VLSG	1.21 (2.66)	321534.18 (892732.3)
Other	0.78 (1.05)	52540.63 (291142.68)
Face Amount Band		
1-9999	1.96 (9.73)	9232.88 (44715.82)
10000-24999	1.96 (9.16)	28665.6 (127418.53)
25000-49999	1.65 (5.65)	48698.62 (170786.89)
50000-99999	1.68 (4.91)	97821.09 (288175.46)
100000-249999	2.44 (7.87)	310147.43 (1018621.12)
250000-499999	1.84 (5.79)	535245.65 (1683867.2)
500000-999999	1.49 (4.24)	832765.69 (2392654.35)
1000000-2499999	1.18 (3.04)	1468632.5 (3728766.38)
2500000-4999999	0.78 (1.05)	2363012.5 (3316490.75)
5000000-9999999	0.68 (0.67)	3739725 (4331501.25)
10000000+	0.61 (0.63)	7260270 (8683126.12)
SOA Anticipated Level Term Period		
5 yr anticipated	1.27 (3.42)	181431.2 (650307.92)
10 yr anticipated	1.66 (5.14)	498630 (2308455.81)
15 yr anticipated	1.45 (3.99)	423288.05 (1648493.4)
20 yr anticipated	2.29 (11.24)	775342 (4402466.5)
25 yr anticipated	1.24 (2.82)	389344.5 (1233117.47)
30 yr anticipated	2.07 (7.6)	704235 (2973443.7)
N/A (Not Term)	1.64 (5.21)	262671.24 (969043.92)
Not Level Term	1.21 (3.47)	81661.09 (365638.28)
Unknown	1.71 (5.39)	413524.47 (1887255.5)
SOA Guaranteed Level Term Period		
5 yr guaranteed	1.16 (3.36)	205787.1 (704356.12)
10 yr guaranteed	1.56 (4.67)	447064.13 (1995000.52)
15 yr guaranteed	1.58 (4.18)	465753 (1695413.52)
20 yr guaranteed	3.15 (14.89)	1118861.49 (5482602.75)
25 yr guaranteed	0.98 (1.83)	371643.9 (953742.53)
30 yr guaranteed	2.42 (8.41)	858904.25 (3426711.12)
N/A (Not Term)	1.64 (5.21)	262671.24 (969043.92)
Not Level Term	1.21 (3.47)	81661.09 (365638.28)
Unknown	1.33 (3.46)	212184.98 (970082.29)
SOA Post Level Term Indicator		
N/A (Not Term)	1.64 (5.21)	262671.24 (969043.92)
Not Level Term	1.21 (3.47)	81661.09 (365638.28)
Post Level Term	0.99 (2.49)	124315.12 (439234.53)
Unknown Level Term	1.33 (3.46)	212184.98 (970082.29)
Within Level Term	2.11 (7.48)	761644 (3144407.32)
Select/Ultimate Indicator		
Select	1.65 (5.09)	380137 (1527964.59)
Ultimate	1.75 (8.17)	116260.58 (563244.26)

Table 2: Factor Statistics (N=30631099)

	Issue Age	Duration	Attained Age
	Median (IQR)	Median (IQR)	Median (IQR)
Gender			
Female	40 (24)	10 (12)	51 (25)
Male	40 (23)	10 (12)	52 (24)
Smoker Status			
NonSmoker	42 (23)	9 (10)	52 (24)
Smoker	39 (22)	11 (12)	50 (23)
Unknown	22 (28)	26 (25)	54 (43)
Insurance Plan			
Perm	37 (30)	16 (19)	55 (31)
Term	40 (19)	9 (9)	50 (20)
UL	42 (29)	13 (15)	55 (30)
ULSG	48 (29)	7 (8)	56 (28)
VL	38 (25)	12 (10)	50 (26)
VLSG	40 (24)	9 (8)	48 (25)
Other	36 (25)	13 (28)	56 (26)
Face Amount Band			
1-9999	34 (35)	24 (22)	63 (31)
10000-24999	37 (33)	18 (17)	58 (30)
25000-49999	39 (29)	14 (16)	55 (29)
50000-99999	40 (27)	12 (12)	53 (27)
100000-249999	40 (24)	10 (10)	51 (25)
250000-499999	40 (21)	9 (9)	49 (23)
500000-999999	40 (20)	8 (9)	49 (21)
1000000-2499999	42 (19)	8 (8)	50 (20)
2500000-4999999	44 (17)	6 (7)	51 (18)
5000000-9999999	46 (18)	6 (6)	52 (19)
10000000+	48 (18)	5 (5)	53 (18)
SOA Anticipated Level Term Period			
5 yr anticipated	37 (18)	13 (12)	52 (20)
10 yr anticipated	43 (22)	8 (8)	52 (21)
15 yr anticipated	45 (20)	9 (8)	54 (19)
20 yr anticipated	41 (18)	10 (9)	50 (19)
25 yr anticipated	38 (15)	7 (9)	46 (15)
30 yr anticipated	36 (14)	7 (7)	43 (15)
N/A (Not Term)	40 (29)	12 (14)	54 (29)
Not Level Term	39 (19)	15 (10)	55 (18)
Unknown	39 (19)	8 (10)	49 (20)
SOA Guaranteed Level Term Period			
5 yr guaranteed	38 (18)	12 (12)	51 (18)
10 yr guaranteed	42 (22)	8 (8)	51 (21)
15 yr guaranteed	45 (20)	8 (8)	53 (20)
20 yr guaranteed	40 (19)	8 (9)	49 (20)
25 yr guaranteed	39 (14)	5 (6)	45 (16)
30 yr guaranteed	36 (14)	7 (7)	42 (16)
N/A (Not Term)	40 (29)	12 (14)	54 (29)
Not Level Term	39 (19)	15 (10)	55 (18)
Unknown	36 (19)	12 (15)	50 (20)
SOA Post Level Term Indicator			
N/A (Not Term)	40 (29)	12 (14)	54 (29)
Not Level Term	39 (19)	15 (10)	55 (18)
Post Level Term	38 (18)	16 (9)	55 (17)
Unknown Level Term	36 (19)	12 (15)	50 (20)
Within Level Term	42 (19)	7 (6)	48 (20)
Select/Ultimate Indicator			
Select	41 (23)	9 (9)	50 (23)
Ultimate	34 (28)	28 (9)	65 (28)

Table 3: Policies Exposed Statistics (N=30631099)

	Mean	Median	1Q	3Q	Max
Gender					
Female	10.97	1.61	0.67	5.71	7383.76
Male	11.97	1.72	0.69	6.37	14238.96
Smoker Status					
NonSmoker	10.23	1.83	0.72	6.75	1695.75
Smoker	4.26	1.13	0.56	3.22	731.84
Unknown	38	2.14	0.73	12.89	14238.96
Insurance Plan					
Perm	28.51	2.79	0.85	14.3	14238.96
Term	8.95	1.7	0.68	6.26	1780.58
UL	10.04	1.6	0.67	5.63	1639.17
ULSG	4.09	1.25	0.61	3.42	623.77
VL	5.54	1.31	0.61	3.93	961.18
VLSG	3.17	1.21	0.58	3.25	198.83
Other	1.51	0.78	0.39	1.44	84.64
Face Amount Band					
1-9999	42.5	1.96	0.7	10.42	14238.96
10000-24999	24.38	1.96	0.72	9.88	3265.45
25000-49999	13.78	1.65	0.68	6.33	4183.39
50000-99999	10.73	1.68	0.7	5.61	1780.58
100000-249999	10.7	2.44	0.84	8.71	1205.82
250000-499999	8.92	1.84	0.73	6.52	629.57
500000-999999	7.5	1.49	0.64	4.89	624.67
1000000-2499999	5.73	1.18	0.57	3.6	709.57
2500000-4999999	1.49	0.78	0.38	1.44	88.36
5000000-9999999	0.96	0.68	0.33	1	29.49
10000000+	0.72	0.61	0.28	0.92	13.42
SOA Anticipated Level Term Period					
5 yr anticipated	5.01	1.27	0.57	3.99	1516.76
10 yr anticipated	5.83	1.66	0.66	5.8	270.75
15 yr anticipated	4.83	1.45	0.62	4.61	217.89
20 yr anticipated	15.44	2.29	0.78	12.02	694.79
25 yr anticipated	5.11	1.24	0.6	3.42	297.82
30 yr anticipated	10.73	2.07	0.75	8.35	482.3
N/A (Not Term)	13.6	1.64	0.68	5.89	14238.96
Not Level Term	5.07	1.21	0.56	4.03	260.01
Unknown	9.04	1.71	0.68	6.08	1780.58
SOA Guaranteed Level Term Period					
5 yr guaranteed	5.62	1.16	0.54	3.9	1780.58
10 yr guaranteed	5.71	1.56	0.64	5.32	270.75
15 yr guaranteed	4.97	1.58	0.67	4.85	230.25
20 yr guaranteed	17.9	3.15	0.89	15.78	1205.82
25 yr guaranteed	2.29	0.98	0.53	2.36	153.24
30 yr guaranteed	10.85	2.42	0.8	9.21	504.82
N/A (Not Term)	13.6	1.64	0.68	5.89	14238.96
Not Level Term	5.07	1.21	0.56	4.03	260.01
Unknown	7.54	1.33	0.6	4.06	1228.67
SOA Post Level Term Indicator					
N/A (Not Term)	13.6	1.64	0.68	5.89	14238.96
Not Level Term	5.07	1.21	0.56	4.03	260.01
Post Level Term	3.6	0.99	0.46	2.95	690.99
Unknown Level Term	7.54	1.33	0.6	4.06	1228.67
Within Level Term	10.64	2.11	0.76	8.25	1780.58
Select/Ultimate Indicator					
Select	8.86	1.65	0.68	5.77	4183.39
Ultimate	27.29	1.75	0.68	8.85	14238.96

Table 4: Amount Exposed Statistics (N=30631099)

	Mean	Median	1Q	3Q	Max
Gender					
Female	1714236	266393.4	59726	1082301.64	452451500.63
Male	2839723.45	392998.06	77671.2	1795699.19	923529986.97
Smoker Status					
NonSmoker	3004640.63	478082	101859.45	2042097.11	923529986.97
Smoker	481513.94	135842.81	36506.46	457650.5	67425478
Unknown	950187.16	120905.5	20309.97	696810.21	106582405.6
Insurance Plan					
Perm	1499404.04	258028.23	47814.2	1229395.07	140278436.23
Term	3599838.55	438356	84630.12	2159851.42	923529986.97
UL	1131372.27	241510.88	51301.34	913425.1	196997800.76
ULSG	1399953.86	253551.9	65753.4	979732.55	264095036.94
VL	1161414.94	315933.79	80360.94	1049756.26	145281340.98
VLSG	951511.77	321534.18	90828.7	983561	120363273.39
Other	517945.24	52540.63	11369.85	302513.49	65754179.19
Face Amount Band					
1-9999	170406.26	9232.88	2979.11	47694.93	41685016.01
10000-24999	346708.84	28665.6	9753.42	137172.07	43960280.32
25000-49999	415315.59	48698.62	19451.84	190238.82	106582405.6
50000-99999	632453.32	97821.09	39315.05	327490.56	89861551.15
100000-249999	1402849.57	310147.43	99316.67	1117938.3	172749728.12
250000-499999	2586448.03	535245.65	204657.6	1888524.8	190641445.35
500000-999999	4203442.19	832765.69	352055	2744712.3	346518578.56
1000000-2499999	6967553.72	1468632.5	646575	4375341.5	923529986.97
2500000-4999999	4640513.02	2363012.5	1164382.5	4480873.25	281175779.75
5000000-9999999	5395062.68	3739725	1821920	6153422	162720532.5
10000000+	9781827.88	7260270	3397260	12080532.23	201561600
SOA Anticipated Level Term Period					
5 yr anticipated	765423.05	181431.2	42260.28	692568.2	78047091.77
10 yr anticipated	2656907.63	498630	88803.75	2397260	201561600
15 yr anticipated	2018353.41	423288.05	93972.6	1742466	140858312.79
20 yr anticipated	7055840.55	775342	144657.6	4547124.15	903133258.89
25 yr anticipated	1665495.53	389344.5	106684.98	1339808.17	96965135.9
30 yr anticipated	4764578.97	704235	150685	3124128.7	506818157.13
N/A (Not Term)	1272083.34	262671.24	58062.98	1027106.9	264095036.94
Not Level Term	1233135.29	81661.09	19863	385501.28	125539029.86
Unknown	3315557.69	413524.47	78082.2	1965341	923529986.97
SOA Guaranteed Level Term Period					
5 yr guaranteed	904550.89	205787.1	50685	755041.12	129737621.33
10 yr guaranteed	2455729.91	447064.13	89931.48	2084932	201561600
15 yr guaranteed	2016146.76	465753	104726.05	1800139.57	140858312.79
20 yr guaranteed	7817023.54	1118861.49	175068.6	5657671.35	923529986.97
25 yr guaranteed	1226142.39	371643.9	120860.27	1074602.8	193935671.75
30 yr guaranteed	4960967.58	858904.25	181506.88	3608218	506818157.13
N/A (Not Term)	1272083.34	262671.24	58062.98	1027106.9	264095036.94
Not Level Term	1233135.29	81661.09	19863	385501.28	125539029.86
Unknown	2403290.23	212184.98	40027.3	1010109.59	643009284.67
SOA Post Level Term Indicator					
N/A (Not Term)	1272083.34	262671.24	58062.98	1027106.9	264095036.94
Not Level Term	1233135.29	81661.09	19863	385501.28	125539029.86
Post Level Term	549999.27	124315.12	31420.75	470655.28	39494164.12
Unknown Level Term	2403290.23	212184.98	40027.3	1010109.59	643009284.67
Within Level Term	4659205.91	761644	160250.58	3304657.9	923529986.97
Select/Ultimate Indicator					
Select	2558491.96	380137	83561.7	1611526.29	923529986.97
Ultimate	903043.49	116260.58	22131.15	585375.45	137254523.75

Table 5: Issue Age Statistics (N=30631099)

	Mean	Median	Mode	1Q	3Q	Max
Gender						
Female	40.32	40	37	28	52	99
Male	40.4	40	40	29	52	99
Smoker Status						
NonSmoker	42.74	42	40	31	54	99
Smoker	38.62	39	37	28	50	99
Unknown	25.18	22	0	10	38	98
Insurance Plan						
Perm	36.99	37	34	22	52	99
Term	40.58	40	37	31	50	98
UL	41.82	42	40	28	57	97
ULSG	46.78	48	50	33	62	92
VL	37.99	38	36	26	51	91
VLSG	39.5	40	40	28	52	90
Other	36.01	36	35	24	49	90
Face Amount Band						
1-9999	35.17	34	0	17	52	99
10000-24999	37.62	37	25	21	54	99
25000-49999	38.78	39	45	24	53	99
50000-99999	39.61	40	40	26	53	99
100000-249999	40.39	40	36	28	52	99
250000-499999	40.45	40	35	30	51	99
500000-999999	41.22	40	35	31	51	96
1000000-2499999	42.71	42	38	33	52	98
2500000-4999999	45.64	44	40	37	54	98
5000000-9999999	47.51	46	39	38	56	95
10000000+	48.92	48	42	39	57	89
SOA Anticipated Level Term Period						
5 yr anticipated	38.19	37	33	29	47	88
10 yr anticipated	43.77	43	38	33	55	85
15 yr anticipated	44.91	45	45	35	55	85
20 yr anticipated	40.84	41	39	32	50	80
25 yr anticipated	38.67	38	40	31	46	70
30 yr anticipated	35.6	36	35	29	43	70
N/A (Not Term)	40.19	40	40	26	55	99
Not Level Term	39.73	39	34	30	49	79
Unknown	39.73	39	37	30	49	98
SOA Guaranteed Level Term Period						
5 yr guaranteed	38.93	38	36	30	48	97
10 yr guaranteed	43.23	42	40	32	54	86
15 yr guaranteed	44.85	45	45	35	55	85
20 yr guaranteed	40.59	40	39	31	50	94
25 yr guaranteed	39.76	39	40	33	47	70
30 yr guaranteed	35.81	36	36	29	43	74
N/A (Not Term)	40.19	40	40	26	55	99
Not Level Term	39.73	39	34	30	49	79
Unknown	36.41	36	33	27	46	98
SOA Post Level Term Indicator						
N/A (Not Term)	40.19	40	40	26	55	99
Not Level Term	39.73	39	34	30	49	79
Post Level Term	38.56	38	33	29	47	97
Unknown Level Term	36.41	36	33	27	46	98
Within Level Term	41.99	42	40	32	51	94
Select/Ultimate Indicator						
Select	41.21	41	40	30	53	95
Ultimate	35.31	34	31	21	49	99

Table 6: Duration Statistics (N=30631099)

	Mean	Median	Mode	1Q	3Q	Max
Gender						
Female	12.32	10	1	5	17	107
Male	12.52	10	1	5	17	107
Smoker Status						
NonSmoker	10.55	9	1	5	15	91
Smoker	12.34	11	1	6	18	90
Unknown	27.67	26	29	13	38	107
Insurance Plan						
Perm	19.17	16	1	7	26	107
Term	10.17	9	1	5	14	86
UL	13.84	13	1	6	21	82
ULSG	8.77	7	1	4	12	61
VL	12.77	12	8	7	17	75
VLSG	9.44	9	8	5	13	33
Other	19.85	13	1	4	32	89
Face Amount Band						
1-9999	27.43	24	20	14	36	107
10000-24999	20.07	18	20	10	27	101
25000-49999	15.84	14	1	7	23	98
50000-99999	13.78	12	10	7	19	99
100000-249999	11.32	10	2	5	15	86
250000-499999	10.17	9	1	5	14	88
500000-999999	9.42	8	1	4	13	82
1000000-2499999	8.76	8	1	4	12	71
2500000-4999999	7.34	6	1	3	10	61
5000000-9999999	6.63	6	1	3	9	52
10000000+	5.95	5	1	3	8	39
SOA Anticipated Level Term Period						
5 yr anticipated	14.63	13	10	8	20	57
10 yr anticipated	9.02	8	1	4	12	62
15 yr anticipated	9.32	9	1	5	13	43
20 yr anticipated	9.85	10	12	5	14	73
25 yr anticipated	8.03	7	1	3	12	38
30 yr anticipated	7.74	7	4	4	11	33
N/A (Not Term)	14.28	12	1	6	20	107
Not Level Term	16.07	15	14	10	20	75
Unknown	10.41	8	1	4	14	86
SOA Guaranteed Level Term Period						
5 yr guaranteed	12.89	12	11	6	18	80
10 yr guaranteed	8.88	8	1	4	12	78
15 yr guaranteed	8.85	8	1	4	12	67
20 yr guaranteed	9.06	8	1	4	13	73
25 yr guaranteed	6.19	5	1	3	9	38
30 yr guaranteed	7.29	7	1	3	10	35
N/A (Not Term)	14.28	12	1	6	20	107
Not Level Term	16.07	15	14	10	20	75
Unknown	14.41	12	1	6	21	86
SOA Post Level Term Indicator						
N/A (Not Term)	14.28	12	1	6	20	107
Not Level Term	16.07	15	14	10	20	75
Post Level Term	17.2	16	11	12	21	80
Unknown Level Term	14.41	12	1	6	21	86
Within Level Term	7.36	7	1	4	10	30
Select/Ultimate Indicator						
Select	9.34	9	1	4	13	25
Ultimate	30.82	28	26	24	33	107

Table 7: Attained Age Statistics (N=30631099)

	Mean	Median	Mode	1Q	3Q	Max
Gender						
Female	51.64	51	51	39	64	120
Male	51.92	52	52	40	64	120
Smoker Status						
NonSmoker	52.29	52	51	40	64	120
Smoker	49.96	50	51	38	61	119
Unknown	51.84	54	64	29	72	120
Insurance Plan						
Perm	55.16	55	55	40	71	120
Term	49.74	50	50	40	60	115
UL	54.65	55	56	40	70	120
ULSG	54.55	56	60	41	69	120
VL	49.75	50	51	37	63	104
VLSG	47.94	48	51	36	61	103
Other	54.86	56	58	42	68	110
Face Amount Band						
1-9999	61.61	63	64	47	78	120
10000-24999	56.69	58	64	42	72	120
25000-49999	53.62	55	62	39	68	120
50000-99999	52.39	53	57	39	66	120
100000-249999	50.71	51	51	38	63	120
250000-499999	49.61	49	50	38	61	120
500000-999999	49.64	49	49	39	60	120
1000000-2499999	50.47	50	49	40	60	120
2500000-4999999	51.99	51	49	42	60	113
5000000-9999999	53.14	52	50	43	62	104
10000000+	53.87	53	51	44	62	104
SOA Anticipated Level Term Period						
5 yr anticipated	51.82	52	54	42	62	115
10 yr anticipated	51.79	52	54	41	62	95
15 yr anticipated	53.22	54	55	44	63	96
20 yr anticipated	49.69	50	52	40	59	97
25 yr anticipated	45.7	46	43	38	53	85
30 yr anticipated	42.34	43	43	35	50	88
N/A (Not Term)	53.47	54	55	39	68	120
Not Level Term	54.79	55	56	46	64	100
Unknown	49.14	49	50	39	59	114
SOA Guaranteed Level Term Period						
5 yr guaranteed	50.81	51	52	42	60	115
10 yr guaranteed	51.11	51	52	41	62	98
15 yr guaranteed	52.7	53	55	43	63	96
20 yr guaranteed	48.65	49	49	39	59	97
25 yr guaranteed	44.95	45	43	37	53	83
30 yr guaranteed	42.1	42	43	34	50	88
N/A (Not Term)	53.47	54	55	39	68	120
Not Level Term	54.79	55	56	46	64	100
Unknown	49.82	50	53	40	60	114
SOA Post Level Term Indicator						
N/A (Not Term)	53.47	54	55	39	68	120
Not Level Term	54.79	55	56	46	64	100
Post Level Term	54.76	55	54	46	63	115
Unknown Level Term	49.82	50	53	40	60	114
Within Level Term	48.36	48	49	38	58	96
Select/Ultimate Indicator						
Select	49.55	50	50	38	61	99
Ultimate	65.14	65	62	52	80	120

Table 8: Totals by Factor Level for Selected Variables

	Policies Exposed	Amount Exposed	Number of Deaths	Death Claim Amount
Gender				
Female	154816174.9	2.420024e+13	1219886	53712137008
Male	197684679.2	4.689486e+13	2223433	125650899863
Smoker Status				
NonSmoker	223199658.2	6.558059e+13	928085	136704598588
Smoker	25932320.3	2.929694e+12	268274	16701978719
Unknown	103368875.6	2.584821e+12	2246960	25956459564
Insurance Plan				
Perm	357532.5	1.226857e+11	2961	260774867
Term	153691641.8	8.083706e+12	2752624	54498008769
UL	123573349.5	4.968824e+13	230360	52613391666
ULSG	45060663.6	5.078338e+12	336337	38831210593
VL	10903811.8	3.735703e+12	47792	20839679371
VLSG	14239546.7	2.985235e+12	58081	9442117489
Other	4674308.2	1.401195e+12	15164	2877854116
Face Amount Band				
1-9999	51273818.0	2.055790e+11	1678648	6372604886
10000-24999	45656249.2	6.492518e+11	732610	10071732533
25000-49999	74767981.2	9.806474e+12	257510	33212366265
50000-99999	15592392.9	1.894816e+13	21933	27747490111
100000-249999	151502.9	2.064044e+12	668	8579575598
250000-499999	41913156.1	1.262819e+12	346443	10805181097
500000-999999	45649492.6	1.323823e+13	79550	23648662073
1000000-2499999	1216068.4	3.783870e+12	2976	9492136442
2500000-4999999	47455258.5	2.796176e+12	282309	17034188891
5000000-9999999	28391185.3	1.591391e+13	38923	22384731765
10000000+	433749.0	2.426581e+12	1749	10014367210
SOA Anticipated Level Term Period				
5 yr anticipated	10234940.9	4.664207e+12	26938	7348295757
10 yr anticipated	7201863.5	3.008794e+12	23862	5787002852
15 yr anticipated	35870536.5	1.639281e+13	57132	15882887522
20 yr anticipated	1786997.4	5.821873e+11	2981	489876024
25 yr anticipated	11561560.8	5.135992e+12	7889	2684093553
30 yr anticipated	2838092.7	4.331965e+11	8168	826183392
N/A (Not Term)	228927504.6	2.140686e+13	3212959	126749645205
Not Level Term	2963793.3	7.211215e+11	10041	1015911549
Unknown	51115564.4	1.874994e+13	93349	18579141017
SOA Guaranteed Level Term Period				
5 yr guaranteed	17529622.1	7.543830e+12	42318	11470899574
10 yr guaranteed	10789542.3	4.376573e+12	32888	8008123858
15 yr guaranteed	55413847.2	2.420517e+13	79230	21795735928
20 yr guaranteed	846182.2	4.534875e+11	622	234814631
25 yr guaranteed	13891386.6	6.350941e+12	8621	3205138972
30 yr guaranteed	6463620.8	1.039865e+12	16283	1694175761
N/A (Not Term)	228927504.6	2.140686e+13	3212959	126749645205
Not Level Term	2963793.3	7.211215e+11	10041	1015911549
Unknown	15675355.0	4.997250e+12	40357	5188591393
SOA Post Level Term Indicator				
N/A (Not Term)	228927504.6	2.140686e+13	3212959	126749645205
Not Level Term	2963793.3	7.211215e+11	10041	1015911549
Post Level Term	6940009.2	1.061131e+12	35227	3937319116
Unknown Level Term	15675355.0	4.997250e+12	40357	5188591393
Within Level Term	97994192.0	4.290874e+13	144735	42471569608
Select/Ultimate Indicator				
Select	232573187.4	6.712698e+13	659093	114004217448
Ultimate	119927666.6	3.968125e+12	2784226	65358819423

Table 9: Totals by Factor Level for EDeath Variables

	N2001VBT	A2001VBT	N2008VBT	A2008VBT	N2008VBTLU	A2008VBTLU	N2015VBT	A2015VBT	N7580E	A7580E
Gender										
Female	1370815.99	81123949201	1225736.10	64358148880	1470063.06	84180739787	1121278.87	56968803908	1611193.96	97197003825
Male	2879493.11	212811707752	2307808.70	156388676201	2774237.01	224336954260	2047444.38	131748076416	3540143.25	299981227621
Smoker Status										
NonSmoker	1304913.22	239415086450	955090.62	174133644937	1265761.53	253064103577	822867.69	147057307959	1772953.36	340352938184
Smoker	285800.73	20966163234	259432.97	18268869959	294452.34	22140347545	225565.53	16081841058	231073.78	16605075496
Unknown	2659595.14	33554407268	2319021.21	28344310186	2684086.20	33313242925	2120290.03	25577731306	3147310.07	40220217766
Insurance Plan										
Perm	3637.67	392088877	3004.36	297893161	3709.89	443857488	2652.24	252920167	4444.19	539873481
Term	3295801.00	79156453070	2830801.97	62717471290	3287787.98	76419984124	2564482.25	55318457745	3904922.29	98938146599
UL	360700.64	106784153724	245185.05	70953426526	382541.92	119878919917	207993.98	59374657892	505303.18	163510031115
ULSG	413482.34	54648575100	320684.43	44113006117	391092.60	54573400412	278353.24	37773945891	513416.02	67744595605
VL	70102.01	33382927418	56019.99	28730140521	76446.42	37544963929	47642.13	23926503388	87888.00	40338969315
VLSG	84939.47	14780849617	62045.24	10550086548	81145.93	14587649430	53786.97	9171083110	107882.18	19568921977
Other	21645.96	4790609147	15803.77	3384800920	21575.35	5068918746	13812.43	2899312132	27481.35	6537693353
Face Amount Band										
1-9999	1930884.86	7166186432	1712712.94	6298232133	1953359.77	7229670194	1578534.11	5757335306	2262695.20	8423745666
10000-24999	849307.67	11944853952	712215.03	10002551534	839069.23	11787697963	632807.26	8881410937	1005440.88	14145299367
25000-49999	398947.28	52363848057	288516.14	37950084843	394125.25	51785922386	248008.25	32642123281	523034.62	68862971376
50000-99999	41730.22	52426734018	29953.55	37888154957	46088.80	57825228468	25397.12	32150567727	61285.43	76557325081
100000-249999	1167.28	15110727137	1001.53	12842776882	1332.85	17124204244	821.00	10611184692	1467.24	19005290552
250000-499999	427999.75	13653407816	343065.27	10949299711	412102.24	13140220849	299897.88	9574654197	512752.21	16366217574
500000-999999	143248.86	42722346059	100323.44	30075402294	150516.44	44776033793	85756.31	25733364008	203021.36	60351780397
1000000-2499999	5015.58	16024714237	3940.43	12626757416	5563.70	17755896193	3317.34	10634083557	6810.19	21675561222
2500000-4999999	374964.07	22928147930	287379.15	17613430389	358506.29	21916281746	247946.05	15217948466	462487.53	28297228307
5000000-9999999	74062.89	42565995430	51895.21	29981142510	80273.19	46010920932	44143.21	25532158032	108599.73	62136151583
10000000+	2980.65	17028695884	2542.13	14518992412	3362.31	19165617280	2094.71	11982050119	3742.82	21356660321
SOA Anticipated Level Term Period										
5 yr anticipated	36449.04	13255222561	26292.16	9317268742	41695.15	15791429409	22143.94	7767536399	50749.82	20116554295
10 yr anticipated	37157.36	11742311096	24896.23	7750214782	38120.46	12548575888	21210.87	6518933892	49563.31	16975963630
15 yr anticipated	101492.37	35985555339	65924.08	23270258249	105715.05	39459368780	56094.99	19497863342	146308.56	55671845556
20 yr anticipated	3435.68	909889285	2262.49	604917445	3737.53	1041243455	1920.84	505620696	5001.66	1418993537
25 yr anticipated	14609.25	5962938014	9547.27	3906811450	16878.45	7062008091	7988.46	3241310742	23033.05	9830226936
30 yr anticipated	9858.08	1170780746	6857.24	800856469	9837.78	1228909630	5852.53	677823035	12466.50	1609603978
N/A (Not Term)	3889608.46	187151503229	3288359.76	149793398555	3861758.16	188638774130	2960729.27	129342222432	4646034.03	233668200330
Not Level Term	16519.77	2506554997	11255.61	1608711387	15976.84	2574162798	9714.74	1349665147	21898.76	3692982736
Unknown	141179.11	35250901685	98149.97	23694388002	150580.67	40173221867	83067.60	19815904639	196281.52	54194400447
SOA Guaranteed Level Term Period										
5 yr guaranteed	60108.91	21002850689	42981.47	14664143762	68372.08	24817257433	36198.92	12229338938	83886.86	31826232606
10 yr guaranteed	52352.71	16210940310	35198.41	10741232189	54301.71	17487084289	29933.13	9030747112	70460.17	23583454554
15 yr guaranteed	135905.93	47387938767	88646.15	30789976769	144546.51	52892278030	75405.62	25827648055	197891.65	73965909285
20 yr guaranteed	1315.88	561519774	853.52	368719617	1506.64	672269019	721.38	307676715	2091.10	947665570
25 yr guaranteed	17260.48	7119959983	11289.04	4673788203	20069.53	8503196070	9432.47	3869652280	27394.70	11809655013
30 yr guaranteed	19509.59	2419019311	13530.77	1650515915	19849.87	2605062884	11572.94	1394553915	24975.93	3398121138
N/A (Not Term)	3889608.46	187151503229	3288359.76	149793398555	3861758.16	188638774130	2960729.27	129342222432	4646034.03	233668200330
Not Level Term	16519.77	2506554997	11255.61	1608711387	15976.84	2574162798	9714.74	1349665147	21898.76	3692982736
Unknown	57727.38	9575369893	41430.08	6456338683	57918.75	10327609395	35014.79	5365375731	76704.01	14286010212
SOA Post Level Term Indicator										
N/A (Not Term)	3889608.46	187151503229	3288359.76	149793398555	3861758.16	188638774130	2960729.27	129342222432	4646034.03	233668200330
Not Level Term	16519.77	2506554997	11255.61	1608711387	15976.84	2574162798	9714.74	1349665147	21898.76	3692982736
Post Level Term	35779.67	4310193811	24807.60	2862977359	34462.61	4273799304	21239.35	2420412396	45492.60	5918981742
Unknown Level Term	57727.38	9575369893	41430.08	6456338683	57918.75	10327609395	35014.79	5365375731	76704.01	14286010212
Within Level Term	250673.83	90392035023	167691.76	60025399098	274183.72	102703348421	142025.10	50239204617	361207.81	139612056425
Select/Ultimate Indicator										
Select	898928.08	207777461876	639834.06	149074211083	907244.41	226103885762	557861.46	124876959110	1193214.26	294412652498
Ultimate	3351381.02	86158195077	2893710.74	71672613998	3337055.66	82413808285	2610861.79	63839921213	3958122.95	102765578948

¹ N = Number of Policies² A = Policy Amount

Table 10: A/E Variables by Factor Level

	N2001VBT	A2001VBT	N2008VBT	A2008VBT	N2008VBTLU	A2008VBTLU	N2015VBT	A2015VBT	N7580E	A7580E
Gender										
Female	0.89	0.66	1.00	0.83	0.83	0.64	1.09	0.94	0.76	0.55
Male	0.77	0.59	0.96	0.80	0.80	0.56	1.09	0.95	0.63	0.42
Smoker Status										
NonSmoker	0.71	0.57	0.97	0.79	0.73	0.54	1.13	0.93	0.52	0.40
Smoker	0.94	0.80	1.03	0.91	0.91	0.75	1.19	1.04	1.16	1.01
Unknown	0.84	0.77	0.97	0.92	0.84	0.78	1.06	1.01	0.71	0.65
Insurance Plan										
Perm	0.81	0.67	0.99	0.88	0.80	0.59	1.12	1.03	0.67	0.48
Term	0.84	0.69	0.97	0.87	0.84	0.71	1.07	0.99	0.70	0.55
UL	0.64	0.49	0.94	0.74	0.60	0.44	1.11	0.89	0.46	0.32
ULSG	0.81	0.71	1.05	0.88	0.86	0.71	1.21	1.03	0.66	0.57
VL	0.68	0.62	0.85	0.73	0.63	0.56	1.00	0.87	0.54	0.52
VLSG	0.68	0.64	0.94	0.89	0.72	0.65	1.08	1.03	0.54	0.48
Other	0.70	0.60	0.96	0.85	0.70	0.57	1.10	0.99	0.55	0.44
Face Amount Band										
1-9999	0.87	0.89	0.98	1.01	0.86	0.88	1.06	1.11	0.74	0.76
10000-24999	0.86	0.84	1.03	1.01	0.87	0.85	1.16	1.13	0.73	0.71
25000-49999	0.65	0.63	0.89	0.88	0.65	0.64	1.04	1.02	0.49	0.48
50000-99999	0.53	0.53	0.73	0.73	0.48	0.48	0.86	0.86	0.36	0.36
100000-249999	0.57	0.57	0.67	0.67	0.50	0.50	0.81	0.81	0.46	0.45
250000-499999	0.81	0.79	1.01	0.99	0.84	0.82	1.16	1.13	0.68	0.66
500000-999999	0.56	0.55	0.79	0.79	0.53	0.53	0.93	0.92	0.39	0.39
1000000-2499999	0.59	0.59	0.76	0.75	0.53	0.53	0.90	0.89	0.44	0.44
2500000-4999999	0.75	0.74	0.98	0.97	0.79	0.78	1.14	1.12	0.61	0.60
5000000-9999999	0.53	0.53	0.75	0.75	0.48	0.49	0.88	0.88	0.36	0.36
10000000+	0.59	0.59	0.69	0.69	0.52	0.52	0.83	0.84	0.47	0.47
SOA Anticipated Level Term Period										
5 yr anticipated	0.74	0.55	1.02	0.79	0.65	0.47	1.22	0.95	0.53	0.37
10 yr anticipated	0.64	0.49	0.96	0.75	0.63	0.46	1.12	0.89	0.48	0.34
15 yr anticipated	0.56	0.44	0.87	0.68	0.54	0.40	1.02	0.81	0.39	0.29
20 yr anticipated	0.87	0.54	1.32	0.81	0.80	0.47	1.55	0.97	0.60	0.35
25 yr anticipated	0.54	0.45	0.83	0.69	0.47	0.38	0.99	0.83	0.34	0.27
30 yr anticipated	0.83	0.71	1.19	1.03	0.83	0.67	1.40	1.22	0.66	0.51
N/A (Not Term)	0.83	0.68	0.98	0.85	0.83	0.67	1.09	0.98	0.69	0.54
Not Level Term	0.61	0.41	0.89	0.63	0.63	0.39	1.03	0.75	0.46	0.28
Unknown	0.66	0.53	0.95	0.78	0.62	0.46	1.12	0.94	0.48	0.34
SOA Guaranteed Level Term Period										
5 yr guaranteed	0.70	0.55	0.98	0.78	0.62	0.46	1.17	0.94	0.50	0.36
10 yr guaranteed	0.63	0.49	0.93	0.75	0.61	0.46	1.10	0.89	0.47	0.34
15 yr guaranteed	0.58	0.46	0.89	0.71	0.55	0.41	1.05	0.84	0.40	0.29
20 yr guaranteed	0.47	0.42	0.73	0.64	0.41	0.35	0.86	0.76	0.30	0.25
25 yr guaranteed	0.50	0.45	0.76	0.69	0.43	0.38	0.91	0.83	0.31	0.27
30 yr guaranteed	0.83	0.70	1.20	1.03	0.82	0.65	1.41	1.21	0.65	0.50
N/A (Not Term)	0.83	0.68	0.98	0.85	0.83	0.67	1.09	0.98	0.69	0.54
Not Level Term	0.61	0.41	0.89	0.63	0.63	0.39	1.03	0.75	0.46	0.28
Unknown	0.70	0.54	0.97	0.80	0.70	0.50	1.15	0.97	0.53	0.36
SOA Post Level Term Indicator										
N/A (Not Term)	0.83	0.68	0.98	0.85	0.83	0.67	1.09	0.98	0.69	0.54
Not Level Term	0.61	0.41	0.89	0.63	0.63	0.39	1.03	0.75	0.46	0.28
Post Level Term	0.98	0.91	1.42	1.38	1.02	0.92	1.66	1.63	0.77	0.67
Unknown Level Term	0.70	0.54	0.97	0.80	0.70	0.50	1.15	0.97	0.53	0.36
Within Level Term	0.58	0.47	0.86	0.71	0.53	0.41	1.02	0.85	0.40	0.30
Select/Ultimate Indicator										
Select	0.73	0.55	1.03	0.76	0.73	0.50	1.18	0.91	0.55	0.39
Ultimate	0.83	0.76	0.96	0.91	0.83	0.79	1.07	1.02	0.70	0.64

¹ N = Number of Policies² A = Policy Amount

Table 11: Credit-Weighted A/E Variables by Factor Level

	N2001VBT	A2001VBT	N2008VBT	A2008VBT	N2008VBTLU	A2008VBTLU	N2015VBT	A2015VBT	N7580E	A7580E
Gender										
Female	0.89	0.66	1.00	0.83	0.83	0.64	1.09	0.94	0.76	0.55
Male	0.77	0.59	0.96	0.80	0.80	0.56	1.09	0.95	0.63	0.42
Smoker Status										
NonSmoker	0.71	0.57	0.97	0.79	0.73	0.54	1.13	0.93	0.52	0.40
Smoker	0.94	0.80	1.03	0.91	0.91	0.75	1.19	1.04	1.16	1.01
Unknown	0.84	0.77	0.97	0.92	0.84	0.78	1.06	1.01	0.71	0.65
Insurance Plan										
Perm	0.82	0.67	0.99	0.88	0.80	0.59	1.12	1.03	0.67	0.49
Term	0.84	0.69	0.97	0.87	0.84	0.71	1.07	0.99	0.70	0.55
UL	0.64	0.49	0.94	0.74	0.60	0.44	1.11	0.89	0.46	0.32
ULSG	0.81	0.71	1.05	0.88	0.86	0.71	1.21	1.03	0.66	0.57
VL	0.68	0.62	0.85	0.73	0.63	0.56	1.00	0.87	0.54	0.52
VLSG	0.68	0.64	0.94	0.89	0.72	0.65	1.08	1.03	0.54	0.48
Other	0.70	0.60	0.96	0.85	0.70	0.57	1.10	0.99	0.55	0.44
Face Amount Band										
1-9999	0.87	0.89	0.98	1.01	0.86	0.88	1.06	1.11	0.74	0.76
10000-24999	0.86	0.84	1.03	1.01	0.87	0.85	1.16	1.13	0.73	0.71
25000-49999	0.65	0.63	0.89	0.88	0.65	0.64	1.04	1.02	0.49	0.48
50000-99999	0.53	0.53	0.73	0.73	0.48	0.48	0.86	0.86	0.36	0.36
100000-249999	0.80	0.80	0.84	0.84	0.76	0.76	0.91	0.91	0.74	0.74
250000-499999	0.81	0.79	1.01	0.99	0.84	0.82	1.16	1.13	0.68	0.66
500000-999999	0.56	0.55	0.79	0.79	0.53	0.53	0.93	0.92	0.39	0.39
1000000-2499999	0.60	0.59	0.76	0.75	0.54	0.54	0.90	0.89	0.44	0.44
2500000-4999999	0.75	0.74	0.98	0.97	0.79	0.78	1.14	1.12	0.61	0.60
5000000-9999999	0.53	0.53	0.75	0.75	0.48	0.49	0.88	0.88	0.36	0.36
10000000+	0.68	0.69	0.76	0.76	0.63	0.64	0.87	0.87	0.59	0.59
SOA Anticipated Level Term Period										
5 yr anticipated	0.74	0.55	1.02	0.79	0.65	0.47	1.22	0.95	0.53	0.37
10 yr anticipated	0.64	0.49	0.96	0.75	0.63	0.46	1.12	0.89	0.48	0.34
15 yr anticipated	0.56	0.44	0.87	0.68	0.54	0.40	1.02	0.81	0.39	0.29
20 yr anticipated	0.87	0.54	1.32	0.81	0.80	0.47	1.55	0.97	0.60	0.35
25 yr anticipated	0.54	0.45	0.83	0.69	0.47	0.38	0.99	0.83	0.34	0.27
30 yr anticipated	0.83	0.71	1.19	1.03	0.83	0.67	1.40	1.22	0.66	0.51
N/A (Not Term)	0.83	0.68	0.98	0.85	0.83	0.67	1.09	0.98	0.69	0.54
Not Level Term	0.61	0.41	0.89	0.63	0.63	0.39	1.03	0.75	0.46	0.28
Unknown	0.66	0.53	0.95	0.78	0.62	0.46	1.12	0.94	0.48	0.34
SOA Guaranteed Level Term Period										
5 yr guaranteed	0.70	0.55	0.98	0.78	0.62	0.46	1.17	0.94	0.50	0.36
10 yr guaranteed	0.63	0.49	0.93	0.75	0.61	0.46	1.10	0.89	0.47	0.34
15 yr guaranteed	0.58	0.46	0.89	0.71	0.55	0.41	1.05	0.84	0.40	0.29
20 yr guaranteed	0.76	0.74	0.88	0.83	0.73	0.70	0.94	0.89	0.68	0.66
25 yr guaranteed	0.50	0.45	0.76	0.69	0.43	0.38	0.91	0.83	0.31	0.27
30 yr guaranteed	0.83	0.70	1.20	1.03	0.82	0.65	1.41	1.21	0.65	0.50
N/A (Not Term)	0.83	0.68	0.98	0.85	0.83	0.67	1.09	0.98	0.69	0.54
Not Level Term	0.61	0.41	0.89	0.63	0.63	0.39	1.03	0.75	0.46	0.28
Unknown	0.70	0.54	0.97	0.80	0.70	0.50	1.15	0.97	0.53	0.36
SOA Post Level Term Indicator										
N/A (Not Term)	0.83	0.68	0.98	0.85	0.83	0.67	1.09	0.98	0.69	0.54
Not Level Term	0.61	0.41	0.89	0.63	0.63	0.39	1.03	0.75	0.46	0.28
Post Level Term	0.98	0.91	1.42	1.38	1.02	0.92	1.66	1.63	0.77	0.67
Unknown Level Term	0.70	0.54	0.97	0.80	0.70	0.50	1.15	0.97	0.53	0.36
Within Level Term	0.58	0.47	0.86	0.71	0.53	0.41	1.02	0.85	0.40	0.30
Select/Ultimate Indicator										
Select	0.73	0.55	1.03	0.76	0.73	0.50	1.18	0.91	0.55	0.39
Ultimate	0.83	0.76	0.96	0.91	0.83	0.79	1.07	1.02	0.70	0.64

¹ N = Number of Policies² A = Policy Amount