

Year t	AV_{t-1}	Premium	Expenses	Interest	EDB	ESB	EAV	Pr_t
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
0*	0	0	2 000					-2 000
1	0	2 250	0	158	67	2	2 098	240
2	2 209	2 250	68	307	83	9	4 419	188
3	4 513	2 250	68	469	98	69	6 772	224
4	6 917	2 250	68	637	110	119	9 233	274
5	9 431	2 250	68	813	123	192	11 805	306
6	12 059	2 250	68	997	139	370	14 344	385
7	14 805	0	45	1 033	154	386	14 856	398
8	15 335	0	45	1 070	170	441	15 377	373
9	15 876	0	45	1 108	189	457	15 906	387
10	16 424	0	45	1 147	210	474	16 440	401
11	16 979	0	45	1 185	234	1 755	15 753	377
12	17 539	0	45	1 225	262	2 716	15 351	390
13	18 100	0	45	1 264	292	2 799	15 821	406
14	18 659	0	45	1 303	326	2 882	16 287	422
15	19 213	0	45	1 342	365	2 962	16 743	440
16	19 758	0	45	1 380	409	3 040	17 186	458
17	20 288	0	45	1 417	458	3 115	17 610	476
18	20 797	0	45	1 453	514	3 186	18 010	495
19	21 278	0	45	1 486	576	3 251	18 378	514
20	21 724	0	45	1 518	646	22 058	—	492

Table 6: UL Type B Example SN4.2, Scenario 1 profit test – calculating the profit vector.

t	Pr[in force at start of year]	Pr_t	Π_t	NPV_t
0*	1.00000	-2000.00	-2000.00	-2000.00
1	1.00000	240.04	240.04	-1781.78
2	0.94937	187.79	178.28	-1634.44
3	0.92964	224.22	208.45	-1477.83
4	0.91022	274.02	249.41	-1307.48
5	0.89112	306.24	272.90	-1138.03
6	0.87234	385.44	336.23	-948.23
7	0.84514	398.25	336.57	-775.52
8	0.81870	372.64	305.08	-633.20
9	0.79297	386.51	306.49	-503.22
10	0.76793	400.94	307.89	-384.51
11	0.74356	376.50	279.95	-286.39
12	0.66787	389.57	260.18	-203.49
13	0.56643	405.70	229.80	-136.92
14	0.48028	422.41	202.88	-83.50
15	0.40712	439.70	179.01	-40.65
16	0.34500	457.56	157.86	-6.29
17	0.29225	475.98	139.11	21.23
18	0.24747	494.96	122.49	43.26
19	0.20946	514.47	107.76	60.88
20	0.17720	492.22	87.22	73.84

Table 7: UL Type B example SN4.2, Scenario 1: Profit signature, NPV and DPP at 10% risk discount rate.