

Cost and IRR analysis using same product with different premium and lapse durations

John Hancock 7,500,000 Death Benefit

		No Lapse Policy		No Lapse Policy to youngest age 110		No Lapse policy to youngest age 105		No Lapse policy to youngest age 100	
		Level Premium	Stepped Premium	Level Premium	Stepped Premium	Level Premium	Stepped Premium	Level Premium	Stepped Premium
		\$59,172 years 1 - 68	\$29,586 years 1-15 \$88,260 years 16-68	\$58,354 years 1 - 57	\$29,177 years 1-15 \$88,710 years 16-57	\$57,996 years 1 - 52	\$28,998 years 1-15 \$88,907 years 16-52	\$56,843 years 1 - 47	\$28,422 years 1-15 \$88,428 years 16-47
First 10 years NPV	4.00%	559,135	309,568	552,235	306,118	549,215	304,608	539,490	299,749
	6.00%	521,642	290,821	515,260	287,630	512,467	286,233	503,472	281,740
	8.00%	488,813	274,406	482,885	271,442	480,291	270,145	471,935	265,971
	IRR in year 10	39.96%	47.93%	40.14%	48.06%	40.22%	48.12%	40.47%	48.32%
First 20 years NPV	4.00%	896,333	629,007	884,772	625,434	879,712	623,871	863,416	615,979
	6.00%	779,420	529,027	769,475	525,655	765,122	524,179	751,104	517,357
	8.00%	687,436	453,477	678,762	450,308	674,966	448,921	662,740	442,945
	IRR in year 20	14.56%	18.25%	14.65%	18.32%	14.69%	18.35%	14.82%	18.45%
First 30 years NPV	4.00%	1,124,132	968,788	1,109,422	966,948	1,102,984	966,143	1,082,248	956,407
	6.00%	923,362	743,729	911,427	741,452	906,203	740,455	889,380	732,467
	8.00%	779,437	590,705	769,492	588,235	765,139	587,154	751,120	580,434
	IRR in year 30	7.77%	9.33%	7.84%	9.36%	7.87%	9.37%	7.96%	9.44%
First 40 years NPV	4.00%	1,278,025	1,198,332	1,261,187	1,197,662	1,253,818	1,197,370	1,230,084	1,186,388
	6.00%	1,003,739	863,617	990,692	861,951	984,983	861,222	966,593	852,584
	8.00%	822,051	654,267	811,517	652,122	806,906	651,183	792,057	644,118
	IRR in year 40	4.79%	5.24%	4.84%	5.25%	4.86%	5.25%	4.93%	5.29%
Pay all years NPV	4.00%	1,491,610	1,482,379	1,414,969	1,400,648	1,371,724	1,366,088	1,303,989	1,301,359
	6.00%	1,085,489	975,525	1,053,699	946,926	1,035,091	933,485	999,295	903,456
	8.00%	854,560	699,772	837,978	688,480	828,634	682,736	806,770	667,005
	IRR last year	1.46%	1.20%	2.45%	2.25%	2.98%	2.81%	3.69%	3.63%

Cost and IRR analysis using same product with different premium and lapse durations

		Lincoln National 7,500,000 Death Benefit							
		<u>No Lapse Policy</u>		<u>No Lapse Policy to youngest age 110</u>		<u>No Lapse policy to youngest age 105</u>		<u>No Lapse policy to youngest age 100</u>	
		<u>Level Premium</u>	<u>Stepped Premium</u>	<u>Level Premium</u>	<u>Stepped Premium</u>	<u>Level Premium</u>	<u>Stepped Premium</u>	<u>Level Premium</u>	<u>Stepped Premium</u>
		\$57,189 years 1 - 68	\$28,859 years 1-15 \$98,859 years 16-68	\$54,765 years 1 - 57	\$27,383 years 1-15 \$94,867 years 16-57	\$51,236 years 1 - 52	\$25,618 years 1-15 \$89,141 years 16-52	\$45,699 years 1 - 47	\$22,850 years 1-15 \$80,290 years 16-47
First 10 years NPV	4.00%	542,408	303,435	521,961	290,985	492,193	276,096	445,486	252,747
	6.00%	506,171	285,149	487,260	273,634	459,728	259,864	416,530	238,269
	8.00%	474,442	269,138	456,876	258,442	431,302	245,651	391,176	225,591
IRR in year 10		40.40%	48.17%	40.94%	48.68%	41.78%	49.31%	43.16%	50.35%
First 20 years NPV	4.00%	868,306	647,849	834,045	620,519	784,167	585,389	705,907	530,628
	6.00%	755,311	541,290	725,839	518,657	682,933	489,818	615,614	444,831
	8.00%	666,409	461,165	640,706	442,094	603,286	417,994	544,574	380,374
IRR in year 20		14.78%	18.28%	15.07%	18.58%	15.50%	18.96%	16.22%	19.58%
First 30 years NPV	4.00%	1,088,471	1,028,433	1,044,878	985,735	981,414	928,562	881,838	839,727
	6.00%	894,429	781,775	859,061	749,431	807,570	706,663	726,781	640,145
	8.00%	755,327	614,871	725,855	589,593	682,948	556,591	615,627	505,209
IRR in year 30		7.93%	9.14%	8.13%	9.38%	8.44%	9.70%	8.94%	10.24%
First 40 years NPV	4.00%	1,237,206	1,285,543	1,187,309	1,232,463	1,114,667	1,160,397	1,000,690	1,048,543
	6.00%	972,112	916,061	933,451	878,294	877,167	827,748	788,857	749,207
	8.00%	796,513	686,067	765,296	657,914	719,847	620,788	648,538	563,032
IRR in year 40		4.91%	4.94%	5.07%	5.14%	5.31%	5.42%	5.71%	5.88%
Pay all years NPV	4.00%	1,443,633	1,642,381	1,331,633	1,482,469	1,218,829	1,341,621	1,060,107	1,152,933
	6.00%	1,051,123	1,052,642	992,583	980,726	921,435	904,766	815,147	795,398
	8.00%	827,932	740,379	790,130	700,934	739,042	654,184	660,366	583,814
IRR last year		1.51%	0.75%	2.63%	1.97%	3.34%	2.84%	4.37%	4.12%